

Harmony and Climax in the Late Works of Sergei Rachmaninoff

by

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Preface

It has not been possible to include scores of the works analyzed in the dissertation. In many cases the analytic figures and reductions provided contain sufficient information to make scores unnecessary, but the reader is nevertheless encouraged to have copies at hand if possible. Works composed before Rachmaninoff left Russia in 1917 (Opp. 1–39) are in the public domain and may be found in numerous editions. References in the dissertation to the late concert works (Opp. 40, 41, 43, 44, and 45) and to the revised version of the Sonata No. 2, Op. 36 follow the most recent Boosey & Hawkes editions (listed in the bibliography), with the exception of Op. 41, which has no North American publisher and is available only in old Soviet editions.

References to specific locations in scores are made using measure numbers or rehearsal numbers as appropriate for a given work, and occasionally using both. In the body of the dissertation, rehearsal numbers are printed in boldface (e.g. **22**). A subscript attached to a rehearsal number indicates a specific number of measures after the rehearsal number. Thus, **22**₇ = seven measures after **22**. In the captions of figures, rehearsal numbers are abbreviated “r.” while measure and measures are abbreviated “m.” and “mm.” In the body of the dissertation and in captions to figures, works identified only by title are Rachmaninoff’s. Works not by Rachmaninoff are identified by composer, title and, where appropriate, opus number, etc.

Russian names are given in the transliterations most familiar to a general reader. Thus, “Rachmaninoff,” “Prokofiev,” “Scriabin,” “Tchaikovsky,” and “Rimsky-Korsakov,” not “Rakhmaninov,” “Prokofieff,” “Skryabin,” “Chaikovsky,” and “Rimsky-Korsakoff.” (Rachmaninoff’s preference for the “-off” spelling of his name as opposed to the “-ov” spelling is respected.) Terms in Russian are italicized in the dissertation (e.g. *nega*, *peremennost*). Such terms are without exception drawn from published research on Russian music, and transliterations follow those of the sources.

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Abstract

This dissertation develops a framework for interpreting the interaction of functional tonal structures, equal-interval chromatic structures, and modal structures in Sergei Rachmaninoff's mature compositions (1909–1940). Three areas of research are involved: 1) harmonic materials, compositional techniques, and expressive characteristics in Rachmaninoff's style; 2) chromatic and modal theories in general but with special emphasis on Russian repertoires; and 3) theories of tonal tension, expressive shape, and climax as applied to Postromantic music.

The harmonic language of Rachmaninoff's mature works may be understood as an amalgam of well formed, differentiated components drawn from the Western common practice and Russian musical traditions. I show that different harmonic components have different rhetorical associations in the works studied; that different components are generally associated with different locations in form; and that acknowledging the interaction of different kinds of harmonic structures in a work contributes significantly to an understanding of expressive trajectory and large-scale organization, and—especially—to exegesis of climax events.

Previous studies of Rachmaninoff's works have with rare exceptions downplayed the significance of both Russian idioms and climax in his works. I argue that reevaluation is warranted on both counts. Although scholars have generally treated climax events as problems to be contained in tonal analysis, I treat them as core events around which to organize an analysis using a strongly tension-oriented approach.

Chapters 1 and 2 address issues of form and harmony in Postromantic works in general and Rachmaninoff's works in particular. I develop a theory of *hyperdissonance* to aid interpretation of extraordinary harmonic tensions and formal problems that resist explanation in conventional tonal and *Formenlehre* terms. Chapter 3 outlines the rhetorical associations that the variegated components of Rachmaninoff's harmonic

language have. Chapters 4 and 5 address equal-interval chromatic structures (octatonic, hexatonic, whole-tone) and modal structures (church modes, *peremennost*, *nega*) in Rachmaninoff's mature works. In Chapter 6, the interpretive apparatus of Chapters 1 through 3 and the technical apparatus of Chapters 4 and 5 are applied to Rachmaninoff's last three compositions: *Rhapsody on a Theme by Paganini*, Op. 43 (1934), Symphony No. 3, Op. 44 (1936), and Symphonic Dances, Op. 45 (1940).

Chapter 1

Introduction

Rachmaninoff does not retreat before extremely complex problems, having worked out already his technical methods and the characteristics of his style. Of these, the greatest power in his creative hands and his favorite is harmony—which is full of colour, lush, often bold and sometimes even rather tough.¹

Rejecting a cherished *modus operandi* of Rachmaninoff scholars, I will not begin this study with a defense of the composer. If recent trends can be trusted, the scholarly tide has turned and a fuller reckoning of his achievements may be forthcoming. The brutal dismissal of the composer in the 5th edition of *Grove's Dictionary of Music and Musicians* has been supplanted by Geoffrey Norris's far more sympathetic account in recent print and online editions; and, as the preliminary review of literature in this chapter testifies, several high-grade dissertations and books have appeared during the last quarter-century.² These advances provide traction for new research on Rachmaninoff's works.

The topic of this dissertation developed from a desire to better understand certain complex chromatic and modal structures in Rachmaninoff's mature works. Three main questions are addressed:

1. How do the special chromatic and modal structures identified in the dissertation interact with the strong functional tonal bases of Rachmaninoff's works?

¹ A.V. Ossovsky, writing in 1904; quoted in Stuart Campbell, *Russians on Russian Music, 1880–1917* (Cambridge: Cambridge University Press, 2003), 176.

² Rosa Newmarch, "Rakhmaninov, Sergey Vassilievich," in *Grove's Dictionary of Music and Musicians*, ed. Eric Blom (New York: St. Martin's Press, 1954); and Geoffrey Norris, "Rachmaninoff, Serge," in *Grove Music Online*, ed. Laura Macy, <http://www.grovemusic.com> (accessed March 16, 2009).

2. Can an interpretive framework be developed that allows the analyst to gather meaning from the identification of special chromatic and modal structures, without denying the desire to hear Rachmaninoff's works as powerfully integrated and tonally unified?
3. What implications does awareness of special chromatic and modal structures have for the interpretation of form, expressive/rhetorical trajectories, and climax events?

The dissertation incorporates three distinct areas of research: 1) harmonic materials, compositional techniques, and expressive characteristics in Rachmaninoff's mature style; 2) chromatic and modal theories in general but with special emphasis on Russian repertoires; and 3) theories of tonal tension, expressive shape, and climax in late Romantic and Postromantic music. I have therefore distributed the requisite survey of literature over multiple sections in the dissertation. Incorporated into this introductory chapter is a survey of pertinent sources concerned primarily or wholly with Rachmaninoff's compositions and a preliminary review of chromatic theories. The topics in Chapters 2 and 3 of the dissertation emerge from a more extensive review of literature on chromatic theory, the analysis of Postromantic works, and tonal tension and climax. Chapters 4 and 5 incorporate a survey of literature on chromatic and modal structures in Russian music.

The selection of harmony as a main focus for study is not arbitrary. As Ossovsky's comments (quoted at the head of the chapter) indicate, Rachmaninoff's highly individual pitch language was noticed quite early in his career. Even in his early compositions there is a "boldness"—a "toughness," even—of harmony, which got amplified in the jagged, intensely chromatic works of the composer's later years. I suggest that this boldness remains to be understood, and that it involves not just a high level of local dissonance resulting from complex linear elaboration of functional tonal syntax, but also, crucially, special chromatic and modal structures that have as yet been largely unexamined in his music.

The boldness was recognized and valued by Rachmaninoff's Russian contemporaries and by later Soviet musicologists. K.A. Kuznetsov observed in 1945 that Rachmaninoff's "musical language is invariably progressive even if permanently connected with sane foundations of Russian and world classicism," and that the

“harmonic boldness” (Kuznetsov uses the same term as Ossovsky) of works composed in the 1910s “exemplifies a certain tribute paid by him...to modernism.”³ Such remarks seem mildly astonishing to us in an academic culture that has conventionally considered Rachmaninoff to be, as Gerald Abraham put it, a “pale shadow” of his Russian musical forebears.⁴ When, writing at various points in the 1940s, Kuznetsov, Soviet musicologist Daniel Zhitomirski, and Russian-born writer Nicholas Slonimsky all point out, as Geoffrey Norris has done more recently, similarities between Rachmaninoff’s and Prokofiev’s works, conventional musicological wisdom about Rachmaninoff is turned on its head.⁵ Norris is explicit about the new features of works composed by Rachmaninoff after leaving Russia in 1917, noting their “biting chromaticism,” “curious, shifting harmonies,” “rhythmic incisiveness,” and “almost Prokofiev-like grotesquery,” though he provides no analytic support for these points.⁶

I will go somewhat further than Norris in the initial chapters of this study, suggesting and demonstrating through analysis certain similarities between Rachmaninoff and not just Prokofiev but a number of other composers with whom Rachmaninoff has traditionally been contrasted, not compared—Rimsky-Korsakov, Scriabin, Mahler, Richard Strauss, and even Shostakovich—before making a strategic retreat to ensure that Rachmaninoff’s own style does not disappear under the weight of too many comparisons. As Zhitomirski put it, Rachmaninoff “overcame the stylistic inertia of modernism by selecting and transfiguring in his own way the most fresh and vital musical agglomerations of the first quarter of the century.”⁷ Barrie Martyn has echoed this observation more recently, noting that “the fundamental fact of Rachmaninoff’s place in Russian musical history is that he stands Janus-like between the old Russia and the new, looking back to the flowering of Russian nineteenth-century ‘classical’ music as also ahead to the first generation of Soviet Composers.”⁸

³ Quoted in Joseph Yasser, “Progressive Tendencies in Rachmaninoff’s Music,” *Tempo* 22 (1951-52): 21.

⁴ Gerald Abraham, *A Hundred Years of Music*, 4th ed. (London: Duckworth, 1974), 248.

⁵ Zhitomirski and Slonimsky are quoted in Yasser, “Progressive Tendencies,” 23.

⁶ Norris, “Rachmaninoff, Serge.” His full-length biography is not much more detailed. See Geoffrey Norris, *Rachmaninoff* (New York: Schirmer Books, 1994).

⁷ Quoted in Yasser, “Progressive Tendencies,” 22.

⁸ Barrie Martyn, *Rachmaninoff: Composer, Pianist, Conductor* (Aldershot, England: Scolar Press, 1990), 3.

Overview of the Repertory and Preliminary Survey of Literature

Detailed analyses of Rachmaninoff's compositions are rare in the scholarly literature. The well-known biographies of the composer written by Sergei Bertensson and Jay Leyda, John Culshaw, Geoffrey Norris, and Barrie Martyn contain only superficial analytic notes, though a wealth of background and contextual information.⁹ Most dissertations on Rachmaninoff's works have been addressed to the performer or general reader.¹⁰

Among the relatively few serious studies of Rachmaninoff's music that have appeared, the late works have been generally neglected, despite a general agreement that the mature style, represented by works composed from the 1910s through the 1930s, has unique characteristics in relation to the repertory in general and Rachmaninoff's earlier works in particular. The most thorough study of Rachmaninoff's harmonic language yet produced, Robert Cunningham's impressive dissertation of 1999, includes in-depth analyses of several of the Op. 33 and Op. 39 Etudes-Tableaux (1911, 1917), but does not include any music composed after 1931 and considers only one work composed after 1917, the "Corelli" Variations, Op. 42 (1931), which cannot be called Rachmaninoff's most analytically challenging late composition.¹¹ Charles J. Smith's short, unpublished study of Rachmaninoff's chromatic techniques deals with works Rachmaninoff composed before leaving Russia.¹² David Cannata analyzes the tonal design and form of the Symphony No. 3, Op. 44 (1936) in his important and scholarly 1999 book (developed from a dissertation of 1992), but he does this as much by examining manuscripts and

⁹ Sergei Bertensson and Jay Leyda, *Sergei Rachmaninoff: A Lifetime in Music* (New York: New York University Press, 1956); John Culshaw, *Rachmaninov* (New York: Oxford University Press, 1950).

¹⁰ See for example Heejung Kang, "Rachmaninoff's *Rhapsody on a Theme by Paganini*, Op.43: Analysis and Discourse" (D.M.A. diss., University of North Texas, 2004); Pamela Wilder, "Sergei Rachmaninoff: Understanding the Composer through the Etudes-Tableaux, Op. 33" (D.M.A. diss., University of Alabama, 1988); and Glenn Winters, "An Analysis of Sergei Rachmaninoff's Preludes, Opus 23 and Opus 32, and Etudes-Tableaux, Opus 33 and Opus 39" (D.M. diss., Northwestern University, 1986).

¹¹ Robert E. Cunningham, Jr. "Harmonic Prolongation in Selected Works of Rachmaninoff, 1910-1931" (Ph.D. diss., The Florida State University, 1999).

¹² Charles J. Smith, "Is It Original, Or Is It Good? The Paradox of Rachmaninoff's Intra-Tonal Chromatic Harmony" (Paper delivered at the Rhodes International Rachmaninoff Conference October 23, 2005).

detailing compositional process as by analyzing the music itself.¹³ The Symphonic Dances, Op. 45 (1940) have yet to be seriously examined, as do the Piano Concerto No. 4, Op. 40 (1926; revised several times) and the *Three Russian Songs*, Op. 41 (1926).

Scholarly treatment of works composed before 1917 is more erratic. The many important vocal works composed by Rachmaninoff during the 1910s have been neglected. The Op. 34 and Op. 38 songs (published in 1912 and 1916, respectively) and the choral symphony *The Bells*, Op. 35 (1913) have yet to enter into the scholarly discourse. Stephen H. Prussing's dissertation on the choral *Vespers*, Op. 37 (1915) is the only substantial, analysis-oriented document about the work.¹⁴ Not surprisingly, piano works from all periods have received more attention; but here the tendency toward performer-oriented documents is especially noted. Heejung Kang's recent dissertation on the *Rhapsody on a Theme by Paganini*, Op. 43 (1934) is representative of such documents.¹⁵ This document is perhaps more analytic in orientation than most, but aims to demonstrate that conventional tonal and stylistic principles apply relatively unchanged; the work is treated, albeit lovingly, as outdated. A similar perspective is common even among serious analysts of Rachmaninoff's works. For example, in his dissertation on Rachmaninoff's symphonies, Dana Collins states his central point as follows: "the harmonic analysis traces and helps evaluate [Rachmaninoff's] progression from a daring to an anachronistic composer."¹⁶ I reject this view as too limited, and believe that rigorous study of Rachmaninoff's later works must be undertaken to overturn such blanket evaluations of his late style.

In part to fill this vacuum, and in part because I believe Rachmaninoff's later works are richer and more complex than his earlier ones, I focus in the dissertation on works composed after 1909, and especially on the relatively few works composed after 1926.¹⁷ With the exception of a few shorter passages meant to demonstrate core

¹³ David Butler Cannata, *Rachmaninoff and the Symphony* (Innsbruck: Studien-Verlag, 1999).

¹⁴ Stephen H. Prussing, "Compositional Techniques in Rachmaninoff's 'Vespers, Opus 37'" (Ph.D. diss., The Catholic University of America, 1980).

¹⁵ Heejung Kang, "Rachmaninoff's *Rhapsody on a Theme by Paganini*, Op.43: Analysis and Discourse" (D.M.A. diss., University of North Texas, 2004).

¹⁶ Dana Livingston Collins, "Form, Harmony, and Tonality in S. Rakhmaninov's Three Symphonies" (Ph.D. diss., The University of Arizona, 1988), abstract.

¹⁷ Rachmaninoff composed nothing of substance between 1917 and 1926.

techniques or to show precedents for complex structures in later works, all of the analyses in this study are of works from 1909 or later.

Cannata has divided the composer's output into four periods: 1890–1896 (Opp. 1–16), 1900–1908 (Opp. 17–28), 1909–1917 (Opp. 30–39), and 1926–1940 (Opp. 40–45), which for the sake of clarity I refer to as the “early Russian,” “middle Russian,” “late Russian,” and “exile” periods, respectively.¹⁸ For Cannata, *Isle of the Dead*, Op. 29 (1909) sits between periods, and represents a landmark in Rachmaninoff's development. The seventeen opuses written between 1909 and 1940 (*Isle of the Dead* through the Symphonic Dances, Op. 45, the last composition) show Rachmaninoff's style in varying degrees of its full maturity, and, while a number of earlier works are as or more famous (for example the Concerto No. 2, Op. 18, the Symphony No. 2, Op. 27, several of the Op. 23 preludes, and of course the C# minor prelude, Op. 3, No. 2), it is to the later works that one must turn if the composer's development is to be charted. In this study, particular attention will be paid Rachmaninoff's last three compositions, all of which are large concert works: the *Rhapsody on a Theme by Paganini*, the Symphony No. 3, and the Symphonic Dances. This choice has been made partly because the characteristics and techniques described in this study are particularly evident in Opp. 43–45, and partly because these three works have received scant treatment in the scholarly literature.

The Compound Harmonic Syntax of Rachmaninoff's Mature Works

Analysts of Rachmaninoff's works have generally concentrated on demonstrating the music's tonal and/or motivic coherence. Comparatively little attention has been paid to ways that sharp contrasts—harmonic, rhetorical, motivic/thematic, etc.—are set up and exploited.¹⁹ Rachmaninoff had something of a Dionysian side as a composer, which comes through especially clearly in works from the late Russian and exile periods. Apollonian analytic approaches disguise the extent to which he was, like many Russian composers before and after him, an eclectic composer in whose music the fusion of different melodic-harmonic idioms sometimes seems as much a mad improvisation as a

¹⁸ Cannata, *Rachmaninoff and the Symphony*, 65.

¹⁹ As discussed below and in Chapter 6, Cannata's analyses of Rachmaninoff's large concert works are exceptions; they are very “problem-oriented.”

conventionally-formed musical argument. This is not to say that a convincing argument is not to be found, only that, as Gerald Abraham put it, “compositional superabundance”—textural, melodic, and especially harmonic—is a recognizable characteristic of Rachmaninoff’s style.²⁰ Abraham means the term disparagingly, but it need not be taken so. In my view, the superabundance is not just on the musical surface (“a lot of notes”), but something deeper that emerges from Rachmaninoff’s unusual position as an inheritor of two traditions: the conventional European tonal practice and the less conventional nineteenth-century Russian practice. No other composer absorbed both as fully as Rachmaninoff did. In the works studied, I recognize a confluence of three musical streams. One is generic; two have distinctly “Russian” overtones. These constitute three components of a rich, compound harmonic syntax:

1. Functional tonal organization.
2. “Fantastic” equal-interval chromatic structures.
3. Special modal structures.

Each category is outlined in brief below, preliminary to more detailed discussion in later chapters.

Functional Tonal Organization

The first and, in terms of structure if not necessarily expressive content, most important component is diatonic-functional tonal organization, which forms the basis of Rachmaninoff’s works even at their most tonally advanced. By functional, I mean goal-oriented tonal organization in which root-relations by perfect fifth and tendency tone resolutions are critical. In the analytic diagrams in the dissertation, functional tonal patterns are often represented using an adaptation of the formula outlined by Marion Guck and also used by Steven Laitz as the basis of his “phrase model.”²¹ Authentic tonal progressions are represented by the formula $T_1 - (x) - PD - D - T_2$, where T_1 and T_2

²⁰ Gerald Abraham, “Rachmaninow,” in Friedrich Blume, ed. *Die Music in Geschichte und Gegenwart* (Kassel: Barenreiter, 1949), 10:1843.

²¹ Marion Guck, “The Functional Relations of Chords: A Theory of Musical Intuitions,” *In Theory Only* 4 (1978): 29-41; and Steven G. Laitz, *The Complete Musician*, 2nd edition (Oxford: Oxford University Press, 2008), 291-96.

indicate initial and goal tonics, D indicates dominant function, PD indicates predominant function and (x) indicates any number of potential contrapuntal and harmonic expansions of the initial tonic.²² Recognizing that, as Anatole Leikin has put it, “in Rachmaninov, plagality becomes quintessential,” subdominant-oriented tonal progressions (rarer than authentic, but sometimes structurally significant in the works analyzed) are represented by the formula $T_1 - (x) - SD - T_2$, where SD represents subdominant function (as distinct from predominant function).²³

As a young composer, Rachmaninoff was strongly influenced by Moscow-based composers Tchaikovsky and Taneyev, and if, as Joseph Yasser argued a half century ago, Rachmaninoff outgrew the Muscovite aesthetic and harmonic limitations fairly early in his career, he nevertheless depended throughout his career on functional tonal patterns and goal-oriented, arc-shaped phrase designs derived from common-practice models more than St. Petersburg composers Mussorgsky or Rimsky-Korsakov did.²⁴ Indeed, arc-shaped melodic structures, and the clear departure-return strategies they suggest on various scales (discussed more fully in Chapter 2), may be Rachmaninoff’s principle inheritance from Tchaikovsky. The prominence of arc shapes in many musical dimensions (melodic contour, harmonic organization, form) strongly differentiates Rachmaninoff’s works from those of more progressive Russian composers working at the same time (especially Scriabin and Stravinsky). Although Rachmaninoff’s harmonic language can be considerably more adventurous and variegated than is generally recognized, expressive trajectories retain a basis in nineteenth-century models.

This has encouraged many scholars to approach Rachmaninoff’s works entirely through the door of the German common practice and its late-Romantic extensions. Cunningham, whose detailed analyses are easily the best yet produced by a Rachmaninoff scholar, speaks very much from within the Schenkerian tradition even as he addresses the tonally complex compositions of the late Russian and exile periods.

²² When unambiguous, conventional Roman numerals and figures are also used.

²³ Anatole Leikin, “From Paganism to Orthodoxy to Theosophy: Reflections of Other Worlds in the Piano Music of Rachmaninov and Scriabin,” in *Voicing the Ineffable: Musical Representations of Religious Experience*, ed. Siglind Bruhn (Hillsdale, NY: Pendragon Press, 2002), 37. Cunningham’s analyses also recognize the possibility of structurally significant subdominants. On the other hand, the “plagality” of Russian music is challenged in Marina Frolova-Walker, “On ‘Ruslan’ and Russianness,” *Cambridge Opera Journal* (1997), 21-45.

²⁴ Yasser, “Progressive Tendencies.”

Cunningham extends the Schenkerian perspective in moderate ways: by referring to Daniel Harrison's influential dualist theory, by acknowledging Deborah Stein's recognition that, in late tonal music, the "plagal axis" may occasionally match the tonic-dominant polarity in structural significance, and by incorporating Howard Cinnamon's work (also undertaken from within the Schenkerian tradition) on equal division of the octave in Liszt's music.²⁵ However, Cunningham's stated goal is a fundamentally conservative one: to show "the solid tonal foundations beneath Rachmaninoff's progressive harmonies."²⁶ For him, "symmetrical pitch structures such as the octatonic collection and progressions by equal divisions of the octave are deployed in contexts where they emphasize deeper-level harmonies and strong, tonality-affirming chordal motion... These innovations arise within complex but generally unambiguous structures, which enhance a listener's grasp of the work's tonal conception."²⁷ For David Cannata, Rachmaninoff's works represent a Russian culmination of post-Wagnerian, Post-Lisztian syntax.²⁸ But, as Rachmaninoff biographer Max Harrison put it, "whatever the music looks like, it never really sounds like Wagner."²⁹

For all the insights Cunningham and Cannata's studies have provided, they fail to account for the crucial structural and expressive roles played by other kinds of melodic-harmonic organization. The analyses in this study suggest that it may be more interpretively useful to construe marked chromatic and modal structures in Rachmaninoff's works as having the potential to problematize or disrupt conventional tonal patterns. This has significant implications for the analysis of large-scale design, expressive shapes, and climax. The Russian accretions in Rachmaninoff's idiom—the second and third components of the compound syntax—are perhaps not so easily dismissed.

²⁵ Daniel Harrison, *Harmonic Function in Chromatic Music: A Renewed Dualist Theory and an Account of Its Precedents* (Chicago: The University of Chicago Press, 1994); Deborah Stein, *Hugo Wolf's Lieder and Extensions of Tonality*, Studies in Musicology Series (Ann Arbor, MI: UMI Research Press, 1985); Howard Cinnamon, "Third-Related Harmonies as Elements of Contrapuntal Prolongation in Some Works by Franz Liszt," *In Theory Only* 12 (1992): 1-30. See Cunningham, "Harmonic Prolongation," 20-23 for an overview of his incorporation of Harrison's, Cinnamon's and Stein's ideas into his methodology.

²⁶ Cunningham, "Harmonic Prolongation," xvii (abstract).

²⁷ *Ibid.*, xvi (abstract).

²⁸ Cannata, *Rachmaninoff and the Symphony*, 29-37.

²⁹ Max Harrison, *Rachmaninoff* (London: Continuum, 2005), 351.

“Fantastic” Chromatic Structures

This category has gone largely unrecognized in Rachmaninoff’s works despite being a subject of considerable interest in studies of other Russian composers’ music. It involves Rachmaninoff’s use (and highly individual extensions) of equal-interval chromatic structures—what Richard Taruskin has called Russian “fantastic” harmony, common in Russian works from the last decades of the nineteenth century and the first two of the twentieth.³⁰ As discussed in Chapters 2 through 4, “fantastic” chromaticism transcends raw structure and emerges as a kind of expressive topic in Rachmaninoff’s mature works.³¹ Here, Rachmaninoff’s deep but little-known interest in the music of progressive St. Petersburg composers one generation his senior (Mussorgsky and, especially, Rimsky-Korsakov) is relevant. It may also be that Rachmaninoff’s performances of Scriabin’s works after the latter composer’s death in 1915 helped spur the intense chromatic developments of 1916–1917 (the six songs published as Op. 38 and the Etudes-Tableaux, Op. 39 are among Rachmaninoff’s most harmonically complex works), though the important concert pieces of 1913 (*The Bells*, Op. 35, and the Piano Sonata No. 2, Op. 36) already show traces of the new chromatic procedures.³²

Appreciation of this side of Rachmaninoff’s compositional persona has suffered from the traditional differentiation, part fact and part musicological fiction, of the Moscow and St. Petersburg musical traditions. However, the once pervasive idea that Rachmaninoff was simply a conservative Muscovite—Abraham’s “pale shadow”—is now generally rejected by scholars. Norris has suggested that Rimsky-Korsakov exerted as powerful an influence on Rachmaninoff as Tchaikovsky; and Martyn has noted that the influence of Rimsky-Korsakov’s chromatic experiments on Rachmaninoff’s harmonic language actually increased after 1909—that is to say, during the late Russian and Exile

³⁰ Richard Taruskin, *Stravinsky and the Russian Traditions* (Oxford: Oxford University Press, 1996); see especially Chapter 4, “From Chernomor to Kashchey: Harmonic Sorcery” (255-306), Chapter 5, “Bells, Bees, and Roman Candles” (307-368), and Chapter 10, “Punch into Pierrot (*Petrushka*)” (661-778). Taruskin’s work is considered in more detail in Chapter 3.

³¹ As outlined in Chapters 2 and 3 and discussed more fully in Chapter 4 (pp.104ff.), fixed zero labels are used for identification of equal-interval structures, e.g. OCT_(0,1) for the octatonic collection containing C and D \flat , and HEX_(1,2) for the hexatonic collection containing C \sharp and D.

³² On Rachmaninoff’s performances of Scriabin works, see Martyn, *Rachmaninoff*, 261 and 435-436.

periods.³³ Rachmaninoff himself described his indebtedness to the central figures of both Moscow and St. Petersburg, while maintaining his individuality:

My music is the product of my temperament, and so it is Russian music; I never consciously attempted to write Russian music, or any other kind of music. I have been strongly influenced by Tchaikovsky and Rimsky-Korsakov; but I have never, to the best of my knowledge, imitated anyone.³⁴

Rachmaninoff's words support Adolfo Salazar's brief summary of the composer's place in Russian music history: "After Glazunov...it is no longer possible to differentiate between the two schools [Moscow and St. Petersburg], which finally become firmly united in Rachmaninoff."³⁵

Modal Structures

The third component of the compound harmonic syntax I describe in this study comprises a variety of well-defined modal structures. As detailed in Chapter 5, some of the modal structures in the works studied—for example, the basic church modes—are familiar and need little theoretical description. However, others have origins in Russian liturgical and folk traditions and may be unfamiliar even to readers with extensive knowledge in music theory, and will therefore require significantly more description and analytic demonstration in that chapter. Michel Dimitri Calvocoressi described the importance of modal structures in Mussorgsky's works as follows: "Exactly as Mussorgsky's syntax represents and adjustment between the tonal principle and the modal (including particular treatment of modes exemplified in Russian folk-music), so do his most interesting forms."³⁶ Calvocoressi's words apply to Rachmaninoff, too, although it must be recognized that Rachmaninoff's works show considerably greater reliance on conventional tonal structures than Mussorgsky's.

³³ Norris, "Rachmaninoff, Serge"; Martyn, *Rachmaninoff*, 31.

³⁴ From a 1941 interview with David Ewen in *The Etude*, quoted in Bertensson and Leyda, *Sergei Rachmaninoff*, 369.

³⁵ Adolfo Salazar, *Music in Our Time: Trends in Music since the Romantic Era*, trans. Isabel Pope (Wesport, CT: Greenwood Press, 1946), 124.

³⁶ Michel Dimitri Calvocoressi, *Mussorgsky* (London: Rockliff, 1956): 290.

Rachmaninoff's "Russian-ness" has often been claimed, even if there has been no agreement on what exactly this means or what effects it may have had on his composing. Nikolai Medtner commented that "Rachmaninov is so profoundly Russian himself that he has no need of folk music."³⁷ In the book *Artists in Exile*, Joseph Horowitz claims somewhat amusingly that "amid the Russian musical floodtide sweeping the United States in the early twentieth century ... Rachmaninoff was the most complete musician—and the most incurably Russian."³⁸ Alexander Goedicke recalled the diversity of Rachmaninoff's liturgical and folk music interests:

"[Rachmaninoff] loved church singing very much and quite often, even in winter, would get up at seven o'clock in the morning and hail a cab in the darkness, mostly to drive to the Taganka, to the Andronyev monastery, where he stood in the half-darkness ... listening to the austere ancient chants from the *Oktoekhos*, sung by the monks in parallel fifths ... It commonly happened that on the same evening he would go to a symphony concert ... and then, more often than not, go on to have supper at the restaurant Yar or the Strelna, where he would stay late into the night, listening with great enthusiasm to the singing of the gypsies."³⁹

While this would seem to indicate that close scrutiny of actual Russian liturgical and folk music might yield significant insights into the nature of Rachmaninoff's tonal language, Alfred J. Swan pointed out that the "verisimilitude [of Rachmaninoff's modal structures] was still vastly handicapped by his own view of harmony. At best he arrived at only a sort of semi-modal conception."⁴⁰ Swan recognized the crucial point: modal structures in Rachmaninoff's works are invariably combined with non-modal melodic and harmonic structures. As a result, an attempt to understand modal structures in Rachmaninoff's music by rigorous comparison with actual Russian chant, actual Russian folk music, or Russian modal theory will likely be as "handicapped" as the modal structures themselves. To avoid compounding the handicap, the description of modal structures in Chapter 5 is therefore limited to only four clearly defined, frequently encountered, and rhetorically significant types.

³⁷ Quoted in Alfred J. Swan, *Russian Music and Its Sources in Chant and Folk-Song* (New York: Norton, 1973), 172.

³⁸ Joseph Horowitz, *Artists in Exile* (New York, Harper Collins, 2008), 199.

³⁹ Alexander Goedicke, quoted in Martyn, *Rachmaninoff*, 30.

⁴⁰ Swan, *Russian Music*, 176.

One goal of this dissertation is to detail through analysis the specific special chromatic and modal structures used in Rachmaninoff's mature works. A difficulty emerges, however, when moving from descriptions of melodic-harmonic components to consideration of the compositional whole. The difficulty is not unique to Rachmaninoff's works, but rather affects a wide range of extended tonal works from the late nineteenth and early twentieth centuries, in which traditional tonal methods and a variety of extreme chromatic procedures are often applied simultaneously. Music analysts have in general been concerned primarily with demonstrating unity in compositions, not with describing in a convincing and meaningful way the interactions of different structural types in a single composition. The crucial question here is how "abnormal" harmonic and melodic structures in extended late tonal works, and particularly in Rachmaninoff's mature compositions, can be made essential to interpretation. This question is the central concern of the dissertation as a whole and Chapters 2 and 3 in particular.

Characteristics of Rachmaninoff's Style, 1909–1940

Analysis of a large number of Rachmaninoff's works has suggested some preliminary observations about the nature of his mature style in comparison to his earlier works. The music composed after *Isle of the Dead*, Op. 29 and the Piano Concerto No. 3, Op. 30, which, as discussed earlier, represent a landmark in the composer's development, especially with regard to tonal design and harmonic complexity, is characterized by the following eight characteristics:

1. Greater concision of thematic material. Although long-spun melodies remain in the later works (several are in fact quite famous), they are fewer than in earlier works. Thematic material in works from the late Russian and exile periods tends to be broken up into shorter units, and, overall, less musical time is spent in exposition.
2. Increased transparency of texture and orchestration, as noted by Barrie Martyn.⁴¹

⁴¹ Martyn, *Rachmaninoff*, 31.

3. Greater rhythmic and metric complexity. Changing meters are increasingly common, as are syncopated patterns. In the case of certain figures that appear in the *Rhapsody on a Theme by Paganini*, Rachmaninoff's acknowledged interest in jazz may have been a factor, as may his familiarity with Gershwin's *Rhapsody in Blue* in particular.⁴²
4. Greater amounts of local dissonance corresponding to the use of more complex vertical sonorities and more adventuresome linear treatment of the ordinary materials of tonal syntax. (This is the central topic of Cunningham's dissertation.)
5. Increasingly prominent use of the *Dies irae* chant, or its distinctive melodic pattern, generalized. Rachmaninoff's interest in—obsession with, perhaps—the *Dies irae* is well-documented, but will probably never be adequately explained.⁴³
6. Increased emphasis on idiosyncratic melodic and harmonic structures referable to recognized Russian chromatic and modal idioms.
7. Emphasis on a special kind of structural melodic-harmonic tension that I call *Hyperdissonance*. Marked hyperdissonance events are anomalous in Rachmaninoff's earlier works, but represent a regular expressive and structural feature of the later works.
8. Increasing problematization of core formal strategies, especially the departure-return principle and conventional tonal structures with which it is associated.

Nos. 1 through 4 on the list are not addressed with any rigor in the dissertation. No. 5 is addressed on a case-by-case basis in the works studied. Nos. 6 through 8 constitute the core of the dissertation. These three characteristics are closely related, and transport Rachmaninoff's style past the nineteenth century in distinctive ways. No. 6 is the subject of Chapters 4 and 5 of the dissertation. No. 7 is treated in Chapter 2 of the

⁴² Harrison, *Rachmaninoff*, 246.

⁴³ But see discussion in Martyn, *Rachmaninoff*, 98-99. As described by Martyn, the *Dies irae* is used thematically in the Symphony No. 1, Op. 13, where it is related to the biblical epigraph "Vengeance is mine, I will repay." Martyn states on p.99 that "after the traumatizing catastrophe of the [symphony's] premiere, it is hardly surprising that the symphony's musical motto was to haunt the composer throughout his life, appearing in his work with increasing insistence as he grew older and approached his own day of judgment." On the use of the *Dies irae* in concert music generally and in Rachmaninoff's works specifically, see Malcolm Boyd, "'Dies Irae': Some Recent Manifestations," *Music & Letters* 49 (1968), 347-356; Robin Gregory, "Dies Irae," *Music & Letters* 34 (1953), 133-139; and Susan Jeanne Woodard, "The Dies Irae as Used by Sergei Rachmaninoff: Some Sources, Antecedents, and Applications" (D.M.A. diss., The Ohio State University, 1984).

dissertation. No. 8 is treated in Chapters 2 and 3 of the dissertation, and forms the basis for the longer analyses in Chapter 6.

Consideration of the style characteristics identified above reveals limitations in existing Rachmaninoff scholarship. Cunningham's analyses are penetrating and technically excellent; but characteristics Nos. 5 through 7 of the list cannot be incorporated into his approach, for the following reasons:

1. The Schenkerian perspective cannot easily account for expressive trajectories and structural tensions that emerge from the interaction and layering of variegated components of a compound syntax. As discussed in more detail in Chapters 2 and 3, I consider such interactions to be crucial to meaningful interpretation of the works studied.
2. More specifically, within Cunningham's framework, it is not possible to consider the rhetorical associations that special chromatic and modal components may have, or the general locations (in relation to the functional tonal basis and in relation to form) at which they are most likely to be found. However, analysis of a large number of works suggests that special modal idioms are generally introductory, expository, or post-climactic, and are therefore found at the beginnings and ends of sections, whereas idioms derived from "fantastic" equal-interval chromaticism are generally associated with intensification, destabilization, and climax.

I agree with Robert Hatten that, following Saussure, "musical meaning is difference."⁴⁴ In fact, the special modal and chromatic idioms described in this dissertation may be "topics" in the sense that Hatten and Ratner have used the term; the idioms are certainly "marked," and beyond question rhetorically differentiated.⁴⁵ Unlike Cunningham, I want unorthodox tonal features in Rachmaninoff's works late works to remain unorthodox in the interpretation, in order to capture the meaning that difference can engender, while developing analytic contexts in which the features can be understood as part of a coherent whole. Cunningham's Schenkerian graphs achieve his stated goal of providing "a frame of reference whereby the analyst, listener, or performer can effectively grasp the structure of a work and recognize idiomatic features of the

⁴⁴ Robert S. Hatten, *Musical Meaning in Beethoven: Markedness, Correlation, and Interpretation* (Bloomington: Indiana University Press, 1994), 276.

⁴⁵ *Ibid.*; Leonard Ratner, *Classic Music: Expression, Form, and Style* (New York: Schirmer, 1980).

composer's style."⁴⁶ However, the analytic agenda motivating the graphs—demonstration that complex chromatic events invariably fold into and prolong basic tonal functions, and, more controversially, perhaps, demonstration that the traditional scholarly view of nineteenth-century chromatic expansion as a challenge to conventional tonal organization and a seed in the destruction of that organization—prohibits incorporation of expressive and structural features that in my view depend on differentiation.⁴⁷

Cunningham renders nonessential those features of each work that arguably carry the greatest expressive weight, and that most immediately identify the work as “a Rachmaninoff.” In Cunningham's approach, background structures are predetermined to the extent that the individual elements in a Postromantic composition cannot easily be used as a basis for interpreting the work's unique expressive qualities. In the final assessment, as demonstrations of analytic muscle, Cunningham's graphs are impressive; but they are interpretively limp, because he fails to recognize the rewards offered by a somewhat more flexible tonal ontology. As Joseph Dubiel has put it, “the best understanding clearly lies not in the simplest explanation of the data, but in the most complex interpretation of them.”⁴⁸

David Cannata's interpretations, on the other hand, suppose no strict form of predetermined background structure.⁴⁹ Cannata's analytic approach derives mainly from Robert Bailey's work on Wagner.⁵⁰ Cannata emphasizes large-scale key relations, and complex structures that emerge from the exploitation of Bailey's “double-tonic complexes.”⁵¹ As a result, he is able to propose individualized structures for each work analyzed, several of which are very convincing. However, within the large structures

⁴⁶ Cunningham, “Harmonic Prolongation,” 318.

⁴⁷ See especially the explicit discussion in “Harmonic Prolongation,” 318-320. The conventional view Cunningham rejects is perhaps stated most powerfully in the writings of Ernst Kurth. See Lee A. Rothfarb, *Ernst Kurth as Theorist and Analyst* (Philadelphia: University of Pennsylvania Press, 1988); and Rothfarb, *Ernst Kurth: Selected Writings* (Cambridge: Cambridge University Press, 1991).

⁴⁸ Joseph Dubiel, “Contradictory Criteria in a Work of Brahms,” in *Brahms Studies*, ed. David Brodbeck, vol. 1 (Lincoln: University of Nebraska Press, 1995), 82.

⁴⁹ It should be noted that analysis is only one component of Cannata's project; his excellent study of sketches and compositional process is of great value.

⁵⁰ Robert Bailey, “An Analytical Study of the Sketches and Drafts.” In *Wagner: Prelude and Transfiguration from “Tristan and Isolde,”* ed. Robert Bailey, 113-46 (New York: Norton, 1985); Bailey, “The Structure of the Ring and Its Evolution,” *19th Century Music* 1 (1977-78), 48-61.

⁵¹ Bailey's double-tonic complexes are developed theoretically in Patrick McCreless, *Wagner's “Siegfried”: Its Drama, History, and Music* (Ann Arbor, MI: UMI Research Press, 1982).

Cannata describes, details are generally lacking, and in the case of the Symphony No. 3, his interpretation is significantly weakened by a failure to recognize important special modal and chromatic structures. (See the analysis of the Symphony in Chapter 6 of the dissertation.) This fault might have been remedied had Cannata studied more works by other Russian composers while preparing the analyses. For, while Rachmaninoff was certainly post-Wagnerian, he was also post-Mussorgskian, post-Rimsky-Korsakovian, post-Borodinian. In fact, the only Russian composer other than Rachmaninoff treated in Cannata's book is Tchaikovsky, whose Fourth, Fifth, and Sixth Symphonies are presented in brief as a prelude to analysis of Rachmaninoff's works.⁵² But, as I have already suggested, by 1909 (to say nothing of 1917, when Rachmaninoff composed his last Russian-period works, or 1936, when the Symphony No. 3 was premiered), the influence of Tchaikovsky on Rachmaninoff was significantly diminished.

Although her work does not approach Cunningham's in analytic sophistication or detail, nor Cannata's in musicological sophistication, Patricia Brady's dissertation on the *Etudes-Tableaux*, Op. 33 and Op. 39 is a document of some substance.⁵³ In it, she suggests that diatonic-functional tonal methods are not unassailable pillars in Rachmaninoff's works, though she recognizes that functional tonal organization is ultimately the paramount factor in each work's structure. Proceeding from the very point of view that Cunningham vehemently rejects, she observes that "many etudes contain certain forces which establish or reinforce tonality and other forces which weaken it."⁵⁴ She notes more specifically that "the use of modal harmony is a characteristic feature of Rachmaninoff's writing. Modal structures appear in most of the seventeen etudes."⁵⁵ In her view, chromatic and modal structures not only decorate but have an *effect* on the tonal basis:

Insofar as the nature of tonality is concerned, the *Etudes-Tableaux* are typical of many late nineteenth century compositions. Both chromaticism and modality—two opposing forces which serve to weaken and obscure functional major-minor tonality—are conspicuously present in the etudes... [The] "B"

⁵² Cannata, *Rachmaninoff and the Symphony*, 66-68.

⁵³ Patricia Brady, "Rachmaninoff's *Etudes-Tableaux*" (D.M. diss., Indiana University, 1986).

⁵⁴ *Ibid.*, 112.

⁵⁵ *Ibid.*, 124.

sections of most etudes are characterized by increased chromaticism, often to the degree that tonal center is completely obscured.”⁵⁶

Brady’s remarks echo the observations made decades earlier by the Russian and Soviet authors quoted at the beginning of the Introduction; and, although her analyses lack rigor and therefore cannot be considered strong scholarly statements, she to some degree anticipates some of my central points:

- 1) A compound melodic-harmonic syntax applies in Rachmaninoff’s mature works. The compound syntax is based on diatonic-functional tonal structures, but incorporates distinct chromatic and modal components that have as much expressive and formal significance as the diatonic-functional framework, and in some cases more.
- 2) Tension between components of the compound syntax—that is to say, between special chromatic and/or modal structures and the diatonic-functional framework—has implications for the interpretation of tonal structure, expressive design and form.
- 3) Certain chromatic and modal components used with great frequency by Rachmaninoff (especially after 1909) can be loosely associated with specific rhetorical functions, and with particular locations in relation to musical form. Brady notes that most “B” sections of the Etudes-tableaux are “characterized by increased chromaticism”—this, combined with the observation that most of the “B” sections are climactic, suggests the tantalizing possibility that clear associations of pitch structure, location, and rhetorical function may be developed.

Toward an Interpretive Model: Chromaticism, Climax, and Culmination

As the discussion above suggests, music analysts have differed greatly in their approaches to the problem of interpreting challenging chromatic structures in nineteenth- and early twentieth-century works in which functional tonal methods still apply. Figure 1.1 is a diagrammatic overview of a number of well known and influential analytic approaches. The figure provides a context in which to outline the hermeneutic I adopt in this dissertation.

⁵⁶ Ibid., 106-7.

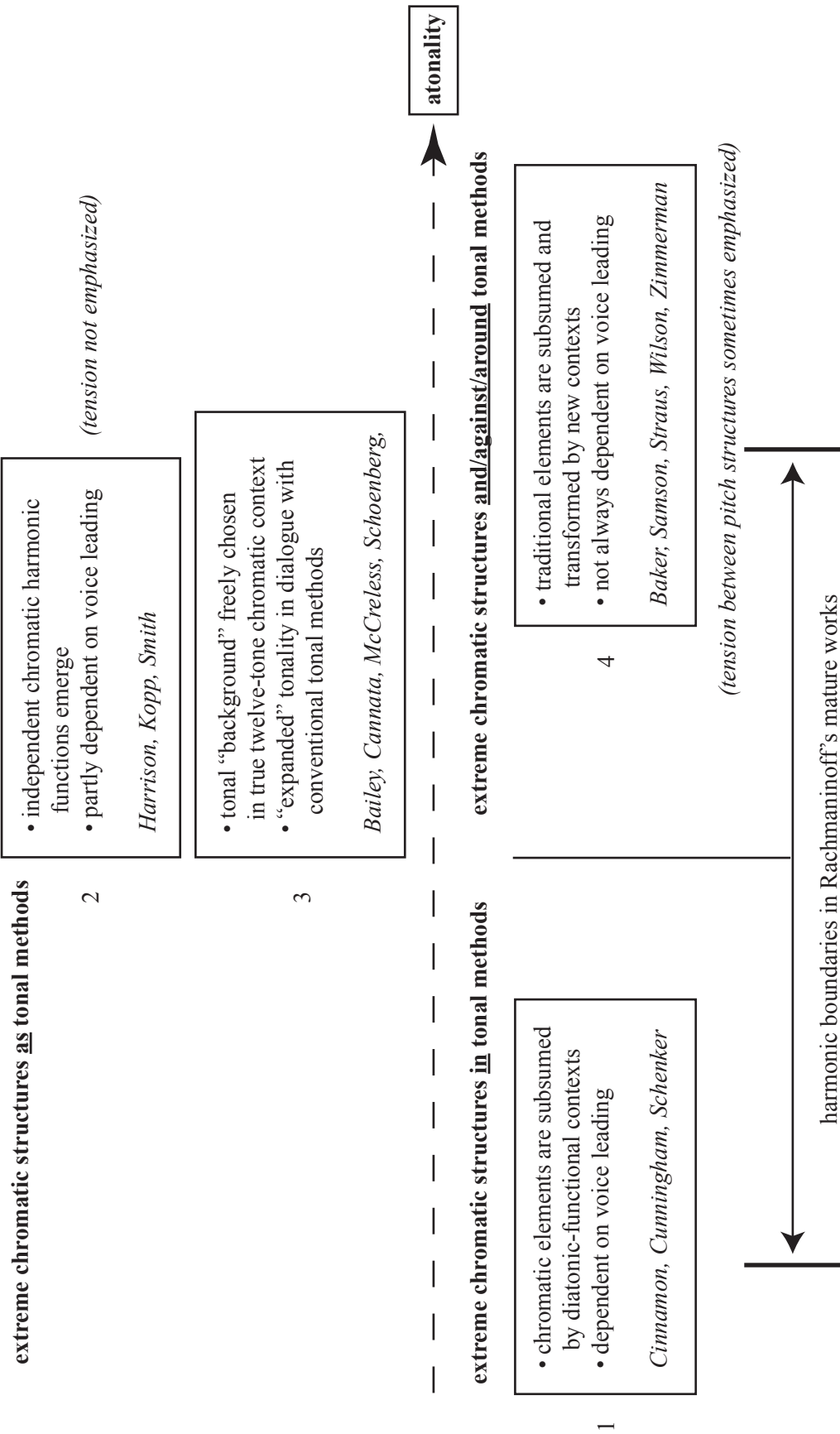
In Figure 1.1, theories are identified by author and organized into four boxes according to the degree to which extreme chromatic events in works that retain tonal methods (in varying amounts) are or are not subsumed by diatonic-functional tonal contexts. The theorists in box 1 (Howard Cinnamon, Robert Cunningham, and Heinrich Schenker) present extreme chromatic structures as only superficially complex; chromatic structures at the foreground and middleground levels do not disrupt but in fact support an underlying diatonic-functional framework, and they are entirely dependent on voice leading operations. These theorists present extreme chromatic structures as occurring in conventional tonal methods.

The theorists in box 2 (Daniel Harrison, David Kopp, and Charles E. Smith) and box 3 (Robert Bailey, David Cannata, Patrick McCreless, and Arnold Schoenberg) differ greatly from one another in important ways; but they all present extreme chromatic structures as at least partly independent of diatonic-functional ones.⁵⁷ According to theorists in box 2, in late tonal music, new, independent chromatic functions emerge. These are legitimate on their own terms, and equal in significance to the diatonic-functional functions, even if they ultimately derive in important ways from the diatonic-functional ones. In box 2 theories, voice leading is only partly responsible for the coherence of chromatic structures. According to theorists in box 3, tonality is expanded by advanced chromatic procedures to the point that, as McCreless put it, “the background is no longer *given* but *chosen*” and a true twelve-tone context exists.⁵⁸ Theorists in boxes 2 and 3 present extreme chromatic structures as tonal methods.

⁵⁷ See entries under these authors’ names in the bibliography.

⁵⁸ Patrick McCreless, “An Evolutionary Perspective on Nineteenth-Century Semitonal Relations,” in *The Second Practice of Nineteenth-Century Tonality*, ed. William Kinderman and Harald Krebs (Lincoln: University of Nebraska Press, 1996), 103.

Figure 1.1. Selected theoretic and analytic approaches to chromatic music



Theorists in box 4 (James Baker, Jim Samson, Joseph Straus, Paul Wilson, and Daniel Zimmerman) go a step further, developing interpretive contexts in which chromatically-expanded tonal syntax leads to and then interacts with early atonal (or post-tonal) structures.⁵⁹ In their theories and analyses, extreme chromatic structures are presented not in or as tonal methods, but and/against/around tonal methods, to the point that tonal methods are themselves sometimes subsumed by the emergent contexts. Some of the repertoires treated in these theories are clearly more radical in matters of pitch organization than Rachmaninoff's works; but as examples of a particular way of thinking about chromatic structures in relation to conventional tonal ones, they stand. Because they emphasize the special tensions this sometimes creates in musical works, the findings of Samson, Straus, and occasionally Zimmerman are consonant with those in the present study. As Straus points out, "twentieth-century works often incorporate traditional elements that are structurally distinct from the prevailing musical syntax...Our understanding of them will be enriched if we can fully appreciate their clash of distinct structures."⁶⁰

Rachmaninoff's mature works challenge in part because, as shown at the bottom of Figure 1.1, tonal organization is variegated in such a way as to make each of the four categories of theory potentially applicable in different ways for different works or passages, or in different interpretive contexts. This variegation allows Cunningham's approach, with its rigid precompositional system, to seem plausible in some contexts, while also encouraging something like Paul Wilson's theory of "structural overlay" in the music of Béla Bartók, in which different pitch structures are activated simultaneously in a work, and precompositional systems are avoided as a matter of principle.⁶¹

In response to this challenge, Chapters 2 and 3 of the dissertation develop an interpretive approach that synthesizes features from the different boxes in Figure 1.1. Linear analysis techniques are used extensively, but I propose no Schenkerian *Urlinien* or *Ursätze*. Following Bailey, Cannata and McCreless, the global structure of each work studied is uniquely determined. The kind of compound syntaxes developed by Baker,

⁵⁹ See entries under these authors' names in the bibliography.

⁶⁰ Joseph N. Straus, "The "Anxiety of Influence" in Twentieth-Century Music," *The Journal of Musicology* 9 (1991), 437.

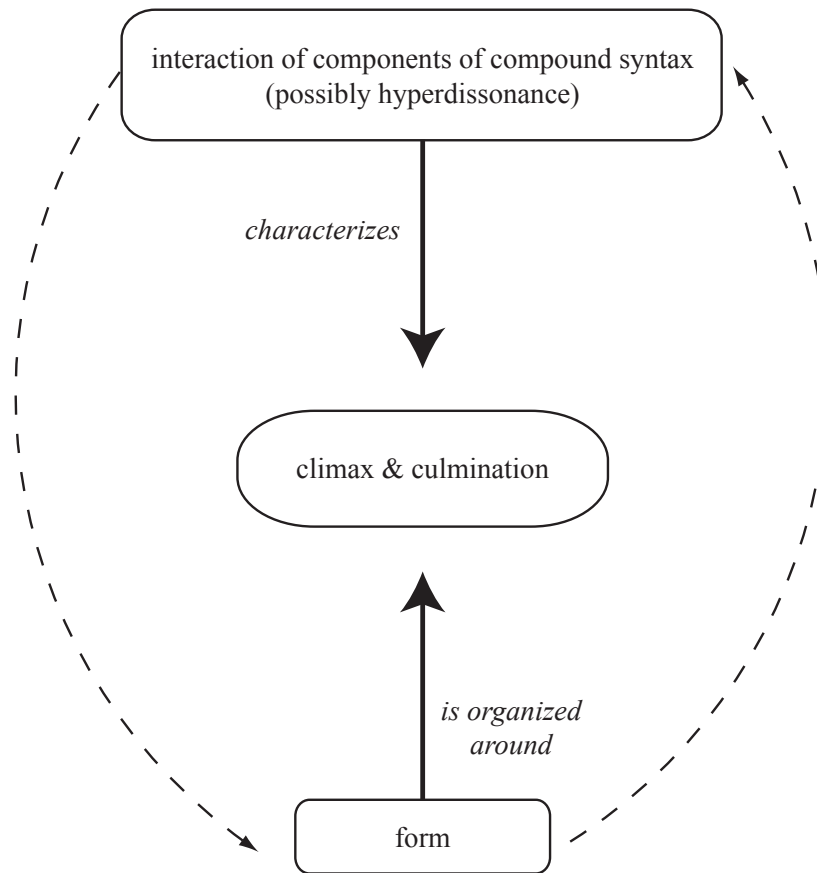
⁶¹ Paul Wilson, *The Music of Béla Bartók* (New Haven, CT: Yale University Press, 1992), especially 14, 51-52, 191.

Straus, Wilson and Zimmerman provide traction for the (more conservative) compound syntax I find in Rachmaninoff's mature works. Like Wilson, I develop an analytic approach in which different structures are conceived as different *layers* in a compound, stratified melodic-harmonic environment.

The interaction of different—and, as discussed in Chapters 2 and 3, differentiated—harmonic structures in a work is a central factor in the interpretation of the work. While Daniel Harrison's elegant theory proposes a synthesis of function and chromaticism, I prefer to savor the tension that can exist between functional tonal “norms” and chromatic or modal “abnorms.”⁶² As explored more fully in the following chapters, Rachmaninoff's works are climax-centric. Form is organized around climax events to a degree matched perhaps only in the works of Mahler; and climaxes are very often characterized by dramatic changes in the nature of the interaction of layers in the compound melodic-harmonic environment—changes, that is to say, in the relative status of the norms and the abnorms. This has led me to the interpretive model outlined in Figure 1.2.

⁶² The concept of “norms” and “abnorms” is developed in Joseph Dubiel, “Contradictory Criteria.”

Figure 1.2. Interpretive model



This loose hermeneutic is based in part on close study of many compositions from the late Russian and exile periods and in part on Rachmaninoff’s own understanding of musical form as a process that directs every musical work toward a “point” of “culmination,” which “must seem a liberation from the last material obstacle, the last barrier.”⁶³ “The composition itself determines this culmination; the point may come at its end or in the middle, it may be loud or soft...”⁶⁴ I offer no strict interpretation of Rachmaninoff’s theory. “Culmination” in Rachmaninoff’s terms resists precise definition. Furthermore, “culmination” (as conceived by Rachmaninoff) and “climax” (as generally understood) are not necessarily coextensive, though they are in many cases

⁶³ From a letter to Marietta Shaginyan, quoted in Bertensson and Leyda, *Sergei Rachmaninoff*, 195.

⁶⁴ *Ibid.*

closely associated. According to Rachmaninoff, a point of culmination may be quiet; but a climax is virtually always a noisy affair, involving a simultaneous intensification of many musical parameters—dynamics, melodic tessitura, textural density, rhythmic activity, harmonic tension, chromatic activity—toward what V. Kofi Agawu calls a “highpoint.”⁶⁵ Agawu observes that “the phenomenon of climax is central to our musical experience,” but that existing music-theoretic approaches tend to de-emphasize it in the interest of greater “seriousness.”⁶⁶ Indeed, attempts to organize analyses of Rachmaninoff’s works around climax events are conspicuously absent from the literature. An exception to this is Jason T. Stell’s master’s thesis, which, drawing from Agawu and others, deals directly with climax events in three piano preludes (one each from the early Russian, middle Russian, and late Russian periods).⁶⁷ Stell’s “expressive curves” share some features with the “tension arcs” I develop in Chapter 2 of the dissertation.⁶⁸ For Stell, a “highpoint” is a “crux” in Robert Hatten’s sense of the word—“the point of expressive focus or greatest intensity in an entire piece.”⁶⁹ This recalls Rachmaninoff’s point of culmination, which need not be a noisy affair (and is therefore unlike climax in a narrow sense), but which need always be the point of expressive focus in a work.

