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THE ROLE OF MULTIPLE NEW-KEY THEMES IN SELECTED SONATA-FORM EXPOSITIONS

by

JAN MIYAKE

A dissertation submitted to the Graduate Faculty in Music
in partial fulfillment of the requirements for the degree of
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Date

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Philip Lambert, Chair of Examining Committee

7/13/04
Date

David Olan (pp)
David Olan, Executive Officer

William Rothstein, Advisor

David Gagné, Primary Reader

L. Poundie Burstein, Primary Reader

Joseph N. Straus, Supervisory Committee

Philip Rupprecht, Supervisory Committee

THE CITY UNIVERSITY OF NEW YORK

Abstract

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by

JAN MIYAKE

Advisor: William Rothstein

This dissertation investigates non-motivic ways of connecting multiple new-key themes; demonstrates how an exposition's new-key area can contain diverse thematic material yet still cohere; and shows that the number of new-key themes affects the amount of characteristic melodic material in an exposition. The expositions covered by this study contain from zero to three new-key themes. How is it that a new-key area can embark on drastically different strategies—from introducing no new characteristic material to introducing multiple new themes—yet still project a sense of a unified section?

I explore two main relationships between new-key themes. First, I show that the construction of new-key themes—namely, their intrathematic organization—influences the order in which they occur. Second, I argue that voice-leading "problems" in the first new-key theme provide opportunities for resolution or clarification in subsequent themes.

In addition to using Schenkerian analysis, this study adopts features from two recent sonata-form theories: James Hepokoski and Warren Darcy's Sonata Theory and William Caplin's revitalization of *Formenlehre*. These recent theories of form view

the distinction between subordinate and closing themes in fundamentally different ways. Caplin does not distinguish closing from subordinate themes. In his view, what I consider to be a closing theme is either a second subordinate theme or part of a chain of codettas in the closing section. Hepokoski and Darcy, on the other hand, invoke the idea of the essential expositional closure—usually the first perfect authentic cadence in the new-key area—to separate subordinate and closing zones. New-key themes occurring before and after the essential expositional closure have different functions and are labeled as subordinate and closing themes, respectively.

Throughout this exploration of the new-key area, my findings are supported by a large body of analyses that draw on the analytical approaches of Hepokoski and Darcy, Caplin, and Schenker. I discuss connections between these seemingly incongruous theories of form and investigate the few tensions that exist. By applying these theories to the exposition's new-key area, I advance a broader and more nuanced understanding of sonata form.

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TABLE OF CONTENTS

LIST OF EXAMPLES

LIST OF TABLES

LIST OF FIGURES

Introduction

Subordinate themes, closing themes, and codettas provide opportunities for diversifying the musical material in the new-key area of sonata forms. However, when these formal units introduce a variety of thematic material, they may seem to be unrelated to each other. In this dissertation I investigate non-motivic ways of connecting multiple new-key themes and demonstrate how the new-key area presents a diversity of thematic material as a coherent whole.

I establish two main relationships between new-key themes. First, I show that the way new-key themes are built—their intrathematic organization—influences the order in which they occur. Second, I argue that problematic aspects of the first new-key theme's voice leading can provide opportunities for resolution or clarification of those problems in the voice leading of subsequent themes. In making these points, I also show connections between intrathematic organization and compositional style and between intrathematic organization and voice-leading structures.

Theoretical foundations

Since the music-theoretical and musicological communities inconsistently employ the terms subordinate theme and closing theme, this study uses the phrase "new-key theme" to encompass the wide variety of situations that an analyst can encounter in the new-key area of an exposition. Intrathematic organization refers to the proportions and content of a theme's parts. A theme typically consists of one phrase or, in a period, two connected phrases. I use the term phrase—perhaps the most inconsistently

defined of all musical terms—to refer to a complete musical idea, which generally undergoes three phases: beginning, middle, and end. Furthermore, phrases close with an authentic or half cadence, frequently include a predominant harmony in the cadential progression, and support a linear progression.

Two late twentieth-century paths of scholarship enable this study's close examination of the new-key area: William Caplin's *Formenlehre* approach, launched from the teachings of Arnold Schoenberg and Erwin Ratz, and the emerging Sonata Theory of James Hepokoski and Warren Darcy.[1]

Caplin establishes the *Formenlehre* on more "secure and sophisticated foundations" by expanding Schoenberg's and Ratz's terminology to deal with all hierarchical levels of form.[2] In particular, Caplin uses the terms "tight knit" and "loose," which are defined in chapter 2 and form the focus of chapters 2 and 3, as metaphors for formal expressions. These concepts can be applied to the parts of a theme, the theme as a whole, or the parts of a sonata form. His theory of formal functions interacts with sonata form because it suggests that the organization of themes corresponds to their function. For Caplin, subordinate themes derive their function from being more loosely constructed than main themes.

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[1] William Caplin, *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven* (New York: Oxford University Press, 1998); James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late-Eighteenth-Century Sonata* (New York: Oxford University Press, forthcoming; Departments of Music Theory, Yale University and Oberlin College Conservatory, 1999, photocopy). Hepokoski and Darcy also introduce basic concepts in "The Medial Caesura and Its Role in the Eighteenth-Century Sonata Exposition," *Music Theory Spectrum* 19 (1997): 115–54.

[2] Caplin, *Classical Form*, 3.

Hepokoski and Darcy's approach to sonata form, Sonata Theory, has two goals: to derive a set of generic norms for sonata form and to "configure the norms into an ordered description of standard practices, deformations, and overrides."[3] For these authors, an exploration of the punctuation structure—structural cadences—establishes the basis for an understanding of sonata form. Their theory arises from the analysis of sonata forms in hundreds of late eighteenth- and early nineteenth-century works from relevant genres. The structural punctuation parses the exposition into "event-zones," such as the primary-theme zone, transition zone, secondary-theme zone, and closing zone. Unlike Caplin, who defines formal function on the basis of how a theme is internally organized, Hepokoski and Darcy define formal function on the basis of a theme's placement relative to important structural punctuations.

According to these authors, the two most important structural punctuations in an exposition are the essential expositional close and the medial caesura. The essential expositional close (EEC) is a "required" structural punctuation because it is the tonal goal of the exposition's new key. The EEC is usually the first perfect authentic cadence in the new key, and themes occurring within the exposition but after the EEC are closing themes. A medial caesura (MC) is "a brief, rhetorically reinforced break or gap that serves to divide an exposition into two parts, tonic and dominant (or tonic and mediant in most minor-key sonatas)."[4] Themes occurring after the MC and before the EEC are subordinate themes. Medial caesuras are an "optional" structural punctuation; Hepokoski and Darcy use the presence—or the

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[3] Hepokoski and Darcy, "Medial Caesura," 116.

[4] Hepokoski and Darcy, "Medial Caesura," 123.

absence—of a MC to distinguish between two exposition-types: two-part and continuous.[5] Throughout this study I will invoke these structural punctuations to determine the function of themes and will annotate their points of arrival in the musical examples.[6]

Today's most basic understanding of multiple new-key themes recognizes that many expositions contain a subordinate and closing theme. However, these two recent theories of form view the distinction between subordinate and closing themes in fundamentally different ways. Caplin does not separate closing and subordinate themes into different theme-types. In his view, a closing theme (he does not use the term) is either a second subordinate theme or is a part of a chain of codettas in the closing section.[7] Hepokoski and Darcy, on the other hand, invoke the idea of the EEC to separate subordinate and closing themes. New-key themes occurring before and after the EEC have different functions and are labeled as subordinate and closing themes, respectively.

This study adopts features of both of these sonata-form theories. Hepokoski and Darcy's approach to formal function is fully embraced. Furthermore, Caplin's work on how the intrathematic organization of primary and subordinate themes is

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[5] In continuous expositions, it is possible that there are no new-key themes.

[6] These concepts are more fully elucidated in Hepokoski and Darcy, "Medial Caesura," 115–27.

[7] Caplin, *Classical Form*, 122. Caplin's view of expositional closing functions is discussed and compared with William Rothstein's and Kofi Agawu's in Joel Galand, "*Formenlehre* Revived," *Intégral* 13 (1999): 183–93.

related is applied to the relationship between the first new-key theme and later new-key themes.

Overview of the dissertation

This study restricts itself to one time period, genre, and set of composers: post-1785 symphonic first movements of Haydn, Mozart, and Beethoven. It covers Haydn's Symphonies Nos. 82 through 104, Mozart's Symphonies Nos. 38 through 41, and all of Beethoven's symphonies. Table A lists these thirty-six symphonies and the corresponding number of new-key themes in the exposition. Of these thirty-six expositions, fifteen contain multiple new-key themes. The prevalence of expositions with multiple new-key themes indicates that Haydn, Mozart, and Beethoven frequently chose to write more than one theme in the new-key area.

Table A also indicates that some expositions have no new-key themes. This occurs when the exposition is the "continuous" type as defined by Hepokoski and Darcy. In a continuous exposition, there is no medial caesura to open up the second "half" of the exposition. One common path through this kind of exposition maintains the rhetoric of the transition until the first perfect authentic cadence in the new key, which functions as the essential expositional close. If no closing theme follows, these expositions will have no new-key themes.

Table A: Number of themes in the new-key area of post-1785 symphonies by Haydn, Mozart, and Beethoven (first movements only)

Symphony (movement 1)	Number of New-Key Themes
Haydn, Symphony No. 82	1
Haydn, Symphony No. 83	1
Haydn, Symphony No. 84	1
Haydn, Symphony No. 85	1
Haydn, Symphony No. 86	2
Haydn, Symphony No. 87	2
Haydn, Symphony No. 88	1
Haydn, Symphony No. 89	1
Haydn, Symphony No. 90	1
Haydn, Symphony No. 91	2
Haydn, Symphony No. 92	2
Haydn, Symphony No. 93	1
Haydn, Symphony No. 94	3
Haydn, Symphony No. 95	1
Haydn, Symphony No. 96	0
Haydn, Symphony No. 97	1
Haydn, Symphony No. 98	2
Haydn, Symphony No. 99	2

Symphony (movement 1)	Number of New-Key Themes
Haydn, Symphony No. 100	2
Haydn, Symphony No. 101	1
Haydn, Symphony No. 102	0
Haydn, Symphony No. 103	1
Haydn, Symphony No. 104	2
Mozart, Symphony No. 38	1
Mozart, Symphony No. 39	2
Mozart, Symphony No. 40	2
Mozart, Symphony No. 41	2
Beethoven, Symphony No. 1	3
Beethoven, Symphony No. 2	1
Beethoven, Symphony No. 3	3
Beethoven, Symphony No. 4	2
Beethoven, Symphony No. 5	1
Beethoven, Symphony No. 6	1
Beethoven, Symphony No. 7	0
Beethoven, Symphony No. 8	1
Beethoven, Symphony No. 9	1

Theories of form have not fully explored the variety of content in the exposition's new-key area. As I will argue in chapter 1, although the rhetoric of a closing theme had been recognized before sonata form developed, scholars of form do not always describe the melodic contents of the new-key area. Furthermore, when melodic descriptions are provided, they frequently do not account for the difference between themes and codettas. This state of research is at odds with the importance of understanding the new-key area. The presence of multiple new-key themes impacts the pacing of the exposition, thematic material available to the development, and the responsibilities of the recapitulation. A detailed study of this particular region of the exposition is overdue.

After chapter 1 surveys the development of recognition of multiple new-key themes, chapters 2 and 3 examine the how intrathematic organization affects the ordering of new-key themes. Chapter 2 explores the ten expositions with one subordinate theme and one closing theme. It proposes that when there is a tight-knit new-key theme, it occurs first in non-monothematic expositions and last in monothematic ones. It also suggests that the intrathematic organization of these themes reflects each composer's distinctive language. Haydn's monothematic symphonies tend to have multiple new-key themes, and his closing themes tend to be more tight-knit than his subordinate themes. In Mozart's expositions with one subordinate and one closing theme, both new-key themes tend to be tight-knit, and the subordinate theme tends to be more tight-knit than the closing theme. Finally, when Beethoven has one subordinate and one closing theme, they both tend to be loosely organized owing to Beethoven's penchant for composing long new-key themes.

Chapter 3 continues the exploration of the intrathematic relationships between multiple new-key themes by analyzing the five remaining expositions that have multiple new-key themes, but not exactly one subordinate and one closing theme. Furthermore, these five expositions all present some kind of formal ambiguity in the new-key area. In addressing this formal ambiguity, this chapter introduces further theoretical concepts by Janet Schmalfeldt, Anthony Newcomb, and Hepokoski and Darcy. Three of these expositions have three new-key themes, and the intrathematic relationships in each of these expositions are more complex than those of chapter 2. However, similar rationales for the ordering of tight-knit and loose themes arise in the analyses of these new-key areas. These explanations are tied to Haydn's treatment of

monothematic expositions and Beethoven's inclination to write broadly constructed new-key themes. The remaining two expositions have only two new-key themes, but the two themes do not take the form of a subordinate and closing theme. These extraordinary expositions highlight fundamental differences in the analytical approaches of Darcy, Hepokoski, and Caplin.

The final chapter develops a Schenkerian-based relationship between new-key themes. It proposes that the content of the first new-key theme allows additional new-key themes to emerge. An examination of the linear progressions associated with each set of new-key themes reveals that an aspect of the first new-key theme's voice leading opens up "voice-leading room" for future linear progressions. These aspects that open additional "voice-leading room" fall into three sometimes overlapping categories: (1) the first new-key theme prominently features borrowed tones in its voice leading; (2) the cadence of the first new-key theme, which is usually the first perfect authentic cadence in the new-key area, is problematic; and (3) the first new-key theme completes its linear descent an octave lower than the obligatory register. Finally, the analyses reveal a correlation between a theme's intrathematic organization and the details of its voice-leading graph.

Chapter 1

Multiple New-Key Themes: An Historical Overview

Introduction

Throughout their development, sonata-form theories have, in general, alternated between harmony-based definitions and melody-based ones. Awareness of multiple new-key themes is most clear in melody-based descriptions of the form. However, when harmony-based definitions dominate, other analytical approaches engage concepts related to multiple new-key themes.

The most common instances of multiple new-key themes take the form of one subordinate and one closing theme; therefore, most of this exploration will focus on descriptions of a closing theme. Since the earliest descriptions of large forms tended to focus on rhetoric and key areas rather than thematic content, explicit descriptions of a closing theme do not occur until the nineteenth century, when the switch in intellectual focus to melody set the stage for a recognition of differing melodic functions in sonata-form expositions.

Some eighteenth-century and most nineteenth-century descriptions of large forms recognize three events in the form's first part: the primary theme, the subordinate theme, and a closing area. The way nineteenth-century theorists use terms such as *Schlußgruppe*, *Schlußsatz*, *Mittelsatz*, and *idées accessoires* sheds further light on their views of the new-key area's contents. The return to a harmonically based understanding of sonata form in the twentieth century, on the other hand, was

accompanied by a divergence of approaches to labeling the parts of the exposition. This chapter will trace selected understandings of multiple new-key themes from Mattheson through contemporary views.

The Art of Rhetoric and the Closing Theme

Few early eighteenth-century writers address large-scale forms in their theoretical writings, and many of those who do discuss large forms tend to describe only the basic formal divisions. For example, the German composer and theorist Johann Adolph Scheibe (1708–76) describes the French overture as consisting of three parts:

> The first part ends on the dominant (or on the third degree in minor). The fugal second part, in which the phrases flow into one another, may end on the tonic. But it is even more effective when the final cadence has some striking effect, such as a strong dissonance. The last part is like the first but only has cadences in the tonic.[1]

Owing to its focus on form-defining cadences rather than melodies, Scheibe's description does not delve into any details of how each of these three parts is constructed.

However, one early strategy for describing large-scale forms does promote a discussion of melody: the use of rhetorical imagery.[2] Germany experienced a revival

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[1] Johann Adolph Scheibe, *Der critische Musicus* (Hamburg, 1737–40), facs. (Amsterdam: Antiqua, 1966), 667–74. Paraphrased by Joel Lester in *Compositional Theory in the Eighteenth Century* (Cambridge and London: Harvard University Press, 1992), 168.

[2] Mark Evan Bonds discusses this topic at length in chapter 2 of his book, *Wordless Rhetoric: Musical Form and the Metaphor of the Oration* (Cambridge: Harvard University Press, 1991) and chapter 2 of his dissertation, "Haydn's False

of the art of rhetoric in the first half of the eighteenth century. Exemplified by Christoph Gottschied's 1736 *Ausführliche Redekunst*, the art of rhetoric provided a powerful method for discussing aesthetics. As Mark Evans Bonds points out, "among German music theorists and aestheticians in particular, this renewed interest in rhetoric gave fresh impetus to the reexamination of an old idea: that music is language."[3] Bonds further notes similarities between the art of rhetoric and sonata-form treatment in the Classical style. He points out that the rhetorical approach to musical form views a "musical movement as an oration in which a basic idea is presented, developed, and examined again in regard to other ideas, both related and contrasting."[4] Furthermore, "the unfolding of these ideas is achieved through both thematic and harmonic manipulation."[5] Although there are no early eighteenth-century descriptions of sonata form, written descriptions of a closing melody—a possible forerunner of the closing theme—arise within discussions of musical rhetoric. Closing sections at the ends of large formal units, such as the first half of a binary form or a concerto's opening ritornello, provide the earliest hints of closing themes.

MATTHESON

The views of the German composer, critic, music journalist, lexicographer, and theorist Johann Mattheson (1681–1764) foreshadow the prevailing late eighteenth- and early nineteenth-century trend of discussing the large-scale structure of a musical

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Recapitulations and the Perception of Sonata Form in the Eighteenth Century," Ph.D. diss., Harvard University, 1988.

[3] Bonds, *Wordless Rhetoric*, 61.

[4] Bonds, "Haydn's False Recapitulations," 119.

[5] Bonds, "Haydn's False Recapitulations," 119.

composition in terms of the organization of melody into phrases and periods. With his recognition of the rising importance of melody in the newly emerging styles of music, such as the galant style, Mattheson is well positioned to address the composition of large forms in his theoretical writings.[6] The foundation of his analytical approach invokes the art of rhetoric to make a correspondence between the structure of a composition and the six parts of an oration: the *Exordium*, *Narratio*, *Propositio*, *Confirmatio*, *Confutatio*, and *Peroratio*, or, in English, the introduction, report, discourse, corroboration, confutation, and conclusion, respectively.[7]

Mattheson's discussion of an aria by Benedetto Marcello (1686–1739) provides an example of a melody-based analysis.[8] Since the *da capo* aria may have contributed to the development of an essential aspect of sonata form—the simultaneous return of the main theme and the tonic key in the middle of the second part of the form—this analysis represents an important starting point for recognition of multiple new-key themes.[9] Owing to Mattheson's belief that the order of an oration can be changed, there is not a one-to-one correspondence between his analysis and the originally presented order of the oration. As Joel Lester comments, Mattheson calls

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[6] Joel Lester, *Compositional Theory in the Eighteenth Century* (Cambridge and London: Harvard University Press, 1992), 161.

[7] Mattheson, *Der vollkommene Capellmeister* (Hamburg, 1739); facs. (Kassel: Bärenreiter, 1954), part 2, chapter 14, paragraph 4; English translation, Ernest Harriss, *Johann Mattheson's 'Der vollkommene Capellmeister': A Revised Translation and Commentary* (Ann Arbor: UMI Research Press, 1981), 470.

[8] This analysis is originally presented in Mattheson, *Kern melodischer Wissenschaft* (Hamburg, 1737), 137, and reappears with minor changes and additions in *Der vollkommene Capellmeister*, part 2, chapter 14, paragraphs 14–22.

[9] James Webster: "Sonata Form," *The New Grove Dictionary of Music and Musicians*, 2nd edition, ed. S. Sadie and J. Tyrrell (London: Macmillan, 2001), xxiii, 691.

the contrasting theme a *Confutatio* and a thematic return a *Confirmatio*, reversing the order of events in an oration.[10] However, Mattheson's changes in the ordering correspond to the musical dialogue—*Confutatio* captures the relationship between contrasting themes better than does *Confirmatio*. Likewise, *Confirmatio* seems to be the best match between a formal part of an oration and the effect of thematic return.

Mattheson's interpretation of how the *Peroratio* corresponds to the music reflects his understanding of closing sections in music.

> The *Peroratio* finally is the **end or conclusion of our musical oration**, which must produce an especially emphatic impression, more so than all other parts. And this occurs not only in the course or progress of the melody, but especially in the epilogue, be it in thorough bass or in a stronger accompaniment; whether or not one has heard this ritornello previously. Custom has established that in arias we close with almost the very same passages and sounds with which we have begun: consistent with which then our peroration is replaced by our *Exordium*.[11]

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[10] Lester, *Compositional Theory in the Eighteenth Century*, 165. In addition to the fact that the *Confutatio* and *Confirmatio* occur out of order, Lester points out some illogical choices in Mattheson's analysis, such as calling the opening ritornello the *Expositio* when the motives are not taken from that section as they would be in an oration. Bonds addresses criticisms that Mattheson's analysis is Procrustean by drawing attention to Mattheson's intention that his proposed outline of events is "intended to be flexible." Bonds, "Haydn's False Recapitulations," 115.

[11] Mattheson, *Der vollkommene Capellmeister*, part 2, chapter 14, paragraph 12. Translated in Harriss, 472.

In the Marcello *da capo* aria, Mattheson locates the *Peroratio* at the end of the first half, which is "closed just as it had begun," returning to the material of the opening ritornello.[12]

Even though the *Peroratio* uses the same musical material and occurs in the same key as the *Exordium*, Mattheson's clear indication of its closing role reflects his recognition of the differing functions melodies can have based on their placement in the music. Despite its occurrence in the tonic key, the *Peroratio* shares two characteristics with a typical closing theme: it occurs at the end of a large formal section, and it is based on the musical material of the first theme.[13] Therefore, Mattheson's *Peroratio*—which is placed in a corresponding position to the closing theme in a sonata form—could foreshadow the development of a closing theme.

Another noteworthy comment by Mattheson indicates that he recognizes a three-phase thematic organization to a musical work: "The cunning device of the orators is, *that they present the strongest points first; then the weaker ones in the middle;* and *finally impressive conclusions.*"[14] Mattheson clarifies that each section of the aria is constructed in this way; he does not conceive the entire aria as possessing a strong and impressive *da capo* section and a "miserable" middle section. As a

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[12] Mattheson, *Der vollkommene Capellmeister*, part 2, chapter 14, paragraph 19. Translated in Harriss, 474.

[13] Although closing themes do not have to use the primary theme's melody, the return of primary-theme material at the end of an exposition often signals the entrance of the closing theme.

[14] Mattheson, *Der vollkommene Capellmeister*, part 2, chapter 14, paragraph 25. Translated in Harriss, 476. (Emphases in original.)

description of the *da capo* section, Mattheson's focus on an impressive closing section has striking parallels in music, especially as the Classical style emerges.

For example, the closing sections of Classical concertos parallel Mattheson's "impressive conclusions." The closing phase of a concerto's opening ritornello shares the most characteristics with Mattheson's *Peroratio* in the Marcello aria. Since the opening ritornello parallels the events of a sonata-form exposition yet closes in the tonic key, there are closing themes—or, at least, an area of closing gestures—in the tonic key prior to the soloist's entrance. When the soloist retraces the path already presented by the orchestra, it modulates before the subordinate theme and presents its closing phase in the new key. Denis Forman calls the soloist's closing passage the "piano climax," which, in Mozart's concertos, tends to be virtuosic.[15] Forman claims that "the piano climax is a theatrical device to 'make a curtain' with a storming virtuoso exit for the star performer."[16] This dramatic emphasis on the closing phase of the solo section corresponds to the rhetorical function of the *Peroratio*.

Closing phases are particularly notable in much of Mozart's music. Edward Lowinsky explores Mozart's strong closing gestures in his article "On Mozart's Rhythm."[17] In this article Lowinsky makes a case for a "principle of increasing

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[15] Denis Forman, *Mozart's Concerto Form: The First Movements of the Piano Concertos* (New York: Praeger Publishers, 1971).

[16] Forman, 43. Forman equates the gesture with the end of an aria. Jane Stevens questions this connection in her article "The 'Piano Climax' in the Eighteenth-Century Concerto: An Operatic Gesture?," in *C.P.E. Bach Studies,* ed. Stephen L. Clark (Oxford: Clarenden Press, 1988), 245–76.

[17] Edward E. Lowinsky, "On Mozart's Rhythm," *Musical Quarterly* 42 (1956): 162–86.

animation," which he believes is present "in one form or another ... in almost all of Mozart's mature compositions."[18] He shows the various ways this acceleration can be accomplished and ties it to the ends of the formal sections of sonata-form works. In particular, he notes that it occurs just prior to the entrance of the subordinate theme, at the end of the exposition, and at the end of the recapitulation before the entrance of the final codetta.

By tying musical gestures of closing to the art of rhetoric, Mattheson's approach suggests that the concept of closing gestures could apply to all musical forms that strive to make a complete statement or argument. Although Mattheson writes about music composed before sonata form develops, closing themes are clearly tied to this tradition of closing gestures because they conclude the first part of a sonata form and are recapitulated to close the sonata-form movement.

Hints of Multiple New-Key Themes in Early Descriptions of Large Forms

Mattheson's concentration on melody foreshadows the focus of the next several generations of writings on music. From this later tradition, I will examine the theories of Johann Joachim Quantz, Joseph Riepel, Heinrich Christoph Koch, and Francesco Galeazzi.

QUANTZ

The German flutist and composer Johann Joachim Quantz (1697–1773) presents another important early recognition of the role of melody in the emerging forms. In his 1752 treatise *Versuch einer Anweisung die Flöte traversiere zu spielen*, Quantz describes the thematic and harmonic plan of a large form that corresponds to sonata

[18] Lowinsky, 174–5.

form, including what would later be called a subordinate theme.[19] In the treatise's last chapter, "how a musician and a musical composition are to be judged," Quantz sets forth rules for the composiiton of the most important types of pieces.[20] Within the category of instrumental music he discusses the concerto, overture, sinfonia, quartet, trio, and the solo. Curiously, it is in his description of a well-constructed solo—the only instrumental form that Quantz indicates has become so formulaic that "writing a solo is today no longer considered an art"[21]—that we find allusions to phrases in the new key.

> The *first Allegro* requires: (1) a melody that is flowing, coherent, and rather serious; (2) a good association of ideas; (3) brilliant passage-work; (4) good order in the repetition of ideas; (5) some beautiful and well-chosen phrases at the end of the first part which are so adjusted that in transposed form they may again conclude the last part; (6) a first part which is a little shorter than the last; (7) the introduction of the most brilliant passage-work in the last part; (8) a bass that is set naturally and with progressions of a kind that sustain a constant vivacity.[22]

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[19] Johann Joachim Quantz, *Versuch einer Anweisung die Flöte traversiere zu spielen* (Berlin, 1752); trans. by Edward Reilly in *On Playing the Flute* (London: Faber & Faber, 1985).

[20] Quantz, *On Playing the Flute*, 305.

[21] Quantz, *On Playing the Flute*, 318. Edward R. Reilly points out that in this section on the Solo, Quantz is describing a three-movement sonata in a slow–fast–fast form. This is the pattern of tempos that is found in most of Quantz's own sonatas, of which he wrote more than 235, and is perhaps the reason for his general disdain for many who write solos. Edward Reilly, trans., J. J. Quantz, *On Playing the Flute*, 318.

[22] Quantz, *On Playing the Flute*, 319. Quantz is among the first to clearly associate the key plan with thematic return. The allusion to a harmonic plan is unusual in the context of the treatise because it is the only time Quantz mentions a harmonic aspect to the compositional plan. In general, Quantz's "interest in practical formal devices does not extend to 'form' as a disembodied, large-scale, constructive formula." Jane R. Stevens, "Theme, harmony, and texture in Classic-Romantic descriptions of

His fifth point—which corresponds to a subordinate theme's placement, non-tonic statement, and rhetoric—seems to imply that more than one melodic phrase could be found in the new-key area of the exposition. However, a closer study of how Quantz uses the term "phrase" would be necessary before making any claim that this passage represents the earliest written acknowledgement of multiple new-key themes; Quantz may be refering to simple four-bar units, not complete musical ideas.[23]

RIEPEL

Joseph Riepel's treatise *Anfangsgründe zur musikalischen Setzkunst* provides one approach to composition during the emergence of the galant style.[24] Riepel (1709–82), a theorist, composer, and violinist, describes a style of composition that contrasts greatly with the previous style; in the new style composers highlight the melody through simple accompaniment and regular phrasing, often into four-bar groups. This change in musical style is accompanied by the publication of a group of theoretical writings—of which Riepel's *Anfangsgründe* is a part—that claimed the bass was

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concerto first-movement form," *Journal of the American Musicological Society* 27 (1974): 28.

[23] A cursory study of Quantz's flute sonatas suggests that his conception of phrase is a four-bar unit. The phrases he refers to in his fifth point close the first part, return transposed to tonic at the end of the second part, and sometimes have contrasting character to the brilliant passage work.

[24] Joseph Riepel, *Anfangsgründe zur musikalischen Setzkunst*, 5 vols. (Frankfurt and Leipzig, 1752, 1755, 1757; Augsburg, 1765, 1768).

subservient to the melody—a paradigm shift in relation to the previous focus by German theorists on thorough-bass realization.[25]

According to Nola Reed Knouse, Riepel is the first author to maintain the primacy of melody throughout all of his writings.[26] Riepel's approach to composition centers on how to expand a simple four-bar phrase and how to connect these phrases into small and large compositions. As Justin London notes, "Riepel's most important theoretical contribution is the large vocabulary he developed to describe phrases and their component parts."[27]

Much of Riepel's pedagogical technique concerns expanding a simple minuet into larger forms such as the symphony and concerto. He constructs his minuets as continuous simple binary forms: they modulate to the dominant at the end of the first half, return to the tonic by the end of the second half, and do not repeat the opening material of the first half within the second half.[28] Since sonata form is a large continuous rounded binary form, Riepel's ordering of phrases in the first half of many

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[25] One of the earliest examples of this paradigm shift occurs in 1694, when Henry Purcell states "Formerly they used to Compose from the *Bass*, but Modern Authors Compose to the *Treble* when they make *Counterpoint* or *Basses* to Tunes or Songs." Henry Purcell, "A Brief Introduction to the Art of Descant, or Composing Musick in Parts," in J. Playford, *An Introduction to the Skill of Musick* (London, 1694; repr. New York: Da Capo Press, 1972), 151 (page citations are to the reprint edition). For a broader discussion see Lester, *Compositional Theory in the Eighteenth Century*, 258–9.

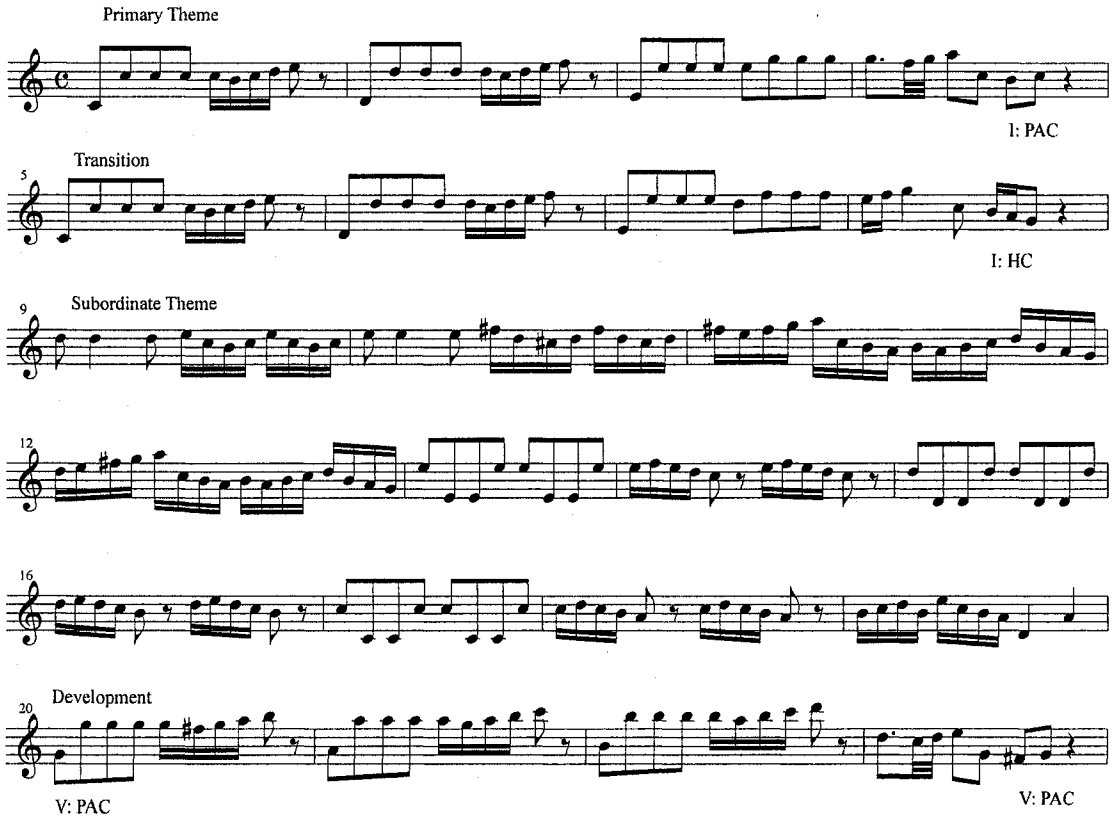
[26] Nola Reed Knouse, "Joseph Riepel and the Emerging Theory of Form in the Eighteenth Century," *Current Musicology* 41 (1986): 48.

[27] Justin London, "Riepel and *Absatz*: Poetic and Prosaic Aspects of Phrase Structure in Eighteenth-Century Theory," *Journal of Musicology* 8 (1990): 508.

[28] This definition of binary form follows Douglass M. Green, *Form in Tonal Music: An Introduction to Analysis*, 2nd ed. (New York: Holt, Rinehart & Winston, 1979), 75–83.

minuets foreshadows possible orderings of cadences in a sonata-form exposition: there is a *Grundabsatz*, a tonic-ending phrase, followed by an *Änderungsabsatz*, a non-tonic-ending phrase, which invariably closes on the dominant. These two phrases could be a primary and subordinate theme, respectively.

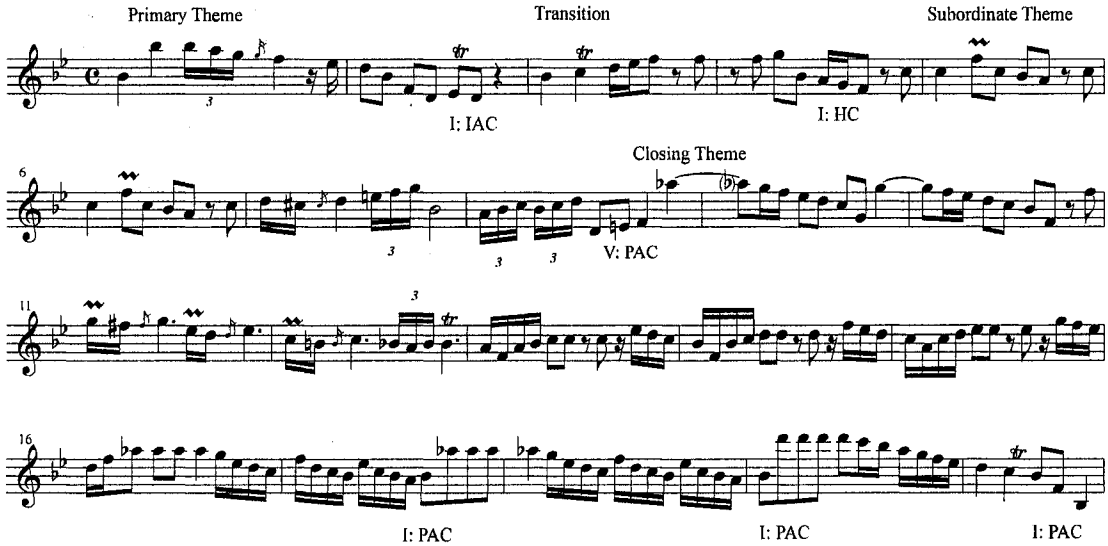
Example 1.1: Riepel, example of a symphony



When Riepel works with more than four phrases, it is striking that the ordering of these phrases in his earliest examples corresponds to aspects of sonata form. Example 1.1 demonstrates how Riepel's ordering of phrases leads to a sonata-form-like structure. Annotated with current-day labels, this example presents the

"exposition" of the *Praeceptor's* corrected version of the *Discantista's* symphony.[29] In the "recapitulation," the "subordinate theme" returns in the tonic key.

