

AN ANALYTICAL STUDY OF PARADOX AND STRUCTURAL DUALISM IN THE MUSIC OF
LUDWIG VAN BEETHOVEN

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Beethoven's rich compositional language evokes unique problems that have fueled scholarly dialogue for many years. My analyses focus on two types of paradoxes as central compositional problems in some of Beethoven's symphonic pieces and piano sonatas. My readings of Beethoven's Piano Sonata No. 27 (Op. 90), Symphony No. 4 (Op. 60), and Symphony No. 8 (Op. 93) explore the nature and significance of paradoxical unresolved six-four chords and their impact on tonal structure. I consider formal-tonal paradoxes in Beethoven's Tempest Sonata (Op. 31, No. 2), Ninth Symphony (Op. 125), and Overture die Weihe des Hauses (Op. 124). Movements that evoke formal-tonal paradoxes retain the structural framework of a paradigmatic interrupted structure, but contain unique voice-leading features that superimpose an undivided structure on top of the "residual" interrupted structure.

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
LIST OF EXAMPLES	viii
CHAPTER 1. INTRODUCTION	1
1.1 Scope and Objectives	1
1.2 Outline.....	1
CHAPTER 2. PARADOX IN MUSIC: A CONTEXTUAL PERSPECTIVE ON THE EXISTING LITERATURE ON PARADOX	6
2.1 Introduction	6
2.2 Reale’s “Enharmonic Paradoxes”	6
2.3 Schmalfeldt and Form as a Process of “Becoming”	9
2.4 Imeson’s “Paradoxes” in Late Beethoven	12
2.5 Stilwell’s “Diametric Opposition”	16
2.6 Conclusion.....	17
CHAPTER 3. PARADOXES AND SCHENKERIAN ANALYSIS: A REVIEW OF SCHENKERIAN LITERATURE ON PARADOX AND STRUCTURAL DUALISM.....	19
3.1 Observations on the Schenkerian Analytical Process	19
3.2 Carl Schachter’s Either/Or	30
3.3 “Von Einem <i>Künstler</i> : Shapes in the Clouds”	34
3.4 Clarification of Terminology and Application	37
3.5 “Paradox” in the Present Study	40
3.6 Conclusion.....	43

CHAPTER 4. UNRESOLVED $\frac{7}{4}$ CHORDS: THREE ANALYTICAL CASE STUDIES OF PARADOXICAL $\frac{7}{4}$ CHORDS	45
4.1 Introduction	45
4.2 Beethoven’s Piano Sonata No. 27 in E minor, First Movement.....	46
4.3 Schenker’s Study of the Op. 90, First Movement.....	51
4.4 The Tonal Significance of the Unresolved $\frac{7}{4}$ Chord: Interrupted vs. Undivided Structure.....	60
4.5 A Possible Programmatic Aspect of the Unresolved $\frac{7}{4}$ Chord	62
4.6 Beethoven’s Symphony No. 4 in B \flat major, First Movement.....	63
4.7 Beethoven’s Symphony No. 8 in F major, Fourth Movement.....	68
4.8 The Significance of the C \sharp vs. D \flat Issue in the <i>Eighth Symphony</i>	74
4.9 Conclusion.....	82
CHAPTER 5. FORMAL-TONAL PARADOX I: THE FIRST MOVEMENT OF BEETHOVEN’S <i>TEMPEST</i> SONATA.....	84
5.1 Introduction	84
5.2 Formal Division vs. Tonal Continuation.....	91
5.3 Compositional Problems in the First Movement of Beethoven’s Piano Sonata No. 17, Op. 31, No. 2, “The <i>Tempest</i> ”.....	98
5.4 Burstein’s Analysis	110
5.5 An Alternative Voice-Leading Analysis of the Movement and the Manifestation of Formal-Tonal Paradox.....	118
5.5.1 Exposition and Development	118
5.5.2 Recapitulation	123
5.6 Conclusion.....	141

CHAPTER 6. FORMAL-TONAL PARADOX II: BEETHOVEN'S <i>NINTH SYMPHONY</i> , I.	146
6.1 Introduction	146
6.2 Incipient Interrupted Structure and Annihilated Interruption	147
6.3 Tonal Processes in an Unusual Recapitulation	152
6.4 The Role of the Subdominant.....	157
6.5 Diachronic Transformation and Formal-Tonal Paradox	161
6.6 Exposition.....	163
6.7 Development.....	175
6.8 Recapitulation	183
6.9 Coda	191
6.10 Conclusion	195
CHAPTER 7. FORMAL-TONAL PARADOX III: BEETHOVEN'S <i>OVERTURE DIE WEIHE DES HAUSES</i> , OP. 124	197
7.1 Introduction	197
7.2 Problematic Reprise in an Unusual Sonata-Form Movement.....	198
7.3 Achieving Structural Closure in the Recapitulation.....	206
7.4 The Significance of the Slow Introduction	210
7.5 The Significance of G# in the Development.....	221
7.6 Monothematic Exposition	224
7.7 Conclusion.....	226
CHAPTER 8. CONCLUSION: PARADOXES IN BEETHOVEN'S PERSONA AND IDEOLOGY	230
8.1 Introduction	230

8.2 Two Types of Paradoxes and the Corresponding Interpretations	230
8.3 Beethoven's Romance Paradox.....	232
8.4 Beethoven's Rapport with Mentors	236
8.5 Beethoven's Ideology	239
8.6 Final Thoughts.....	245
BIBLIOGRAPHY	248

LIST OF EXAMPLES

Example 2.1 Reale’s analysis of the <i>Appassionata</i> Sonata (Op. 57)	8
Example 3.1 J.S. Bach, French Suite, No. 2, mm. 16-23, two component linear strands in the bass.....	20
Example 3.2 J.S. Bach, French Suite, No. 2, mm. 16-24, Beach’s analysis.....	21
Example 3.3 J.S. Bach, French Suite, No. 2, mm. 1-4, parallel tenths.....	22
Example 3.4 Bach, French Suite, No. 2, mm. 17-23, Beach’s rhythmic reduction and voice-leading analysis.....	23
Example 3.5A Brahms, <i>Immer leiser</i> , Op. 105, No. 2, mm. 1-3	25
Example 3.5B Brahms, <i>Immer leiser</i> , mm. 1-3, Jackson’s analysis of the initial harmony as a tonic $\frac{5}{4}$ chord.....	25
Example 3.5C Brahms, <i>Immer leiser</i> , mm. 1-3, Jackson’s analysis of the initial harmony as a cadential $\frac{5}{4}$ chord.....	26
Example 3.6A Schachter’s analysis of the bass motion in Mozart’s Piano Concerto No. 4, K. 491, II as two cadences.....	30
Example 3.6B Schachter’s “middleground sketch” of Mozart’s K. 491, II.....	31
Example 3.7 Schachter’s “genuine double-meaning” shown in three graphs.....	32
Example 3.8A Slottow’s “Reading 1”	35
Example 3.8B Slottow’s “Reading 2”	35
Example 3.8C Slottow’s “Reading 3”	36
Example 4.1 Beethoven’s E minor Piano Sonata, Op. 90, I, mm. 129-149	47
Example 4.2A Graph of the unresolved $\frac{5}{4}$ chord as a “tonic” $\frac{5}{4}$ chord	48
Example 4.2B Graph of the unresolved $\frac{5}{4}$ chord as a cadential $\frac{5}{4}$ chord	49
Example 4.3A Elias’s initial graph of the paradoxical $\frac{5}{4}$ chord.....	53
Example 4.3B Transcription of Example 4.3A.....	53

Example 4.4A Schenker's revised reading of the development and recapitulation (foreground).....	55
Example 4.4B Schenker's revised reading of the development and recapitulation (middleground).....	55
Example 4.4C Transcription of Example 4.4B	56
Example 4.5A Schenker's third reading of the development and recapitulation.....	57
Example 4.5B Transcription of Example 4.5A.....	58
Example 4.6A Schenker's deep middleground analysis of Beethoven's Op. 90, I	59
Example 4.6B Transcription of Example 4.6A.....	59
Example 4.7A Voice-leading graph of Beethoven's Op. 90, I (with interruption)	61
Example 4.7B Voice-leading graph of Beethoven's Op. 90, I (without interruption) 62	
Example 4.8 Unresolved $\frac{5}{4}$ chord in Beethoven's Symphony No. 4, I, mm. 303-313 ..	64
Example 4.9A. Voice-leading graph of Beethoven's Symphony No. 4, I, with interruption and implied resolution to V	66
Example 4.9B Voice-leading graph of Beethoven's Symphony No. 4, I, without interruption	66
Example 4.10 Beethoven's Symphony No. 8, IV, mm. 343-347.....	69
Example 4.11 Typical resolution of a cadential $\frac{5}{4}$ chord in D major.....	70
Example 4.12A: Beethoven's Symphony No. 8, IV, mm. 346-352	71
Example 4.12B Block-chord reduction of the excerpt in Example 4.12A.....	71
Example 4.13 Implied resolution of the unresolved $\frac{5}{4}$ chord to the dominant of D major	72
Example 4.14 Voice leading from the unresolved $\frac{5}{4}$ chord implies a $D\flat$	73

Example 4.15 Beethoven, Symphony No. 8, IV, mm. 11-18	75
Example 4.16 Voice-leading graph of Beethoven's Symphony No. 8, IV, mm. 219-236, enlargement of the unruly C# from the exposition.....	77
Example 4.17 Beethoven, Symphony No. 8, IV, mm. 367-375.....	80
Example 4.18 Voice-leading motions in the first movement of Beethoven's <i>Eighth Symphony</i> that foreshadow the implied C# and Db in the finale	81
Example 5.1 The paradigmatic alignment of formal and tonal procedures in sonata-form movements (via <i>Suurpää</i>)	87
Example 5.2 Laufer's formal-tonal paradigms for sonata-form movements.....	89
Example 5.3 Bach, Partita No. 3 for Unaccompanied Violin, <i>Gavotte en Rondeaux</i> , mm. 60-65	94
Example 5.4 Schachter's analysis of the Bach Partita No. 3 for Unaccompanied Violin, <i>Gavotte en Rondeaux</i> , mm. 60-65	95
Example 5.5A Laufer's paradigmatic 3-line model for minor-mode sonata form movements	99
Example 5.5B Laufer's paradigmatic 5-line model for sonata-form movements	100
Example 5.6 Voice-leading in the exposition of the <i>Tempest</i> sonata	102
Example 5.7 Laufer's <i>Figure viii</i> : minor V converted to major V at the end of the development section.....	103
Example 5.8 Voice leading in the exposition of the <i>Tempest</i> sonata and hypothetical formal- tonal plan for the movement.....	104
Example 5.9A Laufer's reading of the <i>Tempest</i> sonata, I, mm. 65-179	106
Example 5.9B Laufer's reading of the <i>Tempest</i> sonata, I, streamlined.....	107
Example 5.10 Burstein's analysis of Beethoven's <i>Tempest</i> Sonata, I, mm. 87-121..	110
Example 5.11 Burstein's reading of dominant prolongation, which extends from the second theme group past the recapitulation	112

Example 5.12 Burstein’s voice-leading graph showing a “deep-level tonic” return at the recapitulation.....	113
Example 5.13A Burstein presents two different graphs of the first movement of the <i>Tempest</i>	116
Example 5.13B Laufer’s reading of the movement, streamlined for demonstration purposes	117
Example 5.14 Large-scale chromatic voice exchange, mm. 3-93	120
Example 5.15 Voice-leading graph of the <i>Tempest</i> sonata, I, mm. 93-117	122
Example 5.16 Voice-leading graph of the <i>Tempest</i> sonata, I, mm. 143-161	126
Example 5.17A Initial presentation of the arpeggio motive, X, mm. 1-2.....	130
Example 5.17B Large-scale manifestations of the motive X in the <i>Tempest</i>	130
Example 5.18 Voice-leading graph of the <i>Tempest</i> sonata, mm. 3-217	131
Example 5.19 Important motives in the opening of the <i>Tempest</i> sonata.....	134
Example 5.20A Burstein’s voice-leading analysis of the opening <i>Allegro</i> theme.....	135
Example 5.20B Voice-leading graph of Beethoven’s <i>Tempest</i> sonata, I, mm. 1-21..	136
Example 5.20C Beethoven’s <i>Tempest</i> sonata, mm. 21-22.....	135
Example 5.21 Voice-leading graph of Beethoven’s <i>Tempest</i> sonata, I, mm. 3-193..	137
Example 5.22 Voice-leading analysis of Beethoven’s <i>Tempest</i> sonata, I, mm. 3-217, the descent of the <i>Urlinie</i>	139
Example 6.1 Beethoven’s <i>Ninth Symphony</i> , I, deep middle-ground graph showing the incipient interrupted structure.....	148
Example 6.2A Beethoven’s <i>Ninth Symphony</i> , mm. 296-302	149
Example 6.2B Paradigmatic models for sonata-form movements in D minor	149
Example 6.3 Deep middleground graph of Beethoven’s <i>Ninth Symphony</i> , I, mm. 19-301	150
Example 6.4 Deep middleground graph of Beethoven’s <i>Ninth Symphony</i> , I, mm. 17-419	153

Example 6.5A Beethoven's <i>Ninth Symphony</i> , I, mm. 120-127	156
Example 6.5B Voice-leading graph of the <i>Ninth Symphony</i> , I, mm. 19-315	156
Example 6.6 Enharmonic re-interpretation of the B \flat dominant seventh chord as a Ger +6 chord.....	158
Example 6.7 Voice-leading graph showing the exchange from the subdominant in m. 178 bridging over the thematic reprise and typical point of interruption	159
Example 6.8 Beethoven's <i>Ninth Symphony</i> , I, mm. 13-17	165
Example 6.9 Voice-leading graph of Beethoven's <i>Ninth Symphony</i> , I, mm. 1-35.....	167
Example 6.10 Beethoven's <i>Ninth Symphony</i> , I, mm. 29-35	168
Example 6.11 Voice-leading graph, Beethoven's <i>Ninth Symphony</i> , I, mm. 35-63.....	169
Example 6.12 Voice-leading graph, Beethoven's <i>Ninth Symphony</i> , I, mm. 1-80	171
Example 6.13 Voice-leading graph, Beethoven's <i>Ninth Symphony</i> , I, mm. 80-105..	172
Example 6.14 Voice-leading graph, Beethoven's <i>Ninth Symphony</i> , I, mm. 80-150..	173
Example 6.15 Voice-leading graph, Beethoven's <i>Ninth Symphony</i> , I, mm. 160-210, development section (first portion)	176
Example 6.16 Voice-leading graph, Beethoven's <i>Ninth Symphony</i> , I, mm. 202-253, development (middle portion).....	177
Example 6.17 Voice-leading graph, Beethoven's <i>Ninth Symphony</i> , I, mm. 259-301, development section (last section)	179
Example 6.18A Voice-leading graph, Beethoven's <i>Ninth Symphony</i> , I, mm. 19-301, deep middleground analysis of the development section	182
Example 6.18B Voice-leading graph, Beethoven's <i>Ninth Symphony</i> , I, mm. 210-275, intervening progressions break up the parallel fifths in the middleground.....	183
Example 6.19 Beethoven's <i>Ninth Symphony</i> , I, mm. 319-323	185
Example 6.20 Voice-leading graph of Beethoven's <i>Ninth Symphony</i> , I, mm. 301-377, recapitulation (first portion)	185

Example 6.21A Voice-leading graph of Beethoven's <i>Ninth Symphony</i> , I, mm. 301-407, recapitulation (second portion)	189
Example 6.21B Parallel sixths in Beethoven's <i>Ninth Symphony</i> , I, mm. 401-407.....	190
Example 6.22 Voice leading in Beethoven's <i>Ninth Symphony</i> , I, mm. 490-497	192
Example 6.23 Beethoven's <i>Ninth Symphony</i> , mm. 513-515.....	193
Example 7.1 Middleground voice-leading graph of Beethoven's Piano Sonata No. 8 in C minor (Op. 13, <i>Pathétique</i>).....	200
Example 7.2 Voice-leading graph of Beethoven's Op. 124, mm. 89-185ff.....	201
Example 7.2 Voice-leading graph of Beethoven's Op. 124, mm. 89-185ff.....	201
Example 7.3 Voice-leading graph of Beethoven's Op. 124, mm. 89-207.....	204
Example 7.4 Voice-leading graph of Beethoven's Op. 124, mm. 176-207	206
Example 7.5A Voice-leading graph of Beethoven's Op. 124, mm. 225-239.....	207
Example 7.5B Voice leading in Beethoven's Op. 124, mm. 257-263.....	209
Example 7.5C Middleground voice-leading graph of Beethoven's Op. 124, mm. 239-263	209
Example 7.6 Voice-leading graph of Beethoven's Op. 124, mm. 5-12	212
Example 7.7 Voice-leading graph of Beethoven's Op. 124, mm. 89-166.....	213
Example 7.8A Voice-leading graph of Beethoven's Op. 124, mm. 1-20	214
Example 7.8B Voice-leading graph of Beethoven's Op. 124, mm. 89-207	215
Example 7.9 Voice-leading graph of Beethoven's Op. 124, mm. 207-238.....	217
Example 7.10 Voice-leading graph of Beethoven's Op. 124, mm. 239-265	219
Example 7.11 Voice-leading graph of Beethoven's Op. 124, mm. 89-278.....	220
Example 7.12 Beethoven's Op. 124, mm. 32-36	221
Example 7.13 Voice-leading graph of Beethoven's Op. 124, mm. 90-173	222

Example 7.14A Suurpää's generic paradigm for major-mode sonata-form movements
..... 224

Example 7.14B Laufer's paradigms for major-mode sonata-form movements..... 225

CHAPTER 1

INTRODUCTION

1.1 Scope and Objectives

Approaching Ludwig van Beethoven's music from a Schenkerian perspective is by no means a new endeavor.¹ In fact, some theorists might argue that Schenker's work on Beethoven was paramount in the formulation of his theories on the structure of tonal music published in *Der Freie Satz (Free Composition)* and in other essays such as *Das Meisterwerk in der Musik*.² This dissertation will revisit some of Beethoven's piano sonatas, symphonies, and orchestral pieces that have already received significant scholarly attention in journal articles, books, and/or collections of essays. It seeks to open fresh analytical perspectives by considering paradox as a focal compositional problem in Beethoven.

1.2 Outline

Since paradoxes can take many forms in Beethoven's music, the dissertation is divided into chapters that detail two different types of paradoxes and their corresponding structural implications in numerous analytical case studies. At the most basic level,

¹ Schenker's published analyses of Beethoven's music are some of his most detailed and lengthy texts, which would strongly suggest that he spent many hours listening to, performing and working with Beethoven's music while crafting and developing his theories.

² Heinrich Schenker, *Der Freie Satz* (Vienna: Universal, 1935); Heinrich Schenker, *Free Composition*, trans. and ed. Ernst Oster (New York: Longman, 1979); Heinrich Schenker, *Das Meisterwerk in der Musik*, 3 vols. (Munich: Drei Masken, 1925, 1926, 1930, reissued as 3 vols. in one slightly reduced facsimile, Hildesheim: Georg Olms, 1974); Heinrich Schenker, *The Masterwork in Music*, ed. William Drabkin (Cambridge: Cambridge University Press, 1994-7). Schenker's desire to publish his own edition of Beethoven piano sonatas, his notes, and his most detailed essays that lead up to *Free Composition* suggest a profound interest and engagement with Beethoven's music during the formation of his theories on the structure of tonal music.

paradoxes exist when one musical passage (or movement) evokes two self-consistent, but conflicting, interpretations of tonal structure. However, the opposing interpretations unearthed in each type of paradox are different.

Chapter 4 offers a precise definition of paradoxical “unresolved $\frac{5}{4}$ chords” and Chapter 5 defines “formal-tonal” paradoxes. The analytical case studies regarding paradoxical unresolved $\frac{5}{4}$ chords outline their nature and significance in Beethoven’s *Piano Sonata No. 27* (Op. 90), *Symphony No. 4* (Op. 60), and *Symphony No. 8* (Op. 93). In all three excerpts, the analysis not only places the paradoxical $\frac{5}{4}$ chords within the larger tonal framework of each movement, but also discusses salient details that figure prominently in the interpretation of harmony and voice leading.

The discussion in Chapters 5, 6, and 7 focuses on “formal-tonal” paradoxes, the second type of paradox, in which voice-leading motions annihilate an incipient interrupted structure in a sonata movement, composing-over formal divisions, and superimposing an undivided structure upon the remnants of an interrupted structure. Even though “formal-tonal” paradoxes arise via different voice-leading techniques, all of the formal-tonal paradoxes are central compositional problems, which permeate multiple levels of structure in each analytical case study. Chapter 5 discusses “formal-tonal paradox” in the first movement of Beethoven’s *Tempest Sonata* (*Piano Sonata No. 17*, Op. 31, No. 2), Chapter 6 explores the first movement of the *Ninth Symphony* (Op. 125), and Chapter 7 considers a third manifestation of “formal-tonal paradox” in the *Overture die Weihe des Hauses* (*The Consecration of the House Overture*, Op. 124).

Since this study is not the first to apply the term “paradox” to music, Chapter 2 addresses pertinent secondary literature on “paradox” in music, especially those

publications that engage the term in relation to the analysis of tonal music as well as those texts that suggest a connection between Beethoven and paradox. Even though many existing studies present convincing arguments about the nature of paradox in music and its potential manifestations, Chapter 2 delineates how the analytical approaches in this study differ, and uncovers the ways in which this argument for paradox treads new ground.

Chapter 3 establishes a definition of paradox, specifically within the realm of modern Schenkerian theory. In order to arrive at a working definition of the term, Chapter 3 traces significant excerpts and examples from important Schenkerian scholars, most notably Carl Schachter, Timothy Jackson, and Stephen Slottow. These three authors establish important precedents upon which this dissertation builds.³ Schachter refers to a “genuine double-meaning” in his “Either/Or” article from *Unfoldings*. He argues that there can be two valid ways to hear a particular progression or a large-scale tonal plan, but his “genuine double-meaning” does not necessarily convey an inherent element of contradiction. Instead, two readings of voice leading are part of his “Both/And” formation, which does not consider the two interpretations as necessarily conflicting. Timothy Jackson employs the terms “music paradoxes,” “structural dualism,” and “structural plurality” in his discussion of passages in Brahms. He argues that “self-consistent but mutually exclusive interpretations are simultaneously suggested by the same music” in the

³ The important articles that form the foundation for this study include: Timothy Jackson, “Diachronic Transformation in Brahms’ Haydn Variations,” in *Schenker Studies 2*, ed. Carl Schachter and Hedi Siegel (Cambridge: Cambridge University Press, 1999), 239-75; Timothy Jackson, “*Hinauf strebt’s*: Song Study with Carl Schachter,” in *Structure and Meaning in Tonal Music: Festschrift in Honor of Carl Schachter*, ed. L. Poundie Burstein and David Gagné (Hillsdale, NY: Pendragon Press, 2006), 196; Stephen Slottow, “Von einem *Künstler*: Shapes in the Clouds,” in *Res Musica 3* (2011), 123-33; Carl Schachter, “Either/Or,” in *Unfoldings* (Oxford: Oxford University Press, 1999), 121-33.

opening of Brahms' *Immer leiser*.⁴ Stephen Slottow discusses the merits of considering alternative readings in his analysis of Clementi's G major *Sonatina* (Op. 36, No. 2). He outlines three different ways of hearing the development section and observes how salient features of the music accentuate different ways of hearing the voice leading. Despite the fact that the readings convey three distinct interpretations of tonal structure in the development, Slottow contends that all three are "viable" readings, each of which can be supported by citing different structural features of the music.⁵ Schachter, Jackson, and Slottow all establish important precedents for this analytical study. Chapter 3 discusses their arguments further and establishes the conditions of what constitutes "paradox," given the Schenkerian principles outlined in the aforementioned publications.

The last section, Chapter 8, draws conclusions from the analyses presented in Chapters 4-7 and explores extra-musical dimensions of Beethoven's career that could have spurred a fascination with different types of paradoxical formations. Chapter 8 transcends the analysis of paradox as a technical issue in Beethoven's compositions and establishes semantic arguments that re-contextualize the paradoxes in the music. Paradox is an

⁴ Jackson, *Diachronic Transformation*, 247.

⁵ Slottow, *Shapes in the Clouds*, 125-132. All three of the authors mentioned here discuss similar propositions that deal with different interpretations of a single passage. Their respective arguments possess their own nuanced perspective on the issue of multiple readings in different contexts. Ultimately, Timothy Jackson's arguments about structural dualism in the opening of the Brahms song come closest to the premises of this study. While the claims about the unresolved $\frac{3}{4}$ chords in the present study are built on those Schenkerian premises, the analytical perspectives in this dissertation discuss both a new significance of paradoxes in a broader perspective and derives conclusions regarding formal-tonal paradoxes from older precedents. The purpose of citing all three authors in this introduction is to simply outline the basis for the ensuing discussion in the forthcoming chapters; the intent is not to conflate their approaches or suggest that their theories are identical.

overwhelming part of Beethoven's persona, and the contradictions and overlapping tonal plans in his music emulate many facets of his disposition.

The conclusion also interprets the large-scale expressive trajectories of the pieces discussed in Chapters 5, 6, and 7 in an attempt to understand the relationship between the formal-tonal paradoxes and semantics of each work. Since formal-tonal paradoxes figure prominently into the contradictions and overlap in the large-scale tonal plan of a movement, the conclusion considers the possibility of tonal contradictions as metaphors for paradoxes that flooded Beethoven's psyche and infiltrated numerous aspects of his personal and professional life. Therefore, this analytical study not only explicates the nature and significance of paradox in Beethoven's music as a technical issue, but also argues that paradox is a vital part of his style, and that by embracing the paradoxes in the music, one can glean fresh analytical perspectives and interpretations of his music.⁶

⁶ The phrase "modern theory and analysis of tonal music" applies to recent developments and progress in music theory, but particularly in the evolution of Schenkerian theory and voice-leading analysis of tonal structure as it relates to form and sonata theory.

CHAPTER 2

PARADOX IN MUSIC:

A CONTEXTUAL PERSPECTIVE ON THE EXISTING LITERATURE ON PARADOX

2.1 Introduction

The existing literature on paradox in music ranges from passing references to more extensive studies and dissertations. This chapter evaluates selected publications that relate to musical paradox, but not in a specifically Schenkerian context.⁷ Furthermore, this chapter evaluates each author's methodology and terminology, specifying how it differs from or relates to the present analytical approach and case studies.⁸

2.2 Reale's "Enharmonic Paradoxes"

The most significant recent publication to approach the issue of paradox as it relates to the analysis of tonal music is Haley Britt-Beverburg Reale.⁹ Her dissertation, *Enharmonic Paradoxes in Classical, Neoclassical, and Popular Music*, discusses the concept of paradox in various musical contexts and genres. However, Reale's analysis focuses on one specific type of paradox, "enharmonic paradox." She describes how modal mixture expands the realm of pitch space using chromaticism, and then demonstrates how that expansion

⁷ Chapter 3 provides a more detailed context by detailing the relevant Schenkerian research on paradox in music.

⁸ Some of the authors discussed in this chapter do not use the term "paradox," but they are nonetheless significant because the concepts that they describe could be considered paradoxical (i.e. hearing one section of music as fulfilling two different form-functions simultaneously). Those issues are addressed further in the appropriate subsections of the chapter. Chapter 3 addresses the pertinent Schenkerian literature in order to arrive at a more precise definition of paradox for the purposes of this dissertation.

⁹ Haley Britt Beverburg Reale, "Enharmonic Paradoxes in Classical, Neoclassical and Popular Music" (Ph.D. diss., University of Michigan, 2011).

opens up the possibility for “enharmonic paradox.” In a moment of “enharmonic paradox,” one harmony can be conceived as two different, but enharmonically equivalent chords that function differently. One function comes from the key that preceded the paradoxical moment and the second function comes from the key that follows.¹⁰

Overall, Reale defines enharmonic paradoxes as “moments when certain pitch classes are spelled one way to relate diatonically back to a previous key and another way to relate diatonically forward to a new key.”¹¹ Reale locates enharmonic paradoxes in “symmetrical divisions of the octave, remote modulations through enharmonic respelling, or changes in function of a specific pitch class.”¹² Reale contends that a pitch can have, paradoxically, a diatonic approach *and* resolution in two different keys. She does not focus on the interaction between formal and tonal processes in her analysis.

To illustrate the way in which Reale describes the concept of “enharmonic paradox,” one of her analytical examples from Beethoven’s *Appassionata* Sonata in F minor (Op. 57) is reproduced below (Example 2.1). Reale provides a chordal reduction of the key areas that are tonicized in the development. All of the harmonies can be analyzed using Roman Numerals in the key of A \flat (major or minor), except for chord marked “enharmonic paradox” (E minor triad, E-G-B). Reale writes:

Once G, or A $\flat\flat$, is introduced, an enharmonic paradox presents itself; this is the same pitch that was controversial in...Chapter 1. G is the correct spelling for the leading tone in A \flat major or minor, but G cannot be part of a triad with F \flat and C \flat .¹³

¹⁰ In this context, chord function is represented by Roman numeral analysis.

¹¹ Reale, *Enharmonic Paradoxes*, 11.

¹² *Ibid.*, 50.

¹³ *Ibid.*, 52-3.

Example 2.1 Reale’s analysis of the *Appassionata* Sonata (Op. 57), development section

enharmonic paradox

Ab/ab: I i bVI ? iii I

By including Beethoven’s *Appassionata* Sonata as a “case study” in her discussion of enharmonic paradoxes, Reale accepts the premise that Beethoven’s music *can* be paradoxical. Reale’s examples from Beethoven’s Op. 57 speak to the importance of enharmonic double meaning in Beethoven’s music, highlighting an F \flat /E enharmonic issue that pervades more than one piece in Beethoven’s oeuvre.¹⁴ Reale discusses the significance of the F \flat /E issue as it relates to salient features of the movement as a whole, and she does not focus on the impact of large-scale voice-leading motions and the interaction of formal and tonal processes.¹⁵ Reale’s argument is built upon the concept of functional, Roman numeral analysis and she includes some multi-layered voice-leading analysis, but devotes her attention largely to salient features of the foreground and

¹⁴ The enharmonic issue of F \flat /E surfaces most notably in the second movement of Beethoven’s *Pathétique* sonata (Op. 13). The second movement is a rondo in the key of A \flat major, and a similar situation to the one described by Haley Reale occurs. The tonal area of E major occurs in the middle of the movement can be thought of as an enharmonic F \flat major, a modally inflected motion to bVI that Reale would likely claim to originate from A \flat minor.

¹⁵ *Ibid.*, 53.

preliminary middleground levels. Her premise that a harmony with a “diatonic approach and resolution” can be considered paradoxical is compelling, and explores entirely different kinds of problems than the formal-tonal issues that are under examination here.

2.3 Schmalfeldt and Form as a Process of “Becoming”

Janet Schmalfeldt discusses paradox implicitly; she refers to the dualistic nature of a passage or a self-contradictory section of music, but favors alternative terminology. Her theory of form as a process of “becoming” could be considered as one type of formal “paradox” in some pieces—two seemingly contradictory form-functional processes that occur in a single passage. For example, the introduction and the main theme of a sonata-form movement are typically two distinct formal sections.¹⁶ Schmalfeldt, however, hears the first 21 measures of Beethoven’s *Tempest* sonata (Op. 31, No. 2, I) as an introduction *becoming* a main theme. The introduction and main theme are not distinct sections, but instead one mutating section (mm. 1-21). Her concept of form as a process of “becoming” (represented by the “=>” symbol) applies directly to dual-functioning passages in form analysis. Thus, her label for the first section of the *Tempest* sonata is: “introduction => main theme.”¹⁷ Since the introduction “zone” and the main theme “zone” are normally

¹⁶ The introduction and the main theme may often be linked by a transition or a short insertion. Overall, an introduction section does not necessarily return, whereas the first theme group will inevitably return in the paradigmatic design of a sonata-form movement.

¹⁷ Janet Schmalfeldt, *In the Process of Becoming: Analytic and Philosophical Perspectives on Form in Early Nineteenth-Century Music* (New York: Oxford University Press, 2011).

conceived as discrete spaces in a sonata-form movement, the idea of one section that conveys both functions could be considered paradoxical.¹⁸

Schmalfeldt presents a compelling argument for interpreting form as a process of “becoming,” but she does not explicitly unravel paradoxical issues or dualistic features of the tonal structure. Her argument problematizes issues of form, and she commits to one possible reading of tonal structure in problematic passages, consequently masking some of the paradoxical issues evoked by the relationship between the form and structure of the music. According to a review published by Seth Monahan in *Music Theory Online*, Schmalfeldt struggles to “reconcile her sign for “becoming” (=⇒) with Schenkerian methodology.” Monahan’s review applauds Schmalfeldt’s overarching arguments, but also notes her inability to showcase form as a “process of becoming” using Schenkerian graphs.¹⁹

One issue that Monahan addresses in his review is the inherent conflict between the “synchronic fixity of Schenkerian graphs and the protean fluidity of Dahlhausean analytical prose.”²⁰ In other words, a typical Schenkerian voice-leading analysis depicts a single, cohesive reading of the tonal structure in a passage or movement—in order to discuss and fully comprehend sections of music that conjure structural dualism, one must consider and

¹⁸ The term “zone” comes from James Hepokoski and Warren Darcy’s treatise on form: James Hepokoski and Warren Darcy, *Elements of Sonata Theory* (New York: Oxford University Press, 2006).

¹⁹ Seth Monahan, “Review of Janet Schmalfeldt: *In the Process of Becoming: Analytical and Philosophical Perspectives on Form in Early Nineteenth-Century Music* (Oxford: Oxford University Press, 2011),” *Music Theory Online* 17, no. 3, (October 2011).

²⁰ *Ibid.*, 1-7.

present more than one Schenkerian interpretations of the passage in question.²¹ This dissertation does not attempt to reconcile Schmalfeldt's concept of "form as process" with Schenkerian methodology. Instead, this analytical study will highlight paradoxes that occur either 1) within the tonal structure of the music alone, by evoking more than one Schenkerian interpretation of harmony and voice leading (paradoxical unresolved ♯ chords), or 2) as the result of voice-leading processes that "compose-over" formal boundaries (formal-tonal paradoxes).²²

Perhaps Monahan's critique of Schmalfeldt has contributed to the lack of scholarship on paradox in the Schenkerian realm, because of his comments on the "fixity" of Schenkerian voice-leading graphs.²³ Nonetheless, Schmalfeldt presents compelling arguments in her analysis of mutable forms, and even though she does not engage the term "paradox" explicitly, she indeed hears an element of duality and contradiction in problematic passages in Beethoven's music.²⁴

²¹ Traditionally, Schenkerian analysts have presented two vertically aligned graphs in a single example, in order to show either 1) different structural levels in a given voice-leading analysis or 2) different readings of a given excerpt or passage.

²² Formal-tonal paradoxes are discussed further in Chapters 3-7, but, at their core, formal-tonal paradoxes involve the superimposition of an undivided tonal structure upon the remnants of an incipient interrupted (divided) structure.

²³ The three Schenkerian analysts mentioned in Chapter 1 (Schachter, Jackson, Slottow) are cited again in Chapter 3; based on their arguments, they could easily disagree with some of Monahan's points.

²⁴ This sub-section of Chapter 2 (Section 2.3) should not be thought of as a critique of Schmalfeldt's form analysis, which is very sophisticated and insightful. One significant difference between her work and mine is that I focus on structural dualism—two-fold readings of the tonal structure that seem contradictory, but somehow co-exist in a movement or passage. Mark Evan Bonds' discussion of "paradox of musical" form is relevant to Schmalfeldt's arguments, and also to the present study. Although Bonds uses the term "paradox" and Schmalfeldt does not, Bonds is referring to generative and conformational approaches to musical form, in his attempt to arrive at a "general theory of form that can account for conventional patterns and at the same time do justice to the

2.4 Imeson's "Paradoxes" in Late Beethoven

Sylvia Imeson considers paradox as a pervasive aspect of Beethoven's late style.²⁵ She analyzes two of Beethoven's late string quartets, his String Quartet No. 13 in B \flat major (Op. 130) and his String Quartet No. 15 in A minor (Op. 132). Although Imeson also accepts the premise that Beethoven's music can be paradoxical, she does not see the emergence of "paradox" as a noteworthy feature of Beethoven's style until the third (or final) phase of his career. Consequently, Imeson does not focus on early or middle period works in detail.²⁶

Imeson uses William Empson's *Seven Types of Ambiguity* as a basis for defining the term paradox, and consequently she interprets the terms "ambiguity," "contrast," and "paradox" as very close relatives.²⁷ In fact, Imeson uses the term "contrast" to *justify* the existence of paradox in music. Imeson discusses Beethoven's A-minor String Quartet (Op. 132):

A still stronger contrast occurs with the arrival in m. 48 of the lyrical, beautifully simple second theme... This deliberate juxtaposition of seemingly disparate musical elements offers support for the idea that Beethoven was exploring "expression of

immense diversity that exists within the framework of these patterns [rhetorical structure]" (p. 29). Many late 18th century pieces require careful attention because they do not unfold according to conformational approaches to form, but Bonds is not referring to the works themselves as paradoxical; instead, he is discussing a paradox in *approaches* to form analysis. Mark Evan Bonds, "The Paradox of Musical Form," in *Wordless Rhetoric: Musical Form and the Metaphor of the Oration* (Cambridge: Harvard University Press, 1991).

²⁵ Sylvia Imeson, *The Time Gives it Proofs: Paradox in the Late Music of Beethoven*, (New York: American University Series, 1996).

²⁶ Beethoven's Op. 31, No. 2 lies outside the scope of Imeson's study because it was composed in 1801-1802, a time period which is considered to be either the last part of Beethoven's "early" period or the beginning of his "middle" period. Making decisions on issues of periodization in Beethoven can be quite problematic, as discussed in my conference paper, "Before the Heroic E-flat," delivered at the *Florida State Music Theory Forum*, January 2015.

²⁷ Imeson, *The Time Gives it Proofs*, 52-63; William Empson, *Seven Types of Ambiguity* (New York: New Directions, 1947), 48-57.

music's potential for diversity rather than organic coherence;" that these themes can be brought together in this way implies an element of reconcilability, and thus is paradoxical...²⁸

However, "contrast" is not a basis for justifying the existence of a paradox in music. A section of a piece that *contrasts* with the material that came before it may *or may not* be paradoxical. Many pieces in the classical period present stark contrasts from one section to another or contrast the prevailing models of form and structure in different ways, yet they are not all paradoxical. Furthermore, it seems problematic to qualify one section as a "contrasting" relative to dialogic "norms" when the "norms" are developed from such a narrowly chosen repertory.²⁹

The definition of paradox upon which Imeson founds her analysis is too loose; paradox is more than simply a contrasting or an ambiguous section of music. The essence of any paradox lies in an opposing duality—a binary contradiction (not a contrast) that is somehow "true" (or valid). Since a given section of music cannot be "true" or "false," the present analytical study finds elements of voice leading and salient features in the music that support the contradiction and substantiate both dimensions of the paradox. As a result, paradoxes epitomize significant compositional problems that unravel over the

²⁸ Imeson, *The Time Gives it Proofs*, 128.

²⁹ Dialogic norms of the Classical period in the history of Western music generally follow Haydn, Mozart and Beethoven. In Hepokoski and Darcy's *Elements of Sonata Theory*, the main source for analytical examples is Mozart's music. James Hepokoski and Warren Darcy, *Elements of Sonata Theory: norms, types, and deformations in the late eighteenth century sonata* (Oxford: Oxford University Press, 2006). For a more detailed description of these concepts and a breakdown of analytical examples from *Elements of Sonata Theory* by composer, see Paul Wingfield, "Beyond Norms and Deformations: Towards a Theory of Sonata Form as reception history," published in *Music Analysis* 27, 1 (2008), 136-77.

course of a movement.³⁰ With Imeson's approach, there could be various aspects of so many different pieces that could be classified as paradoxical, but she writes as if her definition could only be applied to a handful of pieces from late Beethoven.

One aspect of Imeson's methodology that broadens her definition of "paradox" is her interpretation of the terms "ambiguity" and "paradox." One section of a piece might be considered "ambiguous" according to her approach, but in the present study, it would not qualify as paradoxical. If the underlying structure of a particular passage of music was genuinely unclear or indeterminate, then the term "ambiguous" could be applied appropriately; but in order to have a *paradox* in music, the structure of the passage in question must, conversely, be quite clear! The passage must evoke two clear (unambiguous) but *opposing* structures that might otherwise be conceived as mutually exclusive. Therefore, for the purposes of this study, in order to be classified as paradoxical, the two seemingly opposed readings are *both* supported by salient features of the harmony and voice-leading, and they struggle to co-exist in a given passage or movement.³¹

In order to clarify the meaning of paradox in this dissertation as distinct from Imeson's, consider one example from Beethoven's Piano Sonata No. 27 in E minor (Op. 90). In the first movement of that piano sonata, the retransition section features an unresolved ♯

³⁰ This definition is supported by the Merriam Webster Dictionary definition of the term paradox, which states: "an argument that apparently derives self-contradictory conclusions by valid deduction from acceptable premises." "Paradox," *Merriam-Webster.com*. 2014. <http://www.merriam-webster.com> (24 June 2014).

³¹ In each type of paradox, this principle is applied differently. For example, with formal-tonal paradox, some features of the music reveal an underlying interrupted structure that is never fully supplanted by an undivided structure, which is superimposed atop the divided structure. Paradoxical "unresolved ♯ chords," on the other hand, evoke both tonic (I[♯]) and dominant (V[♯]) functions due to idiosyncratic voice-leading procedures. Their dual role can be substantiated, or perhaps even intensified, by their position in the form of a given movement or passage.

chord that qualifies as paradoxical. The unresolved $\frac{5}{4}$ chord is paradoxical only because it can be heard as two types of $\frac{5}{4}$ chords that would normally be considered to be mutually exclusive: the cadential $\frac{5}{4}$ chord and the tonic $\frac{5}{4}$ chord. Those two types of $\frac{5}{4}$ chords have fundamentally *different* structural implications; the cadential $\frac{5}{4}$ chord is an elaboration of the dominant ($V\frac{5}{4}$), and the tonic (or “consonant”) $\frac{5}{4}$ chord fulfills the tonic function ($I\frac{5}{4}$) with a bass that substitutes for the tonic note.³² Since the $\frac{5}{4}$ chord is left unresolved in Op. 90 (first movement), it simultaneously conveys both dominant and tonic functions—it seems like it might resolve to the dominant, but the dominant harmony never materializes and the $\frac{5}{4}$ chord elides directly into the tonic at the recapitulation. Thus, the evidence for both dominant and tonic functions justifies a claim of the paradoxical coexistence of $I\frac{5}{4}$ and $V\frac{5}{4}$. Furthermore, the position of the unresolved $\frac{5}{4}$ chord in the form of the piece enhances the paradox; the retransition typically prolongs the dominant and the recapitulation regularly re-establishes the tonic harmony. The paradoxical unresolved $\frac{5}{4}$ chord thus blurs the tonal distinction between the two sections and overrides what could have been a clearer sense of division in the movement.

Relative to this study, Imeson’s definition of paradox is much broader—in her approach, many harmonies could be considered “paradoxical.” For example, in her text, a given harmony could be considered paradoxical if it is simply left unresolved. Furthermore, even a difference in register could be evidence upon which a passage could be dubbed “paradoxical.” Consider the following text from Imeson’s book, in which she describes paradox in Beethoven’s Piano Sonata No. 7 in D major, Op. 10, No. 3:

³² Edward Aldwell and Carl Schachter, “ $\frac{5}{4}$ -chord techniques” in *Harmony and Voice Leading*, 4th ed. (Boston: Cengage, 2011), 146-157 and 305-325.

The jaunty trio offers a couple of surprises, in its use of extremely wide registral displacement in the left-hand melody, and its conclusion on an unresolved (at any rate, until the *Da Capo*) dominant seventh chord, followed by four beats of silence, thus prolonging a certain sense of ambiguity.³³

Overall, Imeson's analyses are less convincing because she applies seemingly inappropriate terminology to paradox in music. Her examples fit well within her definition of paradox, but it seems like her definition of paradox is so expansive that many pieces and sections of music (composed throughout Beethoven's oeuvre) would fit within her parameters. There are numerous passages in Beethoven's music in which harmonies are left unresolved or, furthermore, passages in which silence/rests create a similar "sense of ambiguity" that she hears in the Op. 10, No. 3 example. An argument that 1) suggests that those generalized features are particularly characteristic of Beethoven's "late" period compositions, and 2) groups them under the umbrella of "paradox," is quite different than mine.

2.5 Stilwell's "Diametric Opposition"

Although some authors present interpretations of paradox in Beethoven's music that substantially differ from the present study, research by Robynn Stilwell published in *Beethoven Forum 10* fits well within the parameters of my ensuing arguments. Stilwell regards Beethoven reception history as a "picture of a composer who is complicated enough to encompass diametrically opposed identities."³⁴ She also discusses the "myriad of dualities one finds in readings of Beethoven—dualities and contradictions that may be part of Western culture's obsession with either/or configurations but that powerfully

³³ Imeson, *The Time Gives it Proofs*, 49.

³⁴ Robynn J. Stilwell, "Hysterical Beethoven," *Beethoven Forum 10*, no. 2 (Fall 2003): 162-182.

impact cultural understanding of the man and his music.”³⁵ Even though Stilwell’s text is not focused on analytical remarks about specific features of harmony and voice leading, her discussion about the nature of duality and reconciliation of opposites in Beethoven is wholly relevant to the present study.

Stilwell shows how “dualities” and “contradictions” are a central part of the present understanding of Beethoven’s persona, which radiates from his music. Furthermore, Stilwell’s use of the term “either/or configurations” seems especially fitting. After all, Carl Schachter’s compilation of articles published as *Unfoldings* includes an entire chapter titled “Either/Or.”³⁶ Schachter’s discussion of “either/or” formations is analytically based, and given her use of the term, Stilwell might intuitively understand Schachter’s “either/or” as an important part of her argument in “Hysterical Beethoven.” Nevertheless, Stilwell not only accepts the premise that Beethoven’s music could be understood to be paradoxical, but also recognizes many elements of binary opposition as a central part of Beethoven’s music and reception history.

2.6 Conclusion

The publications addressed in this chapter all form arguments that interpret Beethoven’s music as paradoxical. Although some of the aforementioned authors include voice-leading graphs in their texts, the literature reviewed in this chapter is not explicitly Schenkerian. Even though each author supports his/her ideas in different ways and with different aims, all of the authors seem to accept the premise that Beethoven’s music can be

³⁵ Ibid., 162.

³⁶ Schachter, *Unfoldings*, 123-33.

paradoxical.³⁷ The authors discussed in Chapter 2 present arguments that are compelling within their own dominion, but they focus on different compositional problems than the paradoxes to be examined in depth here. Additionally, while there are various levels of analytical probity in the studies discussed here, their definitions and approaches to paradox are not directly applicable to the present study. Chapter 3 will address the Schenkerian methodology I will employ. Indeed, it will revisit pertinent analytical studies that are explicitly Schenkerian, including Carl Schachter's "Either/Or," in order to establish the analytical framework for the ensuing discussion of paradox in Beethoven's music in Chapters 4-7. By doing so, it seeks to construct a methodology with reference to the Schenkerian literature that applies directly to the examples of paradox to be explored.

³⁷ Schmalfeldt's article accepts the premise implicitly, by exposing dual-function formal processes that coexist in opposition to one another.

CHAPTER 3

PARADOXES AND SCHENKERIAN ANALYSIS:

A REVIEW OF SCHENKERIAN LITERATURE ON PARADOX AND STRUCTURAL DUALISM

3.1 Observations on the Schenkerian Analytical Process

The process of tracing voice-leading motions and linear progressions throughout multiple levels of tonal structure forces Schenkerian analysts to make hierarchical decisions about pitches and harmonies. Certain pitches are prominent in the middle and background levels of structure, while others are significant foreground phenomena. Even though an analyst may later revisit a piece of music and re-prioritize the structural significance of certain pitches or harmonies, the Schenkerian analyst ultimately strives to attain *one* cohesive, “personal best” reading of a piece of music (or movement).³⁸ A Schenkerian reading of a piece is therefore a singular, internally-consistent interpretation of voice-leading processes that unfold from the foreground level, through the middleground levels, and all the way to the background level of structure (the *Ursatz*).