This being said, in the large majority of cases climax and culmination are coextensive—the climax is usually the “point.” The Oxford English Dictionary defines “climax” in the proper rhetorical sense as “a figure in which a number of propositions or ideas are set forth so as to form a series in which each rises above the preceding in force or effectiveness of expression.”⁷⁰ Many of the climax events analyzed in the dissertation fit this definition—a series of stages of gradually increasing intensity. However, the same dictionary defines “climax” in the general sense as “the highest point of anything reached

⁶⁵ V. Kofi Agawu, “Highpoints in Schumann’s ‘Dichterliebe,’” *Music Analysis* 3 (1984), 159-180.

⁶⁶ *Ibid.*, 159-160. Agawu identifies Peter Bergquist’s Schenkerian analysis of the first movement of Mahler’s Tenth Symphony, in which a pair of extraordinary climax events are reduced to “foreground events,” as a particularly egregious case in point.

⁶⁷ Jason T. Stell, “Rachmaninov’s Expressive Strategies in Selected Piano Preludes: Highpoints, Dramatic Models, and Dynamic Curves” (M.A. thesis, The Pennsylvania State University, 1999).

⁶⁸ Stell’s, Agawu’s, and my curves/arcs all share something of an origin in Leonard Ratner’s “dynamic curves.” See Leonard Ratner, *Music: The Listener’s Art* (New York: McGraw-Hill, 1966), 2nd edition: 314.

⁶⁹ Stell, “Rachmaninov’s Expressive Strategies,” 17. Stell magnifies Hatten’s original definition of crux—“the point of expressive focus or greatest intensity in a phrase or gesture” (Hatten, *Musical Meaning in Beethoven*, 289).

⁷⁰ Oxford English Dictionary, 2nd ed. (1989), s.v. “climax, *n.*”

by gradual ascent; the culmination, height, acme, apex,” suggesting the degree to which climax and culmination may overlap.⁷¹

Analyses in the dissertation are organized to show how climax events relate to interactions of diatonic, chromatic, and modal structures in a work; how expressive focal points (cruxes) emerge as different structures (with different rhetorical associations and expressive implications) come together or culminate; and how variegated melodic and harmonic materials may be integrated in a climax- and culmination-oriented conception of musical form.

* * *

The dangers of over-interpretation and over-systematization threaten a project such as this one. I have made every effort to avoid these dangers without sacrificing music-theoretic rigor or analytic detail. A passage from an article written by Jay Reise on the music of Scriabin is appropriate here:

When we teach the Bach chorales to beginning harmony students, we do not seek to present an airtight system of composition but rather the elements of a style. Similarly, I am not trying to reveal a rigid system in Skriabin’s work, but rather a few components of a relatively flexible method of composition, which can explain or at least describe certain characteristics of his style.⁷²

Similarly, the goal of this dissertation is explanation (or at least description) of certain characteristics of Rachmaninoff’s mature style, not the presentation of an “airtight system.”

Organization of the Dissertation

The dissertation is in six chapters (including this introductory chapter), which fall loosely into three parts. In Chapters 2 and 3, the interpretive apparatus sketched above is

⁷¹ Ibid.

⁷² Jay Reise, “Late Skriabin: Some Principles Behind the Style,” *19th Century Music* 6 (1983), 226.

developed. These chapters may be of interest even to readers who are unfamiliar with Rachmaninoff's mature works. In Chapters 4 and 5, the special chromatic and modal structures that appear most frequently in the works analyzed are described in detail. By no means are Chapters 4 and 5 meant to be a comprehensive survey of Rachmaninoff's tonal language; additional research will surely expand the view presented here.

Throughout Chapters 1 through 5, numerous analytic vignettes are presented, showing how theory and concepts in the chapters may be applied to the interpretation of climax events in works from the mature period. Most of these shorter analyses are of partial works, of single movements, or of complete short works. In Chapter 6, the full interpretive apparatus of Chapters 2 and 3 and the full technical apparatus of Chapters 4 and 5 are applied to the three large concert works Rachmaninoff composed during his final decade: *Rhapsody on a Theme by Paganini*, Op. 43, *Symphony No. 3*, Op. 44, and *Symphonic Dances*, Op. 45.

Chapter 2

Conceptualizing Harmonic Tension in Rachmaninoff's Mature Style

The term “Postromantic” has recently fallen somewhat into disuse.¹ The term was accepted enough in the recent past to be used as a subchapter heading in the well-known fourth edition of the ubiquitous undergraduate textbook *A History of Western Music*.² But it is entirely absent from the sixth and seventh editions of the same text, due perhaps to increasing awareness that historical demarcations of this sort may be more fluid than scholars sometimes imagine them to be.³ The standard music dictionaries currently have no entries for the term. However, I believe “Postromantic” has value, and would reclaim it for a repertory from the late nineteenth and early twentieth centuries that displays a certain set of aesthetic and technical characteristics. A comprehensive description of these characteristics is surely impossible, given the extraordinary diversity of tonal and quasi-tonal music written during the period ca. 1890–1940 (which I take as reasonable outer limits of Postromanticism, and which correspond very nearly to the boundaries of Rachmaninoff's working years). However, the *Encyclopædia Britannica* provides a starting point:

[A] musical style typical of the last decades of the 19th century and first decades of the 20th century and characterized by exaggeration of certain elements of the musical Romanticism of the 19th century. Postromanticism exhibits extreme largeness of scope and design, a mixture of various musical forms (*e.g.*, opera and symphony), and heightened contrapuntal complexity (*i.e.*, a long or vast

¹ An earlier draft of material from this chapter was read at the 2007 Annual Meeting of the Society for Music Theory in Baltimore as “Maximally Rough and Loving It: Appreciating Expressive Hyperdissonance in the Early Twentieth Century.”

² Donald J. Grout and Claude Palisca, *A History of Western Music*, 4th edition (New York: Norton, 1988), 755-771. I make no distinction between various forms of the term—“Postromantic,” “postromantic,” or “Post-Romantic.”

³ Donald J. Grout and Claude Palisca, *A History of Western Music*, 6th edition (New York: Norton, 2001); J. Peter Burkholder, Donald J. Grout and Claude Palisca, *A History of Western Music*, 7th edition (New York: Norton, 2006).

array, or both, of simultaneous but independent musical lines or events). Often Postromanticism also embraces vivid religious or mystical fervour, a sense of longing, and a sense of the grim and the grotesque.⁴

“Exaggeration” and “vast array...of simultaneous but independent musical lines or events” are particularly telling. From them, I offer a more specific observation: if the Romantic is characterized by chromatic expansion and the development of striking elaborations of linear tonal syntax, then the Postromantic is characterized by exaggeration and ultimately fragmentation of tonal syntax, and the juxtaposition or superimposition of conventional functional tonal structures and intense chromatic and/or modal structures that challenge and even deform the functional tonal basis. In my view, complex interaction of variegated melodic-harmonic components is one source of the continuing fascination Postromantic music holds.

A basic claim in the present document is that Rachmaninoff was a Postromantic composer, not an anachronistic Romantic composer. Echoing many of the authors quoted in Chapter 1, who hear in Rachmaninoff’s music something progressive or at least idiosyncratically “modern,” the analyses in this study demonstrate that Rachmaninoff was not unaffected by musical developments in “Silver Age” Russia or in the early twentieth century generally.⁵ Peter Burkholder has aptly suggested the difficulty of categorizing composers of Rachmaninoff’s generation in the most recent revision of the venerable history textbook cited above, asking the question, “Late Romantic or Modern?” and then responding, “all the composers of this generation have aspects of both eras, combining nineteenth-century elements with twentieth-century sensibilities.”⁶ The characteristics of Rachmaninoff’s mature style identified in Chapter 1 of the dissertation—especially Nos. 6–8 on the list, which involve the articulation of conventional tonal and formal structures and unconventional structures that challenge and disrupt them—correspond in clear ways to the above description of general Postromantic characteristics.

⁴ *Encyclopædia Britannica Online*, s.v. “Postromantic music,” <http://www.britannica.com/EBchecked/topic/472266/Postromantic-music> (accessed March 14, 2009).

⁵ “Silver Age” is the term generally preferred over *fin de siècle* by scholars of Russian arts and literature.

⁶ Burkholder, Grout, and Palisca, *A History of Western Music*, 6th ed., 799.

To be sure, tonal configurations that simultaneously engage more than one kind of melodic-harmonic structure have their origin in the music of nineteenth century composers. In his dissertation on Liszt's music, Ramon Satyendra writes that "chromatic tonality is best seen not as an exclusively diatonic or exclusively chromatic system but as an interaction between pitch-space systems" in which distinct pitch structures may exist simultaneously in "stacked spaces."⁷ In Postromantic and early modernist works, however, stacked or layered configurations involving conventionally tonal and unconventional structures are taken to new heights of explicitness and complexity. Recognizing this, Joseph Straus has written that "twentieth-century composers use traditional methods, but transform them."⁸ Straus suggests that "what we need now is a critical framework for understanding this sort of thing. The framework we need should, above all, be sensitive to the tension in these works between the traditional elements and the new musical context that transforms them."⁹ The present chapter outlines one possible framework, tailored for highly chromatic late tonal works in general and Rachmaninoff's mature compositions in particular.

Postromantic Deformations and Structural Tensions

Marked dialogue between different kinds of musical organization—that is to say, between conventional structures and unconventional structures, or, to borrow again from Joseph Dubiel, between tonal "norms" and "abnorms"¹⁰—may be considered a defining characteristic of Postromantic and nascent modernist styles. Such a dialogue might be primarily one of melody and harmony, or one of phrase design and/or form; it might occur on a large scale or a small one; but it will almost certainly have implications for the interpretation of a work's overall design and expressive trajectory. James Hepokoski has observed that "a central feature of the modernist aesthetic game... was to implicitly or fragmentarily refer to the generic formal conventions, perhaps as lost gestures or the founding gestures of the game, but then to override them. By the last third of the

⁷ Ramon Satyendra, "Chromatic Tonality and Semitonal Relationships in Liszt's Late Style" (Ph.D. diss., The University of Chicago, 1992), vi.

⁸ Straus, "The Anxiety of Influence," 431.

⁹ *Ibid.*, 435.

¹⁰ Dubiel, "Contradictory Criteria."

nineteenth century there had arisen a whole arsenal of ... ‘deformations’ of the *Formenlehre* (standard-textbook) structures.”¹¹ That is to say, comprehension of form and expressive trajectory in a Postromantic work can depend on recognizing that the “game” involves an interaction between conventional bases and new structures that may conflict with those bases. In Postromantic repertory, there is often a sense that conventional tonal organization is somehow endangered, and that the danger is part of an aesthetic stance. As Charles Wilson has put it, “hence, for instance, in the symphonies of Sibelius and Nielsen, the long-range articulations of functional tonality prevail only after a prolonged struggle, even then leaving a palpable sense of their impermanence and vulnerability.”¹²

However it is taken aesthetically, this entanglement of functional syntax and chromatic procedures in late tonal music has fascinated theorists for a long time. Gregory Proctor has formulated a “double syntax” for certain repertories.¹³ Daniel Zimmerman, James Baker, and Allen Forte have developed a variety of “compound analysis” techniques.¹⁴ Daniel Harrison’s powerful theory offers a synthesis of function and chromaticism, as does David Kopp’s recent book; but other scholars prefer to emphasize the friction that can arise between tonal norms and chromatic abnormalities, variously defined.¹⁵ Thinking in terms of Dubiel’s “norms” and “abnorms” suits many passages in

¹¹ James Hepokoski, *Sibelius: Symphony No.5* (Cambridge: Cambridge University Press, 1993), 5. Hepokoski uses “modern” to refer to a number of composers, including Strauss, Sibelius, and Elgar, not ordinarily associated with the term. See also Hepokoski, “Fiery-Pulsed Libertine or Domestic Hero? Strauss’s *Don Juan* Reinvestigated,” in *Richard Strauss: New Perspectives on the Composer and His Work*, ed. Bryan Gilliam, 135-176 (Durham, NC: Duke University Press, 1992).

¹² Charles Wilson, “The Twentieth Century,” in *Grove Music Online*, ed. Laura Macy, <http://www.grovemusic.com> (accessed March 16, 2009).

¹³ Gregory Proctor, “Technical Bases of Nineteenth-Century Chromaticism” (Ph.D. diss., Princeton University, 1978).

¹⁴ James Baker, *The Music of Alexander Skryabin* (New Haven, CT: Yale University Press, 1986); Allen Forte, “Schoenberg’s Creative Evolution: The Path to Atonality,” *The Musical Quarterly* 64 (1978): 133-76; and Daniel J. Zimmerman, “Families Without Clusters in the Early Works of Sergei Prokofiev” (Ph.D. diss., The University of Chicago, 2002).

¹⁵ Harrison, *Harmonic Function in Chromatic Music*; David Kopp, *Chromatic Transformations in Nineteenth-Century Music* (Cambridge: Cambridge University Press, 2002). Approaches that emphasize various kinds of friction include Edward T. Cone, “Sound and Syntax: An Introduction to Schoenberg’s Harmony,” in *Music: A View From Delft*, edited by Robert P. Morgan, 249-66 (Chicago: University of Chicago Press, 1986); Richard A. Kaplan, “The Musical Language of *Elektra*: A Study in Chromatic Harmony” (Ph.D. diss., The University of Michigan, 1985); Lawrence Kramer, “The Mirror of Tonality: Transitional Features of Nineteenth-Century Harmony,” *19th Century Music* 4 (1981): 191-208; and Andrew W. Mead, “Listening to Reger,” *The Musical Quarterly* 87 (2004): 681-707. On the related matter of conflict between tonal elements and post-tonal contexts, see Joseph N. Straus, *Remaking the Past*:

early twentieth century works very well—passages in which there is a clear diatonic-functional basis, and intense, well-defined chromatic activity interacts with and complicates essential premises of that basis.

In theories of the common practice, dissonance results from tension between contrapuntal elements in a single well-formed syntax. In extended tonal works from the early twentieth century, traditional dissonance of course remains; but a higher-order dissonance is often suggested as well—a kind of *hyperdissonance* that results from tension between different layers of a stratified compound harmonic environment. In such a configuration, a chromatic structure in one harmonic layer may exaggerate, distort, or even directly contradict the functional tonal premises stated in another layer. I suggest that analysis of hyperdissonance events allows better appreciation of the harmonic roughness and expressive tensions that characterize Postromantic music; and, furthermore, that the construction of hyperdissonance as a category provides firmer music-theoretic ground for the style observations made by Hepokoski and Straus.

It will be useful to examine instances of hyperdissonance in short passages from the early twentieth-century repertory in general before turning specifically to the interpretation of climax events in Rachmaninoff's works.¹⁶

Figure 2.1 is a passage from Strauss's *Elektra* (1908) David Murray writes that Strauss's *Elektra* "absolutely presupposes a secure tonal norm against which to measure its harsh, disorienting dramatic effects for an audience with late Romantic ears."¹⁷ In Figure 2.1, there is a layer of functional, "normal" tonal activity, and there is a "disorienting" chromatic layer.

Musical Modernism and the Influence of the Tonal Tradition (Cambridge, MA: Harvard University Press, 1990).

¹⁶ In this chapter, only diatonic-functional structures and chromatic structures are considered. Modal structures are added in Chapter 3 and described more fully in Chapter 5.

¹⁷ David Murray, "Elektra," in *Grove Music Online*, ed. Laura Macy, <http://www.groveonline.com> (February 20, 2009).

Figure 2.1. Richard Strauss, *Elektra*, r. 177–178₄

[reduction follows vocal score]

177 fl., harps, pizz. strings
pp

178
Clytemnestra: Ich habe keine guten Nächte
Elektra: Träumst du, Mutter?
Weisst du kein Mittel gegen Träume?
ppp p pp

In a well-known article on Schoenberg’s music, Edward T. Cone examines the interaction of “sound and syntax” in highly chromatic music.¹⁸ “Sound” in this context refers (primarily) to vertical sonority, while “syntax” refers to harmonic progression. Analysis of sound and syntax in Figure 2.1 provides a way into the passage, and lays the groundwork for interpreting longer passages and, ultimately, entire works. Figure 2.2 is an analysis of the first two measures of the *Elektra* passage; in the figure, two harmonic “layers” are identified. As shown in Figure 2.2, the harmonic syntax implied in layer x and the vertical sounds produced by the $x+y$ compound are not concordant. Layer x implies a three-point design, stable-unstable-stable based on leading-tone activity, as indicated on the figure; but the addition of layer y distorts this. The resolution to tonic in layer x at timepoint 3 is contradicted: harmonic tension of the $x+y$ compound is increased at timepoint 3 rather than decreased. That is to say, a basic premise of basic tonal

¹⁸ Edward T. Cone, “Sound and Syntax: An Introduction to Schoenberg’s Harmony,” in *Music: A View from Delft*, ed. Robert P. Morgan, 249–66 (Chicago: University of Chicago Press, 1986).

organization—resolution to the tonic—has been contradicted and a kind of tonal tension not to be found anywhere in the common practice obtains.

Figure 2.2. *Elektra*, r. 177–177₂, analysis

stable unstable stable

177

Layer x

Layer y

non-syntactical

Lt.-type resolution

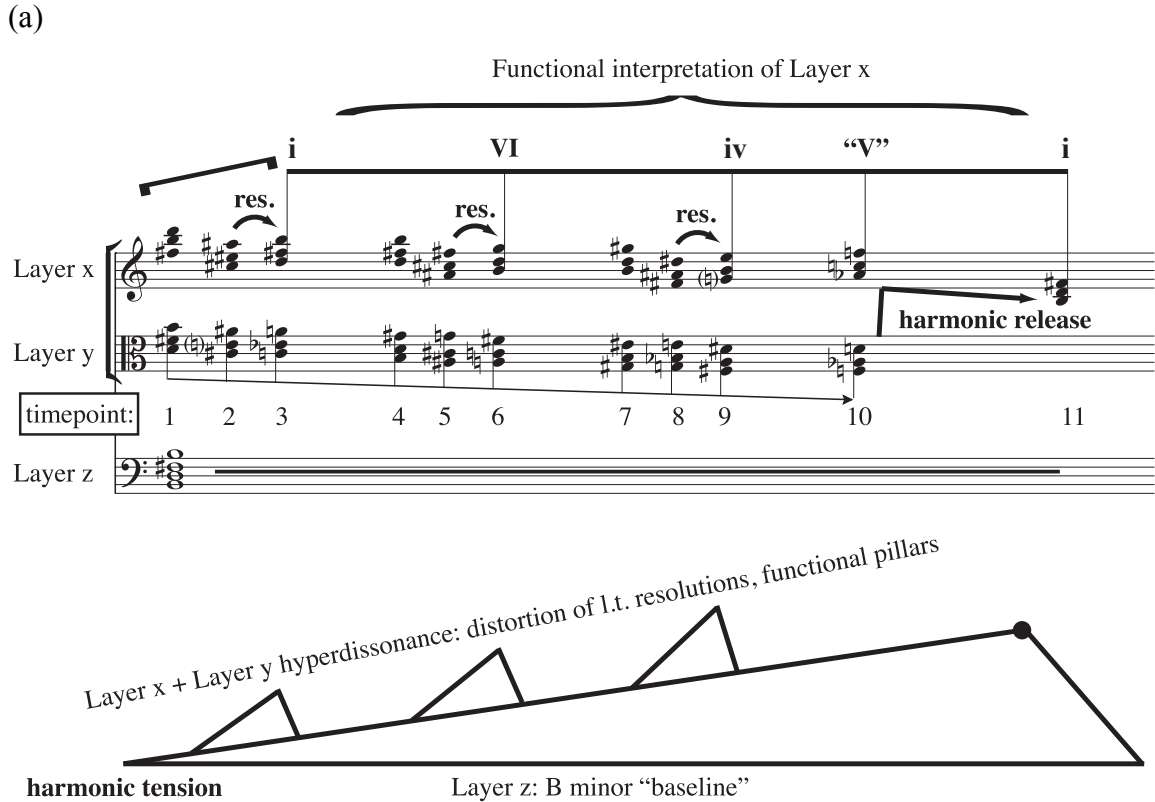
no resolution

tension

timepoint: 1 2 3

The analysis is continued through rehearsal **178** in Figure 2.3a. As shown by Roman numerals in the example, layer *x* implies a complete functional progression, chromatically altered but coherent. Layer *y* is a string of chromatically-descending diminished triads that does not engage that syntax. Layer *z* provides a constant B minor reference-point. Timepoints 3, 6, and 9 are all points of local leading-tone-type resolution to functional pillars inside layer *x*. But intervallically, they are points of maximal tension in the *x+y* compound, as shown by the tension diagram at the bottom of Figure 2.3a and supported by examination of interval vectors in Figure 2.3b. The effect is perhaps related to the textbook deceptive cadence, whose melodic leading-tone resolution is undermined by a failure to resolve to tonic harmonically. However, harmonic roughness in the *Elektra* passage is much greater than in that common-practice prototype, because the entire triads of resolution are actually heard in layer *x*.

Figure 2.3. *Elektra*, r. 177–178₂, analysis and tension diagram



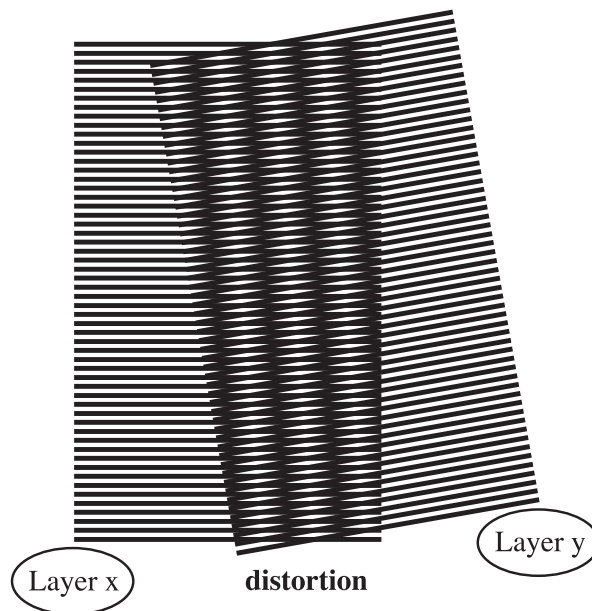
(b) interval vectors of $x + y$ compounds by timepoint

1: [001110] (triad)	4: [012111] (7 th chord)	7: [004002] (7 th chord)
2: [102111]	5: [102111]	8: [213211]
3: [225222]	6: [233241]	9: [233331]

The *Elektra* passage suggests an analogy from the visual domain: the “interference pattern” created when two grid patterns are superimposed, as in Figure 2.4. In the figure, the appearance of an ordinary grid is distorted by the superimposition of a second grid. Both grids are well-defined. It is not a case of seeing either the one grid or the other; the visual surface is both grids including the interference pattern created. The analogy is offered informally; but it suggests a more general schema for the complicated

tonal energetics of the *Elektra* passage: layers x and y may be likened to the two grids. The functional activity in layer x is distorted by superimposition of non-diatonic layer y . A paradox of tonal energetics results: timepoints 3, 6, and 9 are recognizably stable and undeniably unstable at the same time.

Figure 2.4. Moiré interference pattern and analogy with *Elektra* passage



The embedding of a familiar tonal idiom in an extraordinary chromatic environment can have the effect of “defamiliarizing” the tonal idiom, creating new expressive or rhetorical effects while maintaining a functional tonal basis. Figure 2.5, analysis of the opening of the “Elegy” section in Richard Strauss’s *An Alpine Symphony* (1915), demonstrates.

Figure 2.5. Richard Strauss, *An Alpine Symphony*, “Elegy,” r. 100, analysis

The image shows a musical score analysis for Richard Strauss's "An Alpine Symphony", "Elegy", measure 100. The score is divided into two layers, A and B. Layer A shows the actual musical material, and Layer B shows a simple functional i-V-i prototype. The harmonic analysis below the score shows the progression: i, V, i. The V chord is labeled as (bII⁶) with a circled 7 above it. The final chord is labeled as 8 - 7. An arrow labeled "chromatic substitution" points to the third measure of layer A, where the leading tone E# is treated as an enharmonically-equivalent Fb, and harmonized with an F major triad rather than the hypothetical C# major triad (or dominant-seventh chord, etc.) shown in B.

In the *Elektra* passage, the different harmonic layers are quite explicit; in the “Elegy” passage, they are implicit but still clear. In Figure 2.5, layer A contains actual musical material from the passage; layer B shows a simple functional i – V – i prototype that provides a basis for understanding layer A: A is interpreted as a chromatic substitute for B. In the third measure of the passage, leading tone E# is treated instead as enharmonically-equivalent Fb, and harmonized with an F major triad rather than the hypothetical C# major triad (or dominant-seventh chord, etc.) shown in B. It is not difficult to hear A as fulfilling the same basic tonal and phrase functions as B, but in a more energetic way. One striking effect of the chromatic inflection is that passing tone F# (the tonic of the passage) in measures 3 and 4 of A is intensely dissonant with the Fb root of the triad, whereas in prototype version B passing tone F# is only a mild dissonance. Similarly, melodic tone C# in the second half of measure 4 is, because of the

inflection, dissonant with $C\sharp$ of the F major triad, whereas it is a chord member in B. These are more than foreground details. The melody of the passage, which retains the implications of diatonic-functional B, sounds highly charged—even grotesque, to recall the *Encyclopedia Britannica* entry—in the chromatic context.; yet its notes have not been changed, only the context in which they are heard. Specific melodic pitches (the $F\sharp$'s, the $C\sharp$) which are not problematic in hypothetical layer B have quite different effects in layer A. The leading tone has been exaggerated by enharmonic reinterpretation ($E\sharp \rightarrow F\flat$) and chromatic substitution to such a degree that the diatonic basis of the melody is problematized.¹⁹ Because it has not been adapted to suit the chromatically inflected context, the melody sounds like it does not belong; the result is a tension between the melody and the harmonic setting.

The event in Figure 2.5 is quickly followed in the work by a more powerful corruption of diatonic-functional premises involving the same melodic material. As shown in Figure 2.6, at the beginning of the “Calm Before the Storm,” melodic material from the “Elegy” is implanted at pitch into the key of B minor. In the B minor context, primary melodic tone $C\sharp$ (marked x^1 in Figure 2.6) is now extremely dissonant; and the dissonance is never resolved. Instead, $C\sharp$, reiterated in the oboe part throughout the section (as $D\flat$), is gradually transformed into the upper third of $B\flat$ minor—the global tonic of the work, which appears as dissonant x^2 in Figure 2.6—as the “Calm” continues.²⁰ The change in tonal orientation over the course of the passage is understood as a shift in the status of the norms and abnorms. An overview of the entire section is shown in Figure 2.7. At the beginning of Figure 2.7, elements in layer y are heard as the

¹⁹ Even more basically, the raw melodic structure can be heard as an arpeggiation of the tonic triad over the course of five measures: $C\sharp 6$ down to $C\sharp 5$ at a rate of one chord tone per measure. This interpretation makes the actual chromatic setting even more remarkable.

²⁰ I reject Charles Youmans’s claim that the *Alpine Symphony* should be understood entirely in the key of $E\flat$, beginning and ending on the minor dominant. See Youmans, “The Twentieth-Century Symphonies of Richard Strauss,” *The Musical Quarterly* 84 (2000): 247. $B\flat$ is the first and final tonic in the *Alpine Symphony*. Youmans, however, interprets the entire work as a dysfunctional sonata form in $E\flat$ major. In his scenario, the opening of the work articulates the dominant (minor, then major), and the recapitulation takes place entirely in the minor dominant. I agree that there is conflict between $B\flat$ and $E\flat$ in the *Alpine Symphony*, but a global $E\flat$ interpretation actually lessens the impact of the large-scale tonal conflict. Better to say that $E\flat$ implications—and even a form *in* $E\flat$ —are embedded into the global $B\flat$ minor context, and work against that context. It then becomes clear that the work embodies a large-scale tonal deformation similar in many ways to the smaller-scale ones analyzed in the “Elegy” and “Calm Before the Storm” episodes.

local norm, while elements in layer x are dissonant abnorms. At the end of the figure, as the next section of the work (“Thunder and Storm”) begins, precisely the reverse holds. By the end of the passage in Figure 2.7, the torque applied to elements in layer x has dissipated, but not as the result of any clear functional process. Rather, a chromatic progression— c elements in Figure 2.6—leading to a diminished seventh chord at the midpoint of the passage acts as connective tissue.

Figure 2.6. *An Alpine Symphony*, “Calm Before the Storm,” mm. 1-6, analysis

The figure displays a musical score analysis for the first six measures of "Calm Before the Storm" from *An Alpine Symphony*. The score is divided into two main sections: the initial measures (1-6) and a detailed analysis of measures 100-102.

Initial Measures (1-6):

- Woodwinds:** Clarinet and flutes. The clarinet part is marked *espr.* and *p*. The flutes part is marked *pp* and *Immer ruhiger*. The woodwind part is annotated with x^1 , x^2 , and (x^3) .
- Strings:** Cello (cl) and double bass. The cello part is marked y_1 . The double bass part is marked *pp*.

Measures 100-102 Analysis:

- Measure 100:** Piano part marked *p espr.* and "Elegy".
- Measure 101:** Clarinet solo marked *p espr.*. Annotations include "resolution denied" and "resolution denied".
- Measure 102:** Clarinet solo marked *p espr.*. Annotations include "resolution denied" and "resolution denied".
- Annotations:** "melody implanted from F# minor into B minor" and "anticipated ordinary resolution of A# and C# to B".

Figure 2.7. *An Alpine Symphony*, “Calm Before the Storm,” analytic overview

Layer x (measures 104-105)

(x¹ throughout)

dangling A[#] & C[#] from clarinet, picked up by violin and oboe

see box below left

c1 c2 c3 c3b c4 c5 c6

Layer y (measures 106-107)

B minor/E minor “conglomerate”

strings

flute & bassoon

layers, entangled

Y₁ Y₂ Y₃ Y₄ Y_{4a}

x¹ x² x³ y₅ y₆ y₇ y₈ y₉

dim7 pivot

“Slide” from B minor triad to E minor triad.
NB. Actual musical surface extremely angular.

In the “Calm Before the Storm,” local tonal function in B minor is distorted by the implantation of thematic material in another key. At the same time, a different tonic (B_♭ minor) insinuates itself into the passage in an unconventional way—as a dissonance ultimately made consonant as though by force of compositional will. The result is a compound structure that simultaneously articulates diatonic-functional syntax, with its precise implications of tension and resolution, and an intense chromatic structure that undermines those implications.

Hyperdissonance: Definition and Initial Analytic Applications

Although the core concept is intuitively clear, hyperdissonance has proved difficult to define with precision. It is perhaps as much an epistemological anchor in a repertory that has sometimes seemed intractable as a bona fide technique. Nevertheless, I offer the following:

hyperdissonance

In a Postromantic work, tension between a diatonic-functional tonal basis and some explicit chromatic (or potentially modal) structure or structures, resulting in exaggeration, distortion; neutralization of functional premises, fragmentation of tonal patterns; and/or deformation on larger scales. Hyperdissonance is associated with higher-order structural processes, as variegated components of a compound melodic-harmonic environment are juxtaposed and worked out. In Rachmaninoff’s mature style, hyperdissonance is often associated with climax.

Hyperdissonance events occur frequently in works Rachmaninoff composed during the late Russian and exile periods, providing support for the claim that they are fundamentally Postromantic, not Romantic, in expressive and rhetorical orientation.

Common practice models are invoked, but deformed. In the works studied, hyperdissonance and climax are very often associated. Figure 2.8 is an analytic reduction of the climax before recapitulation in the first movement of Rachmaninoff's Symphony No. 3 in A minor, Op. 44. The climax is interpreted as involving a tension between conventional harmonic functions embedded in *Dies irae*-like layer A and characteristically Russian "fantastic" chromaticism in layer B.²¹ The basis of layer A is the establishment of dominant-type leading-tone energy and the functional resolution to tonic, as shown. The "fantastic" chromatic setting distorts the functional basis, yet preserves the pitch-class framework that defines the basis.

²¹ "Fantastic" chromatic structures involving equal division of the octave—octatonic, hexatonic, and whole-tone—are treated more fully in Chapter 4. The convention of using Arabic numerals to represent pitch classes to avoid issues of enharmonic notation is adopted in this dissertation. For example, following Joseph Straus, OCT_(0,1) refers to the octatonic collection containing pitch classes C and C# (or D♭). See Straus, *An Introduction to Post-Tonal Theory*, 3rd ed. (Upper Saddle River, NJ: Pearson/Prentice Hall, 2005).

2.8. Symphony No. 3, Op. 44, i, analysis of climax at the end of the development

Layer A

embedded functional basis

E^{\sharp} & G^{\sharp} primary tones

E^{\sharp} & G^{\sharp} primary tones

(7)

l.t. res.

harm. discharge

minor

Dominant

major

Tonic

plausible setting:

Possible interpretations

1) A minor

2) C^{\sharp} minor

l.t. res.

l.t. res.

D

T

NB. C^{\sharp}/D^{\flat} is important tonal center in *Symph.*

Layer B

oct (1,2)

chrom. descent

Layer A melodic material retained; chromatic setting distorts basis

whole-tone

dissonant?

Tonic

dissonant?

32 measures!

l.t. res.

Severe distortion
Tonic highly charged

“invisible” discharge

[A^{\sharp} of tonic breaks whole-tone]

20

21

23

25

climax

tonic achieved in Layer A
yet tension increases

increasing chromatic “roughening” of functional layer, distortion of diatonic values

harmonic tension

A fundamental premise of tonality is that achieving the tonic corresponds to a lowering of harmonic tension. At the climax of the Rachmaninoff symphony passage, as in the *Elektra* passage, that principle is turned on its head: arrival of the tonic triad after rehearsal **21**—made especially clear by a tonic statement of the symphony’s motto theme in the brass at **21**₅ and the rising melody in the violins at rehearsal **22**—coincides with a heightening of tension, because the intense chromatic activity (specifically, the long-held G#–F# seventh in the lower staff of layer B) does not accept the resolution.²²

To say that this tonic triad is stable throughout the climax, that it simply takes some time for the other elements to catch up to it (at rehearsal **25**), is to miss the dramatic point, especially as it takes a full 32 measures for the others to catch up. In Figure 2.7, the tonic and the image of a progression that achieves that tonic are recognizable, but the chromatic context has dramatically defamiliarized them. The tonic triad is under considerable duress.²³ When the melodic and dynamic apex of the passage is achieved, *ff*, in the flutes and violins at rehearsal **23** the leading tone G# is finally resolved in register; yet even here the long-held G# - F# minor seventh in the lower staff of layer B does not support the resolution to tonic. Only at the actual moment of recapitulation (rehearsal **25**) is the tonic stabilized; the discharge of its unusual energy is invisible, but not inaudible—that is to say, unlike a conventional dissonance, the dissonant tonic does not itself move to resolve; rather, the context is adjusted around it, correcting the tonal error, as it were.

There are some partial precedents for such an event in the common practice. A rhetorically emphasized cadential $\frac{6}{4}$ may raise tonic awareness even in an unstable context. This happens, for example, when Beethoven in the first movement of his “Appassionata” Sonata, and Rachmaninoff in the first movement of his Second Symphony, Op. 27 (rehearsal **17**₁₇), begin a movement’s recapitulation over a dominant pedal. Another precedent may be heard in the first movement of Beethoven’s “Eroica”

²² The sense of A minor as tonic is inescapable. At the same time, the suggestion of possible dominant function in the key of C# throughout the climax (V¹³, with B# spelled as C; see “Possible interpretations” box at top right of Figure) is important. As discussed in the longer analysis of the Symphony in Chapter 6 the dissertation, C#/D \flat has a special significance as a tonal center in the Symphony, and is an extremely important key in Rachmaninoff’s works in general. To put it another way, Rachmaninoff’s adherence to the conventions of monotonal sonata form demands that the climax chord be resolved to A minor, but the chord itself has additional potential.

²³ The defamiliarized tonic suggests what Richard Taruskin has called “the old Russian ploy of parading Self as Other.” See Taruskin, *Defining Russia Musically* (Princeton: Princeton University Press, 1997), 107.

Symphony. In the “Eroica,” at what Leonard Ratner identifies as the point of furthest remove in the development (the location of greatest tonal stress in a conventional sonata form), tonic note E \flat is re-imagined as highly-charged D \sharp , the leading-tone of distant E minor.²⁴ The unstable tonic chord in Figure 2.8 is different, however, in that it occurs not at a point of remove, but at a point of return; tonal tension is measured not in terms of distance *from* the tonic, but in terms of what has been done *to* the tonic triad to give it special meaning. The climax in the “Eroica” movement is an extraordinary (early) Romantic tension event; the climax in Figure 2.8, on the other hand, is an extraordinary Postromantic tension event.

Such dramatic maltreatment of the tonic as a result of intense equal-interval chromatic structures plays a special role at climaxes in many of Rachmaninoff’s works—indeed, as discussed more fully in Chapters 3 and 4, intensification and climax are the two rhetorical characteristics most clearly associated with special chromatic structures in his mature works. Whereas composers of late tonal music often withhold the tonic to heighten the sense of tension, Rachmaninoff is often keen to emphasize the tonic, which in extremely chromatic contexts can create a very different kind of tension. “To postpone the first clear presentation of a composition’s tonic is a characteristic Brahmsian gambit,” Dubiel writes.²⁵ One might say that to insist upon a composition’s tonic even in chromatic contexts that apparently deny it is a characteristic Rachmaninoffian strategy.²⁶

Formalizing the Model: Tension Arcs

Research on tonal tension, expressive shape, rhetorical design, and climax suggests ways to develop a more precise conceptual and interpretive framework for events like the one in the Symphony No. 3 passage analyzed above. Leonard Ratner has described the tonal design of classic sonata form as a “two-stage action”: “centrifugal motion (away from I)” begins during the exposition and continues until a “critical point”

²⁴ Ratner, *Classic Music*, 227.

²⁵ Dubiel, “Contradictory Criteria,” 81.

²⁶ Such emphasis on the tonic even (especially) in highly chromatic contexts recalls Joseph Yasser’s observation that Rachmaninoff’s chromatic language is characterized by strong “intra-tonal” organization, as opposed to the “inter-tonal” organization of Wagner’s chromaticism. See Yasser, “Progressive Tendencies,” 21.

(a “point of furthest remove”) is reached in the development, after which “centripetal motion (toward I)” begins.²⁷ Therefore, in his view, the “principal object of the development ... is to *regain* the tonic.”²⁸ Ratner’s model suggests applications beyond sonata form. A generalized version is shown in Figure 2.9.

Figure 2.9. Generalized tension arc

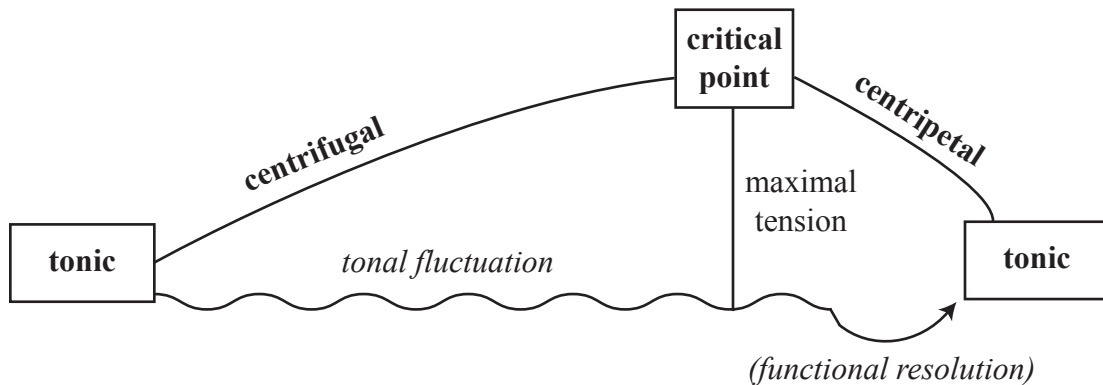
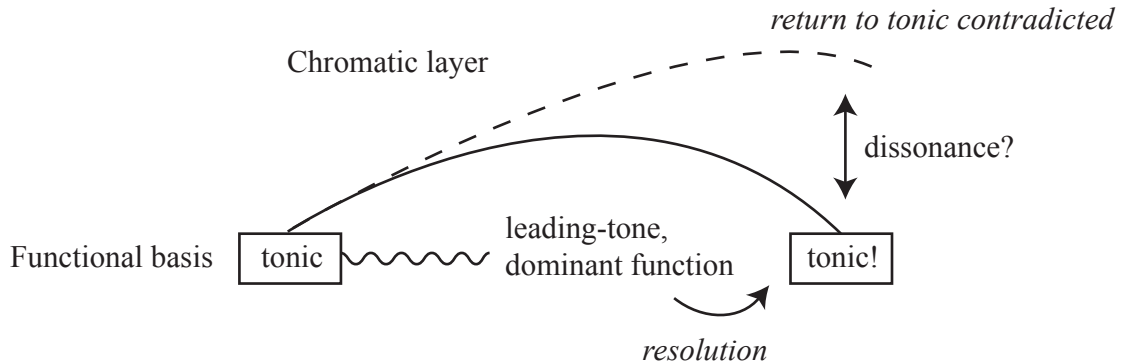


Figure 2.9, which I refer to as a “tension arc,” recalls Ratner’s own “dynamic curves,” which were briefly discussed at the end of Chapter 1. The arc applies in many musical contexts, not just in sonata form movements, and it may be used to model tonal and formal events on many scales. One premise of the Figure 2.9 model is that the *crisis* at the apex of the tension arc (the point of greatest tonal instability and, most likely, expressive focus—the “crux,” or “highpoint” in Hatten’s, Stell’s, and Agawu’s sense) and the *resolution* to tonic are separate events in separate locations. As noted above, in the Rachmaninoff Symphony No. 3 passage, this premise is radically undermined. Arrival of the tonic after rehearsal **21** coincides with a heightening of tension, because the intense chromatic context, involving symmetrical harmonic idioms of a characteristic Russian sort, does not support the embedded resolution to tonic. The tension arc suggested by the functional tonal framework and, more generally, the tenets of sonata form, is deformed, as shown in Figure 2.10.

²⁷ Ratner, *Classic Music*, 209, 225.

²⁸ *Ibid.*, 225.

Figure 2.10. Symphony No. 3, i, deformed tension arc at r. 22–25



Tension arcs provide a way to represent the effects that hyperdissonance can have on the expressive trajectory of a Postromantic passage or work. There is considerable support for such a model. Departure-return metaphors, and various kinds of arch or arc diagrams to show goal-orientation, expressive shape and/or the ebb and flow of tension, are found throughout the literature. Leonard Ratner’s description of sonata form and his “dynamic curves” have already been noted, as has Jason T. Stell’s discussion of “expressive curves” in select piano preludes by Rachmaninoff. Similarly, in Candace Brower’s cognitive theory of musical meaning, departure and return (one example of her more general “source-path-goal” model) is a primary “music-metaphorical schema”—a basic pattern to which musical events are matched and from which musical meaning is gathered.²⁹ Brower’s Figure 27 (reproduced here as Figure 2.11) provides a prototype for “how the phrases of a musical work can be understood as a series of goal-directed motions, with smaller arcs of motion nested within larger ones. The diagram “captures the way that harmony, melody, and rhythm work together to articulate a series of completed motions within an overall progression of departure and return. In its depiction of a specific number of phrases and relatively specific tonal plan, it constitutes more of a prototype than a schema.”³⁰ Brower’s description echoes Ratner: “the overall trajectory of harmonic motion shows the expected cycling of harmony away from the tonic and

²⁹ Candace Brower, “A Cognitive Theory of Musical Meaning,” *Journal of Music Theory* 44 (2000): 323–6, 331.

³⁰ *Ibid.*, 350.

expansion of the tonic-dominant cycle...revealing a general tendency toward motion leading away from tonic to a point of greatest tonal distance followed by a motion of return...Each phrase is represented as having two distinct goals: the climax of the phrase—the turning point between tension and relaxation, and the maximally stable event at the end of the phrase.”³¹ For both Ratner and Brower, some kind of crisis—a limit, a change of direction or conceptual reversal, a climax—happens at the point of furthest harmonic remove. The apex of the arc in Brower’s diagram is, then, quite likely to be a tensional highpoint in Agawu’s terms; and in Brower’s diagram, it is represented as an actual melodic peak, too.

Figure 2.11. Candace Brower’s schema for phrase structure

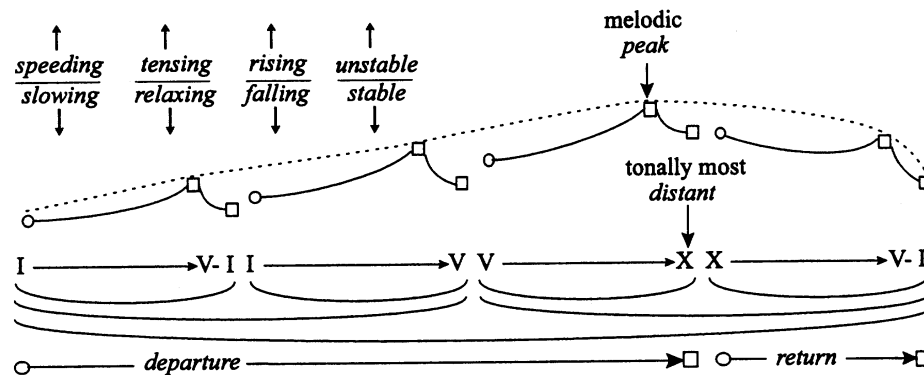


Figure 27. Schema for phrase structure

Fred Lerdahl’s theory of tonal tension also generates arc-shaped diagrams for tonal structures, showing melodic and harmonic fluctuation around a referential tonic (a pitch in the case of melody, a chord in the case of harmony).³² Wallace Berry has gone so far as to suggest that in chromatic contexts, “one is almost tempted to assert that tonal structure is best characterized not in terms of specific tonics, but, rather, in terms of the pattern (tripartite) *stability-fluctuation-stability*.”³³ Berry recognizes that, even when a passage resists description in functional or linear terms, a trajectory referable to basic

³¹ Ibid.

³² Fred Lerdahl, “Calculating Tonal Tension,” *Music Perception* 13 (1996): 319-82.

³³ Wallace Berry, *Structural Functions in Music* (New York: Dover, 1987), 140.

tonal premises often remains. I take this to be a core feature of Postromantic works in general.

Exaggeration of Tonal Premises

There are three basic ways that hyperdissonance can impact a passage's expressive shape, or, more formally, its tension arc: *exaggeration*, *distortion*, and *neutralization*. I suggest that each of these is a kind of deformation in Hepokoski's generalized sense of the word. The first two are dealt with at length in the following pages. The third (neutralization) represents a more radical tonal possibility that has little practical application in the analysis of Rachmaninoff's music, and is therefore presented only in passing.³⁴ Although I have attempted to define exaggeration and distortion as precisely as possible to maximize their potential in analysis, in the final assessment they represent a way of thinking about the expressive effects of unusual kinds of pitch organization, not a strict system of classification.

If tension between diatonic-functional premises and a chromatic structure does not explicitly undermine the resolution to tonic (or other strong local goal), but, rather, amplifies the tension arc to an extent not possible in conventional tonal syntax alone, then *exaggeration* occurs. This may be thought of as hyperdissonance at the point of remove, as diagrammed in Figure 2.12. Essential tonal premises—departure/fluctuation generates tension, functional resolution to a goal provides stability—are not undermined, but greatly amplified. In such situations, the exaggeration itself can be the most significant expressive, rhetorical, or style factor, overtaking the functional tonal basis in significance.

³⁴ But see the comparison of Rachmaninoff's and Skryabin's equal-interval structures in Chapter 4, where the possibility of functional neutralization is considered in more detail.

Figure 2.12. Hyperdissonant exaggeration

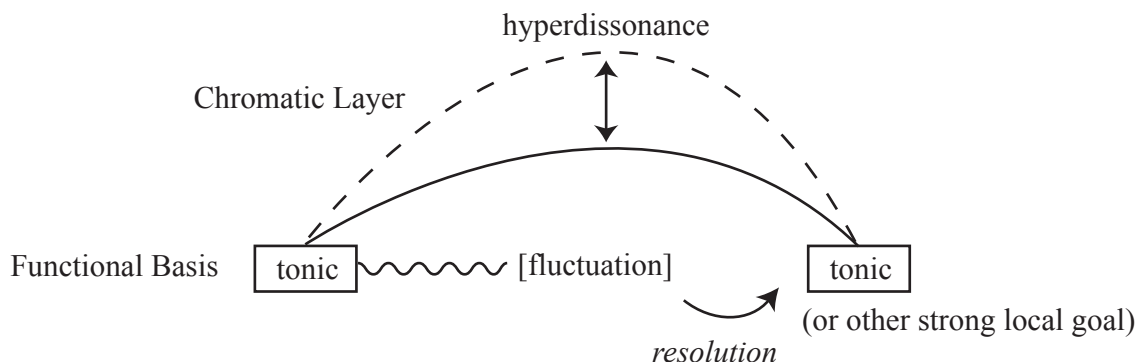


Figure 2.13 gives an example of hyperdissonant exaggeration at rehearsal **87** in the second movement of Prokofiev’s Piano Concerto No. 3, Op. 26 (1921). As shown in the figure, a plagal gesture in the orchestra at **87** in the orchestra is converted into an octatonic version in the solo piano part two measures later. Although the resolution to E minor is not seriously disrupted, substitution of an $OCT_{(1,2)}$ structure for the plagal one has a number of unusual effects. Tonic note $E\flat$, part of the plagal sonority, is instead momentarily dissonant in the octatonic version; and the subdominant “root” ($A\flat$), must be understood as a non-collection tone. These local effects are not powerful enough to seriously disturb (or distort) the tonal basis, but the octatonic substitution turns the solo piano version into something mildly grotesque.

A similar event in the *Rhapsody on a Theme by Paganini* is analyzed in Figure 2.14. The figure shows (1) Paganini’s theme as it is first heard at measure 33 in the *Rhapsody*, (2) a passage from Variation VIII, and (3) a passage from Variation IX. Paganini’s theme is in binary form; the first part is repeated, but the second is not. (Rachmaninoff invariably writes the repeat out in full to allow double-variations procedures; I have used a repeat sign in Figure 2.14 to save space.) Of interest at present are the first four measures of the second part of the theme (mm. 37–40 of (1) in Figure 2.14). The measures are sequential, tonicizing iv and then III, and they contain the first harmonies other than tonic and dominant in the theme. Note the appearance of $B\flat$ in measure 37, which strengthens the tonicization of iv. Measures 37–40 represent a clear

departure, and are followed by a clear return over the course of the rest of the theme and, ultimately, a strong resolution to tonic.

Figure 2.13. Prokofiev, Piano Concerto No. 3, Op. 26, ii, analysis of r. 87

Plagal resolution Octatonic exaggeration

87

orchestra

piano

!

* original SD "root" (A#)
not member of collection

delayed

Figure 2.14. Hyperdissonant exaggeration in passages from *Rhapsody on a Theme by Paganini*, Op. 43

The image displays three musical staves, labeled 1, 2, and 3, illustrating hyperdissonant exaggeration in passages from *Rhapsody on a Theme by Paganini*, Op. 43.

- Staff 1 (Theme):** Labeled "Theme" and "33". It features a treble clef and a key signature of one flat (B♭). The music is marked *p*. Annotations include "V", "iv", and "III" with arrows indicating harmonic movement. A box containing "B♭" is positioned above the staff.
- Staff 2 (Var. VIII):** Labeled "Var. VIII" and "300". It features a treble clef and a key signature of one flat. The music is marked *ff*. Annotations include "iv" and "III" with arrows. A box containing "!" is positioned below the staff.
- Staff 3 (Var. IX):** Labeled "Var. IX" and "344". It features a treble clef and a key signature of one flat. The music is marked *mf*. Annotations include "cresc.", "p", "f", and "III" with arrows. A box containing "!" is positioned below the staff.

Dashed lines connect the "III" annotations in Staff 1 to the corresponding "III" annotations in Staff 2 and Staff 3, indicating the continuation or exaggeration of the hyperdissonant passage across the variations.

At the corresponding location in Variation VIII (2), which Rachmaninoff marks *ff*, a B \flat minor triad is substituted for V of iv, resulting in not a fifth root relation but a chromatic major third root relation (marked with an asterisk in Figure 2.14). As a result, the roles played by A \sharp and B \flat in the melody are exchanged. This is shown by the stemming in Figure 2.15, whose (1), (2), and (3) correspond to those in Figure 2.14. A \sharp , primary in (1), is dissonant in (2); B \flat , dissonant in (1), is a local chord root in (2). Although the local resolution to iv and then to III is maintained in Variation VIII, the *ff* chromatic outburst has exaggerated the departure stage of the form, and mildly problematized certain basic tonal details of the functional tonal theme.³⁵

Figure 2.15. *Rhapsody on a Theme by Paganini*, mm. 41–42, 300–303, 344–347, analysis

The diagram illustrates three stages of chord progression in a musical score. Stage 1 (labeled 1) shows a V chord (G major) resolving to an iv chord (C minor). Stage 2 (labeled 2) shows a chromatic substitution marked with an asterisk (*) resolving to an iv chord (C minor). Stage 3 (labeled 3) shows a chromatic substitution marked with an asterisk (*) resolving to an i chord (C minor), with a '6-5' interval indicated.

In Variation IX, chromatic complication of basic tonal syntax is taken a step further at the corresponding location (m. 344). The B \flat minor triad is retained (it is in fact held for three measures rather than two); however, it resolves in measure 347 not to a D minor triad but to an A minor triad—that is to say, to the tonic triad. This is shown in simplified form in Figure 2.15 (3). This has the effect of more seriously deforming the functional tonal basis of the theme. A clear resolution to the tonic triad in the departure stage of syntax or form—even as a passing event—is usually of considerable interest. At measure 347 in Variation IX (Figure 2.15 (3)), the tonic results from a gradual process of chromatic substitution. Step 1: in Variation VIII, a chromatic chord substitutes for V of

³⁵ As the longer analysis of the *Rhapsody* in Chapter 6 dissertation shows, the substitution of a chromatic third relation for a diatonic relation in Variation VIII has implications for the large-scale structure of the work, which can be understood as involving a cycle of major thirds.

iv. Step 2: in Variation IX, the chromatic chord is retained, but a different chord is substituted for its resolution, altering the shape of the passage.

Comparison of Figure 2.14 and Figure 2.15 (3) with Figure 2.16, Heinrich Schenker's analysis of the theme, suggests the extent of the deformation, while also revealing that core tonal premises nevertheless remain intact.³⁶

Figure 2.16. Schenker's analysis of Paganini's theme (*Free Composition*, Fig. 40, 9)

As shown in Figure 2.15, the process of chromatic substitution process changes the structure of the top voice in Variations VIII and IX: in Figure 2.15 (2) and 2.15 (3), the descent to $F\sharp$ and $D\sharp$ is stunted as the melody remains focused on $A\sharp$, and Schenker's scale degree 4 (see Figure 2.16) is therefore eliminated. If a 5-line reading is to obtain, all the events which follow the chromatic substitution must be reevaluated. Such an interpretation is possible, as shown in Figure 2.17, suggesting that tonal premises have not truly been undermined in Variation IX. Nevertheless, the effect of the chromatic intensification is pronounced. Indeed, the dynamic, textural, and registral characteristics of the passage, shown crudely in Figure 2.17 and more precisely in Figure 2.15, suggest that Rachmaninoff intended the chromatic substitution in Variations VIII and IX to be jarring. In Variation IX, the return of comparatively normal tonal functions later in the

³⁶ Heinrich Schenker, *Free Composition (Neue Musikalische Theorien und Phantasien, III: der Freie Satz)*, ed. and trans. Ernst Oster (New York: Schirmer Books, 1979).

passage is, by contrast, rhetorically unmarked. The exaggeration of the tension arc is the main issue in these two variations.

Figure 2.17. A Quasi-Schenkerian reading of *Rhapsody*, Variation IX, r. 26

The figure shows a musical score for Variation IX, r. 26 of Prokofiev's *Rhapsody*. The score is presented with a Quasi-Schenkerian reading. The notation includes a treble clef, a key signature of one flat, and a common time signature. The melody is characterized by chromaticism and is marked with *8va* and *loco*. Below the staff, Roman numerals indicate the harmonic structure: (V), i, III, bII⁶, V, i. Above the staff, numbers with hats (5, 4, 3, 2, 1) are placed above specific notes. Below the Roman numerals, a diagram illustrates the tension arc. A dashed line starts at a low point, rises to a peak, and then falls. The rising part is labeled 'rising register' and the falling part is labeled 'decreasing tension falling register'. The peak is labeled 'peak intensity'.