Example 1.2: Riepel, Concerto I in B-flat Major[30]



Riepel's compositions, particularly his concertos, show the importance that closing gestures play in the music of his time. His concertos do not fit a Baroque-concerto paradigm or a Classical-concerto paradigm. In Stefan Eckert's paper " '... wherein good taste order and thoroughness rule'—On the Conception of the Mid-Eighteenth-Century Galant Concerto," he argues for a distinct mid-eighteenth-century concerto form, one separate from the Baroque ritornello-concerto form and the late-

[29] Riepel, *Anfangsgründe zur musikalischen Setzkunst*, vol. 1, 53. My cadences in example 1.1 correspond to the annotated formal sections. Aspects that support the division of formal sections, such as rests and melodic return, also support the labelling of cadences.

[30] The first two I: PACs (bars 17 and 19) are implied, but could be evaded through the use of a I^6 chord at either arrival or a vi chord at the second arrival.

eighteenth-century Classical concerto.[31] He founds his definition of this concerto-type on the basis that its punctuation structure defines the form. By showing that Riepel's minuet structure is embedded in his description of the concerto in the *Anfangsgründe* as well as within his own concertos, Eckert suggests that the punctuation structure is the defining aspect of the galant concerto.

In three examples from Riepel's concertos, the repetition of the cadential formula at the end of the opening ritornello helps highlight its closing phase. Example 1.2 presents one of Riepel's opening ritornellos annotated by Eckert with present-day labels. Since the opening ritornello ends in the tonic, the closing portion detonicizes the dominant. However, Riepel expands this section far beyond the proportions set up by the first three sections. This expanded closing section is indicative of the importance of closing gestures in this mid-eighteenth-century concerto form.

KOCH

The German violinist and composer Heinrich Christoph Koch (1749–1816) discusses what came to be called the exposition in a section entitled "The Connection of Melodic Sections in the First Main Periods of Larger Compositions" in his *Versuch einer Anleitung zur Composition* (1782–93).[32] Early in this section, he states that the typical cadence pattern in the opening period of a large composition is I: IAC, I: HC,

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[31] Stefan Eckert, "'... wherein good taste order and thoroughness rule'—On the Conception of the Mid-Eighteenth-Century Galant Concerto," 38th Annual Conference, Royal Music Association, Glasgow, Scotland, 28 Nov.–1 Dec., 2002.

[32] Heinrich Christoph Koch, *Versuch einer Anleitung zur Composition*, trans. Nancy K. Baker as *Introductory Essay on Composition* (New Haven: Yale University Press, 1983), vol. 3, section 4, segments 129–47.

V: HC, V: PAC.[33] In modern terms, the phrase ending with a half cadence in the dominant corresponds to the transition, and the phrase ending with a PAC in the dominant is the subordinate theme. He does, however, recognize musical units that could correspond to closing themes and codettas: "The fourth and last means of connecting several melodic sections in a period is to present some of these after the cadence as an appendix or a subsidiary period which continues in the same key."[34]

This section of his treatise closes with a discussion of four main variants of the basic cadence pattern I: IAC–I: HC–V: HC–V: PAC. Of interest to this study is the first variant, which allows the first phrase to end in a half cadence and creates a cadence pattern of I: HC–I: HC–V: HC–V: PAC. This change causes a ripple effect for the rest of the phrases because, in Koch's opinion, having two of the same phrase types in succession in the same key is undesirable.[35] Thus, Koch suggests changing the second phrase to a half cadence in the dominant (I: HC–V: HC–V: HC–V: PAC).

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[33] Koch, *Introductory Essay on Composition*, 213–14. Similar to Riepel, Koch's terminology for these cadences are *Grundabsatz* (PAC or IAC) and *Quintabsatz* (HC). He specifies the key of each as *der Grund* (the main key) or *die Tonart der Quinte* (the key of the fifth).

[34] Koch, *Introductory Essay on Composition*, 223.

[35] Koch is not entirely consistent on the issue. "...The sequence of phrase-endings is very limited considering their harmonic basis: *for neither two I-phrases nor two V-phrases in one and the same key may be composed immediately after one another with melodic sections which differ from each other*, if the second of these sections is to have no unpleasant effect on us" *Versuch einer Anleitung zur Composition*, 110, section 34. Later, he allows more flexibility for V-phrases: "With the use of V-phrases, however, it happens more often that when two of them are composed successively in the same key, our feeling is not shocked. They are used with good effect for the most part when the first V-phrase is somewhat rushing and extended or connected with more melodic sections, but the following V-phrase is cantabile." *Introductory Essay on Composition*, 221. This exception seems to describe the transition followed by a subordinate theme.

The second and third phrases now share the same cadence. Koch proposes two solutions to this problem: (1) fuse the two half-cadence phrases together, leaving only three phrases in the exposition corresponding to primary theme (I: HC), transition (V: HC), and subordinate theme (V: PAC); or (2) reposition the offending V: HC phrase (the second one) after the perfect authentic cadence. This second solution implies—and the implication is confirmed in Koch's musical example—that its ending is transformed into an authentic cadence (V: PAC). The new placement and ending of this phrase corresponds to that of a closing theme, and this cadence pattern of I: HC–V: HC–V: PAC–V: PAC (altered from V: HC) corresponds to a common cadence ordering for a sonata-form exposition. Thus, for Koch, the closing phrase results from "correcting" the punctuation form of the first variation on his cadence pattern for the first main period.

GALEAZZI

Francesco Galeazzi (1758–1819), Italian theorist, violinist, and composer, describes sonata form in his 1796 treatise *Elementi teorico-pratici di musica.* His discussion contrasts with the two-part approach to large forms adopted by Quantz, Riepel, and Koch because his emphasis on themes leads to a recognition of the three-part thematic pattern that would become the dominant understanding in the nineteenth century. However, Galeazzi still describes the form as a two-part form. "Every well-conducted melody is divided into two parts, either connected, or separated in the middle by a repeat sign."[36]

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[36] Francesco Galeazzi, *Elementi teorico-pratici di musica,* trans. Bathia Churgin in *Strunk's Source Readings in Music History*, ed. Leo Treitler (New York and London: Norton, 1998), 820.

Galeazzi's emphasis on themes also leads to a detailed conception of the form's first part, which—from a modern perspective—includes the introduction and exposition. The exposition consists of six parts: Principal Motive, Second Motive, Departure to the most closely related keys, Characteristic Passage or Intermediate Passage, Cadential Period, and Coda.[37] Galeazzi's Characteristic Passage and Cadential Period can combine to form today's understanding of the subordinate theme. The Characteristic Passage is

> a new idea, which is introduced toward the middle of the first part for the sake of greater beauty. This must be gentle, expressive, and tender in almost all kinds of compositions, and must be presented in the same key as the one to which the modulation was made. Often such a period is repeated, but only in more extended compositions; in short compositions it is very often omitted entirely.[38]

Galeazzi's recognition that this Characteristic Passage can be omitted acknowledges the variety of ways that themes interact with the harmonic plan of sonata form; sometimes there are no new-key themes.

Galeazzi's Cadential Period is a passage of music that leads the Characteristic Passage to a cadence. It drives to the cadence by using faster note values and, in Galeazzi's example, faster harmonic rhythm. "If the voice or instrument has shown off its gentleness and expression in the Characteristic Passage, it will display animation and skill, with agility of voice or hand, in the [Cadential Period]."[39]

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[37] Galeazzi, *Elementi teorico-pratici di musica,* 820.

[38] Galeazzi, *Elementi teorico-pratici di musica,* 820.

[39] Galeazzi, *Elementi teorico-pratici di musica,* 824.

His description of the exposition's new-key area provides the first label, Coda, for the area of the exposition that could contain a closing theme. "This strong cadence [the end of the Cadential Period] can be 'prolonged' by a Coda, whose 'principal function' is to link the beginning and the end of the exposition by deriving its material from the Principal Motive, or to bridge Parts I and II by providing motives for the initial period of Part II."[40] Since this passage prolongs the final cadence, Galeazzi views it as "not an essential period." In his musical example, he provides a four-bar passage that returns to the lyrical mood of the Characteristic Passage. While this example is not a closing theme in my sense of the term, its new, lyrical melodic-motivic material could easily be expanded into a closing theme.

The writings of Quantz, Riepel, Koch, and Galeazzi represent important intermediate steps towards defining sonata form because they bridge the rhetorical approach of Mattheson and treatises that more explicitly recognize sonata form. The contributions of these early treatises include a description of connections between melody and harmony, musical examples that resemble miniature sonata forms, and new vocabulary to address the construction of melody. Even though these writings are precursors to sonata-form theories, each hints at the existence of multiple new-key themes.

The Emergence of the "Modern" View of Sonata Form

In her research on trends of writing on sonata form throughout the eighteenth and nineteenth centuries, Birgitte Plesner Vinding Moyer recognizes two schools of formal

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[40] Bathia Churgin, "Francesco Galeazzi's Description of Sonata Form," *Journal of the American Musicological Society* 21 (1968): 181.

analysis: Leipzig and Berlin.[41] The approach of the Leipzig school was more practical and flexible, emphasizing the interplay of groups of periods rather than themes. The approach of the Berlin school tended to be more theme-oriented. This view led to a sectional understanding of sonata form, and theorists of this school maintained a three-part structure for the movement. The Berlin school of thought dominated the understanding of sonata form by the mid-nineteenth century. Thus, throughout this study of the recognition of multiple new-key themes, theorists from the Berlin school, such as A. B. Marx, play a large role. Our present-day view of sonata form generally stems from nineteenth-century views, which can be found in selected writings of Anton Reicha, Heinrich August Birnbach, Carl Czerny, and Adolf Bernhard Marx.[42] From these writers, we have learned to label four areas in the exposition: the primary theme, transition (or bridge), subordinate theme, and closing theme.

REICHA

Anton Reicha (1770–1836), a Czech composer, theorist, and teacher who was active in France and Germany, describes the *grande coupe binaire* in at least two of his major treatises: *Traité de mélodie* (1814) and *Traité de haute composition musicale* (1824–

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[41] Birgitte Plesner Vinding Moyer, "Concepts of Musical Form in the Nineteenth Century with Special Reference to A. B. Marx and Sonata Form," Ph.D diss., Stanford University, 1969, 7 and 187–90.

[42] Anton Reicha, *Traité de mélodie*, trans. Peter Landey as *Treatise on Melody*, Harmonologia Series no. 10 (Hillside, NY: Pendragon Press, 2000); Reicha, *Traité de haute composition musicale* (Paris: Zetter, [ca. 1824–26]. 2 vols.); Adolph Bernhard Marx, *Die Lehre von der musikalischen Komposition,* vol. III (Leipzig: Breitkopf und Härtel, 5th ed. 1879); Carl Czerny, *School of Practical Composition*, trans. John Bishop, 3 vols. (New York: Da Capo Press, 1979); Heinrich August Birnbach, "Über die verschiedene Form größerer Instrumentaltonstücke aller Art und deren Bearbeitung" in *Berliner Allgemeine musikalische Zeitung* (Berlin: 1827, 1828).

26). As Peter Landey notes, "although Reicha does not actually coin the term, his discussion of *grande coupe binaire* amounts to one of the first descriptions of sonata form."[43] In the earlier treatise, Reicha's conception is heavily based on considerations of harmony and combinations of periods. The few comments he makes concerning themes involve noting that a considerable portion of the ideas that occur in the first part in the dominant are transposed to the tonic, and "in general, the second part is composed and developed from the ideas of the first part."[44] Reicha makes no mention of a subordinate theme. In fact, Peter Landey believes that Reicha's conception of *grande coupe binaire* "appears at this stage to be monothematic...."[45] However, while a monothematic conception of the exposition implies that Haydn—the composer most often linked with monothematic expositions—is an important composer in Reicha's analyses, all five of the analyses Reicha presents with the 1814 description of *grande coupe binaire* are arias.[46] Additionally, although key areas are marked on the musical examples, Reicha's discussions of these arias arise from a point of view focused purely on phrase-length and melody.[47] It is possible that if Reicha uses Haydn's symphonies as his model of *grande coupe binaire*, it would make sense not to recognize a contrasting theme in the first part of the form; many of Haydn's

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[43] Peter M. Landey, "Issues in the Development of Anton Reicha's Theory of *grande coupe binaire*," *Revista de musicologia* 16 (1993): 3572.

[44] Reicha, *Treatise on Melody*, 50.

[45] Landey, "Issues," 3574.

[46] Reicha, *Treatise on Melody*, 51–58.

[47] For a more detailed description of the five musical examples and the problems inherent in them, see Roger Graybill, "Sonata Form and Reicha's *Grande Coupe Binaire* of 1814," *Theoria* 4 (1989): 89–105.

symphonies do not have a new subordinate theme—either the exposition is of the two-part type and is monothematic or the it is of the continuous type and has no subordinate theme.[48]

Reicha's 1824–26 description of the *grande coupe binaire* differs greatly from his 1814 description. As Roger Graybill points out, the detailed 1824–26 description is, at best, a subcategory of his more broadly conceived 1814 description.[49] This later description is often cited as one of the earliest writings to describe sonata form. Reicha's understanding of the exposition has the traditional four parts that tend to be taught today: *motif*, *pont*, *seconde idée mere*, and *idées accessoires*. He connects the the *Seconde idée mere* with its own key, stating that it occurs "dans la nouvelle tonique."[50] The term Reicha chooses for his closing-theme area, *idées accessoires*, implies that the ideas are less important than the first or second idea. However, he does not indicate whether or not these final ideas are thematic or whether they take the form of smaller formal units. Either way, Reicha clearly identifies musical material beyond the subordinate theme and recognizes the differing functions of these closing units.

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[48] A continuous exposition is one of Hepokoski and Darcy's two exposition-types. For a definition, see pp. 3–4.

[49] Roger Graybill, "Sonata Form and Reicha's *Grande Coupe Binaire* of 1814," 104.

[50] Czerny's translation of 1824–26, 48.

BIRNBACH

Outside of Moyer's dissertation, little has been written in English on Heinrich Birnbach (1793–1879).[51] He was a pianist, composer, and music theorist who was born in Breslau and active in Berlin. His theoretical work is significant because even though Reicha's *grande coupe binaire* was organized into three groups, "Birnbach was apparently the first nineteenth-century theorist who openly stated his commitment to the three-part analysis [of sonata form]."[52] In his 1827 and 1828 writings for the Berlin *Allgemeine musikalische Zeitung*, he provides a detailed description of the exposition in a sonata-form movement. He starts with the eighteenth-century two-part harmonic plan, emphasizes thematic material in his description, and concludes that sonata form is a three-part form.

Although he does not indicate whether or not the content of the closing area consists of themes or codettas, two points distinguish Birnbach's understanding of new-key themes. First, the lengths of the subordinate- and closing-theme sections (to use modern terminology) depend on the length of the primary theme. Moyer summarizes Birnbach's prose on 'Der erste Teil' in a table, reproduced below as table 1.1.[53] Birnbach suggests that the three formal areas of *Thema*, *Der zweite Gedanke*,

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[51] Bonds points out that Birnbach is the first writer who "specifically equates the form of a movement with its harmonic outline," but unfortunately does not go into any of Birnbach's details. *Wordless Rhetoric*, 36–7.

[52] Moyer, "Concepts of Musical Form in the Nineteenth Century," 54.

[53] Moyer, "Concepts of Musical Form in the Nineteenth Century," 55. Unfortunately, Moyer does not provide a larger context for Birnbach's terms nor does she comment on his unusual six-part form. Her choice to mix translated terms (remain and modulate) with untranslated ones is particularly mystifying.

and *Koda* are of similar importance, since their lengths depend on the first theme's length.

Table 1.1: Moyer's table of Birnbach's description of the exposition

Thematic Material	*Thema*	Remain	Modulate	*Der zweite Gedanke*	*Passage* (or *Durchzug)*	*Koda*
Length in measures	8–30	4–16	8–30	Corres-ponding to the *Thema*	—	Corres-ponding to the *Thema*
Key scheme	I	I	To HC on V/V	V	May touch on remote keys, ends on V	V

Second, Birnbach seems to describe a monothematic exposition; thematic contrast plays no role in his conception of sonata form. "Der zweite Gedanke oder das zweite Thema ... [must be] dem ersten ähnlich ... [to avoid] mehrerlei Karaktere in einem Tonstück; ... beide Sätze ... [must] in karakteristischer Hinsicht übereinstimmen."[54] This view, which downplays contrast between the *Thema* and *Der zweite Gedanke*, contradicts the theory of sonata form that was passed along to the twentieth century by A. B. Marx; Birnbach's conception of the exposition corresponds more to Haydn's treatment while A. B. Marx's corresponds to Beethoven's. However, as I will show in chapter 2, the majority of Haydn's monothematic symphonies covered in this study still have a contrasting new-key theme; it appears as a closing theme.

[54] Moyer, "Concepts of Musical Form in the Nineteenth Century," 54, quoting Birnbach, "Über die verschiedene Form" (1827), 277.

CZERNY

Carl Czerny's *Schule der praktischen Tonsetzkunst*, op. 600, provides another early description of sonata form.[55] Czerny (1792–1857) was well prepared to make this contribution, owing to his interest in theoretical writings in general and, in particular, his translations of Reicha's *Traité de mélodie* and *Traité de haute composition musicale*.

Czerny views sonata form as a binary form, and his description of the first part is both harmonic and thematic:

> the first part must comprise: (1) the principal subject, (2) its continuation or amplification, together with a modulation into the nearest related key, (3) the middle subject in this new key, (4) a new continuation of this middle subject, [and] (5) a final melody, after which the first part thus closes in the new key, in order that the repetition of the same may follow unconstrainedly.[56]

Czerny's unfamiliar label for the first theme in the new-key area, middle subject, indicates that he recognizes the subordinate theme as the penultimate thematic event of the exposition.[57] Czerny places additional burdens on this "middle subject" by claiming it "must consist of a new idea."[58] He details the difficulties in composing a good subordinate theme.

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[55] Carl Czerny, *Schule der praktischen Tonsetzkunst*, op. 600, 3 vols. (Bonn: Simrock, ?1849–50; Eng. trans., London: 1848). William S. Newman believes this was written in 1837. See Newman, "About Carl Czerny's Op. 600 and the 'First' Description of 'Sonata Form'." *Journal of the American Musicological Society* (1967), 513–15.

[56] Czerny, *School of Practical Composition*, vol. 1, 33.

[57] Czerny's penultimate event, a new continuation of the middle subject, is not a theme; it is a transitional passage between the subordinate and closing themes.

[58] Czerny, *School of Practical Composition*, vol. 1, 35.

> a good middle subject is much more difficult to invent than the commencement; for, *first*: it must possess a new and more beautiful and pleasing melody than all which precedes; and *secondly*, it must be very different from the foregoing, but yet, according to its character, so well suited thereto, that it may appear like the object or result of all the preceding ideas, modulations or passages. A feeble and insignificant middle subject creates the feeling in the hearer, that all the foregoing is useless toil and pains.[59]

William Drabkin has shown that the conception of the subordinate theme as a middle event of the exposition may have been part of Beethoven's understanding of the large two-part form that we call sonata form.[60] In his sketches for the op. 18 quartets and opp. 30–31 sonatas, the abbreviation "m.g.," which may stand for "Mittel-Gedanke," accompanies the entrance of the subordinate theme.[61] The later sketchbooks usually drop this abbreviation; Drabkin suggests that "such a term would have lost much of its relevance by this stage of Beethoven's art of instrumental composition."[62] However, similar markings that probably abbreviate the term "Mittel-Satz" appear at the subordinate theme of the op. 109 and op. 111 sonatas as "Mi.S." and "M.S.," respectively.[63]

By terming the subordinate theme the "middle theme" it is clear that closing themes—in Czerny's sense of the term "theme"—are essential to a sonata-form

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[59] Czerny, *School of Practical Composition*, vol. 1, 35.

[60] William Drabkin, "Beethoven's Understanding of 'Sonata Form'; The Evidence of the Sketchbooks," in *Beethoven's Compositional Process*, ed. William Kinderman (Lincoln: University of Nebraska Press, 1991), 14–19.

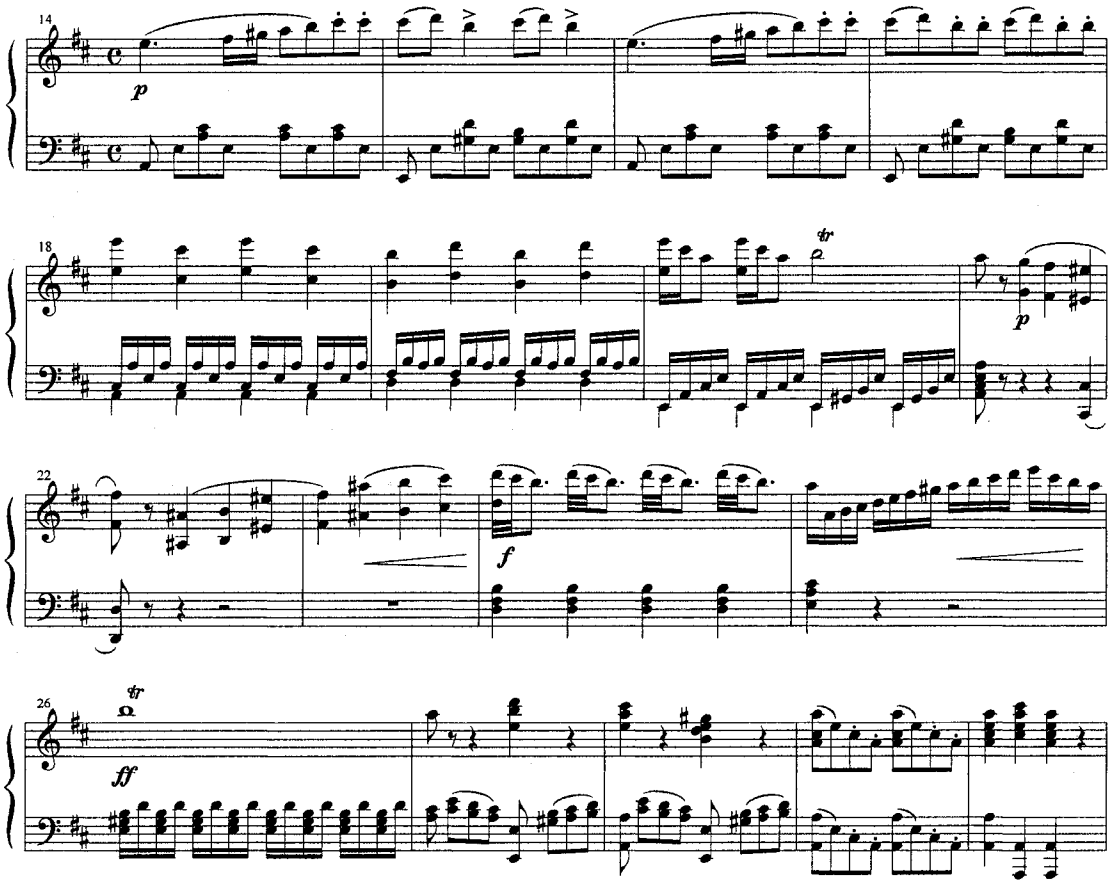
[61] Drabkin, 18.

[62] Drabkin, 18.

[63] Drabkin, 18.

exposition. However, his musical examples show that his definition of theme is broad: it encompasses pretty much any musical unit that ends with a cadence, including four-bar cadence-affirming gestures such as codettas. He uses Mozart's D Major Piano Duet Sonata K. 381 as a major-key example of the form of a first movement in a sonata. He does not clearly define which melody is the final melody, but he seems to imply that bars 21 through 27 are the "fourth melody" rather than an extension of the subordinate theme's cadence. Example 1.3 provides the passage from the subordinate theme to the end of the exposition.[64]

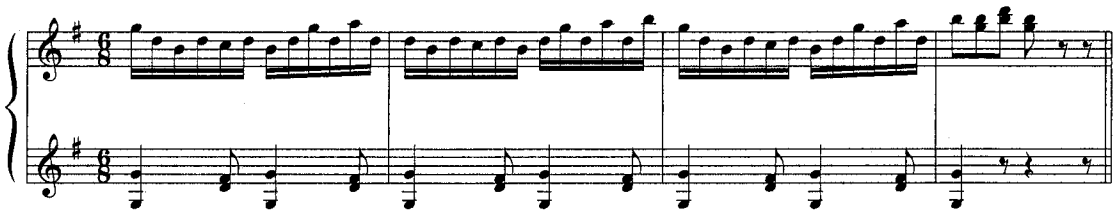
Example 1.3: Mozart, Piano Duet Sonata in D Major, K. 381, mvt. 1, new-key area



[64] Czerny, *School of Practical Composition*, vol. 1, 41.

The minor-key sonata that Czerny discusses presents an even less satisfactory candidate for a "final melody." Czerny does not provide an analysis of the melodies in the first movement of Haydn's E Minor Piano Sonata, instead focusing on the modulation to the relative major. The post-subordinate theme material in this sonata is not a closing theme in the present-day sense. Example 1.4 presents Czerny's candidate for the fourth melody.[65]

Example 1.4: Haydn Piano Sonata in E Minor, Hob. XVI: 34, mvt. 1, fourth melody



MARX

For German theorist, critic, and pedagogue Adolph Bernhard Marx (1795–1866), sonata form is the pinnacle of all the forms in current use. This view is clear owing to the order in which Marx presents the forms, which he considers the "evolution of forms" in his article "Form in Music."[66] In this article, Marx begins with what he considers to be the fundamental forms—basic considerations of melody, harmony, and rhythm—and then proceeds to discuss the artistic forms, which he divides into

[65] Unlike the previously discussed Mozart sonata, this candidate for the fourth melody is developed in the sonata's coda. This may raise the formal importance of this passage, but it is not a point that Czerny mentions.

[66] A. B. Marx, "Die Form in der Musik," from *Die Wissenschaften im neunzehnten Jahrhundert*, ed. Dr. J. A. Romberg, vol. 2 (Leipzig: Romberg's Verlag, 1856), 21–48, edited and translated by Scott Burnham as chapter 3 in *Musical Form in the Age of Beethoven: Selected Writings on Theory and Method* (Cambridge, England: Cambridge University Press, 1997), 55–90.

homophonic, polyphonic, and combined forms. Sonata form arises in the discussion of homophony, evolving from song forms, rondo forms, and what he calls sonatina form, a sonata form without development. As the most advanced of the homophonic forms, sonata form represents Marx's view of the current state of form. Since Marx's understanding of sonata form arises out of the evolution of forms—especially rondo forms—it is important to understand how multiple new-key themes arise in this evolution.

Marx begins his exploration of form by defining three basic types of small formal unit: *Satz*, *Gang*, and period. The *Satz* is a fundamental musical structure upon which all other structures are built. It is a "melody both ordered and closed satisfactorily with regard to pitch content and rhythm."[67] The opposing *Grundform*, the *Gang*, counters the *Satz*. It is "a succession of pitches lacking the closure which characterizes the *Satz*. ... any fragment of the previously constructed melodic *Sätze*, without the closing tonic note, can qualify as a *Gang*."[68] Finally, a period is a slightly larger two-part musical structure made up of a *Satz* and *Gegensatz*, or countering *Satz*.[69]

Rondos represent the majority of Marx's archetypes in the evolution of forms. He has five rondo types, ordered from the most primitive to most advanced (i.e., closest to sonata form). Multiple themes—but not multiple new-key themes—arise in

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[67] A. B. Marx, *Die Lehre von der musikalischen Komposition, praktisch-theoretisch,* 4 vols., 2nd ed. (Leipzig: Breitkopf & Härtel, 1841), vol. 1, 27; trans in Scott Burnham, "The Role of Sonata Form in A. B. Marx's Theory of Form," 249.

[68] Burnham, "The Role of Sonata Form," 251; Marx, *Die Lehre*, vol. 1, 29.

[69] Burnham, "The Role of Sonata Form," 251; Marx, *Die Lehre*, vol. 1, 28.

the second rondo type, early in the evolutionary process. This form evolves from the first rondo form, which consists of a *Hauptsatz* (HS), a *Gang* (G), and the return of the HS. In the second rondo form, Marx recognizes the addition of a *Seitensatz*, which is a new *Satz* in a related key that "stands to the side of the HS and is therefore a *Neben-* or *Seitensatz* (SS)."[70] He diagrams the second rondo form as:

HS – SS – (G) – HS

Since the SS moves away from the tonic, it cannot end the form; the return of the final HS can be accomplished through a *Gang*.

As the rondo forms evolve into more complex entities, additional *Seitensätze* are added. In the third rondo form, a second SS is added; Marx's diagram of this form shows that *Gänge* are still used to prepare the return of the HS.

HS – SS1 – G – HS – SS2 – G – HS

Marx finds this second SS problematic since "the first (and more lightly fashioned) of the subsidiary *Sätze* runs the risk of being forgotten in all the ensuing music."[71] This problem leads to the evolution of the fourth rondo form, which is the first form to associate more than one key area with the same large thematic area, the first SS. In this rondo form, the SS1 returns for an additional hearing at the end of the form, presumably to aid the listener in remembering it. Since it is the last large thematic area of this rondo form, the first subsidiary theme's return must occur in the key of the main theme, rather than its original, non-tonic key area. Marx diagrams this form as:

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[70] Burnham, "The Role of Sonata Form," 257.

[71] Marx, "Die Form in der Musik," 40–41. Trans. Burnham, *Musical Form in the Age of Beethoven*, 80.

HS – SS1 – G – HS – SS2 – G – HS – SS1

Marx does note, however, that an appendix is required following the return of the first *Seitensatz* "as the light nature of SS1 does not serve well as a conclusion."[72] Furthermore, he suggests that "this *Anhang* can be fashioned with material from the HS."[73] This appendix constitutes Marx's first acknowledgement of a closing area for his forms, and its use of material from the primary theme is a common closing-theme technique.

Marx perceives a problem with the fourth rondo form: "But is the main *Satz* of a rondo always in fact worthy of three appearances? Or indeed four appearances, when an appendix fashioned out of it is included?"[74] To correct this problem, Marx suggests omitting the middle full statement of the *Hauptsatz*, which would cause SS1 to lead directly to SS2. Since Marx views the conclusion of SS1 as the end of the form's first part, he suggests following it with a concluding *Satz* to set it off from the rest of this form. This concluding *Satz*, the *Schlußsatz* (*Sz*), reappears in place of the fourth rondo form's final *Anhang*. This fifth rondo form results in a form close to that of sonata form:

HS – SS1 – G – Sz – SS2 – G – HS – SS1 – G – Sz

Furthermore, Marx clearly sets out a key structure, which corresponds to that of sonata form, for all of the appearances of the first *Seitensatz* and the *Schlußsatz*. He also

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[72] Burnham, "The Role of Sonata Form," 257.

[73] Burnham, "The Role of Sonata Form," 257.

[74] Marx, "Die Form in der Musik," 41; trans. Burnham, *Musical Form in the Age of Beethoven*, 80.

points out that the return at the end of the form of the sections prior to SS2 creates a three-part form. These sections could be represented as follows:

HS – SS1 – G – Sz || SS2 – G || HS – SS1 – G – Sz

Evolving from this fifth rondo form to Marx's view of sonata form requires only a small step: replacing SS2 with a development section. In fact, in his article "Die Form in der Musik," Marx speaks little about sonata form, instead concentrating more attention on the five rondo forms. For the sonata form, Marx has the following points. First, it evolves from the sonatina form, which Marx describes as the fifth rondo form without the middle section (SS2 and G):

HS – SS – G – Sz || HS – SS – G – Sz

The sonata form restores the middle section of the fifth rondo form, turning the "binary nature of the sonatina form back to a ternary nature."[75] Unlike the fifth rondo form, the second part of sonata form derives its material from the first part, and therefore gains a "higher unity."[76] Finally, the *Satz* that represents the development experiences more freedom in its contents: "the *Sätze* that are repeated in the second part appear in a different order and in other keys; they are expanded, contracted, applied differently, manifoldly configured and deployed...."[77] It is interesting to note

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[75] Marx, "Die Form in der Musik," 44; trans. Burnham, *Musical Form in the Age of Beethoven*, 82.

[76] Marx, "Die Form in der Musik," 44; trans. Burnham, *Musical Form in the Age of Beethoven*, 82.

[77] Marx, "Die Form in der Musik," 44; trans. Burnham, *Musical Form in the Age of Beethoven*, 82.

that Marx's thematic view of the outer sections—exposition and recapitulation—of sonata form does not differ from his conception of these areas in the fifth rondo form.

Marx's writings communicate a clear sense of the variety of numbers of themes one can find in an exposition. In particular, Marx recognizes that there could be one theme in the original key and two in the new key:

> The division of the exposition ('der erste Theil') into two main groups (Hauptsatz and Seitensatz) each in its key areas, is a rigid rule with Marx. But each group may be divided in many different ways: he mentions, for example ... (3) one theme in the tonic, two in the dominant. ("Man sieht... das die Häufung der Themate keinen wesentlichen Einfluss auf die Konstrucktion des Ganzen hat.")[78]

Marx also clearly separates the new-key area into different functions. The *Seitensatz* provides a contrast to the *Hauptsatz* while the *Schlußsatz* provides appendices that close the form.[79] These clearly expressed details of Marx's view of the exposition remained in the general conception of sonata form until the twentieth century.

Nineteenth-Century Writings on Sonata Form after A. B. Marx

In her dissertation, "Concepts of Musical Form in the Nineteenth Century with Special Reference to A. B. Marx and Sonata Form," Moyer examines the post-Marx writings of Richter (1852), Lobe (1850–67), Widmann (1862), von Dommer (1865), Reissmann (1865–66), Bussler (1878), Skuhersky (1879), Jadassohn (1885), and

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[78] Moyer, "Concepts of Musical Form in the Nineteenth Century," 112. A. B. Marx, *Kompositionslehre,* 1st ed., vol. 2, 499–500.

[79] This is one point at which nothing extra should be read into Marx's choice of the term *Satz* for each of these areas. Burnham points out that "Marx uses the word *Satz* to denote a coherent musical utterance at any level of musical form: a phrase, a theme, or an entire movement." Burnham, *Musical Form in the Age of Beethoven*, 14.

Riemann (1889).[80] She claims that "in the period from Marx to Riemann we find no radical changes in the approach to musical analysis, or in the textbook layout of the treatises."[81] Thus, the authors she reviews still recognize a four-part division of the exposition. These four parts correspond to today's view of the exposition: primary theme, transition, subordinate theme, and closing theme. However, their terminology varies; table 1.2 summarizes the vocabulary selected eighteenth- and nineteenth-century theorists use to describe the subordinate theme.

Table 1.2: Terminological summary

Theorist	Term for subordinate theme	Term for closing theme
Galeazzi	Characteristic Passage + Cadential Period	Coda
Reicha	*Seconde idée mere*	*Idées accessoires*
Birnbach	*Der zweite Gedanke*	*Koda*
Czerny	*Mittelsatz*	*Schlußsatz*
Marx	*Seitensatz*	*Schlußsatz*
Lobe	*Gesangsgruppe*	*Schlußgruppe*
Richter	*Zweite Hauptgedanke*	*Schlußsatz*
Widmann	*Mittelsatz*	*Schlußsatz*
Von Dommer	*Zweites Thema*	*Schlußgruppe*
Riemann	*Zweites Thema*	*Schlußglied*

For example, Lobe (1850–67) claims "c. Der erste Teil hat in der Regel folgende vier. 1. Themagruppe 2. Übergangsgruppe 3. Gesangsgruppe 4.

