# Chopin's Strategic Integration of Rhythm and Pitch: a Schenkerian Perspective

In Two Volumes

**Volume One: Thesis**

by

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## Declaration

This thesis is submitted by the undersigned for the degree of Doctor of Philosophy at the University of Dublin. It has not been submitted as an exercise for a degree at any other university.

Apart from the advice, assistance, and joint effort mentioned in the acknowledgements and in the text, this thesis is entirely my own work. I agree that the library may lend or copy this thesis freely on request.

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## Summary

This thesis synthesises significant aspects of recent analytical approaches and applies that synthetic method to selected works by Chopin. While the method may be regarded as an extension of Heinrich Schenker's analytical approach, its specific combination of four aspects distinguishes this synthesis from previous analytical approaches: attention to the rhythms created by pitch events on all structural levels; a detailed accounting of the musical surface; 'strict use' of analytical notation following guidelines offered by Steve Larson; and a continual concern with what have been called 'strategies' or 'premises'. This approach thus builds on the work of such authors as William Rothstein, Carl Schachter, and John Rink, and, like their work, it raises interpretive questions of central interest to performers.

Applying this method to selected Preludes (Opus 28 Nos. 5, 12, 14, 16, 21, and 22) presents a new picture of the Preludes. Analysis of Preludes that are not as strongly 'closed' as some other pieces not only illuminates the role of closure and motive in those pieces, but also raises interesting questions about the meaning of finding an *Ursatz* in such pieces. This method also demonstrates how each Prelude projects a different affect through the use of compositional techniques such as elision, reinterpretation, and tonal and metric ambiguity. It reveals hidden repetitions that have a durational as well as tonal aspect. They are organised on multiple levels by rhythm as well as pitch. Indeed, surface rhythms are reflected in the background organisation of each of the Preludes analysed here.

This thesis presents a new model for analysing the Nocturnes that considers pairs of pieces within one opus and investigates the similarities and differences in their treatment of compositional strategies. In Opus 48, both Nocturnes deal with the same premises in different ways—as if Chopin were experimenting with two different solutions to the same compositional problems. In Opus 27, however, the two Nocturnes are connected at a deeper level—premises that are introduced and developed in the first piece continue into the second and are finally concluded at the end of that piece. This may explain the divergent readings of the close of the first Nocturne in published Schenkerian analyses. These intraopus connections become even clearer if the second Nocturne follows the first

in performance, as it provides the final element of closure of the premises that run through both pieces.

The Barcarolle incorporates most of the premises found in the smaller, earlier pieces: motivic connections that function on many levels through the entire work; displacement and subsequent metric normalisation; the sixth as a goal interval; mixture that affects melodic and harmonic structures; and register—incorporating what I refer to as 'obligatory coupling'. As in the earlier works, tonal and rhythmic events serve the development of these premises. These premises work together to mould patterns of tension and release in the dramatic narrative of the work and thus prove highly relevant in the preparation of an interpretation.

This thesis thus not only provides interesting information about specific pieces, but also presents a model of how to synthesise recent analytical methods in a productive way—one that raises questions of real interest to scholars and performers.

# Table of Contents

## Volume One: Musical Examples

## Volume One: List of Tables



## Volume Two: List of Graphs and Reductions

# Chapter 1: Introduction

## 1.1 Background

Schenkerian analysis seems the method of choice for many music analysts. However, some writers still question its ability to contribute to our understanding of rhythmic structure or performance issues. Recently, however, other writers (whose work is discussed in the following chapter) have pointed out that Schenker's less well known and earlier writings have addressed rhythmic issues. These writers have taken Schenker's work and expanded it by incorporating specific analytical tools such as durational and rhythmic reduction, and grouping structure into their methodologies. This has enabled them to make persuasive statements about rhythm. Focus on the rhythmic dimension of a work tends to raise interpretive questions that can be addressed in performance. It is not surprising, therefore, that these same writers discuss performance issues resulting from their analyses.

## 1.2 Thesis

This thesis describes and applies an analytical method that synthesises four aspects of recent analytical developments. The synthesis of these four aspects distinguishes this approach from previous analytical work: a focus on rhythm; emphasis on the foreground; graphing based on 'strict use'; and the relation of the above to piece 'strategies' or 'premises'.[1] Without drawing on the specifics of current work on narrative theory or literary criticism, this synthetic approach can say a great deal about the narrative or dramatic 'story line' of a work by tracing the development of its premises.

This synthetic analytical approach presents a picture of the Preludes: (a) organised on multiple levels by hidden repetitions whose durational patterns, not just their pitch patterns, are important; (b) remaining open-ended and not necessarily 'finished'; (c) driven by premises that reflect the 'material' out of which they are constructed and that often have a rhythmic or metric significance.

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[1] 'Strict Use' is a method of analytical notation developed by Steve Larson and described in 'Strict Use of Analytic Notation', in *Journal of Music Theory Pedagogy* 10 (1996): 37–77. The term 'premise' originates in David Epstein *Beyond Orpheus: Studies in Musical Structure* (Oxford: Oxford University Press, 1987). Both works are discussed in more detail in the following chapter.

It presents a model for analysing the Nocturnes, considering pairs of pieces and asking how their similarities and differences illuminate Chopin's compositional strategies and affect our experience of their performance as a pair. It also demonstrates how a late, large-scale work such as the Barcarolle exemplifies similar premises and compositional techniques to those evident in smaller, earlier pieces. These premises combine together to mould and structure the dramatic shape of the work.

This thesis thus not only provides interesting information about specific Chopin pieces, but also presents a model of how to synthesise recent analytical methods in a productive way—one that raises questions of real interest to performers.

### 1.3 Justification of Thesis

This thesis contributes to the current field of research as outlined in section 1.1. However, it develops on from this work by focusing on the strategic manner in which pitch and rhythmic patterns interact within selected works from a single composer's output. This has led to significant findings that include new information about specific pieces and may affect the way in which certain works are performed.

### 1.4 Thesis Outline

The first chapter presents the methodology used in this thesis. It begins by discussing the work of Schenkerian theorists that recognise the rhythmic dimension of Schenker's work and incorporate it into their own analyses. It then describes recent approaches towards the development of a theory of rhythm, and finds that many of these approaches owe much to Schenker's theory of levels. The interpretive possibilities presented by both Schenkerian and rhythmic analysis are presented within these examinations. This chapter concludes by outlining the notational technique used in the voice-leading graphs, and defines and acknowledges specific terminology used throughout this thesis.

The second chapter focuses on the Preludes Opus 28. Six pieces (Nos. 5, 12, 14, 16, 21, and 22) were chosen to represent a broad cross-section from this genre.

The third chapter analyses two pairs of Nocturnes—Opus 27 and Opus 48. As previously mentioned, these are both analysed as pairs in order to highlight intraopus connections. This approach illuminates very interesting similarities and differences in their use of premises that function on the surface and on a deeper level.

The final chapter analyses the Barcarolle. This piece presents many of the premises—both tonal and rhythmic—that feature in the Preludes and Nocturnes. These are intricately woven to form its complex structure and dramatic character.

This thesis raises specific performance questions in response to its analytical findings. Furthermore, it shows how various exemplary performances seem to address those interpretive questions.

### 1.5 Delimitations and Assumptions

The works chosen cover a cross-section of Chopin's compositional output, varying in genre and scale, and ranging from middle to late works. The Preludes were chosen for their brevity and concentration, and because they were composed in the middle of Chopin's life. The Nocturnes present a different case study, as they are larger works and are composed in a freer, more 'romantic' style. The Barcarolle is a large-scale work that contains many of the premises exposed in earlier works and provides a fine example of Chopin's late compositional style. It is left to others to ascertain how well this approach works when applied to other pieces or genres.

This thesis does not provide an account of all of Chopin's rhythmic processes, but concentrates on how they collaborate with tonal processes to form premises.

### 1.6 Editorial Practice

A few brief guidelines will outline the editorial practice adopted in this thesis. The following editions have been consulted in compiling the musical examples: Henle *Urtext* Edition; *Fryderyk Chopin: Complete Works*, edited by Ignacy J. Paderewski; *Editio Musica Budapest*; and the *National Edition of the Works of Fryderyck Chopin*, edited by Jan Ekier.[2] Where variants in editions are discussed, these editions will be referred to as those of Henle, Paderewski, Ekier and EMB (*Editio Musica Budapest*).

Italicisation used within a quotation is from the original source unless otherwise stated. Initial capitalisation has been changed according to the syntactic meaning of its context, for instance, if it is run in to, or set off from, the surrounding text.

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[2] *Urtext Edition*, ed. Ewald Zimmerman (Barcarolle ed. Ernst Herttrich) (Munich, G. Henle Verlag); *Fryderyk Chopin: Complete Works*, ed. Ignacy J. Paderewski (Warsaw: Instytut Fryderyka Chopina); *Editio Musica Budapest* (Budapest, Hungary); *National Edition of the Works of Fryderyck Chopin*, ed. Jan Ekier (Kraków: Polskie Wydawnictwo Muzyczne).

Musical examples that refer to specific issues discussed in the text (such as grouping or voice leading) are accompanied by explanatory captions. Other musical examples are included for the reader's convenience.

The second volume of this thesis contains Schenkerian graphs and durational or rhythmic reductions of whole pieces. References in the text to graphs, levels, or reductions that do not have example numbers relate to this volume.

# Chapter 2: Analytical Methodology

## 2.1 Introduction

This chapter provides an overview of recent work in the area of Schenkerian analysis and rhythmic analysis. Writers such as William Rothstein, Carl Schachter, and Frank Samarotto have shown how Schenker's early or less-well-known work reveals much about rhythm. They have also extended his method by making explicit some of the implicit rhythmic aspects of his analytical methodology. Other theories of rhythmic structure have been strongly influenced by Schenker's theory of levels. The analytical methodology of this thesis follows these writers in making explicit the rhythmic information implicit in Schenker's approach. In so doing, it illuminates much about Chopin's compositions. This synthetic approach helps the listener or performer to understand the artistic content of the music and it raises important interpretive questions that a performer may wish to consider.

This chapter will begin with a discussion of the inherent rhythmic aspects of Schenker's theory and will then study the work of some Schenkerian analysts that incorporate rhythm in their own analyses. This will be followed by a discussion of various authors' views on the potential interpretive contribution of Schenker's theory—a contribution that can prove extremely helpful in preparing a performance. A subsequent examination considers some of the other leading approaches towards developing a theory of rhythm. One reason that a rhythmic approach can prove particularly beneficial to performers is that the temporal domain is one in which a lot of interpretive decisions are based. This discussion on rhythmic theory will therefore be regularly interspersed with writers' opinions on the interpretive potential of their theories. The fact that many of these writers seem to have been inspired by Schenker's tonal theory further validates the approach of this thesis. The final section of this chapter outlines the specific methodology and terminology that will be used in the following analyses.

## 2.2 The Rhythmic Dimension of Schenker's Theory

Many writers (especially those unfamiliar with Schenker's less-well-known and earlier works) have questioned the ability of Schenkerian theory to illuminate musical rhythm. Maury Yeston, in 'The Stratification of Musical Rhythm', explains:

> Schenker has often been accused of ignoring rhythm because of two aspects of his thinking. The first is his concept of the *Ursatz*—an overarching fundamental structure that describes the extreme origin of pieces of tonal music as a linear descent from $\hat{3}$ (or $\hat{5}$ or $\hat{8}$) to $\hat{1}$ over a bass arpeggiation of the tonic triad. The concept of this structure is indeed arhythmic but only because it is posited by Schenker as a schema whose general form is made manifest in specific rhythmic values by the backgrounds of individual pieces.[1]

Yeston suggests that the second reason Schenker has been accused of ignoring rhythm concerns his notation. 'For the purpose of graphically assigning a relative weight to pitches, Schenker gives the prolonged tones a greater durational value and the prolonging tones a lesser durational value'.[2] But Yeston goes on to show how Schenker's writings can provide the basis for an analytical approach that says much about musical rhythm.

David Epstein explains that 'as a work unfolds in time it reveals, in progressive stages, quanta of information about itself. At times the process of revelation itself seems a partial generator of that energy which must be resolved to achieve final closure'.[3] He concludes that the principles underlying this process 'lie in the rhythmic domain of time—specifically, in the large-scale aspects of temporal segmentation and proportioning that represent the ultimate temporal control of music' (p. 195). Epstein maintains that large-scale rhythm is 'intimately intertwined with large-scale harmonic progression' (p. 195). As he astutely exclaims: 'How close to the primal source of musical energy were Schenker's musical perceptions!' (p. 196)

In an often-quoted passage, Schenker provides an important clue to the understanding of musical rhythm; he describes musical content in terms of the metaphor of musical motion:

> The *goal*, the path, is the first thing; content comes only in the second place: without a goal there is no content.
>
> On the way to the goal, in the art of music as in life, there are obstacles, reverses, disappointments, extensive paths, detours, extensions, interpolations—in short, delays of all kinds. Therein lies the seed of all the artistic delays with which a future inventor can bring content into play that is continually new. In this sense we hear an almost dramatic course of events in the middleground and foreground.[4]

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[1] Maury Alan Yeston, 'The Stratification of Musical Rhythm' (Ph.D. diss., Yale University, 1974), 86–87.
[2] Ibid., 87.
[3] David Epstein, *Beyond Orpheus: Studies in Musical Structure* (Oxford: Oxford University Press, 1987), 195; subsequent page numbers refer to this publication until otherwise stated.
[4] Heinrich Schenker, *Free Composition*, trans. and ed. Ernst Oster (New York: Longman, 1979), 5.

The metaphor of musical motion is one with a long history.[5]

Robert Snarrenberg isolates specific aspects of Schenker's theory that rest on rhythmic principles.[6] The first example Snarrenberg cites is

> his habit of interpreting the rhythmic peculiarities of free compositions in terms of the rhythmic equilibrium of strict counterpoint. Simply stated, the principle for interpreting a tonal configuration that arises from a single transformation [...] is a configuration that proceeds in equal note values. (p. 30)

Snarrenberg also asserts:

> Passages in free compositions that proceed in equal note values but arise from more than one operation (for example, a combination of suspension and passing motion) are frequently interpreted as an equalization of a rhythmically differentiated model. (p. 31)

Building on the work of Rothstein and others, Snarrenberg presents three more rhythmic foundations of Schenker's tonal theory: 'A tone is metrically stable if its point of initiation is the strongest point (metrically speaking) within its duration' (p. 31); 'Duple meter is the norm by which nonduple metrical patterns are interpreted' (p. 31); and finally, 'The presented rhythm of a configuration is used to interpret other presentations of the same or similar content' (p. 31). This final point proves fruitful in the analysis of the relationship of tonal motivic content to metric position. Examples of this can be seen in the analysis of the two Nocturnes of Opus 48 and in the Barcarolle.

Time is fundamental to Schenker's theory. This is evident in its goal-oriented approach and in its focus on delay and arrival. Snarrenberg notes that 'the effect of closure does not necessarily rest exclusively on the arrival of the goal tones, but may also depend on the manner in which they are presented' (pp. 37–38). Quite often, the descent of the structural line is followed by a coda that concludes many of the remaining unresolved issues in the piece. This can include issues such as the reassertion of the obligatory register and metric normalisation of an important motif. Snarrenberg concludes: 'As a general rule,

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[5] On the history of musical motion, see Lee Rothfarb, 'Energetics' in *The Cambridge History of Western Music Theory*, ed. Thomas Christensen (Cambridge: Cambridge University Press, 2001). For a discussion that explains the metaphor of musical motion in terms of a contemporary theory of conceptual metaphor, see Mark Johnson and Steve Larson, 'Something in the Way She Moves', presented at the conference on Musical Imagery sponsored by the University of Oslo, June 1999, and at the annual meeting of the West Coast Conference of Music Theory in Eugene, April 2000.

[6] Robert Snarrenberg, *Schenker's Interpretive Practice* (Cambridge University Press, 1997); in the discussion of Snarrenberg's work subsequent page numbers refer to this publication.

Schenker demands that the objects of desire, the goals of motion, the content of "propositions", and so forth be tones. That is a demand Schenker places upon the rhetoric of interpretation' (pp. 104–105). One of Snarrenberg's own goals in this work is 'to show that it is possible to adopt a strict rhythmic interpretation of "diminution" as the relation between some adjacent levels in his interpretation' (p. 94). I shall return to Snarrenberg's work within the discussion of the inherent potential of Schenkerian analysis to aid in the interpretive process following a detailed examination of the work of three eminent writers in the area of Schenkerian analysis and rhythm—Rothstein, Samarotto, and Schachter.

### 2.3 The Integration of Schenkerian Analysis and Rhythm

In his thesis, Rothstein isolates many of the rhythmic elements implicit in Schenker's work and then develops his own methodological approach that incorporates rhythm into a Schenkerian context.[7] Rothstein's thesis provides 'a new coordination of rhythmic structure with pitch structure, both viewed from the standpoint of the theory of structural levels'.[8] He comments on the surge of writings in this area:

> The ultimate aim of most of this recent work appears to be the construction of a comprehensive theory of rhythm which is intended to complement the Schenkerian model of pitch structure. Whether such a comprehensive theory is even possible is still a matter of uncertainty and debate; theorists seem to be united, however, on the need for further research to help fill the perceived theoretical gap. (pp. vii–viii)

Rothstein concludes that 'the best foundation for any "Schenkerian" theory of rhythm may be found in a careful study of Schenker's own works' (p. viii). Thus begins his examination of the rhythmic aspects of Schenker's approach. He states that 'in free composition, rhythm constitutes yet another musical force that may affect voice-leading, motivic repetition, etc.' (pp. 3–4). Rothstein traces many of the rhythmic assumptions underlying Schenker's writings. Rothstein describes a fundamental example of this:

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[7] William Rothstein, 'Rhythm and the Theory of Structural Levels' (Ph.D. diss., Yale University, 1981), subsequent page numbers in the text refer to this publication until otherwise stated.
[8] Ibid., 'Abstract'.

> Schenker again invokes the principle that a contrapuntal situation may determine its own normal rhythmic setting, against which any deviation must be measured [...]. A rhythmic norm such as this exists as an ever-present implicit background; it is only the existence of the norm that allows an abnormal situation to be perceived as something dramatic. (p. 43)

He explains: 'One can only conclude that Schenker believed the equal-value rhythm to be the norm for passing motions in general, *based solely on contrapuntal content*' (p. 46). Rothstein summarises some of the rhythmic norms that he isolates in Schenker's work:

> Harmonic rhythm normally supports the metric structure in free composition, as it does in strict counterpoint. The rhythmic norms of syncopations and passing motions are related more or less explicitly to free composition. And the principle of 'inner psychological congruence' between various forms of rhythmic and metrical emphasis is responsible for many sublime rhythmic effects in free composition. (p. 49)

He also notes that 'irregular groups are generally considered to be modifications of regular ones, although an irregular group may occasionally arise [...] through the operations of internal tonal and/or rhythmic forces' (p. 63). Rothstein explains:

> In *Free Composition*, Schenker views meter and rhythm as partly independent forces which often come into conflict with each other. Some of these conflicts are resolved in favor of meter, others in favor of rhythm. The rhythms of tonal progressions in particular must often be adjusted to fit into a given metrical scheme. (p. 64)

This view of rhythm and metre accounts for the dramatic play on metrical schemes and rhythmic patterns in some of the music analysed in this thesis. Prime examples of this can be heard in the two Nocturnes of Opus 48. Specific tonal motifs are at first adjusted to the notated metre of the piece, but later find their 'natural' presentation in terms of metre. In these instances, the metre adjusts to accommodate the rhythmic nature of the tonal motifs.

Rothstein acknowledges that Schenker's work is not explicit in its rhythmic aspects:

> More often than not, in fact, his graphs do not reflect his rhythmic observations, which are contained in the accompanying textual commentaries. In these cases in which he incorporates groupings into the graphs themselves, his notational methodology varies widely from graph to graph. (p. 72)

He acknowledges that 'expansions are sometimes indicated in two levels of grouping: one shows the underlying hypermeasures, while the other indicates the lower-level groupings at the musical surface' (p. 74).

The foregoing discussion of Rothstein's analysis of Schenker's ideas about rhythm only touches on some of the fascinating insights he uncovers. However, Rothstein's own contribution is important to this thesis as it takes Schenker's implicit rhythmic assumptions and formulates them into a methodology that incorporates tonal and rhythmic analysis. One of the most important contributions of Rothstein's thesis is the concept of 'rhythmic normalization':

> Rhythmic normalization—a term that originates in this dissertation—is the opposite of rhythmic displacement. If a tone is understood to be displaced rhythmically, it is understood to have been shifted from a normal rhythmic position to an abnormal one. The existence of a displacement implies the coexistence of two structural levels: a level, prior to the displacement, at which the rhythm is normal; and a subsequent level at which the rhythm is displaced. (p. 75)

In a more recent article Rothstein defines this still further while underlining its relationship to how music is heard or perceived:

> Rhythmic normalization reflects an unconscious process used by every experienced listener in hearing and understanding tonal music. Abnormal or unexpected rhythmic positions of notes and harmonies are continuously compared with the normal or expected positions of the same events. The difference between the normal and abnormal positions represents a measure of rhythmic tension.
>
> Rhythmic normalization depends largely on pitch structure. The most important rule, that of simultaneity (with its corollaries, the rules of arpeggiation and the primary tone), is based on the vertical, harmonic dimension or pitch structure. Purely durational rhythms play a role in rhythmic normalization, but it is a subsidiary role.[9]

Rothstein relates rhythmic normalisation and displacement to processes involved in Schenker's tonal theory: 'Whereas displacement involves the progression from a higher to a lower structural level, i.e. diminution, normalization accompanies the progression from lower levels to higher ones, i.e. reduction'.[10] Schenker's own graphs demonstrate rhythmic

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[9] William Rothstein, 'Rhythmic Displacement and Rhythmic Normalization' in *Trends in Schenkerian Research*, ed. Allen Cadwallader (New York: Schirmer, 1990), 87–113, 109.

[10] Rothstein, 'Rhythm and the Theory of Structural Levels', 75, page numbers in the text will refer to this publication until otherwise stated.

normalisation. As Rothstein explains:

> Every multi-level analytical graph, if the levels are carefully aligned vertically (as Schenker's almost always are), provides invaluable and often profound insights into the rhythmic life of a composition. The normalization/displacement relationships that are immediately apparent in a multi-level graph reveal the *perceived* tension between the normal and the abnormal; in rhythmic as well as in pitch structure. (p. 75)

He continues: 'Since normalization is the reverse of displacement, any diminution that entails a rhythmic displacement will, upon reduction, require rhythmic normalization' (p. 77). On the subject of Schenker's method of notation Rothstein writes:

> Simple rhythmic displacement, such as foreground suspensions and appoggiaturas, are usually normalized without comment in Schenker's foreground graphs (*Urlinie-Tafeln*) unless they happen to be of particular motivic significance. For many other types of displacement Schenker employs a special graphic symbol, the diagonal line. A diagonal line connecting two tones (most often outer-voice tones) indicates that the tones are simultaneous at some higher level, i.e., that they derive from a vertical interval. The separation of such tones in the foreground is due to the specific demands of the diminution. (pp. 78–79)

Rothstein notes that 'Schenker's treatment of implied tones is, in a way, also a form of rhythmic normalization' (p. 84). In formalising the concept of rhythmic normalisation, Rothstein has demonstrated a further rhythmic dimension to Schenker's graphs. He explains: 'Each point in the higher-level graphs still refers to a specific rhythmic point in the foreground, thus allowing precise analysis of rhythmic displacements' (p. 100). Rothstein takes this one step further:

> *The progressive verticalization of outer-voice intervals at higher levels amounts to a basic principle of higher-level rhythm*. Although Schenker never quite states this principle as such, it operates consistently throughout his analytical work. (p. 110)

This aspect of Schenker's theory provides strong support for Rothstein's situating rhythmic analysis within a Schenkerian context.

Rothstein then deals more specifically with Schenker's writings. He states that 'Schenker proposes a new and radical theory of rhythm in tonal music, based essentially on principles of tonal rhythm' (p. 136).

In support of this assertion, he quotes from *Free Composition*:

> In the middleground every individual level has its own specific rhythm, according to the extent of its contrapuntal content. Thus rhythm, too, progresses through various transformational stages until it reaches the foreground, just as do meter and form, which also represent end-results of a progressive contrapuntal differentiation.[11]

Rothstein further elucidates Schenker's approach to rhythm and this is partially reproduced below:

> The necessity to create a balance between the tones of the linear progressions, which may differ in number, leads for the first time to an intrinsically musical *rhythm*.
>
> *The roots of musical rhythm therefore lie in counterpoint*! [...]
>
> At the later levels rhythm undergoes corresponding changes until, still anchored in counterpoint, it receives its final form in the foreground, by the addition of meter.[12]

Rothstein notes that 'Schenker's only published attempt to trace the rhythmic/metric development of a composition from the first level to the foreground is his analysis of the Menuetto from J.S. Bach's Ouverture in F Major' (p. 138).[13] Rothstein discusses this analysis, noting its potential, but concludes:

> It is unfortunate that Schenker's only published attempt at a synthetic or 'generative' rhythmic analysis (i.e., one which proceeds from higher levels to lower ones) is based on a doubtful tonal analysis. It should be stressed, however, that this fact does not invalidate the approach itself. Indeed, the 'generative' approach—including the relationship between higher-level rhythm and the rhythm of strict counterpoint—represents a fertile area for future investigation. (p. 147)

Returning to the subject of metric ordering of tonal events, Rothstein states: 'Other things being equal, four tones suggest a duple metric ordering' (p. 143). He elaborates: 'The four-bar unit, in other words, is taken as the norm for the four-note diminution' (p. 147). The four-note motif in Opus 48 No. 2 is an interesting example of this (See chapter 4).

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[11] Ibid., 136, from Schenker, *Free Composition*, 15.
[12] Ibid., from Schenker, *Free Composition*, 32.
[13] This can be found in Schenker, *Free Composition*, Fig. 138, 1.

Having been subject to both tonal development and metric displacement, the four-note descent returns at the end of the piece in metrically regular half-bar movement.

Rothstein cautions against an over-simplistic understanding of a natural metric organisation for tonal events:

> These correspondences between diminutions consisting of four tones and measure groups consisting of four bars (whether actual or ideal) are not intended to suggest that the normal metric setting of any diminution is determined by the number of tones in that diminution. It is certainly true that, other things being equal, a one-to-one correspondence between tones and pulses (whether beats or bars) creates a particularly natural sort of rhythmic flow. (p. 148)

He summarises:

> The essential point is that metric organization and diminution need not coincide. When they do not, the diminution usually adjusts rhythmically to fit the meter. Those cases in which the meter adjusts to fit the diminution are exceptional. (p. 149)

(The analysis in chapter 4 suggests that this could indeed be the case in the Nocturnes of Opus 48. They both set up a tension between the rhythm of the tonal motifs and the metre. This then becomes a specific force in structuring each piece.)

Rothstein discusses Schenker's concept of expansion and how it relates to both foreground and middleground metric prototypes (pp. 150–171). Rothstein's conclusion is noteworthy:

> It is extremely important to realize that, by granting to the middleground prototype the status of a metric phenomenon—if only implicitly—, Schenker has significantly expanded the concept of musical meter. A foreground prototype consists of one or more literally expressed measure groups or hypermeasures; but a middleground prototype is metric only at some higher level that is not literally expressed. It appears, therefore, that meter at the hypermeasure level—hypermeter—is capable of some sort of stratification into structural levels, perhaps analogously to the more familiar stratification of tonal (pitch) structure. (p. 171)

This seems to be the main focus of Rothstein's research. He states:

> The levels of tonal structure and the levels of hypermeter are indeed related. The processes of tonal content-expansion (i.e., diminution) and rhythmic expansion are analogous to a degree: however, one does not necessarily imply the other. Much, if not most, diminution occurs without rhythmic expansion; the relative rarity of

> rhythmic expansion in variation forms—which are virtually exercises in diminution technique—is a case in point. Rhythmic expansion usually, but not always, involves content expansion. Those rhythmic expansions that do not accommodate increased diminution fall into the categories of written-out *ritenuti* or written-out fermatas.
>
> The relationship between diminution and rhythmic expansion necessarily holds for their inverse processes: tonal reduction, or the reduction of lower-level progressions to underlying higher-level ones; and rhythmic reduction, or the reduction of measure groups (or hypermeasures) of lower order to those of higher order. *Rhythmic reduction* is thus not to be confused with *durational reduction*, which is a simple proportional reduction of note-values (useful as a graphic technique), or with *rhythmic diminution*, which is the traditional term for the repetition of a motive in proportionally reduced note-values. (p. 174)

Rothstein suggests that 'the correlation between tonal reduction and rhythmic reduction suggests the possibility of pursuing both simultaneously as an analytical technique' (p. 174). The techniques of rhythmic reduction and durational reduction are both used in the following analyses at points where they illuminate specific compositional issues or relationships.

Rothstein's analytical approach is fundamentally grounded in Schenkerian analysis and he specifically analyses works that Schenker has analysed previously. He cites two main reasons for this:

> First, it has been a major thesis of this dissertation that Schenker's voice-leading graphs are enormously suggestive for the analysis of rhythm in tonal music. Using those graphs as starting-points for rhythmic analyses is intended to demonstrate once more, and in a particularly concrete (one might say graphic) way, the truth of this assertion. Secondly, since rhythmic analysis depends so critically upon tonal (i.e., harmonic/contrapuntal) analysis, it is necessary first to perform a conventional 'Schenkerian analysis' of any given work, before undertaking a rhythmic analysis. The rhythmic analysis thus proceeds from the tonal analysis, which is itself full of rhythmic implications (because rhythmic criteria are used implicitly in any tonal reduction). (p. 207)

Carl Schachter's work is very closely related to that of Rothstein. His approach combines voice leading and rhythmic analysis and will be discussed in detail presently as it forms the basis of the approach adopted in this thesis.

Frank Samarotto, in an article entitled 'Strange Dimensions: Regularity and Irregularity in Deep Levels of Rhythmic Reduction' discusses the potential of a different

approach to durational reduction.[14] He begins by summarising the work of Rothstein and Schachter:

> I refer of course to the application of Schenker's theories to the analysis of rhythm, as developed by Carl Schachter and William Rothstein. The aim of this method of rhythmic reduction is to create a hierarchy of rhythm both analogous to and closely in rapport with the hierarchy of tonal structure: groups of measures are combined to form groups of hypermeasures, while their significance is evaluated in coordination with the underlying voice leading. (p. 222)

As Samarotto explains, this involves the formation of 'structure proceeding in a uniform progression from complexity to simplicity' (p. 222). He challenges the presupposition inherent in the work of Schachter that 'irregular features are resolved into regular schemata, individualities are consumed by generalities' (pp. 222–223). He prefers to demonstrate how 'the technique of rhythmic reduction can absorb, or express, some particularly significant irregular features in order to explore not *whether* but *how* models of deeper rhythmic levels can be related to the surface we experience' (p. 223). The conclusion at which Samarotto arrives is noteworthy: The foreground level is 'essential to understanding the deeper levels of hierarchy' (p. 238). He explains:

> In tonal analysis, the analogous idea might be Schenker's concept of *Fühlungnahme*, the rapport or contact among the levels, the unifying impulses that span and connect and transform each level. Schenker typically speaks of this rapport as emanating from background to foreground. It is perhaps essential to the nature of rhythmic analysis that the opposite seems to occur: immediate gestures penetrate to deeper levels and disturb their stability. (p. 238)

Samarotto's work has led to the development of his theory of temporal plasticity—a theoretical framework that was formed through the examination of temporal flexibility in Beethoven's late music.[15] This also is indebted to Schenker's theory of tonal analysis:

> I later realized that all of the elements of this framework were already implicit in Schenker's treatment of rhythm; indeed, I have chosen to present them by teasing out the individual elements from a close reading of Schenker's work on rhythm and meter. (p. vi)

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[14] Frank Samarotto, 'Strange Dimensions: Regularity and Irregularity in Deep Levels of Rhythmic Reduction', in *Schenker Studies 2*, ed. Carl Schachter & Hedi Siegel (Cambridge University Press, 1999), 222–238; subsequent page numbers refer to this publication until otherwise specified.

[15] Frank Samarotto, 'A Theory of Temporal Plasticity in Tonal Music: An Extension of the Schenkerian Approach to Rhythm with Special Reference to Beethoven's Late Music', (Ph.D. diss., City University of New York, 1999), subsequent page references in the text refer to this publication unless otherwise stated.

Samarotto begins by evaluating various approaches to rhythm that have been adopted by other writers. Many of these will be discussed later in this chapter within the context of this thesis. Samarotto advocates an approach based on Schenkerian theory. He explains that 'inherent in expansion, and in all of Schenker's approach to rhythm and meter, is an interplay of independent elements, both tonal and temporal, acting together to shape the rhythmic surface as if it were a tangible material' (p. 9). He recommends that time be

> understood as dynamically shaped by forces, as a sort of alloy forged by tonal and rhythmic tensions. My metaphor for this will be *plasticity*, and plasticity in music will be concretized by understanding aspects of the tonal and the temporal to be forces providing the musical object with its contours, dimensions and boundaries.
>
> It will be argued that it is Schenkerian analysis that allows, indeed necessarily entails, a coordination of pitch and rhythm. (p. 9)

Samarotto isolates three rhythmic elements inherent in Schenker's practice: Duration (Parallelism/Equilibrium), Foreground Diminutional Patterning, and Absolute Meter (duple ordering) (p. 29). He then isolates three of the main tonal elements involved in Schenker's approach: Pitch series (on a single structural level), Tonal Structure (*Züge*, etc.), and Tonal Hierarchy (of *Stufen*, of consonance) (p. 32). He quotes Schenker's alignment of rhythm with contrapuntal content: 'Since rhythm, like meter, is closely connected to specific contrapuntal situations, it changes from level to level'—thereby strengthening his assertion as to the fundamental relationship between tonal and rhythmic elements in Schenker's work.[16] The three rhythmic and the three tonal elements that Samarotto identifies from Schenker's own practice interact together in forming the basis of Samarotto's theory. He explains:

> It was shown in the last section that Schenker's concept of meter and rhythm results from agreement or conflict among six distinct elements. Any amount of disagreement among these elements results in a quality that I will call temporal plasticity. [...] Loosely speaking, plasticity could be described as the manipulation of musical time, manifest as aesthetic experience. (p. 40)

Samarotto follows in the footsteps of analysts such as Schachter and John Rink in that he acknowledges the intuitive element involved in any analysis:

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[16] Ibid., 34, from Schenker, *Free Composition*, 122.

> What is novel about this model is its frank acknowledgement of its interpretive stance. Tonal Structure is not assumed to be objectively inherent in a piece, but is rather the result of an informed listener's compromise between the sensuous material of music and the intellectual constructs that categorize it. (pp. 45–46)

One of the most interesting facets of Samarotto's approach is its potential to capture the experience of music as we hear or perform it. The Temporal Plasticity Framework (TPF) reflects minute changes in tension and release, in both tonal and rhythmic domains. Samarotto acknowledges, however, that

> the TPF can be cumbersome as an analytical tool. Its main purpose is to provide a theoretical background to the analyses of plasticity that inform the approach to rhythm and time presented here. (p. 81)

An example of the analytical application of the TPF was provided by Samarotto at a recent conference of the Society of Music Theory (November 2001, Philadelphia). The paper, entitled 'A Framework for Describing Temporal Plasticity in Tonal Music', was based on his thesis and included a summary of the main theoretical influences on the TPF and analytical examples. The influence of the six tonal and rhythmic elements was examined on a note-by-note level in each musical example. While this was extremely effective at portraying the full extent of tonal and rhythmic influences on our experience of the music, it is, as Samarotto acknowledges, cumbersome as a method of analysis. Its theoretical basis, however, may prove extremely fruitful for future research. As Samarotto explains:

> The two foregoing analyses employ the principles of the Temporal Plasticity Framework to reveal a complex dynamic of temporal and pitch-structural elements. This approach is perhaps cumbersome in its focus on the small scale, but this is also its strength: its ability to reintegrate the salient and vital details that constitute immediate musical experience into a picture of the whole in both rhythmic and tonal structure. More important, this picture of the whole is not one of simple unity, but a more realistic tension among manifold elements that makes up our complete temporal experience of music. (p. 103)

Samarotto's theory is different from Schenker's, not only in its structure and explicitness, but also in a fundamental temporal aspect. As he explains, 'Although Schenker celebrates the presence of a disjunctive rhythm as a motivic entity, he is not willing to forego the principle of equilibrium as a structuring force' (p. 113). He elaborates still further:

> Schenker maintains that the desire for rhythmic equilibrium is a palpable aspect of free composition. Disjunct rhythms disturb equilibrium, however slightly, and effect a kind of resistance to the musical flow, an unevenness in the musical fabric. This may be no more than a potential for disjunction, but, just as any series of tones may blossom into a motivic enlargement, a seemingly insignificant surface disjunction may become the source of a larger disruption later on. Here is where I would go beyond Schenker: rather than treating the specific rhythmic pattern itself as a motive, I consider the disjunction per se as an entity that may be compositionally developed, varied or enlarged as an essential part of music's expressive force. (p. 113)

The approach adopted in this thesis is that rhythm, like tonality, can work motivically. The following quotation outlines the reason behind Samarotto's reluctance to call rhythmic disjunction a motivic phenomenon:

> Though low-level disjunctions are ubiquitous, the effect of any one of these can be rendered compositionally significant when pitch structure is implicated as well. Ultimately the salience of any single example must be judged in the context of the whole. Like traditional motivic development, temporal disjunctions can be repeated and varied, often tending toward a [*sic*] increase in severity. However, unlike the cohesive effect of motivic repetition, disjunctions can be disruptive of the whole. (p. 116)

This thesis follows Samarotto in paying attention to rhythmic disjunction and disturbance, but it does not ignore that motifs have a rhythmic quality or indeed that rhythm itself can behave motivically. In conclusion, Samarotto summarises the potential inherent in his model:

> A unique feature of this model is its alignment of tonal and temporal elements along a spectrum of interpretedness. The aim is to reunite parameters that usually kept separate in order to recover the wholeness of musical experience and open temporal analysis to sensitive attention to salient details.
>
> One result of this perspective is that the experience of fragmentation and disunity become central to the theory, as recognized by the concepts of temporal disjunction and temporal planes. In a sense, tonal coherence and temporal diversity play antagonistic roles, acting in tension with each other. Coordinating intense disjunctions and unexpected changes of temporal planes with voice-leading sketches allows a full and complex [representation?] of this sort of musical experience to emerge. I believe that such a broader perspective is absolutely essential to a comprehension of Beethoven's later music. (pp. 253–254)

Samarotto elaborates on this interrelationship between pitch and rhythm:

> Although tonal and temporal elements can be separated as abstractions, concrete musical experience presents them to us as a unity. While the analyst must surely begin work by considering them independently, a reasonably complete picture of a piece must consider tonal structure as residing in a temporal landscape, and rhythmic structure as giving life to an organic tonality. Plasticity gives no greater weight to either. (p. 264)

Both Rothstein and Schachter situate their rhythmic analyses in the tonal domain. Their reasoning rests on the fact that most decisions regarding rhythm have strong tonal influences. In their opinion, Schenker's approach, with its implicit rhythmic information, provides the best basis upon which to carry out a rhythmic investigation—one that will combine tonal and rhythmic elements, but will be based firmly on tonal foundations. The following section focuses on Schachter's work

Carl Schachter's recently published *Unfoldings* is a collection of many of Schachter's previously published articles in the area of Schenkerian analysis.[17] Part One deals with its relationship to rhythm. Schachter begins by acknowledging the rhythmic side of Schenker's approach:

> It should be noted, however, that Schenker often took great pains to include durational values and important groupings (both of tones and measures) in his foreground graphs, and that these include a wealth of fascinating rhythmic detail. Furthermore, his middleground graphs, even those that contain no rhythmic notation, can yield much valuable insight into the larger rhythms of a composition. (p. 18)

Schachter is convinced of the necessity of situating any rhythmic examination of a piece within a Schenkerian context:

> If it is true that, in Western art music, rhythm is more dependent upon pitch than pitch upon rhythm, then to place pitch at the core of musical structure, as Schenker does, is, I think, a perfectly logical procedure. (p. 23)

Confirming his own stance, Schachter states that

> rhythm is so bound up with tonal organization that the analysis of rhythm must be compatible with our clearest and deepest insights into tonal structure. For me, Schenker's approach provides such insights more readily than any other. (p. 36)

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[17] Carl Schachter, *Unfoldings: Essays in Schenkerian Theory and Analysis*, ed. Joseph N. Straus (New York: Oxford University Press, 1999); subsequent page numbers refer to this publication until otherwise specified.

One of the reasons that Schachter places such importance on Schenkerian analysis as a basis for a rhythmic approach is evident in the following quotation:

> But surely there are other ways of achieving rhythmic emphasis than through duration alone. Other factors might well outweigh in importance the brief or long duration of a tone or a chord.
>
> One of these factors (in a broad sense also rhythmic) is *position*: where in the piece does the tone or chord occur? (p. 23)

The alignment of levels within a Schenkerian analysis reveals very important information as to position of important structural tones, as well as the amount of displacement that can be heard on the surface of the work.

Schachter cautions those who may rush towards the formation of an all-encompassing theory of rhythm:

> Although Schenker gave a great deal of attention to phrase rhythm and to the rhythmic aspects of motivic design (diminution), he did not concern himself much with the proportions of the larger sections. To be sure, the study of these proportions can be of great help in understanding some types of music. But, as Schenker himself pointed out, the matter ought not to be approached in a purely quantitative way, as if our perception of time could remain uninfluenced by the events that fill the time. (p. 28)

This last point is one of the main difficulties facing analysts who formulate a theory of rhythm. Rhythm is so bound up with tonality that a theory that focuses on rhythmic patterns alone may remain on a superficial level. It is the interaction of these elements that forms the flow of time in a piece.

> It is certainly conceivable that a future Schenker will develop a comprehensive theory of rhythm comparable in depth and scope to what Schenker achieved in the area of tonal organization.
>
> But it is also conceivable that such a theory of rhythm is not a real possibility either at present or, perhaps, at all. (p. 29)

Schachter notes that 'Komar believes that the same kind of metrical organization extends to larger musical spans. There, too, the "original" division is presumed to be into equal parts; the "background" equality, however, can be obscured by such rhythmic

transformations as extension or contraction'.[18] Schachter (in agreement with Schenker) questions the application of small-scale rhythmic grouping techniques to large-scale sections of music:

> But what principles, if any, regulate broad rhythmic movement? Are they simply those that govern rhythmic detail expressed over greater spans?
>
> It would seem that many who have written about rhythm believe the answer to the above question to be yes. This is so, I imagine, because accentual patterns do exhibit a hierarchical arrangement, at least up to a point. (p. 30)

Schachter's reticence towards such an approach rests on the complex process of interaction of musical elements that is involved in the formation of rhythm and in the interaction of rhythm with many of these elements.

The apparently circular logic involved in theories that deal with pitch and rhythm is examined by Maury Yeston and shall be discussed later. Schachter addresses this potential difficulty by maintaining that it is important to 'distinguish between *rhythm as an active force* (helping to shape tonal events) and *rhythm as resulting* from the activity of tonal elements' (p. 33). Following a brief discussion of the extended upbeat to Chopin's Etude Opus 10 No. 12, Schachter warns against an over-simplistic approach towards rhythm:

> But we must avoid premature generalizations from such examples, which may turn out to be anything but models of normal rhythmic behaviour. For very frequently—perhaps usually—the various compositional demands (melody, harmony, counterpoint, articulation, texture, dynamics, etc.) create a complex pattern with so many, possibly conflicting, emphases that no overarching structure of weak/strong or upbeat/downbeat emerges. In dealing with rhythm we must account for these conflicting emphasis; otherwise we shall arrive at an oversimplified account of large rhythmic motion. (pp. 30–31)

This view leads Schachter to isolate two main sources of musical rhythm. The first source is tonal and the second is rhythmic:

> What produces the patterned movement, the rise and fall of musical rhythm? I believe that there are two sources, one of them specifically musical, the other shared with other rhythmic phenomena. The purely musical one flows from the succession and combination of tones, *for the tonal system itself has rhythmic properties*. [...] In addition, of course, any tonal piece also reveals a complex

[18] Ibid., 34, referring to Arthur Komar, *Theory of Suspensions: A Study of Metrical and Pitch Relations in Tonal Music* (Princeton: Princeton University Press, 1971), 156.

> pattern of durations, emphases, and groupings which do not arise from the tones; this is the second aspect of musical rhythm. (pp. 36–37)

He stresses, however, that there should not be an exclusive distinction made between these two types:

> Of course the two types are related, for both consist in the patterned flow of events in time. To understand the rhythm of a piece is, essentially, to understand how they combine into a single continuum, sometimes supporting, sometimes diverging from, sometimes even contradicting one another. (p. 37)

Schachter notes that although texture, dynamics, timbre and rhythm can all influence the rhythmic design of a work (p. 40), they are not in themselves rhythmic types: 'Sometimes one of these elements will create a pattern of independent significance, one whose rate of change helps to organize the flow of time'.[19] He concludes: 'It would seem, then, that dynamic change—as well as timbral and textural—tends to articulate and clarify (or perhaps cloud) the rhythmic design of a piece, a design whose primary elements remain time and tone' (pp. 40–41).

Schachter seems to concur with Rothstein on the subject of tonal patterns and metric context. He states:

> Incidentally, many pitch structures of fundamental importance contain an odd number of elements, especially three, Such tonal patterns will frequently—indeed usually—have to adjust to a duple metrical schema [...]. These adjustments probably constitute the ultimate source for the necessity of unequal pacing in metrically patterned music. (p. 105)

Opus 48 No. 1 provides a fine example of this as its main tonal motif consists of movement to the upper neighbour and back, thus forming a tonal pattern of three notes that moves in a duple metre. Chopin plays on this contrast with the introduction of this motif in triplets and this metre is gradually woven into the texture. As Rothstein explains (discussed earlier in this chapter), it is unusual for the metric scheme to adjust to accommodate the tonal pattern. It is much more frequent that the tonal pattern fits into the metre.

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[19] Ibid., 40, also expressed by Wallace Berry, in Review of E. T. Cone, *Musical Form and Musical Performance*, in *Perspectives of New Music* 9, nos. 2–10, no. 1 (1971): 276.

The following section examines Schachter's advice on durational reduction and its employment in context of a Schenkerian approach.

Schachter quotes Anton Schindler in 1824 when he said to Beethoven, 'The extended rhythms in your works do not result from computation, but rather from the nature of the melody and not infrequently from the harmony—am I right?'[20] Here we find reinforcement for Schachter's assertion that rhythm is inextricably combined with tonal forces. This is the prime reason why he is such a strong advocate of a Schenkerian approach. Schachter's suggested analytical approach for including rhythm more explicitly within a Schenkerian context is to employ 'an analytical notation that can help to reveal connections between durational and tonal organization, at least in some types of music' (p. 54). He explains:

> This notation is based on *durational reduction* applied to and coordinated with significant structural levels of voice-leading—in other words, durational reduction combined with a reduction, in Schenker's manner, of the tonal contents. (p. 54)

In his analysis of Chopin's Prelude No. 3, Schachter notates 'the main body of the piece with an equal duration for its two parts, I indicate that its asymmetrical proportions grow out of an underlying symmetry' (p. 59). However, Schachter does not want to assume such an underlying regularity in all pieces. He states: 'I don't believe that all rhythmic and metric irregularities in tonal music necessarily derive from an underlying regularity. But some surely do' (p. 59).

Although he does not regard the Fundamental Structure as useful to a durational/rhythmic reduction of a piece, he does advocate the inclusion of the middleground: 'For one thing, details—rhythmic as well as tonal—often reveal their meaning only when perceived as part of a larger whole; to understand the foreground at all, one must take the middleground into account' (p. 56). He states that 'the pacing of middleground or background progressions may be partly determined by the rhythms of the foreground—a very frequent possibility' (p. 63). This is indeed the case in the Preludes analysed in this thesis. This view reflects Samarotto's, as outlined in 'Strange Dimensions' (quoted on page 15). Samarotto regards the foreground rhythms as capable of affecting the background and even disrupting it. Depending on one's perception, Schenker's approach to

[20] Ibid., 54, from *Beethoven's Conversation Books* (1824), Anton Schindler's hand.

pitch may be regarded conversely, that is, that the foreground emanates from the background. Jonathan Kramer notes the different perspectives that exist amongst analysts on this subject:

> My analytical procedures are reductive, not generative. There is an ongoing debate among Schenkerians (and anti-Schenkerians) over whether Schenker's methods primarily explain how a tonal work is built from a background archetype or how the background underlies a tonal piece.[21]

Kramer does not offer his own opinion as to whether Schenkerian analysis is reductive or generative. Steve Larson discusses this issue in evaluating his own method of Schenkerian graphing called 'strict use'.[22] This will be discussed towards the end of this chapter, as it is the method of graphing employed in this thesis. Larson quotes Schachter:

> But if one needs to understand the background to make sense of the foreground, one also needs to understand the foreground to make sense of the background—a seemingly hopeless impasse. Actually it's a heuristic problem that confronts people all the time and in areas far removed from musical analysis: one can grasp neither the part without the whole nor the whole without the part.[23]

As Larson states, 'Analysis (and presumably the learning of analysis) involves a constant interaction of top-down and bottom-up approaches'.[24] For the purpose of this thesis, it is most important to note that many analysts regard rhythmic structure as hierarchical and have tried to relate that to tonal levels—regardless of direction between foreground and background.

Schachter remains dubious about analytical approaches that use durational reduction to relate the background tonal structure to hierarchical rhythmic structures:

> To include the Fundamental Structure in durational graphs [...] makes little sense. To be sure, one might show the *pacing* of the structural progression in these graphs. One would first establish a 'basic duration' for the piece, that is, the number of measures it would contain without expansions (or elisions) that belong to the middleground or foreground. (If the piece is short and clearly articulated, we do, I think, measure its flow against such a basic duration, though not usually in a fully

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[21] Jonathan Kramer, *The Time of Music: New Meanings, New Temporalities, New Listening Strategies* (New York: Schirmer, 1988), 430 n. 3.
[22] Steve Larson, 'Strict Use of Analytic Notation', in *Journal of Music Theory Pedagogy* 10 (1996): 37–77.
[23] Ibid., 59, from Carl Schachter's 'A Commentary on Schenker's *Free Composition*', *Journal of Music Theory* 25, no. 1 (1982): 115–142, 132.
[24] Ibid.

> conscious way.) We could then coordinate the structural progression with this basic duration.
>
> But to do so would be misleading, for the basic duration takes on meaning, only in relation to the groupings of measure and to the form.[25]

The deepest level at which Schachter relates temporal structure to tonal structure is the middleground level. He provides an example of the problems inherent in trying to analyse the rhythm of the background tonal level of a piece and concludes:

> Since the form of a piece always relates to the prolongation, segmentation, or repetition of its structure and never simply to the structure itself, we can safely assume that we would find similar difficulty in applying durational proportion to the background level of any piece. (p. 75)

Schachter isolates some disadvantages inherent in carrying out a durational reduction. These include the fact that 'the rhythmic notation makes it more difficult to show structural levels and, in general, makes the voice leading harder to perceive' (p. 76). Another, less severe difficulty lies in the fact that 'the reduced durations suggest a tempo several times faster than the real one, and, consequently, produce a distorted picture' (p. 76). Finally, he notes that the 'smaller details of rhythm, those at the most immediate level of foreground, do not show up at all in these reductions' (p. 76). Larson, in his durational reduction of Bach's two-part invention in C major, notes that 'the need to preserve some of the underlying rhythmic character of the foreground in successive reductions adds a difficulty to making durational reductions that is not encountered in making voice-leading graphs'.[26]

Schachter's solution to including durational reductions in analyses is

> to use the durational reductions only where they reveal important features of the piece more clearly than other methods would. And, where necessary, to offset their deficiencies by using them together with voice-leading graphs. The rhythmic reductions will probably prove most useful as an adjunct to graphs of the voice-leading and harmony, used to clarify some otherwise obscure aspect of the rhythmic organization.[27]

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[25] Schachter, *Unfoldings*, 74, subsequent page numbers in the text refer to this publication.
[26] Steve Larson, 'On Analysis and Performance: The contribution of Durational Reduction to the Performance of JS Bach's Two-part Invention in C major', *In Theory Only* 7, no. 1 (1983): 31–45.
[27] Schachter, *Unfoldings*, 76.

That solution is used in this thesis. Schachter's work is firmly based on that of Schenker. His analytical approach begins with Schenkerian analysis and incorporates durational and rhythmic reductions where they illuminate interesting connections or unusual aspects of the piece. He discusses grouping under the same criteria. (Theories of grouping will be discussed presently.) Schachter's approach to grouping is usually based on harmonic or tonal movement (for example, stepwise motion and leaps) or he identifies rhythmic or tonal patterns that define groups. His use of grouping, though often based on intuition, is seldom controversial, and can be explained by many of the existing theories (both methodological and psychological) in this area. One of the main strengths of Schachter's methodology rests on the fact that it is sufficiently flexible to deal with pieces on the basis of their individual characters. This is evident in his use of Schenkerian graphing and in his use of rhythmic analysis. Both of these analytical techniques are used throughout Schachter's work as tools to illuminate the narrative of each piece and to highlight specific individual characteristics that are important to the analyst, the listener, and the performer alike.

### 2.4 Schenkerian Analysis and Interpretation

Schachter briefly remarks on another aspect of Schenkerian analysis that has been neglected until quite recently, that is, its potential interpretive value to performance. Schachter states:

> Then there's the study of Schenker and performance, something which was a major preoccupation of Schenker himself, but which none of his followers until very recently have addressed themselves to very much. Building a bridge between performing musicians and analytical work is, I think, a very important thing, not easy to achieve, but something worthwhile achieving.[28]

Schachter's introduction to the Dover edition of Beethoven's piano sonatas (1975) offers an explanation of Schenker's edition of the same, including such elements as fingering. In a paper read at the 1997 Music Analysis Conference in Cambridge, England entitled 'Playing What the Composer Didn't Write', Schachter refers to the analytical and rhythmic aspects of performance. He explains that notation is three-dimensional, in the sense that it

[28] Ibid., 8.

hides more than it shows or tells, and he uses Schenkerian analysis to delve behind it. He warns that a performance should not turn into a lecture—that ultimately intuition leads to analytical choices.

Steve Larson and Cynthia Folio address the issue of intuition in analysis in their review of Wallace Berry's work:

> Another problem is that Berry defines 'intuition' (as a type of understanding that is based on experience and that is difficult to verbalize) and 'analysis' (as systematic, rational thought that can be verbally articulated) in such a way that they exclude each other. Berry says his book is not concerned with intuitive insights. [...] It seems better to distinguish 'rational' and 'intuitive'—remembering that the line between them is not sharp (in fact, the terms represent poles of a continuum). 'Rational' and 'intuitive' distinguish different ways of understanding the same things, not different types of relationships to be understood. Analysis—like performance—has both intuitive and rational aspects. But Berry's distinction seems to imply that analysis does not have an intuitive component.[29]

In 'Twentieth-Century Analysis and Mozart Performance', Schachter says, 'Every analysis is a kind of conceptualized performance and every performance embodies an implicit analysis'.[30]

Schenkerian analysis has much to offer those who wish to delve deeper into understanding a piece of music. It reveals connections and raises performance questions that may not otherwise be noticed. Nicholas Cook suggests that Schenkerian analysis can act as a guide with which we can experience music more fully:

> The Schenkerian method provides such guidance by suggesting initial questions, such as how the music is experienced as directed motion, and by means of a graphic technique that poses these questions in an increasingly refined and searching form. A Schenkerian graph not only expresses an analytical interpretation: it also constitutes a way of arriving at the interpretation, and an argument for its validity. It constantly refers you to the score, so as to check a particular motion against your experience of the passage or to see how it is confirmed by rhythm, phrasing and other means of articulation.[31]

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[29] Steve Larson and Cynthia Folio, Review of *Musical Structure and Performance* by Wallace Berry, (New Haven and London: Yale University Press, 1989) in *Journal of Music Theory* 35 (1991): 298–309, 301.
[30] Carl Schachter, 'Twentieth-Century Analysis and Mozart Performance', in *Early Music* 19, no. 4 (1991): 620–626, 620.
[31] Nicholas Cook, *A Guide to Musical Analysis* (Oxford: Oxford University Press, 1987; reprint 1996), 114.

Leslie Blasius, in *Schenker's Argument and the Claims of Music Theory*, explains Schenker's position:

> Under his regime the score is replete and the performer is overtly asked for nothing beyond fidelity to the text. He does not relinquish the substantive notion of performance, however; he does not simply assume a textual transparency. Rather, he situates this performance (or the dynamics of this performance—such as precession and recession) within the text itself.[32]

He continues:

> Schenker's insistence on fidelity to the text cannot be taken as a prescription for erasing the performer, as a means of problematizing performance, or as a rejection of the transcendent performance, but as a reintegration of the fractured economy holding amongst composer, editor and performer (assumed by his contemporaries). (p. 47)

Schenker explains in *Free Composition* that

> a performance, in serving background, middleground and foreground can employ the greatest variety of color. Even the richest and most varied resources of performance can be taught—and learned—with great exactness. On the other hand, commitment to background, middleground and foreground excludes all arbitrary personal interpretation.[33]

Rothstein notes Schenker's advice that 'performance must come from within the work; the work must breathe from its own lungs—from the linear progressions, neighboring tones, chromatic tones, modulations…About these, naturally, there cannot exist different interpretations'.[34] Rothstein concludes: 'For Schenker, the performance of a masterwork (and only a masterwork) is an objective and inevitable result of its *structure*'.[35]

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[32] Leslie David Blasius, *Schenker's Argument and the Claims of Music Theory* (Cambridge: Cambridge University Press, 1996), 45.
[33] Schenker, *Free Composition,* xxiii.
[34] William Rothstein, 'Heinrich Schenker as an Interpreter of Beethoven's Piano Sonatas', trans. William Rothstein, *19th-century Music* 8, no. 1 (summer 1984): 2–28, 10.
[35] Ibid., 5.

In 'Analysis and the Act of Performance', Rothstein quotes Schenker as saying, 'Every true work of art has but one true performance, its own particular to it'.[36] However, Rothstein concludes that performance is not an '*explication du texte*', and that Schenker was mistaken, that there are many 'true' performances.[37] Jennifer Tong notes, however, that 'Schenker seems decidedly against prescribing manners of performance for performers'.[38]

> While he insists on an intimate connection between structure and the translation of it into auditory terms in performance, he refuses to concede that identifying structural functions has anything directly to do with how each part should be played.[39]

She continues:

> According to him, there is no one and only correct way of playing a piece, but there is only one correct position to assume concerning performance—namely, performance must elucidate structure, where 'structure' means the *Urlinie* and its expression.[40]

Snarrenberg explains that 'Schenker's interpretive practice rests on the hypothesis that an authentic specification of the musical artwork's tonal arrangements (a score) expresses the means for realising the effects intended by the composer'.[41] Snarrenberg points out that 'Schenker is clearly interested in restricting interpretations to what is demonstrable, namely, to the interests synthesised by the composer' (p. 103). In response to criticisms of analysis on the basis of being too scientific or objective for the study of an artwork, Schenker said: 'Not even the nature of man, for example, as a whole mysteriously woven together out of a thousand-fold forces, is in any way neutralised by the fact that knowledge of it can only be obtained by studies of its particular aspects (for example

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[36] William Rothstein, 'Analysis and the Act of Performance', in *The Practice of performance: Studies in Musical Interpretation*, ed. John Rink (Cambridge: Cambridge University Press, 1995), 217–240, 217, trans. Rothstein, from Schenker's 'Entwurf einer "Lehre vom Vortrag"', compiled by Oswald Jonas from Schenker's unpublished notes; Oswald Memorial Collection, University of California at Riverside, 32.
[37] Ibid., 238.
[38] Chee Yee Jennifer Tong, 'Separate Discourses: A Study of Performance and Analysis', (Ph.D. diss., University of Southampton, 1995), 67.
[39] Ibid., 68.
[40] Ibid.
[41] Snarrenberg, *Schenker's Interpretive Practice*, 8; subsequent references to Snarrenberg refer to this publication.

anatomy, physiology etc.)'.[42] Indeed, according to Salzer, Schenker once labelled his theory among other things as 'a securing of instinct'.[43]

Snarrenberg notes:

> For more than a century, training in the discipline of species counterpoint and in the particular arts of figured bass and improvisation had apparently been sufficient to train the greatest composers and performers. What made a practice such as this necessary, in his mind, was a serious breakdown in the process of cultural transmission. (p. 144)

Snarrenberg explains that 'Schenker's reform of musical culture, then, was to begin with those who were most directly connected to the transmission of the art from one person to another, the performers' (p. 145). Snarrenberg quotes Schenker's feelings on performers:

> They do not pay attention to the fact that the notational signs in reality conceal more than they reveal and that strictly speaking even nowadays the signs mean scarcely more than mere neumes, behind which a world all its own looms deep and wide, a true nether side, as it were, of the artist's soul.[44]

(Hence Schachter's reference to the notion of a three-dimensional notation.) Schenker believed that there was only one true interpretation but, according to Snarrenberg,

> this does not mean that he denied the interpretive conflicts that arise from an event having different effects that are on the face of it incompatible but in fact arise from situating the event in different contexts [...]. What Schenker denied on the whole are ambiguities of effect within a single context. An obvious case is the Urlinie of an entire work. (p. 153)

He concludes that Schenker's interpretive practice is 'not just the appropriation of analytical understanding, but, beyond that, the synthesis of that understanding in musical experience' (p. 134).

Ian Bent notes that 'tones, and their formations, are in a very real sense the

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[42] Snarrenberg, *Schenker's Interpretive Practice*, 105 quoting from Heinrich Schenker, *Beethoven: Die Letzen Sonaten, Sonata A dur Op. 101: Kritische* Einführung und Erläuterung, ed. Oswald Jonas, 2nd ed. (1921; Vienna: Universal Edition, 1972), 8.

[43] Ibid., 139 quoting Felix Salzer, 'Die historische Sendung Heinrich Schenkers', in *Der Dreiklang* 1 (1937): 9.

[44] Ibid., 145 quoting from Heinrich Schenker, *Counterpoint*, vol. 2 of *New Musical Theories and Fantasies*, book 1: *Cantus Firmus and Two-Voice Counterpoint*, trans. John Rothgeb and Jürgen Thym, ed. John Rothgeb (New York: Schirmer, 1987), xviii.

"characters" of Schenker's narrative'.[45] Indeed Schenker often used dramatic analogies and these can prove to be of great benefit to performers. Cynthia Folio, in 'Analysis and Performance: A Study in *Contrasts*', discusses Janet Schmalfeldt's dramatic approach to analysis. She describes her mode of analysis as one 'with the most appeal and value to performers [...] which presents a *dramatic* view of formal and motivic processes'.[46] Schmalfeldt explains it thus:

> The Analyst's interpretation of formal structure in terms of dramatic action attempts to capture the active, diachronic experience of the performer. And though the metaphor of rivalry and ultimate confrontation of ideas may seem highly subjective, it speaks directly to the performer's need to find the character of the work within its structure.[47]

Folio describes musical plots and events through analysis and regards this approach as more helpful to performers: 'Given a purely musical "storyline", the performers can project this story in a live performance and more easily merge the analysis with intuition, emotion, and other subjective qualities'.[48]

Burkhart's article entitled 'Schenker's Theory of Levels and Musical Performance' in Beach's *Aspects of Schenkerian Theory* explains how Schenker's work 'provided the performer with valuable objective information applicable to performance, thereby decreasing the performer's need to rely on guesswork and personal fancy'.[49] He clarifies that 'by no means did he ignore the *intuitive* side of performing, but in his writings he focused on the objective side'.[50] Many writers on the subject of analysis and performance have been criticised due to the non-application of all of their analytical findings to performance. Regarding Berry's use of analysis, for instance, Larson and Folio note that 'the reader is exposed to numerous analytic observations that do not lead to significant or interesting interpretive interventions. In fact, after many exhaustive (and exhausting)

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[45] Ian Bent, 'History of Music Theory: Margin or Center?', in *Theoria* 6 (1992): 13–14 quoted in Snarrenberg, *Schenker's Interpretive Practice*, 69.
[46] Cynthia J. Folio, 'Analysis and Performance: A Study in *Contrasts*', in *Intégral* 7 (1993): 1–37, 1, in reference to Janet Schmalfeldt, 'On the Relation of Analysis to Performance: Beethoven's Bagatelles Op. 126, Nos. 2 and 6', in *Journal of Music Theory* 29, no. 1 (1985): 1–32.
[47] Ibid., 1–2, quoting from Schmalfeldt, 'On the Relation of Analysis to Performance', 18.
[48] Ibid., 36–37.
[49] Charles Burkhart, 'Schenker's Theory of Levels and Musical Performance', in *Aspects of Schenkerian Theory*, ed. David Beach (New Haven: Yale University Press, 1983), 95–112, 96.
[50] Ibid.

analyses, Berry often concludes that the best interpretive decision is to not intervene'.[51] In Burkhart's view, however, not every analytical finding must have a direct translation in performance terms. Yet, he continues in a way that suggests that such findings remain valuable to performers. Burkhart asks, 'Will not this awareness if ever so subtly influence the way the performer shapes the large dimensions of the composition?'[52] Burkhart views the role of the Background, one of the most alienating aspects of Schenker's theory for performers, as having the most significant effect on a performance. On this subject Schenker stated that 'it is improper to expressly pursue the *Urlinie* in performance and to single out its tones…for the purpose of communicating the *Urlinie* to the listener'. Rather, 'for the performer, the *Urlinie* provides, first of all, a sense of direction. It seems a somewhat equivalent function to that which a road map serves for a mountain climber'.[53] As Burkhart explains:

> Only when he is aware of the 'main' tones can he perceive the diminution and perform them in the light of the main tones. When he does so, the surface will benefit, but not only the surface, because proportioning the small with respect to the large has a way of projecting an impression of the large as well. In this sense the background also is 'performed'—the 'long line' conveyed.
>
> […] A responsible theory does not seek to substitute principle for intuition, but to confirm intuition with the help of principle—to 'improve opinion with knowledge' in Samuel Johnson's phrase. But some principles take us further: They can make the mind aware of dimensions that have not hitherto been perceived—not even intuitively. Such is Schenker's theory. It can provide the performer with insights not available by other means. It offers no magic formulas, but it can help a good performer become even better.[54]

A Schenkerian analysis of a work will not tell the performer how to perform it. It will, however, raise interpretive questions that the performer can then address. As John Rink states:

> Just because a given motif is found throughout a work or set of pieces does not mean that the performer should necessarily *do* anything about it: trying to project motivic unity in sound by 'bringing out' all the motivic connections that inhere in a

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[51] Larson and Folio, Review of *Musical Structure and Performance* by Wallace Berry, 302.
[52] Burkhart, 'Schenker's Theory of Levels and Musical Performance', 104.
[53] Burkhart, 'Schenker's Theory of Levels and Musical Performance', 107, from *Das Meisterwerk in der Musik* 1:196, trans. Sylvan Kalib in 'Thirteen Essays from the Three Yearbooks *Das Meisterwerk in der Musik* by Heinrich Schenker: An Annotated Translation' (Ann Arbor: University Microfilms, 1973).
[54] Ibid., 112.