In the process of making hierarchical decisions about voice leading, one of the most significant challenges facing the Schenkerian analyst is the “forked path.”³⁹ When one first hears a passage, more than one middleground linear progression could be considered valid,

³⁸ As discussed briefly in Chapter 1, Stephen Slottow describes how analysts consider multiple possible readings of particular passages, but they ultimately progress towards one unified, internally-consistent interpretation of a movement: “...from among the possible and plausible readings, Schenkerians usually try to find the ‘best’ reading, or at least, as Charles Burkhart once told me, a ‘personal best’ reading—which may change over time and upon further reflection.” Slottow, *Shapes in the Clouds*, 123-33. Slottow also refers to “forks in the road” in his discussion of Scarlatti’s Sonata in C-Major (K. 159, Longo 104). Stephen Slottow, “Forks in the Road: Teaching Scarlatti’s Sonata in C-Major (K. 159, Longo 104),” in *Journal of Music Theory Pedagogy* 21 (2007): 71-100.

³⁹ Schachter, *Unfoldings*, 122.

viable, and internally consistent. Perhaps at a deeper level, the prolongation of a given harmony could be understood in two (or more) different ways. Decisions about structural hierarchy are not always easy, and “forked paths” arise in nearly every Schenkerian analysis. Carl Schachter made the following observation in that regard:

Everyone with a little experience in Schenker’s approach learns that certain successions and combinations of notes inevitably create a forked path for the analyst, who must search for clues about which of two or more possible interpretations is the correct one...⁴⁰

In order to effectively demonstrate one type of “forked-path” that could arise in the Schenkerian analytical process, consider the following excerpt from Bach’s *French Suite No. 2*, BWV 813 (Example 3.1). The bass motion in mm. 17-23 consists of two component linear strands. As shown in Example 3.1, one of the lines descends stepwise from the F in m. 17: F – E \flat – D – C (m. 23) and a second line, beginning on D \flat in m. 18, also moves by step: D \flat – C – B \natural – C.⁴¹

Example 3.1 Bach’s *French Suite No. 2*, BWV 813, mm. 16-23: Two component linear strands in the bass voice present a “forked path” for the analyst.⁴²



⁴⁰ Ibid., 122.

⁴¹ David Beach, *Aspects of Schenkerian Theory* (New Haven: Yale University Press, 1983), 6-7.

⁴² The annotations that show both linear strands are included for the purposes of this demonstration, and they are not included in Beach’s published text. In his article, only the final voice-leading analysis is shown, although his text outlines an analytical sequence that arrives at the same conclusion described here.

In order to interpret the middleground voice leading in mm. 16-23, the bass line (from Example 3.1 above) must be evaluated in context of the harmony and contrapuntal framework of the entire passage. Although both linear strands are important, a closer examination of the entire excerpt reveals that the $D\flat - C - B\sharp - C$ line is subsidiary to the $F - E\flat - D - C$ line (Example 3.2). The subsidiary line, $D\flat - C - B\sharp$, supports $\frac{6}{5}$ chords, and the other line, $F - E\flat - D - C$, supports consonant harmonies. Both linear strands in the bass are part of a descending fifths sequence that occurs in mm. 17-23.⁴³ The $F - E\flat - D - C$ line connects to the F in the bass that precedes the first leg of the sequence (m. 16) and descends in parallel tenths with the top voice (shown in m. 17, 19, 21 and 23 in Example 3.2) until the sequence ends (first beat of m. 23). The prevailing harmonic motion reveals that the truest artistic interpretation of the passage hears the $F - E\flat - D - C$ line at the middleground level. Example 3.2 reproduces David Beach's analysis of the Bach excerpt (mm. 16-24).⁴⁴

Example 3.2 Bach French Suite No. 2, mm. 16-24: David Beach's analysis shows the significant harmonic motion and the parallel tenths in the outer voices.

The image shows a musical score for Example 3.2, which is a Bach French Suite No. 2, measures 16-24. The score is in 3/4 time and features a descending fifths sequence in the bass line. The top voice is marked with 'Cf. m. 2' and the bottom voice with 'm. 3' and 'm. 4'. Fingerings are indicated by numbers 8, 10, and (7) in the top voice, and 6, 5, 6, 5, 6, 5, 6, 4 in the bottom voice. The sequence of chords is F minor (m. 17), Bb dominant 6/5 (m. 18), Eb major (m. 19), Ab major 6/5 (m. 20), D0 (m. 21), G dominant 6/5 (m. 22), and C minor (first beat of m. 23).

⁴³ The root movement in descending fifths sequence unfolds as follows: F minor (m. 17)– $B\flat$ dominant $\frac{6}{5}$ (m. 18)– $E\flat$ major (m. 19)– $A\flat$ major $\frac{6}{5}$ (m. 20)– D° (m. 21) – G dominant $\frac{6}{5}$ (m. 22)– C minor (first beat of m. 23).

⁴⁴ Beach, *Aspects of Schenkerian Theory*, 7.

A Schenkerian analyst must also consider how voice leading in all of the component parts of a given passage relates to tonal events throughout the entire movement (or piece). For example, in the Bach example, if one considers mm. 17-23 in context of the material that precedes it (mm. 1-4, Example 3.3), one will discover that the same parallel tenths from mm. 17-23 (F/A \flat – m. 17, E \flat /G – m. 19, D/F – m. 21, and C/E \flat – m. 23) also occur in mm. 2-3 (the tenths are marked in graphs (b) and (c), Example 3.3). Overall, Beach's analytical discussion of the Bach excerpt illustrates how multiple features of the music can lead the analyst to prioritize one linear strand over another and hear different layers of tonal structure. The F – E \flat – D – C line is clearly more structurally significant than the D \flat – C – B \natural – C line, even though both strands together constitute the bass line as it exists in the foreground.

Example 3.3 Bach French Suite, No. 2, mm. 1-4: The parallel tenths in mm. 16-23 emulate parallel tenths from mm. 2-3.⁴⁵

The image shows three staves of musical notation. Staff (a) is the original score for mm. 1-4. Staff (b) is a graph showing the bass line of mm. 2-3 with parallel tenths marked by dashed lines and the number '10'. Staff (c) is a graph showing the bass line of mm. 16-23 with parallel tenths marked by dashed lines and the number '10'. Arrows connect notes between the graphs to show structural parallels. Chord symbols 'c: i', 'ii⁶', 'V⁴', and 'i' are written below the staves.

⁴⁵ Beach, *Aspects of Schenkerian Theory*, 7.

As a result of the Schenkerian analytical process, one can confidently assert that the bass part in mm. 17-23 is *not* structurally “ambiguous,” nor is it “paradoxical.” Even though there are two component linear strands within the bass line in mm. 17-23, the counterpoint, salient features of the harmony, the sequence, and the preceding musical material all validate the structural supremacy of the F – E♭ – D – C line.⁴⁶ David Beach therefore marks it with stems in his analysis of voice leading (graph “b” in Example 3.4), which is vertically aligned with his rhythmic reduction (marked letter “a”).

Example 3.4 Bach’s French Suite, No. 2, mm. 17-23: David Beach’s rhythmic reduction and voice-leading analysis

The image displays two musical analyses of a passage from Bach's French Suite, No. 2, measures 17-23. Part (a) is a rhythmic reduction, showing the original notation with stems and fingerings (8, 10, (7), 10, (7), 10, (7), 10) in the treble clef and figured bass (4, 6/5, 6/5, 6/5, 6, 6) in the bass clef. A dashed line above the treble clef indicates a comparison to measure 2 ('Cf. m. 2'). Part (b) is a voice-leading analysis, showing the same passage with stems and a large slur over the treble clef line. It includes chord symbols (c: iv, V⁷) and measure numbers (16, 25, 29) in circles. A dashed line connects measure 25 in (a) to measure 25 in (b).

Voice leading in passages like the Bach excerpt conveys a multi-tiered, but *clear* tonal structure. Conversely, one might inquire whether it is possible to encounter a passage in which two different “readings” of a particular harmony might both seem equally

⁴⁶ Schachter, *Unfoldings*, 122.

compelling—in other words, a passage in which the musical context evokes structural dualism. Timothy Jackson is one author who has considered that analytical problem from a Schenkerian perspective.

Jackson's article from Carl Schachter's *Festschrift* discusses a unique $\frac{6}{4}$ chord that conveys a structural dualism in the Brahms's song *Immer leiser wird meine Schlummer* (Op. 105, No. 2, see Example 3.5A). Jackson shows how the extraordinary features of the opening measures do not justify *one* reading of the $\frac{6}{4}$ chord in m. 1, but instead evoke *two* possible interpretations (Example 3.5B and C, respectively). His description of "structural plurality" in the opening measures and the unique way in which the harmony evokes both a "tonic" $\frac{6}{4}$ chord as well as a "cadential" $\frac{6}{4}$ chord is as follows:

In my view, the complexity of *Immer leiser* is related to its deliberate projection of music paradoxes that are motivated by the poem. The very first measure presents a dilemma. Certainly, by the end of the first complete measure, it is possible to hear the initial sonority as a six-four chord. But what kind of six-four? Is it a consonant (tonic) six-four? In this case, the bass would simply arpeggiate the tonic chord, and the dominant seventh on the downbeat of m. 3 would be a passing chord caught within the opening tonic prolongation (Example 1a) [my Example 3.5B]. Or, is the six-four chord to be understood as a cadential six-four, in which case the opening would have to be construed as an introductory dominant prolongation (Example 1b) [my Example 3.5C]... Since a single graph cannot show paradoxically simultaneous "tonic" and "dominant" prolongations at the beginning of *Immer leiser*, I have vertically aligned two different readings.⁴⁷

Unfortunately, Jackson's two vertically aligned readings did not appear in the final published version of the article. Therefore, in consultation with Jackson and with his permission, the following examples show the two graphs that were omitted from his

⁴⁷ Jackson, *Song Study*, 196.

article. They depict the paradoxical $\frac{6}{4}$ chord from *Immer leiser* as it should have appeared in the original article (Examples 3.5B and C).⁴⁸

Example 3.5A Brahms, *Immer leiser*, Op. 105, No. 2, mm. 1-3

The image shows a musical score for the first three measures of Brahms' 'Immer leiser'. The score is written for voice and piano. The tempo and mood are indicated as 'Langsam und leise.' (Slow and soft). The key signature has two sharps (F# and C#), and the time signature is 4/4. The lyrics are: 'Im - - mer lei - - ser wird mein Schlam - - mer. nur wie Schlei - er liegt mein'. The piano part is marked 'pp sempre e legato'. The score is divided into three measures, each marked with a circled number (1, 2, 3). Measure 1 contains the first two notes of the vocal line and the first two notes of the piano accompaniment. Measure 2 contains the next two notes of the vocal line and the next two notes of the piano accompaniment. Measure 3 contains the final two notes of the vocal line and the final two notes of the piano accompaniment.

⁴⁸ In my consultations with Jackson, he emphasized how the top voice in the opening of the song also seems incongruous with the bass, especially in the first full measure, where the A and the F# are dissonant fourths above the bass pitches E and C#, respectively.

Examples 3.5B and 3.5C Brahms' *Immer leiser*, mm. 1-3: Tim Jackson interprets the paradoxical $\frac{5}{4}$ chord in the opening of the song as a tonic $\frac{5}{4}$ chord ($I\frac{5}{4}$, Example 3.5 B) and as a cadential $\frac{5}{4}$ chord ($V\frac{5}{4}$, Example 3.5C).⁴⁹

Example 3.5B

Example 3.5B shows a melodic line in the treble clef and a bass line in the bass clef. The treble clef has a circled '5' above the first measure. The bass line has a circled '5' above the first measure. The score is divided into three measures labeled 1, 2, and 3. The bass line is annotated with Roman numerals: $I\frac{6}{4}$ (cons.) under measure 1, I under measure 2, and V under measure 3. A dashed line connects the notes in measure 3, with the word "passing" written above it.

Example 3.5C

Example 3.5C shows a melodic line in the treble clef and a bass line in the bass clef. The treble clef has a circled '5' above the first measure. The bass line has a circled '5' above the first measure. The score is divided into three measures labeled 1, 2, and 3. The bass line is annotated with Roman numerals: $V\frac{6}{4}$ under measure 1, a dash under measure 2, and I under measure 3. The text "Introductory dominant prolongation" is written below the bass line.

⁴⁹ Ibid., 196.

Jackson's discussion of the Brahms song also describes other passages in which the "paradox of the initial six-four" chord recurs in different guises throughout the movement (i.e. mm. 17-19). Thus, the duplicitous $\frac{6}{4}$ chord in the opening measures is motivically significant—it is the first manifestation of a compositional problem that resurfaces throughout the song. Jackson and his mentor, Carl Schachter, considered the dualistic quality of the opening six-four harmony as particularly striking within the context of the song as a whole—a song where "music paradoxes [are] motivated by the poem."⁵⁰

In the opening of the Brahms song, two seemingly valid interpretations of one harmony lead to two seemingly contradictory conclusions about its structural role (I vs. V). As a result, one Schenkerian voice-leading graph does not suffice; two graphs *together* capture the most compelling interpretation of the passage. Both readings are supported by salient features of the music and highlight compositional issues that pervade the entire piece.

Jackson also discusses paradox and structural dualism in his article on Brahms' Haydn Variations from *Schenker Studies 2*, in which he makes an important distinction between "ambiguity" and "structural plurality," which figures prominently into my arguments. He does not use the term "paradox" in this excerpt, but he begins to clarify the types of contradictions that I will examine in further detail.⁵¹

While it is evident that Schenker decided in favor of the reading of the Chorale published in *Der freie Satz*, the graphs of the variations preserved in Salzer's collection remain consistent with the earlier reading of the theme. I find this discrepancy highly suggestive since it is my belief that, in this very special case, the contradiction highlights an essential aspect of the theme

⁵⁰ Ibid., 196.

⁵¹ The last section of the text is placed in italics for emphasis.

whereby both of Schenker's readings are simultaneously valid. This unusual situation results from structural duality...Although the view of Brahms as a Classical composer (or at least a Classicist) has persisted, in the past decade the term ambiguity—hardly a Classical characteristic—has enjoyed a certain vogue in reference to Brahms' music. *This study, however, is not concerned with ambiguity but with structural plurality in which self-consistent but mutually exclusive interpretations are simultaneously suggested by the same music... Schenker had no conceptual way of dealing with such contradictions; therefore, when he came to publish a reading, he was compelled to eliminate them.*⁵²

Jackson's statement from *Schenker Studies 2* is vital to this project. It not only clarifies some terminology that is relevant to the present study, but also suggests that perhaps Schenker, in a few select circumstances, neglected to publish plausible interpretations of some passages (or movements) because they contradicted certain aspects of his other readings.

My analytical study builds upon Jackson's assertions and investigates two particularly significant types of paradox in the music of Beethoven. Subsequently, each type of paradox is defined with clearly established parameters, and then discussed in context with analytical examples. Furthermore, all of the paradoxes in this study have significant larger-scale ramifications in their respective movements (or pieces). In the analysis of the opening passage of the Brahms song, the paradoxical $\frac{4}{4}$ chord in the opening does not have a significant impact on the overall structure of the piece, suggesting that even if the underlying compositional idea is to evoke two conflicting prolongations in the harmony in the opening measures (dominant vs. tonic function $\frac{4}{4}$ chords), the large-scale structure of the piece still remains largely unaffected by the paradox in the opening

⁵² Timothy Jackson, "Diachronic Transformation in Brahms' Haydn Variations," in *Schenker Studies 2*, ed. Carl Schachter and Hedi Siegel, (Cambridge: Cambridge University Press, 1999), 247.

measures. The readings presented in this analytical study investigate certain passages that are more complex and problematic because they drastically affect the reading(s) of the piece as a whole, suggesting that the paradoxical ideas and dualism penetrate through to the deeper levels of structure. As a result, a movement can contain an underlying tonal structure and a second, but different tonal structure that is superimposed on top of it. Salient features of the movement (or piece) under discussion support both tonal structures, but they are fundamentally contradictory.

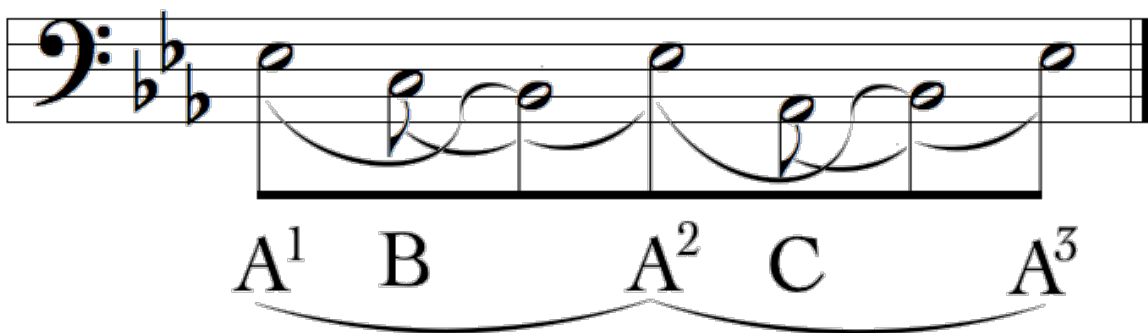
This dissertation first considers the structural ramifications of paradoxical unresolved $\frac{7}{4}$ chords. The definition and significance of paradoxical unresolved $\frac{7}{4}$ chords is presented in Chapter 4, which clarifies the conceptual discussion with musical examples from Beethoven's Piano Sonata No. 27 (Op. 90) and Symphony No. 4 (Op. 60). Chapters 5-7 address a more complex type of paradox that arises in sonata-form movements: formal-tonal paradox. Formal-tonal paradoxes are defined in greater detail at the beginning of Chapter 5, but in short, they exploit contradictions between the formal divisions in a movement and tonal-structural goals. In many sonata movements, design elements and tonal structure unfold as part of one unified formal-tonal process, but in the case studies presented in Chapters 5-7, voice-leading processes pierce through an incipient interrupted structure, consequently superimposing an undivided structure upon the residue of the interrupted structure. Since all three formal-tonal paradoxes occur over large spans, each chapter (5, 6, and 7) is devoted to a single analytical case study.

3.2 Carl Schachter's "Either/Or"

Carl Schachter's "Either/Or" also sets important precedents regarding structural dualism in Schenkerian analysis.⁵³ His reading of the large-scale bass motion in the second movement of Mozart's Piano Concerto, K. 491 is especially pertinent to this study.

Schachter demonstrates how the bass motion evokes two possible readings of the large-scale structure.⁵⁴ The first reading (Example 3.6A), which he aligns with five-part rondo design ($A^1 B A^2 C A^3$), shows how the tonal structure of the movement unfolds two large cadences, I – VI – V – I and I – IV – V – I, which come before the "structural I – V – I that supports the descent of the fundamental line in the third A section."⁵⁵ Schachter's analysis is shown below in Example 3.6A (deeper middleground) and Example 3.6B (a more detailed graph of the same reading).

Example 3.6A Schachter's analysis of the bass motion in Mozart's K. 491 as two cadences ($A^1 - B - A^2$ as I – VI – V – I, and $A^2 - C - A^3$ as I – IV – V – I)



⁵³ The article "Either/Or" was originally published in *Schenker Studies*, ed. Hedi Siegel, (Cambridge: Cambridge University Press) 1990. The version of the article cited here is from Carl Schachter's *Unfoldings* (Oxford: Oxford University Press) 1999.

⁵⁴ Schachter, *Unfoldings*, 128-129.

⁵⁵ *Ibid.*, 128.

Example 3.6B Schachter's "middleground sketch" of Mozart's Piano Concerto, K. 491

(a) middleground sketch (measure numbers follow the upper voice)

Form: A¹ (a¹ - b - a²) B A² (a¹) C A³ (a¹ - b - a²) Coda

Schachter later suggests that another reading of the structure could also be plausible, given salient features of the movement. He considers the brevity of the second A section, the links between episodes that result from the orchestration, and the “coherent progression” created by the foreground key relationships as part of *one* large-scale progression. Thus, Schachter offers two possible readings (Example 3.7) and shows how the return to E_b in the second A section may not be considered to be on the same structural level as the first E_b, even though when it occurs, it sounds like a “fully stable tonic.”⁵⁶ In the following excerpt, Schachter describes the way in which he hears “Both/And” in the Mozart movement:⁵⁷

Indeed, when the reprise begins, one hears the E_b major as a fully stable tonic that forms the goal of the large harmonic motion developed in the episode and transition. But when it breaks off after only four measures, and when a new section begins that connects in tonal motion, orchestral color, and motivic design with the

⁵⁶ Ibid., 129.

⁵⁷ This excerpt is taken from pp. 129-130 of “Either/Or,” which is part of one particular sub-section of the article titled “Both/And.” In that section, Schachter is arguing that there can be particular pieces or passages that genuinely evoke two different structures, even at the deeper levels of structure.

first episode, sensitive retrospective hearing will modify that initial impression of stability. This tonic return will be understood as a brief parenthetical statement that brings into momentary consciousness the tonal motion's point of departure just before it continues on to its next tonal goal... The E \flat that begins the bass line is retained conceptually through the C minor and A \flat major episodes, becoming the third and fifth of their respective "tonics." Not infrequently, middleground structures- linear progressions or arpeggiations- that compose out a prior verticality (as this E \flat - C - A \flat composes out the fifth E \flat - A \flat) will be segmented in a way that allows the background structure to "peer through"; thus E \flat - C - A \flat becomes E \flat - C - (E \flat) - A \flat ."

Schachter argues that the "truest" interpretation of structure in Mozart's K. 491 is paradoxical: "If my reading of the Mozart is correct, it reveals a genuine double meaning."⁵⁸ The only way to show the double meaning is to create two voice-leading graphs of the movement, and Schachter does (see Example 3.7). When he graphs the overall progression of the bass, he expresses the return to E \flat parenthetically (as in E \flat - C - (E \flat) - A \flat , the middle graph of Example 3.7). Example 3.7 shows Carl Schachter's graphic representations of the "genuine double-meaning."

Example 3.7 Schachter's "genuine double-meaning" results in a parenthetical passage in his voice-leading graph; all three graphs together showcase the true double meaning.

(b) two big cadences or one?

In traditional Schenkerian analysis, "double prolongations"—or prolongations in which tonic *and* dominant harmony, for example, are prolonged simultaneously (on the

⁵⁸ Ibid., 130.

same level)—do not exist. The decision-making process of what is prolonged within a certain section at a given level of structure is vital in Schenkerian analysis, so to suggest that multiple pitches are being prolonged or that two distinct structures can persist into the deeper middleground levels of structure seems counterintuitive. Nonetheless, Schachter’s article shows how select tonal structures can evoke “true double meanings,” and his remarks set important precedents for the discussion of “paradox” in this text.

Another striking aspect of Schachter’s analysis of the Mozart K. 491 is the interplay between design and tonal structure. Even though there are two possible interpretations of the large-scale bass motion (two cadences or one large cadence), the important formal junctures (the occurrences of A, B, and C sections) coincide with both readings of tonal structure. For example, in the bass line graphs shown in Example 3.7, whether one interprets the E \flat that occurs with the beginning of the A² section as a return of the tonic *Stufe* or whether one reads a bass line that descends in thirds to the A \flat at the C section (E \flat – C – A \flat), the tonal structure and the formal boundaries in the piece align. There are some movements, especially in Beethoven, in which incongruities between form and tonal structure create contradictions and more complex compositional problems than the dualism in Schachter’s Mozart K. 491 example.

In the present dissertation, the analytical case studies in chapters 5-7 examine three different manifestations of formal-tonal paradox. Each analysis explores the ramifications of seemingly “misaligned” formal divisions and tonal structure. Therefore, in an extension of Schachter’s theories, this study accepts the premise that genuine double-meanings can be represented in Schenkerian terms in order to disclose the essential contradictions of formal-tonal paradox as a focal compositional problem.

3.3 “Von Einem *Künstler*: Shapes in the Clouds”

Stephen Slottow’s article “Von einem *Künstler*: Shapes in the Clouds” is also pertinent to the present investigation of structural paradox. Slottow’s analysis of the first movement of Clementi’s G major *Sonatina*, Op. 36, No. 2, argues that multiple Schenkerian readings of the piece can be validated by different features of the music.⁵⁹ He outlines three different ways of hearing the development section of the Clementi *Sonatina* and delineates which features accentuate and justify each way of hearing the voice leading, even though the readings convey three distinct interpretations of structure. His reflections on the passage are as follows:

Looking from one to the other of these three readings, one can see the kaleidoscopic patterns shifting into new alignments, affinities, and allegiances. All three are theoretically possible. In a way, perhaps Reading 3 is best aligned with the chordal design emphases in the music—highlighted chords in the music are highlighted in the analysis. But they don’t have to be: structural chords in a Schenkerian sense are not always stressed in the compositional design of the piece. In any case, I confess that Reading 1 comes closest to how I hear the development; ... this is my *subjective* preference—although it is not completely arbitrary, because I have my reasons, and because all three are viable readings.⁶⁰

Slottow’s voice-leading graphs, which show the three different interpretations (or “readings”) of the development section in the Clementi *Sonatina*, and are reproduced below in Examples 3.8A, 3.8B, and 3.8C.

⁵⁹ Stephen Slottow, “Von einem *Künstler*: Shapes in the Clouds,” *Res Musica* 3 (2011), 123-33.

⁶⁰ *Ibid.*, 130.

Example 3.8A Slottow's "Reading 1"

22 25 30 32 36

10—10

V $\frac{8}{3}$ (I) $\frac{4}{4}$ V $\frac{7}{3}$

22 25 30 32

Example 3.8B Slottow's "Reading 2"

22 25 30 32

V VII6 V

N

N

Example 3.8C Slottow's "Reading 3"

In the end, the "Shapes in the Clouds" article makes a compelling argument in favor of subjectivity in analysis. Slottow aptly observes how his hypothesis differs Schenker's stance on his own graphical analyses from *Free Composition*:

The musical examples which accompany this volume are not merely practical aids; they have the same power and conviction as the visual aspect of the printed composition itself (the foreground). That is, the graphic representation is part of the actual composition, not merely an educational means.

Therefore, Schenker was never completely convinced that genuine "double-meanings" and structural dualities could exist. He felt that one graph was a singular representation of the music—it was as much a representation of the piece as the actual score. However, there are sketch materials that show how Schenker re-evaluated and

changed some of his readings over time.⁶¹ Schenker was not interested in passages that evoked paradox; his attention was focused on other issues.⁶² As a result, Schenker may have eliminated some insightful interpretations of voice leading. This dissertation hopes to fully examine multiple dimensions of tonal structure in select movements by Beethoven with the intent to demonstrate how paradoxes and structural dualism can be focal compositional problems.

3.4 Clarification of Terminology and Application

This analytical study expands upon the foundation established by the analyses of the Brahms *Immer leiser* (Jackson), the Mozart K. 491 Piano Concerto (Schachter), and the Clementi *Sonatina* (Slottow). However, all of my analyses focus solely on paradox as a compositional problem in Beethoven.

Musicologists and theorists have described striking features of Beethoven's music using a vast array of terminology. In particular, Robert Hatten's extensive research in musical semiotics denotes various terms in a compelling description of expressive aspects

⁶¹ Chapter 4 examines one example of Schenker considering two very different readings of Beethoven's Op. 90, I. His idea that a reading "is" the composition itself could be nullified by examining his own different published analyses of one movement (or piece). Heinrich Schenker and Angelika Elias, *Oster Collection: the Papers of Heinrich Schenker*, Unpublished, on microfilm (New York: New York Public Library, 1990), Files 64/125, 64/126 and 64/127.

⁶² As Schenker developed his theories, his attention must have been (at times) devoted to the development what Olli Väisälä refers to as "Schenkerian archetypes" or "harmonic frameworks" that transcend the analysis of a single movement. Olli Väisälä, "Schenker's Disservice to Schenkerianism," in *Res Musica* 3 (2011), 30-51. Väisälä considers the possibility that a Schenkerian voice-leading analysis of a given movement may or *may not* be supported by salient structural indicators (design, register, meter, gestural emphasis). He contends that a reading may have "second-order" support—it may be supported by the "Schenkerian archetypes."

of Beethoven's music that he hears as closely tied to structural features.⁶³ This dissertation purposefully engages the term paradox because it is the most appropriate term for the compositional problems discussed in the ensuing case studies.

In the beginning stages of my research, and in consultation with respected professors outside of the dissertation committee, the terms "ambiguity" and "multivalence" surfaced as potentially superior alternatives to the term "paradox." However, after thoughtful consideration and additional research, neither of those terms seemed applicable to the excerpts and movements discussed in the ensuing chapters. As the text from Timothy Jackson's article stated, the term "ambiguity" implies that the structure of the music is somewhat unclear, and that the levels of tonal structure and/or voice leading may not be definitive enough to create a Schenkerian sketch of the passage in question. The excerpts in this study do not exemplify that description. In fact, there are two, very clear, valid readings of the passage (or movement) in question—they are not "ambiguous;" they are structurally dualistic. Since the two readings could be considered mutually exclusive, the excerpts therefore evoke different types of paradoxes.

In Carl Schachter's reading of the Mozart Piano Concerto, K. 491, for example, the structure was not "unclear." He argues that the tonal structure unfolds in such a way that it becomes necessary to present two readings that are both *clear*, but distinct. He published two clear, but separate, voice-leading graphs because the two different ways of hearing the movement *could not* be expressed in one middleground graph. Conversely, if the structure were "ambiguous," it would be difficult to construct and interpret a voice-leading graph of

⁶³ Robert Hatten, *Musical Meaning in Beethoven* (Bloomington: Indiana University Press, 2004). Hatten discusses abnegation, correlation, markedness, etc. in relation to specific technical features of Beethoven's music.

the movement. Instead, Schachter offered two plausible readings that are both quite clear. As a result, the term “ambiguous” is not appropriate in the present study.

The term “multivalence” may come closer to describing the tonal problems discussed here, but ultimately it does not suffice. As defined by the Merriam-Webster dictionary, multivalence is the “quality or state of having many values, meanings, or appeals.”⁶⁴ Thus, the definition implies that the multiple possible interpretations of the excerpt in question do not contain any inherent contradiction, opposition, or mutual exclusivity. If one considers Schachter’s Mozart K. 491 example (again), traditional Schenkerian theory would suggest that one can hear the return of E \flat major at the second A section as either a return to the deep-level tonic from the first A section (i.e. I – (VI) – I), OR hear the reprise in E \flat as subsidiary to the C minor harmony in the B section (which would then undercut the E \flat at a deeper level of structure and initiate the large-scale descending thirds progression, I – VI – (V-I) – IV). Schachter’s readings cannot be shown on the same graph; they are mutually exclusive. However, he demonstrates how they can both be valid ways to hear the movement. Thus, there is more to the music than “multiple meanings or values.” Schachter’s readings represent apparent *contradictions* with respect to the overall tonal structure of the movement (hence, Schachter asks the question “two big cadences or one?” in Example 3.7, above). As a result, “multivalence” is not the most appropriate term for my analyses. The term that effectively denotes the crux of the compositional problems encountered in this study is “paradox.”

⁶⁴ “Multivalence,” *Merriam-Webster.com*. 2015. <http://www.merriam-webster.com/dictionary/multivalence> (1 January 2015).

3.5 “Paradox” in the Present Study

Paradox is a term that originates in the study of rhetoric and literature, and it has accrued various shades of meaning since its first known use in ancient Greece. Despite the diaspora of meanings and interpretations that have evolved from its Greek origins, all types of paradoxes contain an element of fundamental self-contradiction or binary opposition, which can only sometimes be reconcilable. Even though the preceding discussions of other secondary texts begin to clarify the meaning of “paradox” as it applies to my analytical study, a precise definition is necessary.

The Merriam-Webster Dictionary defines a paradox as “a statement that is seemingly contradictory or opposed to common sense, and yet is perhaps “true.”⁶⁵ In order to apply that definition to the analysis of tonal music, there must be a musical “statement” (passage) that is seemingly contradictory or opposed to common sense, but nonetheless represents the truest artistic interpretation of the excerpt. Thus, in both types of paradoxes in this study, there are *two* conflicting interpretations of *one* musical “statement” (an excerpt, section, or movement). In addition, salient features of the movement as a whole must substantiate each one of the contradictory interpretations. Those features consequently validate both sides of the “conflicting” musical statement. Overall, paradoxes are more than just slight contradictions—they are striking, extreme contradictions that arise from seemingly coherent and logical lines of reasoning.

Both types of paradox in this study express an essential “contradiction” in a different way. In the analysis of paradoxical unresolved $\frac{5}{4}$ chords, unique aspects of

⁶⁵ “Paradox,” *Merriam-Webster.com*. 2014. <http://www.merriam-webster.com/dictionary/paradox> (11 October 2014).

harmony and voice-leading lead one to hear the unresolved $\frac{6}{4}$ chords as *both* $I\frac{6}{4}$ chords and $V\frac{6}{4}$ chords. Since the functions of those two types of $\frac{6}{4}$ chords are contradictory (tonic vs. dominant function), an unresolved $\frac{6}{4}$ chord can be paradoxical. Formal-tonal paradoxes also convey an essential contradiction. In a movement that exhibits formal-tonal paradox, an incipient interrupted structure begins to unfold, but unique voice-leading processes “compose-over” the interruption and superimpose an undivided structure over the residue of an interrupted structure. The contradiction between the underlying incipient interrupted structure and the overlaid undivided structure is a central compositional problem in all three case studies of formal-tonal paradox.

In order to demonstrate how each paradox is a “true” artistic interpretation of each excerpt, the analytical discussion details salient features of the music that validate each side of the essential contradiction in each analytical case study.⁶⁶ As a result, each paradox is substantiated in a different way—motives, insertions, striking dissonances, and other unique features of each excerpt illuminate the essential contradiction. For example, in the first movement of Beethoven’s *Tempest* Sonata, Op. 31, No. 2, there are important motivic connections and modal conflicts that validate the formal-tonal contradictions, therefore making the “paradox” a focal compositional problem in the movement. Overall, all of the paradoxes examined in this study are particularly emblematic of large-scale compositional ideas in music, particularly Beethoven, that have not been unpacked in scholarly prose.

⁶⁶ The term “true” is placed within quotation marks in this instance because there is no analysis that can be proven “true.” Therefore, the meaning of “truth” could be thought of as “substantiated,” “valid,” or otherwise analytically justified by features of the music and the results of the Schenkerian analytical process that was outlined in the opening sections of this chapter, 3.1 and 3.2.

“Paradox” can be a central idea of a piece of music just as it can be a central concept in a work of literature.⁶⁷ In Shakespeare’s *Hamlet*, the title character states that he “must be cruel, only to be kind.”⁶⁸ It seems like this statement is contradictory; how can Hamlet convey kindness through cruelty? Without delving into the play too deeply, Hamlet feels that in order to “right” the “wrong” of his mother’s incestuous relations and second marriage to her first husband’s murderer (Claudius), he must murder Claudius. The “cruel to be kind” paradox drives Hamlet insane, and it is a central idea in the play. A failure to understand the contradiction of the “cruel to be kind” paradox could contribute to a failure to understand the play as a whole. In similar fashion, my analytical study of Beethoven’s music argues that paradox can be a central part of understanding a musical composition. Whether it comes about as the result of an unresolved ♯ harmony or a formal-tonal incongruity, a paradox can epitomize important compositional processes that pervade an entire movement or piece of music.

The details of each type of paradox are therefore addressed in the first sub-sections of Chapters 4 and 5. Those chapters clarify the definitions of the two types of paradoxes in greater detail (unresolved ♯ chords and formal-tonal paradox, respectively). The overriding definition of paradox in this chapter applies to both types of paradoxes and links the literary definition of the term to its musical manifestations.

⁶⁷ The example from Shakespeare is meant to not only establish a connection with the historical meaning of the term “paradox,” but also to encourage an interdisciplinary line of thinking and approach to music analysis, in which a “paradox” can occur as a central idea in a work of literature and also play a role in great pieces or “masterworks” (to use Schenker’s term) of Western art music.

⁶⁸ William Shakespeare, *Hamlet* (New York: Simon and Schuster, 1992), Act III, Scene 4, Lines 178-201.

3.6 Conclusion

The foundational studies detailed in this chapter outline several important precedents in the existing Schenkerian literature to establish the foundations upon which this study is built. In order to arrive at a clear definition of paradox sufficient for the present study, one must first understand situations like the example from David Beach, in which the prevalence of multiple contrapuntal lines or multiple possible readings of a passage *do not* result in a paradox. Furthermore, certain related terms that other authors or publications employ have been accepted (i.e. structural “dualism”), while others have been rejected (i.e. “ambiguity” and “multivalence”) with accompanying justification for that rejection. Overall, since Beethoven’s compositional style undoubtedly evolved from his early piano sonatas to his late string quartets, the paradoxes in his music should not be conflated underneath one umbrella of “paradox.” Different paradoxes become evident in more complex and striking ways throughout the course of his life, in different genres and, in all likelihood, for different reasons. Nevertheless, the paradoxes addressed in this study all contain one of the two types of essential, striking contradictions discussed in this chapter, and they all epitomize musical processes or concepts that pervade entire movements or pieces.

The end goal is not simply to demonstrate and explicate paradoxical passages in the music of Beethoven, but also to reconsider the somewhat limited lexicon of Schenkerian paradigms that exist for sonata movements. In modern Schenkerian theory, analysts must be able to account for unique passages that seem to evoke twofold readings. Unfortunately, the dualistic nature of some of the passages included in my study has potentially caused one or more authors, including Schenker himself, to rescind or abandon one compelling

reading of a particular passage in favor of a second reading. For example, in Schenker's unpublished sketches of Beethoven's Piano Sonata No. 27 in E minor, Op. 90, one can compare his different attempts to arrive at his personal "best" analysis of a paradoxical $\frac{7}{4}$ chord.⁶⁹ By including published and unpublished analyses of paradoxical formations such as the $\frac{7}{4}$ chord in the Brahms song (studied by Jackson/Schachter) or the $\frac{7}{4}$ chord in Op. 90 (studied by Schenker), I will explore the problems that certain passages present in traditional Schenkerian analysis, in order to open up new possibilities that allow for two-fold readings of passages that evoke paradox as a compositional idea.

⁶⁹ Schenker and Elias, *Oster Collection*, Files 64/125, 64/126 and 64/127. See also Stefan Treber, "A Schenkerian Analysis of Beethoven's E minor Piano Sonata, Op. 90" (Master's thesis, University of North Texas, 2010).

CHAPTER 4

UNRESOLVED $\frac{6}{4}$ CHORDS:

THREE ANALYTICAL CASE STUDIES OF PARADOXICAL $\frac{6}{4}$ CHORDS

4.1 Introduction

In a Schenkerian sense, the structural role of the $V\frac{6}{4}$ chord is an elaboration (or expansion) of V . In fact, the $V\frac{6}{4}$ is denoted as “cadential” precisely because it typically resolves to $V\frac{3}{2}$ as part of a cadence (either $V\frac{6}{4}-\frac{3}{2}$, half, or $V-I$, authentic). Allen Cadwallader and David Gagné suggest that “in eighteenth- and early nineteenth-century music, perhaps no other chord so strongly signals the imminent arrival of an authentic cadence as does the cadential $\frac{6}{4}$.”⁷⁰ This chapter focuses on the structural implications of selected *unresolved* $\frac{6}{4}$ chords. In a few rare cases, a seemingly cadential $\frac{6}{4}$ chord never resolves to the root-position dominant. What if a seemingly cadential $\frac{6}{4}$ chord leads directly into a root-position tonic chord? Then, we might hear it as a tonic $\frac{6}{4}$ chord (or also an anticipatory $\frac{6}{4}$ chord) because the dominant in the bass voice unfolds as the upper fifth of forthcoming the root-position tonic.⁷¹ Therefore, a $\frac{6}{4}$ chord left unresolved can be paradoxical; it can fulfill the function of the cadential $\frac{6}{4}$ chord ($V\frac{6}{4}$) as well as the tonic $\frac{6}{4}$ chord ($I\frac{6}{4}$) synchronically.⁷²

⁷⁰ Allen Cadwallader and David Gagné, *Analysis of Tonal Music: A Schenkerian Approach*, 3rd ed. (Oxford: Oxford University Press, 2011), 53.

⁷¹ Schachter, *Unfoldings*, 179. The $I\frac{6}{4}$ chord can also be termed an “arpeggiated $\frac{6}{4}$ ” or a “consonant $\frac{6}{4}$.” Carl Schachter also refers to the “anticipatory $\frac{6}{4}$ chord” in *Unfoldings* (p. 179) when discussing Beethoven’s music.

⁷² Hearing the cadential chord and the tonic chord in the same split second (“simultaneously” in the strictest sense) is not entirely feasible, but we can experience the impression of both $V\frac{6}{4}$ and $I\frac{6}{4}$ over the same time span, especially when the unresolved chords dissolve gradually, like the one in Beethoven’s E minor Piano Sonata discussed later.

Let us consider paradoxical unresolved $\frac{5}{4}$ chords and their structural implications in three Beethoven pieces: the first movement of *Piano Sonata No. 27 in E minor* (Op. 90), the first movement of *Symphony No. 4* (Op. 60), and the fourth movement (finale) of *Symphony No. 8 in F major* (Op. 93). In the first two pieces, the unresolved $\frac{5}{4}$ chords paradoxically fulfill the role of both a cadential *and* a tonic (or anticipatory) $\frac{5}{4}$ chord. The analysis of the unresolved $\frac{5}{4}$ chord from the finale of the Beethoven's *Symphony No. 8* requires its own explanation, because the voice leading that results from the unresolved $\frac{5}{4}$ chord is emblematic of an enharmonic conflict permeating the entire movement and the symphony as a whole.

4.2 Beethoven's Piano Sonata No. 27 in E minor, Op. 90, First Movement

In the first movement of Beethoven's E minor piano sonata (Op. 90), the retransition consists of a prolonged cadential $\frac{5}{4}$ chord (Example 4.1, mm. 130-143) that never resolves to the root-position dominant ($V_{\#}^5$). Instead, the unresolved cadential $\frac{5}{4}$ chord liquidates and elides directly into the root-position tonic (E minor) and restatement of the first theme at m. 144 (the recapitulation).⁷³ In the score excerpt below (Example 4.1), the annotations demarcate the prolonged dual-function $\frac{5}{4}$ chord in m. 130, which never resolves to a root-position V before the restatement of the first theme (m. 144).

Hence, the practice of interpreting paradoxical $\frac{5}{4}$ chords can involve processual hearing versus a momentary "flash" of two aural impressions.

⁷³ The concept of "liquidation" can be linked to Arnold Schoenberg, who discusses "the reduction of a large-scale musical idea to its essential form" (a contour line or a specific harmonic motion). Arnold Schoenberg, *Fundamentals of Musical Composition*, ed. Gerald Strang (New York: St. Martin's Press, 1967), 58.

Example 4.1 Beethoven's E minor Piano Sonata, Op. 90, I, mm. 129-149⁷⁴

The musical score consists of three systems of staves. The first system (measures 129-134) shows a right-hand part with rapid sixteenth-note runs and a left-hand part with a more melodic line. Measure 130 is circled and labeled "V₄⁶ or I₄⁶ ?". The second system (measures 135-144) continues the right-hand part with sixteenth-note runs and the left-hand part with a more melodic line. Measure 135 is circled and labeled "Liquidation...". Measure 140 is circled and labeled "p" and "cresc.". The third system (measures 145-149) is labeled "*RECAP." and measure 145 is circled. The score includes dynamic markings such as *più f*, *ff*, *p*, *pp*, and *cresc.*

As a result, the unresolved $\frac{5}{4}$ chord presents a question of binary opposition to the analyst: should the unresolved $\frac{5}{4}$ chord be read as a tonic $\frac{5}{4}$ chord, therefore consonant ($I\frac{5}{4}$), because it anticipates the tonic return at m. 144 and never moves to a root-position dominant ($V\frac{5}{\#}$, Example 4.2A), or should it be read as a cadential $\frac{5}{4}$ chord ($V\frac{5}{4}$) whose resolution ($\frac{6}{4} = \frac{5}{\#}$) is implied (unrealized), as shown in Example 4.2B? To show the two

⁷⁴ Ludwig van Beethoven, *Piano sonata No. 27* (Leipzig: Breitkopf and Härtel, 1862).

conflicting interpretations of this passage, a voice-leading graph of each reading is included below (Examples 4.2A and 4.2B).⁷⁵

Example 4.2A Voice-leading graph of Beethoven's Op. 90, I, mm. 130-144: an interpretation of the unresolved $\frac{3}{4}$ chord as a "tonic" $\frac{3}{4}$ chord ($I\frac{3}{4}$)

⁷⁵ One might notice that there are D#s that occur from m. 132 through m. 135, but, in this case, they act as lower neighbor notes. As the melody liquidates from m. 135 onward, the D#s are eliminated as less essential pitches, and a stronger sense of E minor harmony persists until m. 144 (the Recapitulation).

Example 4.2B Voice-leading graph of Beethoven's Op. 90, I, mm. 130-144: an interpretation of the unresolved $\frac{3}{4}$ chord as a cadential $\frac{3}{4}$ chord ($V^{\frac{6}{4}}$) with an implied resolution (to $V^{\frac{5}{\#}}$) before the recapitulation⁷⁶

Both of the two readings are justifiable for different reasons. 1) Since the retransition of a sonata-form movement typically prolongs dominant harmony to set up a tonic return at the recapitulation, one can hear a strong dominant harmony ($V^{\frac{6}{4}}$) whose resolution to $V^{\frac{5}{\#}}$ is implied. Furthermore, the bass motion moves through A# in m. 129 to the B in m. 130—that chromatic bass line ($\hat{4} - \hat{5}$) supports an applied leading tone seventh chord (vii^{o7}/V) that should resolve to the dominant (V), not the tonic. 2) On the contrary, because the emphasis on E minor in the prolonged $\frac{3}{4}$ chord is so striking and the fact that the root-position dominant (B major) never materializes, the B in the bass can be heard as the upper fifth of the forthcoming E minor harmony that unfolds at the recapitulation (m.

⁷⁶ The implied resolution to $V^{\frac{5}{\#}}$ could be inferred on the downbeat of m. 142 or m. 143 when F# ($\hat{2}$) occurs in a stronger metric position. Regardless, the V harmony never emerges.

144). In retrospect, two internally consistent lines of reasoning lead the analyst to two opposing conclusions about the same harmony. Hence, a paradox exists in which the unresolved $\frac{5}{4}$ chord evokes *both* a tonic $\frac{5}{4}$ chord and a cadential $\frac{5}{4}$ chord.⁷⁷ Ultimately, the unresolved property of the $\frac{5}{4}$ chord is what delivers the paradox; if the $\frac{5}{4}$ chord would have resolved conventionally ($V\frac{5}{4} - \frac{5}{\#}$), then the dominant would be prolonged definitively until the return of tonic harmony at recapitulation, and the paradox would not exist.

The unresolved $\frac{5}{4}$ chord in the Op. 90 forms a link between the end of the retransition and the beginning of the recapitulation, with profound implications for the structure of the movement as a whole. Since the point of interruption in a sonata-form movement typically occurs between the end of the prolonged V (retransition) and the deep-level tonic regained at the recapitulation, the paradoxical $\frac{5}{4}$ chord has a significant impact on the tonal structure of the movement. Is this movement divided (interrupted) or undivided?

Since the structural dominant is achieved in the second theme group (m. 55, B minor), one might think that at the retransition, the prolongation of the structural dominant would end on the major dominant ($V\#$, B major), usually coinciding with an interruption and $\hat{2}$ in the top voice. However, since the seemingly cadential $\frac{5}{4}$ chord at the retransition is left unresolved, can we hear a definitive interruption and re-establishment

⁷⁷ Stefan Treber, "A Schenkerian Analysis of Beethoven's E minor Piano Sonata, Op. 90" (Master's thesis, University of North Texas, 2010). Treber implies that the unresolved $\frac{5}{4}$ chord is paradoxical, but he does not address it explicitly. He discusses the dualistic nature of the passage in question focuses on the sonata as a whole instead of paradox as its own phenomenon.

of tonic at the recapitulation, as in a typical sonata-form movement?⁷⁸ Perhaps the E minor at the recapitulation could be an elaboration of the cadential $V\frac{6}{4}$, whose authentic resolution arrives later in the movement.⁷⁹ An alternative interpretation might suggest that the implied root-position dominant is elided and the structural tonic *is* definitively regained at the recapitulation, along with the *Kopfton* in the top voice (G, $\hat{3}$).

This striking passage was also problematic for Schenker himself. Having published his own edition of Beethoven's piano sonatas, Schenker knew them intimately. Perhaps one of the reasons that he never published an analysis of the Op. 90 piano sonata was because of the paradoxical issues that result from the unresolved $\frac{6}{4}$ chord. Therefore, let us consider Schenker's unpublished sketches from the Oster collection that reveal his interpretations of the first movement before drawing further conclusions about large-scale structure.