[80] Ernst Friedrich Richter, *Die Grundzüge zur musikalischen Setzkunst und ihre Analyse* (Leipzig: Georg Wigand, 1852); Johann Christian Lobe, *Lehrbuch der musikalischen Komposition*, 4 vols. (Leipzig: Breitkopf & Härtel, 1850–57); Benedict Widmann, *Formenlehre der Instrumentalmusik* (Leipzig, 1862); Arrey von Dommer, ed., *H. Ch. Koch's Musikalisches Lexicon* (Heidelberg, 1865); August Reissmann, *Lehrbuch der musikalischen Komposition* (Berlin: Guttentag, 1865–66); Ludwig Bussler, *Musikalische Formenlehre in 33 Aufgaben* (1878; 4th ed. Berlin: Habel, 1920); Franz Skuhersky, *Die musikalischen Formen* (Prague: Mikulas & Knapp, 1879); Saloman Jadassohn, *Die Formen in den Werken der Tonkunst* (Leipzig: Kistner, 1885), Hugo Riemann, *Grundriss der Kompositionslehre* (1889, 3rd ed. Leipzig: Hesse, 1905).

[81] Moyer, "Concepts of Musical Form in the Nineteenth Century," 126.

Schlußgruppe."[82] Interestingly, in his analysis of Beethoven's String Quartet op. 18, no. 2, Lobe locates, in both the exposition and the recapitulation, the beginning of the *Schlußgruppe* at the deceptive cadence of the subordinate theme;[83] traditional modern-day analysis identifies closing themes as beginning only after a perfect authentic cadence in the new key.

Ernst Friedrich Richter (1808–79), a German theorist, teacher, and composer, produced possibly the first treatise to deal exclusively with musical form, *Die Grundzüge zur musikalischen Setzkunst und ihre Analyse*. In this treatise, a particularly interesting detail arises in Richter's choice of terms. Richter describes the exposition as consisting of four *Periodgruppen*: "Erste Periodgruppe, erster Hauptgedanke, zweite, oder Verbindungs-Übergangsperioden, dritte, enthält den zweiten Hauptgedanker, vierte oder Schlußsatz."[84] In a footnote, Moyer provides the following analysis:

> Richter uses three different expressions for the main sections of the form: *Periodgruppe*, *Hauptgedanke*, and *Satz*. *Periodgruppe* simply designates a section consisting of several periods; *Hauptgedanke* refers to the thematic–melodic contents of the two most important period groups in the tonic and the dominant; *Satz* refers to a shorter, thematically less significant section (e.g. *Schlußsatz*, *Verbindungsatz*).[85]

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[82] Lobe, *Lehrbuch der musikalischen Komposition*, 314–15; Moyer, "Concepts of Musical Form in the Nineteenth Century," 154–5.

[83] Lobe, *Lehrbuch der musikalischen Komposition,* 317, 321, 325; Moyer, "Concepts of Musical Form in the Nineteenth Century," appendix V, 265–70.

[84] Moyer, "Concepts of Musical Form in the Nineteenth Century," 163; Richter, *Die Grundzüge*, 27.

[85] Moyer, "Concepts of Musical Form in the Nineteenth Century," 163.

This interpretation suggests that Richter does not consider the closing section of the exposition to be of the same importance as the sections containing the primary and subordinate themes. A similar interpretation could be applied to Czerny: by calling the subordinate theme *Mittelsatz* and closing the exposition with a *Schlußsatz* he might imply equal formal weight for the primary, subordinate, and closing themes.

Unfortunately, Richter is inconsistent about the way he uses the term "Satz." In his analysis of the Mozart's Piano Sonata in F Major, K. 533, mvt. 1, he uses several terms, including *Mittelsatz*, to refer to the subordinate theme.[86] This remarkable exposition delays the closing group (m. 89), which consists of codettas, through several dramatic techniques. Richter's statement on the closing group is as follows:

> Der Schlußsatz zeigt sich hier nach dem ausgeführten Mittelsatz um so kürzer. Er enthält keine Perioden, nur kurze Sätze von drei, zwei, und vier Takten, die sich wiederholen und stets mit vollkommener Schlußcadenz endigen.[87]

Richter does not use the term *Mittelsatz* anywhere else in his analysis. Previously, refers to the subordinate theme as "zweite Hauptbestandtheil" and "Gruppe." This inconsistency in his choice of terms means that Moyer reads too much into Richter's choice of terms. Richter's "Mittelsatz" contains four periods and his "Schlußsatz" none; therefore, the term "Satz" can refer to a wide variety of formal units.

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[86] Richter, *Die Grundzüge*, 28–37; Moyer, "Concepts of Musical Form in the Nineteenth Century," appendix VI, 271–84.

[87] Richter, *Die Grundzüge*, 32; Moyer, "Concepts of Musical Form in the Nineteenth Century," 276. "The *Schlußsatz* appears after the completed *Mittelsatz*, but is much shorter. It contains no periods, only short *Sätze* of three, two, and four bars, which are repeated and continue to close with complete authentic cadences."

Benedict Widmann (1820–1910) also uses particularly interesting terminology. He parses the exposition into "(a) *Thema*, oder erster Hauptgedanke; (b) Präparation; (c) Mittelsatz oder zweiter Hauptgedanke in der V; (d) Schlußsatz in der V... ."[88] Widmann clearly describes each of these formal areas in his analysis of Mozart's Sonata in F Major, K. 547a.[89] The exposition has much in common with the previous F major Mozart sonata in that both evade the first new-key perfect authentic cadence several times before embarking on the closing section. When the closing section finally arrives, it consists only of short cadence-affirming gestures. Widmann identifies the *Mittelsatz* (m. 32) and the *Schlußsatz* (m. 64). In particular, in the *Schlußsatz* the

> erste Bassfigur ist dem Basse dem Präparation und die Figur in der Melodie der letzten Periode des Mittelsatzes entlehnt; die Wiederholungen in diesem Sätze werden dem Schüler selbst klar sein. Der Schlußsatz hat die grösste Lebendigkeit, ..."[90]

This analysis shows that Widmann's use of the term *Satz* is similar to A. B. Marx's usage—it does not have to correspond to my definition of theme. However, his conception, which is similar to Czerny's, of the subordinate theme as the *Mittelsatz*

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[88] Widmann, *Formenlehre*, 63. Moyer, "Concepts of Musical Form in the Nineteenth Century," 174.

[89] Widmann, *Formenlehre*, 67ff. Moyer, "Concepts of Musical Form in the Nineteenth Century," Appendix VII, 282–4.

[90] Moyer, "Concepts of Musical Form in the Nineteenth Century," 284; Widmann, *Formenlehre*, 69. In particular, in the *Schlußsatz* the "first bass figure is borrowed from the transition's bass and the figure of the *Mittelsatz*'s last period. The repetitions in this *Satz* will be clear to the student himself. The closing section has the utmost liveliness... ."

between the *Thema* and *Schlußsatz* leaves the door open to entertaining the possibility of more than one new-key theme.

Table 1.3: Arrey von Dommer's conception of the exposition

Hauptthemagruppe	Übergang	Zweites Thema	Schlußgruppe
Hauptgedanke des ganzes Satzes (kurzes Zwischenspiel). Wiederholung des Hauptthema [The *Hauptgedanke* of the entire movement (short intermediate passage). Repetition of the main theme.]	Überleitung zum zweiten Thema: aus kürzeren Sätzen entwickelt. Neue, oder dem Hauptthema entlehnte Motive [Connecting passage between the two themes: develops from shorter *Sätzen*. New motives, or ones borrowed from the main theme.]	Kürzerer, an Inhalt und Form dem Hauptthema untergeordneter Nebengedanke. Einheitlicher Contrast. Einfacher Periodenbau. [Shorter *Nebengedanke*, subordinate to the main theme in content and form. Consistently contrasting. Simple phrase construction.]	Verschieden gebildete Perioden und Sätze. Ganz oder theilweise neue Motive. Verengerte Periodenbildung nach dem Schluße hin. [Variously constructed periods and *Sätze*. Completely or partly new motives. Phrases become shorter and shorter toward the close.]
Herrschaft der Tonika. Leitereigene durchgehender Modulation [Under the rule of the tonic. Passing diatonic modulation.]	Unmittelbare oder durchgehende Modulation von der Tonart der Ersten zu der des zweiten Thema. [Immediate or a gradual move toward modulation from the key of the first to that of the second theme.]	In Dur: Dominant; in Moll: Paralleltonart [In major: dominant; in minor: parallel major.]	Periodencadenzen und Tonschluß auf der Tonart des zweiten Thema [Phrase endings and cadences in the key of the second theme.]

Arrey von Dommer's view takes the middle ground between Richter's view of the closing group as consisting of small *Sätze* and Czerny's view of the closing group

being equal in importance to the subordinate, or middle, group. Von Dommer describes the *Schlußgruppe* as "Verschieden gebildete Perioden und Sätze. Ganz oder theilweise neue Motive. Verengerte Periodenbildung nach dem Schluße hin."[91] He emphasizes that each theme is a group of periods. Table 1.3 reproduces his table in the *Lexicon.*[92]

Finally, in Hugo Riemann's (1849–1919) treatment of larger musical forms, he develops the A–B–A principle ("Hauptgedanke–Nebengedanke–Hauptgedanke") to describe several levels of a form. By changing the contents of each of the three parts, he deals with formal units from the level of phrase to that of sonata form. Furthermore, he relates it to his metrical principles: "The A–B–A principle Riemann sees as an extension of the heavy–light–heavy type (within the measure) as it appeared when the upbeat was omitted."[93] He does not focus on the details of the exposition. However, one can see in his labeling of the exposition's sections that he understands the closing group to be less important than the primary and subordinate groups. His four parts to the exposition are "(a) erstes Thema; (b) Zwischenglied; (c) zweites Thema; and (d) Schlußglied."[94]

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[91] Von Dommer, *Lexicon*, 783; Moyer, "Concepts of Musical Form in the Nineteenth Century," 181.

[92] Von Dommer, *Lexicon*, 783.

[93] Riemann, *Grundriss*, 116; Moyer, "Concepts of Musical Form in the Nineteenth Century," 204.

[94] From Moyer, "Concepts of Musical Form in the Nineteenth Century," 205, figure 7, which summarizes Riemann's systemization of the larger forms.

Selected Twentieth-Century Approaches

During the twentieth century, the method of defining sonata form returned in large part to the prevailing late-eighteenth century view, switching from a thematically based form to a harmonically based one. According to James Hepokoski,

> The twentieth century was marked by a long and distinguished tradition of resisting thematic labels and textbook encapsulations of sonata-form procedures. Characteristically, the dismissal was made on two interrelated grounds, one observational, the second aesthetic and/or ideological. According to the first, sonata procedures circa 1800 were more flexible and variable than any existing textbook descriptions had suggested—especially those quick digests foisted upon undergraduates and popularized in the middlebrow commentary on the standard repertory. According to the second, master composers concerned with the demands of art—as opposed to formula—knew better than to fall prey to stereotyped formal patterns (in which, therefore, we as analysts ought not to shackle them).[95]

Hepokoski defines four trends of approaches to sonata form in the twentieth century: Rosen's work; the motivic analysis of Schoenberg, Réti, and Keller; a historical–rhetorical approach such as Ratner's; and Schenkerian analysis.[96] While Hepokoski recognizes that these views are distinguished, he appears to find them unsatisfying. Resisting textbook labels, returning to a more harmonically based definition of sonata form, and recognizing the variety of ways that the "great" composers worked through sonata forms creates a problem for interpreters of these works: how can one generalize a process without overusing labels and still capture the variety of treatments?

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[95] James Hepokoski, "Beyond the Sonata Principle," *Journal of the American Musicological Society* 55 (2002): 97.

[96] Hepokoski "Beyond the Sonata Principle," 92.

Hepokoski suggests that the concept of the "sonata principle" was put forth to address all of these needs.[97] This principle claims that any important musical material occurring outside the tonic key must be associated with the home key before the work closes. Typically, the association is accomplished by restating the non-tonic material from the exposition in the tonic during the recapitulation. However, other methods of associating non-tonic material with the tonic include restatement in the tonic within the development or coda. Hepokoski highlights James Webster's use of the sonata principle in his well-received analysis of Haydn's Symphony No. 45 in F-sharp Minor.[98] The first movement's D-major episode within the development section is never restated in the tonic key of F-sharp minor. Webster claims that the F-sharp major ending of the symphony fulfills the sonata principle because the major-mode ending connects the D-major material from the first movement's development with the fourth movement's closing key of F-sharp major.[99] The implicit nature of the recapitulation of the D-major developmental episode is an example of why Hepokoski revisits the sonata principle: it allows an analyst to "sweep aside the need to assess the 'meaning' of potentially puzzling thematic arrangements, variants, expansion, reorderings, or omissions in the second half of sonata form movements."[100]

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[97] The "sonata principle" was developed by Edward T. Cone in *Musical Form and Musical Performance* (New York: Norton, 1968).

[98] James Webster, *Haydn's "Farewell" Symphony and the Idea of Classical Style: Through-Composition and Cyclic Integration in His Instrumental Music* (Cambridge: Cambridge University Press, 1991), 39–45, 73–112.

[99] Webster, *Haydn's "Farewell" Symphony*, 112. See also Hepokoski's discussion in "Beyond the Sonata Principle," 106–07.

[100] Hepokoski, "Beyond the Sonata Principle," 100.

Before embarking on my exploration of multiple new-key themes, which is heavily influenced by James Hepokoski and Warren Darcy's Sonata Theory, I will briefly examine how the five twentieth-century approaches—adding Tovey to the four that Hepokoski identifies—deal with multiple new-key themes.

RATNER

Leonard Ratner views sonata form as a "harmonic plan, organized by periods and colored by rich thematic content."[101] This understanding of sonata form acknowledges both the Classic Era theorists' two-part, harmonic understanding and the later three-part, thematic understanding. He points out that "the harmonic plan establishes a two-phase *basis* into which the *three-phase thematic superstructure* is interlocked."[102] However, he finds that the thematic view of sonata form for Classic music "betrays a lack of historical perspective."[103] His discussion of how musical material is used throughout the form points out the problems of considering sonata form a two-theme form. It also recognizes that viewing these themes as contrasting, gendered, and as oppositional forces is problematic.[104]

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[101] Leonard G. Ratner, *Classic Music: Expression, Form, and Style* (New York: Schirmer Books, 1980), 246.

[102] Ratner, *Classic Music*, 221.

[103] Leonard G. Ratner, "Harmonic Aspects of Classic Form," *Journal of the American Musicological Society* 2 (1949): 160.

[104] On the gendering of the second theme, see Scott Burnham, "A. B. Marx and the gendering of sonata form" in *Music Theory in the Age of Romanticism*, ed. Ian Bent (Cambridge, England and New York: CUP, 1996), 163–86. Burnham argues that Marx's understanding of the relation of *Hauptsatz* to *Seitensatz* parallels the complexity and subtleties of differences between masculine and feminine. Thus, by describing the second theme as feminine, Marx was acknowledging the intricate interaction of these two theme-types. "What Marx needed was a way of expressing

Ratner recognizes the presence of multiple new-key themes, but avoids discussing them in any detail. "While many sonata forms have two salient themes, often contrasted in style, many others contain but one main theme, and still others contain three, four, or more."[105] However, he never expands on his recognition of the possibility of additional new-key themes. His conception of the new-key area could easily lead to a classification of new-key themes as subordinate or closing; Ratner divides his harmonically based understanding of the exposition's new-key area into two phases: establishment and close.[106] Themes occurring in Ratner's establishment phase would be subordinate themes, and those occurring in his close phase would be closing. However, he does not discuss the contents of this second phase, and, therefore, does not broach the topic of closing themes.

Ratner's avoidance of the closing-theme concept in his discussions continues throughout his four full analyses of sonata forms. Two of the movements (Mozart, Quintet in E-flat Major, K. 614, mvt. 1, and Haydn's Sonata in E-flat Major, Hob. XVI:52, mvt. 1) only have codetta-like structures at their close.[107] The third

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the interdependence of two themes (or theme groups) which together form a balanced whole. ... Marx's metaphor of gendered themes is a poetic attempt to address this complexity. It has the characteristic economy of metaphor, matching an imposing set of conditions with one more or less succinct image. As such, Marx's gendering of themes does not represent an apriori assumption about sonata form—it serves instead primarily as a kind of covering metaphor for the uniquely ramified theoretical relation of *Hauptsatz* and *Seitensatz* that he was at pains to convey for so many pages of his composition treatise." 183.

[105] Ratner, *Classic Music*, 218.

[106] Ratner, *Classic Music*, 224–5. Ratner's dividing point tends to be the first perfect authentic cadence in the new-key area.

[107] Ratner, *Classic Music*, 412–16.

movement of the Haydn sonata, however, does have a closing theme. Although Ratner supplies the "closing section" of the exposition as a musical example, his main point for reproducing this part of the exposition is to highlight the repeated tone that acts as a non-transposed motive throughout the movement.[108]

Ratner chooses the first movement of Beethoven's Quartet in F Major, op. 59, no. 1, for the final sonata-form analysis of his book. Ratner makes the following interesting observation: "by 1800 the presence of a lyric *middle* theme in a sonata or symphony movement had been fairly well established."[109] Ratner focuses only on outstanding details of this work, and therefore does not address the diversity of thematic material in this broadly constructed exposition.[110] I find this omission particularly curious; in the introduction to this analysis, Ratner makes special mention of a "middle theme." However, he does not explore this theme or explain his choice of the term "middle theme" in his analysis.

TOVEY

Similar to Ratner, the writings of Donald Francis Tovey (1875–1940) represent one of the earliest returns to a harmonic view of sonata form, which Tovey views as a binary form. Tovey frequently expresses his frustration with the terms binary and ternary. "Our pundits would make musical terminology less misleading if they would kindly find Greek or Latin names, not longer than the forms themselves, that should express 'form-with-an-incomplete-first-part' on the one hand, and 'form-with-a-complete-

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[108] Ratner, *Classic Music*, 418–21.

[109] Ratner, *Classic Music*, 422.

[110] Ratner, *Classic Music*, 422–35.

first-part' on the other."[111] For Tovey, the harmonies of a melodic ABA pattern cause it to be binary or ternary: the first A section will not end on the tonic in a binary form, and it will end on the tonic in a ternary form. Since the first A section of sonata form—the exposition—is harmonically open, Tovey argues for a two-part form. Tovey's binary conception of sonata form and his implicit differentiation of the terms theme, paragraph, and group reflect his finely nuanced understanding of sonata form.

Tovey consistently expresses dissatisfaction with the view that the listener should expect a standard sequence of events in the exposition such as primary theme, second theme, and closing theme.

> Some students begin their analysis of a sonata by glancing through it to see "where the Second Subject comes" and where other less unfortunately named sections begin. This is evidently not the way to read a story. The listener has no business even to know that there is such a thing as a "Second Subject" until he hears it.[112]

Furthermore, he develops his own terminology to refer to the parts of sonata form. In particular, by the time he writes his *Companion to Beethoven's Pianoforte Sonatas* in 1931, Tovey adopts the terms first group and second group, which he finds less offensive than the prevailing terms first and second subject. His new terms leave "Haydn free to build both groups out of the same theme, and Spohr free to turn out his standard scheme of a noble first theme, ... a cantabile second theme, ... and a neat

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[111] Tovey, *The Forms of Music* (Cleveland and New York: Meridian Books, 1956), 209.

[112] Donald Francis Tovey, *A Companion to Beethoven's Pianoforte Sonatas* (New York: AMS Press Inc., 1931), 1.

cadence-theme derived from the opening."[113] These broad terms correspond to William Caplin's conception of the exposition: events in the tonic key belong to the primary theme group and events in the new key belong to the subordinate theme group.

In his *Essays in Musical Analysis*, Tovey comments on twenty-three of the thirty-six expositions in the present study.[114] In these essays, Tovey's conception of the relationship between "theme" and "subject," or what he eventually prefers to call "group," is clear in his discussion of six of Haydn's monothematic symphonies, Nos. 92, 94, 98, 99, 100, and 104. From my point of view, each of these expositions has at least two new-key themes: a subordinate theme and a closing theme. In his discussions, Tovey usually refers to all events in the new-key area as belonging to the "second subject."[115] For example, in Symphony No. 92, he states that the second subject "differed in material from the first only by introducing a single square little dance-tune."[116] His "second subject" includes two themes, the subordinate and closing themes. The main difference between the themes in the tonic key and those in the new key is the presence of a closing theme—Tovey's dance tune.

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[113] Tovey, *A Companion to Beethoven's Pianoforte Sonatas*, 2.

[114] Donald Francis Tovey, *Essays in Musical Analysis*, vol. 1 (London: Oxford University Press, 1935–39). Tovey addresses all nine Beethoven symphonies, Haydn's Symphonies Nos. 88, 92, 94, 95, 98, 99, 100, 101, 102, 103, 104, and Mozart's Symphonies Nos. 39, 40, and 41.

[115] The one exception to this occurs in his discussion of Symphony No. 94. Tovey uses the term second subject to refer only to the closing theme, stating "His [Haydn's] 'second subject', more regular than usual with him, begins with as unrestrained an outbreak of dance-rhythm as can be found in symphonic music, and subsides into one of Haydn's inimitable pastoral tunes." Tovey, *Essays in Musical Analysis*, vol. 1, 148.

[116] Tovey, *Essays in Musical Analysis*, vol. 1, 145.

His discussion of Symphony No. 104 sheds additional light on his conception of the term "theme" at this time. "This first theme does duty for the 'Second Subject' as well; and, of the two themes that are new in the second subject, the one is heard again in the course of something far more like a big Beethoven coda than a recapitulation, while the other I need not quote, as it never returns."[117] Tovey hears three "themes" in the second subject: the return of the primary theme and two new "themes." The first of these new "themes" is what I would consider the closing theme and the second is a codetta. Tovey uses the term "theme" to refer to a wide variety of musical units. In his discussion of monothematic symphonies alone, "theme" could refer to (1) the opening incipit of the primary theme that returns as the beginning of the subordinate theme; (2) a codetta; (3) a theme as I have defined it—that is, a complete musical idea characterized by a beginning, middle, and end.

Tovey also uses the terms "sentence" and "paragraph" without defining them. The relationship of the terms is made clear by their correlation to grammar: paragraphs are composed of sentences. Tovey's sentence corresponds to what I refer to as a phrase. Tovey uses the term in his discussion of Haydn's Symphony No. 99, where—in describing the recapitulation of the last new-key theme—he states "no doubt it is the extremely effective recurrence of such a tail-end as the last sentence of the whole movement which has made theorists talk of Haydn's neat symmetry."[118] One of Tovey's few uses of the term "paragraph" in the *Essays* occurs in his concluding overview of Haydn:

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[117] Tovey, *Essays in Musical Analysis*, vol. 1, 174.

[118] Tovey, *Essays in Musical Analysis*, vol. 1, 156.

> In order to make the most of his small space he tends to write his largest movements on a single theme, and has a wonderful art of building that theme into paragraphs of all manner of shapes and sizes without ever falling into any confusion between the manner of formal exposition, where that is wanted, and a free discursive development elsewhere.[119]

Here, Tovey refers to Haydn's penchant for monothematic symphonies. As I will show in chapter 2, in these symphonies two or three of the four formal areas (primary theme, transition, subordinate theme, and closing theme) are based on the opening four to twelve bars of the exposition. So far as the exposition is concerned, Tovey's use of the term paragraph corresponds to these formal divisions.

Tovey's resistance to prescribing a certain number of "themes" for sonata form reflects his implicit view of multiple new-key themes: there may be none and there may be many. He does not, of course, formalize these observations, but one terminological choice reflects his awareness of the different functions multiple "themes" could have. Every once in a while, Tovey uses a term starting with the word "cadence," such as "cadence-group," "cadence-phrase," or "cadence-theme," to refer to a group, phrase, or theme at the end of the "second subject." For example, when presenting an overview of Haydn's treatment of sonata form, Tovey states that Haydn's "second group often contains no new theme until the cadence-group at the end..."[120] Or, in his discussion of Beethoven's Symphony No. 6, he refers to "the cadence-theme of the second subject."[121] Finally, he uses the term "cadence-phrase"

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[119] Tovey, *Essays in Musical Analysis*, vol. 1, 165.

[120] Tovey, *The Forms of Music*, 217.

[121] Tovey, *Essays in Musical Analysis*, vol. 1, 47.

as follows: "Haydn's exposition groups itself clearly into ... the second group (*Seitensatz*) in F major, bars 27–40, with its cadence-phrase (*Schlußgruppe)* in bars 36–40."[122]

SCHOENBERG

Arnold Schoenberg's view of form allows for a wide range of new-key themes. Schoenberg views form as the "embodiment of a content, the 'outside' of the 'inside'."[123] A true artwork finds its own form. From this point of view, the number of new-key themes depends on the artwork's needs.

Schoenberg does make explicit comments about the contents of the exposition's new-key area, however. The main way that the "inside" of a composition creates formal articulations is through the organization of themes along Schoenberg's basic formal polarity of stable and loose formations. The effect of stable and loose formations on the form of a work can be seen in Schoenberg's definition of the subordinate theme.

> Contrast in mood, character, dynamics, rhythm, harmony, motive-forms and construction should distinguish main themes from subordinate and subordinate themes from each other. Aesthetically, the most important type of contrast is that of construction, since it is evidence of subordination.[124]

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[122] Tovey, *The Forms of Music*, 210. The Haydn piece under discussion is his Quartet in D Minor, op. 42, mvt. 4. The cadence-phrase consists of quick tonic-dominant alternations.

[123] Patricia Carpenter and Severine Neff, ed. and trans. Schoenberg, *The Musical Idea and the Logic, Technique, and Art of its Presentation* (New York: Columbia University Press, 1995), 45.

[124] Arnold Schoenberg, *Fundamentals of Musical Composition* (New York: St. Martin's Press, 1967), 183.

In his later discussion of sonata-allegro form, Schoenberg lists the ways the structure of the subordinate group can differ from that of the principal theme (or group).

> Some, at least, of the following features can be expected: loose structure, ... spinning out, ... evasion of definite cadences, ... [and] codettas, or even a definite closing theme.[125]

All of these listed strategies—including the presence of a closing theme—will loosen the construction of the subordinate theme group. Also, this quote shows that Schoenberg understood the closing theme to be a part of the subordinate theme group.

Schoenberg's conception of form indicates his belief in the organic nature of form.

> Above all, a piece of music is (perhaps always) an articulated organism whose organs, members, carry out specific functions in regard to both their own external effect and their mutual relations. ... Members are parts that are equipped, formed, and used for a special function. ... An organism can do without some of its members without ceasing to live. It merely becomes incapable of carrying out individual functions. But in the long run, no member is able to live if it is separated from its organism.[126]

Schoenberg's analysis of Mozart's Quartet in C Major, K. 465 demonstrates the connection between organicism and his view of sonata form by highlighting the motivic connections between sections and formal articulations based on stable and

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[125] Schoenberg, *Fundamentals of Musical Composition*, 204.

[126] Schoenberg, *The Musical Idea*, 121.

loose structures.[127] The primary theme presents the main ideas for the movement and is organized as a stable structure—a sentence. After a varied repetition of the primary theme, the transition enters. Since the function of this passage is "not only to get rid of the old but also to prepare for the new," its content accomplishes this. It begins with a segment based on the main theme that dissolves into new material and prepares for the entrance of the next theme by standing on its dominant. The loose organization of the transition also defines its function relative to the stable construction of the primary theme. This transition is an excellent example of Schoenberg's principle of developing variation.

> Music of the homophonic-melodic style of composition, that is, music with a main theme accompanied by and based on harmony, produces its material by, and I call it, *developing variation.* This means that variation of the features of a basic unit produces all the thematic formulations which provide for the fluency, contrasts, variety, logic and unity, on the one hand, and character, mood, expression, and every needed differentiation, on the other hand—thus elaborating the *idea* of the piece.[128]

Schoenberg's principle of developing variation ties the transition to the primary theme, making Mozart's movement organic. Furthermore, Schoenberg shows how aspects of the subordinate theme also have motivic connections to the primary theme. Although Schoenberg does not discuss the organization of the subordinate theme group, it too has a looser formation than the primary theme does.

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[127] Schoenberg's analysis is found in *The Musical Idea*, 252–5; Carpenter and Neff discuss it in their preface, *The Musical Idea*, 55–7.

[128] Arnold Schoenberg, "Bach" (1950), in *Style and Idea,* ed. Leonard Stein (New York: St. Martin's Press, 1975), 397. Reprinted in Carpenter and Neff, *The Musical Idea*, 366.

SCHENKER

Throughout his writings, Schenker recognizes that multiple new-key themes are a possibility. In *Harmony*, he does not explicitly lay out sonata form. However, in his analysis of part of Beethoven's String Quartet op. 95, he refers to subsidiary and closing sections.[129] Fifteen years later, when publishing *Der Tonwille*, he consistently uses the following terminology for the sections of the exposition: *erste Gedanke*, *zweite Gedanke*, and *Schlußgedanke*.[130] Each time he provides an analysis in *Tonwille*, he lays out the bar numbers that correspond to each of these formal areas. Sometimes the *Schlußgedanke* includes a closing theme (and codettas); in other cases, it contains only codettas.

The culmination of Schenker's conception of sonata form can be found in *Free Composition.* On multiple new-key themes, Schenker has the following to say:

> The composing-out of $\hat{2}$/V or $\hat{5}$/I—$\hat{3}$/III is designated by conventional theory as the second theme, the subordinate theme, the lyrical theme or the like; occasionally there is reference to two subordinate themes, to a new section, a dissolution of the subordinate theme, to one or even two closing themes. Once more I must emphasize that these are in every respect inadequate terms and concepts which afford no insight into sonata form.
>
> A fifth-progression in itself suffices for the prolongation of $\hat{2}$/V without necessarily involving a "lyrical" or "contrasting" theme. The chromatics brought about by the linear progression clearly point up the significance of such a prolongation for the sonata form. For this

[129] Heinrich Schenker, *Harmony*, trans. Elisabeth Mann Borgese, ed. and annotated by Oswald Jonas (Chicago: University of Chicago Press, 1954, republished 1980), 244.

[130] For example, see Schenker, *Der Tonwille,* issue 1 (Vienna: A. J. Gutmann, 1921), 27.

> reason the masters felt no qualms about restating some part of the diminution of the primary tone with the $\hat{2}$.[131]

> Moreover, the number of linear progressions is not limited. There may be two fifth-progressions, as in Fig. 47,2 or, as in Beethoven's Third Symphony, no less than four linear progressions, from $f^{2(3)}$ as the $\hat{2}$ (Jahrb. III). To designate the last of these progressions as "closing theme" would seem to be beside the point.[132]

Schenker's comments seem to suggest that analysts should use no thematic labels in sonata form, and instead should understand function from interpreting the middleground voice leading. However, this contrasts with his own use of sonata-form terms in his prose and in annotating his graphs.

His view of the role multiple new-key themes play in the voice leading could be teased out from his sonata-form graphs from *Meisterwerk* and *Free Composition.* In his chapter on form in the latter work, Schenker clearly states his view of the relationship between form and voice leading.

> The middleground and background also determine the definitive close of a composition. With the arrival of $\hat{1}$ the work is at an end. Whatever follows this can only be a reinforcement of the close—a coda—no matter what its extent or purpose may be. Therefore, those closing sections which, for reasons of obligatory register, hark back to the third or fifth, must also fall into the category of coda.[133]

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[131] Schenker, *Free Composition* (*Der freie Satz*), trans. and ed. Ernst Oster (New York, Longman, 1979), 135.

[132] Schenker, *Free Composition*, 136.

[133] Heinrich Schenker, *Free Composition*, 130.

Schlußgedanken that regain the third or fifth might present another working-out of a linear descent.[134] In such a situation, they tend to take the form of a closing theme. Even though there can be other descents in the middleground that appear after the first descent, they serve a different function in the overall form.

In his few graphs of pieces with multiple new-key themes, Schenker tends to take the first fifth-progression as "the" progression. Of the six published analyses that engage—albeit implicitly—this topic, three show the descent in the subordinate theme and do not even show the closing theme.[135] Schenker's graph of Beethoven's Piano Sonata op. 14, no. 2 shows two equally strong descents, one each for the subordinate and closing themes. However, the descents are in different registers—the subordinate theme's fifth-progression occurs in a higher register than the rest of the middleground voice leading. The final two analyses deal with unusual works: the first movements of Beethoven's Piano Sonata op. 57 and Symphony No. 3. His reading of the op. 57 movement is unusual in that Schenker reads the descent as occurring during the closing theme, which is a far more dramatic theme than the subordinate theme.

Schenker's well known analysis of Beethoven's Third Symphony contrasts with his usual interpretation of sonata expositions because Schenker interprets the last of the four fifth-progressions as "the" fifth-progression of the new-key area. The first fifth-progression is found in bars 45 through 57. However, this is "a progression

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[134] Schenker may be referring to movements that end on $\hat{3}$ or $\hat{5}$, rather than new *Kopftöne* of linear descents.

[135] See his graphs of Mozart's Symphony No. 40, mvts. 1 and 4 (*The Masterwork in Music* vol. 2, ed. and trans. William Drabkin (Cambridge: Cambridge University Press, 1996), 59–65, 91–6; Beethoven's Piano Sonata op. 10, no. 2, mvt. 1 (*Free Composition*, Figure 101,4); and Beethoven's Piano Sonata op. 27, no. 2, mvt. 3 (*Free Composition*, Figure 40,4).

which still ... belongs to the so-called modulation."[136] It begins on the dominant of the dominant and works out the fifth-progression through a series of unfolded sixths that descend by step. The end of the fifth-progression coincides with the arrival of the new-key area.[137]

Schenker does not address the function of the second fifth-progression but claims that the "sequence of scale steps alone makes the second descending fifth-progression more significant than the first."[138] This argument for the greater importance of the second fifth-progression is interesting because the melodic properties of the second fifth-progression are not very distinguished: it is a quick phrase ending consisting of eighth notes that fall from F6 to B♭5.[139] The true complexity is found in the regaining of $\hat{2}$ through an arpeggiation in the upper voice paired with a contrapuntally rich bass line. Schenker realizes this, and even suggests that the weak working-out of the descent leaves musical space for more phrases.

> And yet, in spite of all the undeniable enrichment of the bass counterpoint, the descending fifth-progression in bars 78–83, on which so much depends, remains without any kind of contrapuntal independence having been imparted to the individual notes. Here again the bare

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[136] Schenker, *The Masterwork in Music* 3, 15.

[137] Hepokoski and Darcy suggest that the music associated with this fifth-progression is a kind of S^0 theme; it occurs after the medial caesura but is not yet S mainly because it occurs over a prolonged dominant. James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late-Eighteenth-Century Sonata* (New York: Oxford University Press, forthcoming; Yale University and Oberlin College Conservatory: manuscript photocopy, 1999), 130.

[138] Schenker, *Masterwork* 3, 16.

[139] This system of pitch and register notation will be used throughout this study and refers to the one-octave ascending scale from middle C as C4–D4–E4–F4–G4–A4–B4–C5.