> 'unified' work would result in an absurd distortion of the music.[55]

In this article on Brahm's *Fantasien* Opus 116, Rink demonstrates the importance to the performer of a combination of his Schenkerian approach with rhythmic analysis. He writes:

> What is of undeniable importance to the performer, however, is an aspect of Op. 116's motivic unity virtually ignored by most analysts: *the actualisation in time of the principal motifs*—in other words, *their contexts in the music's unfolding narrative*. [...] Insofar as one can make such a statement without lapsing into the insidious 'language of exigency' employed in much analysis-and-performance literature, I would claim that the performer's chief responsibility in interpreting this multi-piece is to grasp and somehow articulate in performance the intraopus rhythmic 'system' devised by Brahms, for an understanding of rhythm (in the broadest sense) lies at the heart of convincing interpretation.[56]

Schenker's *The Art of Performance* gives concrete examples of possible performance implications of his analyses.[57] These include suggestions regarding dynamics, *legato* and *staccato* accentuation, pedalling, fingering, and tempo modifications. In some of his earlier writings, Schenker asserts that dynamics function in structural levels:

> In my forthcoming treatise, 'The Art of Performance', it will be systematically shown for the first time that dynamics, like voice-leading and diminution, are organized according to structural levels, genealogically as it were.[58]

But the relationship between dynamics and structure is complicated. Larson addresses the idea of dynamics and levels in his article 'On Analysis and Performance: The Contribution of Durational Reduction to the Performance of J. S. Bach's Two-part Invention in C major'. He explains:

> Choosing dynamics on the basis of a reductive analysis demonstrates the complex way in which analysis influences performance. The emphasis given to a note is not greater merely because that note appears on more background levels of structure.

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[55] John Rink, 'Playing in Time: Rhythm, metre and tempo in Brahm's *Fantasien* Op. 116', in *The Practice of performance: Studies in Musical Interpretation*, ed. John Rink (Cambridge: Cambridge University Press, 1995), 254–282, 256.
[56] Ibid.
[57] Heinrich Schenker, *The Art of Performance*, trans. Irene Schreier Scott, ed. Heribert Esser (New York: Oxford University Press, 2000).
[58] Ibid., xv quoting from Heinrich Schenker, *The Masterwork in Music: A Yearbook, vol.1* (1925), ed. Ian Bent, Cambridge Studies in Music Theory and Analysis (Cambridge: Cambridge University Press, 1994), 37.

> While meter will often function this way (more background attack points have greater metric significance in the foreground), melody may not. [...] One does not try merely to bring out more background levels, but decides what emphasis to give certain notes by feeling the dynamic way in which they shape the tonal space defined by more background levels. It is in feeling the relationship between levels (rather than merely identifying the levels) that the performer learns something of value from analysis.[59]

While Schenkerian analysis has been widely acknowledged as being of benefit to performers, a Schenkerian approach is apparently particularly suited to the way in which Chopin's compositions unfold. The pianist Murray Perahia, in an interview for the New York Times in 1994, is quoted as saying:

> I've always been interested in singing line, counterpoint, the mixing of lines, and I instinctively felt that theory should be the basis of music...Schenker's theory was the only one that I felt took account of line—the long lines that hold the pieces together so that the details can add up. But the key is, that for Schenker it's the ear, not the mind, that's the guiding principle...Schenker is a framework that I keep in the back of my mind, although with Chopin, it's more in the foreground. I feel I become more free, not less, when I'm aware of these structures because I get away from the pedantry of measure-by-measure and into something bigger.[60]

### 2.5 Theories of Rhythm

The growing body of literature on rhythm—by Grosvener Cooper and Leonard Meyer, Wallace Berry, Fred Lerdahl and Ray Jackendoff, Maury Yeston, Jonathan Kramer, Joel Lester, David Epstein, John Rink, Christopher Hasty, and Harald Krebs—draws heavily on Schenker's ideas.

*The Rhythmic Structure of Music* by Grosvener Cooper and Leonard Meyer sets forth a theory of rhythm that uses 'architectonic levels' to describe rhythmic layers.[61] This is highly suggestive of the hierarchic system characteristic of Schenkerian analysis. On the subject of grouping, these authors suggest that

> rhythmic grouping is a mental fact, not a physical one. There are no hard and fast rules for calculating what in any particular instance the grouping is. Sensitive, well-

[59] Larson, 'On Analysis and Performance: The Contribution of Durational Reduction to the Performance of J. S. Bach's Two-part Invention in C major', 44–45 n. 8.
[60] Murray Perahia, 'Arts and Leisure', *New York Times*, 3 April 1994, partially quoted in Alexandra Pierce, 'Developing Schenkerian Hearing and Performing', *Intégral* 8 (1994): 51–123, 55–56.
[61] Grosvener Cooper and Leonard B. Meyer, *The Rhythmic Structure of Music* (Chicago: The University of Chicago Press, 1960); subsequent page numbers in the text refer to this publication until otherwise stated.

> trained musicians may differ. Indeed, it is this that makes performance an art—that makes different phrasings and different interpretations of a piece of music possible. Furthermore, grouping may at times be purposefully ambiguous and must be thus understood rather than forced into a clear decisive pattern. In brief, the interpretation of music—and this is what analysis should be—is an art requiring experience, understanding, and sensitivity. (p. 9)

One of the most fascinating aspects of rhythmic analysis is its importance to the interpretation of the music in performance. As Cooper and Meyer explain:

> An understanding of rhythm is as important to the performer as it is to the composer and to the theorist. Indeed, as will be apparent throughout this book, a considerable part of what is usually called 'interpretation' depends upon the performer's sensitivity to and awareness of rhythmic structure. (p. 1)

Cooper and Meyer, in accordance with Schachter, recognise and acknowledge the undeniable fact that analysis necessarily involves intuition—hence their reluctance to impose a series of strict rules on grouping. They do use specific definitions for specific rhythms based on prosody but they also acknowledge the possibility that it may not be possible to define a rhythm in certain contexts:

> Now the reader may ask: if I have a choice—if I can interpret the rhythm of a tune as an anapest, an amphibrach, or a dactyl—how do I decide which way it *should* be performed? What is the correct way? In the light of what has just been said, the answer in this case would seem to be that the passage should not be decisively 'interpreted' as any particular grouping. However [...] groupings are nonetheless possible and necessary. (pp. 34–35)

Cooper and Meyer do not ignore the fundamental relationship between rhythm and all other aspects of composition: 'Dynamics, texture, orchestration, and character, as well as melody and harmony, can play important parts in the analysis of rhythm. Indeed, a satisfactory rhythmic analysis can be said in some sense to summarize the effects of these factors' (p. 123).

Cooper and Meyer discuss the relationship of rhythmic patterns to larger-level form in great detail. They question to what extent larger-level sections, or even the form of a piece, can be related to rhythm:

> Let us say that a musical theme is articulated into three parts, two measures, two measures, and four measures in length, respectively. We are talking about the phrasing of the theme. Are we also talking about rhythm? Or let us say that a whole piece or movement is articulated into four parts which, traditionally, we label A A B A. We are talking about the form of the piece or movement. Are we also talking about rhythm? (p. 144)

The results of their analyses conclude that in certain cases the form of a piece acts like a rhythm and in others it does not:

> We must conclude that a form *may* be a rhythm, but that no form is *necessarily* a rhythm. [...] It is often the case with important insights into the nature of music that one can easily go astray by denying their validity because they are found not to be universally true. It is much more likely that they are part of an as yet undiscovered, more comprehensive truth. (p. 146)

One of the pieces analysed that does demonstrate this characteristic is Chopin's Prelude in E♭. The form of this piece is found to be an amphibrach—a reflection of the main rhythmic material of the surface. The Preludes provide a rich field of investigation in this area due to their brevity and homogeneity. Cooper and Meyer ask, 'But suppose rhythms are more varied? Suppose the lengths of the groups are not compatible with the number of pulses in a measure? How will phrasing and other aspects of form fit with rhythm then?' (p. 153) In order to answer this question, the authors examine the first movement of Beethoven's Symphony No. 8. They conclude that 'the continuity in this movement is less dependent upon low-level rhythm than was the case in the Chopin Prelude' (p. 160).

The Preludes analysed in this thesis all exhibit this feature. Surface rhythms are reflected in the background form. In the context of this thesis, however, they are regarded as rhythmic hidden repetitions in the manner of Schenkerian motivic hidden repetitions, and function in the same manner. This is not the case in many of the larger works examined—the background forms in these cases are indeed 'less dependent upon low-level rhythm'.

Cooper and Meyer discuss the strategy of rhythmic development. They use an excerpt from Brahms' Symphony No. 3 to demonstrate how 'both rhythmic ambiguity and the ultimate removal of that ambiguity through development are part of the character of the music' (p. 171). Further examples of this can be found in both of Chopin's Opus 48 Nocturnes and in the Barcarolle.

Although Cooper and Meyer place primary importance on rhythm in this book, they acknowledge the interrelationship between rhythmic and tonal forces in moulding the narrative of a piece:

> As movement of all kinds, especially melodic and harmonic movement, beginning on the lowest architectonic level, grows into larger and larger spans of time with cumulative effect, the shape of a piece—its tonal configuration in time—gradually emerges. And it is this shape, on all its levels of movement, which is the object of the art which we call 'analysis'. [...]
>
> Rhythmic structure is, of course, only one aspect of this shape. (p. 182)

Fred Lerdahl and Ray Jackendoff promote a rule-driven system of Schenkerian analysis that groups the surface of the music according to rhythmic patterns.[62] They differentiate between grouping structure—which 'consists of *units* organized hierarchically', and metrical structure—which 'consists of *beats* organized hierarchically' (p. 25). The extent to which these coincide or conflict is important: 'Generally, the degree to which grouping and meter are in and out of phase is a highly important rhythmic feature of a musical passage' (p. 30). They explain that 'groups and their structural accents stand with respect to meter in a counterpoint of structures that underlies much of the rhythmic richness in tonal music' (p. 34). Lerdahl and Jackendoff do not believe that metre can be perceived on larger levels, stating that its perception is 'so hypothetical that it would seem wise to give up the attempt altogether' (p. 25). They note the significance of rhythmic analysis to performers: 'The perception of grouping is one of the more important variables the performer can manipulate in projecting a particular conception of a piece' (p. 63). Lerdahl and Jackendoff formalised grouping by investigating the psychological principles involved in listening and perceiving music. In this way they provided a basis for further development of grouping theories.

Jonathan Kramer in *The Time of Music* provides a fascinating overview of recent rhythmic theories.[63] Following a detailed analysis of this research, Kramer states:

> Like most of the theorists cited in this chapter, I believe that accents and hence rhythm can be influenced, if not created, through performance. Cooper and Meyer's book is particularly useful concerning how performance emphasis can

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[62] Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music* (Cambridge, Mass.: MIT Press, 1983); subsequent page numbers refer to this publication until otherwise specified.
[63] Kramer, *The Time of Music*, Chapter 4, 81–122.

> affect rhythmic grouping, especially on the foreground. Furthermore, some of the psychologists mentioned here [...] are beginning to understand the ways in which performers interpret and project accents, rhythms, and meters.[64]

Kramer has a view of metre that is hierarchical. He disagrees with Lerdahl and Jackendoff, stating that he believes that 'we hear on deeper levels as well, up to that of entire movements', and that he would 'defend the experience of metrically accented timepoints as quite real at deep levels and as independent of rhythmic accents'.[65] Kramer seems in accord with Rothstein. He states:

> The usual reason given why meter is not deeply hierarchic is that it is by definition periodic, while in most music metric accents are not evenly spaced on deep levels. I believe, on the contrary, that in many cases deep-level metric accents *are* evenly spaced, if by 'evenly spaced' we mean having the same number of intervening weaker beats. Therefore, meter can be understood on all levels as fundamentally regular, but with frequent irregularities. And meter can be understood as deeply hierarchic, because the introduction of irregularities on one level does not necessarily destroy the fundamental regularity of deeper levels.[66]

Joel Lester, on the other hand, rejects the notion of a possible larger-level application of metre:

> For any given passage, there is a level above which a hypermeter is not definitively established. Either because the primary meter-causing factors (harmonic change, durational accents, and textural accents) do not operate at that level, or because there is no regular pulse, a hypermeter cannot be unambiguously asserted.[67]

This is discussed in more detail below. Lester believes that increased understanding of the rhythmic structure of a piece is extremely beneficial to both performers and listeners. In discussing hypermetre and performance, he writes:

> Questions concerning the presence, absence, or nature of hypermeter in a given passage are not of purely academic concern. How a performer projects a passage and how a listener perceives and understands that performance depend to a not insignificant extent on the issues discussed in this chapter. A person's understanding of the rhythms of a passage bears on the shaping of the musical

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[64] Ibid., 121.
[65] Ibid., 117.
[66] Ibid., 102.
[67] Joel Lester, *The Rhythms of Tonal Music* (Carbondale, Ill.: Southern Illinois University Press, 1986), 161; subsequent page numbers in the text refer to this publication until otherwise stated.

> gestures in that passage and consequently can affect such diverse aspects of performance as tone color, articulation, dynamics, rubato, and even such intangibles as lyricism and musical energy. (p. 192)

Lester finds multiple metric meanings within larger levels of hypermetre and this extends to the communication of rhythm in performance. He warns analysts against an 'absolutist' approach to this subject:

> All too often we hear theorists complaining that performers—students and professionals alike—are oblivious to theoretical perspectives. And those theorists who are also performers soon learn not to speak 'theoretese' to make a point at rehearsals. Some of the reluctance of performers to pursue theoretical considerations may be attributed to ignorance. But a not insignificant aspect is the reluctance of performers to follow absolutist approaches to issues that performers know are not one-sided. Rhythm, as discussed in chapter 1, is a composite of many aspects: durational patterns, composite rhythm, the rhythms of textural changes and harmonic changes, the pacing of motives, accentuation, meter, articulation, continuity, grouping, and increases and decreases in activity in any of these aspects. As demonstrated in several analyses in this chapter, it is the composite of the many different rhythms in a given passage that opens up the range of performance possibilities of that passage. By exploring the interaction of all these factors, theorists will be better able to relate to the concerns of performers. (p. 194)

Lester notes that Schenker's theory contains certain implicit rhythmic aspects and has been highly influential to recent developments in rhythmic theory. He argues, however, that, 'Schenker's writings do not include a comprehensive, explicit approach to musical rhythm. Thus, it is not surprising that several of the recent studies on rhythm explore ways to relate layer analysis and rhythmic structure' (p. 195). Nevertheless Lester remains sceptical about such approaches because he does not regard metre as important at higher levels, due partly to the fact that he believes it to be irregular or ambiguous at larger levels, and due to the difficulty involved in its perception. He states:

> Komar, as well as many other writers on rhythm, bases his theory on the analogy of Schenker's levels of pitch structure. But pitch and rhythm are not of the same nature, and what works well for the pitch aspects of tonality may not work as well or, indeed, may not work at all for rhythm. The crucial problem in treating rhythm like pitch is the relation between levels of structure. (p. 207)

While Lester rejects the rationale behind a hierarchical theory of rhythmic structure, he believes that a Schenkerian approach reveals important rhythmic information:

> Linear analysis is a powerful analytical method for tonal music, revealing, in addition to the obvious pitch and motivic structures, a great deal of information about the rhythms of a piece: the ordering of events, the relationships among events at the same levels and between different levels of structure (local and long-range events), patterns of repetition (motivic structure), the placement of goals and/or motions leading to those goals on many levels of structure, and so forth. These facets are displayed whether or not the analysis utilizes specific rhythmic and metric notations at some or all levels. [...] it may well be that traditional methods of notating hierarchic analyses are as well or better suited to reveal rhythm than more metrically notated analyses. (pp. 216–217)

Lester's reservations seem to be addressed by an approach such as Schachter's—one that is primarily Schenkerian, but also incorporates rhythmic analysis when it illuminates specific aspects of the piece.

As mentioned above, Lester is sceptical about the existence of deeper levels of metric structure. His rationale is based on how a listener infers metre from clues such as accentuation. He offers three reasons as to why larger levels of metric structure (such as the phrase level) cannot be compared to surface metre:

> First, accents within a measure both recede from the preceding downbeat and also lead toward the following downbeat; such is not the case with the accentual status of measures within a phrase. Second, phrases are discrete musical thoughts, ending with a cadence and a breath that separates them from the following music. Measures are, by and large, not separate units; within a phrase they often lead directly to the following measure. Third, the accentual status of beats in a measure arises from predictably repetitious patterning. Since phrase lengths generally do not remain the same throughout most tonal pieces, there is no equivalent patterning on the phrase level. (p. 163)

However Lester's reluctance to acknowledge larger levels of metric structure lies mainly in the fact that they cannot be perceived by a listener:

> Even when there is a demonstrably regular hypermetric structure several levels above the primary metric level, the question remains of how this large-scale regularity is perceived. Meter is the grouping of pulses. We, as listeners, internalize perceived pulses, whether or not we actually tap a foot or move physically to the music. At some level, units simply become too long to be perceived as single pulses awaiting a higher level of grouping. (p. 168)

This belief is similar to that held by Lerdahl and Jackendoff. As previously noted above (p. 37), they also reject the possibility of the existence of larger levels of metric structure on the basis that their perception is largely hypothetical.[68] On the other hand, to requote Kramer, he supports the idea of deeper-level metre because 'we hear on deeper levels as well, up to that of entire movements'.[69]

Lester, and Lerdahl and Jackendoff on one side of the argument, and Kramer on the other, all fail to distinguish between hypermetre as a theoretical construct and our ability to perceive it in a given performance. If we examine Larson's work on prolongational structure and structural hearing and apply it to metre, we can set forth an analogous idea in the rhythmic domain.[70] Larson explains that 'association' occurs when 'a relation of *sameness*, *similarity*, or *successorship* exists between two events'.[71] He stipulates, however, that

> the mere existence of an association does not necessarily guarantee that it will be perceived. The act of *hearing* a passage of music as containing an association I call 'associative hearing'.
>
> Prolongation is also a particular kind of association: it is an association between events at different hierarchical levels. [...] The act of *hearing* a passage of music *as* containing a prolongation I call (after Salzer 1952) 'structural hearing'. Accordingly, Schenker's term *Fernhören* means global structural hearing. These terms suggest a fruitful way of refocusing debates concerning the relation of Schenkerian analysis to the experience of listeners.[72]

Insistence on perceptibility as a condition of existence of the *Ursatz* would pose serious problems. A listener might be able to hear the background level of a 16-bar piece, whereas it may be impossible to perceive the *Ursatz* of a longer work. Does this mean that the *Ursatz* of the longer work does not exist? Larson explains:

> Leonard Meyer has often stressed that local and global levels are heard quite differently. [...] Meyer's view is that while we may hear shorter phrases in terms of prolongation, say, as embellished linear progressions like $\hat{3}$–$\hat{2}$–$\hat{1}$, but that we more readily hear longer pieces in terms of their 'formal structure', say, as an elaborated formal string of sections like ABA. This may be taken as a criticism of Schenker's

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[68] Lerdahl and Jackendoff, *A Generative Theory of Tonal Music*, 25.
[69] Kramer, *The Time of Music,* 117.
[70] Steve Larson, 'The Problem of Prolongation in *Tonal* Music: Terminology, Perception, and Expressive Meaning', *Journal of Music Theory* 41, no. 1 (1997): 101–136.
[71] Ibid., 114.
[72] Ibid., 114–115.

> theories—or more specifically as a denial of the perceptual significance of the *Ursatz*. But the terms offered here suggest a reconciliation: we might more accurately say that prolongation exists at all structural levels of all tonal pieces but that structural hearing may not.[73]

If we apply Larson's suggestion to the rhythmic domain, might it not be possible that deeper levels of metric structure exist that we do not experience either kinaesthetically or aurally? According to that view, deeper levels of metrical hierarchy are perfectly real, even if they are not always perceived. It is important then to distinguish between hypermetre and structural hearing, and to avoid attributing the existence of deeper levels of metric structure to their perceptibility.

Wallace Berry believes that rhythmic analysis has much to offer the performer.[74] He writes:

> All element-processes are rhythmic. In an important sense, the study of rhythm is thus the study of all musical elements, the actions of those elements producing the effects of pace, pattern, and grouping which constitute rhythm. [...]
>
> While there are many compelling factors suggesting the critical importance of rhythmic and metric analysis, one of the most persuasive is the fact that metric analysis, in its proper range of implications, *is a vital basis of construction and interpretation of phrasing and articulation* in performance. (p. 301)

Berry reinforces the importance of rhythm as part of musical experience:

> It may well be that rhythm and meter, seen as a part of rhythm, constitute the most persuasive and immediately perceptible quality within the range of musical effect. The rates at which events (changes) take place within the various structural parameters, and the patterns into which events group themselves, are of decisive significance in expressive effect in the musical experience. (p. 301)

He also acknowledges the subjective nature of rhythmic analysis:

> The range of significant, plausible interpretations of rhythmic structure is often of particular breadth and diversity; and the possible validity of differing conclusions must be noted as an important object of analysis. The subjective and often elusive criteria at the root of particular rhythmic interpretations are especially evident in the study of accent-delineated metric structure. (p. 303)

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[73] Ibid., 115.

[74] Wallace Berry, *Structural Functions in Music* (New Jersey: Prentice Hall, 1976), in particular the chapter 'Rhythm and Meter', 301–424; subsequent page numbers refer to this publication until otherwise stated.

Berry isolates four different rhythmic factors, which include tempo, pattern or motive, the profiles expressed in element-changes, and grouping (pp. 305–306). He is, however, careful to note that there is not a simple relationship between analytically discovered patterns and the notes you stress in performance:

> In some degree, metric structure emerges in a purely 'neutral' interpretation in performance—i.e., accents which are the result of such factors as superiority of pitch and duration will, presumably, be felt in some degree in their central referential functions, and there are many instances in which metric grouping, whether in accord with notated bar-lines or not, derives from inherent accentuation of such clarity and decisiveness that a neutral approach is clearly in order. When it seems necessary to 'bring out' the metric structure (in instances deemed of relative ambiguity), it is done in a variety of discreet ways. (pp. 335–336)

Berry's approach is indebted to Schenkerian theory: 'The concept of levels of structure has been treated at every stage in this book, and it is of great importance in the consideration of meter' (p. 349). Unlike Lester, Berry believes that rhythmic patterns can be perceived at larger levels of structure:

> There is much testimony to meaningful rhythmic experience even at ultimate structural levels, and the sense of hypermetric structure at intermediate levels can surely not be disputed. Thus, the concept of multi-dimensional metric structure is developed here as of entirely conceivable practical significance, not as mere theoretical artifice. (p. 362)

Berry concludes his study of rhythm and metre with a note on ambiguity and the nature of rhythmic analysis:

> We have seen that in dealing with problems of rhythmic analysis, especially in its concern with meter and other manifestations of grouping, one is often led to relatively equivocal conclusions in circumstances of some ambiguity. To some extent this is due to inconclusiveness and uncertainties of knowledge about perceptual responses to musical events which result in groupings at different levels of structure; but the equivocal nature of analytically derived 'information' is also to be traced to the fact that rhythmic structure is only rarely, and in situations of least artistic value, unambiguously expressed. (p. 417)

He stresses the importance of an individual approach to each work that incorporates all aspects of musical structure:

> It is a question not of simple comeasurement of absolute values, but of evaluating contextual relations *different for every musical situation*. Hence, it is extremely unlikely that a purely objective evaluation of metric structure can be achieved for anything like a comprehensive scope of real musical situations. Moreover, it is for related reasons that the penetrating study of rhythm *engages questions of the nature and functional-expressive consequences of change in all elements of musical structure*. (p. 418)

Maury Yeston's 'The Stratification of Musical Rhythm' is deeply indebted to the work of Schenker.[75] He explains that the 'weight of analysis will be thrown towards an elucidation of rhythmic structure that is characterized by levels of meaning. Such a structure will be referred to as a *rhythmic stratification*' (p. 4). He notes, however:

> I would like to stress the formulation 'writing theory' as opposed to 'writing a theory' because this study should in no way be construed as the establishment of, much less the attempt to create, a universal theory of rhythm. It is meant much more as a clarification of the mechanisms of pitch-to-rhythm and rhythm-to-pitch analyses of tonal music and as an attempt to rethink the categories that the traditional literature has devised to describe the rhythmic texture of pieces of music: accent, meter, tempo and structure. The interdependent relationships of these categories will be examined in order to set the theory of musical rhythm apart from the theory of notation and apart from taxonomies of linguistic verse pattern. (pp. 40–41)

Yeston's distinction between pitch-to-rhythm analysis and rhythm-to-pitch analysis is noteworthy. He explains that 'the kind of Schenkerian analysis that discovers middleground pitch designs on the basis of rules of voice-leading is representative of a pitch-to-rhythm approach' (p. 100). On the other hand,

> rhythm-to-pitch analysis interprets pitches on the basis of repetitions of rhythmic patterns, while the pitch-to-rhythm analysis of tonal music is based on certain long-standing principles of tonality—such as the implications of triadic structures as they appear in the context of a rigorous pitch system.
>
> In light of the extensive history of pitch analysis of tonal music, rhythm-to-pitch methodology would appear to be impoverished. In the following chapters, however, some basic rhythmic structures that arise from the interaction of pitch levels are investigated. (p. 102)

Yeston discusses what he calls 'rhythmic consonance' and 'rhythmic dissonance'

[75] Yeston, 'The Stratification of Musical Rhythm'; subsequent references in the text refer to this publication until otherwise stated.

(pp. 108–109). These result from the interaction of rhythmic levels as they coincide or contradict each other. Rhythmic consonance occurs when 'any of its levels is a simple multiplication or division of any other of its levels' (p. 108). An example of rhythmic dissonance can be found in 'the simultaneous division of a span of time into two and three equal segments' (p. 109).

He investigates the rhythmic structures of a selection of Chopin Waltzes and concludes:

> The point of the above discussion of Chopin's waltzes is not to suggest that they are all, somehow, the same, nor is it to reduce all of rhythm to a single structure. Rather each composition is rhythmically stratified in its own unique way; deeper levels of motion are sometimes consonant and sometimes dissonant with each other. (p. 140)

Yeston does, however, view the rhythmic levels of a composition as related—even if not consonant. He isolates various rhythmic patterns that belong together in one family. These are derived from the interaction of rhythmic levels. He explains:

> The rhythmic foregrounds of compositions are thus transformed by interpretive middleground rhythmic levels. Indeed the meaning of a rhythmic foreground is determined by the deeper middleground rhythmic structures it contains and by the kinds of interaction these deeper structures display with each other or with the foreground. In addition, each of these deeper structures can be viewed not only in terms of itself but also in terms of a family of inclusion relationships to which it belongs. The composition in turn may generate now one, now another pattern belonging to the same family; and, although the patterns appear to be different from each other, the inclusion relationships of the large scale rhythmic structure remain in force at the deeper levels and lend their formal coherence to the composition.
>
> Because of the nature of this formal coherence, a composition may very often unfold a rhythmic pattern in the same way that it unfolds a pitch interval. (pp. 194–195)

It is clear that Yeston has Schenkerian theory at the forefront of his mind. He continues this line of thought by comparing the rhythmic system that he has developed with the tonal system: 'Thus, as the unfolding interval is a reflection of the formal nature of a tonal system, so too is the unfolding rhythmic configuration a reflection of the abstract inclusion relationships of a rhythmic system' (p. 195).

Yeston warns:

> Extreme caution should be exercised in evaluating the universality of a theory. If it is too specific to a small domain of musical phenomena, a theory may mistake the unique aspects of very few compositions for general principles. On the other hand, if the theory is too general, the degree to which it may illuminate specific problems may be marginal when compared with the effort expended in arriving at general principles and solutions. (p. 198)

In 'Rubato and the Middleground', Yeston explains that 'the analysis of rhythmic levels and an understanding of their interaction' is a 'problem that remains far from being solved'.[76] He states:

> *The position taken here is that meter cannot be accepted as a functioning 'given' in a composition but that it must be indicated and supported by tonal relationships. [...] Indeed meter would appear to grow out of a relationship between rhythmic levels much in the same way that tonal coherence is an outgrowth of relationships between pitch levels.*
>
> *An additional aspect of temporal relations in the context of pitch levels can be seen by observing the rhythmic values associated with middleground events.*[77]

In his thesis, Yeston concludes:

> The ultimate implication of the present study has special import for the theory of tonality itself. It would appear that any general definition of tonality made exclusively on the basis of pitch and pitch function is, in and of itself, incomplete. Tonality requires a rhythmic component, since it is created by middleground spans and arpeggiations interacting with foreground configurations in accordance with certain obligatory rhythmic relationships. In this sense, Heinrich Schenker's theory of pitch levels is, fundamentally, also a theory of rhythm.[78]

Harald Krebs addresses concepts such as metric consonance and metric dissonance in developing the work of such writers as Yeston.[79] He defines 'the meter of a work as the union of all layers of motion (i.e., series of regularly recurring pulses) active within it.

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[76] Maury Yeston, 'Rubato and the Middleground', in *Readings in Schenkerian Analysis and Other Approaches*, ed. Maury Yeston (New Haven: Yale University Press, 1977), 94–106, 94.
[77] Ibid.
[78] Yeston, 'The Stratification of Musical Rhythm', 205.
[79] Harald Krebs, *Fantasy Pieces: Metrical Dissonance in the Music of Robert Schumann* (New York: Oxford University Press, 1999); subsequent references in the text refer to this publication until otherwise stated.

The layers that contribute to the meter of a work can be divided into three classes: the pulse layer, micropulses, and interpretive layers' (p. 23). As Krebs explains:

> The pulses of each 'interpretive layer' subsume a constant number of pulse-layer attacks; an interpretive layer can therefore be characterized by an integer denoting this constant quantity. I refer to this integer *n* as the 'cardinality' of the layer, and to an interpretive layer of cardinality *n* as an '*n*-layer'. (p. 23)

This greatly aids the following analyses in demonstrating how coincidence and dissonance occur. Krebs then distinguishes between 'grouping dissonances'—which occur when layers occasionally coincide, and 'displacement dissonances'—when layers never coincide.[80]

Krebs includes a small chapter written as a letter from Clara Schumann to her friend Martha entitled 'Performing Metrical Dissonances' (pp. 177–186). He emphasises the performer's role in communicating these conflicting passages: 'The meter of anything that you play, is to a large extent *in your hands*' (p. 179). Although Krebs offers suggestions to performers (through Clara), he nevertheless adds, 'But I should not like to prescribe specific gestures; you must do what comes naturally to you' (p. 181). Krebs associates metric dissonance and consonance with meaning and recommends that performers try to understand the meaning of what they are playing:

> It is not enough to convey the letter of metrical conflicts; you must also attempt to penetrate and to communicate their spirit, that is, their meaning. To a certain extent I have already addressed this issue by referring to tension and relaxation, confusion and ambiguity. Metrical conflict almost invariably results in an increase in tension within the music, and that is an important aspect of its meaning. Such conflict can arouse a sensation of almost physical discomfort in the performer and listener, partly because of the coming apart or going awry of layers of motion that were previously aligned, partly because of the ambiguity and confusion that it generates. Metrical realignment, on the other hand, creates a sense of relaxation, of security, of homecoming. (p. 184)

Christopher Hasty's *Meter as Rhythm* presents a different approach to the analysis of rhythm and metre. He provides a comprehensive overview of recent research carried out in this area. His own approach differs from those discussed:

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[80] Ibid., 31–33, with terms borrowed from Peter M. Kaminsky, 'Aspects of Harmony, Rhythm, and Form in Schumann's Papillons, Carnaval and Davidsbündlertänze' (Ph.D. diss., University of Rochester, 1989), 27.

> It is a central tenet of the theory presented in this book that the metrical is inextricably tied to all those aspects of music that together form the elusive and endlessly fascinating creature we call 'rhythm'. Because meter is here defined as a creative process in which the emerging definiteness or particularity of duration is shaped by a great range of qualitative and quantitative distinctions, we will have no reason to oppose meter to other domains or to rhythm.[81]

In reviewing Hasty's work, Joseph Swain summarises the difference between Hasty's approach and foregoing theories of rhythm:

> In the end [...] it is the qualities of the theory that count, regardless of whether one terms it phenomenological or not, and the essential character of the opposition between traditional accounts of metre and Hasty's is the primacy of the unique experience and the inevitable promotion of the individual listener as arbiter of the analysis.
>
> [...] In any case, the moral is clear: metre is not to be taken for granted.[82]

Swain states that 'one of the most original benefits of projective analysis seems to be a new fund of explanations for the varying effects of performance decisions'.[83] He cites Hasty's analysis of an excerpt from the first movement of Mozart's Piano Sonata in D Major, K. 311.[84] Swain acknowledges: 'As advice to performers, many theorists should wish to be as practical and as persuasive as this, and there are quite a few such observations about various pieces in the treatise'.[85] Swain does, however, regard Hasty's findings as extremely difficult to hear:

> The difficulty is in audition—hearing what Hasty wants us to hear. Time and again, even in the explication of very simple, if abstract, projective phenomena he must admit that to hear the effect he is explaining requires concentration, attention, and sometimes is just hard.[86]

David Epstein, on the other hand, sharply distinguishes between metre and other rhythmic aspects of a composition. He defines the two forms of time in music as 'metrical time' and 'experiential time'.[87] This is obviously in opposition to Hasty's view that metre

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[81] Christopher F Hasty, *Meter as Rhythm* (New York: Oxford University Press, 1997), xi.
[82] Joseph P. Swain, 'Shifting Metre', in *Music Analysis* 20, no. 1 (March 2001): 119–141, 127.
[83] Ibid.
[84] Hasty, *Meter as Rhythm*, 203–204.
[85] Swain, 'Shifting Metre', 129.
[86] Ibid.
[87] Epstein, *Beyond Orpheus*, 55.

is formed by the whole temporal experience. Epstein explains that music 'places both metrical and experiential frames simultaneously, placing them variously in states of coordination or of opposition and tension'.[88] He distinguishes between 'chronometric' (metric) and 'integral' (rhythmic) temporal elements.[89] Chronometric elements include beats, measures, hypermeasures, and hypermeasure groups. Integral elements include pulses, motivic groups, phrases, and phrase groups.

Epstein elaborates on these two modes of time in *Shaping Time: Music, The Brain and Performance*. He states that 'the essence of temporal experience is movement, or motion, through time'.[90] He explains that 'time has dual modes of structure. One is essentially clocklike, a measurement mode that mechanically delineates equal periods. The other mode relies upon experience for its demarcation—experience that is particular and unique' (p. 7).

Epstein seems to capture the essence of musical motion in the following description:

> These many elements—metric and rhythmic, of various degrees of duration and level, each with its unique species of accent, all of them further enlivened by surface stresses—form a matrix of coordinated and uncoordinated intensities whose graduated degrees of tension and releases of tension drive the music forward. The counterbalancing of forces is essential in this matrix. Inadequately established, thus imbalanced, these forces cannot effectively modulate forward drive. Properly balanced, the schedule of motion is effectively set by the structure—directed, carried onward, controlled on many levels to finespun degrees of tension: motion ultimately resolved. (p. 27)

The performer's role in establishing this balance of forces is therefore paramount. Epstein believes that all elements of music are involved in this motion:

> The elements of the music—melodies, rhythms, harmonies—are not seen as elements (or functions) in themselves; as such they are of limited interest. It is the relation of these elements to musical motion that imbues them with new interest; their functional roles assume thereby a higher level of meaning. (p. 457)

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[88] Ibid., 56.
[89] Ibid., 61.
[90] David Epstein, *Shaping Time: Music, The Brain and Performance* (New York: Schirmer, 1995), 5; subsequent page numbers in the text refer to this publication until otherwise stated.

Epstein, returning to the subject of motion in music states: 'Within the sense of motion—a sense that can be delineated, grasped with precision—there seems to lie that confluence of form, structure and effect' (p. 458).

John Rink is a strong advocate of the importance of rhythm to performers. In discussing his own analysis of Brahms' Opus 116, Rink explains:

> It is no accident that the analysis consistently focused on elements involving musical time—specifically, rhythm, metre and tempo—for these more than any other compositional parameter directly affect the performer, whose most essential concerns are forward impulse, timing and 'shape'. Another reason for such a focus stemmed from the lack of attention to rhythm, metre and tempo in the abundant literature on Op. 116, even in the most exhaustive study of the opus, Jonathan Dunsby's essay on 'the multi-piece in Brahms', which serves as a point of departure for this chapter.[91]

This article was discussed earlier in this chapter. It highlights the importance of examining the rhythmic context of the motivic structure in these pieces. Rink also notes: 'Just as Brahms bases the seven pieces on a small number of cells, he "motivically" exploits recurrent rhythmic and metrical devices (such as large-scale hemiola-related processes and extension and contraction of the hypermeasure) to control forward impulse'.[92] The motivic treatment of rhythm is evident in many of the following analyses of Chopin's works, for example, his use of displacement, syncopation, and triple versus duple metre. Rink concludes that although this kind of rhythmic analysis can aid in the preparation of a performance interpretation, it must not be prescriptive in its advice. He states:

> Clearly there are difficult decisions to be made in interpreting this music: however much the 'correct' interpretation may be implicit within the notes, other strategies could work—or appear to work—equally well, thus requiring the performer to exercise discrimination in responding to the 'mechanisms of motion' in Op. 116. Even if the music seems to 'exert its own control', interpretation always involves choice, and the basis for choosing, for discrimination, must be musically—that is, historically, stylistically, analytically, technically, expressively—viable.[93]

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[91] John Rink, 'Playing in Time: Rhythm, metre and tempo in Brahm's *Fantasien* Op. 116', 255, referring to Jonathan Dunsby's 'The multi-piece in Brahms', in *Brahms: Biographical, Documentary and Analytical Studies*, ed. Robert Pascall (Cambridge, Cambridge University Press, 1983), 167–189.
[92] Ibid., 256.
[93] Ibid., 257.

Rink investigates temporal relationships through the seven pieces and makes performance suggestions based on his findings. Characteristically, he is not adamant that his suggestions are strictly followed: 'What counts is the *perceived* relation between pulses, which as a matter of course will be greatly deviated from throughout a performance even though listeners would sense that the music was being played at one tempo'.[94]

Rink's approach to rhythmic analysis places primary importance on tonal issues. The article discussed above, although concentrating on rhythm, is based on previous analytical work on the tonal and motivic structures of the pieces. Schachter's approach is similar. He warns against an approach to rhythm that is too narrow:

> Can one isolate rhythm and consider it apart from pitch? I believe that one can, but within narrower limits, for one crucial aspect of rhythm—grouping—depends in part upon tonal relationships.[95]

In discussing the work of E. T. Cone and of Cooper and Meyer, Schachter states:

> Both approaches, Cone's as well as Cooper and Meyer's, appear to operate on the assumption that tonal events, in themselves, produce a kind of rhythm. But neither approach makes headway against the central problem posed by this assumption: to distinguish between *rhythm as an active force* (helping to shape tonal events) and *rhythm as resulting* from the activity of tonal elements.[96]

As previously discussed, Yeston also noted this shortfall in his distinction between pitch-to-rhythm and rhythm-to-pitch analyses. Schachter warns against rhythmic theories that rely solely on grouping patterns. He believes that

> conflict between durational and tonal groupings can be of crucial importance in shaping a musical idea. Here the importance is such that one must question the validity of any approach to rhythmic analysis that would attempt to reduce such fascinating complexity to a single hierarchy of groupings.[97]

Schachter also acknowledges the importance of rhythmic decisions to performers:

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[94] Ibid., 267.
[95] Schachter, *Unfoldings*, 22.
[96] Ibid., 33, referring to E. T. Cone, *Musical Form and Musical Performance* (New York: Norton, 1968), and Cooper and Meyer, *The Rhythmic Structure of Music*.
[97] Ibid., 48.

> And metrical problems can be among the most serious difficulties that confront the conscientious performer. He must decide what to do when the time signature seems not to correspond to the actual meter of a passage. He must decide how much emphasis he wants to give to the metrical schema, he must know what unit of meter (beat, measure, group of measures) he ought to bring out most strongly, and he must reconcile—or at least adjudicate—conflicts between the metrical and the tonal or durational emphases of a passage.[98]

When metric patterns seem to contradict the notated meter of the piece, Schachter notes that 'in a successful performance the alternative possibilities will strive against the notated meter without ever quite supplanting it'.[99]

Schachter asserts that intuition is involved in any analysis and believes this particularly true of a rhythmic analysis. Referring to his own analysis of metric conflict in Schumann's *Davidsbündlertänze*, Op. 6, No. 1, Schachter states:

> An irreducible residue of personal opinion remains in any metrical analysis of a piece which, like the Schumann example, lends itself to more than one plausible interpretation. There is no way that I (or anyone else) can 'prove' the correctness of my reading to someone who is convinced that one of the alternative schemata of Example 3.9 represents the basic meter, or, for that matter, to someone who thinks that there is no one basic metrical pattern. Perhaps the government might one day appoint a Commissar of Metrics who will decide such matters for us. Before that day arrives, however, we shall have to live with these disagreements as best we can. The important thing is to make our evaluation of the meter in the light of the clearest and most comprehensive understanding we can achieve of all the significant aspects of the piece.[100]

This thesis contributes to that field of Schenkerian analysis laid out by such writers as Rothstein and Schachter. The primary approach is Schenkerian. Schenker's implicit rhythmic assumptions are made more explicit in the manner of Rothstein and Schachter. Rhythmic analysis—in the form of durational and rhythmic reductions—is carried out in the manner of Schachter where it illuminates certain important or interesting facets of the piece. Rhythmic grouping also forms part of the rhythmic analysis throughout this thesis.[101]

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[98] Ibid., 80.
[99] Ibid., 99.
[100] Ibid., 101.
[101] For a comprehensive psychological viewpoint on grouping the reader is referred to the work of Lerdahl and Jackendoff's *A Generative Theory of Tonal Music*.

## 2.6 Definitions, Terminology, and Analytical Notation

The concluding section of this chapter outlines the specific methodology that will be used in the following analyses. This will begin with a definition and brief explanation of the word 'premise'. This description is frequently employed in the analyses of the Nocturnes and the Barcarolle. It will then define specific terminology used to describe rhythm. Finally, the methodology behind the graphing technique used throughout this thesis will be explained.

The word 'premise' originates in the work of David Epstein. He defines musical premises as 'bases, either stated or assumed, upon which musical reasoning proceeds'.[102] He explains: 'It is useful in dealing with compositional bases to distinguish between what may simply be a frame of reference and what may truly be a premise, intrinsic and unique to a particular composition'.[103] Indeed the meaning of the word 'premise' depends on its use in each particular piece. Such premises as triple versus duple metric play or the interval of a sixth, for instance, are elevated to the role of premises in Opus 48 and the Barcarolle respectively, although their use in other compositions may not be of such formative importance. The distinction between premises and other interesting features of a work is drawn in the analysis of the Barcarolle. Epstein concludes: 'When a work has fully exploited the possibilities inherent in its basic ideas, it has completed itself and must end'.[104] Quite often a piece still lacks final closure following the close of the *Urlinie*. The coda then concludes any remaining premises that have yet to be resolved. An example of this can be found in Opus 27 No. 2, where the *Urlinie* descends in the lower register and the coda reinstates the obligatory register.

Berry, in *Musical Structure and Performance*, outlines his belief that 'most decisions regarding performance and most realms of interpretive decision-making involve analysis in the perspectives of a particular composition rather than on any basis of abstract common principles'.[105] An analysis that may be most helpful to performers might approach each work individually, as a performer does, and analyse it according to the premises and the expectations that it sets up at the beginning and ultimately denies or fulfils.

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[102] Epstein, *Beyond Orpheus*, 12.
[103] Ibid., 161.
[104] Ibid., 201.
[105] Wallace Berry, *Musical Structure and Performance* (New Haven: Yale University Press, 1989), 23.

The terminology used to describe rhythmic phenomena in this thesis borrows from that outlined by Steve Larson in an article entitled 'Rhythmic Displacement in the Music of Bill Evans'.[106] Larson explains that 'rhythmic displacement (also called "cross-rhythm" or "polyrhythm") arises when listeners experience an implied grouping or accent structure that conflicts with the underlying metric structure'. He adds that 'displacement may arise in two basic ways: polymeter and accentual shifting'. Both of these rhythmic techniques can be found in the following analyses. Larson isolates two different kinds of polymetre:

> Polymeter pits two different metric structures against one another. [...] If the different meters are juxtaposed so that the downbeats agree, the result is called a 'measure-preserving' polymeter [...]. If not, the result is called a 'tactus-preserving' polymeter.

The resultant effects are quite different. As Larson explains:

> I will add that measure-preserving polymeter tends to create cycling gestures that call attention to the downbeats of current agreement. Tactus-preserving polymeter typically creates longer gestures of suspense that anticipate a forthcoming simultaneous downbeat.

The other kind of rhythmic displacement arises from accentual shifting. Larson explains:

> While polymeter present different meters at the same time, accentual shift presents the same meter at different times. Accentual shift may place a figure before [...] or after [...] its normative placement. Again, the results may be formally equivalent, but they give rise to different musical experiences. Where the pitch content of an accentually-shifted pattern allows us to hear it as an anticipation, it immediately heightens interest by drawing attention to its beginning and to the beat on which it 'belongs'. Where the pitch content of an accentually-shifted pattern allows us to hear it as a delay, it may prolong intensity the way a suspension does, making us wait for the pitches it displaces.

Larson prefers the term 'rhythmic instability' to 'rhythmic dissonance'.[107] He relates rhythmic functions and the way in which they operate to those in the tonal realm:

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[106] Steve Larson, 'Rhythmic Displacement in the Music of Bill Evans', in *Schenker Studies III: A Festschrift for Carl Schachter,* ed. David Gagne and Poundie Burstein (Pendragon Press, Forthcoming); subsequent references in the text refer to this paper until otherwise stated.

[107] Ibid., this follows logically from his preference for the term 'instability' over 'dissonance' in the area of pitch relationships as exemplified in 'The Problem of Prolongation in *Tonal* Music'.

> Just as tonal instability creates an expectation for stability, so rhythmic instability creates a desire to hear agreement with the underlying meter. Just as tonal instability operates on various levels of pitch structure, so rhythmic instability operates on various levels of metric structure. And just as the specific character of tonal instability is shaped by 'musical forces', so also are the gestures that create rhythmic instability.

The 'musical forces' include 'inertia' (the tendency of a pattern of musical motion to continue in the same fashion, where the meaning of the 'same' depends how that pattern is represented in musical memory), 'gravity' (the tendency of a note that is heard as above a stable platform to descend to that platform), and 'magnetism' (the tendency of an unstable note to move to the closest stable pitch).[108]

Throughout the following analyses rhythm is seen to function in similar ways to pitch—using instability and stability to affect patterns of tension and release in conjunction with tonal premises. The following analyses use the terms 'rhythmic displacement', 'polymetre', and 'accentual shift' to describe the rhythmic techniques outlined above.

The method of Schenkerian graphing used throughout this dissertation is based on the strict use of analytical notation outlined by Steve Larson.[109] Usually, all notes of the musical surface are represented in the graphs (except simple suffix repetitions and the most obvious ornaments). Analytical symbols are restricted to noteheads, stems, and slurs. All—and only—those noteheads that are stemmed on a given analytical level are represented on the next more-remote level. Slurs only indicate embellishment function. The embellishment functions of all exceptions should be self-evident. Larson explains: 'Strict use may be best introduced by making an analogy: strict use relates to Schenkerian analysis as strict counterpoint relates to free composition' (p. 38). Larson initially conceived of strict use as a pedagogical tool for more effectively teaching Schenkerian analysis: 'The purpose of strict use, rather than to teach a specific style of analytic representation, is to lead the ear of the serious student of music into the infinite world of fundamental analytic questions' (p. 39). But strict use is valuable in studies such as this thesis. Strict use forms the basis for the graphic techniques used in this thesis and this

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[108] For more on musical forces, see Steve Larson, 'Musical Forces, Melodic Expectation, and Jazz Melody', *Music Perception* 19, no. 3 (2002): 351–385; 'Swing and Motive in Three Performances by Oscar Peterson', *Journal of Music Theory* 43, no. 2 (1999): 283–313; 'Musical Forces and Melodic Patterns', *Theory and Practice* 22–23 (1997–1998): 55–71; and 'The Problem of Prolongation in *Tonal* Music'.

[109] Larson, 'Strict Use of Analytic Notation', subsequent references in the text refer to this publication until otherwise stated.

approach has many advantages that will be discussed presently. It is, however, necessary to deviate occasionally from this method of notation and any substantial deviations will be made clear. Larson elaborates: 'Strict use progresses in small steps from a set of narrowly defined rules toward a deeper understanding; more complex analytic representations are explained as extensions of strict use' (p. 39). It is important to retain an element of flexibility—as it is with any method of Schenkerian graphing—in order to portray sufficiently the richness of the music under examination. On the subject of generative versus derivative approaches to Schenkerian analysis Larson states:

> To the extent that it encourages a purely bottom-up approach, strict use is thus problematic. But it must be remembered that strict use is a method of depicting musical relationships rather than a method of discovering them. Strict use may be used to display the results of analyses that combine any mixture of bottom-up and top-down approaches. (p. 60)

Schenkerian analysts differ substantially in their methods of graphic notation. Slurs and stems can differ in meaning from one analyst to another. Nevertheless, strict use has the advantage that it appears to be universally understandable by analysts from differing Schenkerian traditions. Larson notes that strict use reveals the level-dependent nature of harmonic rhythm and may benefit performers preparing an interpretation of a piece.

In the discussion of 'harmonic rhythm as a level-dependant phenomenon' (pp. 60–64), Larson draws on Rothstein's work:

> Rothstein, in 'Rhythmic Displacement and Rhythmic Normalization', has shown that Schenker's analytic notation often makes interesting, albeit implicit, observations about rhythm through the vertical alignment of graphic levels. Strict use requires the vertical alignment of noteheads and stems at various levels and so makes consistent statements about rhythm that can be clearly perceived and understood. (p. 63)

Slurs can, for instance, show the harmonic rhythm of a particular level, highlighting deeper chord changes. In cases where the chord position changes, but the underlying harmony remains the same, Larson explains:

> While something like 'event rhythm' or 'contrapuntal rhythm' might be a better term, the point is that such terms specify a rhythm of events in some model of tonal structure at a specific level. Whatever they are called, these rhythms help generate the fluctuating tension and release that give expressive direction to tonal music. (pp. 63–64)

In highlighting the potential benefit of strict use to performers, Larson states that 'the clarity with which strict use displays embellishment function and the degree to which it graphically separates analytic levels help it to illuminate relationships between analysis and performance' (p. 64). Larson provides an example of the first eight bars of Schubert's Impromptu in B♭ major Opus 142 No. 3, and analyses it using strict use (p. 67, Ex. 19). He concludes:

> Viewing dynamics as a response to the motion quality of the music (rather than as a mechanical 'get louder here—get softer there' approach, one may associate dynamics with each of the voices of each level of Example 19. Appropriate dynamics will vivify the ways in which the music of a given level departs from the music of underlying levels. (p. 65)

As Larson explains:

> It is an appealing aspect of strict use that it can highlight the ways in which the relations between dynamics and structure not only produce insight into interpretation, but also have the effect of bringing out an elegant hidden repetition. The question (inevitably) arises as to how much such things should be emphasized in performance. One excellent recording of the Impromptu answers this question by shaping the theme according to these dynamics in an attractive but unexaggerated way—but then brings out this hidden repetition with striking clarity in the first variation.[110]

Larson explains the benefits of strict use of notation whereas Schachter believes that flexible notation is important in Schenkerian analysis. He states: 'Well, I much prefer diversity to uniformity in graphing, except for pedagogical purposes in the beginning stages of study. Schenker's own graphs are so expressive partly because he uses his graphic symbols so freely'.[111]

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[110] Ibid., 67, referring to Vladimir Horowitz, *The Studio Recordings—New York*, Deutsche Grammophon 419 217 (1985).
[111] Schachter, *Unfoldings*, 10.

While diversity is important, it may hide problematic contradiction. Larson notes that Schenker's analysis of Schumann's song 'Aus meinen Tränen spriessen' from *Dichterliebe* is internally inconsistent.[112] Larson explains that 'strict use works against such inconsistencies; this inconsistency simply cannot be shown in a single strict-use analysis'.[113] Larson offers four possible explanations for this perceived inconsistency and relates them to strict use. He concludes:

> My point here is not to defend a particular reading—or even to defend a particular interpretation of a particular reading—but rather to suggest that internal consistency, musical ambiguity, and analytical (as well as perceptual) abstraction are important issues that deserve the clarification that strict use can bring.[114]

Indeed there are many instances of ambiguity in Chopin's works, for instance the harmonic meaning of the recurring upbeat in the Prelude in G minor, Opus 28 No. 22. This is an example of ambiguity that cannot adequately be described by either strict use or indeed any single type of Schenkerian graph. Strict use, however, alerts us to its existence. Both Schachter and Larson recognise the need for flexibility within any system of notation and this is one such example. As Larson explains:

> Because strict use offers an artificially limited world in which the effects of musical motion can more carefully be examined—like strict counterpoint—it provides an excellent starting point for generating the more complex analyses that illuminate the role of simplicity and complexity in real music.[115]

The graphic technique used throughout this thesis is based upon strict use and deviates from it only where more flexibility is required.

A Schenkerian methodological approach that incorporates rhythmic analysis elucidates fascinating aspects of Chopin's compositional style. It reveals hidden repetitions on many levels that are both tonal and rhythmic, and it shows how Chopin integrates both tonal and rhythmic premises and strategies. The forms of the Preludes examined constitute hidden repetitions at a background level of surface rhythmic motifs. The pairs of Nocturnes of Opus 27 and Opus 48 are each found to base themselves on similar premises.

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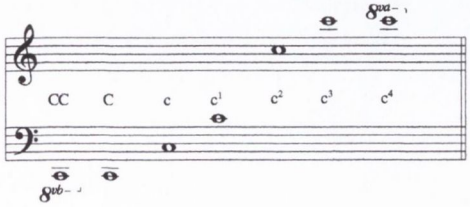
[112] Larson, 'Strict Use of Analytic Notation', 69, referring to Schenker, *Free Composition*, Fig. 22, b.
[113] Ibid., 75.
[114] Ibid., 76.
[115] Ibid., 77.

It is as if Chopin were working in each Opus on two different solutions to similar compositional problems. In Opus 27, this possible pairing of the Nocturnes may be taken into the realms of performance, as it raises the question of whether or not they should be performed as a pair. The Barcarolle demonstrates many of the premises introduced in the analyses of the earlier works. It provides an excellent summary of the complex ways in which tonal and rhythmic events may conspire to serve a given premise and how these premises interact in the formation of the dramatic narrative of the piece.[116]

[116] The following system of notation is used when registers are specified—otherwise capitals are used:



# Chapter 3: Opus 28 Preludes

## 3.1 Introduction

This thesis synthesises recent extensions of Schenkerian theory that make explicit the rhythmic implications of Schenker's theory of pitch structure. This synthesis illuminates Chopin's compositional style, clarifies aspects of his compositional evolution, and poses questions useful to performers preparing an interpretation.

This chapter applies that synthetic analytical approach to the Preludes. That approach clarifies Chopin's use of reinterpretation and ambiguity; reveals hidden repetitions that have a rhythmic as well as melodic aspect; and shows surprising relationships between tonal and rhythmic structure from foreground to background.

Some recent writers have discussed intraopus relationships in the Preludes (Opus 28). Jean-Jacques Eigeldinger, in an article entitled 'Twenty-four Preludes op. 28: genre, structure, significance',[1] quotes André Gide who, in reference to the Preludes, wrote, 'Some of Chopin's shortest works have the pure, necessary beauty of the solution to a problem. In art, solving a problem is a matter of formulating it correctly'.[2] Eigeldinger notes how harmony is made from superimposed lines in a polymelodic texture (p. 175). Stressing maximum economy of means employed in these Preludes, Eigeldinger states: 'Each piece in fact exploits a textural continuum based on a rhythmical ostinato, whether melodic or harmonic' (p. 181). The main thrust of his examination concerns the cyclic nature of Opus 28. He writes: 'Above all, the 24 Preludes are a cycle by virtue of an omnipresent *motivic cell* which assures its unity through a variety of textures' (p. 181).

Jeffrey Kallberg, on the other hand, does not conceive of Opus 28 as a set and criticises Eigeldinger's article, citing an example of Chopin himself playing the Prelude Opus 28 No. 8 with the Opus 36 Impromptu, thereby strengthening his position against performing them as a set. Kallberg discusses the subject of endings rather extensively. 'The endings to the Preludes seldom give comfort. By this I mean that the endings often seem to stand somewhat apart from the body of the prelude; their gestures at closure sound

[1] Jean-Jacques Eigeldinger, 'Twenty-four Preludes op. 28: genre, structure, significance', in *Chopin Studies*, ed. Jim Samson (Cambridge: Cambridge University Press, 1988), 167–193; subsequent page numbers refer to this publication until otherwise stated.
[2] Ibid., 167 from André Gide, *Notes sur Chopin* (Paris, 1948), 111.

unrelated to what has passed before'.[3] He continues: 'Chopin evoked this quality of open-endedness in order to transform the nature of closure in the short, notated prelude, where previously (and indeed still, in several of Chopin's Op. 28) full closure had prevailed' (p. 142). He explains that 'rather than challenge the very idea of closure, Chopin normally preferred simply to leave matters somewhat undone at the ends of preludes', and attributes this compositional approach as serving the genre's traditional role as an introductory piece to a larger work (pp. 142–143). An example of this is Prelude No. 14. 'In other words, by ending preludes abruptly and incompletely, Chopin allowed for an ensuing longer work to fulfil the closural promise left hanging in the introductory prelude' (p. 143). Kallberg concludes: 'Rather than continue to schedule performances of the complete Op. 28 and to construct analytical monuments to its "unity", we need to perform and study the preludes individually' (p. 143).

This chapter follows Kallberg's suggestions that we study the Preludes individually. (While I do not take a position on whether or not they should be performed as a set, I believe that the findings of this chapter may be relevant to those considering that question. I return to the question of intraopus relationships in a chapter on the Nocturnes below.) In order to illustrate the extensions of Schenkerian theory that I draw on, I first examine the work of two renowned writers in the field of analysis and performance in relation to Prelude No. 5. I will then apply these analytical techniques to some of the other Preludes.

### 3.2 Prelude No. 5

John Rink and Carl Schachter, have both published analyses of the D major Prelude. Both authors enrich Schenkerian analytical methodology with contextual observations about grouping structure, and both have made performance suggestions based on their analyses. I will examine both of their analyses before extending this methodology to some of the other Preludes.

Rink's definitions of 'authentic' and 'intuition' reveal the intimate connections in his scholarship between analysis and performance.[4] Rink places high importance on a

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[3] Jeffrey Kallberg, 'Small "Forms": In defence of the Prelude', in *The Cambridge Companion to Chopin*, ed. Jim Samson (Cambridge: Cambridge University Press, 1992), 124–144, 139; subsequent page numbers refer to this work until otherwise stated.

[4] John Rink, 'Authentic Chopin: history, analysis and intuition in performance', in *Chopin Studies 2*, ed. John Rink and Jim Samson (Cambridge: Cambridge University Press, 1994), 214–244; subsequent page numbers refer to this publication unless otherwise stated.

performer's sense of conviction in the interpretation of what he or she is playing. He states that 'it is this very sense of conviction in one's interpretation, not the achievement of historical accuracy, analytical rigour or technical expertise in and of itself, that ultimately matters to the artistically minded performer and that underlies truly "authentic" performance' (p. 214). Rink defines an 'authentic' performance as one which

> will certainly take historical evidence into account where appropriate (it would be foolish to ignore the full fruits of musicological research, as certain aspects of the music's 'meaning' can perhaps be understood only in terms of the composer's original intentions); it will be analytically defensible (there should be at least some audible relation between the music's structure, however that may be manifested, and the structure of the performance); and it will display technical control, but it will also reflect, and ultimately be shaped by, the performer's individual artistic perspective, which determines the very *musical statement* to be articulated by the interpreter, in an inspired act transcending the sterility of the merely 'correct'. This definition of 'authenticity' is the one to which the title of my essay refers and which is the basis of the following study. (p. 215)

Rink clarifies this statement however:

> Although reliance on intuition in and of itself is often an extremely dubious if not downright risky interpretative strategy, the situation is altogether different when one's 'intuition' has resulted from an utter familiarity with the composer's style and performance aesthetic, as well as prolonged immersion in the music itself. The 'second sight' obtained from such an intimate understanding of the music and its stylistic context is in fact an essential goal for the performer. (pp. 216–217)

Rink continues by explaining the background to his approach in the ensuing analyses:

> The stylistic basis of this 'second sight' will be investigated in the following case studies. These derive from my experiences in performing the music, in private and in public. The issues broached here were explicitly considered *after* the performances had occurred, and thus the three studies retrospectively examine the very 'intuitions' that guided my interpretations: in short, they show how historical evidence and analytical insight *as a part of one's general stylistic awareness* can influence the decision-making process guiding an interpretation without exerting ultimate authority over it, instead indirectly helping to shape the mental representation, or 'aural image', that one constructs of the piece to be played. I shall demonstrate how the performer determines what lies behind the notes [...], the score in each case serving as an incomplete version of the music it attempts to represent. (p. 217)

Rink uses Schenkerian notation and durational reduction as analytical tools to reveal pitch and durational patterns that not only illuminate the artistic content of Chopin's Prelude, but also suggest interpretative questions that might guide a performer to a more 'authentic' performance.

Focussing now on analysing the D major Prelude, Rink identifies the two 'fundamental properties' of music as pitch and rhythm, observing that rhythm is notoriously difficult to systemise in the act of analysis (p. 226). He notes, 'of particular interest are the composer's "rules" for musical punctuation and elocution as recorded retrospectively by Kleczynski, which reveal an implicitly hierarchical approach to phrasing and thus to rhythmic structure in general'.[5] Here we find a glimpse of the inherent potential that an analytical approach which combines a Schenkerian theory of levels with one of rhythmic analysis (inclusive of techniques such as grouping, durational reduction and harmonic rhythm) may have for interpreting Chopin. This insight is based on knowledge of historical evidence; thus reinforcing Rink's assertion that all of these facets are necessary in order to arrive at an 'authentic' performance.

Rink begins his examination of this Prelude with a specific individual characteristic of this piece, that is, the slur. He notes that almost the entire piece lies under a single slur—all except the final three bars. 'Determining the slur's function is an important first step in defining the Prelude's "rhythmic shape", this being (in Edward T. Cone's words) the key to achieving "valid and effective performance"' (pp. 227–228). Rink also mentions examples of small-scale rhythmic detail at this point, for example, the bracketed quavers in bars 1–4, 17–20, and 33–36, claiming that they 'violate the 3/8 metre and thus invite special treatment by the performer' (p. 228). He explains: 'To comprehend the rhythmic hierarchy that lies between the huge slur and the quavers requires preliminary consideration of the Prelude's form and tonal structure and of certain motivic details pertinent to the music's interpretation' (p. 228).

In discussing these motivic details, Rink notes the importance of the pitches A♯ and B♭ and comments, 'One of the work's main features is a "pun" between A♯ (which is biased towards B) and B♭ (which would normally descend to A)' (p. 228). He notes the following examples: (p. 228)

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[5] Ibid., 226–227; these rules are outlined in Jean-Jacques Eigeldinger, *Chopin: Pianist and Teacher as seen by his Pupils*, trans. Naomi Shohet with Krysia Osostowicz and Roy Howat, ed. Roy Howat (Cambridge: Cambridge University Press, 1986), 42–44.