4.3 Schenker's Study of the Op. 90 Piano Sonata, First Movement

The files marked 64/125 and 64/126 in the Oster collection (available on microfilms) portray Schenker's initial attempts to sketch the structure of the first

⁷⁸ For a more detailed description of Schenker's paradigmatic sonata form structures and modern Schenkerian research in that vein, refer to the opening of Chapter 5, and my conference talk from the 2015 Indiana Music Research Symposium. Benjamin Graf, "Pardon the Interruption: Reconsidering Schenker's Sonata-form Paradigms" (paper presented at the 21st Indiana University Music Research Symposium, Bloomington, Indiana, February 20-21, 2015).

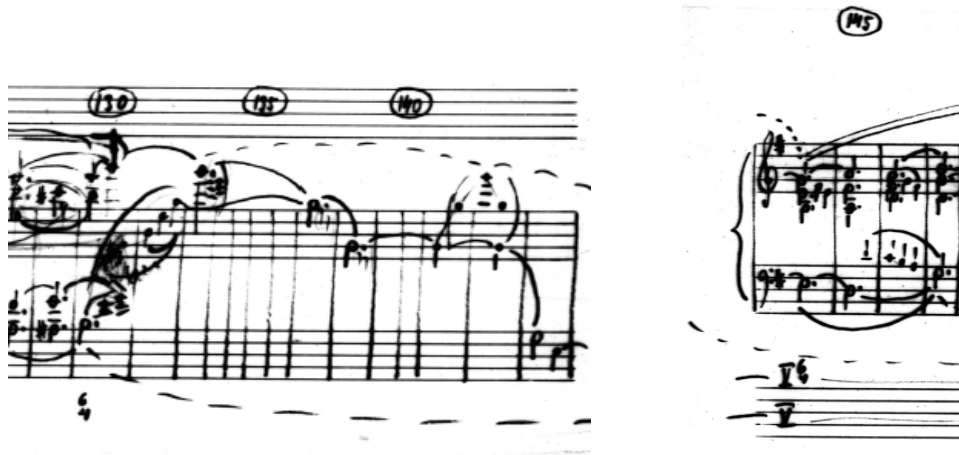
⁷⁹ One can refer back to the graphs from Examples 4.2a and 4.2b and read further into section 4.3 (discussion of Schenker's work on the movement) for a more detailed exploration of the interrupted structure vs. undivided structure issue.

movement with one of his most gifted students, Angelika Elias.⁸⁰ Elias notated the graph shown in Example 4.3A, but it was likely informed by consultations with Schenker. Example 4.3B is a transcription of her graph. In the initial attempts to graph the voice leading, Elias marks the unresolved $\frac{6}{4}$ chord as a simply “ $\frac{6}{4}$ ” (labeled beneath m. 130 on the in the bottom left portion of both examples). The dotted slurs that extend over the folio line not only indicate that she reads the unresolved $\frac{6}{4}$ chord as a cadential $\frac{6}{4}$ chord ($V\frac{6}{4}$), but also show that the dominant prolongation extends beyond the recapitulation (m. 144, marked in Example 4.3B). Therefore, the root-position tonic harmony in m. 144 is marked V to show how the harmony at the recapitulation is not the deep-level tonic (bottom right portion of both examples).⁸¹

⁸⁰ Heinrich Schenker and Angelika Elias, *Oster Collection: the Papers of Heinrich Schenker*, Unpublished, on microfilm, (New York: New York Public Library, 1990), Files 64/125 – 64/128.

⁸¹ Treber, 48-52. Treber argues that the dominant prolongation in Elias’ initial graphs extends until m. 167. Treber does not provide the graphs in Example 4.3A and Example 4.3B in his thesis. He shows Schenker’s graph of the first theme and discusses other portions of the graphs in the analytical prose only. Some inconsistencies between Treber’s text and the graphs on microfilm become apparent. For example, Treber contends that in File 64/127 (my Example 4.4A) the E minor harmony at the recapitulation is marked *both* tonic and dominant; this is false. By investigating the numerals under intense magnification, we discover that the harmony at the recapitulation marked as I (tonic).

Example 4.3A Elias' initial graph of the paradoxical $\frac{6}{4}$ chord shows a $V\frac{6}{4}$ chord within a dominant prolongation that persists past the return of root-position E minor harmony at the recapitulation (m. 144).⁸²



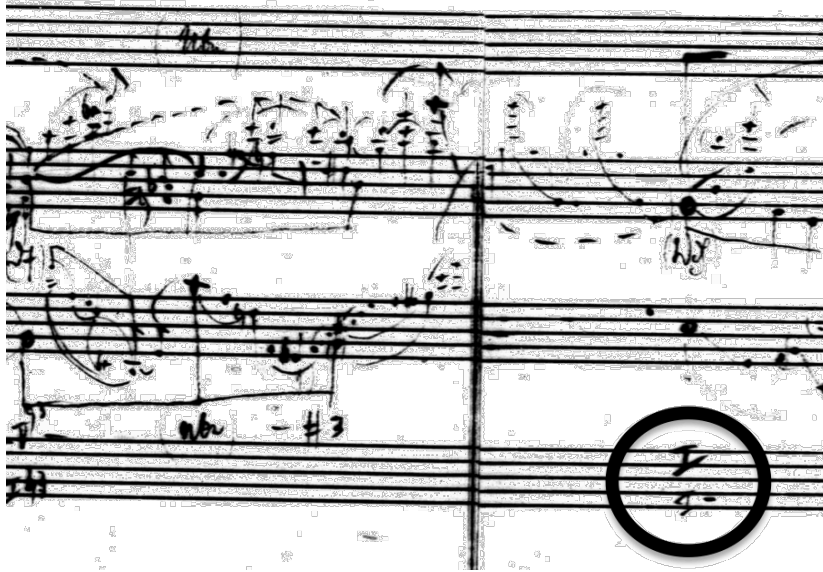
Example 4.3B Transcription of Example 4.3A

⁸² Schenker and Elias, *Oster Collection*, File 64/125-126. The first portion of the graph in Example 4.3A should show a treble clef for the upper staff and a bass clef for the lower staff. I added the clefs to the transcription (Example 4.3B). Elias' sketches are placed beside one another so that readers can see better visualize the connections of the slurs and get a better idea of the reading as one unit, especially the dotted slurs that extend over the page/folio line and past the design reprise (m. 144).

The file marked 64/127 contains a second reading of the unresolved $\frac{4}{2}$ chord and the surrounding tonal processes (Examples 4.4A, 4.4B and 4.4C).⁸³ All three graphs show the development and the beginning of the recapitulation; Example 4.4A is foreground graph, 4.4B is a middleground graph, and 4.4C is a transcription of 4.4B. These graphs seem like a revised version of the sketches from files 64/125 and 64/126 (Examples 4.3A and 4.3B). In Example 4.4B (and 4.4C), the E in the bass at the recapitulation (m. 144) is marked as a half note and it is not connected with any slur to the dominant prolongation preceding it. Schenker and Elias' previous idea that the design reprise could be subsumed within a larger dominant prolongation seems to have changed. Indeed, the most salient feature of the graph in Example 4.4A is the I marked beneath the harmony at the recapitulation, which is circled on bottom right portion of the graph. However, even though the separation between the V from the retransition and the regained I at the reprise is clear, there is no indication of an interruption anywhere on the graphs. Schenker and Elias revisit that issue later.

⁸³ The vertical alignment of the three graphs is not exact, but it is the closest possible alignment that I could achieve.

Example 4.4A Schenker's revised foreground reading of the development and recapitulation



Example 4.4B Schenker's revised middleground reading of the development and recapitulation



Example 4.4C Transcription of Example 4.4B

The file marked 64/128 contains an additional, third reading of the same passage, notated by Schenker.⁸⁴ In Example 4.5A and the corresponding transcription in Example 4.5B, Schenker is attempting to refine the previous readings and reflect on the structure of the movement as a whole. The dominant prolongation in the development remains a vital part of the third reading, but Schenker reconsiders the recapitulation. At m. 144 (Example 4.5B), he initially marked a return to the *Kopfton* ($G, \hat{3}$) and an E in the bass (the tonic *Stufe*). However, he later scratched out the E in the bass (marked with asterisks in Example 4.5B), implying that the deep-level tonic may not return at the recapitulation. However, while he revised the graph, he did not erase or strike-through the half-note G ($\hat{3}$) in the top voice, or the Roman Numeral I beneath the staff! Indeed, the graph captures Schenker in the midst of an internal debate concerning the role of the E minor harmony from mm. 130-

⁸⁴ We can definitively assert that the notation in Example 4.5A is Schenker's because of the handwriting, which is quite different than Elias.'

144.⁸⁵ In his manuscript, the unresolved $\frac{7}{4}$ chord and the E harmony at the recapitulation are nearly vertically aligned (they are somewhat separated in my transcription for clarity). Ultimately, Schenker may have considered the unresolved chord as an arrival of the tonic, but it is very difficult to state definitively.

Example 4.5A Schenker's third reading of Op. 90, I, mm. 65-160⁸⁶

The image displays a musical score for Example 4.5A, Schenker's third reading of Op. 90, I, mm. 65-160. The score is presented on multiple staves, with a complex arrangement of handwritten annotations, including lines, circles, and arrows, overlaid on the printed musical notation. The annotations represent Schenker's voice-leading analysis. At the top of the score, measure numbers are listed: 12, 17, 30, 43, 45, 55, 62, 76, 78, 98, 110, 119, 130, 149, 160. A box at the bottom right of the score contains the word "TRANSCRIPTION".

⁸⁵ The measure numbers in Schenker's graph (Example 4.5A) are somewhat misaligned in some places. The transcription (Example 4.5B) contains measure numbers that reflect my score study and my attempt to accurately reproduce Schenker's voice-leading sketch.

⁸⁶ The graph in Example 4.5 is also cut off; there should be a treble clef for the upper staff and a treble clef for the lower staff.

Example 4.5B Transcription of Example 4.5A

The image shows a musical score transcription for Example 4.5B. It consists of two staves: a vocal line (treble clef) and a piano accompaniment (grand staff). The score is divided into sections: [closing theme], [Dev.], and [Recap.]. Measure numbers 79, 85, 98, 110, 117, 120, 121, 126, 127, 130, 144, and 160 are circled above the staff. The piano part includes chordal figures such as 8, 6, 6, Nbn, 10, 8, 10, 8/7, and #3. The vocal line features a melodic line with various intervals and a final cadence marked with a Roman numeral I. A section of the piano part is marked with asterisks and the text '*scratched out*'. The word 'TRANSCRIPTION' is written in a large, bold, serif font at the bottom of the score, enclosed in a bracket.

The other two graphs from File 64/128 are less detailed (Example 4.6A1 and 4.6A2, transcribed in Example 4.6B1 and 4.6B2, respectively), but they are more intriguing because they offer greater insight into 1) Schenker's re-evaluation of the overall structure and 2) the significance of the unresolved $\frac{3}{4}$ chord in the analysis of the movement as a whole. In these smaller sketches, Schenker attempts to summarize the deep middleground structure of the movement. In one sketch, Example 4.6A2, he proposes an interrupted structure (i.e. $\hat{3} - \hat{2} || \hat{3} - \hat{2} - \hat{1}$), but then scratches it out. In 4.6A1, he suggests that the structure is undivided—he slurs the G ($\hat{3}$) over what could have been a descent to $\hat{2}$ followed by an interruption. At the time, Schenker may have considered the undivided interpretation to be more compelling, but he strongly considered an interrupted large-scale tonal structure (Example 4.6A2).

Example 4.6A Schenker's deep middleground analysis of Beethoven's Op. 90, I

[1] [2]

Example 4.6B Transcription of Example 4.6A

[1] [2]

[undivided structure] [interrupted structure]

[- - - - - scratched out - - - - -]

The paradoxical unresolved $\frac{7}{4}$ chord presented Schenker with various problems that become evident in his sketches and revisions. He reflected on Elias' graphs, made his own sketches, and notated striking changes to his own work (scratch-outs, erasures, new slurs, etc.). Although the graphs are very difficult to interpret, the progression from the first

graphs to the later graphs show how Schenker did not fully commit to a reading of interrupted structure. In the end, he did not publish the analysis, despite his lengthy efforts to interpret the tonal structure. The surviving sketches suggest that he did not pursue the problem of the paradoxical unresolved $\frac{5}{4}$ chord further and consider its implications on the large-scale structure of sonata movements.

4.4 The Tonal Significance of the Unresolved $\frac{5}{4}$ Chord: Interrupted vs. Undivided Structure

As evidenced in Schenker's unpublished work on the movement, the unresolved $\frac{5}{4}$ chord effectively avoids a definitive arrival on the dominant harmony (B major) in the retransition. As a result, the question remains: is the movement interrupted or undivided? If one hears an implied resolution to the root position dominant, then a reading of interrupted structure seems fitting—a two-pronged unfolding of an *Ursatz* that Schenker later claimed was essential in sonata-form movements. However, putting so much structural significance on a B major harmony that never materializes seems naïve, and furthermore, Schenker himself scratched out his reading of interruption (despite the fact that he later claimed that interruption was ubiquitous in sonata-form movements). Therefore, let us consider the consequences of reading the movement as an undivided structure. Ultimately, reading the movement as the elaboration of a single *Ursatz* does not definitively “resolve” the paradox because then the *Kopftön* returns over the dominant *Stufe*, before the restatement of E minor at the reprise (m. 144). The G in the top voice at the recapitulation (Example 4.7) would have already been established earlier, and the descent to $\hat{2}$ with the second group's B minor would be lower level, despite the fact that it is

prolonged from the exposition until just before the unresolved $\frac{3}{4}$ chord at the end of the development.

The only way to sketch this particularly striking retransition and recapitulation is through two graphs, which are vertically aligned to show the dualistic nature of the passage. The first voice-leading graph, Example 4.7A, shows how the movement could be heard as interrupted, with an implied resolution to the dominant harmony. In the second graph, Example 4.7B, the movement is interpreted as a continuous tonal structure, showing how the unresolved $\frac{3}{4}$ chord denies the conventional interruption of the *Uralinie* and instead elides directly into the recapitulation, unfolding tonic harmony.

Example 4.7A Voice-leading graph of Beethoven's Op. 90, I: The resolution to the structural V is implied and there is an interruption before the recapitulation.

Example 4.7B Voice-leading graph of Beethoven's Op. 90, I: The overall structure is undivided and the interruption is bridged-over because the $\frac{3}{4}$ chord is unresolved

The image displays a musical score for the first movement of Beethoven's Op. 90, I, in G major. The score is divided into four sections: '1st Gr.', '2nd Gr.', 'Dev.', and 'Recap.'. Above the treble clef staff, circled numbers 1, 55, 130, and 145 indicate specific measures. Above these numbers are Schenkerian symbols: $\hat{3}$ above 1, $\hat{3}$ above 55, $\hat{3}$ above 130, $\hat{2}$ above 145, and $\hat{1}$ above the final measure. A horizontal line connects these symbols across the top of the score. Below the bass clef staff, Roman numerals I, $\frac{6}{4}$, I, V, and I are placed under the corresponding measures. A dashed line in the bass staff connects the first I to the $\frac{6}{4}$, and another dashed line connects the $\frac{6}{4}$ to the final I. A star symbol (*) is located in the 'Dev.' section. The score is written in G major (one sharp) and 3/4 time.

Perhaps the “truest” hearing of the movement is both interrupted and un-interrupted, which seems contradictory, but is somehow made possible via the prolongation of the unresolved $\frac{3}{4}$ chord.

4.5 A Possible Programmatic Aspect of the Unresolved $\frac{3}{4}$ Chord

Since the striking, unresolved $\frac{3}{4}$ chord in the first movement of Beethoven's Op. 90 piano sonata can be understood as functioning simultaneously as a tonic $\frac{3}{4}$ chord and a cadential $\frac{3}{4}$ chord based on Schenkerian methodology, this section considers one potential thread of deeper significance underlying the paradoxical situation in Op. 90. A few

noteworthy programmatic aspects and surrounding historical context of the piano sonata supports the notion that the Op. 90 piano sonata could evoke the notion of paradox.

When asked what he would title the Op. 90 piano sonata, Beethoven replied that it represented a “struggle between head and heart.”⁸⁷ The “head and heart” reference has since been traced to Count (Graf) Moritz Lichnowsky. Beethoven dedicated the Op. 90 piano sonata to Count Lichnowsky because of a struggle that the Count was faced with in his personal life.⁸⁸ The Count was in love, but not with his wife. Even though it was not unusual for nobility to have mistresses at that time, the Count wanted to legitimize the relationship. Lichnowsky faced a duality that left his desire to marry his lover (a commoner) unfulfilled due to norms of social order. A connection between the programmatic “head and heart” issue and the unresolved $\frac{5}{4}$ chord in the first movement of Op. 90 is merely speculative. I can only conjecture about the structural implications of the unresolved $\frac{5}{4}$ chord and a potential connection to the programmatic elements that would make the paradox an even larger part of the compositional idea in the movement.

4.6 Beethoven’s Symphony No. 4 in B \flat major, First Movement

In the first movement of Beethoven’s Symphony No. 4, Op. 60, a similar paradox occurs involving an unresolved $\frac{5}{4}$ chord. At the end of the development section (Example 4.8, m. 305), a German augmented-sixth chord resolves to what appears to be a cadential $\frac{5}{4}$

⁸⁷ Treber, *Beethoven’s Op. 90*, 19. Treber unpacks the “head and heart” reference from Krones, but does not connect it to a musical paradox. Hartmut Krones, “Ludwig van Beethoven’s e-moll Sonate, Op. 90,” *Osterreichische Musikzeitschrift* 43 (1988): 592-601. However, Treber later describes the end of the development section as “a paradox between the harmonic content and the melodic events,” (p. 52) but does not explain the connection further.

⁸⁸ Treber, *Beethoven’s Op. 90*, 18-9.

chord. Much like the first movement of Beethoven's Op. 90 piano sonata, the anticipated resolution to the $V\frac{4}{4}$ chord fails to materialize, and the unresolved $\frac{4}{4}$ chord proceeds directly to the root-position tonic ($B\flat$ major harmony) at the recapitulation (m. 333). The annotated score excerpt in Example 4.8 shows the augmented-sixth frame ($G\flat$ in the bass and $E\sharp$ in the top voice), which resolves to the cadential $\frac{4}{4}$ chord in m. 305. That $\frac{4}{4}$ chord is prolonged and left unresolved in mm. 309ff.

Example 4.8 Beethoven's Symphony No. 4, I, mm. 303-313: the unresolved $\frac{4}{4}$ chord⁸⁹

303 304 305 306 308 310 312

$E\sharp$ (F)

Ger $+6$ * $\frac{6}{4}$ chord that never resolves to root position dominant

⁸⁹ Ludwig van Beethoven, *Symphony No. 4 in B-flat major* (Leipzig: Breitkopf and Härtel, 1862). The $E\sharp$ resolves to an F that is the fifth of the $B\flat$ major $\frac{4}{4}$ chord. The F is present in the bass voice and is implied at the indicated position above the bass.

The unresolved $\frac{5}{4}$ chord in the first movement of Symphony No. 4 occurs at the end of the development section, just like the unresolved $\frac{5}{4}$ chord in Beethoven's Op. 90 piano sonata. Instead of resolving to a root position dominant (F major), melodic fragments in $B\flat$ major continue in mm. 305-346 and build directly into the recapitulation and return of $B\flat$ major harmony in m. 347.

The retransition in this excerpt from the Fourth Symphony shows that leaving the cadential $\frac{5}{4}$ chord ($V\frac{5}{4}$) unresolved at the end of the development section was a feature not limited to the Op. 90 sonata. Since the dualistic and paradoxical role of the unresolved $\frac{5}{4}$ chord in the Fourth Symphony corresponds very closely to the one in the first movement of the Op. 90 sonata (tonic/consonant $\frac{5}{4}$ chord *or* cadential $\frac{5}{4}$ chord?), it seems unnecessary to restate the conditions for paradoxical $\frac{5}{4}$ chords here. However, it is important to note that again in the Fourth Symphony, the unresolved cadential $\frac{5}{4}$ chord ($V\frac{5}{4}$ chord) effectively thwarts the sense of definitive interruption to the fundamental line—the interruption that occurs in many Classical era sonata form movements (typically first movements of symphonies). Without the definitive V at the end of the development, the descent to $\hat{2}$ must be either implied or delayed until later in the movement. In some cases, the emphasis on the unresolved $\frac{5}{4}$ chord may seem to evoke a $\hat{3}$ that bridges-over the end of the development, usurping the paradigmatic $\hat{2}$ over V from the retransition, and consequently delaying the descent of the *Urlinie's* final $\hat{2} - \hat{1}$ until later in the movement. It is as if the $\hat{3}$ that is present in the $V\frac{5}{4}$ harmony is an “early” or “premature” arrival of the *Kopftön*, acting in the same capacity as an anticipation. Examples 4.9A and 4.9B (below) contain two vertically aligned readings of the same passage. Only together do the two graphs effectively

show how the lack of resolution to the structural dominant avoids the descent to $\hat{2}$ and suggest that the overall structure of the first movement of the Fourth Symphony could be read as *undivided* and/or *interrupted*.

Example 4.9A Voice-leading graph of Beethoven's Symphony No. 4, I, mm. 43-333: The resolution to the structural V is implied and the structure is interrupted

Example 4.9B Voice-leading graph of Beethoven's Symphony No. 4, I, mm. 43-333: The large-scale structure is undivided because of the unresolved $\frac{3}{4}$ chord

The movement could be conceivably have only one definitive descent of the fundamental line (Example 4.9B), *not* a first branch (Exposition and Development, $\hat{3} - \hat{2} ||$) and a second branch (Recapitulation, $\hat{3} - \hat{2} - \hat{1}$). In that reading (Example 4.9B), the *Kopfton* essentially returns “too soon,” before the reprise, with the arrival of the unresolved $\frac{5}{4}$ chord. A reading of the movement as an interrupted tonal structure is also plausible (Example 4.9A), if one accepts the premise that an implied resolution to the root position dominant (V) occurs after the unresolved $\frac{5}{4}$ chord. The implied V would coincide with an implied descent to $\hat{2}$ in the top voice, and show an overall structure that is divided (Example 4.9A).⁹⁰

In both the Fourth Symphony and the Op. 90, the unresolved $\frac{5}{4}$ chords are paradoxical; they concurrently assume the role of a cadential $\frac{5}{4}$ chord ($V\frac{5}{4}$) as well as a tonic $\frac{5}{4}$ chord ($I\frac{5}{4}$). As shown in Schenker’s unpublished analyses of the Op. 90 movement and the two different voice-leading graphs of the Fourth Symphony movement, an unresolved $\frac{5}{4}$ chord can have significant ramifications on the overall structure of a sonata form movement. One might hear the implied resolution to the root position dominant in both movements because of the strong tendency in the Classical era sonata-form movements to prolong the dominant at the retransition, but it seems that the idea of an undivided sonata form must also be considered in these situations, because the root-position dominant never literally materializes. The concept of undivided structures in sonata form movements returns later in other chapters in regard to formal-tonal paradoxes, and will be addressed

⁹⁰ The descent to $\hat{2}$ never materializes, due to the unresolved $\frac{5}{4}$ chord, but it could be implied on the last half of the beat in the m. 322, a split second before the recapitulation (m. 333)

further there. The remainder of the chapter examines a different kind of unresolved $\frac{5}{4}$ chord that occurs in the finale of Beethoven's Symphony No. 8 in F major.

4.7 Beethoven's Symphony No. 8 in F major, Op. 93, Fourth Movement

Although the two aforementioned special cases capture the essence of the dualistic nature of the unresolved cadential $\frac{5}{4}$ chord and its ramifications on the overall structure in the Op. 90 and the Fourth Symphony, perhaps an even more striking example of an unresolved $\frac{5}{4}$ chord surfaces in the fourth movement (finale) of Beethoven's Symphony No. 8 in F major, Op. 93. This movement exhibits various remarkable features that embody Beethoven's witty sense of tonal humor.⁹¹ For example, the second theme group seems to begin in error, because it appears in the "wrong" key area (\flat III, $A\flat$, instead of V, C). Later in the movement, apparent tonic harmonies morph unexpectedly to fulfill other functions and an unresolved $\frac{5}{4}$ chord results in a paradox in voice leading.⁹²

The unresolved $\frac{5}{4}$ chord in the finale of Beethoven's *Eighth Symphony* is different from the previous two examples. Instead of functioning doubly as tonic and cadential $\frac{5}{4}$ chords, the unresolved $\frac{5}{4}$ chord in m. 346 creates a two-fold implication in voice leading: C#

⁹¹ Antony Hopkins, *The Nine Symphonies of Beethoven* (London, UK: Travis and Emery, 2011).

⁹² This analytical example from Beethoven's *Eighth Symphony* is the closer to the "enharmonic paradoxes" described in Haley Reale's dissertation from the University of Michigan (discussed in Chapter 2). However, in this passage, neither of the two implied tones C# or the $D\flat$ actually sound, so it is different from her examples. Furthermore, the C# and $D\flat$ issue is symbolic of larger issues in the movement as a whole.

and D \flat are both implied during a rest that follows an unresolved $\frac{5}{4}$ chord.⁹³ The motivic contraction and acceleration in mm. 336-345 builds to what appears to be a cadential $\frac{5}{4}$ chord in D major (marked with an asterisk in Example 4.10, just before the *p* dynamic marking). Although that $\frac{5}{4}$ chord is left unresolved like the chords in Op. 90 and the Fourth Symphony, the voice-leading motions and unusual “resolution” (or rather lack thereof) that follows are quite different; it does not elide into a root position D major chord. A reduced score excerpt (piano transcription) is provided in Example 4.10.

Example 4.10 Beethoven’s Symphony No. 8, IV, mm. 343-347 (piano reduction)⁹⁴

The image shows a piano reduction of a musical score excerpt. It consists of two staves: a treble clef staff on top and a bass clef staff on the bottom. The music is in 5/4 time. The right hand has a complex texture with many notes, including triplets and slurs. The left hand has a simpler bass line with some chords. There are two 'Ped.' markings under the bass staff. At the end of the excerpt, there is an asterisk above a 6/4 time signature, indicating a cadential 5/4 chord in D major.

To better comprehend the special “resolution” of the unresolved $\frac{5}{4}$ chord in the 8th Symphony, let us first consider a conventional voice-leading paradigm that would follow a cadential $\frac{5}{4}$ chord of D major (Example 4.11). The A in the bass would persist while the F# (6) and D (4) above it would proceed down to E (5) and C# (3), respectively. That

⁹³ See also, Gabriel Fankhauser, Appalachian State University, conference talk presented at the Society for Music Theory Conference (New Orleans, 2012), titled “Deviant Cadential $\frac{5}{4}$ chords.”

⁹⁴ Ludwig van Beethoven, *Symphony No. 4* transcribed for piano solo by Franz Liszt (Leipzig: Breitkopf & Härtel, 1865).

“conventional” or “typical” resolution for a cadential $\frac{5}{4}$ chord in D major is shown below in Example 4.11.

Example 4.11 Typical resolution of a cadential $\frac{5}{4}$ chord in D major

However, in the striking passage in the *Eighth Symphony*, the cadential $\frac{5}{4}$ chord behaves unconventionally, to create the implication of both C^\sharp and D^\flat . Following the unresolved $\frac{5}{4}$ chord (in Example 4.10), the bass continues on the pedal A with quarter notes (the last measure shown in Example 4.10), but the upper voices, F^\sharp and D , do not resolve down to E and C^\sharp , respectively. The bass continues further after the upper voices drop out, eventually moving down a third to F^\flat (at the *pp* dynamic marking in Example 4.12A, m. 348). The F^\flat is repeated as a bass pedal in quarter notes, and when the upper voices re-enter, they play the first theme material in F major (m. 355, not shown in Example 4.12A). The piano reduction in Example 4.12A shows the unresolved $\frac{5}{4}$ chord and the bass motion from A to F^\flat ; Example 4.12B is a block-chord reduction of the same passage.

Example 4.12A Beethoven's Symphony No. 8, IV, mm. 346-352: A seemingly cadential $\frac{4}{4}$ chord of D major moves to root-position F major harmony.⁹⁵

Example 4.12B Block-chord reduction of the excerpt in Example 4.12A

The striking “resolution” to F major harmony (in root position) from the cadential $\frac{4}{4}$ chord of D major opens up the possibility for two different implied tones in the upper voices in the rest that follows the unresolved $\frac{4}{4}$ chord (marked as quarter rests in Example 4.12B). The material that precedes the unresolved $\frac{4}{4}$ chord (D major tonality) supports the

⁹⁵ Ludwig van Beethoven, *Symphony No. 4* transcribed for piano solo by Franz Liszt (Leipzig: Breitkopf & Härtel, 1865).

first reading of voice leading (Example 4.13), while the second reading privileges the material that follows (the motion to F major harmony, Example 4.14). Given the D major context from which the unresolved $\frac{5}{4}$ chord originates, the first reading (Example 4.13) shows how a resolution to a root-position dominant (V) in D major is implied when the upper voices drop out. The E and C# result from the implied voice-leading motions of the sixth (F#) and the fourth (D) over the pedal A in the bass.

Example 4.13 Implied resolution of the unresolved $\frac{5}{4}$ chord to the dominant of D major

D major:
(VI#)

V $\begin{matrix} 6 & (& 5 \\ 4 & (& \# \end{matrix}$

Implied resolution
never materializes

The second reading of this passage (Example 4.14) interprets the resolution of the unresolved $\frac{5}{4}$ chord based on the motion to F major harmony that follows it. Since the V of D never materializes and the motion to F major harmony in m. 355 is direct, the implied C# can be heard as a D \flat , because it moves from D down to C \natural (the fifth of F major). The enharmonic re-interpretation of the C# as a D \flat is necessitated by the F major harmony that

only materializes *after* the unresolved $\frac{3}{4}$ chord (the actual resolution). Example 4.14, below, shows how the voice leading in the top voice also implies a $D\flat$ during the rests, due to the unconventional “resolution” of the unresolved $\frac{3}{4}$ chord.

Example 4.14 Voice leading from the unresolved $\frac{3}{4}$ chord implies a $D\flat$

$D: V \begin{matrix} 6 \\ 4 \end{matrix} \begin{matrix} \cancel{5} \\ \cancel{\#} \end{matrix}$ $F: I$
 (VI#)

This striking move to F major from the unresolved $\frac{3}{4}$ chord results in a double meaning in voice leading, a paradoxical situation in which $C\sharp$ and $D\flat$ are both implied during the rest in the upper voices. The voice-leading roles of $C\sharp$ and $D\flat$ are contradictory— $C\sharp$ is a leading tone to D, which would typically resolve up by step, and $D\flat$ is the $\flat\hat{6}$ of F major, which typically would move down to C. Both tones can be supplied by the listener in the rest because of the irresolution of the cadential $\frac{3}{4}$ chord of D major and the dualism of its possible resolutions. To be sure, the unresolved $\frac{3}{4}$ chord in the finale of Beethoven’s

Symphony No. 8 is a striking paradox—and it epitomizes a significant issue permeating the entire movement. My analysis in the next section reveals the larger significance of the paradox and unravels the enharmonic conflict involving C# and D♭ that pervades the finale, and the symphony as a whole.

4.8 The Significance of the C# vs. D♭ Issue in the *Eighth Symphony*

The unresolved $\frac{5}{4}$ chord and the resulting implication of both C# and D♭ symbolizes a widespread enharmonic issue in the finale. Salient features of harmony and voice leading in this movement highlight the C# vs. D♭ conflict, thus making the paradox a fitting manifestation of issues imminent throughout the movement.

The most striking feature of the first twenty measures of the exposition is perhaps the loud and unruly C# that presents itself in the context of F major (Example 4.15). The C# is emphasized by its dynamic marking (*fortissimo*) and by its metric placement (it is tied over the bar line from mm. 17-18). The C# occurs *loudly* at the end of a phrase that is getting *softer* (all the way to the *ppp* dynamic level). As a result, the protruding C# is a remarkable feature of the first theme group (Example 4.15).

Example 4.15 Beethoven, Symphony No. 8, IV, mm. 11-18⁹⁶

Another perplexing feature of the C# in m. 17 (Example 4.15) is that although it is notated as a sharp, it does not act as a secondary leading tone (i.e. with V/vi harmonic support, the C# would likely ascend to D). Instead, the C# proceeds directly back down to C# in m. 18 with the return to tonic harmony (F major). Thus, without a score in hand, one could *hear* it as C# (raised $\hat{5}$) or D \flat (lowered $\hat{6}$, as in: C – D \flat – C, which is also a neighbor note to the C#). Therefore, the curious behavior of the unruly C# from the opening of the exposition also creates the aural impression of both C# and D \flat via voice leading.

⁹⁶ Ludwig van Beethoven, *Symphony No. 8* (Leipzig: Breitkopf & Härtel, 1862).

The conflicting C \sharp and D \flat idea also surfaces in the second theme group in the exposition. In m. 48, the second theme material is first presented in the “wrong” key area, A \flat major, instead of the dominant (C major). Even though the dominant (C major) prevails as if to “correct” the key area of the second theme (m. 60), a motion to \flat III (A \flat major) could be considered atypical for the structure of a sonata-form movement.⁹⁷ If Beethoven wanted to eventually get to the dominant (V) anyway, then why would he insert the passage in A \flat major between the tonal motion from tonic (I) to dominant (V)? A closer look at the corresponding section of the recapitulation (Example 4.16) reveals its deeper meaning. When the second theme material returns in the recapitulation, the A \flat major section is transposed down a fifth, and therefore occurs in D \flat major (Example 4.16). Situated within the dominant prolongation, the D \flat in the recapitulation represents a prolonged manifestation of the unruly C \sharp that appeared in the first theme group as a chromatic upper neighbor (m. 17, C – C \sharp /(D \flat) – C).

⁹⁷ In a more conventional sonata form in a major key first movement of a classical symphony, the second theme group material would more typically occur in the key area of the dominant, not the chromatic mediant. More information and detailed discussion of Schenkerian sonata-form paradigms can be found throughout Chapters 5, 6, and 7 of this dissertation.

Example 4.16 Voice-leading graph of Beethoven’s Symphony No. 8, IV, mm. 219-236: The unruly C# from the exposition is recast in the large scale tonal plan for the movement—the A♭ major tonal area in the exposition (♭III) returns as D♭ in the recapitulation, suggesting the same C – D♭ – C idea that was present in the exposition (C – C#(D♭) – C).

The image shows a musical score for two measures of music. The top staff is in treble clef and the bottom staff is in bass clef. The key signature has one flat. Above the first measure (m. 219) is a circled number '219'. Above the second measure (m. 224) is a circled number '224'. Above the third measure (m. 234) is a circled number '234'. Above the fourth measure (m. 236) is a circled number '236'. The first two measures are labeled '"Wrong" Reprise of 2nd Gr.' and the last two measures are labeled '"Corrected" Reprise of 2nd Gr.'. In the first measure, the bass line has a note C (labeled 'V') and the treble line has a note C# (labeled '2'). In the second measure, the bass line has a note D♭ and the treble line has a note B. In the third measure, the bass line has a note C and the treble line has a note A. In the fourth measure, the bass line has a note C (labeled 'I') and the treble line has a note C (labeled '3'). Dashed lines and arrows indicate voice-leading connections between notes in adjacent measures.

Thus, we can explain the occurrence of D♭ major in the recapitulation as a striking reincarnation of the unruly C# from the exposition. In this way, we could argue that the D♭ major in the recapitulation justifies the peculiarity of the “wrong” key area of the second theme group (from the exposition) because the prolonged D♭ major in the recapitulation is a large-scale version of the neighbor note motion, C – C# (D♭) – C from the first theme group (mm. 17-18, see Example 4.15). The D♭ comes from the C in the bass in m. 219 and returns to C in the bass of m. 234, therefore acting as a neighbor-note to C at the middle-ground

level (Example 4.16). The unconventional “resolution” of the unresolved $\frac{7}{4}$ chord later in the piece is therefore a symbolic culmination of a pervasive tonal issue, namely C# vs. D \flat .

Some analysts do not interpret these peculiar structural features of the *Eighth Symphony* within the larger tonal context of the movement as a whole. For example, Dmitri Tymoczko states, “there are places in which foreign notes appear, for no particular reason...in the last movement of the *Eighth Symphony*.”⁹⁸ For Tymoczko, the perplexing unruly C# is just a “foreign” note that seems out of place within the larger tonal structure of the movement. However, by considering the voice-leading features in the foreground and drawing connections between the levels of tonal structure, one can hear the C# from the exposition as very much more than a “foreign note” that appears “for no reason.” On the contrary, the analysis presented here explains how both the disruptive C# in the first theme as well as the atypical turn to A \flat major later in the exposition (transposed to D \flat in the recapitulation) are integral to a calculated and logical large-scale tonal plan. The non-normative or seemingly “foreign” aspects of the exposition foreshadow the enharmonic conflict between C# and D \flat and make the paradoxical unresolved $\frac{7}{4}$ chord in the finale particularly emblematic.

Based on the special features of the finale that contribute to the C# vs. D \flat issue, one is compelled to hear the implied C# and D \flat as a significant element in the compositional problems created by the movement. How could Beethoven spell both C# and D \flat at the same time? Obviously, writing either pitch on the score would have forced him to choose *either*

⁹⁸ Dmitri Tymoczko, *The Sublime Beethoven* (Boston: Boston Review, March 2000), 1-5. Tymoczko’s article was published as a short newspaper review, not an in-depth analysis of the piece intended for an audience of music scholars.

C# or D♭! I argue that the only way to achieve both C# and D♭ in one time span is to write *neither* of them, but rather *imply* both. The stunning paradox of the unresolved ♯ chord therefore creates the impression of both C# and the D♭ in the rest following the unresolved ♯ chord.

The coda of the movement makes an explicit reference to the C# /D♭ issue in mm. 372-375, juxtaposing the C# and D♭ and highlighting their enharmonic equivalence (Example 4.17). In mm. 372-373 (marked *D-flat* at the bottom of Example 4.17), Beethoven chooses the D♭ spelling, and follows it immediately with the C# spelling. Short of mixing the spellings between different instrument parts in the orchestra, this is the closest he can come to spelling out both pitches at once.

Example 4.17 Beethoven's Symphony No. 8, IV, mm. 367-375: The C#/D♭ conflict is stated explicitly in the coda⁹⁹

The pitches C# and D♭ also play an important role in the first movement. One especially striking feature of the exposition is that it moves to a “wrong” second key area like the finale (see Example 4.18). In the tonal motion from tonic (F major) to the submediant, Beethoven uses the A major harmony as an applied dominant (m. 34, V/VI). Therefore, in the inner voice motion, the C# acts as a leading tone to D (C – C# – D, bracketed inner voice motion, Example 4.18). That progression in the first movement might

⁹⁹ Ludwig van Beethoven, *Symphony No. 8* (Leipzig: Breitkopf & Härtel, 1862).

foreshadow the notable unresolved cadential $\frac{3}{4}$ chord of D major in the finale that remains unresolved, implying the C#. Example 4.18 shows the voice leading in the first movement that engages the C#/D \flat issue.¹⁰⁰

Example 4.18 Voice-leading motions in the first movement of Beethoven's *Eighth Symphony* foreshadow the implied C# and D \flat in the finale.

The musical score for Example 4.18 is presented in two systems. The first system shows measures 1, 34, and 38. A dashed line connects the notes in measures 1 and 34. The second system shows measures 1 and 38. The first system is labeled "1st Gr." and the second system is labeled "False" 2nd Gr.". The first system shows a G major chord (I) and the second system shows a D major chord (VI#).

Thus, although it may appear to be contradictory at first because of unconventional voice leading and conflicting implications, the dualistic, unresolved $\frac{3}{4}$ chord and its special resolution in mm. 346-355 of the finale can be understood as a fitting way for Beethoven to culminate salient tonal issues of the *Eighth Symphony* as a whole.

¹⁰⁰ Additionally, consider that the D \flat is part of two augmented-sixth chords: one that occurs at the end of the development section in a move towards the dominant (C major) and another occurs in the recapitulation just before the structural dominant (V) is achieved. Thus, one might argue that the D \flat "prevails" over the C# locally (only with respect to structural prominence in the first movement).

4.9 Conclusion

This chapter addresses two types of paradoxical unresolved $\frac{5}{4}$ chords. The first type of unresolved $\frac{5}{4}$ chords are paradoxical because they have the unusual ability to imply two seemingly contradictory functions at the same time: the tonic $\frac{5}{4}$ chord ($I\frac{5}{4}$ chord) and the cadential (dominant) $\frac{5}{4}$ chord (the $V\frac{5}{4}$ chord). If one resolution were to be realized, then the paradox would not exist—the unresolved nature of those $\frac{5}{4}$ chords arouses the paradox. In the second type of unresolved $\frac{5}{4}$ chord, an atypical resolution creates two different implied tones in one span; one tone based on the conventional resolution of the $\frac{5}{4}$ chord (i.e. C \sharp) and another tone based on the realized, atypical “resolution” of the $\frac{5}{4}$ chord (i.e. D \flat). Even though the two pitches are enharmonic equivalents, their voice-leading roles are different, and this special type of paradox *avoids* the explicit spelling of one pitch or the other. That conflict is particularly significant in the finale of Beethoven’s *Eighth Symphony*.

Both types of unresolved $\frac{5}{4}$ chords are highly significant for the large-scale tonal structure. In the Op. 90 and Symphony No. 4, they result in a conversion of what could have been a large-scale interrupted structure (the typical sonata-form paradigm) to what could be an undivided structure (a composed-over interruption, which is atypical in sonata-form movements). The unresolved $\frac{5}{4}$ chord in the *Eighth Symphony* is especially significant because it epitomizes an enharmonic conflict that permeates multiple levels of the structure in the piece. Ultimately, a failure to understand the dualistic nature of both types of unresolved $\frac{5}{4}$ chords could result in a failure to truly comprehend a significant compositional problem that underlies each of the three pieces discussed in the chapter,

Beethoven's Piano Sonata No. 27 (Op. 90), his Symphony No. 4 (Op. 60), and his Symphony No. 8 (Op. 93).

CHAPTER 5

FORMAL-TONAL PARADOX I:

THE FIRST MOVEMENT OF BEETHOVEN'S *TEMPEST* SONATA

5.1 Introduction

The second category of paradox is formal-tonal paradox. The next three chapters each present one analytical case study of formal-tonal paradox and describe its significance within a given movement (or piece). A formal-tonal paradox exists when the structure of a given movement (or piece) exemplifies an incipient interrupted (divided) structure, but a uniquely structured recapitulation obliterates the interruption and suggests that the movement can ultimately be read as undivided (at the deep middleground level). As a result, the prolonged dominant harmony (V) that supported the *Urlinie's* descent to $\hat{2}$ is retrospectively re-interpreted as passing, thereby leaving the remnants of a formally, and, most importantly, tonally divided structure beneath an undivided structure.¹⁰¹ Above the seemingly dividing V, the $\hat{2}$ that might have been part of the *Urlinie* functions instead as a passing tone in the top voice (to $\hat{1}$).

All paradoxes contain an element of apparent contradiction or binary opposition. The essential contradiction of formal-tonal paradoxes involves 1) the sense of division that results from the form of the movement and the incipient interrupted structure, which contradicts 2) a continuation of tonal processes that override the formal boundary, annihilate the interruption, and make the overall structure undivided.¹⁰² The overarching

¹⁰¹ A “passing” harmony is intermediary (lower-level); it is situated between two pillars of tonal structure that connect in a deeper-level tonal motion.

¹⁰² All tonal structures are ultimately undivided at the background level. Even at the deep middleground level, Schenker's graphs (i.e. Figure 26b) reveal that one branch of the two-

undivided structure and the incipient interrupted structure do not occur on exactly the same level— although, the residue of the divided structure remains present at a deep middleground level and the undivided structure exists at a slightly deeper middleground level that can be understood only after the interruption is abolished. Even though the undivided structure is superimposed on top of the incipient interrupted structure, a sense of division persists for various formal and tonal reasons discussed below, and in the end, the undivided structure does not *fully* supplant the interrupted structure. As a result, formal-tonal paradoxes inherently convey a structural dualism—a dividing V that may ultimately prove to be passing. In all three of the ensuing case studies of formal-tonal paradox, there is evidence to suggest that remnants of the divided structure linger, but tonal processes supersede the incipient division and pierce through the interruption, evoking an opposition between formal and tonal goals.¹⁰³

part *Ursatz* is ultimately subsidiary to the other. However, in Schenker's models for interruption (Figures 21, 24, 25, and 26), all of the deep middleground structures contain 1) the re-established tonic *Stufe* in the bass at the beginning of the recapitulation, and 2) the regained (or re-established) *Kopfton* at the recapitulation as a point of departure for the second part of the *Ursatz*. The superimposed undivided structure in a formal-tonal paradox reveals a structure that does not exhibit either of those two components; it bypasses the interruption at the middleground level does not imply a tonal division.

¹⁰³ At the deep middleground level, the unfolding of an apparent divided structure underneath an undivided structure in one sonata movement seems contradictory. However, unique voice-leading motions and distinct tonal processes (especially in recapitulations) in select movements make formal-tonal paradoxes possible. An analogous concept in mathematics is the principle that parallel lines can “never” cross. That fundamental principle is built on the premise that the parallel lines cannot cross *in the Euclidean realm*. Advanced mathematics can posit non-Euclidean environments with different sets of mathematical axioms, and in those unique worlds, parallel lines might cross. Marvin J. Greenberg, *Euclidean and Non-Euclidean Geometries: Development and History* (New York: W.H. Freeman and Company), 18-22. For the purposes of this dissertation, the generic model of interruption (Schenker's Figure 21a) and the basic paradigms of Schenkerian analysis (in particular, the structures of paradigmatic sonata-form movements) are fundamental “axioms” (See also Chapter 3).

To fully elucidate the concept of formal-tonal paradox, we must first consider the conventional unfolding of formal and tonal processes in sonata-form movements.

Therefore, the paradigmatic alignment of formal and tonal processes for sonata-form movements is shown in the voice-leading graphs below (Example 5.1).¹⁰⁴ Since Schenker presents several inconsistent models of interruption in *Free Composition*, let us examine Lauri Suurpää's concise, self-consistent version of the paradigms derived directly from Schenker's two-part *Ursatz* in Figure 21a (major mode, graph a) and Figure 26a (minor mode, graph b).¹⁰⁵

¹⁰⁴ Some modern Schenkerian scholars have outlined a more detailed set of Schenkerian paradigms for sonata-form movements; Charles Burkhart and Edward Laufer come to mind. This chapter focuses on Laufer's paradigmatic models because they are published, whereas Burkhart's are not. Edward Laufer, "Voice-Leading Procedures in Development Sections," *Studies in Music from the University of Western Ontario* 13 (1991): 71. Nonetheless, Burkhart's sonata-form paradigms are very systematized and clear, and undoubtedly closely related to Laufer's (Burkhart acknowledges his debt to Laufer in a note on the manuscript). Charles Burkhart, "Summary of Common Sonata-Form Paradigms" (Unpublished manuscript, 2002), 1-7. Some of the Burkhart paradigms are discussed in David Gagné and Allen Cadwallader, *Analysis of Tonal Music: a Schenkerian Perspective*, 3rd ed. (Oxford: Oxford University Press, 2011).

¹⁰⁵ Lauri Suurpää, "The Undivided *Ursatz* and the Omission of the Tonic *Stufe* at the Beginning of the Recapitulation," *Journal of Schenkerian Studies* 1 (2005), 68. The contradictions and inconsistencies in Schenker's models of interruption from *Free Composition* (Figs. 21, 24, 25, and 26) is a problem that has been addressed in recent Schenkerian literature, but is not the focus of this dissertation. Matthew Arndt, "Interruption and the Problem of Unity and Repetition," *Journal of Schenkerian Studies* 6 (2012): 1-32. Even though Schenker's figures present contradictory theories, there are certain features that they have in common, which are vital here: 1) the tonic *Stufe* in the bass at the beginning of the recapitulation, and 2) the *Kopfton* that continues or is re-established at the recapitulation. The theory of interruption operative in this dissertation is the generic model of interruption—a two-part *Ursatz* at the deep middleground level, as concisely summarized in the paradigms in Examples 5.1 and 5.2. (Even when we consider a retained $\hat{5}$ "over" the first part of the *Ursatz* (i.e the Oster paradigm), the two aforementioned underlying features are present). The generic model is outlined in Schenkerian-oriented textbooks, including the Cadwallader/Gagné and the Forte/Gilbert. Allen Forte and Steven E. Gilbert, *Introduction to Schenkerian Analysis* (New York: W.W. Norton & Co., 1982). Allen Cadwallader and David Gagné, *Analysis of Tonal Music: A*

Example 5.1 The paradigmatic alignment of formal and tonal procedures in sonata-form movements (via Suurpää).