> leap of a fifth, V – I, is the salient feature. But the fact that in the course [of the movement] up to this point no *cantabile* diminution has come to the fore, whereas arpeggiations have predominated (their organic effect is ensured by the sequences and the bass progression), may perhaps be construed in programmatic terms. It is as if the arpeggiations expressed an initially careless impulse, a youthful insouciance and lack of inhibition. For this reason the second descending fifth-progression [like the first] still belongs to the modulatory section.[140]

Schenker claims that an understanding of the "so-called second subject"[141] depends on the third fifth-progression. Schenker attributes the brief length of this eight-bar passage to the method by which Beethoven achieves the character of "genuinely *cantabile* and expressive writing."[142] The use of repeated notes for diminution "can only be used over short distances, and for this reason an eight-bar phrase is sufficient to encompass ascent, neighbor note and descending fifth-progression."[143] It is the shortest working-out of all of the fifth-progressions, and Schenker considers it an antecedent phrase to a larger structure.

> Finally, even the descending fifth-progression in bars 90–1, the third fifth-progression of the movement ..., remains without any kind of contrapuntal independence having been imparted to the individual notes. Thus despite the tendency towards expressive and *cantabile* writing conveyed by the repeated notes, there is still an almost programmatic limitation of the bass prolongations at the crucial point. But it is this that moves the argument on. We suspect, indeed we know, that the bass of the descending fifth-progression must

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[140] Schenker, *Masterwork* 3, 17.

[141] Schenker, *Masterwork* 3, 17.

[142] Schenker, *Masterwork* 3, 18.

[143] Schenker, *Masterwork* 3, 18.

> finally receive its contrapuntal due, and are therefore all the more curious to know how matters will continue.[144]

The fourth fifth-progression corresponds to Schenker's "consequent" phrase of the second theme. In his long discussion, he suggests that this fifth-progression differs from the previous three because it the most contrapuntally worked out. Part of this greater complexity occurs because the first tone of the fifth-progression is supported by tonic, not dominant, harmony.

ROSEN

One of Rosen's main points in *Sonata Forms* and *The Classical Style* is that the exposition articulates the modulation "so that it takes on the character of a polarization or opposition."[145] Furthermore, "the number and variety of themes are not determinants of form, but even when only one theme is used, it must serve to articulate the polarization."[146] This opposition is created through tonal motion that can be accompanied by thematic presentation. Rosen claims that "sonata style ... was the first style to make [the dissonant section] the generating force of an entire movement."[147] By focusing on the result of the exposition—polarization or opposition—instead of the contents of the exposition, Rosen produces an understanding of sonata form flexible enough to encompass many differing expositional strategies.

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[144] Schenker, *Masterwork* 3, 18.

[145] Rosen, *Sonata Forms*, rev. ed. (New York and London: Norton, 1988), 229.

[146] Rosen, *Sonata Forms*, 242.

[147] Rosen, *Sonata Forms*, 229.

Although Rosen downplays the role of themes in the formal construction of the first part, he clearly shows awareness of the potential for multiple new-key themes.

> The first section, or *exposition*, has two *events*, a movement or modulation to the dominant, and a final cadence on the dominant. Each of these events is characterized by an increase in rhythmic animation. Because of the harmonic tension, the music in the dominant (or second group) generally moves harmonically faster than that in the tonic. These events are articulated by as many melodies as the composer sees fit to use.[148]

In his more detailed section on the exposition, Rosen states "a second theme (or even a third, fourth, fifth, sixth, and seventh theme) may occur anywhere in a sonata exposition."[149]

In addition, he identifies the closing theme as a distinct theme-type.

> The confirming final cadence is always set in relief thematically. If there is a new theme at the opening of the second group, then the opening theme or a variant may return as a cadence, framing the exposition. If the first theme is used again at the opening of the second group, then the cadence is almost always marked by a new theme (closing theme).[150]

While Rosen does not define the term "theme," his comments imply that he recognizes themes as distinct and larger formal units than codettas. For example, he states, "at the end of the exposition, in order to confirm the new harmonic center, a considerable amount of insistence upon the new-tonicized dominant is called for. At this point, the

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[148] Charles Rosen, *The Classical Style*, expanded edition (New York and London: Norton, 1997), 99.

[149] Rosen, *Sonata Forms*, 239.

[150] Rosen, *Sonata Forms*, 241.

most conventional material is often found, with cadential phrases repeated many times over."[151] By not equating cadential phrases with closing themes, it is clear that Rosen is saving the label "closing theme" for a specific type of musical unit.

Conclusion

This chapter has surveyed a selection of views on the existence of multiple new-key themes in general and closing themes in particular. Early eighteenth-century writers used rhetoric to explain the large-scale forms that arose from the connection of melodies; the presence of a closing group of ideas was a common part of a composition's rhetorical plan. Writings from the middle of the century show a more explicit interest in the construction of melody. As a codification of sonata form emerged, a four-part plan to the exposition became common and remained unchallenged until the twentieth century. However, the ambivalence—or lack of clarity—that many nineteenth-century theorists displayed over the contents of the exposition's new-key area is highlighted by their inconsistent choice of terms; while many seemed to view the closing group as having equal status to the first and second themes, none prescribe the contents of this formal area. Theorists of the twentieth century, in attempting to account for the wide-ranging compositional strategies composers—especially Haydn—could use in an exposition, returned to a more harmonically-based view of sonata form. In doing so, the thematic contents of an exposition tended to be downplayed.

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[151] Rosen, *Sonata Forms*, 242.

Finally, the theories of William Caplin, James Hepokoski, and Warren Darcy, which were discussed in the introduction, arise from these twentieth-century approaches to sonata form. The new paths that they provide—and that I will explore—enable a detailed discussion of the new-key area's thematic content. Specifically, Caplin's focus on the intrathematic structure of a theme allows for comparisons between new-key themes; Hepokoski and Darcy's focus on the exposition's punctuation structure allows for a clear-cut distinction between subordinate and closing themes.

Chapter 2

Intrathematic Organization and the Ordering of Multiple New-Key Themes

Introduction

Recent work by William Caplin on formal functions in the instrumental music of Haydn, Mozart, and Beethoven makes a significant contribution towards describing how composers achieve contrast between "first" and "second" themes in expositions.[1] Following the *Formenlehre* tradition, Caplin suggests that explanations of this contrast be discussed in terms of intrathematic organization rather than thematic material or character.

This relationship can also be explored within the context of the exposition's new-key area. When there is more than one theme in the new-key area, these themes often have contrasting character. Therefore, it follows that this contrast could be achieved through intrathematic organization. By applying aspects of Caplin's theory of formal functions to the new-key area, I will suggest that there is a typical ordering of new-key themes according to their intrathematic organization. I will also show that invoking the concept of closing theme enables a better description of the relationship between multiple new-key themes, one that is more complicated than Caplin's relationship between primary and subordinate theme.

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

Preliminaries

Caplin's theory of formal functions evolves from the *Formenlehre* tradition of Arnold Schoenberg and Erwin Ratz.[2] Their definition of primary and subordinate themes forms a cornerstone of Caplin's theory. Furthermore, the way that subordinate theme is defined in the theories of Schoenberg, Ratz, and Caplin results in an absence of a closing-theme concept altogether.

Tight-knit and Loose

Schoenberg and Ratz describe the subordinate theme as loosely organized in relation to a relatively tight-knit main theme.[3] Schoenberg defines primary themes as those that appear in the tonic-key area of the exposition, but before the transition begins. He is not specific about what heralds the beginning of the transition, but mentions that the structure of the primary-theme group "may vary widely—from a straightforward period or sentence, through something resembling a ternary form, to a group of distinct themes joined in the most subtle fashion."[4] Similarly, the subordinate-theme group encompasses all the themes in the new-key area. Schoenberg adds, "there are nearly always enough differentiated ideas here to justify the term 'group'."[5]

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[2] Arnold Schoenberg, *Fundamentals of Musical Composition*, ed. Gerald Strang and Leonard Stein (London: Faber & Faber, 1967); Erwin Ratz, *Einführung in die musikalische Formenlehre: Über Formprinzipien in den Inventionen und Fugen J.S. Bachs und ihre Bedeutung für die Kompositionstechnik Beethovens*, 3rd ed., enl. (Vienna: Universal, 1973).

[3] Schoenberg, *Fundamentals*, 184; Ratz, *Einführung*, 21.

[4] Schoenberg, *Fundamentals,* 202.

[5] Schoenberg, *Fundamentals,* 204.

Caplin uses the terms *tight-knit* and *loose* as metaphors for formal expressions. He defines tight-knit as "a formal organization characterized by the use of conventional theme-types, harmonic-tonal stability, symmetrical grouping structure, form-functional efficiency, and a unity of melodic-motivic material."[6] On the opposite end of the spectrum, he defines loose as "a formal organization characterized by the use of non-conventional thematic structures, harmonic-tonal instability, ... an asymmetrical grouping structure, phrase-structural extension and expansion, form-functional redundancy, and a diversity of melodic-motivic material."[7] Table 2.1 compares the musical factors that can create these types of structures.

Table 2.1: Tight-knit vs. loose organization

Tight-knit organization	*Loose organization*
Harmonic-tonal stability	Harmonic-tonal instability
Cadential confirmation	Evasion or omission of cadence
Unity of melodic-motivic material	Diversity of melodic-motivic material
Efficiency of functional expression	Inefficiency or ambiguity of functional expression
Symmetrical grouping structure	Asymmetrical grouping structure

Efficiency of functional expression refers to how clearly the music expresses intrathematic functions. Three of the most commonly encountered intrathematic functions are presentation, continuation, and cadential.[8] Presentation is an "initiating intrathematic function consisting of a unit (usually a basic idea) and its repetition, supported by a prolongation of tonic harmony." Continuation is a "medial

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[6] Caplin, *Classical Form*, 257 (Glossary definition).

[7] Caplin, *Classical Form*, 255 (Glossary definition).

[8] Caplin, *Classical Form,* 17.

intrathematic function that destabilizes the prevailing formal context by means of fragmentation, harmonic acceleration, faster surface rhythm, and harmonic sequence." Cadential is a "concluding intrathematic function that produces the requisite conditions for thematic closure. It is supported exclusively by one or more cadential progressions."[9]

The varying degrees to which a structure is tight-knit or loose make these terms useful for comparing the structures of two themes. For instance, a structure may strike one as very tight-knit, with the exception of one small internal repetition. While there is an element of loose organization within this theme, it remains tight-knit in an overall sense. Therefore, when two themes display tight-knit structures, one will often be loose in relation to the other. The characteristics given in table 2.1 can help the analyst pinpoint individual nuances of tight-knit or loose structures within a theme and among different themes. As techniques of composition, I will often refer to these characteristics as tightening and loosening techniques.

There is no scientific way of quantifying degrees of tightening or loosening; at times it is difficult to ascertain which theme is more tight-knit or loose. Caplin appears to be comfortable with this ambiguity: "In some situations, it is not possible to characterize the individual themes making up a group as more or less loose in relation to one another. They simply contain a different set of loosening techniques."[10] For example, it is difficult to decide which would be looser: a theme with tight-knit harmonic stability and a loose grouping structure or a theme with loose harmonic

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[9] Caplin, *Classical Form,* 253, 254, 256 (Glossary definitions).

[10] Caplin, *Classical Form*, 121.

instability and a tight-knit grouping structure. When a situation arises in which it is difficult to tell which theme is more tight-knit, I will point to the musical factors that—for me—make one theme more tight-knit than the other.

Caplin designates the sentence, period, and small ternary—all of which have tight-knit structures—as the three most important theme-types of classical instrumental music.[11] Small ternary forms are rare in first-movement sonata-form expositions, which tend to contain sentences and periods. A sentence is characterized by its opening, which consists of the statement of a two-bar basic idea and its immediate repetition. These four bars fulfill presentation function and, in tight-knit forms, are followed by four additional bars that provide the intrathematic functions of continuation and cadence. I refer to each of these intrathematic functions as a *phase* of the phrase.[12] In a tight-knit sentence, the length of the presentation phase equals the combined length of the continuation and cadential phases. Additionally, continuation and cadential phases often occupy two bars each. This leads to an overall proportion

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[11] Caplin, *Classical Form*, 9. Caplin's introduction to these theme-types is found on pp. 9–15, and he explores them in depth in Part II: Tight-Knit Themes, especially pp. 35–58 and 71–86. His small ternary form is synonymous with a small-scale, rounded binary form (p. 71).

[12] My choice of the term *phase* results from differences between Caplin's and my definitions of *phrase*. Caplin's phrase is basically a four-bar unit. Therefore, his eight-bar tight-knit themes tend to be made up of two phrases; for example, he describes a sentence as being made up of a presentation phrase and a continuation phrase. While Caplin recognizes that presentation, continuation, and cadential are three different functions, his length-based definition of phrase does not allow him to describe themes in terms of three phrases, presentation, continuation, and cadential. He chooses to combine the two latter functions into the same phrase because they tend to occupy four bars of an eight-bar sentence. My term, phase, refers to the section of music that accomplishes each of Caplin's three intrathematic functions. Caplin discusses the phrases of a sentence in *Classical Form*, 11, 35–48; see especially pp. 40–41 for a rationale of the term *continuation phrase*.

of 2:1:1 for the three phases of a tight-knit sentence; the four-bar presentation phase is twice as long as the continuation and cadential phases, each of which occupies two bars. This proportion differs from the melodic-based proportions usually associated with a sentence of 1:1:2, which corresponds to a two-bar basic idea, its repetition, and the ensuing four-bar drive to the cadence.

A tight-knit period also divides an eight-bar musical unit into two smaller four-bar units. Two phrases, antecedent and consequent, characterize it; the antecedent phrase ends with a weaker cadence than the consequent. Parallel periods—those with antecedent and consequent phrases that begin with similar melodic material—portray characteristics of a sentence because the two-bar basic idea that opens the antecedent phrase returns as the first two bars of the consequent phrase. Unlike a sentence, however, the basic idea is not repeated until the beginning of the consequent, the fifth bar.

Tight-knit versions of these theme-types adhere closely to these descriptions. According to Schoenberg, Ratz, and Caplin, primary themes, usually the most memorable and oft-repeated melodies, tend to have a tight-knit intrathematic organization. Symmetrical phrase groupings and harmonic-tonal stability allow these themes to leave a lasting impression on the listener. On the other hand, composers often apply loosening techniques to subordinate themes. These additions usually cause the theme to grow in length, and the loose characteristics from the right-hand column of table 2.1 become striking features of the musical surface. While Schoenberg, Ratz, and Caplin's generalization about the comparative structures of themes holds true for the relationship between the main theme and the *first*

subordinate theme, it becomes complicated when there are multiple subordinate themes.[13]

The Closing-Theme Concept

Caplin's *Formenlehre* does not distinguish between subordinate and closing themes. He defines a theme as "a unit consisting of a conventional set of initiating, medial, and ending intrathematic functions. It must close with a cadence."[14] The only units he recognizes in a "closing section" are codettas. He makes his stance on the closing theme clear at the end of the chapter on subordinate themes:

> In light of the categories established in this study, what is traditionally called a closing theme can most often be identified as either a true subordinate theme (usually the last of a group) or a collection of codettas following the subordinate theme. Indeed, it is not normally possible to identify a specific theme-type that should be considered a closing theme, as opposed to a subordinate theme. For this reason, the notion of a specific closing "theme" is not adopted here; rather, the term *closing section* is used more specifically to label a group of codettas....[15]

For Caplin, the new-key area is divided into a section that contains themes and a closing section that contains codettas. The boundary between these two sections is the perfect authentic cadence—PAC—that closes the last new-key theme.

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[13] This use of "subordinate theme" refers to the way Schoenberg, Ratz, and Caplin define the term. All future uses of the term will take into account the differences between subordinate and closing themes.

[14] Caplin, *Classical Form,* 257 (Glossary).

[15] Caplin, *Classical Form*, 122 (emphasis in original).

Scholars from Koch to Caplin discuss various orderings of cadences for the exposition (although Koch certainly did not use sonata-form terminology), and all agree that achieving a PAC in the new key is the exposition's main tonal goal.[16] Understanding all themes in the new-key area as subordinate themes downplays the different functions these themes can have in terms of whether or not the tonal goal of the exposition has been realized.

Caplin's closing section will always contain only codettas. This view is, of course, consistent with his theory. His definition of subordinate themes and primary themes depends on differences in structure—this is a defining aspect of his research. Themes that analysts have traditionally considered closing themes do not have a structure clearly distinguishable from that of a subordinate or primary theme. Therefore, there is no room in his theory for a third theme-type.

Yet I would argue that Caplin's theory would benefit from the concept of closing themes in order to explain subordinate themes that are more tight-knit than the primary theme. Caplin points out that when there are multiple subordinate themes, one of them may be a tight-knit theme-type—a defining characteristic of a primary theme. His rationalization of this contradiction is logical: "But the general principle relating main and subordinate themes is sustained if the entire subordinate-theme group, rather than any one theme, is taken into account when comparing the relative

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[16] Heinrich Christoph Koch, *Introductory Essay on Composition: The Mechanical Rules of Melody, Sections 3 and 4*, trans. Nancy Kovaleff Baker (New Haven, Conn.: Yale University Press, 1983); Caplin, *Classical Form*, 197–203. The discussion in *Classical Form* is expanded in William Caplin, "The Classical Sonata Exposition: Cadential Goals and Form-Functional Plans," *Tijdschrift voor Muziektheorie* 6 (2001): 195–209.

degree of tight-knit or loose organization with respect to the main theme (or main theme group)."[17]

Throughout this study, my discussions of new-key themes will take into account their function as defined by their placement relative to the exposition's tonal goal. Distinguishing a closing theme from a subordinate theme depends solely on the placement of the theme within the cadential structure of the exposition. The strongest way of confirming the new-key area is through a PAC in the new key. According to James Hepokoski and Warren Darcy,

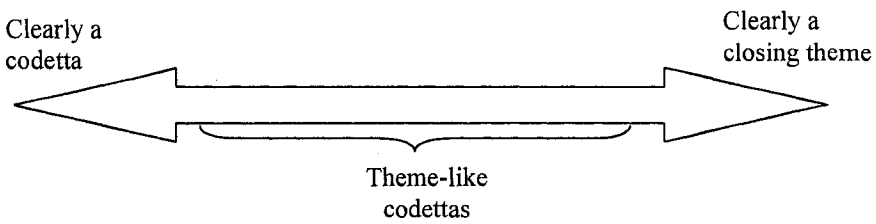
> S [the subordinate theme] normally ends with a V:PAC—usually the first satisfactory PAC in the new key. Its role—an extremely important one—is to cadence firmly in the new key, thus completing the tonal motion from the tonic to dominant and accomplishing what we term "essential expositional closure" ("the EEC").[18]

[17] Caplin, *Classical Form*, 99.

[18] James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late-Eighteenth-Century Sonata* (New York: Oxford University Press, forthcoming; Departments of Music Theory, Yale University and Oberlin College Conservatory, 1999, photocopy), 9.

Therefore, once the first satisfactory PAC in the new-key area has been identified, all subsequent material belongs to the closing zone (C zone).[19] A closing theme—that is, a theme found in the closing zone—has a different function than a subordinate theme because it is no longer part of the drive towards the essential expositional closure (EEC).

Figure 2.1: Continuum of differing musical ideas in the closing zone



The closing zone can contain a wide variety of formal units, ranging from short codettas to full-fledged themes. The contents of this area impact the number of new-key themes, and therefore affect the amount of melodic-motivic material presented in the exposition. Thus, identifying the difference between codettas and themes is necessary step before embarking on this study. Part of the difficulty of defining closing themes engages pinpointing the difference between codettas and closing

[19] Zone terminology originates with Hepokoski and Darcy's research. It relieves the burden of equating formal function with the existence of a theme. The closing zone contains the musical material between the EEC and the actual end of the exposition. There are several important exceptions to the generalization that the first PAC in the new key closes the subordinate-theme zone. Most notable is the case, occurring frequently in Haydn's non-monothematic expositions, in which the subordinate theme is repeated. This repetition causes the second PAC in the new key to close the S zone. Slightly more complex is the situation in which the material following the first PAC in the new key is strongly based on S; this causes the S zone to remain open and the next PAC in the new key will close the S zone. Further discussion can be found in Hepokoski and Darcy, *Elements of Sonata Theory*, "EEC Deferrals: Exceptions to the 'First PAC Rule'," 112–23.

themes. The distinction between a closing theme and a codetta is often hazy. Figure 2.1 provides an image that I hold of the continuum of possibilities for musical ideas in the closing zone. A clear closing theme will feature characteristic rather than conventional material at its beginning. In general, if there is a distinct melodic quality to C's opening, it tends to fit into a sentence or period theme-type. Closing themes also tend to support linear progressions, usually a descent from $\hat{3}$ to $\hat{1}$ or $\hat{5}$ to $\hat{1}$ in the local key. Under these conditions, this musical idea is substantial enough to interact on a thematic level with S and receives discussion as a theme.[20]

A clear codetta will feature conventional material such as virtuosic scales, arpeggios, and reiterations of the cadence. Codettas also frequently contain a tonic pedal point, *forte* dynamic, and fast note values. While codettas can appear after any formal unit, including other codettas, they are most frequently encountered in the closing zone. At this point of the exposition, they typically display conventional gestures and harmonies that affirm the new tonic.[21]

Many cadences in the closing zone mark the end of a musical idea that cannot comfortably be labeled as either "codetta" or "theme," but instead lies somewhere in between these two paradigms. Owing to the expansive gray area between codettas and themes, I tend to include in my discussions of closing themes musical units that might be considered theme-like codettas.

Caplin's relatively brief discussion of multiple subordinate themes establishes a starting point for a discussion about the structures of multiple themes in an

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[20] Example 3.8 (p. 145) provides a classic example of a closing theme.

[21] Example 1.3 (p. 33) and example 3.14 (p. 166) provide classic examples of codettas.

exposition's new-key area.[22] "Frequently, however, one of the themes is distinctly more tight knit. This tight-knit theme often occurs in the first position within the group (especially in Mozart) but also may occupy a medial or final position."[23] In order to explore Caplin's suggestion, this chapter examines the simplest scenario for multiple new-key themes: one S and one C. Table 2.2 lists the ten expositions from this study that have one S and one C. These symphonies make up two-thirds of this study's examples of expositions with multiple new-key themes. The remaining five expositions, which are discussed in chapter 3, have multiple new-key themes, but not one S and one C.

A survey of the ten expositions with exactly one S and one C suggests that one cannot predict which new-key theme is more tight-knit. Table 2.2 describes the relationship between S and C's structures from a tight-knit and loose perspective. Four expositions have S themes that are more tight-knit than the corresponding C; four expositions have C themes that are more tight-knit than the corresponding S; and two expositions have S and C themes that are similarly constructed, thus making it difficult to label one theme as more tight-knit than the other. Table 2.2 does not address an important level of nuance: it does not account for the effect of having two loose themes, one of which is more tight-knit than the other, and two tight-knit themes, one of which is more tight-knit than the other. Observations that deal with this distinction

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[22] Owing to differences in our definitions of subordinate themes, Caplin's phrase "multiple subordinate themes" means the same thing as my phrase "multiple themes in the new-key area of the exposition."

[23] Caplin, *Classical Form*, 121.

will play a large role in each analysis and will lead to a nuanced view of the ordering of multiple new-key themes.

Table 2.2: Symphonies with one S and one C

Symphony	S is more tight-knit	C is more tight-knit	Difficult to tell
Haydn, No. 86			✓
Haydn, No. 91	✓		
Haydn, No. 92		✓	
Haydn, No. 98			✓
Haydn, No. 99		✓	
Haydn, No. 100		✓	
Haydn, No. 104	✓		
Mozart, No. 39	✓		
Mozart, No. 40	✓		
Beethoven, No. 4		✓	

Mozart Symphonies

Caplin's statement about the relative tightness or looseness of multiple subordinate themes cautiously implies that a distinctly tight-knit new-key theme tends to occur first while confidently pointing towards Mozart's style as an illustration of this relationship. Examination of the two Mozart symphony movements that clearly have one S and one C helps to explain why Caplin's observation might make sense. Both expositions have a tight-knit subordinate theme and share one additional similarity: their new-key themes are both surprisingly tight-knit—C is only slightly less tight-knit than S.

Mozart, Symphony No. 39

The closing theme of Symphony No. 39, shown in example 2.1, precariously straddles the gray area between a codetta and a closing theme.[24] In support of identifying it as a theme, it is structured as a sentence and is followed by its own codetta. In support of identifying it as a codetta, the basic idea of C uses closing rhetoric—it is unmelodic, chordally based, and features a *forte,* unvaried rhythm in fast notes.

The thematic material featured in C's cadential phase (bars 125–135) pulls this formal unit out of the gray area between "true" codetta and "true" C and into the closing theme category (see figure 2.1). Derived from a motive in the transition (bars 64–65, given as example 2.2), this characteristic material is developed to expand the cadential phase of this sentence from a prototypical two bars to the six bars implied on the surface of the music—from bar 125 to a hypothetical PAC in bar 130. The cadential phase actually occupies eleven bars because it is further embellished by a use of "one-more time" technique, a cadential strategy often used to expand themes in the new-key area.[25]

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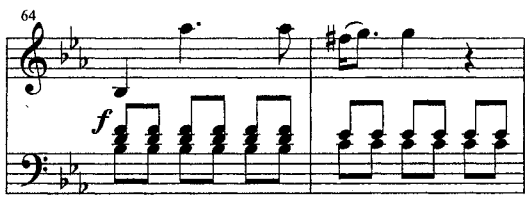
[24] All musical examples in this study are taken from first movements unless indicated otherwise.

[25] Janet Schmalfeldt, "Cadential Processes: The Evaded Cadence and the 'One More Time' Technique," *Journal of Musicological Research* 12 (1992): 1–52. This cadential evasion is a "genuine" evasion—rather than an elision or a deception—in terms of Schmalfeldt's classification of cadences because the cadential tonic does not arrive and the subsequent re-beginning is distinct. See her subsection "The Concept of Cadence: Eighteenth-Century Cadential Strategies," 10–15.

Example 2.1: Mozart, Symphony No. 39 in E-flat Major, C, bars 119–135

Example 2.2: Mozart, Symphony No. 39 in E-flat Major, TR motive, bars 64–65



In addition to using the "one more time" technique, this C features another common strategy for expanding the cadential phase: the "expanded cadential progression," labeled "E.C.P." in all examples where it occurs. Discussed at length in William Caplin's 1987 article, "The 'Expanded Cadential Progression': A Category for the Analysis of Classical Form," an expanded cadential progression involves the

expansion of cadential harmonies at the end of a theme—usually a new-key theme.[26] From Caplin's *Formenlehre* point of view, the cadential phase of a main theme—a tight-knit theme—should occupy two bars; the cadential phase of a new-key theme—a relatively loose theme—is commonly expanded.[27] The cadential progression that closes a theme typically consists of a first-inversion tonic chord, I^6, followed by a pre-dominant harmony, usually ii^6 or IV, and concludes with a root-position dominant and tonic. Caplin pays special attention to the presence of I^6 as an essential cadential harmony.

> ... one or more of the harmonies, including this initial I^6, can be expanded and embellished. Indeed, we will observe that the composer often uses the prominent arrival on a first-inversion tonic as a cue for the onset of an expanded cadential progression; in this respect, a I^6 frequently functions as a "conventionalized sign" for formal organization....[28]

Caplin's article supports recognizing the combination of cadential rhetoric and a prominent I^6 as a conventionalized sign for the onset of the cadential phase. As such, even though expanded cadential progressions are a loosening technique, they perform a tight-knit role: their presence clarifies formal function.

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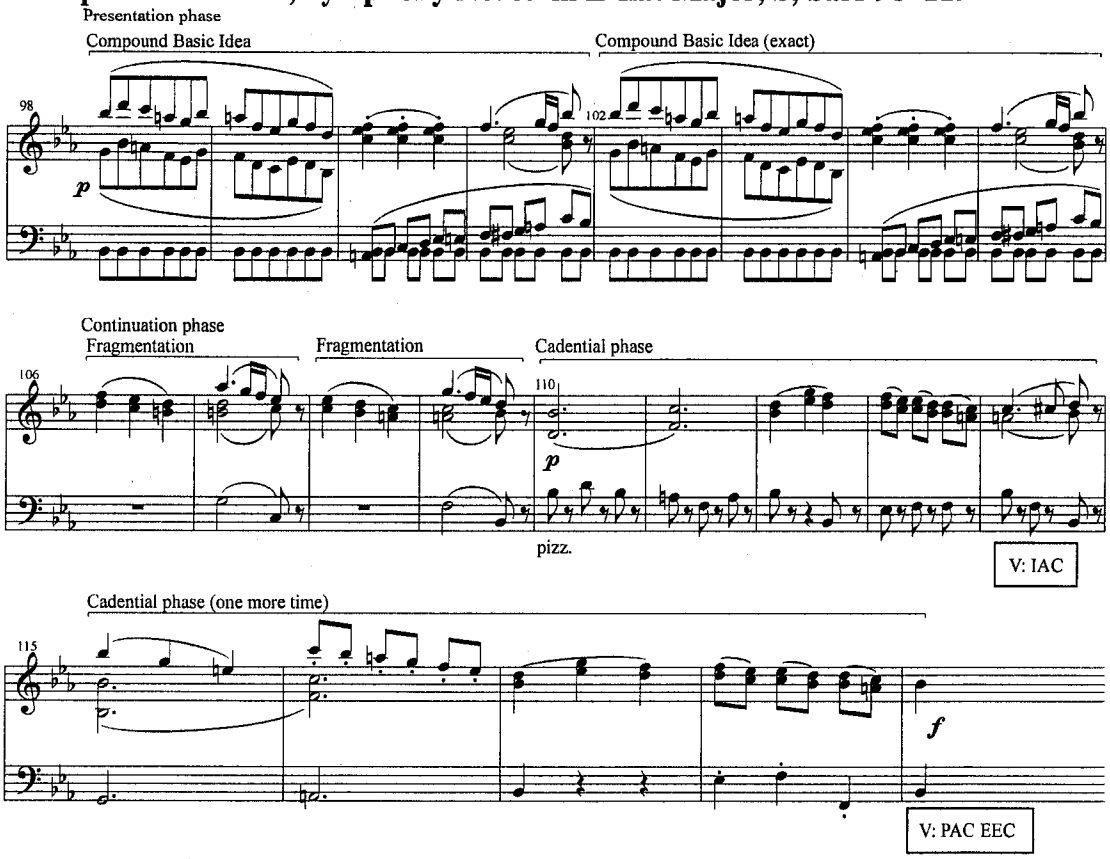
[26] William Caplin, "The 'Expanded Cadential Progression': A Category for the Analysis of Classical Form," *Journal of Musicological Research* 7 (1987): 215–57. Throughout this discussion, it is important to remember that Caplin does not recognize closing themes, such as the one in example 2.1, as a distinct category of theme. Caplin would consider each of my C a subordinate theme or a codetta.

[27] Caplin, "Expanded Cadential Progression," 216.

[28] Caplin, "Expanded Cadential Progression," 218.

In example 2.1 from Mozart's Symphony No. 39, the first harmony of the expanded cadential progression (bar 125) has the same bass note as a I^6 harmony, but instead functions as vii^{o6}_5/ii—a chord that shares two common tones, including its bass pitch, with the I^6 chord. The vii^{o6}_5/ii (substituting for I^6) and ii^6 harmonies are expanded to one bar each while the dominant chord is expanded to two bars, one for the cadential $\frac{6}{4}$ and one for its resolution. These expansions and the addition of an applied fully diminished seventh chord to the dominant increase the total number of bars in the cadential phase to an implicit six (bars 125–130) instead of the two bars expected in a tight-knit theme. Mozart does not allow the cadential dominant in bar 129 to resolve to a root-position tonic, however, instead choosing to repeat the cadential phase one more time. This second attempt lasts for six bars because the dominant is finally allowed to resolve to tonic. The expanded cadential progression provides the musical space necessary to effectively incorporate the motive from the transition, and the eleven bars spent on C's cadential phase raises its formal weight from a codetta to a theme.

Example 2.3: Mozart, Symphony No. 39 in E-flat Major, S, bars 98–119



The organization of C corresponds to the organization of S, shown in example 2.3. S, while occupying twenty-two bars of the musical surface, is derived from a sixteen-bar sentence in which its three phases are found in the tight-knit proportions of 2:1:1.[29] Overall, S's intrathematic organization is unusual because two of its phases use atypical rhetoric; the presentation phase has characteristics of a continuation phase, and the cadential phase has characteristics of a presentation phase.

[29] The five-bar cadential phase (bars 110–114) causes the basic phrase to have seventeen bars; however, the first two of these five bars might be understood (after Kirnberger) as an expansion of a single bar through a lengthening of note values; see William Rothstein, *Phrase Rhythm in Tonal Music* (New York: Schirmer, 1989), 65–6. As mentioned earlier, these proportions refer to the proportions of the phases, not the typical proportion of 1:1:2 that refers to the return and development of a basic idea.

S begins with a four-bar compound basic idea that receives exact repetition.[30] It is similar to C's basic idea in that it is not particularly melodic. In fact, the unstable hemiola effect created by the three-fold repetition of a four-eighth-note figure is more characteristic of a continuation phase than a presentation phase. However, unlike C's two-bar basic idea, S's four-bar compound basic idea leaves room for a new contrasting motive in its second half.

S's continuation phase clearly fragments the basic idea, focusing solely on the motivic content of the second half. Fragmentation, a technique commonly used in the continuation phase, involves "a reduction in the length of the units in relation to the prevailing grouping structure."[31] In this example, the basic idea and its repetition establish a prevailing grouping structure of four-bar units. This concept has been formalized by Fred Lerdahl and Ray Jackendoff in their book, *A Generative Theory of Tonal Music*.[32] Their "Grouping Preference Rule No. 6" supports the analysis of a prevailing four-bar grouping structure: "Where two or more segments of the music can be construed as parallel, they preferably form parallel parts of groups."[33] The two-bar

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[30] A compound basic idea is a four-bar unit consisting of a basic idea followed by a contrasting idea. It usually prolongs tonic and does not end with a cadence. Caplin, *Classical Form*, 253 (Glossary definition).

[31] Caplin, *Classical Form*, 255 (Glossary definition). The definition implies that there does not have to be a melodic-motivic connection between the fragmented units and the preceding units.

[32] Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music* (Cambridge: MIT Press, 1983; second paperback printing, 1996).

[33] Lerdahl and Jackendoff, 51.

units found in the continuation phase halve the length of the prevailing grouping structure.

Finally, the cadential phase of S features the most melodic part of the theme and receives "one-more time" treatment.[34] This phase is set off from the rest of the theme by its stable root-position tonic beginning, change of accompaniment pattern, and new melodic character. Similar to C's cadential phase, S's has been expanded to more than twice its originally projected length. The four-bar basic idea that opens this sentence projects a sixteen-bar sentence containing a four-bar cadential phase. However, unlike C's cadential phase, which used both expanded cadential progressions and one-more-time treatment, S's cadential phase is already "naturally" longer than a typical tight-knit phase, nullifying the need for an expanded cadential progression to support the unusually melodic content. While cadential phases usually feature generic cadential gestures, the lyrical melody opening this cadential phase is made even more remarkable by the lack of lyricism elsewhere in this theme.

Both S and C follow the sequence of events shown in figure 2.2. The striking similarities are the indistinctiveness of the basic ideas and the expansion of the cadential phase through use of the one-more-time technique. Each of the three phases is clearer in S owing to the nearly "perfect" proportions and the presence of a distinct melodic motive in the basic idea. In Mozart's Symphony No. 39, S is the more tight-knit of the two themes in the new-key area. Therefore, the intrathematic organization

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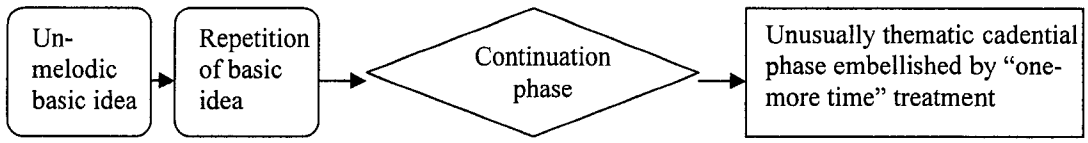
[34] While Schmalfeldt pairs evaded cadences—ones in which the final root-position tonic is avoided—with one-more time technique, this example clearly comes from the same rhetorical tradition despite realizing a root-position tonic at the imperfect authentic cadence. The sense of evasion comes from the melody's upward-resolving suspension through a chromatic passing tone.

of these new-key themes is in line with Caplin's suggestion that—particularly in Mozart—a tight-knit new-key theme tends to occur in the first position.