Chromatic exaggerations such as those in the Prokofiev and Rachmaninoff passages just analyzed are of course not entirely new in the Postromantic. Chromaticism in more conventional contexts may generally be thought of as intensifying the departure/fluctuation stage of tonal organization, sometimes to the point that the instability that results seems the defining musical characteristic. For example, Geoffrey Chew has examined the effects of intense chromaticism on local climaxes in the *Abschied* from Act II of Wagner's *Tristan und Isolde* along lines suggested by Ernst Kurth.³⁷ Chew observes that, while in Schenker's theory the tonic and dominant are stable pillars to which all other contrapuntal and harmonic events are at some point bound in analysis, in a Kurthian interpretation of harmonic "instability" in chromatic contexts, events neither

³⁷ Geoffrey Chew, "Ernst Kurth, Music as Psychic Motion and *Tristan und Isolde*: Towards a Model for Analysing Musical Instability," *Music Analysis* 10 (1991): 171-193.

the tonic nor the dominant may be considerably more crucial, and may in a sense become the conceptual pillars. Chew notes that:

“...Dominant harmonies at the end of the refrains are points at which the emotion (dependent on leading-note tension) has passed its peak and subsided...The climaxes themselves – the points of greatest tension and instability – give the *Abschied* its characteristic dramatic shape, and so they may have some claim to be thought of as *Grundpfeiler* in a Kurthian sense, even though they cannot be regarded as such in any Schenkerian sense.”³⁸

In other words, intense chromaticism achieves its most powerful effects before the dominant stage of syntax, and the phrase or passage is thereby restructured in some sense. As Kurth put it:

“...One experiences the leading-note effect in these contexts the more strongly where originally, in the blandest and most hackneyed form of the scale, no semitones occur; for this reason, every chromatically altered note has an effect even stronger than the chromatic tension of the leading note in its normal position...”³⁹

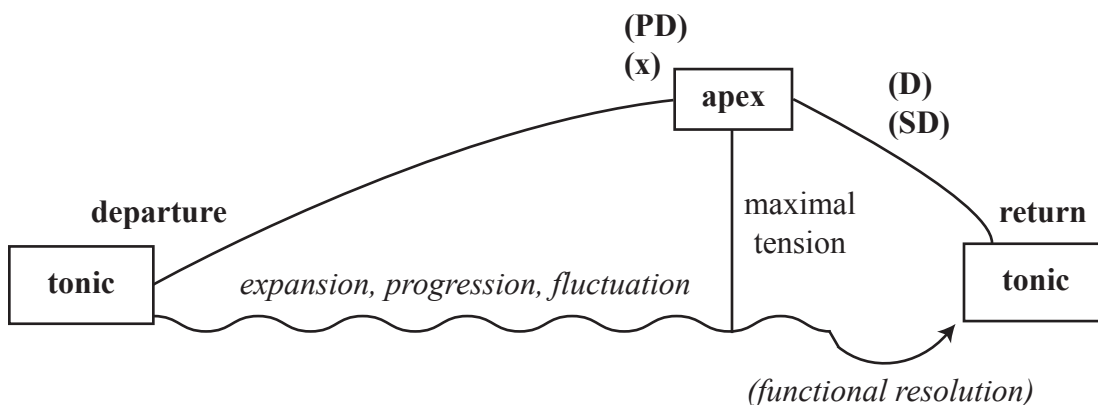
This relocation of harmonic tension from the dominant to the predominant stage in syntax is, for Chew, a defining characteristic of the chromatic idiom.

It is possible to map functional progressions onto a basic tension arc in a way that successfully models a majority of cases, reflecting Brower’s, Kurth’s, and Chew’s observation that the predominant stage of a functionally-organized phrase or passage is, in chromatic Romantic and Postromantic works, generally the most intense and the most rhetorically accented. (See Figure 2.18.)

³⁸ Ibid., 187.

³⁹ Quoted in Geoffrey Chew, “The Spice of Music: Towards a Theory of the Leading Note,” *Music Analysis* 2 (1983): 45. See also the discussion of Kurth’s theories in Lee A. Rothfarb, *Ernst Kurth as Theorist and Analyst* (Philadelphia: University of Pennsylvania Press, 1988); and Rothfarb, “Energetics,” in *The Cambridge History of Western Music Theory*, ed. Thomas Christensen, 927-55 (Cambridge: Cambridge University Press, 2002).

Figure 2.18. Tonal functions mapped onto a prototypical tension arc



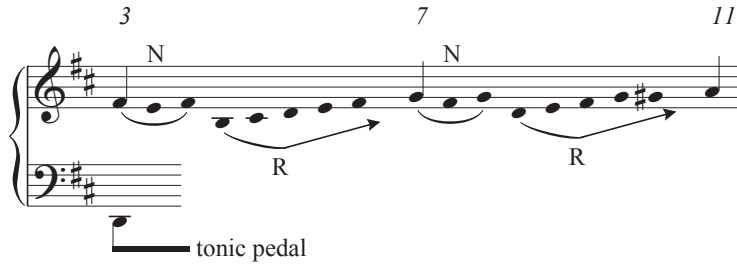
Many passages in Rachmaninoff works from all periods follow this plan without necessarily suggesting interpretation in layers or hyperdissonance as an analytic framework. Figures 2.19 and 2.20 present an overview of the main climax in the well-known middle-Russian-period Prelude in D major, Op. 23, No. 4 (1903).⁴⁰ The chromatic materials in the passage are of a very conventional kind, including modal mixture and the Neapolitan, and neither hyperdissonance nor harmonic stratification is suggested.

In Figure 2.19(a), the motivic material of the prelude is shown: a neighbor figure (N), and a rising figure (R). The piece is in ternary form. Figure 2.19(b) shows that the A section is periodic; its defining perfect authentic cadence in measure 35 overlaps with the beginning of the B section. Although the period is parallel, there is development within the A section. Most obviously, a countermelody in triplets is added in the consequent phrase. Less obviously is the emphasis on a new chromatic tone in the consequent phrase: E \flat joins A \sharp /B \flat , as shown in Figure 2.19(b).

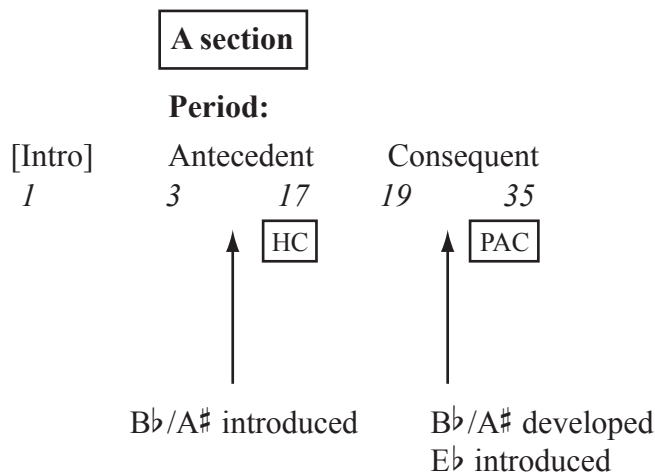
⁴⁰ This prelude is discussed in Stell, “Rachmaninov’s Expressive Strategies,” 77–92. Many of my findings are consonant with his. One difference, however, is that I adhere to a ternary form interpretation of the work, while he finds a ternary interpretation insufficient.

Figure 2.19. Prelude in D major, Op. 23, No. 4, analysis of A section (mm. 1–35)

a) Motivic material



b) Period design and introduction of chromatic tones



These basic materials are developed into the climax shown in Figure 2.19. The neighbor figure is retained, and the rising figure is gradually extended. The climax that arrives in measure 51 is unmistakable. It is the moment of peak chromatic intensity in the piece, an arrival at registral extremes following an ascent in the upper voice and a descent in the bass, the occasion of peak textural and dynamic intensity (*ff*; compare the *pp* at the beginning of the section); and it immediately impels a reversal of melodic directionality.⁴¹ The climax chord— \flat II in measure 50—represents a synthesis of the two

⁴¹ Stell considers the expressive implications of the reversal in detail on pp. 87–92.

chromatic tones exposed in the two phrases of the A section (see again Figure 2.18(b)). But the Neapolitan is not treated conventionally. As Stell has noted, the addition of C♯ in an upper register suggests the German augmented sixth of G major/minor, correct resolution of which would continue the wedge shape in the outer voices.⁴² Instead, however, ♭II is directly replaced by ♯II in a fashion that Rachmaninoff would duplicate four years later in the D major second theme of the Symphony No. 2's finale.⁴³ At the moment of climax, B♭ in the right hand part becomes A♯ and pushes to B♯, while E♭ is blocked from taking the next step (to D♯), and leads back to E♯.

Hyperdissonant exaggeration may be considered an extreme, historically specific form of chromatic amplification. Analysts have previously recognized its significance in Postromantic works, but have never to my knowledge named or formalized it. Richard Kaplan's analysis of the dense chord heard at the *ff* climax near the end of Richard Strauss's *Salome* is one example. His analysis is reproduced in Figure 2.21; the passage is shown in reduction in his system "a" and parsed into two neighbor chords in his system "b".⁴⁴ Kaplan interprets the climax chord as a compound of the two neighbor chords, entangled yet clarified by register. The chord shown on the top staff of system "b" is "generated principally by the diatonic melody" and as such is tightly bound to the diatonic-functional basis, as its Roman numeral label suggests.⁴⁵ Kaplan observes that the chromatic neighbor chord in the bottom staff of system "b" "combines as dissonantly as possible with this melody: each pitch class of the lower chord forms a semitonal relationship with a pitch class of the upper chord."⁴⁶

⁴² Stell, "Rachmaninov's Expressive Strategies," 84–86.

⁴³ See mm. 185–188 of the symphony movement. The prelude and the symphony theme have other features in common, including a wedge formation of the outer voices and the gradual exposition of chromatic tones B♭ and E♭. The similarities suggest that the prelude might have served as a model for the symphony theme.

⁴⁴ Kaplan, "The Musical Language of *Elektra*," 48

⁴⁵ *Ibid.*

⁴⁶ *Ibid.*

Figure 2.20. Prelude in D major, analysis of climax in B section (mm. 35–53)

B section

35 PAC N R 37 N R 39 N R 41 N R 43 N R

8th V I departure

vi = ii = iv

7 # V V 6 5 ii

climax

45 N R 47 R 49 R 51 R 53 N

ascent release

pp p cresc. ff dim. mf

descent

IV bII (Ger⁺⁶ of G) V I

chromatic amplification

A section

reprise

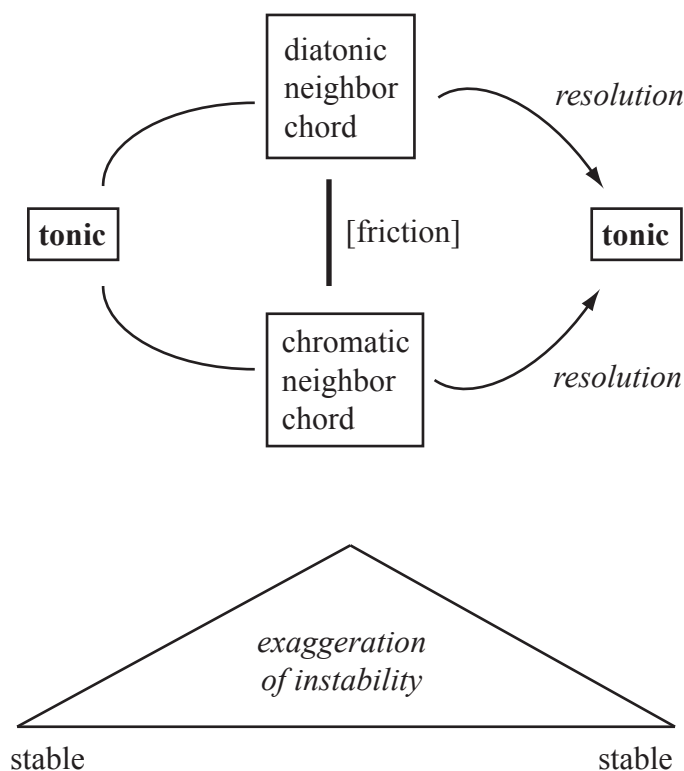
return

Figure 2.21. Richard Strauss, *Salome*, Op. 54, 360₅ - 361 (Kaplan's Example 1-25)

The image displays two systems of musical notation, labeled 'a' and 'b'. System 'a' consists of three staves: a vocal line in treble clef and two piano accompaniment staves (treble and bass clefs). The key signature has three sharps (F#, C#, G#) and the time signature is 4/4. The vocal line begins with a quarter rest followed by a quarter note G5, then a quarter note A5, and a quarter note B5. The piano accompaniment features chords and triplets. System 'b' shows harmonic analysis for the same three staves. The vocal staff has Roman numerals I, vii^o7, and I. The piano accompaniment staves have figured bass notation: I, 5, and I. The vii^o7 chord is specifically labeled with a '5' in parentheses below it.

In Figure 2.22, I contextualize Kaplan's analysis using the current framework; the three harmonies (tonic–compound neighbor chord–tonic) are mapped onto a three-point tension arc. As the figure shows, intense friction between the two neighbor chords exaggerates the basic shape suggested by the diatonic melody. Both neighbor chords resolve to tonic; nevertheless, the friction at the point of remove—a moment of hyperdissonance in a layered configuration—essentially defines the moment. That is to say, the complex, unstable sonority, not the tonic resolution, is the conceptual anchor of the event.

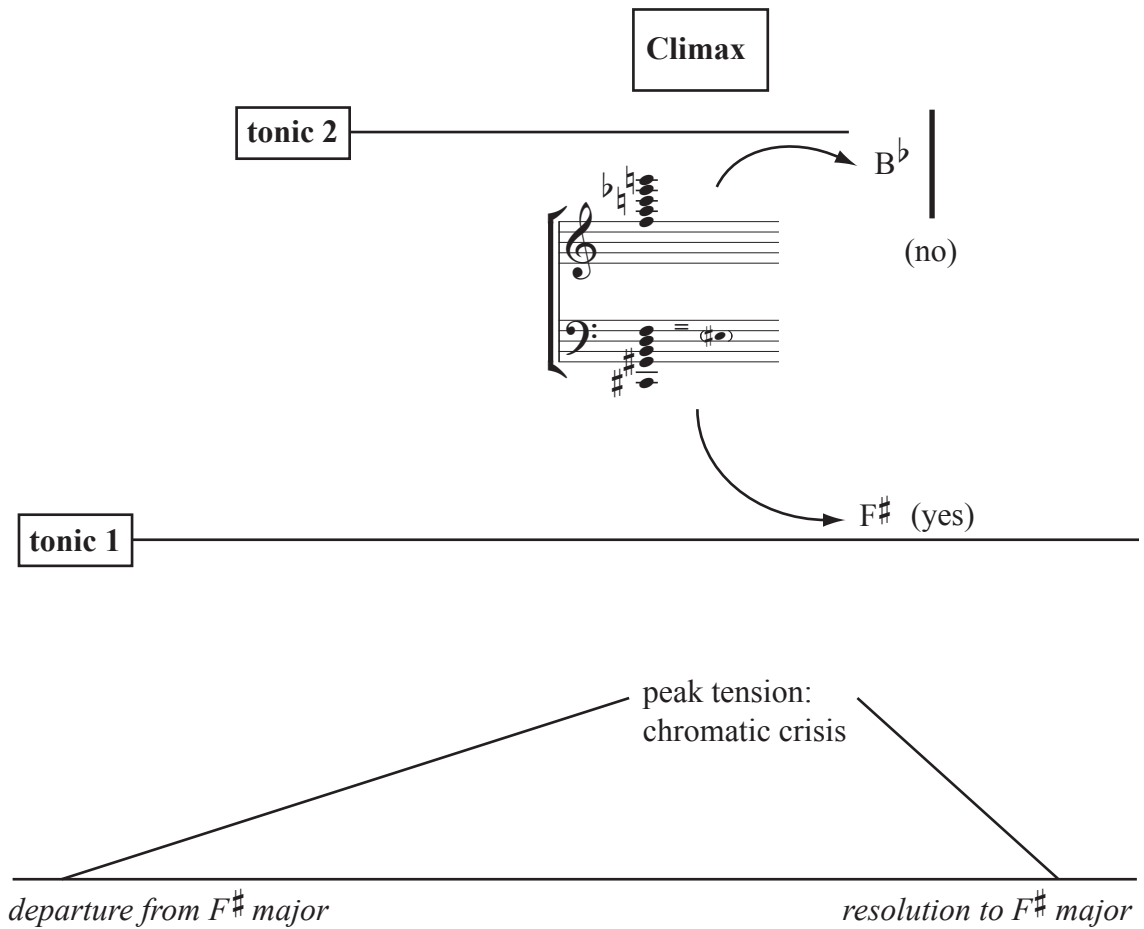
Figure 2.22. Diagram of hyperdissonant exaggeration at the *Salome* climax



Similarly, the famous nine-note chord heard at the climax in the first movement of Mahler's Tenth Symphony (measure 208), has been interpreted by Kaplan, and Agawu following him, as a radical, layered chromatic exaggeration of a functional basis.⁴⁷ The chord is considered a compound sonority referring to two keys at once— V^9 of $F\sharp$ major plus V^9 of $B\flat$ major, both of which key areas are significant in the work, but only one of which ($F\sharp$ major) emerges from the climax event. Figure 2.23 contextualizes their analysis according to the current theory. As the figure shows, the event demands tonal comprehension, yet depends almost entirely on a unique set of structural circumstances that reside outside ordinary tonal grammar.

⁴⁷ Kaplan, "The Musical Language of *Elektra*," 49; V. Kofi Agawu, "Tonal Strategy in the First Movement of Mahler's Tenth Symphony," *19th Century Music* 9 (1986): 222-233.

Figure 2.23. Mahler, Symphony No. 10, i, interpretation of climax (m. 208) following Kaplan



Distortion of Tonal Premises

If a clear statement of tonic or resolution to some other strong local goal in one harmonic layer is explicitly contradicted by a well-defined structure in another layer, as happens in the Symphony No. 3 passage analyzed earlier in this chapter, then a kind of *distortion* occurs. An essential tonal premise has been undermined, and an extremely conflicted, powerfully marked tonal situation results. As demonstrated in the analysis of the Symphony No. 3 climax in Figure 2.8, this may be thought of as hyperdissonance at the point of return (or, occasionally, at the point of departure), and is diagrammed in

Figure 2.24. In such a case, the chromatic “abnorms” overwhelm and distort tonal premises, which nevertheless remains in another layer. Although there are some partial precedents for hyperdissonant distortion in the common practice, I believe it is for the most part a Postromantic trait, and as yet little understood. The theory developed here is only a starting point for the interpretation of such events; further work in the repertory will be necessary before the extent to which this model applies in a wider repertory will be determined.

Figure 2.24. Hyperdissonant distortion

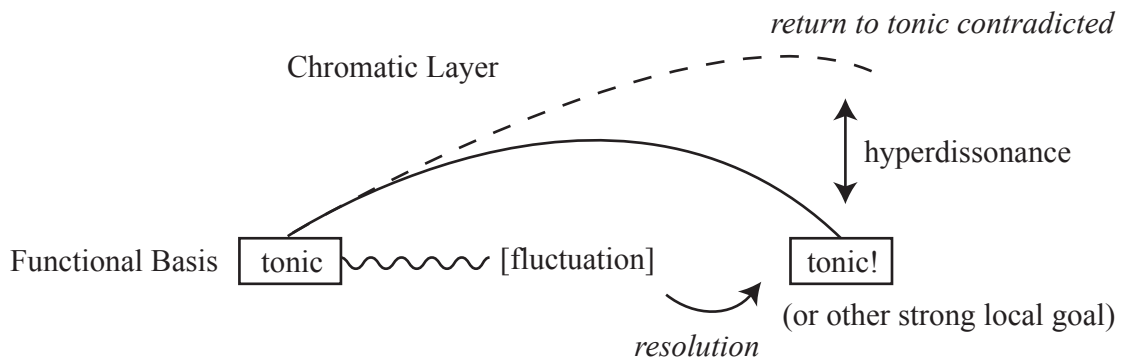


Figure 2.25 presents an analytic overview of the climax in Rachmaninoff’s song “A-u!” Op. 38, No. 6 (1916). The climax involves clear hyperdissonant distortion—that is to say, severe conflict between some functional tonal premise and a strong, well-defined chromatic structure at a point of return.⁴⁸ Specifically, the climax is interpreted as the result of conflict between $OCT_{(1,2)}$ and $OCT_{(2,3)}$ structures in layer 2 and $D\flat$ major tonic elements in layer 1. Layer 1 is organized around dyad $F/A\flat$ (motivic in the song) and includes pitch class $D\flat$ ($C\sharp$) after measure 24. Functional $D\flat$ major is established at the start of the song (not shown in Figure 2.25) by passing from the tonic to the dominant between measure 1 and measure 4; but it is largely abandoned (or at least radically de-emphasized) as octatonic methods gradually intrude and come to prominence. As shown

⁴⁸ In Figure 2.25, the poem by Konstantin Balmont is omitted from the vocal part except at the climax. The song’s title comes from the shriek heard at the climax.

in Figure 2.25, the return of tonic—really more a tortured projection of the tonic, prepared by scale degree 5 ($A\flat$) throughout measure 23—at the box in measure 24 is extremely tense. Restabilization is a gradual process, not complete until measure 28 (if even then), and, like the restabilization of tonic in the Symphony No. 3 passage (see again Figure 2.8), more an “invisible discharge” as layers are reoriented than a genuine resolution of the unstable tone(s).

Figure 2.26 provides a more detailed analysis of layer 2 octatonic activity at the “A-u!” climax. Figure 2.26(a) shows how an octatonic oscillation like that in the “Coronation Scene” of Mussorgsky’s opera *Boris Godunov* is extended to the form heard in measures 24–25.⁴⁹ This is connected to measures 26–27 in Figure 2.26(b), showing how the two diminished-seventh chords contained in $\text{Oct}_{(1,2)}$ (labeled #1 and #2) are entangled, creating a dense $\text{OCT}_{(1,2)}$ frame against which the projection of $D\flat$ major tonic is highly unstable.

⁴⁹ On octatonicism in the “Coronation Scene” of Mussorgsky’s *Boris Godunov*, see Chapter 4 of the dissertation and Allen Forte, “Mussorgsky as Modernist: The Phantasmic Episode in ‘Boris Godunov,’” *Music Analysis* 9 (1990): 3–45.

Figure 2.25. "A-u!" Op. 38, No. 6, analysis of climax (mm. 21-28)

The analysis shows a musical score with four staves: voice, piano, and two layers of tonal elements. The score is divided into two layers:

- Layer 1** (mm. 21-24): Labeled "D^b tonic elements". It includes the voice part and the piano accompaniment. Annotations include "C[#] disrupts oct.", "oct(2,3)", "?Dominant of D^b", and "oct(1,2)".
- Layer 2** (mm. 25-28): Labeled "octatonic". It includes the piano accompaniment and a lower staff. Annotations include "dim7 #1", "dim7 #2", and "2x".

Key annotations and transitions:

- tonic projection highly unstable**: A dashed line indicates a transition from the D^b tonic elements to the "invisible" discharge at m. 28.
- Scream: "A-u!"**: A box highlights the voice part at m. 24.
- maximally rough**: A box highlights the piano accompaniment at m. 25.
- Layers merge**: A box highlights the transition between the two layers at m. 26.
- Layer 1 highly charged**: A box highlights the piano accompaniment at m. 27.
- restabilization**: A box highlights the final state at m. 28.
- D^b major global tonic**: An oval highlights the final state at m. 28.

Figure 2.26. Analysis of OCT_(1,2) structure at the “A-u!” climax

(a) Extension of “Coronation”-type octatonic oscillation

prototype octatonic binary \longrightarrow measure 24

(b) Entanglement of diminished-seventh chords and OCT_(1,2) melodic segment

The climax event has an effect on the harmonic material of the song’s postlude. As Figures 2.27(a) and 2.27(b) show, layers 1 and 2 merge to create a sort of hybrid D \flat major collection that is partly diatonic and partly octatonic; and things are left dangling at the end, in D \flat , but with a quasi-octatonic binary that looks elsewhere as it were (Figure 2.27(c)).⁵⁰ Figure 2.28 provides a schema for the entire passage: at the climax, “little” D \flat major on top is highly unstable in relation to the octatonic layer, which is, however, highly charged in relation to “big” D \flat major underneath. It is a wrenching moment—the

⁵⁰ The hybrid and the dangling E \flat recall measure 2 of the song, where they occur in passing. The hybrid is in fact the so-called “acoustic collection,” whose significance in other Russian works from the period is discussed in Clifton Callender, “Voice-Leading Parsimony in the Music of Alexander Skryabin,” *Journal of Music Theory* 42 (1998): 219-33; and Zimmerman, “Families without Clusters.”

point of maximally roughness and expressive intensity in the song; the climax, and, as the tension recedes into the postlude, probably the point of culmination, too.

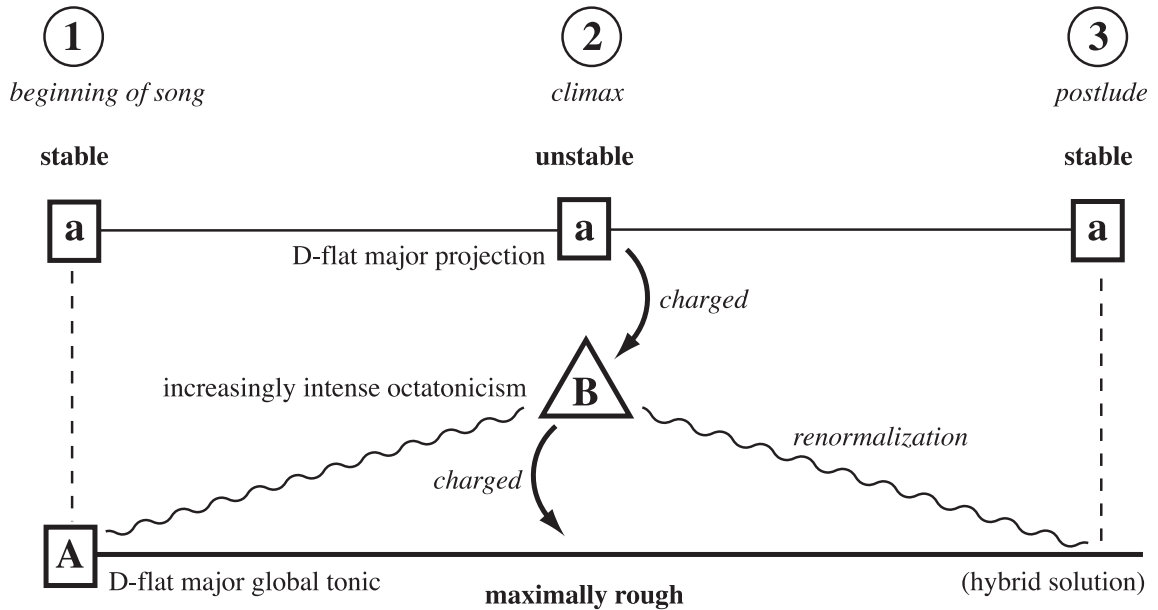
Figure 2.27. “A-u!” postlude, analysis

(a) “A-u!” postlude (mm.28-end)

(b) Analysis of hybrid collection

(c) M.34 Quasi-octatonic binary in relation to earlier octatonic binary

Figure 2.28. Schema of “A-u!” climax



In “A-u!” there is no real harmonic activity after the climax event; as though all energy has been spent, the postlude takes place over what I call a “post-climactic pedal point”—common in Rachmaninoff’s mature works, as subsequent analyses in the dissertation will show.

In each of the examples presented so far, juxtaposition of a diatonic-syntactic basis and recalcitrant chromaticism creates some sort of intense anxiety about the tonic. In the Strauss and Mahler passages, the separation into harmonic layers, individual but interactive, is texturally and registrally obvious. The Rachmaninoff examples are perhaps not as obviously counter-traditional, nor are their harmonic layers quite as explicit, but they are equally dramatic: insistence upon the tonic triad in unremitting chromatic contexts creates moments of climactic roughness—quite the opposite of what one expects from a statement of tonic. In the case of the Rachmaninoff Symphony No. 3 passage (see again Figures 2.8 and 2.10), the result is a dramatic twist, a hyperdissonant accent, on what was by 1936 utterly *passé*: the return of tonic at a sonata-form recapitulation.

While I believe that hyperdissonant distortion, in particular, is characteristic of Rachmaninoff’s mature style (that is to say, of works composed in the late Russian and

exile periods), there is at least one clear precedent in the early Russian period: the climax in the Elogy in E \flat minor, Op. 3, No. 1 (1892). As the analysis in Figure 2.29 shows, the event shares important features with the “A-u!” climax, and might even be heard as a prototype for it.

Figure 2.29. Elogy in E \flat minor, Op. 3, No. 1, analysis of climax

The analysis is divided into several sections:

- A section (measures 38-41):** Starts with a piano (*pp*) dynamic. The bass line shows a V 7 iv cadence. The chord progression is i, III, V.
- B section (measures 41-68):** Features an ascent (measures 53-68) and a descent. The dynamic is *pp*. The chord progression includes III and V.
- Climax (measures 70-82):** Marked with fortissimo (*fff*). The dynamic is OCT_(0,1). The tonic is D \sharp /E \flat . The E-flat emerges at measure 82. The dynamic is highly charged.
- A section (measures 83-84):** Features a piano (*p*) dynamic. The dynamic is *p*. The chord progression includes i and V 7 iv. The tonic is E \flat stable.

A dashed arrow labeled "invisible discharge" points from the climax towards the A section, indicating a transition from a highly charged state to a stable state.

The piece is in ternary form (ABA). Its main melodic material can be understood as emerging from a basic $\hat{3}-\hat{2}-\hat{1}$ descent in measures 3–5. This provides the kernel for the hyperdissonant distortion event at the climax. As shown in Figure 2.29, the B section (a departure in Ratner’s sense) progresses through III to V, the latter of which hosts a wedge progression that “should” prepare the return of tonic but goes to far, leading to the climax event that begins in measure 80. At the climax, tonic E_b is entangled with A major, resulting in an octatonic-type binary reminiscent of the ones at the “A-u!” climax in Figure 2.25. In this case, however, the melodic material does not follow suit: it is not octatonic. E_b emerges at measure 82, but as a major-minor seventh chord (again, characteristic of octatonic organization)—not a minor triad. As shown in the boxes in the A sections of Figure 2.28, this sonority functions as V^7 of iv in the functionally normative A sections of the piece. At the climax, hyperdissonance emancipates it from a functional role.

Figure 2.30. *Elegy*, analysis of distorted cadential figure at climax

(a) 3-line model (b) Hyperdissonant distortion at climax

The figure consists of two musical staves, (a) and (b), illustrating a cadential figure. Staff (a) is labeled '(a) 3-line model' and shows a treble clef with notes G4, F4, E4 and a bass clef with notes C3, B2, A2. Above the treble clef are labels $\hat{3}$, $\hat{2}$, $\hat{1}$ and below the bass clef are labels I, V, I. Staff (b) is labeled '(b) Hyperdissonant distortion at climax' and shows a treble clef with notes G4, F4, E4, D4, C4, B3, A3, G3 and a bass clef with notes C3, B2, A2, G2, F2, E2, D2, C2. Above the treble clef are labels $b\hat{3}?$, $\hat{2}$, $\hat{1}$ and below the bass clef is a bracket labeled $OCT_{(0,1)}$.

As Figure 2.30 shows, a basic cadential formula ($\hat{3}-\hat{2}-\hat{1}$) is contradicted by extreme chromatic activity at the climax, applying a kind of expressive torque to the tonic triad. As shown in Figure 2.29, the discharge of the hyperdissonance occurs during a one measure cadenza-like passage that Rachmaninoff notated in small noteheads. Although it is perhaps possible to hear an A_b minor sonority in the cadenza, suggesting functional

resolution of the E_b^7 chord, such an interpretation is weak. I prefer to hear the same kind of “invisible” discharge as that featured in the “A-u!” and Symphony No. 3 passages analyzed above. As the A section of the Elegy begins again in measure 87, the extraordinary climax chord is restored to its original, ordinary function (V^7 of iv).

A Parenthesis: Neutralization of Tonal Premises

As stated above, the third possible effect that hyperdissonance can have on a functional tonal basis—neutralization of functional premises rather than exaggeration or distortion of them—does not appear to have much analytic usefulness when it comes to Rachmaninoff’s works. Tonal underpinnings are simply too strong. However, recognizing that such neutralization is possible provides a way to differentiate Rachmaninoff’s works from works that use similar or identical chromatic structures to different ends. The music of Alexander Scriabin is a particularly good case in point.

As I demonstrate analytically in Chapter 4, the equal interval structures that many authors have identified in Scriabin’s works are in and of themselves not unlike those in Rachmaninoff’s mature works.⁵¹ However, the effect of the structures is very different indeed. Simon Morrison describes octatonic and whole-tone materials (and the so-called “mystic” chord that combines features of both) in Scriabin’s works as “inert acoustic structures modeled on traditional harmonies but devoid of functionality.”⁵² Taruskin’s view is similar: “Since it is harmonic progression that had always articulated the structural rhythm of music, which is to say its sense of directed unfolding in time, a music based on universal invariant harmonies becomes quite literally timeless, as well as emotionally quiescent.”⁵³ On the other hand, I have suggested, and will do so more forcefully in Chapters 3 and 4, that equal interval structures in Rachmaninoff’s works are associated with intensification and climax. According to the above authors, in Scriabin’s late works, equal-interval structures, though modeled on “traditional harmonies” (translation: they are tertian sonorities) do not engage tonal functions at all. Tonal

⁵¹ See again notes in Chapter 1 on Rachmaninoff’s performances of Skryabin’s works in the 1910s. The two composers were classmates.

⁵² Simon Morrison, “Skryabin and the Impossible,” *Journal of the American Musicological Society* (1998): 315-316. See also Reise, “Late Skriabin: Some Principles Behind the Style.”

⁵³ Taruskin, *Defining Russia Musically*, 348-349.

premises are therefore neutralized by symmetrical pitch structures in Scriabin's works, while they are exaggerated or distorted by the same in Rachmaninoff's. (Rachmaninoff's and Scriabin's equal-interval structures are compared in more detail in Chapter 4.)

Conclusion

“Practically anything in music can be labelled passing-note or appoggiatura,” Calvocoressi warns us.⁵⁴ The interpretive framework Calvocoressi develops for Mussorgsky's music to some degree resonates with the one I am proposing for Rachmaninoff's, insofar as both proceed from the premise that an interaction of functional tonal structures and special chromatic and modal structures is significant. Calvocoressi suggests that expansion of tonal premises is only part of that significance:

[Mussorgsky's] music embodies the *genre omnitonique* foretold by Liszt, but in a form depending upon the fundamental properties of Mussorgsky's ideas, melodic and harmonic, rather than upon the artifices by means of which his Western contemporaries were extending the boundaries of the major-minor system.⁵⁵

In a similar vein, Jim Samson has suggested that “there is... a distinction between the *expansion* of classical tonality from within and its *modification* from without. In the music of the Russian nationalist composers the modification of tonality was particularly thoroughgoing... The remarkable flowering of Russian music in the nineteenth century was characterized by a fascinating dialogue between indigenous traits—often the product of a distinctive folksong heritage—and Western traditions which were alternately embraced and rejected.”⁵⁶ That is to say, the means by which Russian composers developed new melodic and harmonic resources in the late nineteenth and early twentieth centuries were only in part related to the “internal” expansion of syntax that characterizes late Romantic music in the West. For example, numerous octatonic passages occur in the works of Chopin and Liszt as a *result* of internal tonal expansion. In a great deal of

⁵⁴ Michel Dimitri Calvocoressi, *Mussorgsky* (London: Rockliff, 1956), 238.

⁵⁵ *Ibid.*, 257.

⁵⁶ Jim Samson, *Music in Transition: A Study of Tonal Expansion and Atonality, 1900–1920* (New York: Norton, 1977), 9–10.

Russian music from the late nineteenth and early twentieth centuries, on the other hand, octatonicism (along with other “fantastic” chromatic structures) is treated as a *source*—a topic, something conceptually marked, expressively accented.

While, as the analyses in this chapter all demonstrate, the insights afforded by linear analysis are invaluable for the interpretation of tonal music from any era, such methods are not necessarily well configured to capture certain kinds of melodic-harmonic configurations—especially configurations that involve idioms which may have topical associations or special kinds of motivic significance, or when stratification and hyperdissonance may be involved.⁵⁷ As melodic-harmonic configurations gain in complexity and explicit or implicit deformational procedures become a central point in the undertaking, analysis emerges from considerations of foreground, middleground, and background levels into a grayer area that recalls Roland Barthes’s familiar claim: “to interpret a text is not to apply meaning to it, but on the contrary to appreciate the plurality that constitutes it.”⁵⁸

Put simply, conventional linear analysis methods and functional analysis methods require supplementation in the study of Postromantic music. It is my hope that the interpretive framework sketched in this chapter has suggested the potential benefits of an approach that incorporates the abnormal as abnormal, that allows a “surface-level” deformation or anomaly to in fact *be* deformational or anomalous. Identification of a linear or a functional prototype is therefore only a starting point for interpretation. Figures 2.31 through 2.34, collectively an analysis of Rachmaninoff’s song “Daisies,” Op. 38, No. 3 (1916), demonstrate.

Figure 2.31 contains the first four measures of the song. Three features stand out: a plagal orientation, various statements of the melodic figure E \flat -C or F- E \flat -C (marked *y* in Figure 2.31), and a striking harmonic relation that is extracted into a box on the figure. It is tempting to interpret the harmonic event—a “harmonic motive”—in exclusively linear terms. Motion from the unstable first chord into the second is characterized by semitones in all voices. Resolution of the leading tone (E \rightarrow F) is amplified by simultaneous resolution of three additional, “artificial” leading tones (D \flat \rightarrow C, B \rightarrow C,

⁵⁷ I have already suggested that by reducing octatonicism to a simple prolongational technique in Rachmaninoff’s works, Cunningham eliminates an important rhetorical consideration.

⁵⁸ Roland Barthes, *S/Z*, trans. Richard Miller (New York: Hill and Wang, 1974), 58.

and $A\flat \rightarrow A\sharp$). The spelling of the chromatic chord, in fact, makes the linear basis entirely clear: Rachmaninoff has chosen a non-tertian spelling of what sounds like a $D\flat$ minor seventh chord, thereby emphasizing the quadruple semitonal voice-leading resolution.

Figure 2.31. “Daisies,” Op. 38, No. 3, analysis of mm. 1–4

The figure displays a musical score for the first four measures of "Daisies." It features a piano part (right and left hands) and a voice part. Above the piano part, a box labeled "harmonic motive" shows a chromatic chord with a non-tertian spelling. The score includes markings for "Lento" and "piano." The voice part is marked "voice" and includes a slur labeled "y." The piano part has a slur labeled "x" and another labeled "y." At the bottom, an arrow points from "(SD)" to "T".

However, this harmonic formula, which if considered without regard to spelling involves root motion by chromatic major third, has a deep structural and motivic significance in the song. This is made clear at the climax (measures 1–18). Measures 17–18 of the song are clearly climactic: the piano part achieves its highest and lowest registers (the low $D\flat$ represents a plunge more than two octaves below anything previously heard in the song), and the voice achieves its highest dynamic indication, *f*, and its highest note upon the word *gotov'* (“prepare”). An overview of the climax in the context of the entire song is shown in Figure 2.32. As shown in Figure 2.32, the climax results from a gradual ascent, in stages (marked 1a, 2, 3, and 4 on the figure) in the vocal

line, which is rendered in simplified form. The climax occurs on D \flat major—previously the unstable chord in the harmonic motive; and it is setup up by an F⁷ chord. Figure 2.32 reveals a kind reciprocal relationship between F major (the overall tonic of the song) and D \flat . In other words, the harmonic motive can be reversed: either chord can be the basis of a seventh chord that resolves into the other chord. The chromatic major-third relationship is motivic, and, because it is exploited on the largest scale of the song’s harmonic structure, and provides the source of a climax event, it is structural. The potential reciprocity of the chromatic major-third relation heard at the onset of the song is actualized at the climax.

Figures 2.33 and 2.34, in conjunction with the annotations of measures 1–4 in Figure 2.31, show how the melodic material in the song reflects the reciprocal nature of the harmonic motive. The melodic figure labeled *y* in Figure 2.30 establishes pitch class E \flat as a significant melodic feature; as shown in Figure 2.32(a), this combines with frequently sounded B \natural (which is also contained in the harmonic motive) to suggest the F acoustic scale, which contains an F Lydian pentachord. In the climactic D \flat region of the song, melodic tone G \natural is emphasized. As shown in Figure 2.32(b), this creates a Lydian pentachord. Figure 2.33 shows the relationship between the F and D \flat Lydian pentachords and the two chords of the harmonic motive, and shows that, collectively, all of these features suggest a symmetrical background source: WT₁, or the whole-tone scale containing D \flat . WT₁ and the chromatic major third relationship in the harmonic motive both suggest equal division of the octave, which, as discussed in Chapters 3 and 4, is strongly associated with intensification and climax in the works studied.

In view of all of these features, the F⁷ chord leading into the climax is in my view not a passing event, but rather represents a kind of tonal involution. The main harmonic motive of the piece is reversed in its directionality—its “charge”—and in being reversed is made to serve not a composed-out “tonical” structure but a chromatic, non-tonical background harmonic source. The large-scale design and the melodic material of the work therefore reflect, or perhaps rely on, the harmonic motive.

Figure 2.32. "Daisies," analytic overview of climax

climax

vocal line, simplified

1A 2 3 4

1B

postlude

post-climactic pedal

Part 1 (28-31):
harmonic motive echoes

Part 2 (32-37):
plagal-oriented closure
in climax registers

(SD) harmonic motive

(D) harmonic motive

(SD) harmonic motive

(SD) harmonic motive

authentic cadence

D T

8^{ba}

11 14 18 24 28

F major

D^b

F major

reversal of harmonic motive

tonic charged

departure

return

F major

Figure 2.33. Scales and pentachords in “Daisies”

a)

acoustic scale

F major scale

b)

lydian pentachord

Figure 2.34. Relationship between the harmonic motive and the scales in “Daisies”

a)

F⁷

Db⁷

b)

Lydian/acoustic pentachords

F

Db

WT₁

The climax in “Daisies” is neither as gritty as the “A-u!” climax nor as grim as the Symphony No. 3 climax; it is, on the contrary, a kind of expressive breakthrough at a point of remove, not a collapse at the point of return. The projection of a charged, unstable tonic at the point of remove, recalling the climax in the development of Beethoven’s “Eroica” (see discussion of that work in relation to the Symphony No. 3 first movement climax, above), brings the chromatic distance traveled—the dislocation, the defamiliarization, or, to be precise, the exaggeration—into expressive focus. Certainly there is no diatonic structure of comparable significance; and, as in the “A-u!” climax, everything following the climax unfolds over a post-climactic pedal point, as though emphasizing that the chromatic climax event is *the* event in the song.

* * *

It is perhaps typical of Rachmaninoff that “extraordinary” chromaticism is in the end somehow subsumed under some “ordinary” tonal procedure—if this failed to happen, he would be not a Postromantic composer but a modernist one. Yet the moments when the “extraordinary” overwhelms the “ordinary” largely define the music’s expressive content. In considering tonal design in the usual sense, the emphasis may be on harmonic norms; but emphasis on the effects of the abnorms reveals more dynamic designs that are reminiscent of Wallace Berry’s “intensity curves.”⁵⁹ Lee A. Rothfarb has traced Berry’s idea back to Ernst Kurth, who was working around the same time Rachmaninoff.⁶⁰ Kurth’s theories, with their emphasis on disruptive, even destructive forces, perhaps reflect the tonal music of his own day better than generally recognized. In the examples presented in this chapter, tension between components of a variegated harmonic language shapes larger structural and expressive processes, and, to borrow a phrase from Kurth, “contradictions are thus transformed into an overpowering accord.”⁶¹

⁵⁹ Berry, *Structural Functions*, 4.

⁶⁰ Rothfarb, *Ernst Kurth: Selected Writings*, 33.

⁶¹ *Ibid.*, 191.

Chapter 3

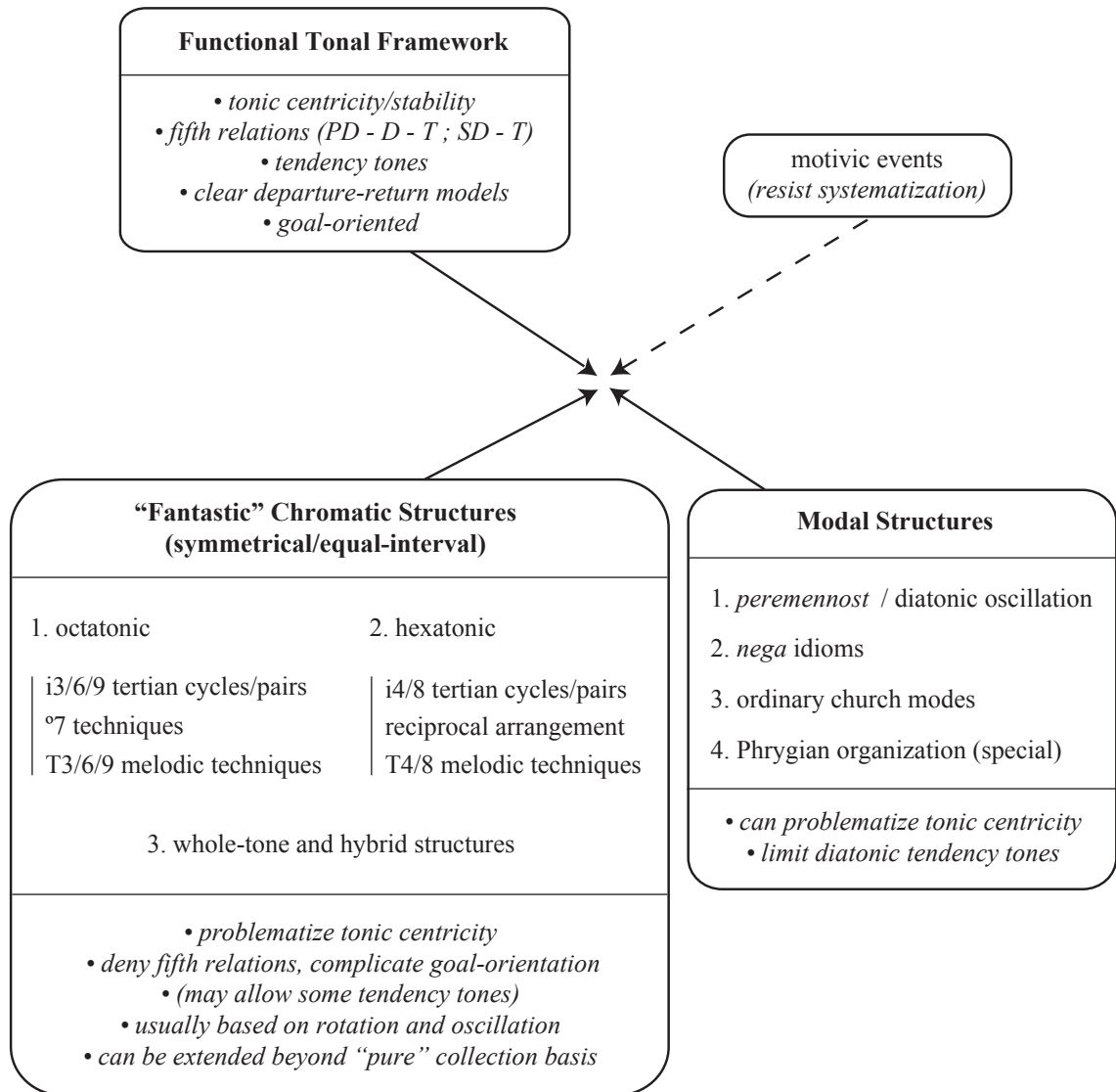
Overview of Harmonic Structures and Their Rhetorical Associations

In Chapters 4 and 5 of the dissertation, the special chromatic and modal components of Rachmaninoff's mature harmonic language are described in detail, and their technical characteristics are defined in order to prepare the longer analyses in Chapter 6. The present chapter modulates, as it were, from the abstraction of Chapters 1 and 2 to the specificity of Chapters 4 and 5 by considering the rhetorical and expressive characteristics that special chromatic and modal structures have in the context of the interpretive model developed in Chapters 1 and 2.

Figure 3.1 provides an overview of the compound harmonic language described in Chapters 4 and 5. In addition to listing the main melodic and harmonic components found in the works studied and a number of the most important techniques through which they are articulated, Figure 3.1 lists the salient characteristics of each (bulleted and italicized) to make clear some of their essential differences. Some of the chromatic and modal types listed in the figure, e.g. the ordinary church modes, will be familiar to a reader with even limited knowledge of music theory and therefore require little discussion. Others, e.g. *peremennost*, may be unfamiliar even to a reader's conversant in the literature, and will therefore require more extensive theoretical description in Chapters 4 and 5.

The present chapter details the rhetorical associations that special chromatic and modal structures have in Rachmaninoff's mature style. The goal is to demonstrate in analysis that Rachmaninoff used different kinds of pitch organization for different rhetorical purposes, and that interpretation of form and climax events in the works analyzed benefits substantially from awareness of these rhetorical associations, which depends in turn on *not* reducing the special chromatic and modal structures to diatonic prototypes.

Figure 3.1. Components of Rachmaninoff's mature harmonic language



As suggested in Chapters 1 and 2, Rachmaninoff's music is not unique in combining diatonic-functional syntax and special chromatic and modal idioms. Research on late Romantic, Postromantic, and early modernist works written by composers of many nationalities has suggested various kinds of compound syntax. However, as Jim Samson has pointed out, Russian music from the late nineteenth and early twentieth

centuries is characterized by such combinations to an especially large degree, and scholars have not been reluctant to incorporate this into their analyses.¹

James Baker's work on Scriabin and Michel Dimitri Calvocoressi's description of functional, modal and chromatic structures in Mussorgsky's works have been cited in Chapters 1 and 2. Simon Morrison has written about Rimsky-Korsakov's *Sadko* in similar terms.² Morrison recognizes a kind of triple syntax, noting "the equivalency of the 'diatonic,' 'modal,' and 'octatonic' passages. No single musical syntax dominates."³ Morrison suggests that the dialogue between special chromatic music (in this case, octatonic) and modal music is not just structural in *Sadko*; it is meaningful. Octatonic music is "supernatural," and associated with the character Volkhova (she is a fantasy, a projection of the imagination), while modal music is "natural," and associated with the title character, Sadko. "That her "supernatural" (octatonic) music derives from his "natural" (modal) music signals that she is as much an aural as a visual object of masculine conjuring, a product, in short, of synaesthesia."⁴ Differentiation of pitch structures is therefore crucial in Morrison's interpretation of the opera.

I argue that differentiation is similarly useful in the interpretation of Rachmaninoff's mature works, though in less precise, less "plotted" ways than in Morrison's interpretation of *Sadko*. Analysis of a large number of works suggests that different kinds of pitch structures in Rachmaninoff's works are generally associated with different basic rhetorical functions. Figure 3.2 lists the most important special chromatic and modal components and their basic rhetorical associations. As the table shows, recognition of rhetorical characteristics makes possible the identification of probable locations of special chromatic and modal structures in relation to the underlying functional tonal framework.

¹ Samson, *Music in Transition*, 9-12.

² Simon Morrison, "The Semiotics of Symmetry, or Rimsky-Korsakov's Operatic History Lesson," *Cambridge Opera Journal* 13 (2001): 261-293.

³ *Ibid.*, 291.

⁴ *Ibid.*, 269.

Figure 3.2. Harmonic components and their rhetorical associations

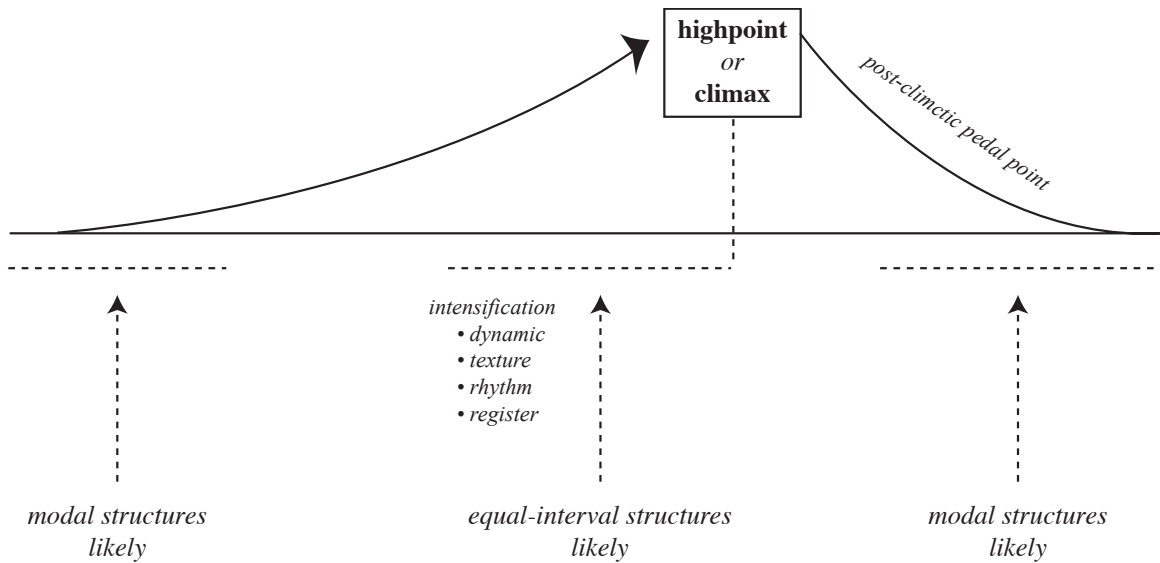
Type	Associations	Most Common Locations
[functional tonal organization] [generic (linear) chromaticism]	[structural framework]	[pervasive]
church modes <i>peremennost</i> / diatonic oscillation <i>nega</i> idioms	introductory initiating digressive post-climactic	beginning and end of episode/arc
Phrygian	↕	<i>special case</i>
“fantastic” chromaticism equal-interval structures	intensifying destabilizing climactic	into highpoint/climax

As shown in Figure 3.2, functional tonal organization (almost invariably decorated by generic linear chromatic events, which should not be confused with special, “fantastic” chromatic structures) provides the structural framework for all Rachmaninoff’s works, even in the most extreme chromatic and/or modal contexts. In most cases, modal structures—including the familiar church modes, *peremennost* techniques, and the related *nega* idiom, all of which are discussed in Chapter 5—appear in introductory passages, serve to initiate thematic exposition or to close a section (after a highpoint or climax), or, occasionally, appear as digressions inside longer sections. In most cases, “fantastic” chromatic structures—that is to say, structures that can be understood as involving equal division of the octave, possibly extended to include additional tones—appear in passages that intensify, destabilize, and lead to climaxes on various scales. (The Phrygian mode is a special case treated at length in Chapter 5.)

Figure 3.3 shows the probable locations of these structures in relation to the prototypical, Ratnerian tension arc developed in Chapter 2. The figure also identifies a few additional musical characteristics toward the goal of enhancing the associations being made between specific pitch structures and expressive trajectories: processes of intensification generally engage several musical parameters simultaneously, including

harmonic structure, dynamics, texture, rhythm, and register; and, as demonstrated in several analyses in this and later chapters, pedal points following climaxes are a common feature in Rachmaninoff's works, and may coincide with post-climactic modal structures.

Figure 3.3. Probable locations of special chromatic and modal structures



Figures 3.2 and 3.3 are not meant to present an iron-clad formula. Rather, they are based on the observation that, in the works analyzed, clear modal organization is *more likely* toward the beginning or end of an episode or a section or a work, while equal-interval chromatic structures are *more likely* in passages that intensify and at highpoints and climaxes. This by no means implies that modal organization is found at the beginning and at the end of every section of music in the works analyzed, nor that equal-interval chromaticism is found at every intense moment or climax. Many passages and even entire works are composed using primarily or only functional tonal methods. But when modal and/or “fantastic” methods are emphasized to a substantial degree, the result is likely to follow the broad outlines given in Figures 3.2 and 3.3.

Four short analyses demonstrate the point. In these analyses, I will of necessity anticipate some of the technical points made more fully in Chapters 4 and 5, and I will use terminology and labels from those chapters in the interest of consistency throughout

the document, even at the risk that some details in the present analyses may not yet be fully understood. However, the importance of the main point these analyses are intended to make—that clear rhetorical differentiation of special chromatic and modal structures exists and is significant—supersedes any organizational drawback.