- alternating B–A and B♭–A appoggiaturas in bars 1–4 and 17–20
- A–A♯–B movement in bars 5 and 21
- A♯s in bars 13–16 as part of F♯ major and then A♮ as part of F♯ minor
- B♭–A and B♭–A–G–F♯ in bars 29–36

The identification of such motivic connections raises interesting interpretive questions that can be addressed in performance. Evgeny Kissin responds to these motivic connections by giving slightly more time before B, the fourth semiquaver of bar 1.[6] Movement from B to A is first introduced in semiquavers and then moves in quavers. Kissin thereby highlights this change and points to the importance of this motif. He then gives more time to the alternation of B and B♭, and A and A♯ throughout.

Rink also stresses the 'motivic' role of the major/minor mixture in bars 1–4, 13–16, 17–20, and 29–36 as well as the three-note melodic line in bars 13–16 (F♯–G♯–A♯/A♮), bars 29–32 (D–E–F♯), and bars 37–39 (F♯–E–D) 'where at the last moment it restates in miniature the Prelude's underlying tonal structure'.[7]

Rink contextualises his findings in a summary example of structural and formal components (p. 229).

His conception of the anacrustic function of the **A** sections shows how the combination of Schenkerian analysis with rhythmic analysis can illuminate the overall structure of a piece. Rink's example contains an overall upbeat–downbeat structure from A to F♯ beneath the large notated slur, a voice-leading summary of ancillary motion around $\hat{5}$, a middleground Schenkerian graph, and middleground harmonic rhythm shown in durational reduction. All of these are aligned and underpinned with bar numbers, dynamics, and formal-section identification.

Rink regards the overall structure as being upbeat–downbeat with the structural downbeat on bar 37, but notes: 'Within this span pulses an extraordinarily regular harmonic rhythm [...] reflecting the steady succession of four-bar sections' (p. 228). His overall view of the form is summarised below:

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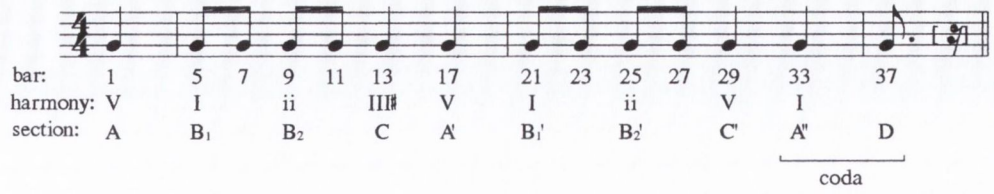
[6] Evgeny Kissin, *Chopin: 24 Preludes, Op. 28, Sonata No. 2, Op. 35, Polonaise, Op. 53*, RCA Victor Red Seal 09026 63535 2 (2000).

[7] Rink, 'Authentic Chopin: history, analysis and intuition in performance', 228; subsequent page numbers continue to refer to this publication until otherwise stated.




Example 3.2.1: Rink's summary of the form of Prelude Opus 28 No. 5 (p. 229).

In his explanation of this example Rink states:

> The harmonic-rhythm diagram demonstrates the anacrustic function of A, A' and A", with 'downbeats' on bars 5, 21 and (especially) 37, where the slur from bar 1 reaches the most important stress of all, on the registral peak f♯$^3$ (with the ensuing *forte* the Prelude's loudest explicit dynamic level, the dynamics otherwise contained within the wave shapes shown on the example, which are not unlike wave patterns in the figuration), and it is the high F♯ that precipitates the coda's $\hat{3}$–$\hat{2}$–$\hat{1}$ descent. In addition to the middleground voice-leading, Chopin decorates the fifth scale degree A with the auxiliary progression shown on level 2, this pitch being prolonged throughout the work as the anacrusis element of the fundamental upbeat–downbeat gesture. (p. 229)

Thus we understand that sections **A**, **A'**, and **A"** have an 'anacrustic function' and that structural downbeats fall on bars 5, 21 and 37 (p. 229). Although my own interpretation of the form of this piece agrees with the concept of structural accents, I do think that the opening four bars serve as more than just an upbeat. I will return to my own concept of the formal structure of this work later. Rink notes the importance of $\hat{5}$ A, as part of the auxiliary progression B–A♯–A and prolonged as the 'anacrusis element' of what he regards as the fundamental upbeat–downbeat gesture of A–F♯ (p. 229). Thus we see an example of how tonal voice-leading can be inextricably linked with rhythmic structure.

In reference to the rhythmic structure of the Prelude, Rink comments on the regularity of the harmonic rhythm and sectional divisions:

> Here, the regularity of the scheme is an essential source of stability in a work otherwise racked by rhythmic tensions, some of which threaten the very metrical foundation. These arise not in the rhythmic background or middleground but the turbulent rhythmic foreground, which the performer must somehow logically shape if the music is to make sense. (p. 230)

As I suggest below, these rhythmic tensions may also affect deeper levels even where the surface of the music is structured in a regular manner. He continues:

> Though constant, these *moto perpetuo* semiquavers are by no means functionally equal, and it remains for the pianist to infer shaping criteria from the clues latent within the music so that some notes emerge as more 'fundamental' (thus to be sustained, accented, articulated differently, or whatever), while others are subordinate. (p. 230)

Rink articulates the rhythmic action well when he reacts to the 'complex *rhythmic counterpoint* organising the ostensibly equal semiquavers into a functional hierarchy' (p. 230).

It is necessary here to mention parts of Rink's rhythmic analysis to demonstrate how he incorporates it into a generally Schenkerian approach. He notes that the Prelude begins with the time signature in 3/8 until the start of bar 2 where a 2/8 metre settles in for three four-semiquaver groups, 'extended by a quaver at the end of the section to propel us towards the strong downbeats that kick off the B sections in bars 5 and 21' (p. 231). He continues:

> The beamed semiquaver groupings, which possess an implied hemiola function, *treat the* B–A/B♭–A *appoggiaturas as syncopations* (not as falling on accented downbeats), the pivotal quaver shape thus serving as a rhythmically enlivening rather than accentually stultifying force. This driving force is enhanced by the analogous left-hand groupings, which are synchronised with the right and which complement the syncopated treble by slurrings *against* the four-note grouping, extending from the low A in each group [...] to the first note in the next. (pp. 231–233)

Rink rejects the complete rebarrings of Leichtentritt and Chominski on the grounds that the original 3/8 is 'not entirely supplanted (thanks to its presence in bars 1 and 17)'.[8] Such an edition would 'oversimplify the music's metrical flow', an opinion with which I entirely agree (p. 234). Rink goes into more detail on the subject of the rhythmic flow of section **A"**:

> In A", however, which has a closing as well as an anacrustic function, the situation is different. Here, without the 'grounding' 3/8 bar at first, the implied 2/8 prevails from the start, articulated by the rolling contrary-motion shapes in both hands and by the outer Ds, the inner lines in quavers now sounding even more syncopated than their appoggiatura counterparts in A and A'. The terrific momentum generated by this surging duple (which 'summarises' all the conflicting metrical implications) catapults the music towards the structural downbeat on f♯[3], in the same way as a hemiola—which is what A" amounts to, spread over four bars—precedes a cadence

[8] Ibid., 234; referring to Hugo Leichtentritt, *Analyse der Chopin'schen Klavierwerke*, vol. II (Berlin, 1921–1922) 137–138, and Jozef Chominski, *Preludia Chopina* (Cracow, 1950), 101–115, Ex. 12.8b.

> point in much baroque and classical repertoire. The effect in performance, when the huge slur finally reaches its goal after thirty-six bars, is electrifying. (p. 234)

While Rink's primary tool is Schenkerian analysis, many of his observations concern such rhythmic effects.

> Whereas hemiola effects are exploited in A, A' and (especially) A", the propulsive device used by Chopin in C and C' is metric shift, as the 3/8 metre is retained but starting at a different point in the bar. Both C sections follow 8 bars of relative metrical tranquillity, this being necessary given the processive, more discursive sequential activity in $B_1/B_2$ and $B_1'/B_2'$ (versus the 'static', though rhythmically energised, repetition structures in the highly contrasting A and C sections). Once the 'correct' 3/8 pulse has been well and truly established in bars 5–12 and 21–8, Chopin enlivens the rhythm by the three-note melody in the uppermost part of C and C', which is shifted out of phase by a semiquaver to pull against the foundation below, almost prevailing by the time C and C' draw to a close. (p. 234)

Rink concludes that 'the Prelude is almost a study in syncopation', and 'it is one of the pianist's greatest challenges to invest the bass line with the breathless forward energy it requires, given the way Chopin delays and hence abbreviates pitches which ordinarily would attract emphasis' (p. 234).

It may appear that Rink believes performance should inform analysis—rather than vice-versa. For example, he stresses that what counts most in preparing an interpretation is 'informed intuition' and that one should approach the piece 'instinctively' (p. 235).

Rink summarises his advice to performers thus:

> I do not propose that before playing a composition the performer must produce complex analytical diagrams (mine were drafted well after the fact), nor must he or she carry out extensive historical research on the music or its style. But if at some stage the particular knowledge that can accrue through continued exposure to a composer's works—with the aid of 'an accomplished technique, love of the music and scrupulous fidelity to the score'—has been assimilated by the performer so that it operates at a 'submerged level of consciousness', it may well guide the intuitive understanding of the music that alone can inspire authentic interpretation. (p. 244)

However it must be borne in mind that Rink is an adept analyst and his own performances, even without undertaking an explicit analysis beforehand, would be imbued with analytical insight—indeed the sort of knowledge one needs to arrive at an 'authentic' performance by his definition. On the subject of performance approach, his advice to the pianist (quoted in full above) is to 'infer shaping criteria from the clues latent within the

music' (p. 230). As the whole piece moves in constant semiquavers it is left to the performer to convey his or her own interpretation as to relative structural importance.

To summarise, Rink's approach to the analysis of this Prelude includes use of the following strategies:

- acknowledgement of individual aspects of the piece (the slur)
- analysis of formal, tonal and rhythmic structure, and of motivic details

His methodology includes:

- Schenkerian graphing on the middleground level to show auxiliary motion around A and A–F♯
- durational reduction to show middleground harmonic rhythm
- a more detailed diagram of the middleground rhythmic structure of certain sections
- formal analysis and discussion of performance elements such as dynamics and pedalling
- foreground diagram of rhythmic counterpoint showing *hemiola* effects, metric shifting and structural downbeats
- comparisons with the rhythmic analyses of other writers
- some performance suggestions

In other words, Rink uses Schenkerian techniques in conjunction with rhythmic analysis that incorporates grouping, harmonic rhythm, and durational reduction to arrive at a cogent and convincing understanding of how the piece is structured and may be interpreted. His approach also bases itself on the individual premises of each work and takes historical evidence into account.

A different article on the same piece by Carl Schachter, entitled 'Chopin's Prelude, Opus 28, No. 5: Analysis and Performance' incorporates a similar approach to Rink's by integrating rhythmic and Schenkerian analysis.[9] Schachter begins, 'An interesting piece of music, like an interesting person, will probably have some qualities that set it apart' (p. 27).

Schachter's analogy between pieces and people helps to clarify the central relationship between analysis and performance in his writing. In asserting the similarities between pieces and people, he notes that each has eccentricities or unusual characteristics:

[9] Carl Schachter, 'Chopin's Prelude, Opus 28, No. 5: Analysis and Performance', in *Journal of Music Theory Pedagogy* 8 (1994): 27–45; subsequent page numbers refer to this publication until otherwise stated.

'And in general, when we analyze a piece in preparation for performing it, a useful first approach is often to become aware of its special, idiosyncratic elements and to ask the piece why they are there' (p. 27). He explains that 'if the piece does begin to reveal itself to us, we shall be in a position to play it in ways that fit its individual character rather than with a generalized, one-size-fits-all, sort of expression' (p. 27). Schachter identifies the slur as one of the work's 'idiosyncratic' elements and questions its function.

He begins this exploration with a study of form that explains formal structure in terms of Schenkerian voice-leading structure. Schachter regards the opening four bars as 'clearly a kind of introduction' due to its unstable rhythm and harmony and lack of 'perceptible downbeats' (p. 32). He explains: 'It takes place outside of the structure, though it leads into the opening tonic of that structure in the way an upbeat leads into a downbeat' (p. 32). Schachter offers the following explanation as to how the piece is constructed:

> If we chart the music's form from the perspective of tonal structure and large-scale rhythmic shape, then, the primary landmarks that articulate the music's flow occur at mm. 5 and 21. If we chart according to pattern repetition [...], the main division would occur at m. 17, where the music 'starts over'. Because of this overlapping between tonal motion and motivic design, there is no uncontested point of articulation or formal division in the middle of the piece. This blurring of boundaries produces a special kind of continuity for the Prelude; perhaps Chopin's extravagant slur is at least in part the external sign of this inner continuity. In any case, the Prelude's form results from the tension it maintains between two articulative forces, design and structure. (p. 32)

Schachter notes that V in bars 17–20 forms 'an integral part of a larger cycle of harmonic movement', which is I–III♯–V–I, unlike V in bars 1–4, which enters without preparation (p. 33). He concludes: 'The two dominants, therefore, have quite different meanings and functions especially with regard to rhythm: the second one sounds like an upbeat *inside* a larger tonal and rhythmic structure, whereas the opening one sounds like an upbeat *outside* the structure' (p. 33). The analysis of these passages as upbeats corresponds to Rink's reading of the same.

Schachter uses voice-leading sketches of different types to reveal different aspects of the music. A middleground graph isolates the unfolding of 'a 5–6–5 progression in the bass motion leading from D to E and a variant of this motion, a 5–°7–5 unfolding, in the continuation from E to F♯. In both phases of the ascent, an applied chord—dominant or diminished seventh—prepares the next goal by means of a chromatic inflection, D♯ to E

and E♯ to F♯' (p. 35). A more detailed voice-leading sketch illustrates a specific foreground device such as the reaching-over of bars 5 to 16. He points out that

> this stepwise ascent moves through the same scale degrees as the bass, a procedure that would have led to parallel octaves were it not for the considerable melodic, harmonic, and contrapuntal activity in between the octaves, activity which breaks up the parallel motion. (p. 37)

Incidentally, this also results in the rhythmic displacement, which is clearly apparent when normalised on higher graphic levels. This is an example of Schenkerian graphing demonstrating the dual function of elucidating tonal reasons for certain passages (for example, avoidance of parallel octaves) while also illustrating rhythmic structure through the act of rhythmic normalisation.

Schachter provides an interesting insight into the role of the high F♯ $\hat{3}$ in bar 37. He notes that in bar 29, the harmony $I^6$ instead of III♯ brings melodic change in that the upper line sinks back to D (p. 37). Due to the repetition of the initial ascent

> listeners would naturally expect the climactic event to recur. And in general, we would expect the repetition of a large-scale pattern to equal (or even surpass) the impact produced by its model. Chopin's avoidance of the climactic F♯, therefore, creates a kind of frustration for the melodic line, which turns back from the expected goal at the very moment it should arrive there. [...] As the apparent coda unfolds, however, the crescendo suggests that something momentous is about to occur; and indeed in m. 37, Chopin gives us our F♯, lifted into the splendor of a higher octave and made all the more welcome because the piece was already sounding as if it were just about over. (p. 38)

Even where Schachter and Rink offer contradictory readings of a passage, it is worthwhile examining both. It is possible to arrive at different conclusions using this analytical method as it accommodates ambiguity and different perspectives that could be viewed as 'correct'. Schachter writes:

> The surprising advent of the high F♯ sheds light on the Prelude's form, large-scale rhythm, and emotional tone. First as to the form: if we understand the structural meaning of a coda to be an extension of the final tonic, after the piece's story has been told, then these last bars do not form a true coda, but an integral part—indeed the capstone—of the Prelude's structure. Note that Chopin refuses to let go of this hard-won F♯ once he has achieved it; the top-voice resolution $\hat{3}\ \hat{2}\ \hat{1}$ is submerged in the middle of the right-hand chords, with F♯ ringing out on top of it. The arrival on F♯ also creates a focal point in the Prelude's rhythmic structure: m. 37 becomes another structural downbeat and indeed the most impressive one in the entire piece.

> The four bars preceding it, then, function as an extended upbeat preparing this climactic event. And as to the emotional tone: the way Chopin deceives us at first into hearing a coda shows an important and often overlooked facet of his artistic personality—his playfulness, wit, and humor. (p. 38)

Here is a further example of the interconnection of tonal and rhythmic structure—one that is well illustrated with Schenkerian analysis.

Schachter's rhythmic analysis of the foreground complements Rink's, notating the quaver figure as syncopations moving with the bass A in the left hand (pp. 39–40). On the subject of the use of chromaticism in this piece, Schachter notes hidden repetition as A♯ moves to A♮ over III–V harmony, thereby reflecting the B♭–A motif (p. 41). He suggests that in performance the pianist should distinguish between movement from B to A and B♭ to A. He himself uses fingerings to achieve this distinction; 3–2 for B–A and a 2–2 slide for B♭–A.

Schachter provides a foreground reduction of the Prelude with suggested agogic nuances for the performer (p. 43). He emphasises that 'people can't always hear as fast as pianists can play, and there is no point in racing through the Prelude if its melody, harmony, and counterpoint are reduced to a kind of sonic rubble in the listeners' ears' (p. 42). The suggested agogic and dynamic nuances include such things as holding back for the motif B–A and singing out the melodic D in bar 6, as '(the weak metrical position of this important note might tempt some players to slight it)' (p. 44). Schachter states:

> In my opinion, such deviations from strict time are necessary in playing almost any piece, and they are particularly crucial to an effective performance of the Prelude. This is because the continuous legato required by Chopin's slur prevents our using articulation as a shaping element, so that a distinctive profile in performance can arise only out of dynamics and agogics. (pp. 42–44)

However, Schachter does qualify this statement by saying that this does not give a licence for over-dramatic use of rubato: 'These nuances of time must be so slight as to be almost imperceptible, and they must be performed smoothly enough to give the impression (or should I say illusion?) of a steady pace' (p. 45).

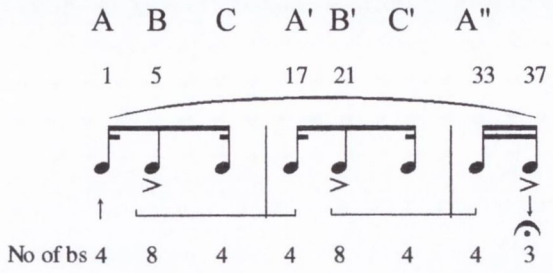
In summarising Schachter's analytical approach we encounter much in common with Rink's:

- both authors begin by identifying individual aspects of the work (in this case, the slur)
- both carry out a formal analysis, a harmonic analysis, and a middleground graph of the piece
- both use graphs to show specific structural issues that they wish to clarify (for example, unfolding)
- both examine the melodic structure, noting displacement of octaves, reaching-over, and the event of the F♯ at the end
- both use rhythmic grouping to demonstrate their interpretation of the first 4 bars and Schachter includes a 'less good' and a 'better' rhythmic interpretation of this section
- finally, Schachter includes a foreground reduction with suggestions for performers

So, Schachter's approach uses Schenkerian analysis for harmony, voice leading, rhythmic and structural issues such as parallel octaves, displacement and normalisation, and 5–6–5 unfolding. He also focuses on the individual characteristics of the work under examination and uses formal and rhythmic analysis.

Once again, alternative readings are possible. Using durational reduction as Rink has done, it is possible to notate the formal outline, derived from thematic material, in terms of musical duration. There is a clear division before bars 17 and 33 marked by the return of thematic material, but the structural downbeats that Rink has noted lie on bars 5, 21, and 37. Both Rink and Schachter regard section **A** as having the character of an upbeat as compared to the following material. The diagram below reflects the downbeat nature of section **B** while also retaining section **A** as a part of the main structure of the piece.

Notating each four bars as one semiquaver we find the formal structure thus:




Example 3.2.2: Formal Pacing of Prelude Opus 28 No. 5.

Barlines reflect the repetition of material, and accents show the structural downbeats. The dynamics of the piece enhance this reading by joining the two **B** sections under one *crescendo*. When viewed in this way, the formal structure of this Prelude contains a syncopated section **B**, so that syncopation is not just a surface feature of the Prelude but actually underlies the whole structure. In other words, according to this view, the overall pacing of the piece forms a rhythmic hidden repetition in the structure of the piece.

A central claim of this thesis is that its analytical method raises important questions relevant to preparing an interpretation for performance. While my reading of this large-scale syncopation differs from Schachter's, I believe that a performance shaped by either his interpretation or mine would have more interest than a 'flat' performance uninformed by either perspective. In other words, this kind of analytical approach incorporates great flexibility and allows for alternate readings of the same piece without insisting on one possible 'correct' interpretation. In so doing, it yields interpretative questions that could help when preparing a performance.

Analytical studies such as these by Rink and Schachter combine Schenker's explicit methods of analysing pitch structure with the kinds of insights about rhythm that are implicit in his writings and are elucidated by these analysts through such techniques as durational reduction and descriptions of grouping. Their synthesis of analytical methods reveals the 'hidden' structures and rhythmic design of this Prelude and has much to offer anyone preparing a performance. I will now examine some other Preludes to illustrate how this approach may increase our understanding of these pieces and illuminate some of their more hidden aspects.

### 3.3 Prelude No. 12

A voice-leading graph and a durational reduction of the middleground of the G♯ minor Prelude (included in Volume Two, pp. 1–2) help to explain its unusual phrase structure, illustrate the use of replication of the fundamental line throughout various structural levels, and demonstrate Chopin's use of metric devices to highlight tonal events.

The durational reduction of the middleground graph shows how the phrase structure of this Prelude relates to its voice leading. The pacing of events and the voice leading are strongly interrelated. The piece begins with a relatively straightforward phrase structure of eight bars subdivided into two four-bar phrases. This features a diminution of the $\hat{5}\hat{4}\hat{3}\hat{2}$ descent, which can be seen in both the voice-leading graph and the durational reduction, and prolongs $\hat{5}$. The following section comprises twelve bars subdivided into three four-bar phrases. This features a descent to $\hat{3}$ over the chord of III. Another eight-bar section follows (bars 21–28) but, rather unusually, it is subdivided into 3 + 4 + 1. Regular pacing returns in the following twelve-bar section that subdivides into two two-bar phrases and two four-bar phrases.

The unusual pacing in bars 21–28 reflects the unusual voice-leading in the same bars. As in the D major Prelude, a sequence in octaves and fifths (level C) elaborates what is essentially parallel octaves in the middleground (level B). As the soprano moves from B ($\hat{3}$) in bar 17 to A♯ ($\hat{2}$) in bar 37, the bass (or tenor, as level A suggests) makes the same motion (because the A♯ is supported at first by V/V in bar 37). One explanation for how Chopin makes this connection without giving us the sense of parallel octaves is given in level A, which shows that the A♯ is approached in contrary motion. Some enharmonic re-interpretation seems to be involved, because Chopin writes a descent by step (B–A–G from bar 7) and then ascends by step (to bar 37). Since that ascent ends with A♯, perhaps we should think of it F𝄪–G𝄪–A♯. The respelling of A as G𝄪 makes sense, as this chord functions as an augmented-sixth chord. But the respelling of G as F𝄪 seems problematic. The point is that this passage is not just rhythmically ambiguous, but also tonally ambiguous. Tonal ambiguity and tension leading up to the point of interruption is further heightened by ambiguity of phrase structure. The syncopation shown in the durational reduction of the middleground allows us to better appreciate this effect by comparing it to the regular pacing of its notated hypermetre.

This raises the interpretive question of how, or even whether, such cross-accentuation could be performed. Martha Argerich responds by dynamically lightening bars 23 and 27 and heavily accentuating bars 21, 24 and 28.[10] This effectively portrays the unusual grouping and also highlights the voice leading from B to A♮ to G♮ in the top voice.

This interesting combination of tonal and rhythmic effects is anticipated on a more surface level of metric and rhythmic structure.[11] Syncopation is implied in bar 1, as the repeated notes form a rhythm of ♪ ♩ ♩ ♩ and so forth.[12] The bass accents the first beat of each bar, but the second beat sounds an octave lower. A *crescendo* leads to the summit of the phrase in bar 5 over dominant harmony. In bars 5–8, accents in the bass and low octaves have disappeared so the rhythmic pattern is of pairs of crotchets providing a *hemiola* effect. Thus a pair begins on the downbeat of bar 7 on the return to D♯ $\hat{5}$. However the harmony of the bass moves in bar-lengths and the pedalling reflects this, so the feeling of a duple organisation is very weak at this point. The surface quaver movement of bars 1 to 8 involves repetition that crosses expected boundaries. This same issue is explored in the foregoing discussion of the subdivision of bars 21 to 28.

In bars 13–16, the bass rhythm (in the equivalent position to bars 5–8) now begins on the lower pitches of each pair thereby strengthening the duple effect. Bars 15–16 are more emphatic as the right hand rises to G♯ before falling from F♯ to C♯.

In bars 17–20, the effect of polymetre is intensified. The brackets in the left hand of Example 3.3.1 show crotchets grouped in 2, 3, 2, 2, 2 and 2. This begins in two, based on the previous pattern of pairing. Dissonance to resolution is heard in both hands going into bar 18 as $\frac{6}{4}\frac{5}{3}$. Repetition of $\frac{5}{3}$ on the second beat of bar 18 forms the single group of three crotchets, and the right hand is heard a quaver later on each beat enhancing the syncopated effect. The right-hand motif is then curtailed, resulting in a change of pitch on the first beat of bar 19, which subdivides the four bars in two, although the bass grouping runs across this division. The bass movement in pairs continues and right-hand resolution from 6 to 5 occurs *with* the left hand now. Pairing is further emphasised by the bass in bars 19–20 when what was a pedal bass B moves from iv$^{\flat 3}$ to I three times (in B major, III).

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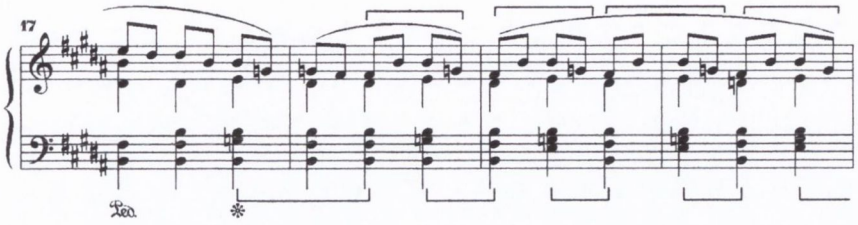
[10] Martha Argerich, *Solo Works: Chopin /Bach*, Deutsche Grammophon 453 572-2 (1997) recorded in 1975.
[11] The use of accentual shifting in Prelude No. 12 is more subtle, but it resembles that seen in Prelude No. 5. The hemiola principle was also characteristic of No. 5. This principle is expanded in Preludes Nos. 12, 14, and 21. In No. 12, it takes the form of a play between duple and triple metre.
[12] Douglas Hofstadter uses this passage as an example of Chopin's artful play with pattern in Douglas Hofstadter et al., *Fluid Concepts & Creative Analogies: Computer Models of the Fundamental Mechanism of Thought* (New York: BasicBooks, 1995), 79.

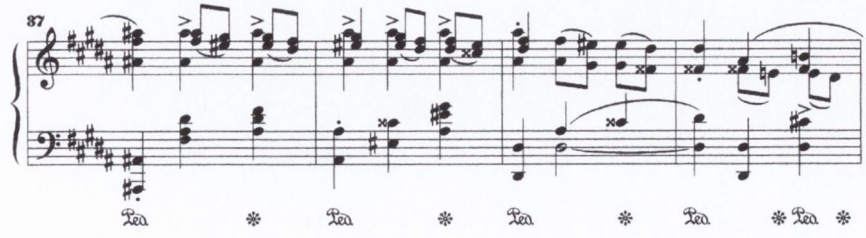
Syncopation and the use of duple grouping add intensity and heighten expectation of change. This change arrives in bar 21 when the voice leading becomes more developmental and less diatonic, and—as noted above—the phrase structure is affected.




Example 3.3.1: Prelude Opus 28 No. 12, 17–20, with grouping annotations.

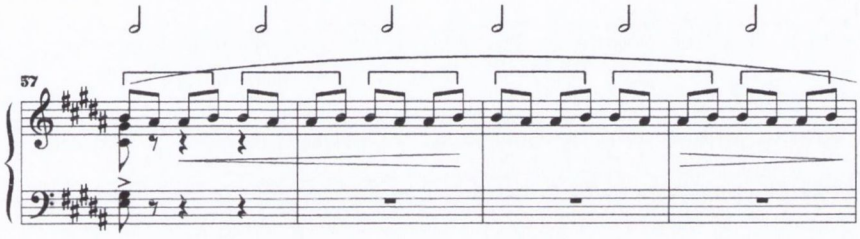
To summarise bars 1–20, we hear four bars rising and four bars falling (with a hint at left-hand pairing in the second phrase). Bar 9 begins the initial rise once more for four bars. Bars 13–16 are subdivided in two with more obvious left-hand pairing and bars 17–20 see the crotchet pairs taking over and migrating also into the right-hand motif. Return to the opening material in bar 9 forms a larger division of 8 + 12 bars, with increasing duple activity and the move to III adding to the expectation caused by this extension.

Following the arrival of $\hat{2}$, an interesting bass pattern begins with octave D♯ (V) in the bass in bar 39. The bass ties over into bar 40, forming an approximate pattern of 4 + 2 crotchets over two bars, as seen in Example 3.3.2 below. The lower right-hand line falls A♯–G♯–F𝄪–E–D♯ over V, and the return arrives in bar 41 over I and D♯ $\hat{5}$ takes over. Thus the point of interruption on $\hat{2}$ over V moves seamlessly by pitch, grouping, and dynamics into the recapitulation.



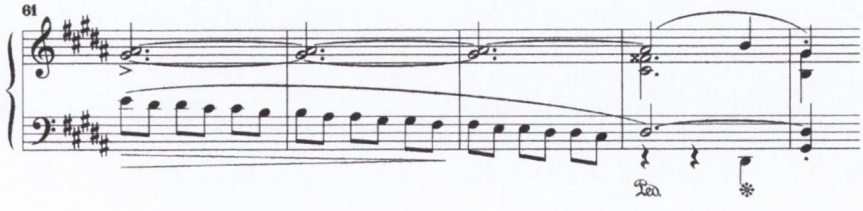

Example 3.3.2: Prelude Opus 28 No. 12, 37–40.

In bar 57, another middleground event is articulated by rhythmic effects. C♯ $\hat{4}$ falls to B $\hat{3}$ and the left hand disappears after the first quaver for the remainder of the four bars. B $\hat{3}$ alternates with A♯ throughout with the return of syncopated repetition. However, due to the return of B each time, the organisation sounds in patterns of four quavers, thereby giving an impression of duple time in minim movement—the polymetric effect of the *hemiola* again. This is made even more stark and obvious by the absence of the bass.



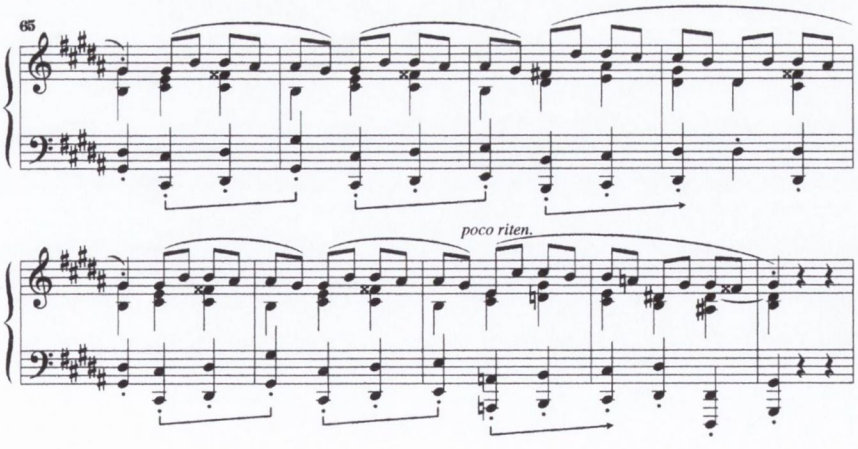

Example 3.3.3: Prelude Opus 28 No. 12, 57–60, with grouping annotations.

As A♯ $\hat{2}$ arrives in bar 61, another rhythmic effect suspends the metre. The left hand descends an octave over three bars from $d\sharp^1$ (with upper neighbour $e^1$) to d♯, bar 64. This is held and joined by D♯ an octave below on the third beat. The original repeated syncopated pattern forms this descent and as a result it lacks a clear sense of metre. Again, this is accentuated by the lack of movement in the right hand, which is held over bars 61–63. This left-hand descent provides an answering gesture to the right-hand ascent in bars 49–52 from $d\sharp^1$ to $d\sharp^2$. In bars 64–65, $\hat{2}$ falls to $\hat{1}$ (via $\hat{3}$) over V–I harmony. Longer note-values give the effect of a *rallentando* after the free-moving quavers.



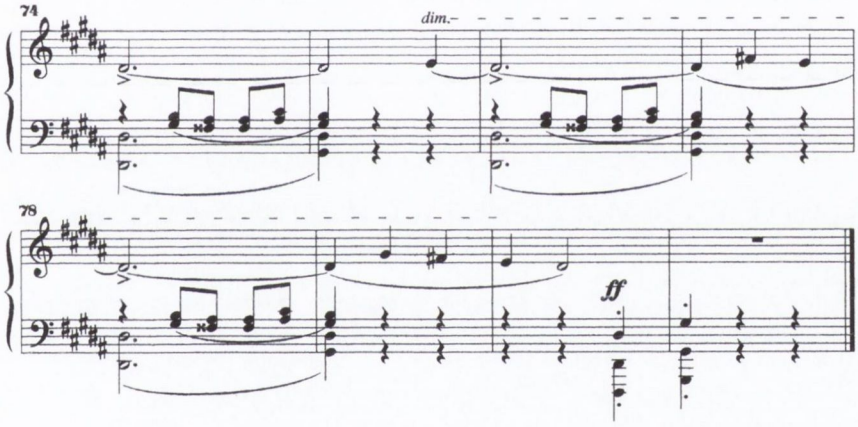

Example 3.3.4: Prelude Opus 28 No. 12, 61–65 (first beat).

The coda also reinforces important middleground events with changes in rhythmic texture and techniques of phrase expansion. It begins in bar 65 and can be divided approximately into 4 + 5 + 8 bars. The right hand is based on G♯ $\hat{1}$. Bars 65–66 outline $\hat{3}$–$\hat{2}$–$\hat{1}$ over iv–V–i, bars 66–67 outline $\hat{3}$–$\hat{2}$–$\hat{1}$ over iv–V–VI and, in bars 67–69, $\hat{5}$–$\hat{4}$–$\hat{3}$–$\hat{2}$–$\hat{1}$ is heard over III–ii$^{\circ 6}$–V$^{6}_{4}$–i. The latter descent provides a sense of stretching. Movement begins in bar 65 on the second beat due to resolution to $\hat{1}$ on the first. Thus this section retains the characteristic delayed accentual shift. However, bar 68 does not accent the second beat but emphasises the third beat to the first of bar 69 and so highlights the extension. Bar 69 begins as bar 65 and continues as such until the third bar. Here (bar 71) the right hand fails to reach $\hat{5}$ and rises instead to $\hat{4}$ accompanied by a *poco ritenuto*. Basically this third bar drops a tone. From bar 71, the harmony changes to ♭II–i$^{6}$–♭II$^{6}$–V$^{6}_{4}$–i. Octave movement in the bass moves A♭–B–C♯–D♯. The delayed accentual shift is ousted by this four-note rise and the subsequent drop of an octave highlights this extension. The prominent use of the flattened second, in the coda with a *poco rit.*, has an obvious relationship to B and the chord of I. This harks back to the heavy emphasis on A♭ (and A♭ bass octaves) in the movement from B $\hat{3}$ to A♯ $\hat{2}$ in bars 21–37. Furthermore the right hand moves C♯ $\hat{4}$ – B $\hat{3}$ – A♭ $\hat{2}$♭ – G♯ $\hat{1}$, thereby underlining this relationship, following as it does after numerous descents using A♯ $\hat{2}$. Therefore this final reference concludes this harmonic exploration.




Example 3.3.5: Prelude Opus 28 No. 12, 65–73, with grouping annotations.

Bars 69–73 form a five-bar unit due to the rests in the final bar on arrival on I. Low D♯ $\hat{5}$ returns in bar 74 over V while inner quavers circle the third G♯ and B This marks the return of $\hat{5}$—the primary tone. A crotchet E enters at the end of bar 75 as an upper neighbour to $\hat{5}$. Bars 76–77 repeat the previous two bars but bar 77 ends this time with two crotchets descending F♯–E onto D♯, bar 78, thereby further stressing $\hat{5}$. This is repeated in bar 79 but concludes G♯–F♯–E–D♯ with the final pitch arriving on the second beat of bar 80. This extension functions as an inner *rallentando* before the final cadence. The final *ff* cadence consists of D♯ moving, on the first beat of bar 81, to G♯ with the bass in octaves and the top voice doubling. The *diminuendo* from bar 75 culminates with the loss of metre resulting from the four-note descent in bars 79–80. D♯ $\hat{5}$ is finally exorcised after being thoroughly worked-through and dying out with the *diminuendo*.




Example 3.3.6: Prelude Opus 28 No. 12, 74–81.

The ultimate conclusion and summary is the final *ff* cadence as $\hat{5}$ moves to $\hat{1}$. This final cadence also provides metric resolution in its upbeat to downbeat 'correct' position.

The coda achieves resolution for all the main premises in the work:

- it summarises the descent of the *Urlinie*
- it incorporates ♭$\hat{2}$, A♮
- it works out D♯ $\hat{5}$
- accentual shifting is finally regulated and triple wins over duple
- the final cadence summarises $\hat{5}$–$\hat{1}$

The main rhythmic play in this Prelude is accentual shifting, as a result of syncopated emphasis, and the play between triple and duple time. As discussed in the chapter on analytical methodology, this rhythmic device results in prolonged intensity and increased emphasis on the 'correct' position when the accentual shift realigns with the metre. A summary of the overall use of these two rhythmic devices is outlined below.

| Bars | Triple/duple | Accentual shift | Effect |
|---|---|---|---|
| 1 | triple | hinted | |
| 5 | hint at duple | none | (increasing |
| 9 | triple | ~ more | focus on |
| 13 | duple, stronger | none | duple metre) |
| 17 | heavy duple, left and right | none | |
| 21 | triple | hinted | |
| 29 | triple | none | gen. more stable |
| 33 | duple, strong, left and right | none | (except duple) |
| 37 | triple (+ extension) | none | |
| (Interruption) | | | |
| 41 | triple | hinted | |
| 45 | hint at duple | none | (increasing |
| 49 | triple | very strong | focus on |
| 53 | triple | none | accentual shifting) |
| 57 | duple, right only, last time | none | |
| 61 | lack of metre, slowing mvt. | none | |
| 65 | triple | strong + extension | |
| 69 | triple | strong + extension | |
| 74 | triple | regular, conclusive | resolution |

Table 3.3.1: Summary of the use of rhythmic techniques in Prelude Opus 28 No. 12.

These two main rhythmic techniques are used in conjunction with tonal goals and tonal development as can be understood from the preceding examination. Rhythmic ambiguity heightens tension during tonal development or prior to a point of arrival and relative metric stability marks points of tonal resolution. Metric issues are not fully resolved, however, until the final bar of the piece, and this is one of the compositional techniques that lends the work its sense of forward momentum. Tonal events also affect the overall phrase structure of this work as was discussed at the beginning of this analysis. An analytical approach that combines tonal voice-leading with rhythmic analysis focuses attention on the way in which these two aspects interact on the foreground level as well as on larger levels, and thus aids our understanding of the structure of the work.

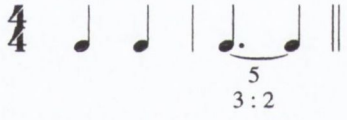
The Prelude is divided in half by the return of the opening material. Within the first half, it is subdivided into 20 + 20 bars by change in thematic material. The second half is subdivided approximately (the elision in bar 65 renders it difficult to be precise) into 24 + 16 bars by the resolution onto $\hat{1}$ and the start of the coda in bar 65.

The overall division of bars in relation to the *Urlinie* is thus:

| $\hat{5}$ | $\hat{4}$ | $\hat{3}$ | $\hat{2}$ (Int.) $\hat{5}$ | $\hat{4}$ | $\hat{3}$ | $\hat{2}$ | $\hat{1}$ |
|---|---|---|---|---|---|---|---|
| 20 bars | | 20 bars | 24 bars | | | 16 bars | |
| ¼ | | ¼ | | | ½ (3:2) | | |

Table 3.3.2: The *Urlinie* in relation to form in Prelude Opus 28 No. 12.

In musical notation this could be notated as:



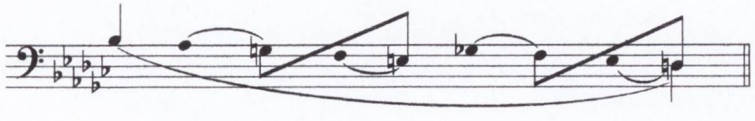

Example 3.3.7: Formal pacing of Prelude Opus 28 No. 12.

The piece is divided in half by the interruption of the fundamental line. The first half, which concentrates on the opposition of duple time within triple, is subdivided in two, coinciding with the prolongation and tonal offshoot from $\hat{3}$. The second half, which concentrates on triple metre and its positioning, is subdivided in the ratio 3:2 by the final descent. Here we find that the formal structure, as dictated by voice leading and harmonic goals, reflects the surface rhythmic issues of the piece on a background level. As with Prelude No. 14, surface rhythmic and tonal issues are connected, background pacing and tonal events are interdependent, and the rhythmic foreground is reflected in the background structure just as the tonal events of the foreground are reflected in the tonal background of the work.

### 3.4 Prelude No. 14

Chopin's E♭ minor Prelude provides a fine example of how rhythmic and tonal structure are inextricably linked in Chopin's compositions. Analysis of Prelude No. 14 will include discussion of linear intervallic patterns, hidden repetition, displacement, grouping, rhythmic ambiguity, dynamics, and form. This analysis will conclude with a brief discussion of performance issues, and will refer to Schenker's own comments on the performance of this piece.[13]

As can be seen from the voice-leading graph of this Prelude (Volume Two, p. 3), the main harmonic motion is relatively simple; moving from the theme in the tonic to the theme in the dominant minor in bar 5 before returning to the tonic in bar 11 and moving to $ii^{o6}$ as a dominant preparation in bar 15 before the bass moves $iv^7$–V–i in bars 16–17. What lends this piece its sense of direction, however, is the use of linear intervallic patterns (LIPs) that lead to more stable points of arrival. Level B of the graph shows that the intervals of a fifth and a sixth are used in linear intervallic patterns to reach the dominant. However, increased movement caused by the reaching-over of a seventh in bars 3 and 4 adds intensity to this motion. The notated dynamics also support this building intensity. Increased chromaticism from bar 7 takes the form of augmented-sixth chords in the first half of the bar that resolve towards the end of the bar—for example, the first-inversion German sixth in bar 7 (A♭, C♭, D♮, F♭) resolves to first-inversion E♭ by the end of that bar. The resulting linear intervallic pattern is a series of sixths that ends at the end of bar 10. Within this LIP, however, is a pattern of dissonance-resolution that subdivides these sixths into pairs. What this highlights is an expanded hidden repetition on a deeper level of the bass movement in the first bar of the piece. A voice-leading reduction of this section is shown below in Example 3.4.1.

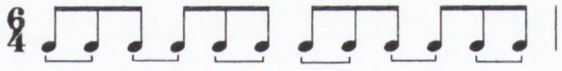


Example 3.4.1 Voice-leading reduction of Prelude Opus 28 No. 14, 5–10.

[13] Musical examples in this Prelude use the time signature and dynamic markings of Ekier and Henle with pitch spellings from Paderewski and EMB. Points of difference in enharmonic spelling will be noted as they arise.

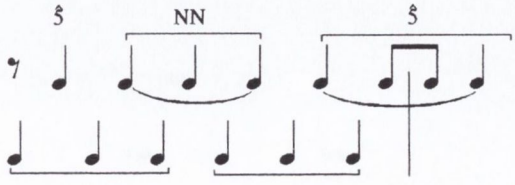
When the theme returns in the tonic, a LIP of sixths follows that leads into a $iv^7$–V–i cadence. This is not a straightforward cadence, however, as it moves directly from $V^6_4$ to i. This moment of closure will be discussed later. Although the surface of this piece sounds relatively complex, the underlying tonal plan is straightforward. The apparent chromatic and rhythmic complexity results from the interaction between the LIPs in this piece and the use of grouping. The following section discusses grouping and metre. A rhythmic reduction of the piece is included (Volume Two, pp. 4–5) in order to clarify the changes in movement throughout the piece. This reduction normalises the quaver displacement throughout the piece but retains the distinction between dotted-crotchet or crotchet movement—notated here as crotchets and triplet crotchets respectively.

On first inspection, the rhythm of this piece could be viewed as relatively simple. Both hands are playing in unison and move in quavers throughout. The time signature is simple duple time and the piece is marked *Allegro*. Notationally, it is written in 12/8 time with grouping of quavers in pairs implying 6/4, resulting in a bar-preserving (or even half-bar-preserving) polymetre:



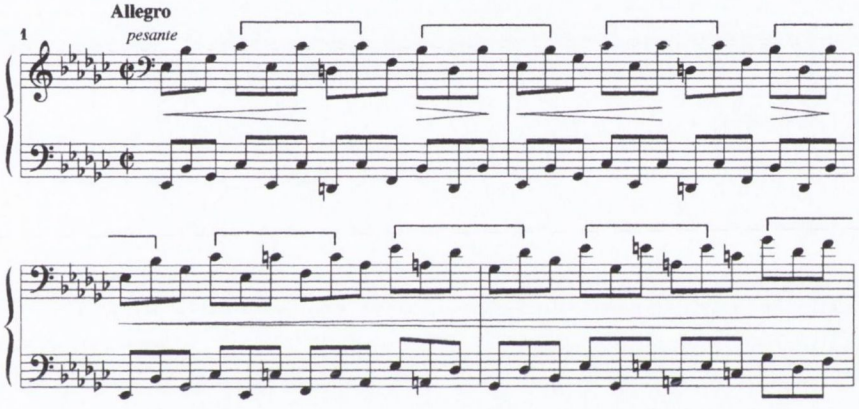
Example 3.4.2: Grouping in bar 1 of Prelude Opus 28 No. 14.

The bass of bar 1 may be grouped in three crotchets, E♭–G♭–E♭, D♮–F–D♮, outlining the first and third beats of the bar. The top line moves after the bass note each time: on the second quaver at the smallest level, and in groups of three offbeat crotchets starting on the second and fourth beats of the bar as if answering the three crotchets in the bass.




Example 3.4.3: Grouping of outer voices in bar 1 of Prelude Opus 28 No. 14.

The top voice highlights $\hat{5}$ (B♭) with neighbour motion from C♭. Then it moves C♭–C♮ E♭–D♭, and, in sequence, E♭–E♮ G♭–F. Looking at the rhythmic reduction it can be seen that increased movement is caused by the change in the LIPs. Chromatic inflection in the first half of the bar results in a triplet effect, and a reaching-over of the seventh continues this in the second half of the bar as both the fifth and seventh resolve to the sixth. Here we see an example of the co-dependency of the tonal and the rhythmic organisation in this piece. This increase in tonal and rhythmic movement moves the harmony into the dominant minor, B♭. A repeat of the opening begins in bar 5, with emphasis on $\hat{5}$ (F) with its upper-neighbour in the dominant minor key.

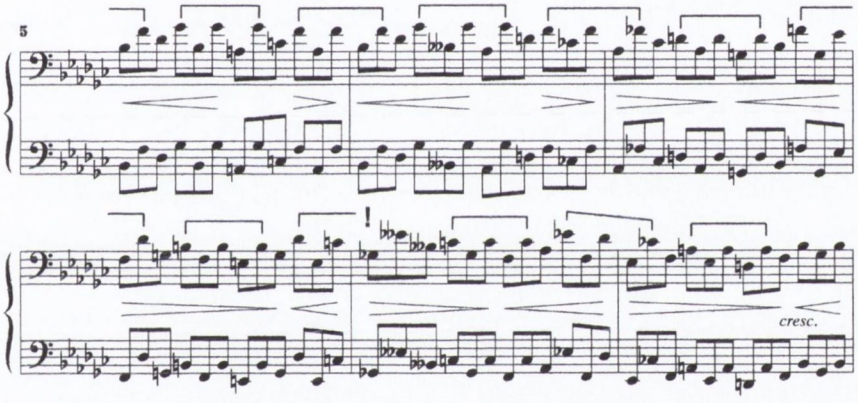



Example 3.4.4: Prelude Opus 28 No. 14, 1–4, with grouping annotations.[14]

Movement increases again from bar 7 as the augmented sixths (German in bars 7 and 9, and French in bars 8 and 10) raise the tonal tension and the seventh again reaches over in the latter half of the bar resulting in a duple followed by a triple pattern as can be seen in the accompanying rhythmic reduction. In the top voice, F♮ falls through E♭ to D♭. This third continues down to C♮ in the following bar. This repeats in sequence over bars 9–10 from E♭ down to B♭ $\hat{5}$. This outlines on a much broader scale, and with chromatic adjustment, the neighbour motif of the opening by emphasising the pitches C♮–B♭.

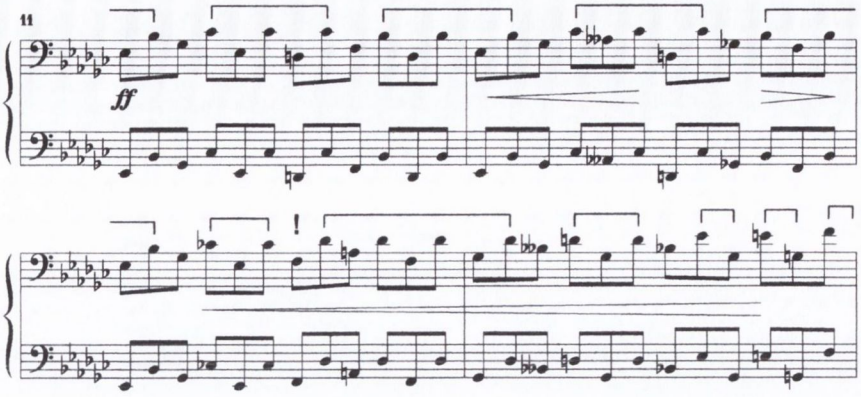
[14] The penultimate quaver of bar 3 is notated as B𝄫 by Henle and Ekier in keeping with the original. Paderewski justifies the enharmonic change thus: 'The notation at this point seems rather to demand an A, as a passing note between A♭ (the ninth note of this bar) and B♭ (the third note of the following bar). Riemann uses this notation in his edition of this Prelude'. From Paderewski, 'Commentary' in *Chopin Complete Works: Preludes*, Frederyk Chopin Complete Works, 22nd edition, (Cracow: Polish Music Publications, 1981), 69.

The hidden repetition in these few bars of the bass from the opening was shown in Example 3.4.1 above. This small section therefore forms a hidden repetition of both voices from the opening of the piece—a fact that is very hard to hear with the added dissonance of the augmented sixths. In bars 8–9, the top voice moves D♭–C♮–E𝄫, changing direction at the join of sequences in the bass and thus highlighting this. The right-hand movement during the extended sequences in bars 7–10 blurs the dotted crotchet emphasis that arose from the alternating three-crotchet groups in both hands. This remains until the resumption of the theme and gives extra strength to the return of the tonic and to main-beat emphasis. Bar 10 loses the seventh, thus slowing the pace of movement, thereby preparing for the return of the theme and its slower voice-leading pace. This can be seen in the rhythmic reduction as duple takes over the previous triplet motion in the second half of bar 10.




Example 3.4.5: Prelude Opus 28 No. 14, 5–10, with grouping annotations.

After the opening returns in the tonic in bar 11, another LIP connects to the dominant (ii$^{\circ 6}$) preparation in bar 15. Once again, rhythm and pitch structure combine to create a sense of building intensity. As the line ascends, added chromaticism accelerates the soprano's climb, and once again, the notated dynamics support this combination of rhythmic and tonal effects. A hairpin *crescendo* accompanies this accelerated movement as crotchet movement replaces larger group-durations of dotted minims.

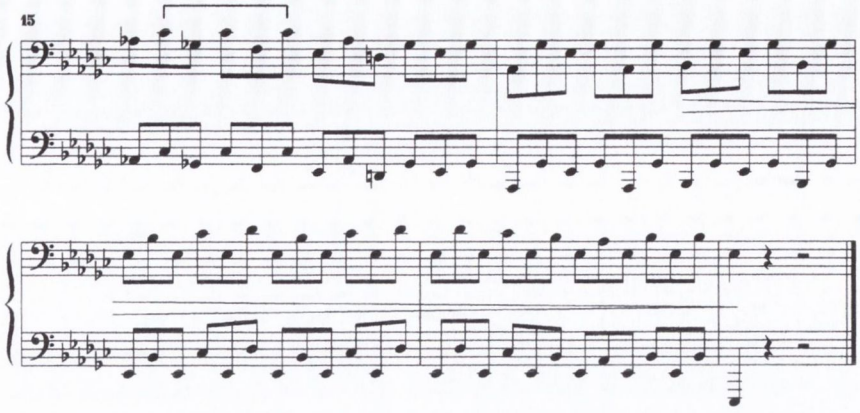



Example 3.4.6: Prelude Opus 28 No. 14, 11–14, with grouping annotations.[15]

The bass descends A♭–G♭–F–E♭ in bar 15. The top voice sounds three C♭s beginning on the second quaver of the bar. A♭ is heard once before the top voice remains on G♭ for eight crotchets in bars 15–16. The effect of bar 15 at the climax of the *crescendo* is of perceived acceleration due to the faster movement of the bass in crotchets—strengthening the polymetre. The bass returns to half-bar movement under the eight G♭s. In bar 17, the bass rests on a tonic pedal over which the top voice plays B♭–C♭–D♭ on the second of each quaver-pair—enhancing the polymetric effect and subjecting this concurrent metre to delayed accentual shifting. This stresses $\hat{5}$ once again and intensifies the feeling of syncopation. The top voice sounds this rise of a third once more and the D♭ is repeated before descending back to B♭ $\hat{5}$. This provides a broadening-out and extension before the final bar, and is accompanied by a hairpin *diminuendo*. These effects can be seen more clearly in the rhythmic reduction, as triplet movement seems to predominate.

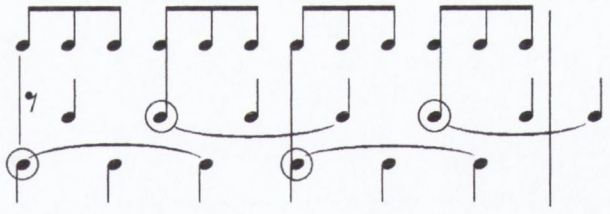
The descent in the bass in bar 15 accentuates the first of each quaver pair. The ascents in the top voice in bar 17 move on the second of each pair thereby enhancing the syncopation. The curtailment of the last B♭ in the top voice to one quaver realigns it with the bass. In the final bar, both voices converge on the downbeat on unison E♭. The movement of the soprano voice from A♭ to B♭ to E♭ recalls the bass of bars 16–17.

[15] Paderewski and EMB modify the spellings of the original pitches in bar 14. The original notates E♯ on the fourth and sixth quavers, and F♭ on the tenth quaver of that bar. Paderewski's modifies this notation 'in accordance with the harmonic movement', Paderewski, 'Commentary', 69.




Example 3.4.7: Prelude Opus 28 No. 14, 15–19, with grouping annotations.

In summary, each quarter bar is emphasised by the general movement of the top and bass voices in dotted minims subdivided into crotchet triplets (shown with slurs in Example 3.4.8 below). On a smaller scale, the movement is in pairs of quavers providing a 6/4 metre. The bass sounds on the first of each quaver pair while the top voice enters on each offbeat.

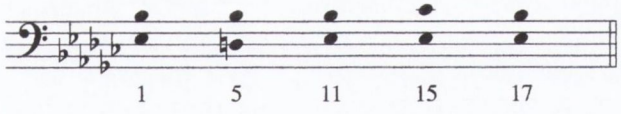


Example 3.4.8: Smaller-scale movement in Prelude Opus 28 No. 14.

Therefore, dotted crotchet beats are accentuated in the interaction of larger group-durations between the voices. However, the 6/4 organisation and the resultant polymetre are still audible. This 6/4 metre gradually comes to the fore towards the end, with crotchet movement accentuated on the beat in the bass in bar 15, and off the beat in bars 17–18 in the upper voice. Simultaneous convergence in both voices on the beat occurs in the final bar. The emergence of 6/4 gives the effect of acceleration and emphasis towards the end of the Prelude.

The main metric device used in this piece is the polymetric play on 2/2 versus 6/4 time and dotted-crotchets versus crotchets throughout, lending shape to the Prelude, clarity to the theme each time, ambiguity to developmental sequences, and excitement and drive towards the ending. This metric play results from the use of different linear intervallic patterns throughout the piece and is thus totally interdependent on the voice leading in this piece.

The subject of the final descent of this piece is fascinating. It could be viewed as descending from $\hat{5}$, as shown in the accompanying graph, with $\hat{2}$ implied. This is not very convincing, however, due to the use of $V_4^6$ in place of the structural dominant. In *Free Composition*, Schenker, in reference to Clementi's *Preludes et Exercices*, No. 32, notes: 'It is of little consequence that at Ex. 1 a linear progression is entirely lacking', explaining, 'Their content is just enough for preludes, which as their name implies, merely prepare for genuine compositions, that is, those founded on repetition'.[16] It may be possible that the fundamental structure of this piece does not include a final descent. If this is the case, the overall structure of this Prelude may be notated as shown below in Example 3.4.9. Although the foreground harmony of bar 5 is B♭ minor, the bassline unfolds a sixth between B♭ and D♮ (bars 5–10), thereby prolonging B♭ major. This is shown on level B of the graph. When normalised, therefore, the major mode is notated in bar 5.




Example 3.4.9: Background structure of Prelude Opus 28 No. 14.

Notice that in this example, the two voices shown take turns being emphasised as the piece unfolds (in the first dyad, we get the E♭ before the B♭, in the second dyad, we get the B♭ before the D♮, and so forth). The result is that this is, in fact, a giant hidden repetition of the main motivic movement of the work. This demonstrates Chopin's total integration of tonal issues from the foreground right back to the background basic structure.

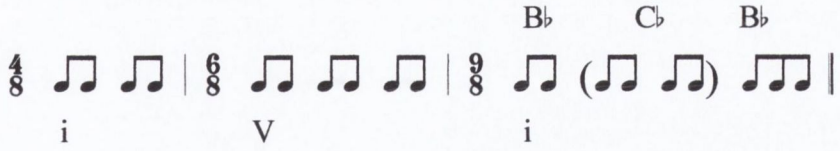
[16] Heinrich Schenker, *Free Composition*, trans. and ed. Ernst Oster (New York: Longman, 1979), 118–119.

The form and main material of this Prelude are outlined below:

| Bars | Metre | Themes | Contents |
|---|---|---|---|
| 1–4 | 2/2 | Theme in tonic | sequences over i and III |
| 5–10 | blurred | Theme in dominant | longer sequences—faster movement |
| | | | extension and development |
| 11–16 | 2/2 to 6/4 | Theme in tonic | acceleration of movement |
| | | | *crescendo* and intensification |
| | | | final descent? & resolution to $\hat{1}$ |
| 17–19 | 6/4 | 'Coda' | resolution of hands on downbeat |

Table 3.4.1: Form and thematic material in Prelude Opus 28 No. 14.

The Prelude is approximately divided in half by the return of the opening material in bar 11. The first half consists of four bars (2 + 2) over i and six bars (2 + 2 + 2) over V. The remaining nine bars lie over i, and are subdivided into 2 + 4 + 3 due to the final cadence onto chord i in bar 17. The subdivision of bars is thus 4 + 6 + 9. The ratio 2:3 governs the relationship between subsequent sections and reflects the duple versus triple play throughout. The subdivision of the last nine bars into 2 + 4 + 3 further reflects this duple-triple motto. In musical notation this form would be notated thus:




Example 3.4.10: Formal pacing of Prelude Opus 28 No. 14.[17]

Here again we find that the background form, as derived from the harmonic structure and the material, reflects the surface rhythmic structure, that is, the play between duple and triple organisation. Not only is there a reflection in the background of foreground tonal issues, but there is also a reflection in the background of foreground temporal issues and these are interdependent from the foreground to the background level.

[17] These time signatures do not imply internal groupings.

Performance considerations that would affect the interpretation of this piece include dynamics, pedalling, and accentuation. I have already shown how some of the notated dynamics reflect the use of dissonance and resolution. Notice also that the neighbour is played at the peak of a *crescendo* in bars 1 and 2. A *crescendo* accompanies the increase in pace in bars 3 and 4 leading in to the dominant minor. A shift occurs in bar 7 as the tension–release pattern changes. The augmented sixths form the strongest dissonance in the bar and occur at the beginning of the bar. The dynamics reflect this with the *crescendo* climaxing with the barline now. A written *crescendo* at the end of bar 10 accompanies the slowing of pace into the resumption of the theme. A fascinating use of dynamics is found towards the end of the piece. A huge *crescendo–diminuendo* begins in bar 13 and peaks in bar 15. This serves to highlight the C♭ of the large hidden repetition of the neighbour motif B♭–C♭–B♭ over these few bars and also to emphasise the C♭ if the overall form is itself a giant hidden repetition as outlined in Example 3.4.9 above.

Pedalling, or slightly holding certain bass notes, achieves a result resembling the rhythmic reduction and can reflect harmonic and intervallic knowledge. Therefore an interpretative approach such as this that incorporates voice-leading and rhythmic analysis can prove very helpful in preparing a performance.

Schenker mentioned this Prelude in *The Art of Performance*. He wrote: 'Indications such as *pesante* (heavy) and *sostenuto* (held) refer to the overall character of a formal section but do not mean a slowing down of the tempo'.[18] He explained that the indication of *pesante* in the case of this Prelude 'refers to the expression of:

c♭$^1$ in the third quarter of m. 1;

e♭$^1$ in the fourth quarter of m. 3;

g♭$^1$ in the fourth quarter of m. 4;

f♭$^1$ in the first quarter of m. 7;

d♭$^1$ in the first quarter of m. 8'.[19]

Looking at the piece we discover that all of these pitches form the strongest dissonance in that particular bar. This complements Chopin's use of dynamics throughout and demonstrates the potential information that can be gleaned from harmonic analysis of this piece and its applicability to performers.

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[18] Heinrich Schenker, *The Art of Performance*, trans. Irene Schreier Scott, ed. Heribert Esser (New York: Oxford University Press, 2000), 57.

[19] Bar numbers have been corrected. The original text has 'e♭$^1$ in the fourth quarter of m. 2; g♭$^1$ in the fourth quarter of m. 3'.

It is interesting to examine various approaches to this piece by renowned pianists. Kissin, for instance, emphasises the sevenths that reach over in bars 3 and 4 by taking more time over them.[20] In other words, he achieves the emphasis that Schenker sought for these pitches using different means. Alfred Cortot emphasises the final cadence of the piece by slowing into bar 17 and doubling the bass an octave below—thus mirroring the final registral position of the bass in bar 19.[21] Argerich reinforces the offbeat melody in the final three bars in a manner that strengthens the ambiguity of the downbeat until the final note.[22]

The use of a combination of voice-leading analysis with rhythmic analysis has uncovered fascinating aspects of this piece. Through discussion of LIPs and grouping it was found that these were interrelated and the pace of rhythmic movement in the piece was reinforced by the density of the voice leading. Looking at such aspects as hidden repetition and form revealed that the form of the entire piece was a hidden repetition of the initial motif. The rhythmic structure of the piece was traced to the background and the overall form of the piece was found to be a hidden repetition of the *rhythmic* foreground material also. A brief discussion of performance issues highlighted the potential inherent in this kind of analysis for performers.

### 3.5 Prelude No. 16

We have seen how an analysis (such as Schachter's analysis of the D major Prelude) may identify individual characteristics (such as the single long slur) that work as a point of departure for a deeper understanding of that work. Chopin's Prelude in B♭ minor begins in an unusual fashion—with crotchet triplets—a texture that does not return in that Prelude. That motif, $\hat{5}$–NN–$\hat{5}\hat{4}\hat{3}\hat{2}\hat{1}$, and its component parts, shapes the melodic material from foreground to background. (Bar 1 is shown below in Example 3.5.1.) The use of F♭ or E♮ colours the piece, and the neighbour relationship introduced first as G♭ NN to F $\hat{5}$ has deep significance on all levels of pitch and rhythmic structure. Its statement in the contrasting rhythm of crotchet triplets may even suggest that this motif will play an important role in the rhythms of this piece as well.