Diagram illustrating the paradigmatic alignment of formal and tonal procedures in sonata-form movements (via Suurpää). The diagram shows two examples, a) and b), with musical notation and Roman numerals below.

Example a) shows the formal structure: Exp. (Exposition), Dev. (Development), and Recap. (Recapitulation). The tonal structure is indicated by Roman numerals: I V || I V I.

Example b) shows the formal structure: Exp. (Exposition), Dev. (Development), and Recap. (Recapitulation). The tonal structure is indicated by Roman numerals: I || V || I V I.

Schenker's voice-leading graphs demonstrate how the dominant prolongation achieved in the exposition (or in the development, as in Example 5.1b) is a dividing dominant in both major and minor-mode sonata form movements. That dividing dominant typically underpins $\hat{2}$ in the top voice and stretches until the end of the development.

Schenkerian Approach (New York: Oxford University Press, 2011), 303-359. David Beach, *Advanced Schenkerian Analysis: Perspectives on Phrase Rhythm, Motive, and Form* (New York: Routledge, 2012), 203-205. All interrupted structures are ultimately undivided at the background level, but that is not the focus of this dissertation, which deals primarily with the deep middleground level. Theorists including Irna Priore have developed other, new and insightful theories of interruption, which still contain a re-established tonic *Stufe* at the recapitulation. Irna Priore, "Further Considerations of the Continuous $\hat{5}$ with and Introduction and Explanation of Schenker's Five Interruption Models," *Indiana Theory Review* 25 (Spring-Fall 2004): 115-38. Frank Samarotto's remarks on "free forms of interruption" are also noteworthy, and his conceptual framework considers a flexible interpretation of interruption. Frank Samarotto, "Schenker's 'Free Forms of Interruption' and the Strict: Toward a General Theory of Interruption" (paper presented at the annual meeting for the Society of Music Theory, Boston, MA, November 11, 2005). In general, David Falterman reviews many of the Schenkerian theories of interruption and discusses some of the differences between them. David Falterman, "The Treatment of Interruption in Schenkerian Theory" (Unpublished manuscript, University of North Texas, 2014).

Following the interruption, the recapitulation re-establishes not only the tonic *Stufe* (I) in the bass, but also the *Kopfton* ($\hat{3}$ or $\hat{5}$) in the top voice. Consequently, there is a division in the *Urlinie* as well as in the *Bass-Brechung*, and a two-pronged structure for the movement as a whole.¹⁰⁶ The first branch of structure consists of the exposition and the development ($\hat{3} - \hat{2} ||$ in the *Urlinie*), and the second branch of structure unfolds in the recapitulation ($\hat{3} - \hat{2} - \hat{1}$ in the *Urlinie*). “The recapitulation,” as William Rothstein has stated, “is then a true re-beginning, acting much like the consequent phrase within a parallel period.”¹⁰⁷

In the ensuing analytical case studies, there is still a prolonged dominant that, with a more typical unfolding of tonal material in the recapitulation, would have been a dividing dominant supporting the descent to $\hat{2}$ in the *Urlinie*, just as the models demonstrate.

However, in movements that exhibit formal-tonal paradox, the dividing dominants from the above graphs become transformed into passing dominants based on a unique unfolding of tonal structure and voice leading that occurs in the recapitulation (and perhaps also at the end of the development section). Thus, when that transformation occurs, the interruption is retrospectively obliterated and the tonal structure must be reconceived as an uninterrupted process, despite the formal division at the reprise and the presence of a “would-have-been” dividing dominant with $\hat{2}$ in the top voice.

Schenker’s paradigmatic graphs are an indispensable point of departure in the present analysis for unique interactions between formal and tonal processes in sonata-form movements. However, later analysts have expanded upon Schenker’s work in order to develop more varied and detailed sonata-form paradigms. For example, Edward Laufer

¹⁰⁷ William Rothstein, *Phrase Rhythm in Tonal Music* (New York, Schirmer, 1989), 112.

further clarified the typical unfolding of form and structure in sonata-form movements, focusing most notably on the tonal structure of development sections.¹⁰⁸

Laufer outlines slightly more detailed paradigmatic models of sonata form movements (Example 5.2), and supplements his models with numerous analytical examples. He delineates more detailed ways in which form and tonal structure might typically align in both major and minor mode sonata-form movements, and he explains descents from $\hat{3}$ as well as from $\hat{5}$ in the *Urlinie*. Laufer's formal-tonal models for sonata-form movements are reproduced below in Example 5.2. Note that all of Laufer's background formal-tonal paradigms contain *interrupted* tonal structures in which the dividing dominant is prolonged in the exposition and/or the development section, with a corresponding descent to $\hat{2}$ in the top voice.¹⁰⁹

Example 5.2 Laufer's formal-tonal paradigms for sonata-form movements

¹⁰⁸ Laufer, *Development Sections*, 71.

¹⁰⁹ Laufer, *Development Sections*, 70-1. "Figures a-d show how a Schenkerian reading would designate the background of a typical sonata exposition and development section. An initial primary tone of either $\hat{3}$ or $\hat{5}$, supported by I, descends to $\hat{2}$ over V (interruption); the seventh is then added to the V, to lead more compellingly back to I. In the minor, there might typically be a bass arpeggiation through III."

In a movement that evokes formal-tonal paradox, a significant portion of Laufer's paradigmatic models still remains largely intact. The dividing dominant is achieved in either the exposition or the development section with a prominent $\hat{2}$ in the top voice, then prolonged until the recapitulation. However, voice-leading techniques in select recapitulations are not circumscribed by the paradigms defined by the Lauferian models. An idiosyncratic unfolding of tonal structure in the recapitulation can necessitate a re-evaluation of the tonal processes in the piece as a whole, transcend the interruption, and leave only the vestiges of a divided structure. While there is still a sense of division at the recapitulation, the tonal structure is crafted in such a way that there is no division (interruption) in the voice-leading processes. Consequently, the $\hat{2}$ in the top voice that appeared atop the apparent dividing V is no longer a tone of the *Urlinie*—it ultimately turns out to be a passing tone (to $\hat{1}$) with respect to the large-scale tonal structure.

Based on the development of Schenkerian formal-tonal paradigms, a sonata-form movement must exhibit two fundamental criteria in order to be classified as a formal-tonal paradox:

- 1) The tonal structure of the movement must exhibit an incipient divided structure in which $\hat{2}$ is prolonged atop a dividing dominant that is achieved in the exposition or in the development section and appears to be destined for interruption before the recapitulation.
- 2) At the recapitulation (and/or development section), a sense of formal division is present via thematic reprise, yet striking features of the recapitulation *simultaneously* penetrate the formal boundary, obliterate the incipient interruption (tonal division) and effectively transform the apparent dividing dominant into a passing V, relegating the $\hat{2}$ in the top voice to a passing tone to $\hat{1}$ instead of an *Urlinie* tone, retrospectively.

The features of a movement that bridge-over an incipient interruption can be comprised of many different techniques including voice-exchange, harmonic re-

valuation/transformation, motivic elaboration, changes in texture of figuration, insertions, and more. The resulting structure of each movement under discussion must be understood as a superimposition of a residual interrupted structure onto an undivided structure that overrides the interruption, but does not entirely eradicate the remnants of the underlying incipient divided structure. Because the tonal processes that destroy the interruption are distinct in each movement, the unique elements of each of the three analytical case studies will be addressed in separate chapters. However, all three examples of formal-tonal paradox present tonal structures that embody the vestiges of an interrupted structure with a dividing dominant and its corresponding $\hat{2}$; this “residual interruption” is supported by the formal division at the recapitulation, yet it is nonetheless overridden by a single, undivided tonal structure that becomes apparent later in the piece.

5.2 Formal Division vs. Tonal Continuation

In Schenker and Laufer’s paradigmatic models, interruption occurs in all of the graphs just before the recapitulation, following the prolongation of the dividing dominant. Paradigmatically, the recapitulation thus re-establishes the *Kopfton* and the tonic *Stufe*, making the descent of the *Urfinie* divided ($\hat{3} - \hat{2} || \hat{3} - \hat{2} - \hat{1}$). However, not every movement unfolds in accordance with those Schenkerian formal-tonal paradigms. Significant thematic/formal junctures in a given movement might typically align with tonal/structural goals, but some Schenkerians have described how this may not always occur. Carl Schachter, for example, made the following remarks regarding the interplay between formal and tonal processes:

Boundaries between prolongational spans—especially between those spans governed by structural harmonies—often coincide with points of formal articulation. In a sonata movement, the boundary between the interrupted V and the resumed structural I is also usually the boundary between the development and the recapitulation. Sometimes, however, the extension of a prolongational span bridges over the formal division.¹¹⁰

Schachter addresses two important issues in relation to formal-tonal paradox. He first notes the prevalence of aligned formal and tonal elements in sonata-form movements, referring specifically to interruption. That concept is the basis for the “incipient interrupted structure” and sense of formal division that persists in movements discussed here. More importantly, however, Schachter takes a step further beyond the paradigms and demonstrates how exceptional tonal motions can override formal divisions. As a result, he theorizes that even if the form of the movement creates a sense of division at one juncture, tonal motions may override that division and progress through it towards a later goal—a goal that need not align with formal divisions.

Other Schenkerian contemporaries of Carl Schachter have researched similar formal-tonal problems, showing how tonic harmonies at important formal junctures do not always re-establish a deep-level tonic. Jack Adrian demonstrated how tonic harmony at the beginning of development sections could ultimately be interpreted as “apparent tonic” harmony with respect to the tonal structure.¹¹¹ Peter Smith has investigated the concept of “structural vs. apparent tonics,” fusing psychological and Schenkerian theories to show

¹¹⁰ Schachter, *Unfoldings*, 127.

¹¹¹ Jack Adrian, “The Function of the Apparent tonic at the Beginning of Development Sections,” *Intégral* 5 (1991): 1-53.

how a tonic harmony that might appear to be a structural I may be subservient to another harmony which is a more significant tonal/structural goal.¹¹²

Outside of the Schenkerian realm, Hepokoski and Darcy's discussion of "defaults" and "deformations" in sonata movements comes to mind. In one section, they refer to the "paradox of art" in relation to their concept of "deformation:" "Deformations are compositional surprises, engaging forays into the unexpected. But the paradox of art is that the nature of the game at hand also and always includes the idea that we are to expect the unexpected."¹¹³ Although a movement that exhibits formal-tonal paradox may also contain "deformations," a formal-tonal paradox is a very specific type of compositional problem that contains the essential contradiction outlined here. A given movement may contain several "surprising" departures from conventional tonal practice, but they may not allow an undivided structure to overtake an incipient interrupted structure. Therefore, formal-tonal paradox is a specific technique (that can unfold in different ways), and "deformation" is a generalized term that encompasses a plethora of unique features in given movements.¹¹⁴

In order to demonstrate how tonal or voice-leading processes can supersede a formal division, consider the following example from Carl Schachter's *Either/Or*.¹¹⁵ In Bach's *E-major Partita* (my Examples 5.3 and 5.4 correspond to Schachter's Examples 4.5A

¹¹² Peter Smith, "Structural Tonic or Apparent Tonic" *Journal of Music Theory* 39/2 (1995): 274.

¹¹³ James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations* (New York: Oxford University Press, 2006), 617.

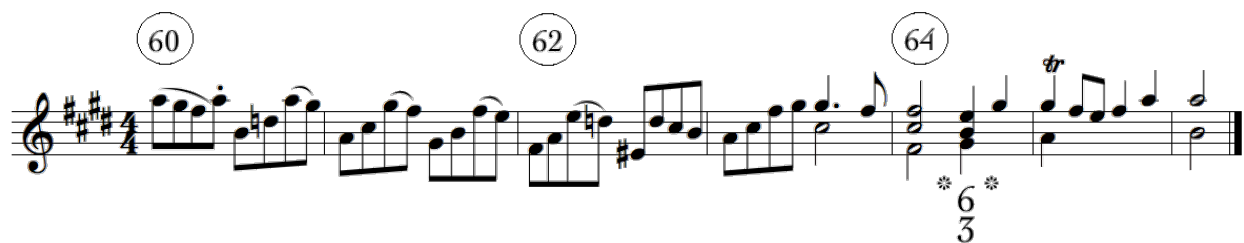
¹¹⁴ Hepokoski and Darcy also discuss first- and second-level "defaults." Second-level "defaults" sometimes displace the "first-level defaults," which are more typical formal-tonal procedures. Since development sections often begin with primary theme material (P or "first theme"), a development section that begins with new motivic ideas could "be a second-level default option." Hepokoski and Darcy, *Sonata Theory*, 207-12.

¹¹⁵ Schachter, *Unfoldings*, 127.

and 4.5B, respectively), tonal procedures override the boundary between the development and recapitulation sections. The published excerpt from Bach's E-major Partita for Unaccompanied Violin (*Gavotte en Rondeau*) is reproduced below (Example 5.3) and accompanied by Schachter's analysis (Example 5.4).¹¹⁶ Schachter's reading shows how the supertonic harmony (II) is prolonged through the reprise of the *Rondeau* theme and the return of tonic harmony (for reasons discussed below). Although it is not as complex as the examples discussed here, the Bach partita fulfills the requirements for formal-tonal paradox at the most basic level. In his analytical remarks, Schachter's use of the term "double-meaning" is more a reflection of his interpretation of the tonic harmony at the recapitulation, versus an appraisal of the overall formal-tonal interplay that this study explores further.

By unmistakably signaling a return to the rondeau, it simultaneously signals an imminent return to tonic harmony, though it does not embody that return. Here we have a true double meaning: the E chord does not function as tonic, but, almost like some negative formations in language, it asserts the existence of that which it is not.¹¹⁷

Example 5.3 J.S. Bach, Partita No. 3 for Unaccompanied Violin, *Gavotte en Rondeau*, mm. 60-65 (Schachter's Example 4.5A)



¹¹⁶ Ibid., 127.

¹¹⁷ Ibid., 127.

Example 5.4 Schachter's analysis of the Bach Partita No. 3 for Unaccompanied Violin, *Gavotte en Rondeau*, mm. 60-65 (Schachter's Example 4.5B)

As Schachter shows, the prolongation of the supertonic (II) harmony supersedes the formal boundary that leaves an underlying sense of division at the thematic reprise. IHe explains the subsumed reprise as follows:

“One might be tempted to hear this return to E [“reprise of rondeau” in Example 5.4] as occurring at the usual spot—the beginning of the reprise (m. 64, second half)—but this interpretation would be most unconvincing here. Since II lacks a direct harmonic relationship with I, but has one with V, and since the V appears prominently at the head of measure 66, it makes more sense, on harmonic grounds alone, to infer a connection II-V. Furthermore, that connection is composed-out in the voice leading of the passage, whose “bass” passes by step from II through II6 to V. The reprise, then, begins with an apparent tonic—a passing chord between II and II6. Note how Bach, to achieve this stepwise bass, transforms the opening chord of the reprise from a $\frac{5}{3}$ to a $\frac{6}{3}$.”

Hence, even though the recapitulation of the *Rondeau* theme indeed coincides with the return to tonic harmony (E major), the deep-level tonic does not return until later in the movement. Thus, there is no interruption or division at the recapitulation with respect to tonal processes, despite the clear formal boundary.¹¹⁸

¹¹⁸ Edward Laufer's discussion of continuity and discontinuity is noteworthy here. Edward Laufer, “Continuity in the Fourth Symphony (first movement),” in *Perspectives on Anton*

Historically, the tonal practice of bridging-over formal divisions was prevalent in the first half of the 18th century, but, following the death of J.S. Bach in 1750, many composers clarified the sense of division at the reprise.¹¹⁹ By the time Beethoven was composing sonata movements in the last twenty years of the 18th century, divisions immediately preceding the recapitulation and two-pronged tonal structures were prevalent in sonata movements. The case studies discussed in the ensuing chapters represent progressive movements for the late 18th century or early 19th century which simultaneously begin to break down the interruption, while simultaneously honoring the mid-late 18th century tonal practice by leaving an underlying skeletal framework of the divided structure.

The succeeding sections of the current chapter, Formal-Tonal Paradox I, consider the structure of the first movement of the *Tempest* sonata (Op. 31, No. 2) as the first analytical case study of formal-tonal paradox. In the *Tempest*, dominant harmony is prolonged from the second group in the exposition and re-asserted at the end of the development section. The marked presence of the dominant creates the basis for a tonal structure that appears to be divided, destined for interruption before the reprise.

However, even though the *Allegro* theme returns at the recapitulation in the tonic key (D minor), striking features of the recapitulation suggest that the sense of division created by the formal boundary is superseded by tonal processes that push past the thematic

Bruckner, ed. Crawford Howie, Paul Hackshaw and Timothy Jackson (Burlington, VT: Ashgate, 2001), 114-144. Laufer outlines five types of continuity: “modified restatement,” “concealed association,” “linking technique,” “transformation,” and “progression to a goal” (p. 116). Although there is no space here to further explore each type of continuity, Laufer demonstrates how elements of continuity and discontinuity in the same section can be paradoxical.

¹¹⁹ For more details on the subtle evolution of the early sonata and more detailed discussion of J.S. Bach and his descendants, see Wayne Petty’s article in *Schenker Studies* 2. Wayne Petty, “C.P.E. Bach and the Fine Art of Transposition,” in *Schenker Studies* 2 (1999): 49-66.

recapitulation to obliterate the interruption. The end result is a paradox, which in one way establishes the tonal framework of a divided structure (supported by the formal division at the recapitulation), yet simultaneously pierces through the interruption in favor of an undivided structure whose voice-leading processes supersede an underlying sense of division, but do not fully supplant it.

Chapter 6, Formal-Tonal Paradox II, discusses formal-tonal paradox in the first movement of Beethoven's Symphony No. 9. Even though dominant harmony is prolonged in the development section, the striking features of the end of the development and the recapitulation (especially mm. 301-315) effectively penetrate through the formal division with tonal processes, surpass the incipient interruption, and permit a hearing of the entire movement as the unfolding of a single tonal process over the enduring shadow of a more typical divided structure.

Chapter 7, Formal-Tonal Paradox III, presents an analytical case study of Beethoven's Op. 124, *Overture die Weihe des Hauses* (*Consecration of the House Overture*), a major-mode sonata form movement that exemplifies formal-tonal paradox. The *Overture* is an unusual sonata-form movement in which the formal and tonal processes do not align according to the paradigmatic models. For example, a typical retransition section might prolong the dividing V and $\hat{2}$ of the *Urlinie* at the end of the development section until the point of interruption. The structural implications of a retransition that occurs *after* the recapitulation and return of tonic harmony could be very different. My analysis reconsiders the role of both C and G harmonies in the *Overture* and demonstrates how the movement unfolds the framework of a divided structure as a backdrop for an emergent

undivided structure. My interpretation of the movement considers formal-tonal paradox as a central problem.

5.3 Compositional Problems in the First Movement of Beethoven's Piano Sonata No. 17 in D minor, Op. 31, No. 2, "The *Tempest*"¹²⁰

The first movement of Beethoven's *Tempest* sonata has been the subject of numerous studies, articles, and collections of essays. The unfolding of form and tonal structure in the first movement does not seem to fit neatly within the parameters of existing theories of form, and it does not exemplify the conventional formal-tonal paradigms in Schenkerian theory, as outlined by Schenker and Laufer.¹²¹ Composed in 1802, a particularly troublesome year for Beethoven, the *Tempest* sonata (*Der Sturm*) exploits, as James Hepokoski states, the "potential for the stormily realized drama available in minor-mode sonata formats."¹²² Even though the authenticity of the nickname reported by Anton Schindler has since been called into question, a sense of conflict and dramatic struggle pervade the sonata in many ways. As Scott Burnham noted, "even the most dedicated debunkers of the 'Tempest's' sobriquet would agree that the movement follows a

¹²⁰ The remainder of the chapter is best read alongside a printed score of the first movement of the *Tempest* sonata.

¹²¹ The first movement of the *Tempest* sonata receives special attention in Hepokoski and Darcy's *Elements of Sonata Theory*, which corroborates the argument that the movement must be treated as a special case with respect to Classical era forms. Hepokoski and Darcy, *Sonata Theory*, 182. As discussed in Chapter 2, the unique form of the first movement of the *Tempest* sonata is addressed fully by Schmalfeldt, *Form as Process*, 3-21.

¹²² *Ibid.*, 182. 1802 was the year Beethoven considered taking his own life. As he describes in his *Heiligenstadt* testament, he had significant troubles coming to terms with his impending deafness.

course of passionate action and reaction that can be described as tempestuous.”¹²³

Formal-tonal paradox is one type of dramatic contradiction that develops via the complex intersection of formal and tonal trajectories. Overall, whether or not one hears the movement as particularly evocative of *Der Sturm*, formal-tonal paradox is a focal compositional problem, and the resulting formal-tonal turbulence is prominent feature of the movement as a whole.

Since the first movement of the *Tempest* sonata is in D minor, it is appropriate to refer back to Laufer’s paradigmatic models for minor-mode sonata form movements, which are reproduced below in Examples 5.5A and 5.5B (transposed to D minor).¹²⁴

Example 5.5A Laufer’s paradigmatic 3-line model for minor-mode sonata form movements

¹²³ Scott Burnham, “Singularity and Extremes: Dramatic Impulse in the First Movement of Beethoven’s *Tempest* Sonata,” in *Beethoven’s Tempest Sonata: Perspectives of Analysis and Performance*, ed. Pieter Bergé (Leuven, Belgium: Uitgeverij Peeters, 2009): 40.

¹²⁴ The recapitulation completes the second branch of the *Ursatz* even though it is not shown in the transposed Lauferian model. This chapter focuses on the beginning of the recapitulation, where the lack of a definitive point of departure for the second branch of the *Ursatz* presents tonal/structural problems.

Example 5.5B Laufer's paradigmatic 5-line model for sonata-form movements¹²⁵

Laufer's 3-line and 5-line models are not identical, but share some important features. For example, in both models, the dividing V is achieved in the development section, through an arpeggiation up through III (F major). That mediant harmony is prolonged in the second theme group in the exposition. Following the prolonged dividing V, both models show an interruption just before the recapitulation. Once the recapitulation begins, the tonic *Stufe* is re-established in the bass (D) and the *Kopfton* (either $\hat{5}$, A, or $\hat{3}$, F) is re-established in the top voice, thus establishing a noteworthy point of departure for the second branch of the divided *Ursatz*.

The first movement of the *Tempest* sonata pushes the limits of the paradigms for a number of reasons, and one of them is the key area of the second group (Example 5.6).¹²⁶

¹²⁵ In the 5-line model, Ernst Oster has discussed the possibility of prolonging $\hat{5}$ all the way to the recapitulation- as a cover tone over the *Urlinie's* descent to $\hat{2}$ that can be applied to the paradigmatic model in Example 5.5B. That concept is sometimes referred to as the "Oster paradigm" by modern Schenkerians, and it is described in the footnotes to the section on form in Schenker's *Free Composition*.

Instead of moving up from I (D minor) to III (F major) in the exposition, the first movement of the *Tempest* moves from I (D minor) to V (A minor) at m. 55. James Hepokoski interprets the move to the minor dominant as a denial of the possible “escape” from the minor mode that a prolongation of the relative major (F major, III) promises in the second group. The tragic nature of the sonata therefore persists through the exposition, through the prolonged V harmony (A minor). The minor dominant, however, does not arrive in root position; instead, the A minor harmony is presented initially in first inversion, and the arrival on A as a bass *Stufe* is secured as the result of an auxiliary cadence (C – E – A) that occurs in the second theme group. The voice-leading graph in Example 5.6 shows the tonal structure of the exposition and the auxiliary cadence motion that leads into the A minor prolongation (m. 55).

¹²⁶ The question of whether the D minor *Allegro* theme in m. 3 definitively establishes D minor as the tonic harmony for the movement is addressed later in the chapter in Section 5.5B. For the purposes of this section, whether one considers the opening D minor to occur in m. 3, or whether one interprets it to be fully established in m. 21, D minor is undoubtedly prominent in the first portion of the exposition as the first tonal area. Therefore, D minor is the point of departure for the tonal structure of the movement in both readings presented here. The second, alternative reading of the *Tempest* sonata, unique to this dissertation, is discussed later in the chapter and takes the initial structural tonic at m. 3 for reasons outlined later.

Example 5.6 Voice-leading in the exposition of the *Tempest* sonata, mm. 3-63

The cadences on root-position A minor harmony at the end of the second theme group suggest that perhaps the dividing dominant is achieved in the exposition, and then picked up again in the development section. However, without hearing the movement in its entirety, there is no way to definitively assert that the A minor of the second group is the dividing *V* and that the *Urlinie* has descended to $\hat{2}$ in the exposition, and for that reason, the question marks are placed at the bottom of the graph in Example 5.6.

Perhaps the move to the minor dominant in the exposition of a minor-mode movement is not quite as unique as it seems in relation to Schenker's models. Laufer's expanded models for sonata-form movements include a minor-mode paradigm in which the dividing *V* is established in the exposition. His "Figure viii," reproduced below (Example 5.7), shows a dominant prolongation that begins in the exposition and continues

through the development until the interruption.¹²⁷ Over that span, the minor dominant establishes the *V Stufe*, supporting the corresponding $\hat{2}$ in the top voice in the exposition, and then later in the development section (at the retransition), minor V is converted to major V before the interruption.¹²⁸

Example 5.7 Laufer's *Figure viii*: A dividing dominant is established in the Exposition as a minor V and converted to the major V at the end of the development section.

In the model, Laufer chooses half notes for the V in the bass and the $\hat{2}$ in the *Urlinie*, so a reading of a dividing V with $\hat{2}$ in the top voice in the *Tempest* sonata seems fitting, given the A minor prolongation. It is also important to report that the principle of interruption is so ubiquitous in Schenkerian theory that in the “Figure viii” model, Laufer does not need to show the structure of the movement following the end of the development

¹²⁷ Laufer, *Development Sections*, 72.

¹²⁸ Laufer's example is only an abstract reading of a hypothetical sonata form movement, and it is graphed in the key of C minor for the purposes of demonstration.

section. The interruption and start of the second branch of structure at the recapitulation are implied based on the overall background paradigms. Therefore, based on Laufer's models, one might infer a hypothetical tonal plan for the remainder of the first movement of the *Tempest* (Example 5.8). That hypothetical tonal plan is shown in the deep middleground graph as a prolongation of A harmony (first as a minor V and then converted to the major V), followed by an interruption, then the recapitulation (tonic return and point of departure for the second branch of the *Ursatz*). Example 5.8 shows the anticipated structure of the movement as an elaboration of Figure viii.

Example 5.8 Voice leading in the exposition of the *Tempest* sonata and hypothetical formal-tonal plan for the movement

After achieving and prolonging a dividing V with $\hat{2}$ in the top voice, one might posit that the recapitulation re-establishes the deep-level tonic (I), with $\hat{3}$ in the top voice.

However, one problem posed by the *Tempest* sonata is that the remainder of the movement does not fit into that hypothetical trajectory (Example 5.8). Laufer's article explicitly addresses the first movement of the *Tempest* (Example 5.9A), but unfortunately, it does not include a graph of the entire movement in detail.¹²⁹ However, Laufer provides a partial graph of the movement that is particularly striking, given his models, and he also reveals some features of the movement that support the argument for formal-tonal paradox. Example 5.9B is a streamlined version of Laufer's graph that includes the formal divisions (only bar lines shown in Laufer's graph appear on my version). His analysis shows a dominant prolongation that supersedes the return of D minor at the recapitulation of the *Allegro* theme.¹³⁰ Dotted parentheses show that the D minor return is not definitively a structural I. Laufer states:

"The tonic returns at m. 148. In a poetic if not technical sense, however, this I is evaded, for the two V chords (mm. 121 and 171) appear to be connected. If so, the I of m. 148 would be a parenthetical enclosure, not really the final tonic. Thus, the recapitulation arises indefinitely out of the preceding material, with the motives once again finding shape and the tonic in a shadow."¹³¹

¹²⁹ Laufer, *Development Sections*, 106.

¹³⁰ *Ibid.*, 106.

¹³¹ *Ibid.*, 104. To be sure, Laufer read the movement from $\hat{3}$ even though the exposition is not shown in his graph (Example 5.9A). Laufer discussed his analysis in phone conversations with my advisor (Timothy Jackson), who confirms that Laufer interpreted F^{\sharp} ($\hat{3}$) as the primary tone.

Example 5.9A Laufer's reading of the *Tempest* sonata, I, mm. 65-179

The image displays a musical score for three staves, numbered 1, 2, and 3. The score is annotated with various musical notations and measure numbers. Measure numbers are placed above the staves at intervals: 63, 87, 99, 121, 133, 144, 158, 161, 169, 171, 175, and 179. Staff 1 begins with a circled '1' and includes the annotation 'turn fig.' with an arrow pointing to a specific figure. Staff 2 starts with a circled '2' and contains several annotations: 'motivic' with a dashed line, '6 5 - 6, 5 - 6, 5', and 'NB' in a circle. Staff 3 starts with a circled '3' and includes 'V#', 'NB', and 'V#' annotations. The score features complex rhythmic patterns, including triplets and sixteenth notes, and is heavily annotated with brackets, circles, and lines to highlight specific musical elements and motifs.

Example 5.9B Laufer's reading of the *Tempest* sonata (streamlined)

The musical score is presented in two staves (treble and bass clef). Above the staff, a series of circled numbers (3, 63, 93, 121, 144, 171, ?) are placed over specific notes, with small numbers (3, 2, 2, 3, 2, 1) and arrows indicating their relationship to the notes. The score is divided into sections: Expo. (1st Gr.), Dev. (2nd Gr.), and Recap. Below the staff, Roman numerals (I, V^b, V[#], V[#], I) are placed under the notes, indicating harmonic structure. The analysis is labeled as 'Inferred' at the beginning and end, and 'Published Analysis' in the middle.

Laufer's graph effectively demonstrates the unfolding of structure akin to "Figure viii" in that the minor V^b from the exposition (A minor) is converted to the major $V^\#$ in the development (A major), through mm. 65 - 121 - 171, respectively. However, even though that dominant prolongation is a manifestation of his Schenkerian model, he does not read an interruption before the recapitulation. Instead, the prolongation of what appeared to be a dividing dominant persists well into the recapitulation, and the restatement of the *Allegro* theme (the section of the Example 5.9 in dotted parentheses) fails to definitively regain the tonic *Stufe* and the *Kopfton*. Laufer's graph suggests that the movement is not simply an elaboration of the "Figure viii" paradigm, but is more complex formally and tonally than the model.

There are some remarkable features of Laufer's graph that shed light on the formal-tonal paradox in the movement. Naturally, Laufer reads the retransition (m. 117) as a continuation of a dominant prolongation, but when the D minor harmony returns in the recapitulation, he *does not* show an interruption in the fundamental line and a re-established *Kopfton*. Instead, his reading encompasses the D minor return within a large pair of dotted parentheses, thus indicating that the passage from mm. 144-171 is an interpolation—an interjection into a dominant prolongation that continues further into the movement. Although we will never know if he hears an interruption later in the movement, Laufer clearly shows that an interruption in the typical location becomes superseded by tonal motions that continue through the restatement of the *Allegro* theme.¹³²

Even though Laufer does not entertain the notion of paradox in the movement, his graph certainly hints at the type of formal-paradox discussed in this study.¹³³ The dotted parentheses epitomize the type of dualism that occurs in the recapitulation. The recapitulation is a significant formal juncture in the movement, and as such, there is a sense of division at this point in the sonata. However, overriding that formal division is a tonal process that is uninterrupted—a linear unfolding of a single tonal structure that knows no

¹³² Some of Laufer's unpublished graphs may address the question of whether he reads interruption later in the movement. Nonetheless, all of the background sonata form models show an interruption just before the recapitulation, which is why it is especially significant that his graph of the *Tempest* begins to highlight the formal-tonal paradox in the movement.

¹³³ Laufer discussed the movement with my advisor (Timothy Jackson) before he passed away in May 2014. As shown in his published analysis, he told Jackson that the movement was "problematic" and "paradoxical." A closer investigation of Laufer's unpublished sketches could provide a more complete picture of his reading, but they are not available to scholars at this time.

division and surpasses what could have been an interruption.¹³⁴ Therefore, the dotted parentheses are Laufer's way of expressing the formal-tonal contradiction in the voice-leading graph. Laufer's analysis is consistent with my argument about formal-tonal paradox and demonstrates the essential contradiction addressed in the beginning of the chapter.

Laufer's use of dotted parenthesis and graph of the interpolated tonic harmony in the *Tempest* immediately brings to mind Carl Schachter's endnote regarding apparent tonics from *Either/Or*.¹³⁵ Schachter notes that "interpolated" or "parenthetical" tonic harmony can occur as a displacement of tonic harmony that was "structural in a previous time span" (i.e. the reprise or recapitulation of a theme that established a key at the beginning of a movement). He contends that those tonics are not "merely" apparent tonics. Therefore, the return of tonic harmony and the reprise of the *Allegro* theme (mm. 144ff) create an important boundary in the piece, but at the same time, there is no genuine interruption to the tonal process at that juncture. Thus, even though Laufer never studied formal-tonal paradox as a specific compositional problem, his analytical findings support the theses presented here.

Laufer's analysis serves as a preliminary foray into the realm of formal-tonal paradox in the first movement of the *Tempest*. In the same way, L. Poundie Burstein's analytical insights also align with my argument for formal-tonal paradox and help to cultivate a deeper understanding of different ways of hearing and interpreting the fierce conflicts in *Der Sturm*.

¹³⁴ Laufer did not make any indications of form in his graph, but the measure numbers he provides can be matched up with the formal divisions in the piece in order to draw conclusions about the interplay between formal and tonal processes in his reading.

¹³⁵ Schachter, *Unfoldings*, 132-3.

5.4 Burstein's Analysis

Burstein also studies the first movement of the *Tempest* sonata from a Schenkerian perspective.¹³⁶ Burstein's article, published in a collection of essays on the *Tempest* sonata, also offers a reading that extends a dominant prolongation from the second group in the exposition (m. 55) to the last portion of the development section (mm. 121, Example 5.10). In particular, Burstein notes the significance of the "turn figure" motive, which is expanded in the top voice in the development section (Example 5.10, A – A# – G# – A). Unlike Laufer, Burstein reads the movement from $\hat{5}$ in the top voice.¹³⁷

Example 5.10 Burstein's analysis of Beethoven's *Tempest* Sonata, I, mm. 87-121

(a) Deep-level graphic analysis of bb. 87–121, showing large-scale turn figure and octave-ascent in top voice

87 93 98 99 117 119 121
A A# (A) G# (A)

(* = D chords that embellish deeper-level V)

¹³⁶ Burstein's analysis of the movement was published in 2009 as part of an insightful collection of analytical essays edited by Pieter Bergé, which offers various perspectives on analysis and performance of the *Tempest* sonata. L. Poundie Burstein, "Beethoven's *Tempest* Sonata: A Schenkerian Approach," in *Beethoven's Tempest Sonata: Perspectives of Analysis and Performance*, ed. Pieter Bergé (Leuven, Belgium: Uitgeverij Peeters, 2009), 61-85.

¹³⁷ Laufer only appears to read the movement from $\hat{3}$ because his entire graph was not published in his article on development section paradigms. Based on the portion of the movement that is shown in the graph, one can infer a reading from $\hat{3}$.

Burstein's reading of dominant prolongation in the development section (m. 93 through m. 121, Example 5.10) is unsurprising, given Laufer's "Figure viii" and expanded models for minor-mode sonata movements. However, Burstein's remarks on the recapitulation seem to contradict the paradigmatic models, and he specifically refers to the problematic nature of the recapitulation in his text. Burstein writes: "Normally, one would expect the return of a deep-level tonic to coincide with the reappearance of the main theme at the start of the recapitulation. For this movement, however, various factors raise the possibility of an alternate interpretation in which the tonic at the beginning of the recapitulation instead embellishes a deep-level V that resolves only at the end of the recapitulation."¹³⁸

Burstein notes the possibility for a tonal continuation past the typical place for interruption in the movement and sketches a continuation of dominant prolongation past the formal boundary at the recapitulation. He indicates formal divisions on his graph (his Example 3.12b, reproduced below as my Example 5.11) and demonstrates how the prolongation of V can override the sense of division created by the restatement of the *Allegro* theme.

¹³⁸ Burstein, *Tempest*, 82.

Example 5.11 Burstein's dominant prolongation extends from the second theme group past the recapitulation in the *Tempest* sonata.

(b) Graph that interprets return of deep-level tonic as delayed until the end of recapitulation

87 end of exposition
89-138 development
143 149 recapitulation first theme
151 152 153 158 159 161 165 169 171 205 second theme

(D) E F F# G G# A
(D) E F F# G G# A
E F F# G G# A
D

(NB: bass D does not actually appear in this register until much later)

V extended past beginning of recapitulation, resolves only at end of second theme)

As Burstein’s discussion of the movement continues, he proposes another possible reading of the recapitulation—one in which the deep-level tonic “returns near the outset of the recapitulation.”¹³⁹ He contends that in certain performances of the sonata, one could hear a return of deep-level tonic harmony at the reprise of the *Allegro* theme (Example 5.12). Consequently, he presents another voice-leading graph—one that shows the possibility of hearing the tonic return at m. 149. Burstein does not include the top voice in his “Example 3.12a” graph, so he does not explicate the significance of the unusual recapitulation for the descent of the *Urlinie*. Burstein’s Example 3.12a is reproduced below (Example 5.12).

Example 5.12 Burstein shows the return of deep-level tonic near the outset of the recapitulation (m. 149).

Ex. 3.12. Beethoven, Op. 31/2, i: different interpretations of bb. 87ff.

(a) Bass-line graph that interprets deep-level tonic as returning near the outset of recapitulation

87 89-138 143 149
end of exposition development recapitulation
first theme

deep-level tonic
returns near outset of
recapitulation

¹³⁹ Ibid., 83.

Even though Burstein focuses on the explanation and demonstration of basic Schenkerian principles as applied to aspects of performance and analysis in the *Tempest* sonata, his interpretation of the movement also highlights the main elements of the formal-tonal paradox, just like Laufer's analysis. After a strong dominant prolongation that extends from the second group in the exposition through the end of the development (Example 5.10), an interrupted structure seems to be unfolding. However, the recapitulation occurs in such a way that the interruption is surpassed and voice-leading prolongations supersede the formal boundary (Example 5.11). Burstein's other graph, which shows the D minor return as the deep-level tonic return, is evidence for the residue of the divided structure that is never fully eradicated in the movement (Example 5.12). His inclusion of the significant formal divisions in his voice-leading graphs makes the formal-tonal contradictions more prominent in the analytical discussion.

Another noteworthy feature of Burstein's analysis is his treatment of the D harmonies in m. 93 and m. 117 (Example 5.10).¹⁴⁰ It appears that he marked them with asterisks because their structural role required additional clarification. His textual side-note states that he interprets the D harmonies at m. 93 and m. 117 as embellishments of the "deeper level V," which is prolonged over the formal boundary between development and recapitulation. Therefore, both Laufer and Burstein hear the D harmonies occurring on lower levels of structure and privilege the prolongation of the A major harmony across the development and the recapitulation. Burstein does not deny the presence and prominence of D harmonies that recur throughout the development section, starting with the D major first inversion chord in m. 93, but he specifies that the D harmonies do not function on the

¹⁴⁰ Ibid., 82.

same structural level as other prolonged tonic harmonies that occur earlier in the piece, like the D minor in the exposition, which established the tonic *Stufe*. Even though Burstein makes a compelling and clear argument, there is reason to carefully re-evaluate the structural role of D harmonies in the movement—their significance is revisited later in the chapter.

Overall, a comparison of two published analyses by modern Schenkerians reveals a striking dualism at the recapitulation in the first movement of the *Tempest* sonata. Even though the return of the *Allegro* theme coincides with the return of tonic harmony (D minor), it seems that neither analyst came to a definitive conclusion about whether the reprise effectively re-established the structural tonic. Even though both analysts present different interpretations of voice leading in the movement, their analyses demonstrate an element of contradiction as a compositional problem in the piece, in which the formal boundary establishes what “should” be a return of deep-level tonic, yet other factors compel a hearing of a prolonged dominant harmony past the formal boundary at the recapitulation. Laufer depicts the structural duality with a pair of dotted parenthesis that shroud the D minor reprise; Burstein publishes two different readings of the recapitulation, which show two different structural possibilities (his Examples 3.12a and 3.12b). The unusual features of their analyses are evident in my Example 5.13, which reproduces both of Burstein’s graphs (Example 5.13A) as well as a streamlined version of Laufer’s graph (Example 5.13B), shown together to facilitate a comparison of the two different interpretations of the movement.

Example 5.13A Burstein presents two different graphs of the first movement of the *Tempest*, arguing that perhaps there is enough evidence to read a “deep-level tonic” at the recapitulation.

Ex. 3.12. Beethoven, Op. 31/2, i: different interpretations of bb. 87ff.

(a) Bass-line graph that interprets deep-level tonic as returning near the outset of recapitulation

87 89-138 143 149
end of exposition development recapitulation
first theme

deep-level tonic returns near outset of recapitulation

Detailed description: This diagram shows a bass-line graph for the first movement of Beethoven's Op. 31/2, i. It covers measures 87 to 149. Measure 87 is labeled 'end of exposition'. Measures 89-138 are labeled 'development'. Measures 143-149 are labeled 'recapitulation first theme'. A dashed line connects the bass note in measure 87 to the bass note in measure 143, indicating a return of the deep-level tonic. An arrow points to the bass note in measure 143 with the text 'deep-level tonic returns near outset of recapitulation'.

(b) Graph that interprets return of deep-level tonic as delayed until the end of recapitulation

87 89-138 143 149 151 152 153 158 159 161 165 169 171 205
end of exposition development recapitulation first theme second theme

(D E F F# G G# A)

(D) [NB: bass D does not actually appear in this register until much later]

E F = E# F# G G# A D

V extended past beginning of recapitulation, resolves only at end of second theme)

Detailed description: This diagram shows a more detailed bass-line graph for the same piece, covering measures 87 to 205. Measure 87 is 'end of exposition', 89-138 is 'development', 143-149 is 'recapitulation first theme', and 151-205 is 'second theme'. A dashed line connects the bass note in measure 87 to the bass note in measure 205, indicating a delayed return of the deep-level tonic. A note in measure 143 is labeled '(D) [NB: bass D does not actually appear in this register until much later]'. A sequence of notes is shown: (D E F F# G G# A). Below the bass line, a sequence of notes is shown: E F = E# F# G G# A D. A horizontal arrow at the bottom is labeled 'V extended past beginning of recapitulation, resolves only at end of second theme)'. The final bass note in measure 205 is labeled 'D'.

Example 5.13B Laufer's reading (streamlined for demonstration purposes)

The lack of interruption in the three graphs is particularly striking (Example 5.13A and B). Even in Burstein's graph that indicates a return of deep-level tonic at the recapitulation, there is no top voice line that shows interruption.¹⁴¹ Voice-leading motions that continue over the formal boundary therefore effectively override the interruption. Yet on the whole, a sense of division underlies the recapitulation because of the thematic reprise and return of D minor harmony. Both of these analyses support the basic criteria for formal-tonal paradox and evoke the essential contradiction in different ways. The fact that Laufer and Burstein do not address formal-paradox does not diminish the value of

¹⁴¹ Burstein reads the movement from $\hat{5}$, which can be prolonged over an interruption via the Oster paradigm; but nevertheless, there is no top voice in his graph, so it is not clear how he hears in the top voice. Perhaps the structural duality in the movement was something he heard intuitively, but did not intend to explicate fully in the article.

their insights in any way. As stated in Chapter 3, this dissertation is built on premises stated and presented by other scholars.

Let us now demonstrate how formal-tonal paradox underlies many features of the movement, from the large-scale tonal plan to the small details that highlight pervasive tonal issues at the foreground level.¹⁴² As a result, the remainder of this chapter outlines an alternative analysis of voice leading in the first movement, which clarifies the precise nature and significance of formal-tonal paradox. My analysis considers paradox as a central compositional problem and suggests that it could be added to the list of “tempestuous” features that other authors have observed in the movement.

5.5 An Alternative Voice-Leading Analysis of the Movement and the Manifestation of Formal-Tonal Paradox

5.5.1 Exposition and Development

As evidenced by the two previously discussed analyses of the first movement of the *Tempest* sonata, there are many ways to depict the conflicting formal-tonal processes that occur at the recapitulation. This section presents a different interpretation of voice leading that treats the formal-tonal contradictions in the movement as a focal problem.¹⁴³ In my alternative reading, the structural dominant is not achieved in the exposition, nor is it achieved in the development. My reading re-prioritizes some of the tonic harmonies that

¹⁴² Owen Jander, “Genius in the Arena of Charlatanry: The First Movement of Beethoven’s ‘Tempest’ Sonata in Cultural Context,” in *Musica Franca: Essays in Honor of Frank D’Accone* (New York: Pendragon Press, 1996), 585-630. Jander refers to both “lightning and thunder” and the “eye of the storm” in the *Tempest* sonata.

¹⁴³ The author strongly suggests reading the remainder of the chapter with the score of the movement in hand.

were relegated to lower levels of tonal structure in the Burstein and Laufer analyses and suggests another compositional idea unfolding in the large-scale voice-leading processes.

Even though the second theme group (m. 55, Example 5.14) prolongs A minor (the minor V), it is framed by two definitive D harmonies (both of which figure prominently into Burstein and Laufer's graphs). The first is the D minor that was established in the opening *Allegro* theme of the sonata in the third measure. The second is the D major first inversion chord (with the low F# in the bass) that occurs in m. 93, at the beginning of the development section. I read that D major $\frac{6}{3}$ harmony at m. 93 as the result of a large-scale, chromatic voice exchange prolonging D harmony from the initial D minor tonic in m. 3, over the dominant in the second group, all the way to m. 93. The F# of that D major $\frac{6}{3}$ chord is the lowest note in the piece thus far, and it connects thematically to the opening of the movement via its slow arpeggiated figuration. As a result, the second group's A minor is not an arrival on the structural V, but instead a passing harmony that is caught in the middle of a chromatic voice exchange.¹⁴⁴ Example 5.14 shows my reading of the exposition and the beginning of the development.

¹⁴⁴ The dominant prolonged in the second group (mm. 55-89) is a passing harmony between I and I⁶. Not all passing chords are built on passing tones in the bass.

Example 5.14 Voice leading in the *Tempest* sonata, I, mm. 3-93: A large-scale chromatic voice exchange from the exposition to the opening sonority of the development

The minor dominant of the second theme group is part of a bass arpeggiation down from the initial D: D – A – F#. The harmony prolonged in the second group (the minor dominant) is not a structural V—it is a passing V between two tonic harmonies, connected via voice exchange.

At the end of the exposition, both the first and second endings have important ramifications for the structure of the movement (please refer to the score). In the first ending, the A in the bass (m. 88, carried over from the cadence on A in m. 87) connects back up with the C# in m. 1 through a stepwise descent, A (m. 87) – G – F – E – D – C# (m. 1). That C# then moves back to D with the repeat of the *Allegro* theme (m. 3). In the second ending, the A in the bass also moves down by step, but it does not descend all the way down to D the second time. Instead, it moves to F# in a stepwise descent: A (mm. 87-90) – G (mm. 91-92) – F# (m. 93). As a result, the As in the first and second endings both return to D

harmony; the first one moves back to D minor of the exposition and the other moves to the D major $\frac{6}{3}$ harmony in m. 93. Therefore, a reading that connects the D minor of the opening theme to the chromatically altered I⁶ chord at the beginning of the development section (m. 93) seems especially fitting in the context of the exposition as a whole.

If one argues that the development section begins with the tonic harmony in first inversion, then another tonal issue arises: how long can the deep-level tonic be prolonged in the development section? None of Laufer's Schenkerian models consider the possibility of a deep-level tonic prolongation that is still ongoing at the beginning of the development section. This reading, however, argues that the D harmony is prolonged deeper into the development section (through mm. 93 – 117, Example 15).

Following the low F# from the D major $\frac{6}{3}$ harmony in m. 93, D harmony unfolds in the first portion of the development (Example 5.15). The D major $\frac{6}{3}$ harmony in mm. 93-94 is temporarily transformed into F# minor at mm. 99 through a 6 – 5 exchange. Beginning at that F# minor harmony (m. 99), the tempo changes to *Allegro* and the prevailing tonal motion is a string of ascending parallel tenths that starts in m. 99 and concludes at the arrival on D minor at m. 117, shown in Example 5.15. The bass ascends by step from the F# in m. 99 through G# – A – B – C – C# and arrives on D in m. 117. Parallel to that stepwise ascent in the bass is a stepwise ascent above it, starting from the A in m. 99 and moving up through B – C – D – E to the F in m. 117. Therefore, the structural goal of the sequential passage in mm. 99 – 117 is the D minor arrival at m. 117, which in turn confirms a substantial prolongation of D harmony in the first portion of the development section. The voice-leading analysis in Example 5.15 shows how D harmony unfolds from mm. 93-117.