Four Short Analyses

“From the Gospel of St. John,” WoO (1915)

Figure 3.4 is an analysis of the posthumously published song “From the Gospel of St. John,” composed in the late Russian period. The song is little more than a fragment. It is only thirteen measures long (lasting about a minute and a half in performance), and lacks any real resolution at the end; it ends as it begins—on a first-inversion A major triad. The song has no key signature, but A major serves as the tonic, melodically and harmonically (never, however, in root position). There is a limited amount of functional tonal activity, which, together with the A major tonic, serves as a framework for interpretation.

As Figure 3.4 shows, the piano prelude suggests the Lydian mode, with the exception of F^{\flat} , which may be interpreted as a neighbor tone. With the entry of the voice in measure 3, the mode is disrupted, and linear chromatic activity prepares the arrival of V^6 in measure 5. (This motion from I^6 to V^6 represents the extent of functional tonal progression in the song.) As Figure 3.4 shows, the complex passage that follows (mm.6-8) may be understood as an ornamented version of an octatonic chord cycle, as shown more clearly in Figure 3.5. Octatonic structures are formally discussed in Chapter 4, and the full details of Figures 3.4 and 3.5 may not be clear until then; however, some analytic observations pertinent to this particular song are possible now.

As Figure 3.4 shows, the octatonic cycle in “From the Gospel of St. John” involves minor third root relations. It emerges from the initial A major triad, proceeds through seventh and ninth chords on roots $F^{\#}$, E^{\flat} (or $D^{\#}$), and C^{\flat} , and is ornamented by passing and neighbor tones that to some degree obfuscate the octatonic basis. Simultaneously, two different diminished seventh chords are articulated in the passage

(labeled °7: [0,3,6,9] and °7: [1,4,7,10] in the figure); these diminished seventh chords combine to form the complete OCT_(0,1) collection. The vocal part presents a tonic triad “frame,” which, with the addition of a few chromatic tones, represents a composing-out—in inversion—of the motive labeled “x” in the piano prelude, as shown in Figure 3.6.

As Figure 3.4 shows, the song’s climax occurs as the octatonic cycle reaches its limit (the C^{b9} chord in measure 8) and then cycles back to I⁽⁶⁾. The dynamic marked is *ff*, and there is a clear acceleration into and through the climax event. The appearance of G# at the end of measure 8 (marked “*” in Figure 3.4) represents the dissolution of octatonicism (G# does not belong to the OCT_(0,1) collection) and a return of Lydian organization, now in a post-climactic capacity and above a post-climactic pedal point. A Lydian and OCT_(0,1) are closely related. As Figure 3.7 shows, they share many tones—most significantly for present purposes, A^b and D#/E^b. D# characterizes the Lydian mode on A, and participates as a chord root in the climactic OCT_(0,1) cycle; and both the Lydian and octatonic collections contain the A major tonic triad. In the absence of genuine tonal progression, the “modulation” from Lydian A to OCT_(0,1) and back to Lydian A is perhaps the most important factor in the song’s overall harmonic design.

In “From the Gospel of St. John,” octatonicism is associated quite explicitly with intensification and climax, while Lydian organization fulfills initiating and post-climactic rhetorical functions. Furthermore, the tension that exists between the large-scale tonic frame in the voice and the octatonic structure in the piano has taken the place of functional tonal progression as the main event of harmonic interest, and serves as grist for the climax. Figure 3.8 summarizes these points in a diagram.

Figure 3.4. "From the Gospel of St. John," WoO, analysis

voice

3 4 5 6 7 8 9

tonic frame

(x')

p *ff* *mf*

climax of song

piano

11 12 13

acceleration through climax

$^{\circ}7: [1, 4, 7, 10]$

$^{\circ}7$

octatonic scale

$^{\circ}7: [0, 3, 6, 9]$

pedal point

x

A Lydian

OCT_(0,1) cycle

A Lydian

introductory

intensifying, climactic

roots related by minor thirds

post-climactic

Figure 3.5. “From the Gospel of St. John,” overview

The figure shows a musical score in bass clef. The top staff is labeled "tonic frame" and contains a melodic line with notes numbered 5, 6, 7, 8, and 9. An arrow points from note 5 to note 6. The bottom staff shows a series of chords and a bass line. A box labeled "OCT_(0,1) cycle" spans the bottom staff. Two boxes labeled "A Lydian" are positioned below the bottom staff, one at the beginning and one at the end of the cycle.

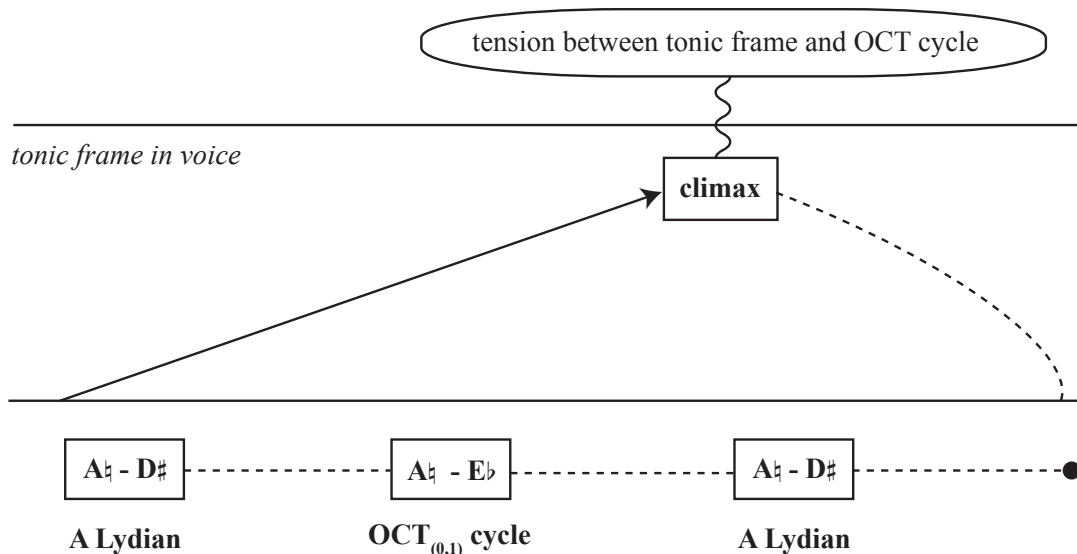
Figure 3.6. “From the Gospel of St. John,” motivic analysis

The figure shows two musical motifs on a bass clef staff. The first motif, labeled "x", consists of a quarter note G#4, a quarter note A4, a quarter note B4, and a quarter note C5. The second motif, labeled "x'", consists of a quarter note G#4, a quarter note A4, a quarter note B4, a quarter note C5, and a quarter note D5. Below the first motif is the text "piano, m.1 (etc.)" and below the second is "structure of vocal line, mm.3-7".

Figure 3.7. The relationship between A Lydian and OCT_(0,1)

The figure shows a musical score in bass clef. The left half is labeled "A Lydian" and the right half is labeled "OCT_(0,1)". A box labeled "A major triad" spans the top staff. A box labeled "A/D#" spans the bottom staff. The top staff shows a melodic line with notes G#4, A4, B4, C5, D5, E5, F#5, G#5. The bottom staff shows a bass line with notes G#3, A3, B3, C4, D4, E4, F#4, G#4.

Figure 3.8. “From the Gospel of St. John,” diagram of climax



The Bells, Op. 35 (1913), First Movement Climax

Similar associations between modal structures and initiating or post-climactic rhetorical functions, and between “fantastic” chromatic structures and intensifying or climactic rhetorical functions obtain even in works or passages whose overall tonal designs are more conventional than “From the Gospel of St. John.” Figure 3.9 is an analytic overview of the main climax in the first movement of *The Bells*, Op. 35 (1913). In this movement, functional tonal organization is considerably more prominent than it is in “From the Gospel of St. John”; but similar chromatic and modal structures may be heard, and the same basic rhetorical associations exist.

Figure 3.9 The Bells, Op. 35, i, analysis of climax (mm. 106–162)

The figure displays a musical score for 'The Bells, Op. 35, i', focusing on the climax from measures 106 to 162. The score is divided into three main sections: **B section** (measures 106-119), **A' section** (measures 120-152), and **coda** (measures 153-162). An arrow labeled 'intensification to climax' points from left to right across the top of the score.

Section B (measures 106-119): Features a melodic line with notes marked 'n' and 'x'. A box labeled 'B section' is placed above the staff. The bass line includes a 'ff' dynamic marking and a box labeled '(several times)'. Chord symbols $(iv)^6$, IV, V, and I are indicated below the staff.

Section A' (measures 120-152): This section shows a significant increase in intensity. The melodic line includes notes marked 'x', 'x'', 'x''', and 'x'''. A box labeled 'A' section' is placed above the staff. The bass line features a 'ff' dynamic marking and a box labeled 'all major-minor 7th chords'. A chord symbol ${}^{\circ}7: [2,5,8,11]$ is shown. A box labeled 'OCT_(2,3)' is placed below the staff, with a note '“nodes”: B, G#, D' below it.

Coda (measures 153-162): The coda concludes with a melodic line marked 'n' and a bass line marked 'ff'. A box labeled 'coda' is placed above the staff. A box labeled 'Lydian' is placed below the staff, with a note 'post-climactic pedal point' above it. A box labeled 'I' is placed below the staff.

Other annotations include 'etc.' in boxes, a box labeled '26' above measure 162, and a box labeled 'n' above measure 155. The score ends with a final chord symbol $V^7 V^7$.

The movement is in ternary form, and its tonic is A \flat major. Figure 3.9 shows, in a simplified form, the B section and then, in more detail, the A' section, followed by a portion of the coda. Rehearsal numbers and measure numbers are provided. Marked “*n*” throughout Figure 3.9 is a neighbor figure of significance throughout the movement. In measure 1 of the movement (not shown in the diagram), the upper neighbor of A \flat and the upper neighbor of E \flat are activated simultaneously; in Figure 3.9, neighbor figures on A \flat and E \flat occur several times. Marked “*x*” throughout Figure 3.9 are various forms of a separate motivic figure that plays a more direct role in the climax event. Motive *x* saturates both the A section (not shown) and the climactic A' section.

As Figure 3.9 shows, the climax event is framed by functional tonal activity in the key of A \flat major, but itself has a strong octatonic basis. OCT_(2,3) is articulated by seventh chords on “nodes” D, B, and G \sharp . As shown in Figure 2.10, The seeds for the climactic octatonic structure are planted in the first A section: the seventh chords on C \flat (B) and D in measures 33, 35, and 38 are the first substantive chromatic events heard in the work. In this early passage, the C \flat and D sonorities are combined with A \flat major tonic elements in a complex layered structure, and an A \flat seventh chord is heard as well, heightening the suggestion of octatonic organization. This early passage sets up the OCT_(2,3) events exploited in the climax.

As Figure 3.9 shows, several non-collection tones may be heard in the climactic octatonic passage. These may be interpreted as passing events within the octatonic structure, and do not significantly disrupt the overall octatonic structure of the measures. Furthermore, the non-octatonic events all involve the same type of sonority as the structural octatonic harmonies—major-minor seventh chord—and they occur when the dynamic is reduced down to *p* before another buildup to *ff* (into measure 152) that is associated once more with explicitly octatonic organization.

Figure 3.10. *The Bells*, i, analysis of mm. 32–39

The image shows a musical score for 'The Bells, i' (mm. 32-39). It consists of three systems of music. The first system (mm. 32-34) shows piano accompaniment with dynamics *mf* and *p*. A circled note in measure 34 is connected by an arrow to a circled note in measure 35. The second system (mm. 35-37) includes piano accompaniment and woodwinds (Corni). Dynamics include *p*, *dim.*, and *f(marc.)*. The third system (mm. 38-39) includes piano accompaniment and woodwinds (Corni and Tromba). Dynamics include *mf*. A circled '6' is present in measure 38. Various other annotations like arrows and brackets are used throughout the score.

In Figure 3.9, as in “From the Gospel of St. John,” two different diminished seventh chords are simultaneously articulated in different registers; these combine to form $OCT_{(2,3)}$. One of the diminished seventh chords (${}^{\circ}7$: [0,3,6,9]) emerges from the functionally significant $E\flat$ in the melody—more specifically, it emerges from chromatic inflection of motive x . Diatonic x in measure 139 spans a perfect fourth from primary note $E\flat$ down to $B\flat$. With $OCT_{(2,3)}$, diatonic x is inflected to x' , which spans a tritone and is therefore integrated into the octatonic structure and ${}^{\circ}7$: [0,3,6,9]. After rehearsal **23**, x' is simplified to just the tritone—in this context, an especially raw signifier of octatonicism.

In the A' section, the octatonic structure is associated with a process of intensification, and directly sets up the movement's climax. By sharp contrast, the coda, which commences in measure 155, begins with a passage in the Lydian mode. The $D\sharp$

from OCT_(2,3) (which, as described above, is set up early in the movement) is thus retained in the coda, but the rhetorical effect is different. Here, modal organization, as in “From the Gospel of St. John,” is post-climactic; and again there is a post-climactic tonic pedal point. In the coda, the falling melodic contours (heard most clearly in the sequential figure marked “*” in Figure 3.9), supported by a long diminuendo, contrast sharply with the rising tessitura and crescendo of the octatonic passage.

Etude-Tableaux in E♭ minor, Op. 39, No. 5 (1917), First Section

The previous two analyses demonstrate the utility of Figures 3.2 and 3.3 in the analysis of large-scale climax events. A third analysis demonstrates that similar structures and associations can apply even in passages whose climaxes are of local rather than global significance. Figures 3.11 and 3.12 present in two parts an analytic overview of most of the first section (section A of a ternary form) of the well-known Etude-Tableaux in E♭ minor, Op. 39, No. 5.

3.11. Etude-Tableaux in E \flat minor, Op. 39, No. 5, mm. 1–12, analysis

1 5 8 12 13

scalar ascent

pedal: tonic + fifth

tonic frame

(tonic frame)

E \flat minor: i ————— (Ger⁶) V PD i

apex of phrase 1

• Phrase 1: linear chromatic elaboration of tonic frame and basic T - PD - D - T syntax over a tonic pedal

3.12. Etude-Tableaux in E \flat minor, mm. 12–22, analysis

T3 melodic structure

12 16 18 21 22

tonic frame and scalar ascent broken !

P P P P P

N N N N N

ff

III? VII? = III in B \flat minor OCT_(1,2) intensification to local climax local climax

i

peremennost reharmonization of phrase 1

= VII^{o7} 6/4 V

B \flat minor

- Phrase 2: reharmonization of phrase 1 initiated using peremennost technique
- Elaboration of tonic frame and basic T - PD - D - T syntax is disrupted by octatonic structure, leading to a local climax event

As shown in Figure 3.11, phrase 1 of the etude is organized around a clear T–PD–D–T progression over a tonic pedal point. (The pedal point also includes the upper fifth, B \flat , enriching the texture and adding dissonance.) Pitch classes of the tonic triad serve as a frame for the melody; this partly explains the V¹³ in measure 11.⁵ Phrase 2 (mm. 12–22), shown in Figure 3.12, begins with a reharmonization of phrase 1 melodic material. In the reharmonization, the melodic tones are supported with different diatonically-related triads in a manner suggesting the *peremennost* idiom described in Chapter 5: G \flat major, III, and D \flat major, VII or III of B \flat minor, the goal of the passage. The modal (or, in this particular case, perhaps only quasi-modal) structure initiates the phrase, supporting the general associations outlined in Figure 3.3. The new diatonic chords in phrase 2 are presented using a strategy of suggestion followed by confirmation. G \flat major is suggested in measure 13, but under a dissonant melodic tone (because the melodic structure is the same as that in phrase 1), and confirmed as a local goal in measure 16 (marked “√” in Figure 3.12). Because the melody in measures 1–4 and 6–7 is set sequentially, a similar strategy of suggestion-confirmation is suggested for the D \flat major triad, as shown in Figure 3.12, but on a larger scale owing to the interference of an intensifying octatonic passage that begins in measure 18.

As shown in Figure 3.12, the octatonic passage interrupts the (reharmonized) tonic frame and functional tonal progression, leading to a local climax event. The octatonic passage shares many superficial characteristics with the climax-inducing octatonic passages in “From the Gospel of St. John” and the first movement of *The Bells*: heightening melodic tessitura, increasing dynamic level, faster rhythms, and so on. It also features the same basic octatonic structure: two different diminished seventh chords articulated in different registers, and emphasis on seventh chords whose roots are related by minor third. To these the passage adds a third, even more explicitly octatonic technique: transposition of a melodic segment, along with its harmonic support, up by minor third (T3).⁶ A number of non-collection tones can be understood as passing and neighbor events within the octatonic structure.

⁵ Cunningham recognizes blurring of tonal functions as a significant feature in Rachmaninoff’s style, calling it “hybrid function.” See Cunningham, “Harmonic Prolongation,” 99-112.

⁶ Octatonic structures are treated in more detail in Chapter 4.

Rhapsody on a Theme by Paganini, Op. 43, Measures 1–9

Even very brief passages on occasion display the rhetorical functions identified in Figure 3.2 and Figure 3.3. Figure 3.13 is an analytic reduction of the first nine measures of the *Rhapsody on a Theme by Paganini*. These measures are labeled “Introduction.” In the passage, a tonic frame (referable to the initial motive of Paganini’s theme) is decorated by a neighbor figure ($E\flat-F\sharp-E\flat$, which, as discussed in Chapter 6, comes to climactic prominence later in the work). The tonic frame is sustained throughout the passage. At the same time, an ascending $OCT_{(0,1)}$ scale in the bass supports a clear octatonic seventh chord cycle through roots $F\sharp$, $A\flat$, $C\sharp$, and $E\flat$, which are boxed in Figure 3.13; the chord “nodes” are connected by non- $OCT_{(0,1)}$ sonorities that provide harmonic support for the motivic neighbor figure while maintaining smooth voice-leading throughout the passage.

The passage begins fairly loudly (*f*); nevertheless, a crescendo is indicated before the *sf* in measure 7, so that the octatonic structure is once again associated with a process of intensification. The rhetorical association is maintained even in this brief introductory flourish. In a manner very similar to that of “From the Gospel of St. John,” which in some ways anticipates the structure of the *Rhapsody* passage, the octatonic structure coexists with a tonic frame. The moment of maximal tension between the two structures—one “structuring,” referable to the tonic triad, and proceeding into a functional tonal progression ($V^7 - i$), the other intensifying, involving equal division of the octave, and referable to Russian “fantastic” chromatic techniques—is the occasion of a climax event—or, as seems more appropriate for this very brief passage, a “highpoint.” Although the passage differs from the other three passages analyzed in this chapter in that no modal structures occur in the passage, even in this very limited context, the basic rhetorical premises suggested in Figures 3.2 and 3.3 may be heard.

Figure 3.13. *Rhapsody on a Theme by Paganini*, Op. 43, Introduction (mm. 1–9), analysis

The figure shows a musical score with three staves. The top staff is in treble clef, the middle staff is in treble clef, and the bottom staff is in bass clef. The top staff has a dynamic marking of *f* and a label "tonic frame". The middle staff has a label "motivic neighbor figure". The bottom staff has a label "OCT_(0,1) chord cycle" and "OCT_(0,1) scale". A circled exclamation mark is placed above the bottom staff. A box labeled "hyperdissonant highpoint" is placed above the top staff. A dynamic marking of *sf* and *p* is placed above the top staff. Below the score, a functional progression is shown: (i) —————> PD — V7 — i.

The analysis in Figure 3.13 suggests three additional analytic points:

1. In the passage, an octatonic structure is itself the subject of contrapuntal elaboration. This demonstrates that octatonic idioms are well-defined in Rachmaninoff's works. Even if equal-interval structures in the tonal repertory have their origins in elaboration of common-practice tonal structures, they demonstrate a degree of self-sufficiency in works from the late nineteenth and early twentieth centuries. This observation conflicts with Cunningham's interpretation of equal-interval structures in Rachmaninoff's works.⁷
2. There is a clear change in functional orientation over the course of the octatonic cycle—from tonic function to predominant function. The passage is therefore not strictly prolongational.⁸

⁷ See again the discussion of Cunningham's methodology in Chapter 1.

⁸ This assumes that "predominant" is a recognized tonal function. As explained in Chapter 2, I regard intensification of the predominant stage of syntax to be a significant component of late Romantic and Postromantic style.

3. Neither the OCT_(0,1) structure nor the tonal interpretation alone can account for the passage's effect; it is necessary to recognize the conflict that results from the superimposition of the tonic frame and the octatonic structure.

As discussed in more detail in the longer analysis of the *Rhapsody* in Chapter 6 of the dissertation, the passage in Figure 3.13 has a larger significance in the composition. The rhetorical procedure exposed in the passage—statement of the tonic, simultaneous statement of a clear octatonic structure, and exploitation of a tension that exists between them—is the subject of a much larger climax in Variation XXII, involving precisely the same pitch structures as Figure 3.13.⁹

Conclusion

Passages that contradict the rhetorical associations and probable locations identified in Figures 3.2 and 3.3 of course exist: the theory does not prescribe. Exceptions to the general rhetorical associations/locations, are, however, usually strongly marked. Climaxes at which modal structures are emphasized rather than chromatic structures, do occur—I take them to be special events.¹⁰ Other passages contradict the general rhetorical associations because some modal or special chromatic idiom has especially strong motivic significance in a work and is therefore found in a greater variety of contexts than suggested in Figures 3.2 and 3.3. Some passages contradict the basic rhetorical associations and locations described in this chapter on account of special expressive circumstances—particularly potent is the effect of a passage that begins intensely or even

⁹ See the analysis of the *Rhapsody* in Chapter 6 of the dissertation, with special focus on rehearsal 66–68 in the work.

¹⁰ Examples of climaxes featuring strongly articulated modal structures may be found in the Prelude in B minor, Op. 32 No. 10 (1910); the second movement of the Piano Sonata No. 2, Op. 36 (1913), which is analyzed in Chapter 5; the Etude-tableaux in C minor, Op. 39 No. 7 (1917). All of these climaxes involve *peremennost*-derived “diatonic stacks,” which are discussed in Chapter 5.

hyperdissonantly and therefore has an unusually deformed tension arc. This may be heard in several works analyzed later in the dissertation.¹¹

However, the simple view outlined in Figures 3.2 and 3.3 provides a useable starting-point for interpreting Rachmaninoff's compound syntax, and, moreover, encourages appreciation of the special expressive effects that exceptional passages such can produce.

Summary of Chapters 2 and 3

In Chapter 2, a framework for interpreting the interactions of variegated components in a compound harmonic environment was sketched, suitable for the analysis of Postromantic works in general and Rachmaninoff's late Russian and exile works in particular. Tension between different components was characterized as a kind of hyperdissonance, which can have the effect of exaggerating, distorting, or (exceptionally) neutralizing conventional tonal and formal premises. Following the work of several scholars, it was suggested that the Postromantic style may be understood as involving a variety of "deformations" and structural tensions, to which hyperdissonance events were added as a category.

In Chapter 3, the basic rhetorical associations that "fantastic" chromatic and modal structures have in Rachmaninoff's mature works were identified. Close reading of several works suggested that a trend toward increasing symmetry of pitch organization is likely to correspond to processes of intensification and/or climax in a given passage or work, while explicitly modal structures are likely to be associated with introductory, expository, and/or post-climactic functions.

¹¹ See for example the analysis of the second movement of *The Bells* in Chapter 4 and the analysis of the Etude-Tableaux in D major, Op. 39, No. 9 in Chapter 5.

Chapter 4

“Fantastic” Chromatic Structures

William Benjamin has suggested that chromatic structures in late tonal works may do more than “fill in the cracks” between parts of a composed-out conventional tonal structure.¹ Although many chromatic events in Rachmaninoff’s works can be understood as embellishments of functional syntax, analyses in Chapters 2 and 3 have shown that some chromatic structures resist such description—and that the resistant structures are often rhetorically marked. Most of these have involved equal division of the octave—primarily chromatic minor-third relations (referable to the octatonic collection) and chromatic major-third relations (referable to the hexatonic collection or to a background whole-tone collection or augmented triad). Chromatic third relations in general have been treated extensively by Gregory Proctor, Richard Cohn, Matthew Bribitzer-Stull, Howard Cinnamon, David Kopp, and others.²

Richard Taruskin has traced the history of chromatic third relations in nineteenth- and early twentieth-century Russian music from Glinka through Stravinsky; drawing from his work, I refer to such idioms collectively as “fantastic” chromatic structures.³ Although Taruskin is concerned primarily with octatonic organization, he also recognizes whole-tone organization, and he cites a number of passages that suggest hexatonic organization without, however, using that term. In Taruskin’s outline, equal-interval devices are traced from Schubert to Glinka and from Liszt to Rimsky-Korsakov.⁴ The Russians absorbed equal-interval devices into the national idiom, and, in the process,

¹ Benjamin, “Interlocking Diatonic Collections as a Source of Chromaticism in Late Nineteenth-Century Music,” *In Theory Only* 1 (1976): 33.

² See entries under these authors’ names in the bibliography, and discussion later in the present chapter.

³ Taruskin, *Stravinsky and the Russian Traditions*, in particular Chapter 4, “Chernomor to Kashchey: Harmonic Sorcery” (255-306) and Chapter 10, “Punch into Pierrot (*Petrushka*)” (661-778, with special focus on 737-59).

⁴ *Ibid.*, 255-72.

certain technical features and the general rhetorical associations of chromatic third-relations took on a uniquely Russian character, which Taruskin summarizes as follows:

1. “In Russian music...there is a notable tendency to make the symmetry of the third-relations explicit in a literal way that composers to the west normally did not exploit.”⁵
2. Octatonic and whole-tone structures are “equivalents: both were outgrowths of mediant interval cycles, both were originally used as modulatory devices, both first appeared as descending basses; and both, for Russian composers, were evocative of evil magic.”⁶ This observation may be extended to hexatonic structures.

In other words, Russian composers converted equal-interval operations from something occurring “inside” syntax and therefore comparatively generic into something “fantastic”— more explicitly symmetrical than similar chromatic devices in German works, and transmitting a kind of expressive code. Taruskin’s view has been influential; take for example the following comments by Anatole Leikin:

Rimsky-Korsakov applied the octatonic scale...to portray fantastic creatures in his orchestral fantasy *Sadko*... All this constitutes the beginning of the long-standing tradition of representing the supernatural in music... The whole-tone scale, the augmented triad, and the octatonic scale have not acquired similar semantic connotations in Western music.⁷

When Taruskin says that chromatic third relations are “modulatory,” he means that they are unsettling or disruptive in either a structural or a rhetorical sense (or both), even in cases where the passage in question begins and ends in the same key or on the same chord (as many of Taruskin’s examples do). Taruskin’s approach to the analysis of equal-interval chromatic structures is thus consonant in important ways with the ideas presented in the first three chapters of this dissertation. It differs from the approach adopted by theorists such as Cinnamon and Cunningham, who re-genericize chromatic

⁵ Ibid., 261-62.

⁶ Ibid., 267.

⁷ Leikin, “From Paganism to Orthodoxy to Theosophy,” 31.

third relations, treat them invariably as prolongations of tonic or dominant, and therefore consider them fundamentally supportive of syntax, not disruptive.⁸

Although in Rachmaninoff's works the specific semantic connotations of equal-interval chromaticism (evil magic, the supernatural, etc.) are largely abandoned, its markedness remains. In his use of octatonic structures (and extended structures derived from octatonicism), especially, Rachmaninoff reveals a kinship with "progressive" Russian composers with whom he is not often associated, including Rimsky-Korsakov, whose extensive development of octatonic devices has been covered at length by Taruskin; Rimsky-Korsakov's student Stravinsky, as covered by Arthur Berger, Pieter van den Toorn, Taruskin, and others;⁹ and Mussorgsky, Scriabin and Prokofiev, as covered by Allen Forte, James Baker and Daniel Zimmerman, respectively.¹⁰ As discussed in Chapter 1, the influence of Rimsky-Korsakov on Rachmaninoff seems to have been especially significant. When Rachmaninoff fled Russia in late 1917, he took with him only a single score by another composer: Rimsky-Korsakov's *Golden Cockerel*.¹¹ Of the harmonic materials in this opera Rachmaninoff is reported to have exclaimed: "And then the chromaticism. This is where the source of all the wretched modernism lies hidden. But with Rimsky it is in the hands of a genius."¹² Still later, when preparing for a summer of composing in 1934 (which resulted in the *Rhapsody on a Theme by Paganini*), Rachmaninoff studied his own *All-Night Vigil*, Op. 37 and Rimsky-Korsakov's *The Golden Cockerel* and *Kitezh*.¹³ "The true greatness of Rimsky-Korsakoff dawned on me gradually," he said, "and I was very sorry that I never got to be his pupil."¹⁴

One notes a significant increase in passages based on equal-interval devices in

⁸ See again the discussion in Chapter 1.

⁹ Taruskin, *Stravinsky and the Russian Traditions*, 255-306

¹⁰ Arthur Berger, "Problems of Pitch Organization in Stravinsky," *Perspectives of New Music* 2 (1963): 11-42; Pieter van den Toorn, *The Music of Igor Stravinsky* (New Haven: Yale University Press, 1983); Forte, "Mussorgsky as Modernist"; Baker, *The Music of Alexander Scriabin*; and Zimmerman, "Families Without Clusters in the Early Works of Sergei Prokofiev." See also Steven Baur, "Ravel's 'Russian' Period: Octatonicism in His Early Works, 1893-1908," *Journal of the American Musicological Society* (1999): 531-92.

¹¹ Martyn, *Rachmaninoff*, 287.

¹² Quoted in Alfred J. and Katherine Swan, "Rachmaninoff: Personal Reminiscences," *Musical Quarterly* 30 (1944): 178.

¹³ Harrison, *Rachmaninoff*, 301.

¹⁴ Swan, "Rachmaninoff: Personal Reminiscences," 177.

Rachmaninoff's late Russian and exile periods—that is to say, after *Isle of the Dead* (1909). Vladimir Ashkenazy has suggested that Rachmaninoff's late works, in contradistinction to the works of earlier Russian composers and Rachmaninoff's own earlier compositions, are “no longer outgoing”—harmonies are “closing in on themselves” in ways that “Tchaikovsky would never have dreamed of.”¹⁵ Although Ashkenazy's observation resists easy definition in music-theoretic terms, I take it to be in part a response to the increased emphasis—especially at moments of structural or rhetorical importance—on symmetrical chromatic structures.

The following pages describe in detail the special chromatic structures introduced informally in analyses in Chapters 2 and 3. The structures described may be understood as ultimately deriving from various kinds of equal-interval oscillation or rotation operations. Rachmaninoff developed several idiosyncratic extensions and combinations of “fantastic” structures, without, however, altering the basic technical procedures or rhetorical associations. As described in Chapters 1 and 2, the appearance of equal-interval pitch devices in a functional tonal environment represents in Rachmaninoff's music a kind of stress upon the functional system, which, as discussed in Chapter 3, is often exploited expressively. In many of the analyses presented thus far, intensification, tonal instability, and climax coincide with a trend towards symmetry in pitch organization. These associations obtain in a large majority of works analyzed in the dissertation. In this one regard, at least, Rachmaninoff is perhaps not so different from the early Stravinsky after all. In Taruskin's view, octatonic harmony in Stravinsky's *Petrushka* “is animistic; the *Petrushka* chord is conceived, nay motivated, by a sense of struggle, and antagonism of order and chaos reflecting the roles of pianist versus orchestra... We are meant to hear C and F-sharp in terms of an active, not a static, polarity—as competing centers, not merely as docile constituents of a single, static, octatonically referable “hyperharmony,” to borrow an apt term from Rimsky-Korsakov's own vocabulary.”¹⁶

“Fantastic” chromaticism differs from functional tonal organization not so much in the specific scale or collection involved (the eight-note octatonic or six-note hexatonic and whole-tone collections as opposed to the seven-note diatonic collection) as in the

¹⁵ Geoffrey Norris, “Vladimir Ashkenazy on Sergei Rachmaninoff,” *Andante Online* (December 2001), <http://www.andante.com/article/article.cfm?id=15463> (accessed March 10, 2009).

¹⁶ Taruskin, *Stravinsky and the Russian Traditions*, 756-57.

non-goal-directedness of the harmonic structures that result from the “fantastic” collections’ inherent symmetries. Whereas functional tonality may be regarded as basically goal-oriented (see Chapters 1 and 2), equal-interval chromatic structures are primarily based on oscillation and rotation. See again Figure 3.1; the techniques outlined in that figure are described more formally below.

Octatonic Structures (Interval 3/6/9 Basis)

“Octatonic” refers to a symmetrical eight-note scale or collection in which semitones and whole-tones alternate. Assuming enharmonic equivalence, only three transpositions of the scale are possible, as shown in Figure 4.1. In this dissertation, Pieter van den Toorn’s “model A” (semitone + whole-tone) is used exclusively.¹⁷ As stated in Chapter 2 of the dissertation, to deal with issues of enharmonic equivalence (e.g. C# = D \flat), I follow Joseph Straus’s fixed-zero labels: OCT_(0,1), OCT_(1,2), and OCT_(2,3), as shown in Figure 4.1. (There is no OCT_(3,4), as it would duplicate the pitch-class content of OCT_(0,1).)

Figure 4.1. Octatonic scales



In Rachmaninoff’s works, octatonic structures are characterized by four closely-related melodic-harmonic techniques, often in some combination:

1. Melodic presentation of segments referable to an octatonic scale
2. Rotation or oscillation of triads/seventh chords whose roots are related by minor third or tritone
3. Special techniques involving diminished seventh chords
4. Transposition of melodic segments (purely octatonic or not) by T3, T6, or T9

¹⁷ Van den Toorn’s technical system is described in *The Music of Igor Stravinsky*, 31-72. His “Model B” octatonic scale has a whole-tone + semitone configuration.

Although technique 1 above might be considered sufficient for defining “octatonicism,” recognition of techniques 2 through 4 allows identification of octatonic structures in contexts that are not exclusively based on an octatonic scale—i.e. contexts in which other harmonic structures are simultaneously articulated, or in which an octatonic framework is itself chromatically decorated and the underlying scale is therefore disguised. The word “octatonic” therefore means a *modus operandi* as much as a referential collection, insofar as it indicates not only a source for melodic and harmonic material, but a set of particular ways that that material is used in actual musical contexts, and insofar as a structure might be clearly octatonic even if more than eight unique pitch classes are used.¹⁸ As Vincent Persichetti observed more generally, a procedural melodic or harmonic conception in fact often precedes a scalar conception: “It is advisable that scales be allowed to form as a result of the impetus of melodic or harmonic patterns; the material generated by thematic ideas may then be gathered up and placed into scale formation.”¹⁹ This has already been shown informally in several short analyses. (See especially the analysis of the first nine measures of the *Rhapsody on a Theme by Paganini* and the analysis of “From the Gospel of St. John” in Chapter 3.)

Cycles and oscillations

Russian octatonicism through the era of Scriabin and Rachmaninoff is fundamentally tertian, distinguishing it from the Bartók’s scale-oriented melodic octatonicism. The octatonic is unique among symmetrical collections in the variety and abundance of triads and seventh chords that may be obtained from it: major, minor, and diminished triads, and major-minor, minor-minor, half-diminished, and fully-diminished seventh chords. Rotations (or cycles; the terms are interchangeable in the present context) of triads and/or seventh chords built upon the first, third, fifth, and seventh notes of the scale, which are related by minor thirds) are a common manifestation of octatonicism in Russian music from the late nineteenth century on. Oscillation between two chords is equally common. Figure 4.2 gives sample cycles and oscillations in OCT_(0,1).

¹⁸ A similar understanding of noncollection tones in octatonic and whole-tone structures in Scriabin’s works is suggested in Jay Reise, “Late Scriabin: Some Principles Behind the Style.”

¹⁹ Vincent Persichetti, *Twentieth-Century Harmony*, 2nd ed. (New York: Norton, 1961), 43.

Figure 4.2. Sample chord cycles and oscillations in OCT_(0,1)

a) ascending minor triads b) descending minor triads c) ascending major triads

OCT_(0,1)

d) dominant 7th cycle e) dominant 7th cycle f) half-diminished 7th cycle

g) dominant 7th pair h) dominant 7th pair i) half-dim 7th pair j) minor-minor 7th pair

A well-known example of octatonic oscillation is the tritone-related pair of major-minor seventh chords used extensively in the “Coronation Scene” from the prologue of Mussorgsky’s *Boris Godunov* (see Figure 4.3). The octatonic basis of the chord pair is clear despite the fact that the collection is incomplete (as shown in the figure, only six pitch classes are used).²⁰ In more complex contexts, tertian sonorities may be superimposed, as for example with the F \sharp and C major triads of Stravinsky’s “Petrushka chord,” or at the climax of Rachmaninoff’s “A-u!” in the Chapter 2 analysis.

²⁰ See also Forte, “Musorgsky as Modernist.”

Figure 4.4. *Isle of the Dead*, Op. 29, global structure in relation to $OCT_{(0,1)}$

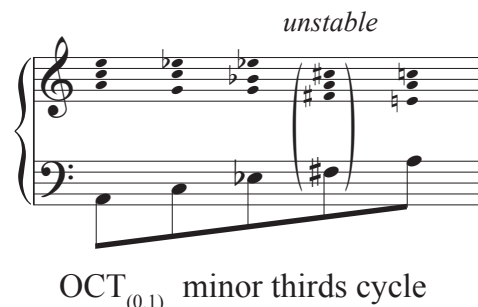
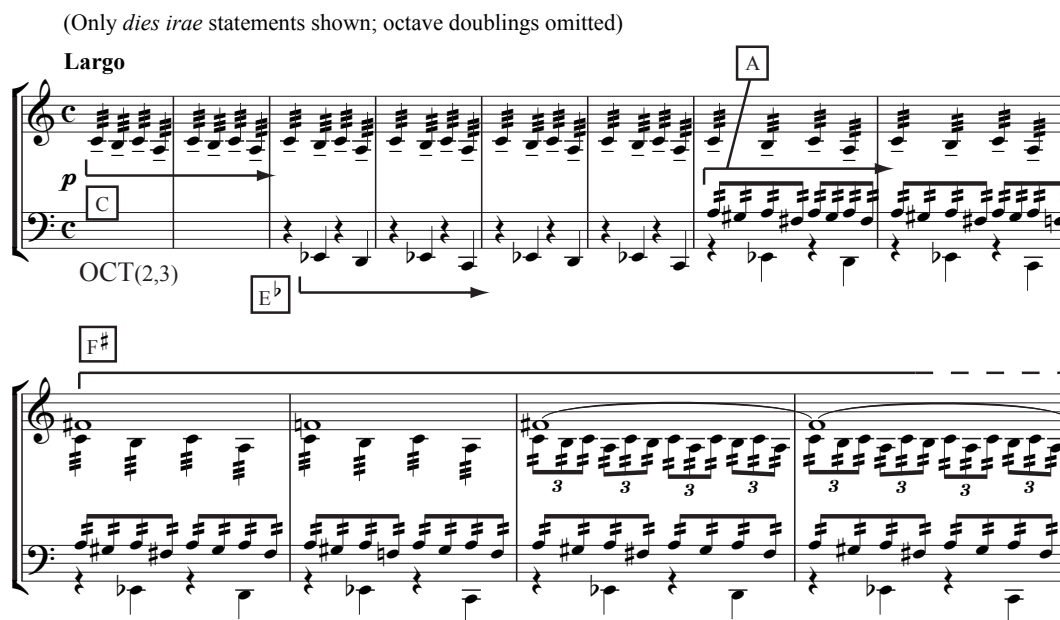


Figure 4.5. *Isle of the Dead*, octatonic *Dies irae* canon after r. 22



What Cannata does not discuss is that the chromatic minor thirds key scheme suggests a large-scale octatonic cycle, and that the canonic summary is explicitly octatonic, as shown in Figure 4.5. Moreover, as Figure 4.6 shows, the summary canon emerges from a climax event in which the four principal tones involved (A, C, E \flat , and F \sharp) are fused into a diminished seventh chord. The diminished seventh chord ($^{\circ}7$: [0,3,6,9] on the figure) is shared by $OCT_{(0,1)}$ (global key scheme) and $OCT_{(2,3)}$ (canonic passage).

Figure 4.6. *Isle of the Dead*, climax at r. 22

The first movement of the next work composed by Rachmaninoff, the Piano Concerto No. 3 in D minor, Op. 30 (1909), is similar in certain ways to the *Isle of the Dead*. Although Op. 29 and Op. 30 are in different keys (A minor, D minor), the climax in the first movement of Op. 30 uses almost exactly the same structure—at pitch—as that shown in Figures 4.4 through 4.6. The movement follows a conventional concerto movement plan, and the music through measure 203 is characterized by strong functional tonal organization. As shown in Figure 4.7, the first theme is in D minor, the second theme (measure 93 and following) is in B \flat major, and the middle-section development (starting with the false repeat of the first theme at measure 167) begins in fairly unproblematic fashion. At measure 203, the minor dominant is attained. At this point, as shown in Figure 4.8, an octatonic structure similar to those described in *Isle of the Dead* replaces—or, perhaps, displaces—the conventional tonal organization displayed in the movement up to that point. (The melodic transposition techniques indicated in Figure 4.8

are not discussed until later in this chapter; the reader is encouraged to return to Figure 4.8 at that point.)

Figure 4.7. Concerto No. 3, Op. 30, i, analytic overview of mm. 1–203

As shown in Figure 4.8, the climax at measure 235 is prepared by an extensive octatonic structure, and involves diminished seventh chord [0,3,6,9]. (The octatonic intensification into the climax is reflected by a crescendo—*mf* to *ff* to *fff*—and an accelerando—*Più vivo* at measure 203, then *Alllegro* at measure 223.) As shown in Figure 4.9, the climax chord and the OCT_(2,3) melodic cell heard several times at the climax and in the measures following it are not unlike the climax chord and *Dies irae* motive at the *Isle of the Dead* climax (see again Figures 4.5 and 4.6).

However, the event in the concerto has additional, opus-specific significance. If *D#* is respelled as *Eb*, it becomes clear that the climax event may be interpreted as a development of the *Eb* introduced into the movement's main theme in measure 12 (Figure 4.10). This early *Eb* is the first chromatic tone heard in the composition (other than the ordinary leading tone, *C#*). In measures 12 and 14 it tonicizes G minor (*iv*). At measure 235, at the climactic apex of an octatonic structure, the *Eb* is radically exaggerated. As shown in Figures 4.9 and 4.11, the climactic *D#/Eb* carries through the cadenza (which contains a recapitulation of the first theme) into the flute solo which follows at rehearsal **19** and, ultimately, into the recapitulation of the second theme, which occurs in the key of *Eb* major.

Figure 4.8. Concerto No. 3, i, analytic overview of mm. 203–235

The figure displays a musical score for the first movement of Concerto No. 3, measures 203 to 235. The score is divided into two systems, each with a treble and bass clef staff.

System 1 (mm. 203-235):

- Measures 203-218:** Marked *Più vivo*. A box labeled "melodic basis: OCT_(2,3)" spans these measures. A T_3 transformation arrow points from measure 203 to 218. A box labeled "chord cycle: OCT_(0,1)" spans measures 203-218.
- Measures 219-235:** Marked *mf cresc.* and *ff*. A box labeled "non-OCT: chromatic ascent" spans measures 219-235. A T_3 transformation arrow points from measure 219 to 235. A box labeled "OCT_(2,3) melodic cell" spans measures 219-235. A box labeled "WT ascent" spans measures 219-235. A V^7 of V^7 of transformation arrow is shown at the end of the system.

System 2 (mm. 235-270):

- Measures 235-270:** Marked *Allegro*. A box labeled "T₃ (aborted)" spans measures 235-270. A T_3 transformation arrow points from measure 235 to 270. A box labeled "climax" spans measures 235-270. A V^7 of [0,3,6,9] transformation arrow is shown at the end of the system.

Figure 4.9. Concerto No. 3, i, m. 235 through recapitulation in cadenza

Climax

235 $E\flat$ N

OCT_(2,3) melodic cell

fff

ff

18

291 303 *fff*

6 4 9 #6 4 3

PD D T

D major

cadenza/recapitulation

07

Figure 4.10. Concerto No. 3, i, main theme, introduction of $E\flat$

Allegro ma non tanto

3 *p*

9 *mf* *p* $E\flat$ *mf*

Figure 4.11. Concerto No. 3, i, end of cadenza through coda, analytic overview

E \flat

19 **E \flat (N)** flute **p** (etc.) **E \flat (N)**

D major

(Recapitulation of Second Theme)

melodic descent through 7 measures **(N)** **p**

SD ————— **T**

E-flat major

20 +2 **(N)** **Tempo I** **(Coda)** **pp**

T
= \flat II

V **i**

D minor

In Figure 4.11, pitch class E \flat is associated with a neighbor figure (marked “N” on the figure), which is finally absorbed back into D minor at the coda. (However, even here the story is not over. See rehearsal **48** in the third movement, where the first movement’s

second theme material is again treated in E \flat major; and see also the apotheosis E \flat major chord, *fff*, now in the context of D major, after rehearsal **77** near the end of the concerto.) To summarize: lowered scale degree 2, introduced conventionally early in the first movement, is exploited octatonically at the movement's climax, creating a structural dissonance that is only resolved at the end of the first movement (and which has implications for a point of culmination at the end of the third movement).

The *Isle of the Dead* and Piano Concerto No. 3 passages feature cyclical (or rotational) articulation of octatonic structures. Similar cycles were featured in several of the analytic vignettes in Chapters 1 and 2, including "From the Gospel of St. John," and the E \flat minor Etude-Tableaux, Op. 39, No. 5. Oscillations between two octatonically-related chords are also common in Rachmaninoff's mature works (and, exceptionally, earlier works such as the Elegy in E \flat minor, Op. 3, No. 1), usually appearing at strongly marked moments. (See for example analysis of the "A-u!" climax in Chapter 2.) Figure 4.12 shows an octatonic oscillation used in conjunction with a motivic melodic cell in the finale of the Symphony No. 3, Op. 44. The passage, from rehearsal **79** through rehearsal **80**, contains the end of the movement's exposition, and forms a bridge to the fugal episode that substitutes for a proper development in the movement. Fuller analysis of the passage must wait until Chapter 6, where it is interpreted in the context of the entire symphony; but some initial observations are possible here.

Figure 4.12. Symphony No. 3, Op. 44, iii, r. 79–80⁷

79

flute *p* oboe *dim.*

clarinets *dim.*

bassoon *pp* strings *f*

80

trumpets (in octaves) *ff*

winds *ff* etc.

strings *ff sforzando* *ff* *ff* *p*

The second theme group ends in E \flat major (rehearsal 79), quietly. At rehearsal 80, intensification of dynamics, texture, and instrumentation coincides with the onset of an octatonic oscillation and a statement of the symphony’s motto theme in the trumpets on C \sharp .²⁴ In Figure 4.13, the events of Figure 4.12 are summarized. The motto is not explicitly octatonic, being capable of numerous harmonizations; but it is, in this context, an OCT_(1,2) melodic cell. The chord oscillation is of the “Coronation” tritone type.

²⁴ As discussed in Chapter 6, the motto theme is heard at a variety of pitch levels in the symphony: most significantly on A in the first movement, and on C \sharp in the second and third movements.

Figure 4.13. Symphony No. 3, iii, r. 80, octatonic chord pair and melodic cell

Dynamics and instrumentation make clear the passage’s rhetorical significance. The passage is also structurally significant, as shown in the analytic overview in Figure 4.14. (The events in Figure 4.14 are described more fully in Chapter 6.) The $OCT_{(1,2)}$ oscillation at the end of the exposition (Figure 4.12) initiates a much larger cycle that ultimately leads into the recapitulation by way of E^b , supporting V^7 of the global tonic A major. The fugue which substitutes for a proper development in the movement begins in D major and climaxes on B major at rehearsal **93**, as shown. The extraordinary *pp* passage after rehearsal **94**—an interruption, raw in its “orientalism”—occupies the B^b $OCT_{(1,2)}$ node, preparing the large-scale dominant which follows. As shown in Figure 4.14, the primary melodic tones and highpoints from rehearsal **80** through the recapitulation involve notes from the motto theme on C^\sharp heard in the trumpets at **80**. This large-scale articulation of the motto carries over into the movement’s coda (after rehearsal **110**), at which point the motto is again stated on C^\sharp , but this time in A major—and note how the C^\sharp major-minor seventh chord from rehearsal **80** is incorporated into the motto statement.

Figure 4.14. Symphony No. 3, iii, analytic overview of r. 80 through coda

End of Exposition	Fugue		(interruption)		Recapitulation	Coda
80	80 +12	93	94 +9	95 +7	99 +5	110 +5
<i>rehearsal</i>						
<i>ff</i>	<i>ff</i>	<i>ff</i>	<i>pp</i>	<i>< ff</i>	<i>sf</i>	<i>pp</i>

motto theme

Diminished seventh techniques

Because octatonic structures are characterized by minor thirds and tritones, diminished seventh chords are particularly easy to come by. (See again the *Isle of the Dead* climax chord in Figure 4.5, the analysis of the Concerto No. 3 first movement climax in Figure 4.10, and numerous analyses in Chapters 2 and 3.) Any given octatonic scale contains two different diminished seventh chords, which leads directly to several notable techniques in the works studied. The first technique is shown in Figure 4.15a: octatonic decoration of a (functional) diminished seventh chord with passing tones.²⁵ However, Taruskin dismisses such decorated diminished seventh chords as only superficially octatonic: “true octatonicism preempts functions normally exercised by the circles of fifths, whether by a rotation of thirds or, more radically, by a tonally stable diminished harmony.”²⁶ More idiomatically octatonic is the technique shown in Figure 4.15b: two diminished seventh chords, which combine to form a complete octatonic

²⁵ The *Dies irae* canon in *Isle of the Dead* may be interpreted as articulating an ornamented diminished seventh chord.

²⁶ Taruskin, *Stravinsky and the Russian Traditions*, 269.

collection as shown in Figure 4.15d, are entangled. Entangled diminished seventh chords in octatonic contexts were featured but not discussed in detail in several analyses in Chapters 2 and 3.

Figure 4.15. Octatonic diminished seventh chord techniques

a) decorated °7 b) entangled °7's c) related dom7 cycle

d) °7's combine to octatonic

°7 + °7 = OCT(1,2)

Although the entangled diminished seventh chords of Figure 4.15b are clearly related to the chord cycle shown in Figure 4.15c, melodic emphasis in a given passage may bring out the entanglement, greatly increasing the intensity of dissonance in the passage. Figure 4.16 is such a case. (The passage has a $D\flat$ major key signature in the score but is notated without a key signature in Figure 4.16 to make plainer the interval structure.) In this passage, tones of [2,5,8,11] are emphasized in the melodic material, while the roots of the $OCT_{(1,2)}$ chord rotation emphasize [1,4,7,10].

Figure 4.16. Symphonic Dances, Op. 45, iii, analysis of local climax at r. 79

OCT_(1,2) melodic cell, transposed

79 80

T_9 T_9

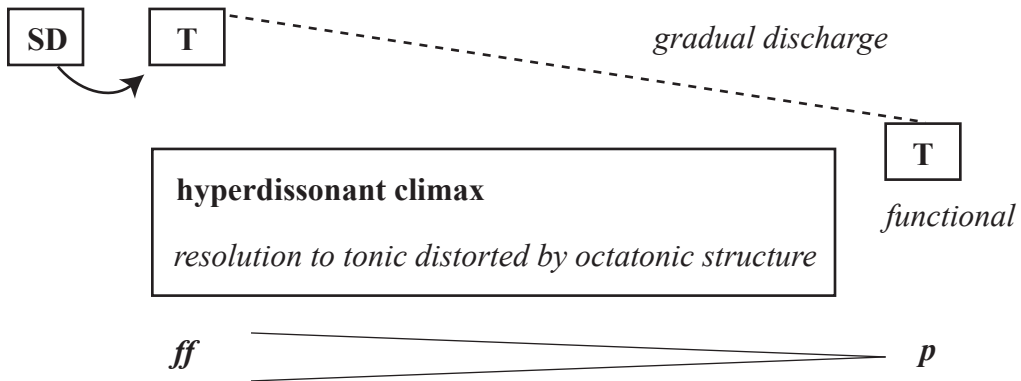
$^{\circ}7: [2,5,8,11]$

N N

"N" (breaks Oct)

$^{\circ}7: [1,4,7,10]$

OCT_(1,2) chord rotation + auxilliary tones



Transposition of melodic segments by T3, T6, or T9

Because the octatonic collection (0134679t) features an interval pattern that recurs at the distance of a minor third, any octatonic material (melodic, harmonic or both) transposed by minor third up or down or by tritone will stay inside the given octatonic collection. Particular clear examples of this will be found in passages analyzed in the section above, and in several analyses in Chapters 1 and 2 of the dissertation. The T3/T6/T9 technique can be extended to involve transposition of material that is not exclusively octatonic: when several T3, T6, or T9 operations are used in succession, the effect may be “octatonic” even if the segment so transposed is not itself exclusively octatonic. Figure 4.17, an annotated reduction of the opening of Rimsky-Korsakov’s *Golden Cockerel*, demonstrates. (The passage features all of the octatonic techniques identified above.)

In Figure 4.17, the pair of triads outlined in the first six measures—D \flat major and F \flat (or E) major—establish OCT_(1,2) as a potential basis for the passage; D \flat and E are two of the four OCT_(1,2) nodes. In measures 7 – 12 of the passage, diminished seventh chord [2,5,8,11] is outlined by chain transposition of a melodic theme at T9. (The structure is similar to that in Figure 4.15, but on a larger scale. Other similarities between *The Golden Cockerel* and Rachmaninoff’s *Symphonic Dances* are noted below.) The transposition process, and the diminished seventh chord it generates are disguised but not undone by the presence of many non-octatonic auxiliary tones in the melodic motive itself.

After measure 11, diminished seventh chord [2,5,8,11] is sustained above bass note G \sharp (a third OCT_(1,2) node). Octatonic organization gradually dissolves after measure 13, and a non-octatonic passage follows at measure 19. However, octatonic structures again characterize the music at measure 27: OCT_(1,2) node E \sharp in the bass, diminished seventh [1,4,7,10] (the other OCT_(1,2) diminished seventh chord), and T9 transpositions of the melodic theme. The fourth OCT_(1,2) node, B \flat , arrives at measure 38 (marked by an asterisk); but by this point, OCT_(1,2) has been left behind in favor of OCT_(0,1), which is the setting for similar T9 and diminished seventh techniques leading into measure 38.

Figure 4.17. Rimsky-Korsakov, *The Golden Cockerel*, Prologue, analysis of mm. 1–38

1
7
Basis: OCT_(1,2)
T₉
E
D_b
G

11
7: [2,5,8,11]
8^{OCT}
T₉

13
19
not octatonic
Basis: E
T₉
E
27
7: [1,4,7,10]
8^{OCT}
T₉
2x with change of octave

31
38
Basis: OCT_(0,1)
T₉
E
B_b
6
4
7: [2,5,8,11] over E
7: [0,3,6,9] over E (sim.)

Figure 4.18 is an analytic overview of the entire passage, showing $OCT_{(1,2)}$ nodes $D\flat$, E, G, and $B\flat$ and diminished seventh chords that result from T9 treatment of the melodic theme. Triads belonging to $OCT_{(1,2)}$ or, later in the passage, $OCT_{(2,3)}$ are boxed.

Figure 4.18. *The Golden Cockerel*, Prologue, mm. 1–38, analytic overview

$OCT_{(1,2)}$ ————— $OCT_{(0,1)}$

$°7: [2,5,8,11]$ $°7: [1,4,7,10]$ $°7: [2,5,8,11]$ $°7: [0,3,6,9]$

$°7: [1,4,7,10]$

$[1,4,7,10] + [2,5,8,11] = OCT_{(1,2)}$

$[1,4,7,10] + [0,3,6,9] = OCT_{(0,1)}$

As discussed at the beginning of this chapter, Rachmaninoff showed great interest in *The Golden Cockerel* over a period of many years. Barrie Martyn has noted a specific melodic similarity between a theme in the Prologue of *The Golden Cockerel* and a theme from the first movement of Rachmaninoff's *Symphonic Dances* without, however, developing the observation analytically. Recognition of octatonic structures allows a more detailed comparison of the themes. Figure 4.19 shows the two themes; an analytic reduction is shown beneath each theme. (Figure 4.19b is the melodic theme from Figure 4.17.)

Figure 4.19. Comparison of Symphonic Dances theme and *Golden Cockerel* theme

(a) Symphonic Dances, Op. 45, i, analysis of measures 10–11

Musical score for Symphonic Dances, Op. 45, i, measures 10–11. The score is in 3/4 time, key of B-flat major, and marked **Allegro**. The upper staff (treble clef) begins at measure 10 with a **ff** dynamic. The lower staff (treble clef) begins at measure 7. Both staves show a descending chromatic line.