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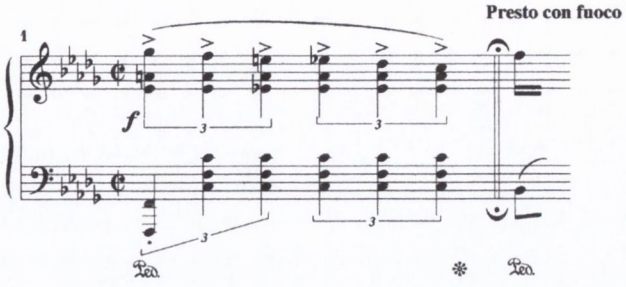
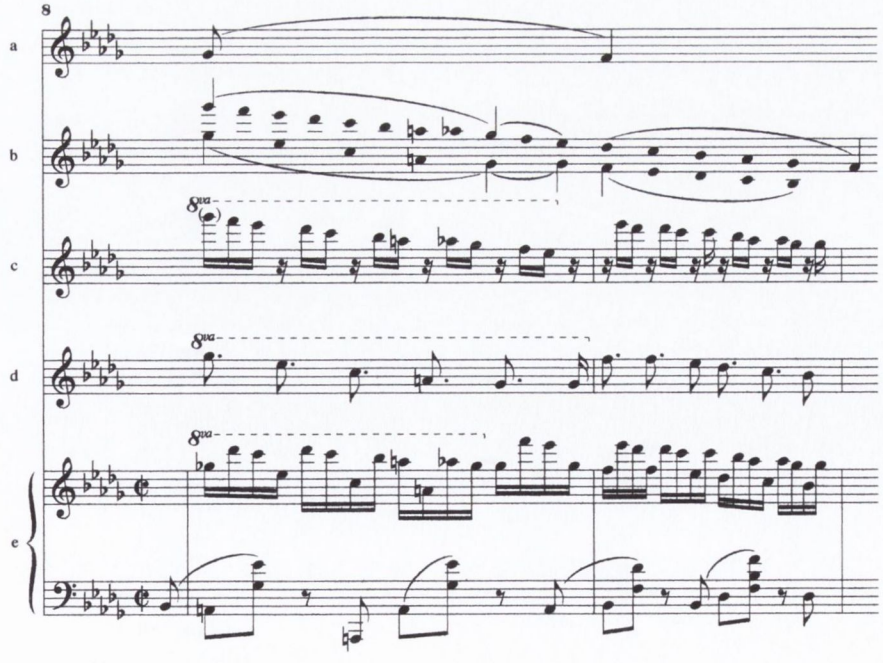
[20] Kissin, *Chopin*, RCA Red Seal (2000).
[21] Alfred Cortot, *Chopin: Œvres pour piano*, EMI Classics CZS 7 67359 2 (1991) recorded 1942.
[22] Argerich, *Solo Works*, Deutsche Grammophon (1997).

In the accompanying graph (Volume Two, pp. 6–9), levels H and I reflect the foreground events, while levels A to G attempt to explain the broader structure of the work.




Example 3.5.1: Prelude Opus 28 No. 16, 1.

The $\hat{5}$–$\hat{6}$–$\hat{5}$ motion initiates the first phrase on several levels. For example, bars 2–11, the opening tonic prolongation of the first phrase, are based on this motion (see level H of the graph). Within that phrase, another marvellous combination of rhythmic and tonal effects recalls the introductory bar. As Example 3.5.2 shows, bars 8–9 articulate this middleground NN–$\hat{5}$ motif in a foreground compound melodic structure that forms a hidden repetition of the $\hat{6}$–$\hat{5}$–$\hat{4}$–$\hat{3}$–$\hat{2}$–$\hat{1}$ motif.




Example 3.5.2: Voice-leading reduction of Prelude Opus 28 No. 16, 8–9.

The two-bar descent beginning in bar 8 features a new right-hand shape that sounds in groups of three semiquavers due to its two-voice layout. The lower notes form the first of each group, implying a 3/16 polymetric effect. The third beat of the bar therefore receives no emphasis in the right hand. A four-semiquaver group extension at the end of the bar brings grouping back onto the first beat of bar 9. This time the grouping is heard as 3 + 3 + 2, 3 + 3 + 2, thereby stressing beats one *and* three, and using grouping to affect a sense of punctuating and slowing of the descent. This results from half-bar emphasis after a whole bar, causing a sense of deliberation due to diminishing forward momentum. The bass moves on the half bar to $i^6$, thus adding to this third-beat emphasis. This can be seen on level I of the graph. From this point until bar 14, harmonic rhythm is in half bars and diminished chords on the downbeats resolve on the second half-bar to first inversions. This pattern reverses in bars 14 and 15, as diminished chords are heard on the second half of each bar following first-inversion chords. This further emphasises half-bar movement with accented dissonances occurring in the second half of the bar. Hairpin dynamics reflect the contours of the right hand.

The matter of performance interpretation again comes into question in light of this information. Argerich clearly portrays these groupings, as well as changes in harmonic patterns.[23] She articulates the grouping in bars 8–9, 24–25 and from bar 42 until the end. She also differentiates between movement within the bar from a diminished chord to a first inversion (bars 10–13)—highlighted by a dynamic pattern of tension and release, and movement from a first inversion to a diminished chord (bars 14–15)—using a more directed, continuous dynamic level. She thereby demonstrates her awareness of harmony and grouping and provides a fine example of one of the ways in which this kind of analytical finding mirrors the intuition of performers.

Bar 10 marks the beginning of **B** material. Movement in single bars predominates, as does the use of repetition and sequence. The harmonic rhythm is faster than that of **A**. Here chords change every half bar; this rate of change was subtly prepared in bar 9. **B** material always features the neighbour to $\hat{5}\hat{4}\hat{3}\hat{2}\hat{1}$ descent as introduced in bar 1 in various keys and descending to $\hat{1}$ within the bar. As will become evident, however, this material uses different metric patterns of harmonic tension depending on its position in the piece. All of these compositional techniques lend an increase in intensity to this section.

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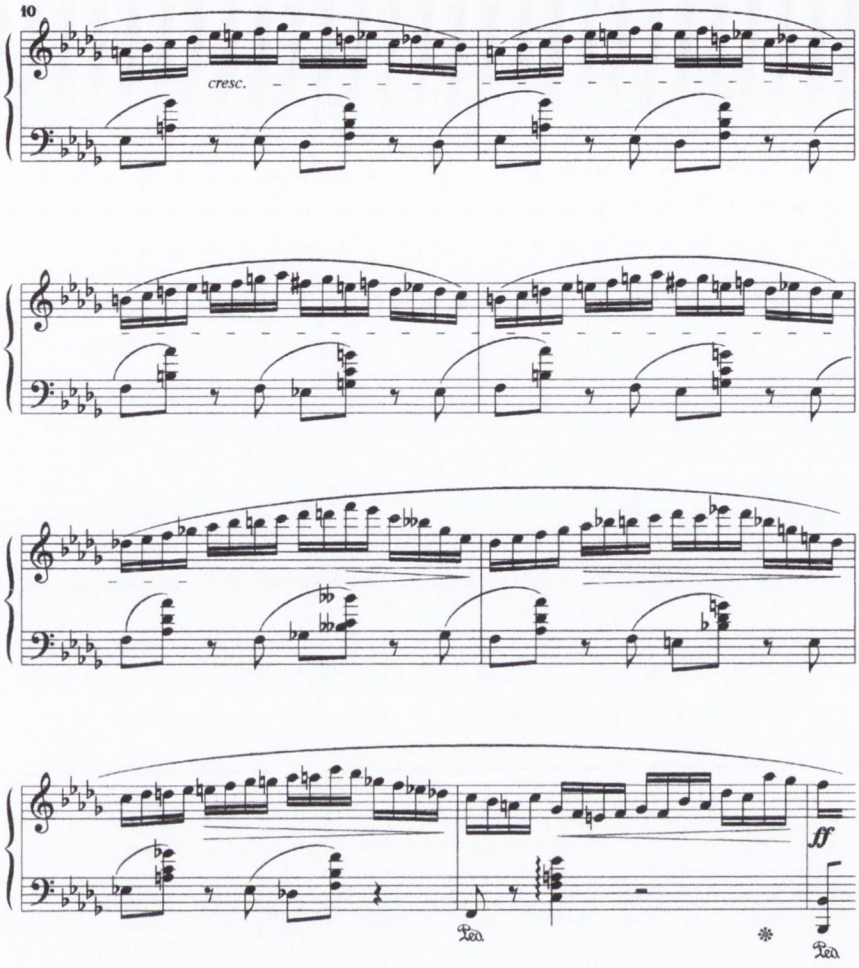
[23] Ibid.

Bars 10 and 11 on B♭ minor are followed in bar 12 by a repetition of the single-bar pattern over C minor harmony and the descent of F $\hat{5}$ to E♭ $\hat{4}$ (shown as an implied tone on level F of the graph).

These right-hand statements of the motif, like so many in the piece, include not just the typical elements of this pattern, $\hat{5}$–$\hat{6}$–$\hat{5}$–$\hat{4}$–$\hat{3}$–$\hat{2}$–$\hat{1}$, but also the chromatic passing tone between $\hat{5}$ and $\hat{4}$.

In bar 14, the motif appears again—but now in the bass—and still with that chromatic passing note between $\hat{5}$ and $\hat{4}$. Once again, the motif plays important rhythmic as well as tonal functions. In bar 14, a first-inversion chord of III moves to a diminished 7th chord.[24] This reverses the previous harmonic pattern of strong-beat dissonance and provides a stronger sense of forward movement and half-bar emphasis. Larger spans and a sense of broadening accompany this move (and a large slur begins in bar 14), although the shape is still contained within the bar. The interruption arrives in bar 17 over V and a change of shape in the right hand forms an upbeat gesture into bar 18 and the return of **A** and $\hat{5}$. This harmonic movement results in the hidden repetition of the motif in the bass as it moves F–G♭–F–E♮–E♭–D♭–C into B♭ over bars 14–18. As previously mentioned, bars 2–17 form a larger expansion of the neighbour to $\hat{5}\hat{4}\hat{3}\hat{2}$ descent into bar 18 and the return of the material from bar 2. Bars 10–18 are given below in Example 3.5.3.

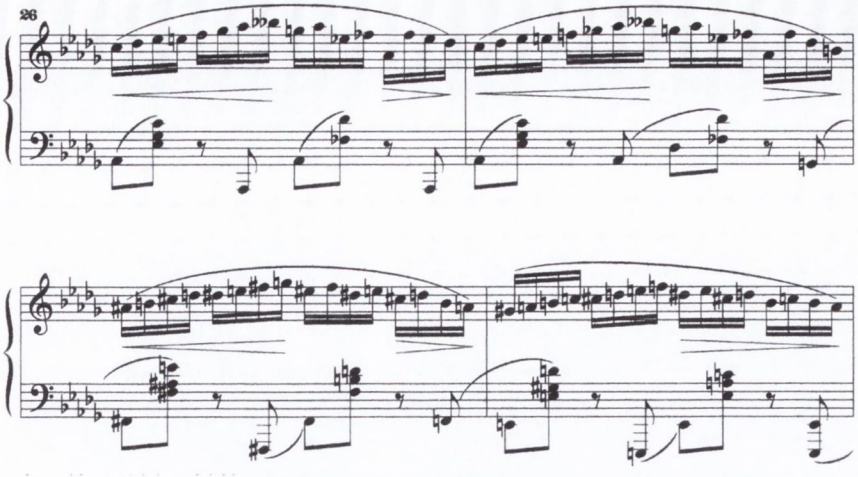
[24] Henle and Ekier both notate the left hand chord in the second half of bar 14 as A♮ instead of B𝄫. This example follows the editions of EMB and Paderewski. This spelling retains the harmonic pattern of second-inversion vii chords as shown in bars 10–16 in level F of my graph. Paderewski explains that 'Chopin wrote A instead of the more correct B𝄫. This is a diminished seventh chord on the leading C–E♭–G–B𝄫, serving as an intercalated dominant between the two D♭ –F–A♭'s. The original version has C♯[3] as the ninth semiquaver in the treble; we have changed this to D♭[3], as seeming more appropriate to the key of D♭ major. (In the corresponding passage at bar 16, Chopin writes A♭[2] and not G♯[2])', from Paderewski, 'Commentary', 70.




Example 3.5.3: Prelude Opus 28 No. 16, 10–18 (first chord).

In each appearance of the motif, the E♮ seems to play a role of increasing importance. In bars 18–30, an unusual progression leads us from the tonic to the dominant—and the turning point in that motion is an E♮ in the bass, bar 29. The goal of this progression is F♮ on the downbeat of bar 30. E♮ would ordinarily be a typical turning point on the route to that goal. However, as the harmony moves from i to V (from B♭ to F), it does so through a linear intervallic pattern that moves in tenths and arrives on the leading note, E♮—making it the root of a chord, rather than a third (as it might ordinarily be in a more typical progression). This LIP can be seen in level F of the graph.[25] As a root, and with G♯ above it, E♮ thereby takes on more significance as a turning point before the dominant.

[25] For the purpose of illustrating this LIP of a fourth, E♮ (bar 29) is notated as F♭ in levels F, G, and H, and is corrected back to E♮ again in level E.



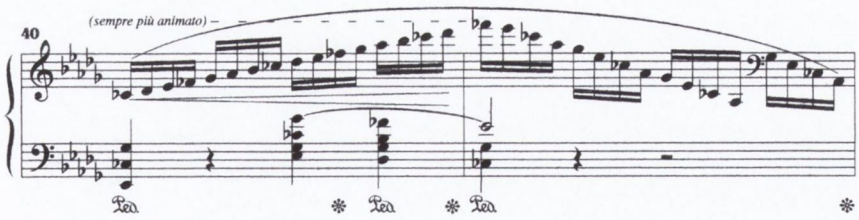
Example 3.5.4: Prelude Opus 28 No. 16, 26–29.

Bar 30 begins a two-bar circle of fifths around the tonic beginning $V^7$–i in B♭ minor. Right-hand scalic descents occur off the beat grouped in a ♪ ♩ ♩ ♩.|♪ ♩.♩ ♩. pattern. This progressive lengthening of group duration is curtailed into the downbeat of bar 32. This forms an opening-out and closing gesture that mirrors the arch shape with expansion and broadening in the middle. Two-bar movement is emphasised again, particularly as the first beat of bar 31 is unacknowledged in the right hand. The bass is sounded on every crotchet for the first time with spread chords. This accentuates the offbeat syncopation of the right hand even more. The alto sounds D♭–C–B♭ starting in the second half of bar 30 and moving every half bar. This resolves the emphasis on A♮ leading-note as local Î in bar 29 and is in the same register. There is a *stretto* marked at the start of bar 30 that remains until bar 41. All of these facts: the roving harmony, the changing shape, the *stretto*, and faster movement in the bass, contribute to the increase in tension at this point.

Quicker movement characterises the two-bar descent beginning in bar 32. Four-semiquaver groups form a gradual descent and are very chromatic. The overall movement is of B♭ down an octave. Although the rhythm is much more regular, the heightened chromaticism adds pungency and uncertainty, and the left hand joins the right hand an octave lower on the last beat of bar 32. The offbeat ascent followed by the onbeat descent further accentuates the increase and decrease of tension inherent in the shape.

The *stretto* becomes *sempre più animato* at bar 34 with the return to **B** in the tonic as in bar 10 but now, as a result of the octave transfer in bars 32–33, an octave lower. The original harmonic tension pattern of metrically accented diminished chords resolves in the second half of each bar onto a first inversion chord. F $\hat{5}$ has been re-established after all the E♮/F♭ colouring previously mentioned. The shaping changes in bar 36 as movement occurs in half bars. Right-hand voicing highlights C to B♭ in the alto register and G♭ as neighbour to F $\hat{5}$ above that, over the chords of ii$^{\varnothing 6}_{5}$ and V$^{6}_{4}$. Bar 37 moves from V$^7$ to i, arriving again on the tonic chord in the second half of that bar as the top voice descends through E♭ to D♭, thereby completing a $\hat{5}$–NN–$\hat{5}\hat{4}\hat{3}$ descent. This motif is a fragment of the larger motif that descends to $\hat{1}$. This motif when descending as far as $\hat{2}$ also plays an important motivic role in the middleground of the work. This will be discussed presently. Bars 38 and 39 continue the previous harmonic pattern with i$^6$ arriving on the second half of each bar.

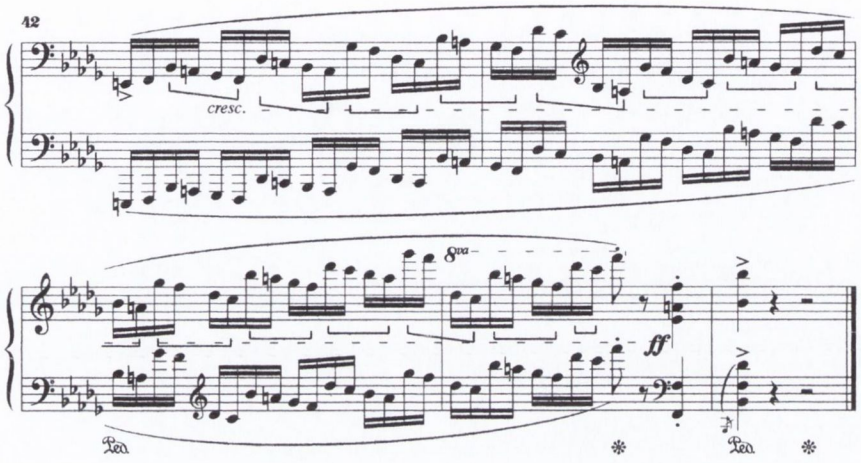
In bar 40, the Neapolitan harmony of C♭ major enters unexpectedly—another use of the semitonal relationship to the tonic B♭. A one-bar ascent to f♭$^3$ on the first beat of bar 41 over ♭II serves to highlight this pitch as the peak of the arch and, with the first beat of the bar, coincides with local resolution to I. F♭ serves as the upper neighbour to E♭ $\hat{4}$ and this is the last appearance and final resolution of this chromatic inflection. Interestingly this marks the end of the *sempre più animato* and the beginning of the final descent. Bar 41 features a descending arpeggio into the bass register.




Example 3.5.5: Prelude Opus 28 No. 16, 40–41.

Bar 42 begins a huge four-bar ascent over V and a *crescendo*. This large ascending passage forms a complementary gesture to the relatively large arch shapes of **A**. Descent to $\hat{3}$ and $\hat{2}$ occurs as part of the V$^{6}_{4}$-$^{5}_{3}$ harmony. As in bars 30–31, the right hand begins scalic segments off the beat—now in groups of four after the initial pair of semiquavers. This relatively short grouping and syncopated positioning—a form of delayed accentual

shifting—adds to the sense of drive until finally, in bar 45, the four-semiquaver groups are cut short to two-semiquavers ($\hat{3}$–$\hat{2}$) rising to right-hand $f^4$ $\hat{5}$ on the third beat. This extremely high F ousts E♮/F♭ completely.




Example 3.5.6: Prelude Opus 28 No. 16, 42–46, with grouping annotations.

The final cadence features $f^2$ back in the original register and $b♭^1$ $\hat{1}$ is heard finally on the first beat of bar 46 an octave higher than the obligatory register in the top voice but doubled an octave lower with $a♮^1$ moving to $b♭^1$. The use of onbeat chords adds to the sense of conclusion after the delayed accentual shifting in unison over four bars, and, more fundamentally, arrival on the tonic occurs on the first beat of the bar for the first time since the resumption of the fundamental line after the interruption. The emphasis on F $\hat{5}$ resolves the E♮/F♭ issue conclusively and refers to the prominence of $\hat{5}$ and the $\hat{5}\hat{4}\hat{3}\hat{2}\hat{1}$ descent throughout, especially in the introduction and **B** sections. The neighbour motif has been prominent throughout the Prelude. It forms the movement from G♭ to F $\hat{5}$ generally, as part of the primary motif of the **B** sections, as well as the main motif of the whole work as shall be evident from the ensuing focus on the overall structure. Neighbour motion is featured as E♮ to E♭ in the introduction and its elaboration throughout, and is reflected in the choice of the Neapolitan harmony in bars 40–41 (Example 3.5.5) as a deeper elaboration of a surface feature.

A fascinating feature of the management of the flow of time in this piece is the manipulation of contour as regards both shape and span. The alternation between intensity and broadening is used to characterise the thematic material, differentiate between stable

sections and those that are more developmental, and to highlight motifs and structural pitches. Harmonic arrivals are used both with and against the metre, as well as shifting position in the same thematic material. This also adds to the sense of fluctuation in movement and direction in the piece.

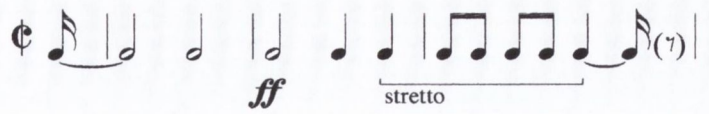
The following discussion focuses on levels A to G of the graph. There are two cadences of structural significance in this piece; the half cadence that divides the piece into bars 1–17 and 18–46 and the final tonic cadence. Each potential (or defeated) cadence within bars 18–46 is a motion that is 'nested' within the next larger motion that contains it. Each such nested motion is a nested tonic prolongation on this graph. Each level of the graph removes one of these prolongations in order to show them more clearly. An interesting feature of each one is that it is built on the motivic material of the surface of the piece and on the *Urlinie*. Each contains the $\hat{5}$–NN–$\hat{5}$ neighbour motion and subsequently descends to various scale degrees. The frequency of these nested prolongations increases throughout the piece. In the first section, the descent to $\hat{2}$ takes 16 bars. $\hat{5}$ returns in bar 18 and subsequent reinstatements of this pitch via its neighbour G♭ occur in bars 34 (with no descent), 36 (followed by a descent to $\hat{2}$) and finally 38 (which initiates the final descent to $\hat{1}$). Even the top voice of bars 18–26 incorporates the neighbour motif and subsequent descent.

The issue of form will now be examined briefly. Below is a summary of the main material of the piece.

| Bar No: | 2 | 10 | 18 | 26 | 30 | 34 | 36 | 38 | 40 | 42 |
|---|---|---|---|---|---|---|---|---|---|---|
| Material: | **A** | **B** | **A** | **B** | **C** | **B** | **A** | **B** | **A** | **C** |
| Bars: (1) | 8 | 8 | 8 | 4 | 4 | 2 | 2 | 2 | 2 | 5 |

Table 3.5.1: Summary of form in Prelude Opus 28 No. 16.

Notating the table above with one bar equal to a semiquaver we find the overall form of this Prelude, based on alternation of thematic material distinguished by the shape and the length of these gestures, to be:




Example 3.5.7: Formal Pacing in Prelude Opus 28 No. 16.

So, an overall gradual increase in momentum is achieved by faster changes of material as well as by the written *stretto* and *sempre più animato*. The background pacing of the material and form in this Prelude is reliant on the character of its material and complements the written increase in tempo. It also reflects the increasing rate of entrance of each nested tonic prolongation.

Schenkerian analysis that incorporates harmonic displacement as well as examination of rhythmic aspects such as grouping and even contour helps to explain much about the character and sense of fluctuation of tension in this Prelude. The surface complexity of melodic chromaticism and harmonic movement serves an intricate, tightly interwoven texture of tonic prolongations that are built upon the motivic germ of the entire piece.

### 3.6 Prelude No. 21

> In the Preludes Op. 28 (the chronological centre of Chopin's oeuvre), No. 21 is governed from the start by an underlying four-part texture, the alto and tenor progressing by contrary motion between longer bass and soprano notes. At bar 33, this contrary motion is found in both hands over a dominant pedal, and tension builds towards the cadence, the whole passage acting at once as an allusive recapitulation and a conclusion. Here the shape of the figuration prevails over the actual motivic substance; the expressive effect is indescribable.[26]

Eigeldinger is right in his assertion that it is impossible to describe the expressive effect of this Prelude. However he places figuration and motivic substance in opposition. In my opinion they are intimately tied. The figuration is not only central to the movement and inner dynamics of the piece, but it also introduces the main motivic material. Bar 33, to which Eigeldinger refers, forms a large-scale hidden repetition of the main motivic substance—a point to which I will return later. My voice-leading reduction of this Prelude (Volume Two, p. 10) highlights structurally important motivic material. The following

[26] Jean-Jacques Eigeldinger, 'Placing Chopin: Reflections on a Compositional Aesthetic', in *Chopin Studies 2*, 102–139, 129.

discussion will focus on the unusual motivic material in this work and trace its evolution through the piece. The importance of the pitch B♭ will be examined, as will the use of the flattened sixth, G♭. Finally the analysis will conclude with an investigation of how rhythmic and metric devices are used to highlight these tonal events.

The figuration of the left hand (contrary linear progressions that ascend or descend from F) becomes the underlying structure of the music that follows. The primary tone of the piece is F $\hat{5}$. The filled-in third from F to D plays a prominent role on many levels as can be seen from the brackets in the graph. The left-hand figuration contains a filled-in sixth from F up to D in the alto voice—a literal inversion of the same notes. The work contains many examples of this kind of inversion and expansion of motivic material. This rising line incorporates movement from F up to B♭—B♭ being aurally emphasised by the bass pitch. The contrary-motion figure in the left hand simultaneously introduces movement from F down to B♭ in a diminution of the *Urlinie* of the piece. Implicit resolution to B♭ occurs in bar 9 and the left-hand figuration becomes melodic in bar 13. Movement from F to B♭ continues to bind the piece as F in the alto rises to B♭ in bar 15 of the graph.

The pitch B♭ has thus far received great emphasis, not only as the tonic pitch and goal of the descent from $\hat{5}$, but also as the goal of ascending motion from F. In bar 17, however, it forms the basis of a common-tone modulation as the bass falls to G♭. This can be seen most clearly on level B of the accompanying graph. The chord of G♭ acquires a seventh (F♭) in bar 25 as though heading for C♭ but, rather than resolve to C♭, F♭ becomes E♮ as part of an augmented-sixth chord that resolves in bar 33 onto the dominant of B♭.

Thus far, the top voice in the right hand has featured descending motion. The aforementioned alto ascent from F to B♭ (notated on level B of the graph) hints at providing the contrary motion to this top voice, thereby referring to the left-hand figuration. With the arrival on the dominant in bar 33, however, the top voice of the right hand begins an ascent from F to B♭ and thus features the ascending part of the initial left-hand motif. In this way the melody takes a turn at playing each of the voice-leading strands of the left hand and develops them. F, over the dominant in bar 33, forms the initial pitch of the final descent to $\hat{1}$.

The prominence of the pitch G♭ will now be examined. The first occurrence of this pitch in the piece is in the alto voice in bar 5 as a chromatic inflection onto F. This is

closely followed by similar treatment in the lower voice in the following bar. G♭ then features when the left-hand figuration overtakes the melody from bar 13. It is only with the common-tone modulation in bar 17, however, that G♭ is made prominent—as ♭VI in the harmony and in the melodic contour of a sixth from B♭.[27] This pitch returns in bar 39 as the chromatic upper-neighbour to the primary tone and features prominently in the subsequent descent to $\hat{4}$. Bars 45 to 49 alternate between the use of G♮ and G♭. It is noteworthy that Chopin double-stems E♭ in these bars to emphasise its importance as part of the final descent. G♮ takes over in bar 50 as the bass falls an octave to low GG♮ beneath $\hat{3}$ in the right hand. This marks the final elimination of the flattened sixth. Kissin recognises the significance of this pitch by taking extra time before placing the bass G♮ in bar 50—thereby highlighting its reaffirmation.[28]

This is an example of Chopin's tendency to introduce chromaticism in the melody or figuration that later migrates to the bass line and becomes a fundamental, harmonic part of the composition. Throughout this thesis there will be many examples of this compositional technique—one that demonstrates Chopin's adeptness at total integration of musical means. In this Prelude, a small figurative detail, which seems at first merely decorative, forms the basis for the melodic structure of the entire piece. However, the analytical approach presented here also illuminates Chopin's rhythmic and metric devices.

The piece begins in four-bar phrases. In bar 9, two two-bar phrases expand upon the motif of bar 1, left hand, leading towards a modulation to G♭ major—the flattened sixth—in bar 17. It is marked *forte* and, for the first time, there is a change in metric patterning in the bass. After the low G♭, a pattern of four quavers begins on the second quaver giving a duple effect.[29] The rhythmic grouping of the bass could be described as a combination of polymetre and delayed accentual shifting of this concurrent metre. The right hand remains in triple time, but sounds a lot less regular than before due to the uncertainty and ambiguity caused by the bass grouping.

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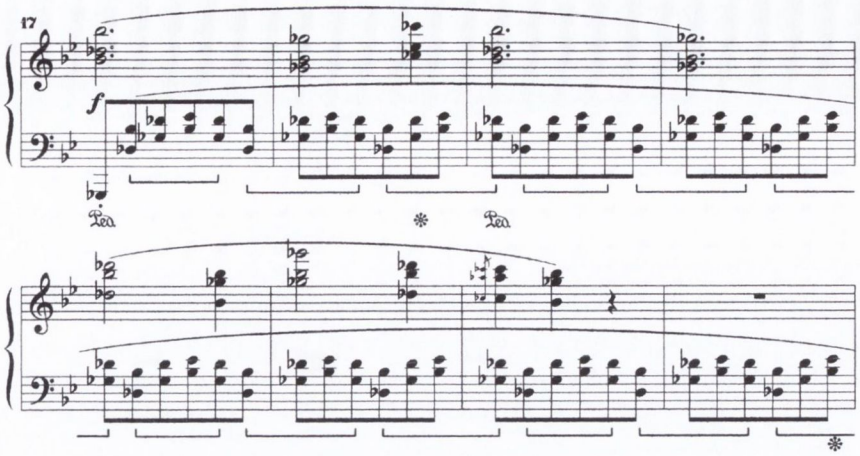
[27] Level A of the graph notes consecutive octaves from G♭ to F between the outer voices in bars 17–33. This is not unprecedented in Chopin's music. See, for example, Schachter's graph of the D major Prelude in 'Chopin's Prelude, Opus 28, No. 5: Analysis and Performance', 34.

[28] Kissin, *Chopin*, RCA Victor Red Seal (2000).

[29] An alternative reading is also possible, whereby four-note quaver groups begin on the third quaver of the bar.



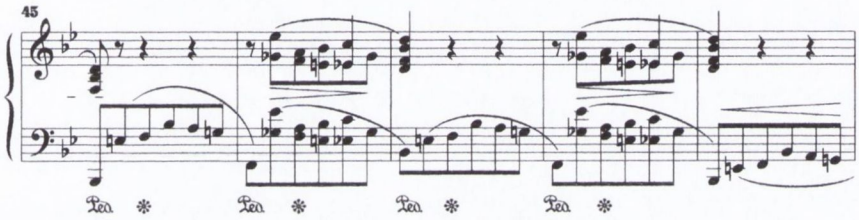

Example 3.6.1: Prelude Opus 28 No. 21, 17–24, with grouping annotations.

A repeat of the eight bars begins in bar 25, but now, after the establishment of duple metre in the bass in the previous bar, the right-hand entry sounds offbeat, and the dynamic is *pp*. The left hand changes into pairs of quavers and the lower voice remains on G♭. Undulation between F♭ and G♭ in the alto voice is audible over $V^7$ of C♭, with added emphasis on C♭ in the right hand as an *appoggiatura*. Alto movement is now on the beat, comprising duple movement in the F♭s–G♭s. The tenor voice alternates between D♭ and E♭ on the second of each pair, thereby slightly emphasising the offbeats.

Thus, from bar 17 the right hand remains in strict triple metre while the left hand introduces offbeat duple metre, giving an ethereal effect when the right hand re-enters *pp* in bar 25. The right hand is similar in style to the opening but sounds offbeat and ungrounded now. This perfectly complements the tonal exploration and the uncertainty as to how the dominant 7$^{th}$ will resolve.

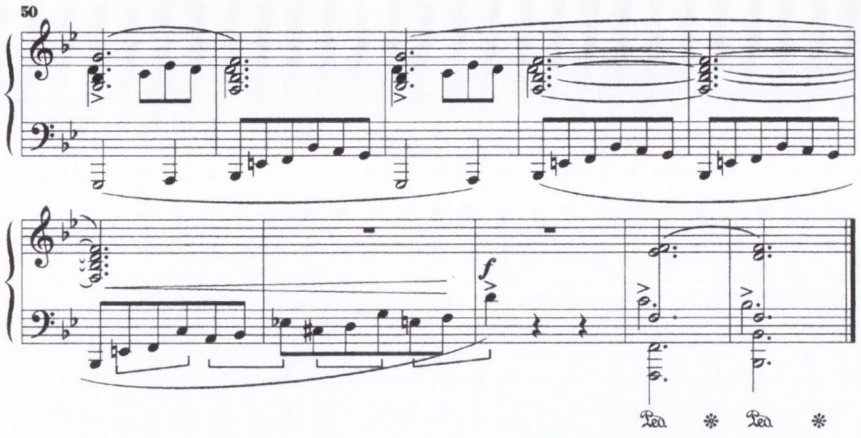
The aforementioned E♮, as part of the augmented-sixth chord in bar 32, extends the duple movement of G♭ to F♭ into three crotchets, and thereby prepares for the return of triple movement, of $\hat{5}$, and of tonic harmony. The left-hand figure returns as at the opening of the Prelude but has the developmental character of bar 9. A bass pedal F underlies these 6 bars, with a *crescendo* and increased chromaticism adding to the sense of expectation. Bars are grouped in two pairs followed by two single bars. This increase in the pace of change adds intensity as the top voice rises from F to B♭—featuring again the left-hand motif from bar 1—and adds weight to the subsequent arrival on V.

With the return of the flattened sixth in bar 39 comes the return of metric ambiguity. For two bars accented quaver pairing takes over with no definition of the barline and no obvious larger grouping. Bar 41 begins a four-bar chromatic descent in all four voices similar to bars 13–14. As can be seen from the graph, this outlines a scalic descent from E♭ to C, followed by a diminished triad that ends on G♭ as neighbour to F. The bass slides from G♭, flattened sixth, to F $\hat{5}$ underneath the local progression of $\hat{4}$–$\hat{3}$ before falling to B♭. This is a reference to the much larger harmonic exploration of G♭ (♭VI–aug. 6th) to F (V) in bars 17–33. The foregoing resolution of the first-beat upper neighbour motif on the second quaver makes the resolution to D on the downbeat of bar 45, and in subsequent bars, much stronger.




Example 3.6.2: Prelude Opus 28 No. 21, 45–49.

In bars 50–51, the top line moves G♮ to F $\hat{5}$ above D $\hat{3}$. Bars 52–53 repeat bars 50–51 and the right-hand chord is held over three bars in an extension of this pattern. The left hand repeats bar 49 in bars 53 and 54 and then begins a two-bar ascent to D $\hat{3}$. The grouping consists of (1 + 3) + 3 + 3 + 2 quavers joined into crotchet D on the first beat of bar 57. This grouping in threes has the effect of driving the passage forward. Two crotchet rests add to the sense of expectancy. The final cadence sees the final descent of the *Urlinie* from $\hat{2}$ to $\hat{1}$ over V–I in the obligatory register with F $\hat{5}$ on top.




Example 3.6.3: Prelude Opus 28 No. 21, 50–59, with grouping annotations.

Below is a brief outline of the main use of G♭ and its accompanying temporal characteristics:

| | |
|---|---|
| Bar 17 Harmony and melody moving to F V and F $\hat{5}$ | + left-hand offbeat duple |
| | + left-hand onbeat duple |
| Bar 39 Melody, NN to F | lack of metre |
| Bar 44 NN to bass F V–I | metric resolution |

Table 3.6.1: Use of G♭ and temporal characteristics in Prelude Opus 28 No. 21.

The main metric or rhythmic deviation in this Prelude is the polymetric effect during focus on G♭. This is particularly evident in bars 17–32 where G♭ harmony dominates and the metre is ambiguous, with duple organisation or grouping within triple metre.

A secondary temporal characteristic is the accentuation of the second quaver. A summary of its treatment is given below:

> From the beginning, the second quaver is highlighted, marking the start of the movement between the alto and tenor voices, and their accompanying dynamics. From bar 13, the right hand reinforces the second-quaver emphasis. Resolution of the neighbour motif occurs on the second quaver each time. While thus far its employment as a specific compositional device is questionable, it comes into its own in bar 17. Here the duple-time movement in the bass begins on the second quaver of the bar with a delayed accentual shift, continuing its introduction and

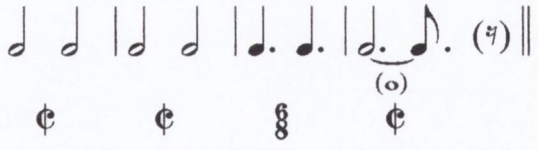
persistence up until that point. Resolution of each eight-bar section onto B♭ occurs on the second beat of the seventh bar, thereby retaining the offbeat character and lack of resolution. From bar 25 there is very little emphasis on the second quaver—only that provided by the tenor movement, which is negligible in relation to the main-beat movement. It returns in bar 33 with the opening left-hand movement, but is much stronger as inner right-hand voices reinforce it. In bar 39, resolution onto F occurs on each offbeat quaver, and in bars 41–44 resolution occurs on the second quaver of each bar. Bar 45 sees the arrival of D on the downbeat of the bar but the left hand retains the second-quaver start. The right hand once again joins with the left after a quaver rest in bars 46 and 48. Bar 50 sees the final elimination of this hint of syncopation and downbeats are emphasised until the end.

This second-quaver emphasis is connected both to the shape of the inner voices and to the neighbour motif. It serves to highlight these much as the duple/triple play served to emphasise G♭ harmony. The use of rhythm and metre in this Prelude strengthens the melodic and harmonic premises of the piece.

The large-scale form of this piece is straightforward. Divided into sections based on material (including dynamics), texture, phrasing, and tonality, we find the outline as shown below.

No. of bars: 16 (8 + 8) + 16 (8 *f* + 8 *pp*) + 6 *cresc.* + 6 *ff-dim.* + 15 *p*

In musical notation that would be:



Example 3.6.4: Formal pacing of Prelude Opus 28 No. 21.

The form is quite regular and reflects the temporal regularity of the surface. The smaller sections towards the end form a larger kind of intensification before the final expansion.

The combination of a voice-leading graph with rhythmic, metric, and phrase analysis uncovers the very tight construction that underlines this Prelude. The unusual figuration in the left hand that opens the piece contains within it the germ not only for the melodic material, but also for the rhythmic material of the entire piece.

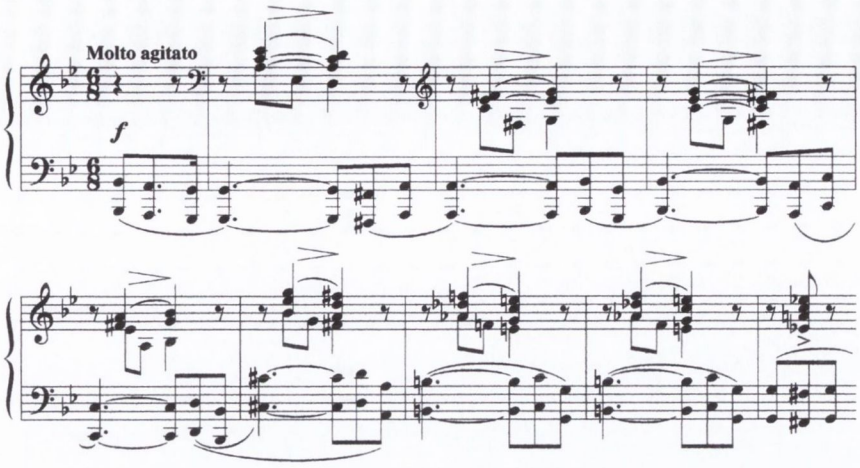
### 3.7 Prelude No. 22

The Prelude in G minor produces a passionate drive that pervades every aspect of its tonal and rhythmic structure. Therefore the following analysis will focus on this individual aspect of the piece by analysing how its unusual texture, its distinctive motto, its voice leading (see graph in Volume Two, pp. 11–14), and its rhythmic and metric structure contribute to this effect.

The left hand carries the melody for most of this piece, yet the structural upper voice migrates up into the right hand in bar 17, moves back into the left hand with the upbeat to bar 35, and finally concludes in the right hand from bar 39.[30] These points are noted with diagonal arrows in level G of the graph. The structural upper voice is written out on a single staff in level F. This arrangement of voices contributes to the character of this Prelude. The melody sounds as if it has more weight due to its lower register. This gives the piece a sense of depth and control.

The descending third that begins the piece provides a fascinating motto. It is rhythmically distinctive; every time this motto appears—and only when it appears—do we hear a semiquaver. As a foreground replication of the *Ursatz*, it can be heard to forecast the path that the piece will follow. In fact, the whole piece may be heard as an attempt to state this motif conclusively—that is, so that it ends on a stable tonic. At the beginning, we hear it as an upbeat. But this upbeat leads to a note that becomes an *appoggiatura* to dominant harmony. Level H thus interprets these notes as prolonging tonic harmony. In the foreground, *appoggiaturas* continue to place unstable notes on stable metric locations. At the next deeper level of structure (see levels G and H), unstable chords occur in stable metric positions and vice versa. The dominant chord appears in bar 1, the tonic appears in bar 2, and the harmonic pattern continues in this same manner. This may be viewed as absorption of the melodic use of the *appoggiatura* into the harmonic structure, and at a deeper level of metric structure.

[30] Charles Burkhart, 'The Polyphonic Melodic Line of Chopin's B-minor Prelude', in *Chopin: Preludes, Op. 28*, Norton Critical Scores, ed. Thomas Higgins (New York: Norton, 1973), 80–88, notes a similar procedure.




Example 3.7.1: Prelude Opus 28 No. 22, 1–8.

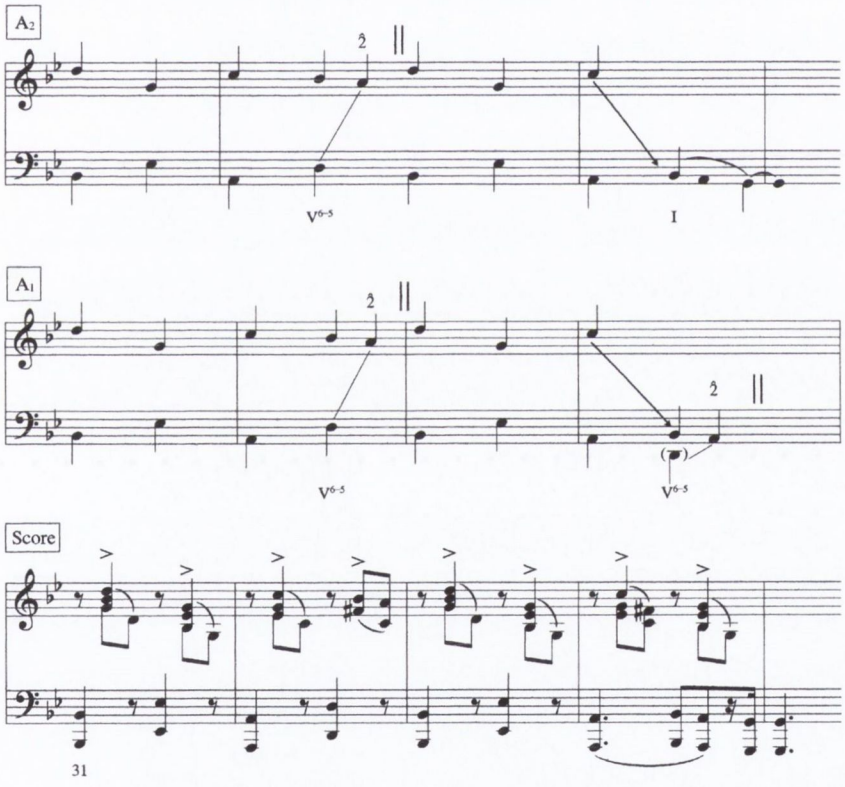
The motto returns in bar 8. Here, however, the B♭ *resolves to* A over dominant harmony; when the motto first enters in bar 8, it thus prolongs $\hat{2}$ over V instead of tonic harmony. But then the motto continues as it did in bar 1 so that the A is heard as a passing tone that *resolves to* G. The result is that the motto elides the end of the first phrase with the upbeat to the second; it thus prolongs tonic harmony into what follows.

The harmonic ambiguity of this motto raises questions regarding its performance, for instance, whether A or G be emphasised in accordance with a dominant or tonic reading. Different pianists react differently to this figure. Chopin notates a rest after the note A in bars 8 and 34. Arthur Rubinstein plays a rest after the note A in the first and second appearance of the motto, thereby highlighting its harmonic dominant function.[31] He plays the final appearance in bar 34 without a rest, thereby outlining movement from B♭ to G, and tonic harmony. Kissin also de-emphasises the note A in the final sounding of the motto.[32] Cortot, on the other hand, plays the note A very short followed by a noticeable rest in the first appearance of the motto.[33] He slows down in bar 8 for its reappearance and no rest is audible. In bar 34, he slows again for the motto and highlights the rest after A with a longer break, thereby stressing $\hat{2}$ and the dominant chord.

These contradictory readings are shown below in Example 3.7.2. The first reading is notated on level $A_1$ and the second on $A_2$. Level $A_1$ shows this figure as the arrival of $\hat{2}$ over V as part of an interruption. This follows the voicing and the expectation set up by the

[31] Arthur Rubinstein, *Chopin: 24 Preludes, Piano Sonata No. 2 ('Funeral March'), Barcarolle, Berceuse, Impromptu No. 3*, RCA Red Seal 09026-63016-2 (1999) recorded 1946.
[32] Kissin, *Chopin*, RCA Victor Red Seal (2000).
[33] Cortot, *Chopin*, EMI Classics (1991).

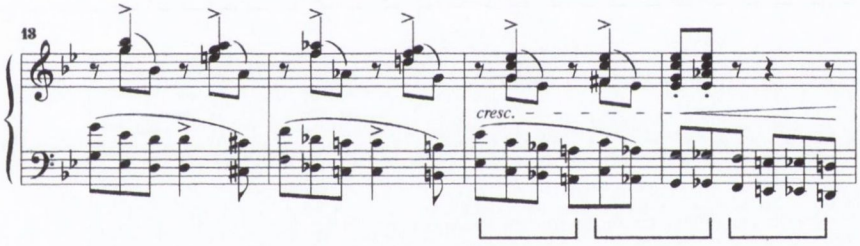
bass harmony of the previous two bars. However, as this figure continues, it is obviously the upbeat to the theme and, as such, denotes tonic harmony. This other possible interpretation is shown on level $A_2$. Even more fascinating is that Chopin has highlighted the interpretation shown in level $A_1$ by slurring octave A at the beginning of bar 34 to A in the middle of the motto figure. Slurring in bar 8 also follows this pattern. The first appearance of this figure unmistakably outlines tonic harmony and is slurred accordingly—the slur encompasses the entire motto from B♭ to G. In bars 8 and 34, A is notated as a quaver followed by a semiquaver rest, whereas the opening motto does not include a rest. The inclusion of this rest strengthens the effect of the slurring. All of the editions consulted agree on this slurring.




Example 3.7.2: Voice-leading interpretations for the motto in Prelude No. 22, 31–34.

The theme returns an octave higher with the upbeat to bar 9 and continues until bar 13. The following four bars provide a fine example of harmonic reinterpretation as well as metric manipulation. In the latter half of bar 13, the harmony moves from a $\frac{6}{4}$ chord to a dominant 7th chord. The left hand plays a motif that includes the interval of a diminished third from E♭ to C♯ and resolution onto D is expected. This is avoided, as in the next bar a

sequence occurs and resolution is then expected to arrive with C. Arrival on C in bar 15 provides this resolution as part of a C minor chord. The left-hand motif is now concentrated and takes place over four quavers instead of a bar's length. The motif is heard again beginning on the third crotchet of the bar, and the final four quavers in bar 16 complete this cross-metre grouping. A German-sixth chord in the key of C minor at the end of bar 15 moves through a passing $\frac{6}{4}$ chord at the beginning of bar 16 to what sounds like the same augmented-sixth chord in a different position. This time, however, it resolves as $V_2^4$ of IV in A♭ major.[34] Bars 15 and 16 are paired by the metric effect produced by the grouping and by the downbeat passing $\frac{6}{4}$ chord at the beginning of bar 16. Inner voice exchange between the bass and the alto enhances this effect even further. This exchange is notated on level H of the graph. This interpretation of the grouping in bars 15 and 16, with its inherent recognition of motivic concentration, seems to be reflected in Cortot's performance, as he stresses C at the beginning of the second group.[35]

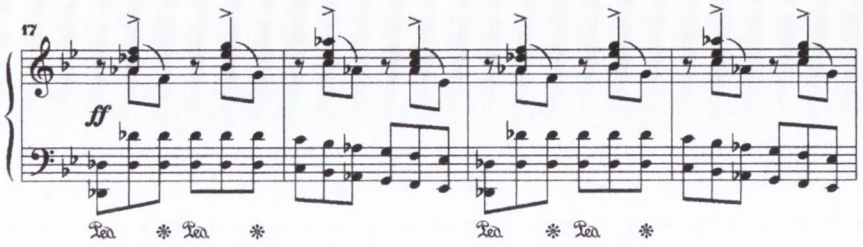



Example 3.7.3: Prelude Opus 28 No. 22, 13–16, with grouping annotations

Not only does the *hemiola* resolve on the D♭ downbeat, reinforcing the metre and resolving the harmony, but repetition on D♭ also allows our attention to migrate back to the to the right hand, which now seems to take over the role of leading melodic line and structural upper voice (see Example 3.7.4 below).

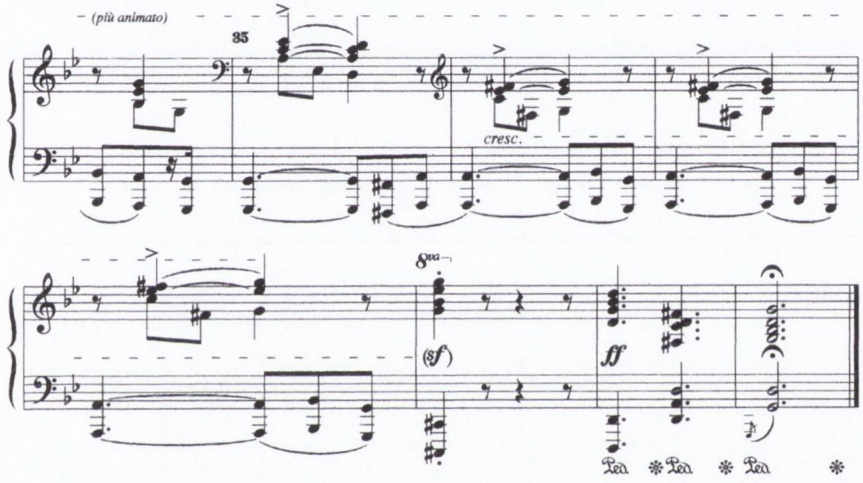
[34] Both Henle and Ekier notate the augmented chord at the end of bar 15 with G♭ in place of F♯—in keeping with the original and making the voice exchange even clearer (See level H of my graph). However, as the chord at the end of bar 15 functions harmonically as an augmented sixth (and in a very different manner to its respelling in bar 16), the editions of EMB and Paderewski are followed in this example. Paderewski explains that 'in the original notation, the second chord of this bar has $G♭^1$; $F♯^1$ is better suited to the resolution of the chord' (Paderewski, 'Commentary', 73).

[35] Cortot, *Chopin*, EMI Classics (1991).



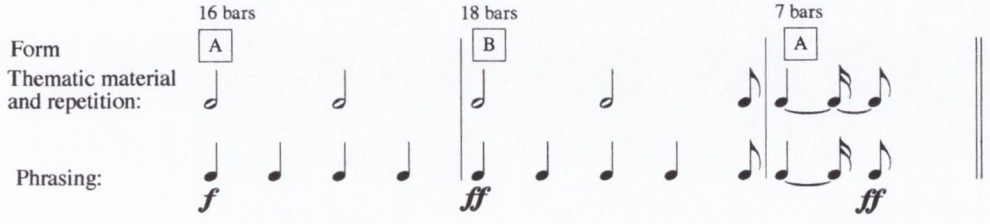

Example 3.7.4: Prelude Opus 28 No. 22, 17–20.

The bass takes over with the upbeat to bar 35 and reclaims the structural top voice.




Example 3.7.5: Prelude Opus 28 No. 22, 35–41.

The form is notated below and derives from thematic material, tonality, texture, and repetition. One bar is notated as one semiquaver.




Example 3.7.6: Formal pacing in Prelude Opus 28 No. 22.

The quaver delay of original thematic material for the return (due to the extension of the section by 2 bars) reflects on a much deeper level the melodic delay of a quaver throughout the Prelude. The use of *più animato* does not compensate temporally for the two-bar extension. This deepens the characteristic syncopation, delay, and lack of synchronisation in the piece.

Chopin's elision forces us to hear two different readings for one melodic figure that contradict one another.[36] This raises practical interpretive questions that suggest that to claim one 'correct' interpretation or analysis would seem to miss the essential nature of this Prelude.

The passionate drive of this Prelude is reflected in its unusual texture, distinctive motto, elided functions, *appoggiaturas*, and suspensions. The melody plays against the notated metre at several levels; these techniques also migrate into the harmonic structure of the work as harmony conflicts with hypermetric position.

The analytical method offered here not only captures all of these effects, but also illuminates the striking ways in which the motto seems to present simultaneous conflicting meanings—and these are clearly depicted by rendering those conflicting meanings as conflicting readings in strict use of analytical notation.

In addition to giving us a clearer picture of the emotional content and musical meanings of this Prelude, this approach raises valuable interpretative questions for the performer.

### 3.8 Conclusion

These Preludes were analysed in order to demonstrate the potential inherent in recent analytical methodologies that extend Schenkerian theory by making explicit its implicit rhythmic potential as well as its theory of pitch. This kind of approach reveals abundant detail that helps our understanding of how these works are constructed. Information is gleaned on Chopin's compositional style and evolution. Investigation of each piece from the starting point of its individual characteristics can bring forth interpretative questions that may be of help to performers in the preparation of a performance.

Using this methodology to analyse these pieces has also brought out a number of analogous compositional characteristics within the group.

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[36] I would like to thank Steve Larson for pointing out how this upbeat figure elides tonic and dominant functions.

Hidden repetitions are evident not only between levels of the voice-leading structure of each Prelude, but also in the rhythmic structure and, indeed, the overall construction of each piece.

In each Prelude the endings reflect the main compositional premises of the piece. The Prelude sets out its main premises and deals with these by developing and concluding them as a story that unfolds. Chopin encapsulates all of these individual threads in the concluding section of each piece.

The neighbour note has great significance in all of these Preludes. This is evident in the B♭/B♮–A alternation in No. 5, the use of the flattened second scale-degree in No. 12, the basic structural motif of No. 14, the basic motif of No. 16, the flattened sixth scale-degree in No. 21, and the flattened second in No. 22.

Another compositional technique that Chopin employs is the tendency for melodic events to migrate into the bassline and thereby take on more structural importance. In No. 5, this is evident in the inversion of the *Urlinie* to form the bass line. In No. 12, these events happen simultaneously as $\flat\hat{2}$ is tonicised with A minor harmony. Not only is the melodic neighbour motif reflected in the bass line in No. 14, but it also configures the whole structure as a large hidden repetition on a background level of a foreground melodic event. On a lesser scale, in No. 16 the prominence of F♭ is reflected in the bass descent to bar 29 before the dominant enters. In Prelude No. 21, the flattened sixth scale-degree that appears first as a mere chromaticism in the melody becomes fundamentally harmonic and resolves to the dominant, thereby also retaining its neighbour function. Prelude No. 22 plays with the concept of differentiating melody from bassline. It also tonicises the melodic $\flat\hat{2}$ with Neapolitan harmony.

These Preludes contain fine examples of Chopin's ability to transform one thing into another, for example, enharmonically or through harmonic reinterpretation. This is achieved through metric interaction in Prelude No. 16. The same thematic material is used to achieve a different pattern of harmonic tension by shifting or reversing the harmonic roles. In Prelude No. 21, prominence of the pitch B♭ is further underlined by its use in a common tone modulation, thereby providing an example of reinterpretation. In bar 32, the respelling of F♭ as E♮ changes the chord into an augmented sixth that leads perfectly onto the dominant. One of the finest examples of ambiguity and reinterpretation, however, is found in Prelude No. 22. On a small scale, the reinterpretation of a German sixth in C minor in bar 15 as a dominant $7^{th}$ to IV of A♭ in bar 16 is entirely seamless. The finest

example of reinterpretation amongst these pieces has to be the theme of this Prelude. The dual structural function of its upbeat on both returns is ingenious.

Rhythmic techniques are used in all of these Preludes to highlight tonal events, but the overall phrase structure and pace are dictated by these tonal events. In all of these pieces there is a relationship between foreground and background rhythmic structure as well as tonal structure. There is also an interrelationship between rhythmic and tonal structure at all levels. It could be surmised therefore that there is an analogy between metric and tonal processes in these Preludes.

Finding such striking temporal relationships between surface and background in the Preludes raises the question of whether one may find such relationships in other genres. Perhaps their short, concise form provided an ideal vehicle for this kind of experimentation. Of course the only way to answer this question will be to examine Chopin's works in other genres, using the same synthesis of analytical methods.

This combination of Schenkerian voice-leading analysis with rhythmic analysis (inclusive of grouping and rhythmic normalisation) displayed in strict use and focussing on the premises of each piece illuminates the individuality of each piece as Schachter advises and has much to offer to analysts and performers alike. Through this kind of approach it may be possible to arrive at an even closer understanding of how Chopin composed, and to pose interpretative questions that can form the basis of an 'authentic' performance.[37]

[37] The use of the term 'authentic' follows that of John Rink in his definition of an 'authentic' performance, which is discussed on page 62 of this thesis.

# Chapter 4: Nocturnes

## 4.1 Introduction

Schenkerian analysis has often been used to analyse single works. Jonathan Dunsby, in his article, 'The Multi-piece in Brahms: *Fantasien* Op. 116', explains:

> The Schenkerian system is well known for offering the chance to analyse pieces in different styles—by Bach and Chopin for instance—in comparable ways. It is also well known for being preoccupied with musical wholes. That characteristic, however, is by no means restricted to the work of Schenker and his followers.[1]

In this article, Dunsby examines the seven pieces of Op. 116 and investigates their relationship to each other. He identifies relationships between keys, form, metre, and thematic and motivic material. For example, he states:

> The closest detailed correspondence comes with the coda of No. 7, with its 3/8 time-signature. This not only transforms the material of No. 7 into the metre and typical rhythmic patterns of No. 1, but the transformation begins with the most characteristic sonority from No. 1.[2]

He is careful to distinguish between collections and what he calls 'multi-pieces':

> The simplest idea of a collection is that pieces of the same genre, for the same medium, are presented to the consumer because they are likely to be used in more or less similar ways. It may make a pleasing sequence to take such a collection all at once—for instance, with Brahms's Op. 39 Waltzes. On the other hand, there is a sharp limit to the effectiveness of such a formation, in the absence of a tension between contrast and unity to provide long-term musical 'logic': [...] In the tension between contrast and unity that marks genuine long-term logic, however, the elements of unity can appear as relatively intermittent although hierarchically deep features of the kind described so far in Op. 116; or they can be threaded into the continuity of the foregound [*sic*]. These latter may appear in genuine collections, as they do usually in variations, but not in combination with a deeper level of unity. In extended tonal structures it is the interaction of levels that is considered a sign of musical richness and coherence.[3]

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[1] Jonathan Dunsby, 'The Multi-piece in Brahms: *Fantasien* Op. 116', in *Brahms: Biographical, Documentary and Analytical Studies*, ed. Robert Pascall (Cambridge, Cambridge University Press, 1983), 167–189, 167.
[2] Ibid., 178–179.
[3] Ibid., 180.

For Dunsby, a 'multi-piece' has deeper connections:

> The significance of this kind of unity lies not so much in the mere presence of thematic materials of a rather basic kind (a progression in thirds and a turn figure embedded in an arpeggiated six-four) but in the structure of these as combinations of these materials.[4]

It is deeper-level connections such as these that lead Dunsby to use the term 'multi-piece' in describing Opus 116. Given these definitions, this chapter suggests that Opus 48 can be regarded as a kind of collection of pieces with very interesting commonalties. Opus 27, on the other hand, demonstrates 'long-term musical "logic"' that runs through both Nocturnes.

This chapter focuses on the application of Schenkerian voice-leading and rhythmic analysis to a pair of pieces in a single Opus. The Nocturnes included in this examination are Opus 48 and Opus 27. The two Nocturnes of Opus 48 (both in ABA' form) demonstrate similar compositional premises that are illuminated through tonal and rhythmic analysis. To the analyst, this significant overlap is interesting as it shows how Chopin may have worked on similar compositional problems in different ways within one opus, looking at two aspects of the same question. While the relationships between the two pieces in Opus 48 are interesting, applying the same methodological approach to Opus 27 reveals even deeper relationships between those two pieces. It suggests that those intraopus relationships may play an important role in our experience of Opus 27 when performed as a whole.

### 4.2 Opus 48 No. 1

Applying the analytical method developed and illustrated in the previous chapter to Opus 48 No. 1 reveals that motivic connections are intimately related to displacement, and to the play between duple and triple metre, and that the use of major and minor modes plays an important part in these motivic connections.[5]

Comparing this Nocturne with Chopin's C minor Prelude suggests how part of the character of the Nocturne derives from its use of displacement. Example 4.2.1 below shows the first two bars of the Prelude.

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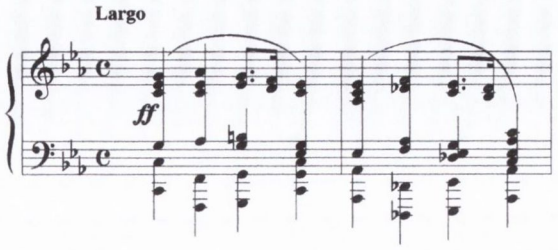
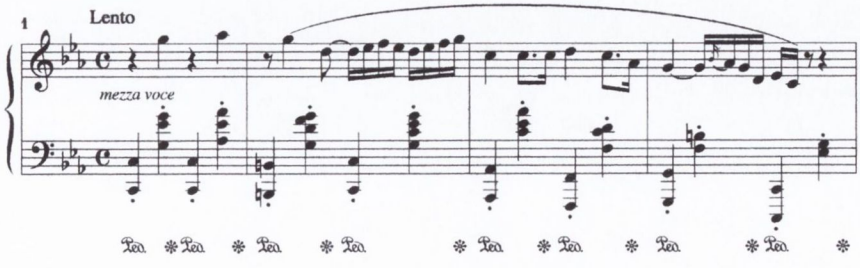
[4] Ibid., 183.

[5] The first section of this Nocturne has been analysed by John Rothgeb in 'Chopin's C minor Nocturne, Op. 48, No. 1, First Part: Voice Leading and Motivic Content', in *Theory and Practice* 5, no. 2 (1980): 26–31. Having only recently discovered this analysis, my own analysis was carried out without the benefit of having read Rothgeb's findings. I have left my analysis unchanged so that the reader can compare both readings. My comparison between Rothgeb's analysis and my own is included in Section 4.2.1.




Example 4.2.1: Prelude Opus 28 No. 20, 1–2.

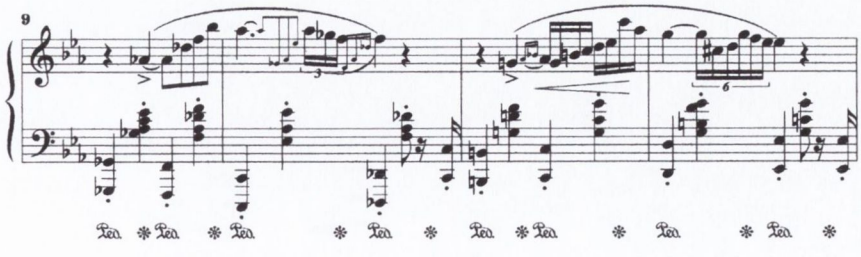
The similarities are highlighted if the left hand of the Prelude is played as written but the right hand is displaced by a quaver. Both pieces feature the motif $\hat{5}$–upper NN–$\hat{5}$–$\hat{4}$–$\hat{3}$. This can be seen on level C of the accompanying graph of this Nocturne (Volume Two, pp. 15–17). This level shows the main voice-leading movement on the surface of the piece. In the Nocturne, the motif is elaborated by the leap of a fourth down to D. The semitonal neighbour is fundamental to the motivic structure of the Nocturne. The upper neighbour a semitone above a primary tone is found on the fifth scale-degree in the minor mode. This position of the motif opens the piece and each tone is displaced from the main beats of the bar. In the minor mode, the same succession of semitones will occur if the motif is inverted and begins on the third scale-degree. This is exactly what happens at the end of bar 2 on E♭–D–E♭–F–G. The rising fourth, as the last four notes of this motif, takes on greater importance through the piece. At the end of the first phrase in bar 4, the melodic outline of the opening is used an octave lower to close the phrase. This is a slightly modified version that retains the neighbour motif, the leap of a fourth down to D, the rise to E♭, and the closing fall of a third to C. The tenor doubles the neighbour motif and the bass inverts it in the first two bars. Level C of the graph shows that these first four bars form an extension of the $\hat{5}$–NN–$\hat{5}$–$\hat{4}$–$\hat{3}$ motif down to $\hat{1}$.




Example 4.2.2: Nocturne Opus 48 No. 1, 1–4.

The original form of the neighbour motif returns in bar 5 at the beginning of the second phrase. The harmony has changed to that of the relative major, E♭. The motif occurs, therefore, on its local third scale-degree in order to retain the original pitch level. The second half of this phrase in bars 7 and 8 focuses on D–E♭–D and G–F♯–G. These can be seen on level B of the graph. Level C of the graph shows how movement from F♯ to G is displaced and level B realigns this resolution to its structural position.