Example 5.15 Voice-leading graph of the *Tempest* sonata, mm. 93 – 117

The unfolding of D harmony from mm. 93-117 supports the claim that the D harmony is more than just a lower-level phenomenon in the first portion of the development section. The D harmonies that create the framework for the prolongation of D harmony are the same harmonies that Burstein initially marked with asterisks in his graph of the development section (reproduced in Example 5.10, Section 5.4), so that they do play a significant role in the development section.

At the middleground level, the chromatic voice exchange and the unfolding of D harmony in the first portion of the development exemplify an emerging modal conflict between D minor and D major that is a pervasive compositional problem in the movement. The movement begins in D minor, but when the arpeggiated motive returns at m. 93 in the first inversion D harmony, the F# in the bass is chromatically inflected. The ascending tenths in mm. 93-117 temporarily “correct” the D major $\frac{6}{3}$ harmony back to D minor (in

root-position), but by no means does that D minor return conclude the modal conflict that pervades the movement. The modal duality continues throughout the entire piece and resurfaces most notably in the recapitulation of the first movement.

Following the D minor arrival m. 117, voice-leading motions intensify a motion to the dominant via an augmented-sixth chord in m. 120 (shown in Example 5.16). The G[#] in the top voice and the B^b in the bass form the basis of an Italian augmented-sixth chord that resolves to the dominant, A major (V), in m. 121. That A major harmony is prolonged from mm. 121 – 138.¹⁴⁵

The dominant prolongation that begins in m. 121 is highly significant because it could be interpreted as the structural dominant. According to Laufer's models, the major V harmony at the end of the development section might typically be a dividing V, which is followed by an interruption immediately before the recapitulation. With the intensification of the motion to the dominant via the augmented-sixth chord and the definitive arrival on the dominant, the A major prolongation from mm. 121-138 contains some of the hallmark traits of a retransition. Naturally, the paradigmatic models indicate that an interruption should follow, with an imminent return to tonic and thematic reprise at the recapitulation.

5.5.2 Recapitulation

But, the recapitulation of the *Tempest* sonata's first movement does not unfold as a typical elaboration of the Schenkerian models. Following the brief linking passage in mm.

¹⁴⁵ Burstein, *Tempest*, 62-80. Burstein's analysis details the fifth descents that are passed back and forth between treble and bass voices in double counterpoint within the A major prolongation from mm. 121-138.

139-142, the opening A major arpeggio (in first inversion) is re-stated (mm. 143-144).¹⁴⁶ Since that figure is clearly a re-statement of the opening material (mm. 1-2), one might assume that the retransition ends at m. 143, and that the recapitulation is underway. However, from a tonal perspective, the dominant prolongation persists, so perhaps the tonal role of the retransition is extended past the formal boundary at the thematic reprise.¹⁴⁷

The return of the off-tonic opening arpeggio of the sonata thus creates a striking dualism when it returns in the recapitulation. From a thematic perspective, the opening theme has evidently returned, so the recapitulation is surely underway. From a tonal/structural perspective, however, the tonic harmony has not yet returned, suggesting that *tonally*, the recapitulation is not fully underway. The return of root-position tonic harmony that would typically coincide with the thematic reprise is not present, and the result is a formal-tonal incongruity—a conflict between formal divisions and tonal/structural goals. Burstein and Laufer’s analyses (Examples 5.11 and 5.13 respectively) consider the possibility of reading a very long dominant prolongation through the return of the A major arpeggiation at m. 143. The present, alternative interpretation of the movement also hears a local dominant prolongation that composes-over (or through)

¹⁴⁶ William Caplin observes that the opening arpeggio on the dominant in the *Tempest* sonata is the first of its kind in all of Beethoven’s piano sonatas. William Caplin, “Beethoven’s *Tempest* Exposition: A Springboard for Form-Functional Considerations,” in *Beethoven’s Tempest Sonata: Perspectives of Analysis and Performance*, ed. Pieter Bergé (Leuven, Belgium: Uitgeverij Peeters, 2009), 113-4.

¹⁴⁷ Another paradoxical element of the *Tempest*’s first movement is the idea of a “returning” introduction. The opening arpeggio sounds introductory in character and rhetorical effect, but in the traditional sense, introductions do not return later in a sonata form movement. Therefore, the “returning” introduction in the *Tempest* sonata is also paradoxical. The same idea applies to the first movement of Beethoven’s Op. 13 sonata (*Pathétique*), in which the slow *Grave* “introduction” returns later in the first movement.

the recapitulation (see Example 5.16). The A major arpeggiation (marked *reprise in Example 5.16) effectively marks a distinct formal boundary while simultaneously bridging-over the boundary by extending the dominant harmony. That striking duality is one part of the formal-tonal paradox in the movement.

Another significant formal-tonal event occurs at m. 149—the D minor harmony indeed returns with the reprise of the *Allegro* theme. What is the meaning of that root-position, D minor return coinciding with the thematic return of the *Allegro* theme? Perhaps that juncture constitutes the “real” recapitulation, and that tonic harmony at m. 149 might occur on the same structural level as the D harmony prolonged via voice-exchange from mm. 3-93, a “correction” of the chromatic voice exchange, and a return to D as a bass *Stufe* with the *Kopfton* F in the top voice?

Despite the thematic reprise of the *Allegro* theme, the D minor return at m. 149 fails to re-assert the deep-level tonic harmony. Furthermore, there is no “misplaced” interruption that occurs before the D minor return since the interruption is completely overtaken (Example 5.16). The overall tonal structure is undivided and the unique features of the recapitulation allow one to hear the movement as an uninterrupted tonal process.

Example 5.16 Voice-leading graph of the *Tempest* sonata, I, mm. 143-161:

Two important formal junctures are bridged-over by voice-leading motions: 1) the reprise of the opening arpeggio (m. 143), and 2) the reprise of the D minor *Allegro* theme (m. 149). The structure transforms from incipient divided structure to an undivided structure as a result of the idiosyncratic recapitulation.

One reason that the movement evokes an undivided structure is an important difference between the opening D minor theme and its reprise in m. 149. In the restatement, two striking, recitative-like passages are inserted around the *Allegro* theme, neither of which was present in its initial presentation in mm. 3-13.¹⁴⁸ The first recitative

¹⁴⁸ The recitative passages in this movement come as insertions into the recapitulation because only the slow arpeggios were present in the corresponding passage in the exposition. Not only do these recitative passages serve to expand and elaborate the existing tonal structure, but they simultaneously serve as extremely important signifiers. In the operatic tradition, passages of vocal recitative deliver (in general) some of the most expressive texts and signify important turns in the dramatic action. In the *Tempest*, the recitatives are fulfilling a similar role, but in the instrumental genre. Therefore, since the D

settles on an F \natural in m. 148, seemingly “resolving” a prolonged leading-tone seventh harmony (C \sharp – E – G – B \flat) before the return of D minor. Similar to the first recitative, the second also unfolds a leading-tone seventh chord (E – G – B \flat – D \flat) that resolves to the A \flat in m. 158, marked with the fermata. The A \flat in m. 158 is supported by the implied tone, F, which would underlie the A \flat in the resolution of the diminished seventh chord. Following the end of the second recitative, the F and A \flat at m. 158 are enharmonically transformed in m. 159 to E \sharp and G \sharp (respectively), and they move to F \sharp minor at the return to the *Allegro* in m. 161. However, the F \sharp minor harmony at m. 161 is *not* the structural goal of the first section of the recapitulation. The bass line continues to move up by step, and beginning from the C \sharp back in m. 143, it ascends C \sharp – D – E – E \sharp – F \sharp – G – G \sharp – A, making the A in m. 171 the first main tonal goal in the recapitulation, not the D minor at the reprise of the *Allegro* theme, and not the F \sharp minor harmony at m. 161.

The formal-tonal incongruity is therefore heightened by the voice leading during the D minor return. Even though the *Allegro* theme returns with the D minor harmony in root-position, the continuous stepwise ascent in the bass proceeds as if to disregard the formal juncture and press onward in a perpetuation of voice leading that continues to a tonal goal at m. 171.

Neither the thematic reprise of the opening arpeggio figure (m. 143), nor the reprise of the *Allegro* theme (m. 149) constitutes a division in voice-leading processes in the recapitulation. The movement is structured in such a way that the dominant prolongation

minor at m. 149 is preceded *and* followed by recitative passages, they create a “bubble” around the D minor reprise and signal that the structural goal is still forthcoming.

that originated at the end of the development section (m. 121) continues well past the thematic recapitulation, and circumvents an interruption that might have typically occurred following the retransition. The D minor reprise at m. 149 is nonetheless an important formal juncture in the movement, but the tonal motions bridge over it and refuse to allow it to reach deep-level tonic status. The D minor return is isolated by two recitative passages that create a “bubble” around it and the *Allegro* theme, but the voice-leading motions undoubtedly continue through those recitatives and through the figuration changes at both m. 159 and 161.

The end result of the formal-tonal incongruities in the recapitulation is a formal-tonal paradox in which the dividing dominant appears to occur (mm. 121-138), but unique voice-leading processes in the recapitulation transcend the incipient interruption and continue through the recapitulation. The root position D minor return indeed occurs after a dominant prolongation, but not in paradigmatic fashion, and in the end, only the remnants of a divided structure remain intact in the movement as a whole.

In the large-scale bass motion, the incipient dividing dominant must be re-interpreted as a passing harmony in the overall structure because of the annihilation of the interruption. In the top voice, the apparent descent to $\hat{2}$ as an *Urlinie* tone is also annihilated in the recapitulation, and the E which was $\hat{2}$ in the *Urlinie* is consequently transformed into a passing tone on its way to a D (which comes later). Example 5.16 depicts the voice-leading motions from mm. 143-161 and indicates how significant formal junctures in the movement become composed-over.

The graph in Example 5.16 also highlights an important motivic connection that becomes apparent in the first portion of the recapitulation. The C# at m. 143, which signals the thematic recapitulation, also marks the beginning of a larger-scale arpeggio that composes-over the D minor reprise at m. 149 (Example 5.16). The C# (m. 143) – E (m. 153) – A (m. 171) is therefore a composing-out of the very first arpeggio motive of the sonata, C# – E – A from mm. 1-2 (motive X, Example 5.17), but expanded in order to encompass the D minor return.

The arpeggio figure in the key of A was also significant in the exposition, because the arrival of the second group's root-position A minor harmony came via the C# – E – A auxiliary cadence (Example 5.17B, m. 55ff). The C# – E – A figure in the exposition is a chromatically altered version of the original C# – E – A motive (labeled "X" in Example 5.17A). In the recapitulation, the arpeggio figure returns with its original pitch content, successfully supporting the dominant prolongation that extends well into the recapitulation (shown in both Example 5.16, mm. 143-171 and Example 5.17B, mm. 143-171).

The motivic expansion in the recapitulation is essential to the formal-tonal paradox. The arpeggio figure is what establishes the middle-ground continuity through the significant formal junctures in the recapitulation. Example 5.17 shows the initial A major arpeggio from mm. 1-2 and a voice-leading graph of its larger-scale manifestations in both the exposition and the recapitulation.

Example 5.17A Initial presentation of the arpeggio motive (X) in mm. 1-2



Example 5.17B Large-scale manifestations of the X motive in the *Tempest* sonata, I

After the enlargement of the C# - E - A motive in the recapitulation effectively extends the dominant prolongation from the end of the development through the first portion of the recapitulation, the second group returns at m. 185 in the home key of D minor (Example 5.18). The second group's D minor comes as a fitting resolution to the prolonged dominant that persisted far into the recapitulation's formal space. As a logical down-by-fifth transposition of the second group's A minor first inversion harmony from

the exposition (m. 55), the restatement of the second theme material arrives as D minor in *first inversion* (m. 185).

Example 5.18 Voice-leading graph of the Tempest sonata, mm. 3-217: Two large-scale, overlaid voice exchanges prolong tonic harmony deep into the movement.

The voice-leading graph illustrates the harmonic structure of the Tempest sonata from measures 3 to 217. It features two large-scale voice exchanges overlaid on the musical score. The first exchange begins at measure 3 (I) and concludes at measure 185 (I⁶). The second exchange starts at measure 145 (V) and ends at measure 217 (I). The score is divided into three sections: EXPO. (measures 3-55), DEV. (measures 55-145), and RECAP. (measures 145-217). Key moments include the return of D minor at measure 145 and the first inversion tonic return at measure 185. The graph uses various symbols like 'x' and '*' to mark specific voice exchanges and returns.

That first inversion tonic return constitutes an especially important tonal goal in the movement because it 1) resolves the prolonged dominant that bridges over the earlier return of D minor, and 2) is the tonal goal of a second, massive voice exchange that “corrects” the chromatically inflected voice exchange that occurred from the exposition to the development (Example 5.18). Since only the residue of an interrupted structure is present in the movement through the second group’s return, one can hear the opening theme’s D minor, root-position harmony as part of a large-scale voice exchange with the D minor harmony in first inversion at m. 185. In the second, overlaid voice exchange, D minor reclaims the tonal throne by diatonicizing the voice-exchange idea, which

encompasses an even longer prolongational span than the first (mm. 3-93 and mm. 3-185, respectively). The two overlaid voice exchanges, one chromatic and one diatonic, both prolong D harmony, and suggest that the structural dominant is not achieved in the prolonged A minor of the exposition (mm. 55), *nor* is it secured in the prolonged A major at the retransition (m. 121). Even as late as m. 185, the structural dominant still proves to be elusive because the apparent dividing dominant harmonies were transformed into passing dominants.

The graph in Example 5.18 shows the voice exchanges and the two subsumed dominant prolongations. Both large-scale dominant prolongations create the initial impression of dividing dominants, but they end up subsumed within voice exchanges—the first as a passing dominant in a chromatic voice exchange and the second as a passing dominant in the diatonic voice exchange that reasserts the D minor tonality of the movement.

One reason that Burstein's reading of dominant prolongation in the passage from m. 93 to the first portion of the recapitulation is so compelling is that he supports his interpretation of voice leading by showing the "composing-out" of the turn figure motive (or double-neighbor motive) in the top voice across his dominant prolongation (Example 5.11, top voice). My alternative reading of the movement with the two overlaid voice-exchanges is also supported by motivic connections (Example 5.19). As stated, the opening arpeggio of the sonata resurfaces in two larger bass motions that prove to be significant in the movement (auxiliary cadence, mm. 55, Example 5.18, and mm. 143 bass arpeggiation of motive X). Furthermore, the gesture that follows the initial presentation of the X motive (C/C# – E – A) in the sonata is also motivic.

The initial D minor *Allegro* theme contains two overlaid voice exchanges that prefigure the large-scale voice-exchanges in the movement (Example 5.19).¹⁴⁹ My voice-leading analysis shows the two important motives in the opening measures of the sonata—the arpeggio (mm. 1-2) and the two overlaid voice exchanges (mm. 3-4). Both of the opening motives are especially important to the large-scale formal-tonal processes that unfold over the course of the first movement and the motivic enlargements are essential to the formal-tonal paradox.

¹⁴⁹ The overlaid voice-exchanges in mm. 3-4 of the *Allegro* theme involve one diatonic and one chromatic voice exchange, just like the large-scale voice-leading in the movement, but in the opening, the D major supplants the D minor, instead of vice versa, which unfolds over the course of the entire movement.

Example 5.19 Salient motives in the opening of the *Tempest* sonata, mm. 1-5

The image shows a musical score for the opening of the *Tempest* sonata, measures 1-5. The score is divided into two sections: **Largo. Allegro.** (measures 1-6) and **Adagio.** (measures 7-8). The first section begins with a piano introduction in the right hand, marked *p**, and a bass line with a *pp* dynamic. The second section begins with a piano introduction in the right hand, marked *p*, and a bass line with a *sf* dynamic. The score includes various musical notations such as dynamics, articulation, and fingerings. A circled number 5 is placed above the first measure of the **Adagio.** section. The score also includes a diagram of the piano keyboard with fingerings indicated by numbers 1-5 and a chord diagram for a V4 chord with a #7.

The annotated score and voice-leading indications in the opening measures (Example 5.19) show how the large-scale voice exchanges reverse the idea expressed in the initial, small-scale exchanges. In the opening *Allegro* theme, the chromatic voice exchange (from D minor to D major) supersedes the initial D minor exchange (m. 3). However, in the large-scale overlaid voice exchanges, the D minor voice exchange supersedes the chromatic one, effectively cementing the imminence of the minor mode in the movement, despite numerous attempts of F# to assert itself as the major third of the D harmonies. My voice-leading interpretation of the opening measures of the sonata is different from the way other authors hear the first theme (Example 5.20A). Burstein hears a voice exchange in the opening measures, but since he reads the movement from $\hat{5}$, the voice exchanges with D, F and F# are not prominent in his voice-leading graph (Example 5.20A). His reading of the opening *Allegro* theme is reproduced below.¹⁵⁰ My analysis of mm. 3-21 (Example 5.20B) not only shows the voice exchanges in mm. 3-4, but also demonstrates how the motive in mm. 21-22 (Example 5.20C) “summarizes” the opening bass arpeggio from mm. 3-21 (D [m. 3] – F [m. 8] – A [m. 13] – D [m. 21]).

Example 5.20A Burstein’s voice-leading analysis of the opening *Allegro* theme, mm. 3-6

¹⁵⁰ Burstein, *Tempest*, 69.

Example 5.20B Voice-leading graph of Beethoven's *Tempest* sonata, I, mm. 1-21: The tonic *Stufe* is established in the *Allegro* theme.

Example 5.20C Beethoven's *Tempest* sonata, mm. 21-22: A summative arpeggio motive in the bass confirms D minor as tonic for the movement.

In my view, the voice-exchanges in the opening *Allegro* theme cannot be glossed over because they not only prefigure the large-scale voice exchanges, but they also mark the beginning of the pervasive modal conflict that extends past the culmination of the large-scale voice exchange at m. 185 (Example 5.21). The low F# that occurred in the bass at m. 93 only temporarily returns to an F \flat in the top voice at m. 117, and D minor re-asserts itself in the measures that follow via the sequential motion. The F \flat remains in the top voice at

the return of the *Allegro* theme, but following the recitatives in the recapitulation, the modal conflict surfaces in the bass (mm. 159-161, Example 5.21). As stated, the implied $F\flat$ underneath the $A\flat$ (m. 158) in the second recitative becomes an enharmonic $E\sharp$, which rises to the $F\sharp$ in the bass at m. 161 (Example 5.21). Ultimately, that $F\sharp$ (m. 161) is on its way up to the A in m. 171, but the voice-leading motion of a rising $F\flat/E\sharp$ to $F\sharp$ is another manifestation of the modal conflict aroused by the first large-scale voice-exchange (mm. 3-93, Example 5.18). The rise of $F\flat$ to the $F\sharp$ in the first (chromatic) voice exchange is diatonically “corrected” in the second, large-scale voice exchange. In the end, $F\sharp$ (and the D major tonality) cannot triumph in the movement. On the largest scale, $F\sharp$ is “tragically” doomed to fall back to $F\flat$, and its efforts to displace the primary tone are thwarted again at m. 185, with the arrival of D minor harmony in first inversion.

Example 5.21 Voice-leading graph of Beethoven’s *Tempest* sonata, I, mm. 3-193: The modal conflict between D minor and D major recurs throughout the movement, but D minor ultimately prevails.

3 55 93 117 121 143 149 161 171 185 193

Expo. 1st Gr. 2nd Gr. Dev. Recap. 1st Gr. 2nd Gr. Aux. Cad.

I D minor D major $\frac{6}{3}$ D minor D minor E# - F# 6 D minor $\frac{6}{3}$ "open" D harmony

Overall, the large-scale purpose of what first seemed to be a slightly “abnormal” turn to the minor dominant (A minor) in the exposition becomes much clearer in the recapitulation. Perhaps the compositional idea underlying the use of the minor dominant (V, A minor) in the exposition instead of the relative major (III, F major) was to prepare for the recapitulation, in which the A minor of the second theme group would return as D minor when transposed down by fifth. Consequently, the D minor restatement of second group material not only maintains a definitive tonic prolongation in the recapitulation, but also definitively re-establishes F \natural as the primary tone and D minor as the definitive tonal center of the movement. The voice-leading graph in Example 5.21 highlights the modal conflict that pervades the movement.

The F \natural that serves as the main bass note for the restatement of the second group (m. 185) ascends through G to A in m. 192 (Example 5.21). In a striking cadence from mm. 192-193, the A major harmony in m. 192 resolves to a unison D in m. 193 (marked “open D harmony” at the bottom right corner of Example 5.21). The striking omission of the 3rd and 5th of the D harmony not only opens the possibility for an implied resolution to D major or to D minor, but more importantly, typifies the pervasive modal conflict in the movement between F \natural ($\hat{3}$) and F \sharp ($\sharp\hat{3}$). Furthermore, the “thin” resolution that leaves only the octave Ds weakens what might have been a more definitive cadence in the movement, ensuring that definitive structural closure of the movement occurs later.

As shown in Example 5.22, in m. 195, F \sharp makes one final attempt to reassert itself on top of the D in the bass, but its reign is short-lived because in m. 202, the F \natural returns in the D minor harmony (Example 5.22). The dominant harmony articulated in m. 204 following the crescendo is the structural dominant, which figures prominently in the reiterated

cadential motions at the end of the movement (V-I). After the dominant in m. 204, the modal conflict experiences a temporary hiatus, as only cadential motions in D minor prevail from m. 204 to the end of the movement. The final cadence occurs in m. 217, and at that point, the *Urlinie* descends to $\hat{1}$, effectively closing the tonal structure of the movement.

Example 5.22 Voice-leading analysis of Beethoven's *Tempest* sonata, I, mm. 3-217: The *Urlinie* descends and the structure closes in mm. 206-217.

Undivided Structure is superimposed on top of the residual interrupted tonal structure

In the end, this alternative reading of the first movement of the *Tempest* sonata (Example 5.22) does not interpret a definitive arrival on the structural dominant until much later in the movement (as compared to the other published readings). Even though motivic connections and unique voice-leading motions in the recapitulation support more than one interpretation of the piece (as Burstein notes), there are several extremely prominent motives and features of the exposition and development suggesting that formal-tonal paradox is a central compositional problem in the entire movement. Furthermore, other published readings verify the formal-tonal contradiction that underlies the

recapitulation, even though the authors did not develop the concept of formal-tonal paradox as a compositional problem. Since the structural hierarchy of numerous D harmonies requires additional clarification throughout the piece—i.e. the opening measures (Dalhaus), the development (Burstein), the recapitulation (Laufer and others), and at the structural close of the piece—tonal contradictions are a prevalent feature of the entire movement.¹⁵¹ Since so many features of the movement contribute to the formal-

¹⁵¹ The D harmonies in the development section are not the only D harmonies whose structural importance has been debated. The role of the initial D minor tonic has also been discussed in the secondary literature on the *Tempest* sonata. Analysts have considered the question of whether the D minor *Allegro* theme in m. 3 is strong enough to represent a definitive establishment of D minor for the movement. Carl Dalhaus, for example, calls the opening D minor tonic “provisional” and “not fixed.” Carl Dalhaus, *Ludwig van Beethoven: Approaches to his Music*, tr. Mary Whittall (Oxford: Oxford University Press, 1991). Furthermore, he states that although “nowhere [in the opening] does the thematic material take on a basic form, it manifests itself in changing guises according to its location in the formal process.” Although Dalhaus’ statements about the dualistic nature of the movement are compelling, James Hepokoski refuted his reading of the first D minor harmony (m. 3). Hepokoski states that the opening *Allegro* “modules” in D minor are “obviously P-thematic” and that “Dalhaus’ proclamation of an innovative novelty and self-evident ‘new path’ at the opening of Op. 31 No. 2 was overdrawn.” James Hepokoski, “Approaching the First Movement of Beethoven’s *Tempest* Sonata through Sonata theory,” in *Beethoven’s Tempest Sonata: Perspectives of Analysis and Performance*, ed. Pieter Bergé [Leuven, Belgium: Uitgeverij Peeters, 2009], 61-85. Dalhaus does not consider tonal structure in the *Tempest* as a self-sufficient entity evoked by harmony and voice leading and not necessarily dependent on design. As a result, he refers to the arpeggiation in m. 1 as “not yet” and the bass arpeggio in m. 21 as “no longer.” My analysis of mm. 1-21 (Example 5.20B) demonstrates how the foreground bass arpeggiation of D minor in mm. 21-22 (Example 5.20C, D – F \flat – A – D) is a *definitive summary* of the middleground bass arpeggio in mm. 3-21 (Example 5.20B). The dominant in m. 6, approached via augmented-sixth, is a back-relating dominant, a local half-cadence. The D in the bass of m. 3 continues up through E (in the second slow arpeggiation, mm. 7-8) to the F in m. 9. From the F, the bass ascends chromatically through F \sharp (end of m. 9), G (m. 10) and G \sharp (m. 12) to the A in m. 13. The A in m. 13 resolves to the D in m. 21 to complete the arpeggiation, after the cadential $\frac{3}{4}$ chord resolves to the root position dominant (mm. 13-20). Although Dalhaus hears mm. 21-40 as a “modulating developmental passage,” the D minor at m. 21 is clearly a goal; it is a defining D minor statement that affirms the already established I (D minor) at m. 3 (Example 5.20B and Example 5.20C). D minor harmony is prolonged in the first portion of the exposition as the first overriding tonal area regardless of whether one hears it as tonic at m. 3 or m. 21.

tonal paradox and the unique way of hearing the piece expressed in this chapter, the paradox in the movement transcends a binary contradiction and expresses an essential truth about the entire movement. For that reason, the term formal-tonal paradox is particularly applicable to the *Tempest* sonata.

5.6 Conclusion

Approaching the first movement of the *Tempest* sonata with conventional theories of sonata form and prevailing Schenkerian tonal paradigms will inevitably be problematic. However, many of the “unusual” features of the movement contribute to one overriding compositional problem in the movement: formal-tonal paradox. The movement fulfills both of the two criteria established at the beginning of the chapter and salient voice-leading motions and motivic elements across multiple sections of the movement support the formal-tonal paradox.

1) The tonal structure of the movement must exhibit an incipient divided structure in which $\hat{2}$ is prolonged atop a dividing dominant that is achieved in the exposition or in the development section and appears to be destined for interruption before the recapitulation.

In both interpretations, D minor is the point of departure for the tonal structure of the movement and it seems that none of the authors would disagree that at m. 21, D minor is established definitively. Even though the figuration changes, and the section “becomes” transitory in nature, the arrival on D minor at m. 21 is definitive. The reference to “becoming” in this chapter comes from Janet Schmalfeldt’s analysis of the movement, which can be found in her text on form: Janet Schmalfeldt, *In the process of Becoming: Analytic and Philosophical Perspectives on Form in Early Nineteenth-Century Music* (New York: Oxford University Press, 2011). Schmalfeldt hears the section as “becoming” transitory in nature, even though it might not appear to be a “transition” in its initial stages.

By prolonging the minor dominant in the exposition (mm. 55-92) and prolonging the major dominant at the retransition (mm. 121-143), an incipient interrupted structure exists. In fact, both published Schenkerian readings arrive at the structural V in the exposition.

2) At the recapitulation (and/or development section), a sense of formal division is present via thematic reprise, yet striking features of the recapitulation *simultaneously* pierce through the formal boundary, obliterate the incipient interruption (tonal division) and effectively transform the apparent dividing dominant into a passing V, relegating the $\hat{2}$ in the top voice to a passing tone (to $\hat{1}$) instead of an *Urlinie* tone, retrospectively. In the *Tempest*, root-position tonic harmony returns at the reprise of the *Allegro* theme (m. 149), but voice-leading processes continue without division and exceed the interruption. Therefore, the formal boundary (or formal division) that would typically coincide with the interruption in the tonal structure is superseded by voice-leading motions that “compose-over” the formal division and superimpose an undivided tonal structure on top of the residue of a divided structure. Burstein and Laufer’s readings both reveal the formal-tonal paradox, even though it does not figure into their respective arguments about the piece.

The analysis discussed in this chapter demonstrates how formal-tonal paradox is a focal compositional problem in the first movement of the *Tempest* sonata. However, the nature of formal-tonal paradox in the movement transcends its technical features and evokes the alleged expressive trajectory suggested by *Der Sturm*. Other authors have observed “stormy” details in the movement, calling m. 93 the “eye of the storm” (Jander), or referring to the dissonant clash of G# above A in m. 6 a metaphor for violent “collision”

(Burnham).¹⁵² Formal-tonal paradox could also be heard as one aspect of the tempestuous movement.

Conversely, other authors, who have focused solely on technical aspects of the movement, have used less “stormy” language to describe other formal-tonal problems in the *Tempest* (as compared to Jander and Burnham). William Caplin, for example, refers to a “harmonic-formal dilemma” at a cadence in the end of the second theme group.¹⁵³ Cooper makes a larger claim about the movement, which supports the idea of formal-tonal paradox: “Beethoven has ingeniously contrived that the movement can be perceived in more than one way.”¹⁵⁴ Thus, even if one cannot hear the formal-tonal paradox as part of *Der Sturm*, its presence as a technical phenomenon affects analysis, performance and interpretation of the first movement.

The analysis in this chapter treads new ground by not only presenting an entirely different analysis of voice leading for a movement that has received significant scholarly attention, but also by showing the way in which idiosyncratic features of the movement contribute to and strengthen the argument for formal-tonal paradox as a central compositional problem that has not been given significant attention in Beethoven’s music. The off-tonic opening to the sonata, the arpeggio motives, the two large-scale overlaid voice-exchanges, the recitatives in the recapitulation, and the motivic connections all contribute to the tonal processes that transcend the sense of formal division that underlies

¹⁵² Owen Jander, “Genius in the Arena of Charlatanry: The First Movement of Beethoven’s ‘Tempest’ Sonata in Cultural Context,” in *Musica Franca: Essays in Honor of Frank D’Accone*, edited by Irene Alm (New York: Pendragon Press, 1996), 585-630.

Scott Burnham, “Singularities and Extremes: Dramatic Impulse in the First Movement of Beethoven’s *Tempest* Sonata,” in *Beethoven’s Tempest Sonata: Perspectives of Analysis and Performance*, ed. Pieter Bergé (Leuven, Belgium: Uitgeverij Peeters, 2009), 54.

¹⁵³ Caplin, *Tempest*, 113-4.

¹⁵⁴ Barry Cooper, *Beethoven* (New York: Oxford University Press, 2000), 117.

the recapitulation. Even small details of the musical surface play a role in the formal-tonal paradox.

The larger aim of the analysis of the *Tempest* sonata is not only to consider and explicate the conditions for and necessary contradictions of formal-tonal paradox in sonata movements, but also show how unique features of each case study support the argument for formal-tonal paradox as a pervasive compositional problem in multiple Beethoven pieces. It is possible, and quite likely, that Laufer and Burstein intuitively understood the essential contradictions of formal-tonal paradox in the *Tempest* sonata, given their published readings of the movement. However, their way of expressing the contradictions varied, and without delving into the problem in-depth, their graphs do not address the problem in such a way that one could fully comprehend it as its own phenomenon.

The atypical structure of the recapitulation forces the analyst to consider different readings of voice leading, even at the background level of structure. The thwarting of the ubiquitous principle of interruption in a sonata-form movement forces a reconsideration of the *Tempest*, despite the fact that Laufer's Schenkerian models do not account for the possibility of an uninterrupted sonata movement.¹⁵⁵ It is clear from the voice-leading graphs presented in this chapter (i.e., Example 5.18) that I do not hear an interruption in

¹⁵⁵ The differences in Schenker's description of interruption from *Free Composition* (Figs. 21, 24, 25, and 26) are addressed in note 107. All interrupted structures are ultimately undivided at the background level, but that is not the focus of this dissertation, which deals primarily with the deep middleground level. At the deep middleground level, the concept of interruption in sonata-form movements is ubiquitous. This dissertation attempts to expand the realm of possibilities by considering formal-tonal paradox. Another paradoxical aspect of the movement is the idea of a "returning" introduction. The opening arpeggio sounds introductory in character and rhetorical effect, but, strictly speaking, "introductions" do not typically return in sonata form movements. Therefore, the "returning" introduction in the *Tempest* sonata could also be considered paradoxical. The same idea applies to the first movement of Beethoven's *Pathétique* sonata (Op. 13) in which the slow *Grave* "introduction" returns later in the sonata form movement.

the movement. The D *Stufe* is prolonged all the way up through the first inversion D minor harmony at m. 185 and the structural dominant comes later (m. 204). The analysis of formal-tonal paradox shows how the interruption can be bridged-over, while leaving behind the framework of an interrupted structure.

Ultimately, the aim of this chapter is not to prove the superiority of one Schenkerian reading over another, but instead argue for the possibility that formal-tonal paradox is not only evident in the first movement of the *Tempest* sonata, but an essential, overriding compositional problem. The paradox is an essential part of the “stormy” drama that many authors have observed, a striking manifestation of violent collisions between formal-tonal processes. The analytical discussion of the *Tempest* serves as an ideal point of departure for the analyses in Chapters 6 and 7. The two other case studies exhibit some of the same properties as the *Tempest*, but contain their own unique voice-leading processes that result in formal-tonal paradoxes. In Beethoven’s *Ninth Symphony* and *Overture die Wiehe des Hauses* (Op. 124), formal-tonal paradox is also a central compositional problem, but other unique features of each movement support the paradoxes in new ways as part of different expressive trajectories.

CHAPTER 6

FORMAL-TONAL PARADOX II:

THE FIRST MOVEMENT OF BEETHOVEN'S SYMPHONY NO. 9 IN D MINOR

6.1 Introduction

According to David Benjamin Levy, the “issues raised by the *Ninth Symphony* are virtually limitless.”¹⁵⁶ Indeed, scholars have studied various aspects of the piece, including its political and reception history, philosophical underpinnings, and iconography.¹⁵⁷ My analysis focuses on harmony and voice leading in the first movement as the second case in my study of formal-tonal paradox. Similar to the first movement of the *Tempest* sonata, formal-tonal paradox is a central compositional problem in the *Ninth Symphony* permeating multiple levels of structure.¹⁵⁸

Unlike the *Tempest*, which begins and ends in D minor, D major overtakes D minor in the *Ninth Symphony* (in the “Ode to Joy” in the finale). Thus, Levy aptly describes the *Ninth Symphony* as a “spiritual pilgrimage, with the relationship of the first part of the symphony to its finale representing ‘a marriage of opposites’ (the absence of joy and its attainment).”¹⁵⁹ To be sure, the first movement evokes conflict, darkness, and turmoil with formal-tonal paradox at its core. Multiple dimensions of tonal structure compete for supremacy at the middleground level as the movement unfolds. Michael Spitzer suggests that conflict is a vital component of the concepts evoked by the symphony as a whole; in his

¹⁵⁶ David Benjamin Levy, *Beethoven: the Ninth Symphony* (New Haven, CT: Yale University Press, 2003), 1-2.

¹⁵⁷ The *Ninth* was Beethoven's last complete symphony. Esteban Buch, *Beethoven's Ninth: A Political History* (Chicago: University of Chicago Press, 2003), 7-8.

¹⁵⁸ Although the first movements of the *Tempest* sonata and the *Ninth Symphony* fulfill the two essential criteria for formal-tonal paradox in different ways, their tonal structures are strikingly similar in certain respects, as will become apparent later in the chapter.

¹⁵⁹ Levy, *Ninth Symphony*, 162.

view, “instrumental interplay yield[s] to choral song” as a “metaphor of human discord and reconciliation.”¹⁶⁰ Esteban Buch offers a similar perspective concerning the relationship between the finale and the preceding movements: “the collective Hymn treats of a Joy of which the world’s suffering has been deprived. That said, we may wonder whether the suffering is not in fact the motif of the preceding instrumental movements.”¹⁶¹ To be sure, my investigation of structural dualism and formal-tonal paradox explores a technical issue, but it could figure prominently into semantic issues discussed by Spitzer and Buch.

6.2 Incipient Interrupted Structure and Annihilated Interruption

To satisfy the first condition for formal-tonal paradox, the first movement must possess an incipient interrupted structure that unfolds in the exposition and/or development section (Example 6.1).¹⁶² The movement first prolongs D minor, then moves through the submediant (B \flat major) and the subdominant (G minor) before the retransition (the dominant prolongation [A major] that begins in m. 275). Example 6.1 outlines how the tonal structure from mm. 1-275 suggests a descent to $\hat{2}$ in the *Urlinie* and anticipates an imminent interruption before the recapitulation. My deep middleground reading of mm. 1-275 (Example 6.1) also outlines a hypothetical tonal trajectory for the remainder of the movement based on the sonata-form paradigms discussed earlier.¹⁶³

¹⁶⁰ Spitzer, *Music as Philosophy*, 133.

¹⁶¹ Buch, *A Political History*, 100.

¹⁶² Chapter 6 should be read alongside a full score of the first movement.

¹⁶³ Refer to Chapter 5 (Section 5.1) for a more detailed discussion of the Schenkerian paradigmatic models for sonata-form movements.

Example 6.1 Voice-leading analysis of Beethoven's *Ninth Symphony*, I, mm. 1-275: This deep middle-ground graph shows the incipient interrupted structure and hypothetical tonal plan for the recapitulation.

At the recapitulation (m. 301), the structure immediately departs from this hypothetical tonal trajectory (Example 6.1) in an atypical unfolding of formal and tonal processes. The recapitulation is unique for many reasons, but perhaps most striking is the first inversion D major harmony that occurs in m. 301, the reprise of the opening theme (marked with an asterisk and labeled $\overset{6}{3}$ in the last measure of Example 6.2A). Instead of an emphatic, root-position D minor harmony, the recapitulation begins on a chromatically inflected D major $\overset{6}{3}$ harmony (F# in the bass and D in the top voice) that perverts the paradigmatic point of departure for the second branch of the *Ursatz* and instigates the continuation of voice-leading processes overriding the interruption. Example 6.2 contrasts the idiosyncratic recapitulation in the first movement of the *Ninth* (Example 6.2A) with the

typical recapitulation in the paradigmatic models (Example 6.2B, now transposed to D minor).

Example 6.2A Beethoven's *Ninth Symphony*, mm. 296-301: The recapitulation perverts the paradigmatic point of departure for the recapitulation, placing the typical the bass *Stufe* (D) in the top voice and a chromatically inflected *Kopfton* (F#) in the bass.¹⁶⁴

The image shows a musical score for Example 6.2A, which is a transcription of measures 296-301 from Beethoven's Ninth Symphony. The score is written for piano and is in D minor. It features a recapitulation starting at measure 301. The bass line is chromatically inflected, and the top voice contains the bass Stufe (D). The score is marked with measure numbers 296, 297, 298, 299, 300, and 301. The 301st measure is marked with an asterisk and the word "Recap.". The score also includes a dynamic marking of *ff* and a fingering of **6** over a *3*.

Example 6.2B Generic formal-tonal paradigm for a sonata-form movement in D minor (Laufer's minor-mode model transposed to D minor)

The image shows a musical score for Example 6.2B, which is a generic formal-tonal paradigm for a sonata-form movement in D minor. The score is written for piano and is in D minor. It features three sections: EXPO. 1st Gr., DEV., and RECAP. 1st Gr. The bass line is marked with Roman numerals I, V, and I. The top voice is marked with Roman numerals 3, 2, and 3. The score is divided into three sections by vertical lines. The EXPO. section is marked with a Roman numeral 3 above the staff. The DEV. section is marked with a Roman numeral 2 above the staff. The RECAP. section is marked with a Roman numeral 3 above the staff. The bass line is marked with Roman numerals I, V, and I below the staff.

¹⁶⁴ Beethoven, Ludwig van, *Symphony No. 9* trans. for solo piano by Franz Liszt (Leipzig: Breitkopf & Härtel, 1922).

The D major $\frac{6}{3}$ harmony is essential to the formal-tonal paradox. Root-position D minor harmony might have kept the interrupted tonal structure intact and continued the hypothetical tonal plan outlined in Example 6.1. However, despite the fact that the striking D major $\frac{6}{3}$ harmony occurs at a prominent formal boundary (the recapitulation), it is not a definitive point of departure for the second branch of the *Ursatz*. Instead, the first-inversion harmony forges a tonal connection between the recapitulation and the initial D minor prolongation through a large-scale chromatic voice-exchange with the initial bass *Stufe* (D) and *Kopfton* (F \sharp) from the exposition (Example 6.3). That massive voice exchange bridges-over the formal boundary, supersedes the pending interruption, and induces a hearing of the first movement as a single, *undivided* tonal process.

Example 6.3 Deep middleground graph of Beethoven's *Ninth Symphony*, I, mm. 19-301: An undivided structure overrides the remains of a divided structure via voice exchange at the recapitulation (m. 301).

The large-scale chromatic voice exchange seemingly defies the common Schenkerian sonata-form paradigms, which consider only the two-part *Ursatz* (with interruption) in sonata-form movements at the deep middleground level.¹⁶⁵ The underlying compositional idea in the *Ninth Symphony* appears to be fundamentally different (Example 6.3); the inverted harmony at the recapitulation and the massive voice exchange suggest that there is no dividing dominant at the retransition, even though it might appear as such.¹⁶⁶ Instead, in this interpretation, the typical point of interruption and point of departure for the second branch of the *Ursatz* may be “composed through.” The tonal continuation at m. 301 does not, however, come as the result of misaligned formal-tonal processes (as in the *Tempest* sonata). Measure 301 is both 1) a vital formal boundary and 2) a noteworthy tonal goal—the atypical $\frac{6}{3}$ harmony transcends the interruption while maintaining formal-tonal alignment. The first movement therefore meets the second fundamental criterion for formal-tonal paradox: the apparent dividing dominant is effectively transformed into a passing harmony, and $\hat{2}$ in the top voice (that appeared to be an *Urlinie* tone) is converted to a passing tone (to $\hat{1}$). Example 6.3 sketches the tonal structure prompted by the first inversion harmony at the recapitulation (m.

¹⁶⁵ Examples 5.1 and 5.2 outline the generic Schenkerian models for sonata-form movements.

¹⁶⁶ Levy, *Ninth Symphony*, 26. Levy describes some earlier sketches of the first movement as “far less idiosyncratic” and “rather traditional,” which implies that Beethoven could have altered the formal-tonal scheme to produce an “atypical” movement. I do not address the exact nature and details of the changes, but Levy presents compelling evidence about Beethoven’s re-evaluation of what might have been a more normative sonata movement.

301)—a substantial departure from the hypothetical tonal trajectory suggested in Example 6.1.¹⁶⁷

Various features of the movement contribute to the paradox and salient details embody the large-scale formal-tonal interplay, thereby infusing multiple levels of structure with interrelated compositional problems.¹⁶⁸ Let us now consider the features of the movement that illuminate the conflicting formal and tonal processes, in order to demonstrate how and why formal-tonal paradox is a focal problem.

6.3 Tonal Processes in an Unusual Recapitulation

After the first-inversion D major harmony at m. 301, the F \sharp in the bass descends to F \natural and D *minor* first inversion harmony re-establishes the minor mode (Example 6.4, m. 315). The first section of the recapitulation is therefore marked by two striking $\frac{6}{3}$ harmonies: the D major $\frac{6}{3}$ harmony at m. 301 (F \sharp in the bass and D in the top voice) and the D minor $\frac{6}{3}$ harmony at m. 315 (F \natural in the bass and D in the top voice). As a result, the tonal structure does not evoke a single large-scale voice exchange, but overlays *two* large-scale voice exchanges in an almost identical span. The first exchange, mm. 17-301 (Example 6.4), is a chromatic voice exchange, while the second exchange is *diatonic*—it supersedes the first and prolongs D minor harmony from mm. 17-315.¹⁶⁹

¹⁶⁷ To be sure, other features contribute to the formal-tonal paradox, but Example 6.3 illustrates the essential contradiction.

¹⁶⁸ The subsequent sections of the chapter address significant foreground features of the movement that relate to formal-tonal paradox.

¹⁶⁹ The reading of overlaid voice exchanges in Example 6.4 came as the result of numerous discussions, analyses and consultations with my advisor, Timothy Jackson. Without his encouragement to explore various interpretations of the tonal structure and to pursue lines

Example 6.4 Deep middleground graph of Beethoven's *Ninth Symphony*, I, mm. 17-419: Two overlaid voice exchanges unfold across a massive span, prompting an undivided tonal structure.

The second voice exchange intensifies the formal-tonal paradox. At first, m. 301 appeared to be the definitive a tonal goal and formal boundary—but retrospectively, m. 315 overtakes m. 301. Therefore, the diatonic voice exchange not only pierces through the interruption, but also creates a formal-tonal incongruity. The recapitulation at m. 301 marks the thematic reprise, but it is not the eventual tonal goal. The D minor $\frac{6}{3}$ harmony at m. 315 is the definitive *tonal* goal, even though m. 301 remains significant.

The underlying compositional idea in the movement is to prolong D harmony over a massive tonal span. The D *Stufe* is prolonged in both the chromatic and the diatonic large-scale voice exchanges, and it seems unnecessary to strip the first inversion D major

of reasoning that extend beyond the paradigmatic structures of sonata-form movements, there is no way that this document would exist in its current form.

harmony at m. 301 of its tonic insignia.¹⁷⁰ The second voice-exchange indeed supplants, and in a sense, diatonically “corrects” the first voice-exchange, thereby lessening the structural prominence of the D major $\frac{6}{3}$ harmony at m. 301.

There are various reasons why it seems especially fitting to read the large-scale tonal structure as a prolongation of two overlaid voice exchanges. First, the D minor and D major harmonies epitomize the modal conflict that unfolds over the course of the entire symphony. The chromatic voice exchange in the first movement foreshadows D major’s tonal victory in the finale. Indeed, D minor’s triumph at the conclusion of the first movement is only temporary. The modal conflict also expresses a paradox based on the associated key characteristics of D minor and D major discussed by Christian Schubart in the *Ideen zu einer Aesthetik der Tonkunst*.¹⁷¹ Schubart describes the key of D major as “the key of triumph, of Hallelujahs, of war-cries, of victory-rejoicing.” He also suggests “the inviting symphonies, the marches, holiday songs and heaven-rejoicing choruses are set in this key.”¹⁷² Conversely, Schubart’s affective key characteristics for D minor are: “melancholy womanliness, the spleen and humour’s brood.”¹⁷³ The two voice exchanges

¹⁷⁰ Graf, “Pardon the Interruption.” This conclusion came as a result of not only consultation with my advisor, Tim Jackson, but also after reflecting on a question from Indiana University professor Frank Samarotto, who attended my presentation “Pardon the Interruption” at the 21st Annual Indiana Music Research Symposium. Both first-inversion D harmonies are genuine tonic harmonies, even though the second exchange overtakes the first.

¹⁷¹ Christian Schubart trans. by Rita Steblin, in *A History of Key Characteristics in the 18th and Early 19th Centuries* (Ann Arbor, MI: UMI Research Press, 1983), 118-9.

¹⁷² Schubart via Steblin, *Key Characteristics*, 118-9.

¹⁷³ *Ibid.*, 118-9. Schubart’s “humours brood” refers to the offspring of the four humours, which are part of a disease theory that can be traced back to ancient Greece (melancholy, choleric, sanguine and phlegmatic). Thus, the references to “melancholy womanliness” and “the spleen” are closely linked to the “humours brood.” When the balance of the humours was offset, bodily fluids surfaced—black bile was associated with “melancholy.” The

therefore create the impression of two opposing key characteristics, intertwined in the tonal structure. The opposing key associations supplement the purely technical aspects of the formal-tonal paradox.¹⁷⁴

The voice exchanges also typify the F[♯]/G[♭] paradigm—a compositional “problem” that recurs throughout the movement in various guises. The most prominent example is the bass motion that underlies mm. 301-315 (Example 6.5B, asterisk). The F[♯] in the bass at m. 301 ultimately descends to the F[♮] in m. 315, sinking like a G[♭]. Conversely, G[♭] ascends as if it were F[♯] in the foreground in mm. 120-126 (Example 6.5A). The beamed connections in the top voice show the G[♭]s rising to G[♮]s in Example 6.5A. The rising G[♭] is particularly striking to the ear because it is a dissonant $\flat 9$ to $\natural 9$ motion over an F[♮] in the bass. The F[♯]/G[♭] issue thus symbolizes the modal conflict because 1) the sinking F[♯] (F[♯]–F[♮]) prefigures the “tragic” minor-mode conclusion to the first movement, and 2) the rising G[♭] anticipates the forthcoming F[♯] that transpires in the finale.