(b) *The Golden Cockerel*, analysis of measures 7–8

Musical score for *The Golden Cockerel*, measures 7–8. The score is in 3/4 time, key of B-flat major, and marked **Allegro**. The upper staff (bass clef) begins at measure 7 with a **pp** dynamic. The lower staff (bass clef) begins at measure 7. Both staves show a descending chromatic line.

The similarity of the themes' general contours is obvious. Less obvious is the fact that both themes outline a diminished seventh chord, and that the chord is decorated by a descending chromatic line, which creates the distinctive contour. The similarity does not end here. Figure 4.20 shows that the entire opening passage of Rachmaninoff's dance resembles the opening of *Golden Cockerel*.²⁷

²⁷ Bertensson and Leyda report Rachmaninoff's recollection, many years after the fact, of an occasion when he, Rimsky-Korsakov, and Scriabin discussed *The Golden Cockerel* (still a work in progress) at a café.

Figure 4.20. Symphonic Dances, Op. 45, i, introduction (mm. 1–16), analytic overview

°7: [0,3,6,9]

pp

1

*

basis: OCT_(2,3)

10 12 14 15 16

OCT_(2,3) [0,3,6,9] + [2,5,8] OCT_(1,2) [2,5,8,11] + [7,10,1]

PD -----> D T

As shown in Figure 4.20, many non-octatonic tones are present in the sixteen measure introduction to dance. It might be correct to say that the OCT_(2,3) material shown in Figure 4.20 is only a framework upon which a complex, highly individual structure is built. However, certain features are common to the Rimsky-Korsakov and Rachmaninoff passages: the diminished-seventh oriented melodic material at measure 10, and the gradually filled-in diminished seventh chord of the opening measures. The Rachmaninoff passage is perhaps richer than the Rimsky-Korsakov passage, however, because the OCT_(2,3) material is only one component of the structure. Of the three triads arpeggiated

Rachmaninoff comments, “What untold riches there are in the Coq d’Or! The beginning alone—how novel...I don’t know what impression this conversation made on Scriabin. But I was deeply stirred.” (Bertensson and Leyda, *Sergei Rachmaninoff*, 138-39).

at the beginning of the passage (bracketed and marked with an asterisk), only two belong to the OCT_(2,3) collection—the D major and A \flat major triads are part of the collection, but the G \flat major triad does not belong (though the sustained G \flat does). Similarly, the A minor triad at measure 7 and measure 14 is treated as a kind of non-octatonic alternative to the A \flat major triad (a neighbor chord, perhaps); it enriches the harmonic content of the passage, without, however, necessarily undoing the octatonic framework. The octatonic structure of the introduction is “dirty”; but the dirtiness is significant, because the three bracketed triads (plus the A minor triad) comprise a chord group that is used motivically in all three movements. (See the longer analysis of Op. 45 in Chapter 6.) The octatonic framework in this late Rachmaninoff passage is itself extensively elaborated and decorated—it is given the same kind of flexible treatment that familiar tonal idioms are given in the mature common practice.

I have been at pains to suggest throughout this dissertation that functional tonal syntax remains central in Rachmaninoff’s idiom even when special chromatic and modal structures are emphasized. Figure 4.20 is a good case in point. As marked on the figure, tonal functions in C minor are engaged as the introduction ends, and a lengthy span of music in C minor (actually C Aeolian) begins in measure 16. (That section is analyzed later in the present chapter). No similarly clear functional engagement occurs within the octatonic structure in the *Golden Cockerel* opening.

Rachmaninoff’s and Scriabin’s Symmetrical Structures Compared

By now, the exaggeration and distortion effected by equal-interval chromatic structures in many passages from Rachmaninoff’s mature works are clear. These are, I believe, a hallmark of the composer’s mature style. It is interesting to compare such passages as the Symphony No. 3 first movement climax, the “A-u!” climax, and the “Daisies” climax to the same kinds of symmetrical pitch structures as they occur in Scriabin’s late music.

Figure 4.21 is an analytic overview of the first half of Scriabin’s Prelude, Op. 74, No. 3 (1914). The prelude is almost entirely octatonic. It falls into two parallel halves, followed by a short “tag” (measures 25–26). As Figure 4.21a and 4.21b show, the

octatonic techniques in the piece are similar to those used by Rachmaninoff and Rimsky-Korsakov: a melodic motive (x) is transposed at T6 and T9; major-minor seventh chords related by tritone appear; two different diminished seventh chords are entangled, summing to $OCT_{(0,1)}$ (as shown in Figure 4.22); and in measures 9–12, an extended segment of octatonic melodic patterns is transposed up by minor third to close the section.

As shown in Figure 4.23, the second half of Scriabin's prelude is a transposition by tritone of the first half.²⁸ The entire prelude remains inside one octatonic collection. There is motion within the collection, but otherwise no motion at all, recalling Taruskin's observation (quoted in Chapter 2) that "music based on universal invariant harmonies becomes quite literally timeless, as well as emotionally quiescent."²⁹ How different from Rachmaninoff's boiling octatonic climaxes! Although the equal-interval pitch structures in Scriabin's prelude and Rachmaninoff's "A-u!" (see Figures 2.25, 2.26, and 2.27) are nearly identical, all being derived from tertian models, and all involving the same kinds of root relations, transposition operations, and diminished seventh techniques, the rhetorical effects of the structures in the two passages could hardly be more different—distortion and climax in the Rachmaninoff, invariant, changeless quiescence (motion without motion) in the Scriabin. In Scriabin's late style, functional premises are effectively neutralized. In Rachmaninoff's late style, a tension between conventional functions and symmetrical chromaticism remains.

²⁸ Commonly available editions have a misprint in measure 21, which has unfortunately been followed in many performances and recordings. On the lower staff, the \sharp before G should instead be before D. This restores the chord to $OCT_{(0,1)}$, and makes it an exact analog (at T6) to the chord in measure 9.

²⁹ Taruskin, *Defining Russia Musically*, 348-49.

Figure 4.21. Stryabin, Prelude, Op. 74, No. 3, analytic overview of mm. 1–13

(a) OCT_(0,1) materials in measures 1–5: motive *x*, melodic segments and seventh chords at T6

(b) Analysis of measures 1–13

Figure 4.22. Prelude, Op. 74, No. 3, “entangled” diminished seventh chords

${}^{\circ}7: [0,3,6,9] + {}^{\circ}7: [1,4,7,10] = \text{OCT}_{(0,1)}$

melody & bass "tenor"

Figure 4.23. Prelude, Op. 74, No. 3, analytic overview of the entire piece

Part 1 T6 Part 2 Tag

1 13 25

tertian sonorities used throughout, but functions neutralized

Consider, as a contrast to the Scriabin prelude, the second movement of *The Bells*, Op. 35 (1913), an intensely chromatic work almost certainly composed with Scriabin’s and Rimsky-Korsakov’s harmonic experiments in mind. The movement is in D major. The previous movement is in A \flat major (see again the discussion of the first movement in Chapter 2).³⁰ The tritone relation between the first movement’s A \flat major and the second movement’s D major suggests octatonic possibilities. As suggested in Figure 4.24 (boxes 1 and 2) and in Figures 2.26 and 2.27, an octatonic structure is articulated when the two keys—or, rather, triads representing the two keys—are superimposed at the beginning of the second movement. The movement therefore begins, unusually for Rachmaninoff, with a marked octatonic structure.

³⁰ The Bells does not begin and end in the same key. David Cannata has suggested that the entire composition is organized around the fourth movement’s C \sharp minor/D \flat major. See Cannata, *Rachmaninoff and the Symphony*, 83-87.

Figure 4.24. *The Bells*, Op. 35, ii, annotated reduction of mm. 1–14

Lento

violas (con sordini) *p*

strings pizz., clarinets, and harp

horns and trumpets *f*

cellos and basses *sforz.*

violins I and II

formation of theme *d*

poco a poco cresc.

30

31

1

2

3

dim.

dim.

dim.

f

pp

sforz.

sforz.

pp

OCT_(2,3) oscillation
("Coronation"-type)

Figure 4.25. *The Bells*, ii, overview of thematic material

(a) Formation of theme *d* during the hyperdissonant opening

Lento
1 violas (con sordini)
p
poco a poco cresc.
theme *d*
theme *d*
mf

(b) Theme *d* in tonic D major

31 theme *d*
violins I and II
p
cellos
p

(c) Chromatic theme

35 violin I
p dolce
oboe
dim.

As shown in Figure 4.24, the opening measures of the second movement feature a gradual spinning-out of thematic material (theme *d*, so labeled because of the contour similarity with the *Dies irae*) to fill in the interval between pitch class E \flat and pitch class A \flat . This interval may be interpreted as a sort of holdover from the first movement's tonic. (Note that the D \natural gives this material an A \flat Lydian character, which is the modal form heard at the end of the first movement. See again the analysis of that movement in Chapter 3.) Theme *d* is important throughout the second movement, appearing in a number of forms: see Figure 4.25a and 4.25b. The only other significant thematic material, the "chromatic theme" shown in Figure 4.25c, is probably derived from the cello countermelody to theme *d* shown in Figure 4.25b. Throughout the movement, the sixteenth-note version of theme *d* shown in Figures 4.24 and 4.25a is associated with octatonic structures.

The OCT_(2,3) oscillation at the beginning of the movement (Figure 4.24) is one of the more remarkable "fantastic" passages in Rachmaninoff's works. It is similar in several ways to Mussorgsky's "Coronation Scene" prototype: it features two sonorities related by tritone (here rooted on D and A \flat) and it features the same kind of antiphonal *blagovest* bell texture wherein the harmonic material is separated into two sonic layers, one in the upper register and one in the lower.³¹ The *blagovest* texture in Mussorgsky's "Coronation" is explicitly associated with bells; in the Rachmaninoff movement, no actual bells sound, but the title of the composition and the poem make the association plain. The octatonic structure of the opening measures is detailed in Figure 4.26. Because the D major tonic of the movement is entangled in a noisy octatonic structure at the opening of the movement, this may be interpreted as hyperdissonance at not the point of remove nor the point of return, but at the point of departure (or perhaps, if the first

³¹ See Edward V. Williams, "The Blagovest Theme in Russian Music," *Kennan Institute for Advanced Russian Studies Colloquium* (Washington, D.C.: Wilson Center, 1987). Williams defines the idiom as a two-part sonic texture or "sound complex" referable to bells (Williams, "The Blagovest Theme in Russian Music," 40), and he identifies the opening of Concerto No. 2, Op. 18 as the paradigmatic example of the idiom in Rachmaninoff's music. Jason T. Stell identifies the *blagovest* idiom in some of Rachmaninoff's solo piano works, drawing from Williams's research ("Rachmaninov's Expressive Strategies," 23-25). Stell notes that "blagovest permeates Rachmaninov's music to such an extent that it becomes a recurrent topic" ("Rachmaninov's Expressive Strategies," 24).

movement is taken into account, the point of continuation). The unusual tension of the event—an unstable tonic at the opening of a movement, not treated as an applied chord (as for example the first chord in Beethoven’s *Symphony No. 1*)—is reflected in a dynamic and textural crescendo across the opening measures. As shown in Figure 4.26c, the clarification of D major as tonic at rehearsal **31** is entirely non-functional. Up to that point, thematic presentation has strongly suggested that A \flat major will be the movement’s tonic. When D major emerges as the legitimate tonic, at **31**, the violins take up theme *d* and give it an entirely new rhythmic and textural character.

Figure 4.26. *The Bells*, ii, OCT_(2,3) in mm. 1–10

The figure shows a piano accompaniment score for measures 1-10 of the second movement of *The Bells*. The score is divided into three sections: (a) OCT_(2,3) oscillation, (b) ninth chord, and (c) rehearsal 31. Section (a) shows a series of chords in the right hand and a single note in the left hand, with a diagonal line indicating oscillation. Section (b) shows a ninth chord in the right hand and a single note in the left hand. Section (c) shows a non-functional resolution to the movement II tonic. A diagram below the score shows a horizontal arrow pointing right, labeled 'non-functional resolution', leading to the text 'movement II tonic'.

Figure 4.27 is an analytic overview of the entire movement. (Some material is omitted to save space.) The figure shows the return of octatonic structures at several points, and shows how the climactic E \flat major at measure 97 may be understood as emerging from the octatonically-induced tension between E \flat /A \flat and D major in the first ten measures.³² I am tempted to say that the hyperdissonant opening—an unusual and

³² In David Cannata’s short analysis of the movement, he emphasizes the E \flat major/G \flat major material from rehearsal 41 through 44 (including the climax event at measure 97) as a “contrasting tonal plateau,”

striking thing in Rachmaninoff's works, to be sure—carries over into the climax. Significantly, the climax event features theme *d* at the same pitch level heard in the opening measures of the movement; and theme *d* is prominent in all of the octatonic oscillations and at the climax event. As shown in Figure 4.28, the third octatonic passage in the movement (at measure 111) connects back to the first, returning to OCT_(2,3); it is post-climactic, and marked *p*, unlike the two octatonic passages that came before. As shown in Figure 4.27, a final OCT_(2,3) event at measure 151 confirms D major as tonic.

All of this is to say that, while the “fantastic” structures used by Rachmaninoff and Scriabin are similar in many superficial regards (and sometimes virtually identical), the active, tensive hyperdissonance exploited by Rachmaninoff is expressively far different from the static, “timeless” condition engendered by Scriabin's symmetrical structures. In the former case, insistence upon functional tonal premises as an underlying basis leads to a structural tug of war (to exaggeration, to distortion, and ultimately to climax events that exploit the tension); in the latter case, insistence that those premises shall not—must not—apply results in their neutralization.

without, however, associating the event with any earlier events in the movement or work. See Cannata *Rachmaninoff and the Symphony*, 86-87.

Figure 4.27. *The Bells*, ii, analytic overview

[1st movement] [2nd movement]

E♭ elements ————— **climax**

structural hyperdissonance with tonic D major →

(full release) ↘

1 13 68 72 76 97 105 122 151 153 etc.

theme *d*

OCT_(2,3) *sf*

material omitted

OCT_(0,1) *f*

OCT_(2,3) *p*

OCT_(2,3) *pp*

D major elements

$bII^7 V^7b5 I$ $IV I$

Figure 4.28. *The Bells*, ii, octatonic oscillations in measures 1, 72, and 111

The image shows a musical score for 'The Bells, ii'. It consists of three systems of music, each labeled with a measure number in a box: 30, 39, and 45. Each system is labeled 'theme d'. The top staff is a vocal line with a treble clef and a key signature of one sharp (F#). The bottom staff is a piano accompaniment with a grand staff (treble and bass clefs) and a key signature of one sharp. The piano accompaniment features octatonic chords. Below the piano staff, three octatonic structures are identified: OCT_(2,3) under measures 1 and 111, and OCT_(0,1) under measure 72. A dashed arrow points from the OCT_(2,3) label under measure 1 to the OCT_(2,3) label under measure 111.

Hexatonic Structures (Interval 4/8 Basis)

“Hexatonic” refers to a symmetrical six-note collection in which semitones and minor thirds alternate, of which there are four distinct transpositions as shown in Figure 4.29 (transposition of any hexatonic scale by major third up or down duplicates pitch-class content).³³ Again, fixed-zero labels are used.³⁴ If octatonicism is characterized by consistent interval 3/6/9 and/or T3/T6/T9 operations and diminished seventh chord techniques in a tertian context, hexatonicism is characterized by interval 4/8 patterns and T4/T8 transposition activity in a tertian context, even if—as already suggested for octatonicism—tones foreign to the hexatonic collection are present.

³³ The term “hexatonic” was introduced in Vincent Persichetti, *Twentieth-Century Harmony*, 2nd ed. (New York: W.W. Norton, 1961), 53; see especially his Example 2-37, where the term covers a variety of different six-note collections. The more restricted definition adopted in the dissertation has been popularized by Richard Cohn, “Maximally Smooth Cycles, Hexatonic Systems, and the Analysis of Late-Romantic Triadic Progressions,” *Music Analysis* 15 (1990): 9-40.

³⁴ These labels are derived from Straus’s octatonic labels, and are also suggested in Miguel A. Roig-Francoli, *Understanding Post-Tonal Music* (New York: McGraw-Hill, 2008), 57-58.

Figure 4.29. Hexatonic scales



As with octatonicism, structures based on chord rotation and oscillation are common in the works analyzed. Samples are shown in simple form in Figure 4.30. In Figure 4.30, note the inclusion of some “extended” hexatonic structures—that is to say, structures involving seventh chords with tones foreign to the hexatonic collection. A pure hexatonic collection does not allow major-minor seventh chords; but they are commonly used in hexatonic-type progressions. In such a case, the structure may be said to have HEX_(x,x) as a basis, without necessarily committing to HEX_(x,x) for its full content. (A hexatonic-type structure involving a seventh chord not purely of the collection was analyzed, though not labeled as such, in the song “Daisies,” Op. 38, No. 3 in Chapter 2; the basic structure is reproduced in Figure 4.30h.)

Figure 4.30. Sample hexatonic rotations and oscillations, including extended versions

(a) HEX_(1,2) (b) HEX_(1,2) (c) HEX_(2,3) (d) HEX_(0,1) (e) HEX_(0,1)

major triads minor triads 7 7 oscillation oscillation

cycle cycle cycle oscillation oscillation

(f) HEX_(0,1) (g) HEX_(0,1) (h) HEX_(0,1) (i) HEX_(0,1)

7 7 7

“Daisies”

Unlike octatonic rotations and oscillations, hexatonic rotations and oscillations may simulate V – I or iv – I resolutions, including melodic resolution of the leading tone or melodic resolution of scale degree 6 (lowered) to scale degree 5, or both. In other words, although hexatonic structures deny root relations by perfect fifth just as octatonic structures do, hexatonic structures do not completely eliminate tendency-tone activity.³⁵ (In Figure 4.30, some tendency tones, are shown by small noteheads in parentheses.) The availability of functional tendency tones allows hexatonic structures to substitute for diatonic functional ones in some cases, making explicit the interaction of functional syntax and symmetrical chromaticism and simplifying the introduction of equal-interval chromaticism as a structuring mechanism.³⁶ (See again the analysis of the *Rhapsody on a Theme by Paganini*, Theme and Variations VIII and IX in Chapter 2.)

Figure 4.31 shows a HEX_(3,4) cycle substituting for functional syntax in a work by Prokofiev. Figure 4.31a is an analytic reduction of the first two measures of “The Girl Juliet,” from the ballet *Romeo and Juliet* (composed 1935–36; later revised). Figures 4.31b through 4.31e detail the relationship of the hexatonic structure to an underlying syntactical model—the hexatonic structure may be taken as chromatic exaggeration of a kind not unlike that discussed in Chapter 1. Figure 4.31b shows a basic I – V – I prototype. Figures 4.31c and 4.31d show the hypothetical inflection that yields the version used in the passage. Figure 4.31e details the tendency tones that remain. As Kevin J. Swinden has observed in his analysis of Wagner’s “Tarnhelm” motive, chromatic major-third relations may be thought of as functional hybrids, combining aspects of authentic and plagal harmonic motion.³⁷ This is shown in Figure 4.31e by the resolution of scale degree 7 (associated with dominant function) to scale degree 1 and the resolution of lowered scale degree 6 (associated with subdominant function) to scale degree 5.

³⁵ On potential dominant function of chromatic major-third relations, especially when major-minor seventh chords are involved, see Charles J. Smith, “The Functional Extravagance of Chromatic Chords,” *Music Theory Spectrum* 8 (1986), 126-27.

³⁶ However, an important difference should be noted: as discussed in relation to the “Daisies” climax in Chapter 1, chromatic major third relations, quite unlike the arrangement of proper dominant and tonic in functional syntax, are reciprocal—a chord may be constructed on any “root” in a hexatonic collection so as to contain the leading tone of any other major or minor triad in the same collection, which means that a chord “tonicized” hexatonically might well turn around and tonicize the chord that tonicized it.

³⁷ Kevin J. Swinden, “When Functions Collide: Aspects of Plural Function in Chromatic Music,” *Music Theory Spectrum* 27 (2005): 249-82.

Figure 4.31. Prokofiev, *Romeo and Juliet*, “The Girl Juliet,” analysis of mm. 1–2

(a) mm.1-2: analytic reduction

HEX_(3,4) I V I I bVI V⁷ I HEX_(3,4) $\hat{b}6$ $\hat{5}$

T D T T PD D T

Perhaps because of the relative ease with which chromatic major-third relations and tonal functions can be fused, hexatonic structures do not have the strong extra-musical associations (evil magic, the supernatural, etc.) that octatonic structures do in Russian music. However, in his article on “Fantastic” chromaticism, Taruskin identifies a number of passages based on chromatic major-third relations. His statement, quoted earlier in the chapter, that octatonic and whole-tone structures are functional “equivalents” might be revised to read as follows: “octatonic, hexatonic and whole-tone organization are (to some degree) functional equivalents.”

Important recent contributions to scholarship on chromatic major-third relations in general have been made by Richard Cohn, Matthew Bribitzer-Stull, and David Kopp. These scholars differ greatly in their basic conceptions, however.³⁸ Cohn emphasizes the “smoothness” of his chromatic major-third cycles.³⁹ Bribitzer-Stull’s chromatic major-third relations, on the other hand, are full of tension, reminiscent of the disruptive third-relations Taruskin describes. And yet Cohn’s theory has value for the present study, because he allows chromatic major-third relations to exist separately functional syntax—indeed, he *insists* that they exist outside functional syntax, whereas Bribitzer-Stull, like

³⁸ Matthew Bribitzer-Stull, “The A-Flat-C-E Complex: The Origin and Function of Chromatic Major Third Collections in Nineteenth-Century Music,” *Music Theory Spectrum* 28 (2006): 167-90; Cohn, “Maximally Smooth Cycles”; and Kopp, *Chromatic Transformations in Nineteenth-Century Music*.

³⁹ He means “smooth” from the standpoint of underlying voice-leading; but I find it difficult to separate the technical smoothness from a rhetorical smoothness.

Cinnamon and Cunningham, is concerned primarily with the occurrence of chromatic third relations inside functional organization. David Kopp's theory of chromatic third relations (major and minor) to some degree resembles Cohn's in that it is based on a belief that chromatic third relations "possess an identity and a quality which are independent of the fifth relations and diatonic third relations of the tonal system, displaying an independent functional identity."⁴⁰ Kopp, however, presents a larger, "well-ordered harmonic system" of "common-tone tonality" that, like Daniel Harrison's theory, effectively eliminates a basis for any friction between diatonic and chromatic structures.⁴¹ This I regard as deeply problematic for Rachmaninoff's music, for reasons that I hope are clear by this point.

A sort of theoretical compromise is offered: chromatic major-third relations, like chromatic minor-third relations, are presented as conceptually independent of functional syntax in the present description of Rachmaninoff's harmonic language; yet, unlike Cohn's hexatonic cycles, they do not always occur separately from syntax—in Rachmaninoff's dense, layered harmonic environments, they may be quite simultaneous. They are not smooth (in any expressive or rhetorical sense, at least), and "component [pitch-classes] are certainly" *not* "equally weighted," as they are in Cohn's cycles.⁴² For the sake of simplicity, Cohn's term "hexatonic" is retained to refer to chromatic major-third relations in general; but his terms "Northern," "Southern," "Eastern," and "Western" for the four possible systems are not used.⁴³ At the same time, Bribitzer-Stull's point is not lost, and his observation that consecutive chromatic major-third relations can seriously disrupt a tonal context is taken seriously.⁴⁴ Bribitzer-Stull's research has been primarily on works from the common practice. By the Postromantic era, the structures he describes represent a common way of going about harmonic business—yet the disruptive effects of chromatic major-third relations are never fully lost in Rachmaninoff's works. (See for example the analysis of "Daisies" in Chapter 2.)

As discussed in more detail in Chapter 6, hexatonic structures are especially important in the *Rhapsody on a Theme by Paganini*, participating on the small scale and

⁴⁰ Kopp, *Chromatic Transformations in Nineteenth-Century Music*, 3.

⁴¹ *Ibid.*, 263.

⁴² Cohn, "Maximally Smooth Cycles," 13.

⁴³ *Ibid.*, 17.

⁴⁴ Bribitzer-Stull, "The A-flat–C–E Complex," 176-77.

the large. The introduction of hexatonic-type chromatic major-third relations as a kind of hyperdissonant exaggeration in Variations VIII and IX of the work has already been discussed (see the analysis of the passage in Chapter 2). Figure 4.32 shows a similarly intense hexatonic structure in Variation XIII. At the beginning of the variation, a diatonic tonic-dominant (i – V) alternation originating in the arpeggio motive of Paganini’s theme (labeled *x* on the figure) and a strong $HEX_{(1,2)}$ cycle are combined. In fact, the material labeled “1” in Figure 4.32 and the hexatonic material labeled “2” are in a state of friction with one another throughout the variation. The friction is intensified by upper and lower pedal points: A^{\flat} in the upper register (marked “3” on the figure) and D^{\flat} in the lower, which combine to maintain a sense of the local tonic amidst the intense chromaticism. Note that, following the precedent established in Variations VIII and IX, the hexatonic structure is marked *ff*, supporting the rhetorical associations developed in Chapter 3 of the dissertation. In Variation XIII, hexatonic organization is associated with a state of heightened dynamic, textural, and expressive intensity.

Figure 4.32. *Rhapsody on a Theme by Paganini*, Op. 43, Variation XIII, analysis

The figure displays a musical score analysis for Variation XIII. It consists of three staves labeled 1, 2, and 3. Staff 1 (bass clef) contains a diatonic arpeggio motive labeled 'x' and 'diatonic i / V from theme', with a box labeled 'T' below it. Staff 2 (treble clef) features a hexatonic structure labeled 'HEX_(1,2)' and 'ff'. Staff 3 (treble clef) has a 'pedal point: A' indicated above it. A dashed line labeled 'increasing tension between 1, 2, and 3' spans across the staves. At the bottom right, boxes labeled 'PD', 'D', and 'T' are shown. Measure numbers 34 and 35 are boxed at the top. A box with an asterisk (*) is placed above a note in staff 2.

In the second half of Variation XIII (rehearsal **34**, repeated with slight alterations at rehearsal **35**), the hexatonic structure of the opening measures is mitigated—but, as shown by the dashed beam on the upper staff of Figure 4.32, a remnant remains. (The chord marked “*” on the figure is variable in the Variation, and Rachmaninoff’s full score and two-piano reductions do not completely agree on its pitch-class content: in the two-piano reduction, it contains $A\flat$ and $B\flat$ after rehearsal **34** and $A\flat$ and B after rehearsal **35**, while in the full score it contains $A\flat$ and $B\flat$ after rehearsal **34** and just $A\flat$ after rehearsal **35**. $B\flat$ goes against a $HEX_{(1,2)}$ reading, but the overall content of the chord suggests a connection with the hexatonic framework established earlier in the variation.)

Engaged dramatically in Variation XIII, hexatonic organization carries over into the following variation, as shown in Figure 4.33. A $HEX_{(0,1)}$ relation substitutes for dominant-tonic resolution to F major (the new local tonic) at the beginning of Variation XIV, and the $HEX_{(0,1)}$ chord pair, C# minor – F major, is stated many times over the course of the variation. As shown on Figure 4.33, arpeggio motive *x* (see again Figure 3-32) is inverted in Variation XIV, preliminary to the more famous inversion of the entire theme in Variation XVIII. At the same time, a new version of the original (non-inverted) motive, marked *y* on Figure 4.33, is introduced. (The derivation of *y* from arpeggio motive *x* is not obvious in Figure 4.33, but is instantly audible, especially when rhythm is considered.)

Figure 4.33. *Rhapsody on a Theme by Paganini*, Variation XIII into Variation XIV

The figure shows a musical score with two staves: a treble staff and a bass staff. The treble staff contains a sequence of chords and melodic lines. A dashed beam connects the first two chords. Above the treble staff, an arrow points to a chord labeled 'x', and another arrow points to a melodic line labeled 'y'. The bass staff contains a sequence of chords. Two brackets below the bass staff label these as $HEX_{(0,1)}$ substitutions. The first bracket is under the first two chords, and the second bracket is under the last two chords. A vertical line separates the end of Variation XIII from the beginning of Variation XIV.

As detailed in Figure 4.34, melodic idea *y*, the $HEX_{(0,1)}$ structure with which it is associated, and the underlying functional syntax model bear an interesting three-way relationship. In the figure, (a) through (d) show the derivation of the $HEX_{(0,1)}$ relation used in Variation XIV from a diatonic prototype. (Note that Figure 4.34d invokes the dominant-subdominant hybrid function proposed by Swinden.) As shown in the figure, pitch class $D\flat$ in melodic idea *y* is treated by Rachmaninoff as lowered scale degree 6, moving down to $C\sharp$ (scale degree 5). Hexatonic chord root $C\sharp$, however, is *not* treated as lowered scale degree 6, and does not move down to $C\flat$. In Figure 4.34e, melodic idea *y* is split into two voices to make plain its content in relation to the $HEX_{(0,1)}$ relation underneath it. Figure 4.34 reveals a momentary clash between hexatonic values and diatonic values.

Figure 4.34. *Rhapsody on a Theme by Paganini*, Variation XIV, $HEX_{(0,1)}$ analysis

(a) (b) (c) (d) (e) Variation XIV

6
o5
ii V I

$\flat 9 - 8$
7
V I

$\flat 9 - 8$
 $\sharp 5$
V I

plagal inflection → (y)

PD D T D T SD+D T

Unlike octatonic structures, which are rare in Rachmaninoff's works before the late Russian period, hexatonic structures—including cycles of chords (or, on a larger scale, keys) related by chromatic major third and substitution of hexatonic oscillation for conventional dominant-tonic or subdominant-tonic progressions—appear fairly

frequently in works from the early and middle Russian periods.⁴⁵ This is perhaps because chromatic major-third relations are more generic than octatonic ones, and because hexatonic structures and conventional tonal functions may be synthesized more easily than octatonic structures and tonal functions. Figure 4.35 shows the use of $HEX_{(0,1)}$ organization in the early Waltz, Op. 10, No. 2 (1893-94).

In the waltz, the secondary key area of $D\flat$ major bears a hexatonic relationship with the home key of A major, suggesting the $HEX_{(0,1)}$ cycle shown in Figure 3-36a. The A- $D\flat$ key relationship in and of itself is probably not enough to suggest that the work is “hexatonic” in orientation; but the chords marked “*” on Figure 4.35 support a hexatonic reading. The “*” chords are all seventh chords built on triads from the $HEX_{(0,1)}$ cycle, including F major (which does not appear as a key area in the piece)—auxiliary seventh chords that create local hexatonic relations that mirror the large-scale chromatic major-thirds structure of the work. The “*” seventh chords are extracted in Figure 4.36b.; when the seventh chords are considered, all three hexatonic “roots” (A, F, and $C\#/D\flat$) are accounted for.

⁴⁵ Bribitzer-Stull includes the second and third movements of Rachmaninoff’s Piano Concerto No. 2, Op. 18 in his list of works involving chromatic major-third relations (“The A-flat–C–E Complex,” 186).

Figure 4.35. Waltz in A major, Op. 10, No. 2, analytic reduction

1 33 57 69 78 81 94 97 124 139 195 238

mf *fff* *p*

A major $HEX_{(0,1)}$ basis Db major A major

1 2 *

Figure 4.36. Waltz, Op. 10, No. 2, $HEX_{(0,1)}$ cycle and auxiliary seventh chords

(a) $HEX_{(0,1)}$ cycle (b) overview of Waltz, Op.10, No.2

Figure 4.37. Waltz, Op. 10, No. 2, auxiliary seventh chords and melodic details

Allegro assai

1 53 x

mf *accel. e cresc.* *con moto*

123 135 x'

p *accel.* *mf*

Examples of $C\sharp$ and F seventh chords in the waltz are boxed in Figure 4.37. (The $C\sharp$ seventh chord at measure 53 is superimposed above tonic $A\flat$.) Figure 4.37 also shows how the reciprocal nature of the underlying hexatonic structure is manifest in certain surface melodic details of the work. Melodic cell x in measures 53 – 56 connects a $C\sharp$

auxiliary seventh chord to a restatement of thematic material in A major at measure 57; note the connection of measure 57 to measure 1. The same melodic cell is adapted in measure 135 and following to connect an F auxiliary seventh chord (following the D \flat major section) to restatement of thematic material in A major. An enharmonic pun bridges the change of key signature, and again suggests the symmetrical, reciprocal nature of the underlying harmonic basis: C \flat -D \flat -E \flat = B \sharp -C \sharp -D \sharp .⁴⁶

The Hexatonic junctures of the waltz, though colorful, are not rhetorically marked to any great extent. The chromatic major-thirds structure of the work seems on the contrary a kind alternative tonal plan, not a disruption or intensification—very much as Kopp would have it. By the late Russian period, however, the rhetorical associations presented in Chapter 3 crystallized—equal-interval and diatonic structures are increasingly differentiated, tension between them is emphasized, and explicitly layered formations come to the fore.

In the first movement of Rachmaninoff's Sonata No. 2 in B \flat minor, Op. 36 (1913), for example, hyperdissonance resulting from an interaction of hexatonic and diatonic structures at the beginning of the recapitulation results in a climax event and in a substantial modification of traditional sonata form tonal design and rhetorical strategy.⁴⁷ The passage shown in Figure 4.38 contains a climax in the proper rhetorical sense: a series of events arranged in stages of increasing intensity—in this case, increasing chromatic intensity. The stages are marked 1 through 3 in the figure.

⁴⁶ In connection with the present discussion, see also the Mazurka in D \flat major, Op. 10, No. 7. In that work, composed around the same time and published at the same time as the waltz, the same hexatonic cycle (HEX_(0,1)) is used; but D \flat major is the global tonic, F major is the key of the middle-section digression, and A major triads are used as auxiliary chords. See especially the last 25 measures of the Mazurka, in which the A major auxiliary chord is tonicized, *ffff*, and an explicit HEX_(0,1) cycle is presented as a kind of summary.

⁴⁷ The analysis is based on the revised version of 1931.

Figure 4.38. Sonata No. 2, Op. 36, i, climax at recapitulation

The figure displays a musical score for three staves (1, 2, and 3) across three stages of climax. Stage 1 (measures 98-101) is labeled 'stable' and features a 'diatonic/modal' texture with a D^b+ chord. Stage 2 (measures 101-104) is labeled 'highly-charged' and features a 'HEX_(1,2)' chord. Stage 3 (measures 104-107) is also labeled 'highly-charged' and features a $F^{\#+}$ chord. A dashed arrow labeled 'tension remains' points to the right. A diagram below the score shows a horizontal line representing chromatic intensity, starting from a circled 'B-flat minor global tonic' and ending at a double bar line labeled 'Maximal chromatic pressure'. A dashed arrow labeled 'increasing chromatic intensity' points from the tonic to the double bar line.

In Figure 4.38, the music is separated into layers. Layer C is a harmonic framework; layer B contains the three highly unstable chords at the highpoints of the three stages of climax; and layer A contains, simply, tonic elements B^b and D^b .⁴⁸ The *blagovest* texture of the passage (alternating material in the high register and in the lower

⁴⁸ It is worth noting that the three unstable “highpoint” chords in Layer B represent the three key areas in which the second theme is heard in the Sonata: D^b major in the first movement exposition, $F^{\#}$ (G^b) major in the first movement recapitulation, and $F^{\#}$ (E) major at the end of the second movement.

register, creating a bell-like effect; see again the discussion of *blagovest* in the second movement of *The Bells* earlier in this chapter) accentuates the highpoint chords in layer B. The climax reaches its peak with the F# major triad inside stage 3. Maximal expressive intensity is thus attached to a highly-charged chord that contains, enharmonically, the defining third of the just re-established global tonic, Bb minor. At the climax, a powerful chromatic torque is applied to tonic elements.

Figure 4.39. Sonata No. 2, i, diatonic and hexatonic third relations in the exposition

(a) Diatonic (modal) third relation in exposition

(b) Hexatonic relation in exposition coda

Stages 1 and 3 of the climax are defined by different kinds of third relations: stage 1 contains a diatonic (or modal) minor-third relation, B \flat minor – D \flat major, and stage 3 contains a chromatic major-third relation, D major – F \sharp major (that is to say, a HEX_(1,2) relation). As Figure 4.39a and 4.39b show, both kinds of third relation are established earlier in the piece: the minor-third relation in the exposition, the hexatonic relation in the exposition coda. (The diatonic minor-third relation is related to the modal *peremennost* idiom discussed in Chapter 5; it is sufficient for now to simply regard it as differentiated from the hexatonic relation.)

Figure 4.40 compares the beginning of the recapitulation to the exposition. As the dotted lines show, stages 1 and 2 of the recapitulation and the music following stage 3 all correspond to parts of the exposition. But climactic stage 3 is new. Stage 3 represents a chromatic insertion that distorts what was in the exposition a plainly functional large progression, tonic-predominant-dominant-tonic. The recapitulation moves from B \flat minor to G \flat major for the second theme; this, too, could have been a straightforward, basically diatonic course. The insertion of stage 3, however, means that an extraordinary chromatic path is traveled instead. As a result, a larger chain of major thirds is suggested for marked events in the recapitulation as a whole, as beaming in Figure 4.40 indicates.

As shown in Figure 4.41, the start of the recapitulation at measure 98, the climax at measure 104, the return of the second theme at measure 112, and the coda at measure 124 all occupy nodes in a large chain of HEX_(1,2) major thirds. Climax occurs inside the D major node—the chromatically rough stage 3 climax, which contains the highly-charged F \sharp major triad. In his recent article on chromatic major-third relations, Matthew Bribitzer-Stull notes that successive chromatic major-third relations can seriously disrupt an ordinary tonal context.⁴⁹ Stage 3 of the Rachmaninoff climax is such an event. There is first a chromatic major-third move from B \flat to D \natural between stage 2 and stage 3, and then a chromatic major-third relation inside stage 3, which distorts tonic elements B \flat and D \flat .⁵⁰ The F \sharp major triad represents an unstable chromatic complication inside a larger unstable chromatic complication.

⁴⁹ Bribitzer-Stull, “The A-flat–C–E Complex,” 176.

⁵⁰ In Bribitzer-Stull’s article, disruptive successive major-third relations occur at the same level of tonal hierarchy. In the Rachmaninoff passage, they do not; but the principle—disruption crucial premises of ordinary tonal design, in this case tonic elements—is similar.

Figure 4.40. Sonata No. 2, i, comparison of exposition and recapitulation

Recapitulation

highpoint chords (layer B)

stage 1 98 101

stage 2 101 104

stage 3 104 112 117 124

chromatic M3 (dominant function)

B-flat minor

G-flat major

B-flat major --> minor

NEW

equivalent music

equivalent music

Exposition

stage 1 2 6 10

stage 2 10 15 24 28 38

stage 3 15 24 28 38

B-flat minor

D-flat major

chromatic M3 (dominant function)

[NB. There are no highpoint chords in the opening measures of the exposition]

Figure 4.41. Sonata No. 2, i, schema of recapitulation climax and solution

The figure illustrates the recapitulation climax and solution in Sonata No. 2, i, through a musical score and a schematic diagram.

Layer A: Shows the overall tonal structure, starting with a **stable** state (B-flat major/minor, D^b/B^b) and ending with an **entirely stable** state (B-flat major/minor, D^b/B^b).

Layer B: The main melodic line, divided into sections: **climax** (measures 101-106), **2nd theme recap.** (measures 112-117), and **coda** (measures 124-124). The **climax** section is characterized as **highly charged**. The **2nd theme recap.** is **more stable**. The **coda** is **entirely stable**.

Layer C: The bass line, showing **stage 1** (measures 98-101), **stage 2** (measures 101-104), and **stage 3** (measures 104-106). The **climax** section is also marked with **stage 3**. The **2nd theme recap.** and **coda** are marked with **stage 3**.

Schematic Diagram:

- Layer A:** **stable** (D^b/B^b)
- Layer B:** **climax** (highly charged), **2nd theme recap.** (more stable), **coda** (entirely stable)
- Layer C:** **stage 1**, **stage 2**, **stage 3**
- Key Signatures:** **B-flat minor** (initial), **G-flat major** (during climax), **B-flat major --> minor** (during coda).
- Structural Elements:** **M3 framework**, **HEX_(1,2)**, **hyperdissonant climax**, **chromatic pressure distorts tonic elements**, **diatonic restabilization**, **tension**, **B flat minor = global tonic**.

Between measures 106 and 112, a “proper” pathway is found, to stabilize “F#-ness” into more legitimate G \flat major. The second theme is thus set in G \flat major in the recapitulation, not in B \flat . The need to discharge the lingering tension from stage 3 of the climax is more compelling than the urge to flatten the recapitulation into a single key. The large-scale tonal crisis inherent in sonata form is as a result extended past the development into the recapitulation—it is in fact greatly amplified in the recapitulation, creating a context for the unconventionally located tension climax and delaying full solution of the tonal problem.⁵¹

At the bottom of Figure 4.41 is a diagram of the entire recapitulation, showing how equal-interval chromatic pressure is associated with a climax event, and how the tension is then released in stages over the rest of the movement. In connection with this, it is worth noting that the disruptive hexatonic progression of the climax is essentially reversed at the start of the coda in measure 124. As Figure 4.42a shows, hexatonic and diatonic/modal relations from stages 1, 2, and 3 are engaged in reverse; and for good measure, as Figure 4.42b shows, the diatonic/modal minor-third relation is heard one final time at the very end of the movement. Significantly, neither the direct reversal at measure 124 nor the final minor-third relation at the end of the movement happens in the original 1913 version of the sonata; they happen only in the revised version of 1931, which suggests that Rachmaninoff’s controversial revisions go somewhat deeper than generally recognized.

⁵¹ In the first movement of Rachmaninoff’s Symphony No. 2, Op. 27 (1907), the tonal crisis in the development is similarly extended into the recapitulation. In the symphony movement the mechanism is considerably simpler than in the sonata movement: reprise of exposition material over a dominant pedal-point.

Figure 4.42. Sonata No. 2, i, hexatonic and diatonic/modal third relations in coda

(a) mm. 112 – 126

2nd theme recap Coda

112 124 **Meno mosso**

pp *pesante*

NB G flat

G^b_+

D^+

B^b_+

HEX_(1,2)

(with chords from stages 2 and 3)

D^+

B^b_-

B^b_-

climax chord stabilized

diatonic/modal minor-third relation (~stage 1)

NB. Essentially reverses the order of events at climax → complete restabilization

(b) mm. 136 – end

136

perdendo

mf

p

m.g. **Meno mosso** *m.g.* *m.d.* *m.g.* *m.d.*

D^b_+

B^b_-

diatonic/modal minor-third relation

Whole-Tone Structures (Interval 2 Basis) and Hybrid Structures

Strict whole-tone organization in Rachmaninoff's works is comparatively rare, perhaps because the whole-tone collection contains no major or minor triads, only augmented ones, and because there are only two distinct transpositions of the collection— WT_0 and WT_1 , starting on C and $D\flat$, respectively. The idiom therefore has a certain stagnant quality. Only a few whole-tone passages have been identified thus far in the dissertation. A brief WT_0 passage was analyzed in first movement of the Symphony No. 3 as part of a general trend toward equal-interval organization at an important structural and expressive moment (see Figure 2.7); and a whole-tone ascent in the bass was identified in the first movement of the Concerto No. 3 (see Figure 4.8), again as part of a general trend toward increased symmetry of pitch organization associated with an intensification leading to a climax event.

Figure 4.43 shows whole-tone (and octatonic) organization at the climax in the middle section of the Etude-Tableaux in $E\flat$ minor, Op. 39, No. 5. (See again the analysis of the etude's first section in Chapter 3.) The structures shown in the figure are not entirely whole-tone: whole-tone scales are involved, and T2 operations, but triads outside the whole-tone collection are used.⁵²

The climax in Figure 4.43 is associated with both octatonic and whole-tone structures, and with gradual intensification of register, texture and dynamics. Roman numerals shown on the figure are in relation to the global tonic, $E\flat$ minor. As suggested on the figure, each stage of functional syntax is exaggerated by equal-interval structures. (Not shown on the figure is the resolution of V^7 to $E\flat$ minor for the reprise at measure 53; note that the entire reprise occurs over a post-climactic pedal point.)

⁵² Taruskin has identified a similar structure—a whole tone scale connecting triads related by chromatic major third—in the overture to Glinka's *Ruslan and Lyudmila*. See *Stravinsky and the Russian Traditions*, 261-62.

Figure 4.43. Etude-Tableaux in E \flat minor, Op. 39, No. 5, climax in middle section

Musical score for Etude-Tableaux in E \flat minor, Op. 39, No. 5, climax in middle section. The score is in E \flat minor and features a piano (*p*) section with a *poco a poco cresc.* marking. It includes annotations for T_2 and T_3 tableaux, $OCT_{(1,2)}$ (OCT broken), and *tonicizes B major*. Measure numbers 26, 29, 33, 35, 37, 38, and 39 are indicated.

Musical score for Etude-Tableaux in E \flat minor, Op. 39, No. 5, climax in middle section. The score is in E \flat minor and features a fortissimo (*ff*) section with a *chromatic ascent* marking. It includes annotations for **climax**, T_2 , WT_1 , WT_0 , VI , bII^7 , and V^7 . Measure numbers 41, 42, 43, 44, 45, and 46 are indicated.

In Figure 4.43, different kinds of equal-interval structure are used in close proximity at a climax event. In the late Russian and exile periods, the strong association between equal-interval structures and processes of intensification and climax results in many situations where more than one kind of “fantastic” structure is articulated at the same time. Such a case is shown in Figures 4.44 and 4.45, an analysis of measures 16–78 of the first movement of the Symphonic Dances, Op. 45. The dance is in ternary form (A1–B–A2), with an introduction and a coda. (The introduction was analyzed in Figures 4.19 and 4.20. Note that the “arpeggio motive” from the introduction is retained in Figures 4.44 and 4.45.) Figure 4.44 is an analytic reduction of the thematic exposition (measures 16–40) in the first A section. As shown in the figure, thematic exposition is associated with modal organization (as suggested more generally in Chapter 3)—specifically, an Aeolian structure in which the tonic and (minor) dominant are entangled until the end of the first phrase. Following this, between measures 29 and 32, a chromatic structure leads to a local highpoint; as indicated on the figure, the highpoint suggests hexatonic organization without committing to it.

Figure 4.45 is an analytic reduction of the measures which follow—that is to say, the rest of the A section, including a local climax event leading into measure 79 (note the crescendo to *ff*). The passage may be understood as involving a large-scale $\text{HEX}_{(3,4)}$ structure, important nodes of which are connected by marked whole-tone ascents (such that WT_0 is filled out in the structural bass over the course of the section), and above which is superimposed a cycle of diminished seventh chords. To put it more plainly, three different kinds of equal-interval structure are combined in this section. None of them by itself is sufficient to account for the structure or expressive content of the passage; but collectively, as a kind of general trend toward harmonic symmetry leading to the A section climax—all the more potent after the modal exposition in Figure 4.44. As a last piece of evidence that equal-interval structures in Rachmaninoff’s works may lead to unorthodox kinds of tonal tension, observe that the point of furthest tonal remove in Figure 4.45 (measure 62, marked with an exclamation point on the figure) is a hexatonic node that involves the tonic note, C^{\flat} , arrived at by whole-tone ascent in the bass, and entangled with diminished seventh chord [1,4,7,10], creating a nonfunctional, nonresolving ninth chord on the tonic root.

Figure 4.44. Symphonic Dances, Op. 45, i, mm. 16–40, analytic reduction

The figure displays an analytic reduction of a musical passage from 'Symphonic Dances, Op. 45, i, mm. 16–40'. It consists of two systems of musical notation, each with a treble and bass staff.

System 1 (mm. 16–25):

- Measures 16–18 are grouped under a box labeled **2**. Measure 16 is marked with a hat over the number 1 ($\hat{1}$).
- Measure 16 contains an 'ap. motive' (accented motive).
- Measures 19–25 are grouped under a box labeled **2**. Measure 25 is marked with a hat over the number 2 ($\hat{2}$).
- A box labeled **Aeolian** spans measures 19–25.
- Structural markers **T** (Tonic) and **D** (Dominant) are placed below measures 16 and 25, respectively.
- A box labeled **PD** (Phrase Domain) spans measures 19–25.

System 2 (mm. 27–40):

- Measures 27–30 are grouped under a box labeled **3**. Measure 27 is marked with a hat over the number 1 ($\hat{1}$).
- Measures 31–33 are grouped under a box labeled **2**. Measure 31 is marked with a hat over the number 2 ($\hat{2}$).
- Measures 34–36 are grouped under a box labeled **1**. Measure 33 is marked with a hat over the number 1 ($\hat{1}$).
- Measures 37–40 are grouped under a box labeled **4**. Measure 40 is marked with a hat over the number 4 ($\hat{4}$).
- An arrow labeled 'intensification' points from measure 31 to measure 33.
- Measures 37–39 are enclosed in a box labeled **? HEX_(0,1) basis**.
- Structural markers **T** and **D** are placed below measures 33 and 37, respectively.
- A box labeled **PD** spans measures 31–36.
- Dynamic markings include *eresc.* (crescendo), *ff* (fortissimo), and *dim. pp* (diminuendo pianissimo).

Vertical dashed lines connect the structural markers and boxes between the two systems, indicating their alignment across the two systems.

Figure 4.45. Symphonic Dances, i, mm. 42–78, analytic reduction

C minor tonic frame: $\hat{3}$

°7 overlays: °7: [0,3,6,9] °7: [2,5,8,11] °7: [0,3,6,9]

WT ascent

HEX_(6,4) basis: $\boxed{A^b}$ \boxed{C} \boxed{E}

42 45 48 52 56

°7: [0,3,6,9]

°7: [2,5,8,11]

°7: [0,3,6,9]

°7: [1,4,7,10]

58 60 62 68 71

WT ascent

$\boxed{A^b}$ $\boxed{C \uparrow}$ \boxed{E}

°7: [0,3,6,9]

71 73 75 76 78 79

WT ascent

$\boxed{A^b}$ \boxed{C} \boxed{PD} \boxed{D} \boxed{T}

cresc. *sf*

Conclusion

The analyses in this chapter have suggested that identification of equal-interval chromatic structures in Rachmaninoff's works allows more meaningful interpretation of large- and small-scale organization, and contributes to better understanding of expressive trajectory and climax events. Idioms featuring symmetrical pitch organization are thereby rehabilitated: genericized in much recent music theory, they become "fantastic" once again when it is recognized that they serve specific rhetorical functions in the works analyzed—intensification, climax, disruption—and are therefore strongly differentiated from the underlying functional tonal basis and from modal structures. The analyses have also shown Rachmaninoff's connection with the post-Wagnerian chromatic tradition in general and—perhaps more tellingly—with progressive Russian composers of the late nineteenth and early twentieth centuries in particular.

Chapter 5

Modal Structures

This chapter is devoted to detailed technical description of specific modal structures that appear with frequency in Rachmaninoff's mature works. Many of the modal structures described may be considered extensions of recognized Russian idioms with origins in liturgical or folk music; in some cases, the modal structures are more generic. To avoid the risk of suggesting ad hoc structures, this chapter is limited to only four kinds of modal organization. I consider the following to be clearly defined, particularly common, and structurally significant in the works analyzed:

1. Use of the traditional church modes (Dorian, Aeolian, Lydian, etc.) as straightforward substitutes for conventional major/minor tonality.
2. Russian *peremennost* idioms and extended diatonic tertian structures that can result from their application.
3. A distinctive melodic-harmonic idiom Taruskin has associated with the Russian word "*nega*." *Nega* is related to *peremennost* but has its own expressive and structural qualities.
4. Phrygian organization, which has particularly complex structural implications and which in Rachmaninoff's oeuvre seems to be associated with "gypsy" music.

Previous treatments of modality in studies of Rachmaninoff's music have been limited to category 1 above. (Anatole Leikin's brief comments on *peremennost*, discussed below, are an exception.¹) It is hoped, therefore, that the present chapter may provide a starting point for more extensive work on the topic. Throughout the analyses in this chapter, the general rhetorical associations established in Chapter 3 apply: modal

¹ Leikin, "From Paganism to Orthodoxy to Theosophy," 36-37.

structures in Rachmaninoff's mature works are generally associated with introductory, initiating, digressive, and/or post-climactic rhetorical functions in the context of the section in which they are heard or possibly in the context of the entire work. Phrygian organization is a special case, as described later in this chapter. Phrygian structures are especially important in the Symphony No. 3 and the Symphonic Dances, excerpts from both of which are presented at the end of the chapter.

The Church Modes

The familiar church modes require no special treatment in the present context (again, with the exception of the Phrygian mode). Passages referable to church modes were identified in several works earlier in the dissertation—e.g. Lydian organization in the opening and closing measures of the song “From the Gospel of St. John” in Chapter 3. In many passages in the works analyzed, a structure in a church mode substitutes in a clear way for a conventional functional tonal structure.

Figure 5.1b shows Aeolian substitutions for conventional tonic-dominant relations in Variation VII of the *Rhapsody on a Theme by Paganini*. Variation VII contains the first explicit statement of the *Dies irae* theme in the composition (the *Dies irae* is indicated on the figure), and the modal structure can therefore be considered expository.² The syntax of Paganini's theme is shown in Figure 5.1a. (The repetition of the first four measures of the theme is written out in Figure 5.1a to simplify comparison with Figure 5.1a; recall that in the *Rhapsody* Rachmaninoff invariably writes out the repetition to multiply the opportunities for variation.) In Variation VII, modal inflection results in a “neutral”-sounding treatment of the theme: the leading tone (scale degree 7, G#) is eliminated in the Aeolian mode.

² The *Dies irae* chant is in the Dorian mode. However, Rachmaninoff's setting of its first seven notes in Variation VII includes F[♯] at prominent points, suggesting A Aeolian rather than A Dorian.

Figure 5.1. *Rhapsody on a Theme by Paganini*, Op. 43, analysis of Variation VII

(a) Paired i – V gestures in Paganini’s theme

(repetition written out)

paired gestures

(b) Exposition of *Dies irae* in Variation VII and Aeolian substitutions for i – V

(Meno mosso, a tempo moderato)

18 (repetition, modified)

 (etc.)

(paired gestures become sequential)

Aeolian substitutions
→
III **i**
for V

Figure 5.2 shows a similar modal substitution at the end of Variation VII, this time as an explicit reharmonization of the motive from Paganini’s theme; again, the leading tone is eliminated. Recall that hexatonic structures are noisily articulated in following two variations. (See again the analysis of Variations VIII and IX in Chapter 2.) Variation VII (modal) is expository, initiating, neutral; Variations VIII and IX (hexatonic) are intensifying. The dynamics marked throughout these variations support this rhetorical framework—modal structures are generally *p* or *pp*, while hexatonic structures are louder.

Figure 5.2. *Rhapsody on a Theme by Paganini*, end of Variation VII into Variation VIII

The musical score shows the transition from the end of Variation VII to the beginning of Variation VIII. The first staff (treble clef) begins with a *dim.* dynamic, followed by a *p* dynamic. A box labeled '20' is above the first measure. The second staff (bass clef) begins with a *p* dynamic. A bracket labeled 'Paganini' spans the first two staves. A dashed line separates the end of Variation VII from the start of Variation VIII. Below the staves, a diagram shows 'i' leading to 'III⁶ for V' via an arrow labeled 'Aeolian substitution', and 'i' is shown below the start of Variation VIII. A note '(to HEX)' is above the first measure of Variation VIII.

A similar but more rapid juxtaposition of modal and symmetrical chromatic structures within a similar rhetorical framework may be heard in the introduction to the first movement of the Symphony No. 3, as shown in Figure 5.3. The symphony's Phrygian motto theme is heard, unharmonized, on A \flat in the opening measures.³ Modal organization gives way to chromatic organization as the passage intensifies—tones from the Phrygian “cell,” A, B \flat , and G act as pitch-class pivots between the modal opening and the chromatic structure in measures 6 – 8. As shown on the figure, in measures 9 and 10 a HEX_(0,1) relation substitutes for V – i; then, an Aeolian echo initiates a decrescendo preliminary to the (modal) exposition of the primary theme in the following measures. As in Variation VII of the *Rhapsody*, the Aeolian substitution for conventional V – i has a de-intensifying effect, especially in proximity to the intense HEX_(0,1) version.

³ The Phrygian motto is discussed again at the end of the chapter, and more fully in Chapter 6.

Figure 5.3. Symphony No. 3, Op. 44, i, analytic reduction of mm. 1–10 (introduction)

The figure displays an analytic reduction of the first ten measures of the introduction to the first movement of Beethoven's Symphony No. 3, Op. 44. The score is presented in two staves: a treble clef staff for the right hand and a bass clef staff for the left hand. The key signature is one flat (B-flat major/C minor), and the time signature is common time (C). The tempo is marked 'motto'.