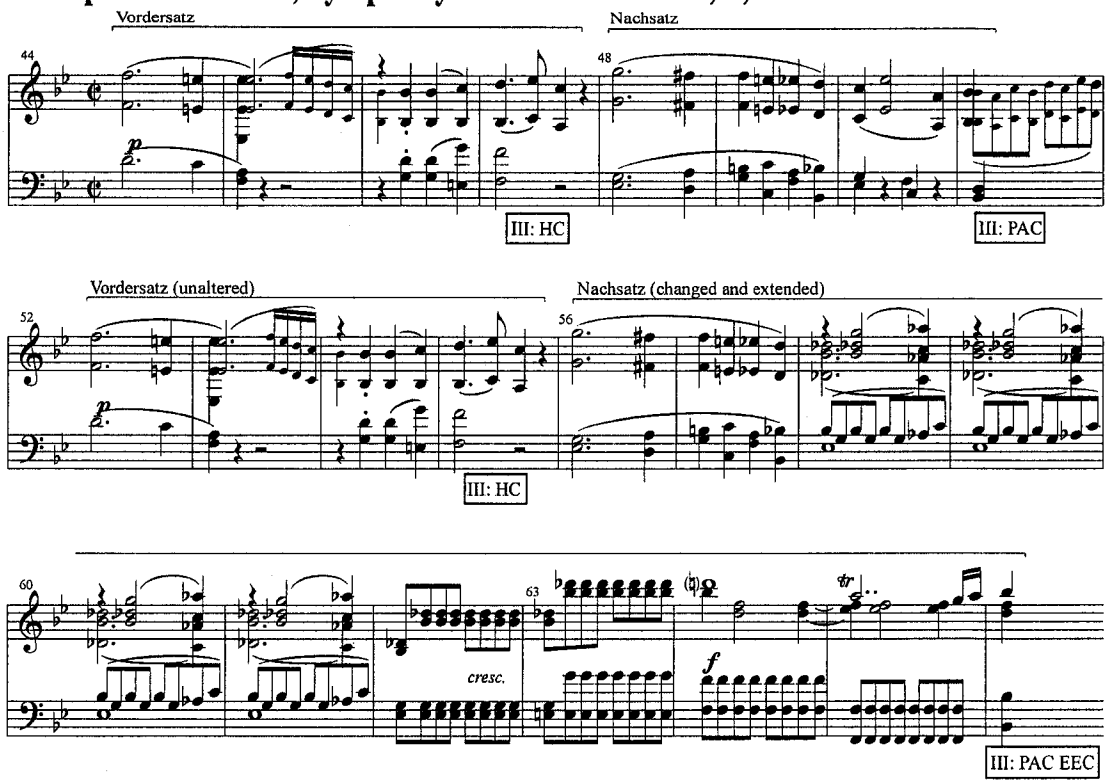
Figure 2.2: Parallel constructions of S and C in Mozart, Symphony No. 39



Mozart, Symphony No. 40

Of the ten expositions listed in table 2.2, only Mozart's Symphony No. 40 contains a repetition of S. Repetitions—exact or expanded—of S are common; a tight-knit S is often too brief to sufficiently establish the new-key area. By contrast, S themes in monothematic expositions are rarely repeated. All seven symphonies by Haydn in table 2.2 are monothematic. When Haydn bases S on the primary theme, he does not repeat it, thus avoiding an oversaturation of the musical surface with the first motive of the exposition. In the five expositions in which Haydn does repeat S (Nos. 83, 89, 90, 93, and 95), none have multiple themes in the new-key area. When S is the only theme in the new-key area, it makes sense that it be repeated; without repetition, the new-key area would not be sufficiently emphasized in terms of both thematic material and length to balance the primary-key area. With the exception of Symphony No. 93 these repetitions are modestly embellished, if at all. Symphony No. 93 is the only one that features dramatic expansions of S in its repetition.

Example 2.4: Mozart, Symphony No. 40 in G Minor, S, bars 44–66



Repetition of new-key themes seems necessary in the exposition of Mozart's Symphony No. 40 in order to create a sense of balance between the exposition's two key areas. The primary-theme and transition zones of this exposition last for forty-three bars. However, S is an eight-bar period, and C a nine-bar sentence. Both S and C receive a repetition and a codetta, which helps the new-key area balance the length of the first two zones of the exposition. These repetitions and additions bring the total number of bars in the exposition to 99, within which the last two zones occupy a little more than half the total. Example 2.4 provides S without its codetta.

S's first iteration takes the form of a classically tight-knit period. Its eight bars feel brief owing, in part, to the fact that the pulse now feels twice as fast as it did at the opening of the movement; a quicker half-note pulse now replaces the whole-note pulse

established in the primary theme. The first PAC in the new-key area dovetails with a quick linking gesture that leads back to the re-presentation of the *Vordersatz* beginning in bar 52.[35] The *Nachsatz* (bars 56–66) continues to be faithful to the original for the fifth and sixth bars of the theme, but then it goes awry. The subdominant of the cadential gesture is greatly expanded by a slow mutation from an apparent dominant seventh of A-flat major in bars 58 through 62 to an applied fully diminished seventh chord to the dominant in bar 63. Most of the additional time is spent sitting on the E♭ bass pedal and embellishing it with neighboring $\frac{\flat 7}{5} - \frac{6}{4}$ motions, which provide the sense of tonicizing A-flat major and imply that the descending-fifths progression went one fifth too far. The instability produced by the non-diatonic seventh, D♭, is heightened with a crescendo. When the PAC finally arrives, it is overlapped by a seven-bar codetta that ultimately returns the dynamic to *piano* and thus sets the stage for C.

Similar to Mozart's Symphony No. 39, the new-key themes in Symphony No. 40 are both fairly tight-knit, and C is slightly less tight-knit than S. C, given in Example 2.5, is structured as a nine-bar sentence. The outer voices of the basic idea in

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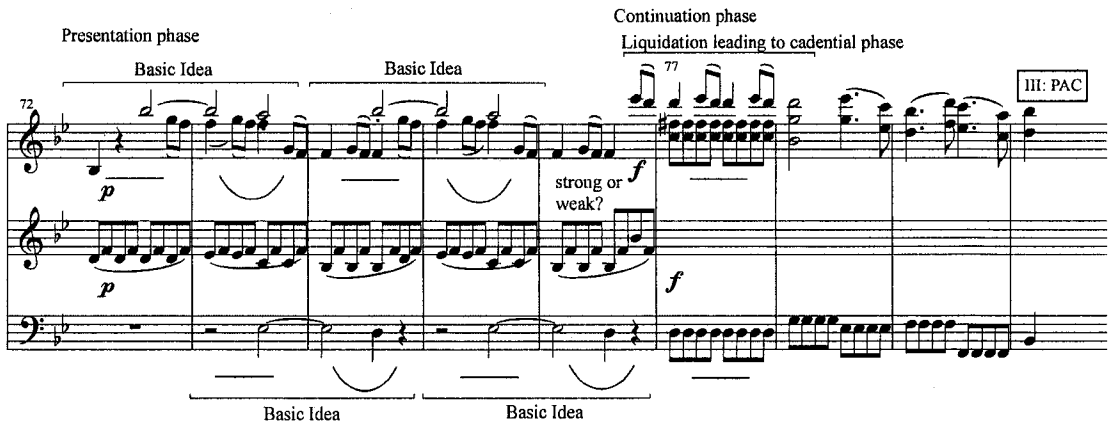
[35] This use of *Vordersatz* and *Nachsatz* is similar to William Rothstein's usage in *Phrase Rhythm in Tonal Music* (New York: Schirmer, 1989), 18. Rothstein saves the terms antecedent and consequent to refer to the parts of a parallel period and requires them to end with a half cadence and perfect authentic cadence, respectively. He uses *Vordersatz* and *Nachsatz* to refer to all other first and second parts, respectively, of a period. I broaden his definition by loosening the requirement of specific cadences for antecedents and consequents. In this study, the terms antecedent and consequent refer to the two parts of a *parallel* period, regardless of their cadences. *Vordersatz* and *Nachsatz* then apply to the two parts of a non-parallel period.

bars 72 through 74 feature the descending half-step motive that governs much of the movement's thematic material. In the continuation phase the rhythm of the primary theme's basic idea, which was one of the accompanimental figures in C's presentation phase, joins the outer voices' melody. Changes of dynamic and rhythm clarify the formal function of each of C's phases. In bars 80 through 88, which are not provided in example 2.5, Mozart repeats C without additional embellishment and follows the repetition's cadence with a series of brief codettas.

Example 2.5: Mozart Symphony No. 40 in G Minor, C, bars 72–80

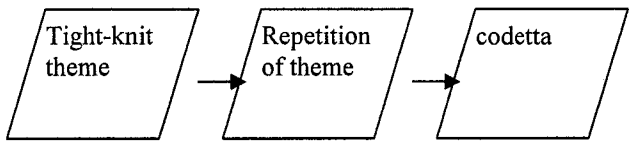


Even though both S and C are tight-knit themes, the unclear phrase rhythm of C's presentation phase creates a less tight-knit structure than S. Specifically, the imitation between the outer voices produces two conflicting hypermeters—levels of meter higher than the notated meter. Shown below these voices in example 2.5, the hypermetric analysis designates strong bars with a straight line and weak ones with a curved line. The regularly recurring basic ideas of C establish an alternation of strong and weak bars because of the exact repetition of the two-bar basic idea. The decision to provide parallel analyses to similar structures is discussed by Lerdahl and

Jackendoff. In their exploration of metrical analyses, Lerdahl and Jackendoff's first preference rule is "Where two or more groups or parts of groups can be construed as parallel, they preferably receive parallel metrical structure."[36] Following this guideline, I interpret the first bar of each basic idea similarly: a strong bar.

Since the imitation in the bass line follows the top line by only one bar, two conflicting strong–weak–strong–weak patterns occur. The five-bar length of the presentation phase is necessitated by the one-bar delay between the lower and upper voices' four-bar presentation phases. Additionally, the odd number of bars in C's presentation phase requires a reinterpretation of one bar in the top voice from strong to weak or vice versa in order for the *forte* onset of the continuation phase to be interpreted as a strong bar of the hypermeter.[37] These factors—conflicting hypermetrical analyses and necessary metric reinterpretation—combine to create a presentation phase that is a loosening agent in an otherwise tight-knit theme.

Figure 2.3: Parallel constructions of the S and C zones in Mozart, Symphony No. 40



Again, it is striking how the S zone and C zone are similarly organized. This time, however, the similarities occur on a higher level of the form. While in Symphony No. 39 the similarities engage the intrathematic organization of the two

[36] Lerdahl and Jackendoff, *Generative Theory of Tonal Music*, 75.

[37] Specifically, either bar 76 can be reinterpreted as weak instead of strong, or bar 77 can be reinterpreted as strong instead of weak. The point at which reinterpretation occurs depends on when the analyst/listener decides to interrupt the established hypermeter.

themes, in Symphony No. 40 the similarities engage the organization of the zones in which the themes occur. Figure 2.3 illustrates the similarities of the S and C zones of Mozart's Symphony No. 40. Even though these two Mozart symphonies deal with different issues of structure, they both feature tight-knit C themes that, nevertheless, have a looser intrathematic structure than the corresponding S.

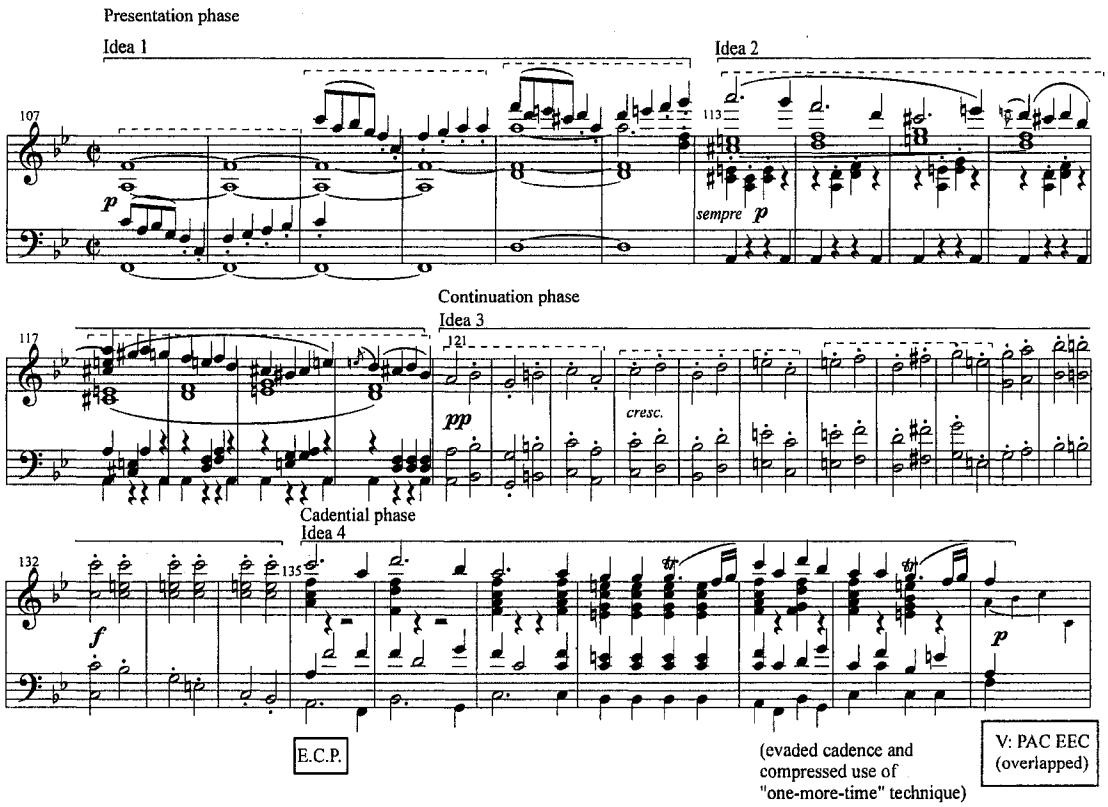
The C themes of both Symphony No. 39 and Symphony No. 40 exhibit many of the rhetorical qualities of a codetta. Mozart uses two common C-zone techniques: a *forte*, unmelodic idea appropriate for a codetta as the basic idea in Symphony No. 39 and motives from P in Symphony No. 40. I suspect the reason that Caplin expects many C themes to have looser organizations than their corresponding S is because many of C's basic ideas will exhibit closing rhetoric and thus may not lead to the tight-knit structure of a sentence or period. His observation—that when a new-key theme is tight-knit, it tends to be the first of multiple new-key themes—seems to hold true for these two symphonies. We can now add to this observation that both new-key themes can be tight-knit yet still exhibit a relationship in which one is more tight-knit than the other.

Beethoven, Symphony No. 4

Beethoven's Symphony No. 4 in B-flat Major uses themes with broad proportions. The extraordinary length of its primary-theme zone (P zone) sets the stage for future zones of the exposition to be equally long. The P zone consists of a seven-bar introduction and a twenty-three-bar parallel period that is extended for fifteen

additional bars over a tonic pedal.[38] Occupying forty-five bars of this symphony's exposition, the length of this zone dwarfs the corresponding lengths in Mozart's Symphonies Nos. 39 and 40, which had twenty-eight- and twenty-one-bar P zones, respectively. Balancing Beethoven's large P zone, the S zone is also longer than the S zones of Mozart's Symphonies Nos. 39 and 40, occupying thirty-five bars instead of twenty-two and twenty-nine bars, respectively.

Example 2.6: Beethoven, Symphony No. 4 in B-flat Major, S, bars 107–141



Unlike Mozart's S, the form of Beethoven's S, shown in example 2.6, does not fit easily into the categories of sentence or period. In fact, Hepokoski and Darcy note

[38] Owing to the contents of the first ending at the exposition's conclusion in Beethoven's Symphony No. 4, I take bar 36 as the beginning of the exposition and bar 43 as the beginning of P.

the common presence of modular S themes in Beethoven's symphonies. Modular themes contain several ideas, and only the last idea achieves a PAC.

> This is common in Beethoven, where strenuous striving within the S zone is common—as though accomplishing the deed of the EEC is a monumental or nearly impossible task. In one common Beethoven scenario—as in the first movement of the Fifth Symphony—S begins normally, more or less non-problematically, then runs into difficulties—represented by an ominous, murky, or threatening central module [often with notable diminished-seventh coloration]—and finally breaks through to a decisive cadential module that "heroically" attains the EEC.[39]

The S zone in Beethoven's Symphony No. 4 certainly fits this description. The four modules are clearly delineated by four distinct ideas, and the final module strives to achieve a PAC, only to have it overlapped by the C zone. Not only does the struggle to attain the EEC propel the S zone though its drawn-out continuation and cadential phases, but the denial of a satisfactorily *felt* PAC at its conclusion provides impetus for a long and heroic C zone.

The imitative entries in the woodwinds (bars 107, 109, and 111) introduce the first motive of S, which is neither developed nor fragmented. The theme then moves through several diverse ideas. However, each idea corresponds to one or more intrathematic functions. The second idea in S (bars 113–120), a lyrical four-bar melody scored for flute, is immediately repeated by the violins. Since this second idea presents a new, short melody and provides its exact repetition, it still belongs to the presentation phase of S. The harmonization of this second idea integrates a chromatic

[39] Hepokoski and Darcy, *Sonata Theory*, 132.

pitch, C♯, by expanding D minor's dominant, and C♯ must be removed from the musical surface before the theme can cadence in F major at the essential expositional close (EEC).

The third idea (bars 121–134) consists of a unison motion in the string sections that crawls through several keys—Hepokoski and Darcy's "ominous, murky, or threatening module." The loss of a clear hypermeter—and even a sense of the notated meter—is a result of a six-note pattern that is broken into three-note pairs. Each note of the pattern is a half note, and the division into three-note groups contradicts the prevailing meter. Lerdahl and Jackendoff's metrical preference rule 1 (Parallelism) suggests that every third note should receive parallel metrical analyses; the notated meter—*alla breve*—suggests that every other note receives parallel metrical analyses.[40] This conflict between the three-note groups and the notated meter is a device appropriate for the continuation phase, where characteristics established in the presentation phase tend to be broken down. After three iterations, the six-note pattern is liquidated, losing its contour and signaling the impending conclusion of continuation function. The increasing dynamic and expansion to three-voice harmony builds the intensity until it is released in S's triumphal fourth idea.

This final idea, which is cadential in nature, leads through an expanded cadential progression, repeated by means of an evaded cadence and one-more-time treatment that double times the approach to the cadence, to the EEC in bar 141. However, the *piano* entrance of C overlaps the expected *forte* cadence. The linkage

[40] Lerdahl and Jackendoff, *Generative Theory of Tonal Music*, 75.

between the two phrases is somewhat uncommon and has the effect of marring the EEC, thus opening up musical space for an extensive C zone.

Phrase overlap occurs when "the last note (or chord) of the first phrase acts simultaneously as the first note (or chord) of the second phrase."[41] While phrase overlap and dynamic contrasts are common techniques in sonata-form expositions, they do not tend to be combined at the junction between the EEC and C zone. For instance, each of the thirty-six 6 expositions in this study concludes with a closing zone. Twenty-six of these symphonies connect the EEC and C zone with phrase overlap, but only six of these (Haydn Symphonies Nos. 85, 92, 96, 98, 103 and Beethoven Symphony No. 4) also combine contrasting dynamics with the overlap. From a different point of view, sixteen symphonies in this study use contrasting dynamics between the EEC and the beginning of the C zone, but only six of them also feature phrase overlap.

Beethoven's Symphony No. 4 is one of four symphonies in which a *forte* EEC is overlapped by a *piano* C zone. While a listener can imagine a *piano* cadence being hidden behind the *forte* onset of the C zone, it is more difficult to imagine a *forte* cadence hiding behind a *piano* initiation of the C zone. Often when this dynamic pairing occurs there is a caesura, which is frequently filled in with accompanimental texture, before the C zone begins.[42] The combined effects of the intense build-up to

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[41] Rothstein, *Phrase Rhythm in Tonal Music*, 44.

[42] Clear examples of caesuras between the EEC and the C zone are found in Haydn's Symphonies No. 86, 87, and 94.

the EEC, phrase overlap, and contrasting dynamics create a setting in which a closing theme may seem necessary.

Owing to the broad nature of Beethoven's themes, the structures of this symphony's themes stand in a polar opposition to the Mozart themes previously discussed. In Beethoven's Symphony No. 4, even though C, given as example 2.7, is slightly more tight-knit than S, neither theme is particularly tight-knit. While S was an example of four different modules strung together to create a theme, C is an example of a loosened hybrid theme. Hybrid themes are Caplin's approach to classifying themes that do not clearly belong to one of the two fundamental theme-types of sentence or period but exhibit some features of each.[43] Usually the functions of the two halves characterize the themes. This C is best described as *compound basic idea + cadential.*[44] While this is not one of the four hybrid theme-types that Caplin discusses, it relates to his *compound basic idea + continuation.* The distinction between these two theme-types concerns the second half of C; it has very little continuation function and extensive cadential function. Therefore, *compound basic idea + cadential* is a more apt description of this hybrid theme.[45] Example 2.7

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[43] Caplin, *Classical Form,* 59–63.

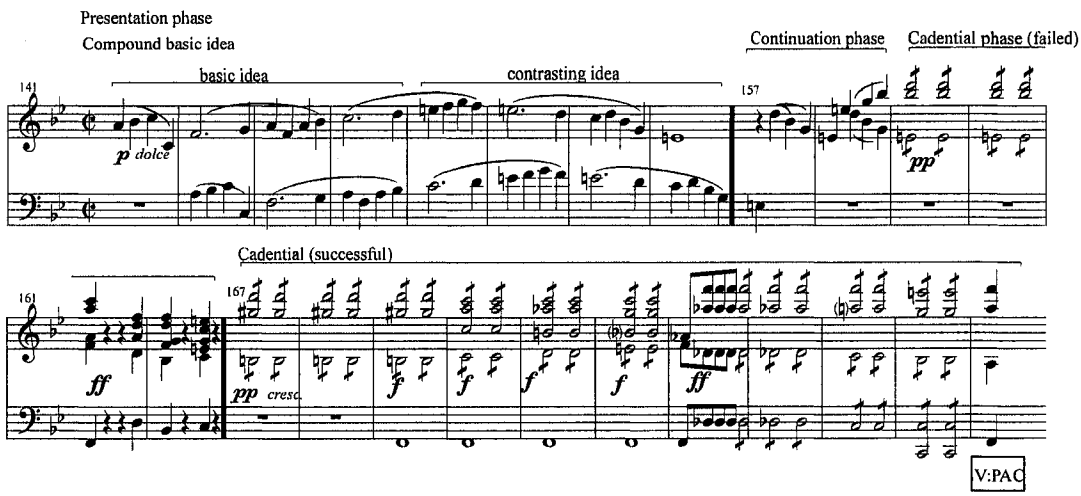
[44] A compound basic idea is similar to an antecedent phrase in that it is four bars long, but different in that it does not end with a half cadence. It tends to be divided into two equal parts, labeled basic idea and contrasting idea. It fulfills presentation function and tends to prolong tonic (although Caplin provides examples that clearly do not; see especially *Classical Form*, 62, ex. 5.8). Caplin introduces the term in *Classical Form*, 61.

[45] Perhaps *compound basic idea + cadential* is not one of Caplin's hybrid theme-types because his continuation phrase subsumes my continuation and cadential phases.

provides only the structural pieces of the hybrid theme—thickened barlines indicate places where internal repetitions have been omitted.

The compound basic idea of C is presented first in the clarinet and bassoon at a *piano* dynamic in a canon at the octave with entries separated by one measure (bars 141–148). This eight-bar theme is then re-presented in the full orchestra, again in a canon, but this time at a *forte* dynamic (not shown in example 2.7). After the repetition of the theme, a brief continuation phase occurs and the phrase attempts to achieve a cadence. The cadence is interrupted twice before it finally reaches its conclusion in bar 177.

Example 2.7: Beethoven, Symphony No. 4 in B-flat Major, C, selected measures from 141–177



The unusual degree of dissatisfaction produced by the overlapped EEC (example 2.6, bar 141) leaves room for C to take on a more tight-knit structure than S. While neither S nor C conforms to any of Caplin's main theme-types, both undergo the conventional set of initiating, medial, and ending intrathematic functions. The surprising diversity of melodic-motivic material in S represents the strongest factor for

deciding that S has a looser organization than C. Additionally, while both S and C experience ambiguity of functional expression, the two distinct melodic ideas in S's presentation phase cloud functional expression more than do the internal repetitions within C. Finally, S is slightly more harmonically unstable than C owing to idea 3, which winds its way through an ascent in unison staccato half notes.

The different types of loosening techniques used in each theme make it difficult to tell which of this exposition's two new-key themes is more tight-knit. Caplin's observation about the ordering of new-key themes does not apply, because it is restricted to expositions with a distinctly tight-knit theme. This exposition contrasts with the two Mozart expositions that contain two relatively tight-knit themes. Thus we can see how an exploration of intrathematic organization can provide an effective method for describing differences in compositional style.

Haydn Symphonies

The remaining seven symphonies of the ten that had exactly one S and one C are all monothematic symphonies by Haydn. I define a monothematic exposition as one in which the beginning of the subordinate theme is marked by the return of the primary theme in the new key. The amount of primary-theme material that is recycled in the subordinate theme varies greatly: sometimes only the opening two bars reappear; in other cases the entire theme returns.

This study encompasses ten monothematic symphonies, all composed by Haydn. Seven of these monothematic symphonies, which are listed in table 2.2 (p. 77), have one S and one C each. Of the three remaining monothematic symphonies,

two, Symphonies Nos. 85 and 86, are not listed in table 2.2 because they have no closing theme. Symphony No. 94, the remaining monothematic symphony, will be discussed in the next chapter as a symphony that has multiple themes in the new-key area, but not one S and one C. Overall, Haydn's monothematic symphonies do not support Caplin's suggestion that the most tight-knit theme occupies the first position in the new-key area. In fact, I propose that in monothematic symphonies, it is normative for S to have the loosest construction of the themes in the new-key area.

In monothematic symphonies, P's opening gestures provide a launching point for S, allowing it to refer back to P and yet explore new musical directions. Jan LaRue has included Haydn's treatment of monothematic expositions as examples of multistage variance, basing music on variants of variants.

> Most significant for Beethoven among Haydn's various techniques was the idea of basing much of the material for a movement on a single point of departure *[launching point]*. The term "monothematicism" does not adequately describe this technique, since it suggests limitation, the very opposite of the sense of boundless variety one experiences in the continual unfolding of Haydn's ideas. Haydn's sophisticated procedure evolves contrasting derivatives that give a polythematic effect (particularly when coordinated with key change and textural contrast) even though genetically related by the ingenuity of his seemingly limitless imagination.[46]

At times, the development after this launching point becomes so unstable that a listener may even question whether the transition zone has truly ended. The unstable nature of these S zones leaves room for a tight-knit C to solidify the new-key area

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[46] Jan LaRue, "Multistage Variance: Haydn's Legacy to Beethoven," *Journal of Musicology* 1 (1982): 265. See also, LaRue "A Haydn Specialty: Multistage Variance," in Eva Badura-Skoda, ed., *Joseph Haydn* (Munchen: Henle, 1986), 141–6.

from a thematic standpoint. As table 2.2 shows, three of these monothematic symphonies, Nos. 92, 99, and 100, have a C with an intrathematic organization more tight-knit than the corresponding S. In two other symphonies, Nos. 86 and 98, it is difficult to distinguish one theme as more tight-knit than the other because both S and C have loose structures. Finally, in two symphonies, Nos. 91 and 104, S has a more tight-knit construction than the corresponding C; in these non-normative cases, S is strikingly tight-knit for a monothematic symphony. My exploration of monothematic symphonies will first present one analysis of what I propose is a typical ordering of new-key themes in a monothematic exposition: one in which C is the most tight-knit theme in the new-key area. Then, the symphonies in which it is difficult to tell which theme is more tight-knit will be discussed. Finally, possible reasons for the unusual situation of S being the most tight-knit theme will be presented.

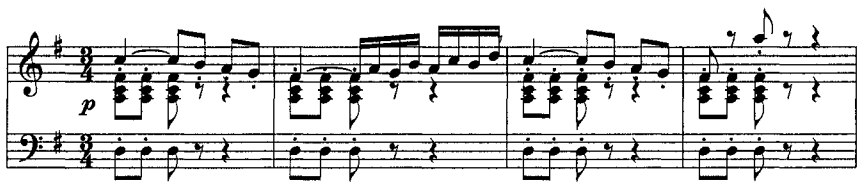
Haydn, Symphony No. 92

Haydn's Symphony No. 92 in G Major is a monothematic symphony in which the first three zones of the exposition are initiated with the same motto. Each statement of these four bars, given in example 2.8, remains unchanged throughout the movement and heralds the entrance of the exposition's main formal areas. These four bars are akin to a presentation phase for each theme, providing a basic idea and its repetition. However, these bars do not initiate a true sentence because the basic ideas prolong the dominant seventh, rather than the tonic.

Instability is a shared characteristic of all parts of this exposition. Supported solely by a dominant seventh harmony, the exposition's motto does not allow for a

harmonically stable beginning to any theme it initiates.[47] The material following these four bars varies, but is always introduced in *forte* sixteenth notes. Its transition-like rhetoric is *forte*, features short note values, and is unmelodic. Therefore, when P's half cadence is followed by a caesura, it seems as though the return of P's head motto heralds the onset of S. However, the head motto's return cannot be the beginning of S: not only is the motto still in the home key of G major, but it is followed by the same transition-like material that followed P. This parallel structure creates what Hepokoski and Darcy would call a "grand antecedent and parallel grand consequent relationship."[48] This parallel grand consequent eventually dissolves back into transition-zone rhetoric and arrives at a second caesura, a half cadence in the new key, in bar 56.

Example 2.8: Haydn, Symphony No. 92 in G Major, monothematic motto, bars 21–24



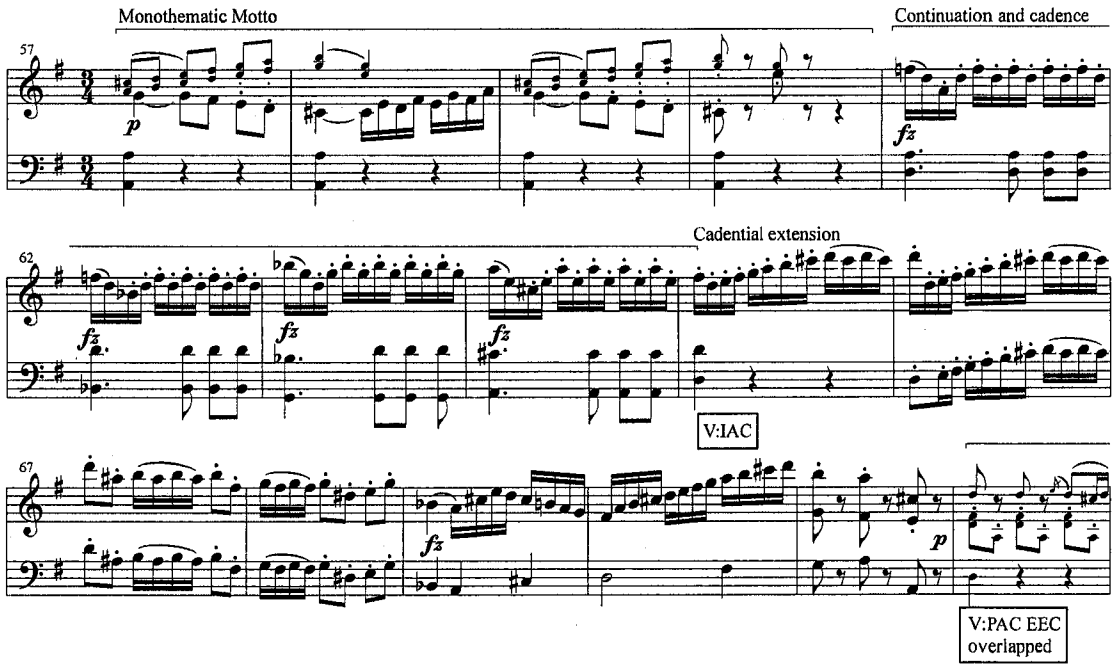
Aspects of S, shown in example 2.9, are tight-knit, but instability in the mode loosens the theme. S's beginning is similar to a relatively tight-knit sentence because

[47] Additionally, as Caplin notes, since P opens with a dominant prolongation, the development ends with an unusual chord, VII^{6}_{5}/V. Caplin, *Classical Form*, 141, ex. 10.1.

[48] Hepokoski and Darcy discuss this term in their "Medial Caesura" article, referring to one of the situations in which the medial caesura is declined. "Following a proposed I:HC MC, the music refuses to leave the tonic key (perhaps even restating P-material)." When the transition-zone takes on the structure of a parallel grand consequent, it is "marked by an incipit of P in the tonic… that soon dissolves into more normative TR rhetoric." See "Medial Caesura," 139.

the first nine bars exhibit roughly the proportions of a sentence. The opening two-bar motive is repeated, creating a potential four-bar presentation phase and projecting an overall length of eight bars. This projection is almost fulfilled when a second four-bar unit drives toward a cadence in the ninth bar. However, these nine bars could not actually be a sentence owing to the prolongation of the dominant during the potential presentation phase.

Example 2.9: Haydn, Symphony No. 92 in G Major, S, bars 57–72



Instability is expressed by the sudden shift into the parallel minor for the four bars following the motto's statement. The added high wind obbligato, which climbs up to a metrically accented $\hat{6}$ in bars 58 and 60, prepares the conflict between the diatonic and lowered $\hat{6}$ that arrives in bar 63. While the imperfect authentic cadence

in bar 65 quickly switches back into D major, the extension of the cadence in bars 65 through 72 suggests that the theme has not yet recovered from its D-minor outburst. Bar 69 features a second flattened $\hat{6}$, B♭, this time accented through metric placement, duration, and a *sforzando*. After this final intrusion of the parallel minor, the phrase finally achieves the EEC, a PAC in the new key (bar 72). While S could be seen as a well-proportioned sentence ending in an imperfect authentic cadence (bar 65), and followed by a codetta, the EEC's delay until bar 72 is a result of S's modal instability. The unconvincing conclusion of S's opening nine bars is balanced by the convincing conclusion of the extended cadential phase.[49]

C's brevity—it is based on a four-bar melody—complicates any decision to label it as a theme rather than a codetta. However, combined with its embellished repetition, the theme, shown in example 2.10, occupies eight bars of the musical surface and creates the effect of an eight-bar period. The melody of the first four bars ends on a PAC in bar 75 that is approached by a skip from $\hat{5}$ to $\hat{1}$. Labeling this cadence is made difficult by the shared register of the melody and accompaniment. In bar 75, $\hat{3}$, which belongs to the accompaniment, is the highest pitch and slightly weakens the cadence.