“humour’s brood” is the emergent bodily fluids that arise from an overly melancholic imbalance of the humours. Ingvar Johansson and Niels Lyone, *Medicine and Philosophy: A Twenty-First Century Introduction* (Frankfurt: Ontos Verlag, 2008), 24-32.

¹⁷⁴ Some very early sketches of the movement reveal that Beethoven drafted the *Ode to Joy* theme in C major. Beethoven’s decision to change to D minor and in D major implies a struggle between two “opposing” keys, given Schubart’s key associations. However, there is no definitive connection between Beethoven’s compositional choices and the resulting associations—my idea is merely speculative. Levy, *Ninth Symphony*, 25-37.

Example 6.5A Beethoven's *Ninth Symphony*, mm. 120-127: The dissonant $\flat 9 - \sharp 9$ motion in mm. 120-127 confronts the ear with the $F\sharp/G\flat$ issue.¹⁷⁵

Example 6.5B Voice-leading analysis of Beethoven's *Ninth Symphony*, mm. 19-315: The bass motion in mm. 301-315 is a manifestation of the $F\sharp/G\flat$ issue—the $F\sharp$ is doomed to fall back to $F\sharp$ in the first movement.

¹⁷⁵ Beethoven, *Symphony No. 9*, trans. Liszt.

The large-scale structure is therefore comprised of two, overlaid voice exchanges that not only bridge-over the typical point of interruption, but also exemplify numerous aspects of voice leading that unfold over the course of the movement. The second voice-exchange outdoes the first and magnifies the paradox by creating a definitive tonal goal inconsistent with the thematic reprise at m. 301. Nevertheless, both voice exchanges prolong D harmony and epitomize the modal conflict of the symphony as a whole. The role of the subdominant harmony and the tonal processes that unfold in-between the two striking $D \frac{6}{3}$ harmonies (m. 301 and m. 315) present additional compositional problems related to the formal-tonal paradox.

6.4 The Role of the Subdominant

The pillars of an additional tonal structure materialize in the critical passage between the two first inversion D harmonies (m. 301 and m. 315). One especially significant feature of mm. 301-315 is the transformation of the $B\flat$ dominant-seventh harmony in mm. 313-314 (Example 6.6). Although the harmony is spelled as a dominant-seventh chord ($B\flat - D - F - A\flat$), it behaves as if it were a German augmented-sixth chord. Instead of resolving down by step like a typical chordal seventh, the $A\flat$ rises like $G\sharp$, thereby signifying the augmented-sixth (German +6 spelled enharmonically). Since a German augmented-sixth chord typically resolves to a cadential $\frac{6}{4}$ chord ($V\frac{6}{4}$), the forthcoming resolution of the chord in mm. 313-314 ($B\flat - D - F - [A\flat] = G\sharp$) should be to a cadential $\frac{6}{4}$ chord in D minor built on A in the bass (Example 6.6).

Example 6.6 The B \flat dominant-seventh chord (m. 313) is enharmonically reinterpreted as a German augmented-sixth chord. The cadential $\frac{4}{4}$ chord of D minor is the anticipated resolution of the transformed harmony.

The musical notation shows two staves. The upper staff is in treble clef with a key signature of one flat (B \flat). The lower staff is in bass clef with the same key signature. A circled number '313' is above the first measure. The first measure contains a B \flat dominant-seventh chord (B \flat , D \flat , F, A \flat) with an equals sign and a sharp sign (#) above it, indicating its enharmonic equivalence to a German augmented-sixth chord (B \flat , D \flat , F, A \sharp). The second measure shows the resolution of this chord to a D minor cadential $\frac{4}{4}$ chord (D \flat , F, A \flat). The text 'enh.' is written below the first measure, and 'Anticipated Resolution' is written below the second measure. Below the bass staff, a bracket connects the bass notes of the first and second measures, with a dashed line indicating the anticipated resolution path. The chord symbols are: B \flat dom. 7 = D minor: Ger +6. To the right, a Roman numeral V is followed by a table of voice exchanges:

8	-	7
6	-	5
4	-	#

In m. 315, the resolution of the German augmented-sixth harmony is similar to the anticipated resolution in Example 6.6 (above), except for the bass (Example 6.7, below, m. 315). The bass undermines the anticipated motion to A and instead leaps *down* to F \sharp ! Hence, the anticipated cadential $\frac{4}{4}$ chord in D minor morphs into a D minor *first-inversion* chord, revealing the second voice exchange and deflating the possibility for an emphatic dominant arrival in m. 315. The enharmonically reinterpreted dominant-seventh/augmented-sixth harmony presents the possibility for an additional interpretation of tonal structure in the movement at the deep middleground level (Example 6.7).¹⁷⁶ The

¹⁷⁶ The first interpretation of structure is the apparent (or incipient) interrupted structure shown in Example 6.1. The second interpretation of structure is the undivided structure

$A\flat$ ($G\sharp$) and the $B\flat$ from the enharmonic augmented-sixth chord (m. 314) connect to the prolonged subdominant (IV, G minor) from the development section (m. 178, Example 6.7) via large-scale chromatic voice exchange. The G of the bass and the $B\flat$ in the top voice at m. 178 are exchanged with the $G\sharp$ (= $A\flat$) in the top voice and the $B\flat$ in the bass at m. 314 (Example 6.7). The deep middleground reading in Example 6.7 shows how the chromatic voice exchange arises from the enharmonic transformation.

Example 6.7 Voice-leading analysis of Beethoven's *Ninth Symphony*, mm. 19-315: The voice exchange from the subdominant in m. 178 bridges over the thematic reprise and typical point of interruption, connecting to the enharmonic augmented-sixth chord in m. 314.

The voice-exchange from mm. 178-314 also pierces through the thematic reprise at m. 301, surpassing the incipient interruption and continuing the tonal processes over the

shown in Example 6.4. The undivided structure overtakes both the first and third structures, which are emergent—they are neither fully realized nor fully supplanted.

formal boundary. Based on other sonata movements and the paradigmatic models published by Edward Laufer, it might seem more conventional to compose-out a large-scale voice exchange idea with the subdominant and an augmented-sixth chord *before* the recapitulation occurs. Paradigmatically, it would occur in the development section in the material leading up to the retransition, so that the resulting augmented-sixth chord resolves to the dividing/interrupted V (or a cadential $\frac{6}{4}$ chord), prolonged until the interruption. If one refers back to the Schenkerian models from the previous chapter, the interrupted V figures prominently into the end of all of the development section paradigms. In the *Ninth Symphony*, the chromatic voice exchange leading up to the enharmonic augmented-sixth chord in m. 314 is displaced—it occurs *after* the recapitulation is underway (m. 301ff), and that incongruity magnifies the formal-tonal paradox. Nonetheless, if the augmented-sixth chord (m. 313) would have resolved conventionally (to $V\frac{6}{4}$), then the possibility for an interrupted structure might have remained open. Hypothetically, the interruption could have occurred after the prolonged cadential dominant ($V\frac{6}{4}$) and before the return of tonic harmony later in the recapitulation. Therefore, the emergent tonal structure containing the large-scale chromatic voice-exchange with the subdominant can be considered an incipient interrupted structure.

Ultimately, the first movement of the *Ninth Symphony* contains three tonal structures—two incipient interrupted structures that are both surpassed by an undivided structure. The first incipient interrupted structure, shown in Example 6.1, arrives on the dominant at m. 275 and disintegrates at the recapitulation (m. 301) because of the chromatically altered first inversion tonic harmony. The first large-scale voice-exchange thwarts the unfolding of a more typical interrupted structure (Example 6.3). The second

incipient interrupted structure (Example 6.7) materializes when the subdominant from the development section (m. 178) is exchanged with the enharmonically-spelled German augmented-sixth chord in m. 314—that structure dissolves when the anticipated resolution to a cadential $\frac{6}{4}$ chord (V_4^6) morphs into D minor first-inversion harmony. Hence, the second large-scale voice exchange foils the unfolding of the second nascent interrupted structure (Example 6.7, m. 315). The third tonal structure is undivided (Example 6.4); the two overlaid voice exchanges are superimposed on top of the other, slightly lower-level, tonal frameworks. All three structural possibilities intensify the formal-tonal paradox because the sense of formal division created by the design reprise (m. 301) is definitively bridged over *in multiple ways* as two potentially interrupted structures dissolve at m. 301 and at m. 315, respectively. Formal-tonal paradox is therefore a principal compositional problem in the movement.

6.5 Diachronic Transformation and Formal-Tonal Paradox

The concept of having two incipient interrupted tonal structures overtaken by an undivided structure in a single sonata-form movement has not been thoroughly addressed in Schenkerian theory, and therefore requires further elucidation. One groundbreaking article that considers the possibility that a single movement can simultaneously evoke two different tonal structures is Timothy Jackson's "Diachronic Transformation in Brahms' Haydn Variations."¹⁷⁷ Jackson's analysis of Brahms' *Haydn Variations* employs Ferdinand

¹⁷⁷ Timothy Jackson, "Diachronic Transformation in Brahms' Haydn Variations," in *Schenker Studies 2*, ed. by Carl Schachter and Hedi Siegel (Cambridge: Cambridge University Press, 1999), 239-275. Ferdinand de Saussure, *Cours de linguistique générale (Course in General*

Saussure's concept of multiple linguistic states, which can be mapped using "synchronic" and "diachronic" transformations, and applies them to Haydn and Brahms excerpts.¹⁷⁸

In linguistics, a diachronic transformation exists when the "old" version of a word (or phrase) is phased out, but the "new" form of the word is not yet fully realized.¹⁷⁹ The diachronic transformation "ruptures a steady state to create a duality of previous state and end state and, from a single synchronic perspective, distortion and paradox."¹⁸⁰ Jackson's analysis of Brahms' *Haydn Variations* compares voice-leading graphs from an inferred "previous state" of tonal structure to graphs of passages in the "distorted" state of "diachronic transformation."

Jackson's theory is applicable to the multi-faceted tonal structure in the first movement of the *Ninth Symphony*. There is a residue of an "old," or more typical, tonal framework in the movement (Example 6.1). The I - VI - IV - V progression that unfolds through the dominant prolongation at the retransition (m. 275) appears to form the first branch of an interrupted structure. In addition, there is a chromatic voice exchange that connects the G (IV) *Stufe* from the development section to the augmented-sixth chord in m. 314 (Example 6.7), which might typically resolve to the interrupted V before a tonic return later in the recapitulation. However, a newly conceived tonal structure (Example 6.4) asserts itself on top of the residual, "older" tonal/structural frameworks—the overlaid voice exchanges with D minor and D major exemplify the "newer" form of the tonal

Linguistics), ed. Charles Bally and Albert Sechehaye, trans. Roy Harris (La Salle, IL: Open Court, 1983).

¹⁷⁸ Jackson, *Diachronic Transformation*, 240-4.

¹⁷⁹ The concept of "diachronic transformation" is a linguistic process in which a word becomes transformed from the "old" version to a "new" version and the diachronic state exists in between the two—it is neither the old version of the word nor the new.

¹⁸⁰ *Ibid.*, 240.

language that distorts the older versions of tonal structure. Ultimately, the compositional idea in the movement is idiosyncratic and unveils a more complex tonal structure than the generic models suggest. The movement is in the midst of a metamorphosis—Beethoven’s style evolved in such a way that the *Ninth* exhibits the tonal traits of an “older” form of language, but also usurps them with a newer, grander tonal process. Indeed, the result is a striking unfolding of conflicting tonal processes that violently contradict one another as the movement progresses. Their interactions result in a tonal fracas that strengthens the formal-tonal paradox.

If we disregard the remnants of the two emergent interrupted structures or consider them only at a very low level of structure, we mask the complexity of the formal-tonal paradox and the element of diachronic transformation. The contradictions in the formal-tonal paradox, the two incipient interrupted structures (Example 6.1, Example 6.7), and the tonal processes that pierce through the interruption are a fundamental starting point for understanding the movement as a whole. Many other aspects of harmony and voice leading in the movement support the overall formal-tonal paradox. Some seemingly insignificant details in other passages make the formal-tonal paradox seem like a fitting manifestation of pervasive compositional problems. Let us explore some additional striking features that contribute to the overall cohesiveness of the movement.

6.6 Exposition

Even though the essential contradiction of the formal-tonal paradox can be understood with middleground level voice-leading graphs, foreground features of the movement are an essential part of the whole. Conversely, a description of every single

voice-leading event seems unnecessary, so my analysis focuses on salient details in each section of the movement that are relevant to the formal-tonal paradox. I will further elucidate passages that were glossed over in the preceding discussion, presenting a more complete analysis in which voice-leading processes at multiple structural levels contribute to the paradox.

The symphony begins with the open fifth (A-E) motive, sometimes referred to as the “creation” theme, with the dominant pedal (A) as the main note in the bass.¹⁸¹ As other analysts have noted, the primacy of the open fifth motive creates a sense of “earthliness” or “natural beginning” that continues until the arrival of the first root-position tonic harmony, which materializes through the arpeggiation in mm. 17-19.¹⁸² Even though the first D minor *harmony* does not unfold until mm. 17-19, the *pitch* D enters earlier (Example 6.8), asserting itself amidst the A-E open fifth. The striking D, played by the bassoons in mm. 15-16, enters two measures “early,” and it is marked with an asterisk in Example 6.8.

¹⁸¹ Levy, *Ninth Symphony*, 50.

¹⁸² *Ibid.*, 49-51.

Example 6.8 Beethoven's Symphony No. 9 in D minor, I, mm. 13-17: The "early" D in the opening theme prefigures the first arrival of D harmony (m. 301)—the heart of the formal-tonal paradox.

The image shows a musical score for measures 13-17 of Beethoven's Symphony No. 9 in D minor, I. The score is arranged in a system with seven staves: Upper W.W., Bassoon, Violin I, Violin II, Viola, Cello, and Bass. The key signature is D minor (two flats) and the time signature is 2/4. Measures 13, 14, 15, 16, and 17 are circled at the top. In measure 15, the Bassoon part has a note marked with an asterisk and the text "* 'early' D *". The Violin II and Cello parts feature triplet patterns in measures 13-14 and 15-16. The Bass part has a triplet in measure 16.

The "early" D is the principal feature of the opening theme that presages the formal-tonal paradox. In the recapitulation, the D major harmony at m. 301 is a large-scale "early D" because it arrives before the definitive tonal goal of D minor ($\overset{6}{3}$) at m. 315. Hence, we can only understand the D major $\overset{6}{3}$ harmony as an "early D" retrospectively. Only after the diatonic voice exchange and D minor $\overset{6}{3}$ harmony occur in m. 315 do we realize that the harmony in m. 301 is surpassed. The "early" D in the exposition (mm. 15-16) anticipates the impending arrival of D minor harmony in mm. 17-19, emulating the first arrival on D harmony at the design reprise.

Even within the local context alone, the bassoons' "early" D is paradoxical with respect to traditional consonance/dissonance paradigms. The D enters during the long bass pedal A that continues until m. 16. Thus, strictly speaking, the D is a dissonant fourth above the bass (A1 at the end of m. 14 in the double bass part). However, the "early" D does not resolve down by step to C# (or C \sharp) as a dissonant fourth "should" (i.e., 4-3). Instead, the D is *treated* as if it were a consonance, without any regard for the conventional resolution down by step. The "early" D is sustained through m. 17, as if it were an anticipation of the forthcoming D minor harmony in mm. 17-19.¹⁸³ Therefore, the D in the bassoon part in mm. 15-16 could be described as a paradoxical "dissonant consonance." Even as early as the first arrival of D minor in the exposition, paradox begins to play a central role in the movement.

Not long after the opening tonic harmony is established, there is a striking move to a root-position Neapolitan harmony in mm. 24-25 (Example 6.9), which is marked *fortissimo*. The bass note for the Neapolitan harmony, E \flat , moves up to E \natural in m. 27, the bass note of a fully diminished seventh chord in first inversion. Even though the E \flat to E \natural voice-leading motion is striking, the main bass progression in the opening of the movement is I (D) – IV (G) – V (A) – I (D)—the E \flat to E \natural line is an inner-voice motion of the bass. Measures 21-22 prolong D minor, and with the same figuration, mm. 23-24 prolong the subdominant (G minor). That G in the bass (m. 24, Example 6.9) underlies the move to the Neapolitan and ascends to A in m. 28. The move from G to A is reiterated in mm. 31-33, with the insertion

¹⁸³ Schenker refers to the "early" D as an "anticipation of grandest style." Heinrich Schenker, *Beethoven's Ninth Symphony* trans. and ed. by John Rothgeb (New Haven: Yale University Press, 1992), 34.

of G# as a chromatic passing tone (G – G# – A). That A in m. 35 moves down by fifth back to D at the cadence (m. 35, Example 6.9).

Example 6.9 Voice-leading graph of Beethoven's *Ninth Symphony*, I, mm. 1-35

The image displays a musical score for Example 6.9, showing voice-leading graphs for measures 1, 19, 22, 24, 25, 27, 28, 32, and 35. The score is in G major (one sharp) and 3/4 time. The treble clef staff shows a melodic line with a triplet of eighth notes in measure 22 and a chromatic passing tone G# in measure 35. The bass clef staff shows harmonic support with chords labeled (V)4-, I, IV, N6, V, and I#7-8. A dashed line connects the A in measure 35 to the D in measure 35, indicating a fifth descent.

The cadence in m. 35 also exudes a structural duality (Example 6.10). Even though the string basses, the second violins, and the cellos articulate a clear D on the downbeat of m. 35, the first violins and violas refuse to bring the upper line to a close on the same beat. Instead, they land on a C#5—a dissonant major seventh above the D in the bass, and resolve to a D4 on the *second* beat of m. 35 (Example 6.10). The upper voices and the bass therefore cadence on different beats, resulting in a structural duality—an overlap between tonic and dominant, in which the bass moves to the tonic but the upper voice is still

unfolding the dominant.¹⁸⁴ The unruly cadence in mm. 34 -35 could be interpreted as a manifestation of Beethoven’s ill-mannered personality, which according to the pianist Frau von Bernhard, “showed no signs of exterior polish.” However, in my view, it exemplifies the state of primeval formlessness that encompasses the opening of the symphony.

Example 6.10 Beethoven’s *Ninth Symphony*, I, mm. 29-35: The “misaligned” cadence in the exposition overlaps tonic and dominant (marked with an asterisk in m. 35).¹⁸⁵

Following the cadence, the first theme occurs in the home key, D minor, and leaves only the open-fifth (D-A) in mm. 36-48 (Example 6.11). By excluding the modal-defining third of the D harmony, mm. 36-48 set up the symphony-long struggle between D minor and D major, which becomes most apparent in the tonal duel between $F\flat$ and $F\sharp$. As demonstrated by the large-scale overlaid voice exchanges, the modal conflict is not

¹⁸⁴ The overlap of tonic and dominant at that cadence could convey a number of different meanings, and the meaning I suggest is ultimately speculative. For example, we might also interpret the incongruity as a manifestation of Frank Samarotto’s concept of “temporal plasticity,” which he describes in greater detail with examples from Beethoven in his dissertation. Frank Samarotto, “A Theory of Temporal Plasticity in Tonal Music: An Extension of the Schenkerian Approach to Rhythm with Special Reference to Beethoven’s late music” (PhD diss., City University of New York (CUNY), 1999).

¹⁸⁵ Beethoven, Ludwig van, *Symphony No. 9* trans. for solo piano by Franz Liszt (Leipzig: Breitkopf & Härtel, 1922).

confined to the top voice. The *Kopfton*, F^{\flat}_3 ($\hat{3}$), which was established in m. 22 (Example 6.9), is prolonged through the “primal” D minor theme in mm. 36-48, despite the fact that on the surface level, the D-A fifth motive is left without F^{\flat} or F^{\sharp} . In the pick-up to m. 49 (Example 6.11), the A of the open fifth rises to a B^{\flat} in a 5-6 exchange, resulting in a turn to B^{\flat} major. B^{\flat} major harmony is prolonged via the arpeggiation motives in mm. 51-53, the same motives which established the D minor harmony in mm. 17-19, but the B^{\flat} in m. 51 is on its way to the A in the bass in m. 63. A chain of parallel sixths ascend as part of an inner voice motion (m. 55ff), and the ascending line D – E^{\flat} – F – F^{\sharp} – G – G^{\sharp} – A (mm. 55-63) also moves to an A in the upper voices m. 63. The graph in Example 6.11 shows the voice-leading motions in mm. 36-63, the second portion of the first theme group of the exposition.¹⁸⁶

Example 6.11 Voice-leading graph of Beethoven’s *Ninth Symphony*, I, mm. 35-63

The image shows a musical score for Example 6.11, which is a voice-leading graph for Beethoven's Ninth Symphony, I, measures 35-63. The score is written in G major (one sharp) and 3/4 time. It features a treble and bass clef. Circled measure numbers 35, 49, 51, 53, 55, 59, 62, and 63 are placed above the staff. A dashed line connects the notes in measures 35, 49, 51, 53, 55, 59, 62, and 63. Below the staff, the numbers 5-6, 6-6-6-6-5, and Trans. are written. A Roman numeral 'I' is placed below the bass clef staff.

¹⁸⁶ One could hear the linear progression from the B^{\flat} to G^{\sharp} (mm. 53-62 in Example 6.11) in the exposition as a foreshadowing of the striking $Ger+6 = V^7$ harmony verticalized in the recapitulation.

The first transition section begins in m. 63 with the prolongation of A major (Example 6.12). Tritone voice exchanges oscillate between C# and G in the inner-voices, either rising C# – D – E – F – G, or descending G – F – E – D – C# (mm. 63-70). The exchanges prolong the dominant seventh harmony (A – C# – E – G) above the A in the bass. The A in the bass in m. 63 comes from the B \flat in m. 53, and continues the descending line through G and G \flat (in m. 70 and m. 72, respectively) to the F in m. 73. The F in m. 73 is an important tonal goal in the bass because it is a sustained dominant pedal on the V/VI harmony, which prepares the forthcoming B \flat major (VI) in the second theme group (m. 80). The overall tonal motion in the exposition is from the tonic D minor (I) to the submediant B \flat major (VI), and the arrival of the second group coincides with the B \flat major prolongation. Therefore, the principal tonal goals and formal divisions remain congruent in the exposition, even though certain aspects of voice leading are paradoxical (namely the “early” D and the “overlap” at the cadence at m. 35). The graph in Example 6.12 depicts the middleground voice-leading motions from the beginning of the movement until the arrival of the second theme group (m. 80).

Example 6.12 Middleground voice-leading graph of Beethoven's *Ninth Symphony*, I, mm. 1-80

Since the second theme group occurs in $B\flat$ major, the global *Kopfton* (F^{\natural}) is retained throughout the second theme, and D ($\hat{3}$ of $B\flat$) is the local *Kopfton* (Example 6.13). In mm. 80-88, $B\flat$ major harmony unfolds to a local I^6 chord via a series of three parallel tenths. In order to enlarge the same string of parallel tenths from mm. 80-88 in mm. 80-102, multiple attempts to cadence in $B\flat$ major are thwarted (m. 96 and m. 102, marked with asterisks in Example 6.13). In the first attempt (mm. 92-95), the G to F motion in the bass and the $\hat{3} - \hat{2}$ descent in the top voice form the framework for a $V^{\hat{6}}_{\hat{3}}$ cadential motion (m. 95), which appears to be setting up a cadence in $B\flat$ major. However, even though the top voice resolves to $B\flat$, the bass returns to G , which simultaneously subverts the anticipated cadence on $B\flat$ in m. 96 and initiates a second motion to the dominant of $B\flat$ (F major, first-inversion harmony before m. 102).

Example 6.13 Voice-leading graph of Beethoven's *Ninth Symphony*, I, mm. 80-105

The image shows a musical score for Example 6.13, which is a voice-leading graph for measures 80-105 of Beethoven's Ninth Symphony, I. The score is written in B-flat major and 3/4 time. It consists of a vocal line (treble clef) and a piano accompaniment (bass clef). The piano part is divided into two staves. The upper staff of the piano part shows harmonic motion with labels '2nd Gr.', 'local descent', and 'Trans.'. The lower staff of the piano part shows bass line motion with labels '10', '10-10-10', '10', '10-10', and '10-10'. Above the vocal line, circled numbers 80, 88, 96, 100, 102, and 106 mark specific measures. Below the piano part, there are labels: 'B♭ major: I (VI)', 'NOT B♭ *', and 'NOT B♭ * 6'.

The second motion to F (V of B \flat major) begins with falling thirds, G – E \flat – C, in mm. 96-100 (Example 6.13). The C in m. 100 moves up to D, E \flat and F in mm. 102-104, but yet again the cadential V $\frac{4}{3}$ motion and descent of the local $\hat{3}$ (D) to $\hat{2}$ (C) in m. 105 avoids a cadence on a root-position B \flat harmony. Instead, B \flat $\frac{6}{3}$ harmony returns in m. 106 and moves to E \flat minor in m. 107.

The presence of E \flat minor as a modally mixed subdominant transforms the F – G \sharp line in the top voice of mm. 102-103 to an F – G \flat motion in mm. 106-107 (Example 6.14). The modal mixture catalyzes an enharmonic transformation in which the G \flat of the top voice is transformed into F \sharp . The F \sharp is the upper-fifth of B \natural major, which is the respelled \flat II (C \flat Neapolitan) of B \flat major (m. 111, Example 6.14). The B \natural behaves like a C \flat because it

descends through A[♯] (B[♭]) – A – G to the F in m. 120. The prevailing harmonic progression in mm. 80-120 (Example 6.14) is therefore: I (m. 80, B[♭]) – N (m. 111, B[♯] = C[♭]) – V (m. 120, F).

Example 6.14 Voice-leading graph of Beethoven's *Ninth Symphony*, I, mm. 80-150

The arrival on F (m. 120) in the bass marks the beginning of the second transition in the movement (Example 6.14), which bridges the second theme group and the closing group in the exposition. The F at m. 120 is a bass pedal from mm. 120-129, and above it, especially striking $\flat 9$ (G \flat) and $\sharp 9$ (G \sharp) dissonances occur. The dissonant ninths above the F in the bass alternate between G \flat and G \sharp , creating the aural impression of an F \sharp to G motion through voice-leading behavior—a particularly striking feature amidst the second group's large-scale B \flat prolongation. As shown in Example 6.5A (Section 6.3), the rising G \flat in mm. 120-129 garners special attention because it is not treated like a typical dissonant ninth. The distinctive G \flat behaves like an F \sharp in disguise, creating an enharmonic foreshadowing of not only the F \sharp in the bass at m. 301, but also other larger-scale manifestations of D major in

the symphony as a whole (i.e. “Ode to Joy” in the finale). To be sure, the enharmonic spelling of $G\flat$ as $F\sharp$ (m. 111) and the $\flat 9$ ($G\flat$) and $\natural 9$ ($G\sharp$) dissonances in mm. 120-127 are emblematic of the tonal conflict in the movement between D major and D minor, which is most prominent in the two overlaid voice exchanges, realized in m. 301 and m. 315 respectively.

From mm. 138-150, the second transition moves toward a cadence in $B\flat$ major, bridging the second theme group (m. 80) to the closing group (m. 150, Example 6.14). The approach to the cadence resembles earlier attempts to cadence in $B\flat$, marked by an ascent, $D - E\flat - F - G$ in mm. 138-144—but in the second statement, the G moves through $G\flat$ in m. 148 before the conclusive $F - B\flat$ cadential motion in mm. 149-150. The graph in Example 6.14 shows the middleground voice-leading motions from the prolonged $B\flat$ major harmony in the second theme group through the closing theme.

In short, the exposition establishes D minor as the tonic and moves to $B\flat$ major (VI). In many of the paradigmatic models, the second group in minor mode sonata-form movements occurs in the key of the mediant (III), but this movement prolongs the submediant (VI, $B\flat$ major). The $B\flat$ major harmony in the second group is fitting in the broader context of the *Ninth Symphony* for many reasons. First, the $B\flat$ of the second group in the exposition is a foreshadowing of the key area of the third movement, which contains its own *Ursatz* in $B\flat$ major. In addition, the $B\flat$ in the second group supports the *Kopftön* ($F\sharp$), which retains supremacy in the top voice throughout the second group. Furthermore, the tonal motion to $B\flat$ major enlarges the technique of the 5-6 exchange (supported by the

bass), which is an idea that recurs throughout various levels of structure, not only in the motion to the Neapolitan in Example 6.9, but in other instances to be discussed later.

6.7 Development

The development begins in m. 160 when the bass steps down from B \flat to A (Example 6.15). The open fifth motive from the first theme returns in the upper voices (A – E) over the pedal A in the bass (mm. 160-170). Instead of moving to a root position D *minor* harmony like the pedal A in the exposition (mm. 1-16), the sustained A in the bass in the development precedes a first-inversion D *major* harmony (m. 170). Based on the discussion of the *Tempest* sonata in Chapter 5, we might consider the argument for a large-scale chromatic voice exchange that prolongs tonic from the initial D minor harmony through the beginning of the development. However, in the *Ninth Symphony*, the D major first inversion harmony in m. 170 is not first main tonal goal of the development. Unlike the *Tempest*, in which the first portion of the development unfolded D harmony, the D major $\frac{6}{3}$ harmony here is clearly the dominant of the subdominant, G minor (IV), which comes on the second beat of m. 178 (Example 6.15). The brevity of the first-inversion D major harmony in mm. 170-178 and the prominence of the ensuing G minor prolongation suggest that the first main tonal goal of the development is indeed G minor (V 6 /IV, Example 6.15). However, the first-inversion harmony in m. 170 retains immense significance because it foreshadows the $\frac{6}{3}$ harmony at the recapitulation (m. 301) and suggests that prominent $\frac{6}{3}$ harmonies in the symphony as a whole may represent the pathway towards

large-scale redemption.¹⁸⁷ Paradoxically, the V⁶/IV harmony creates the aural impression of a nascent voice exchange that becomes surpassed by subsequent events, primarily the descending thirds motion in the bass (refer back to Example 6.7 if necessary).

Example 6.15 Voice-leading graph of Beethoven's *Ninth Symphony*, I, mm. 160-210

Brief statements of the first theme material occur in G minor during the subdominant prolongation, which continues through definitive cadences in both m. 192 and m. 198, which affirm G minor. The modal mixture in m. 198 transforms the G minor arpeggiations from mm. 198-201 into G major arpeggiations. As a result, the $\flat 3$ (B \flat) to $\sharp 3$

¹⁸⁷ The prominent first-inversion harmony at the recapitulation also evokes the D major tonality achieved in the finale. Other first-inversion harmonies possess greater motivic significance that cannot be fully addressed here, but one striking harmony that contains the essence of the B \flat major tonality from the second movement and the D minor from the first movement is the opening sonority in the finale: a B \flat – D – F – A chord in first inversion ($\frac{6}{4}$ position).

(B \flat) over G in the bass converts the function of the G harmony from the subdominant of D minor into the dominant of the forthcoming C minor (VII \flat of D minor).

The C minor section at m. 210 possesses a striking resemblance to the G minor section at m. 192 and thereby constitutes the second leg of a descending fifths sequence. In a strict sense, the sequence only has two legs (G minor, m. 192ff – C minor, m. 210ff), but we hear an accelerated descending fifths motion from mm. 228-231 which continues the harmonic pattern through F to the B \flat major harmony in m. 232 (descending fifths, Example 6.16). Thus, the accelerated descending fifths progression, G – C – F – B \flat , completes the harmonic progression initiated by the sequence that began in m. 192.

Example 6.16 Voice-leading graph, Beethoven's *Ninth Symphony*, I, mm. 202-253

The image shows a musical score for Example 6.16, which is a voice-leading graph for Beethoven's Ninth Symphony, I, measures 202-253. The score is written in bass clef with a key signature of one flat. It consists of two staves: a treble staff and a bass staff. Above the treble staff, circled measure numbers 202, 210, 215, 218, 223, 232, and 253 are indicated. A dashed line connects the notes in the treble staff from m. 202 to m. 253. Labels 'desc. 5ths seq. [leg 1] [leg 2]' and 'desc. 5ths D - G - C - F - B \flat ' are placed between the staves. A label '5 - 6 - 6 - 6 - 6 - 6 - 6' is placed above the bass staff. Roman numerals VII \flat and VI are placed below the bass staff.

The B \flat in the bass in m. 232 is the point of departure for a series of parallel sixths that span mm. 232-253. The first sixth, G above B \flat , is the result of another 5-6 exchange—the F above B \flat in m. 237 (5) ascends to G in m. 241 (6). The bass voice (the leading voice) descends, B \flat – A – G – F – E – D, and the upper voice follows a sixth above, G – F – E – D – C – B \flat . The parallel descending lines contribute to a middleground level chromatic voice

exchange between B \flat /D and D/B \sharp in mm. 232- 253. The voice-leading graph in Example 6.16 shows the descending fifths motion, the parallel sixths, and the chromatic voice exchange in the development section.

The D in the bass from m. 253 moves up to E in m. 259 (Example 6.17). Descending third motives from the G minor and C minor sections (m. 215, m. 218) return in the upper voices in m. 259, transposed to A minor. The sustained A in the top voice is dissonant with the bass note (E), and it resolves down to G \sharp on the second beat of m. 261 (4- \sharp). The 4- \sharp motion creates aural impression of a cadential V $\frac{6}{4}$ - $\frac{5}{3}$ progression in A minor. However, after a restatement of similar material in mm. 263-266, the attempted cadence in A minor is subverted by the bass, which rises from E to F in mm. 266-267. Ultimately, the bass arrives on A a few measures later (m. 275, Example 6.17) when motivic fragments of the second theme return in the bassoons. The A attained in the last eighth-note of m. 275 is reaffirmed when all of the low strings return to *arco* bowing in m. 279. The A in the bass from m. 279 is regained in m. 287, amidst intimations of F major harmony in the upper voices. Following the two neighbor notes, the G in m. 293 and the B \flat in mm. 294-296, the A from m. 287 is transferred into the timpani part in m. 297. That A moves down through G during the unfolding of the dominant seventh harmony in the string bass part at m. 300 and then descends to the F \sharp (marked *fortissimo*) in the bass at m. 301 (Example 6.17).

Example 6.17 Voice-leading graph of Beethoven's *Ninth Symphony*, I, mm. 259-301

A particularly striking moment in the retransition is the evaded cadential motion on A in m. 267. Even when the A arrives in m. 275, it is not clearly articulated on the downbeat of the measure. The B \sharp is tied over the bar line, and the A enters on the second sixteenth note of the measure, and then recurs on the second beat. Furthermore, the last significant A that the string basses play in the end of the development (m. 275 to m. 301) is the A in m. 279 (where they return to *arco* bowing). Therefore, in the twenty measures between m. 279 and the recapitulation, the A only occurs in the timpani part. The basses emphasize the C \sharp - C \sharp motion, which is the $\sharp 3$ - $\sharp 3$ above the A (V), instead of reiterating an emphatic dominant pedal. Indeed, multiple features of the retransition weaken the dominant prolongation. Furthermore, in the final measures before the recapitulation, the

dominant harmony gives way to fully diminished seventh harmony, C# – E – G – B \flat , which lessens the sense of a prolonged V and continues directly into the arrival of D major at m. 301, without any sense of division (Example 6.17). The wilting dominant prolongation at the retransition not only supports a hearing of the development that connects the G minor in m. 178 to the F# in m. 301, but also catalyzes the tonal continuation that annihilates the interruption.

Despite the fact that the generic Schenkerian archetypes posit the structure of all sonata-form movements to be divided (at the deep middleground level), this movement does not evoke a definitive interruption.¹⁸⁸ The exposition and development sections together indeed constitute a nascent interrupted structure, seemingly unfolding what promises to be a two-pronged *Ursatz*. However, in the critical passages at the very end of the development and the beginning of the recapitulation, multiple unique features transcend the interruption and continue existing voice-leading processes. Consequently, the overall structure morphs from the incipient interrupted structure into an undivided tonal structure that unfolds a singular tonal process *through* the formal boundary at the recapitulation.

Similar to the *Tempest* sonata, the transformation from the incipient interrupted structure to the undivided structure relegates the apparent $\hat{2}$ in the *Urlinie* to a passing tone (to $\hat{1}$). The root position V harmony that supported $\hat{2}$ functions as a passing harmony between I and I⁶ instead of a deep-level divider. The movement moves away from what could have been a stronger, root-position, dominant prolongation in the measures before

¹⁸⁸ Graf, *Pardon the Interruption*, February 2015. (See also the Sections 5.1 and 5.2 in Chapter 5, which explain sonata-form paradigms based on Figure 23 from *Free Composition*)

m. 301 and it eschews a root-position tonic harmony at the recapitulation, which could have firmly established the beginning of the second branch of the *Ursatz*. Instead, the upper voices at m. 301 do not re-establish the *Kopfton*, F \sharp —they sustain a prominent D, and the F \sharp in the bass undermines the return of the F \natural . Thus, in the retransition and recapitulation, the emergent interrupted structure becomes over-shadowed by voice leading that pierces through the interruption and induces the formal-tonal paradox.

On the whole, the principal tonal motions in the development section are the motion to the G minor (IV) in m. 178 (Example 6.18A) and the stepwise descent that leads to the F \sharp in the bass at m. 301. The large-scale bass motion descends in thirds from the initial D minor (I) of the first theme group, to the B-flat major (VI) of the second theme group, and arrives on G minor (IV) as the first main tonal goal of the development. The C (m. 201) – B \flat (m. 232) – A (m. 275) bass motion that emerges following the G minor prolongation is a significant middleground linear progression that descends stepwise towards the F \sharp at m. 301 (bracketed linear progression in Example 6.18A).

The F \sharp in the bass from the beginning of the development (m. 170, Example 6.15) is not on the same level as the F \sharp at the recapitulation (m. 301). As stated, the D major $\frac{6}{3}$ harmony in mm. 170-178 is a V 6 /IV harmony, and that F \sharp in the bass is the leading tone to G (IV). The D major harmony at m. 301 (I 6) is more emphatic, played *fortissimo* by all members of the orchestra, and it is the goal of the stepwise linear progression, C – B \flat – A – G – F \sharp from the end of the development section (bracketed in Example 6.18A). Furthermore, the D major harmony at the design reprise is sustained from mm. 301-312, which, as compared to the D major harmony from the beginning of the development, re-

affirms its deep-level significance. The deep middleground graph in Example 6.18A shows the overriding tonal motions in the development and two significant linear intervallic patterns: the parallel tenths in mm. 19-178 (D/F [m. 19] – B \flat /D [m. 80] – G/B \flat [m. 178]) and the parallel fifths in mm. 210-275 (C/G [m. 210] – B \flat /F [m. 232] – A/E [m. 275]).

Example 6.18A Deep middleground graph of Beethoven's *Ninth Symphony*, I, mm. 19-301

The parallel fifths are especially noteworthy because of their motivic significance. In the exposition, the open fifth (A-E) motives occurred in the foreground as part of the primal, formless, natural beginning to the symphony. In the development, the fifths are broken up by intervening progressions (Example 6.18B), unfolding over a much larger span. Thus, metaphorically, as the universe evolves from an amorphous mass to a more distinct, fully formed state, the fifths recede into the middleground. Example 6.18B shows

how the overriding the linear intervallic pattern (5-5-5) arises in the development amidst subsidiary voice leading motions.

Example 6.18B Voice-leading graph of Beethoven's *Ninth Symphony*, I, mm. 210-275

The image displays a musical score for the first movement of Beethoven's Ninth Symphony, measures 210 to 275. The score is written for piano in D minor. Above the staff, several measures are circled with their measure numbers: 210, 215, 218, 223, 229, 232, 253, 259, 267, 271, and 275. The score features a voice-leading graph with dashed lines connecting notes across measures. Below the staff, the chord progression is indicated as D minor: VII^b, VI, and V. The number '5' is written below the staff in three locations, corresponding to the voice-leading graph.

6.8 Recapitulation

In his discussion of the D major $\frac{6}{3}$ harmony in m. 301 (the recapitulation), David Benjamin Levy states: “never before had a composer destabilized this critical formal juncture as does Beethoven with his first-inversion D major triad. And never before had a D major chord sounded so apocalyptic.”¹⁸⁹ Although every listener may not hear the D major $\frac{6}{3}$ chord as “apocalyptic,” the opening sonority of the recapitulation positively eludes what could have been a stronger tonal return (root-position D minor harmony). The D major $\frac{6}{3}$ harmony is significant, but it is not a final structural destination. It is a significant part of voice-leading processes that continue past m. 301 and fuse the movement into an undivided tonal structure at the deep middleground level.

¹⁸⁹ Levy, *Ninth Symphony*, 62.

The harmony and voice leading in mm. 301-315 make the formal-tonal paradox most apparent. The voice exchange with G/B \flat and B \flat /A \flat (G \sharp) materializes (mm. 313-314, Example 6.7) and the D minor first inversion harmony (m. 315) brings the multi-faceted dimensions of structure into the spotlight. Ultimately, the large-scale diatonic voice exchange prevails as the most significant tonal goal in the first portion of the recapitulation, but the twists and turns that result from the two lingering incipient interrupted structures are vital in the recapitulation.

The most noteworthy detail in mm. 319-322 is the motive in the low strings (Example 6.19). The cellos and double basses play two stepwise descents that are marked with *sforzandi* and *fortissimos*: C – B \flat – A – G – F \natural (mm. 319-320) and C – B \flat – A – G – F \sharp (mm. 321-322). Those motives summarize the large-scale linear progression in the bass from the development (bracketed descent in Example 6.18, mm. 210-301). The stepwise descent at the middleground level (Example 6.18, C – B \flat – A – G – F \sharp) is especially significant because it pierces through the formal boundary at the recapitulation, thereby enhancing the formal-tonal paradox. Furthermore, the foreground motives accentuate the two prominent bass pitches that are vital tonal goals in the overlaid voice exchanges—one steps down to F \natural (mm. 319-320) and the other descends to F \sharp (mm. 321-322).

Example 6.19 Beethoven's *Ninth Symphony*, I, mm. 319-323: Motives in the low strings summarize the middleground linear progression from the development that surpasses the formal boundary at m. 301 (C - B \flat - A - G - F \sharp /F \sharp).

Violin I & II
Viola
Cello
Double Bass

319 320 321 322 323

ff *ff* *f*

ff *ff* *f*

ff * *sf* *ff* * *sf*³ *f*

ff * *sf* *ff* * *sf*³ *f*

*C B \flat A G F \sharp *C B \flat A G F \sharp

Example 6.20 Voice-leading graph of Beethoven's *Ninth Symphony*, I, mm. 301-377

315 325 339 345 355 363 373 377

Recap. "early" again 2nd Gr. deceptive 10-10-10 unis. D

I 6 IV 5 b_6

local descents

The imperfect cadence in G minor at m. 325 is also an important marker of structure even though it seems to be somewhat transitory (Example 6.20 above). There is an immediate turn towards the Neapolitan ($E\flat$) in m. 326, and then a pedal D that persists in the bass from mm. 327-338. That $E\flat$ to D motion occurs as a 6-5 motion over the G (IV) in the bass, a reincarnation of the 5-6 motion that occurred in the exposition (mm. 24-27, Example 6.9). In both cases, the overriding bass progression is the stepwise ascent from G to A, and the 5-6 (D - $E\flat$) or 6-5 ($E\flat$ - D) exchange occurs over the G. In the upper voices, there is a chromatic descent in mm. 329-335 from $C\sharp$ down to G. A curious feature of the upper voices is that both the $C\sharp$ and the G are dissonances above the pedal D in the bass (a 7th and a 4th, respectively). Since neither of the dissonances appear to “resolve” traditionally (down by step), the pedal D is a prolonged anticipation of the D that comes with the reprise of the second group.

One could argue that the bass in mm. 329-338 “should” have been an A; if it was, then the $C\sharp$ and the G would be chord members of a prolonged A dominant seventh harmony, setting up the forthcoming D harmony at m. 345 (return of the second theme material). The anticipatory D in mm. 329-338 is reminiscent of the “early” D from the first theme (see Example 6.8). The D in mm. 15-16 was a paradoxical because it was a dissonant fourth above the bass (A), but it was treated like a consonance, requiring no stepwise resolution. The A in the bass that “should” have occurred in m. 329 materializes in m. 339, setting up the return of the second group material at m. 345 (Example 6.20). Transposed up a third from the exposition, the second theme material occurs in D major in the recapitulation. However, D major’s attempt to re-assert itself is thwarted yet again. The D

in the bass at m. 345 moves up through E in m. 353 to an F^{\sharp} in m. 355, thereby morphing the D major root position harmony (m. 345) into D minor harmony in first inversion (m. 355). The voice exchange in mm. 345-355 is not only another manifestation of the modal scuffles that infiltrate the symphony as a whole, but also a small-scale emblem of the two overlaid voice exchanges that span the majority of the movement.

The evaded cadence in m. 363 following the V_{4-3}^{6-5} progression (m. 362) initiates a second attempt to cadence in D minor, which begins with a string of parallel tenths in mm. 369-372 (Example 6.20), which lead directly into the successful cadence on D at m. 373. However, the second attempted cadence on D harmony is only somewhat successful, because the resolution (to D) is left without a third or fifth, and it is elided with a restatement of transition motives from the exposition (from m. 102). In retrospect, the D harmony prolonged in mm. 345-373 is not as strong as other D harmonies in the recapitulation, namely those in m. 301 and m. 315.

After the cadence on D at m. 373, the reprise of the second group continues by recasting the B^{\sharp} of the exposition (an enharmonic C^{\flat}) as an E^{\flat} , the Neapolitan of D minor. Using the same figure that set up the cadence in D from mm. 371-372, the B^{\flat} in the bass sets up a cadence in E^{\flat} major in mm. 375-377 (Example 6.20). At this juncture in the recapitulation, we might initially consider the Neapolitan harmony as the large-scale predominant, which would move to the structural dominant (V). Furthermore, the dominant would be the next corresponding tonal goal if the material from the second theme group in the exposition returned transposed up by third and otherwise unaltered. Indeed, the root-position Neapolitan harmony (E^{\flat} major, \flat II) eventually moves to the dominant (m. 399, Example 6.21A), but it does so indirectly, in order to avoid the direct

tritone relation in the bass ($E\flat - A$). The $E\flat$ in the bass (mm. 375-377) moves down through D (m. 380) to $C\sharp$ (m. 383), emulating the voice-leading motion that might customarily occur in an upper voice ($\hat{b}2 - \hat{7}$, $E\flat - C\sharp$). After all, the $\flat II$ harmony frequently occurs in first-inversion to deliberately avoid tritone relation with $\hat{5}$ in the bass; when the $\flat II^6$ chord moves to the dominant (V), the bass typically ascends by step from $\hat{4}$ to $\hat{5}$.

Over the $C\sharp$ in the bass, the struggle between $G\flat$ and $G\sharp$ from the exposition resurfaces, now transposed by a third and recast as a duel between $B\flat$ and $B\sharp$. The $B\flat$ in m. 387 behaves as if it were an $A\sharp$, and rises up to $B\sharp$. The rising $B\flat$ above the $C\sharp$ in the bass creates the aural impression of an $A\sharp$. The $C\sharp$ in the bass is prolonged from mm. 383-397, and the coupling ($C\sharp - D$ and $G - F\sharp$) emphasizes the same tritone outlined in the chromatic line from mm. 329-335 ($C\sharp - G$). From a broader perspective, the $C\sharp$ is the upper third of the A in the bass that arrives in m. 399. The bass A was present as early as m. 387 in the timpani part, but the low strings do not arrive on the A until twelve measures later (m. 399).¹⁹⁰ In m. 399, the string basses, the cellos, and the timpani all emphasize the A. Even though the pedal $\hat{5}$ appears to be a strengthened manifestation of what could have been a strong A in mm. 383-387, it is still not the structural dominant. Despite the fact that it occurs on a hypermetric downbeat, the bass A is only prolonged for two measures, and it moves towards a more important tonal goal in m. 407, the emphatic return of the first inversion D minor harmony.

¹⁹⁰ The As in the timpani part are not especially significant beyond the foreground level because they begin to alternate with Ds starting in m. 387. Hence, my analysis does not consider that A the structural dominant; its importance seems secondary to the unfolding of the $C\sharp$ as the upper third of the forthcoming A in the bass (m. 399).

Example 6.21A Voice-leading graph of Beethoven's *Ninth Symphony*, I, mm. 301-407

The first inversion D minor harmony at m. 407 *also* occurs on a hypermetric downbeat, and it represents the culmination of a long crescendo that began in m. 391. Furthermore, the D minor at m. 407 is marked *fortissimo* and distinguished by significant changes in figuration and texture. The A in m. 399 thus moves to the F \sharp in m. 407 through G in m. 401 (marked *sforzando*). The G in m. 401 initiates a string of parallel sixths (Example 6.21B) that lead directly into the D minor at m. 407: G/E (m. 401) – A/F (m. 402) – B \flat /G (m. 403) – C/A (m. 404) – D/B \flat (m. 405) – E/C \sharp (m. 406) – F/D (m. 407). Example 6.21A outlines the voice-leading motions in mm. 345-407 within the larger context of the recapitulation.