Key annotations and features include:

- Measure 1:** Starts with a piano (*pp*) dynamic. A box labeled 'motto' is placed above the first few notes.
- Measure 6:** A bracket labeled 'tonic frame' encompasses measures 6 through 7. A '6' is written above the first measure of this frame.
- Measure 7:** Features a forte (*f*) dynamic marking.
- Measure 8:** Features a sforzando (*sff*) dynamic marking.
- Measure 10:** Ends with a piano (*p*) dynamic marking.
- Phrygian Cell:** A bracket labeled '(Phrygian cell)' spans measures 1 through 7.
- Harmonic Labels:**
 - Below the treble staff, labels $\hat{6}$, $\hat{7}$, $\hat{1}$, $\flat\hat{6}$, and $\hat{1}$ are placed above specific notes.
 - Below the bass staff, labels 'V', 'i', 'PD', 'D', 'T', 'D', 'T', 'D', 'T' are placed under measures 8 through 10.
 - Labels 'HEX_(0,1)' and 'Acolian' are enclosed in boxes below the bass staff.
- Process Arrows:**
 - An arrow labeled 'intensification: modal becomes chromatic' points from measure 1 towards measure 7.
 - An arrow labeled 'de-intensification: chromatic becomes modal' points from measure 7 towards measure 10.
- Additional Note:** A note 'coalesces into functional harmony' with an arrow points to the transition between measures 8 and 9.

modal exposition of primary theme follows

Peremennost, Diatonic Oscillation, and Diatonic Stacks

Certain unconventional harmonic structures in Rachmaninoff's mature works may be understood as based on his idiosyncratic extensions of the so-called *ladovaya peremennost* (or simply *peremennost*) in traditional Russian music. The term is translated as "modal mutability" by Anatole Leikin and as "tonal mutability" by Richard Taruskin.⁴ Leikin, citing Russian musicologist Andrey Myasoyedov, defines *peremennost* as a shifting of harmony "between at least two equal tonics."⁵ Taruskin's definition is similar: "the quality...whereby a tune seemed to oscillate between two equally stable points of rest, as it were two 'tonics'."⁶ Leikin, again citing Myasoyedov, suggests that *peremennost* developed from a kind of "protoharmony" found in "older liturgical chants"—a system of melodic organization in which each of four pitches "can and does carry the function of a temporary 'tonic' in a melody" so that there is "no single unifying center, since each member of the protoharmony tends to be equal and independent."⁷

The quotation marks placed around "tonic" by both Taruskin and Leikin are significant; for "tonic" is in general too strong a word when *peremennost* idioms are applied in art music contexts (as opposed to genuine liturgical or folk contexts). Rather, *peremennost* idioms involve some kind of oscillation between or superimposition of diatonically but non-functionally related chords, one of which is tonally more important than the others, but which together form a kind of harmonic network that is distinctly less center-specific than conventional tonal syntax and in some cases even approaches a limited form of pan-diatonicism. In the present context, "peremennost" refers to a family of related, non-functional diatonic structures. *Peremennost* idioms in Rachmaninoff's usage usually involve chords related by diatonic third.

⁴ Leikin, "From Paganism to Orthodoxy to Theosophy," 37; Taruskin, *Defining Russian Musically*, 133. The term is used with or without an apostrophe—*peremennost* or *peremennost'*.

⁵ Leikin, "From Paganism to Orthodoxy to Theosophy," 37, citing Andrey Myasoyedov, *O garmonii russkoy muzyki* (Moscow: Prest, 1998), 33-34, 49.

⁶ Taruskin, *Defining Russia Musically*, 133.

⁷ Leikin, "From Paganism to Orthodoxy to Theosophy," 36, citing Myesoyedov, *O garmonii russkoy muzyki*, 18-21. Leikin notes that Myasoyedov has identified protoharmony in several Rachmaninoff's middle-Russian period works, but I have not had access to this research. Leikin also suggests that protoharmony may be the basis of the emphasis on "plagality" in Russian music in general and Rachmaninoff's music in particular ("From Paganism to Orthodoxy to Theosophy," 37), which agrees with the my finding that *peremennost* idioms intensify plagal action in several passages analyzed.

Although *peremennost* idioms are like “fantastic” chromatic idioms in that they are based on oscillation and superimposition of tertian sonorities as opposed to functional, goal-oriented syntax patterns, they differ from “fantastic” structures in two important ways:

- 1) Interval content. *Peremennost* idioms do not involve equal-interval structures, but rather diatonically related triads (and seventh chords).
- 2) Rhetorical associations. *Peremennost* idioms, with few exceptions, generally have introductory, expository, or post-climactic functions whereas equal-interval structures (octatonic in particular) tend to be intensifying and climactic.

Central to *peremennost* is the articulation of a kind of melodic-harmonic structure in which a specific pitch center is de-emphasized while a diatonic basis remains clear. The concept of center-less (or multi-center) tonal systems figures prominently in a wide range of scholarship on Russian liturgical, traditional, and concert music. In his introduction to the *Musica Russica* edition of Rachmaninoff’s complete sacred choral works, Vladimir Morosan notes that “equal emphasis between a key and its relative major (or minor) is frequently found in both Russian Orthodox liturgical music and Russian music in general, to the point that it may be deemed a stylistic trait.”⁸ The late nineteenth- and early twentieth-century Russian musicologist Stepan Smolensky developed a pattern-oriented theory of mode for Russian liturgical music. In Smolensky’s view, a mode is determined not by a “final” note and a scale built around that final, but rather by a set of characteristic melodic patterns, which might be organized around one or more of many different finals.⁹ Rachmaninoff knew Smolensky well and dedicated the *All-Night Vigil*, Op. 37 (1915) to his memory. (Yekovlev, writing in 1911—before the composition of the

⁸ Morosan, ed., *Sergei Rachmaninoff: The Complete Sacred Choral Works*, The Monuments of Russian Sacred Music, vol. 9 (Madison: Musica Russica, 1994), lxxiii (footnote 111).

⁹ Smolensky’s theories of Znamenny chant were introduced to English readers in Alfred J. Swan, “The Znamenny Chant of the Russian Church,” *The Musical Quarterly* 26 (1940): 232-43, 365-80. Smolensky’s pattern or motive-oriented rather than scalar view is similar to Gustav Reese’s statement that a mode “is composed of a number of MOTIVES (i.e. short music figures or groups of tones) within a certain scale” (Gustav Reese, *Music in the Middle Ages* (New York: W. W. Norton, 1940), 10).

All-Night Vigil—offers the tantalizing observation that “Rachmaninoff is under the influence of the theories of S.V. Smolensky,” but adds nothing more.¹⁰)

Similar multi-tonic or multi-center interpretations of tonal structures in nineteenth-century works by non-Russian composers have been presented by a number of scholars. The well-known book *The Second Practice of Nineteenth-Century Tonality* takes the “double-tonic complex” as one theoretical and analytical starting-point.¹¹ Charles Rosen has suggested that tonal structures in nineteenth-century European music generally may be understood as involving a conceptual fusion of relative major and minor, greatly enlarging the number of possible tonal structures while at the same time reducing the traditional tonal polarity between relative keys.¹² However, *peremennost* idioms as described above differ from the generic tonal relationships described by Rosen et al. in three important ways:

1. Fluctuation between members of the *peremennost* pair or group is considerably more immediate and explicit in Russian music than it is in mainstream European music of the nineteenth century. This recalls Taruskin's observation that the oscillations and rotations of chromatic third relations are more explicit in Russian music than in Western European music. In some cases, members of the *peremennost* pair or group are superimposed, resulting in extended diatonic “stacks” that to my knowledge have no real counterpart in Western music of the nineteenth and early twentieth centuries. As mentioned above and shown in several analyses below, a limited pan-diatonicism can even result.
2. Specific melodic and harmonic idioms—in the works studied, often ostinato patterns—are associated with *peremennost*, and these can retain their identity even when used in complex, compound harmonic environments.
3. A significant differentiation between *peremennost*-type structures, the chromatic structures described in Chapter 4, and the underlying functional tonal basis is maintained in a majority of cases in the works studied, whereas in Rosen's generalized formulation, no rhetorical differentiation is suggested or perhaps even possible.

¹⁰ Quoted in Stuart Campbell, *Russians on Russian Music, 1880–1917* (Cambridge: Cambridge University Press, 2003), 184. Yekovlev's comments are not about the *All-Night Vigil* but about the *Liturgy for St. John Chrysostom*, Op. 31, then recently composed.

¹¹ William Kinderman and Harald Krebs, eds., *The Second Practice of Nineteenth-Century Tonality* (Lincoln: University of Nebraska Press, 1996); Bailey, “An Analytical Study of the Sketches and Drafts”; Bailey, “The Structure of the Ring and Its Evolution”; McCreless, *Wagner's “Siegfried”: Its Drama, History, and Music*.

¹² Charles Rosen, *Sonata Forms*, Rev. ed. (New York: W.W. Norton, 1988), 368-69.

David Cannata, drawing more on Robert Bailey’s theory of double tonic complexes than on anything in Russian music theory, has identified structures involving multiple tonal centers on a large scale in several of Rachmaninoff’s large concert works, suggested that Rachmaninoff used a number double-tonic complexes involving relative keys in his concert works and that he “equated relative keys to an advanced degree.”¹³ Although I suggest that in the strong “intra-tonal” contexts of Rachmaninoff’s compositions there will rarely be any real ambiguity about a work’s governing or global tonic, Cannata argues that the global tonic is in fact uncertain in some works until the advent of some clarifying event (generally late in the work). I believe he overstates the case here. I prefer the view, explained in Chapters 1 through 4, that problematization of the tonic is not ambiguity, *per se*, but, rather, a kind of hyperdissonance resulting from tension between different components of a compound melodic-harmonic environment—a Postromantic structural and aesthetic idiosyncrasy that occurs as known tonal premises are disrupted by unconventional tonal events. Whichever view of large-scale tonal design is accepted, however, “de-centered” harmonic structures referable to *peremennost* are fairly common in Rachmaninoff’s mature works. Such structures may involve any or all of three specific techniques:

- Oscillation between and/or superimposition of diatonically related triads, often with a melodic ostinato.¹⁴ Such oscillations often appear in the opening and closing measures of a composition.
- Extended tertian structures—“diatonic stacks”—resulting from the superimposition of two or more diatonically related triads. Often, these may be interpreted as elaborations of the subdominant in structural plagal structures.
- Modal reharmonization: statement of a melodic segment in one diatonic harmonization, followed by restatement of the segment at its original pitch level but with a different diatonic harmonization that emphasizes a different local pitch center, such that a larger-scale oscillation between pitch centers occurs around an unchanging melody.

¹³ Cannata, “Rachmaninoff’s Concept of Genre,” 72.

¹⁴ Taruskin has suggested that Stravinsky’s well-known penchant for ostinatos was derived from Russian folk music models (*Stravinsky and the Russian Traditions*, 957, 961). My analysis of a *peremennost* ostinato in the first of Rachmaninoff’s Three Russian Songs, Op. 41 (see Figures 5.8 and 5.9) suggests a similar connection between *peremennost* ostinatos and folk music.

Note that in this conception *peremennost*-derived structures do not necessarily involve “tonic(s),” specifically, but rather a conceptual fusion of tertian sonorities in a variety of melodic-harmonic contexts. In the works studied, a *peremennost* idiom may occur inside any stage of functional syntax, or it may resist a syntactical interpretation altogether. In Rachmaninoff’s works, superimposition of tertian sonorities, as opposed to oscillation between them (that is to say, vertical rather than horizontal *peremennost*), may be considered a development in the late Russian and exile periods, as may the limited pan-diatonicism that results from the *peremennost*-based extended tertian stacks and reharmonization techniques described below.¹⁵

A number of structures involving *peremennost* may be found in passages analyzed earlier in the dissertation. The diatonic/modal minor-third relations discussed in the analysis of the first movement of the Sonata No. 2, Op. 36 in Chapter 4 may be interpreted as a simple *peremennost*-based oscillation/superimposition. (See again Figures 4.x through 4.x; B \flat minor and D \flat major are the triads involved; they are clarified by a two-layer, bell-like *blagovest* texture.) Following closely the rhetorical associations laid out in Chapter 3, the *peremennost* idiom in the sonata analysis initiates the recapitulation and concludes the coda, while the more harmonically intense hexatonic relation is associated with climax. The analysis of the first section of the Etude-Tableaux in E \flat minor, Op. 39, No. 5 in Chapter 2 suggests *peremennost*-based diatonic reharmonization of a melodic segment to emphasize different local centers without, however, changing the melodic segment itself. (See again Figures 2.x and 2.x.) In the analysis of the A section of the first Symphonic Dance in Chapter 4, the C minor tonic and the minor dominant are superimposed in an Aeolian passage. (See Figure 4.x.) A number of more striking *peremennost* structures are described below.

The last movement of *The Bells* features a particularly clear *peremennost* oscillation as an ostinato in the opening measures. Figure 5.4 is an analytic overview of measures 1–19. Although a voice-leading reduction of the oscillation might suggest its origin in a neighbor figure (G \sharp –A–G \sharp), examination of the full score shows that Rachmaninoff took pains to emphasize the chords of the oscillation (a rocking back and

¹⁵ Joseph Straus has suggested that overlapping or superimposed triads are an important component of Stravinsky’s harmonic vocabulary, even at the level of deep structure. See Straus, “Stravinsky’s ‘Tonal Axis’,” *Journal of Music Theory* 26 (1982): 261–290.

forth between C# minor and A major triads), not the abstract neighbor figure. The 5-6 contrapuntal motion has been hypostasized in a repeating chord pair. The oscillation itself has several components: a drone in the harp, a layer in the upper strings, and a layer in the lower strings. On Figure 5.4, the *peremennost* pattern (marked *pp*), which supports statements of thematic material in the english horn, is thrice interrupted by triads in the winds: A minor – F minor – D minor, marked *forte*. (A fourth disruption, involving a Bb minor triad in measure 20, is shown in Figure 5.5.) The disruption triads bear various chromatic relationships with the C# minor tonic, and chromatic third relations with each other. Note that the triads on F and D are foreshadowed underneath the A minor triad in measure 6, drawing the chromatic disruptions into an especially close association that will bear climactic fruit later in the movement. As indicated on Figure 5.4, falling contours characterize the opening measures of the movement. This may be heard most clearly in the three english horn phrases shown in the figure (the descending melodic line in each phrase is beamed); but the diatonic oscillation in the strings and harp is also downward-oriented, as is the trajectory of the three chromatic disruption chords on a somewhat larger scale.

Figure 5.4. *The Bells*, Op. 35, iv, analytic overview of mm. 1–19

connect to *Climax 2*

chromatic disruptions

1 2 5 7 12 15 17 19

1 2 3

(strings + harp) (english horn)

pp diatonic oscillation

pp diatonic oscillation

pp diatonic oscillation

f

f

f

pp

C# minor

falling contours

Figure 5.5. *The Bells*, iv, analytic overview of mm. 20–138

The figure displays a musical score for the fourth movement of 'The Bells' in C# minor, spanning measures 20 to 138. The score is annotated with various analytical elements:

- Tempo and Dynamics:** The tempo is marked 'Poco più mosso' and 'Allegro'. Dynamics include *sf* (sforzando), *ff* (fortissimo), and *p* (piano).
- Structural Elements:** Two climaxes are identified: 'climax 1' at measure 113 and 'climax 2' at measure 117. A 'gradual declining action to C# minor' is indicated by an arrow pointing from the end of the piece back to the beginning.
- Harmonic Analysis:**
 - Diagrams:** Harmonic diagrams are provided for measures 20, 54, 70, 93, 113, 117, and 120-121. These diagrams show chord structures and are labeled as 'diatonic oscillation (expanded)', 'diatonic stack', 'iv (ext.)', 'SD' (Structural Disruption), and 'WT₀'.
 - Chromatic Pressure:** A horizontal line at the bottom indicates 'maximal chromatic pressure in relation to tonic', with a 'rising contours' oval below it.
 - Non-functional:** A label 'non-functional' points to the WT₀ diagram.
- Other Annotations:** 'material control' boxes are placed over measures 50, 70, 93, and 117. A 'V' symbol is located below the 120-121 diagram.

Several elements from the opening passage are developed climactically later in the movement, as shown in Figure 5.5. (As indicated on the figure, several passages are omitted to save space. Changes of key signature are not shown, to make plainer the relationships of all events to the global tonic, C# minor.) At measure 24, the diatonic oscillation from the opening measures is expanded. This expanded *peremennost* structure leads to the first climax event at measure 54. From measure 50 onward, contours generally rise as dynamic levels generally increase. *Dies irae*-related theme *d* (see again the analysis of the second movement of the work in Chapter 4) returns, leading at measure 54 to a climactic extended diatonic stack—vertical *peremennost* as a culmination of the horizontal *peremennost* that has characterized the movement thus far: C# minor and A major triads (the two members of the oscillation at the beginning of the movement) above F#, suggesting a diatonic elaboration of the subdominant.

After this, an increase in tempo leads to a second, more powerful climax event beginning at measure 113. As indicated on Figure 5.5, the second climax event may be interpreted as involving greatly enlarged, intensified versions of the first three chromatic disruptions heard at the beginning of the movement (A minor, F minor and D minor). The F minor sonority is heard only in passing; but the A minor sonority is intensified by its own *peremennost* diatonic stack, and the D minor sonority is intensified by a WT₀ structure that acts as a kind of large equal-interval appoggiatura. The second climax event, then, may be interpreted as a synthesis of the *peremennost* structures from the movement's exposition and intense chromatic structures more typical of Rachmaninoff's approach to climax. As shown in Figure 5.6, the movement closes in D♭ major—and the final event in the work synthesizes the fourth chromatic disruption triad (B♭ minor; see again Figure 5.5) and a *peremennost*-derived diatonic stack in a culminating plagal gesture.

Figure 5.6. *The Bells*, iv, analytic reduction of mm. 138–end

138 *sim.* 143

falling contour

diatonic oscillation

T

C# minor

147 152

rising contour

diatonic oscillation

falling contour

T

D# major

PD

D

T

final event in the work

156 157

diatonic stack

SD

T

Peremennost structures are quite common in the late Russian and exile periods. Although in Rachmaninoff's oeuvre *peremennost* is removed from its folk and liturgical associations to a large degree, the appearance of particularly explicit *peremennost* idioms in several liturgical and folk-based compositions suggest that the tether is not completely severed. Figures 5.7 through 5.9 show that *peremennost* is a main structural component in the first of the Three Russian Songs, Op. 41, No. 1 (1926), "Across the River." The composition is a setting of the folk song "Cherez rechku," which, according to Barrie Martyn, tells "the pathetic tale of a drake escorting a duck over a bridge; the duck becomes frightened and flies away, leaving the drake forlorn and weeping."¹⁶

The five phrases sung by the chorus of men's voices are shown in Figure 5.7. Note the gradual increase in tessitura, culminating in pitch E4 at rehearsal **8**. Figure 5.8 contains an analytic reduction of the setting of the first three phrases. A *peremennost* oscillation between E minor and C major is established as an ostinato in the opening measures. Although there is little doubt that E minor (or E Aeolian) is the tonic of the song, the C major component of the *peremennost* oscillation is solidified to a large degree between rehearsal **1** and rehearsal **3**, as shown on Figure 5.8. Between rehearsal **6** and rehearsal **8**, a limited pan-diatonicism emerges from the *peremennost* structure.

The climax of the song occurs with the choral highpoint at rehearsal **8**. As shown in Figure 5.9, the *ff* arrival of E4 in the chorus is distorted by an OCT_(0,1) structure. The OCT_(0,1) structure, which incorporates a C major-minor seventh chord (first heard at rehearsal **5**, then more powerfully after rehearsal **8**) may be interpreted as an outgrowth of the C major member of the *peremennost* oscillation. The hyperdissonant clash at rehearsal **8** between the arrival of tonic highpoint E4 in the chorus and the OCT_(0,1) structure is therefore a climactic compounding of equal-interval chromaticism and *peremennost*. The diatonic oscillation returns with choral phrase 5 at rehearsal **10**, as the two diatonic chords (E minor and C major) are superimposed. E minor emerges cleanly only at the very end of the song. Following closely the general rhetorical associations laid out in this study, *peremennost* is associated with the opening (introductory, expository) and closing (post-climactic) portions of "Across the River," while an equal-interval structure characterizes the climax event.

¹⁶ Martyn, *Rachmaninoff*, 309.

Figure 5.7. Three Russian Songs, Op. 41, i, melodic highpoints in the five chorus phrases

1 2 *pp*

2 4 *p*

3 5 *mf*

4 7 *mf* *cresc.* *f* *mf* *cresc.* *f* *dim.* *p*

5 10 *p*

(B3)

(C4)

(D4)

8

hyperdissonant climax of song

Figure 5.8. Three Russian Songs, i, analytic overview through r. 7

The figure shows a musical score with two systems of staves. The first system contains measures 1 through 4, and the second system contains measures 5 through 7. The score is annotated with several key features:

- Measure 1:** Labeled with a box containing the text "peremennost ostinato".
- Measure 2:** Labeled with a box containing "C major".
- Measure 3:** Labeled with a box containing "E minor (Aeolian)".
- Measure 6:** Labeled with a box containing "limited modal pan-diatonicism".
- Measure 7:** Labeled with a box containing "[no real bass]".

Other annotations include "etc." at the end of measures 1, 2, 3, 4, 5, and 6. The word "[chorus]" appears in brackets above the melody in measures 2, 3, 4, 5, 6, and 7. Dynamics are indicated as *pp* (pianissimo) at the beginning of measures 1 and 2, and *mf* (mezzo-forte) at the beginning of measure 7. A dashed arrow at the bottom of the page points to the right, labeled "(to OCT climax)".

Figure 5.9. Three Russian Songs, i, analytic overview of climax through end

hyperdissonant climax

Arrival on E4 in chorus phrase 4 distorted by intense chromatic structure

8 8^{ves}

9 *ff* *dim.* *pp*

10 **11** *pp* [chorus] **E and C superimposed** *peremennost ostinato*

OCT $(0,1)$

equal-interval structure **modal structure**

(OCT broken)

Figure 5.10. *All-Night Vigil*, Op. 37, v, analytic reduction of phrases 1 through 4

2 6 10 11 12 14 16 17

phrase 1 phrase 2 phrase 3

ppp *p* *iv*

i

peremennost oscillation

17 19 20 21 22

phrase 4 (canonic) gradual ascent phrase 4 (concluded) Climax

mf *f* *ff*

iv *i* *III* *V*

(chromatic activity)

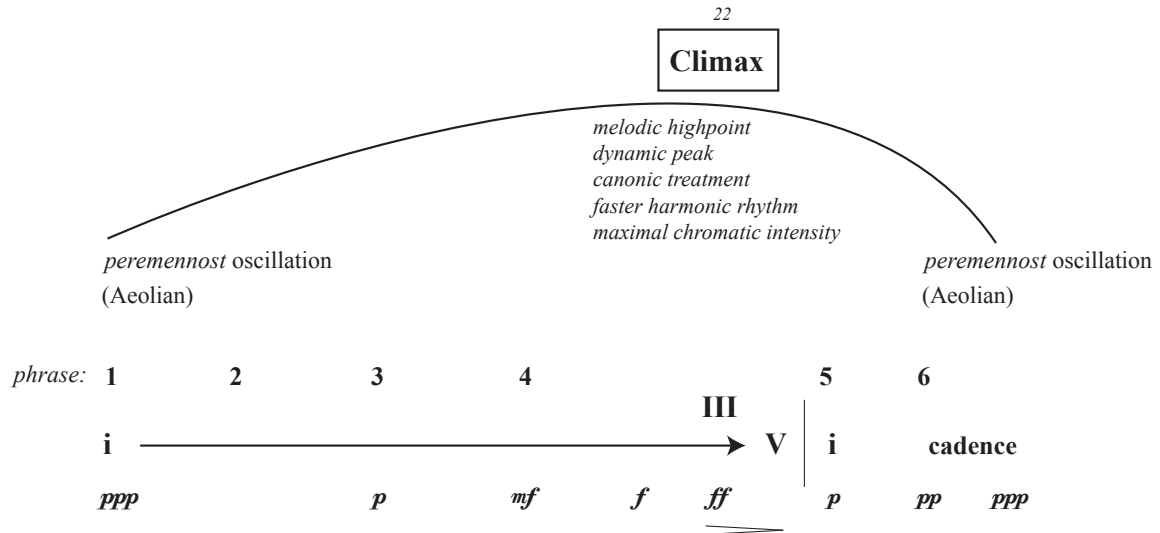
HC

The best-known number in Rachmaninoff's *All-Night Vigil*, Op. 37 (1915)—No. 5, “Nyne otpushaeshi,” a setting of the Nunc dimittis (Luke 2:29-32)—features extensive use of a similar *peremennost* oscillation in the opening and closing measures, contrasted with a chromatic climax event. Figure 5.10 provides an analytic reduction of the first four phrases of the work. As shown in the figure, a *peremennost* oscillation—caught midway between B \flat minor (i), G \flat major (VI), and D \flat major (III), as it were—is established as a wordless ostinato in the opening measures. In phrase 4, the text “which Thou hast prepared before the face of all people” is set canonically, and increasingly chromatically, leading to the climax at measure 22, where the D \flat major component (III) of the *peremennost* oscillation emerges, *ff*, as a highpoint on the way to a straightforward half cadence. As shown in Figure 5.11, *peremennost* returns in phrases 5 and 6. Figure 5.12 gives an overview of the entire composition.

Figure 5.11. *All-Night Vigil*, v, analysis of phrases 5 and 6

The figure shows a musical score for two phrases. The top staff is the treble clef and the bottom staff is the bass clef. The key signature has three flats (B-flat, E-flat, A-flat). Measure numbers 23, 27, 29, 31, 33, 34, and 36 are marked above the staff. A box labeled 'phrase 5' spans measures 23 to 27. A box labeled 'phrase 6' spans measures 29 to 36. The score includes dynamic markings: *p* at measure 23, *pp* at measure 29, *V⁷ i* at measure 33, and *ppp* at measure 36. A box labeled 'peremennost oscillation' is placed below the staff between measures 29 and 33. A box labeled 'cadential closure' is placed below the staff at measure 36.

Figure 5.12. *All-Night Vigil*, v, analytic overview



In Rachmaninoff’s late Russian and exile compositions, *peremennost* techniques reach a point where the diatonic members are freely superimposed and even used in place of one another. Figure 5.13 is an analytic overview of the opening measures of the second movement of the Sonata in B \flat minor, Op. 36. Measures 1–6 of the movement establish D major as a dominant-function sonority.¹⁷ As shown in Figure 5.13, this resolves not to G major but to E minor for the start of “phrase A” (the start of the movement proper)—that is to say, the dominant of G major is used directly as the dominant of *peremennost*-related E minor. E and G chords are then interchanged and superimposed throughout phrase A and phrase B. Note in particular the structure of phrase B—G major at measure 16, then G major and E minor superimposed at measure 18, then E minor and A minor superimposed before the arrival of the dominant at measure 20. As shown in Figure 5.14, the climax later in the movement involves a similar but more intense *peremennost*-type superimposition as an elaboration of the subdominant, leading to the major tonic (E major) at measure 64. (This is one of comparatively few climax events featuring modal rather than chromatic structures in Rachmaninoff’s mature works.)

¹⁷ Note that chords on F \sharp and D bookend the introduction, recalling sonorities from the first movement climax event. See again the analysis of that movement in Chapter 4.

Figure 5.13. Sonata No. 2 in B \flat minor, Op. 36, ii, analysis of mm. 1–23

1 introduction

6 phrase A (repeated, ornamented)

11

V of G major

i

15 phrase B

16

18 phrase A

20

22

23 phrase A (ornamented) m.24-

V of E minor

V of G major

V of G major

peremennost (G major/E minor)

i / III

p

pp

Figure 5.14. Sonata No. 2, ii, analysis of climax in mm. 53–62

The figure displays a musical score for measures 53 to 62, with a circled label "climax" above measures 58-62. The score is written in treble clef with a key signature of one sharp (F#). The analysis includes the following elements:

- Measures 53-54:** Labeled "material omitted" in a box. The notation shows a sequence of notes with a dynamic marking of *pp* and the instruction "peremennost oscilation".
- Measure 55:** Features a melodic line with a dynamic marking of *pp* and the instruction "poco a poco cresc.". The notes are marked with "etc.".
- Measures 56-57:** The melodic line continues with "etc." and a dynamic marking of *pp*.
- Measure 58:** A boxed label "E minor" points to a triad. The melodic line is marked with "etc.".
- Measures 59-60:** A boxed label "C major" points to a triad. The melodic line is marked with *ff*.
- Measures 61-62:** A boxed label "A minor iv (ext.)" points to a triad. The melodic line is marked with *pp* and "dim.". A circled "climax" label is positioned above these measures.
- Measure 63:** A boxed label "I (major tonic)" points to a final triad.
- Measure 64:** The final measure of the excerpt.
- Annotations:** A bracket labeled "peremennost stacked triads" spans from measure 58 to 62. A bracket labeled "peremennost stacked triads" spans from measure 53 to 62.

A *peremennost*-based superimposition in the transition from the first A section to the B section in the first movement of the Symphonic Dances, Op. 45 is shown in Figure 5.15. As in the Sonata No. 2 passage above, the *peremennost* event may be interpreted as an intensification of the subdominant.

Figure 5.15. Symphonic Dances, Op. 45, i, analysis of transition, mm. 91–98

end of A section (transition) ----- start of B section

peremennost superimposition

91 oboe 94 98

clarinet

saxophone

(iv) (Phrygian)

C# minor: SD T

Phrygian resolutions and F# minor (iv) emphasized throughout B section

Peremennost provides a basis for understanding certain unconventional harmonic events in works otherwise not strongly characterized by modal structures. Figure 5.16 shows an unconventional resolution to tonic in the well-known “Vocalise,” Op. 34, No. 14. As indicated on the figure, in measures 34–35 of the song, a tonicization of E major (III) is strongly implied; but the expected resolution to E is denied, as the dominant of E major instead resolves directly to the tonic C# minor at measure 36 in a manner reminiscent of the resolution of D major directly to E minor in Figure 5.13. It is a

moment of considerable expressive weight in the song: an expected blossoming into the major mode is undercut by a *peremennost*-derived substitution. The perfect authentic cadence that follows in measure 37 occurs entirely in the shadow of the *peremennost* event.

Figure 5.16. “Vocalise,” Op. 34, No. 14, *peremennost* resolution in mm. 31–36

The figure displays a musical score for measures 31-36 of Rachmaninoff's "Vocalise." The score is in 2/4 time and consists of a vocal line and a piano accompaniment. The key signature is three sharps (F#, C#, G#). Measure 31 begins with a piano (*p*) dynamic. The piano part features a melodic line in the right hand and a rhythmic accompaniment in the left hand. The vocal line enters in measure 32. The score concludes with a perfect authentic cadence (PAC) in measure 36. Below the score is a harmonic diagram illustrating the resolution of the *peremennost* idiom. The diagram shows a sequence of chords: Ger (G# minor), V⁷, ii⁷, V⁷, and i (C# minor). The Ger chord is marked with a 6/3 interval. The V⁷ chord is identified as the dominant of E (III). The ii⁷ chord is shown resolving to C# = i. The V⁷ chord is shown resolving to i. The final chord is i, which leads to the PAC. The diagram is labeled with "cresc." and "p" dynamics.

A final example of *peremennost* demonstrates the large-scale implications that the idiom may acquire in the complex contexts of Rachmaninoff's mature works. Figure 5.17 shows the exposition of the second theme area in the third movement of the Symphony No. 3, Op. 44. (The symphony is discussed more fully in Chapter 6; several passages have already been analyzed in the dissertation.) As shown in Figure 5.17, the material is

layered: the melody strongly implies C# minor, and even introduces the leading tone of that key (B#). Underneath this material, A major and, at rehearsal 77, E major are superimposed—that is to say, the notes of the movement’s overall tonic (A, C#, and E) provide a basis for the expanded *peremennost* domain in which the theme is heard. Figure 5.18 puts this theme in the context of the exposition. The figure shows the opening of the movement in A major, a transition that moves to the gamut of Db/C#, the *peremennost*-inflected second theme area (Figure 5.17), the *ff* “chromaticization” of C# before around 78, the closure of the exposition—unexpectedly—in Eb major, and the octatonic statement of the symphony’s motto theme on C# at rehearsal 80 that prepares the large-scale statement of the motto over the course of the fugue that follows. (See again the analysis of rehearsal 80 and following in Chapter 4; Figures 4.x through 4.x.) In Figure 5.18, arrows indicate points where C# in some form is strongly emphasized. Recall that the hyperdissonant climax in the first movement (analyzed in Chapter 1; see again Figure 1.x) strongly suggested potential resolution to Db/C#. All of this material suggests that the incorporation of Db/C# into the symphony’s global A minor/major is a central concern in the work. (Further evidence for this view is provided in the analysis of the second movement later in the present chapter.) In this interpretive context, the thematic statement in Figure 5.17 represents a synthesis of the respective tonal gamuts—A major and its dominant, E major, and thematic material in C#—via *peremennost*.

Figure 5.17. Symphony No. 3, Op. 44, iii, analysis of *peremennost* in the second theme (exposition)

Meno mosso

mf cantabile

77

C# minor material

A major

E major + (nega)

peremennost superimposition

Figure 5.18. Symphony No. 3, iii, overview of exposition

The musical score is presented in two staves: treble and bass clefs. The key signature consists of two sharps (F# and C#). The score is annotated with various musical terms and dynamics:

- Measure 71:** Labeled "motto".
- Measure 72:** Labeled "augmented triad".
- Measure 73:** Labeled "transition".
- Measure 74:** Labeled "peremennost".
- Measure 75:** Labeled "motto".
- Measure 76:** Labeled "ff".
- Measure 77:** Labeled "f".
- Measure 78:** Labeled "pp".
- Measure 79:** Labeled "ff".
- Measure 80:** Labeled "octatonic".

Harmonic and structural annotations include:

- Measure 71:** Roman numerals I, V.
- Measure 72:** Roman numerals 6, 4, 3, 2, 3, 4, 5, 3, 5.
- Measure 73:** Roman numeral V, III iii.
- Measure 74:** Roman numerals 6, 4, 3, 2, 3, 4, 5, 3, 5.
- Measure 75:** Roman numerals 6, 4, 3, 2, 3, 4, 5, 3, 5.
- Measure 76:** Roman numerals 6, 4, 3, 2, 3, 4, 5, 3, 5.
- Measure 77:** Roman numerals 6, 4, 3, 2, 3, 4, 5, 3, 5.
- Measure 78:** Roman numerals 6, 4, 3, 2, 3, 4, 5, 3, 5.
- Measure 79:** Roman numerals 6, 4, 3, 2, 3, 4, 5, 3, 5.
- Measure 80:** Roman numerals 6, 4, 3, 2, 3, 4, 5, 3, 5.

Structural annotations include:

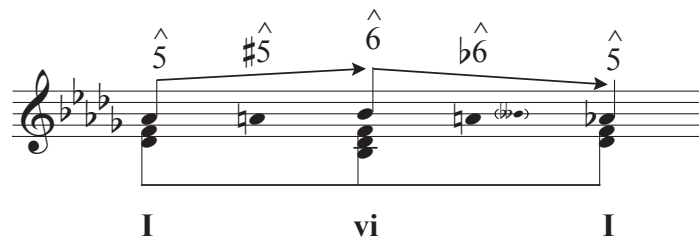
- Measure 74:** "fusion of C# minor", "A major", "E major".
- Measure 77:** "Theme area I".
- Measure 78:** "Theme area II".
- Measure 79:** "emphasis on C#".

Measure numbers 71, 73, 74, 75, 76, 77, 78, 79, and 80 are indicated at the bottom of the score.

Nega

An interesting structure results when a *peremennost*-type oscillation between mediant-related triads is filled in chromatically, as in Figure 5.19. (A similar device may be clearly heard in Figure 5.17 after rehearsal 77—the E major and C# minor components of the *peremennost* compound are connected the B#.) Figure 5.19 resembles the expressively-packed *nega* idiom that Taruskin has discussed at length.¹⁸ As he tells it, the word *nega* “is usually translated as ‘sweet bliss,’ but it really connotes gratified desire, a tender lassitude...In opera and song, *nega* often simply denotes S-E-X à la russe, desired or achieved.”¹⁹ In its original musical form, *nega* is part of the standard late nineteenth-century Russian “orientalist” package. Although certain rhythms and textures are associated with *nega*, it is a melodic figure that really defines the idiom: “the reversible chromatic pass between the fifth and sixth [scale] degrees is in fact the essential *nega* undulation,” as Taruskin presents it.²⁰ See again Figures 5.19; a corollary in the minor mode is shown in Figure 5.20. Because a chromatic tone is involved, *nega* is not strictly modal; but I view the idiom as an outgrowth of *peremennost*, and, as several analyses below show, its general rhetorical associations (expository or digressive—in middle sections—as opposed to climactic) support inclusion in the modal category.

Figure 5.19. Basic *nega* idiom in D \flat major

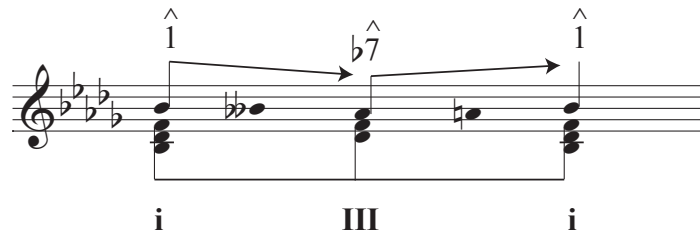


¹⁸ Taruskin, *Defining Russia Musically*, 165-185; and “Russian Musical Orientalism: A Postscript,” *Cambridge Opera Journal* 6 (1994): 81-84.

¹⁹ Taruskin, *Defining Russia Musically*, 165. Taruskin discusses the “orientalist” implications of *nega* at length.

²⁰ *Ibid.*, 168. Taruskin has pointed out (*ibid.*, 135-136) that Gerald Abraham identified the same kind of “chromatic pass” as a characteristic of Russian music decades earlier, though Abraham did not associate the technique with any particular expressive topic. See Gerald Abraham, “The Elements of Russian Music,” *Music and Letters* 9 (1928): 51-58.

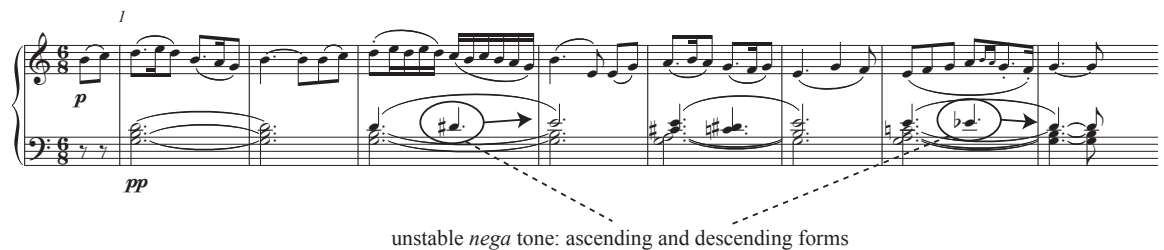
Figure 5.20. Basic *nega* idiom in B \flat minor



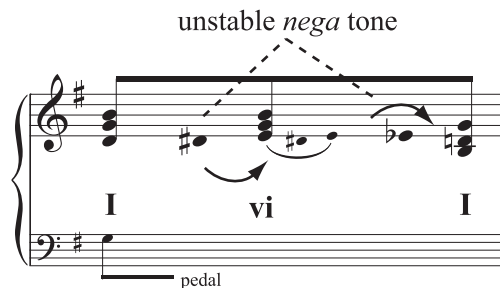
Taruskin identifies the *nega* idiom in works by Glinka, Borodin, Tchaikovsky, and even the young Rachmaninoff (“Ne poy, kravitsa,” Op. 4, No. 4 of 1892, which does not fare well in Taruskin’s hands).²¹ A particularly clear example of the idiom (clear both musically and in terms of its strong exotic associations) not mentioned by Taruskin is in the third movement of Rimsky-Korsakov’s *Scheherazade* (1888), “The Young Prince and The Young Princess.” An analysis of the passage is given in Figure 5.21.²²

Figure 5.21. Rimsky-Korsakov, *Scheherazade*, iii, analysis of mm. 1–8

(a) annotated reduction



(b) analysis



²¹ Taruskin, *Defining Russian Musically*, 165-185; Taruskin, “Russian Musical Orientalism: A Postscript,” 81-84.

²² In later editions of the work, Rimsky-Korsakov removed the movements’ programmatic titles. The third movement came to be known simply as *Andantino quasi allegretto*.

Several compositions from Rachmaninoff’s early Russian period feature the *nega* idiom in a straightforward form—that is to say, emphasis on the “reversible chromatic pass” between scale degrees 5 and 6 (in the major mode), effecting a rocking back and forth between I and vi (as in Figure 5.19), often above a pedal tone. The *nega* idiom often occurs at the beginnings of sections (and is in such contexts associated with thematic exposition); and usually the idiom occurs in lyrical middle episodes or movements. Figure 5.22, from middle section of the *Elegy* in E♭ minor, Op. 3, No. 1, contains a structure quite like the one in the *Scheherazade*. (The hyperdissonant climax at the end of the middle section of the *Elegy* was analyzed in Chapter 2; see again Figures 2.29 and 2.30.)

Figure 5.22. *Elegy* in E♭ minor, Op. 3, No. 1, analysis of middle section

(a) annotated score excerpt

unstable *nega* tone: ascending and descending forms

(b) analysis

unstable *nega* tone

Figure 5.23 shows Rachmaninoff's use of the *nega* melodic idiom in a somewhat more complex harmonic environment; the reversible chromatic pass is clear, however. Like the excerpt from the Elegy above, the excerpt in Figure 5.23 is from the beginning of a lyrical middle section. Note that the expressive focal point of the phrase is the area of maximal *nega* activity. The straightforward cadential progression that follows is, by comparison, unremarkable—and unmarked.

Figure 5.23. Musical Moment in B \flat minor, Op. 16, No. 1, analysis of mm. 38–41

Figure 5.23 shows a musical score excerpt from Rachmaninoff's Op. 16, No. 1, measures 38–41. The score is in B \flat minor, 7/4 time. The tempo is marked "Con moto". The dynamics range from *mf* to *p*. The melodic line features several triplet figures. A box labeled "expressive focal point of phrase" points to a specific melodic passage. Labels "nega tone (ascending)" and "nega tone (descending)" are placed below the melodic line with arrows. A cadential progression is shown below the score: V⁷, V⁷, I.

Analysis of works from the middle Russian, late Russian, and exile periods suggests that Rachmaninoff maintained an interest in the *nega* idiom throughout his career, developing it, however, in distinctive ways that transport it beyond the basic nineteenth-century forms described above. In all the cases I have identified, an association with romance (in song), with middle-section lyrical episodes (in shorter instrumental works, or inside individual movements of longer instrumental works), or with slow movements is retained. To take an especially well-known work as an example, *nega* provides a starting point for interpreting the second movement of the Piano Concerto No. 2, Op. 18. Figure 5.24a shows a suggestion of *nega* underneath the flute solo in measures 9–11. Figure 5.24b shows *nega* more fully developed in the harmonization of the main theme in measures 13–19: note the characteristic move from I to vi and back, and the characteristic interplay of scale degrees 5 and 6 (here in an inner voice), as indicated by arrows on the figure. As discussed below, in the context of the entire movement, *nega*, combined with hexatonic organization, provides a basis for interpretation of climax.

Figure 5.24. Piano Concerto No. 2, Op. 18, ii, analysis

(a) *nega* in mm. 9–11

17

9 flute solo
mf espress.
p
nega

(b) *nega* in main theme, mm. 13–19

13

p dolce e sempre espress.
I
nega
I
vi
nega

As shown in Figure 5.25, the movement opens with a short $HEX_{(3,4)}$ passage that effects a transition from the first movement's C minor to the second movement's E major.²³ As detailed above, *nega* in the movement involves E major (I) and C# minor (vi), bridged by the unstable *nega* tone C# \flat /B#. The *nega* tone, then, is established in the $HEX_{(3,4)}$ structure in the movement's opening measures. While the G# major triad in the $HEX_{(3,4)}$ structure resolves directly to E major in measure 5, it may also be interpreted as diatonic V of the *nega* alternate, C# minor—that is to say, V of vi. (Note that, in the $HEX_{(3,4)}$ opening, a *forte* dynamic strongly emphasizes the G# major triad in a generally *pp* context.) At measure 105 in the movement (rehearsal 23), a large-scale, *ff* resolution to VI—here C# major rather than C# minor—occurs. Figure 5.26 puts the climax event in a larger context.

Figure 5.25. Piano Concerto No. 2, ii, connection between introduction and climax

The diagram illustrates the harmonic connection between the introduction and the climax. In the introduction (measures 1-5), the music is in E major. A $HEX_{(3,4)}$ structure is shown, with a *forte* (f) dynamic emphasizing the G# major triad, which is identified as the V of VI. This triad resolves to E major (I). The introduction is marked *pp* (pianissimo). The climax (rehearsal 23, measure 105) is marked *ff* (fortissimo) and features a C# major chord (VI#). A diagram below the score shows a box labeled "E major" with an arrow pointing to the climax, labeled "peak chromatic intensity".

²³ As noted in Chapter 4, chromatic major-third relations are identified in the movement in Bribitzer-Stull, "The A-flat–C–E Complex," 186.

Figure 5.26. Piano Concerto No. 2, ii, analysis of climax

1

2

Climax, part 1

Climax, part 2

23

24

25

26

Piu animato

ascent (WT)

descent

SD

VI

ff

nega

cadenza

(HEX)

sffz

Tempo I

pp

IV V V

D

apex

(cont.)

Return

(E major)

As detailed in Figure 5.26, the C# major triad (VI) is the first part of a two-part climax that synthesizes the *nega* idiom and hexatonicism. A large articulation of the *nega* figure (C#-C#-B) connects VI to IV at rehearsal 24 in the wake of the first stage of climax. A second intensification at rehearsal 25 leads to a cadenza on the Neapolitan (F major), which is hexatonically related to the C# major event. This may be interpreted as large-scale harmonization of the *nega* tone. Figure 5.27 shows the two-stage climax in the context of the entire movement.

In such a rich harmonic structure, *peremennost*, the “chromatic pass,” Taruskin’s *nega* as an expressive topic, and hexatonic organization bleed together into a complex multilayered environment. Certainly, any specific folk or liturgical implications are long since erased. The harmonic materials involved are nevertheless strongly marked in relation to the general functional tonal context, and retain the basic rhetorical associations identified in Chapter 2: *nega/peremennost* in a straightforward form characterizes thematic exposition in the movement, while emphasis on hexatonic structure characterizes the climax events. The second movement of the Piano Concerto No. 2 demonstrates a kind of structural interaction taken to new heights in the late Russian and exile periods.

Figure 5.27. Piano Concerto No. 2, ii, analytic overview

The figure consists of a musical score and a harmonic diagram. The musical score is in bass clef with a key signature of three sharps (F#, C#, G#) and a common time signature. It is divided into two sections: "Adagio sostenuto" and "Tempo I". Rehearsal marks 19, 21, 23, and 25 are indicated. A large bracket spans from rehearsal 21 to 25, labeled "climax in 2 stages". Below the score, a harmonic diagram shows the sequence of chords: I, VI, iv, V, bII, V, I. The VI chord is associated with the "nega" figure, and the bII chord is associated with the "nega + hexatonic" figure. The diagram also shows "departure" and "return" points.

Figure 5.28. Prelude in E major, Op. 32, No. 3, analysis of mm. 1–40

Allegro vivace
(octave doublings freely omitted)

peremennost reharmonization of x (I - vi)

no bass support

! 6 f dim. p cresc. ff x bass support

24 26 28 31 40

6 6 7 #3

I vi (III) V I

A similar structure may be heard in the much shorter E major Prelude, Op. 32, No. 3 (1910). Again, an intersection of *nega*, *peremennost* and hexatonic structures is involved. Figure 5.28 provides an analytic overview of the prelude's first forty measures. As shown in the figure, a simple motive (*x*) is set in a number of contexts. Measure 22 is a significant point of arrival in the work, establishing the G# major triad as a double-function chord: it is hexatonically related to the E major tonic, and it is V of vi (the *peremennost* partner of the E major tonic). Figure 5.29 shows this more plainly. As shown in Figure 5.30, later in the prelude, pitch-class B# from the G# major triad is treated as a *nega* tone underneath continued treatment of motive *x*, culminating in a more explicit HEX_(0,1) harmonization. As shown in Figure 5.31, motive *x* is harmonized with a more straightforward E major tonic in the prelude's coda.

Figure 5.29. Prelude in E major, analytic overview

peremennost idiom
+
chain of thirds

dominant buildup

resolution

Figure 5.30. Prelude in E major, mm. 50–55

50 x (etc.)
poco a poco dim.
 I (vi) (IV)

53 $HEX_{(0,1)}$ harmonization of x **iii** 55
p
 vi

Figure 5.31. Prelude in E major, motive x in the coda (m. 55–57)

55

Figure 5.32 shows in generalized form the “hexatonicization” of the *nega* idiom suggested in the analyses of the Concerto No. 2 movement and the E major prelude. The figure shows chromatic harmonization of the *nega* tone such that the same major-minor seventh chord (on root F^{\flat} in Figure 5.32) is used as the “dominant” of both *peremennost*-related diatonic chords (I and vi). In Figure 5.32, the first resolution of the *nega* tone is “diatonic”—in the sense that the major-minor seventh chord acts as a conventional applied chord (V^7 of vi)—while the second resolution of the *nega* tone is hexatonic

(specifically, $HEX_{(0,1)}$; recall from Chapter 4 that relations based on hexatonicism may in the works analyzed contain extended tones foreign to the collection—in this case, the seventh, $E\flat$, is not a member of $HEX_{(0,1)}$).

Figure 5.32. Chromatic harmonization of the *nega* tone

Figure 5.33 shows the structure from Figure 5.32 as it appears in the opening of the the song, “A-u!” Op. 38, No. 6. (The octatonic, hyperdissonant climax of the song was analyzed in Chapter 2; see again Figures 2.25 through 2.28.) In the beginning of the song, a chromatic descent in the accompaniment provides a framework for the music from measure 1 through the arrival on V^7 in measure 4. In measure 5, the “other” dominant seventh chord from Figure 5.32, V^7 of vi , replaces diatonic V^7 , resolving to a fused $D\flat/B\flat$ (I/vi) sonority and ultimately progressing to $B\flat$ minor (vi)—above the tonic note $D\flat$, however—to end the first section of the song. After a fermata, a new section of music begins (measure 12). In measures 12 and 13, the *nega* melodic figure implicit in the structure of the first 11 measures of the song is made explicit (circling around the unstable *nega* tone, $A\flat$), providing the basis for a complex, quasi-octatonic oscillation that will later develop into the true octatonic structure heard at the climax. (See again Figure 2.26.)

Figure 5.33. "A-u!" Op. 38, No. 6, analysis of mm. 1-13

1 voice
Andante

pp piano

1 2 3 4 5 6 7 8 9 10 11 12

tempo piu vivo. Appassionato

play on *nega* tone A4

ff

dim.

p

cresc.

piano

piano

peremennost
fusion:
Db/Bb
(I/vi)

V7 V7 (of vi) vi6

I

quasi-OCT
(develops into climax)

Figure 5.34. "In the Soul of Each of Us," Op. 34, No. 2, analysis of mm. 1–14

voice

4 5 6 9 10 12 13

nega

piano

(HEX)

(HEX)

I vi iv V I

7
b5
b3

T PD D T

Figure 5.34 shows an intersection of *nega* and hexatonic structures in the first fourteen measures of the late-Russian period song “In the Soul of Each of Us,” Op. 34, No. 2. Although the *nega* tones are disguised by the chromatic context, the essence of *nega* remains: the reversible chromatic pass and the exchange of I and vi (with iv added in this context) are embedded in the passage.

As discussed earlier in the chapter, Rachmaninoff extended *peremennost* techniques to include the possibility of vertical as well as horizontal presentation. The *nega* idiom is similarly extended in several of the works analyzed: the “reversible chromatic pass” may be resolved both up and down at the same time—i.e. the *nega* tone, and any chord with which it is associated, may be resolved to two different diatonically related chords simultaneously, as shown in Figures 5.35a and 5.35b. In the figure, the *nega* tone has two enharmonic meanings at once. It is simultaneously scale degree #5 rising to scale degree 6 as the root of vi, and scale degree $\flat 6$ (spelled enharmonically in the figure) resolving to scale degree 5 as the fifth of the tonic triad, resulting in conventional and chromatic resolutions at the same time. (In the figure, the superimposed sonorities are labeled simply I^{+6} .) The principle outlined in Figure 5.35 suggests a basis for understanding certain complex structures in the Postromantic repertory more generally. Figure 5.36, from the last movement of Gustav Holst’s *The Planets*, shows the simultaneous resolution of a tendency tone in two directions at once.

Figure 5.35. Complex resolution of a chromaticized *nega* chord

Figure 5.36. Gustav Holst, *The Planets*, vii (“Neptune”), m. 101

101
(repeated *ad libitum* as sound fades away)

women's choruses

E major

C# minor

As explored more fully in Chapter 6, *nega/peremennost* is elevated in the *Rhapsody on a Theme by Paganini* to the point that a hyperdissonant climax event in the famous eighteenth variation may be interpreted as an outgrowth of *nega* on the global scale. Although a detailed description of that moment must wait, a few preliminary observations are possible here. Figure 5.37 shows an excerpt from Variation XVI in the key of B \flat minor. The figure shows a momentary *peremennost*-derived superimposition of B \flat minor and D \flat major, the latter of which will emerge as the key of Variation XVIII, which is the centerpiece of the *Rhapsody*. B \flat minor is retained throughout the excerpt; but melodic and harmonic resolutions to D \flat major as “tonic” are articulated. In the next variation (XVII), more pronounced superimposition of B \flat minor and D \flat major is enhanced by articulation of the *nega* idiom, as shown in Figure 5.38a. Throughout Variation XVII, A \natural is treated as an unstable *nega* tone, resolving up to B \flat as the root of B \flat minor and down to A \flat , as the fifth of D \flat major, and, at measure 621, to both simultaneously.

The climactic culmination of A \natural *nega* in Variation XVIII (where it is compounded hexatonically) is taken up in Chapter 6. That the doubly-unstable *nega* tone

A \sharp used throughout Variations XVII and XVIII is in fact the *global tonic* of the *Rhapsody* constitutes one of the most intricate expressions of hyperdissonant exaggeration in any of the works analyzed.

Figure 5.37. *Rhapsody on a Theme by Paganini*, Op. 43, Variation XVI, mm. 575–577

mf

melodic resolution to D \flat

p

V - I in D \flat

i

peremennost superimposition: i - III

Phrygian Organization

Several analyses earlier in the dissertation featured flat scale degree 2 at strongly marked moments. (See again the analyses of the second and fourth movements of *The Bells* in Chapter 4 and the present chapter, respectively; and the analysis of the first movement of the Piano Concerto No. 3 in Chapter 4.) While many such cases may be interpreted as articulating the Neapolitan as a conventional chromatic predominant harmony, in some works the lowered second scale degree is emphasized to such a degree that a genuine Phrygian organization results.

Figure 5.39. Symphony No. 3, Phrygian motto theme in mm. 1–5



Figure 5.39 shows the motto theme of Rachmaninoff's Symphony No. 3 as it is first heard in measures 1–5 of the work. Its most distinctive characteristic is the Phrygian tone B \flat . The motto may be understood as an upper and lower neighbor figure—B \flat and G \sharp orbiting tonic A \sharp .²⁴ The motto is one in a distinguished line of opening Phrygian gestures in Rachmaninoff's concert works. Figure 5.40 shows a Phrygian figure used extensively in the opening of Rachmaninoff's opera *Aleko* (1892; the opera was his graduation work). A similar figure at the opening of the Symphony No. 1, Op. 13 (1896) is shown in Figure 5.41. Like the Symphony No. 3 motto, the figure circled in Figure 5.41 serves as a kind of connective tissue across the movements of the symphony. These are probably all descendents of the essentially Phrygian theme heard at the opening of Alexander Borodin's Symphony No. 2 (1876), shown in Figure 5.42.

²⁴ David Cannata's interpretation of the Symphony No. 3 also centers on the B \flat (Cannata, *Rachmaninoff and the Symphony*, 125-30). However, his conclusions are quite different from my own, as explored more fully in Chapter 6. For Cannata, the B \flat suggests a large-scale D minor/major implication, which I regard as insufficient, particularly as there is only one extended passage in the key of D in all three movements. My reading of the work suggests a more intricate structure that emerges in part from the Phrygian nature of the motto theme.

Figure 5.40. *Aleko*, Phrygian organization in the introduction

Andante cantabile

p *mf* *p* *p* *ff*

Phrygian neighbor figure (etc.)