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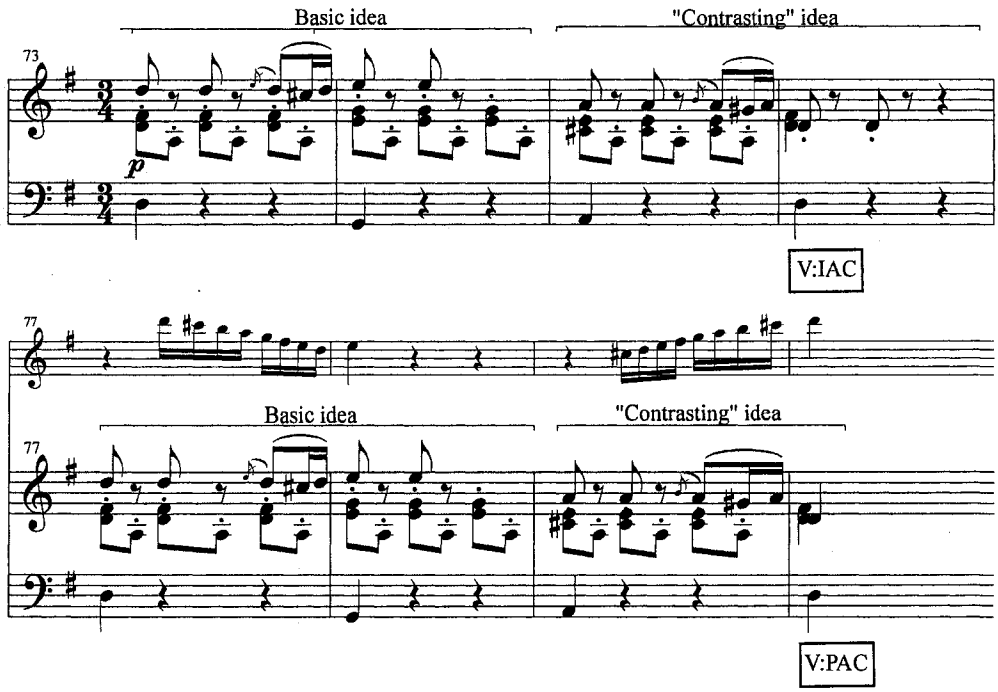
[49] An alternate interpretation could be that bars 61 through 65 are a tonic prolongation, dramatized by the use of the minor mode that then leads to another tonic prolongation in bars 65 through 70. The harmonic paths of bars 61–65 and 65–70 are similar: each features a descending bass arpeggiation en route to the dominant. The bass arpeggiation of bars 61–65 uses the minor mode while that of bars 65–70 uses the major mode. This similarity is disguised by the difference in texture and the hemiola in bars 67 and 68. Understanding bars 61–70 as tonic prolongations clarifies the location of the theme's cadential phase—bars 70 through 72.

Example 2.10: Haydn, Symphony No. 92 in G Major, C, bars 73–80



A flute obbligato line, stating scalar gestures spread over two beats, embellishes the repetition of the opening four-bar phrase. This addition results in the creation of a stronger cadence at the end of the repetition because the approach to $\hat{1}$ is conjunct, ascending through the leading tone, instead of disjunct. Additionally, the obbligato line's higher register clarifies and strengthens the implied PAC in bar 75. As a whole, these eight bars form a flawed period—flawed because the antecedent and consequent parts are almost identical and do not consist of a pairing of contrasting ideas.[50] However, the similarity in the beginnings of the four-bar units and the fact

[50] After the basic idea's statement, the latter halves of the antecedent and consequent phrases contain a contrasting idea. Ideally, the contrasting idea achieves its function through means of melodic-motivic contrast. However, it is more important that the basic idea and contrasting idea differ in their harmonic organization: the basic idea is a prolongation, and the contrasting idea is cadential. See Caplin, *Classical Form,* 49.

that the second cadence is stronger than the first support hearing these eight bars as a parallel period. Viewed as a period, this eight-bar phrase clearly has a tight-knit structure.

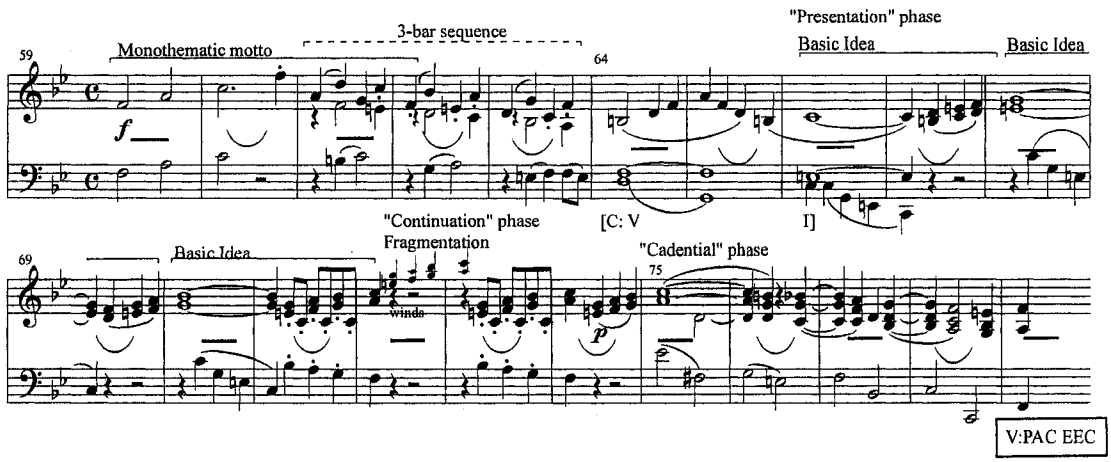
Additional support for recognizing these eight bars as a closing theme comes from the substantial attention they receive in the development. Whichever label, "pair of codettas" or "C," one places on these bars, they exhibit a more tight-knit construction than the subordinate theme does. The melody has a squareness and simplicity to it that cannot be found in the subordinate theme or anywhere else in the exposition. In fact, C provides a balance to the turbulence of S, in effect confirming the new key after S questioned it. In this exposition, a distinctly tight-knit theme, C, occurs in the second position; this placement contradicts Caplin's suggestion that when there is a distinctly tight-knit theme, it occurs in the first position. A distinctly tight-knit theme also occurs in the second position in Haydn Symphonies Nos. 99 and 100. I view a loose S followed by a tight-knit C as the normative ordering for a monothematic exposition's new-key area.

Haydn, Symphonies Nos. 86 and 98

In the discussion of Haydn's Symphony No. 92 I implied that it is reasonable to expect a monothematic symphony's S to have loose construction. Even though in table 2.2 it appears as though Haydn's Symphonies Nos. 86 and 98 are aberrations to my hypothesis that C is the most tight-knit theme in the new-key area of a monothematic symphony, these two symphonies begin as expected: the reappearance of P-material at the beginning of S enables the composer to develop S in a different direction than P.

These expositions depart from my suggested norm because C has a construction roughly equal in its looseness to that of S. The way that each new-key theme uses a different set of loosening techniques makes it difficult to tell which theme is more tight-knit. This leads to a situation in which there is no distinctly tight-knit theme in the new-key area. My analysis of Haydn's Symphony No. 98 in B-flat Major will demonstrate the similarly loose organization of S and C.

Example 2.11: Haydn Symphony No. 98 in B-flat Major, S, bars 59–79



In this monothematic symphony, several loosening techniques are found in both S and C. S, given in example 2.11, begins with the memorable arpeggiation already heard in P (bars 16–27) and the codetta to P (bars 27–32). The first three bars of P's opening motto remain unchanged in each of its returns, but Haydn varies the continuation in the fourth bar. In S, he uses an embellished descending-thirds sequence to extend the third bar's motive for two extra bars (bars 62–63). Even though the sequence in these three bars still prolongs the new tonic of F major, he takes the sequence one step further, introducing a potential new leading tone, B♮, to tonicize C major (bar 64). The arrival of B♮, accented through duration and change of

melodic pattern, makes the phrase rhythm irregular; bars 61 through 63 are a three-bar group.

The three-bar grouping in bars 61 through 63 creates an asymmetrical grouping structure because two-bar groups surround it. For Caplin, a grouping structure is "the organization of discrete, perceptually significant time spans (group, unit, part, section, etc.) at any or all hierarchical levels in a movement."[51] An asymmetrical grouping structure is an element of loose construction (see table 2.1, p. 68). Even though Caplin does not address aspects of meter in his consideration of grouping structure, his referral to the organization of all levels of time spans is closely tied to issues of phrase rhythm.

Support for this analysis comes from Lerdahl and Jackendoff's Metrical Preference Rules No. 5. "MPR 5 (Length) ... Prefer a metrical structure in which a relatively strong beat occurs at the inception of either (a) a relatively long pitch-event, ... [or] (d) a relatively long pattern of articulation...."[52] The pattern of articulation established in bars 61 through 63 is a long pattern of articulation compared to the material that immediately precedes and follows it. Thus, I interpret its first bar as relatively stronger than the surrounding bars. Likewise, the B♮ of bar 64 is relatively a long pitch-event, especially when one recognizes that bars 64 and 65 prolong this pitch. Furthermore, the length of the bass line's pitches from bar 64 onward are

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[51] Caplin, *Classical Form*, 255 (Glossary definition).

[52] Lerdahl and Jackendoff, *Generative Theory of Tonal Music*, 84.

clearly longer than the surrounding bass pitches. The combination of these factors leads me to interpret bar 64 as metrically stronger than the surrounding bars.

Another characteristic of loose construction, harmonic-tonal instability, is introduced at the arrival of the new key's dominant, C major, in bar 66. This arrival is heightened by a change in character created through introduction of *legato* articulations in the winds and strings, loss of contrapuntal texture, and expansion of the lower register in the cellos and basses. Tonicization of C major is briefly implied, but not fully realized, by B♮'s presence in bars 64 through 69; in bar 70, the C-major triad receives an added minor seventh, B♭, reaffirming it as the dominant of F major.

The clearly articulated arrival of the dominant in bar 66 coincides with the beginning of a sentential structure. Despite close correlation to a sentence's phases, the off-tonic initiation of the musical unit in bars 66 to 79 prevents it from being a "true" sentence. A tight-knit theme can stabilize the new-key area, one important function of the S zone. However, S's beginning, the motto of the symphony, does not correspond to the beginning of the sentential structure, which commences with the arrival of C major in bar 66. This off-tonic, mid-theme initiation of a sentential construction adds another dimension of loose structure to S.

The strong arrival of C major and its prolongation—made explicit through a three-fold repetition of a C-major arpeggio in the bass line (bars 66–67, 68–69, and 70–71)—contribute to the sentential structure of bars 66 through 79. The tight-knit version of a sentence is loosened through an extra repetition of the basic idea (bars 70–

71), which reactivates the dominant by adding B♭. In the continuation phase, a proportionally equal amount of extra time is spent on fragmenting the basic idea; this phase also exhibits a three-fold repetition (bars 72, 73, and 74). Overall, the space of the presentation phase is increased by 50 percent, to six bars from the expected four, and the space of the continuation phase is also increased by 50 percent, to three bars from the expected two.[53] However, this is not a true sentence because as soon as B♭ is reintroduced to the harmonic landscape, the presentation phase becomes a prolongation of dominant—not tonic. As such, the arrival on C major in bar 66 becomes correctly interpreted as a standing on the dominant rather than a tonicization.

The structure of S has been loosened in four different ways. First, the sequential continuation of the motto's third bar creates an asymmetrical grouping structure. Second, the strong tonicization of the new key's dominant causes harmonic-tonal instability. Third, the presence of a mid-theme, loosely constructed sentential structure produces inefficiency or ambiguity of functional expression. Finally, S contains two distinct ideas, the motto of the symphony and a loose sentential structure, thus providing a diversity of melodic-motivic material.

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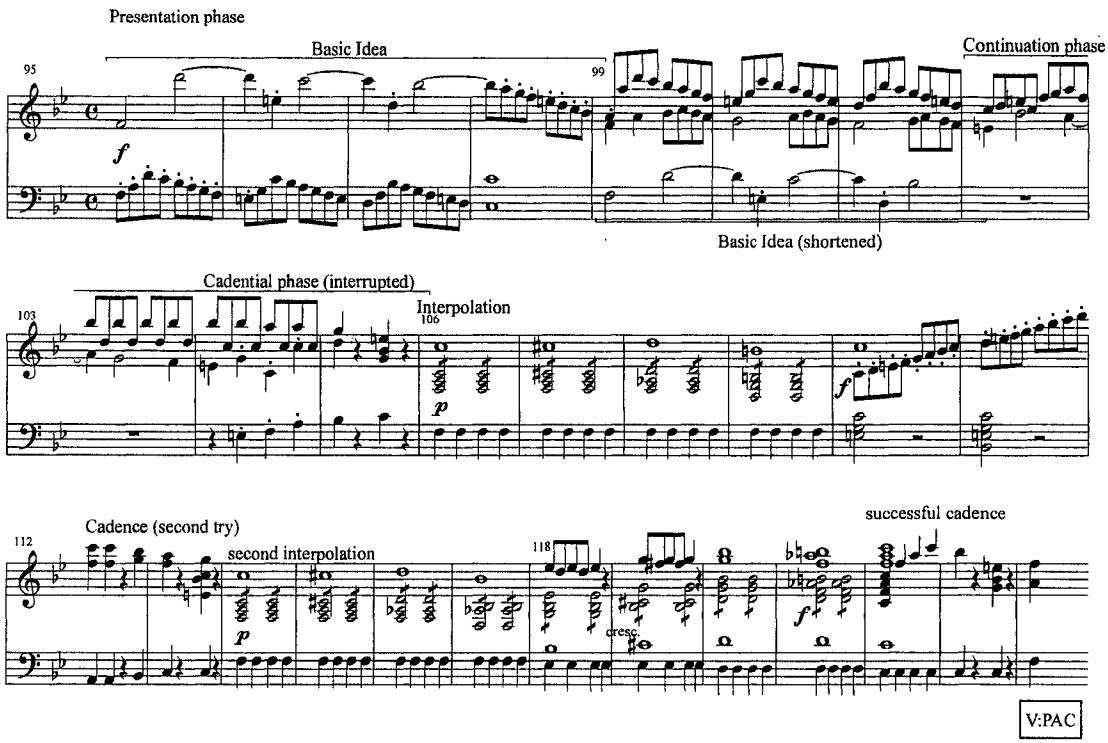
[53] As William Rothstein pointed out in an email on 23 February 2003, the hypermetrical analysis given for bars 72–79 is open to question. Bar 74 appears to be parallel to bar 72, hence probably strong. Bar 76 begins a new pattern that is replicated in the next bar, suggesting that bars 76–77 are strong–weak. While bar 75 has a long note in the melody, the bass has a chromatic passing tone, F♯, which suggests that this bar might be weak. However, the reading presented in example 2.11 corresponds to the formal functions—the three-fold repetitions in the presentation and continuation phases—of the sentential structure within S. It is further supported by the parallel interpretations of melodic durational accents in bars 66, 68, 70, 72 (implied), and 75. I propose that having two conflicting yet viable hypermetrical interpretations is another loosening technique.

The S zone is further weakened by its codetta. S's codetta begins by repeating its continuation and cadential phases. However, before the cadential phase achieves its cadence, the codetta takes an eight-bar detour. The S-zone can tolerate these devices because its first musical idea, the motto, has already been used in P as a tight-knit structure. However, the instability present in S and its codetta leaves room for—and possibly demands—additional closure.

Example 2.12: Haydn Symphony No. 98 in B-flat Major, C, bars 95–124



C displays an equally loose organization. Not all of its intrathematic functions are clear, and the understandable emphasis placed on cadential function ruins the overall sense of balance present in tight-knit themes. Shown in example 2.12, C is based on a twelve-bar sentence, an unusual aspect of this theme since—in monothematic expositions—closing themes structured like a sentence or period tend to

be of the tight-knit, eight-bar variety. A four-bar basic idea projects an overall length of sixteen bars for this theme—an abnormally long tight-knit C.[54] While this theme's presentation phase is not as clear as it is in a standard sentence owing to the length of the basic idea, the statement of a four-bar basic idea and its repetition with the use of invertible counterpoint is unmistakable. The compositional style, sequenced one-bar units accompanied by 7–6 suspensions, matches the style of the continuation of S's head motto. Specifically, the opening of C is reminiscent of the third, fourth, and fifth bars of S (see example 2.11), where the contrapuntal nature of the sequential continuation of the third bar and the implied 2–3 suspensions between the melody and inner voice is striking.

The main loosening technique used here, the evasion or omission of cadence, takes the form of significant interpolations before the final cadence. The S zone ended with a strongly implied PAC—implied because the *forte* beginning of C overlapped it. Even though the essential goal of the exposition—a PAC in the new-key area—has been achieved, the lack of an explicitly stated cadence in S's codetta leaves room for one more theme.

Haydn delays the PAC concluding C twice through the use of *piano* interpolations, heightening the audience's desire for the cadence's attainment. By postponing the first *forte* PAC in the new-key area, Haydn builds anticipation for the most convincing new-key cadence in this exposition. When C's PAC is finally

[54] Loose Cs often have lengths of sixteen bars or greater. However, they still tend to be based on an eight-bar, tight-knit version.

achieved in bar 124, it is followed in quick succession by two two-bar codettas, which dissolve into several smaller cadence-confirming codettas.

C's structure is also loosened by the contradictory proportions of time spent on each of its intrathematic functions. The basic idea, a four-bar unit, projects an overall length of sixteen bars for this theme. However, the continuation and cadential phases move at a pace that implies four total bars for their combined length instead of eight bars of combined length, which is the length projected by the duration of the presentation phase. While the two interpolations increase the overall length of the cadential phase, the amount of added musical material only skews the proportions in the opposite direction: the cadential phase now occupies twenty-one bars instead of the three bars implied on the musical surface (bars 104–106) and the four projected by the length of the four-bar-long basic idea. This disproportionate amount of time spent on the cadential phase of the phrase serves to further loosen C's structure.

Overall, S and C are subjected to a variety of loosening techniques, and neither is particularly tight-knit.[55] Since there is not a distinctly tight-knit theme, Caplin's suggestion concerning the ordering of new-key themes does not apply to this exposition. However, several factors support labeling C as the looser of the two structures. First, while arguments for sentential structures in both zones were made, the sentence identified in the C zone is less convincing because of the character of the basic idea: its rhetoric is decidedly that of continuation. Second, the evasion of the

[55] It is interesting to note that in the recapitulation, the cadence that separates the S and C zones in the exposition is not present. This has the effect of fusing S and C and delays the essential structural close (the cadence that parallels the essential expositional close in the recapitulation) to the long-awaited cadence in the C zone.

cadence in C is so strong that it becomes the main event of this theme. None of the loosening techniques described in the S zone were as disruptive. Finally, and perhaps most important, the diversity of melodic-motivic material in C, caused by the interpolations before the cadence, is so striking that C has less motivic coherence as a theme.

Haydn, Symphonies Nos. 104 and 91

Haydn's Symphonies Nos. 104 and 91 are unusual monothematic symphonies because a distinctly tight-knit new-key theme is followed by a second theme. These two expositions contradict my suggestion that tight-knit new-key themes in monothematic expositions occur last. In Symphony No. 104, both S and C are tight-knit; in Symphony No. 91, both S and C are loose. Reasons for this feature differ in each symphony; therefore, I will discuss both.

In Haydn's Symphony No. 104, S and P share *twelve* bars in common. This is unusual. Example 2.13 provides S, aligning it with a transposed version of P to facilitate comparison. Table 2.3 lists the amount of P-material recycled in each of Haydn's monothematic expositions and shows that two symphonies, Nos. 85 and 104, have significantly longer amounts of recycled material. Each of these symphonies has a tight-knit P and S. Symphony No. 85's high degree of common material results from the restatement of P's entire eight-bar presentation phase. S diverges from P during the continuation and cadential phases. Similarly, Symphony No. 104's P is a sixteen-bar parallel period. S recycles the entire eight-bar antecedent, the first four bars of the consequent, and uses a variant of P's final four bars to descend, rather than ascend, to tonic. The unusual degree to which S duplicates P leaves less room for this

S to explore new musical directions, the normal action for S in Haydn's monothematic expositions.

Example 2.13: Haydn, Symphony No. 104 in D Major, S, bars 65–80

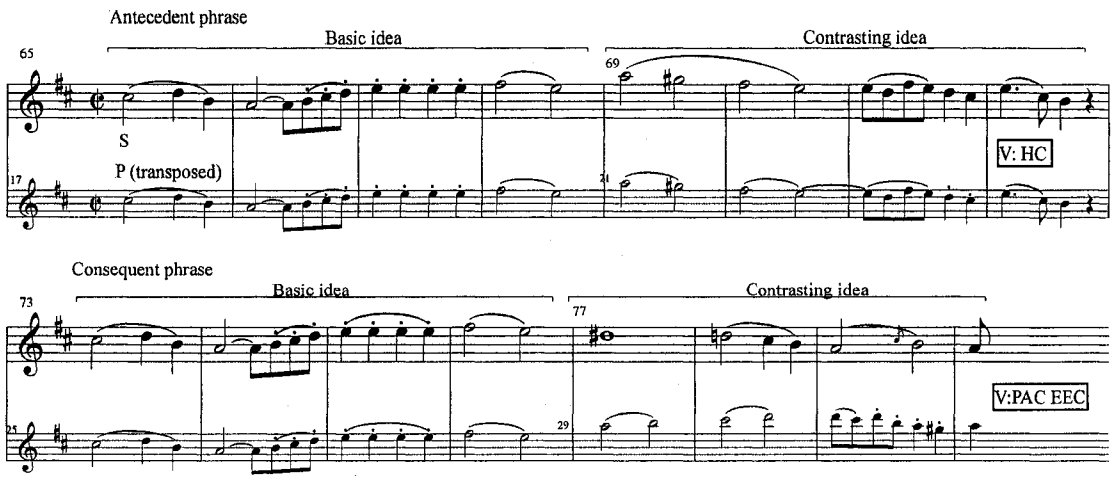


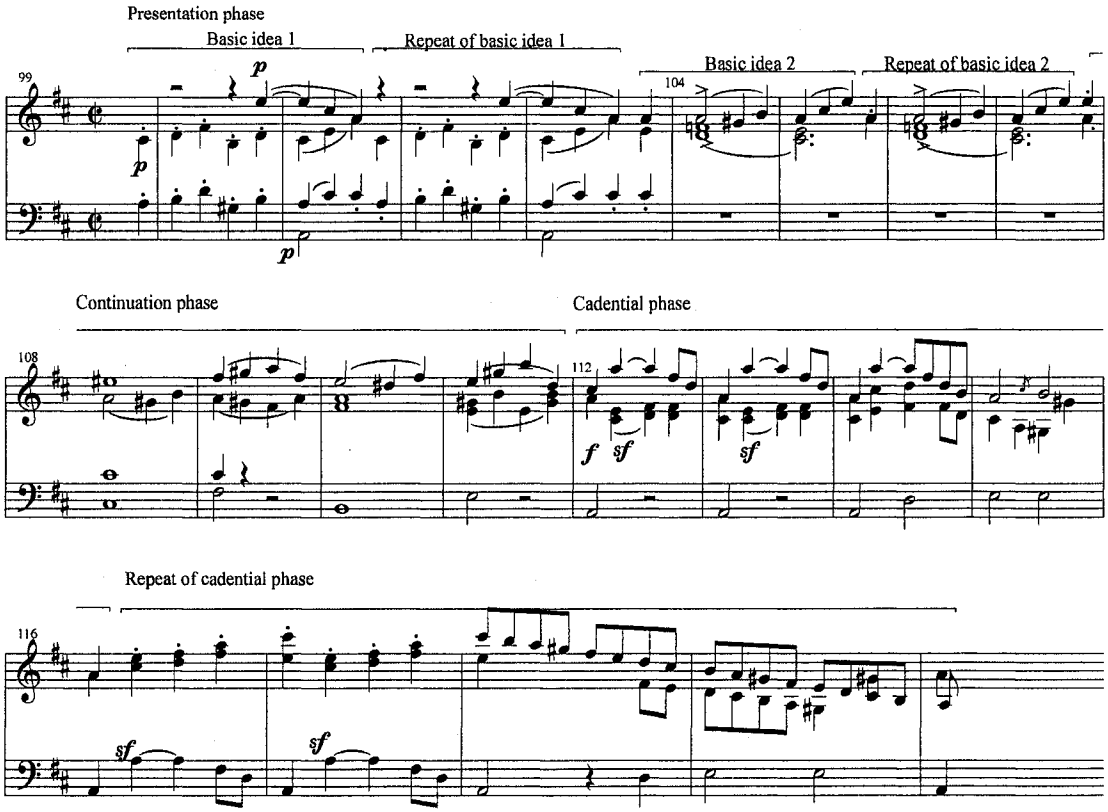
Table 2.3: Amount of P-material (in numbers of bars) recycled at the beginning of S in Haydn's monothematic symphonies

No. 84	2.25
No. 85	8
No. 86	4
No. 91	5
No. 92	4
No. 94	2
No. 98	3.25
No. 99	2
No. 100	4.5
No. 104	12

In Symphony No. 104, C enters in bar 100 after an extensive codetta to S. It is organized as a sentence with several loosening techniques. Shown in example 2.14, C has two different—but related—basic ideas, each of which receives exact repetition. Continuation function develops the second basic idea, and the onset of the cadential phase coincides with a change in dynamic. The presence of two basic ideas in C's

eight-bar presentation phase adds more diversity of melodic-motivic material than a typical tight-knit sentence would have. It is interesting to note that the eight-bar presentation phase is followed by eight bars of continuation and cadential phases; C accepts the lengths projected by the longer presentation phase.

Example 2.14: Haydn, Symphony No. 104 in D Major, C, bars 100–120



Overall, both S and C are relatively tight-knit. Owing to diversity in its melodic-motivic material, C is slightly less tight-knit than S. The relationship between these themes is unusual in the context of Haydn's monothematic expositions because it seems to revert to the relationship observed in the Mozart expositions. Furthermore, the non-normative ordering corresponds to another atypical characteristic: an uncommonly large amount of P material returns at the beginning of S. The way that Haydn's treatment of this monothematic exposition differs from his

normal strategy—to repeat only a small amount of P material in S—impacts the intrathematic organization of S.

Symphony No. 91 features another kind of divergence from Haydn's normal strategy in a monothematic exposition. In this example, the atypical treatment leads to two loosely organized new-key themes. Even though both S and C are loose, S's organization is more tight-knit than C's because C is based on the symphony's monothematic motto. This is an unusual choice for Haydn; table 2.4 lists the parts of the exposition that begin with P's opening motto for each of Haydn's monothematic symphonies in this study.

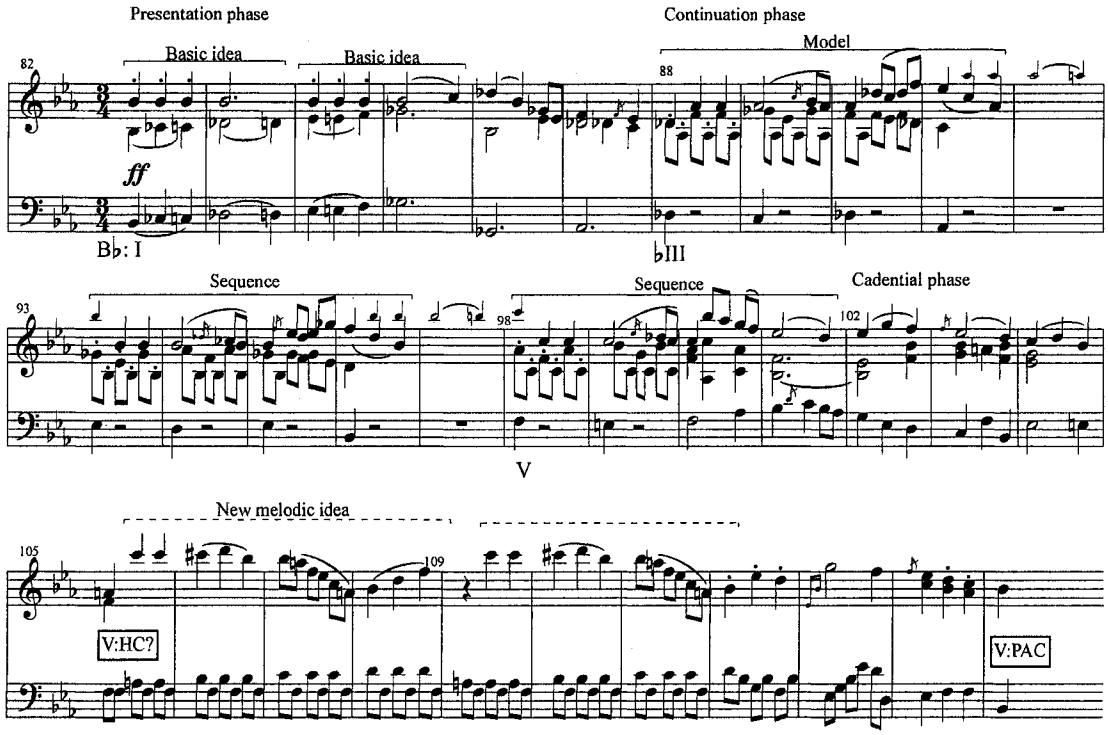
Table 2.4: P-based parts of the exposition in Haydn's monothematic symphonies

No. 84	P, TR, S
No. 85	P, S
No. 86	P, S
No. 91	P, S, C
No. 92	P, TR, S
No. 94	P, TR, S
No. 98	P, S
No. 99	P, S
No. 100	P, S
No. 104	P, S

Not only is Symphony No. 91 the only monothematic symphony in this study in which C is based on P, but C takes the P-material to a distant tonal region. Presented in example 2.15, the arrival on the unlikely key area of D-flat major in bar 88 coincides with characteristics of continuation function. Bars 88 through 91 present a four-bar model that is repeated through a rising sequence. Caplin refers to such a pattern as *model-sequence* technique and designates it "especially appropriate for creating a

more loosely organized section."[56] This sequence outlines a slow stepwise ascent toward the dominant, which arrives in its minor form in bar 98. The D-flat model of the sequence, best understood as ♭III of the local key, initiates an unusual, yet not unnatural, way of progressing from the local tonic to its dominant.

Example 2.15: Haydn, Symphony No. 91 in E-flat Major, C, bars 82–115



An additional loosening technique in the continuation phase is the use of five-bar segments in the sequence. Before the second and third iterations of the sequence's model, Haydn inserts an extra bar. The change in orchestration and the chromatic passing tone linking the final note of one iteration to the first note of the next support the analysis of these five bars as divided into 4 + 1.

[56] Caplin, *Classical Form*, 77.

The sequence's conclusion announces the onset of the cadential phase, which is expanded by a prolongation of the dominant. The approach to the dominant could imply a half cadence, but the dominant harmony supports a new melodic idea that eventually leads to the perfect authentic cadence closing C.

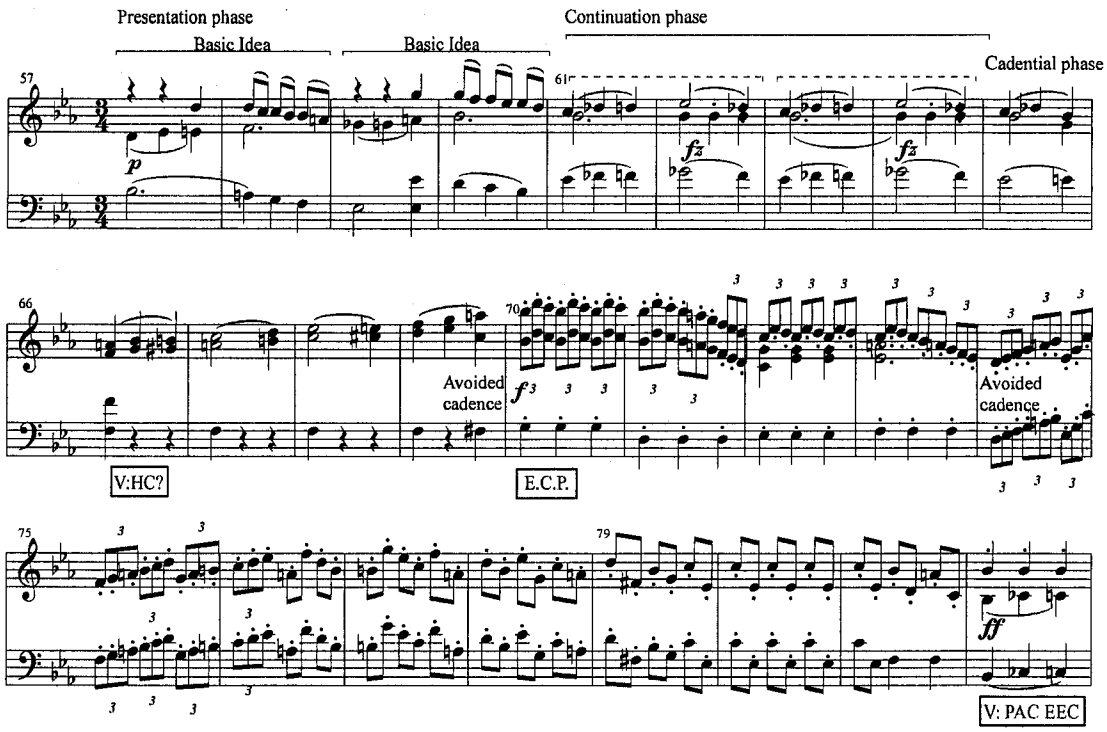
The sequence—the continuation phase of the theme—seems more tight-knit than the presentation phase. The process of tonicizing D-flat major extends C's presentation phase for two bars, from the four-bar presentation already heard in P and S to a six-bar presentation that leads to a distant tonal region. Additionally, it introduces harmonic-tonal instability when the bass line rises to $\flat\hat{6}$ in bar 85. On the other hand, the continuation phase exhibits many of the characteristics lacking in the presentation phase. Each repetition of the sequence is tonally stable, and the regular occurrence of four-bar units—despite the extra bar inserted between repetitions—contrasts with the irregular six-bar presentation phase. The arrival at a tonally distant point, introduction of a new melody, and change of texture and dynamic create a strong sense of "beginnings" rather than "middles." The resulting ambiguity of functional expression is a final characteristic of this C's loose construction.

Another aspect of C that expresses ambiguity of function expression is C's presentation phase. In this exposition, the monothematic motto functions as the presentation phase for a sentence in P and S. Since C begins with the same gesture, the analysis in example 2.15 reflects a similar function for the monothematic motto. In retrospect, one can hear the monothematic motto as a link between S's end and the

pseudo-presentation that begins with the model-sequence technique in bar 88. However, I find the model-sequence technique to be a strong signal for continuation function, and hear C divided into a beginning, middle, and end, despite the ambiguity of intrathematic function.

S, shown in example 2.16, is also not particularly tight-knit. Presentation function is clearly stated and parallels P's presentation phase. However, in the continuation phase, the diatonic motion between $\hat{2}$ and $\hat{4}$ in P becomes chromatic (bar 61) in S and is shadowed by a lower voice moving between $\hat{4}$ and $\flat\hat{6}$. The introduction of new chromatic tones, $\flat\hat{3}$ and $\flat\hat{6}$, into a familiar motive creates a small degree of harmonic-tonal instability. The two-bar continuation phase projected by the four-bar presentation phase is doubled in length owing to the immediate repetition of bars 61 and 62. This repetition creates an inefficiency of functional expression since the continuation phase had fulfilled its function within its first two bars. The cadential phase begins in bar 65 and achieves a strong arrival on the new-key dominant, an arrival that foreshadows the dominant prolongation in C's cadential phase. This potential half cadence, however, initiates a effort to achieve the EEC that is complicated by two factors: the avoidance of two potential cadences (bars 70 and 74) and the disintegration of the meter in bars 75 through 79. Harmonic-tonal stability, asymmetrical proportions, inefficiency of functional expression, and evasion of cadences are four aspects of S's loose structure.

Example 2.16: Haydn, Symphony No. 91 in E-flat Major, S, bars 57–82



Even though neither S nor C is particularly tight-knit, C's loose characteristics are more overpowering than S's. Haydn's S themes tend to be loose in monothematic expositions because Haydn develops P's opening motive in new directions. By initiating P, S, and C with the same motto, Haydn's tendency is also applied to C. However, since S has already explored new directions, there are fewer options for C's continuation, and Haydn's solution is to take C even further astray than S. This treatment results in both S and C having a loose organization, but C's organization is looser. S features redundancy in its continuation phase and an arduous approach to the EEC, but C features surprising tonal instability, redundancy in its cadential phase, and functional ambiguity.