Example 6.21B Parallel sixths in Beethoven's *Ninth Symphony*, I, mm. 401-407

In the overall tonal structure of the movement, the D minor first inversion harmony at m. 407 (Example 6.21A) connects to the D minor first inversion harmony at m. 315, which subverted the D major $\frac{6}{3}$ chord at the thematic recapitulation (m. 301). The tonicization of G minor in m. 325 is a neighboring motion between the two D minor $\frac{6}{3}$ harmonies on the middleground level. The smaller scale 6-5 exchange with E \flat and D that follows the cadence on G in m. 325 is enlarged and reversed to a 5-6 exchange (mm. 345-377, Example 6.21A). The D major (m. 345) and the E \flat major (m. 377) in the recapitulation can be heard as a reincarnation of the 5-6 motion that occurred in the exposition (mm. 24-27, Example 6.9). The bass descends in thirds from the root-position Neapolitan harmony in m. 377, E \flat - C \sharp - A - F \natural , passing through the dominant (m. 399) on the way to the D minor arrival in m. 407.

The D minor first-inversion harmony at m. 407 initiates the final impetus for structural closure in the first movement (Example 6.21A). The parallel sixths that led into the D minor first inversion harmony at m. 399 continue up by step through the G/E in m. 409 and the A/F# in m. 411 to the local goal, the B \flat /G in m. 413 (Example 6.21A). The chain of parallel sixths links the pitches F and B \flat in the bass. The F – B \flat relationship is especially important throughout the recapitulation, surfacing at mm. 312-314 at the enharmonic transformation of the B \flat dominant seventh/German+6 harmony and its unusual “resolution” (Example 6.6), then returning briefly in mm. 355-359 (as a V/VI to VI progression). However, the B \flat at m. 413 behaves conventionally and as part of the bass descent and global tonal closure. The B \flat immediately descends to G and then A twice. After articulating the *fortissimo* A in m. 418, the definitive cadence on D occurs in m. 419. The cadence in mm. 418-419 marks the final descent of the *Uralinie* and effectively closes the tonal structure of the movement (Example 6.21A).¹⁹¹

6.9 Coda

The coda revisits some of the tonal issues that surfaced in the main sections of the first movement.¹⁹² For example, mm. 489-492 (Example 6.22) refer back to the enharmonic reinterpretation of A \flat (=G#) that occurred in the first portion of the

¹⁹¹ A striking feature of the final cadence in mm. 418-419 is a small-scale reference to the enlarged 5-6 exchange in the reprise of the second theme group. The voice-leading motion D (5) – E \flat (6) occurs over the G that immediately precedes the structural dominant in m. 418. As a result of that 5-6 motion, we can infer an ascent to the structural $\hat{2}$ (E) that comes from the chromatically rising D – E \flat line in m. 418 (Example 6.21A).

¹⁹² The coda spans mm. 489 – 546. I recommend following the analytical discussion with a score in hand.

recapitulation (mm. 313-314, Example 6.6). In the reminiscence in the coda (m. 490), the harmony is spelled as an augmented-sixth chord, so a written G# sounds above a Bb in the bass (Example 6.22). However, in the coda, the enharmonic transformation is reversed; the G# creates the aural impression of an Ab! Thus, the augmented-sixth chord with Bb/G# becomes a dominant-seventh chord with Bb/Ab. The function of the Bb dominant-seventh chord is the V7 of the Neapolitan, and it resolves to bII harmony (Eb, N) in m. 492. The Bb in the bass, however, persists as a pedal, resulting in a Neapolitan 4/4 chord (N4/4)—a rare harmony in classical tonal language, but nonetheless a consequence of voice-leading in the coda. The N4/4 chord gives way to a IV6 harmony as the Eb in the bass descends by step to D (m. 493, Example 6.22).

Example 6.22 Voice-leading analysis of Beethoven's *Ninth Symphony*, I, mm. 490-497: The enharmonic reinterpretation from the recapitulation (mm. 313-314, Example 6.6) is reversed in the coda (mm. 490-497).

490 492 493 494 496 497

Ger+6
 \bar{V}^7/N N^6_4 IV^6 $V^6_4 - 5$ I

Even though the G \sharp in m. 490 resembles an A \flat , it exemplifies its true identity in mm. 531-538. As D major harmony makes a final effort to assert itself, the top voice ascends from F \sharp . The F \sharp bypasses G \natural and ascends through G \sharp to A, a linear progression that recalls the rising A \flat (= G \sharp) from m. 313 (Example 6.6). The F \sharp – G \sharp – A line allows the G \sharp to embody its true identity one last time before the movement ends.

Another particularly striking aspect of voice leading in the coda is the behavior of the C \sharp (Example 6.23). The ascending and descending motives involving the C \sharp arouse a C \sharp /D \flat conflict that is related to the F \sharp /G \flat issue by fifth transposition. In the chromatically descending eighth-note progression in mm. 513-514 (Example 6.23), the C \sharp creates the impression of a D \flat (D – C \sharp – C \natural – B \natural – B \flat – A), but then it reassumes its spelled identity in mm. 514-515 (A – B \natural – C \sharp – D).¹⁹³

Example 6.23 Beethoven's *Ninth Symphony*, I, mm. 513-515: Descending and ascending fourth motives in the bass signify the C \sharp /D \flat issue in the coda.

The image shows a single staff of music in bass clef, spanning measures 513, 514, and 515. The notes are: m. 513: D \sharp , C \sharp , B \natural , A \flat ; m. 514: G \sharp , F \sharp , E \sharp , D \sharp ; m. 515: C \sharp , B \natural , A \flat , G \sharp . Brackets below the staff indicate a 'descending 4th' from m. 513 to 514 and an 'ascending 4th' from m. 514 to 515. Above the staff, the notes in m. 513 and 514 are circled and labeled '(= D \flat)', and the notes in m. 514 and 515 are circled and labeled '(= C \sharp)'.

¹⁹³ The same issue arises in mm. 530-531—the C \sharp behaves like a D \flat and descends to C \natural just before the movement concludes.

In the end, D major harmony (and its modal-defining third, F \sharp) never definitively conquers D minor in the first movement. Throughout the exposition, development, and recapitulation, F \sharp makes numerous attempts to assert itself over the presiding *Kopfton*, F \natural . For example, the D major first-inversion harmony at m. 301 instigates the most significant tonal thrust in the movement thus far, connecting to the D minor first theme via chromatic voice exchange. However, shortly after the D major $\frac{6}{3}$ harmony emerges, it is enveloped by D minor harmony, and the F \natural *Kopfton* surfaces in the bass voice (m. 315). The last remnant of D major in m. 531 again fails to supplant D minor. In the coda, the preeminence of the D major triad is weakened by the presence of a C \natural in the bass, making it the V $\frac{4}{2}$ chord of the subdominant (IV). The D in the bass is elided in the first part of m. 531—it only arrives later in the measure, supplementing the harmonic framework already in place.¹⁹⁴ Similar to the D major harmony at the beginning of the development (V $\frac{6}{4}$ /IV, Example 6.15), the D major in m. 531 is V $\frac{4}{2}$ /IV.

Conversely, the D major chord at m. 301 genuinely embodies structural dualism. It conveys both the deep-level tonic harmony and the V/IV harmony. In one tonal dimension, the deep-level tonic returns in inversion via the overlaid voice-exchanges. However, it could also be heard as a V $\frac{6}{4}$ /IV chord, retrospectively, after the voice exchange with the subdominant and the enharmonic B \flat /G \sharp surfaces (the second incipient interrupted structure). The D major at the beginning of the recapitulation outshines many of the other D major harmonies in the movement, and it is central to the formal-tonal paradox.

¹⁹⁴ The timpani part has a D on the downbeat of m. 531, but, like other cases throughout the movement, the *strongest* bass pitches are doubled (string basses and timpani).

6.10 Conclusion

The first movement of Beethoven's *Ninth Symphony* is a unique manifestation of formal-tonal paradox in which tonal processes transcend two incipient interrupted structures. The large-scale progression, I – VI – IV – V, that unfolds through the retransition is the basis for a tonal structure that is destined for interruption. However, idiosyncratic harmony and voice leading in the recapitulation dissolves the interruption via a pair of large-scale, overlaid voice-exchanges that “compose-over” the formal boundary and deliver the formal-tonal paradox.

Overall, the conflicting formal and tonal processes may contribute to the “tension between the compulsion of cyclicity and the resistance to cyclicity” that Michael Spitzer cites as a “deliberate strategy of the music” in his discussion of the *Ninth*.¹⁹⁵ Regardless, the paradox is a central compositional problem because the voice exchanges that bridge-over the interruption epitomize the modal conflict between D major and D minor. Failed attempts from D major to overtake D minor infiltrate the movement, surfacing in small details and in large-scale tonal motions.

One aspect of the formal-tonal paradox in the *Ninth Symphony* that did not transpire in the *Tempest* sonata was the emergence of a second nascent interrupted structure. The opposition between 1) a lingering incipient interrupted structure and 2) the superimposed undivided structure is apparent in both movements. However, in the *Ninth*, the second incipient interrupted structure is vital to the tonal struggle. The subdominant (IV, G minor) from the development section (m. 178) is prolonged via voice exchange with the enharmonically re-interpreted augmented-sixth chord (B \flat /G \sharp in mm. 313-314). This

¹⁹⁵ Spitzer, *Music as Philosophy*, 183.

additional dimension of tonal structure enhances the formal-tonal paradox because the exchange swallows the D major harmony at m. 301 and penetrates through the thematic reprise, suggesting that the *formal* boundary m. 301 is not a *tonal* goal. Therefore, a complete hearing of the movement considers all three dimensions of tonal structure, and recognizes the scar tissue that remains from their vehement interactions.

The formal-tonal paradox is a fitting manifestation of voice-leading features that permeate the movement. For example, the “early D” that comes in the exposition could be heard as a foreshadowing of m. 301, which, in retrospect, arrives before the “corrected” tonal goal of D minor in m. 315. Despite the paradigmatic structures outlined in Schenker’s models, idiosyncratic voice-leading motions in the movement evoke an undivided structure superseding the two promised interrupted structures. Other motivic features and curious dissonances also call attention to voice-leading features that figure prominently into the formal-tonal paradox and the tonal structure as a whole. Formal-tonal paradox is a vital compositional problem in the first movement of the *Ninth Symphony*—a tonal fracas that pleading for reconciliation in the finale.

CHAPTER 7

FORMAL-TONAL PARADOX III:

BEETHOVEN'S *OVERTURE DIE WEIHE DES HAUSES*, OP. 124

7.1 Introduction

Beethoven's *Overture die Weihe des Hauses* (*The Consecration of the House Overture*) was finished in 1822, just two years before the completion the *Ninth Symphony* (1824).¹⁹⁶ Even though a significant portion of the incidental music for *Die Weihe des Hauses* originates from *Die Ruinen von Athen* (*The Ruins of Athens*, Op. 113), Beethoven wrote an entirely new overture for the 1822 production of *The Consecration of the House* for Carl Friedrich Hensler, director of the Theater in der Josefstadt.¹⁹⁷ The resulting overture provides the focus for the third analytical case study of formal-tonal paradox. Composed during the same time period as two of Beethoven's milestone works, the *Missa Solemnis* (Op. 123), and the *Ninth Symphony* (Op. 125), the *Overture* (Op. 124) is representative of his mature style and advanced compositional language. Formal-tonal paradox is a central compositional problem in the *Overture* that arises from a "misplaced" dominant pedal and voice leading that bridges-over the design reprise, suggesting an undivided structure for the piece as a whole.

The tonal plan of the *Overture* is entirely different than the *Tempest* sonata and the *Ninth Symphony*. For example, the *Overture* begins and ends in C major, so its large-scale tonal path does not evoke a "darkness" to "light" metaphor like the *Ninth Symphony* (D minor to D major). However, within the tonal realm of C major, the *Overture* induces a

¹⁹⁶ Solomon, *Beethoven*, 344-6.

¹⁹⁷ *The Ruins of Athens* was composed in 1811, eleven years before the *Overture de Weihe des Hauses*. Ibid., 344-6.

progression from mortality to transfiguration. The slow march in the introduction is particularly reminiscent of a slow processional towards a place of worship, and as the movement progresses, a transformative voice-leading motion from a falling A \flat to one that miraculously ascends (to A \natural) could symbolize a divine metamorphosis. Let us explore the formal-tonal paradox further and consider its significance in the *Overture*, a piece charged with religious overtones.¹⁹⁸

7.2 Problematic Reprise in an Unusual Sonata-Form Movement

The *Overture die Weihe des Hauses* begins with a lengthy introductory section comprised of a slow march and processional that do not figure into the sonata-form proper.¹⁹⁹ The sonata-form portion of the movement begins at m. 90 with the fugal *Allegro* theme in C major, which constitutes the first theme.²⁰⁰ Like the other two case studies of formal-tonal paradox, the *Overture* is an atypical sonata movement with respect to formal and tonal paradigms. One unusual feature of the exposition is that it lacks a second theme; indeed, the sonata design is monothematic. However, the absence of a second-theme group does not make the piece less problematic. Even though the recapitulation restates only one theme (the first, fugal *Allegro* theme in C major), the interaction of form, harmony, and voice-leading features contribute to a striking formal-tonal paradox.

¹⁹⁸ The term “consecration” implies a special dedication associated with sacred or religious purpose. The deeper significance of the “consecration” as well as the importance of titular reference to the “house” (the Theater in der Josefstadt) will be revisited later.

¹⁹⁹ Solomon, *Beethoven*, 345. Some aspects of Beethoven’s Op. 124 have been called “Handelian.” The presence of a slow, regal introduction followed by an intense fugal theme in the *Overture die Weihe des Hauses* is similar to the design of many French overtures. Perhaps through his intense study of Bach and Handel, Beethoven gained a familiarity and proficiency in styles from earlier in the 18th century.

²⁰⁰ Chapter 7 should be read with a full score of the *Overture* in hand.

Following the relatively concise exposition and development sections, the reprise of the fugal *Allegro* theme occurs in m. 176. Based on the Schenkerian paradigms for sonata-form movements outlined in Chapter 5, the root-position tonic return that coincides with the thematic reprise at m. 176 should re-establish the structural tonic and serve as a point of departure for the second branch of the *Ursatz*. However, in the *Overture*, unique structural features and voice-leading motions transcend the formal boundary at the design reprise, suggesting that the piece evokes an uninterrupted tonal structure.

The most striking feature of the *Overture* is the seemingly “misplaced” dominant pedal. In a typical sonata-form movement, the retransition consists of a prolonged dominant pedal that immediately *precedes* the recapitulation; it sets up the return of tonic harmony that coincides with the thematic reprise. Consider the first movement of Beethoven’s *Pathétique* Sonata (Op. 13), which begins with a sonata-form movement in C minor (Example 7.1). In that movement, a dominant pedal (G) is prolonged in the bass, from the retransition (m. 167) until the beginning of the recapitulation (m. 195). The dominant pedal (mm. 167-194) fulfills the paradigmatic role of the retransition and effectively demonstrates how form and tonal structure might align in a conventional sonata movement (Example 7.1).

Example 7.1 Middleground voice-leading graph of Beethoven's Piano Sonata No. 8 in C minor (Op. 13, *Pathétique*), mm. 1-195ff: The dominant pedal at the retransition occurs *before* the recapitulation and the tonal structure is interrupted.

The image displays a musical score for the first movement of Beethoven's Piano Sonata No. 8 in C minor, Op. 13, *Pathétique*, measures 1 to 195. The score is presented in two staves: the upper staff in treble clef and the lower staff in bass clef. Above the treble staff, several measures are circled and numbered: 1, 137, 163, 167, and 195. Below the treble staff, structural divisions are labeled: '1st Gr.', '2nd Gr.', 'Dev.', 'Retrans.', and 'Recap.'. Below the bass staff, Roman numerals indicate the harmonic structure: I, III, V, I, V, I. A double bar line is placed between measures 167 and 195. A box labeled 'Retrans.' with an asterisk is positioned above the 'V' numeral in the bass staff. Below the score, a note reads: '*Dominant Pedal precedes recapitulation'.

Following the dominant pedal in the *Pathétique*, the tonic *Stufe* (C) returns definitively at the recapitulation, and the structural tonic (I) is re-established (Example 7.1). Thus, the movement is divided, or interrupted. The interruption occurs at the typical juncture in the sonata's design—namely, just before the recapitulation, which re-establishes the $E\flat$ (the *Kopfton*) in the top voice and C (the tonic *Stufe*) in the bass. The tonal structure of the first movement of the *Pathétique* sonata unfolds as a clear elaboration of the Schenkerian formal-tonal paradigms.

In the *Overture*, the dominant pedal is unique; it occurs *after* the restatement of the first theme material at the recapitulation (m. 176). As a result, we must reconsider the tonal structure: if the dominant pedal occurs *after* the recapitulation, does it still prolong the deep-level V? Furthermore, the “late” retransition casts doubt on the status of the C major harmony at the design reprise (m. 176) as a deep-level tonic (Example 7.2). Without a dominant pedal before arrival of tonic harmony at the reprise, the potentially emphatic return of C major loses structural weight. The “late” pedal G in the bass thereby problematizes the tonal plan of the entire movement. The voice-leading graph in Example 7.2 shows the end of the development section, the design reprise (m. 176), and the “late” arrival of the dominant pedal in context.

Example 7.2 Voice-leading graph of Beethoven’s Op. 124 *Overture*, mm. 89-185ff: Formal and tonal processes are incongruous—the dominant pedal occurs *after* the design reprise and return of tonic harmony (C major).

The image displays a musical score and a voice-leading graph for the piano part of Beethoven's Op. 124 Overture, measures 89-185. The score is written in two staves (treble and bass clef). Above the score, measures 89, 138, 176, and 185 are circled. Measure 89 has a 3/4 time signature, and measure 185 has a 2/4 time signature. The score is divided into sections: Expo., Dev., pianissimo Recap., and "Late" Retrans. Dom. Pedal. Below the score is a voice-leading graph with Roman numerals: I, III, 5 # - b, 6, I?, V, and deep-level V?.

The material preceding the design reprise suggests that there is no interruption before m. 176 (Example 7.2). The sense of a pure division is diluted not only by the absence of the dominant pedal before the recapitulation, but also because the tonic return is subtly ushered in via a 5-6 exchange from the prolonged E minor harmony. Furthermore, instead of a loud, resounding return of the *Allegro* theme, the recapitulation (m. 176) is marked *pianissimo* (*pp*). A gradual crescendo builds toward the “late” arrival of the dominant pedal (m. 185), thereby making the onset of the “misplaced” retransition a more emphatic statement than the design reprise. Changes in texture also soften the reprise at m. 176—only a small portion of the orchestra plays at the *pianissimo* level, so the aural impression is quite faint. Overall, even though m. 176 marks a significant formal boundary and coincides with a return to tonic harmony, there are numerous features that diminish its prominence, mainly the “late” dominant pedal, but also the soft dynamic indication, the voice leading (arrival via 5-6 exchange) and the thinly orchestrated texture. All of those features taken together weaken the tonal/structural priority of the tonic return at the recapitulation, implying that it may not re-assert deep-level tonic harmony.

An additional feature negating the structural prominence of the tonic arrival at m. 176 is the metric displacement of the fugal *Allegro* theme. In the exposition (mm. 88-89), the G in the top voice ($\hat{5}$) occurred as an anacrusis to the more prominent E ($\hat{3}$), which arrived on the downbeat. That E established the principal point of departure for the top voice in the entire piece (the *Kopfton*, $\hat{3}$). In the recapitulation (m. 176), the G ($\hat{5}$) occurs on the downbeat of the measure, instead of the E ($\hat{3}$), thereby granting the G the metric accent and weakening the sense of a firmly re-established *Kopfton*, E ($\hat{3}$), over C (I) in the bass. The emphasis on the dominant at the reprise (and $\hat{5}$) is noticeable with each successive

fugal entry, and the stress on the tonic harmony has faded. Therefore, metric displacement also abates the re-assertion of structural tonic at the design reprise.

Since multiple features devalue the structural prominence of the tonic harmony at m. 176, the underlying compositional idea in the *Overture* could be to set up a second tonic return later in the piece (a more definitive restatement of C major harmony). The second return could follow the “late” dominant pedal, which would hypothetically precede the “real” tonic return. Furthermore, the interruption to the *Urlinie* might occur after the dominant pedal and before the second tonic return. The overall structure could still be divided, but in a somewhat unusual fashion. After the “late” dominant pedal in mm. 185 – 202, a definitive cadence on C major seems imminent, and the incipient interrupted structure is still unfolding (Example 7.3). However, a B \flat in the bass thwarts the return of definitive tonic harmony (m. 203), and transforms what could have been a second return of structural tonic into a V $\frac{4}{2}$ /IV harmony on its way towards the root-position subdominant at m. 207 (IV, F major).

Example 7.3 Voice-leading graph of Beethoven's *Overture die Weihe des Hauses*, Op. 124, mm. 89-207: The C major harmony at the reprise is composed-over and the $V\frac{4}{2}/IV$ harmony in m. 203 initiates a move towards the subdominant.

The voice leading in mm. 202-203 therefore surpasses the incipient interrupted structure and makes the *subdominant* the overriding tonal/structural goal. To be sure, the $B\flat$ in the bass and the resulting $\frac{4}{2}$ harmony simultaneously negate the possibility for interruption in mm. 202-203 and initiate the advance toward the subdominant. Overall, neither the recapitulation at m. 176 nor the attempted cadence following the “late” dominant pedal suggests a divided structure for piece as a whole. Therefore, the presence of the incipient interrupted structure and the tonal processes that supersede the formal boundary result in a formal-tonal paradox. The first main *tonal* goal of the recapitulation is the subdominant at m. 207, even though m. 176 is the design recapitulation. Example 7.3

depicts the formal-tonal paradox in the Op. 124 *Overture*, which primarily results from the “misplaced” dominant pedal (mm. 185-202).

Since the first main tonal goal in the recapitulation is the subdominant in m. 207, neither the tonic harmony at m. 176 nor the dominant pedal at m. 185 are structural (Example 7.3). In many major-mode sonata-form movements, the structural dominant is achieved in the exposition and is definitively regained at the end of the development section.²⁰¹ Since there is no second theme in the *Overture*, there is no dominant prolongation in the exposition to which a later dominant pedal could conceivably connect. Hence, instead of picking up an earlier dominant prolongation, the “late” pedal G in the *Overture* (Example 7.4) finds itself between the C major reprise in m. 176 and the C-rooted $V\frac{4}{2}/IV$ chord in m. 203. Consequently, the pedal G is enveloped by the two surrounding V/IV harmonies, and it is not the deep-level V. The voice-leading graph in Example 7.4 shows the large-scale structure of the movement after the reevaluation of the “late” dominant pedal (m. 185) and the transformation of C harmony in m. 203.

²⁰¹ The Schenkerian paradigms presented in Chapter 5 show the second theme group of a major-mode sonata-form movement typically prolongs the structural V. That dominant is prolonged through the end of the development to the point of interruption.

Example 7.4 Voice-leading graph of Beethoven's Op. 124 *Overture die Weihe des Hauses*, mm. 176-207: The "late" dominant pedal is enveloped by the V/IV prolongation.

7.3 Achieving structural closure in the recapitulation

In the Op. 124 *Overture*, prolongations that initially seemed like deep-level dominant or tonic harmonies become retrospectively displaced to lower levels of structure. To be sure, the tonic harmony at the reprise in m. 176 is not a deep-level tonic like the C major that initiated the fugal *Allegro* theme (m. 89). Furthermore, the "misplaced" dominant pedal is transformed into a passing harmony in the midst of a V/IV prolongation, which emerges from a failed attempt to return to C major in m. 203. Beginning in m. 225, multiple attempts to achieve the decisive V-I unveil other striking problems.

In the first attempt at structural closure (Example 7.5A, mm. 225), an Italian augmented-sixth chord proceeds to a cadential dominant complex ($V_{4-3}^{\#}$), underscored by

multiple *sforzandi*. However, when the dominant resolves to tonic (C major) in m. 229, the orchestra suddenly drops to a *pianissimo* dynamic level, and the texture thins out significantly, similar to the lackluster arrival on C major at the recapitulation (m. 176). The emphasis taken away from that resolution is re-directed towards a forthcoming tonal goal; the crescendos in mm. 231-238 build towards the *subdominant* (F major, m. 239, Example 7.5A), which is marked *fortissimo*. Indeed, the subdominant overtakes yet another arrival on C major harmony (I), effectively prioritizing F major (IV) in the tonal structure. The C major harmony in m. 229 can therefore be relegated to the status of a V/IV harmony, just as the two significant C harmonies in m. 176 and m. 203. The arrival of the structural dominant and tonic is postponed.

Example 7.5A Voice-leading graph of Beethoven's Op. 124, *Overture die Weihe des Hauses*, mm. 225-239

The image shows a musical score for Example 7.5A, covering measures 225 to 239. The score is written for piano and includes dynamic markings: *sfz* (sforzando) in measures 225 and 227, *pp* (pianissimo) in measure 229, *cresc...* (crescendo) in measure 231, and *ff!* (fortissimo) in measure 239. The harmonic structure is indicated by Roman numerals: II^6 in m. 225, It^6 in m. 227, V_{4-3}^{6-5} in m. 228, I in m. 229, and IV in m. 239. A 'local' graph above the treble clef shows pitch contours for measures 228, 229, and 231, with labels $\hat{3}$, $\hat{2}$, and $\hat{1}$ respectively. The word 'faint' is written below the I chord in measure 229.

The struggle to attain a deep-level V-I cadence climaxes in mm. 257-278 (Example 7.5B and 7.5C). The $A\flat$ in the bass of m. 257 attempts to move down to G in m. 258—a G that has the potential to be the bass *Stufe* for the structural V. However, the G supports a \sharp chord, and it is marked *piano* (m. 258). The $A\flat$ subsequently makes a second attempt to resolve down to G in the bass (mm. 259-261). However, the G in m. 261 is the bass of a $\frac{6}{3}$ chord, an $E\flat$ major first-inversion chord, which also fails to fulfill the elusive role of structural dominant. In m. 262, a miraculous reversal occurs in which the $A\flat$ transcends its destiny to move *down* to G; instead, the $A\flat$ *rises* to $A\sharp$ (as if it were $G\sharp$), and that $A\sharp$ moves to G (m. 263). The G in the bass in m. 263 indeed supports the structural dominant harmony.²⁰² The voice-leading graphs in Example 7.5B (mm. 257-263) and Example 7.5C (mm. 239-263, middleground) sketch the failed attempts to achieve the structural V in the recapitulation and the striking reversal that leads toward the definitive arrival of the deep-level V (m. 263).

²⁰² Graf, Benjamin, “Beethoven’s Transcendent Voice Leading: Musical Evocation of Kantian Ideals” (paper presented at the 15th International DNS Enlightenment Conference in Eighteenth Century Studies, Sydney, Australia, December 10-12, 2014). Transcendent voice leading is a striking phenomenon in which one pitch seems to descend in a foreground motion, but at a higher level of structure, it rises and transcends its destiny. The ascent is particularly emblematic of one or more important tonal motions in the entire movement (or piece) and therefore epitomizes a larger “transcendent” idea that unfolds on a grand scale.

Example 7.5B Voice leading in Beethoven's *Overture die Weihe des Hauses*, mm. 257-263:

Multiple attempts to reach the structural dominant culminate in a striking reversal involving $A^b (= G^\#)$.

Example 7.5C Middleground voice-leading graph of Beethoven's *Overture die Weihe des Hauses*, mm. 239-263: The subdominant (IV) is prolonged over the C harmony at m. 251 via overlaid voice exchanges²⁰³

²⁰³ The voice leading in mm. 239-263 is discussed again later in the chapter (see Examples 7.9 and 7.10)

The structural V is prolonged from mm. 263-277. The resolution to the final structural tonic (I) follows in m. 278, and the *Uralinie* makes its final descent to $\hat{1}$. Overall, the metamorphosis of seeming tonic harmonies into V/IVs and the delayed arrival of the structural V fuse the tonal events into one continuous process. The formal-tonal paradox—and numerous other features that contribute to the weakening of other tonic and dominant harmonies—leaves only the framework of an interrupted tonal structure beneath an undivided structure. Although there is a distinctive dominant pedal, it does not prolong the structural V, and there is only one structural V-I cadence in the movement, which arrives after the protuberant subdominant prolongation.

Formal-tonal paradox is therefore a principal compositional problem in the *Overture*. Many aspects of the exposition, development, and recapitulation contribute to the paradox, but some tonal processes that occur beyond the sonata-form proper also foreshadow the large-scale compositional problems in the *Overture*. Section 7.4 explores the salient features of the slow introduction that support the previous arguments about the tonal structure of the piece and further substantiate the claim that formal-tonal paradox epitomizes the compositional problems of the piece as a whole.

7.4 The Significance of the Slow Introduction

Even though it does not figure into the sonata-form proper, the 89-measure introduction is an essential part of the *Overture*. The introduction presages some of the most striking features of the formal-tonal paradox, and moreover, the structure of the slow march (mm. 5-36) conveys the entire tonal structure of the piece in embryonic form.

Since the *Overture* totals 286 measures, the introduction comprises roughly a third of the piece (mm. 1-89). Hence, we can divide mm. 1-89 into five component sections: brief introduction (mm. 1-4), slow march (mm. 5-36), processional (mm. 37-54), dominant pedal (mm. 55-78), and transition (mm. 79-88).²⁰⁴ Each segment contributes to the structural whole in different ways, but the slow march is particularly significant. The slow march articulates two statements of the same thematic material (mm. 5-20 and mm. 21-36). The second, *tutti* statement of the slow march theme is very similar to the first, but it is not identical. My voice-leading analysis of mm. 5-20 (Example 7.6) reveals the structure of the slow march to be a microcosm of the tonal structure of the entire *Overture*. For example, following the initial C major harmony, the first significant motion away from the tonic is an auxiliary cadence to E minor in m. 12 (Example 7.6).

²⁰⁴ The passage marked “meno mosso” (mm. 55-75) serves as a prolonged dominant pedal that sets up the arrival of the first theme and the beginning of the sonata form proper at m. 90. The main theme is the fugal *Allegro* in C major.

Example 7.6 Voice-leading graph of Beethoven's Op. 124, *Overture die Weihe des Hauses*, mm. 1-12: The slow march moves from the initial C major harmony (I) to E minor (III) via auxiliary cadence

The first tonal motion in the opening slow march, C major (I) to E minor (III), epitomizes the first large-scale tonal motion in the *Overture* (Example 7.7). The C major from the fugal *Allegro* theme moves to E major (III \sharp) at the beginning of the development (m. 138). E major harmony is prolonged throughout the development and is later transformed to E minor (mm. 166-173). The slow introduction intimates the forthcoming modal switch in the development. In the first beat of m. 12, the modal-defining third of the E harmony is nonexistent, and then G \sharp arrives a beat later (m. 12), completing the E minor triad as an afterthought. Thus, the auxiliary cadence in the introduction appears to be a premeditated microcosm of the first large-scale tonal motion in the *Overture*. The voice-leading graph in Example 7.7 shows the motion from the initial tonic harmony to the E major (III \sharp) and E minor (III \flat) prolongations.

Example 7.7 Voice-leading graph of Beethoven's Op. 124, *Overture die Weihe des Hauses*, mm. 89-166: The large-scale tonal structure unfolds a progression from I (C major) to III (E major and minor).

The image shows a musical score for Example 7.7, which is a voice-leading graph for measures 89-166 of Beethoven's Op. 124, *Overture die Weihe des Hauses*. The score is written in 3/4 time and consists of two staves: a treble clef staff and a bass clef staff. Above the treble staff, four measures are marked with circled numbers: 89, 138, 152, and 166. A 3/4 time signature is placed above measure 89. Dashed lines connect notes across measures, illustrating the voice-leading paths. Below the bass staff, Roman numerals I, III#, and a key signature change to E minor are indicated. The graph shows the progression from I (C major) to III (E major and minor).

Measures 13-17 of the slow march theme also reflect large-scale tonal motions that unfold during the sonata-form portion of the *Overture* (Example 7.8A). After the arrival on E minor (III, m. 12), C major harmony returns through a 5-6 exchange (m. 13). Hence, we must consider whether the second C major harmony (m. 13) occurs on the same level as the initial tonic harmony from m. 5. When C major emerges in m. 13, the strings are still marked *pizzicato*, the *piano* dynamic level is retained from the preceding measures, and the double basses play only a synthetic bass line (the timpani plays the lowest sounding pitches). A crescendo begins in m. 13 and builds gradually towards m. 17, the point at which the *subdominant* harmony arrives (F major). In m. 17, the strings return to *arco* bowing, the melody climaxes in an ascent to its highest point (A5 – B5 – C6), and the double

basses reclaim the “real” bass line. The tonal goal in the slow march is evidently the subdominant, such that the return of C major harmony in m. 13 becomes part of the tonal motion towards the F major harmony (IV, m. 17, Example 7.8A).

Example 7.8A Voice-leading graph of Beethoven’s *Overture die Weihe des Hauses*, mm. 1-20: A motion from III (E minor) to IV (F major) in the opening slow march envelops the C major harmony in m. 13.

The opening slow march therefore conveys the most significant tonal motions in the *Overture* on a small scale, projecting the return to C major that comes via the 5-6 exchange in m. 176 (Examples 7.8A and 7.8B). Furthermore, the second C major harmony in the slow march also functions as a V/IV chord, on its way to the subdominant, just as in the recapitulation of the sonata-form proper (Example 7.8B). Thus, the tonal motions in the slow march that surpass the C major harmony in m. 13 mirror the voice-leading motions that deliver the formal-tonal paradox in the movement as a whole. The graphs in Example

7.8A and Example 7.8B demonstrate how the voice leading that transcends the return to C major in the slow march (Example 7.8A) is a microcosm of the tonal processes that unfold on a grand scale (Example 7.8B).

Example 7.8B Voice-leading graph of Beethoven's Op. 124, *Overture die Weihe des Hauses*, mm. 89-207: A motion from III (E harmony, m. 138) to IV (F major, m. 207) undermines a C major harmony on a grand scale

Both of the voice-leading graphs above (Examples 7.8A and 7.8B) show how the C major in mm. 13-14 of the slow march theme is subsumed within a motion from the E harmony (III) to F major (IV), just like the C major at the recapitulation (m. 176), which is engulfed by the motion from E major (III#) in m. 138 to F major in m. 207. The progression from III to IV in the slow march is not only significant because it becomes manifest in the

large-scale structure, but also because it emphasizes the tonal motion that overrides the formal boundary at the recapitulation. Ultimately, the slow march contains the formal-tonal paradox in embryonic form, which materializes fully in mm. 90-278 (the sonata-form proper).

The approach to the dominant in the slow march is also a miniature version of the approach to the structural dominant in the recapitulation. In the slow march, the G major harmony (V) is approached through a chromatic voice exchange between the subdominant and an applied dominant, V_3^4/V (Example 7.8A above). The F in the bass of the subdominant chord in m. 16 moves to the inner voice F# in m. 18, and the A above the F in m. 16 moves down into the bass voice in m. 18. The V_3^4/V harmony resolves to the root-position dominant after the cadential $\frac{6}{4}$ chord ($V_4^{\frac{6}{4}}$, m. 19).

The chromatic voice exchange (mm. 16-18) is another noteworthy feature of the opening slow march that epitomizes large-scale voice-leading motions. In the recapitulation (Example 7.9), numerous attempts to achieve the structural dominant involve voice exchanges. In each attempt, a voice exchange originates with the pitches F and A, the root and third of the subdominant harmony (respectively). The first exchange, which begins in m. 207, prolongs the subdominant through *chromatic* voice exchange (Example 7.9): the F in the bass of m. 207 connects to the top voice in m. 217, and the A in the treble at m. 207 is exchanged with the chromatically altered A \flat , prolonged in mm. 210-217. The second voice exchange is doubly chromatic, even though it first seems like it might be diatonic. The F in the bass at m. 225 rises to F#, which surfaces on the last half-beat of m. 227. The A in the inner voice of m. 225 is transferred to the bass in the last half-

beat of m. 227 as an $A\flat$ (Example 7.9). The resulting $A\flat$ and $F\sharp$ form the basis of an Italian augmented-sixth chord, which subsequently resolves to the dominant (m. 228). Even though the dominant indeed resolves to the tonic (C major, m. 229), a sudden drop to *pianissimo* dynamic weakens the overall effect of the authentic cadence. In both resolutions to C major, the tonic harmony does not gain enough strength to attain deep-level tonic status. Conversely, the subdominant is stated emphatically, suggesting that the C major arrivals are ultimately V/IV harmonies. Example 7.9 presents a voice-leading graph of the recapitulation in which the first and second voice exchanges from the IV harmony resolve to G major harmonies, but neither are the structural V. The arrivals on C major are subsidiary to the subdominant prolongation—they are V/IV harmonies.

Example 7.9 Voice-leading graph of Beethoven's Op. 124, *Overture die Weihe des Hauses*, mm. 207-238: Voice-exchanges prolong the subdominant (IV) in the recapitulation.

IV V/IV IV V/IV IV

*Chromatic Voice Exchange **Doubly Chromatic Voice Exchange

The third, decisive, voice exchange in the *Overture* initially resembles the first exchange (mm. 207-217)—a chromatic voice exchange in which the A moves into the bass and is transformed to A \flat . However, the two descending motions from the A \flat down to G become subsidiary to a *rising* line from A \flat (Example 7.10), which ascends to A \sharp in m. 262. The ascending linear progression indicates that 1) the A \flat is emulating the voice-leading behavior of G \sharp , and 2) the goal of the linear progression from the A \flat is not the G in m. 261, but the A \sharp in m. 262. Similar to the overlaid exchanges in the previous case studies, there is also a superimposition of voice exchanges in the *Overture*. The first voice exchange (mm. 239-257) is a subsidiary exchange that connects to the A \flat in the bass, and the second, overlaid voice exchange materializes in m. 262 when the bass ascends to A \sharp . The exchange between the subdominant and the vii^{o6}/V harmony (mm. 239-262) is an enlargement of the voice exchange that occurred in the slow march (mm. 17-18, Example 7.8A). Example 7.10 depicts the overlaid voice exchanges in the approach to the structural dominant in the recapitulation.

Example 7.10 Voice-leading graph of Beethoven's Op. 124, *Overture die Weihe des Hauses*, mm. 239-265: Two overlaid voice exchanges precede the arrival of the structural dominant.

The image shows a musical score for measures 239-265 of Beethoven's *Overture die Weihe des Hauses*. The score is in G major and features two overlaid voice exchanges. The first exchange involves the first and second voices, and the second exchange involves the second and third voices. The harmonic progression is IV - V/IV - VII°6 - V. Measure 265 is marked with a 2/2 time signature.

The *Urlinie* in the slow march makes a $\hat{3} - \hat{2} - \hat{1}$ descent in mm. 19-20 as part of the cadence in C major ("local descent," Example 7.8A). Thus, the structure of the slow march is a single, unified tonal process that bears a striking resemblance to the large-scale structure of the entire *Overture*. A comparison of the voice-leading analyses in Example 7.8A and Example 7.11 (below) reveals the tonal similarities between mm. 5-20 (Example 7.8A) and mm. 89-278 (Example 7.11). In both analyses, the overall harmonic progression is I - III - IV - V - I and a return to C major harmony is subsumed within the III - IV motion.

Example 7.11 Voice-leading graph of Beethoven's *Overture die Weihe des Hauses*, mm. 89-278: The structure of the *Overture* as a whole reflects the same undivided tonal process that unfolded in the slow march.

The second statement of the slow march in the introduction (mm. 21-36) is similar to the first (mm. 5-20), but contains a few significant alterations. The second statement of the slow march is a thicker, *tutti* orchestration of the same march theme, but more importantly, the restatement definitively reaffirms the function of the second C major harmony as V/IV instead of structural tonic (m. 16 in the first statement corresponds to m. 31 in the second statement, Example 7.12). The *tutti* version of the slow march (mm. 21-36) has the same overall tonal structure as the first statement (mm. 5-20), but when the C major harmony returns after the auxiliary cadence on E in m. 28 (Example 7.12), the C triad becomes a dominant seventh chord with the addition of B \flat . The B \flat solidifies the function of the returning C harmony in the slow march (m. 16, Example 7.8A and m. 31, Example 7.12) as the dominant of the subdominant. Furthermore, the C – B \flat – A – G – F descent in m. 31 is

the same linear progression that thwarts the resolution of the “late” dominant pedal in mm. 203-207 and points to the subdominant as a tonal goal. Example 7.12 shows the B \flat in the second statement of the slow march (m. 31). (Example 7.4 shows the large-scale V $\frac{4}{2}$ /IV harmony in mm. 176-207).

Example 7.12 Beethoven’s *Overture die Weihe des Hauses*, mm. 32-36: C major harmony morphs into V $\frac{7}{4}$ /IV chord in the slow march. The addition of B \flat in the second statement reinforces its role as the dominant of the subdominant.²⁰⁵

30 31 32 33 34 35 36

NOT I

V $\frac{7}{4}$ /IV IV V $\frac{3}{4}$ /IV V $\frac{6}{4} - \frac{5}{3}$ I

7.5 The Significance of G \sharp in the Development

The first main tonal motion away from the initial tonic harmony in the *Overture* is the modulation to E major at m. 138 (Example 7.13). Instead of moving to the diatonic III \sharp

²⁰⁵ Ludwig van Beethoven, *Overture Die Weihe des Hauses* (Leipzig: Breitkopf & Härtel, 1862).

harmony, the development begins on III \sharp (m. 138), and as a result, G \sharp is the local *Kopfton* instead of G \natural . From the global perspective, E ($\hat{3}$ of C) is prolonged in the top voice through the development and the G \sharp is an inner voice. The contrapuntal origin of the G \sharp is the G \natural that was an inner voice of the tonic harmony (C major) prolonged in the fugal *Allegro* theme. Since the G \sharp is a raised note, traditional voice-leading conventions might suggest that it would ascend to A, acting like a secondary leading tone. However, when the mode switches from E major to E minor in the development (Example 7.13), the G \sharp descends to G \natural . Therefore, the inner voice G \sharp exhibits the tonal behavior of an A \flat at the middleground level. The voice-leading graph in Example 7.13 shows how the inner voice motion from G \sharp (= A \flat) to G \natural emerges via the modal shift in the development section.

Example 7.13 Voice-leading graph of Beethoven's *Overture die Weihe des Hauses*, mm. 90-173: The G \sharp exhibits the tonal behavior of A \flat in the inner voice at the middleground level.

The image shows a musical score for Example 7.13, illustrating a voice-leading graph for the inner voice. The score is written in treble and bass clefs. The top voice (treble clef) contains a melodic line with notes G \sharp (m. 138), G \sharp (m. 148), G \sharp (m. 152), G \sharp (m. 155), G \sharp (m. 158), G \sharp (m. 165), and G \sharp (m. 166). The bottom voice (bass clef) contains a melodic line with notes G \natural (m. 138), G \natural (m. 148), G \natural (m. 152), G \natural (m. 155), G \natural (m. 158), G \natural (m. 165), and G \natural (m. 166). A dashed line connects the G \sharp notes in the top voice to the G \natural notes in the bottom voice, showing a descending motion. The graph is labeled with Roman numerals: III \sharp (m. 138), V 7 /III \flat (m. 148), and III \flat (m. 152). The measure numbers 138, 148, 152, 155, 158, 165, and 166 are circled above the staff.

Even though the G[#] in the development is doomed to fall back to G^b with the turn to E minor harmony, its reincarnation fulfills its tonal destiny to ascend (to A^b). The G[#] resurfaces in the striking approach to the structural dominant (Example 7.10, mm. 257-261), in which the A^b first descends to G, but then emphatically rises to A^b and reconciles the earlier descent of the G[#] (to G^b). The reversal of voice-leading implications involving G[#]/A^b not only makes the E major harmony in the development section especially notable, but also makes the rising A^b particularly symbolic of a pervasive tonal issue in the movement.

The A^b in mm. 257-261 is also significant because it evokes a paradox on its own accord: it descends and ascends in an almost identical span. How can a pitch move in two opposite directions in a single tonal process? In the foreground, the A^b descends to G and fulfills the role of its spelled pitch name (A^b). Conversely, in the middleground, it exhibits the tonal behavior of its enharmonic counterpart (G[#]), rising to the A^b in m. 262. Thus, if one understands voice leading on multiple structural levels, a pitch can paradoxically ascend and descend in a single conceptual time space.

The two-pronged behavior of the G[#] also evokes the process of transfiguration that man might undergo in a “consecrated house” or a place of worship.²⁰⁶ Given the titular reference, the descent of the A^b could emulate the earthly realm—a voice-leading motion that occurs through nature alone. The rise of the A^b however, could be heard as the spiritual ascent—even redemption—of man, a voice-leading transfiguration or metamorphosis that is only possible through divine intervention. Regardless of semantics,

²⁰⁶ Even though the title of the *Overture* certainly arouses religious overtones and refers to a place of worship (as stated), any explicit connection to specific features of voice leading is speculative.

the divergent voice leading from the $A\flat$ is an especially significant reincarnation of the $G\sharp$ and a vital part of the tonal processes in the *Overture*.

7.6 Monothematic Exposition

Another aspect of the *Overture* that contributes to the formal-tonal paradox is the monothematic exposition. Since the other two case studies present analyses of minor-mode sonata movements, let us reconsider Suurpää and Laufer's paradigms for major-mode sonata movements (Examples 7.14A and 7.14B, respectively).²⁰⁷ The exposition frequently establishes the tonic harmony and then moves to the dominant with the arrival of the second theme material. The deep-level V achieved in the second group underlies the development section and is interrupted (at a deep middleground level) before the recapitulation.

Example 7.14A Suurpää's generic paradigm for major-mode sonata-form movements

a) $\hat{3} \hat{2}$ || $\hat{3} \hat{2} \hat{1}$

Exp. Dev. Recap.

I V || I V I

²⁰⁷ Suurpää, *The Undivided Ursatz*, 68.

Example 7.14B Laufer's paradigms for major-mode sonata-form movements

The monothematic exposition contributes to the formal-tonal paradox because it does not set up a tonic/dominant polarity in the exposition. Without the presence of a second theme group in the key of the dominant (G major), there is no middleground-level dominant prolongation until the “late” dominant pedal (m. 185), which would customarily prolong $\hat{2}/V$ before the recapitulation. On the whole, three principal features delay what could have been an earlier arrival of the structural dominant: 1) the lack of dominant prolongation in the exposition, 2) the “late” arrival of the retransition (dominant pedal), and 3) the two prominent C major harmonies that function as V/IV chords and evade the definitive V-I cadence. Had Beethoven included a second theme group in the key of the dominant, as outlined in the sonata paradigms, the underlying tonal structure may have changed dramatically. Regardless, the *Overture* indeed contains many elements of the paradigmatic formal-tonal processes, namely a tonic return that coincides with the design reprise and a prolonged dominant pedal. However, the dominant pedal does not occur before the design reprise and the subdominant emerges as a tonal goal in the recapitulation. Therefore, the interruption fails to materialize, leaving only the remnants of a divided structure beneath an undivided tonal process that supersedes the formal boundary created by the design reprise. Again, then, formal-tonal paradox is a central

problem in the *Overture die Weihe des Hauses*, permeating all aspects of the movement, from the smallest details to largest-scale tonal progressions.²⁰⁸

7.7 Conclusion

The *Overture die Weihe des Hauses* is an atypical sonata movement, evoking a striking formal-tonal paradox through voice-leading procedures that induce an undivided *Ursatz*. Voice-leading motions not only override the C major harmony at the design reprise (recast as V/IV) but also the “late” dominant pedal in m. 185, which does not constitute the deep-level V. The somewhat lengthy introduction unveils the large-scale tonal plan of the piece before the arrival of first theme. In particular, the slow march is a microcosm of the tonal processes that unfold across the entire *Overture*. The overlaid voice-exchanges in the approach to the structural dominant provoke a reincarnation of the G \sharp from the development section through the transfiguration of A \flat , which ultimately overcomes its restraints to the earthly realm by ascending to A \natural in the recapitulation.