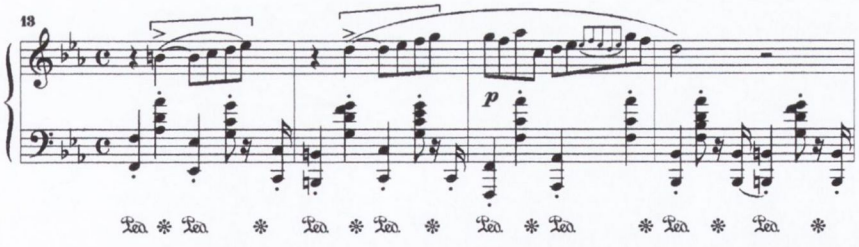
The bass of bar 9 moves from G♭ down to F in a move that complements the F♯ to G in the soprano of bar 8. The two-bar phrase, bars 9 to 10, features two semitonal neighbours in the bass: G♭ to F and C to D♭. This bass line echoes the original motif as it outlines a fall of a third and incorporates semitonal neighbour motion. These two bars explore the Neapolitan relationship to the tonic. The use of this key will be discussed in more detail later. The soprano plays A♭–B♭–A♭–G♭–F as shown on level C of the graph. The outline of bars 9 and 10 retains the shape of the preceding two bars as it plays between two registers an octave apart. The top voice of bars 11 and 12 moves G♮–A♭–G–F–E♭ in a modified sequence of the preceding two-bar phrase, now in the tonic key. C at the end of bar 10 instigates the following bass movement from B♮ to C and D to E♭. This is reminiscent of the opening C–B♮–C movement in the bass and the top voice enters an octave lower than before on G♮ on the offbeat. The semitonal neighbours in the bass are thus incorporated into a rising (in this case, diminished) fourth—a motivic feature heard at the end of bar 2 that is now taking on more importance. The voice leading of bars 9 to 10 and 11 to 12 forms a hidden repetition on a deeper level of the initial G–A♭–G motif from the opening. This can be seen on level A of the graph.




Example 4.2.3: Nocturne Opus 48 No. 1, 9–12.

Chopin's use of slurs in the first few phrases of the piece further highlights the deeper hidden repetition of the upper neighbour motif from the opening. The first phrase is slurred from G and the second is slurred from A♭. This A♭ is an upper neighbour and is not structural but the slurring serves to emphasise it nevertheless. This is then answered by A♭ to G in the third and fourth phrases of bars 9 to 12.

The ascending four-note motif returns in the top voice of bar 13. These four pitches imitate the bass from bar 11. Displacement is retained as B♮ enters on the second beat with an accent in the same manner as bars 9 and 11. A sequence of this motif is heard a third higher in bar 14. The entry on D on the second beat of bar 14 begins an untransposed, rhythmically augmented version of the ascending fourth from bar 2. On a deeper level, bar 13 rises from B♮ to C and bar 14 continues through D and E♭. This level of the ascending fourth is shown on level C of the graph. It thus forms a deeper imitation (another hidden repetition) of the bass in bars 11 and 12 over the same two-bar unit. The bass moved to upper neighbour F and back to E♭ in bar 13. In bar 15, the top voice rises to F and falls to E♭ continuing that imitation of the bass. In bar 16, the melody falls to D $\hat{2}$ over the dominant as an interruption. The tenor voice in bars 14 to 16 moves from G to A♭ to G in another hidden repetition of the original neighbour motif. This last four-bar phrase has the character of a sentence (in the Schoenbergian sense) subdivided into (1 + 1) + 2, but its slurring suggests a subdivision of 1 + 3. This syncopated accentuation forms an augmented version at the phrase level of the surface syncopation throughout.




Example 4.2.4: Nocturne Opus 48 No. 1, 13–16, showing motif in sequence.

The primary tone $\hat{5}$ returns in bar 17 with a modified version of the theme. The voice leading of this section descends in bar 24 to $\hat{1}$ over the tonic. The original motif of $\hat{5}$–NN–$\hat{5}$–$\hat{4}$–$\hat{3}$ and the ascending fourth both return. The ascending fourth in bar 18 is at the same pitch level as in bars 2, 6, and 14. The statement in bar 20 is at the same pitch level

as the bass in bars 11–12 and the melody in bar 13. The bass in bars 21–23 sounds a retrograde version of the opening motif before falling to the tonic—thus perfectly concluding the first section. D♭ upper neighbour to C is ornamented in bar 22. In bar 23, two syncopated triplets are heard on the pitches C–D♮–C and G–A♭–G. The whole of the first section of this Nocturne is absorbed with neighbour notes in different metric locations. They have generally been displaced off the beat within a duple metre, while in bar 23 the neighbour motion is heard in its 'natural' metric character as a triplet.[6] This section ends therefore with the most prominent motif in its most natural organisation of pitches. Guiomar Novaes plays these triplets in a deliberate manner, thereby recognising their importance, both motivically and metrically.[7]

The middle section of the piece provides contrast. The mode is major, the texture is homophonic, and the register is lower. The melody itself is also contrasting in character, but, as the graph of section **B** suggests, it is based on the same motif. Previous use of the major (in E♭) retained the original motif on its local $\hat{3}$. Here, however, it is the motivic pattern that changes while the bass remains the same. In the major key, the upper semitonal neighbour exists on $\hat{3}$ and not on $\hat{5}$. To retain the same succession of semitones as the original motif requires that it be heard as $\hat{3}$–$\hat{4}$–$\hat{3}$ here instead of $\hat{5}$–$\hat{6}$–$\hat{5}$. If this section is regarded on its own it could be considered to have a primary tone of $\hat{3}$. However, in context of the work as a whole, this section prolongs the primary tone $\hat{5}$. The upward arpeggiation in bar 26 leads up to G $\hat{5}$ in bar 27. This is heard locally as a cover tone. The upper neighbour of G $\hat{5}$ appears in bar 33, but is heard in this harmonic context as G–A♮–G. The harmony moves through D major and E major in two-bar sequences. F♯ in bar 33 provides the neighbour a semitone below G. In bar 36, G♯ forms the enharmonic equivalent to A♭ and falls back to G. The major mode is thoroughly emphasised in various keys and F♯ and G♯ are used as neighbours a semitone below and above G $\hat{5}$.

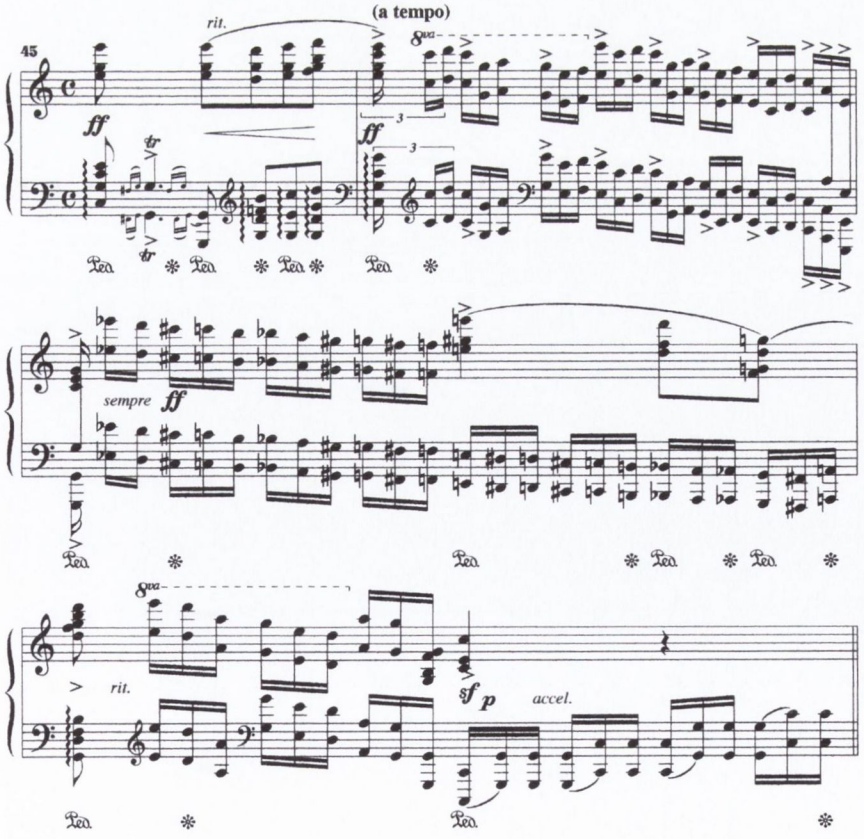
In bar 39, Chopin reintroduces the original minor form of the neighbour motif in triplets within the major, compound-metre section. Both hands play F♯–G–A♭–G. This summarises and intensifies the use of F♯ and G♯ a few bars previously and notates the upper

[6] The term 'natural' is used here, and in the succeeding pages, to denote the simplest organisation of a pattern of pitches in equal durations, as first described on p. 9. This subject is discussed in the chapter on Analytical Methodology (pp. 7, 9, 12–13). Note, for example, Rothstein's use of the same term (quoted on p. 13).
[7] Guiomar Novaes, *Guiomar Novaes Plays Chopin*, Voxbox Legends CDX3 3501 (1993), recorded in mid-1950s.

neighbour in its original form of A♭. Triplets (perhaps reflecting those of bar 23) are used throughout the rest of this section.

The main movement of the theme in half-bars is unaffected by this addition. The triplets are largely chromatic and rising and thereby add to the sense of tension and expectation toward the climax of the section. The initial pitches of these triplet passages from bar 41 onward form an ascending chromatic scale from B up to E in bar 45 and thus intensify the return of the melody at this point. A trill in the bass on G in bar 45 is preceded by F♯ and emphasises A♮ upper neighbour again.

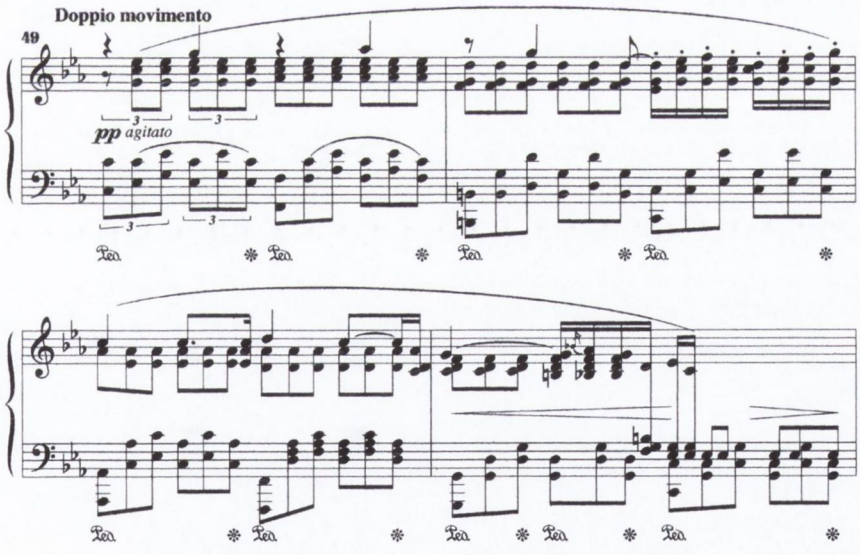
The triplet motion in bar 46 more explicitly emphasises the upper neighbour motif on C (to D) and on G (to A♮). These triplets associate the three-part neighbour motif with the three-part triplet organisation—but their alignment is shifted. Accents on the first of each triplet group highlight this triple movement and three accents on the final triplet act as brakes to stop the forward momentum. The triplet motion in bar 48 summarises the main voice-leading material in this section, restating $\hat{3}$–$\hat{2}$ and resolving to $\hat{1}$ and highlighting the neighbour motion of A–G $\hat{5}$.




Example 4.2.5: Nocturne Opus 48 No. 1, 45–48.

The introduction of triplet movement in the middle section can be highlighted by various means in performance. Vladimir Ashkenazy, for instance, begins the triplets very slightly late in bar 39 and thereby draws more attention to their entrance.[8] The movement from $\hat{3}$ to $\hat{2}$ and from $\hat{6}$ to $\hat{5}$ in the triplets in bar 48 is clearly audible in Arthur Rubinstein's interpretation.[9] He articulates grouping in pairs within the triplet descent by accentuating the first of each pair, thereby highlighting yet another example of duple versus triple organisation.

*Doppio movimento* begins in bar 49 and the theme from section **A** returns. C minor is reinstated and the original motifs recur. They are, however, integrated with the triplets of the **B** section. The tempo here doubles that of the previous section so what was a semiquaver is now a written as a quaver. The triplet semiquavers are written therefore as quavers and are integrated into the original theme. Offbeat, syncopated emphasis is once again prevalent in the right hand entries. Duple versus triple organisation is highly marked. This section sounds as if it were written with a time signature of 12/8.

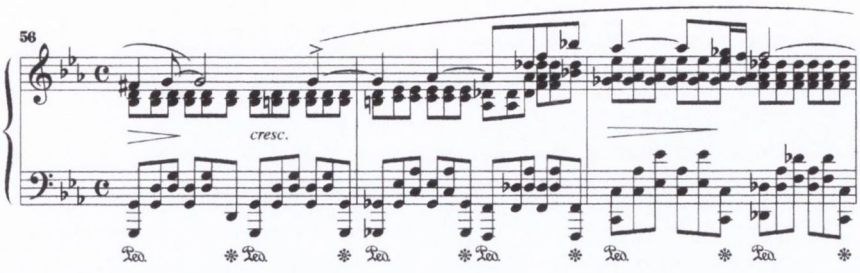



Example 4.2.6: Nocturne Opus 48 No. 1, 49–52.

Low $g^1$ $\hat{5}$ is repeated and accented in a syncopated entry on the fourth beat of bar 56. This begins the two-bar phrase ending on F $\hat{4}$. A♭ has lost some of its emphasis here

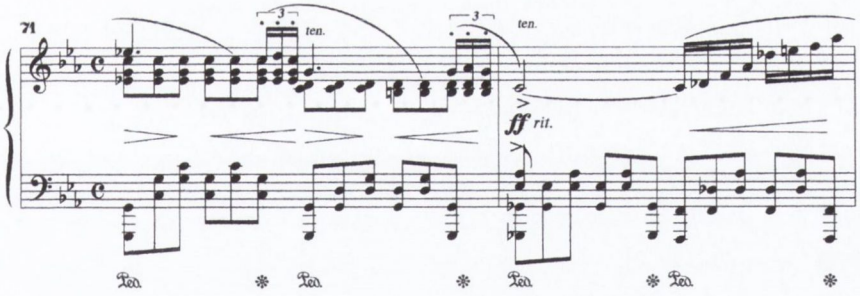
[8] Vladimir Ashkenazy, *Chopin: Nocturnes, Ballades*, Decca 452 597–2 (1997).
[9] Arthur Rubinstein, *Chopin: Nocturnes, Barcarolle, Berceuse*, Magic Talent CD 48064 (1997), recorded in 1937.

due to its displacement as compared to bar 9, but its relationship to G is made even more emphatic. The harmony again centres around the Neapolitan introduced via G♭ to F octaves in the bass.




Example 4.2.7: Nocturne Opus 48 No. 1, 56–58.

In bar 71, $d^2$ $\hat{2}$ is transferred down an octave into the alto to lead to $c^1$ $\hat{1}$. This connection did not occur in bars 23–24. Now, however, instead of the bass falling to C octave (I), it slides down from G octave to G♭ octave. This could have been the final descent with registral compensation following suit.



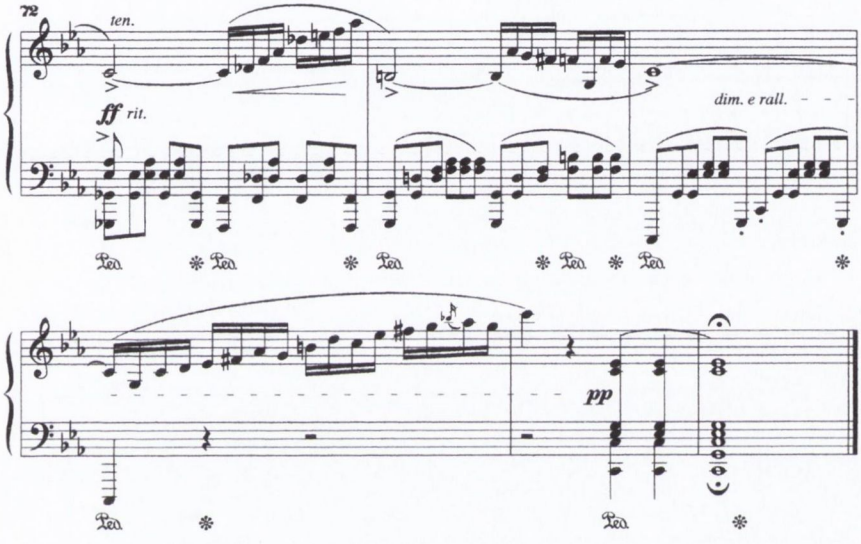

Example 4.2.8: Nocturne Opus 48 No. 1, 71–72.

The move to G♭ in the bass reactivates Neapolitan harmony. The right hand holds a minim C before rising over ♭II in a modified D♭ arpeggio. C falls to B♮ minim in bar 73 and finally resolves to C again in bar 74. The move from C to B♮ and back up to C occurs over three bars, extending the motif and finally integrating its natural triple-metre character in this duple metre section.

Neapolitan harmony has been used three times in the Nocturne:

- in bars 9–10 as a two-bar sequence over D♭ major
- in bars 57–58 as in bars 9–10
- it now occurs unexpectedly with the descent to C Î

This final appearance only lasts for one bar as the bass rises to G V under B♮ leading-note.




Example 4.2.9: Nocturne Opus 48 No. 1, 72–77.

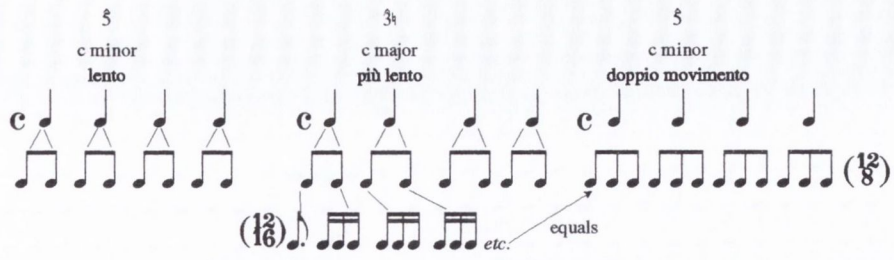
The reintroduction of D♭ harmony (previously only used in sequences), so near the end at a point of expected conclusion, reactivates this chord and associates it more strongly with C Î. From bar 72 we hear $V_2^4$–$I^6$ in D♭ and $V^7$–i in C minor. This forms a final intensification of the two-bar sequences on D♭ and C earlier. Bar 72 forms the last bar of the eight-bar phrase but is elided as the first of the final six-bar phrase due to this harmonic excursion. Bars 73–74 contain the last $V^7$–i cadence with low $c^1$ Î on the first beat of bar 74 over low CC in the bass. Here is another example of structural displacement that is used to great dramatic effect. Final resolution is delayed and displaced from its structural position of bar 72. This results in a two-faceted displacement as resolution between the hands is displaced and therefore ultimate resolution of the *Urlinie* is displaced.

Chopin uses Neapolitan harmony, heard earlier in the work, to delay resolution in the bass even though the top voice had reached its final descent. More importantly, the Neapolitan plays an important role in this Nocturne due to its semitonal neighbour relationship to the tonic. Chopin uses the semitone above important structural tones as a motivic premise in this piece, both in major and minor keys. This final ornamentation on D♭ forms a modification of this motif on $\hat{1}$.

The displacement of structural resolution in bar 72 adds even more stress to the accented pitches C–B♮–C—the motif of the bass in bars 1 to 2. This inversion of the original neighbour motif closes the main motivic premise as it answers the Neapolitan emphasis and occurs here in its most stable metrical form.

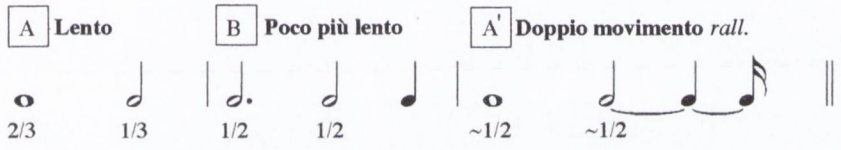
The basis of the right-hand ascent in bar 75 is the C minor triad with neighbours highlighting $\hat{1}$, $\hat{3}$, and $\hat{5}$. This ascent ends with the motif G–A♭–G, with A♭ emphasised by an *appoggiatura*. High $c^3$ $\hat{1}$ forms the goal of the ascent on the first beat of bar 76. High $c^3$ is on the beat here for the first time. It was consistently offbeat and syncopated before.

Pitch and rhythmic strategies work together throughout this piece. Having established the neighbour motif in the first section and allied it with its most natural metric layout, Chopin integrates this triplet rhythm into the middle section. Although G $\hat{5}$ is the prolonged tone of this section, it cannot be used to retain the original form of the motif as the mode is now major. Therefore, the original pattern of the neighbour motif is heard here on $\hat{3}$, E♮. The first use of triplets in this section reintroduces the minor form of the $\hat{5}$–$\hat{6}$–$\hat{5}$ motif. The triplets become even more prominent towards the end of the section in outlining the main voice-leading motion using the neighbour motif. The three-note pattern is shifted, however, from its natural metric alignment. Triplet movement remains constant and is integrated into the return of section **A**. Triplets are finally absorbed into the compound metre, as the duration of the triplet is augmented to fill three bars on C, B♮, and C—the neighbour motif heard in the bass of bars 1 to 2. Example 4.2.10 below provides a summary example of how triple metric organisation is introduced and assimilated through the three sections of the piece.




Example 4.2.10: Metric organisation in Nocturne Opus 48 No. 1.

The form of this Nocturne is in three sections of 24, 24, and 31 bars respectively. Section **A** subdivides into 16 + 8 bars based on thematic return (the form is $a_1$ - b - $a_2$). Thematic return subdivides section **B** into 12 + (8+4) and subdivides the final section into 16 + 13 bars. This forms an overall rhythmic pattern (notating four bars as a crotchet) of:




Example 4.2.11: Formal pacing in Nocturne Opus 48 No. 1.

Therefore section **A** subdivides into three and section **B** subdivides into two. **A'** approximately divides in half, particularly if a decrease in tempo in the last few bars is taken into consideration. A further subdivision of the second half of **B** forms a 6/4 organisation. This triple and duple subdivision reflects the surface preoccupation with triple versus duple metre. John Rothgeb has pointed out that the form of section **B** can also be interpreted as 8 + 𝄆 8 𝄇, with the sequences in bars 33 and 41 defining the beginning of each measure group.[10] My reading is that section **B** is subdivided into two groups of three four-bar units (with further subdivision of the second half—see Example 4.2.11 above), while Rothgeb hears it as subdivided into three groups of two four-bar units (this would be notated as three minims using the same durational reduction as Example 4.2.11). Instead of choosing between these two views of the formal structure, the piece could be regarded as offering the listener both possibilities. This results in a *hemiola* effect. The conflict between these readings reflects the ambiguity of the large-scale rhythm of the section, which is a deeper exploration of the duple versus triple organisation of the foreground.

[10] Private communication, 22 July 2002.

### 4.2.1 A Comparison of Analyses of Opus 48 No. 1

Some critics of Schenkerian analysis have argued that its results are arbitrary, assuming that different analysts will produce different results when using the same method of analysis. It is thus quite interesting to compare John Rothgeb's findings to those outlined above.[11] A complete response to the criticism that Schenkerian analysis is arbitrary and that analysts produce significantly different results would involve the comparison of more than just two analyses of one piece (and it could be argued that the production of different results might itself be regarded as an advantage). However, the following comparison shows similarities that are so striking that we must question the assumptions behind this criticism.

Both analyses interpret the piece as descending from $\hat{5}$ and both place an interruption at bar 16. Both analyses are marked by hidden repetitions of two main motifs—the first begins with neighbour motion G–A♭–G and the second is the stepwise ascending fourth that first appears as D–E♭–F–G in bar 2. Both analyses describe the first of these motifs as shaping the beginning of the piece and the middleground, noting deeper-level movement from A♭ to G in bars 9 to 12. Both readings note that the second of these two motifs occurs in the bass in bars 11 to 12 as B–C–D–E♭, anticipating the soprano of the following two bars. Both analyses also mention the fact that the subsequent transposition of the rising fourth features the same pitches that were heard in bar 2. Rothgeb's description of the bass in bars 13–14 as providing what was 'due' in bars 11–12, that is, F–E♭–B–C (p. 28) agrees with the brackets in level C of my graph. Both analyses of the remainder of section **A** note appearances of the ascending fourth motif, and both note that the concluding cadence incorporates the neighbour motion of G–A♭–G and C–D–C (p. 30).

There are a few differences between these analyses. However, the differences pale in comparison to the similarities. In fact, a list of the differences underscores the importance of the similarities between these analyses.

The different interpretations of the initial motif cause most of the small differences in our analyses.

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[11] Rothgeb, 'Chopin's C minor Nocturne, Op. 48, No. 1, First Part: Voice Leading and Motivic Content', 26; subsequent references in the text refer to this publication unless otherwise stated.

In my reading, the neighbour motif G–A♭–G forms part of a larger motif that continues down to F and E♭. Its inversion in bar 2 thus forms the ascending-fourth motif.

Both readings seem to have their advantages. Rothgeb's analysis clearly shows how the end of bar 4 imitates the opening shape (p. 26)—a similarity that is not clear from my graph. However, the inclusion of F and E♭ in my interpretation of the motif make the parallelisms between bars 2 and 6 clearer.

Rothgeb notes another appearance of the neighbour motif in the movement from C to D to C in bar 3 (p. 26). My graph does not show this instance of the motif, as these pitches are read as belonging to different voices—C as the lower voice of an unfolding third and D as the upper voice of an unfolding third.

Rothgeb finds downward octave couplings in both of the first four-bar phrases, whereas my own graph shows only the second (p. 26).

Both readings recognise the overall movement from A♭ to G in bars 9 to 12. However, due to my interpretation of the initial motif, the foreground of each individual two-bar phrase has the same motivic shape as bars 1–2. Level C of my own graph shows how bars 9 to 10 and bars 11 to 12 contain elaborated versions of the initial motif that incorporates the neighbour motif and the consequent descent of a third on local $\hat{5}$–NN–$\hat{5}$–$\hat{4}$–$\hat{3}$.

Rothgeb notes two interesting motivic aspects that occur in the immediate surface of the music in the right-hand melody in bar 11—the first three notes (excluding the grace note) forming the neighbour motif, and the ascending fourth mirroring the bass (p. 28). These are not visible on my graph.

Rothgeb suggests that the bass in bars 9–10 might derive from the melody in bars 1–2 (p. 28, n. 2). However, as level C of my graph shows, these bars could also be regarded as a motivic development of the shape in the right hand of bars 7–8.

Both analyses note that the bass in bars 11 to 12 ascends a fourth (B–C–D–E♭), is imitated in the melody of the following two bars, and that the subsequent transposition of this motif is an exact imitation of bar 2. However, Rothgeb also notes a rhythmic connection:

> The association of bar 14 with the last half of bar 2 is expressed not only through pitch but also through rhythm: in both cases, the initial tone $d^2$ is suspended, and the eighth notes of bar 14 reflect the underlying eighth-note rhythm of bar 2. (p. 28)

Both readings note that the bass of bars 13–14 provides the sequence to bars 9–10 (p. 28). This is shown with brackets in level C of my graph. If the intervening semiquaver C is taken into account, however, the bass of bars 10–11 and 13–14 imitates the bass motif from bars 1–2, itself an inversion of the original neighbour motif. As Rothgeb does not include this semiquaver, his own graph does not show this motivic connection.

Both of our analyses point out neighbour motion that resolves A♭ to G in the tenor voice of bar 16. My analysis suggests this is part of a larger neighbour motion that begins with G in the tenor of bar 14 and thus completes a hidden repetition of the initial neighbour motif (see page 119 of this thesis).

In addition, Rothgeb provides detailed explanations of underlying counterpoint and voice leading that I do not supply.

These two, independently produced analyses arrive at very similar readings of the underlying structure and motivic content of this passage. Indeed most of the differences stem from the fact that I regard the neighbour motif as part of the larger motif that incorporates the subsequent descent of a third. This comparison suggests that Schenkerian analysis is not, in this instance at least, an arbitrary method that tends to produce significantly different analyses. It suggests, instead, that different analyses of the same piece may simply offer advantageously different perspectives that can illuminate the structure and meaning of Chopin's music.

### 4.2.2 Conclusion

Opus 48 No. 1 provides a fine example of Chopin's use of hidden repetition and its interaction with rhythmic techniques such as displacement and the contrast between duple and triple metre. Hidden repetitions of the basic motifs are found throughout the piece on many structural levels. The dramatic character of this piece results from the exploration of the original motif in the major and minor modes and on different scale degrees. This tonal premise is intimately connected to the main rhythmic issues of displacement and duple versus triple metre. A combination of rhythmic analysis and voice-leading analysis helps to isolate examples of hidden repetition and to understand how tonal and rhythmic issues combine and are interrelated to form the structure of the work.

### 4.3 Opus 48 No. 2

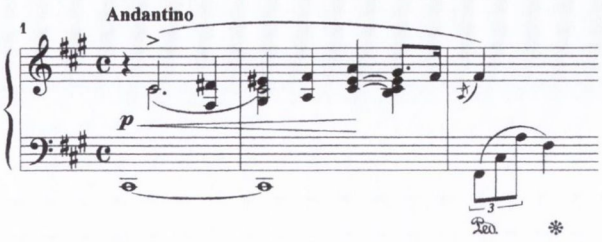
Opus 48 No. 2 shares compositional premises with No. 1. These include the opposition of major and minor modes, duple versus triple temporal organisation, displacement or syncopation, and hidden repetitions of pitch patterns that are used on various structural levels in different guises. It is the interaction of these premises that structures the piece. While the same temporal issues are introduced and developed in No. 1, they affect much deeper temporal levels in No. 2. I will return to the concept of a possible relationship between both Nocturnes after a closer examination of how these premises interact in the second Nocturne. An accompanying voice-leading graph of the Nocturne is included in Volume Two, pp. 18–21.

The two-bar introduction (shown in Example 4.3.1) presents many of the main premises of the piece. Rothstein writes:

> The two-measure introduction is critical to the phrase rhythm of the entire section. The opening gesture, a bare double octave on C♯ with its second and higher note syncopated, prepares the similar rising octave in the melody of m. 3, which returns many times in various guises. The recognition of these two gestures as related is vital to a proper understanding of the melody; for, without such recognition, one is liable to hear the first note of m. 3 as the end of the introductory cadence, rather than as end and beginning simultaneously.[12]

The ascending octave that Rothstein mentions plays an important role in the surface displacement of the melody, in eliding phrases, and in stressing the beginning of the four-note motif that will be discussed shortly. The placement of notes in relation to the metre is largely responsible for the phrase structure and the subsequent endless melody. Notes are delayed from where they belong structurally. For example, the melody of the introduction begins on the second beat of the bar and arrives on the first of bar three. The theme is therefore displaced and begins on the second beat of bar 3 on F♯. Rothstein also notes the $\hat{3}$–$\hat{2}$–$\hat{1}$ descent incorporated into the two-bar introduction: 'The introductory descent has a visionary, unreal quality because its first tone is dissonant (an appoggiatura) against the V harmony' (p. 242).

[12] William Rothstein, 'Chopin: Nocturnes, Mazurkas and Études', in *Phrase Rhythm in Tonal Music* (New York: Schirmer, 1989), 214–248, 239–242; subsequent page numbers refer to this chapter until otherwise specified.




Example 4.3.1: Nocturne Opus 48 No. 2, 1–3.

The alternation between second and third beat emphasis plays an important part in defining the flow of the piece. This pattern is first introduced in the two-bar introduction and is underscored in these bars by the dynamic marking. Rothstein notes that there is emphasis on the second beats of even bars and the third beats of all uneven bars until bar 19:

> This pattern [...] serves consistently to de-emphasize the downbeats of the odd-numbered bars. The accented third beats, on the other hand, are always dissonant; therefore the presence of a longer note there—these accents are mostly of the durational or 'agogic' type—cannot stop the forward motion, since the dissonances demand resolution. (p. 244)

The introduction thus presents the technique of displacement, the octave leap, and a hidden repetition (in this case an anticipation) of the *Urlinie*. It also introduces the play between major and minor modes and the main motivic material of the piece. Both hands begin on C♯, suggesting the key of C♯, and with the rise up to F♯ incorporating E♯, the piece has yet to qualify the status of this C♯. A♮ on the third beat of the second bar could be understood as borrowed from the minor mode. On the last beat of that bar, however, it becomes obvious that A♮ was, in fact, part of a 6–5 motion over the dominant seventh. The use of the major mode in the introduction is associated with ascending motion. The main motivic material of the Nocturne is first heard in the rising four-notes ($\hat{5}$–$\hat{6}$–$\hat{7}$–$\hat{8}$) of the top voice. This four-note pattern in both ascending and descending versions forms an important part of the melodic material throughout the work.

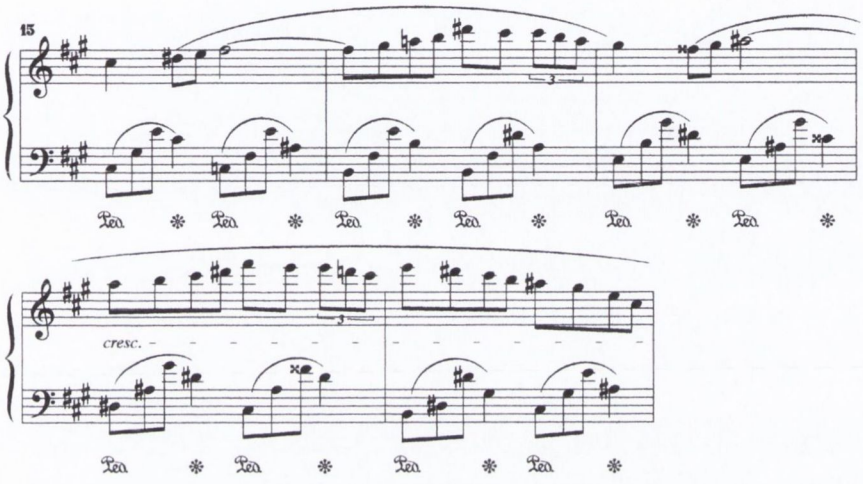
The harmony at the beginning of section **A** confirms F♯ minor in the left-hand arpeggiation. The tenor voice rises to A♯ in the second half of the bar, changing this chord to F♯ major. Ascending motion is again associated with the move to the major mode. The metric positioning of this change of mode, moving from a strong beat to a weak beat, is important. The opposition of major and minor modes in this piece is associated with ascending gestures that introduce major-mode elements into the minor-mode world in distinctive ways. Some of these involve rhythm and metre. Whereas one might think, for example, that the F♯ major chord in bar 3 is used simply to lead smoothly to B minor, it is the distinctive way in which these modes are introduced and contrast with each other that elevates the opposition of major and minor to the level of a premise. In bar 5, the bass ascends from F♯ to A♯ as the harmony moves from F♯ minor to F♯ major. This moves metrically from the first half of the bar to the second half of the bar and provides another example of how Chopin often introduces a premise as a melodic entity and subsequently transforms it into a bass line.

The theme begins with the descending version of the four-note motif in an $\hat{8}$–$\hat{7}$–$\hat{6}$–$\hat{5}$ descent. It is initiated by the upward leap of an octave and thus begins on the second beat of the bar—highlighted by this displacement. This four-note motif pervades the entire melody and can be found, for instance, in bars 4, 6, 7, and 8. Although many of these form intervals of a third on a deeper structural level, they form instances of the motif of a fourth on the surface. The dissonant third beats that Rothstein referred to can be found in the form of French augmented-sixth chords in bars 7, 9, 15, 17, and 18, to cite but a few examples.

A phrase extension produces an effect at the level of the bar similar to the displacement evident at the beat-level in the theme. This extension results in a five-bar phrase from bar 15 to bar 19, which is shown below in Example 4.3.2. The phrase begins with the ascending four-note motif. The bass movement from bar 17 descends a fourth and ascends back up again into the beginning of the next phrase in bar 20, thereby joining these phrases more smoothly. This is, however, a surface-level phenomenon. Level C of the accompanying graph shows the deeper voice-leading at this point. Rothstein attributes this phrase extension to the 'preparation for a stronger approach to V of G♯ and a decisive cadence in that key' (p. 244). He also notes that 'the renewed approach to V causes an expansion of the four-bar hypermeasure to five bars, an expansion that is significantly clarified by Chopin's dynamics (a *crescendo* through mm. 18–19, to a *forte* at the arrival of

the cadential $\frac{6}{4}$ in m. 20)' (p. 244). An extension such as this, following such regular and repetitious phrasing, is highly effective aurally.

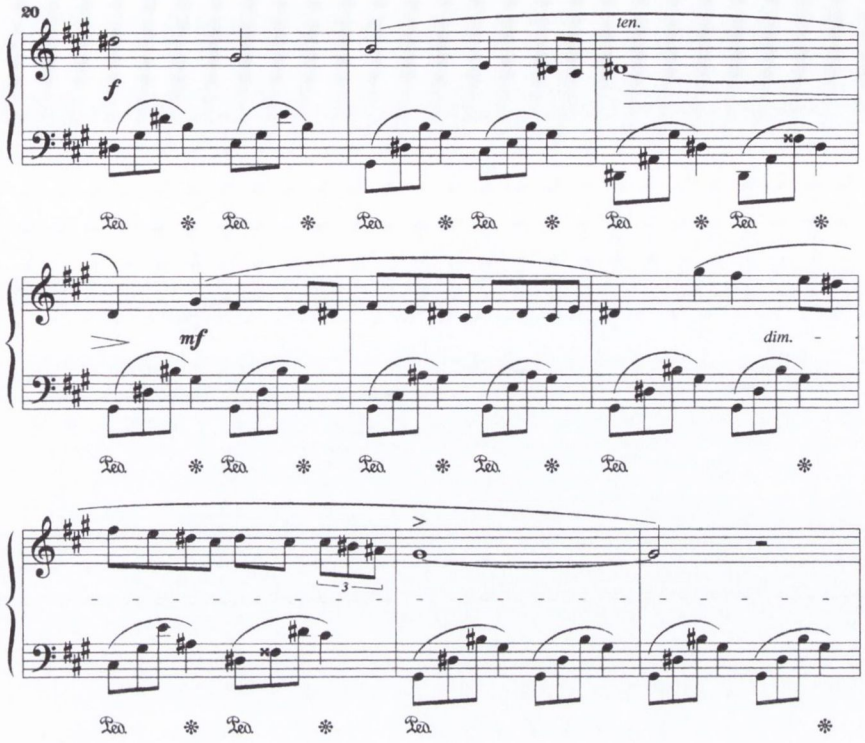
Observing Rothstein's own rules of normalisation leads us to hear this five-bar phrase as a deviation from the established four-bar phrase length. The arrival on V of G♯ is thus made more emphatic, as on a deeper structural level this harmonic goal is structurally displaced. The effect is similar to the displaced entry of the theme on the second beat.




Example 4.3.2: Nocturne Opus 48 No. 2, 15–19.

D♯ is held over the cadence on G♯ in bar 23, extending to form a four-bar group. Rothstein notes that 'the motivic reprise transforms bar 23 from a metrically weak bar into a strong one; this is an example of *metrical reinterpretation*, a common device but one not very often found in Chopin's short character pieces'.[13] Bar 23 thus transforms from the last bar of a four-bar phrase into the first of the next phrase. This next phrase begins with the four-note descending motif and, on a deeper level, this motif spans bars 23 and 24.

[13] William Rothstein, 'Phrase Rhythm in Chopin's Nocturnes and Mazurkas', in *Chopin Studies*, ed. Jim Samson (Cambridge: Cambridge University Press, 1988), 115–141, 139.



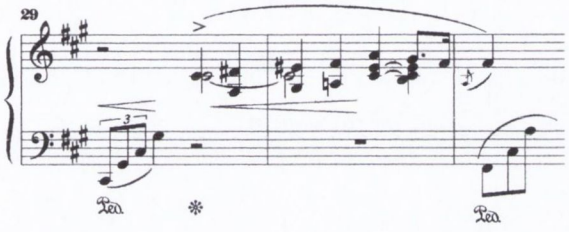

Example 4.3.3: Nocturne Opus 48 No. 2, 20–28.

Throughout section **A**, three premises interact strategically. Triplets in the left hand support duple movement in the right hand, but triplets are introduced into the melody at moments of local structural significance, for instance, at the end of phrases. In bar 26, a triplet is used in the melody as it descends a fourth from C♯ to G♯ in the major mode. Thus the premises of duple versus triple, major versus minor, and the motivic fourth interact to form a moment of dramatic significance. This major-mode descent of a fourth acts as a consequent to the antecedent, ascending major-mode fourth of the introduction and serves to round off the section.

Rothstein interprets the foregoing section thus: 'The thematic echoes in mm. 23–28 constitute a suffix to the opening section; the suffix extends the cadence just reached and gradually transforms the local G♯ minor tonic to G♯ major'.[14] It is noteworthy that the extended G♯ in the melody of bars 27–28 (prolonged from bar 23) belongs structurally with the harmony heard in bars 29–30, that is, dominant harmony.[15]

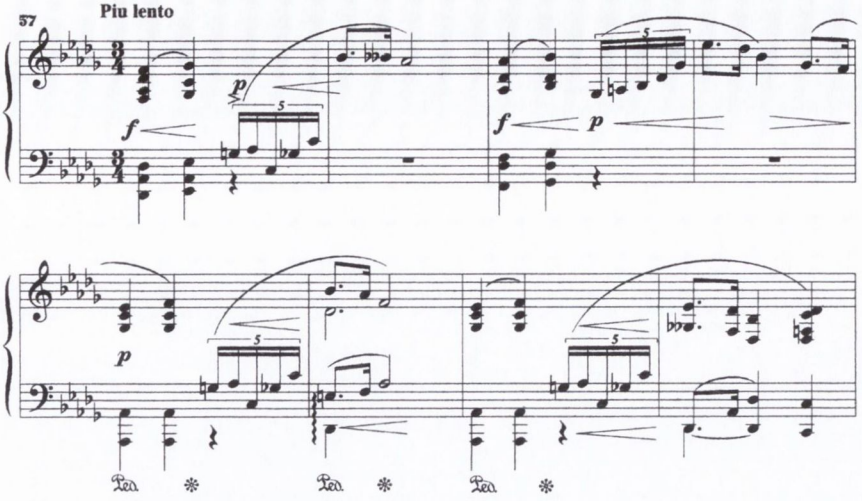
[14] Rothstein, *Phrase Rhythm in Tonal Music*, 245.
[15] This is also suggested in the graph by Felix Salzer in *Structural Hearing: Tonal Coherence in Music* (New York: Dover Publications, 1982), 220–221.

The foregoing plasticity of phrasing has caused the introductory two-bars to be heard now as the last half of a four-bar hypermetre. This four-bar phrase is further strengthened by the structural relationship between the first and last two bars. Thus the four-bar phrase serves to bridge the join between the end of one large section and its repeat. Displacement is therefore used on a larger scale to aid in the technique of elision and in the achievement of seamless motion. An ascending triplet upbeat leads into the return so the introduction takes on a hint of the character of the left hand for the first time.




Example 4.3.4: Nocturne Opus 48 No. 2, 29–31 (first beat).

Section **B** is a large-scale development from the two bars of the introduction—harmonically, motivically, and temporally. The ascending four-note pattern that is largely doubled in sixths in the introduction is inverted in tenths spanning bars 57 to 60. This can be seen in level C of the accompanying graph. The lowered $\hat{6}$ that formed part of the 6–5 motion over the dominant seventh in bar 2 is heard here in bar 58. Thus the section retains major-minor opposition. The ascending four-note pattern that started on the second beat of bar 1 is heard here over four bars within a triple metre. The 'natural' metric organisation of this tonal motif is duple metre and this contributes to the sense that this section forms an expansion of this metre within triple time. Bars 64 and 80 descend in a modified version of the descending third of bar 2. This pitch pattern is highly reminiscent of the introduction.




Example 4.3.5: Nocturne Opus 48 No. 2, 57–64.

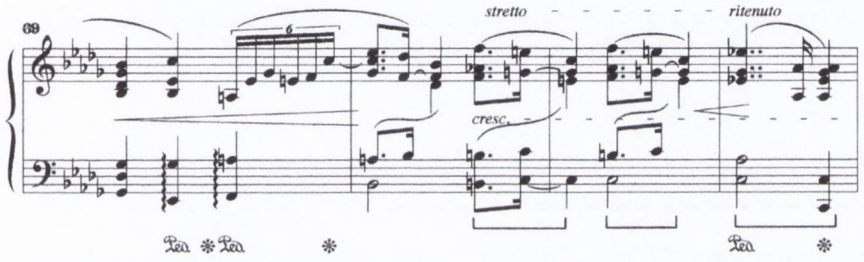
The second-beat emphasis of the middle section's Sarabande-like rhythm can be heard as a development of the introduction's inherent 'Sarabande potential'.[16] The opening rhythm of the introduction is metrically ambiguous (an ambiguity that is also evident tonally). The second-beat stress that is introduced there is developed throughout section **A** and further explored in this middle section. It sounds, therefore, like an expansion of duple time.

The middle section of this Nocturne is analogous to the middle section of Opus 48 No. 1. Taken on their own, both sections would appear to have a primary tone of $\hat{3}$, with $\hat{5}$ acting as a cover tone, but in the context of their whole pieces that $\hat{5}$ (which is $\hat{5}$ in No. 1, and is $\hat{2}$ in No. 2) is the *Urlinie* tone. The distinction between the local voice leading of this section and its context within the piece is shown on level B of the graph. Upward stems are used for the larger prolongation of the global $\hat{2}$ while downward stems show the local voice leading of this section.

The voice leading of this passage (bars 65–72) is described in level C, but closer examination reveals the intimate connection between its tonal events and the rhythmic devices that pace these event to lead into their modified repetition from bar 73. The two-bar sequence in bars 65–66 and 67–68 forms a compressed version of the four-note motif. This can be seen on level C of the graph (see the bracket). This compressed four-note motif spans four bars. A subsequent ascent of the motivic fourth to E♭ spans four bars and

[16] Rothstein also notes the 'Sarabande-like' nature of the middle section in *Phrase Rhythm in Tonal Music*, 245.

precedes a modified repeat of the middle section. From bar 70 the rhythmic motif ♩♫ ♩ is used three times: once over B♭ minor and twice over C major. This is accompanied by a *crescendo* with a *stretto* followed in bar 72 by a *rit.* This *rit.* is not marked in the original French edition.[17] This change of pace is extremely effective as movement in duple time contradicts the triple metre. Tension is increased until, in bar 72, the rhythmic motif is expanded back into a 3/4 group. This acts as a *ritardando* and could possibly explain why the tempo indication was excluded from the French edition. Inner temporal flexibility is used here in preparation for the return of bar 57 in bar 73. Example 4.3.6 below shows bars 69–72.



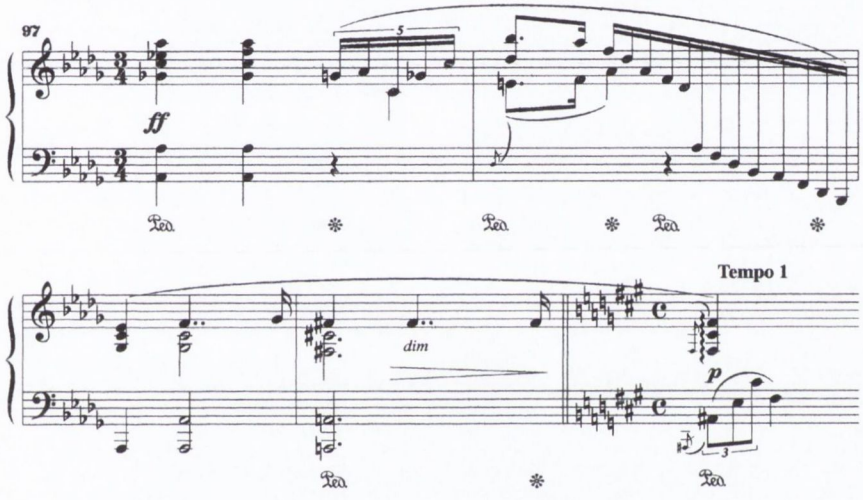

Example 4.3.6: Nocturne Opus 48 No. 2, 69–72, with grouping annotations.

In the modified repeat of this section, the harmony moves from D♭ or C♯ major to E major in bars 75–76. Here is another example of minor and major interrelation as the flattened third (the third of C♯ *minor*) is harmonised as a major chord within the major-mode context. In bar 99, $V^7$ of D♭ major with an added sixth (or dominant thirteenth) moves up a semitone to F♯ minor. Instead of resolving back to A♭ for a Phrygian cadence in D♭, the bass moves up a semitone to A♯ as the third of F♯ major. This is the same as the harmonic movement in bars 3 and 5. Now the bass adopts the tenor movement from bar 3 in ascent into the major mode. Previously, this harmonic change highlighted the movement from the first half of the bar to the second half—a broader play on the movement away from the first beat to the second beat of the bar, and one that highlights beat three in these uneven bars. Now this harmonic move is used to join whole sections and to increase forward movement from the middle section into the return of the theme. The emphasis on the change of mode, concentrating on the move from A♮ to A♯, displaces the arrival of the

[17] Noted by I. J. Paderewski, ed., 'Commentary' in *Chopin Complete Works: Nocturnes*, Frederyk Chopin Complete Works, 22nd edition, (Cracow: Polish Music Publications, 1985), 121.

tonic (in root position) until the third bar of the return. The displacement of the tonic from the point of return can be seen on level A of the graph. The premises of displacement and of major/minor opposition are used together to join these two sections and to add weight to this point of structural importance. Rothstein comments:

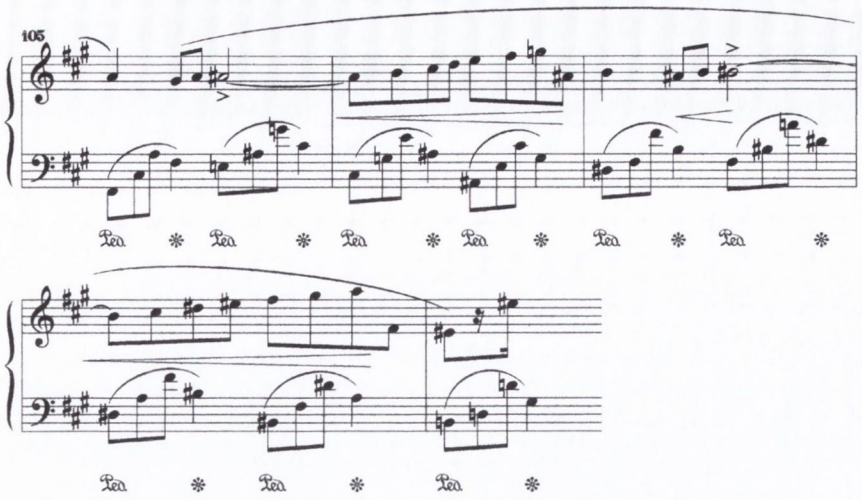
> The thematic return occurs at m. 101, in the middle of an ascending bass progression moving from V of V (spelled as A♭, m. 99) to V (m. 102); the tonic arrives only at m. 103, in the middle of the phrase. Thus even a major sectional division is evaded, reestablishing the endless melody and adumbrating further rhythmic conflict.[18]




Example 4.3.7: Nocturne Opus 48 No. 2, 97–101.

The first significant change to section **A** occurs in the fifth bar of the theme in bar 105. Bar 7 featured a prominent version of the ascending four-note motif. In bar 105, the second phrase ends on A♮ and rises a semitone to A♯ in the second half of the bar. This tonal movement that originated in the major/minor premise of F♯ minor becoming major has taken the place of the four-note motif. It has retained its metric positioning and joins these two phrases smoothly. It also flags the beginning of chromatic alteration of the four-note motif. The chromatic rise continues with B and B♯ in bar 107 completing a disjointed chromatic version of the ascending four-note motif. Resolution to C♯ is expected but avoided in bar 109.

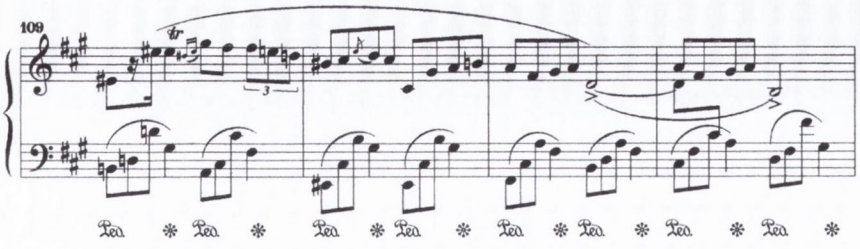
[18] Rothstein, *Phrase Rhythm in Tonal Music*, 245.




Example 4.3.8: Nocturne Opus 48 No. 2, 105–109.[19]

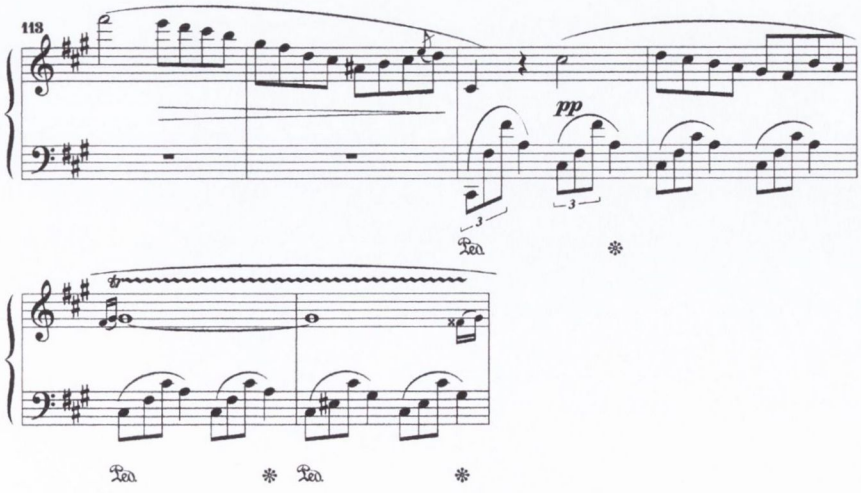
From bar 109, Chopin plays on this expected resolution to C♯ and the four-note motivic shape. Following its chromatic alteration, the four-note motif metamorphoses into a double-neighbour motif around C♯. The tenor voice sounds D♮–C♯–B in bars 109 to 110 and follows through to C♯ in the alto in the second half of bar 110. A chromatically altered version of this motif is heard in the top voice in the first half of bar 110 in inverted diminution as B♯–C♯–D–C♯. This also functions as a restatement of the B♯ in bars 107–108 but now provides its resolution to C♯. This voice leading carries over the phrase-join and thus drives the music forward. It also places further emphasis on C♯ as the goal pitch of this section. In bar 111, an accented minim D in the second half of the bar moves to C♯ as the third note of a triplet in the following bar. This pitch is double-stemmed in order to highlight its importance as part of the motif. An accented B minim follows in the second half of the bar. This line forms a more emphatic rendering of the tenor line in bars 109–110. Expectation of resolution to C♯ is very strong given the recent versions of this motif. The bass line moves from B to C♯ to D beneath D–C♯–B in a simultaneous inversion of the motif (and a voice exchange). Therefore resolution to C♯ is also expected in the bass. Arrival on C♯ is subsequently delayed by two bars. The main forms of this motif are outlined on level C of the graph.

[19] Henle and Ekier have F𝄪 in place of G♮ on the third quaver of the third beat of bar 105 and on the second quaver of bar 106. However, they retain G♮ on the last beat of bar 106. This example follows Paderewski's edition, which understands the second half of bar 105 until the end of bar 106 as an arpeggiation of the same harmony (See level C of my graph).




Example 4.3.9: Nocturne Opus 48 No. 2, 109–112.

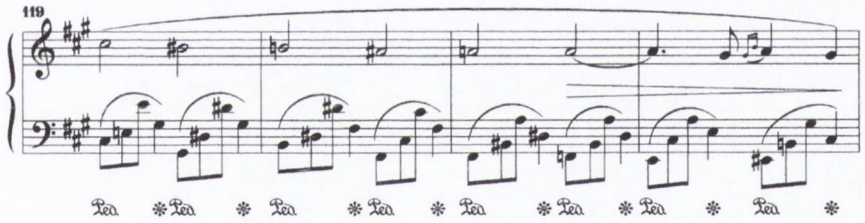
The two-bar interpolation sounds $f\sharp^3$ on the first beat of bar 113. This is the first time a high F♯ has been heard at the beginning of the bar. In the theme on each occurrence, the higher F♯ was displaced, appearing on the second beat of the bar. The left hand disappears for these two bars and so highlights this normalisation. This can be compared to bar 76 in Opus 48 No. 1 when high $c^3$ is heard for the first time on the first beat after consistent second-beat positioning. Descending right-hand quavers land on C♯ in bar 115. This forms a registrally expanded, normalised version of the original descending four-note motif from F♯ to C♯ in section **A.** Its goal pitch provides final resolution of the tenor/alto line in bars 111–112 while the bass also completes its motif on C♯. This can be seen more clearly on level C of the graph where the motifs are beamed. This delayed resolution is extremely effective. Anticipation of resolution onto C♯ is very strong. Any deviation from this immediate resolution thus attracts more attention—in this case, the normalisation of the initial entry of the $\hat{8}$–$\hat{7}$–$\hat{6}$–$\hat{5}$ motivic descent of the main theme. Half-bar emphasis has taken over since bar 110 and second-beat stress has been eliminated.




Example 4.3.10: Nocturne Opus 48 No. 2, 113–118.

Another motivic four-note descent arrives on $\hat{2}$ on the first beat of bar 117 with a two-bar trill on G♯ over V. This is similar to the held $\hat{2}$s in bars 27–28 and bars 55–56. G♯ $\hat{2}$, if normalised, belongs structurally over the arrival of the dominant, two bars earlier, in bar 115. This is shown on level B of the graph. The arrival of G♯ two bars late complements the previous entrances of this pitch two bars early in the service of bridging over large sections of music (bars 27 and 55).

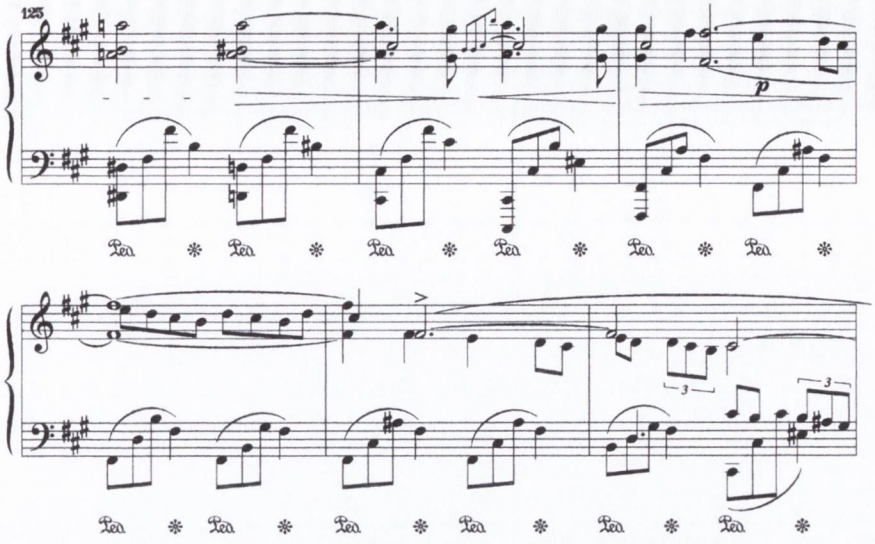
Resolution to F♯ $\hat{1}$ does not follow in the next bar. Rothstein writes: 'The frustration of non-ending is most dramatic at m. 119, where the final cadence—announced by a two-measure trill on $g\sharp^1$ ($\hat{2}$) over the dominant—is interrupted by an eight-measure parenthesis'.[20] Instead, bar 119 begins a four-bar phrase with a chromatic descent in minims in the right hand from C♯ $\hat{5}$ to G♯ $\hat{2}$ but still there is no resolution to $\hat{1}$. These two four-bar phrases form chromatic developments of the motivic descending fourth from C♯ to G♯ that was heard in bars 115 to 117 and also highlight movement from A♯ to A♮.




Example 4.3.11: Nocturne Opus 48 No. 2, 119–122.

The final descent of the *Urlinie* occurs in bar 127. F♯ $\hat{1}$ arrives displaced onto the second beat as it was in the theme. Rothstein notes: 'The cadence finally occurs at m. 127; it is extended by a suffix that is essentially a transposition of mm. 23–27' (p. 245). The motivic fourth is heard twice in the following four bars—beginning on the second beat and moving from F♯ down to C♯. A turn to the major mode is highlighted by a final triplet which descends to F♯ $\hat{1}$ in the tenor voice on the *first* beat of bar 131. F♯ $\hat{1}$ is finally resolved temporally.

[20] Rothstein, *Phrase Rhythm in Tonal Music*, 245; subsequent page numbers in the text refer to this publication until otherwise stated.

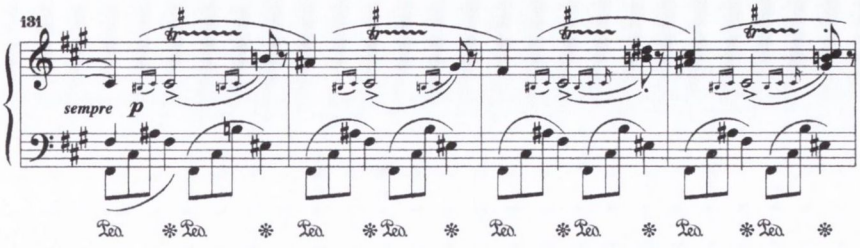



Example 4.3.12: Nocturne Opus 48 No. 2, 125–130.

Rothstein explains the metric content of the last section:

> Resolution of the conflict in the phrase structure—the conflict between first-beat-as-ending and first-beat-as-beginning—comes momentarily at m. 131, the end of the cadential suffix and the beginning of the coda [...]. But immediately thereafter the same conflict emerges again: the one-measure units that begin with syncopated trills [...] compete against Chopin's articulation, which stresses the first beats as beginnings of slurs. The eighth rests at the end of each measure support the first-beat stresses, as does the alternation of I♯ and $V^7$ over the tonic pedal. (p. 245)

This forms another example of a delayed accentual shift in the right hand. The delayed accentual shift beginning in bar 17 of Prelude No. 21 was a deeper, metric manifestation of the emphasis on the second-quaver. A similar technique is evident here. The characteristic displacement and second-beat emphasis is now manifest in this delayed accentual shift. C♯ $\hat{5}$ is strongly emphasised from bar 131 onwards. The trills with their prefixes summarise the motivic double-neighbour around C♯ from bar 109 to 115—an offshoot from the original four-note motif. The melody sounds the motivic descending fourth from B to F♯ and incorporates the major-mode A♯. Displacement is still very much in evidence.

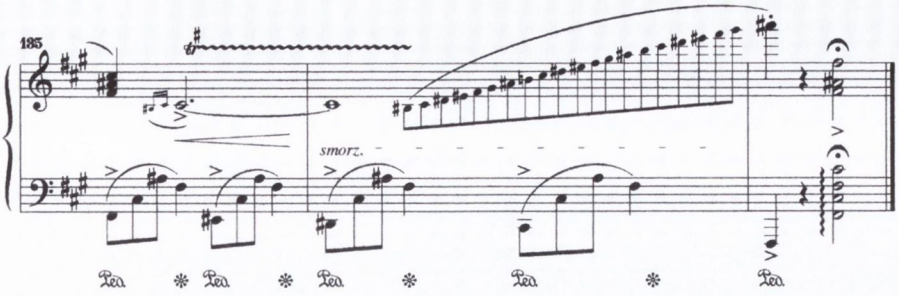



Example 4.3.13: Nocturne Opus 48 No. 2, 131–134.

Rhythmic normalisation has been used as an *analytical* technique throughout this thesis, but, in the final bars of this Nocturne, Chopin uses rhythmic normalisation as a persuasive *compositional* technique. In bars 135–136, the bass falls F♯–E♯–D♯–C♯, accented on each half bar beneath the major-mode tonic chord. This is a complete rhythmic normalisation of the original $\hat{8}$–$\hat{7}$–$\hat{6}$–$\hat{5}$ of the theme. It provides a conclusion to the prominence of this descending tetrachord throughout the piece on various levels, and demonstrates the normalised, natural metric placement of these pitches. This duple metric formation of these four tones was a constant goal throughout the piece. It became increasingly obvious in the duple movement of this motif within the triple time signature of the middle section.

In bar 136, an ascending scale sends $c\sharp^1$ $\hat{5}$ off and arrives on $a\sharp^3$ over low FF♯ bass on the first beat of the final bar. This huge ascending gesture encapsulates the previous tendency for major-mode interpolations to be introduced with ascending motion. A rest in both hands on the second beat facilitates entry of the chord of F♯ major on the third beat in a large, inward, closing gesture. F♯ $\hat{1}$ is heard in the top voice of this accented tonic chord.