6 *ff* *ff*

Figure 5.41. Symphony No. 1, Op. 13, i, Phrygian opening gesture

Allegro ma non troppo

Grave

fff *fff* *p*

Phrygian

IV \flat i

Figure 5.42. Borodin, Symphony No. 2, i, Phrygian organization in mm. 1–3

1

analysis

B Phrygian

Both *Aleko* and the Symphony No. 1 explicitly invoke a non-Western context. The libretto of *Aleko* is an adaptation of Pushkin's poem "The Gypsies." Barrie Martyn has observed that the Symphony No. 1 represents a synthesis of liturgical music and gypsy music in a symphonic context.²⁵ In both cases, Phrygian material is associated with a strongly marked musical and cultural content. Martyn tells how Rachmaninoff's teacher Nikolai Zverev introduced the composer to gypsy performers as a young man:

Like many Russian musicians Zverev himself was greatly attracted by gypsy music, and in the course of preparing his 'cubs' for life he used to take them to the fashionable Moscow restaurants at which gypsy musicians played and stirred the Russian soul.²⁶

Of perhaps more personal significance was Rachmaninoff's close association (and entirely unrequited infatuation) with the gypsy singer Anna Lodizhensky in the early 1890s.²⁷ Memories of the association might partly explain the gypsy melodic "sobs" and strong Phrygian elements in the late Russian period song, "To Her," Op. 38, No. 2 (1916). The poem of the song, by Andrei Bely (pseudonym for Boris Nikolayevich Bugayev), "tells of a lover who hears, or imagines he hears, his beloved call to him but waits for her in vain."²⁸ Figure 5.43 details the Phrygian structure of the opening measures: a melodic ostinato based on an upper and lower neighbor figure not unlike the Symphony No. 3 motto theme, and a recurring Phrygian resolution to F major/minor.

Figure 5.44 shows these features more plainly; the arrow shows the essential three-note Phrygian cell. An analytic overview of the entire song is given in Figure 5.45. Two different kinds of music are involved. "A" sections are based on the ostinato shown in Figure 5.43. "B" sections, which do not contain the ostinato, involve local highpoints and, in measures 33–35, the song's climax. As shown by beams on the top staff of Figure 5.45, the first half of the song (measures 1–26, sections A1–B2) can be understood as a large-scale articulation of a Phrygian melodic structure derived from the ostinato: the essential tones are the highpoints of the vocal line, F-E \flat -G \flat -F-A \flat -F.

²⁵ Martyn, *Rachmaninoff*, 98-100.

²⁶ *Ibid.*, 56.

²⁷ *Ibid.*

²⁸ *Ibid.*, 265.

Figure 5.43. “To Her,” Op. 38, No. 2, Phrygian structure in mm. 1–4

2 3 4

(piano)

ostinato

Phrygian resolution Tonic

Figure 5.44. “To Her,” Phrygian organization

F Phrygian major/minor

Phrygian organization largely disappears in the second half of the song (sections A3, B3 and A4). However, the climax in section B3, which continues the trajectory of highpoints in the vocal line begun in the first half of the song, involves a larger-scale version of the F minor-major alternation that characterized the Phrygian opening measures (see again Figure 5.43): F minor, with pitch class E \flat at the climax, resolves to F major for the postlude. The resolution to F major involves the same Phrygian chord heard at the opening of the song; both are marked “*” in Figure 5.45. At measure 39 in the postlude, the ostinato figure is set in conventional F major rather than F Phrygian.

The above examples suggest that Phrygian structures in Rachmaninoff’s works have expressive associations and structural implications quite unlike those of the other church modes. The Phrygian is for Rachmaninoff not a pseudo-religious mode, but a pseudo-exotic one. Here, Rachmaninoff as an “Eastern” composer comes to the fore, even if such a label may be problematic.²⁹ The Phrygian mode is, like *nega*, a harmonic sign for something not at all of the Western common practice. It is therefore strongly differentiated from conventional tonal structures in Rachmaninoff’s music.

Figure 5.46. Rimsky-Korsakov, *Capriccio Espagnol*, iv, excerpts

(a) mm. 7–11



(b) mm. 22–25



Rimsky-Korsakov used Phrygian organization extensively in the fourth movement of his *Capriccio Espagnol* (1887), “Scena e canto Gitano”—again, to portray a non-mainstream European culture. Figure 5.46 shows two representative passages from the movement; their tonal substance is extracted into Figure 5.47. As shown in Figure 5.47,

²⁹ Taruskin considers the problem of locating Russian music between East and West in detail, historically, hermeneutically, and aesthetically in *Defining Russia Musically*.

A \flat Phrygian major is involved. The one-flat key signature of the fourth movement must not be construed as suggesting simply D minor, though that key may be suggested in due course. Rimsky-Korsakov’s music does more than hover around the dominant of D minor—A \flat clearly emerges as the legitimate pitch center of the movement.³⁰ As shown in Figure 5.48, the B \flat necessary for the mode may be interpreted as a holdover from the flat regions in the second and third movements. A \flat Phrygian major is replaced by conventional A major in the fifth movement.

Figure 5.47. *Capriccio Espagnol*, iv, Phrygian organization

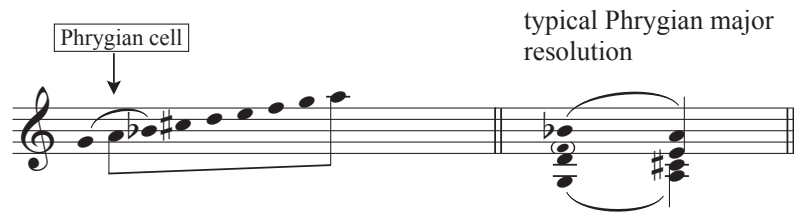
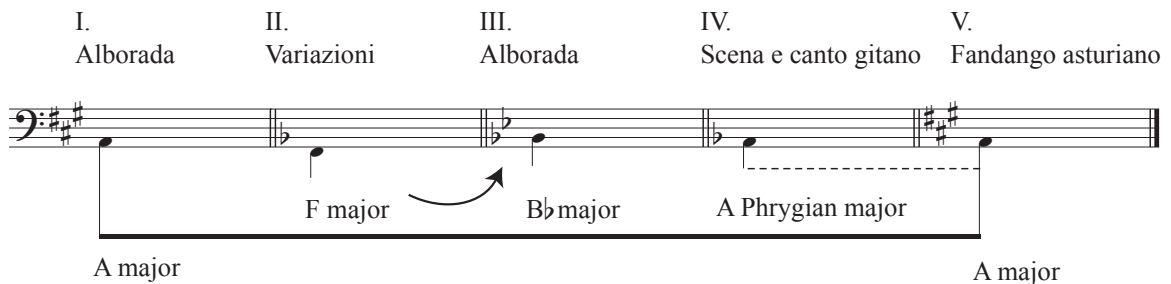


Figure 5.48. *Capriccio Espagnol*, overview



Mussorgsky used Phrygian organization in conjunction with other modal structures in the sixth number of *Pictures at an Exhibition* (1874), “Samuel Goldenberg und Schmuyle.” Figures 5.49 and 5.50 provide analytic highlights. The piece is in ternary form (A1-B-A2). As shown in Figure 5.49a and in Figure 5.50, the A sections are based on the so-called “gypsy” minor scale, which is closely associated with OCT_(1,2) (see the

³⁰ The Prelude to Act IV of Bizet’s opera *Carmen* involves the same pitch structure, again with a one-flat key signature. The opera predates Rimsky-Korsakov’s work by more than a decade.

line labeled “1” on the figure). The B section is based on D \flat Phrygian, which is similarly closely associated with OCT_(1,2) (see the line labeled “2” on the figure). The minor third relation between the D \flat tonic of the B section and the B \flat tonic of the A sections may be interpreted as a manifestation of this quasi-octatonic background association.³¹

Figure 5.49. Mussorgksy, *Pictures at an Exhibition*, No. 6, overview

(a) mm. 1–2



(b) mm. 9–19 (portions omitted)

³¹ Joel Lester has identified a similar intersection of OCT_(1,2) and E Phrygian organization in the opening measures of Part I in Stravinsky’s *Symphony of Psalms* (Joel Lester, *Analytic Approaches to Twentieth-Century Music* (New York: Norton, 1989), 166–167).

Figure 5.50. Mussorgksy, *Pictures at an Exhibition*, No. 6, interaction of scales

B^b “gypsy” minor [A1 & A2 sections]

OCT_(1,2)

T3

D^b Phrygian minor [B section]

The foregoing discussion of non-mainstream European cultures and musical representations is not meant to advance any specific hermeneutic agenda, nor to suggest any specific extramusical content to the works analyzed, but, rather, to establish the specialness of Phrygian organization in Rachmaninoff’s works. This may be understood as an outgrowth of work undertaken by his Russian predecessors, and to some degree continued by his Russian successors. See for example the Phrygian-type modes described in Ellon D. Carpenter’s study of modality in Shostakovich’s music.³² In Rachmaninoff’s works, Phrygian organization is in some ways a thing apart. It is unlike the functional tonal basis and, as discussed below, problematic for that basis in many regards; and it is

³² Ellon D. Carpenter, “Russian Theorists on Modality in Shostakovich’s Music,” in *Shostakovich Studies*, ed. David Fanning, 76-112 (Cambridge: Cambridge University Press, 1995).

also unlike other modal structures and “fantastic” structures, although it may interface with them in interesting ways.

Lori Burns considers Phrygian structures in conventional tonal contexts in detail in *Bach’s Modal Chorales*.³³ A number of her observations are relevant here. She recognizes a Phrygian upper and lower neighbor formula similar to the neighbor-tone formulas used by Rachmaninoff in the Symphony No. 3 motto, in the song “To Her,” and in other Phrygian contexts discussed below and in Chapter 6.³⁴ Burns suggests that the Phrygian mode poses special problems in tonal contexts, because a Phrygian tonic may be understood as a dominant in a conventional tonal context, and, conversely, what seems like a tonic to tonal ears may be understood as the subdominant of a *bona fide* Phrygian tonic.³⁵ Burns concludes that interpretation of a larger context is generally necessary to determine whether the modal final has a tonic function, or whether it should be interpreted as an articulation of the dominant.³⁶ A Phrygian final or “tonic,” then, may have a number of potential tonal implications—and harmonic function and tonal stability/instability may be very much in flux.

In Rachmaninoff’s Phrygian settings, it is sometimes neither possible nor desirable to decide which of the above implications is in effect. In a number of the works analyzed, a Phrygian tonic’s different implications are explored without complete resolution of the issue. A tonic established in a Phrygian context may be unstable, wanting, as it were, to become a dominant; yet “dominant” is in many cases too simple. That, in Burns’s theory, two apparently identical structures might be interpreted quite differently in different cases (tonic vs. dominant) points to the familiar premise that in music analysis context is everything; but it also suggests something more directly relevant to the study of Rachmaninoff’s (and other Postromantic) works: centricity and tonal function may be quite distinct, and a tussle between the two may be quite salient.

³³ Lori Burns, *Bach’s Modal Chorales* (Stuyvesant, NY: Pendragon Press, 1995), 25-30, 39-60.

³⁴ *Ibid.*, 53-54.

³⁵ *Ibid.*, 41-46.

³⁶ See for example her analysis of “Aus tiefer Not schrei ich zu dir,” 61-84.

Figure 5.51. "Polichinelle," Op. 3, No. 4, analytic reduction of mm. 1–56

mm.36 - 55 = mm.16 - 35

m.56
to B section

(WT₁)

peremennost oscillations

peremennost oscillations

peremennost oscillations

basis: HEX_(1,2)

F# Phrygian (major)

F# Phrygian

climax of A section

primarily modal

increasingly "fantastic"

modal

The early piano work “Polichinelle,” Op. 3, No. 4 (1892) is a compelling case in point. The piece is in ternary form. As shown in Figure 5.41, F# Phrygian major organization is articulated in the opening and closing measures of the A section, along with *peremennost* oscillations and equal-interval patterns at the local climax.³⁷ To conventional tonal ears, the F# Phrygian major tonic sounds very tentative. The bulk of thematic statement in measures 11 through 26 involves not F# but *peremennost*-related D major and B minor, which to some degree act as surrogate tonics.³⁸ F# major, by comparison with D and B, sounds quite charged, even unstable. Yet F# cannot be interpreted simply as an unresolved dominant—the three-sharp key signature chosen by Rachmaninoff prohibits this. The only sensible interpretation of the key signature is F#, suggesting that Rachmaninoff considered that to be the effective tonic of the work.³⁹

As shown in Figure 5.52, the return of Phrygian F# at the reprise of the A section follows a climactic passage at the end of the B section in which the hexatonicism suggested at the local climax in the A section is developed into a stronger and more explicit hexatonic relation between B minor, one of the surrogate tonics in Figure 5.51, and G minor, which emerges as the link back to Phrygian organization. As shown in Figure 5.53, the piece ends in F# Phrygian major.

“Polichinelle” establishes a fairly straightforward precedent for the interpretation of complex Phrygian structures in Rachmaninoff’s later works. Rachmaninoff’s most elaborate essays involving Phrygian organization may be found in his last two compositions—the Symphony No. 3, Op. 44 and the Symphonic Dances, Op. 45—in which, as discussed more fully in Chapter 6, Phrygian organization emerges as a central structural concern in large-scale, hyperdissonance-oriented Postromantic organization. In the case of the symphony, key signature is again a significant clue to Rachmaninoff’s structural conception.

³⁷ There is some uncertainty about the exact bass pitches in measure 30 and following (at the location marked “*” in Figure 5.51). In published scores, both E# and E \flat appear as neighbor tones to F#. However, in his Ampico piano roll recording of the piece (date?), Rachmaninoff plays exclusively E \flat , bringing the passage into even closer association with the Phrygian figure used in measures 1–10.

³⁸ Note that F# is related to B minor as a conventional dominant and to D major as a “V of VI” dominant (D major acting as “I”).

³⁹ The use of an F# minor key signature rather than an F# major key signature, which might seem more appropriate, may have been expediency on Rachmaninoff’s part, or, perhaps, an attempt to more closely approximate the pitch-class content of the Phrygian major mode.

Figure 5.52. "Polichinelle," analysis of climax, mm. 83–98

The figure displays a musical score for the piece "Polichinelle" from mm. 83 to 98. The score is written for piano and voice. The piano part features a complex rhythmic pattern with many sixteenth notes and triplets. The vocal line consists of melodic phrases, including triplets and sixteenth-note runs. The score is annotated with several key elements:

- Measure 83:** Starts with a dynamic marking of *f*. The piano part has a complex rhythmic pattern.
- Measures 84-86:** The piano part continues with a complex rhythmic pattern. The vocal line has a triplet of eighth notes.
- Measure 87:** The piano part has a complex rhythmic pattern. The vocal line has a triplet of eighth notes.
- Measures 88-90:** The piano part has a complex rhythmic pattern. The vocal line has a triplet of eighth notes.
- Measures 91-94:** The piano part has a complex rhythmic pattern. The vocal line has a triplet of eighth notes.
- Measures 95-98:** The piano part has a complex rhythmic pattern. The vocal line has a triplet of eighth notes.

Annotations include:

- Dynamic markings:** *f* (measures 83-86), *fff* (measures 87-90, 91-94, 95-98).
- Hexatonic:** The word "(hexatonic)" is written below the piano part in measures 83-86 and 91-94.
- Return of F# Phrygian:** A bracketed annotation "return of F# Phrygian" spans measures 95-98.
- Material omitted:** Two boxes labeled "material omitted" are placed above the piano part in measures 95-96 and 97-98.

Figure 5.53. “Polichinelle,” mm. 126–130

ends in F# Phrygian major

A Phrygian link between the early Russian-period “Polichinelle” and Opp. 44 and 45—a gap of almost 50 years to fill—may be found in the last published work of the late Russian period, the Etude-Tableaux in D major, Op. 39, No. 9 (1917). As is standard in Rachmaninoff’s etudes-tableaux (and his character pieces in general), the work is in ternary form. As shown in Figure 5.54, initial statement of the D major tonic is entangled with a quasi-hexatonic structure in the introduction to the etude. Phrygian organization emerges with the start of the section A1 proper in measure 5, and is maintained throughout the exposition of thematic material in measures 6–14. Figure 5.55 details Phrygian events (emphasizing E♭ in relation to D♯) in these measures.

An overview of the entire etude is given in Figure 5.56. As discussed above, Phrygian organization in general may be construed as hybridizing tonic and dominant functions. As shown in Figure 5.56, section B in G major may be interpreted as a resolution of this hybrid function, and the arrival on C major at the end of section A1 may be interpreted a large-scale harmonization of C♯, which, as suggested throughout Figure 5.55, is involved in a majority of Phrygian events in the opening measures.⁴⁰

⁴⁰ In a functional tonal D major context, C♯ has no clear role; but, in a D Phrygian major context, it is not at all out of place.

Figure 5.54. Etude-Tableaux in D major, Op. 39, No. 9, analytic reduction of mm. 1–8

The image displays an analytic reduction of the first eight measures of the piece. It features two staves: a treble clef staff on top and a bass clef staff on the bottom. The key signature is D major (two sharps). Measure numbers 1, 3, 5, 6, and 8 are indicated. Annotations include:

- Introduction**: A box above measures 1-3.
- quasi - HEX_(1,2)**: A label below measures 1-3.
- A section**: A box above measures 4-8.
- Phrygian**: Labels with arrows pointing to specific notes in measures 4, 5, 6, and 7.
- T**: A box containing the letter 'T' with an arrow pointing to a note in measure 6.
- SD**: A box containing 'SD' with an arrow pointing to a note in measure 5.
- Phrygian**: Labels with arrows pointing to notes in measures 7 and 8.
- D major**: A label at the bottom left.
- hyperdissonant opening**: A box at the bottom right with a line pointing to the first measure.
- thematic exposition**: A label at the bottom right with a line pointing to the first measure.

Other annotations include *ff* (fortissimo) at measure 1, *mf* (mezzo-forte) at measure 6, and an asterisk (*) above a note in measure 6. Brackets and curved arrows group notes across measures, indicating thematic or harmonic relationships.

Figure 5.55. Etude-Tableaux in D major, Phrygian events in the main theme, mm. 6–14

6 *mf* *p* *cresc.* 8th.....]

Phrygian events (2)

10 *ff* *f* *ff*

Figure 5.57. Etude-Tableaux in D major, analysis of climax in section A2, mm. 78–83

CLIMAX

$\hat{b}2$

b II

I

SD

T

Figure 5.58. Etude-Tableaux in D major, mm. 89-92

89

cresc.

complex harmonization of Phrygian ascent

quasi - HEX₍₁₂₎

V⁷ I V⁷ I V⁷ I V⁷ I V⁷ I V⁷ I V⁷ I

D T D T D T D T

The climax of the etude at measure 79 in section A2 is shown in both Figure 5.56 and Figure 5.57, and can be interpreted as a culmination of Phrygian organization. The climax event—E \flat major in a larger D major context—is not unlike those analyzed earlier in the dissertation in the first movement of the Piano Concerto No. 3 (see Figures 4.7 through 4.11) and second movement of *The Bells* (see Figures 4.25 through 4.28). As shown in Figure 5.58, the final measures of the etude emerge from a reprise of the quasi-hexatonic structure following a complex passage in which a clear dominant-tonic pattern in one layer is set against a striking chromatic harmonization of a Phrygian ascent in another layer.

It is interesting to note that the last movement of the last work of Rachmaninoff's exile period (the third movement of the Symphonic Dances, Op. 45)—and therefore the last product of his career as a composer—and the last work in the last opus of the late Russian period (the D major Etude-Tableaux just analyzed) are similar in several ways. As shown in Figure 5.59, the third movement of the Symphonic Dances begins in D Phrygian major with material derived from the *Dies irae*. As in several examples above, the Phrygian tonic has a dominant function embedded in it. The exposition of the main theme (also derived from the *Dies irae*) at rehearsal 58 is plainly derived from the opening measures of the introduction. As discussed in Chapter 6, Phrygian organization reaches a zenith in the central episode of the dance, interfacing with octatonic structure in a climactic moment of extreme hyperdissonance that integrates the *Dies irae*, the Phrygian mode, octatonic organization, and Rachmaninoff's favorite "marked" key area, D \flat major.

Figure 5.59. Symphonic Dances, Op. 45, iii, analytic reduction of mm. 1–30

Introduction

Lento assai *Dies irae* *sff f*

Allegro vivace *Dies irae* *sff p*

56 (iv) (I) Phrygian

(V) I

57 Phrygian

sff ff pesante *p*

(HEX)

Phrygian

Figure 5.60. Symphonic Dances, iii, analytic reduction of main theme at r. 58

Section A1

58

Dies irae

A final brief analysis will pave the way to the last chapter of the dissertation and bring the exposition of technical material to a close. Figure 5.61 contains an analytic reduction of the opening measures of the second movement of the Symphony No. 3, Op. 44. As indicated on the figure, Phrygian C# organization accompanies a statement of the symphony's Phrygian-inflected motto theme in C#. (Note that Rachmaninoff provides no key signature for the movement, suggesting that its complex harmonic structure is to be understood in the larger context of the symphony's A minor/major, and suggesting a certain amount of tonal flux.) As may be expected in a strong Phrygian passage, C# has a double meaning: it is Phrygian tonic, and it is the dominant of F#, the focus on which however is to some undermined by a preponderance of extended tertian sonorities—in fact, only with the resolution to C# major in measure 10 is a clear triad articulated.⁴¹ Figure 5.62 contains a reduction of the final measures in the movement, showing a statement of the motto theme on C# as a closing gesture, following some forty-one measures in which C# is essentially never absent. As discussed earlier in the present chapter and in Chapter 4, the motto theme is stated once more on C# at rehearsal **80** in the third movement. The C# “problem,” so to speak, is ultimately solved only in the coda of the third movement.

⁴¹ Cannata treats the movement as simply in the key of F# (*Rachmaninoff and the Symphony*, 127-28), though he states that it is F# minor (which is defensible) on one page (127) and F# major (which is indefensible) on another page (128).

Figure 5.61. Symphony No. 3, Op. 44, ii, analysis of mm. 1–14

local highlight: tones of Phrygian motto verticalized

Phrygian motto

horn

p

f *dim* *p*

36

10

6

14

violin solo

winds

harp

SD

T

V

I

F# minor

i⁹

iv⁹

C# Phrygian major

Figure 5.62. Symphony No. 3, ii, last three measures

The image shows a musical score for the final three measures of the second movement of Rachmaninoff's Symphony No. 3. The tempo is marked 'Adagio'. The score consists of three staves: strings pizzicato (top), winds (middle), and harp (bottom). A box labeled 'Phrygian motto on C#' points to the first measure of the strings pizzicato staff. The strings pizzicato part begins with a 7-measure rest, followed by a series of eighth notes. The winds part consists of sustained chords. The harp part features a rhythmic pattern of eighth notes. Dynamics are marked as *p*, *dim.*, and *pp*.

The most straightforward tonal explanation of the material in Figure 5.61 is that it establishes the dominant of F# minor. But this explanation seems quite insufficient in the last third of the movement, as C# becomes increasingly the focus, and especially in the closing measures of the movement, as the Phrygian motto theme is stated on C# in a manner analogous to its statement on A \flat at the end of the first movement (where it is undeniably a tonic). A better explanation of the material in Figure 5.61 is that it strongly establishes C# as a pitch center, and that the Phrygian context allows an interaction of tonic and dominant functions within and around that center. It is too simple to say, as Cannata does, that C# in the second movement of the symphony is simply the dominant of F#. ⁴² Such a view misses the significance of Phrygian organization in Rachmaninoff's oeuvre generally, the central role C# plays in the symphony more specifically, and the absence of a key signature in the movement most specifically.

A tension seems to be inherent in Phrygian organization—especially Phrygian organization around a major tonic, as for example in the fourth movement of *Capriccio Espagnol*, in “Polichinelle,” in the Etude-Tableaux in D major, in the third movement of

⁴² Cannata, *Rachmaninoff and the Symphony*, 127-28.

the Symphonic Dances, and in the second movement of the Symphony No. 3. As already shown in the analyses of the second movement of *The Bells* and the first movement of the Concerto No. 3, a tug of war between the tonic note and the lowered second scale degree—the Phrygian tone—is not infrequently associated with climax even when Phrygian modal organization *per se* is not otherwise strongly indicated in a passage or a movement. The rhetorical and expressive associations of Phrygian structures are unusually complex: clearly modal, and frequently expository or initiating; yet also a stimulus for climax, which makes it unlike other modal structures in Rachmaninoff’s works.

Conclusion

By recognizing types of modal organization whose significance is not acknowledged in existing Rachmaninoff scholarship (*peremennost*, *nega*, and the Phrygian mode), it has been possible in the present chapter to amplify the framework of rhetorical associations laid out in Chapter 3. Although *peremennost* and *nega* are similar in some regards to certain tonal formations used in mainstream European music of the late nineteenth century, they remain at least implicitly “Russian” in Rachmaninoff’s mature works. Modality emerges as more than an adornment of ordinary diatonic-functional tonal syntax. Modal structures are marked in the works studied, and their contributions to form, in large-scale tonal design, and in expressive trajectory are generally different from the contributions of the functional basis and “fantastic” chromaticism.

Summary of Chapters 4 and 5

Whereas Chapters 2 and 3 of the dissertation constitute an interpretive apparatus suitable for Rachmaninoff’s late works, Chapters 4 and 5 constitute a technical apparatus. In Chapter 4, equal-interval structures originating in traditional Russian representations of the “fantastic” in music were described. Analysis of many works demonstrated

Rachmaninoff's extensive use of octatonic, hexatonic, whole-tone, and hybrid structures throughout the late Russian and exile periods. In Chapter 5, Rachmaninoff's use of the church modes, of *peremennost*-based diatonic oscillation and superimposition techniques, of the expressively-packed *nega* idiom, and of complex Phrygian structures was detailed. The analyses in Chapter 5 also featured increasingly complex combinations of functional tonal, equal-interval chromatic, and modal structures, laying groundwork for the more comprehensive analyses in Chapter 6.

Chapter 6

Climax in the Last Three Concert Works

In this final chapter, the focus shifts from microscopic descriptions of individual passages such as those in Chapters 2 through 5 to a macroscopic consideration of Rachmaninoff's last three compositions—*Rhapsody on a Theme by Paganini*, Op. 43, Symphony No. 3 in A minor, Op. 44, and Symphonic Dances, Op. 45—as exemplars of a hyperdissonance-oriented approach to large-scale Postromantic form. This chapter is therefore an application of the interpretive and technical apparatuses developed in the dissertation to large works in their entireties. Several passages from Opp. 43, 44, and 45 were analyzed in Chapters 2 – 5. This material is reviewed and expanded in the following pages as it is incorporated into more comprehensive analyses. Rachmaninoff's last three opuses, composed in bursts of activity between 1934 and 1940, represent in many ways a culmination—the composer's own word seems appropriate—of his entire oeuvre. In these works can be heard a powerful synthesis of four threads that had occupied Rachmaninoff increasingly after the watershed works of 1909:

1. Complex combinations of functional tonal structures, equal-interval structures, and modal structures within the general framework of rhetorical and expressive associations described in Chapters 2 through 5.
2. Emphasis on points of intense hyperdissonant exaggeration and hyperdissonant distortion as a way to articulate large form in a Postromantic—that is to say, in a deformation-oriented—melodic and harmonic context.
3. Extensive use of the *Dies irae* as thematic material.
4. Emphasis on the region of D \flat major as a structural linchpin and expressive crux, regardless of the global tonic of the work.

Items 1 and 2 above involve techniques and tendencies described at length in the preceding five chapters. Items 3 and 4 need special discussion here.

The *Dies irae* in Opp. 43, 44, and 45

Rachmaninoff's use of the *Dies irae* melodic incipit—four notes, which might be extended as a generic sequential pattern—was shown in several analyses in earlier chapters.¹ (See again the analysis of the second and fourth movements of *The Bells* in Chapters 4 and 5, and the analytic overview of the fugal episode in the finale of the Symphony No. 3 in Chapter 4.) The incipit is used prominently in many compositions from the Symphony No. 1, Op. 13 on; yet Rachmaninoff apparently had no substantial direct knowledge of the chant until after he completed the Corelli Variations, Op. 42 in 1931:

Shortly after the composition of the *Corelli Variations* Rachmaninoff had at last tried to find out more about the theme which had never ceased to haunt him since the disaster of the First Symphony and about which, paradoxically, he was still ignorant, asking the musicologist Joseph Yasser about its origins, its full form (Rachmaninoff invariably quotes only its opening phrase) and its meaning, without giving him any clues as to why.²

Rachmaninoff's familiarity with the *Dies irae* before his communication with Yasser seems to have been gathered mainly from the general concert repertory, in which the chant incipit had long been used as a motivic signal for death, judgment, and so on. In the *Rhapsody on a Theme by Paganini*, which was the first work composed after the Corelli Variations, the appearance of the *Dies irae* in something closer to its actual chant form—a distinct opening phrase of seven notes rather than a generic set of four notes that might be extended sequentially—is probably a result of the composer's correspondence with Yasser.

¹ Additional research on appearances of the *Dies irae* in Rachmaninoff's and other composers' works was cited in Chapter 1, and is listed in the bibliography.

² Martyn, *Rachmaninoff*, 329.

In the finale of the Symphony No. 3 and the third movement of the Symphonic Dances, the *Dies irae* effectively displaces all other thematic material, as discussed in more detail below. However, as stated in Chapter 1, no rigorous basis for understanding Rachmaninoff's frequent recourse to the *Dies irae* in the late works suggests itself. Rachmaninoff claimed a quasi-programmatic meaning for the *Dies irae* in the *Rhapsody* in a letter written to choreographer Michael Fokine when a ballet version of the work was being planned: "all variations on the *Dies irae* would be for the evil spirit."³ But the spirited, even celebratory nature of the chant's treatment in the third movement of the Symphonic Dances and at the end of the final of the symphony suggest that a view in which the chant is a straightforward sign for evil and/or death is too limited. In the end, despite the consistency with which it appears, the *Dies irae* remains something of an enigma in Rachmaninoff's works.

D \flat -Major Focal Points

Crucial to the analyses in this chapter is "D \flat major"—as a key area, as a concept. The key of D \flat major has a special significance in Rachmaninoff's oeuvre as a whole, shared to a lesser extent by the enharmonic parallel minor, C \sharp minor. It is the global tonic of several important works. The most famous early composition is the Prelude in C \sharp minor, Op. 3, No. 2 (1892). Eighteen years later, Rachmaninoff concluded his cycle of twenty-four preludes in the key of D \flat major (Op. 32, No. 13), borrowing motivic material from the early C \sharp minor piece for the last prelude and thereby making a pair of bookends for the cycle. The fourth movement of the *The Bells* begins in C \sharp minor and ends in D \flat major, and Cannata has suggested that the entire four movement composition can be heard in the gamut of D \flat .⁴ (See again the analysis of the fourth movement in Chapter 5.)

³ The letter dates from 1937 and is published in Bertensson and Leyda, *Sergei Rachmaninoff*, 333.

⁴ Cannata, *Rachmaninoff and the Symphony*, 83-87.

Figure 6.1. Marked D₁ events in well-known Rachmaninoff works from all periods

Work	Movement	Key	Event or Significance
Prelude No. 1 in C# minor, Op.3, No.2		C# minor	First published prelude
Trio élégiaque in D minor, Op.9	ii	F major	Lyric episode in D ₁ major
Symphony No. 1 in D minor, Op.13	ii	F major	D ₁ major as a hexatonic partner to F major throughout lyric movement
Concerto No.2 in C minor, Op.18	ii	E major	Climax on C# major
	iii	C minor	Lyric second theme in D ₁ major in recapitulation
Chopin Variations, Op.22		C minor	Lyric penultimate variation (XXI) in D ₁ major (derived from theme)
Sonata No.1 in D minor, Op.28	i	D minor	Climax on D ₁ major directly before recapitulation
Concerto No.3 in D minor, Op.30	ii	*	Lyric movement involves an interaction of D ₁ major and F# minor * <i>probably a prototype for the second movement of Op.44</i>
Prelude No.24 in D ₁ major, Op.32, No.13		D ₁ major	Last published prelude
“Vocalise,” Op.34, No.14		C# minor	Lyric final song of the set is in C# minor
<i>The Bells</i> , Op.35		D ₁ major	Entire composition organized around final culmination in D ₁ major
Sonata No.2 in B ₁ minor, Op.36	i	B ₁ minor	Lyric second theme in D ₁ major in exposition
<i>All-Night Vigil</i> , Op.37, v		B ₁ minor	Climax on D ₁ major
“Daisies,” Op.38, No.3		F major	Climax on D ₁ major
“Dreams,” Op.38, No.5		D ₁ major	
“A-ut!” Op.38, No.6		D ₁ major	Last song cycle closes in lyric D ₁ major
Concerto No.4 in G minor, Op.40	iii	G minor	Lyric second theme in D ₁ major in exposition
Corelli Variations, Op.42		D minor	Lyric variations (XIV and XV) in D ₁ major
<i>Rhapsody on a Theme by Paganini</i> , Op.43		A minor	Lyric variation XVIII in D ₁ major; just one variation in the key
Symphony No.3 in A minor, Op.44	i	A minor	Central climax event suggests D ₁ ; climax on D ₁ major in recapitulation
	ii	*	* Lyric movement involves an interaction of C# Phrygian major and F# minor
	iii	A major	Lyric second theme in exposition involves C# minor Fugue/development emerges from C# octatonic event
Symphonic Dances, Op.45	i	C minor	Lyric middle section in C# minor; climax on D ₁ major
	ii	G minor	(Middle section skirts D ₁ major, but deflects)
	iii	D major	Lyric middle section in D ₁ major

Even more significant are the many interior climax events and expressively-packed lyric episodes on or in D \flat major in works from all four periods. Figure 6.1 is a list of important events involving D \flat /C \sharp major/minor in a number of well-known works. The list suggests the special significance this key area had for the composer. Of principal interest at present are occasions in the large concert works composed after 1926 when marked D \flat major moments (climaxes or lyric episodes/movements) emerge in the contexts of D minor, A minor, G minor, and so on—that is to say, in keys with which D \flat major is only distantly related.⁵ As shown in Figure 6.1, a majority of Rachmaninoff's large instrumental works are in natural keys, in which contexts D \flat major sounds very striking.

D \flat major looms throughout the analyses in this chapter. It is an expressive and structural focal point in Rachmaninoff's last works to such a degree that conventional, relativistic key relationships (expressible in generic terms by Roman numerals, e.g. "I – V" or "i – III") seem replaced in part by a kind of "absolute" tonal organization in which D \flat major emerges as a setting for important events regardless of what overall key is in use. None of the last concert works is set in the key of D \flat major. Yet the *Rhapsody*, the *Symphony No. 3*, and the *Symphonic Dances* all revolve in large part around core events in or about D \flat major. It becomes not a question of if D \flat major will appear, but a question of in what larger context it will appear, and through what technical means its role in structure will be articulated. In Opp. 43, 44, and 45, D \flat major represents a realm of the interior—distant, often lyrical, usually introspective by comparison with the more active music on either side, and expressively packed.

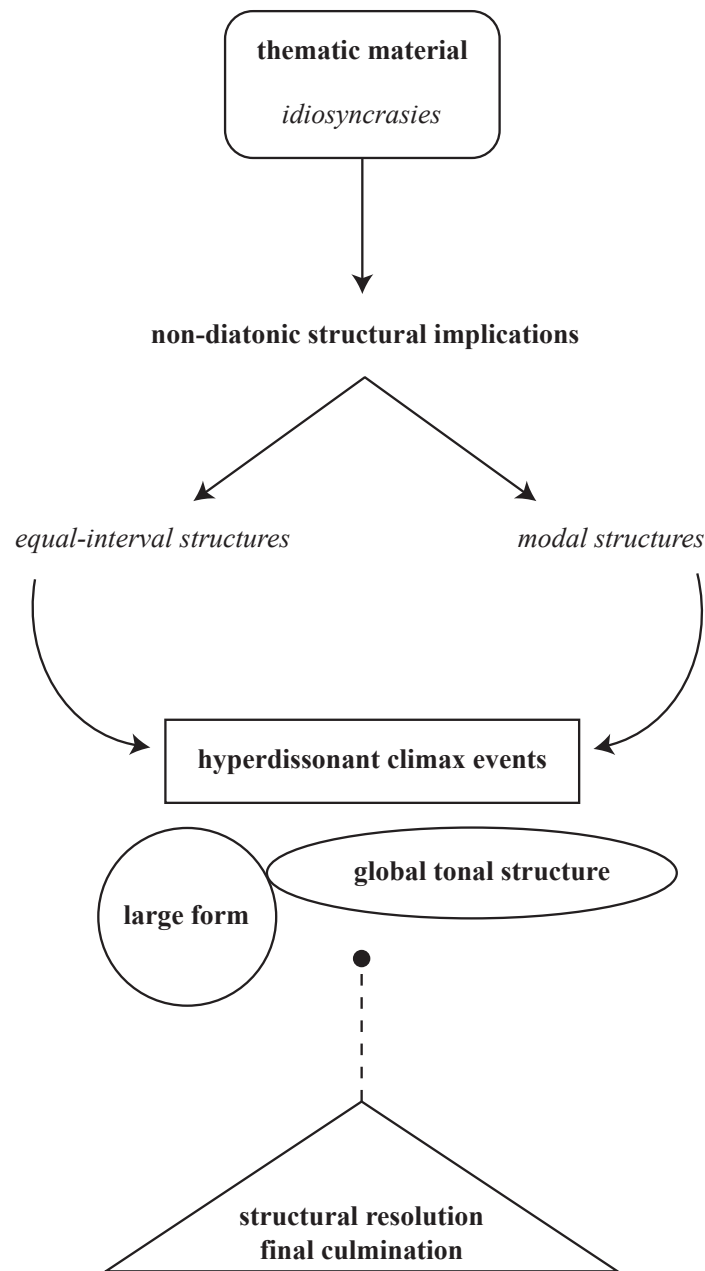
Organization of the Analyses

Limitations of space make complete analytic reductions of Opp. 43, 44, and 45 impossible. (The three works take up approximately 480 pages in full score.) Myriad

⁵ For comments on a general trend in the nineteenth and early twentieth century music toward extreme flat and sharp keys, see Hugh MacDonald, "[G-Flat Major Key Signature]," *19th-Century Music* 11 (1988): 221-37. For related but more abstract comments, see Bertold Hoeckner, "Schumann and Romantic Distance," *Journal of the American Musicological Society* 50 (1997): 55-132.

features of interest must go without comment in the interest of holistic treatment. Instead, in this chapter, synopses of form, thematic material, and tonal design on the large scale provide frameworks in which analytic snapshots of structurally significant climax events may be meaningful. Here, Rachmaninoff's theory of "culminating points," discussed in Chapter 1, comes to fruition.

Figure 6.2. Synthesis of thematic material, form, and hyperdissonant climax events



In each of the following analyses, I show a clear correlation between large-scale climax events (at most two or three in an entire composition) and large-scale hyperdissonance events resulting from strong articulation of specific “fantastic” chromatic and special modal structures at formal and expressive junctures. It is not necessary to account for every note in each work to demonstrate how such climaxes are developed. It is necessary only to show how Rachmaninoff unifies these large compositions by drawing thematic material, harmonic structure, large-scale form and tonal design, and hyperdissonance climax events into close associations. One way to conceptualize such a synthesis is shown in Figure 6.2.

As suggested in Figure 6.2, the thematic materials used in Opp. 43, 44, and 45 have idiosyncracies that suggest various non-diatonic structures. The modal and chromatic structures that result engender hyperdissonant climax events by complicating or deforming a work’s large-scale tension arc (that is to say, its tonally- and formally-derived trajectory of departure and return, as explored in Chapter 1). Structural resolution is achieved at some late stage in a work as the melodic and harmonic components involved are brought into a more harmonious arrangement, solving problems and conflicts established earlier in the work. Rachmaninoff’s Postromantic aesthetic position, as opposed to a Romantic position or to a modernist position, is clear: conflict, fragmentation, distortion, and exaggeration beyond the boundaries of the Romantic, yes; but also, in the end, unity of design and structural resolutions tied to conventional roots that true modernists tried to sever.

With regard to the last point in the preceding paragraph, Olin Downes’s early review of the Symphony No. 3 is compelling: “There is the impression of frustrated strength, which gathers, to crash helplessly against some obstacle... His idiom is more his own than ever before, and free of the indebtedness it once had to Tchaikovsky.”⁶ Jason T. Stell has noted in his study of Rachmaninoff’s piano works that the composer’s practice setting up of musical obstacles to be overcome climactically later in a work resembles processes in Bruckner’s music.⁷ Stell notes Warren Darcy’s study of “blocked tendencies” and sonata deformations in Bruckner’s symphonies, specifically noting

⁶ Quoted in Bertensson and Leyda, *Sergei Rachmaninoff*, 325. Downes’s review, however, is generally negative.

⁷ Stell, “Rachmaninov’s Expressive Strategies,” 15.

Darcy's comment that "Bruckner causes all these achievements to converge and resonate sympathetically in a climactic moment of splendor."⁸ Yet, as the following analyses show, the results here are uniquely Rachmaninoffian, insofar as they involve alloys of functional tonal, "fantastic" chromatic and special modal structures that are unique to his mature style.

Rhapsody on a Theme by Paganini, Op. 43 (1934)

The *Rhapsody* has a double-function form. The twenty-four variations (plus Introduction and Tema) are played essentially without a break, forming a single large movement. This large movement, however, may be understood as simultaneously suggesting a multi-movement plan. Although Martyn claims that the *Rhapsody* "divides naturally into three sections, corresponding to the form of a sonata or concerto," several factors suggest the four-movement plan shown in Figure 6.3.⁹

Martyn's analysis treats Variations XII through XVIII as a single movement. Indeed, Rachmaninoff had made a single hybrid movement from slow movement and scherzo in the Piano Concerto No. 3, and he would do so again in the second movement of the Symphony No. 3. However, in the *Rhapsody*, tempos and key structures (D minor and F major as a pair of relatives, B \flat minor and D \flat major as a second pair of relatives) suggest that Variations XII through XVIII represent two distinct stages in the composition. Further support for a four-movement interpretation is provided by the codas appended to the ends of Variation XV (at rehearsal **40**) and Variation XVIII (at rehearsal **51**), which add material not suggested by the structure of Paganini's theme and not included in any other variations. The codas strongly suggest that Variations XV and XVIII should be heard as concluding utterances in separate internal movements.

⁸ Ibid., citing Warren Darcy, "Bruckner's Sonata Deformations," in *Bruckner Studies*, ed. Timothy L. Jackson and Paul Hawkshaw (New York: Cambridge University Press, 1997), 77.

⁹ Martyn, *Rachmaninoff*, 328.

Figure 6.3. *Rhapsody on a Theme by Paganini* as a four-movement structure

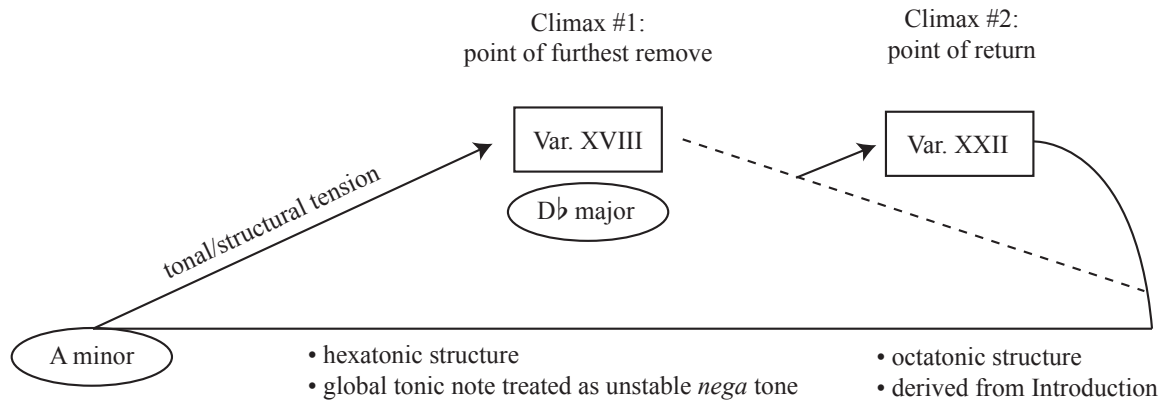
First movement	Introduction Variation I (precedente) Tema Variations II - X	A minor	
<i>transition</i>	Variation XI		<i>cadenza #1</i>
Minuet / Scherzo	Variations XII - XV	D minor F major	
Slow movement	Variations XVI - XVIII	B \flat minor D \flat major	Climax #1
Finale	Variations XIX - XXIV	A minor	Climax #2 <i>cadenza #2</i> <i>cadenza #3</i>

As shown in Figure 6.3, Variation XI may be interpreted as a transitional, modulating episode between the first and second movements. Variation XI is also the first of three cadenzas. The second cadenza is at the end of Variation XXII, and the third cadenza is at the end of Variation XXIII. The cadenzas punctuate stages in a large trajectory of tonal departure through the slow movement (motion to regions increasingly distant from A minor throughout Variations XII and XVIII) and return (with Variation XIX and following) that forms a basis for interpretation of two main climax events in the work. As shown in Figure 6.4, the first climax event occurs in Variation XVIII—the point of furthest remove in the work, and the only variation in D \flat major. The second, arguably more powerful climax event occurs in Variation XXII—around the point of return. Climax #1 is associated with a hexatonic structure and with *nega*; Climax #2 is associated with an octatonic structure.

In addition to the double-function form outlined above, I propose another interpretation of the *Rhapsody*'s form: the large-scale structure of the work, including the

two climax events and the overall trajectory of departure and return, closely follows the structure of Paganini's theme, to such an extent that the work as a whole may be considered an enormous variation on the theme. This is shown in more detail in Figure 6.5.¹⁰

Figure 6.4. Overview of main climax events in *Rhapsody on a Theme by Paganini*



The figure reveals strong correspondences between the theme (A) and the *Rhapsody* as a whole (B). The first stage of activity in both establishes A minor as tonic. Tonal departure begins with motion to the subdominant as part of a sequence. In both, there is a provisional return to A minor (measure 10 in the theme; Variation XIX in the *Rhapsody*), followed by a more powerful functional affirmation of A minor as tonic. The three cadenzas in the *Rhapsody* (see again Figure 6.3) are indicated by fermatas on Figure 6.5. As dotted lines on Figure 6.5 show, the cadenzas are associated with the moments of chromatic activity in Paganini's theme. As explained more fully below, cadenza #1 establishes *nega* in the work by bringing pitch class B♭ into play; and cadenzas #2 and #3 are based on pitch classes E♭ and F, which may be interpreted as large-scale manifestations of the two tones articulating the Italian augmented sixth chord in Paganini's theme, at the corresponding location in the large form of the *Rhapsody*. In other words, specific chromatic moments in Paganini's theme provide a basis for specific large-scale structural features in the work.

¹⁰ For purposes of comparison, see again Heinrich Schenker's analysis of the theme (Figure 2.16).

Figure 6.5. Comparison of (A) Paganini's theme and (B) *Rhapsody on a Theme by Paganini*

(A) Theme

chromatic event

chromatic event

sequential: circle of fifths

V^7 iv III

i

(B) Rhapsody

OCT

i

V^7 iv $VI = V^7$ bIV $bIII$

sequential: $HEX_{(0,1)}$

i

(i) HD distortion

Climax #2 octatonic

It^6 V^7 i

HD exaggeration

Climax #1 *nega* hexatonic

nega

V^7 VI bIV $bIII$

i

Intro						
Var I (Precedente)						
Tema						XIX
Variations: II	X	XI	XII	XIV	XVI	XX
			XIII	XV	XVII	XXI
first movement			minuet/scherzo		slow movement	finale
						XXII, XXIII
						XXIV

Climax #1

However, Figure 6.5 also reveals a crucial difference between the structure of Paganini's theme and the structure of the *Rhapsody*. Whereas the sequential passage in Paganini's theme is a conventional circle of fifths motion, the sequential structure at the corresponding location in the *Rhapsody* is a $\text{HEX}_{(0,1)}$ structure. Recall from Chapter 2 that hexatonicism is introduced as an intensifying device in Variations VIII and IX.¹¹ In Figure 6.5 (B), the basically diatonic framework of Paganini's theme is deformed hexatonically; the theme's pattern of departure and return is thereby greatly exaggerated. As a result, $\text{D}\flat$ major emerges as the point of greatest difference between the *Rhapsody*'s structure and Paganini's theme, and the point of furthest remove in the *Rhapsody*. As observed above, Rachmaninoff includes only a single variation in the key, thereby bringing its special status into focus.

An earlier, fleeting suggestion of $\text{D}\flat$ major may be heard at rehearsal **31** in transitional Variation XI (the first cadenza), as shown in Figure 6.6. This tonal foreshadowing is concomitant with a statement of a *nega* figure that will be featured throughout the flat-key slow movement variations (XVI – XVIII). Figure 6.6 shows an entanglement of A minor/major (the tonic of the preceding variations, which emerges as the dominant of D minor), D minor (the tonic of Variations XII and XIII), and $\text{D}\flat$ major (something yet to come, later the setting of a major climax event), underneath the *nega*-type melodic figure.

As suggested in Figure 6.7, the *nega* figure is derived from the $\text{B}\flat$ in the fifth measure of Paganini's theme. The *nega* configuration of the melodic gesture— $\text{A}\natural$ as an unstable tone oscillating up to $\text{B}\flat$ and down to $\text{G}\natural/\text{B}\flat$ —is actually first heard in Variation VIII, where it is clearly associated with the introduction of hexatonicism. Recall from Chapter 5 that *peremennost* and *nega* techniques strongly characterize the $\text{B}\flat$ minor portion of the *Rhapsody* (Variations XVI and XVII), bringing these variations into close association with the $\text{D}\flat$ major that is to come. (See again Figures 5.37 and 5.38, recalling that *nega* idiom is generally associated with lyric movements, or lyric episodes and digressions.

¹¹ See again Figures 2.14–2.17.

Figure 6.6. *Rhapsody on a Theme by Paganini*, Variation XI, *nega* figure at r. 31

The image shows a musical score for Variation XI of *Rhapsody on a Theme by Paganini*. The top staff is for piano, starting with a *piano* dynamic and a *mf* dynamic. The bottom staff is for winds and strings. A rehearsal mark **31** is placed above the piano staff. A bracket labeled *nega melodic figure* spans a sequence of notes in the piano part, which is also labeled as *repeated*. Annotations include *V7 of D minor* for the piano part and *D♭ major*, *A minor major*, and *D minor* for the winds and strings part. Arrows point from these labels to the corresponding notes in the score.

Figure 6.7. Derivation of *nega* figure from Paganini's theme

(a) Paganini's theme, measures 5 - 6

A short musical phrase in treble clef, showing a sequence of notes with a slur and a repeat sign at the end.

(b) *nega* figure + HEX in Variation VIII (at rehearsal 31)

A musical phrase in treble clef, showing a sequence of notes with a slur and a repeat sign at the end.

(c) *nega* figure in Variation XI (after rehearsal 21)

A musical phrase in treble clef, showing a sequence of notes with a slur and a repeat sign at the end.

As shown in Figure 6.5, the emphasis on *nega* in Variations XVI and XVII occurs within a framework of large-scale hexatonic exaggeration resulting from chromatic deformation of the sequential episode in Paganini's theme. To put it another way: as the *Rhapsody* approaches its hexatonically-defined point of furthest remove, the tonic note A^{\flat} is treated as an unstable *nega* tone, suggesting a structural hyperdissonance involving the tonic. Throughout Variation XVII, not just pitch class A^{\flat} but whole triads on root A^{\flat} are repeatedly articulated. Rachmaninoff keeps the global tonic triad in circulation even in the distant key of B^{\flat} minor, calling attention to the chromatic distance traveled.

Nega and $HEX_{(0,1)}$ come together powerfully at Climax #1 in Variation XVIII. Figure 6.8 is an analytic reduction of the variation. As is well known, the famous melody in Variation XVIII results from the inversion of Paganini's theme.¹² (Recall from Chapter 4 that the F major variations, XIV and XV featured partial inversion of the theme along with hexatonic structures.¹³ Variation XVIII represents a more complete inversion.) The inversion of the opening decorated arpeggio figure (x) in Variation XVIII is indicated on Figure 6.8.¹⁴ Inversion procedures are continued throughout the variation. Whereas the theme features a descending sequence leading to cadence, Variation XVIII features an ascending sequence. The theme is treated doubly in the variation, resulting in a two-phrase periodic structure. Phrase 1 cadences on the dominant. Climactic phrase 2 cadences on the tonic. A coda follows, featuring continued play on the *nega* tones (A^{\flat} - A^{\natural} - B^{\flat}) above a post-climactic D^{\flat} pedal point (not shown on Figure 6.8).

As shown in Figure 6.8, climax #1 may be understood an integration of a $HEX_{(0,1)}$ cycle (A minor – F minor – D^{\flat} major), which reflects the large-scale tonal design of the

¹² Cannata's study of draft materials has revealed that a sketch of the inversion of the theme was among the first things Rachmaninoff produced when beginning work on the *Rhapsody*, and that the sketch dates from the 1920s (Cannata, *Rachmaninoff and the Symphony*, 55–57). Paul Vining and Rollo Piaf have suggested that the melody of Variation XVIII is also derived from the Credo of William Byrd's Mass for three voices, a performance of which they claim Rachmaninoff directed at Foulis Castle in Scotland in 1934 (before composing the *Rhapsody*). See Paul Vining and Rollo Piaf, "Byrd Plagiarized," *Musical Times* 118 (1977): 300. I have been unable to confirm Rachmaninoff's participation in the Byrd performance, and Cannata's research suggests that the inversion of Paganini's theme had been sketched before the 1934 Byrd performance. If Vining and Piaf's report is accurate, however, it might add another layer of meaning to Rachmaninoff's famous melody.

¹³ See again Figures 4.33 and 4.34.

¹⁴ The subdominant / tonic oscillations and subdominant-dominant hybrid / tonic oscillations in the opening measures of the variation may also be interpreted as a kind of inversion—that is to say, a harmonic inversion of the dominant / tonic oscillation featured in the opening measures of Paganini's theme.

entire opus, and the *nega* figure from Variations XI and XVII in the key of D \flat major. The harmonic material of the climax is clearly stratified: the HEX_(0,1) cycle is articulated in the upper register, while a functional D \flat major progression is propelled by the bass motion. The most intensely dissonant element at the climax is the A minor triad. The climax is therefore a hyperdissonant exaggeration in which the global tonic is entangled in a hexatonic structure at a point of furthest remove at the end of a hexatonic structure on a much larger scale. The event recalls the climax of the song “Daisies,” Op. 38, No. 3, which also features an unstable tonic sonority at a hexatonically produced point of remove.¹⁵

At the climax in Variation XVIII, the global tonic is treated as an unstable element in both the *nega* idiom and the hexatonic structure that resolves to D \flat major. Figure 6.8 also shows how the melodic structure of the sequential/climactic portion in both phrases may be interpreted as articulating a large neighbor tone that seems to belong more to A minor than to the local tonic D \flat major: C \sharp – B \sharp – C \sharp in phrase 1, F \sharp – E \sharp – F \sharp in phrase 2. The F \sharp – E \sharp – F \sharp figure specifically recalls the opening measures of the *Rhapsody*, which featured a recurring E \sharp – F \sharp – E \sharp melodic figure. The connection between the opening measures of the Introduction and Variation XVIII is shown more clearly in Figure 6.9. The first chord heard in the *Rhapsody*—an A minor triad with F \sharp /G \flat underneath—returns at the Variation XVIII climax, but in entirely different tonal circumstances. The relative values of E \sharp and F \sharp are reversed: F \sharp resolves to E \sharp in the Introduction, but E \sharp (associated with tonic A minor) resolves to F \sharp in Variation XVIII. Figure 6.10 shows how this is part of a more general tonal “inversion” that characterizes Variations XVI through XVIII as a whole. Pitch classes which are stable in the key of A minor are, on the contrary, highly charged in B \flat minor and D \flat major, and vice versa—including, because of the *nega* idiom in used throughout the flat-key variations, the tonic A \sharp .

¹⁵ See again Figure 2.32.

Figure 6.8. *Rhapsody on a Theme by Paganini*, Variation XVIII, analytic overview of climax #1

Phrase 1

x (inverted)

sequence begins on V

C - B - C

cresc.

f

mf

ascending fifths sequence

T

PD

D

T

D

Phrase 2

octave doublings omitted

50

mf

sequence begins on I

F - E - F

cresc.

mega

ff

ascending sequence (altered)

T

PD

D

T

HEX_(0,1)

51

Climax

*

coda above post-climactic pedal point follows

Figure 6.9. Climax in Variation XVIII, analytic details

The image shows a musical score for 'Climax in Variation XVIII'. It features three staves: strings (top), piano (middle), and strings and horns (bottom). The key signature is three flats (B-flat, E-flat, A-flat) and the time signature is 3/4. The score is annotated with several key elements:

- Introduction:** The first few measures of the piano part are marked with a forte (*f*) dynamic and include notes E and F.
- Tonic function:** A dashed line connects the piano part's initial notes to the beginning of the main section.
- intensely dissonant harmonically charged:** This label is placed under the piano part during the climactic section.
- HEX_(0,1) cycle:** Arrows point from this label to E and F notes in the strings part, indicating a specific harmonic cycle.
- Dynamic markings:** The piano part starts *piano*, moves to *cresc* (crescendo), and reaches *ff* (fortissimo) at the climax.