Part of what makes Haydn's Symphonies Nos. 104 and 91 unusual is their relatively loosely constructed C themes. Each of these symphonies' intrathematic

organization distinguishes these expositions from the other monothematic expositions in this study. In Symphony No. 104, the large quantity of P's thematic material that is reused in S leads to an S theme so tight-knit that C is not left any room to present a more tight-knit structure than S's. In Symphony No. 91, P, S, and C are all introduced with the same head motto. While S has the expected loose structure, introducing a third theme with the same head motto leads to a C that goes further awry than S. In doing so, more loosening techniques are encountered in C than in S.

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Conclusion

This chapter began by asking whether Caplin's suggestion—that if a new-key theme is tight-knit, it occurs first—applies to the ten expositions in this study with exactly one S and one C. I have shown that not every new-key area has a tight-knit theme. However, when there is a tight-knit new-key theme, its placement depends on whether or not the exposition is monothematic. In non-monothematic expositions, Caplin's suggestion applies; in monothematic expositions, I propose it is normative for the tight-knit theme to occur last. Furthermore, I claim it is normative for S to be loosely organized in monothematic expositions because it bears responsibility for developing the monothematic motto in new ways.

This chapter also shows that a detailed examination of the structure of new-key themes suggests a correlation between intrathematic organization and compositional style, which is summarized in table 2.5.

Table 2.5: Proposed correlation between composers and new-key theme organization

	S's organization	*C's organization*	*Other comments*
Haydn	Loose	Tight-knit	Haydn's monothematic expositions tend to have multiple new-key themes.
Mozart	Tight-knit	Tight-knit	S is slightly more tight-knit than C
Beethoven	Loose	Loose	Difficult to tell which theme is less loose.

While only two Mozart symphonies were discussed, both adhere to Caplin's suggestion. Furthermore, these expositions are distinctive because both new-key themes are tight-knit; C is only slightly less tight-knit than S. Even though only one Beethoven symphony was discussed, my conclusions are tied to the length of its new-key themes, which lead to two loose structures. Both themes display multiple loosening techniques, making it difficult to label one more tight-knit than the other. Since Beethoven's penchant for broadly structured themes is well known, one could logically expect that my comments on Symphony No. 4 will apply to other of his works. Finally, Haydn symphonies with one S and one C tend to be monothematic. These expositions contradict Caplin's suggestion because C—the second new-key theme—tends to be a tight-knit theme. Furthermore, the intrathematic organization of Haydn's new-key themes displays the most contrast.

Chapter 3

Five Unusual Expositions

Five expositions with multiple new-key themes contain a new-key theme whose formal function cannot be described with a simple label of S or C. In chapter 2, ambiguity of intrathematic function proved to be a useful concept for describing how themes are loosely organized. This chapter takes that concept to a higher level of the form, exploring how ambiguity of thematic function impacts the new-key area. My analyses will explore the unclear formal functions that arise in the new-key areas of the remaining five expositions with multiple new-key themes, namely Beethoven's Symphonies Nos. 1 and 3, Mozart's Symphony No. 41, and Haydn's Symphonies Nos. 87 and 94.

In the chapter's first section I examine expositions with three themes in the new-key area. I will show that one of the three themes does not fit into the standard paradigm for S or C and will draw on the ideas of William Kinderman, G. Cook Kimball, Janet Schmalfeldt, and Anthony Newcomb to help explain how the extra theme arises. In the chapter's second section I explore two expositions that are remarkable because they present unusual situations that engage several special cases described by Hepokoski and Darcy. In all analyses, I will relate the intrathematic organization of the new-key themes to the suggestion I put forth in chapter 2: when

there is a tight-knit new-key theme, it occurs first in non-monothematic expositions and last in monothematic ones.

Section I: Three Themes in the New-Key Area

Three symphonies contain three themes in the new-key area of their exposition: Haydn's Symphony No. 94 and Beethoven's Symphonies Nos. 1 and 3. Each of these three new-key areas contains an "oddball" theme with ambiguous formal function. In both Beethoven's Symphony No. 1 and Haydn's Symphony No. 94 this formally ambiguous theme occurs in the medial position, after S and before C; in Beethoven's Symphony No. 3 the extra theme occurs in the last position.[1]

Beethoven, Symphony No. 1 in C Major

In this exposition, the outer themes function as a subordinate and closing theme, but the middle theme has unclear formal function. The first new-key theme begins as a tight-knit parallel period but undergoes loosening techniques as it approaches its final cadence. In his 1987 article "The 'Expanded Cadential Progression': A Category for the Analysis of Classical Form," William Caplin discusses in detail the harmonic progression I^6–II^6 (or IV)–V–I that often closes a subordinate theme.[2] This cadential progression typically supports the two-bar cadential phase of a tight-knit theme.

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[1] In labeling multiple new-key themes, superscripts will be added as necessary to the labels "S" and "C." For Beethoven's Symphony No. 1 and Haydn's Symphony No. 94, I label the new key themes S^1, S^2, and C. For Beethoven's Symphony No. 3, I label the new-key themes S, C^1, and C^2.

[2] William Caplin, "The 'Expanded Cadential Progression': A Category for the Analysis of Classical Form," *Journal of Musicological Research* 7 (1987): 215–57.

However, composers often use phrase expansion—or, perhaps more appropriately, *phase* expansion—as a technique to loosen themes. Since subordinate themes typically have a looser organization than primary themes, phase expansion occurs frequently in these new-key themes. The expanded cadential progression loosens a tight-knit structure by increasing the length of its cadential phase.[3] When discussing the harmonies that can be expanded, Caplin makes this observation:

> In the case of an expanded cadential progression, if the composer prolongs the initial I^6 for four measures and, at the same time, introduces a new two-measure basic idea with its repetition, he creates, in effect, a presentation phrase; a continuation could then bring the remaining harmonies of the cadence, thereby forming an eight-measure sentence.[4]

He takes his first example of an expanded cadential progression from the first new-key theme of Beethoven's Symphony No. 1 in C Major. As shown in example 3.1, S^1 enters after a clear caesura and is organized as a large parallel period in which each of the period's phrases is constructed as a sentence. The eight-bar, tight-knit antecedent phrase is answered by a consequent phrase that also begins with a tight-knit structure. This phrase, however, is loosened at the last minute by an eight-bar addition to the cadential phase (bars 69–76); this expansion destroys the sentence's expected tight-

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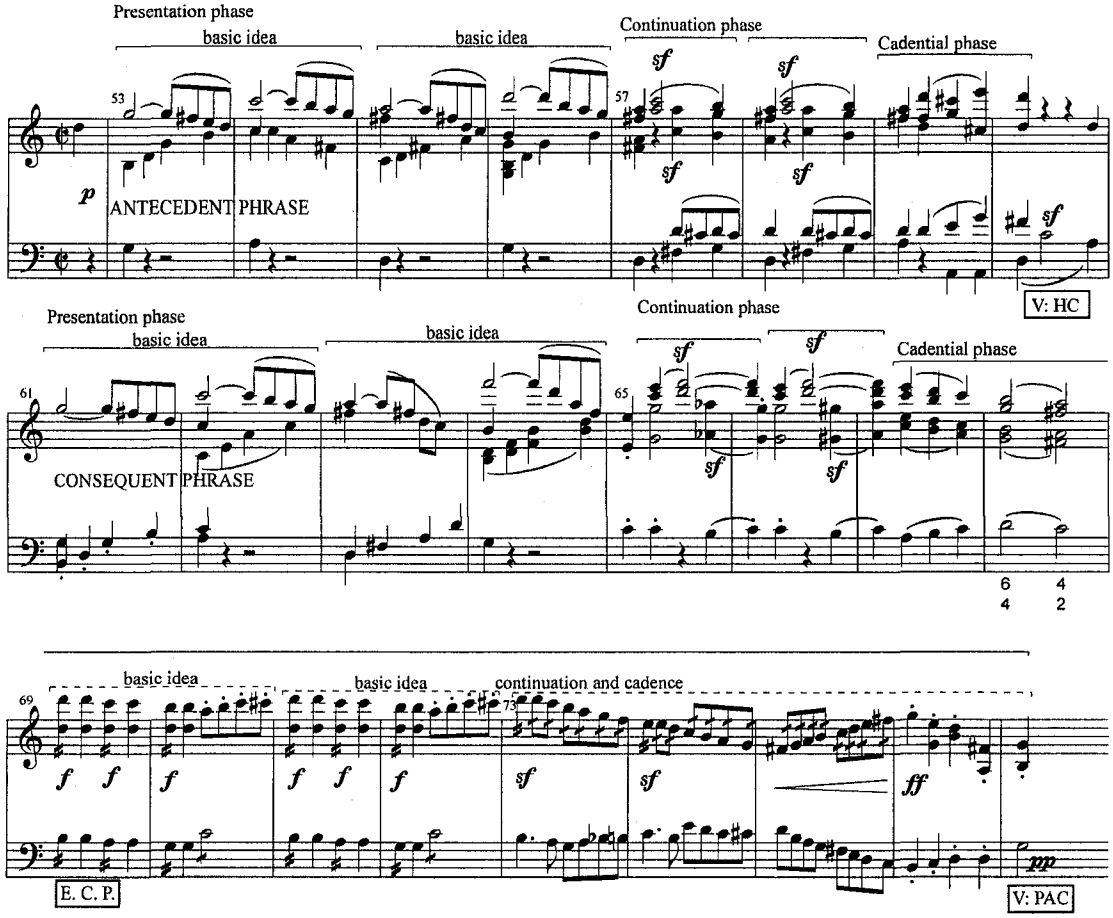
[3] Further discussion can be found in chapter 2, pp. 82–4. As in chapter 2, I will designate expanded cadential progressions with the label "E. C. P." when they occur in the musical examples.

[4] Caplin, "Expanded Cadential Progression," 234. Owing to differences in Caplin's and my definition of phrase, his "presentation phrase" corresponds to my "presentation phase." See chapter 2, footnote 12 (p. 72) for further explanation of the terms phase and phrase.

knit proportions.[5] Beethoven extends this phrase by resolving the cadential $\frac{6}{4}$ of the predicted eight-bar sentence to a dominant seventh in the $\frac{4}{2}$ position (bar 68). This chord requires resolution to what becomes the initial I^6 of Caplin's expanded cadential progression.

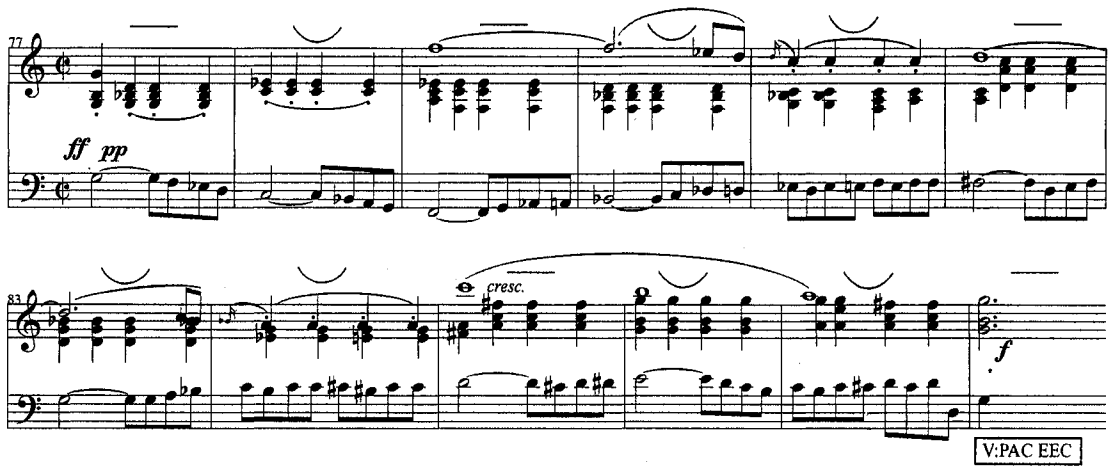
Example 3.1: Beethoven, Symphony No. 1 in C Major, S^1, bars 53–77



[5] The expected proportions of the phases in a tight-knit sentence are 2:1:1 for the presentation, continuation and cadential phases, respectively. In S^1's consequent phrase, the tight-knit presentation and continuation phases project a two-bar length for the cadential phase. Therefore, the eight-bar expansion of this phase skews the expected proportions of this sentence. See chapter 2, pp. 72–3 for a discussion of the proportions of the phases.

Caplin uses this excerpt to exemplify how expansion of a cadential progression's initial tonic can support the presentation phase of a sentence.[6] Shown in example 3.1, these final nine bars (bars 69–77) are organized as a tight-knit sentence. They do not, however, constitute a second S since a perfect authentic cadence has not yet closed S^1. This cadential phase demonstrates how a musical unit that provides closing function for a larger musical structure can mirror the organization of a theme; this relationship parallels the role of a closing theme, which provides closing function for the larger musical structure of an exposition. Even though a closing theme occurs after EEC, which is "essential" close of the exposition, the presence of a closing zone in every exposition in this study indicates that composers wanted further closing gestures. Significantly, although the expanded cadential progression's structure is tight-knit, its presence causes S's overall structure to be loosened.

Example 3.2: Beethoven, Symphony No. 1 in C Major, S^2, bars 77–88



[6] Caplin, "Expanded Cadential Progression," 234–6.

Immediately following the PAC that concludes the first new-key theme, a drastically contrasting passage emerges in the violoncellos and basses. Shown in example 3.2, the cadence in bar 77 is immediately followed by the minor mode, change of orchestration, contrasting dynamic level, unclear phrase rhythm, and circle-of-fifths melody. These characteristics loosen this passage's structure and create an overall impression of having temporarily lost one's way through the exposition. I interpret this passage as a theme because it is harmonically complex enough to support a linear progression and has a beginning, middle, and end. However, a successful analysis of this theme should capture the ambiguity of formal function and unusual rhetoric created by the contrasting characteristics of this theme's opening. In the process of arriving at such an analysis, I will invoke three analytical concepts: Sonata Theory will provide a label for this theme, "insertion" will help capture the "otherness" of the passage, and the ordering of intrathematic organization will address the passage's impact on the new-key area.

Sonata Theory provides tools for labeling this theme. Since both the lower strings' melody and the countermelody articulated by the oboe and bassoon are derived from the opening gestures of the subordinate theme, a five-note stepwise descent in which the first note is accented by its duration and metric placement, I label this second new-key theme S^2. Furthermore, the motivic connections between this new theme and S^1 prevent understanding the first PAC in the new-key area (bar 77) as the essential expositional close (EEC). The EEC "closes off" the body of exposition

and is followed by post-cadential material that affirms the new key. Unless the exposition is monothematic, recollection of S's opening motive after the EEC almost always reopens S and is a technique of delaying the EEC to a later position.[7] Therefore, this new theme, S^2, reopens the S zone and delays the EEC to the second new-key PAC in bar 88.

The contents of this new-key area are unusual enough that Caplin, Hepokoski, and Darcy address it in their writings. Caplin discusses these new-key themes in his article "Structural Expansions in Beethoven's Symphonic Forms."[8] He identifies three subordinate themes in the new-key area and remarks on the ternary design created by the second theme's presence, which he describes as a "contrasting middle." This interpretation captures the oddness of the second theme but does not acknowledge the motivic connections between S^1 and S^2 or the differing function of his third subordinate theme, my C.[9] Hepokoski and Darcy explain S^2 as an appendix to S^1.[10] This interpretation recognizes the motivic connection between S^1 and S^2 but does not account for the theme's unusual rhetoric.

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[7] James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late-Eighteenth-Century Sonata* (New York: Oxford University Press, forthcoming; Departments of Music Theory, Yale University and Oberlin College Conservatory, 1999, photocopy), 113.

[8] Caplin, "Structural Expansions in Beethoven's Symphonic Forms," in *Beethoven's Compositional Process*, ed. William Kinderman (Lincoln: University of Nebraska Press, 1991), 27–54.

[9] Caplin, "Structural Expansions," 32–6.

[10] Hepokoski and Darcy, *Elements of Sonata Theory*, 114.

In stark contrast with the themes that precede and follow it, S^2 seems both out of place in the exposition yet subtly integrated into it owing to its motivic content. By using a familiar technique of phrase expansion, *insertion*, a second description for this theme arises. Heinrich Koch's corresponding term for insertion is *Parenthese*, which he defines as "the insertion of unessential melodic ideas between the segments of a phrase."[11] His examples demonstrate the removability of insertions by presenting a simple phrase that he elaborates in subsequent examples by adding insertions; therefore, the phrase is coherent both with and without the insertions. For this analysis, I propose insertions at a higher structural level. Rather than inserting measures into a phrase, I examine the insertion of phrases into zones of the exposition. Phrase insertion as a technique of zone expansion should be held to the same standards of removability—the zone should be coherent both with and without the inserted phrase. However, insertions at this level have two options: one phrase can be inserted *within* another, or one phrase can be inserted *between* two others.[12]

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[11] Heinrich Christoph Koch, *Introductory Essay on Composition*, trans. and ed. Nancy Kovaleff Baker (New Haven: Yale University Press, 1983), 53.

[12] It seems to me that the line between insertion and suffix starts to become hazy at this level. For instance, I would consider a codetta to S a suffix even though it could be considered an insertion between S and C. Since codettas are less structurally significant than themes, it is easier to perceive them as suffixes. However, it is difficult for me to understand one theme as a suffix to another.

William Kinderman makes a convincing case for the insertion of second themes in Beethoven's Piano Sonatas op. 109 and 111.[13] His examples show insertions of one phrase within another. This type of insertion produces a strong effect of parenthesis and Kinderman remarks that it is a "rare and unusual procedure."[14] He suggests that the juxtaposition of two contrasting themes through the device of insertion offers "a particularly rigorous—and Beethovenian—solution to the compositional problem of relating themes of strongly contrasting character."[15] Kinderman, cautious about generalizing Beethoven's use of insertion, implies that this technique is a late-period development (1820–22) in Beethoven's compositional style.

In Beethoven's Symphony No. 1, S^2 can be interpreted as an insertion. This symphony does not, however, belong to the time frame suggested by Kinderman, and this type of insertion is not as rigorous as Kinderman's. In his examples, one phrase was inserted within another; in this exposition, one phrase is inserted between two others. The type of insertion in this symphony is more conservative because the themes are part of a well-formed group, a Classical-period characteristic.[16]

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[13] William Kinderman, "Thematic Contrast and Parenthetical Enclosure in the Piano Sonatas, Op. 109 and 111," in *Zu Beethoven: Aufsätze und Dokumente*, vol. 3, ed. Harry Goldschmidt (Berlin: Verlag Neue Musik, 1988), 43–59.

[14] Kinderman, "Thematic Contrast and Parenthetical Enclosure," 43.

[15] Kinderman, "Thematic Contrast and Parenthetical Enclosure," 52.

[16] According to Lerdahl and Jackendoff, the insertion of one phrase within another cannot be a well-formed group for two reasons. Grouping Well-Formedness Rule (GWFR) 1 states that "only contiguous sequences can constitute a group." GWFR 5 states, "if a group G_1 contains a smaller group G_2, then G_1 must be exhaustively

Understanding S^2 as an insertion meets the requirement of removability; its absence would cause the downbeats of bars 77 and 88 to occur simultaneously. Three features support this interpretation. First, the removal of S^2 restores the *forte* cadence in bar 77. Second, bars 77 and 88 share similar orchestration and registral spacing. Third, S^2 features mixture, a frequent signal of insertion.[17]

The final aspect of this analysis will examine how the new-key themes are ordered in terms of their intrathematic organization. The loose organization of the inserted S^2 changes the pacing of the new-key area. Part of the theme's searching quality results from its loose structure—S^2's organization bears scant resemblance to sentences or periods. Additionally, S^2's harmonic support acts as a loosening agent; Beethoven's use of a circle-of-fifths progression to launch the theme makes it relatively unstable and is more characteristic of the continuation phase of a phrase rather than the presentation phase. Although the clear binary grouping of measures that initiates the theme is a tightening agent, the phrase rhythm quickly becomes ambiguous. Example 3.2 presents one possible analysis in which the hypermeter switches from two-bar units to three-bar units when the countermelody enters. The binary hypermetrical interpretation starts with bar 77's status as a strong bar owing to the change of dynamic, mode, and orchestration. Bar 79 is also a strong bar owing to

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partitioned into smaller groups." Lerdahl and Jackendoff, *A Generative Theory of Tonal Music*, 37–38.

[17] William Rothstein provides several examples of phrase expansions that borrow from the minor mode. The discussions that include insertions can be found in Rothstein, *Phrase Rhythm in Tonal Music* (New York: Schirmer, 1989), 88–91 and 271.

a preference to maintain a binary reading and the entrance of the oboe. However, another countermelody, patterned after the oboe's countermelody, enters three bars after the oboe (bar 82). These prominent entrances need to have parallel hypermetrical interpretations.[18] Hence the three-bar hypermeasures shown in example 3.2.

G. Cook Kimball's research on Joseph Riepel and A. B. Marx suggests a way of interpreting the succession of intrathematic organizations in this new-key area. In his 1991 article "The Second Theme in Sonata Form as Insertion," Kimball proposes that we recognize Marx's second theme as a descendent of Riepel's insertion.[19] While Kimball shares the traditional view of insertion, saying that "it stands as something apart, brought in from the outside, not acting with the phrase," he does not support his hypothesis with any musical examples and I will demonstrate that some of his reasoning may be unconvincing.[20] However, his research is valuable for this analysis. Kimball argues that A. B. Marx's view of the exposition's new-key area as an alternation between states of motion and rest is tied to one particular use of insertion by Riepel. Viewing the new-key area of Beethoven's Symphony No. 1 as an

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[18] Support for this interpretation can be found in the Metrical Preference Rules of Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music* (Boston: MIT Press, 1983; 2nd paperback printing, 1996), 74–86.

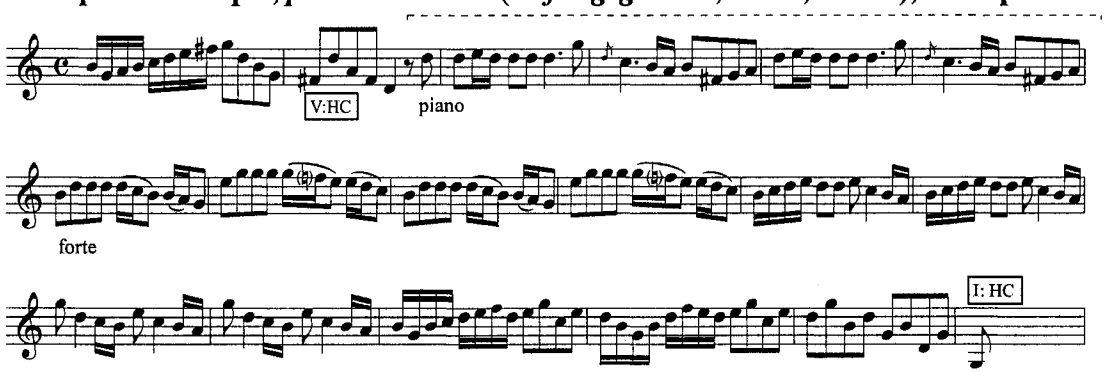
[19] G. Cook Kimball, "The Second Theme in Sonata Form as Insertion," *The Music Review* 52 (1991): 279–93.

[20] Kimball, "The Second Theme in Sonata Form as Insertion," 283.

alternation between states of rest and motion captures much of the relationship between these new-key themes.

Many of Riepel's longest insertions are set apart from the surrounding music by a contrasting *piano* dynamic. These *piano* themes occur in three of Riepel's examples; example 3.3 presents the last instance of the *piano* theme.[21] Kimball points out that even though Riepel implies these insertions may occur anywhere, all three of his longer *piano* insertions occur after a dominant-phrase ending (I: HC or V: HC), the typical position of a subordinate theme. His examples share three characteristics that cause the *piano* insertion to feel more at rest than the surrounding music. Reduced dynamic level and relatively longer note values lower the tension in the phrase and, at times, may suggest a slower level of pulse. Riepel's *piano* insertions are repeated. Repetition of an entire phrase—rather than the repetition of one measure as a technique of phrase expansion—adds to the stagnancy of the *piano* theme.

Example 3.3: Riepel, *piano* insertion (*Anfangsgründe*, vol. 2, 85–86), excerpt



[21] The other two examples are found in Riepel, *Anfangsgründe zur musicalischen Setzkunst*, vol. 1 (Frankfurt and Leipzig, 1752), 36–7.

Marx's view of sonata form as expressed in his treatise *Die Lehre von der musikalischen Komposition* details a three-phase structure for the exposition's new-key area: *Seitensatz*, *Gang*, and *Schlußsatz*.[22] Kimball claims that in Marx's examples, the *Sätze* are the themes and are stationary, offering no forward movement, while *Gänge* are the transitions, exhibiting strong forward motion.[23] Kimball points out that "the three points of Marx's subsidiary section correspond exactly to those of Riepel's—insertion (*piano* theme), phrase, and cadential area—in producing the broad structure of an initial area of stability followed by one of movement and a concluding one of terminating formulas."[24] The striking correspondence of these three areas is one of Kimball's most important observations. However, equating Riepel's phrases with Marx's *Gänge* works only from the perspective of states of relative rest and movement. From a form-functional point of view, Riepel's phrases correspond to Marx's *Sätze*, not his *Gänge*.

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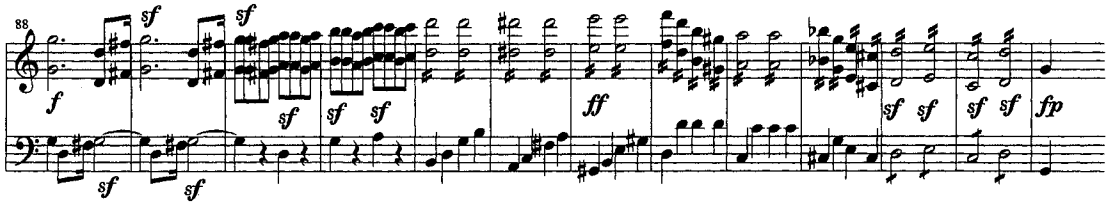
[22] See "Selections from A.B. Marx's *Die Lehre von der musikalischen Komposition, praktisch-theoretisch*" translated and edited by Scott Burnham in *Musical Form in the Age of Beethoven: Selected Writings on Theory and Method*, Cambridge Studies in Music Theory and Analysis no. 12 (New York: Cambridge University Press, 1997), 92–154 and "Form in Music," translated and edited by Burnham in *Musical Form in the Age of Beethoven*, 55–90.

[23] I find this argument unconvincing because it oversimplifies Marx's concept of *Satz* and *Gang*. See chapter 1, p. 36 for a summary of these terms. Furthermore, many themes display strong forward motion, a charachteristic Kimball attributes solely to *Gänge*.

[24] Kimball, "Second Theme," 289.

Viewing the new-key themes in Beethoven's Symphony No. 1 from the perspective of alternating states of motion and rest matches the pacing of the exposition. S^1, constructed as a parallel period, represents an area of rest. Even though the expansion of its consequent phrase strengthens the drive toward the cadence, it contrasts with the transition and S^2 because Beethoven set it with a contrasting dynamic and organized it clearly. S^2 represents an area of motion. The opening circle-of-fifths progression causes it to begin with continuation function, which typically signifies motion toward a cadence. This beginning is a striking way to contrast S^2's unrest with S^1's stability. Finally, C, shown in example 3.4, is a closing module from any point of view. It represents an area of stability because of the return of P's motive, restoration of the major mode, and opening two-bar presentation phase.

Example 3.4: Beethoven, Symphony No. 1 in C Major, C, bars 88–100



The strength of this interpretation is that a description of intrathematic organization explains aspects of the middle theme's strangeness. The overall pacing of *Ruhe–Bewegung–Ruhe* in the new-key area parallels Marx's three-phase approach, which may have had its origins in Riepel's use of the *piano* insertion. I understand this new-key are as follows. Even though S features a dramatically expanded cadential phase, S and C are both relatively tight-knit. However, the insertion of a

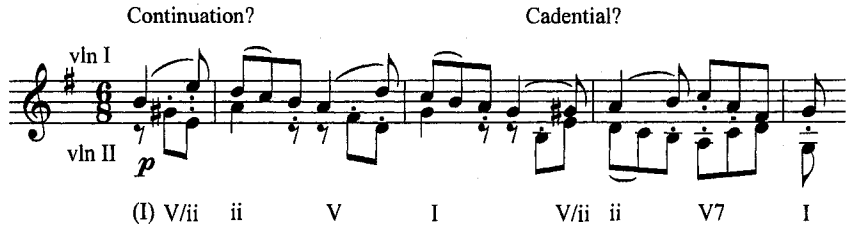
passage that eventually reveals it to be a new theme based on S's motives adds dramatic contrasts to the new-key area through aspects of its loose organization.

Finally, in terms of the relationships between the structures of these themes, S^1 is the most tight-knit theme in the new-key area. Despite Beethoven's penchant for broadly constructed themes—a quality often at odds with tight-knit structures— this symphony adheres to my suggestion that relatively tight-knit themes in non-monothematic symphonies tend to occur at the beginning of the new-key area.

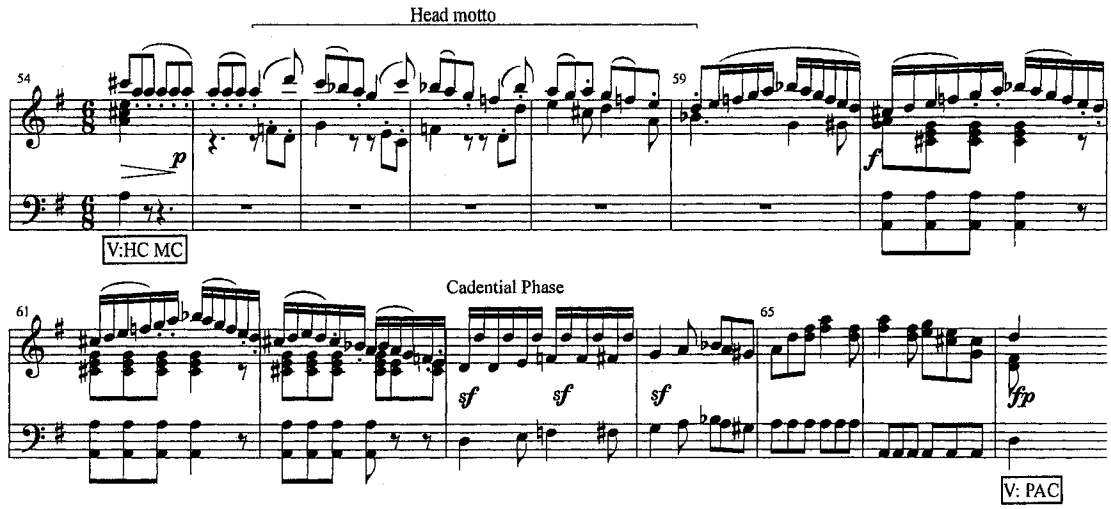
Haydn, Symphony No. 94 in G Major

In Haydn's Symphony No. 94 in G Major, my second example that contains three themes in its new-key area, the theme with ambiguous formal function also occurs in the medial position. This monothematic exposition uses a head motto with an off-tonic beginning supported by a falling-fifths progression. Example 3.5 presents this head motto, which is used to initiate the P, TR, and S zones of this movement. Introducing these formal areas with a sequence denies the corresponding themes a stable presentation phase and instead creates the impression of opening formal areas with continuation function. In the monothematic symphonies presented in chapter 2, the motto functioned as the basic idea of a tight-knit structure—usually a P-zone technique—or as a launching-off point for a loose structure—usually an S-zone technique. Owing to its construction, it is difficult to have a tight-knit theme that opens with this motto.

Example 3.5: Haydn, Symphony No. 94 in G Major, head motto, bars 19–21



Example 3.6: Haydn, Symphony No. 94 in G Major, S^1, bars 54–67



Of the themes launched by the head motto, S^1 comes closest to a tight-knit structure. Shown in example 3.6, S^1 enters after a clear V:HC medial caesura (MC) in bar 54. However, two features make S^1 problematic: (1) the prominent use of the minor dominant in lieu of the traditionally used major dominant and (2) the inexact transposition of the original P. Often, the use of the minor mode at the expected beginning of S will cause the music to return to TR rhetoric in favor of reapproaching S and successfully restarting in the major mode. However, the return of the head motto in the dominant—albeit the minor dominant—strongly signifies the onset of the

new-key area and successfully opens up the S zone.[25] The inexact transposition results from Haydn's method of connecting the V:HC MC to S through the use of a reiterated common tone. Rather than initiating the head motto's sequence, shown in example 3.5, with the rising fourth between the current tonic's $\hat{3}$ and $\hat{6}$, S begins on $\hat{5}$, which is maintained as a common tone from the preceding half cadence. Since $\hat{5}$ is the only tone shared by tonic and dominant chords, using a common-tone transition between the medial caesura and S^1 requires S^1 to begin on $\hat{5}$ instead of $\hat{3}$. Additionally, this repeated $\hat{5}$, A5, makes an important return in the after S^1's cadence. Haydn rectifies the inexact transposition level by providing an extra iteration of the descending sequence. Since S^1 presents the motto for the third time and since the motto beginning S^1 finally outlines two members of the local tonic triad, the S zone is the first formal area to begin with a semblance of presentation function. After its head motto, S proceeds through continuation and cadential phases and switches to the expected major mode on the cadential $\frac{6}{4}$.[26]

The second subordinate theme, shown in example 3.7, emerges from a cadential extension to S^1. The actual starting point of S^2 is ambiguous since the cadential extension does not immediately take on thematic characteristics. Analyzing

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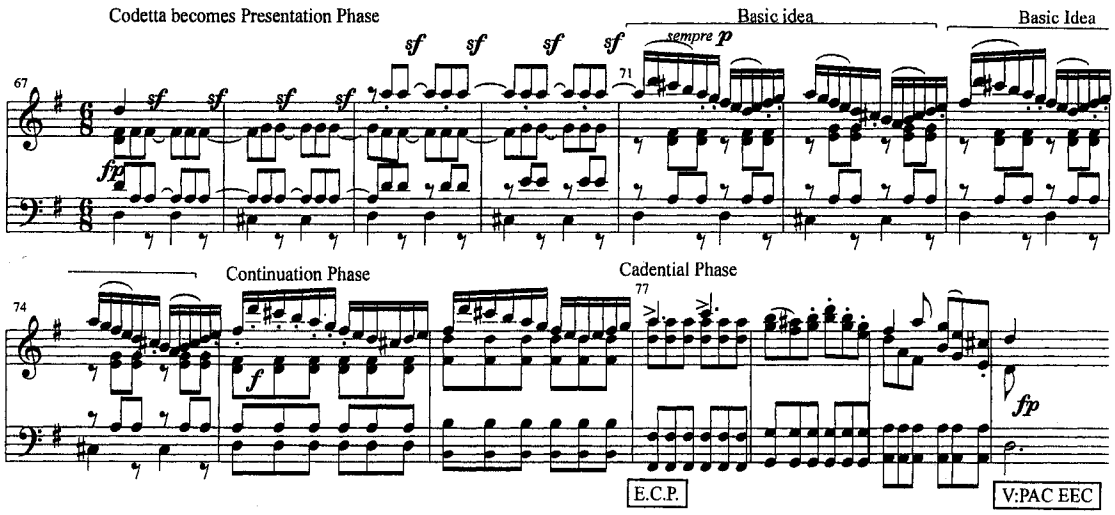
[25] This possible rejection could have taken the form of several techniques discussed in James Hepokoski and Warren Darcy, "The Medial Caesura and Its Role in the Eighteenth-Century Sonata Exposition," *Music Theory Spectrum* 19 (1997): 133–50.