The last three bars outline an arched pattern consisting of the pitches C♯–A♯–F♯, thereby summarising the pitch concerns throughout the piece and highlighting the move to the major mode for the conclusion. The opening outlined an arched pattern of C♯–A♮–F♯. Thus, the beginning and ending of this piece form a giant hidden repetition of the minor-major premise focusing on movement from A♮ to A♯. This tonal movement was used to move from first beats to third beats, to join sections and finally to enclose the entire piece. This also forms a summary of the second-beat emphasis versus third-beat emphasis, as C♯ enters very strongly on the second beat and F♯ arrives on the third.




Example 4.3.14: Nocturne Opus 48 No. 2, 135–137.

Another fascinating example of the influence that surface rhythmic peculiarities have on larger levels can be found here in the last phrase of the piece. Rothstein notes this in his own analysis:

> Measure 137 is the third bar of a hypermeasure. Together, the incomplete hypermeasure and the fermata on the F♯ major chord imply one additional measure for the chord to sound, an imaginary m. 138. The F♯ major chord is syncopated within mm. 137–38; this syncopation is an augmented version of the second-beat syncopations. (p. 328, n. 37)

The form of the second Nocturne is, like the first, in typical **ABA'** organisation. The first section is divided in two by repetition of the theme. The second section divides into three subsections in the ratio 4:4:3 due to the inner form of **B** (16 bars), **B'** (16 bars), and **B'** cut (12 bars). This, in musical notation with four bars equal to a crotchet, would be equivalent to 4/4, 4/4, and 3/4 time. The final section divides approximately in half at bar 119 by the change of material and phrase lengths. Therefore, as in the first Nocturne, duple and triple surface issues are reflected in the formal divisions of the piece, as are the main time signatures.

### 4.3.1 Summary of Premises

A summary of the main premises operating through this Nocturne underscores the interaction of melodic and rhythmic structure. The opposition of major and minor modes is associated with ascending gestures and with metric position. It functions to move from strong beats towards weak beats and from one section to the next. The integration of major harmony into the minor mode in conjunction with ascending forward motion helps to create the positive dramatic character so evident in this piece. The motivic premise of this Nocturne centres on the four-note motif. These start as rising and falling four-note successions and then get compressed in bars 65–68. From bar 105 there is a chromatic version of the motif in the rising pattern A–A♯–B–B♯. It then transforms into the double-neighbour motif around C♯ that can be heard from bar 109 to bar 115. Finally, the original four-note motif returns in a normalised, major-mode version for the conclusion. The middle section of this Nocturne is a developmental offshoot from the introduction. It includes the four-note motif, the major-minor premise, and duple tonal organisation within a triple metre. The duple versus triple premise is introduced at the surface level of section **A**. The four-note motif has a natural duple organisation and the middle section has duple tonal movement within a triple time signature. Second-beat emphasis is introduced in the first two bars and carries through section **A** into the middle section, contributing to its Sarabande-like character. Displacement is used in the treatment of motifs (including the four-note motif and the octave leap), phrases, and even at structural points.

### 4.3.2 Performance Interpretation

Analytical investigation such as this raises many interpretive questions. It is sometimes unnecessary to stress particular analytical findings in performance. In other cases, however, highlighting certain premises can enliven and strengthen the dramatic narrative of the piece. The performer must make these decisions in light of his or her own findings. Ashkenazy's interpretation of this Nocturne seems to reflect many of the premises outlined above.[21] In bar 2, he takes more time on A, thereby highlighting $\hat{3}$, emphasising the third beat of the bar, and stressing the minor-mode inflection. He also highlights the move to the major mode in bar 23 by allowing extra time.

[21] Ashkenazy, *Chopin*, Decca (1997).

The return of the first section is beautifully prepared as he takes extra time into bars 100 and 101, also highlighting the change of mode. The bass movement is played extremely *legato*, smoothing the already seamless move from the middle section into the return. A small *rallentando* at the end of bar 108 draws attention to the avoidance of resolution onto C♯. C♯ in the second half of bar 110 is held longer than notated. This connects it to the ensuing, accented version of the motif beginning in bar 111. In bar 112, a small *rallentando* highlights both the lack of conclusion of this motif and also the entrance in bar 113 of high F♯ on the first beat.

Schenkerian theory has often dealt with hidden repetitions of pitch patterns. However, the synthesis of methods used here shows the intimate connections between three things in Chopin's music: the hidden repetitions of pitch patterns, the hidden repetitions of rhythmic and metric patterns, and their mutual relationship to the dramatic 'premises' of the music. In Chopin's music, rhythmic and tonal gestures intimately combine in creating the structure or dramatic narrative of each work.

### 4.4 Intraopus Connections in Opus 48

This focus on premise reveals some striking similarities between the two Nocturnes of Opus 48. These include motivic hidden repetitions and their development, the opposition of major and minor modes, displacement and subsequent normalisation, and the contrast between duple and triple metre. In both pieces, the main tonal motivic material finds its natural metric organisation, having been displaced and developed throughout. Tonal and metric premises are dependent upon each other and function together to mould the shape of each piece.

The opening of the second Nocturne sounds as if it follows the first Nocturne smoothly even though they are a tritone apart in key. This piece opens on C♯ in both hands—a semitone above the final cadence of the preceding Nocturne. The emphasis on C♯ in the first Nocturne as the Neapolitan to the tonic formed a migration of the motivic neighbour concentration into the harmony. Therefore its relationship to C♮ was strongly established. Although the primary tone of the second Nocturne is $\hat{3}$, C♯ plays a prominent role throughout.

Below is a comparative outline of the formal structure and the use of metre in both Nocturnes:

| | **No. 1** | **No. 2** |
|---|---|---|
| **A** | C minor<br>4/4 time—*Lento*<br>duple<br>melody and accomp. | F♯ minor<br>4/4 time—*Andantino*<br>duple versus triple<br>melody and accomp. |
| **B** | C major<br>4/4 time—*poco più lento*<br>with triplet integration<br>homophonic | D♭ (C♯) major<br>3/4 time—*più lento*<br>'expanded' duple<br>homophonic |
| **A'** | C minor<br>4/4 time *Doppio movimento*<br>duple versus triple<br>melody in chordal texture | F♯ minor–major<br>4/4 time—*Tempo 1*<br>duple versus triple<br>melody and accomp. |

Table 4.4.1: Comparative outlines of Nocturnes Opus 48 Nos. 1 and 2.

If the two Nocturnes are played in succession, the 4/4 *Andantino* of No. 2 could be played as equal to the 4/4 *Doppio movimento* of No. 1. This would result in a continuous temporal relationship between the two pieces.

| | | |
|---|---|---|
| No. 1 | **A** | l*ento* |
| | **B** | *poco più lento* |
| | **A'** | *doppio movimento* |
| No. 2 | **A** | a*ndantino*—equal to *doppio movimento* of No. 1 |
| | **B** | *più lento*—bar in 3/4 equal to bar of *andantino* in 4/4 |
| | **A'** | *tempo 1* |

Table 4.4.2: Temporal relationship between Nocturnes Opus 48 Nos. 1 and 2.

The duple/triple play that featured on the surface of No. 1 is integrated into the metre in the second Nocturne. However, a continuous tempo relationship between the two Nocturnes could deepen this.

Schenkerian analysis that is informed by rhythmic theory demonstrates that these Nocturnes deal with similar issues. It can be of great interest to the analyst to investigate how similar premises are worked out—not just in a single piece but in a pair of pieces. Perhaps Chopin approached this Opus with a mind to experimenting with, and providing different answers to, similar compositional problems. In Opus 48, both Nocturnes deal with the same rhythmic and metric issues. Indeed this functions not only on the surface of the works but also on the background level of organisation, and may even flow through both of the pieces.

### 4.5 Opus 27

The keys of C sharp minor and D flat major enjoy a special relationship in Chopin's music. Their contrast gives dramatic and emotional effect within works such as the *Fantaisie-Impromptu* and the 'Raindrop' Prelude. While their relationship within individual pieces seems clear, what about their connection within an opus? The use of C minor versus C major in Opus 48 No. 1 demonstrates the same harmonic relationship (parallel major and minor tonics), but it is still not the typical one. The analytical method of this thesis shows relationships between the individual pieces of Opus 27 that will be of interest to analysts and performers.[22] After noting superficial but interesting surface similarities between the two pieces, the analysis looks at the connection from the first Nocturne into the second. Finally, it will focus on the premises that are set up in the first piece and how they develop throughout both works. As we will see, some of these premises do not conclude totally in the first Nocturne and are more deeply explored and finally resolved in the second.

#### 4.5.1 Similarities

The main surface similarities between both works concern their keys, openings, and endings. The first Nocturne is in C sharp minor and the second is in D flat major. The first begins in sharps, moves to a key signature of flats, and returns again to sharps. The second begins in flats, the build-up to the climax is notated with sharps, and it returns to flat notation.

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[22] Both of these Nocturnes have been graphed in full by Felix Salzer in Felix Salzer, 'Chopin's Nocturne in C♯ Minor, Opus 27, No. 1', in *The Music Forum*, ed. W.J.Mitchell and Salzer (New York: Columbia University Press, 1970), 2:283–297, 286; and *Structural Hearing: Tonal Coherence in Music* (New York: Dover Publications, 1982), 306–307.

The openings of both works have a lot in common. The first Nocturne opens with a solo left-hand playing sextuplets and the right hand then enters a tenth above on the third scale-degree. Similarly, the second Nocturne opens with a solo left-hand playing sextuplets and the right hand enters a tenth above on the third scale-degree.

The codas of both pieces are also comparable. No. 1 features a texture of two voices that answer each other before coming together. The left hand sounds on its own in bar 98 before the final cadence with $\hat{3}$ on top. The subject of closure will be discussed later. In the second Nocturne, the coda is also written in a texture of two voices that answer each other before coming together. The left hand sounds on its own in bar 74 and a simple closing gesture concludes the work with $\hat{1}$ in the top voice.

### 4.5.2 Connections

However, beyond the surface similarities, pitches and gesture more strongly connect the end of Opus 27 No. 1 to the beginning of Opus 27 No. 2. Most of the pitches in the final chord of the first Nocturne are taken up in the left hand of the second. Top-voice E♯ at the end of the first piece is transposed up an octave and respelled as F ($\hat{3}$) for the first pitch of the melody of the second piece. Finally, the upward moving, opening-out gesture of the cadence at the end of the first Nocturne is mirrored in the initial movement of the bass and on entry of the right hand in the second.

### 4.5.3 Premises in Opus 27 No. 1

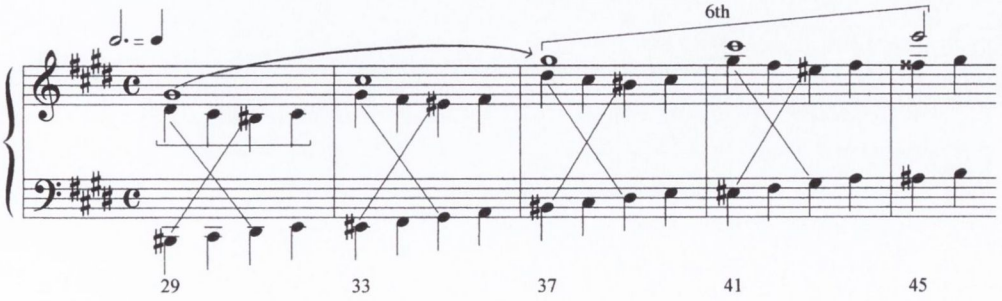
Premises that are set up in No. 1 are developed through both pieces. The first Nocturne will therefore be examined in more detail. Premises set up in Nocturne No. 1 include:

- semitonal neighbours (featured also as part of an important motif)
- melodic events becoming bass lines
- the sixth
- enharmonic reinterpretation
- 'new theme'

The first Nocturne opens with solo left-hand arpeggiation that omits the third of the tonic harmony. This first introduces the element of modal ambiguity that characterises this piece. The melody enters on E♮ and moves immediately up a semitone to E♯. E♮ returns in the subsequent descent. The theme then continues by exploring two semitones in the form of a double-neighbour motif—heard for the first time as D♮–C♯–B♯–C♯. However, its final resolution back to C♯ is delayed by a bar's rest in the right hand. Motivic disjunction, and the fact that its final resolution is left hanging, results in the heightening of tension at this point and it also joins these two phrases together.

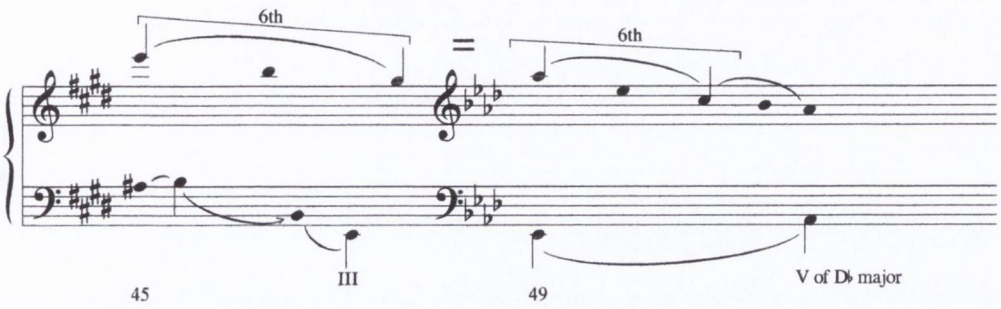
In bars 25 and 26, the motif is left unresolved and a *ritenuto* leads into two bars of solo left hand. This sounds very mysterious and lacks tonal or metric stability. On closer inspection, however, the main movement in the left hand is of D♮ to C♯. The motif is completed with the initiation of the *Più mosso* section as the bass moves down to B♯ and back up to C♯. Now, not only is this motif used to bridge phrases, but also to bridge whole sections. This motif that started as a melodic motif is now used in the bass line and has assumed even more importance. Thus far we have witnessed the introduction of two of the main premises of the piece. The semitonal neighbour motion was transformed into a thematic motif and this melodic event migrated into the bass line and took on more importance.

The *Più mosso* section highlights the prominence of the interval of a sixth. This section is also formed from the semitonal double-neighbour motif in the bass and alto. The main harmonic movement continues as shown below in Example 4.5.3.1. The durational reduction is notated with one bar of the score equal to one crotchet in the reduction. The overall ascent is of a sixth from G♯ to E♮.




Example 4.5.3.1: Durational Reduction of Opus 27 No. 1, 29–45.

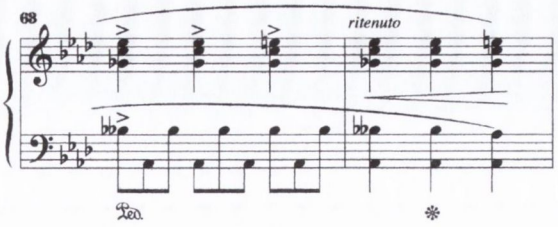
The interval of a sixth is used as a way of highlighting the E♮/E♯ ambiguity from the opening. Here, the sixth outlines C♯ minor—G♯–E♮. Later, the sixth from G♯ to E♯ will be used to establish the major mode and it will be respelled as A♭ to F in the second Nocturne. A voice-leading sketch of bars 45–52 is shown below in Example 4.5.3.2.




Example 4.5.3.2: Voice-leading sketch of Opus 27 No. 1, 45–52.

This passage outlines the descent of a sixth from E♮ back to G♯. G♯ is then enharmonically respelled as A♭ in a common tone modulation in bar 49. In this section, there is concentration on the sixth and it offers the first example of enharmonic reinterpretation. At the change of key in bar 49, another sixth emerges. The melody descends a sixth from A♭ to C before falling to A♭ an octave lower.

The section that follows uses the original E♮–E♯ semitonal motif to prepare a synthesis of this motif and the motif of the sixth. The rising sequence that follows in bar 53 is full of semitonal motion and the original motif. The alto voice contains a chromatically altered, retrograde version of the motif that is expanded over four bars. The tenor and top voices feature semitonal motion and there is a general rise in tension. The goal of this motion arrives in bar 65. The tenor voice in the two preceding bars focuses on B𝄫 resolving to A♭. B𝄫 is heard seven times before finally falling to A♭. This highlights it and provides a further example of the focus on semitonal neighbour motion—this time to the fifth scale-degree of the tonic, D♭ major.



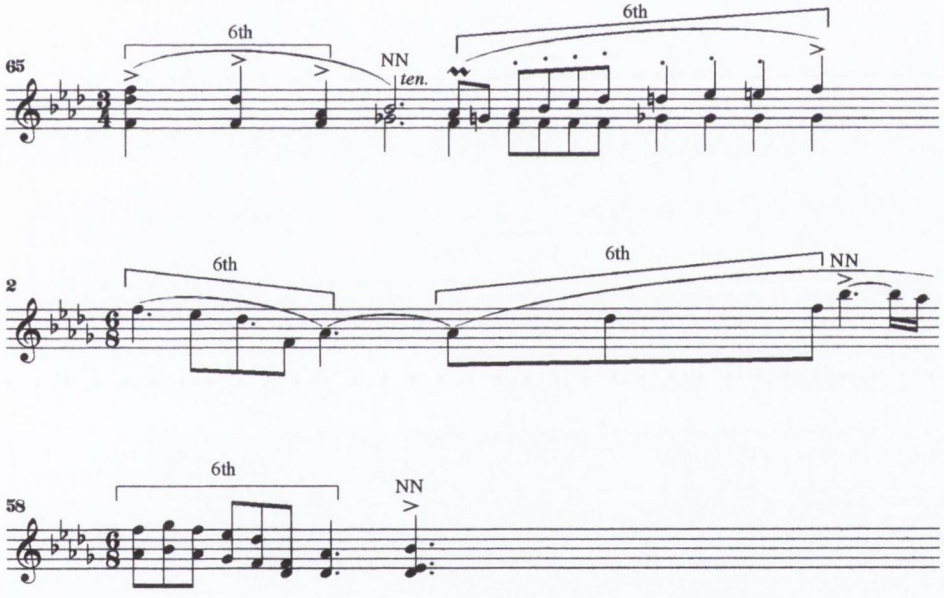

Example 4.5.3.3: Nocturne Opus 27 No. 1, 63–64.

The theme that appears in bar 65 may sound like a new theme. Salzer writes of this passage: 'It is as if the major mode demanded a different thematic content'.[23] It is a distinctive melody and does provide an attractive contrast with the material that precedes it. However, it may also be heard as the end result of a process of developing variations that smoothly transforms the opening material into this theme. The opening melody focuses on semitonal movement (from E to E♯ and the double-neighbour motif), and it features repetition of the pitch E♯. This is transformed into the material used in the *Più mosso* section from bar 29. As mentioned previously, the double-neighbour motif appears throughout this section. It also makes a feature of the pitch repetition evident in the opening theme and hints at an arpeggiated melody (in the second bar of each phrase). The interval of a sixth (from G♯ to E) emerges as the overall contour of the melody and triple metre takes over. The goal of this section arrives in bar 45 and a new melody enters. This melody retains pitch repetition and it answers the previous ascending sixth from G♯ to E♮ with a descending sixth from E♮ to G♯. Whereas previously the interval of a sixth was formed by the overall contour of the melody, now the sixth is formed by melodic arpeggiation that was only hinted at in the previous section—thereby intensifying focus on this interval. The melody is now in E major. Bars 49 to 52 form a consequent phrase that enharmonically respells G♯ as A♭ and descends a sixth in a melodic arpeggiation. The key signature has now changed to that of four flats and the harmony rests on V of D flat major. The section from bar 53 until bar 64 features the double-neighbour motif and is similar, both in character and organisation, to the *Più mosso* section. Thus the theme in D♭ major in bar 65 seems to have evolved through a series of developing variations. The double-neighbour motif and pitch repetitions were both used as links on the way towards this theme. It is thus noteworthy that this theme makes a feature of the neighbour B♭. In bar 67,

[23] Salzer, 'Chopin's Nocturne in C♯ Minor, Opus 27, No. 1', 286–287.

the semitonal lower neighbour to A♭ initiates the ascent back to F. Semitonal movement then takes over at the end of each ascent. Repetition is retained in the harmonic support to the melody. The characteristic outline of a sixth began in the overall contour of the *Più mosso* section before taking on more melodic importance from bar 45. Its triple metre was also established from bar 29 and the key of D♭ was prepared by the enharmonic reinterpretation of G♯ as A♭ leading to its dominant.

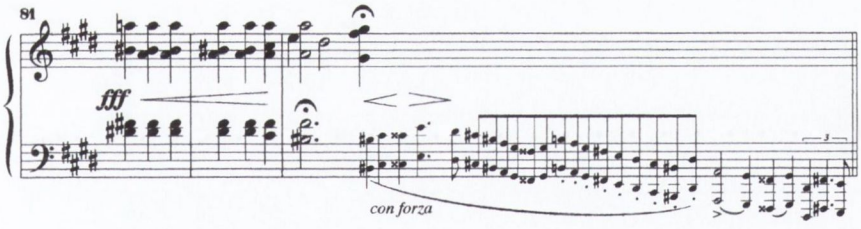
Hearing such a process not only seems central to the dramatic process of Opus 27 No. 1, but also enhances our experience of Opus 27 as a single whole. If this theme is compared to the theme of the second Nocturne, further similarities become apparent. These two themes (and an offshoot of the theme of No. 2) are juxtaposed in Example 4.5.3.4 below to demonstrate this similarity.




Example 4.5.3.4: Melodic outline of themes of Opus 27 Nos. 1 and 2.

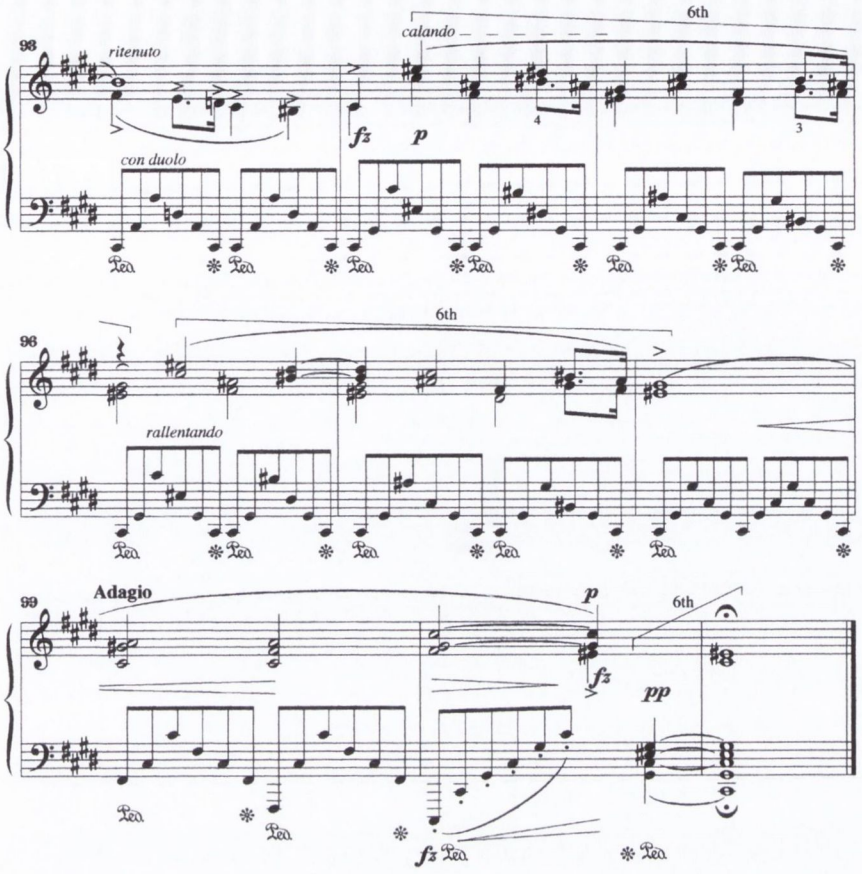
The 'new' theme is in D♭ major—the key of the second Nocturne. Both themes have a melodic contour of a descending sixth from F to A♭ and subsequent ascent of a sixth back to F, and both emphasise the neighbour G♭. Perhaps this theme is a hint at the relationship between these two pieces.

A sequence follows that leads to a *fff* climax and the return of the original key signature. A fascinating analogy is provided here when A♮ is heard seven times before resolving to G♯ ($\hat{5}$ in C♯ minor). This might be heard as a direct reference to the seven-fold repetition of B𝄫 that resolved to A♭ ($\hat{5}$ in D♭ major) in bars 63–64. This is a fine example of enharmonic reinterpretation in this piece. The pitches G♯ and A♭ were associated previously with the common tone modulation leading into the D♭ section. B𝄫 is now made equivalent to A♮, and G♯ to A♭. Not only is this an example of further enharmonic reinterpretation, but it incorporates the semitonal neighbour motion and these techniques are now associated. The alto voice contains semitonal neighbour motion as B♯ moves to C♯ and E then moves to D♯ in a new version of the motif. This figure then migrates into the bass, incorporating C𝄪, and a left-hand cadenza over the dominant arrives finally on minim A♮. The original double-neighbour motif returns as A♮ moves through G♯ and F𝄪, arriving back on G♯. The motif is reinstated and it now incorporates the semitonal neighbour motion of A♮ to G♯ $\hat{5}$. Thus, it also refers to the former process of enharmonic reinterpretation of these pitches and provides another example of melodic events migrating into the bassline.




Example 4.5.3.5: Nocturne Opus 27 No. 1, 81–83.

The theme returns in bar 84. Bars 1–7 merge midway through the bar with bars 22–26 and thus form an abridged version of the theme. Resolution to C♯ occurs in the lower register on a bare octave in bar 94. The subject of the final descent will be discussed later. The coda focuses on the descent of a sixth from E♯ to G♯ as can be seen in Example 4.5.3.6 below.




Example 4.5.3.6: Opus 27 No. 1, 93–101, noting the sixth.

The major mode has taken over and finally resolves the sense of uncertainty caused by the modal ambiguity of the theme. The final cadence is in the major mode and rises a sixth from G♯ to E♯ in preparation for the opening of the second Nocturne.

The premises that were introduced in the first Nocturne will now be summarised. Semitonal neighbour motion is developed and takes the form of a motif. The tendency of melodic events to become bass lines incorporates this motif in joining phrases and sections. The interval of a sixth is used to characterise thematic contour and is also used in conjunction with the E♮/E♯ alternation to establish mode. This takes the form of the sixth from G♯ to E♮ or from G♯ to E♯. The enharmonic reinterpretation of G♯ as A♭ is taken even further by incorporating the semitonal neighbour motion of B𝄫–A♭ and A♮–G♯. Finally, the 'new' theme introduced in bar 65 emerges from a gradual process of transformation and sounds suspiciously like the main theme of the second Nocturne.

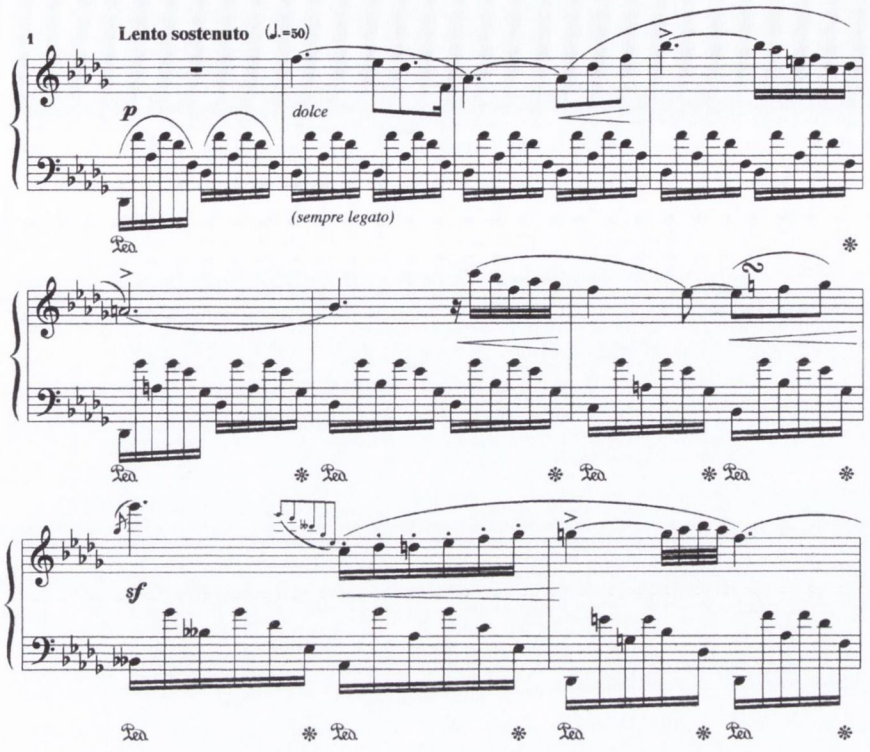
Hearing the themes of the first Nocturne in terms of this process of transformation gives added meaning to that Nocturne. Realising that the same process of transformation links the two Nocturnes may give added meaning to a performance in which the second Nocturne follows the first.

### 4.5.4 Premises in Opus 27 No. 2

The following are the main premises of the second Nocturne:

- semitonal neighbours
- melodic events becoming bass lines
- the sixth
- enharmonic reinterpretation
- thematic similarities

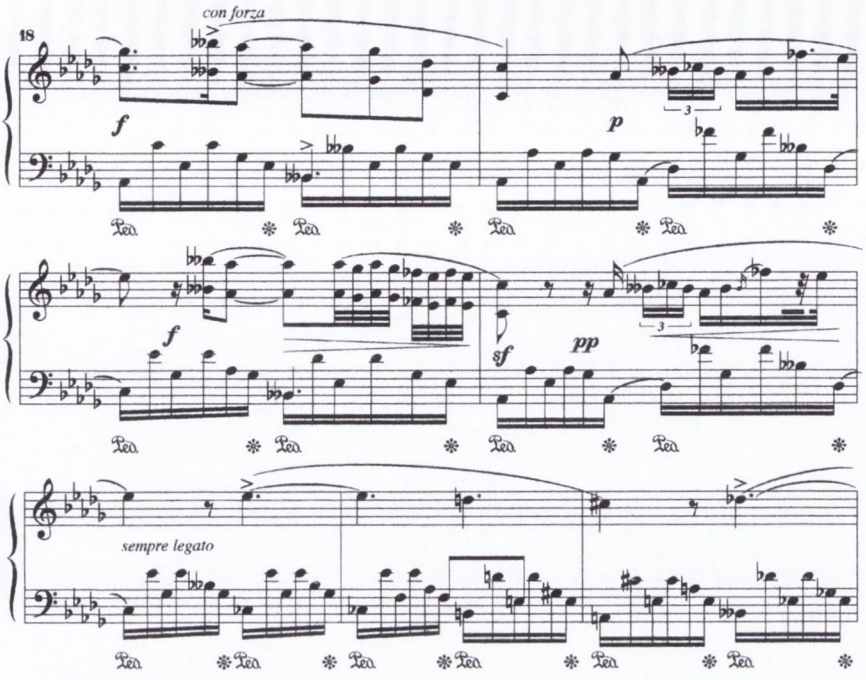
As already noted, the second Nocturne has a lot in common with the first. Nevertheless, it is distinctive in many ways. The opening theme of Opus 27 No. 2 descends a sixth to A♭ and is characterised by semitonal neighbours—E♮ to F, C to D♭, and A♮ to B♭. A♮ is extended and only resolves up to B♭ after a whole bar. This is an effective device that heightens tension at this point. The eventual arrival on B♭ coincides with low bass D♭ and thereby adds weight to this pitch. This semitonal neighbour motion is mirrored in the tenor voice and takes on a life of its own in this register. A♮ moves to B♭ in bar 6. In bar 7, A♮ moves back up to B♭ within the bar. B𝄫 enters in bar 8 and resolves down to A♭, and this is now doubled by the bass. A♭ falls to D♭ and thereby completes the ♭$\hat{6}$–$\hat{5}$–$\hat{1}$ motion that was such a feature of the first Nocturne. In this small passage, we have already encountered prominence of the sixth, semitonal neighbour motion, enharmonic reinterpretation of A♮ as B𝄫, and a melodic event becoming a bass line.




Example 4.5.4.1: Nocturne Opus 27 No. 2, 1–9.

B𝄫 in the bass in bar 8 is heard simultaneously with a leap up an octave to high g♭$^3$ in the right hand and a marking of *sforzando*. G♭ is the upper semitonal neighbour to $\hat{3}$ and is only resolved in the lower octave at this stage as the upper octave is abandoned. The use of semitonal neighbour motion to $\hat{5}$ and $\hat{1}$ (as part of the motif D♮–C♯–B♯–C♯) in the first Nocturne is extended in this Nocturne to include similar treatment of $\hat{3}$ with emphasis on neighbour G♭ $\flat\hat{4}$.

For ease of reference, this Nocturne will be divided into three phases defined by the return of the theme. Phase two begins in bar 26 and phase three begins in bar 46. Phase one contains significant working of the B𝄫–A♭ motion. This begins in bar 17 as a syncopated G♭ entry initiates the B𝄫–A♭ issue again.




Example 4.5.4.2: Nocturne Opus 27 No. 2, 18–24.

Phase one introduces the main premises listed above and substantially develops the B𝄫–A♭ relationship. The melody emphasises B𝄫 and its resolution to A♭, which subsequently descends a sixth to C. Enharmonic change is reintroduced in bar 23 and leads to the chord of A major in bar 24. A♮ in the bass is respelled as B𝄫, and C♯ becomes D♭ in the melody. B𝄫 resolves down to A♭ in the bass as the dominant chord before finally resolving to the tonic and the return of the theme. This melodic event has once more migrated into the bassline and is characterised by enharmonic reinterpretation.

The second phase further develops these premises, especially the migration of melodic events to the bass line. It begins with the theme and continues as before until bar 32. High $g♭^3$ now resolves in this higher register as well as in the lower octave. The harmony from this point onward is fascinating. Sharps are reintroduced in bar 34 when D♭ in the bass of the previous bar is enharmonically reinterpreted as C♯. A major harmony takes over at this point and thereby tonicises the previous focus on A♮. The melody is doubled in sixths and the melodic outline highlights the interval of a sixth from C♯ down to E, as well as a leap of a sixth upward from C♯ to A in bar 37. Both texture and melodic contour have now integrated the sixth. A major moves to G♯ dominant harmony in bar 38. The aural expectation at this point is of resolution to the key of C♯ minor—the key of the

first Nocturne. This section provides a perfect example of melodic events taking on more importance and migrating into the bassline. In the first Nocturne, B𝄫–A♭–D♭ was enharmonically reinterpreted as A–G♯–C♯. In the second Nocturne, there is play between A♮ and B𝄫. B𝄫–A♭–D♭ first appeared in the bassline in bars 8–9. A♮ was harmonised with an A major chord in bar 24 before being respelled as B𝄫 and the motif resolved to the tonic with the return of the theme. Finally, this movement is totally assimilated into the harmonic structure in the section from bar 34 to bar 46. Here again, resolution occurs with the return of the theme. This may therefore be regarded as a huge expansion and harmonic exploration of the lead-in to the theme in bars 24 to 26.

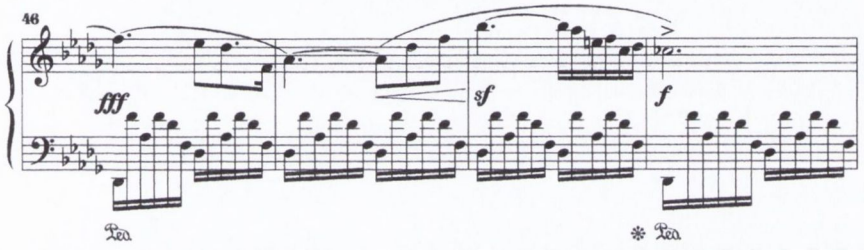
The voice-leading sketch (Example 4.5.4.3) below shows the main movement from bars 37 to 46.


Example 4.5.4.3: Voice-leading sketch of Opus 27 No. 2, 37–46.

A♮ moves to G♯ in the top voice and in the bass. Bass G♯ is enharmonically reinterpreted as A♭ before resolving to the tonic. The top voice respells F♯ as G♭ NN before resolving down to F $\hat{3}$. So, ♭$\hat{6}$–$\hat{5}$–$\hat{1}$ is now totally integrated into the harmony and incorporates enharmonic reinterpretation. The chromatic ascent in the bass adds to the overall rise in tension. The rhythmic structure of this climactic section enhances this, but will be discussed later. Another fascinating aspect of this section becomes evident if it is compared to the opening theme. The theme introduced G♭ neighbour moving to F in the melody with B𝄫 moving to A♭ in the bass. This section forms a huge expansion of those premises. B𝄫–A♭ is now integrated into the harmony as A major moving to G♯ major. G♯ is retranslated as A♭—the dominant of D♭ major. The neighbour G♭ of the theme is now highly accented and developed.

Thus far, there has been significant development of the semitonal neighbour figure—both as B♭–A♭ and as G♭–F. Phase one included substantial musical discussion of B♭–A♭. In phase two, G♭ appears with increasing urgency and frequency coming up to the climax and it is finally resolved down to F $\hat{3}$ for the final appearance of the theme.

The third phase (beginning in bar 46) synthesises the premises already listed. The final return of the theme is dramatic, although editions differ regarding the dynamic markings at this point.[24] Instead of the previous entry of A♮ for the expansion of the semitonal neighbour motif, C♭ is heard in bar 49.

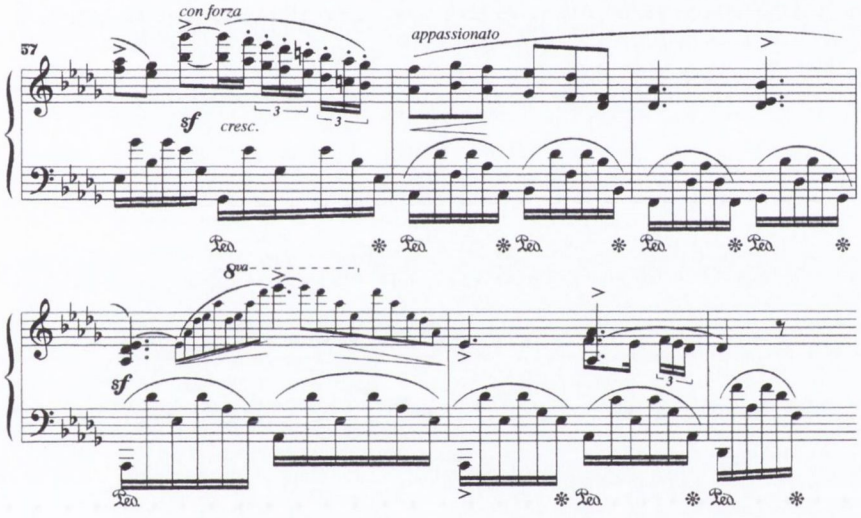



Example 4.5.4.4: Nocturne Opus 27 No. 2, 46–49.

This is the other semitonal neighbour to B♭. Entry of A♮ previously had been reinterpreted as B♭♭ and had activated its migration into the bassline. Now, however, there is a sense of relaxation as no new issues are activated. C♭ is transposed up an octave and the dynamic falls to *pp*. The cadenza passage that starts in bar 51 basically moves from C♭ to B♭ and is constructed from many repetitions of the semitonal neighbour motif. Resolution to B♭ arrives in the lower octave in bar 53 with D♮ in the bass. Resolution in the higher octave forms the anticipatory entry to bar 54. This B♭ is held over as D♮ in the bass resolves up to E♭, thereby completing another semitonal neighbour motion. Whereas previously in the theme A♮ resolved up to B♭ in the following bar, C♭ is now extended to incorporate the expansive cadenza before resolving to B♭ four bars later.

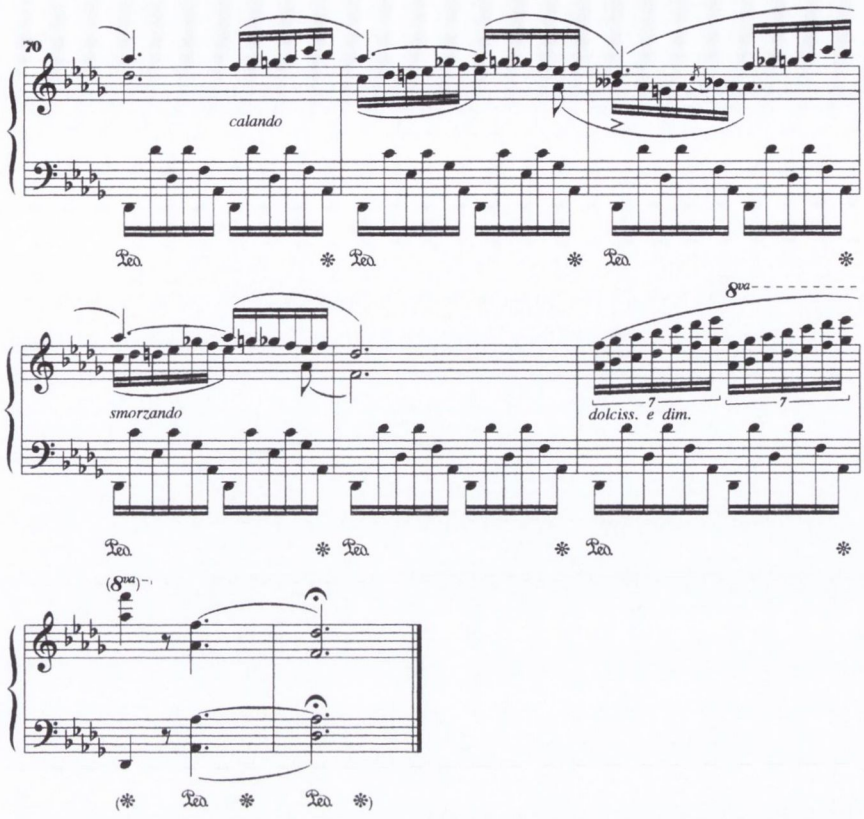
[24] Paderewski marks a *crescendo* in bar 45 followed by *fff* in bar 46. Henle has a *diminuendo* in bar 45 and no dynamic marking in bar 46. Paderewski explains that in bar 45 'FE and GE give a long *diminuendo* sign after *f*, and the word *diminuendo*. The Oxford edition, however, adds *crescendo* after *f* in bar 45 and *fff* in bar 46. In the copy belonging to Madame Jedrzejewicz, this *crescendo* and *fff* are also written in pencil in place of the work *diminuendo*, which is crossed out', Paderewski, 'Commentary', 115.

Bar 56 features the upward leap of a sixth heard before in this theme. G♭ enters *con forza* in bar 57. It is accented, preceded by an upward leap of an octave, and is syncopated. A descent in sixths falls from this pitch and another theme is heard. This is marked *appassionato*. It is based on the main theme of the second Nocturne but also incorporates the texture of sixths. When compared to the 'new' theme of the first Nocturne and the main theme of this piece, it is obvious how closely each is related. This theme also outlines a descent of a sixth from F to A♭, and emphasises and accents neighbour B♭. G♭ is incorporated within this melody as an upper neighbour to F and has lost its dominant position.




Example 4.5.4.5: Nocturne Opus 27 No. 2, 57–62.

In No. 2, as in No. 1, there is a sense that the piece needs to end in the higher octave that is established at the beginning in order to achieve a sufficient degree of closure. F $\hat{3}$ is extremely strong and dominant throughout this Nocturne. Resolution in the lower register in bar 62 is very strong but does lack the necessary resolution in the higher octave. The coda attempts to recapture this register. A chromatic descent that incorporates B♭♭–A♭ eludes expected resolution to $d♭^2$. A♭ is given a lot of weight as it forms the goal of the upper line of the descent and it lasts over a bar. This reinforces this pitch after the previous focus on B♭♭ and A♮. The second attempt to reach D♭ is successful. It arrives on the downbeat of bar 70 beneath A♭. This close incorporates the motif B♭♭–A♭–D♭.




Example 4.5.4.6: Nocturne Opus 27 No. 2, 70–77.

In bar 72, a final reminder of the B𝄫–A♭ sounds in the melodic fragment in the lower voice before concluding as B♭–A♭. This melodic motif can be compared to that found in bars 22 and 89 of the first Nocturne. This idea is so important throughout both pieces that it seems only natural that the piece closes by referring to it. A simple F–D♭ summary leads into bar 74 where the left-hand sounds on its own. Finally, F is sent off into the upper register of the piano in an ascending run in sixths. The final gesture arpeggiates the tonic chord and the top voice concludes F–D♭. Tritones feature prominently in this coda and these were not a feature of this Nocturne. The theme of the first Nocturne outlined a tritone and this was answered by the concentration on fifths in the coda of that Nocturne. Perhaps this coda functions as a reminder of that melodic characteristic.

Before proceeding, it may be useful to summarise the main premises of the first Nocturne. It sets up the semitonal neighbour motion with the alternation between E♮/E♯ and its inherent ambiguity. This is then resolved in the major-mode ending. Semitonal neighbour motion then develops into a motif—D♮–C♯–B♯–C♯. This motif then migrates into the bass line. G♯ is reinterpreted as A♭. Movement from A♮ to G♯ incorporates the semitonal

motion and is then reinterpreted as B𝄫–A♭. This leads into the 'new' theme that sounds suspiciously like the theme of the second Nocturne. The interval of a sixth plays an important role throughout the piece. Many of the premises that are set up and developed in the first Nocturne are taken up and further developed in the second.

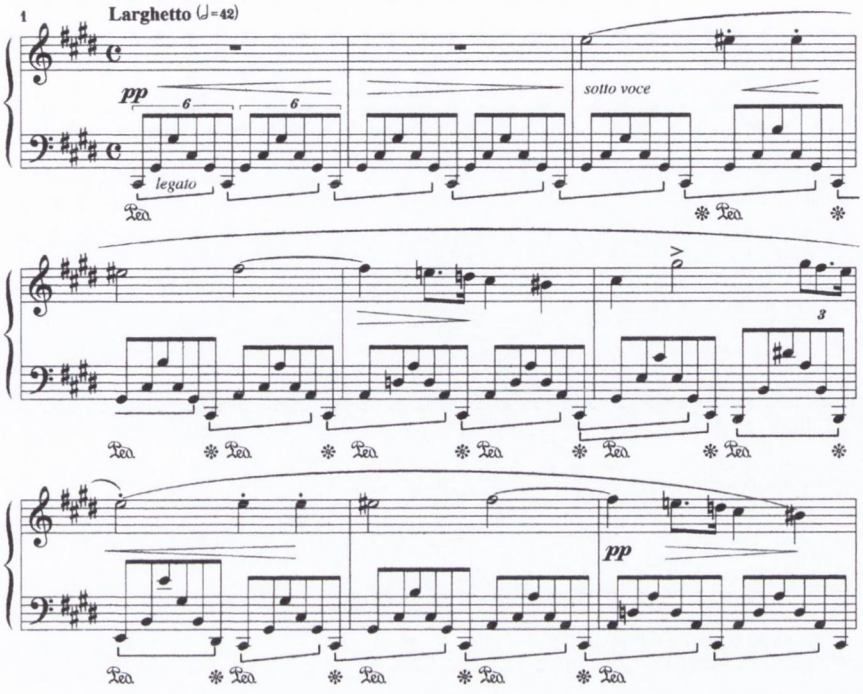
### 4.5.5 Notated Temporal Flexibility and Interpretation

Superficial similarities between these pieces have been noted and the connection between them has been examined. The first Nocturne introduces premises that are taken up and substantially developed in the second. The ♭$\hat{6}$–$\hat{5}$ movement in the first piece migrates to the bass line in the second and is expanded climactically to lead to the final restatement of the theme. Neighbour motion is further emphasised in the use of G♭ to strengthen F $\hat{3}$. However, these pieces have very different characters. One of the reasons for this lies in their treatment of time. It provides a complementary difference, as if they were two sides of a coin. Both works have movement in sextuplets in the left hand. The right hand of the first Nocturne is relatively stable while the left hand features more fluctuation. The second maintains a resolutely stable left hand while the right hand flows either with or against it. In both pieces, metric and tonal stability coincide, and metric and tonal ambiguity coincide. They do so in service of the main premises of each piece. A few examples demonstrate this.

The opening of the first Nocturne provides a good example of tonal and metric ambiguity. Bass C♯ defines the grouping of the left-hand sextuplets. This results in a single group of five notes and subsequent six-note groups that move just before the barline. The grouping here causes anticipatory accentual shifting. As previously quoted in the chapter on analytical methodology, this type of metric grouping 'immediately heightens interest by drawing attention to its beginning and to the beat on which it "belongs"'.[25] Thus the right-hand entry that is heard on the first beat of the bar sounds out of alignment with the bass grouping and is thereby highlighted. The tonal ambiguity caused by the alternation between E♮ and E♯ is further enhanced by this metric ambiguity. Performers who recognise this ambiguity will want to ask themselves how much to emphasise the barline and how much to emphasis the grouping. This instability seems to be resolved in bar 7 as bass grouping realigns with the barline and coincides with the goal of the phrase, E♯. This

[25] Steve Larson, 'Rhythmic Displacement in the Music of Bill Evans', in *Schenker Studies III: A Festschrift for Carl Schachter,* ed. David Gagne and Poundie Burstein (Pendragon Press, Forthcoming).

stability is short-lived as the theme continues as before and the hands move out of synchronisation as major/minor alternation resumes.



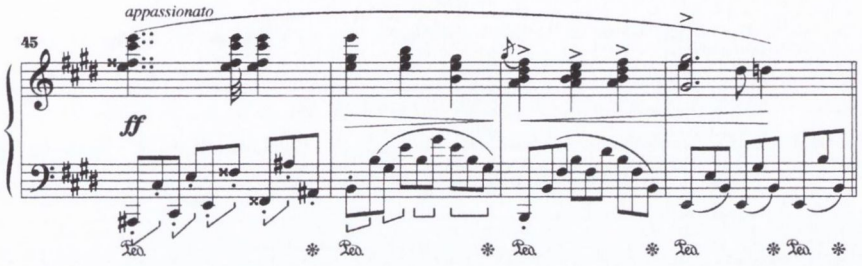

Example 4.5.5.1: Nocturne Opus 27 No. 1, 1–9, with grouping annotations.

Evgeny Kissin's performance of the opening of this Nocturne seems in accordance with the above interpretation of the grouping.[26] The bass groups sound as if they begin with low C♯ each time, as the first C♯ is stressed and his clear playing of every note highlights the extension of the grouping from five to six notes. A slight pause before the right-hand entry accentuates its lack of coordination with the bass grouping. When the bass grouping realigns itself with the barline Kissin strengthens the first of each bar dynamically. This reinforces the sense of stability following the ambiguity of the opening.

The modal ambiguity of the opening and the metric ambiguity of the left hand are reflected on an even deeper metric level. The first melodic phrase that begins in bar 3 is elided with the beginning of the second phrase in bar 7. This next phrase is broken by the rest in the right hand of bar 10 and its continuation (the equivalent to bar 6) in bar 11 forms the first bar of another phrase. This constant reinterpretation is highly characteristic of all aspects of this piece and contributes greatly to its unusual character.

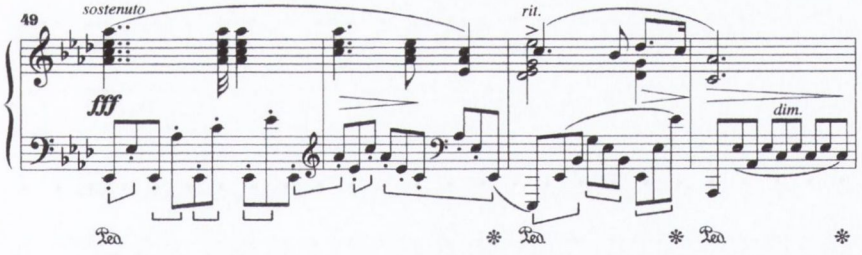
[26] Evgeny Kissin, *Chopin, Volume 1*, RCA Victor Red Seal 09026 60445 2 (1993).

Another example of this kind of effect occurs in the *appassionato* section beginning in bar 45. The bass moves in two-note groups, providing a duple accentuation against the metre. Towards the ends of bars 45 and 46 the left-hand grouping becomes less clear as triple movement seems to resume.




Example 4.5.5.2: Nocturne Opus 27 No. 1, 45–48, with grouping annotations.

In bar 49, two-note grouping returns. This is followed by an expansion to six notes from the second beat of bar 50.



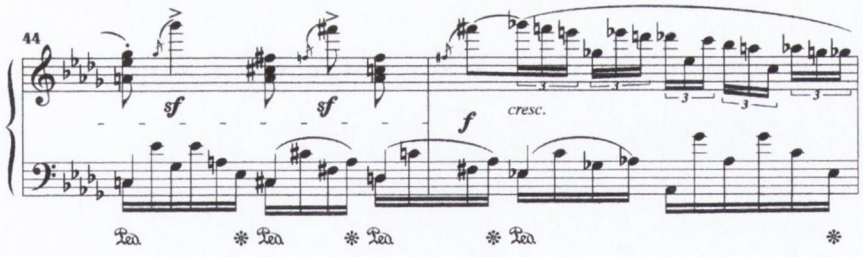

Example 4.5.5.3: Nocturne Opus 27 No. 1, 49–52, with grouping annotations.

In bars 53 to 64, tonal and metric ambiguity coincide once more, and they transform a series of regular four-bar phrases into a passage that leads elegantly to a climactic statement of the B♭–A♭ motif. Play on grouping in this manner results in ebb and flow, or breathing, in the left-hand part and provides stark contrast to the strictly metric right-hand. This is a fine example of a tactus-preserving polymetre that aligns every two bars and thus strengthens the two-bar phrase structure. Two-note grouping in the bass is reintroduced in bar 52 and joins the end of that phrase to the *agitato* sequences that begin in bar 53. Chopin marked accents on the first quaver of bar 53 and the second of bar 54, and this alternation continues until the *ritenuto* in bar 64. These markings serve to accent

each change in pitch in that voice but also to define the two-note groupings. These counteract the metre and add to the sense of tension at this stage in the work. Tonally, bars 45–52 feature the enharmonic reinterpretation of G♯ as A♭ and the key signature changes. From bar 53, rising sequences full of the neighbour motif blur perception of what the tonal goal might be. This tension culminates in bars 63–64, as B𝄫 is heard seven times before resolving to A♭. Stability and certainty arrives in bar 65 with resolution onto D♭ major and strictly metric motion in both hands.

A final example of metric ambiguity in this Nocturne can be found at the end. From bar 98, grouping in the left hand moves in five, then six, then seven quavers and these are defined by the bass C♯. This forms a natural expansion and a kind of composed *rallentando* that complements the *Adagio* marking.

Discussion of rhythmic or metric ambiguity in the second Nocturne will be confined to one particular example, that is, bars 44–45. It will be recalled that this section focused on the G♭ neighbour and that B𝄫–A♭ has been incorporated into the harmony. Enharmonic reinterpretation is employed here in working both of these premises. This is a huge climax and serves to prepare for the final return of the theme. Left-hand grouping changes in bar 44 for the first time in the piece.




Example 4.5.5.4: Nocturne Opus 27 No. 2, 44–45.

Chopin notates the left hand in three groups of four semiquavers beginning in the middle of bar 44. A sextuplet at the end of bar 45 brings the grouping back in line with the metre for the return of the theme. This tactus-preserving polymetric effect is similar to a *hemiola* and increases the intensity and sense of pace in these two bars. The return of the sextuplet serves as a slowing down again into the theme. The right hand meanwhile increases the rate of entrances of the syncopated G♭s. This becomes enharmonically respelled as F♯. In bar 45, instead of leaping down an octave, F♯ is respelled again as G♭. Three groups of four

triplet semiquavers are caused by an upward leap followed by stepwise movement. The hands are totally separate at this point—their grouping totally unrelated.

If this grouping is realised in performance it can result in an incredibly tense climax—one in which the two hands sound as though they are being torn apart. The composed *rallentando* resulting from the sextuplet at the end of bar 45 may partially account for the fact that many performers, including Dinu Lipatti, naturally slow down into this return of the theme.[27] Whether consciously or subconsciously they are aware of the desired effect of the notation and reflect that in their playing. This complex section of grouping can be realised in different ways in performance. Vladimir Ashkenazy achieves the desired effect by articulating the various groupings using dynamic stress on the first of each group.[28] Kissin dynamically stresses the first of each group but also holds this note over until the end of each group.[29] This is particularly audible in the four-note groups of the bass and right hand. It is noteworthy that Chopin double stems the first note of each bass group as a crotchet from bar 44 to the middle of bar 45.

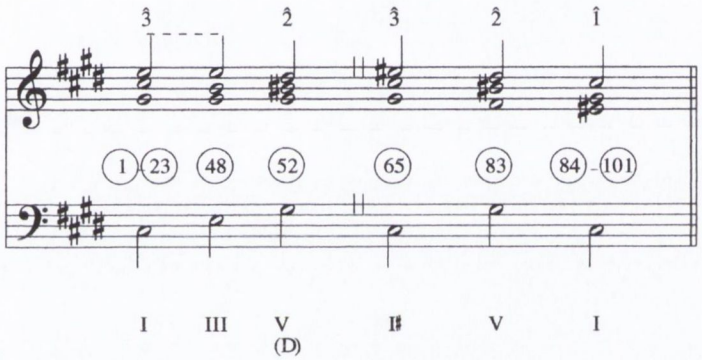
### 4.5.6 Closure

The unusual close of the first Nocturne depends on register and harmonic support, and is reflected in the score markings. In bars 21–22, we get a perfect cadence, with a root-position dominant, and end in the obligatory register. However, in bars 92–93, the upper register is abandoned and B♯ in this register does not immediately resolve to C♯. Chopin double stems the lower C♯, perhaps to highlight its dual function as a resolution of the lower C♯ and as a replacement resolution for the higher C♯. C♯ Î is still needed in the higher register, however, in order to achieve a satisfying sense of closure. Comparing bars 21–22 with bars 93–94 underscores the lack of closure. The melodic descent and resolution to C♯ has bass support in bars 21–22. Bars 93–94 are heard over a bass pedal C♯. In fact, the final structural dominant of the piece is heard in bar 83 before the return of the theme. The sense of closure is thus weakened in bars 93–94 as it occurs in the lower register and is not supported by a dominant chord. The *Adagio* at the end of the piece does not contain a dominant chord and the final cadence of the work is plagal. C♯ is heard in the obligatory register in bar 100, however a *sforzando* E♯ is followed by a rise of a sixth from G♯ to

[27] Dinu Lipatti, *Chopin: 14 Valses, Barcarolle Op. 60, Nocturne Op. 27 No. 2, Mazurka Op. 50 No. 3*, EMI Classics 7243 5 66222 2 7 (1997) recorded in 1947.
[28] Ashkenazy, *Chopin*, Decca (1997).
[29] Kissin, *Chopin*, RCA Victor Red Seal (1993).

another E♯ above this final cadence. E♯ is still heard retaining its strong position. In summary, there is a sense of resolution at the end of the Nocturne, but it maintains a certain open-ended feeling.

This unusual close may explain why Schenkerian analysts have provided divergent readings of the first Nocturne. Two interpretations of the *Urlinie* of No. 1 will be examined: the first by Salzer (shown below in Example 4.5.6.1) and the second by Rink.[30] Salzer suggests that the final descent occurs with the return of the theme—$\hat{2}$ over the dominant cadenza in bar 83, and that the return itself marks the descent to $\hat{1}$. In favour of Salzer's interpretation, note that the final dominant chord of the piece occurs in bar 83 and D♯ occurs there in the correct register.




Example 4.5.6.1: Graph from Felix Salzer, 'Chopin's Nocturne in C♯ Minor, Opus 27, No. 1', in *The Music Forum* vol. 2, 285.

However, as Rink points out in his thesis, this reading goes against the form of the piece. The return of the theme should denote the return of the primary tone, particularly when preceded by the pitches G♯ and F♯. Salzer places the interruption at bar 52 with $\hat{2}$, and the post-interruption section beginning with scale-degree $\hat{3}$♯ in bar 65. Rink suggests an alternative reading with $\hat{3}$–$\hat{3}$♯–$\hat{3}$♮ spanning bars 1–64, 65–83, and 84–92, and the structural descent in bars 93–94. Rink explains that this reading, 'avoids the binary–ternary opposition from which Salzer's study suffers'.[31] In favour of Rink's analysis, note that bars 93–94 do sound like the final descent of the *Urlinie*. A *ritenuto* and accents, as well as the double-stemmed C♯, support this reading. However, this descent lacks harmonic support.

[30] John Rink, 'The Evolution of Chopin's 'Structural Style' and its Relation to Improvisation', (Ph.D. diss., University of Cambridge, 1989), 228–229, and Salzer, 'Chopin's Nocturne in C♯ Minor, Opus 27, No. 1', 285.
[31] Ibid., 228.

The only 'cadence' in the final section is the plagal cadence at the end, which precludes a descent. Perhaps these contradictory readings reflect the possibility that this piece does not conclude in a true Schenkerian sense, that it retains a sense of openness and only really concludes at the end of the second Nocturne. Perhaps Chopin has continued the C♯ minor/D♭ major connection into an opus.

The close of the second Nocturne might be compared to that of the first. Many of the premises introduced in the first Nocturne are then taken up in the second and subsequently further developed. In the first Nocturne, the final descent of the *Urlinie* takes place in bars 93–94; in the second Nocturne, the final descent of the *Urlinie* takes place in bars 61–62. In the first Nocturne, C♯ resolves in the lower register over a bare octave; in the second Nocturne, D♭ also resolves in the lower register over a bare octave. However, it is immediately preceded in the second Nocturne by a root-position dominant and therefore sounds more conclusive. The coda re-establishes the obligatory register in both Nocturnes. In the first Nocturne, the final cadence forms an opening-out gesture that stresses $\hat{3}$; and in the second Nocturne, the final arpeggiation closes inward and ends on $\hat{1}$. It seems, therefore, that the close of the second Nocturne is much stronger than that of the first. This supports the hypothesis that the close of the second Nocturne may have the dual function of ultimately resolving the first Nocturne.

### 4.5.7 Performance Considerations

Analytical methodology that incorporates both voice leading and rhythm uncovers a lot of information concerning the artistic content of a piece. In the case of Opus 27, it has shown connections between the two pieces that could be of interest to performers. Both interpretation and programming may be affected. Regarding interpretation, performers will decide for themselves how best to highlight certain musical issues, but understanding the musical threads that connect both pieces will aid in the communication of their musical content. Recognition of metric ambiguity will preclude over-emphasis or normalisation of the grouping, and pedalling may be used in a considered way. It is important to stress that the foregoing analysis does not suggest that these pieces must be performed as a pair—many great pianists have performed them separately. If they are performed together, however, a deep relationship between the pieces will emerge and the conclusion of the second Nocturne will seem even more satisfying.

Schenker's acknowledgement of the open-ended nature of preludes can be compared to the lack of fundamental conclusion at the end of Opus 27 No. 1. Perhaps, as preludes serve to prepare for the following work, this could be the case with these two Nocturnes. Opus 27 provides a fascinating example of how premises that are introduced and developed in one piece are further developed and finally concluded in the second.

### 4.6 Conclusion

The combination of Schenkerian theory with rhythmic analysis contributes towards an increased understanding of Chopin's compositions. In the case of the Nocturnes examined, premises were isolated and their development was traced throughout the works. It was found that tonal and rhythmic events conspire together to serve a given premise and that these premises—both tonal and rhythmic—are mutually supportive and work towards structuring the dramatic narrative of each piece. In Opus 48, many of the premises used in both works are the same. Chopin seems to use the two Nocturnes to experiment with different answers to the same compositional questions. In Opus 27, however, there is a much deeper exploration of the premises throughout both works. If these two Nocturnes are performed together, the premises from the first Nocturne are heard in the second and are subsequently developed and finally concluded. The open-ended nature of the first Nocturne may help us hear the second as tying up the threads of the first.

# Chapter 5: Barcarolle, Opus 60

## 5.1 Introduction

The Barcarolle is a late, large-scale work that stands on its own, with a unique 'dramatic story' and character. It also brings together all of the compositional techniques that were discussed as features or premises of the earlier works analysed in this thesis. It therefore provides an excellent summary example to illustrate the capability of this analytical method to reveal the interaction of rhythm and tonal structure in the service of piece premises.[1] The Barcarolle maintains momentum and interest right until the end—beyond the close of the *Urlinie*—due to the intricate 'story' created from the interaction of the work's premises. An analytical approach that incorporates voice leading and rhythmic analysis demonstrates how these premises are set up in the introduction and are developed throughout the piece to serve the narrative and fluctuation of movement described below.

The premises of the Barcarolle include:

- the motivic structure
- the use of displacement and offbeat metric positioning to affect temporal flexibility
- the sixth—as a goal in a specific register, as a significant interval throughout the work in supporting voice leading, and as chromatic inflection in the form of the augmented sixth
- mixture—in particular the play between A♮ and A♯ that occurs not only on the surface but migrates into the bass and becomes part of the harmonic structure
- register

Although many of the compositional techniques listed above as premises can play subsidiary roles in other works, their role is more fundamental in the Barcarolle due to the part they play in the formation of the dramatic narrative of this work. In the following examination, the development of each premise will be discussed up until the coda. The interaction of all of these premises in this final section of the work will be dealt with in the section on the coda towards the end of this analysis. The penultimate section of this

[1] For a detailed analysis of voice leading and motifs, see John Rink, 'The *Barcarolle*: *Auskomponierung* and apotheosis', in *Chopin Studies*, ed. Jim Samson (Cambridge: Cambridge University Press, 1988), 195–219. Throughout this chapter, page references attributed to Rink are derived from this article.

chapter briefly examines selected recordings of the Barcarolle in light of these findings. The conclusion then summarises the main development and interaction of these premises.