Figure 6.10. Melodic and tonal “inversion” in Variations XVI – XVIII

This figure illustrates melodic and tonal inversion across different parts of the work.

- a) Theme:** Shows a melodic line in two staves. The upper staff has a circled note labeled 'tonic'. The lower staff has a circled note labeled 'nega tone'. Arrows indicate melodic movement and relationships between notes.
- b) Variations XVI - XVIII:** Shows a similar melodic line. A circled note in the lower staff is labeled '(saved for Climax 2)', indicating its reuse in a later section.

Climax #2

The Introduction to the work also provides a basis for interpreting the second climax event, which occurs in Variation XXII. In Chapter 3, an OCT_(0,1) cycle in the

Introduction was analyzed.¹⁶ A tension between the A minor tonic and the octatonic cycle characterizes these measures, building to a direct clash between A minor and E \flat in measure 7. As shown in Figure 6.11, a large version of the same conflict is involved at the Variation XXII climax.

The *Dies irae* returns in Variation XXII before the climax. It is set chromatically, building in intensity until A minor is “broken” after rehearsal **64**. The A major-F \sharp minor compound at rehearsal **67** (again recalling the very first chord of the composition) is extremely unstable in the context of the E \flat major-minor seventh chord that is the basis of those measures. As in climax #1 (Variation XVIII), a projection of the global tonic is highly charged; but in Variation XXII, the climax occurs at the point of return in the large-scale departure-return arc, not the point of remove. Climax #2 is therefore interpreted as an large-scale hyperdissonant distortion according to the criteria established in Chapter 2. The second cadenza in the work follows, expanding E \flat . The beginning of Variation XXIII capitalizes on the tonal dislocation effected in climax #2 and in the cadenza, as the piano and orchestra momentarily disagree about what key to play in: the orchestra returns to A minor, but the piano resolves the E \flat seventh chord to A \flat minor.

As described above, the two main climaxes in the *Rhapsody* may be understood as involving hexatonic structures, octatonic structures, and *nega* ultimately developed from marked chromatic tones in Paganini’s theme: B \flat and D \sharp /E \flat . As shown in Figure 6.12, a final statement of the *Dies irae* in Variation XXIV synthesizes these two pitch classes firmly into the gamut of A minor (they are marked by arrows in the figure), and a *peremennost* flourish recalling the now-familiar A/F \sharp compound brings the work to an end. The *Dies irae* statement may be interpreted as a final moment of culmination. The “problems” caused by B \flat /E \flat are fully resolved, and the hexatonic and octatonic climaxes are contextualized.

¹⁶ See again Figure 3.13.

Figure 6.11. *Rhapsody on a Theme by Paganini*, Variation XXII, analytic overview of climax #2

61 62 63 64

pp *ff* *sff*

Phrygian

increasing chromaticism

Dies irae

OCT (2,3)

T

A minor tonic "broken"

OCT (0,1)

65 66 67 68

pp *sff*

Paganini theme

perememmost

A major

F# minor

hyperdissonant distortion (octatonic): tonic highly dissonant

Climax #2

Cadenza #2

Figure 6.12. *Rhapsody on a Theme by Paganini*, Variation XXIV, final statement of the *Dies irae*

Symphony No. 3, Op. 44 (1936, rev. 1938)

The Symphony No. 3 is in the same key as the *Rhapsody*, and echoes of the earlier work may be heard throughout the symphony. Particularly salient here are the incorporation of pitch class B \flat into the gamut of A minor/major, the use of HEX_(0,1), and an intervallically complex climax sonority that resembles the A minor/major + F \sharp compound used prominently in the *Rhapsody* (most notably at its climaxes). Several passages from the symphony were analyzed in other chapters of the dissertation. The climax at the end of the development in the first movement was discussed in Chapter 2.¹⁷ The Phrygian motto theme stated in the opening and closing measures of the first movement was discussed in Chapter 5.¹⁸ The C \sharp Phrygian major statement of the motto theme in the second movement was also described in Chapter 5.¹⁹ Modal structures in the third movement's second theme area, the octatonic statement of the motto theme at rehearsal 80 in the third movement, and the large-scale articulation of the motto theme

¹⁷ See again Figure 2.8.

¹⁸ See again Figures 5.3 and 5.41.

¹⁹ See again Figures 5.61 and 5.62.

over the course of the central, developmental fugal episode in the movement were described at various points in Chapters 4 and 5.²⁰

These features can be synthesized into a coherent view of the entire work. In the following analyses, two main components are highlighted:

1. Phrygian structures referable to the motto theme.
2. A large-scale hexatonic structure suggested by and emerging from the climax event at the end of the development in the first movement.

The shattering climax event at the end of the development section in the sonata-form first movement was presented in Chapter 2 as an example of hyperdissonant distortion at a point of structural return. At the climax, intense equal-interval structures, punctuated by the appearance of *Dies irae*-like material at rehearsal **20**, undermine a clearly-articulated return of the tonic (A minor) before rehearsal **22**. A snapshot of the beginning of the event is shown in Figure 6.13.

Figure 6.13. Symphony No. 3, Op. 44, i, hyperdissonant climax at the end of the development

hyperdissonant distortion climax →

WT₀ **tonic triad (A minor)** **motto theme on A** **22**

dominant function tones

²⁰ See again Figures 4.12–4.14 and 5.18.

The passage, which lasts over 40 measures (from before rehearsal **22** to rehearsal **25**), is of such intensity and of such dimensions that it calls for interpretation well outside the conventional tonal box. As explored more fully below, it is the central event in the first movement, on which the movement's entire structure hinges; and the other two movements emerge from its shadow. To put it more bluntly, the hyperdissonance of the climax is not completely resolved until the coda of the third movement.

In the *Rhapsody*, pitch class B \flat , derived from the first chromatic tone in Paganini's theme, plays an important structural role in several ways. However, suggestions of bona fide Phrygian organization are limited to the beginning of Variation XXII (see again Figure 6.11) and a handful of other locations. In the Symphony No. 3, the Phrygian potential of the B \flat in the opening statement of the motto theme is much greater, taking three movements to work out in full.²¹ Throughout the symphony, the melodic motive A \sharp - B \flat (with or without G \sharp , which is the other tone in the motto and the other neighbor tone in the basic Phrygian cell), sometimes accompanied by auxiliary tones from further on the flat side (especially E \flat —again, the *Rhapsody* seems to be a precedent), appears with such frequency and in such a variety of contexts that it would be virtually impossible to list them all. As the following analysis suggests, this may be taken as surface evidence of a deeper structural concern for integrating pitch class B \flat and the Phrygian motto theme into the gamut of A minor/major.

The climax at the end of the development in the first movement, revisited

The first movement of the symphony has an outwardly conventional sonata form, as shown in Figure 6.14. The opening and closing measures of the movement are characterized by clear statements of the Phrygian motto theme. The proportions of the movement are fairly balanced, as suggested by the fact that the midpoint of the

²¹ As cited earlier, the B \flat plays an important role in Cannata's interpretation of the Symphony, too. For Cannata, it implies a large-scale, subdominant-oriented double-tonic complex oriented, A minor - D minor, which is resolved in favor of A in the finale following the D major fugal episode after rehearsal 80 (Cannata, *Rachmaninoff and the Symphony*, 125-30). Although the fugal episode is undoubtedly significant, the present analysis suggests a more complex structure for the work as a whole than the one suggested by Cannata. Cannata struggles to incorporate the second movement into his interpretation, and largely fails to account for the general absence of significant passages in D minor or D major throughout the first and second movements.

development section (measures 162) and the midpoint of the movement as a whole (measure 159) are almost the same.

Figure 6.14. Symphony No. 3, i, form

1 – 11	Introduction	motto theme: A Phrygian minor
12 – 97a	Exposition	
96b – 229	Development	midpoint of movement: 159 midpoint of development: 162
230 – 310	Recapitulation	
311 – 318	Coda	motto theme: A Phrygian major

The core event of the first movement is the hyperdissonant climax at the end of the development section (rehearsal **21** through **24**, resolving at rehearsal **25**). The climax, which occurs at a point of expected tonal and formal return, seriously disrupts the sense of regularity and balance that the movement's proportions engender. The climax event is of such length, and is so strongly emphasized, that the hyperdissonant tail threatens to wag the tonal dog, so to speak.

Analysis of the harmonic material at the climax provides important clues to interpreting the symphony's overall organization. The material is condensed in Figure 6.15a. The similarity between Figure 6.15a and Figures 6.8 and 6.9 (climax #1 in the *Rhapsody*) is striking. In both, the global tonic of the work (A minor in both cases) is a highly charged body, entangled in a complex structure involving G[♯]/A[♭] and F[♯]/G[♭]. In the *Rhapsody*, the structure occurs in the *nega*-inflected context of D[♭] major. In the symphony, embattled A minor emerges as tonic (at rehearsal **25**); but the gamut of D[♭]/C[♯] is nevertheless strongly implied, as shown in hypothetical Figure 6.15b. In Figure 6.15b, as in the climax in Variation XVIII of the *Rhapsody*, a conventional tonic – dominant resolution and a hexatonic resolution (A minor – C[♯] minor/major) are combined.

Figure 6.15. Symphony No. 3, i, harmonic content of the first movement climax chord

(a) A minor

i

(b) C# minor/major

V⁷ i / I

dominant resolution
+
hexatonic resolution (major third)

The chord shown in figure 6.15b is in fact an extended dominant sonority familiar in Rachmaninoff's works. Figures 6.16a and 6.16b show the appearance of the same type of chord at climax events in the first and third movements of the Piano Concerto No. 4 in G minor, Op. 40 (1926; rev. 1941). Figure 6.16a occurs at the hyperdissonant climax at rehearsal **21** in the first movement of the concerto. The movement is in the key of G minor. A long dominant pedal point (D \flat) precedes the climax shown in Figure 6.16a, which means that the climax represents a powerful harmonic and expressive breakthrough to a new tonal level at a point where harmonic and formal processes have led the listener to expect a return to G minor. At the climax, the movement's tonic, G \flat , and pitch class A \flat , which has figured prominently throughout the movement, are entangled, resulting in an extended dominant chord that resolves to C major.²² In the third movement, the same kind of extended dominant chord is used, climactically but not hyperdissonantly, along with the same thematic material, between rehearsal **79** and **80**, this time resolving to G major. The climaxes of the first and third movements are

²² C major is the tonic of the concerto's second movement, which has its own hyperdissonant climax at rehearsal 36.

therefore closely associated, and it might be said that the event in the third movement corrects the hyperdissonant “error” in the first.

Figure 6.16. Piano Concerto No. 4, Op. 40, i and iii, climax events

(a) First movement, hyperdissonant climax at end of development

21

V
 $\begin{matrix} \flat 13 \\ \flat 9 \\ 7 \end{matrix}$
I (= IV in G major)

(b) Third movement, climax at coda

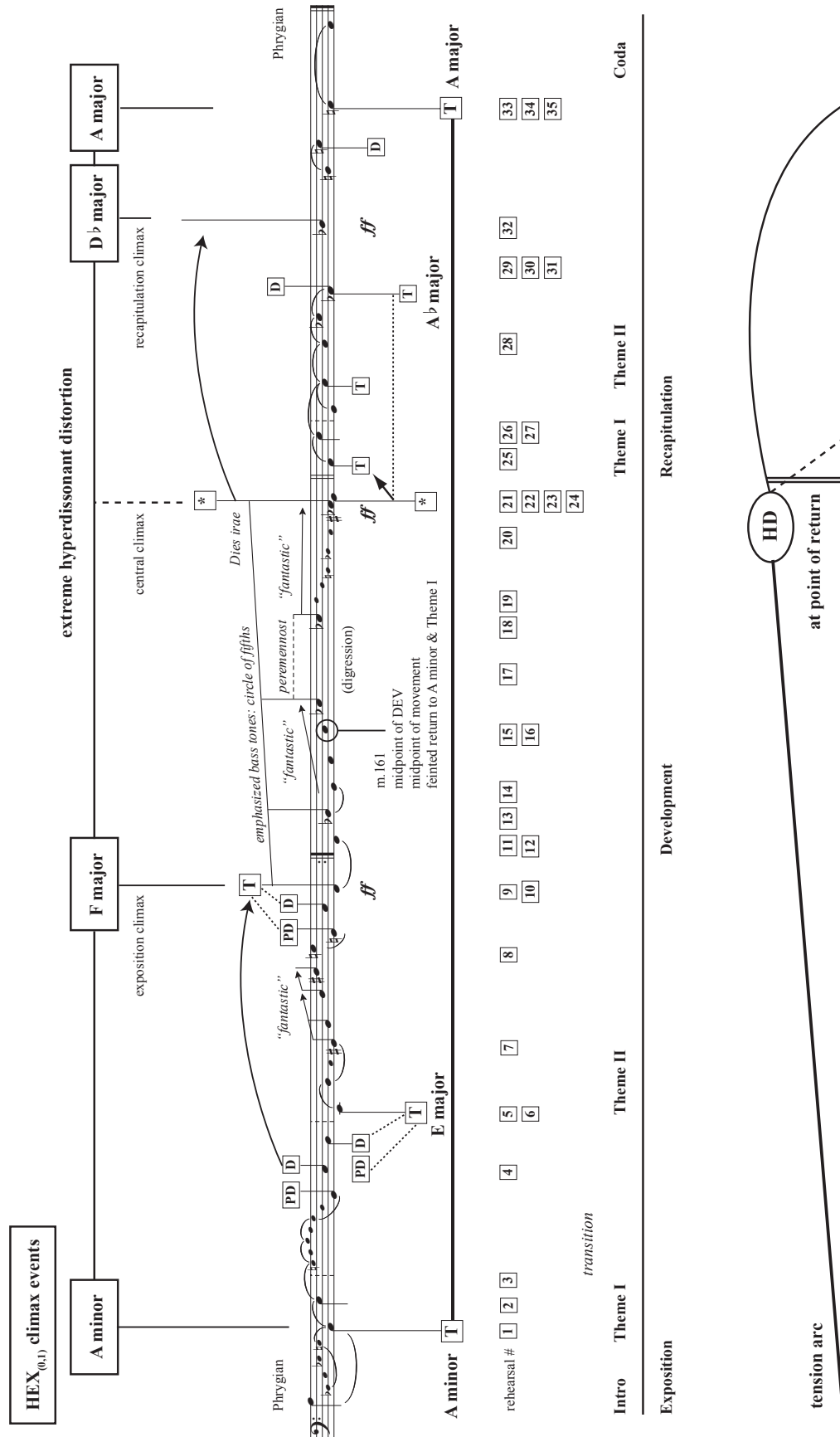
80

V
 $\begin{matrix} \flat 13 \\ \flat 9 \\ 7 \end{matrix}$
I

The evidence in Figure 6.15b and Figures 6.16a and 6.16b supports the claim that the climactic sonority at the end of the development in the first movement of the Symphony No. 3 (Figure 6.15a) may be heard as having strong implications in the key of D \flat major/minor in addition to its more obvious (and realized) function as a gateway to recapitulation in the key of A minor. As shown in Figure 6.17, the structure of the first movement hinges on this implication: D \flat major is explicitly articulated at a climax event at rehearsal **32** in the recapitulation, conceptually resolving the “other” side of the hyperdissonance at rehearsal **22** and following. As also shown in Figure 6.17, the exposition climaxes on F major. The climax events in the movement therefore articulate a HEX_(0,1) structure within the global A minor/major tonic context: A minor/major itself, F major at the end of the exposition, D \flat major in the recapitulation, and the complex sonority at the end of the development that simultaneously suggests both A minor/major and D \flat . Figure 6.17 shows how the tonal settings of the second theme material in both the exposition and the recapitulation are “adjusted” in mid-stride to create the HEX_(0,1) climax events: from E major up to F major between rehearsal **7** and rehearsal **9** in the exposition, and from C major/minor through A \flat major to D \flat major and, ultimately, to global tonic A major between rehearsal **27** and rehearsal **33** in the recapitulation. In other words, the key in which the second theme material is first heard—E major, the dominant—turns out to be the “wrong” key for the HEX_(0,1) structure; it is replaced by F major as indicated on Figure 6.17. A more complex tonal structure characterizes the second theme material in the recapitulation; but again manipulations are undertaken to ensure a climax on D \flat major.

As shown in Figure 6.17, the hyperdissonant climax at the end of the development (indicated by an asterisk on the figure) is entangled in both the large-scale functional tonal structure and the HEX_(0,1) structure of the climax events; and the global tonic, A minor, is entangled in the climax chord.

Figure 6.17. Symphony No. 3, i, analytic overview



Hexatonic and Phrygian structures synthesized in the second and third movements

The structures just described, and the Phrygian motto theme, carry over into the second and third movements of the symphony. The second movement has a hybrid form: slow movement plus scherzo, as suggested in Figure 6.18.²³ The figure provides an overview of the movement, showing the F# minor / C# Phrygian major pitch centers of the slow movement frame and the F minor tonic of the interior scherzo portion. As suggested in the brief analysis of the movement in Chapter 5, tonic and dominant functions are entangled in the C# Phrygian major setting of the motto theme in the outer sections, and the fact that Rachmaninoff provided no key signature for the movement suggests that the movement's complex harmonic structure is to be interpreted in the larger context of A minor/major.²⁴ As suggested on Figure 6.18, the movement may be interpreted as a synthesis of a HEX_(0,1) structure from the first movement and Phrygian organization, bringing it into close association with the events in the first movement.

The association between first and second movements is made explicit at the climax in the second movement. As shown on Figure 6.18, the climax occurs shortly between rehearsal **57**, which is the midpoint of the scherzo portion of the movement (*Allegro vivace*) and therefore conceptually of the symphony as a whole, and rehearsal **58**. As the figure shows, the complex climax sonority from the end of the development in the first movement reappears at the midpoint of the F minor scherzo. The three participants in the HEX_(0,1) structure—A minor/major, C# minor/major, and F minor/major—are thereby bound across two movements by common association with the climax chord.

²³ As suggested in Figure 6.1, the prototype for this movement seems to have been the second movement of the Piano Concerto No. 3, which is also a slow movement – scherzo hybrid, and which involves the same two pitch centers—F# and Db.

²⁴ See again Figures 5.61 and 5.62.

Figure 6.18. Symphony No. 3, ii, analytic overview

The figure displays an analytic overview of a musical score. At the top, a musical staff shows a melodic line with various chords and dynamics. A box labeled "central climax chord" with an asterisk (*) points to a specific chord in the score. Below the staff, rehearsal numbers are listed in boxes, grouped into sections: "Slow movement (Adagio ma non troppo)", "Scherzo (Allegro vivace)", and "Slow movement". A horizontal line labeled "midpoint of Scherzo" is drawn across the rehearsal numbers at measure 57. Chord labels include "F# minor", "C# Phrygian major", "D", "F minor", "D/T", and "T". Dynamics include "ff" and "molto".

36	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70						
													midpoint of Scherzo																									
Slow movement (Adagio ma non troppo)													Scherzo (Allegro vivace)													Slow movement												

As suggested in Chapter 5, the last forty-one measures of the second movement, including a final clear statement of the motto theme on C#, strongly favor C# Phrygian major as a center over F# minor. As a result, the overall structure of the symphony takes on the shape of a large-scale $HEX_{(0,1)}$ structure organized around climax events, and in which the Phrygian motto theme acts as a kind of periodic structural articulation across movements. The third movement, in A major, features C# prominently in several ways, as discussed earlier in relation to Figures 4.12–4.14:

- The *peremennost*-inflected second theme area superimposes triads on C#, A, and E around rehearsal **77** in the exposition.
- The central fugue, in which the motto theme and the *Dies irae* are brought together, emerges from an $OCT_{(1,2)}$ statement of the motto theme on C# (rehearsal **80**) that explicitly recalls the C# statements of the motto theme in the second movement. (The *Dies irae* pervades the rest of the movement.) The fugue articulates a large-scale version of the motto theme on C#, creating a large $OCT_{(1,2)}$ cycle that achieves the home dominant.
- Most significantly, in the coda, the motto theme on C# is set in the key of A major, with C# major triads explicitly incorporated into the gamut of the home tonic (the Allegretto after rehearsal **110**).

With these events, the structural tensions ultimately referable to the Phrygian motto in the opening measures of the first movement and to the hyperdissonant climax at the end of the development in the first movement are resolved. Recalling the end of the *Rhapsody*, a flourish on the *Dies irae* in the last two measures of the symphony brings the B \flat back into play (along with modal associate G \sharp and auxiliary tone E \flat)—a reminder, perhaps, of the Phrygian starting point.

Symphonic Dances, Op. 45 (1940)

The Symphonic Dances differ from the *Rhapsody* and the Symphony No. 3 in that there is no single global tonic.²⁵ The three movements are in three different keys: C minor, G minor, and D major. But they are unified around a common group of chromatic chords, which is shown in Figure 6.19.²⁶ As briefly discussed in Chapter 4, these four chords are first heard in measures 1–8 of the first movement.²⁷ They appear in prominent locations elsewhere in the first movement and in the other two movements, and I therefore take them to be motivic material. Their distribution across the three movements is of great analytic interest. I suggest that in Op. 45, unity is provided not by a large-scale composing-out of a tonic nor even by shared thematic material, but by inter-movement manipulation of a highly chromatic, distinctly non-tonical motivic chord group. Because the motivic chords are stated plainly at the start of the opus, in a C minor context that scarcely accommodates them tonally, one might say that a certain amount of hyperdissonance is loaded into the work from the very start. The following analysis traces the roles played by the motivic chords (singly or collectively) in the Symphonic Dances, especially at climax events. I describe a gradual unfolding through the first two movements leading to an acme in the third movement, where octatonic, hexatonic, and Phrygian structures—all suggested by the motivic chord group—are brought together.

The motivic chord group resists easy description in functional tonal terms, especially in the keys of C minor, G minor, and D major. Rachmaninoff took care to present them at the beginning of the first movement in a way that obscures clear voice-leading. (See again example Figure 4.20, where the triads are arpeggiated in different instruments and in different registers.) In other words, Rachmaninoff establishes them as *chords*, not as results of linear activity. The chords provide raw chromatic material that

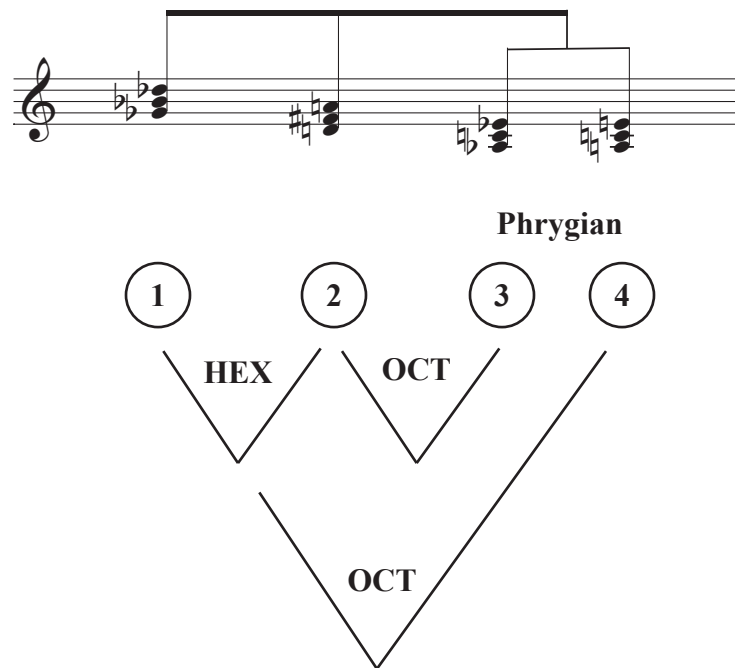
²⁵ In the present context, there is no compelling reason to make a distinction between the orchestral and two-piano versions of the Symphonic Dances, which Rachmaninoff worked on simultaneously.

²⁶ Another commonality between the three movements are the clear quotations from or references to Rachmaninoff's own earlier compositions. Several of these are indicated on the figures in this section of the chapter, and are discussed at appropriate points in the analysis. At the end of the first dance, Rachmaninoff appears to quote the primary theme from the first movement of the Symphony No. 1, Op. 13. In the third dance, he refers to a passage (beginning three measures after rehearsal **10**) in *Isle of the Dead*, Op. 29, and he uses material from the ninth number (Blagosloven esi, Gospodi) of the *All-Night Vigil*, Op. 37.

²⁷ See again Figure 4.20.

Rachmaninoff works into a variety of contexts. In the group, root relations by tritone, major third, and minor third suggest the possibility of various “fantastic” structures, as shown on Figure 6.19. The Phrygian structures that figure prominently in the following analysis may similarly be understood as suggested by the motivic chord group. The chord group therefore presents in a concentrated form several of the harmonic structures preferred by Rachmaninoff in the late Russian and exile periods. In the analytic figures that follow, the chords in the group are identified by circled Arabic numerals from 1 to 4, corresponding to the order in which they are shown in Figure 6.19.

Figure 6.19. Motivic chord group in Symphonic Dances, Op. 45



Overview of movements i and ii

Each of the three movements in Op. 45 is in some kind or large ternary form. Figure 6.20 is an analytic overview of the first movement. The introduction to the first movement was analyzed in Chapter 4, as was section A1.²⁸ Recall that the motivic chord group is first heard in a “fantastic” context in the introduction, but that the thematic

²⁸ See again figures 4.20, 4.44, and 4.45.

exposition beginning at rehearsal **2** is modal. As section A1 intensifies, equal-interval structures come to the fore, confirming the general rhetorical associations outlined in Chapter 3—but also calling attention to the tonally unsettled nature of the motivic chord group as it is stated at the beginning of the movement.

As shown in Figure 6.20, the first movement incorporates motivic chord 1 (F♯ or G♭ major) at an internal climax event, inside a large Phrygian structure (sections A1 and A2 in C♯, section B1 and B2 a half-step higher in C♯/D♭). As in the *Rhapsody* and the *Symphony No. 3*, C♯/D♭ emerges as the centerpiece in the overall design. The trajectory of the B music mirrors the larger trajectory of the A music: motion from the minor mode to the major mode. The key of C major at the end of the movement (starting four measures before rehearsal **27**) is the setting for what appears to be a loose quotation of the primary theme from the composer's *Symphony No. 1*, Op. 13.²⁹

Figure 6.21 shows how motivic chords 2, 3, and 4 (on D, A♭, and A) are incorporated into the key of G minor in the introductory measures of the second movement. As suggested in Figure 6.17, the tritone root relation between chords 2 and 3 suggests an octatonicism that is realized at the beginning of the second movement. The “slide” between A minor and A♭ major after rehearsal **31** recalls the similar slide between the same two triads before rehearsal **2** in the first dance; but the tonal context is of course different. An overview of section A1 of the large ternary in the second movement is given in Figure 6.22. Section A1 itself describes a smaller ternary structure. As shown on Figure 6.22, the section modulates from G minor to A♭ minor, which may be understood as a larger articulation of motivic chord 3. Note also that motivic chord 1, on root F♯, is suggested briefly at a local highpoint at rehearsal **36**.

²⁹ But note that the symphony theme is itself related to the incipit of the *Dies irae*. Martyn has suggested that the melody which appears at the end of the first dance may be a reference more to the chant than to the symphony theme (Martyn, *Rachmaninoff*, 350).

Figure 6.20. Symphonic Dances, i, analytic overview

The figure displays a musical score with harmonic analysis across several sections:

- Intro:** Measures 1-2. Labeled "chord group" and "fantastic" modal. The key signature is C minor.
- A1:** Measures 10-11. Labeled "fantastic" modal. The key signature is C# minor (Aeolian).
- B1:** Measures 17-19. Labeled "fantastic" (Phrygian). A circled "1" indicates a chord. The key signature is C# minor (Aeolian).
- B2:** Measures 18-20. Labeled "fantastic". A circled "1" indicates a chord. The key signature is C# minor (Aeolian).
- A2:** Measures 21-22. Labeled "peremennost". A circled "1" indicates a chord. The key signature is C minor.
- Coda:** Measure 27. Labeled "quotation from Symphony No.1". The key signature is C major.

Harmonic analysis symbols include: T (Tonic), C minor, C# minor (Aeolian), D♭ major, SD (Secondary Dominant), PD (Predominant), bII (Flat Second), D, V (Dominant), and C major.

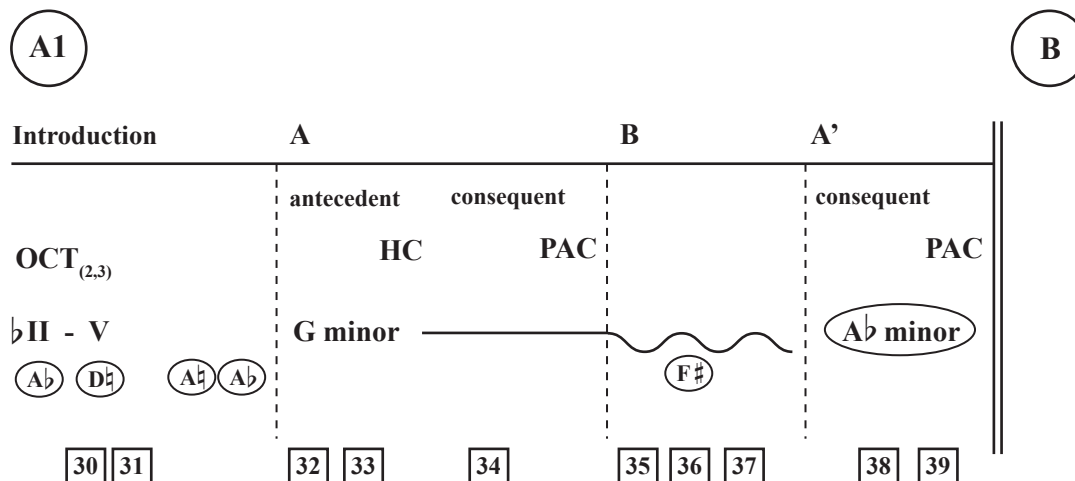
An arrow points to the transition between A2 and Coda, labeled "internal climax".

Figure 6.21. Symphonic Dances, ii, analysis of the introduction

The figure shows a musical score for the introduction of 'Symphonic Dances, ii'. The score is in G minor and features a violin solo. The analysis includes the following elements:

- Introduction:** A box labeled 'Introduction' covers the first part of the score.
- Section A1:** A box labeled 'section A1' covers the latter part of the score.
- Measure Numbers:** Measures 30, 31, and 32 are marked.
- Violin Solo:** A 'violin solo' section is indicated in measure 31.
- Harmonic Analysis:**
 - repeated, slightly altered:** A box highlights a section of the score that is repeated with slight alterations.
 - OCT_(2,3):** A box highlights a chord structure labeled OCT_(2,3).
 - bII - V:** A box highlights a chord progression labeled bII - V.
 - chords 3 2:** A box highlights a chord structure labeled chords 3 2.
 - Tonic:** A box labeled 'Tonic' points to the final chord of the section.

Figure 6.22. Symphonic Dances, ii, overview of section A1



Climax and culmination in movement iii

The events in the first and second movements lay groundwork for the D major third movement, which represents a high-water mark in Rachmaninoff's structural thinking. Two passages from the movement were analyzed earlier in the dissertation. Phrygian organization and the use of the *Dies irae* in the opening measures of the movement were shown in Chapter 5.³⁰ The internal climax of the central B section was briefly presented in Chapter 4 as an example of hyperdissonant distortion involving an octatonic structure at a point where resolution to the (local) tonic is expected.³¹ These observations provide a framework for more comprehensive analysis.

Figure 6.23 provides an overview of section A1 in the third movement. The introduction establishes Phrygian organization as structurally significant (involving pitch class E^b in a D major context, as discussed in Chapter 5), and it establishes the *Dies irae* as thematic material. The *Dies irae* is taken up as theme I at measure 30, as shown in Figure 6.24. The *Dies irae* appears in two main forms in the movement: the form stated at

³⁰ See again Figures 5.60 and 5.61. It was suggested that the movement resembles the Etude-Tableaux in D major, Op. 39, No. 9.

³¹ See again Figure 4.16.

measure 30 involves short rhythmic values (shown in Figure 6.24, and marked “*Dies irae: short*” in Figure 6.23), while a form introduced later in the movement involves longer rhythmic values (shown in Figure 6.28).

Figure 6.23. Symphonic Dances, iii, overview of section A1

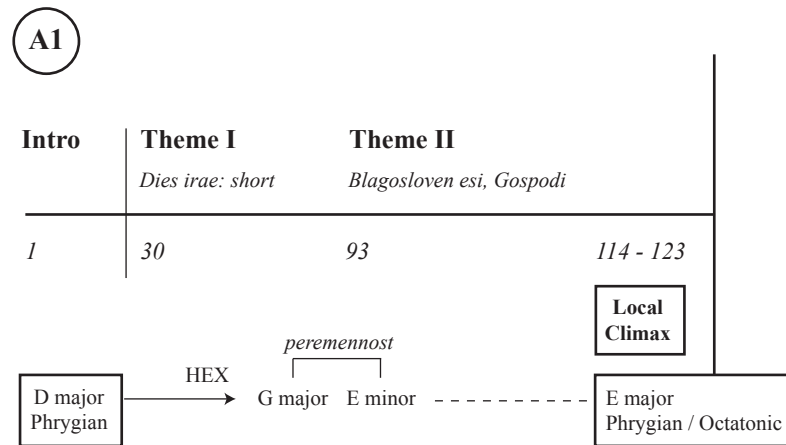


Figure 6.24. Symphonic Dances, iii, theme I: *Dies irae* in short rhythmic values



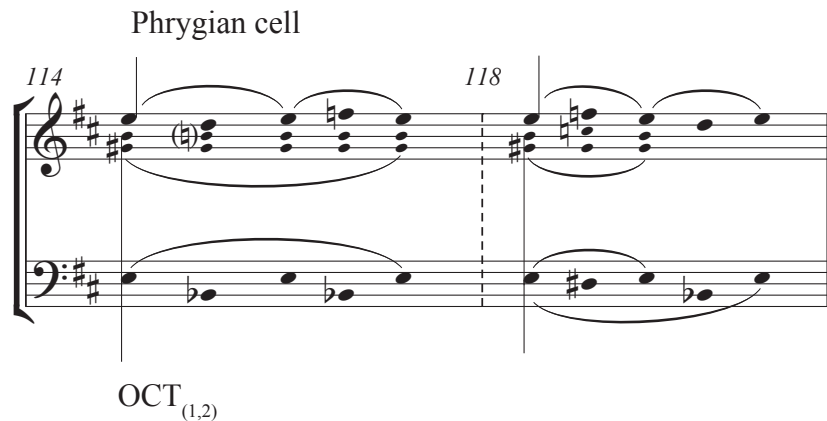
As shown in Figure 6.23, the goal of the first portion of section A1 is G major, which reflects the smaller motion from D to G in measure 6 of the movement—a resolution of the dominant side of the Phrygian tonic. *Peremennost*-type fusion of G major and E minor leads to theme II, which is an extensive reworking of “Blagosloven esi, Gospodi,” No. 9 from the *All-Night Vigil*, Op. 37. The beginning of this material is shown in Figure 6.25. The E major climax of section A1 follows in measures 114–123, and involves a hybridization of Phrygian and OCT_(1,2) idioms, shown in Figure 6.26.

Pitch class $C\sharp$ (measure 118 and following) does not belong to $OCT_{(1,2)}$, but may be understood as associated with the clearly articulated Phrygian upper and lower neighbor figure cell. Pitch class $D\sharp$ in the bass is more problematic from a harmonic analysis standpoint, being strictly associated with neither $OCT_{(1,2)}$ nor Phrygian E; but it does not disrupt the overall sense of Phrygian and octatonic structures at the section A1 climax.

Figure 6.25. Symphonic Dances, iii, theme II, beginning



Figure 6.26. Symphonic Dances, iii, octatonic–Phrygian hybrid at section A1 climax



An overview of section B in the third movement is given in Figure 6.27. The figure shows the emergence of $D\flat$ major as an octatonic associate of E major in what amounts to an extension of the $OCT_{(1,2)}$ structure from the climax at the end of section A1. At measure 133, the *Dies irae* is stated in longer rhythmic values (marked “*Dies irae: long*” in Figure 6.27), as shown more clearly in Figure 6.28. Both the form of the *Dies irae* and the harmonic material in this passage refer to *Isle of the Dead*: compare

measure 133 and following in the dance to the passage beginning three measures after rehearsal **10** in the earlier work.

Figure 6.27. Symphonic Dances, iii, overview of section B

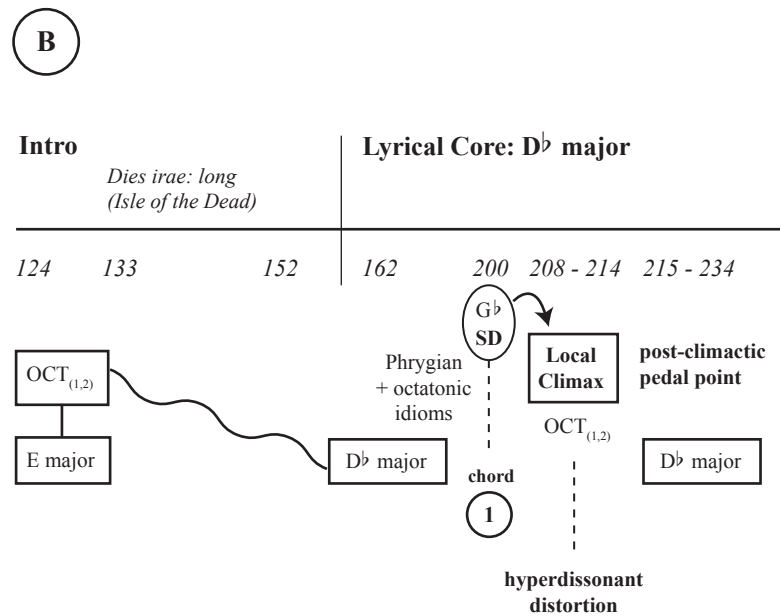


Figure 6.28. Symphonic Dances, iii, *Dies irae* in long rhythmic values



Figure 6.27 provides a context for the local climax event in measures 208 – 214. As shown more clearly in Figure 6.29, an accumulation of Phrygian and octatonic idioms in the D \flat major music precedes a strong move to the subdominant—G \flat major, or motivic chord 1—at measure 200. The incorporation of motivic chord 1 into D \flat major recalls central section of the first movement.³² Resolution of the subdominant to local tonic D \flat major is powerfully distorted by the entangled diminished seventh chords of the OCT_(1,2)

³² See again Figure 6.20.

structure at measure 208. A post-climactic pedal point follows, above which echoes of octatonic and Phrygian idioms are heard.

Figure 6.29. Symphonic Dances, iii, climax in section B

Section A2 returns to the tempo and material of section A1; but it is organized very differently, as shown in Figure 6.30. The reprise of theme I in D major is delayed until measure 334, making measure 235 and following more developmental than recapitulatory. In section A2, the short and long forms of the *Dies irae* are brought together, synthesizing material from section A1 and section B. Two strongly marked statements of the long form in section A2 frame the main climax event of the movement: a statement on A \flat major, preceding a long dominant pedal beginning in measure 287, and a statement on D major at measure 328, as shown in Figure 6.30.

Figure 6.30 shows that the main climax of the movement may be interpreted as a culmination involving the entire motivic chord group. The statement of the *Dies irae* on A \flat major (motivic chord 3) is the goal of the first portion of section A1. The long dominant pedal on A \natural (motivic chord 4) resolves to D major (motivic chord 2, and the tonic of the movement) at measure 318. But the resolution is a passing event, not a structural one, as the process of intensification begun at the start of section A2 continues,

pushing through D major to E major at measure 322 (thus recalling the climax at the end of section A1) and then, climactically, to F# major (motivic chord 1—the first marked event heard in the first movement of the opus, and associated with several earlier climaxes) at measure 326.

Figure 6.30. Symphonic Dances, iii, overview of section A2

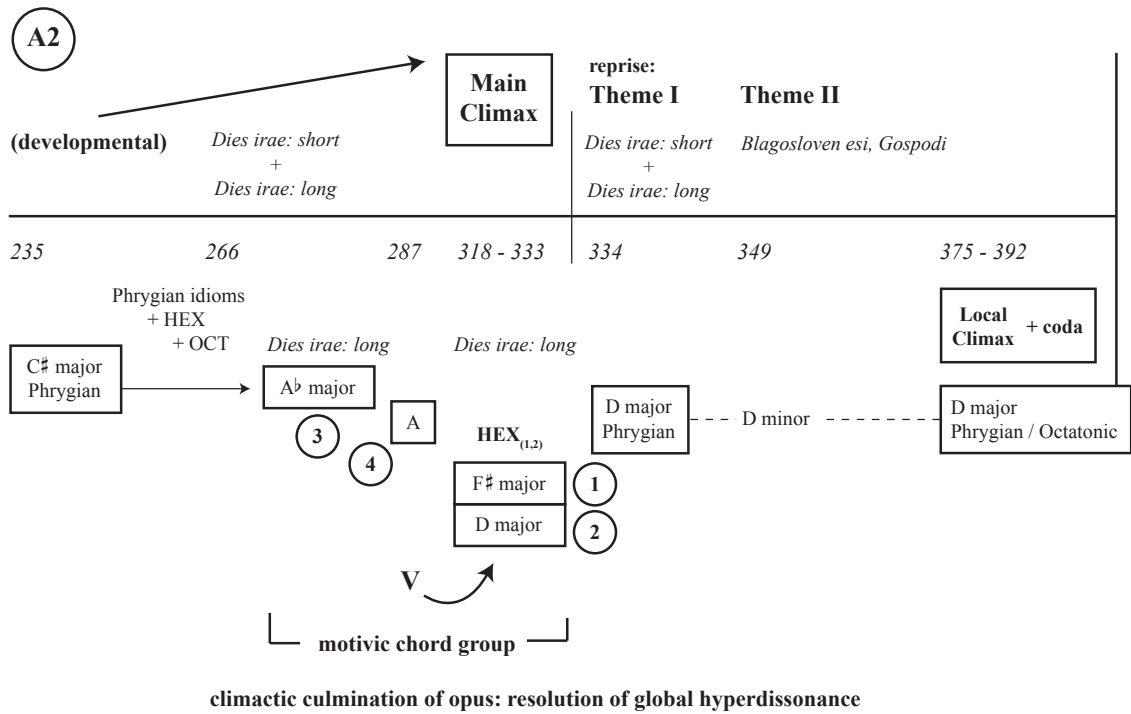


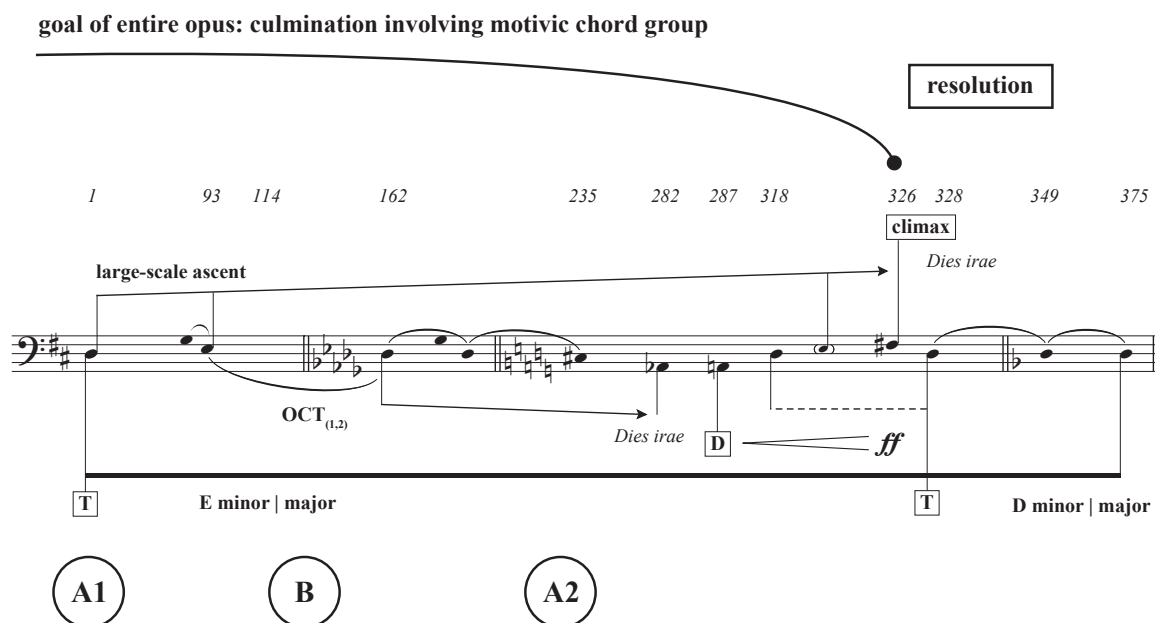
Figure 6.31. Symphonic Dances, iii, octatonic–Phrygian hybrid at section A2 climax

Figure 6.31 shows musical notation for the octatonic-Phrygian hybrid at section A2 climax. The notation is in two staves. The top staff is in treble clef and shows a 'Phrygian cell' starting at measure 375. The bottom staff is in bass clef and shows an 'OCT_(2,3)' starting at measure 375. The notes in the bass clef are G, A, B, C, D, E, F, G, which is an octatonic scale.

The hexatonic resolution of F# major to D major in measure 328 coincides with a *ff* statement of the long-form *Dies irae*, prefacing the radically truncated reprise of theme I at measure 334. The *All-Night Vigil* material returns as theme II at measure 349, leading to a final climax event that, like the climax event at the end of section A1, may be understood as involving a hybridization of Phrygian and octatonic structures (Figure 6.31).

These points are contextualized in Figure 6.32, an analytic overview of the entire movement. The figure shows how a large-scale ascent across all three sections culminates in a main climax event that integrates the motivic chord group fully into the gamut of D major. The conventional dominant – tonic resolution at measure 318 is entirely subordinate to the “fantastic” F# major–D major event in measures 326–328, which may be understood the goal of the entire opus—the resolution of a global, opus-long hyperdissonance between the symmetrical chromatic and Phrygian implications of the motivic chord group and conventional tonal structures. The interaction of these variegated components in such a powerfully climax-centric context makes the movement a fitting culmination of the late Russian and exile periods as a whole.

Figure 6.32. Symphonic Dances, iii, analytic overview



Concluding Remarks: Rachmaninoff in Context

Rachmaninoff's openly stated disdain for the "modern music" of his day—"about modern music I feel as about interviews before breakfast," he told the San Francisco press in 1937—has perhaps clouded scholarly judgment of his music's aesthetic and stylistic characteristics.¹ It has been too easy to consider him an anachronism. A Webern he was not; nor a Stravinsky; but neither was he a Tchaikovsky, or even a Glazunov. To dismiss him as such is to accuse him of a kind of musical parochialism. A number of photographs held by the Glinka Museum in Moscow show Rachmaninoff as a young man in the early 1890s at the rural estate at Ivanovka (now a museum), rake in hand, his relatives the Satins with him and (in at least one) Father Nikolay, their dour-looking priest, at the rear.² The photographs were perhaps intentionally stylized, but, still, to twenty-first-century eyes Rachmaninoff appears very old-fashioned—a hay-bale, horse-and-buggy figure. Forty years later he was a lover of motorboats and fast cars, a man who enjoyed jazz, a cosmopolitan, globe-trotting figure.³ The cultural collision recalls the musical collision described by Peter Burkholder: "All the composers of this generation have aspects of both eras, combining nineteenth-century elements with twentieth-century sensibilities."⁴

By the same token, I have shown through analysis of many works that Rachmaninoff's mature music resists characterization exclusively in conventional tonal terms. My analytic lens has suggested connections between Rachmaninoff's mature works and progressive European music of the early twentieth century, and suggested that his Russian heritage is neither superficial nor dismissible. Particular modal and chromatic

¹ Quoted in Bertensson and Leyda, *Sergei Rachmaninoff*, 327.

² These photographs are in the public domain and may be viewed online in many locations. See for example <http://www.tstu.ru/en/tambov/kultur/composer/rahm/s1.htm> (accessed April 23, 2009).

³ On Rachmaninoff and motorboats, see Bertensson and Leyda, *Sergei Rachmaninoff*, 319-20.

⁴ As discussed in Chapter 2 (Burkholder, Grout, and Palisca, *A History of Western Music*, 6th ed., 799).

structures have identities in the works studied. They are marked, and have clear rhetorical associations: intensification, climax, and disruption in the case of “fantastic” equal-interval structures; introduction, exposition, digression, and post-climax in the case of modal structures (although Phrygian organization, as shown in several cases, has more complex associations).

The challenge of developing an analytic strategy rigorous enough yet flexible enough for such variegated harmonic environments has led me to reject existing approaches that treat chromatic events as invariably adornments of functional structures. Rachmaninoff was a Postromantic composer, and expressive trajectories in his music involve processes of deformation, exaggeration, and distortion that result in part from frictions between and integrations of differentiated components in a complex, compound harmonic environment. Generalized, such processes may be taken as representative of the Postromantic repertory in general. Analyses of several works by other composers in Chapter 2 suggest potential applications of the approach developed in that chapter to a larger repertory.

Rachmaninoff’s approach to form is at once Procrustean and plastic. This apparent paradox, too, may be taken as a Postromantic trait. In his music we hear a fusion of clear, conventional plans (ternary form and sonata form are preferred) and *sui generis*, hyperdissonance-oriented shapes. The former supply frameworks; the latter supply energy, and inform the interpretation of climax in the works analyzed. To return to a metaphor suggested early in the dissertation, Dionysius is bound by Apollo; but he nevertheless impels the action. In the works studied, interpretation of hyperdissonance and climax has shown that a kind of expressive form is imposed on conventional form and tonal design in flexible ways.

* * *

The analyses in the dissertation represent a departure from existing Rachmaninoff scholarship in methodology, in depth of analysis, and in the variety of musical genres considered. Though Robert Cunningham’s dissertation equals the present work in analytic detail, his approach emphasizes a kind of unity and integration very different

from mine, because he fails to incorporate what I deem to be essential Russian chromatic and modal idioms into his analyses. As analyses throughout the present dissertation have shown, important rhetorical information is packed into these idioms.

If Barrie Martyn is correct and Rachmaninoff does indeed stand “Janus-like between the old Russia and the new, looking back to the flowering of Russian nineteenth-century ‘classical’ music as also ahead to the first generation of Soviet Composers,” then it may be possible to hear in the works of later composers some of the structures and techniques identified in the dissertation.⁵ In Chapters 2 and 4, analysis of octatonic and hexatonic exaggeration in passages from Prokofiev’s works validated Geoffrey Norris’s claim that similarities between the two composers may be more extensive than earlier generations of musicians and scholars realized.⁶ In Chapter 5, Rachmaninoff’s extensive use of Phrygian organization was shown to be a continuation of a practice established by his Russian predecessors, and it was briefly suggested that Shostakovich continued the practice (in, however, a radically adapted form).

But perhaps more revealing are ways that Rachmaninoff’s hyperdissonance-oriented approach to musical form may resemble approaches in later composers’ works. Yuriy Kholopov comments on Shostakovich:

Shostakovich’s new solution as a twentieth-century composer consists of finding new effective means of contrast, an even higher order of dissonance. In the develop section he now starts to place contrasted sound-layers one on top of another. The unity of the harmony in the vertical dimension is broken. The layers of *polyharmony* dissonantly contradict one another, as if the voices somehow are not listening to one another; in some places they even try to out-shout one another to see who can make the most noise. In places it becomes impossible to sense any tonality whatsoever. Supercharging the discordant mass of sound leads to a huge ‘proclamation’ at the beginning of the recapitulation, where uncoordinated shouting lines suddenly merge into a mighty unison. This type of solution imparts new life to sonata form and other symphonised forms...⁷

⁵ Martyn, *Rachmaninoff*, 3.

⁶ See again discussion of Norris’s view in Chapter 1.

⁷ Yuriy Kholopov, “Form in Shostakovich’s Instrumental Works,” in *Shostakovich Studies*, ed. David Fanning (Cambridge: Cambridge University Press, 1995),

Kholopov’s comments recall with surprising clarity observations made in this dissertation, suggesting that the characteristics he describes are not new in Shostakovich’s music, only new in the extent to which they are featured. A “higher order of dissonance” results from harmonic stratification. Conflict and contradiction generate new kinds of expressive trajectories and rejuvenated formal processes. The “shouting lines” finally come to some agreement, and the higher order of dissonance—the hyperdissonance—is solved at a moment of climactic culmination.

It is true that harmonic materials in Rachmaninoff’s music are not as explicitly stratified as they sometimes are in Shostakovich’s (or Richard Strauss’s)⁸. But a passage like the one in Figure 5.58 is not far off: it features an unyielding layer of tonic triads on the very bottom, functional resolutions to those tonics in the middle, and, on top, an increasingly tense chromatic harmonization of a Phrygian ascent.

It is interesting to consider how hyperdissonant exaggeration, distortion, and—perhaps more significantly—neutralization (as demonstrated in Skryabin’s Prelude, Op. 74, No. 3) may be manifest in radical but still recognizable ways in modernist works from the first half of the twentieth century.⁹ At present, this is more speculation than theory. The ground here is not at all firm underneath the analyst’s feet; but consider, for example, the opening of Arnold Schoenberg’s twelve-tone Violin Concerto, Op. 36 (1936), shown in Figure C.1.¹⁰

Figure C.1. Arnold Schoenberg, Violin Concerto, Op. 36, i, reduction of mm. 1–4

⁸ See again the analyses of *Elektra* and the *Alpine Symphony* in Chapter 2.

⁹ On the Skryabin prelude, see again Figures 4.21–4.23.

¹⁰ I am grateful to Andrew Mead for calling my attention to this passage.

Taken on its own, the solo violin part seems to suggest a pair of tonal gestures in B \flat minor (shown by arrows on the figure). A conventional goal-oriented rhythmic figure leads to the downbeat as “leading-tone” resolves to “tonic” in measure 1; the second gesture behaves similarly. The accompaniment in the strings of course completely denies such an interpretation; but are the implications of the melody entirely lost, or just embedded so deeply that it takes a kind of tonal archaeology to reveal them? I am tempted to suggest in this very limited context that hyperdissonance—melodic implications distorted or neutralized by the “chromatic” (really twelve-tone) context—is so fully incorporated into the language of the piece that it is insoluble. The tension is frozen in place, so to speak, and new harmonic processes are required to give shape to the music.

Of course, nothing of this sort occurs anywhere in Rachmaninoff’s works. Hyperdissonance is prepared; or, in the rare cases where a work begins hyperdissonantly (e.g. the Etude-Tableaux in D major, Op. 39, No. 9 and the second movement of *The Bells*, both analyzed elsewhere in the dissertation), it is at least resolved. Even the dangling quasi-tonic at the end of “A-u!” comes nowhere near atonality.¹¹ Rachmaninoff’s is a Postromantic ethos. But seeds planted in the Postromantic grew into modernist plants. It is a quirk of musicology that modernism is perhaps better understood than late Romanticism or Postromanticism. Continued work along lines suggested in the dissertation, undertaken without preconceptions or prejudices, might fill in some of the gaps.

* * *

Much remains to be done in the study of Rachmaninoff’s works. This dissertation has of necessity been limited in scope and subject. Rhythm, texture, and orchestration have not been considered in any detail, and have in fact never been taken up with any rigor in the Rachmaninoff literature.

Also needed is a comprehensive comparison of Rachmaninoff and his schoolmate Skryabin. Steps were taken in Chapter 4 of the dissertation, but many more will be

¹¹ See again Figure 2.27.

necessary before century-old assumptions are replaced by solid conclusions. Skryabin was perhaps not as utterly radical as James Baker has suggested; and Rachmaninoff was surely not as utterly conservative as the literature has generally suggested.¹² When Rachmaninoff died in 1943, Skryabin had been dead nearly thirty years. Had Rachmaninoff also died in 1915 (just after the Op. 34 songs, *The Bells*, the Sonata No. 2, and the first set of Etudes-Tableaux, and with the Op. 38 songs and second set of Etudes-Tableaux on the horizon), he would likely be remembered quite differently. His style did not change radically after 1917; but this should be taken as refinement, not regression.¹³

Rachmaninoff's adjacency to the German Postromantic tradition was suggested by comparisons to Strauss and Mahler in Chapter 2. Further investigation will likely reveal more parallels, and confirm Rachmaninoff's position as a central figure in Postromantic music. It would be satisfying to see his perennial popularity in the concert hall reflected in a more widespread scholarly appreciation of his place in the repertory. As Rachmaninoff put it, "taken individually the people in an audience may be poor critics of music, but as a complete body, the audience never errs."¹⁴

¹² Baker, *The Music of Alexander Scriabin*.

¹³ For discussion of similar "refinement" in the apparently conservative late works of Richard Strauss, see Kaplan, "The Musical Language of Elektra," 176.

¹⁴ Bertensson and Leyda, *Sergei Rachmaninoff*, 362.

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