The religious implications of the *Consecration of the House Overture* may be tied to technical features of the movement. In the introduction, the slow march implies a solemn processional into a place of worship (or a consecrated house). The progression from solemn processional to transfiguration becomes intertwined with the tonal journey of two enharmonically equivalent pitches: G \sharp and A \flat . As Timothy Jackson noted, the “potential of the transformation of a flat into its enharmonically equivalent sharp [can] signify the

²⁰⁸ Lauri Suurpää, “The Undivided *Ursatz* and the Omission of the Tonic *Stufe* at the Beginning of the Recapitulation,” *Journal of Schenkerian Studies* 1 (Fall 2005): 66-91. Suurpää discusses Schenker’s concept of interruption in sonata-form movements, outlining the way in which some movements can exhibit uninterrupted structures because of special or idiosyncratic features, mainly the omission of the tonic *Stufe* at the recapitulation.

Judeo-Christian experience of redemption through faith.”²⁰⁹ The long-standing relationship between enharmonic transformation and religious symbolism is prevalent throughout generations of composers including (but not limited to): Haydn, Mozart, Beethoven, Bruckner, and Brahms.²¹⁰ Some enharmonic transformations can represent a divine *ascent* of man (or mankind), while others suggest a divine *intervention* (i.e. the “hand” of God entering the universe):

Notice how Haydn’s enharmonic metaphor for the incarnation of the Godhead is related—but not identical—to the enharmonic metaphor for redemption discussed in my earlier article. There I proposed that the flats’ “fall” metaphorically represents the “fallen” or “unredeemed” state and the sharps’ “rise” the “risen” or “redeemed” one. In my analysis of Bruckner’s *Christus factus est* (1884; WAB 11), I argued that D-flat represents Christ’s assumption of Original Sin, and that, as He redeems mankind through His sacrifice, D-flat is transformed into ascending C-sharp. While, in the Haydn example, the enharmonic transformation is reversed, i.e. sharps descend into enharmonically equivalent flats as “*the breath and image of God*” descends into Adam, comparison of the Haydn and Bruckner examples reveals that the semantics of sharps and flats within the metaphor remains consistent. In both cases, flats represent “the human” and “the fallen,” and their enharmonically equivalent sharps, “the divine” and “the redeemed.”²¹¹

Paradoxically, the *Overture* suggests both a divine intervention (via the “falling” G# [Example 7.13]) and the ascension of mankind (through the “rising” A♭ [Example 7.10]). Therefore, the overriding enharmonic metaphor may imply that the image/hand of God enters the universe and later, through a divine miracle—*deus ex machina*—redeems

²⁰⁹ Timothy Jackson, “Schubert as ‘John the Baptist to Wagner-Jesus’: Large-scale Enharmonicism in Bruckner and his Models,” *Bruckner-Jahrbuch* 1991/92/93 (1995): 63.

²¹⁰ Timothy Jackson, “The Enharmonics of Faith: Enharmonic Symbolism in Bruckner’s ‘Christus factus est’ (1884),” *Bruckner-Jahrbuch* (1987-88): 7-11. In our consultations, Jackson also noted the prominence of enharmonic metaphors in Beethoven’s *Missa Solemnis*, which was composed in the same time period as the *Overture die Weihe des Hauses*.

²¹¹ Jackson, “Large-scale Enharmonicism,” 64.

mankind. The formal-tonal paradox plays a critical role in valorizing the religious connotations. The voice-leading motions that bridge-over C major harmonies *transcend* putative returns to tonic harmony and implied formal boundaries. The large-scale subdominant prolongation supersedes multiple returns to C major, emphasizing a higher-level, continuing voice-leading process spanning the entire piece that culminates in the metaphorical transfiguration of the A \flat . In turn, we might speculate that the large-scale voice-leading motions leave only the “earthly” remains of the incipient interrupted structure as a skeletal framework behind an undivided tonal structure that surpasses formal boundaries while accentuating the sacred connotations outlined in the title.

In all three analytical case studies, formal-tonal paradox involves tonal processes that encompass much more than a single “paradoxical moment.” It signifies a way of hearing that accounts for the remnants of paradigmatic formal and tonal archetypes, yet considers unique voice-leading motions that superimpose undivided tonal structures on top of emergent interrupted structures (which may or may not align with formal divisions). Formal-tonal paradox is not limited to the unfolding of one single technique in isolation; elements including, but not limited to, motivic connections, dynamics, orchestration, insertions, chromatic alterations, register, meter, and texture can contribute to the evocation of conflicting processes in each case study. All of those elements and the way in which they interact can impact multiple levels of tonal structure. Surface-level features that highlight salient aspects of the middleground structure suggest that paradox is a pervasive compositional problem. Comprehending the nature of formal-tonal paradox is a therefore a principal part of understanding the overriding compositional idea in select pieces by Beethoven, especially the first movement of the *Tempest* sonata (Op. 31, No. 2),

the first movement of the *Ninth Symphony* (Op. 125), and the *Overture die Weihe des Hauses* (Op. 124).

CHAPTER 8

CONCLUSION:

PARADOXES IN BEETHOVEN'S PERSONA AND IDEOLOGY

8.1 Introduction

Although the preceding analyses of paradoxical unresolved $\frac{4}{4}$ chords and formal-tonal paradoxes illuminate two principal types of paradoxes in Beethoven's musical language, my discussion of technical issues leaves some questions unanswered. For example, why is paradox a significant compositional problem for Beethoven? Why is paradox especially striking in some pieces and not others? My arguments are ultimately speculative, and I will not attempt to link aspects of Beethoven's identity to specific style features. However, a brief investigation of some aspects of Beethoven's persona and ideology could provide a richer perspective on the origin and nature of the paradoxes in my analyses.

8.2 Two categories of paradoxes

While many composers were surely confronted with issues in their personal lives that could be described as contradictory, I will investigate some especially striking aspects of Beethoven's career that reveal how extreme contradictions and illogical oppositions might have been central to his overall persona.²¹² In turn, those aspects of his identity may have left imprints on his compositional style. Although I will not address every type of

²¹² As stated in Chapter 3 (Section 3.5), paradoxes represent more than just slight contradictions. All paradoxes contain an element of self-contradiction that is especially striking and extreme—a fundamental, binary opposition at their core.

paradox in Beethoven's life that may surface in his compositional language, I will explore the effect of selected personal, social and historical issues on his disposition and belief system.

In my view, some aspects of the conflicting dualities in Beethoven's persona and ideology become manifest in two broad categories of paradoxes in the music: 1) purely musical paradoxes and 2) programmatic paradoxes. Purely musical paradoxes may be devoid of deeper-level semantic meanings, and they need not epitomize philosophical concepts. A purely musical paradox is a mannerism that arises as part of the composer's style; Beethoven may have intuited purely musical paradoxes at the subconscious level. Conversely, other paradoxes in Beethoven's music are programmatic—they are metaphorical expressions of his ideology. Programmatic paradoxes could be premeditated efforts to symbolize especially salient contradictions or struggles that relate to ideological phenomena. The paradoxical unresolved $\frac{4}{4}$ chords described in Chapter 4 could be thought of as purely musical paradoxes; they may be an idiosyncratic manifestation of Beethoven's personality. The large-scale, formal-tonal paradoxes described in Chapters 5-7 are programmatic paradoxes. Hence, the essential contradictions in each of the three case studies embody their own semantic meanings. The paradoxes in the *Tempest* sonata, the *Ninth Symphony*, and the *Overture die Weihe des Hauses* transcend aspects of Beethoven's personality, and they may express principles or concepts that relate humanity as a whole. Although I will not attempt to link specific personal anecdotes or occurrences from Beethoven's life to specific style or compositional features of a particular movement (or passage), I will examine some aspects of Beethoven's personal life and ideology that evoke apparent contradictions. Ultimately, my investigation of both purely musical paradoxes

and programmatic paradoxes might allow us to better interpret the musical embodiments of the composer's bravura and dogma.

8.3 Beethoven's Romance Paradox

There is one overriding principle that applies to the vast majority of Beethoven's romantic endeavors—Beethoven continually fell in love with *unattainable* women. Numerous anecdotes describe how Beethoven became captivated with women who were either 1) already in committed relationships (with aristocrats) or 2) outranked him in social status (i.e. “out of his league”). Neither of those two factors prevented Beethoven from conveying his attraction to the unreachable women, but at the same time, he inevitably harbored underlying frustrations because his desires were insatiable. In Bonn, Beethoven found Eleonore von Breuning to be one such woman; she was one of the first objects of his affection.²¹³ His pleas to become more than a friend to Eleonore are outlined in the following letter, which captures his struggle between tender affection and internal “suffering:”

However little, in your opinion, I may deserve to be believed, yet I beg you to believe, *my friend* (please let me continue to call you my friend), that I have suffered greatly, and am still suffering, from the loss of your friendship... However little I may mean to you, please believe that I entertain just as great a regard for you and your mother as I have always done... Think now and then of your true friend, who still cherishes a great regard for you.²¹⁴

The sentiments in his message to Eleonore von Breuning bear a striking resemblance to letters he wrote to other women later in life, most notably Josephine von

²¹³ Solomon, *Beethoven*, 58-9.

²¹⁴ *Ibid.*, 58-9.

Deym and Therese Malfatti.²¹⁵ Even though each relationship surely presented its own nuances, Beethoven's dreamy desire for unattainable lovers never waned—he struggled to reconcile his mental romantic euphoria with the underlying exasperation that it would never become a reality.

Beethoven's relationship with his "Immortal Beloved" is perhaps the most striking example of the underlying paradox in his relationships with women. Even though scholars have debated and recast the "Immortal Beloved" as different women, the most compelling evidence suggests that it was Antonie Brentano.²¹⁶ His relationship with Antonie was likely underway in 1811, when he composed *An die Geliebte* for her.²¹⁷ Maynard Solomon reveals the most glaring evidence of the overriding duality that can be traced throughout Beethoven's relationship with Antonie and many, if not all, of his romantic endeavors:²¹⁸

His desire for Antonie is in conflict not only with his deeply rooted psychological inability to marry, but also with the prospect of the betrayal of a friend, Franz Brentano. Beethoven had warmed himself at the Brentano's family hearth, partaking vicariously of their family life. He loved them both, and he could not separate them. His anguish and confusion are apparent in the letter. And his answer becomes clear: he will continue to love both of them, as a single and inseparable unit.²¹⁹

²¹⁵ Those two women (Deym and Malfatti) play an important part in the "immortal beloved" debate, which, in my view, is settled in Maynard Solomon's biography (pp. 58-9) for reasons discussed here.

²¹⁶ Ibid., 207-240. Antonie Brentano is the only woman that meets Solomon's primary and secondary criteria. His section on the "Immortal Beloved" describes the evidence and his conclusions in detail. Steblin suggests that Josephine Deym was Beethoven's one and only "Immortal Beloved." Rita Steblin, "Auf diese Art mit A geht alles zugrunde: A New Look at Beethoven's Diary Entry and the 'Immortal Beloved,'" *Bonner Beethoven-Studien* 6 (2007): 147-80.

²¹⁷ Beethoven's *An die Geliebte* is a single song composed in 1811; *An die ferne Geliebte* is a song cycle.

²¹⁸ Ibid., 238-9.

²¹⁹ Ibid., 238.

Thus, Beethoven's love for Antonie was inhibited by another barrier—the close relationship he had with her brother, Franz. Beethoven could not fulfill his romantic desires for fear of compromising his previous, family-like relationship with Antonie's brother. Some authors have evidence that Antonie should not be considered the “Immortal Beloved,” but in the broader perspective, the factors that make Antonie an “unattainable” lover fit well within the theory of Beethoven's romance paradox. The unattainable lover was perhaps *more* attractive to Beethoven (i.e. “forbidden fruit”), which implies that Antonie was the ideal candidate to be his “Immortal Beloved.”

To be sure, other anecdotes suggest that Beethoven was *unattracted* to women who overtly expressed romantic feelings towards him. One report from 1791 identifies a waitress who kept flirting with Beethoven while he was having a meal in a restaurant.²²⁰ Following her unmistakable advances and charming remarks, Beethoven reportedly became outraged and struck her on the ear.²²¹ Thus, the most flirtatious women were likely *less attractive* to Beethoven, perhaps even to the extent that they agitated him. Therefore, identifying the name of Beethoven's “Immortal Beloved” is less significant than understanding the overriding principle that exemplifies the life-long paradox in Beethoven's romantic endeavors: he was more attracted to women he *could not* marry than women who flirted with him.

Apparently, Antonie expressed her attraction to Beethoven and “actively pursued” it, suggesting that there might have been a possibility for the relationship to become more

²²⁰ *Ibid.*, 59.

²²¹ *Ibid.*, 59.

than an idealistic vision.²²² However, the prospect of the relationship flowering in real life was so terrifying to Beethoven that he renounced the idea of marriage entirely and accepted his loneliness. Solomon aptly describes Beethoven's innermost romantic paradox as follows:

Conflicting emotions struggle for ascendancy in Beethoven: he is at once "fearful" and "eager." Although he was spurred to proceed onward, he felt "I was wrong" to do so. He knew that he should have remained safely at the last stage until the storm had passed over; he should have avoided the forest at night and taken the next stage in the light of day. He had not been able to resist the perilous quest, and at its close his fear is mingled with a sense of triumph. But he has won a symbolic victory only: he cannot achieve it in reality.

...

Beethoven could not overcome the nightmarish burden of his past... His only hope was that somehow he could make Antonie understand (as he himself did not) the implacable barrier to their union without at the same time losing her love. It is to Antonie's eternal credit that she was equal to this apparently impossible task. In return she has earned a special sort of immortality.²²³

Beethoven's fear of marrying Antonie and consummating his love for the "Immortal Beloved" is a compelling testament to his intrigue with the "unattainable lover" and its contradictory implications. His relationship with Antonie not only unearths the omnipresent "unattainable lover paradox," but it also reveals the composer's reluctance to relinquish it. Beethoven's romance paradox is more than just a slight contradiction—it represents a striking opposition that is more extreme than other, more simplistic incongruities. Beethoven must have adored the contradictory struggle of longing for the unattainable lover—he refused to marry Antonie, and he saw no escape from the conflicts

²²² Beethoven's inner conflict of attraction to unattainable lovers is most overt in his letter to the "Immortal Beloved" (Antonie Brentano).

²²³ *Ibid.*, 246.

of his romances. Instead, he favored his melee with the inaccessible, a romance paradox that beguiled the composer for the vast majority of his life.

8.4 Beethoven's Rapport with Mentors

Beethoven's relationships with his teachers and advisors also reveal extreme and illogical contradictions in behavior that seem to transcend the typical student/teacher skirmishes. In numerous instances, Beethoven's adamant desire for individuality and expression of personal freedom collided with traditional norms and established musical "boundaries." Beethoven worked with many influential mentors, but the accounts of his relationship with Haydn are particularly significant. Overall, from the time he began his studies with Haydn until his death, "[Beethoven's] innermost beliefs and private quests were metamorphosed...into a complex quarrel with artistic tradition, into a propulsive tension between conformity and originality, Classicism and modernism."²²⁴

Haydn was Beethoven's mentor in Vienna; he critiqued Beethoven's counterpoint exercises as well as his compositions. Haydn's advice, however, was not always welcome. Not only did Beethoven refuse to print "pupil of Haydn" on some of his compositions, but he also deceived Haydn in 1793 when he sent "new" manuscripts (from Vienna) to the Elector Maximilian Franz (in Bonn), which were actually older compositions.²²⁵ Furthermore, he lied about his salary and owed Haydn a significant sum of money. The tumultuous start to their relationship evolved into lasting resentment that may have been irreconcilable. As Ferdinand Ries noted, "Haydn seldom escaped without a few digs in the

²²⁴ Ibid., 117.

²²⁵ Ibid., 97-103.

ribs, for Beethoven *cherished* a grudge against him..."²²⁶ In the end, the issues became much more than a personality conflict between student and teacher—their opposition embodied the collision between Beethoven's thirst for originality and the prevailing norms of compositional practice and taste. The most scathing criticism, which left Beethoven the most scarred, was Haydn's critique of the Op. 1 Trios. Haydn reportedly "had not believed that this Trio would be so quickly and easily understood and so favorably received by the public."²²⁷ In Beethoven's mind, Haydn's influence effectively obstructed the expression of his own creativity, constantly tugging on the reigns of his compositional progress. Therefore, as Beethoven published more compositions from his first years in Vienna to his late string quartets, his underlying grudge towards the existing paradigms became a signature part of his style. Giuseppe Carpani recounted Haydn's thoughts on the evolution of Beethoven's style: "The first works pleased me very much; but I confess that I do not understand the later ones. It seems to me that he writes more and more fantastically."²²⁸ Overall, even though Haydn indeed influenced Beethoven's music, Beethoven expressed a lasting antipathy that can be traced from the Op. 1 trios to some of his later works.

Beethoven's relationships with other mentors also revealed conflicting, bipolar behaviors. For example, he worked with Antonio Salieri on vocal and dramatic composition. Even though Beethoven dedicated the *Sonatas for Violin and Piano* (Op. 12), to the Italian composer, he called Salieri his "most active opponent" a decade later

²²⁶ Ibid., 99.

²²⁷ Alexander W. Thayer and Elliot Forbes, *Thayer's Life of Beethoven* (Princeton, NJ: Princeton University Press, 1991), 164.

²²⁸ H.C. Robbins Landon, *Haydn: Chronicle and Works, IV: The Years of 'The Creation'* (Bloomington, IN: Indiana University Press, 1980), 126.

(1809).²²⁹ To be sure, Beethoven's disdain for authority over his compositional freedom was not restricted to Haydn; he refused to incorporate Salieri's suggested alterations to his opera, *Fidelio*, despite the fact that Salieri had much more experience in that genre than he did. Even though Haydn and Salieri undoubtedly influenced Beethoven, he envisioned them as impediments to his creative genius and authoritative restrictions on his compositional freedom.

Beethoven also sparked a conflict with Albrechtsberger, a well-respected counterpoint teacher in the late 18th century. He called Albrechtsberger a composer of "musical skeletons" and a "musical pedant."²³⁰ However, Beethoven referenced Albrechtsberger's counterpoint treatise quite frequently, and he made many annotations in it, which suggest that in reality, Albrechtsberger's teachings were quite valuable to the developing composer. Despite his offensive remarks about Albrechtsberger, annotations on the manuscripts preserved in the Beethoven-Haus expose Beethoven's detailed markings on well-thumbed copies of Albrechtsberger's treatise.²³¹ Therefore, even though Haydn, Salieri, and Albrechtsberger all shaped Beethoven's career, he continually seemed reluctant to acknowledge their influence. He envisioned himself as a composer destined for a "new path," continually exploring new compositional problems that, in my opinion, may have included paradoxes.²³²

Overall, Beethoven's interactions with women and his relationships with mentors illustrate behavior that follows contradictory logic. Beethoven appears to have nourished

²²⁹ Solomon, *Beethoven*, 97-8.

²³⁰ *Ibid.*, 98.

²³¹ Graf, "Transcendent Voice Leading."

²³² James Webster, "The Concept of Beethoven's 'Early' Period in the Context of Periodization in General." *Beethoven Forum*, 1996, 2-9.

his own “romance paradox” in his interactions with various women in many different circumstances. His clashes with advisors extend beyond the traditional student/teacher conflicts; he insisted on forging his self-proclaimed “new-path,” yet maintained the well-thumbed treatises and manuscripts from his mentors, all while refusing to acknowledge their influence on his work. Beethoven’s studies with Albrechtsberger, Haydn and Salieri contain the same essential contradiction; a purposeful desire to overstep musical conformity that nonetheless left residue of their styles on his output. In my view, Beethoven never “decided” to follow logical behavior in his relationships because the essential, prominent contradictions were a part of his persona—they may have become part of his subconscious. Notwithstanding, Beethoven may have also been interested in apparent contradictions on a higher intellectual level. Some paradoxes in the music could be deliberate and precisely calculated conflicts that reveal central concepts of his philosophy.

8.5 Beethoven’s Ideology

Let us now consider that the paradoxes in the structure of the music can also be understood as outgrowths of Beethoven’s ideology. Indeed, the dynamic social, political, and historical environment that encompassed Beethoven’s life also impacted his style. The French Revolution had an especially significant impact on the evolution of European politics and social issues in the latter part of the eighteenth century, and it also made a lasting impression on Beethoven. Perhaps the most definitive evidence of Beethoven’s interest in the politics of the French Revolution was his violent erasure (or scratch-out) of the dedication to Napoleon Bonaparte in the manuscript of the *Eroica* (Symphony No. 3 in

E♭ major).²³³ Beethoven's opinions of Napoleon shifted from enthusiastic support to disdain because the French leader first championed French democratic ideals, but later morphed into a tyrant. Beethoven retained his allegiance to the ideals of the French Revolution but could not tolerate tyranny in any form, hence the eradication of the dedicatory note.²³⁴

Beethoven's intellectual engagement with the revolution was musical as well. The French Revolution spawned what Esteban Buch calls a "virtual boom in political music" that coincided with the last decade of the eighteenth century, the decade before the world premiere of the *Eroica* symphony.²³⁵ Many of Beethoven's French contemporaries, most notably Étienne Nicolas Méhul and François-Joseph Gossec, were composing revolutionary music that was inspired by (and for) the ideals of the French revolution. For example, Gossec's *Hymn de l'Être Supreme* united thousands of French voices in a final refrain that embodied a unified national spirit: "the French sang in a single voice—a voice that was both a hymn and a summons, a voice that was both political and religious, an anthem that was both liturgical and warlike..."²³⁶ Other French music rose to national prominence in the same time period (1790s), including *Le Marseillaise*, which expressed the central tenets of the French revolution: *liberté, égalité, and fraternité*.²³⁷ The core political and social

²³³ Solomon, *Beethoven*, 172.

²³⁴ *Ibid.*, 72. Beethoven dedicated the *Eroica* to the "memory of a great man" instead of Napoleon Bonaparte. (The original manuscript reads: *composta per festeggiare il sovvenire di un grand Uomo*.)

²³⁵ Buch, *A Political History*, 31.

²³⁶ *Ibid.*, 41.

²³⁷ *Ibid.*, 27-44. The national French motto is roughly translated as liberty, equality, and fraternity.

ideology in revolutionary music certainly did not go unnoticed in other European circles.

Esteban Buch aptly states:

La Marseillaise is the point at which the two principal trends in revolutionary music—anthems and popular song—were to meet. An anthem owing to its strongly ideological words and its rapid acceptance; a song because of its magnificently simple music, so perfectly wedded to the text and, as a result, highly expressive.²³⁸

The melodic and harmonic simplicity of French revolutionary music indeed resembles the *Ode to Joy* theme from Beethoven's *Ninth Symphony*. Furthermore, the sentiments of the text in the *Ninth* bear a striking resemblance to the revolutionary music of Méhul, Gossec, and the like. However, on the whole, the French Revolution was not a tranquil celebration of democratic idealism—it was one of the most *violent* political upheavals in world history. The “Reign of Terror” (*la Terreur* in French) was a two-year climax of tumult (1793-1794), in which revolutionary leaders such as Maximilian Robespierre rose to power via numerous acts of street violence.²³⁹ Some of the uprising factions in France who sought equality and freedom justified the brawls as a necessary means to achieve democratic ideals. Robespierre once paradoxically stated:

If the basis of popular government in peacetime is virtue, the basis of popular government during a revolution is both virtue and terror; virtue, without which terror is baneful; terror, without which virtue is powerless. Terror is nothing more than speedy, severe and inflexible justice; it is thus an emanation of virtue; it is less a principle in itself, than a consequence of the general principle of democracy, applied to the most pressing needs of the patrie.”²⁴⁰

²³⁸ Ibid., 33.

²³⁹ Marisa Linton, “Robespierre and the terror: Marisa Linton reviews the life and career of one of the most vilified men in history, Maximilien Robespierre,” *History Today* 56/8, August 2006.

²⁴⁰ Linton, *Robespierre*, 23.

As Beethoven reflected on the French Revolution, and all of its mayhem from 1789-1799, he became keenly aware of the violent and conflict-ridden path that led towards freedom and equality. The 16,000 deaths at the guillotine and the innumerable uprisings in France revealed that *liberté, égalité, and fraternité* came at an exorbitantly high price. In Beethoven's eyes, the revolution conveyed the brutal realities of violent conflict and political unrest that were potentially inescapable barriers between humanity and greater equality, or a higher existence of mankind.

Especially in the *Ninth Symphony*, paradoxes in music can be metaphors for the revolutionary political struggle. In order to achieve the joyful reconciliation and *Freude* in the Finale's *Ode*, there is a massive struggle in the first movement. Tonal structures collide vehemently—an undivided structure attempts to impose its will upon an underlying divided structure and cannot completely eradicate it. The recapitulation does not embody reconciliation. Instead, it intensifies and exemplifies a tonal struggle that may be a metaphor for humanity's conflicted path toward freedom and joy. The first movement presents the brutal reality of conflict and fervent altercation in extraordinary fashion. Some of Beethoven's critics, namely the German philosopher Georg Wilhelm Friedrich Hegel, did not venerate his propensity to surpass the limits of musical decorum:

Characteristic features of such music readily incur the risk of overstepping the finely drawn boundaries of musical beauty, more especially when the intention is to express force, selfishness, evil, impetuosity, and other extremes of exclusive passion.²⁴¹

²⁴¹ Solomon, *Beethoven*, 354. Hegel's remarks were published in 1835 in *The Philosophy of Fine Art*, volume III as a reflection on music and art. They do not explicitly apply to Beethoven's *Ninth Symphony*. Georg Wilhelm Friedrich Hegel, *The Philosophy of Fine Art*, trans. F.P.B. Osmaston (London: Bell, 1920), vol. 3, 417.

The historical significance of the French Revolution and its “Reign of Terror” to music composition at the turn of the century cannot be understated. The events of European politics made a lasting impression on Beethoven’s ideology, which, in my view, ultimately becomes manifest in the *Ninth Symphony*. *La Terreur* and the harsh brutalities of the French Revolution may have led some early 19th-century Europeans, possibly including Beethoven, to wonder: is the path towards *liberté, égalité, and fraternité* laden with ruthlessness and cruelty?

The concept of violence as a means to further virtuous aspirations may have already been part of Beethoven’s ideology. Let us consider the reference to Shakespeare’s *Tempest* in relation to the Piano Sonata No. 17 (Op. 31, No. 2) from Chapter 5. Shakespeare’s *Tempest* is the last play that he wrote unassisted (1610-1611), a late literary masterpiece whose Beethovenian equivalent could be the *Ninth*. Even though Beethoven’s instructive reply to “read Shakespeare’s *Tempest*” may never be confirmed definitively, the nickname has endured, and his affinity for Shakespeare has been documented.²⁴² If we recall the significance of the storm (or tempest) that Prospero conjures in the play, it is a means for which he can 1) reveal the baseness of his brother (Antonio) who betrayed him, and 2) redeem his daughter, Miranda.²⁴³ Hence, the intense fury of the storm is crucial to obtaining reconciliation and restoring justice. In the end, Prospero forgives his brother (Antonio) and his conspirator (Alonso) and relinquishes all of his powers. Overall, the narrative plot of the *Tempest* reveals a *purposefully violent* struggle towards resolution and

²⁴² Thomas Sipe, “Beethoven, Shakespeare, and the *Appassionata*,” *Beethoven Forum* 4 (1995): 86-94.

²⁴³ William Shakespeare and Robert W. Langbaum, *The Tempest: With New and Updated Critical Essays and a Revised Bibliography*, second revised edition (New York, NY: Signet Classics: 1998).

peace, a concept that emerges in other Shakespearian masterpieces that Beethoven may have read.

In Shakespeare's *Hamlet*, the title character is confronted with a seemingly irreconcilable debate about whether murder can be justified if it is committed for the right reasons.²⁴⁴ Commonly referred to as the "cruel to be kind" paradox, Hamlet questions whether murdering his Uncle (Claudius) could be morally "correct"—a means through which he could restore justice and integrity in his family. By killing Claudius, Hamlet could not only avenge his father's death, but also put an end to his mother's romance with her husband's murderer. He is baffled by the idea of assuming the role of a murderer and an enforcer of justice simultaneously. The paradox drives Hamlet insane, and he cannot come to terms with the idea of attaining reconciliation through murder.

Evidence of Beethoven's engagement with certain Shakespearean plays and his interest in the political struggles of the French revolution suggests that he may have considered paradoxical issues that confronted humanity in general. In mankind's journey towards a state of serene liberty, will he inevitably encounter intense conflict? Stephen Rumph argues that Beethoven was engaged with numerous leading intellectual and political issues throughout his life, from the late Enlightenment period through the French Revolution and up to the Restoration.²⁴⁵ He demonstrates how political events could be tied to musical characteristics of the late works. I believe that the violent, extreme tonal

²⁴⁴ William Shakespeare, *Hamlet (Cambridge School Shakespeare)*, ed. Rex Gibson, Vicki Wienand and Richard Andrews (Cambridge: Cambridge University Press, 2014), 265.

²⁴⁵ Stephen Rumph, *Beethoven After Napoleon: Political Romanticism in the Late Works* (Los Angeles: University of California Press, 2004). Michael Tusa's review summarizes Rumph's arguments. Michael C. Tusa, "Beethoven and the Voices of Authority," review of *Beethoven After Napoleon: Political Romanticism in the Late Works*, by Stephen Rumph, *Beethoven Forum* 12, No. 2, (2005): 195-205.

contradictions in Beethoven's music could be tied to aspects of his ideology. Incongruities in tonal structure and formal divisions might evoke the same type of contradictory issues that confronted humanity in the first half of the 19th Century. The paradoxes in the music could be metaphorical representations of struggles in literature and European politics that intrigued Beethoven.

8.6 Final Thoughts

Even though my analyses focus primarily on technical aspects of Beethoven's music, numerous social, historical, and political issues throughout Beethoven's career can offer a broader perspective on the paradoxes in my analyses. Socially, evidence suggests that Beethoven continued to feed his own contradictory (and illogical) approach to romantic endeavors. His self-proclaimed his thirst for originality and his refusal to acknowledge his mentors directly contradicts evidence that reveals he studied some of their work intently and referred to it while composing. Indeed, some paradoxes in Beethoven's music could be interpreted as idiosyncratic mannerisms—somewhat surface-level contradictions that do not embody conflicts facing humanity at-large. However, given the evidence of Beethoven's intellectual engagement with the political uprisings of the French Revolution as well as his interest in Shakespearean literature, other paradoxes could assume greater metaphorical significance. In my opinion, the conflicting tonal structures in the first movement of the *Tempest* sonata and the *Ninth Symphony* could be a musical representation of violence that is ultimately aimed towards large-scale reconciliation. The *Tempest* may illustrate a manifestation of Prospero's violence taken from Shakespeare, which seeks forgiveness (and reconciliation) between family members. Since Beethoven struggled with family issues throughout his life, the narrative of the *Tempest* may have been particularly

intriguing to him. Historically, in the shadow of the realities of the French Revolution, Beethoven portrays humanity's path towards ultimate joy as the resolution of a violent tonal-political struggle. My interpretations of these two specific references are indeed speculative, but I argue that the prevalence of paradoxical issues *throughout* Beethoven's career suggests that they are more than just isolated incidents. For example, by investigating the circumstances of his "Immortal Beloved," one discovers that Beethoven refused to abandon his romance paradox. He savored the contradictory aspects of his approach to women, and that part of his persona likely surfaced his musical language.

Consequently, I argue that interpreters and analysts of Beethoven's music need not mitigate or smooth-over conflicting tonal issues. An attempt to arrive at one unified reading of a piece that quells the warring tonal factions might neglect focal compositional problems in paradoxical movements. My analyses and overview of contextual issues only represents a preliminary step towards understanding the conflicting tonal procedures and shifting allegiances within Beethoven's rich musical language. Let us remember that even though the form and tonal structure of selected excerpts (or movements) can be interpreted in different ways, very few pieces evoke genuine paradoxes. In many instances, evidence for one reading outweighs evidence for another for specific reasons (motives, rhythm, harmony, register, etc.), but in some instances, I argue that two types of essential contradictions can induce paradoxes. Compositional problems in Beethoven can be complex, and analysts have revisited many of the pieces discussed here for many years. Ultimately, my alternative analyses in the preceding chapters attempt to continue the lively scholarly discourse on some of Beethoven's most cherished masterworks. After all,

Beethoven himself once stated: "So all is illusion, friendship, kingdom, empire, all is just a mist which a breath of wind can disperse and shape again in a different way."²⁴⁶

²⁴⁶ Solomon, *Beethoven*, 291.

BIBLIOGRAPHY

- Adrian, Jack. "The Function of the Apparent Tonic at the Beginning of Development Sections." *Intégral* 5 (1991): 1-53.
- Aldwell, Edward and Carl Schachter with Allen Cadwallader. *Harmony and Voice-Leading*, 4th ed. Boston: Cengage, 2011.
- Arndt, Matthew. "Interruption and the Problem of Unity and Repetition." *Journal of Schenkerian Studies* 6 (2012): 1-32.
- Beach, David. *Aspects of Schenkerian Theory*. New Haven, CT: Yale University Press, 1983.
- _____. *Advanced Schenkerian Analysis: Perspectives on Phrase Rhythm, Motive and Form*. New York: Routledge, 2012.
- Beethoven, Ludwig van. *Overture Die Weihe des Hauses*. Leipzig: Breitkopf & Härtel, 1862.
- _____. *Piano Sonata No. 8 in C minor*. Vienna: Universal, 1918-21.
- _____. *Piano Sonata No. 17 in D minor*. Vienna: Universal, 1918-21.
- _____. *Piano Sonata No. 27 in E minor*. Vienna: Universal, 1918-21.
- _____. *Symphony No. 4*. Leipzig: Breitkopf & Härtel, 1862.
- _____. *Symphony No. 4*. Transcribed for piano solo by Franz Liszt. Breitkopf & Härtel, 1865.
- _____. *Symphony No. 8*. Leipzig: Breitkopf & Härtel, 1863.
- _____. *Symphony No. 9*. Leipzig: Breitkopf & Härtel, 1863.
- _____. *Symphony No. 9*. Transcribed for solo piano by Franz Liszt. Leipzig: Breitkopf & Härtel, 1922.
- Britt-Beverburg Reale, Haley. "Enharmonic Paradoxes in Classical, Neoclassical, and Popular Music." Ph.D. diss., University of Michigan, 2011.
- Buch, *Beethoven's Ninth: A Political History*. Chicago: University of Chicago Press, 2003.
- Burkhart, Charles. "Summary of Common Sonata-Form Paradigms." Unpublished manuscript, 2002, 1-7.
- Burnham, Scott. "Singularities and Extremes: Dramatic Impulse in the First Movement of Beethoven's *Tempest* Sonata." In *Beethoven's Tempest Sonata: Perspectives of*

- Analysis and Performance*, ed. Pieter Bergé, 39-57. Leuven, Belgium: Uitgeverij Peeters, 2009.
- Burstein, Poundie. "Beethoven's *Tempest* Sonata: A Schenkerian Approach." In *Beethoven's Tempest Sonata: Perspectives of Analysis and Performance*, ed. Pieter Bergé, 61-85. Leuven, Belgium: Uitgeverij Peeters, 2009.
- Caplin, William E. "Beethoven's *Tempest* Exposition: A Springboard for Form-Functional Considerations." In *Beethoven's Tempest Sonata: Perspectives of Analysis and Performance*, ed. Pieter Berge, 61-85. Leuven, Belgium: Uitgeverij Peeters, 2009.
- _____. *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven*. New York: Oxford University Press, 1998.
- Cohn, Richard. "The Dramatization of Hypermetric Conflicts in the Scherzo of Beethoven's Ninth Symphony." *19th-Century Music* 15/3 (Spring 1992): 188-206.
- Colie, Rosalie L. *Paradoxia Epidemica: The Renaissance Tradition of Paradox*. Princeton, NJ: Princeton University Press, 1966.
- Cooper, Barry. *Beethoven*. New York: Oxford University Press, 2000.
- Empson, William. *Seven Types of Ambiguity*. New York: New Directions, 1947.
- Escher, M.C. *Waterfall*. 1961. lithograph print. 15 in. x 12 in.
- Falterman, David. "The Treatment of Interruption in Schenkerian Theory." Unpublished manuscript, honors paper at the University of North Texas, 2014, 1-11.
- Fankhauser, Gabriel. "Deviant cadential $\frac{4}{4}$ chords." Conference paper from the *Society for Music Theory* national conference. New Orleans, 2012.
- Forte, Allen and Steven E. Gilbert. *Introduction to Schenkerian Analysis*. New York: W. W. Norton & Co., 1982.
- Frost, Robert. *The Tuft of Flowers*. Derry, NH: *Enterprise*, 1906.
- Gagné, David and Allen Cadwallader. *Analysis of Tonal Music: a Schenkerian perspective*, 3rd ed. Oxford: Oxford University Press, 2011.
- Goldenberg, Yosef. "The Interruption-fill and Corollary Procedures." *Music Theory Online* 18:4 (December 2012). Online.

- Graf, Benjamin. "Pardon the Interruption: Reconsidering Schenker's Sonata Form Paradigms." Paper presented at the 21st annual Symposium for Research in Music, Bloomington, Indiana, February 20-21, 2015.
- _____. "Beethoven's Transcendent Voice Leading: Musical Evocation of Kantian Ideals." Paper presented at the 15th International DNS Enlightenment Conference, Sydney, Australia, December 10-12, 2014.
- Greenberg, Marvin. *Euclidean and Non-Euclidean Geometries: Development and History*. New York: W.H. Freeman and Company, 1993.
- Hatten, Robert. *Musical Meaning in Beethoven*. Bloomington: Indiana University Press, 2004.
- Hegel, Georg Wilhelm Friedrich. *The Philosophy of Fine Art*, vol. 3. Translated by F.P.B. Osmaston. London: Bell, 1920.
- Hepokoski, James. "Approaching the First Movement of Beethoven's *Tempest* Sonata through Sonata theory." In *Beethoven's Tempest Sonata: Perspectives of Analysis and Performance*, ed. Pieter Bergé, 61-85. Leuven, Belgium: Uitgeverij Peeters, 2009.
- Hepokoski, James and Warren Darcy. *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-Century Sonata*. New York: Oxford University Press, 2006.
- Hunt, Graham G. Review of *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-Century Sonata*, by James Hepokoski and Warren Darcy. *Theory and Practice* 32 (2007): 213-38.
- Imeson, Sylvia. *The time gives it proofe: Paradox in the Late Music of Beethoven*. New York: American University Series, 1996.
- Jackson, Timothy. "Diachronic Transformation in a Schenkerian Context: Brahms' *Haydn Variations*." In *Schenker Studies 2*, edited by Carl Schachter and Hedi Siegel, 239-75. Cambridge: Cambridge University Press, 1999.
- _____. "The Enharmonics of Faith: Enharmonic Symbolism in Bruckner's 'Christus factus est' (1884)." *Bruckner-Jahrbuch* (1987-88): 7-20.
- _____. "*Hinaufstrebt's*: Song Study with Carl Schachter." In *Structure and Meaning in Tonal Music: Festschrift in Honor of Carl Schachter*, edited by L. Poundie Burstein and David Gagné, 191-202. Hillsdale, NY: Pendragon Press, 2006.
- _____. "Schubert as 'John the Baptist to Wagner-Jesus': Large-scale Enharmonicism in Bruckner and his Models." *Bruckner-Jahrbuch* 1991/92/93 (1995): 61-107.

- _____. "The Tragic Reversed Recapitulation," from the *Journal of Music Theory*, vol. 40, no. 1 (Spring 1996).
- Jander, Owen. "Genius in the Arena of Charlatanry: The First Movement of Beethoven's 'Tempest' Sonata in Cultural Context." In *Musica Franca: Essays in Honor of Frank D'Accone*, edited by Irene Alm et al., 585-630. New York: Pendragon Press, 1996.
- Johansson, Ingvar and Niels Lyone. *Medicine and Philosophy: A Twenty-First Century Introduction*. Frankfurt: Ontos Verlag, 2008.
- Kamien, Roger. "Aspects of the Recapitulation in Beethoven Piano Sonatas." In *The Music Forum*, edited by Felix Salzer and Carl Schachter, 4: 209-36. 1976.
- Kerman, Joseph and Alan Tyson. *The New Grove Beethoven*. New York: Norton, 1983.
- Kinderman, William. "The First Movement of Beethoven's *Tempest* Sonata: Genesis, Form, and Dramatic Meaning." In *Beethoven's Tempest Sonata: Perspectives of Analysis and Performance*, ed. Pieter Berge, 61-85. Leuven, Belgium: Uitgeverij Peeters, 2009.
- Korsyn, Kevin. Review of *Beethoven's Ninth Symphony: A Portrayal of its Musical Content, with a Running Commentary on Performance and Literature as Well*, by Heinrich Schenker, *Notes (Music Library Association)* vol. 50, June 1994.
- Kosovsky, Robert, *The Oster Collection: Papers of Heinrich Schenker, a finding list*. New York: New York Public Library, 1990.
- Krones, Hartmut. "Ludwig van Beethoven's e-moll Sonate, Op. 90," *Österreichische Musikzeitschrift* 43 (1988): 592-601.
- Landon, H.C. Robbins. *Haydn: Chronicle and Works, IV: The Years of 'The Creation.'* Bloomington, IN: Indiana University Press, 1980.
- Laufer, Edward. "Continuity in the Fourth Symphony (first movement)." In *Perspectives on Anton Bruckner*, edited by Crawford Howie, Paul Hackshaw and Timothy Jackson, 114-144. Burlington, VT: Ashgate, 2001.
- _____. "Voice leading Procedures in Development Sections." In *Studies in Music from the University of Western Ontario*, 13 (1991): 69-120.
- Levy, David Benjamin. *Beethoven: the Ninth Symphony*. New Haven, CT: Yale University Press, 2003.
- Linton, Marisa. "Robespierre and the terror: Marisa Linton reviews the life and career of one of the most vilified men in history, Maximilien Robespierre." *History Today* 56/8, August 2006.

- Lively, Michael. "Non-linear and multi-linear time in Beethoven's Op. 127: an analytical study of the Krakow sketch materials." Ph.D. diss., University of North Texas, 2010.
- Marston, Nicholas. "The Development of Schenker's Concept of Interruption." *Music Analysis* 32:3 (October 2013): 332-362.
- Monahan, Seth. "Review of Janet Schmalfeldt: *In the Process of Becoming: Analytical and Philosophical Perspectives on Form in Early Nineteenth Century Music* (Oxford: Oxford University Press, 2011) in *Music Theory Online*, 17, no. 3, (2011).
- "Multivalence." *Merriam-Webster.com*. Merriam-Webster, 2015. Web. 1 January 2015.
- "Paradox." *Merriam-Webster.com*. Merriam-Webster, 2014. Web. 24 June 2014.
- Petty, Wayne. "C.P.E. Bach and the fine art of transposition." In *Schenker Studies* 2 (1999): 49-66.
- Priore, Irna. "Further Considerations of the Continuous $\hat{5}$ with an Introduction and Explanation of Schenker's Five Interruption Models." *Indiana Theory Review* 25 (Spring-Fall 2004): 115-138.
- Quine, W.V. *The Ways of Paradox*. Cambridge: Harvard University Press, 1976.
- Reale, Haley Britt Beverburg. "Enharmonic Paradoxes in Classical, Neoclassical and Popular Music." Ph.D. diss., University of Michigan, 2011.
- Rosen, Charles. *The Classical Style: Haydn, Mozart, Beethoven*. New York: W.W. Norton, 1971.
- _____. *Sonata Forms*. New York: W.W. Norton, 1980.
- Rosenweig, Michael. "Enriched Predator-Prey Systems: Theoretical Stability." *Science* 177 (1972): 902-904.
- Rothstein, William. *Phrase Rhythm in Tonal Music*. New York: Schirmer, 1989.
- Rumph, Stephen. *Beethoven after Napoleon: Political Romanticism in the Late Works*. Los Angeles: University of California Press, 2004.
- Salzer, Felix and Carl Schachter. *Counterpoint in Composition*. New York: McGraw Hill, 1969; reprint, New York: Columbia University Press, 1989.
- Samarotto, Frank. "Schenker's 'Free Forms of Interruption' and the Strict: Toward a General Theory of Interruption." Paper presented at the annual meeting for the Society for Music Theory, Boston, MA, November 11, 2005.

_____. "A Theory of temporal plasticity in tonal music: an extension of the Schenkerian approach to rhythm with special reference to Beethoven's late music." Ph.D. diss., City University of New York (CUNY), 1999.

Saussure, Ferdinand de. *Cours de linguistique générale (Course in General Linguistics)*, edited by Charles Bally and Albert Sechehaye. Translated by Roy Harris. La Salle, IL: Open Court, 1983.

Schachter, Carl. *Unfoldings*. Oxford: Oxford University Press, 1999.

Schenker, Heinrich. *Beethoven's Ninth Symphony*. Translated and edited by John Rothgeb. New Haven, CT: Yale University Press, 1992.

_____. *Free Composition*, trans. and ed. Ernst Oster. New York: Longman, 1979.

_____. *Das Meisterwerk in der Musik*, 3 vols. Munich: Drei Masken, 1925, 1926, 1930. Hildesheim: Georg Olms, 1974.

_____. *Harmony*, ed. Oswald Jonas, trans. Elizabeth Mann Borgese. Chicago: University of Chicago Press, 1954.

_____. *Der Tonwille*, 2 vols. trans. and ed. William Drabkin. New York: Oxford University Press, 2004-2005.

Schenker, Heinrich and Angelika Elias. *Oster Collection: the Papers of Heinrich Schenker*, unpublished, on microfilm. New York: New York Public Library, 1990.

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

Schoenberg, Arnold. *Fundamentals of Musical Composition*. Edited by Gerald Strang. New York: St. Martin's Press, 1967.

Schubart, Christian. *Ideen zu einer Aesthetik der Tonkunst*, trans. by Rita Steblin, in *A History of Key Characteristics in the 18th and Early 19th Centuries*. Ann Arbor, MI: UMI Research Press, 1983.

Shakespeare, William. *Hamlet (Cambridge School Shakespeare)*. Edited by Rex Wilson, Vicki Wienand and Richard Andrews. Cambridge: Cambridge University Press, 2014.

Shakespeare, William and Robert Woodrow Langbaum. *The Tempest: With New and Updated Critical Essays and a Revised Bibliography*. 2nd Rev. ed. New York, NY, USA: Signet Classic, 1998.

- Sipe, Thomas. "Beethoven, Shakespeare, and the *Appassionata*." *Beethoven Forum* 4 (1995): 73-96.
- Slottow, Stephen. "Forks in the Road: Teaching Scarlatti's Sonata in C-Major (K. 159, Longo 104)." *Journal of Music Theory Pedagogy* 21 (2007): 71-100.
- _____. "Von einem Künstler: Shapes in the Clouds," in *Res Musica* 3 (2011).
- Spitzer, Michael. *Music as Philosophy: Adorno and Beethoven's Late Style*. Bloomington, IN: Indiana University Press, 2006.
- Smith, Peter. "Structural or Apparent Tonic." *Journal of Music Theory* 39/2 (1995): 245-83.
- Steblyn, Rita. "Auf diese Art mit A geht alles zugrunde: A New Look at Beethoven's Diary Entry and the 'Immortal Beloved.'" *Bonner Beethoven-Studien* 6 (2007): 147-80.
- Stewart, James. *Calculus: Early Transcendentals*. Belmont, CA: Thomson Brooks/Cole, 2008.
- Stilwell, Robynn J. "Hysterical Beethoven." *Beethoven Forum* 10, no. 2 (Fall 2003): 162-182.
- Suurpää, Lauri. "The Undivided Ursatz and the Omission of the Tonic *Stufe* at the Beginning of the Recapitulation." *Journal of Schenkerian Studies* 1 (2006): 66-91.
- Thayer, Alexander Wheelock and Elliot Forbes. *Thayer's Life of Beethoven*. Princeton, NJ: Princeton University Press, 1991.
- Tovey, Donald Francis. *A Companion to Beethoven's Pianoforte Sonatas*. New York: AMS Press, 1976.
- Treber, Stefan. "A Schenkerian analysis of Beethoven's E minor piano sonata, Op. 90." (Master's thesis, University of North Texas, 2010).
- Tusa, Michael C. "Beethoven and the Voices of Authority." Review of *Beethoven After Napoleon: Political Romanticism in the Late Works*, by Stephen Rumph. *Beethoven Forum* 12, No. 2, (2005): 195-205.
- Väisälä, Olli. "Schenker's Disservice to Schenkerianism," in *Res Musica* 3 (2011): 30-51.
- Webster, James. "The Concept of Beethoven's 'Early' Period in the Context of Periodizations in General." *Beethoven Forum* (1996): 1-27.
- Wingfield, Paul. "Beyond Norms and Deformations: Towards a Theory of Sonata Form as reception history," in *Music Analysis* 27, I (2008).