Before examining these premises and investigating their support of the basic narrative of the piece, it will be helpful to summarise its overall form. Rink's table provides a concise summary (p. 197):

| Bars | Form | Harmony |
|---|---|---|
| 1–3 | Introduction | V (C♯) |
| 4–16 | Theme A | I (F♯) |
| 17–23 | 'development' | |
| 24–34 | Theme A' | |
| 35–9 | Transition | i – ♭III (F♯–A) |
| 40–50 | Theme B(1) | ♭III (A) |
| 51–61 | Theme B(1)' | |
| 62–71 | Theme B(2) | |
| 72–7 | Transition | V (C♯) |
| 78–83 | '*Dolce sfogato*' | |
| 84–92 | Theme A' | I (F♯) |
| 93–102 | Theme B(2)' | |
| 103–10 | Coda (B(1)") | |
| 111–16 | Coda | |

Table 5.1.1: Rink's formal outline of the Barcarolle, Opus 60.

The following discussion will use Rink's formal labels. Charles Rosen notes a similarity between the form of the Barcarolle, the Polonaise-Fantasie, and the third Ballade:

> (Both the Polonaise-Fantaisie and Barcarolle, in fact, never lose their essential character, but they take over from the third Ballade the wonderful conception of the final pages as a concentrated synthesis of the first and second parts: an excessively abbreviated return of the first theme followed by a triumphant apotheosis of an important melody from the second section, now appearing in the tonic.)[2]

Rosen also relates the form of the Barcarolle to sonata-form procedures:

> The underlying skeleton is one that Chopin had made most personal: two contrasting sections, juxtaposed, but not linked as in a sonata, the second with two

[2] Charles Rosen, *The Romantic Generation* (London: Harper Collins, 1996), 323. Throughout this chapter, page references attributed to Rosen are derived from this publication.

> distinct themes; then an abbreviated but triumphant reprise of the first section and a more complete one of the second theme of the second. (p. 453)

### 5.2 The Introduction

Rink astutely places much importance on the introduction: 'In the piece itself Chopin effectively conceals the structural skeleton of the introduction with slight variations and rhythmic subtleties' (p. 204). He attributes to it the function of 'laying the foundation for subtle connections throughout the work', citing as examples the outlining of registral boundaries (bass C♯), the elaboration of the supertonic over a dominant pedal and the introduction of some motifs (p. 218). 'Of even greater importance, the introduction states from the outset Chopin's commitment to the "principle of variety" in the way he fleshes out its structural skeleton with subtle variations in contour, rhythm, and harmonic colour' (p. 218).

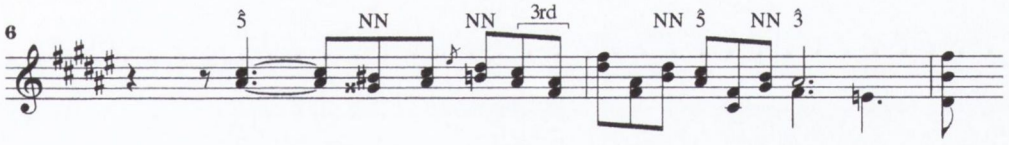
Rink notices some important features of the introduction. However, an analytical approach that focuses on premise reveals that its function in this work seems to be even more fundamental than Rink suggests. The introduction sets up most of the main premises that are discussed and developed throughout the work. It introduces the concept of displacement and second-beat entry. The motivic material used in these three bars forms the basis of the main thematic and motivic material throughout the piece. This includes a number of elements that will be referred to as 'the z motivic complex'. This is developed and altered as the work progresses—always maintaining what could be referred to as a 'family resemblance'. The importance of the sixth is established as the goal of the passage—F♯ over A♯ over bass octave F♯—and becomes the fundamental goal of the entire work. The concept of registral coupling is introduced as $g\sharp^2$ falls an octave to $g\sharp^1$ and resolution to F♯ is thus expected in this lower octave. The Nocturne Opus 48 No. 2 features an introduction of similar importance: there the two-bar introduction establishes the *Urlinie*, the concept of displacement, second-beat entry, dissonance on the half-bar, major and minor opposition, and the motivic ascending-fourth.

### 5.3 Motivic Substance

The motivic substance of the Barcarolle plays a fundamental role in the development of its dramatic narrative. The 'z motivic complex' is a term that I use to describe a group of individual motivic elements. These elements come together in a variety of different ways

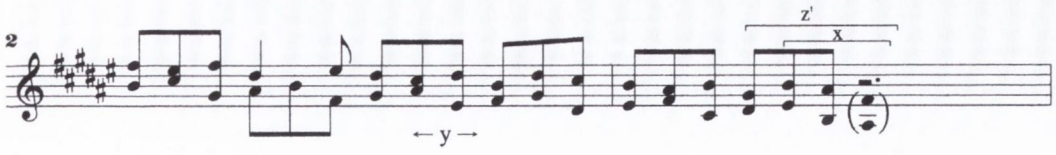
as the piece progresses. Various manifestations of the z complex are aurally recognisable—even when all of its elements are not present. The process of relating all of these component motivic parts may appear technical, but, as shall be demonstrated, it also seems to mirror the compositional process that Chopin uses to relate the dramatic storyline of this work. Not only does the content and shape of the z motivic complex relate different themes to each other, but it is used to affect the flow of the piece, to emphasise important structural pitches, to shape the melodies on deeper structural levels, and to connect separate sections.

The z complex changes and develops throughout the work. Its relationship to other occurrences can be compared to that of a family resemblance. Often, not all elements are present. It may be subjected to inversion, retrograde, or expansion. Nevertheless, it appears in sufficiently similar shapes so that it is recognisable. All of these component parts are introduced in the opening melody. Example 5.3.1 below shows the right hand of bars 6 and 7. It includes three main elements—a diatonic upper neighbour to $\hat{3}$ or $\hat{5}$, and/or a semitonal lower neighbour (usually chromatic) to $\hat{3}$ or $\hat{5}$, and a following descending leap of a third. In this opening melody, both neighbours are heard on $\hat{3}$ and $\hat{5}$ concurrently (in thirds). In bar 7, they are separated as an upper neighbour resolves to $\hat{5}$ and then to $\hat{3}$.



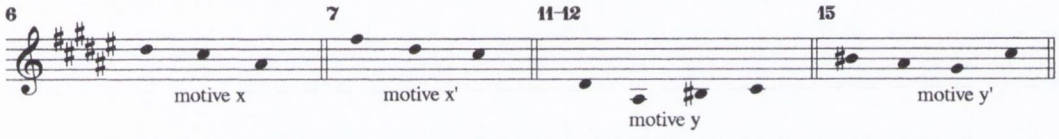

Example 5.3.1: Barcarolle, 6–7, showing elements of the z motivic complex.

The introduction does not explicitly state this motivic complex—but it does suggest it. Resolution to F♯ is expected at the end of the introductory descent. This would complete the pattern G♯–B–A♯–F♯. This implies a motivic shape that resolves the upper neighbours of $\hat{1}$ and $\hat{3}$ (as the upper and lower voices of unfolding thirds), and includes the characteristic descending leap of a third. It thus forms a perfect answer to the z complex and will be referred to as the 'z' shape'. This is shown below in Example 5.3.2.




Example 5.3.2: Barcarolle, 2–3, showing motifs x, y, and z'.

The tight motivic structure of the Barcarolle plays a fundamental role in binding together various themes and sections and in providing an overall sense of coherence between passages that seem on the surface to be quite distantly related. Rink highlights two main motifs—x and y—and briefly traces their appearances throughout the work (pp. 216–217). Motifs x and y and their inversions are shown in Example 5.3.3 below.



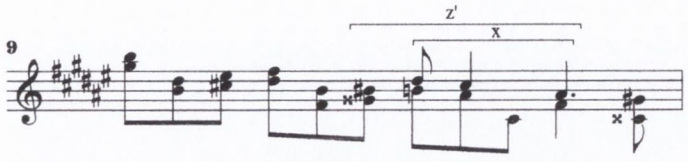

Example 5.3.3: Barcarolle, Rink's motivic definitions.

Motifs x and y are related in that they both consist of a step or neighbour motion (between the first and last pitches in motif y) and the interval of a third (as a leap or filled in). In the right hand of the introduction (see Example 5.3.2 above), the lower line consists almost entirely of motif y and the upper line ends with motif x if the implied resolution to F♯ in the top voice is included. Motif x thus forms the final three notes of the z' shape and is incorporated into the z complex. This analysis focuses not on isolating specific motifs and their inversions, but on tracing the development of the z complex.

As can be seen in the introduction, the x motif forms part of this complex, and the y motif is more distantly related to it. The characteristic shape of the z complex is also fundamental to the sense of coherence in this work. The following analysis retains Rink's definitions of x and y. Although Rink does not isolate the various elements of the z complex, he does note the importance of shape in the motivic structure of the Barcarolle:

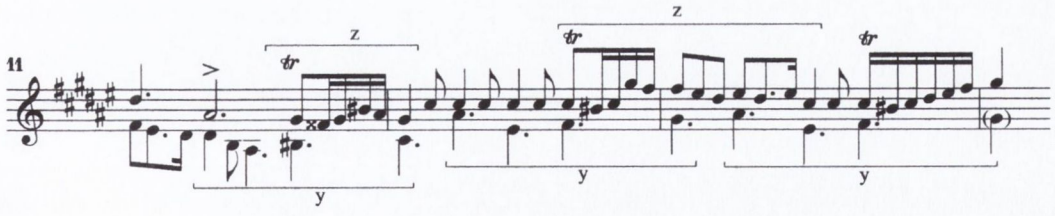
> Melodic contour acts as an equally subtle agent of synthesis. As a pattern for various cadential and ornamental figures in the work, the melodic contour of bar 6 reappears first as the trill figure in bar 11 (transposed down a fourth) and later at the cadence in bar 50 (with chromatic alterations). (p. 217)

A modified sequence in bar 9 is based on the patterns of the introduction and on the z complex. Example 5.3.4 below shows a semitonal lower neighbour and a diatonic upper neighbour to $\hat{5}$ with a subsequent descending leap of a third.



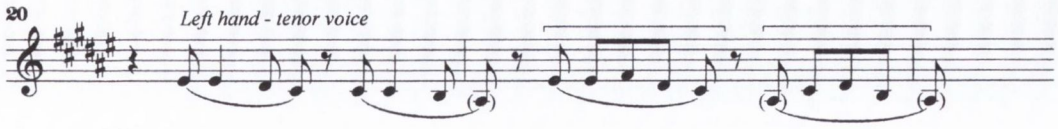

Example 5.3.4: Barcarolle, 9.

In bars 6 and 8, a grace note precedes the upper neighbour. In bar 10, grace notes are used to highlight upper neighbours. The trill figure at the end of bar 11 forms another example of the z complex with a semitonal lower neighbour and a diatonic upper neighbour to $\hat{5}$ of a C♯ chord. The grace note is now notated as a semiquaver and thus initiates a filled-in descending third—developing the leap of a third in the original z complex. Chopin focuses more on the z complex in bars 12 to 13. The larger leap up to G♯ delays resolution back to the initial pitch. The two-bar phrase of bars 12 and 13 forms a development and expansion of this complex while highlighting C♯ $\hat{5}$. The lower line of the right hand from bar 11 to bar 14 comprises augmentations of motif y. This kind of motivic development joins phrases together and contributes to the sense of momentum towards the end of section **A**. Bars 11 to 14 are shown below in Example 5.3.5.




Example 5.3.5: Barcarolle, 11–14, showing motif y and the z complex.

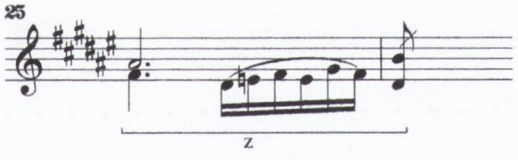
In bar 20, the tenor voice is heard quite clearly in descending thirds—an offshoot from the descending leap of a third in z—and is then altered to resemble z more closely. The parentheses around pitch A in bars 21–22 denote their registral displacement. The tenor voice of bars 20–22 is notated below in Example 5.3.6.




Example 5.3.6: Barcarolle, 20–22, showing motivic connections.

The neighbour motion inherent in the z motivic complex is used to heighten expectation of resolution and prepare for the return of the primary tone. A trill on D♯ in bars 20 and 21 resolves to C𝄪 and this pitch acts as a chromatic neighbour to C♯ $\hat{5}$ of the theme. The upper neighbour (D♯) to $\hat{5}$ in the upper voice of bar 22 does not resolve to C♯ or C𝄪, but falls to A♯ via G♯. This increases expectancy for the eventual arrival on C♯ $\hat{5}$. In bar 23, C𝄪 is reiterated as a half-bar trill as the chromatic upper-neighbour to C♯, thereby adding more strength to the return of $\hat{5}$.

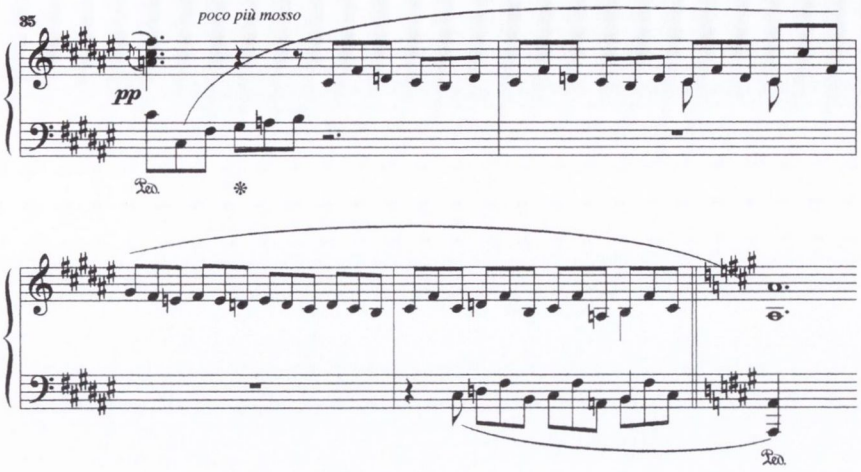
On the repeat of section **A**, an elaborated alto voice in bar 25 prominently features the z complex with its semitonal lower neighbour, diatonic upper neighbour, and fall of a third. Example 5.3.7 below shows the second half of bar 25.




Example 5.3.7: Barcarolle, 25, noting the z complex.

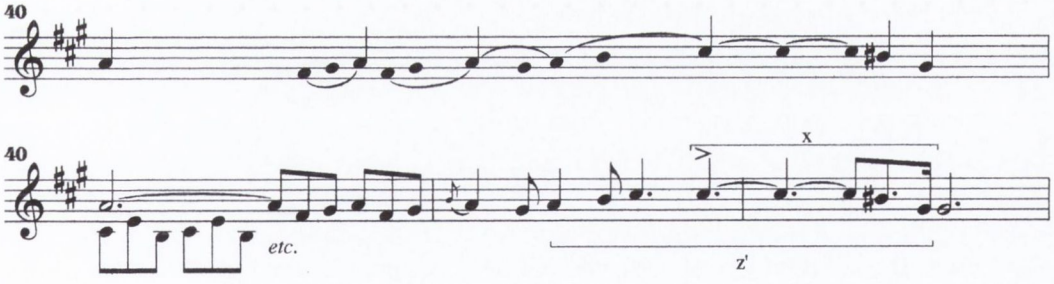
The thematic material of section **A** contains many instances of neighbour motion to chordal $\hat{3}$ and $\hat{5}$—both within the z complex and as ornamentation. In bar 34, upper neighbours to $\hat{3}$ (A♯) and $\hat{5}$ (C♯) are used to highlight these pitches even further.

The *poco più mosso* beginning in bar 35 derives its transient feeling in part from the sudden reduction to a solo line and its undulation around $c♯^1$. It uses neighbour motion and descending leaps of a third, and develops both of these in bar 37 with filled-in descending thirds. This transition passage is almost totally constructed from elements of the z complex.



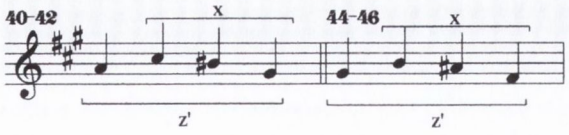

Example 5.3.8: Barcarolle, 35–39.

Section **B1** features the key elements of the z motivic complex on many levels—in its melody and accompaniment, and in its deeper structure. The **B1** motif appears first in bars 41–42. It is a rhythmically distinctive version of the x motif—itself the last three notes of the z' shape, and is allied here to specific metric placement, or displacement. The inner voice of bar 40 comprises an inverted version of motif x. The upper voice of bars 40 to 42 is shown below in Example 5.3.9, and a reduction is notated above them.



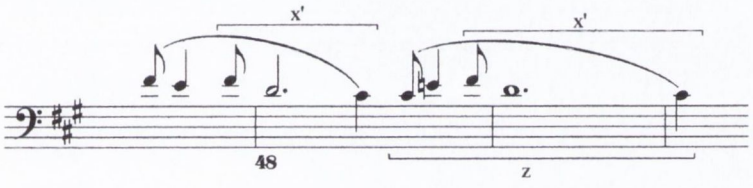

Example 5.3.9: Voice-leading reduction of Barcarolle, 40–42.

The shape and elements of the z complex are apparent in the surface detail of each bar. Yet overall, on a deeper level, the original, introductory shape of z' is evident—that is, the one that was set up by the introduction. The sequence of this section in bars 44 to 46 completes another example of this shape. Both of these deeper-level instances of the z' shape are outlined below in Example 5.3.10. The latter instance appears on the same pitches as the original form of the motif heard at the end of the introduction in bar 3.



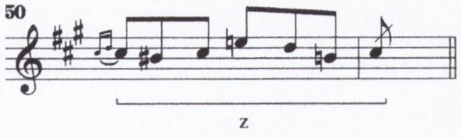

Example 5.3.10: Reduction showing motivic structure of Barcarolle, 40–42 and 44–46.

A modified version of the z complex is used at the end of this section to enhance expectation and increase energy towards its modified repetition. This occurs in bars 48 to 49, as shown below.




Example 5.3.11: Barcarolle, 48–49, noting motif x' and the z complex.

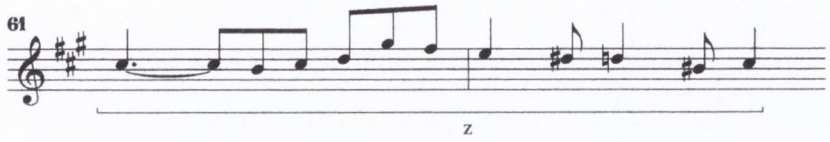
Motif x' is heard twice, but the second time it is encapsulated within another version of the z complex. The D♮ neighbour to C♯ is doubled in length in bar 49 and serves to emphasise this pitch further. The latter half of bar 50 focuses on another appearance of z, inclusive of the semitonal lower neighbour and the diatonic upper neighbour of $\hat{3}$, and the fall of a third. This can be seen below in Example 5.3.12. As this takes place within a half-bar, it intensifies the motif and flags the beginning of section **B1'**.




Example 5.3.12: Barcarolle, 50–51, noting z complex.

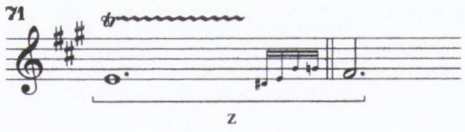
Section **B1'** begins in bar 51 with the z complex. The trill that enters on the second quaver on local $\hat{5}$ concludes with its semitonal lower neighbour. Chopin plays upon the aural connections inherent in all of the instances of this motivic complex. A fine example of this occurs in bar 61 at the end of section **B1'**. The expectation is of something similar to

that heard in bar 50. However, an expansion of the motif connects over into the following section. The expansion of the z complex in bar 61 can be compared to the expansion of the z complex in bars 12 to 13. The larger leap up to G♯ initiates the descent back to C♯ that forms the content of the expansion in both cases. The thematic material of section **B2** is almost entirely constructed from upper and lower neighbours, particularly around C♯ (local $\hat{3}$), and linear thirds—fundamental elements of the z complex.




Example 5.3.13: Barcarolle, 61–62, showing expansion of z complex.

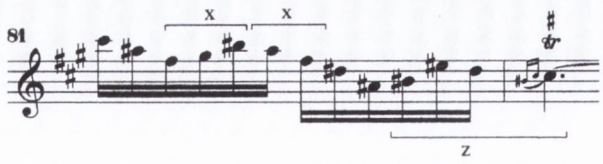
The extended trill in bar 71 and the subsequent lead-in to the *meno mosso* section can be compared to bar 11.




Example 5.3.14: Barcarolle, 71–72, showing z complex.

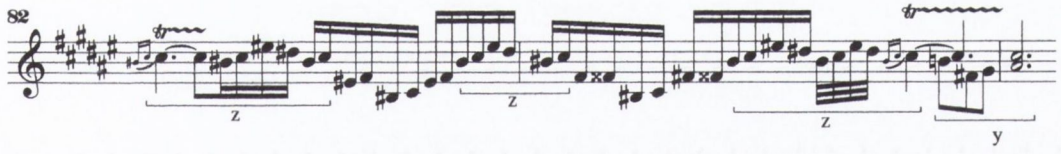
The hovering melody of the *meno mosso* section plays on mixture using both forms of the upper neighbours of G♯ and E. Here is another example of how Chopin combines premises to achieve a certain effect. The feeling of uncertainty throughout this section stems largely from its concentration on chromatic inflection in the alternation of these neighbours.

The z complex forms the basis for the cadenza-like melody throughout the *dolce sfogato* section. It features semitonal lower neighbours, diatonic upper neighbours, and both filled-in thirds and leaps of a third. One of the most prominent uses of the z motivic complex is heard in bars 81 to 83 at the end of this section. The right hand of bars 81 to 82 is shown below in Example 5.3.15.




Example 5.3.15: Barcarolle, 81–82, showing motif x and the z complex.

The z complex is used to affect the temporal flow of the music again in bar 83, where its concentrated appearance on the second half of the bar brings the trill in on the offbeat, thereby breaking the half-bar established norm. Motif y is heard in the alto voice connecting into the return of section **A**. Bars 82 and 83 are highly effective in building tension because they focus so intensely on this motivic material. Neighbour motion centres around C♯ $\hat{5}$ and there is significant concentration and development of this neighbour motion in two octaves. This is an example of how three main premises—in this case, motivic content, octave coupling, and displacement—interact to serve the overall narrative of the piece. The right hand of bars 82–83 is shown below in Example 5.3.16.




Example 5.3.16: Barcarolle, 82–83, showing motif y and the z complex.

The z motivic complex, although most effective in the surface of the piece, can also be found at the middleground level in the use of neighbour motion and in the frequent use of filled-in third descents. Even though Rink does not discuss the z motivic complex, it is clearly visible in his graph of the second middleground level of bars 6 to 20 (p. 199) where both upper and lower neighbours surround C♯ $\hat{5}$ and a subsequent fall of a third from bar 15 reaches A♯ in bar 20. It may be recalled that this descent was highlighted by the motivic interval of a sixth and metric realignment. These techniques are thus involved in forming this middleground materialisation of the z complex.

Similar procedures may be found in the other works analysed in this thesis. For example, hidden repetition of motivic material is evident in the two Nocturnes of Opus 48. The main motifs are developed and altered throughout these Nocturnes, ultimately

returning to their original forms. The combining of tonal motivic premises with metric displacement and normalisation in the Barcarolle is also characteristic of Opus 48. In these Nocturnes, the metric displacement of the tonal motifs is gradually normalised and the tonal motifs eventually find their natural metric arrangement.

Tempo indications are used to differentiate sections in Opus 27 No. 1, and on a deeper level may actually relate the two Nocturnes in Opus 48. In the Barcarolle, temporal markings carry similar importance. Themes are distinguished and characterised by tempo. Section **B1**, for instance, remains at the same tempo both times. This enhances the audibility of the subtle changes and development of the **B1** motif. The outline below shows the overall temporal structure of the piece:

| | | |
|---|---|---|
| Bar 1 | *Allegretto* | Introduction<br>Theme **A**<br>development<br>Theme **A'** |
| Bar 35 | *Poco più mosso* | transition<br>Theme **B1**<br>Theme **B1'** |
| Bar 62 | *Poco più mosso*<br>*Meno mosso* | Theme **B2**<br>transition<br>*Dolce sfogato* |
| Bar 84 | *Tempo primo* | Theme **A'** |
| Bar 93 | Più mosso | Theme **B2'** |
| Bar 103 | *Tempo primo* | Coda (incl. elements of **B1'**) |

Table 5.3.1: Tempo Indications in the Barcarolle.

After the return to the original tempo and theme **A**, **B1** is left out and **B2** enters straight away. Coinciding with this is the omission of '*poco*' from the tempo marking in bar 93. From this evidence it could be surmised that **B2** in bar 93, marked *più mosso*, should be taken at the same tempo as **B2** in bar 62. The first appearance of this theme followed two markings of *poco più mosso*—one being the tempo of **B1** and the second that of **B2**. Section **B2** is therefore also characterised by tempo. Chopin notates a return to the original tempo for the coda, thereby summarising and concluding all of the premises in the

introductory tempo in which they were all introduced. Chopin's notated tempo suggestions thereby further align the motivic (and thematic) connections throughout the work.

Four performances were examined in an attempt to ascertain how Chopin's tempo markings were approached in this work. The four recordings are by Dinu Lipatti, Alfred Cortot, Claudio Arrau, and Nikita Magaloff.[3] The performance tempi for the main themes in each of these recordings are outlined below in dotted crotchets per minute. These tempo markings are extremely approximate given the amount of rubato used in each performance. They do, however, give a relatively clear indication of speed relationships between sections.

| Themes | | Lipatti | Cortot | Arrau | Magaloff |
|---|---|---|---|---|---|
| **A** | *Allegretto* | 63 | 69 | 56 | 60 |
| **B1** | *poco più mosso* | 72 | 80 | 69 | 72 |
| **B2** | *poco più mosso* | 80 | 76 | 76 | 72 |
| **A'** | *Tempo primo* | 63 | 76 | 60 | 69 |
| **B2'** | *Più mosso* | 72 | 80 | 74 | 88 |
| Coda | *Tempo primo* | 60 | 66 | 54 | 76 |

Table 5.3.2: Tempo Relationships in Recordings of the Barcarolle.

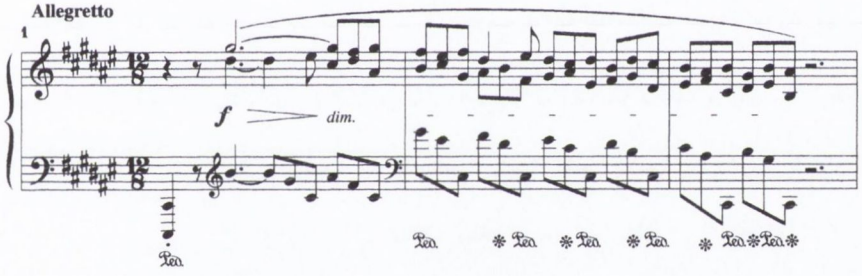
It can be seen from these results how much these four performers differ in following the same tempo instructions. Arrau's performance is the closest to Chopin's markings and follows the general shape of the tempo relationships. In Lipatti's interpretation, the tempo of **B2'** is the same as that of **B1**. Magaloff does not differentiate between **B1** and **B2** and the coda takes time to return to the original tempo. Cortot's interpretation results in **B2** played slower than **B1** and at the same speed as **A'**.

[3] Dinu Lipatti, *Chopin: 14 Valses, Barcarolle Op. 60, Nocturne Op. 27 No. 2, Mazurka Op. 50 No. 3*, EMI Classics 7243 5 66 222 2 7 (1997), recorded in 1948; Alfred Cortot, *Chopin: Oeuvres pour Piano*, EMI Classics CZS 7 67359 2 (1991) recorded in 1933; Claudio Arrau, *Chopin: Fantaisie-Impromptu, Ballade No. 3, Barcarolle, 2 Nocturnes, 2 Waltzes, and other works*, Philips 420 655-2 (1985) recorded in 1979; Nikita Magaloff, *Chopin: The Complete Piano Music*, Philips Classics 456 376-2 (1997) recorded in 1976.

## 5.4 Displacement

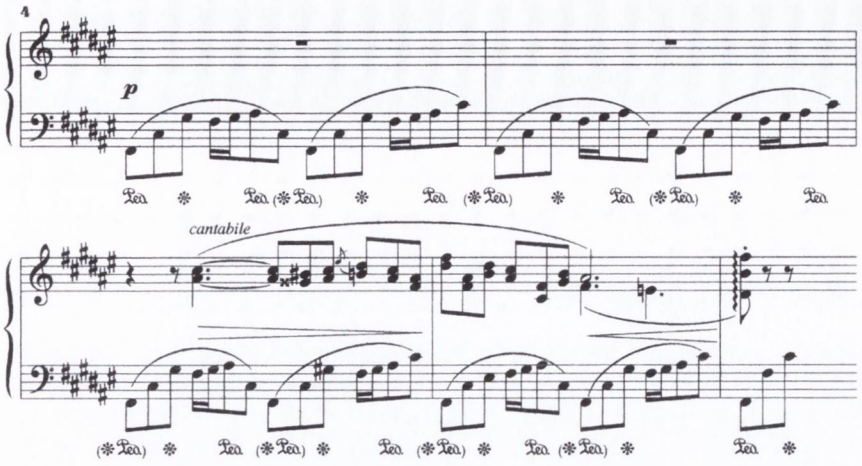
The techniques of displacement and second-beat emphasis contribute to the fluid character of all of the themes of the Barcarolle, to the interaction between the hands, and to the rhythmic interest that complements the forward energy of the traditional Barcarolle rhythms. Furthermore, in a strategic process of intensification, displacement and offbeat emphasis grow throughout the work.

Every section of the Barcarolle begins by establishing second-beat emphasis or by transforming it into some other related metric displacement. The introduction emphasises the second beat by beginning with low C♯ octave in the bass and then placing a chord on the second beat of the bar. The introduction sets up the premise of syncopation and a play on the co-ordination between parts. The half-bar rest before the entrance of the bass in bar 4 establishes this unit as fundamental to the pacing of events.




Example 5.4.1: Barcarolle, 1–3.

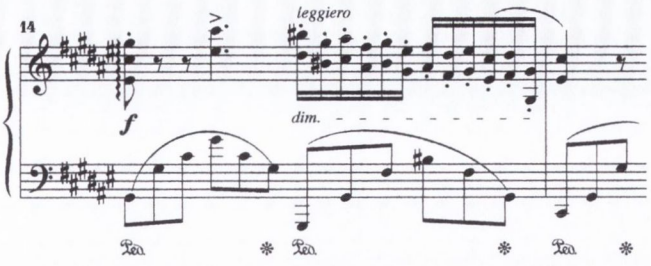
The left-hand 'vamp' in bar 4 also emphasises the second beat. From bar 4 onward, this bass functions as a steady time marker (as in Opus 27 No. 2) against which the right hand plays and undulates. It moves in half-bar repetitions, and a larger leap from the end of the bar down to F♯ in the next bar lends more weight to the first beat of the bar and a secondary stress to the third beat. At the same time, however, the distinctive semiquavers in this vamp give a subtle push to the second beat. In any case, the metric clarity of the repeated left-hand figure also makes the right-hand entry on the second beat of bar 6 a more striking syncopation.




Example 5.4.2: Barcarolle, 4–8 (first beat).

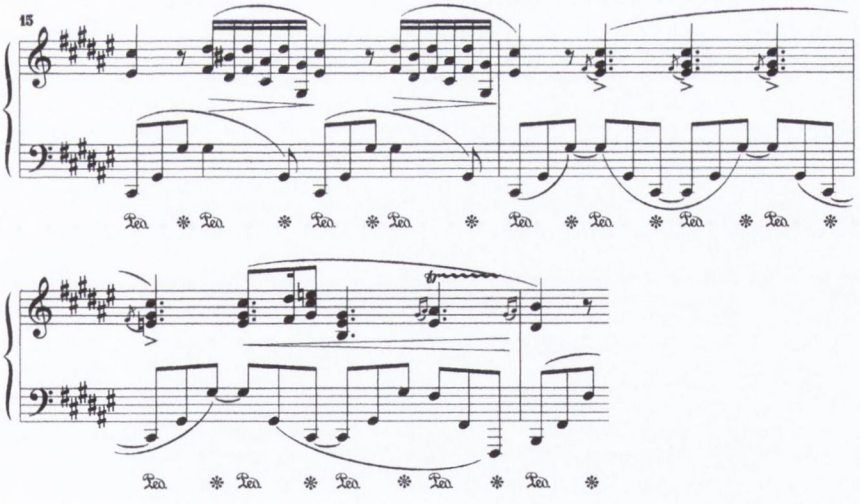
An elegant example of the interaction of rhythm and motif occurs in bar 11. There, the second-beat emphasis is absorbed motivically, as the alto voice imitates the soprano a beat later in a modified version of motif y.

Displacement of the right hand onto the second beat continues throughout **A**, and its 'resolution' to downbeat emphasis at points of cadential arrival integrates rhythm and pitch (as well as other premises concerning closure). Bass harmonic movement remains in half bars as established at the beginning. However, it increases the frequency of harmonic change to each beat as it moves towards different local harmonies. Having reached its local harmonic destination, it then returns to its half-bar grouping. Displaced, syncopated entry is used to great effect to emphasise the pitch C♯—the primary tone. Bar 14, for example, features an accented right-hand entry on C♯ on the second beat of the bar in the middle of a half-bar contour in the bass. This pitch is transferred down an octave and arrives on the first beat of the bar with the bass. This readjustment onto the first beat and the coincidence of the hands lends weight to this local harmonic goal and the sixth in the right hand. In the discussion of the sixth as a goal pitch, it will become evident that these premises work together to highlight the harmonic and voice-leading movement at this point—that is, $\hat{5}$–$\hat{4}$–$\hat{3}$ over V–IV–III (an example of melodic movement reflected in harmonic movement, as evident also in Opus 27). These outer-voice parallel octaves can also be found in Prelude No. 5.



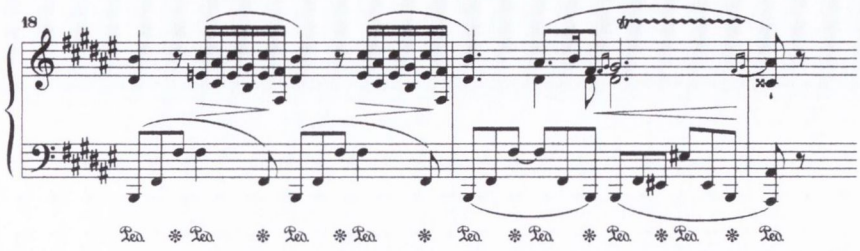

Example 5.4.3: Barcarolle, 14–15 (first beat).

In bars 15–23, the process of 'resolving' second-beat emphases and other metric displacements at points of tonal arrival intensifies. In bar 15, the bass sounds crotchets on the second and fourth beats, although overall half-bar shapes are maintained. The falling-sixths figure enters on the second and fourth beats of the right hand. The roles reverse in bars 16 and 17, as syncopation pervades the bass beneath a straight, on-beat right hand. This adds more weight to the harmonic arrival beneath the sixth in bar 18.




Example 5.4.4: Barcarolle, 15–18 (first beat).

Right-hand movement on the second beat of bar 19 leads to a half-bar trill on G♯ over a hairpin *crescendo*. There has been a cut and elision here, as the equivalent of bars 15 and 17 is heard in bars 18 and 19 without the intermediary bar. All of this lends heightened intensity to this modulatory section and increases the rate of harmonic movement.



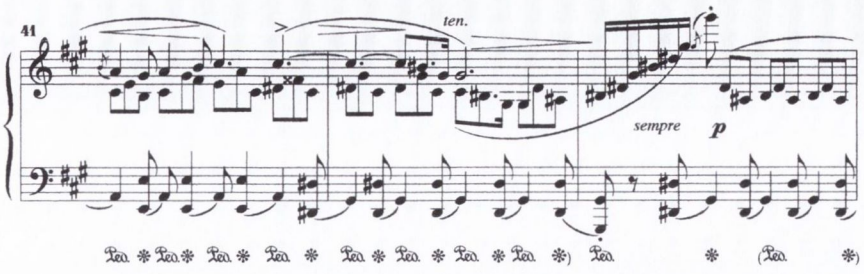
Example 5.4.5: Barcarolle, 18–20 (first beat).

When the melody finally settles on the local harmonic goal (III),[4] a changed texture, with metric certainty and greater agreement between the hands, reflects this arrival.

Although the **B1** section is contrasting—melodically, tonally, and texturally—it continues the premise of second-beat emphasis, and it does so in a way that recalls the **A** section. The **B1** figure (motif x) enters in bar 41 within the context of a version of the z complex. This figure is accented on the fourth beat of the bar on the repetition of its initial pitch.[5] Second-beat emphasis returns as the right-hand C♯ is suspended and then resolves after the second beat to B♯. As in bar 11, the alto imitates a beat later in a concentrated version of the figure, as C♯ lasts a mere quaver in duration. G♯ in the alto voice is double-stemmed to highlight this imitation. This voice then rises up to B♯, which is joined by a bass octave G♯ (II) on the first beat of the bar. This initiates an upward arpeggiated flourish to high $g\sharp^3$ $\hat{2}$, arriving on the second beat. Here again is an example of the interaction of premises of register and displacement—the upper register emphasising the second beat, and the syncopated arrival highlighting the upper register.

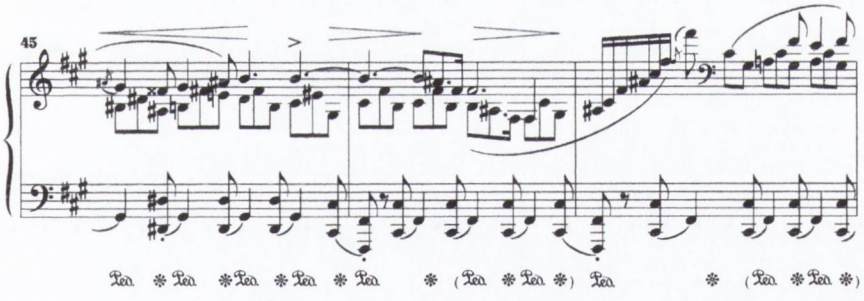
[4] A similar harmonic relationship is formed in the 'Black Key' Etude.

[5] Paderewski notates an accent on the fourth beats of bars 41 and 45. The Henle edition has no accents in either bar. Ekier offers two possibilities. The main text contains no ties from bar 41 into 42 and from bar 45 into 46, and only bar 46 has an accent. The alternative version has ties over the bar, but only bar 42 has an accent. In order to maintain consistency, this text keeps both accents and these are included in the ensuing discussion of the **B1** motif. However, this discussion would not be greatly affected by the omission of this accentuation, as the main point is that the motif is displaced and undergoes subsequent normalisation.




Example 5.4.6: Barcarolle, 41–43.

The arrival each time of high $g\sharp^3$ and $f\sharp^3$ occurs on the second beat and does not coincide with the bass octave. Arrival of the bass octave coincides with the beginning of the flourish in bar 43. However, in bar 46, the bass octave is first heard underneath the tied B. Therefore, the early entry of the preceding fourth beat is made even more pronounced. This is the original z' shape as featured first at the end of the introduction. The use of low F♯ highlights shape z' in the tonic key.



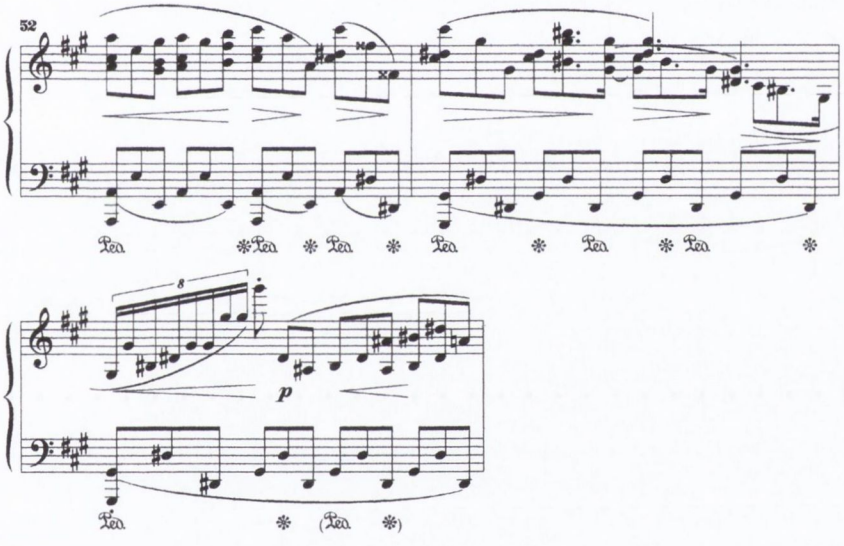

Example 5.4.7: Barcarolle, 45–47.

A version of the z complex in the latter half of bar 50 is used to realign the hands and eliminate displacement. Here again two premises are used to form and support the basic narrative, as the hands arrive together, finally, on the first beat of bar 51 for the modified repeat of **B1**.

Further emphasis is placed on the lack of coincidence between the hands and offbeat right-hand entries throughout section **B1**. In this section, the syncopated right-hand entries occur early on the fourth beat. The two-voice texture is explored and developed throughout, becoming increasingly contrapuntal.

The repeat of **B1** from bar 51 continues much as **B1**, bar 40. The first significant change occurs in bar 52 when the fourth-beat repeat of C♯ is not accented and is marked

instead with a hairpin *diminuendo*. C♯ is not tied over into the first beat of the following bar. Therefore, its repetition coincides with the low octave bass. Bars 52 to 54 are shown below in Example 5.4.8. Three voices are now quite audible, as three lines in the right hand answer each other with the descending figure. Following the two-beat figure in the soprano, the alto sounds the figure on the third beat and the lower voice sounds on the fourth beat. G♯ is highlighted in these three registers as the goal pitch of the descent. The figure is therefore more regular than it was in **B1**. Downbeats are emphasised by low octaves on the first beat of every bar from bar 51 to 58. Generally, therefore, **B1'** is much more regular, with downbeat emphasis and omission of fourth-beat accents and ties. This regularity is achieved through the interaction and combination of register, metric position, and motivic structure.



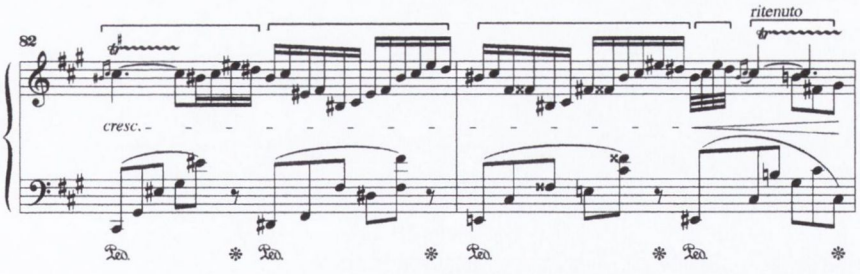

Example 5.4.8: Barcarolle, 52–54.

Modification of the **B1** figure results in the loss of accents and ties, and a generally more regular temporal character. The beats are more clearly articulated by grouping, voicing, and dynamics. An additional upward flourish in bar 60 increases the frequency of these flourishes from four to two bars and further emphasises the delay in resolution to C♯ as part of the z complex. This ornamentation enters on the third beat of the bar and ends offbeat on A♮, thereby highlighting this pitch. The combination of register, displacement, and the interpolation of this figure within an incidence of the z complex all contribute to this emphasis. Second-beat emphasis on C♯ in bar 61 begins another occurrence of the z

motivic complex—one that connects into the following thematic section. This provides another example of the interaction of premises—namely the use of displacement and motivic connections—in the service of the overall form of the piece. Syncopated entry highlights the entrance of the motif, and the expansion of that motif joins the two sections.

The *dolce sfogato* section that begins in bar 78 could be regarded as a development and extension of the introduction, and, as in the introduction, it leads into the return of theme **A**. As in the introduction, the melody begins on the second beat on an accented $g\sharp^2$. As in the introduction, G♯ descends an octave over C♯ V in the bass. The way in which the *dolce sfogato* section reflects the introduction can be compared to the way the middle section of Opus 48 No. 2 reflects its introduction.

The d*olce sfogato* section also combines various premises and expectations that are set up and then altered to shape and structure the flow of movement through a process of developing various elements of the z motivic complex in a beautiful preparation for the return of section **A**. C♯ $\hat{5}$ is trilled over V in bar 82. Grouping is shortened in both hands as it outlines half-bars and increases in frequency. As mentioned previously, this ornamentation is entirely formed from the neighbour motion of the z complex and it involves octave coupling between $c\sharp^2$ and $c\sharp^1$ via $f\sharp^1$. The end of bar 83 suddenly alters the pace of events as the trill enters after four demi-semiquavers (an intensification of the z complex) resulting in the pattern of ♪ ♩♩. . This effectively brakes the movement and is also marked with a *ritenuto* and a hairpin *crescendo*.




Example 5.4.9: Barcarolle, 82–83, with grouping annotations.

The conclusion of section **A** this time leads towards a substantial climax. Section **B2'** delivers the registral high point in bar 93. **B2'** is harmonically more definite and decisive than **B2**. In bar 94, early, syncopated entry on the fourth beat *coincides* with the bass octave on $V^7$ of II (resolving to II on the first beat of the following bar). This happens

again in bar 96 on $V^7$ of VII (resolving onto $VII^7$ in bar 97). So this time, instead of right-hand syncopation entering early and contradicting the bass, the harmonic and octave movement in the bass consorts with, and adds weight to, this syncopation. This leads to a greater sense of climax. The exception occurs in bar 100 when C♯ enters on an accented fourth beat without bass octave accompaniment.[6]

Metric displacement and subsequent normalisation is used as a premise throughout the Barcarolle in highlighting important motivic connections, harmonic goals, voice leading, and in the service of the overall structure of the piece. Displacement and offbeat emphasis are found in the Nocturnes of Opus 48 and serve the purpose there of providing forward momentum (and even affecting the phrase structure in No. 2). Displacement is also used as a premise in Opus 48. It combines with motivic material that is subsequently normalised, and it is used to highlight other premises, for instance, the major-minor and the duple-triple premises of Opus 48 No. 2.

### 5.5 The Sixth

Of course, there are many sixths in the Barcarolle—they appear at the surface of the music in bars 10, 14, and 15, for example. But in the Barcarolle these sixths initiate ideas, articulate important structural arrivals, define significant middleground progressions, and provide an important goal that is hinted at throughout. It is evident in the relationship between A♯ and F♯ and A♮ and F♯ (this will be discussed in more detail in the examination of the next premise—mixture). It is used in the contour of melodies and in the texture. The augmented sixth is a more disruptive manifestation of the sixth and it is used to create tension, focus attention, and enhance the need for continuation. The sixth is used to highlight important voice-leading patterns on a larger scale (for example, bars 15, 18, and 20). Fundamentally, the sixth over the tonic in a specific register provides the ultimate goal of the work—one that is needed for resolution as early as the end of the introduction. The importance of the sixth as texture, melodic contour, and as the highlighter of important events is also evident in the pair of Nocturnes in Opus 27.

The following examination traces the importance of the sixth through the work and demonstrates why it has been attributed the status of a premise.

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[6] Paderewski and Ekier notate this fourth-beat C♯ with an accent and Henle substitutes a small hairpin *diminuendo*.

The introduction descends in sixths from g♯$^{2}$ over b$^{1}$ to g♯$^{1}$ over b (see Example 5.4.1). This is illustrated in Rink's graph of the foreground (p. 205). The introduction sets up the need for resolution onto the interval of a sixth between f♯$^{1}$ and a♯ over bass F♯ octave (I). Strong emphasis on G♯ $\hat{2}$ heightens expectation of resolution to F♯ $\hat{1}$, while B in the lower line demands resolution down to A♯. A half-bar's rest denies us this expected resolution and, as shall become evident, the piece plays upon this expectation with constant reminders, near-resolution, and avoidance.

The first melodic phrase is doubled in thirds and the top line descends C♯–A♯ as part of the z motivic complex before leaping up a sixth to f♯$^{2}$. There is repetition on f♯$^{2}$ on the second beat of bar 8 and this second phrase descends back to a♯$^{1}$. The pitches C♯, A♯, and F♯ are strongly emphasised in the contour of the melody. C♯ is the primary tone, yet A♯ is of fundamental importance—not just in its sixth relationship to F♯, but also within the premise of mixture that will be discussed presently. In bar 10, the melody is doubled in sixths beginning again on f♯$^{2}$ on the second beat. This is the interval that was set up by the introduction, but it sounds an octave higher than expected and enters over vi (not tonic) harmony and, with its second-beat emphasis, it begins a phrase. It is therefore robbed of any potential to provide a sense of resolution after the introduction. The interaction of the sixth with metric position and register demonstrates the way in which Chopin sets up specific premises and ingeniously employs them in constructing the narrative of the work. The texture of sixths does, however, act as a reminder of this important goal. Again, F♯ descends a sixth to A♯, arriving on an accented dotted minim on the second beat of bar 11 before falling to G♯.

Entry on c♯$^{3}$ on the second beat of bar 14 is doubled a sixth below. The right hand maintains its concentration on intervals of a sixth, as a descending semiquaver motif fills the last two beats of the bar. Rink refers to this motif as 'the extension figure' (p. 217). In this instance it is used to transfer C♯ down an octave (see Example 5.4.3), and in bar 15, it is used to highlight this pitch with its upper neighbour.

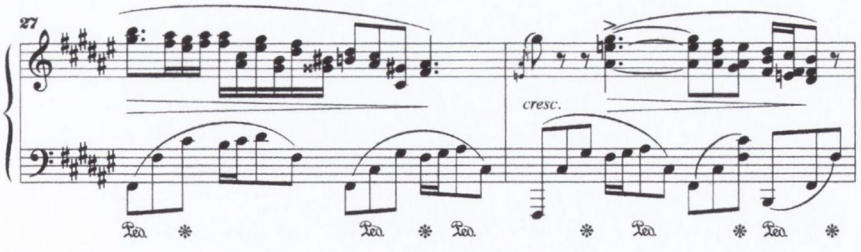
The interval of a sixth on C♯ over bass C♯ V begins bar 15. Following the offbeat extension figure that emphasises movement from upper neighbour D♯ to C♯, the melody begins to move through different harmonies using the aforementioned motif y. Arrival on B $\hat{4}$ occurs on the first beat of bar 18. The left hand marks this local modulation, arriving on the first beat of bar 18 instead of tying it over. B is highlighted by the interval of a sixth

over low bass BB IV in the same manner as C♯ $\hat{5}$ over C♯ V in bar 15. This effectively links these chords and stresses the voice-leading descent (see Example 5.4.4).

In bar 20, A♯ $\hat{3}$ is heard over III$^{\sharp 3}$ in the same layout as $\hat{5}$ and $\hat{4}$ in bars 15 and 18, thereby completing the voice-leading descent of $\hat{5}$–$\hat{4}$–$\hat{3}$ tonicised by the harmonic movement V–IV–III. This section was briefly discussed in the section on displacement. In this modulating section, Chopin uses motif y to affect movement and marks points of local arrival with metric normalisation and the distinctive sixth interval (see Example 5.4.5).

The falling-sixth figure takes over as the main melodic material in this transition section. The sixth interval is used with metric realignment to point out voice leading and harmonic movement and also as a constant reminder of the goal of hearing this interval in the lower register over the tonic.

A few points are worthy of mention in relation to the return of **A**. In bar 27, the falling-sixths figure is heard ending, as in bar 9, on a♯$^{1}$. It now outlines sixths in its tonal movement but it has a texture of thirds. Low bass FF♯ in bar 28 (as V of IV) accentuates the move in the right hand up to g♯$^{2}$ in place of f♯$^{2}$. G♯ re-enters, accented, on the second beat before falling a sixth to B. This is based on the falling figure in bar 10 from F♯ to A♯. However, it is filled-in and outlines the neighbour G♯ followed by a $\hat{5}\hat{4}\hat{3}\hat{2}\hat{1}$ descent in the key of IV. This neighbour and subsequent descent is noted by Rink also (p. 206). The sixth is never far from the surface and is used in this new descending format as a force of tension in leading towards a potential climax.




Example 5.5.1: Barcarolle, 27–28.

Resolution onto F♯ over I is heard in bar 33. The sixth appears here (and is emphasised by a grace note). However, registral issues prevent it from being entirely conclusive in two ways: bar 33 is in the wrong register for bar 32, and bar 33 answers only one of the registers of the introduction. The falling-sixth figure is heard in the tonic for the

first time, with G♯ resolving to F♯ restating the final part of the descent to $\hat{1}$. This is as bar 15 but over I instead of V.

Section **B1** focuses mainly on the z motivic complex, but the sixth still plays a central role. Held A♮ in the soprano is joined in bar 40 by the alto voice as it mimics the oscillation of the previous solo line around C♯. The soprano joins a half-bar later around A. On the first beat of bar 40, therefore, we hear the interval of a sixth, $a^1$ and $c\sharp^1$, over bass A. This serves to flag the arrival of this new key in a manner similar to its previous usage.

The upward arpeggiated flourish to high $g\sharp^3$ $\hat{2}$ in bar 43 forms an embellishment or development of the original interval of the sixth over an octave in the bass. The interval of a sixth from B♯ up to G♯ is retained over bass octave G♯, but is now extended over two octaves and spread in an arpeggio (see Example 5.4.6).

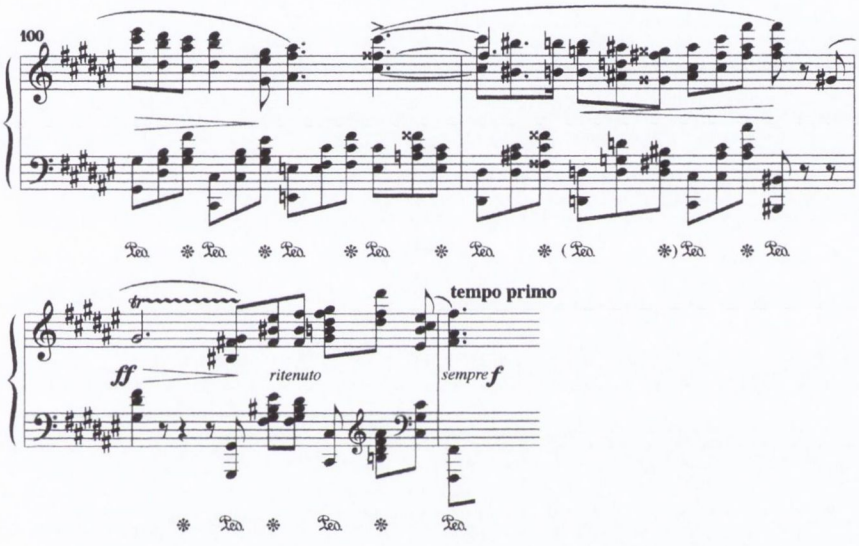
Following the z' shape in the tonic key—as suggested by the introduction—over bars 44 to 46, the upward arpeggiated flourish is heard outlining the sixth from A♯ up to F♯ over low F♯ in the bass (see Example 5.4.7).

The original interval of a sixth that the introduction set up, and that was henceforth eluded, is thus played upon again in section **B1**. The sixth is expanded and arpeggiated with the bass octave coinciding with the lower pitch only. Nevertheless these intervals highlight movement from ♭$\hat{3}$ to $\hat{2}$ to $\hat{1}$ in a development of their use in highlighting movement from $\hat{5}$ to $\hat{4}$ to $\hat{3}$ earlier, although F♯ is not the tonic in this section.

The repeat of section **B1** uses these motivic flourishes very differently. The flourish in bar 54 begins on G♯ and spans three octaves, arriving on $g\sharp^3$ (see Example 5.4.8). The outline of a sixth has been ousted by this octave, which sounds over low octave G♯ in the bass. This three-octave span on G♯ recalls the contrapuntal imitations ending on G♯ in bar 53. The flourish in bar 58 features three octaves of F♯ over octave F♯ in the bass. Again, this echoes the F♯ goals of the sequential figure in bar 57 and also provides an element of conclusion to the heavy emphasis on G♯ in the flourish in bar 54. The sixth had achieved its goal in the previous section by highlighting harmonic movement; octaves are used here to balance the three-voice texture and as a registral summation.

Section **B2** provides contrast, as the melody outlines the descent of a third. However, the sixth remains prominent—both in the use of arpeggiation and in stepwise movement. The sixth from A down to C♯ forms the outer registral boundaries of the melody, thereby further highlighting C♯ in relation to A.

From bar 71 on, the melody hovers around G♯ and E♮. Play on the sixth between these two pitches and their various upper neighbours lends an elusive sense to the section. The final cadence of this section is to the dominant, and the bass falls to low C♯ on the first beat of bar 78 with the arrival on C♯ over E♯ in the treble. This marks a significant point of harmonic arrival as C♯ $\hat{5}$ is heard doubled below by a sixth over low bass C♯. The interval of a sixth is used here to mark a new section, a local harmonic goal, and to highlight the return of the primary tone.



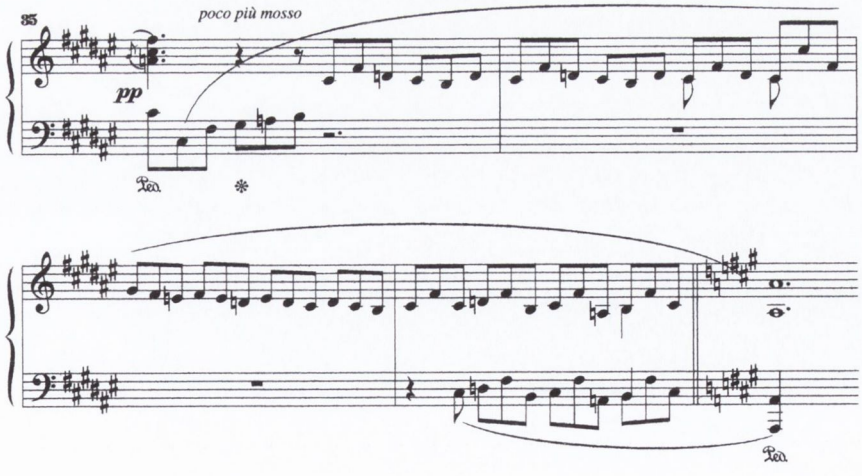

Example 5.5.2: Barcarolle, 100–103 (first chord).

The final descent takes place in bars 102–103 as the $\hat{5}$–$\hat{4}$–$\hat{3}$ descent is heard in the tonic key and finally completed $\hat{2}$–$\hat{1}$. Despite the strong closure of this cadence, it does leave some issues concerning the sixth unfinished. We still have not heard the sixth as f♯$^1$ over a♯ with bass octave F♯. Descent to F♯ $\hat{1}$ occurs an octave higher than expected and not in the register of f♯$^1$ as set up by g♯$^1$ at the beginning of bar 102. Furthermore, the proliferation of chromatic harmony and the use of augmented sixths (in bars 100 and 101) seems to call for more balancing resolution.

## 5.6 Mixture

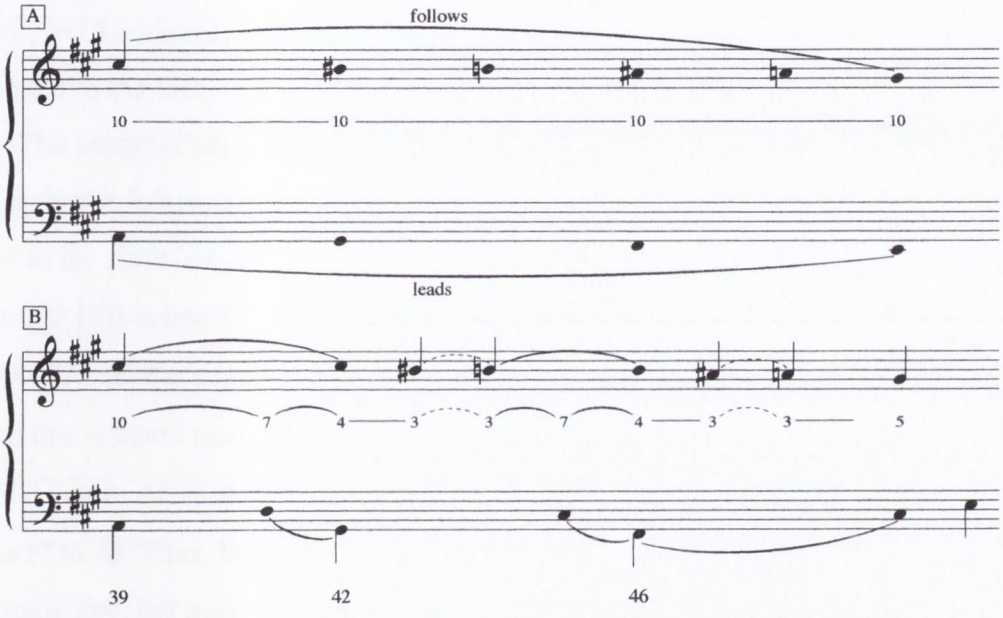
The pitches A♯ and A♮ are important as forms of mixture on the third scale-degree. Melodic A♮ is assimilated into the harmony in a technique that is also used in Opus 27 No. 2. A♯ is emphasised as the goal of the tonicised movement of $\hat{5}$–$\hat{4}$–$\hat{3}$ in bars 15 to 20. It is noteworthy that it is these pitches that are highlighted by sixths. Section **B1** from bar 39 is in the key of A, so the minor third of the tonic is harmonised and ♮$\hat{3}$ is assimilated into the harmonic structure. The *meno mosso* section plays on the relationship between the dominant ninths of A major and A minor, thereby alternating F♯ and F♮. Bar 76 onward focuses on F♯ and A♯, and the sixth between them. A♮ is heard as the bass of an augmented-sixth chord in bar 97 and as a chromatic upper-neighbour to G♯ in bar 107. The coda provides final resolution of this conflict with the sixth F♯ and A♯. The interrelationship of this premise and the sixth plays an important role in the establishment and development of each premise and in forming the dramatic narrative of the work. The following analysis summarises the use of mixture throughout the work.

The **A** section closes with a cadence to F♯ major but mixture changes it to F♯ minor with an A♮ (bar 35). That pitch then becomes its own key. Towards the end of the transition passage, both hands outline C♯ $\hat{5}$–B $\hat{4}$–A♮ ♮$\hat{3}$ into bar 39. Arrival on this final pitch coincides with a key change to that of A major, ♮III.




Example 5.6.1: Barcarolle, 35–39.

The introduction of A♮ therefore takes us from F♯ major to F♯ minor, and then to A major. Within the A major section there is also a play on mixture. Example 5.6.2 below shows my voice-leading graph of bars 39 to 52. Movement from sharps to naturals (major to minor chords) is a fundamental part of the LIP in this section. This interpretation differs from Rink's, as he isolates the pitch A as the structural upper voice in this section (p. 200). I hear this section as a LIP of tenths at a deeper level between the top voice (starting on C♯) and the bass.




Example 5.6.2: Voice-leading graph of Barcarolle, 39–50.

A♯ returns within the z' shape (and the **B1** motif) in bar 46 and the ensuing arpeggiation outlines the sixth from A♯ to F♯ over the tonic. Chopin even manages to move within the A major section to a chord that mixes A♯ and A♮. This is heard in bar 47, as F♯ major becomes F♯ minor. The alto revolves around A♮ while the soprano rhythmically augments the upper neighbour of the z complex. Resolution to C♯ over V occurs in bar 50. However, V of F♯ becomes iii of ♮III (A) as E♯ subsequently moves to E♮. The final beat of bar 50 consists of V of A in the bass beneath E♮–D♮–B in the top voice. This resolves to C♯ (local $\hat{3}$) over I of A major and a modified repeat of **B1**.

The premise of register is combined with mixture in sections **B1'** and **B2**. The extra arpeggiated flourish in bar 60 of **B1'** stretches from b♯ up to a♮$^3$, and connects registrally

with f♯$^3$ in bar 58. This stresses A♮ (♮$\hat{3}$) after the A♯ focus in the F♯ major harmony preceding it (as part of the z' shape). Movement in the right hand from g♯$^2$ continues the registrally-disjointed descent from A♮ (in bar 60) to f♯$^2$. In section **B2**, c♯$^3$ leaps up to a$^3$ in bar 70, in answering the descending sixth from A to C♯ in the outer contour of the melody. This rounds off the section and connects on a larger scale to bar 60 and the end of **B1'**.

The *meno mosso* section takes mixture to a new level. The harmony alternates between V$^9$ of A major and V$^9$ of A minor, thereby resulting in the shifting between the pitches F♯ and F♮. This contributes to its wavering, uncertain character. Movement from V$^9$ of A (E$^9$) to C♯ major (sounding like a dominant) causes a third relation—and is therefore also related to the idea of mixture.

The return of section **A** and the climax leading to the return of **B2** strengthen the tonic key and reinforce the primary tone, C♯. The following section was discussed in relation to the sixth but is worth mentioning again in context of this premise. A V–i motion in A♯ minor (iii) in bar 97 imitates the harmonic movement of bar 66. The bass then slides from A♯ to A♮ for the augmented-sixth chord. The voice leading in **B2** concentrated on $\hat{5}$–$\hat{4}$–$\hat{3}$ and this is heard now as C♯–B–A♯ in the tonic key. The melody emphasises the sixth from F♯ down to A♯. In A major, the sixth spanned from A♯ down to C♯, and in the tonic key it spans F♯ to A♯. Thus, **B2** is brought into the tonal realms of section **A**—not just in terms of the tonic key, but also in terms of its voice-leading preoccupations. The original motivic sixth is used to stress the alternation of A♯ and A♮ and to highlight the fundamental pitches throughout the piece.

To summarise our discussion of mixture, the pitches A♯ and A♮ are not only important as melodic versions of the third scale-degree, but A is also assimilated into the harmony (in a compositional technique that has been mentioned previously in Opus 27 No. 2). The pitch A♯ moves to A♮ in bar 35 as the third of the minor mode of F♯. This strengthens the aural relationship between these two pitches. Section **B1**, beginning in bar 39, is in the key of A major. Here, the minor third of the tonic is harmonised and ♮$\hat{3}$ is assimilated into the harmonic structure. The *meno mosso* section takes mixture to a higher level with its opposition of E♮ and E♯, and the dominants of A and F♯. A♮ appears again in the bass of bar 97 beneath the augmented sixth before moving to G♯ (II$^7$). It is also used as a chromatic neighbour to G♯ $\hat{2}$ in bar 107. A♮ is finally resolved in the coda with the pitches A♯ and F♯ thoroughly worked-out.

This kind of chromatic conflict is very prevalent in Chopin's works. Mixture on the third scale-degree is found in the major-mode middle section of Opus 48 No. 1. Alternation is found between A and A♯ (or B♭) in Opus 28 No. 5, and between F and F♭ in Opus 28 No. 16. In Opus 27 No. 1, alternation between the two modes of the third scale-degrees, E and E♯, is highlighted by the use of the sixth from G♯. The major-minor premise of Opus 48 No. 2 naturally focuses on the pitches A♮ and A♯. These pitches are related to metric position and gesture, they migrate into various voices, and the major mode takes over at the end.

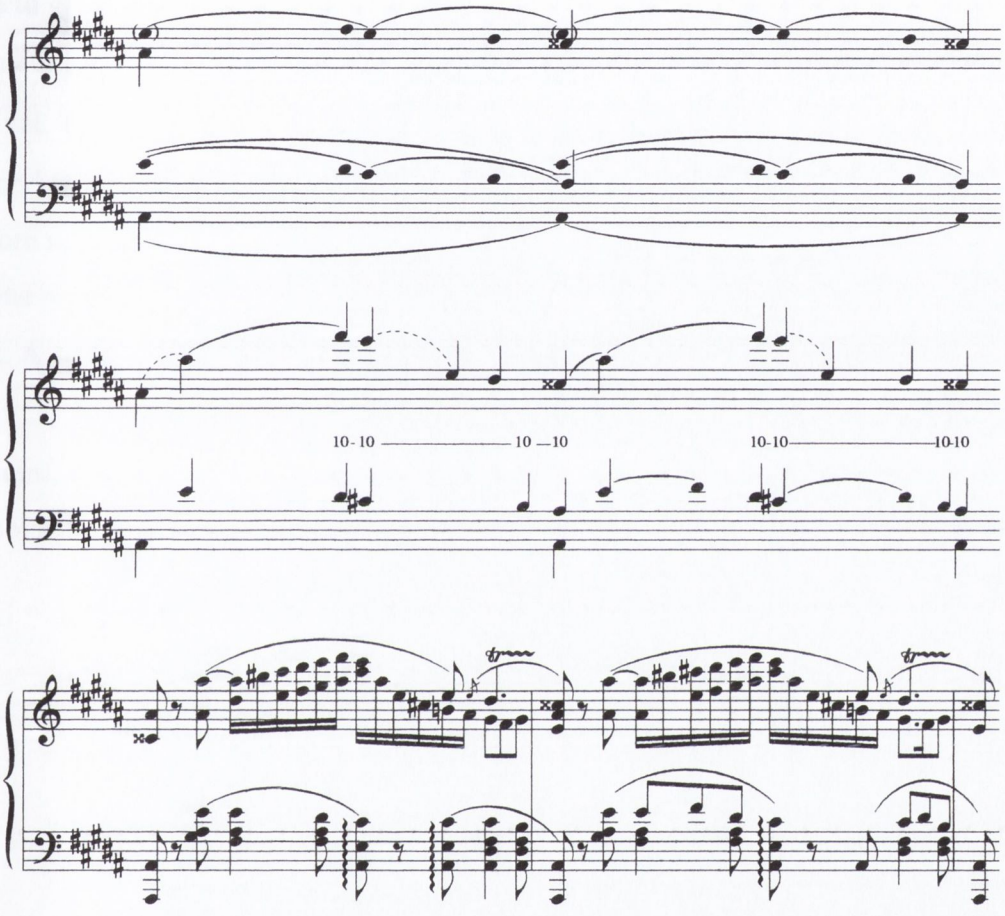
### 5.7 Register

Register—especially the coupling of notes an octave apart—not only differentiates between one octave and another octave, but also integrates the ebb and flow of tension throughout the work. Rather than speak of an 'obligatory register' in this piece, perhaps we should speak of 'obligatory coupling'. Rink notes that 'both bass and treble articulate registral connections that extend over many bars' (p. 218). The following analysis will show how register is used as an important premise in the narrative of the piece and will discuss its interrelationship to other premises where appropriate.

The introduction features a prominent octave transfer of $g\sharp^2$ $\hat{2}$ in the top voice down an octave to $g\sharp^1$ (see Example 5.4.1). This octave transfer is highlighted by metric displacement, as both octaves are heard on the second beat of the bar. Ending on $g\sharp^1$ instigates an immediate demand for resolution onto $f\sharp^1$ as the upper voice of the sixth interval. However, a complete answer to the introduction's clear octave coupling would also couple that $f\sharp^1$ with $f\sharp^2$.

The theme plays on the two octaves introduced in the first three bars of the piece. In the first phrase, the lower octave seems to be the goal, but this is usurped by a leap up to $f\sharp^2$ for the second phrase. The second phrase descends again towards $f\sharp^1$ but another octave leap upward avoids this outcome. The melody seems to be constantly searching for a conclusion that will couple $f\sharp^1$ (and the sixth interval below it) with $f\sharp^2$ (and the sixth below it). Bar 10, with the upper sixth, seems to remind us of this expectation, as this interval is heard without tonic harmony. The registral peak of this section in bar 14 on $c\sharp^3$ is swiftly followed by an octave coupling down to $c\sharp^2$ (again, with the sixth below it).

As discussed previously, a middleground descent from $c\sharp^2$ in bar 15, to $b^1$ in bar 18, and to $a\sharp^1$ in bar 20, is stressed by the interval of a sixth, use of motif y, and metric realignment. A voice-leading graph of bars 20–22 is shown below in Example 5.7.1.

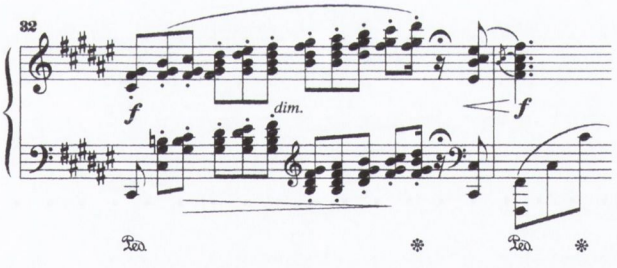



Example 5.7.1: Voice-leading graph of Barcarolle, 20–22.

In bar 20, the tenor voice forms an extension of the same pattern by descending a third from E to C♯, and then continues with the third from C♯ to A♯. The motivic content thus reflects this point of arrival with hidden repetition of the overall descent of bars 15 to 20. The two thirds that the tenor presents successively are presented simultaneously also. As the tenor begins its second third, the top voice begins the first from E♯ to D♯ to C𝄪. The alto voice also plays C♯ to B to A♯ in its surface detail, thereby reflecting the tenor movement and the voice leading from bar 15. The top voice replaces A♯ with C𝄪 following the descent from E♯. It achieves this by leaping to A♯ an octave higher followed by a rise of a sixth, which then leads into the descent of a third that arrives on C𝄪. The process of the

introduction of a new voice is elaborated with octave coupling, and octave coupling is used in conjunction with the motivic content. In bar 23, the top voice reaffirms this voice-leading motion by moving directly from A♯ to C×.

Arrival on $\hat{2}$ in bar 31 is heard in the upper octave on $g\sharp^2$. This pitch then falls an octave to $g\sharp^1$, arriving on the first beat of bar 32. Bar 32 seems to be a reversal of the introduction, with $\hat{2}$ ascending an octave over C♯, V. This is a moment of potential climax or arrival. The top voice continues its ascent to $d\sharp^3$. Musical inertia predicts continuation up to $e\sharp^3$ and $f\sharp^3$. This ascent connects the lower register to the higher register. This passage therefore sets up the expectation of resolution in this upper register. However, it resolves in only one register—and not the one we most want—as it answers the middle register from bar 32. A semiquaver rest with a pause precedes this dislocation, as $e\sharp^2$ enters an octave lower than expected before moving to $f\sharp^2$. In the following bars, neighbour motion from $g\sharp^2$ to $f\sharp^2$ reinforces this octave. Resolution is achieved in only one register—therefore the need for resolution in more than one octave is kept alive.




Example 5.7.2: Barcarolle, 32–33 (first beat).

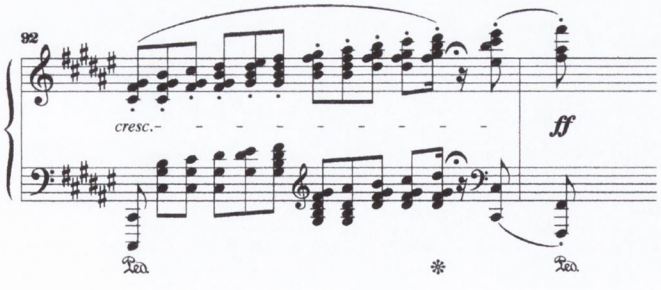
Octave coupling continues to play an important role in the section that begins in bar 39. It not only shapes the **B1** and **B1'** sections themselves, but also shapes their relation in a coupling of sections. Register is used to achieve many things in these two sections. The highest pitches are metrically displaced and serve to stress the neighbour motion of G♯ to F♯ as first heard in the introduction. More importantly, they relate F♯ to A♮ and form an important role in the development of the A♯/A♮ mixture. The main motivic material of section **B1** emphasises the lower register, but its consequent section strongly reinforces the upper octave.

Chopin uses octave coupling to shape the piece. He employs it in turn to set up expectations, avert resolution, and ultimately provide conclusion in each register. In the first section, the lower register is established. The two octaves above this seem to form potential goals in bars 32 to 33. The middle octave is then accepted and strengthened in relation to the lower octave throughout the **B1** sections.

**B2** maintains focus on the upper register (or middle register). On the fourth beat of bar 69, an octave coupling up to high e♮$^3$ leads to an elaborated version of the opening phrase in this register. E falls, as before, through D to C♯ before rising to a$^3$. As mentioned previously, and noted by Rink (p. 206, n. 10), the only equivalent use of A in this register is in bar 60 with the extra flourish towards the end of **B1'**. Thus, octave coupling is used to connect both sections and to highlight A♮ further.

The *meno mosso* section focuses on f♯$^1$—the lower register. The *dolce sfogato* section has already been compared to the introduction and one of the main similarities is the octave coupling of g♯$^2$ down to g♯$^1$ over V.

The return of theme **A** re-establishes c♯$^2$. The climax at the end of the section in bar 92 differs from that of bar 32. The top line continues this time up to e♯$^3$ and f♯$^3$ over a V–I cadence, providing a very powerful climax and a resolution in this register. Ultimate conclusion is prevented by the upward direction of the line of movement and the lack of conclusive octave coupling. At this climactic moment, we get the satisfaction of immediate resolution in the 'correct' octave for the local gesture, but we still need to couple octaves for complete resolution.




Example 5.7.3: Barcarolle, 92–93 (first chord).

Following the integration of **B2** into the tonal and motivic context of section **A**, the descent of the *Urlinie* occurs in bars 102–103. G♯ $\hat{2}$ is transferred up an octave to $g\sharp^2$ and falls to $f\sharp^2$ $\hat{1}$ over I on the downbeat of bar 103. Bar 93 provides a strong sense of resolution in the highest register and the descent of the *Urlinie* occurs in the middle register. The extension and trill on $g\sharp^1$ at the beginning of bar 102 hints at the remaining need for resolution in this octave. The interval of a sixth of $f\sharp^1$ over a♯ with bass octave F♯ is also missing and further contributes to the need for the coda.

Register is often used in this piece to highlight important voice leading. It works in conjunction with other premises such as the sixth motif, the play between A♯ and A♮, and metric displacement and resolution. These work together to structure the dramatic form of the work. They highlight each other and stress moments of tension and release. Important points of arrival are associated with octave couplings. Octave coupling is used to blur and redefine registral goals throughout the work, and by the end of the piece all three main registers have been alluded to and teased about. This is then used to form moments of tension and resolution at various structural moments.

Dynamics are used in conjunction with register throughout the Barcarolle. Chopin establishes the norm that dynamics mirror gesture. Thus, ascending motion is accompanied by a rise in dynamic level, and a lessening of dynamic level reflects descending motion.

The introduction moves in similar, descending motion in both hands and has an accompanying *diminuendo*. This tentatively introduces the concept that dynamics and gestures work in conjunction with each other. This is reinforced in section **A**, as throughout this section, shapes and gestures are mirrored by dynamics. In other words, any *crescendos* accompany ascending motion and *diminuendos* govern descending motion.

The moment of potential climax after section **A** is usurped in bar 32 as the melodic line resolves an octave lower than expected—in the middle register. A *diminuendo* marking accompanies the rising line in both hands up until the dislocation. This is the first time that dynamics have not mirrored the direction of movement. The effect sounds unnatural and adds to the sense of frustrated climax.

Another example of reversal of the relationship between dynamics and gesture occurs at the end of section **B2**, as bar 70 moves towards the high $a^3$ that forms a registral connection with the end of **B1**. This impetus and height is usurped by a *diminuendo*, which removes some of the forward drive and momentum as it did before in bar 32. These are both prime examples of how an established norm—of dynamics mirroring gestural

direction—can prove so effective when deliberately contradicted. Thus, dynamics are used to highlight octave coupling, and, in particular, the denial or delivery of resolution in each of these registers.

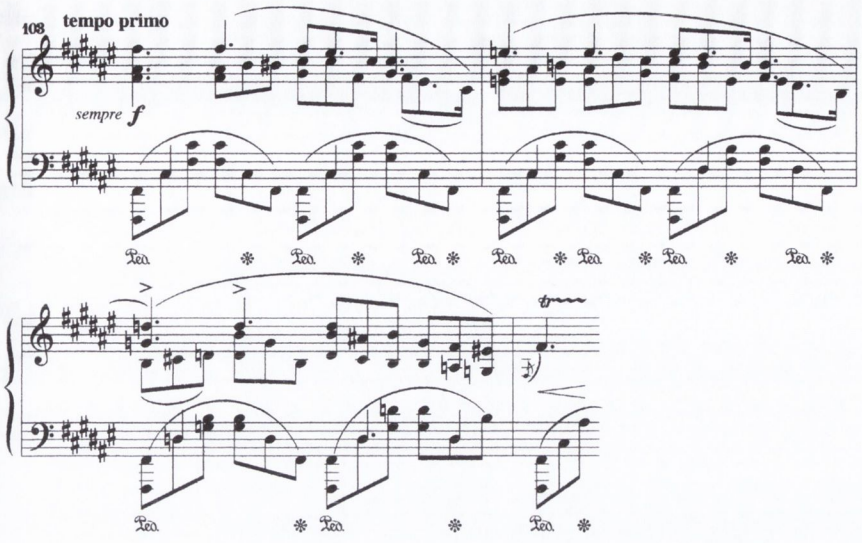
In bar 91, two additional hairpin *diminuendos* sound on the first two beats, taking back the dynamic level in order to allow even more growth in bar 92. A *crescendo* begins over a bass octave C♯ V. This time there is no *diminuendo* and the *crescendo* continues, mirroring the upward movement in both hands with fuller chords. The top line continues this time up to e♯$^3$ and f♯$^3$ over the V–I cadence. The reinforcement of this registral goal with the dynamic expectation that was previously denied provides a very satisfying climax.

Shape and dynamics mirror each other throughout the work. The few exceptions have been mentioned and serve to highlight important structural moments. The penultimate bar is perhaps the best example of this device and provides a very dramatic conclusion. This is discussed in the section on the coda. Chopin takes great care generally with dynamic markings. Dynamics are used to great effect to highlight the LIPs in Opus 28 No. 14, to mirror gestures in Nos. 21 and 16, and to differentiate between versions of the theme in Opus 27 No. 2.

### 5.8 The Coda

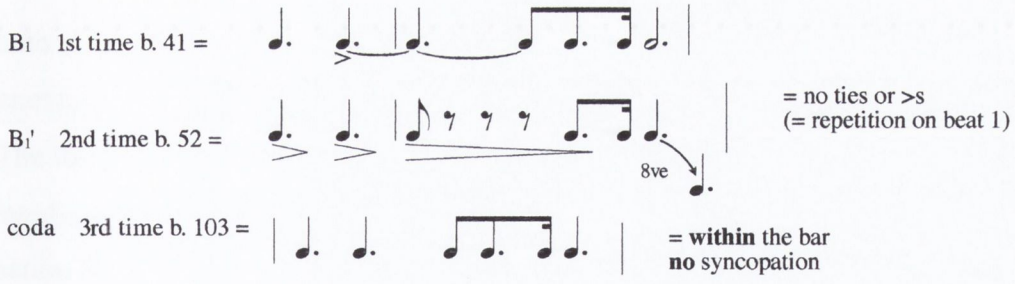
Rosen states that 'the coda of the Barcarolle [...] is Chopin's most orchestral conception, and uses largely new thematic material' (p. 456). I do not think that the coda is entirely new. In fact, the following discussion demonstrates how Chopin integrates and finally resolves each of the main premises of the work in this section.

The coda uses second-beat emphasis and displacement to advance its feeling of arrival. The descent of the *Urlinie* to f♯$^2$ $\hat{1}$ in bar 103 begins the coda marked *Tempo primo* with a low octave F♯ bass pedal. The bass moves in half-bar shapes, but the extra crotchet stem on the second and seventh quavers continues the element of syncopation.




Example 5.8.1: Barcarolle, 103–106 (first beat).

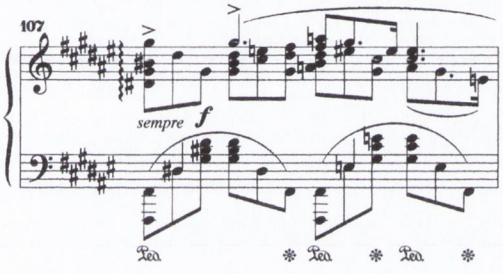
The melody focuses on **B1** material and is in three voices, although only two work the contrapuntal idea. These highlight octave coupling between the octaves of f♯$^{1}$ and f♯$^{2}$. The **B1** motif is not prepared this time by the upward leap of a third—thus it no longer completes the z' shape, but is self-contained. The falling figure is displaced again. Its metric positioning each time it recurs is outlined below.




Example 5.8.2: Metric positioning of the **B1** figure in the Barcarolle.

The figure is displaced in a treatment similar to that of the melody in the Nocturne Opus 62 No. 1. In this, its third version, the figure begins on the second beat instead of the fourth. It is also concentrated due to the lack of delay into the falling quavers. This results in conclusion on the fourth beat. Overall it is more regular and straightforward with its inherent rhythmic quirks resolved.

A split octave F♯ in bar 106 brings focus back to the register of f♯[1] and resolves the augmented-sixth chord from the end of bar 105. This begins a trilled rise that includes both elements of the mixture that played such an important part throughout—A♮ and A♯. A♯ $\hat{3}$ does not continue the descent, but is dislocated by a leap up to g♯[2] $\hat{2}$ and the return of the **B1** figure in bar 107. This time there is a new aspect to the shape. G♯ moves up a step to A♮ before falling through the x motif. This adds emphasis to A♮ as it functions as the alteration to an established figure. Movement from neighbour A♮ $\hat{3}$♮ to G♯ $\hat{2}$ provides a final reminder of the use of this pitch earlier.



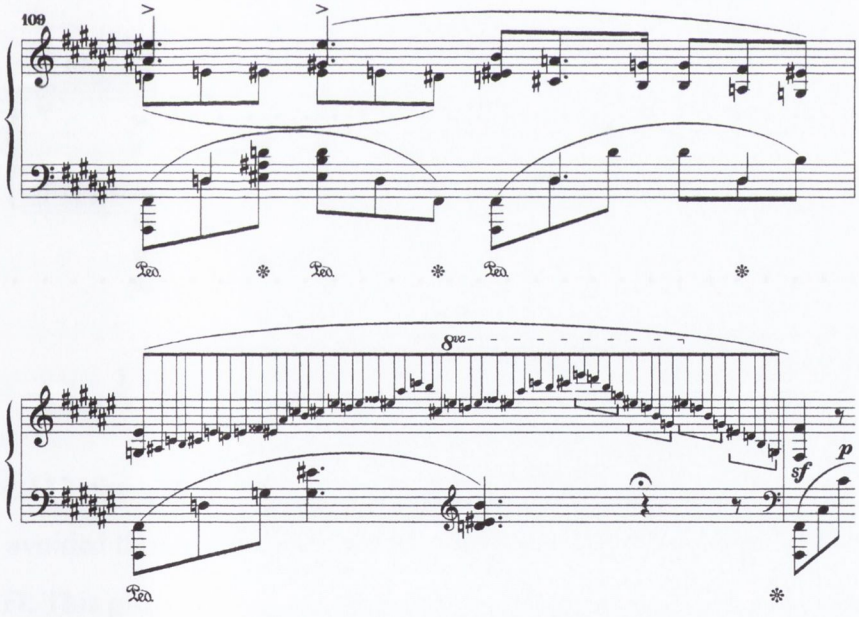

Example 5.8.3: Barcarolle, 107.

Neighbour motion that is such a feature of the z motivic complex becomes a main focus in the coda. In the last beat of bar 109, the melody descends through G♮, F♯, and E♯—using both chromatic neighbours to F♯ $\hat{1}$. These two pitches are then presented simultaneously in a move that merges the motivic premise of neighbour motion with the sixth. The lower voice in the right hand arrives on G♮ below E♯, thereby forming another augmented-sixth chord. Additional stemming in the left hand of bar 109 introduces extra syncopation in the second half of the bar. This has a braking effect beneath the augmented-sixth chord, in preparation for the forthcoming ascent, and also highlights this chord. In bar 110, the cadenza-like writing plays on upper and lower neighbours to B, D, and E♯. The last pitch of the augmented-sixth chord, G♮, is featured in the descent in an arpeggiation of the chord.

Many of the original premises remain unresolved following the structural descent in bar 103. The coda gradually concludes all of the remaining issues. Metrically, the coda stabilises, realigns, and normalises displacement. From *Tempo primo*, there is focus on a straightened version of the **B1** figure leading to an augmented sixth. Half-bar shapes predominate in all but the trill bar. The syncopated figure from **B1** is now metrically

resolved, having been straightened and completed within the confines of the bar in this, its third version. Syncopation is now only a colouring taking the form of double stemming. Even after the close of the *Urlinie*, resolution in the form of the tonic sixth-shape is needed, as is $f\sharp^1$ $\hat{1}$ in the lower register. Resolution of the foregoing heightened chromaticism and the use of augmented sixths is also necessary. The descent $\hat{5}$–$\hat{4}$–$\hat{3}$–$\hat{2}$ is reiterated and there is a large expansion of the augmented sixth in the lower register in bar 110. This is the register in which the sixth interval was set up by the introduction and in which we still need resolution. The neighbour motif has been assimilated into the premise of the sixth in the form of this chromatic chord.

The ornamentation of the augmented-sixth chord is grouped in three notes in the ascent of the right hand (the upper and lower neighbours), while four-note groups (the arpeggiation of the entire chord) are used in the descent, thereby underlying the stretch and expansion.

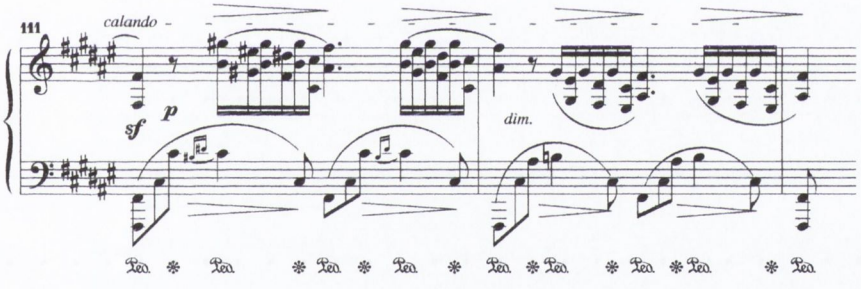



Example 5.8.4: Barcarolle, 109–111 (first beat).

Finally, in bar 111, $f\sharp^1$ $\hat{1}$ is heard in this lower register with a low bass octave—resolving the augmented-sixth chord. This begins the final section marked *calando*. The extension figure first heard in bar 15 returns and outlines $g\sharp^2$ $\hat{2}$ moving to $f\sharp^2$ $\hat{1}$—an octave higher than the beginning of the bar. The right-hand figure is then heard an octave lower in bar 112 with $\hat{2}$–$\hat{1}$ restated in the lower register. This time there is no doubling beneath the

G♯s, thus marking them out even more. Neighbour motion is thus used to summarise two of the important registers in the piece. Resolution occurred in the higher octave of f♯$^{3}$ in bar 93 following the ascent that referred to all three registers. In bar 33, the parallel passage evaded this resolution and concluded instead in the middle register. The structural descent in bar 103 occurred in the middle register on f♯$^{2}$—thereby coupling it with the higher octave (bar 93). The coda plays on the lower and middle registers with the voices of the **B1** motif and the displacement of octaves. Coupling of this structural descent finally arrives with the lower register in bar 111, and is followed by play on these two registers.

The z motivic complex is hinted at in the tenor voice of bar 111. The neighbours a semitone below and a tone above C♯ $\hat{5}$ form a reminder of the importance of this pitch throughout the work. The goal sixth is heard as the resolution of the extension figure in the middle register (f♯$^{2}$ over a♯$^{1}$) and then in the lower register without octave accompaniment, thereby reinforcing this octave coupling.

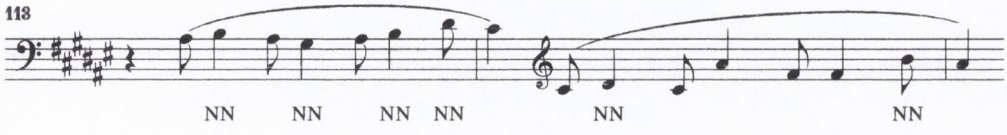



Example 5.8.5: Barcarolle, 111–113 (first chord).

In bar 113, the interval of a sixth that had been set up in the introduction, and deliberately avoided throughout the whole piece, is finally heard on the first beat over a bass octave F♯. This provides the ultimate conclusion of the A♯/A♮ alternation. The importance of the interval of a sixth is evident in the relationship between A♯ and F♯, and between A♮ and F♯. Generally, it is used in the contour of melodies, when doubling a sixth below, and in the extension figure first heard in bar 15 (which comes into its own in the coda). The augmented sixth (as a migration of the neighbour preoccupation into the realms of harmony) is a more disruptive manifestation of this preoccupation and acts as an agent of tension, creating a demand for continuation and resolution. This is introduced as a chromaticism in **B2**. It becomes more prevalent before the final descent and increases its

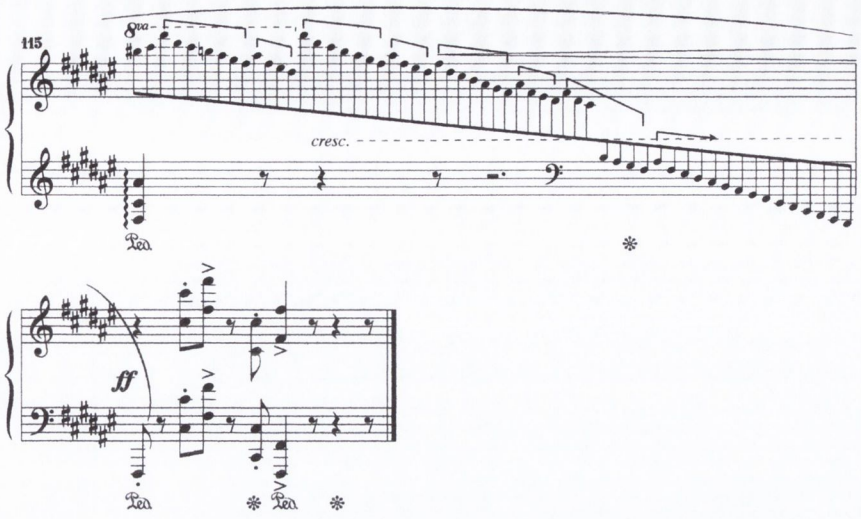
demand for resolution. Finally, its extension in bar 110 provides its development, and its resolution onto the tonic occurs in bar 111. Fundamentally, the specific interval of a sixth between a♯ and f♯[1] over octave F♯ provides an ultimate goal of the work. This was established by the introduction and hinted at in various keys throughout the work, highlighting important voice-leading, local harmonic goals, and octave coupling. Final achievement of this specific goal only arrives in bar 113—long after the completion of the final descent.

The tenor melody that begins in bar 113 is notated below in Example 5.8.6.



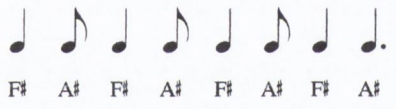

Example 5.8.6: Barcarolle, 113–115 (first beat), showing neighbour notes.

Left-hand triads now have the melody in the tenor voice, taking over from the register of the sixths. This consists of two phrases, with the melody moving from a♯ (the lower note of the long-awaited sixth) up a third to c♯[1] in the first phrase, and from c♯[1] up a sixth to a♯[1] in the second. The concentration in this melody on A♯ and C♯ and, in particular, their upper and lower neighbours (elements of the z motivic complex), refers back to the opening melody. It is as if Chopin deliberately returned to the basis of the original melody for conclusion after the various themes, tempi, and sections. This melody recapitulates the main tonal and motivic concerns of the piece. The right hand, meanwhile, accompanies with a running passage that highlights the pitches G♯ falling to F♯, B♮ resolving to A♯, and B♯ rising to C♯, thereby recapitulating the main structural pitches of the piece and the motivic importance of neighbour motion. It will be recalled that this neighbour motion was one of the fundamental elements of the z complex and, within that context, focused on $\hat{3}$ and $\hat{5}$. This can be compared to the *dolce sfogato* section in that it has a similar contour and pitch emphasis. It resolves on the first beat of bar 115, and the peak of the right-hand ascent arrives a semiquaver later. A swift, solo right-hand descent is heard over the bar.




Example 5.8.7: Barcarolle, 115–116, with grouping annotations.

This outlines the descent of a sixth from F♯ to A♯ in the rhythm of crotchet–quaver, a fact also noted by Rosen (p. 394).




Example 5.8.8: Rhythmic reduction of Barcarolle, 115.

This descent of sixths hugely expands this intervallic goal and summarises the entire registral span of the piece. Heavy emphasis on A♯ and its relation to F♯ throughout the coda provides the strong resolution needed following the prominent use of A♮—melodically, harmonically, and structurally. The final group in the descent enters on the quaver but continues in a smooth descent. This is a syncopated entry and provides an extension and stretch towards the end of the descent. This brakes the forward momentum, behaving like a *ritardando*. It arrives on low FF♯ on the first beat of bar 116.

The highest registral point of the piece, $f♯^4$, is heard on the second semiquaver of bar 115. Rink notes its relation to $e♯^4$ in the similar cadenza-like passage in bar 80 (p. 212). This kind of registral connection is used to sustain long-range movement throughout the work. The whole range of registers explored throughout the piece is summarised in bar 115. This descent also answers the ascent of bar 110. Three main registers are used in this piece in a manner that constantly redefines registral goals through octave coupling. This

moulds patterns of tension and release through the avoidance and subsequent provision of resolution in each register.

The final bar begins on low FF♯ and this is followed by a quaver rest in both hands. Bare octaves C♯ to F♯ enter *ff* in similar motion. Another quaver rest is then proceeded by octaves C♯ and F♯ in contrary motion in an outward-moving gesture. Both hands have arrived and moved together, thereby redressing their previous lack of synchronicity. Accents are on the second and third beats, moving from the offbeat to an onbeat position as beat two gives way to beat three. So, syncopation and divergence between hands have both been eliminated. F♯ is heard in the three main registers in the final bar. The final $f♯^2$ is in the same register as the final descent in bar 103, as well as the initial $g♯^2$ of the introduction and the $f♯^2$ peak of the opening theme. The concept of obligatory coupling is thus brought to its natural conclusion, as this register is coupled with the lower register of bars 111 and 113.

In the penultimate bar of the work, dynamics again work against the direction of the movement. A *crescendo* is notated with the right-hand descent. The *crescendo* adds even more weight to the lowest register of the piano. Coupled with the breaking of the established dynamic premise, this provides a very powerful ending to the work.

### 5.9 Performance Interpretation

Arrau's performance seems to address many of the kinds of performance questions that would arise from identifying the premises discussed above.[7] His interpretation highlights these premises and focuses on their developments and resolutions through various technical means. It is worthwhile, therefore, examining his performance in more detail. The descent in sixths that forms the basis of the introduction is outlined by Rink.[8] Arrau demonstrates awareness of this structure by subtly holding over these intervals. The descent sounds smoother and more directed as a result. This also has the effect of stressing the need for resolution onto the sixth over the tonic. Motivic recognition is evident in bars 11 to 13, as Arrau carefully voices both lines in the right hand, bringing out shape z' and motif y. He also takes extra time on the grace notes, thereby noting their importance as neighbours. From bar 15, Arrau slightly delays the local harmonic goals with their characteristic intervals of a sixth. He then adds extra weight to the arrival of A♯ major in

[7] Arrau, *Chopin*, Philips (1985).
[8] Rink, 'The *Barcarolle*: *Auskomponierung* and apotheosis', 205.

bar 20. Displacement is highlighted in bars 28 and 29, as he accents the right-hand entries. Arrau seems to recognise the tonal importance of A♯ and A♮. He highlights the change of mode in bars 34 to 35 by taking extra time and by dynamically highlighting the change from A♯ to A♮. Throughout section **B1**, Arrau clearly articulates the separate right-hand voices. One of the ways in which he achieves this effect is by accenting the beginning of the alto version of the **B1** motif. In **B1'**, he takes extra time before playing the bass octaves in bars 51, 53, and 57. He also plays these goals louder than the surrounding dynamic. This makes the harmonic motion from A♮ to G♯ to F♯ even more apparent. It also highlights the fact that the **B1** motif omits its slur and now repeats its initial pitch on the first beat of the bar with the bass octave. Arrau plays without much pedal in the *meno mosso* section. This helps to keep the chord changes clear and highlights the alternation in the right hand between the various forms of the sixth. In **B2'**, he accents the fourth-beat entries—thereby stressing their offbeat, displaced character. He notes the arrival of the goal interval in the tonic in bar 113 by slowing into that bar. Finally, in bar 115, Arrau takes extra time on the A♯ prior to the final, extended section of the descent. This adds weight to the re-assertion of this pitch following the focus on A♮ throughout the piece.

The registral premise of the Barcarolle seems to be addressed by both Lipatti and Rubinstein.[9] In bar 60, Lipatti plays a *rallentando* up to high a♮$^3$. He treats the ascent to a♮$^3$ in bar 70 in the same manner, thereby highlighting this registral connection. Rubinstein uses dynamic levels to differentiate register. Throughout **B1** and **B1'**, for instance, the flourishes up to the higher register are lighter.

Murray Perahia's recording of the Barcarolle provides another fascinating interpretation.[10] His playing of the introduction sounds directed—as if it seeks resolution. Indeed this directed, forward motion seems to be a feature of Perahia's playing in this piece. He uses different timbres to differentiate between voices. From bar 11, for instance, both voices in the right hand are clearly audible and distinct. He highlights changes of mode from major to minor by taking time and changing dynamic. This occurs in bars 16 to 17 and bars 34 to 35. One example of his directional playing can be found in bar 38. Perahia brings out the pitches that are double stemmed in the alto voice with a singing legato. This leads smoothly into section **B1**. The main characteristic of his playing in **B1** is

[9] Lipatti, *Chopin*, EMI Classics (1997); Arthur Rubinstein, *Chopin: Nocturnes, Barcarolle, Berceuse*, Magic Talent CD 48064 (1997), recorded in 1937.
[10] Murray Perahia, *Chopin: Impromptus, Fantaisie Op. 49, Barcarolle, Berceuse*, CBS Masterworks MK 39708 (1985).

his use of voicing. Both voices in the right hand sing out above the accompaniment but yet sound independent from each other. The upward flourishes are played at a lighter dynamic level, thereby enhancing their aural connection. Perahia's voicing technique is heard again from bar 103. In **B1'** Perahia adopts a similar approach to Arrau's in that he takes extra time before the arrival of each new harmonic goal. Perahia's performance of this piece has a definite sense of direction and line. The chapter on analytical methodology referred to Perahia's interest in Schenkerian theory—in particular when applied to the music of Chopin. Perhaps this analytical approach has influenced his playing and contributed to the coherence of his interpretation.

### 5.10 Conclusion

The Barcarolle is an extremely complex, late work. This examination does not purport to offer an all-encompassing analysis. Instead, it focuses on what might be regarded as some of the work's most important premises and traces their development throughout the piece. The combination of voice-leading and rhythmic analyses helps us to understand more about how the Barcarolle was written. It goes some way towards explaining how Chopin formed the waves of tension and release within the work while maintaining overall forward direction. Tonal and rhythmic events (and premises) conspire to serve any given premise. This is evident in the use of metric alignment in the service of the sixth, and in the use of displacement to highlight registral connections. Another example of tonal and metric/rhythmic events conspiring can be heard in the use of a metrically-shifting thematic motif in **B1**. The metric position of this motif is shifted, concentrated, and is finally metrically resolved.

Many of these premises work on both small-scale levels and on larger levels. The introduction is a structural upbeat, but it is also a generator of most of the main premises that are then developed throughout the work. The z motivic complex can be found on many levels. It is evident at the middleground level in the use of neighbour motion and in the frequent use of filled-in third descents. Displacement (and metric realignment) is used in surface syncopation, but also, as mentioned above, in conjunction with tonal premises on a deeper level. These include the z motivic complex (in particular the z' shape in the **B1** figure), the sixth, and registral connections. The sixth is used in the contour of the main themes, in highlighting structural pitches in each thematic context, and in the texture. It is used to emphasise harmonic and tonal movement on a deeper level, and its chromatic

alteration in the form of the augmented sixth adds tension and increases the need for ultimate resolution in the form of the original motivic sixth in the coda. The play between A♮ and A♯ appears at the surface level of the piece, but also migrates into the harmonic structure of the work. Octave coupling is used to highlight other premises and to connect voice leading on surface levels as well as between sections. It is also used in a much more fundamental way in conjunction with the other premises in structuring the dramatic plot of the work.

This thesis does not include a complete voice-leading graph of the Barcarolle due to the comprehensive nature of Rink's graph. Voice leading examples (using 'strict use' notation) have been included where specific points need graphic explanation or where my interpretation of a given passage differs from Rink's.[11] The synthetic analytical method (combining four aspects of recent analytical developments as defined on page 1) remains the same as that applied to all other works in this thesis, as Rink's graph replaces my own. This method reveals how tonal and rhythmic manipulation co-ordinate in reinforcing particular premises, and how the Barcarolle adopts and develops many of the premises and compositional techniques that were evident in earlier works. It also demonstrates how these premises work together in forming the structure or dramatic narrative of this work, and can therefore present interpretive questions for the performer. Indeed many of the recordings examined seem to deal with these questions in cogent and compelling ways.

[11] This approach is similar to that adopted in the case of Opus 27 where Salzer has published full graphs of both Nocturnes.

# Chapter 6: Conclusion

This thesis presents a novel approach to analysing Chopin's works using a synthesis of four specific components of recent analytical developments: a focus on rhythm; emphasis on the foreground; graphing based on 'strict use' of analytical notation; and the concept of work 'strategy' or 'premise'. This conclusion will recapitulate the findings resulting from the application of this analytical approach. Another advantage of this synthetic method lies in the fact that it raises further questions—both theoretical and practical, some of which will be outlined during the course of this chapter.

## 6.1 The Integration of Pitch and Duration in the Service of Premises

Patterns of pitch and duration conspire in developing premises. In the Barcarolle, the growth of many of its premises depends on the interaction of tonal and metric techniques. For instance, displacement (another premise)—and subsequent metric realignment—is used in combination with tonal premises throughout. Within the **B1** figure, motif x appears in different metric positions with different accentuation. The metric position of this figure is shifted, concentrated, and finally metrically aligned. Metric displacement and alignment also serve the premise of the sixth as a tonal goal. When this interval is heard in its tonic form, it is metrically displaced and harmonised by chord vi (bar 10). However, when it arrives over a bass octave on the first beat of the bar it is not in the tonic key (bars 15, 18, and 20). Therefore, the final arrival of this tonal goal on the first beat of the bar in bar 113 adds significant weight to its resolution. Metric displacement is also used to highlight registral connections throughout. The Barcarolle thus provides a good example of how tonal and rhythmic manipulation co-operate in reinforcing particular premises. Other examples include both Nocturnes in Opus 48, where tonal premises interact with displacement and the premise of duple versus triple organisation.

## 6.2 The Combination of Premises in the Construction of Narrative

Premises work together to mould the dramatic storyline of each piece. Complex patterns of tension and release are formed as premises are developed and finally resolved or carried forward. This is evident in Opus 27. In the first Nocturne, the thematic material undergoes

a process of developing variation that predominantly results from the development of premises. This affects the character of the piece—contributing to its restless, developmental feeling—and ultimately arrives at the 'new theme'. In the second Nocturne, the three phases arise from the development and resolution of different premises at different stages.

Opus 48 No. 1 derives its character of contrasts largely from the interaction of its motivic material with three of its premises—displacement, major versus minor, and the contrast between duple and triple time. In the Barcarolle, the interaction of the sixth with metric position and register, for instance, demonstrates the way in which specific premises are set up and conspire in constructing the narrative of the work.

### 6.3 Tonal and Metric Ambiguity

Chopin makes effective use of ambiguity that is both tonal and rhythmic. In the Prelude in G minor, Opus 28 No. 22, the upbeat to the theme (rhythmically distinctive as it includes the only semiquaver in the entire piece) is tonally ambiguous. In some of its appearances, it seems to have two conflicting interpretive possibilities, functioning as dominant and tonic harmony at the same time—supporting $\hat{2}$ and $\hat{3}$. Obviously both readings are mutually exclusive and various performers seem to have taken a stand on one or the other possibility in their own interpretations.

Ambiguity is introduced in the surface of the piece through the use of anticipations and *appoggiaturas*. It also affects the harmonic structure of the work, as harmony conflicts with metric positioning. *Appoggiaturas* align unstable notes with stable metric locations at the foreground level. At the next deeper level of structure, unstable chords occur aligned with stable metric positions and vice versa. Thus we find the melodic use of the *appoggiatura* at the surface level migrating into the harmonic structure at a deeper level. Tonal and metric ambiguity thus combine to form a premise that permeates structural levels.

In Opus 27 No. 1, the modal ambiguity of the opening and the metric ambiguity of the left-hand grouping are reflected on an even deeper metric level in its phrase structure. The reinterpretation necessary to try to follow its phrase structure is characteristic of all aspects of this piece and contributes to its uncertain character. In both Nocturnes of Opus 27, metric and tonal stability coincide, as do metric and tonal ambiguity. They do so in supporting the main premises of each piece.

Another example of the interaction of tonal and metric ambiguity/certainty can be found in the E♭ minor Prelude, Opus 28 No. 14, in the interaction of voice leading and grouping throughout. In the Prelude in G♯ minor, Opus 28 No. 12, the unusual pacing in bars 21–28 reflects the unusual voice leading in the same bars. Tonal ambiguity and tension leading up to the point of interruption is thus further heightened by ambiguity of phrase structure.

### 6.4 Tonal and Rhythmic Hidden Repetitions

This analytical approach reveals hidden repetitions that have a rhythmic as well as melodic aspect. Opus 48 No. 1 provides a good example of Chopin's use of hidden repetition that is both rhythmic and tonal. Hidden repetitions of the basic motifs are found throughout the piece on many structural levels. However, they are constantly related to metric premises such as displacement and the contrast between duple and triple metre. For instance, the metrically displaced neighbour motif from bars 1 and 2 is heard inverted on the main beats in the bass in the same bars. After it is heard in its most natural triplet organisation, it appears (inverted) in the bass of bars 72 to 74 in a rhythmically augmented version that expands the triplet to reunite it with compound metre. Thus we encounter deeper-level hidden repetitions that are both rhythmic (the triplet) and tonal (the inversion of the neighbour motif).

In Opus 48 No. 2, rhythmic hidden repetition is evident in the last phrase of the piece. The second-beat emphasis that is a feature of the metric surface of the piece (at the bar level) is evident here at the phrase level. The beginning and ending of this piece can be thought of as forming a large hidden repetition of the minor-major premise focusing on movement from A♮ to A♯.

The motif, $\hat{5}$–NN–$\hat{5}\hat{4}\hat{3}\hat{2}\hat{1}$, in Prelude No. 16 shapes the melodic material in nested prolongations from foreground to background. The neighbour relationship, introduced first in the contrasting rhythm of crotchet triplets as G♭ NN to F $\hat{5}$, is significant on levels of pitch and rhythmic structure. In the Prelude in B♭ major, Opus 28 No. 21, the left-hand figuration introduces the main motivic material and is central to the movement and inner dynamics of the piece. For example, bars 33 to 38 form a large-scale hidden repetition of the main motivic substance. Syncopation in the form of second-quaver emphasis is related both to the shape of the inner voices and to the neighbour motif.

All six of the Preludes demonstrate rhythmic hidden repetitions of surface rhythmic characteristics in the pacing of their background form. This is further discussed below. Motivic hidden repetitions in the Barcarolle are also affected by rhythmic and metric devices—as presented in the treatment of the **B1** motif.

### 6.5 Rhythmic Relationships between Levels

Relationships between levels are rhythmic as well as tonal. Indeed there is an analogy between metric and tonal processes in the Preludes. This analytical method reveals relationships between foreground and background rhythmic structure as well as an interrelationship on all levels between rhythmic and tonal structure.

Using a durational reduction to notate the formal structure of the Prelude in D major, Opus 28 No. 5, reveals the syncopated entrance of section **B**. Syncopation is thus not simply a surface feature of the Prelude, but actually underlies the whole structure. In other words, according to this interpretation, the overall pacing forms a rhythmic hidden repetition in the structure of the piece.

In the Prelude in E♭ minor, Opus 28 No. 14, the background form reflects the surface rhythmic structure, that is, the play between duple and triple polymetric organisation. Not only is there hidden repetition in the background of foreground tonal issues, but there is also hidden repetition in the background of foreground temporal issues, and these are interdependent on all levels.

Rhythmic relationships between levels are found in all of the pieces examined, for example, the rhythmic hidden repetitions of Opus 48. However, the Preludes form more obvious and specific instances of this, as their individual rhythmic characteristics are retained from foreground to background (or, depending on the approach, from background to foreground). It would be interesting to examine other small-scale genres to see if they are constructed in a similar manner.

### 6.6. Lack of Closure in Certain Preludes

The Prelude in E♭ minor, Opus 28 No. 14, may be regarded as 'unfinished' in that its *Urlinie* does not close in a strictly Schenkerian way. Many writers regard this 'open-ended' quality as usual for this type of genre. In this instance, entertaining the possibility that there is no final descent led to the discovery of the large-scale motivic hidden repetition that forms its background tonal movement.

## 6.7 Intraopus Connections

This thesis presents a new model for investigating the relationships between multiple pieces in one opus, as demonstrated in the Nocturne chapter. Investigating how similar premises are worked out—not just in a single piece but in a pair of pieces—reveals interesting intraopus connections. In Opus 48, both Nocturnes seem to offer different answers to similar compositional premises. Both pieces deal with the same rhythmic and metric issues. This functions not only on the surface of the works but also on the background level of organisation. If the pieces are performed together, a temporal relationship may even flow through both of the pieces. It seems, however, that similarity of premise runs even deeper in Opus 27. Premises that are introduced and developed in the first Nocturne are continued and concluded in the second, thus forming a much deeper exploration of the premises throughout both works. If these two Nocturnes are performed as a pair, the continuity of these premises is made audible. The lack of complete closure at the end of the first Nocturne can be compared to the open-ended nature of some of the Preludes. Perhaps the weaker sense of closure at the end of the first Nocturne may help us hear the second as finally concluding the premises of the first.

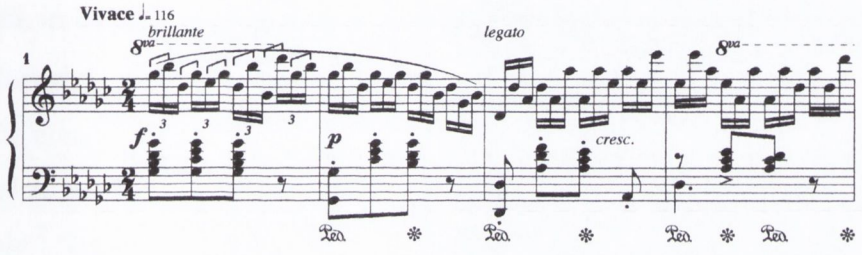
Further research could be carried out in this area. It would be interesting to examine the pairing of pieces in other Opus numbers to see what this analytical method would reveal about their intraopus connections.

## 6.8 Etudes

This synthetic analytical approach could be applied to works such as the Etudes. A brief look at some examples suggests that this might prove productive, as they seem to demonstrate quite similar techniques in the integration of pitch and rhythm. It might be interesting to investigate if their function as technical studies affects their structure.

In Etude Opus 10 No. 5, duple grouping sounds within triplet notation in support of the voice leading. The Etude sets up a premise of offbeat grouping as early as bar 1 (see Example 6.8.1). The right hand, notated in triplet semiquavers, appears as if written in a time signature of 12/16. However, these are internally grouped as pairs, creating a polymetric effect. Schenker advises: 'Even amidst the semiquaver figuration, it is worth

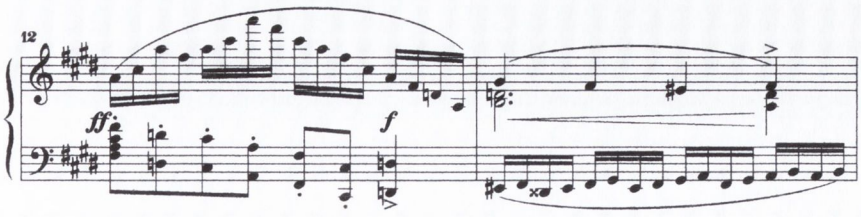
subdividing the semiquavers 3 x 2, contrary to the notational grouping of 2 x 3'.[1] This attention to grouping results in the clarification of a primary motif—D♭–E♭–D♭—referred to by Schenker as the neighbour motif. It is only on arrival on the last D♭ that coincidence with the left hand is achieved. This offbeat or syncopated play runs throughout the work in conjunction with tonal motifs. The metric organisation of this piece can be compared to that of the Prelude in E♭ minor, Opus 28 No. 14. Both are notated in triplets, although the written time signatures are in duple time, and both make a feature of duple grouping in highlighting important voice leading. This Etude thus provides a further example of how pitch and rhythmic techniques combine to support premises.




Example 6.8.1: Etude Opus 10 No. 5, 1–4, with grouping annotations.

Etude Opus 10 No. 4 provides a further example of how Chopin integrates pitch and rhythmic strategies in the service of a premise. The accented octave fourth-beat combines tonal and rhythmic characteristics to function as a catalyst, or force of change. In this way it takes on the status of a premise. It acts as a force of interruption that affects harmony, grouping, interaction between the hands as it initiates cross-over of material, and it ends phrases. It becomes aligned with harmonic disturbance and development. An example can be found in bar 12 (see Example 6.8.2). An accented octave D♮ crotchet on the fourth beat in the bass, as VI of F♯ minor, halts the flow and re-marks time and bar position. This also causes the hands to swap roles as semiquavers return to the bass.

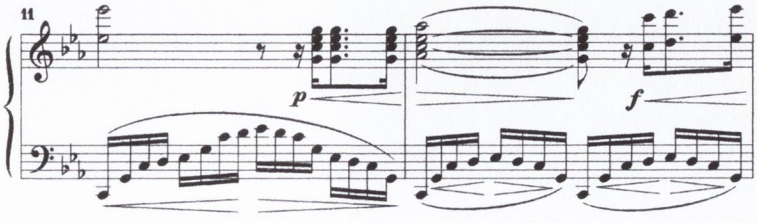
[1] Heinrich Schenker, *The Masterwork in Music: A Yearbook, vol.1* (1925), trans. William Drabkin, ed. Ian Bent, Cambridge Studies in Music Theory and Analysis (Cambridge: Cambridge University Press, 1994), 94.




Example 6.8.2: Etude Opus 10 No. 4, 12–13.

Etude Opus 10 No. 12 provides a fascinating example of tonal hidden repetition that is intimately connected to metric position and rhythm. The main motivic energy in this Etude comes from the neighbour motif. The pitches G–A♭–G dominate bars 1–21 and continue until, in bar 33, the motif rises to A♭–B𝄫–A♭, then B♭–C♭–B♭ (bar 34), and C–D♭–C in bar 35. The original pitches G–A♭–G return in bar 41 and, from bar 77 to the end, C–D♭–C governs the conclusion. Schenker comments in *Free Composition* on 'the achievement of organic relationship in genuine diminution', using the motivic design of Opus 10 No. 12 as an example.[2] 'Here we have the repetition of a mere neighboring-note figure which maintains its pitch position while the harmonic degrees (V–I, IV–I) change; yet precisely this feature contributes greatly to the cohesiveness of the whole'.[3] Schenker refers here to the use of the G–A♭–G motif over V (bars 1–2) and i (bars 11–12), and C–D♭–C over iv (bars 37–39) and i (bar 77).

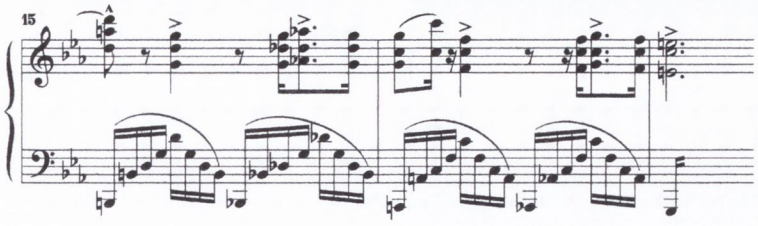
This Etude can be compared to Opus 48 No. 1. They share the key of C minor and focus on the same neighbour motif. In both pieces, hidden repetitions of this motif are heard on different levels (in surface figuration and in deeper levels), and in different rhythms and metric positions. In bars 11–12 (Example 6.8.3) of the Etude, for example, the motif begins as an upbeat with the neighbour situated on the following downbeat.




Example 6.8.3: Etude Opus 10 No. 12, 11–12.

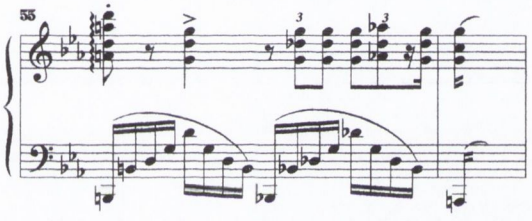
[2] Heinrich Schenker, *Free Composition*, trans. and ed. Ernst Oster (New York: Longman 1979), 98.
[3] Ibid., 100.

In bars 15–16 (Example 6.8.4), the entire motif is heard as an upbeat:



Example 6.8.4: Etude Opus 10 No. 12, 15–16.

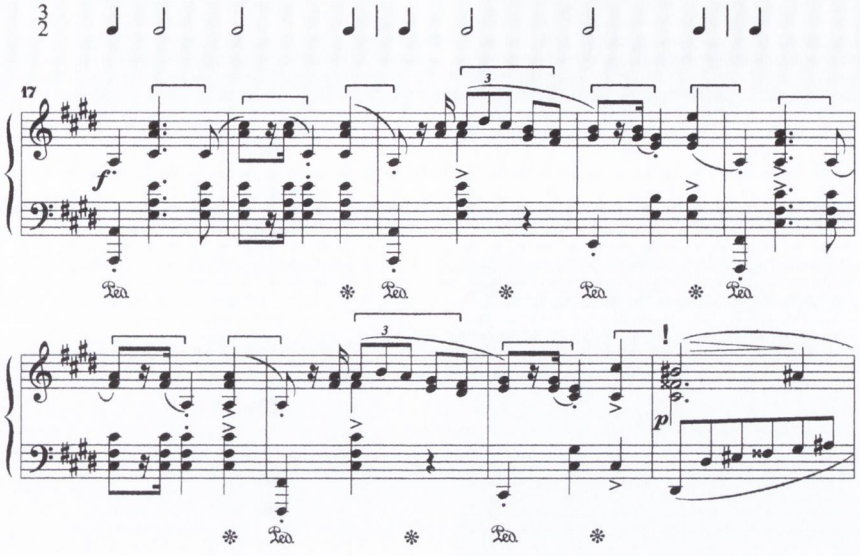
The neighbour motif is heard on $\hat{5}$ in triplets in bar 55 (Example 6.8.5)—its most natural metric organisation—in a move highly reminiscent of its treatment in Opus 48 No. 1.



Example 6.8.5: Etude opus 10 No. 12, 55.

### 6.9 Mazurkas and Waltzes

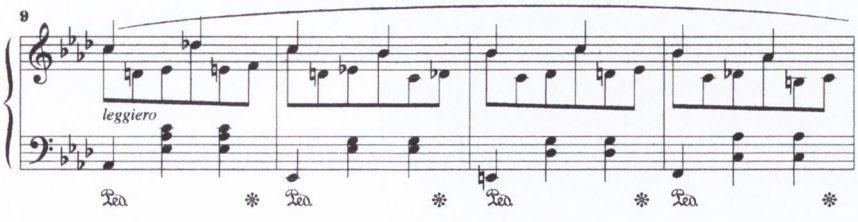
Another area of investigation that might prove fruitful would be the dance-influenced pieces such as the Mazurkas and Waltzes. Is there a difference in their treatment of rhythm as a result of their origins? Duple versus triple polymetric organisation seems to feature in many of these pieces. For instance, in the Mazurka Opus 50 No. 3, there is obvious play between duple grouping and triple metre. Bars 17–25, shown below in Example 6.9.1, demonstrate this polymetric grouping:



Example 6.9.1: Mazurka Opus 50 No. 3, 17–25, with grouping annotations.

As can be seen in the above example, there is a strong sense of duple (2/4 or 4/4) metre within the notated triple metre of this Mazurka. Accents are used to reinforce this ambiguity. On a deeper level, this seems to cause a 3/2 effect as shown by the rhythmic notation above the score. The performer must then decide whether to play entirely according to duple or triple metre, or maintain this sense of flux. Dinu Lipatti's recording of this Mazurka underlines its ambiguous metric organisation, as he does not emphasise either grouping above the other.[4]

Chopin uses the same technique in the Waltz in A flat, Opus 42, as duple grouping is heard in the movement of the melody (see Example 6.9.2). Solomon Cutner plays these duple groupings with such clarity that it is difficult to hear it in triple metre until well into the piece.[5]




Example 6.9.2: Waltz in A flat, Opus 42, 9–12

[4] Dinu Lipatti, *Chopin: 14 Valses, Barcarolle Op. 60, Nocturne Op. 27 No. 2, Mazurka Op. 50 No. 3*, EMI Classics 7243 5 66222 2 7 (1986), Mazurka recorded in 1950.
[5] Solomon Cutner, *The Complete Recordings of Chopin*, Testament SBT 1030 (1993), Waltz recorded in 1933.

Eigeldinger discusses the origins of the name 'Mazurka' in *Chopin: Pianist and Teacher*: 'The generic name "Mazurka" covers three popular dance forms, all in fact quite distinct: the Kujawiak, the Mazur, and the Oberek. All three are in triple time, with the principal accent on the weak beats (second and occasionally third)'.[6] It would be interesting to use this analytical method to investigate any stylistic differences that might characterise these forms—their rhythmic structures or use of premise, for instance.

### 6.10 Stylistic Development

This method of investigation raises the question of whether or not Chopin's integration of rhythmic and tonal techniques becomes more complex and moves deeper into structural levels in his later works. This might be the case—particularly in light of the deep connections between premises in the Barcarolle. Another path for future research lies in the chronological development of Chopin's notational skills. Richard Hudson writes: 'In his earlier works Chopin frequently employs terms to describe mood or rhythmic flow. After the Op. 24 Mazurkas, written in 1835 and published in 1836, there is a steady decline in the use of such terms, as well as in the number of metronome markings'.[7] This may have been due to Chopin's increased ability and skill in incorporating rhythmic and temporal information into his musical notation.

### 6.11 Stylistic Influence

This analytical method has been used to reveal connections between different pieces by the same composer. Could it also be used to trace stylistic influences between different composers? As previously discussed, Samarotto has developed a theoretical framework to help analyse and understand temporal flexibility in Beethoven's late music.[8] Various analysts have noted a stylistic connection between the works of Chopin and Beethoven.

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[6] Jean-Jacques Eigeldinger, *Chopin: Pianist and Teacher as seen by his pupils*, trans. N. Shohet (Cambridge: Cambridge University Press, 1986), 145, n. 169.

[7] Richard Hudson, *Stolen Time: The History of Tempo Rubato* (Oxford: Clarendon Press, 1994), 179, with reference to Eigeldinger, *Chopin: Pianist and Teacher*, 121 n. 99.

[8] Frank Samarotto, 'A Theory of Temporal Plasticity in Tonal Music: An Extension of the Schenkerian Approach to Rhythm with Special Reference to Beethoven's Late Music', (Ph.D. diss., City University of New York, 1999).

Wayne Petty isolates examples of Beethoven's influence on Chopin's compositional style, focusing largely on thematic and harmonic connections.[9] Ernst Oster draws significant comparisons between Chopin's *Fantaisie-Impromptu* and Beethoven's 'Moonlight' Sonata, including hidden repetitions of tonal motifs and a discussion of their rhythmic treatment.[10] Oster's article goes some way towards explaining Chopin's reluctance to publish this work:

> The real explanation is that Chopin possessed the modesty of a truly great man, and a feeling of responsibility toward art that did not permit him to publish the *Fantaisie-Impromptu*. To him it was not an authentic, not an independently wrought composition. And even it were entirely obscure, for Chopin it was only a kind of study after Beethoven, and he made his decision accordingly.[11]

The application of the synthetic methodology developed in this thesis to the work of Beethoven could reveal more connections in the domain of rhythmic structure that might prove influential to Chopin's style.

### 6.12 'Compositional Rubato'

An interesting theoretical question arises as a result of the perceived temporal flexibility that is created by Chopin's imaginative use of rhythm: To what extent do these notated rhythmic effects create something that might usefully be called 'compositional rubato'? 'Compositional rubato' occurs when perception of time is altered by a change in the pacing of musical events conveyed through the notation and resulting in a perceived metric fluidity/flexibility. Comments from earwitnesses refer to a temporal flexibility in Chopin's playing that contradicts the advice of strict adherence to metre that was left by Chopin's pupils. Perhaps compositional rubato might go some way towards accounting for these discrepancies.

### 6.13 Performance Rubato

This methodology raises practical questions also. For instance, whether of not performer-introduced variations from strict tempo enhance or detract from the inherent rhythmic structure of the piece. Hudson's *Stolen Time: The History of Tempo Rubato* provides a

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[9] Wayne C. Petty, 'Chopin and the Ghost of Beethoven', in *19th-Century Music* 22, no. 3 (1999): 281–299.
[10] Ernst Oster, 'The *Fantaisie-Impromptu*: A Tribute to Beethoven', in *Aspects of Schenkerian Theory*, ed. David Beach (New Haven: Yale University Press, 1983), 189–207.
[11] Ibid., 205.

detailed discussion of the many different types of performance rubato.[12] Hudson concludes that Chopin had the earlier kind of rubato (when the left hand remains steady and the right hand remains more temporally flexible) in mind when he notated the direction in the score. He provides substantial evidence in support of this assertion.[13] A performer's approach to rubato will affect the flow of time and has the potential to disturb the inner dynamic of the composition. However, a considered performance can realise and enliven Chopin's rhythmic techniques in the manner of many of the performances considered in this thesis. The increased understanding of Chopin's strategic use of rhythm derived from this analytical approach might help a performer to enhance rather than detract from these effects with rubato or other interventions.

### 6.14 Summary

The methodology presented in this thesis is distinctive due to its particular synthesis of certain key aspects of recent analytical developments: a focus on rhythm; emphasis on the foreground; strict use of analytical notation; and the relation of the above to piece strategies or premises. This conclusion has briefly summarised the findings of the application of this approach to Chopin's music. It illuminates his strategic integration of pitch and rhythm on many levels, and raises interpretive issues that can be addressed in performance. It also raises theoretical and practical questions that could lead to further research.

[12] Richard Hudson, *Stolen Time: A History of Tempo Rubato* (Oxford: Clarendon Press, 1994).
[13] Ibid., 208.

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