[26] This new-key area provides a monothematic example of A. B. Marx's alternating states of rest–motion–rest, which correspond to the head motto, its continuation, and C, respectively.

the phrase in reverse, as one may be forced to retrospectively reevaluate it, a cadential phase supported by an expanded cadential progression occurs in the final four bars (bars 77–80). S^{2}'s presentation and continuation phases take place within a ten-bar alternation of root-position tonics and first-inversion dominant seventh chords, which act as stagnant lower neighbors to the tonic chords. This static texture not only provides the first firm grounding in the correct mode of the new-key area, but also is a gesture familiar from the transition between the TR and S zones, which features the same pitch, A5. The gradual development of the texture results in a potential basic idea: after the first four bars of tonic–dominant alternations, the addition of sixteenth notes to the texture results in a two-bar pattern (bars 71–72) that is immediately repeated. These four bars of presentation are followed by two bars of continuation (bars 75–76) before reaching the expanded cadential progression. In this hearing, bars 67 through 70 serve a dual function: they expand S^{1}'s final cadence and provide a transition to S^{2}'s presentation phase. While S^{2} is not a memorable theme, it displays the initiating, medial, and cadential phases expected of themes, supports a linear descent from $\hat{5}$ (or $\hat{2}$ of the original key) and ends with a PAC. Since it started as an extension of S, it still belongs to the S zone. Additionally, its cadence mirrors that of the first PAC, the most notable difference being the use of the major mode throughout the theme.

Example 3.7: Haydn, Symphony No. 94 in G Major, S^2, bars 67–80



The views of Anthony Newcomb and Janet Schmalfeldt suggest an analysis that matches the way this theme emerges.[27] The most problematic aspect of S^2's status as theme comes from its basic idea, which extends S^1's cadence. Schmalfeldt suggests an interpretation for bars 63 through 68 of Beethoven's "Tempest" Sonata in which "a codetta … has now *become* a presentation (codetta → presentation)"[28] She describes the sensation as: "We are being asked by the music to exchange categories for others (Dahlhaus); the music … needs to 'be heard forward and backward at the same time' (Adorno)."[29] S^2 begins as a codetta to S^1, extending its cadence. However, as repetitions of a two-bar idea keep occurring the function of these two bars is called

[27] Anthony Newcomb, "Those Images That Yet Fresh Images Beget," *Journal of Musicology* 2 (1983): 227–45; Janet Schmalfeldt, "Form as the Process of Becoming: The Beethoven-Hegelian Tradition and the 'Tempest' Sonata," in *Beethoven Forum* 4, ed. Lewis Lockwood and James Webster (Lincoln: University of Nebraska Press, 1995), 37–71.

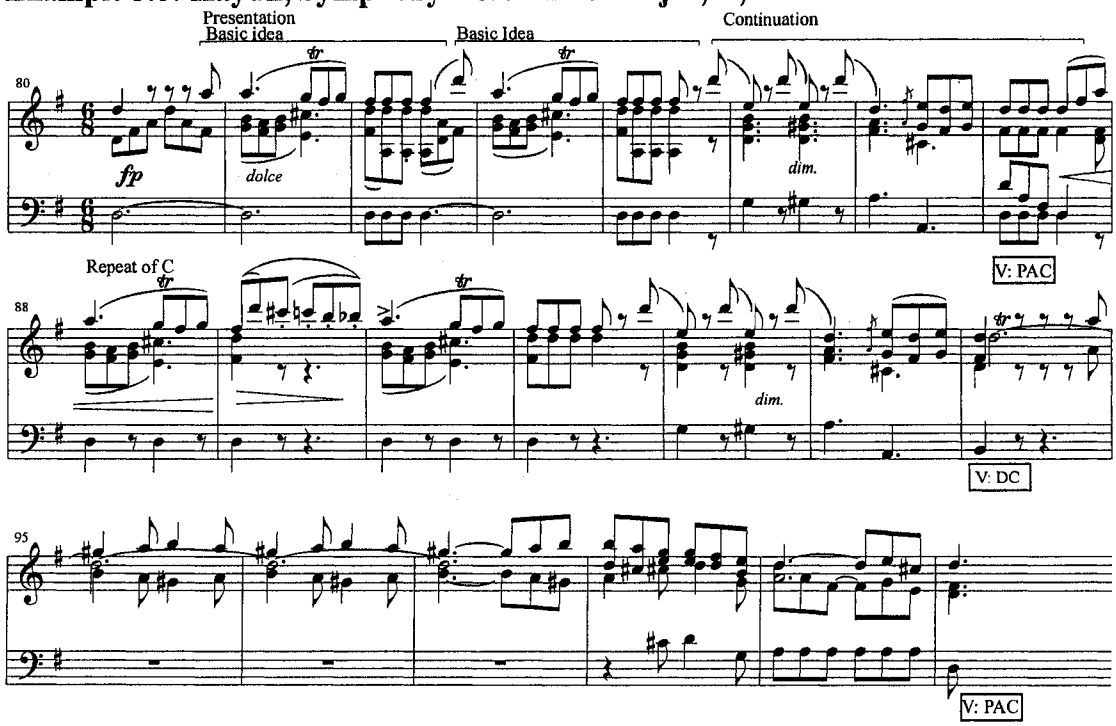
[28] Schmalfeldt, "Form as the Process of Becoming," 67.

[29] Schmalfeldt, "Form as the Process of Becoming," 67.

into question. Once the expanded cadential progression begins—a progression strongly associated with the cadential phase of subordinate themes—this musical unit's function has changed from a codetta to a theme. This "problematic" basic idea is essential to this analysis of the theme because it sets the original function of bar 67 as codetta. As the music progresses its function changes, encouraging a new understanding of the passage.

S^1's structure is more tight-knit than S^2's primarily owing to differences at their beginnings. The return of the head motto clearly marks off the initiation of S^1; the beginning of S^2, however, is difficult to pinpoint because it emerges from a codetta that becomes a presentation phase. Additionally, in a monothematic symphony, the return of the head motto is so distinctive that it tilts the balance towards S^1 as the more important theme of the two. While "more important" does not have to correspond with "more tight-knit," there is often a correlation between these two states; tight-knit themes are easier for a listener to comprehend owing to the repetition of a basic idea, familiarity with the structure, and the simple proportions of the theme's phases. S^2 has features that make it tight-knit, but not more tight-knit, than S^1: the mode is stable, there is no sequence, and the hypermeter is regular owing to the binary alternation of tonic and dominant chords. These three factors provide grounding in the new key that was lacking in S^1. For these reasons, both themes contribute to the successful achievement of the essential expositional close.

Example 3.8: Haydn, Symphony No. 94 in G Major, C, bars 80–100



This symphony adheres to my observations in chapter 2 because it is a monothematic symphony in which the most tight-knit theme in the new-key area, the closing theme, occurs in the last position. For Haydn's Symphony No. 94, this relationship between the structures of new-key themes results from the fact that C is not based on the symphony's head motto, which tends to lead to a loose structure. C's melody, shown in example 3.8, appears to be a tight-knit, eight-bar sentence. However, upon closer inspection, it covers only seven bars. The basic idea occurs in the first two bars, and its repetition follows in bars 83 and 84. Continuation and cadential functions are fused in bars 85 through 87; the bass line is clearly cadential while the melody fragments the basic idea by reducing the length of the motive to its opening rhythmic gesture. In this

fusion of cadential and continuation phases, a bar of the eight-bar structure projected by the basic idea is lost.[30]

This C contrasts with S^1 and S^2 in two additional ways. First, C is written in a more learned style. The texture of C is far more intricate than any other theme in this movement. Rather than producing only chord tones, the inner voices have melodic function. Second, Haydn repeats C, one of the few closing themes in this study that is repeated. Since S^1 and S^2 have loose structures, the repetition accomplishes a similar effect as a repetition of S does in non-monothematic symphonies. C is tight-knit, and as such, it ends too quickly to provide stability to the new-key area. A deceptive cadence interrupts the repetition, and the resulting expansion—while loosening the structure of the theme's repetition—highlights C's status as an important theme in this exposition.

Unlike the extra theme in Beethoven's Symphony No. 1, which I chose to understand as an essential part of a three-phase process in the new-key area (albeit one that can be understood to result from an insertion), the extra theme in Haydn's Symphony No. 94 grows out something considered formally inessential: a codetta to S^1. As the codetta unfolds, its formal function changes by increasing in importance from a codetta to a full-fledged theme. Again, this piece seems to transcend the paradigms set up in the theories of Hepokoski, Darcy, and Caplin.

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[30] C literally occupies eight bars of music because a complete bar of accompaniment is provided before the melody enters.

Beethoven, Symphony No. 3 in E-flat Major

My third and final example that has three themes in the new-key area is Beethoven's Symphony No. 3. The formal structures of this exposition feature many interesting peculiarities, including a remarkably short transition—nine bars (bars 37–45) out of the 148-bar exposition—and an introduction to S (bars 45–57).[31] The organization of S (bars 57–83), a loosely constructed twenty-seven-bar phrase, parallels that of S from his Symphony No. 4.[32] Each phase of the phrase is expanded and clear, but the phrase is not organized as a period or sentence. Unlike the other two symphonies with three themes in the new-key area, this symphony features two C themes. Therefore, I will focus my discussion on the C zone.

C^1, given in example 3.9, has a structure similar to a parallel period despite consisting of only one phrase. Beethoven divides the phrase into two parts through a change in timbre and parallel opening rhythms. A sense of "call" and "answer" accompanies the two subphrases, and each begins with the same motive. However, one does not find the traditional cadence between the two parts of the structure.

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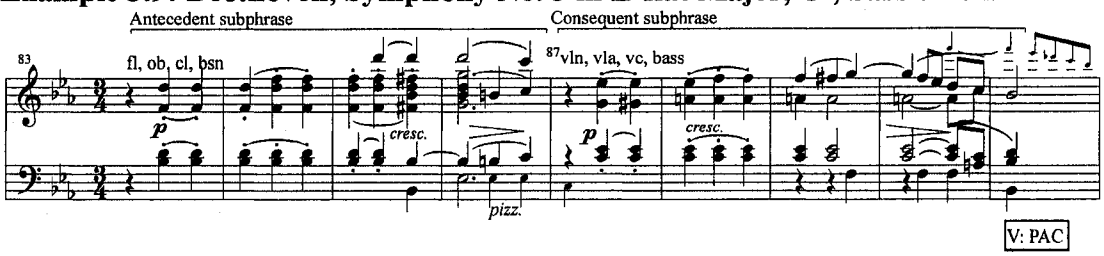
[31] Hepokoski and Darcy discuss the status of the introductory S material in bars 45–56 as an S^0 theme, i.e. an S that begins over a prolonged dominant. This is a little misleading since S^0 is not a theme, but instead provides a thematically based link between the medial caesura and the onset of S. See *Elements of Sonata Theory*, 129–30.

[32] See chapter 2, pp. 95–7.

Example 3.9: Beethoven, Symphony No. 3 in E-flat Major, C^1, bars 83–91

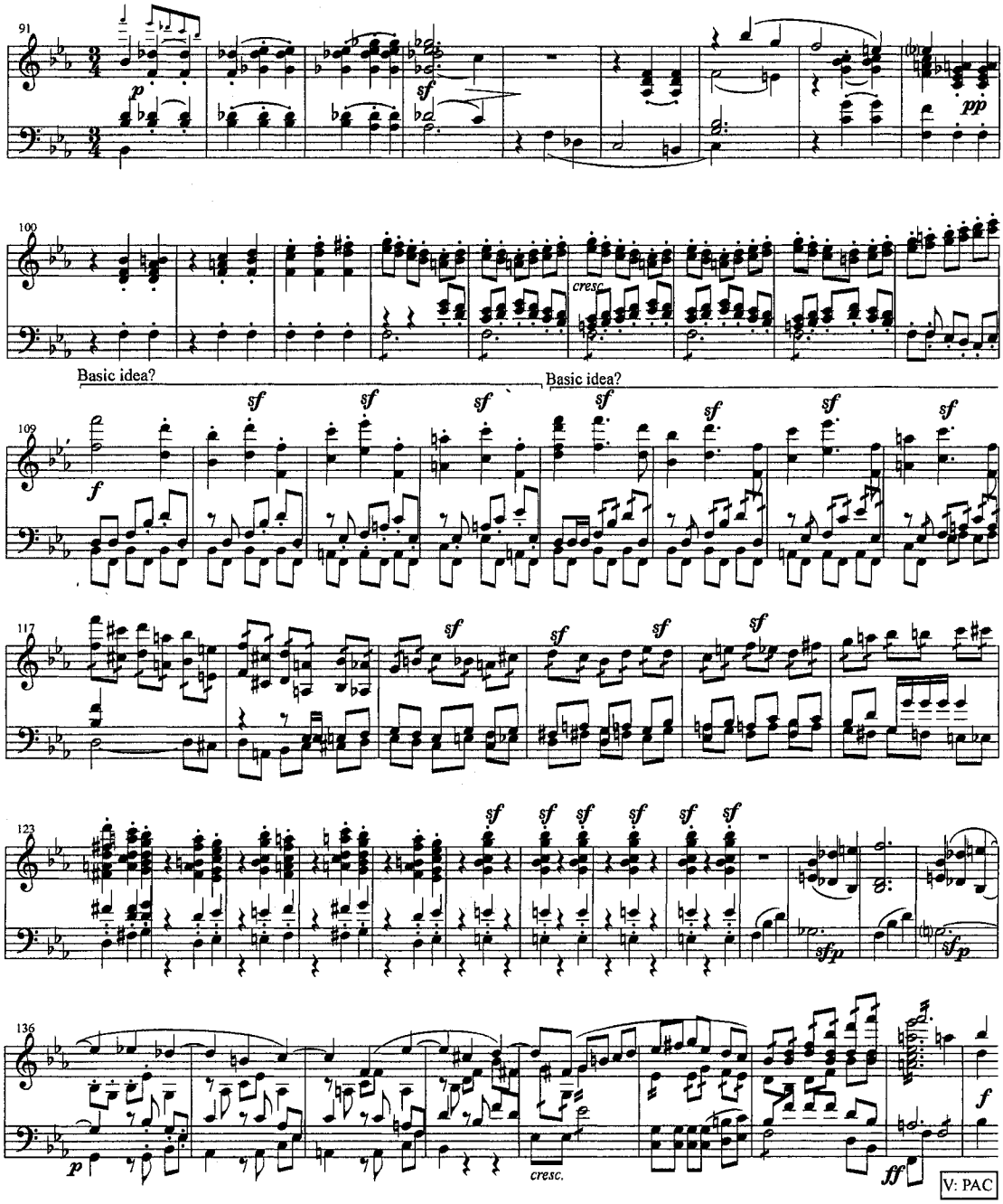


Similar to the analysis of S^1 and S^2 in Haydn's Symphony No. 95, my interpretation of C^2, which emerges from a repetition of C^1, depends on the concept of changing formal functions.[33] The repetition of C^1 immediately opens up new musical space by invoking the minor mode at its opening in bar 91, shown in example 3.10. Despite the change in mode, the articulations, rhythm, and dynamics of C^2's antecedent subphrase parallel those of C^1's antecedent phrase. However, the repetition explores a new direction when Beethoven develops C's rhythmic motive (bars 83–84, also shown with smaller noteheads in bars 86–87). Using this motive and the $\flat\hat{3}$ introduced by the minor mode, Beethoven initiates a brief tonicization of the local ♭III, implied by the presence of a ii^4_3–V^7 progression in D-flat major (bars 92–94).[34] The next sub-phrase (bars 95–98) implies the key of F, the dominant of B-flat major, with a similar progression.

[33] Caplin hears this theme differently. He understands my two closing themes as one greatly expanded subordinate theme, the second of the exposition. The eight-bar phrase I call C^1 represents the presentation phase of Caplin's large-scale theme. See Caplin, "Structural Expansion in Beethoven's Symphonic Forms," 36–44.

[34] This gesture is similar to the tonal journey taken in C of Haydn's Symphony No. 91, also in E-flat major. See chapter 2, pp. 118–21.

Example 3.10: Beethoven, Symphony No. 3 in E-flat Major, C^2, bars 91–144



Beethoven finally returns to B-flat major by adding a chordal seventh (bar 99) and standing on B-flat's dominant, F^7, for ten bars (bars 99–108) before proceeding to the closing phase of the theme. While the arrival at bar 109 may seem like a PAC,

which would indicate a boundary between two themes, the device of "standing on the dominant" implies that the tonic arrival in bar 109 is not the goal of a cadence. Standing on the dominant is used usually as a post-cadential gesture, such as an extension of a half cadence, or a medial intrathematic function, such as the B section of a ternary form.[35] In this example, the standing on the dominant is a link between C's first module and cadential module. The expanded closing phase (bars 109–144) is marked by new motivic material and is loosely structured as a sentence. It is similar to the previously discussed closing phase of S^1 in Beethoven's Symphony No. 1 in that it is structured like a theme but functions as the closing phase of a larger theme.

Similar to the change of function described in the new-key area of Haydn's Symphony No. 94, the repetition of the closing theme in Beethoven's Symphony No. 3 also encourages retrospective reinterpretation of formal function. The repetition travels to tonally distant areas, is greatly expanded, introduces new melodic-motivic material, and arrives at a cadence made more conclusive than the first owing to its dynamic and orchestration. Newcomb describes this situation clearly, stating:

> When things do not go as we thought—when new data "disconfirms" the pattern into which we had fit our past and present experience—we rearrange our understanding of the origins and the middle in such a way as to relocate ourselves in a new pattern or paradigm, and we project a new end according to the new pattern or paradigm.[36]

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[35] See Caplin, *Classical Form*, 16, 75.

[36] Newcomb, "Fresh Images," 236.

Although what becomes C^2 clearly began as a simple repetition of C^1, the extent to which it explores new musical space may encourage listeners to rearrange their understanding of the theme as a new and different theme rather than a varied repetition of C^1.

Beethoven's Symphony No. 3 has the first exposition that does not support the observation (put forth in chapter 2) that a tight-knit theme in non-monothematic expositions tends to occur first. The structure of the first closing theme is similar to an eight-bar period, proportioned as expected into two four-bar subphrases. The second closing theme, which starts as a repetition of the first, is much looser. In this new-key area, C^1 is the most tight-knit of the three themes and occupies the medial position. Owing to the way C^2 grows out of a repetition of C^1, C^1 must be the more tight-knit closing theme. Therefore, the loose structure of S promotes the divergence from the norm. In general, and particularly in the works discussed in this study, it is uncommon to have both a tight-knit S and a tight-knit C. Even though this situation occurred in the Mozart symphonies, those C were not particularly thematic, instead growing out of codetta-like basic ideas.[37] Beethoven's penchant for long themes was not expressed in C^1, which set the stage for the large proportions of C^2.[38] Again, the

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[37] The other exception in this study, Haydn's Symphony No. 104, has a tight-knit S and C because of the unusual amount of P's head motto recycled at S's beginning. See chapter 2, pp. 115–16.

[38] It is an interesting phenomenon that the symphony with a transition that occupies nine of the 148-bar exposition (6%) also has an unusually short (for Beethoven) first closing theme. It creates an alternation of long–short–long–short–long–short for the formal areas P–Tr–S–C^1–C^2–codettas.

ideas of Schmalfeldt and Newcomb, which explore how formal functions can change *en route*, provided analyses that closely match musical experience.

Section II: Two Remarkable Expositions

The expositions of Haydn's Symphony No. 87 and Mozart's Symphony No. 41, the remaining symphonies with multiple themes in the new-key area, engage finer points of Hepokoski and Darcy's analytical approach, Sonata Theory, to clarify the formal function of some unusual musical passages. While Sonata Theory develops tools to deal with the special cases found in these expositions, the resulting analyses leave one with the sense that the amount of theoretical work needed to analyze these expositions may be unwieldy. I will show that, despite the heavy theoretical investment, using Sonata Theory allows for a description of these expositions that highlights their unusual characteristics. For each exposition I will first introduce necessary theoretical background and then present the solutions provided by Sonata Theory. Finally, I will point out the benefits of Sonata Theory in the analysis.

Haydn, Symphony No. 87: Medial Caesura Issues

Two problems arise when analyzing the exposition of Haydn's Symphony No. 87, and both involve identification of the medial caesura. As defined by Hepokoski and Darcy, the medial caesura is the "brief, rhetorically reinforced break or gap that serves to divide an exposition into two parts, tonic and dominant (or tonic and mediant in most minor-key sonatas)."[39] Hepokoski and Darcy's definition of two exposition-

[39] Hepokoski and Darcy, "Medial Caesura," 123. Example 3.6 in this chapter, Haydn's Symphony No. 94, provides a *locus classicus*.

types, two-part and continuous, depends on the existence of a medial caesura. If there is no medial caesura to divide the exposition into two parts—a situation common to several of Haydn's expositions in this study—the exposition is continuous.[40]

According to Hepokoski and Darcy, composers of this period tend to use three kinds of cadences as medial caesuras: the half cadence in the original key (I:HC MC), the half cadence in the new key (V:HC MC), and the perfect authentic cadence in the new key (V:PAC MC).[41] While other cadence-types could be used as medial caesuras—for instance, an authentic cadence in the original key—Hepokoski and Darcy rarely find examples of these other cadences acting as medial caesuras.

They further note that each of these three medial-caesura types corresponds to a distinct range of "temporal appropriateness," regions within an exposition during which these medial caesuras tend to occur.[42] These ranges are graphically represented in figure 3.1. The most frequently used medial caesura is the half cadence in the new-key area (V:HC MC), which is also the most "medial" in terms of its placement within the exposition. This cadence is effective as a medial caesura from twenty-five to fifty percent of the way through the exposition. The next most common medial caesura is a

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[40] The five unambiguous continuous expositions encompassed by this study are Haydn's Symphonies Nos. 88, 96, 102, and 103, and Beethoven's Symphony No. 7.

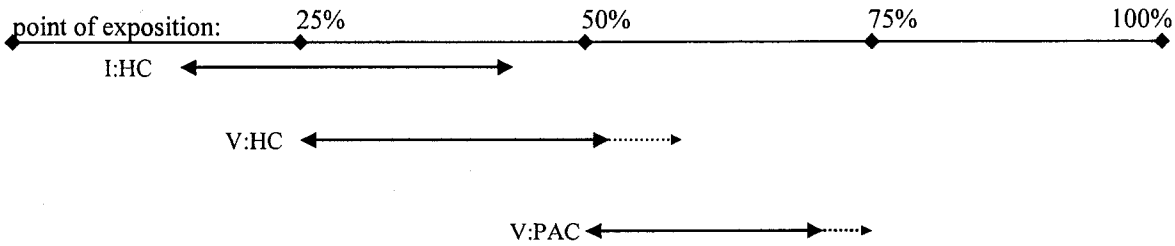
[41] These abbreviations communicate the cadence's key, type, and function. While the new-key area in minor-mode symphonies is usually III, not V, when referring to the new key in a general sense, I will assume that the new-key area is the dominant.

[42] Hepokoski and Darcy, *Elements of Sonata Theory*, 42. The ranges are also discussed in "Medial Caesura," 126–7.

half cadence in the original key (I:HC MC).[43] This option is available as a feasible medial caesura from fifteen to forty-five percent of the way through the exposition. Finally, the medial caesura that can occur the latest is the most rare: the PAC in the new-key area (V:PAC MC). This medial caesura candidate tends to occur between fifty and seventy percent of the way through the exposition. Figure 3.1 includes an indication for rarely occurring, later placements for the half cadence in the new key and the PAC caesuras.

Figure 3.1: Ranges of temporal appropriateness for medial caesura candidates[44]

Dashed lines indicate possible, but rare, temporal placement of medial caesura candidates.



The caesuras' temporal ordering parallels the progression of tonal events in a sonata-form exposition: events in the original key occur before events in the new key, and HCs tend to occur earlier than PACs since they require slightly less tonal motion. Therefore, I:HC medial caesuras tend to appear before V:HC medial caesuras because

[43] This occurrence and use of this medial-caesura type has been described in detail by Robert S. Winter in his articles "The Bifocal Close and the Evolution of the Viennese Classical Style," *Journal of the American Musicological Society* 42 (1989): 275–337, and "Bifocal Tonality in Haydn's Symphonies," in *Convention in Eighteenth- and Nineteenth-Century Music: Essays in Honor of Leonard G. Ratner*, ed. Wye J. Allanbrook, Janet M. Levy, and William P. Mahrt (Stuyvesant, NY: Pendragon Press, c1992), 59–73.

[44] Adapted from Hepokoski and Darcy, *Elements of Sonata Theory*, 42–4.

fewer tonal events need to occur in order to create a I:HC. Similar logic applies to the temporal placement of perfect authentic cadences in the new key. It takes at least one extra step to arrive at a V:PAC instead of a V:HC: the final movement from dominant to tonic. Additionally, V:PACs tend to occur late in the exposition because they signal closure. Even though they can be effective as medial caesuras, they do not seem to be able to avoid late placement in the exposition.

The ranges of temporal appropriateness for the I:HC MC and V:HC MC are also logical. In order to create a two-part effect, medial caesuras should generate a sense of dividing the exposition into two parts such that the second part seems equal in importance to the first part. This balance can be accomplished in a number of ways, including length and thematic content. The placement of the V:HC MC tends to come the closest to dividing the exposition's length into two equal parts. However, both of the half-cadence caesura candidates can occur relatively early in the exposition's duration: the V:HC MC can occur as early as twenty-five percent of the way through the exposition, and the I:HC MC can occur as early as fifteen percent of the way through the exposition. Even with an early placement within the exposition, both caesuras are convincing in dividing the exposition into two parts because of the importance that tends to be accorded by listeners to the opening gestures of the exposition.

While the ranges of temporal appropriateness for the two types of HC caesuras make musical sense, the fifty-to-seventy-five-percent range for the V:PAC MC is

more difficult to explain. When this cadence occurs in the later portion of its range, it may not seem to divide the exposition into two parts. In these cases, it becomes difficult to decide if the V:PAC—the first of the exposition—is the medial caesura of a two-part exposition or the EEC of a continuous exposition. The shared tonal paths of all sonata-form expositions create this ambiguity. As Hepokoski and Darcy have pointed out,

> Both two-part and continuous exposition types share the same *tonal form*. Each modulates to the key of the dominant (or, in most minor-mode pieces, to the major mediant) and directs its linear-contrapuntal energy toward a clearly articulated tonal goal—usually the first satisfactory perfect authentic cadence (PAC) in the new key.... Once this cadence has been achieved ... the tonal work of the exposition is over. Although more music—perhaps a good deal—may follow in order to accomplish various expressive or proportion-satisfying tasks ... the exposition has completed its essential mission, that of providing a clearly articulated sign of closure in the new key.[45]

In their extended discussion of this issue, "V:PAC caesuras are heard as signs of closure, not of expectancy."[46] Therefore, on an initial hearing, it could be difficult to interpret the first V:PAC as a medial caesura. A first assumption would probably be that this PAC signals the imminent closure of the exposition, i.e., it is the EEC of a continuous exposition. However, if the music following the caesura exhibits characteristics of a subordinate theme, and another equally convincing V:PAC EEC

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[45] Hepokoski and Darcy, "Medial Caesura," 119.

[46] Hepokoski and Darcy, "Medial Caesura," 151. For an extended discussion, see *Elements of Sonata Theory*, V:PAC (III:PAC) Medial Caesuras, pp. 150–53.

candidate arrives, then the first PAC may be retrospectively reinterpreted as a medial caesura.[47] Repetition of the exposition will then allow a clearer journey through these events in the new-key area. Owing to the problematic range of temporal appropriateness for the V:PAC MC, analytical difficulties often arise when they occur.

Finally, reliance on percentages as a determinant or explanation of the function of a medial-caesura candidate is not a desirable analytical practice. These percentages merely represent tendencies in the data gathered by Hepokoski and Darcy, not a method of analysis. Decisions of whether or not the caesura is a medial caesura should be based on the rhetoric of the surrounding musical material in addition to proportional placement. While the theory seems clear, in practice many analytical difficulties can arise when identifying the medial caesura.[48]

Haydn, Symphony No. 87: Problem #1, S or not S?

For the first time in this study, paradigms promoted by Caplin, Hepokoski, and Darcy lead to a conflict concerning a subordinate theme; usually such a conflict involves calling a theme a second subordinate theme (Caplin) or a closing theme (Hepokoski and Darcy). In this exposition, a phrase that Caplin would call the first subordinate

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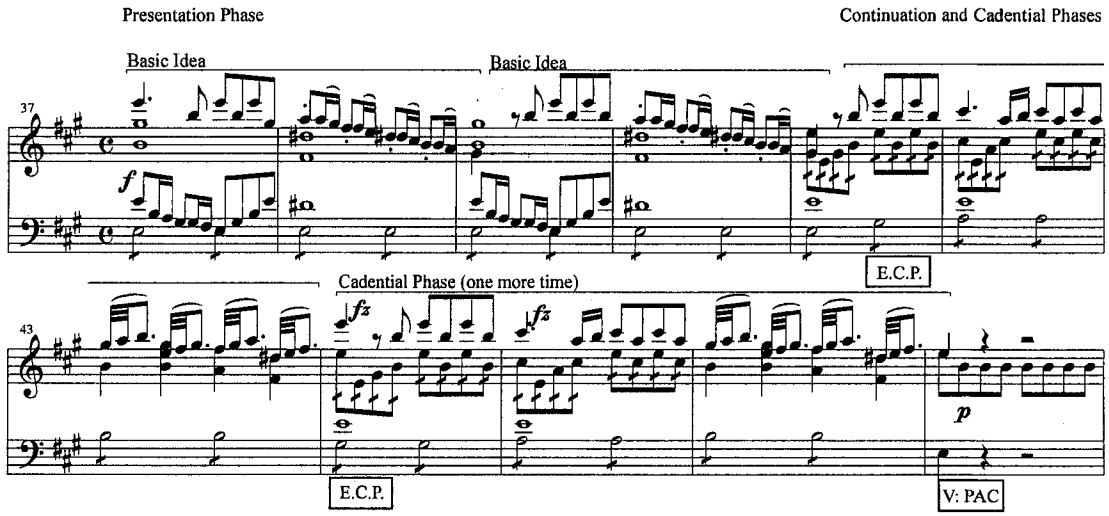
[47] A clear III: PAC MC can be found in Haydn's Symphony No. 83 at bar 45. The lack of ambiguity surrounding this caesura results from the point at which it occurs (67% of the way through the exposition) and the clear "S-ness" of the ensuing theme.

[48] These analytical difficulties are introduced in consecutive sections of their article "Medial Caesura": caesura fill (section 5), bait-and-switch tactic (section 6), medial caesura declined (section 7), the mid-expositional trimodular block (section 8), and the V:PAC (III:PAC) medial caesura (section 9).

theme does not fit Hepokoski and Darcy's definition of S. The phrase in question is shown in example 3.11.

Example 3.11: Haydn, Symphony No. 87 in A Major, tight-knit theme, bars 37–47



This theme spans eleven bars, the first eight of which are a tight-knit sentence with an evaded cadence; the last three bars repeat the cadential phase of the sentence, concluding with a perfect authentic cadence. The "one-more time" technique, referred to in chapter 2 and discussed by Janet Schmalfeldt, dramatizes the completion of this theme's cadence.[49] Schmalfeldt ties cadential-phase-expanding gestures to secondary themes in the opening of her article "Cadential Processes: The Evaded Cadence and the 'One More Time' Technique."[50]

> A hallmark of the stylistic evolution that characterizes mid- to late-eighteenth-century music is the emergence

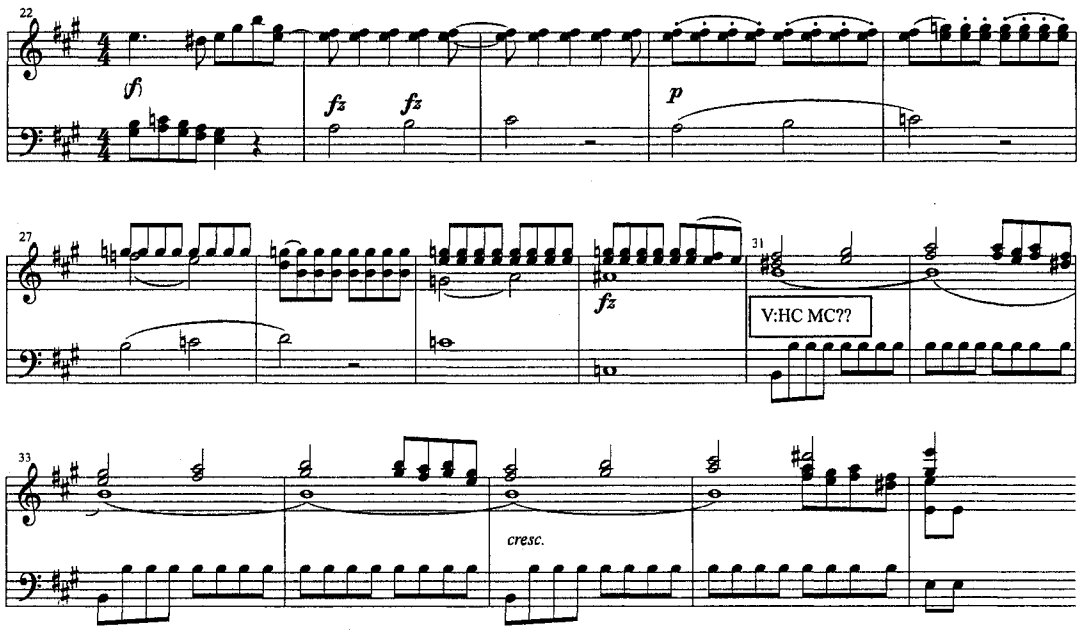
[49] See chapter 2, p. 81, footnote 25.

[50] Janet Schmalfeldt, "Cadential Processes: The Evaded Cadence and the 'One More Time' Technique," *Journal of Musicological Research* 12 (1992): 1–52.

> of the *secondary theme* ...—a phenomenon that logically coincided with the tendency to highlight the *cadential progression* as the supreme signal for thematic closure. ... Toward the goal of expanding the materials of the secondary key, to the point where, within sonata forms, the secondary-key section tends to assume more than twice the length of the main theme, new cadential techniques and distinctive forms of closure arose.[51]

Owing to its tight-knit structure and the one-more-time treatment, a *Formenlehre* analysis would identify this theme as a subordinate theme—the first one in this symphony's exposition. Shown in isolation in example 3.11, this analysis of the theme is viable. However, placed in context of the entire exposition, this analysis becomes problematic.

Example 3.12: Haydn, Symphony No. 87 in A Major, questionable MC, bars 22–37



[51] Schmalfeldt, " 'One More Time' Technique," 1. A similar example from Mozart's Symphony No. 39 in E-flat Major is discussed in chapter 2, 81–2.

Example 3.12 provides the approach to the tight-knit theme. Seen in context, interpreting this theme from the viewpoint of Hepokoski and Darcy is complicated because it is unclear whether a medial caesura has occurred. If there is no medial caesura, the theme in example 3.11 cannot be an S since subordinate themes occur only after a medial caesura in expositions of the two-part type and not at all in expositions of the continuous type. Some may argue that the six-bar standing on the dominant (bars 31–36) constitutes a V:HC MC. I argue, however, that the pause on the dominant is not a cadence, and therefore not a medial caesura. The increase of tension created through the rising line, crescendo, and dominant pedal implies that the goal of this passage is still imminent—and finally arrives at bar 37 with the onset of the questionable S candidate. Additionally, there is little sense of a break or pause, hallmarks of a caesura.[52] From the viewpoint of Sonata Theory, this approach to the theme is akin to the situation *medial caesura declined.*

> … [It] is possible for a composer to create the impression that the music *following* an apparent MC (or MC candidate) conceptually undoes that caesura by refusing to accept its implied consequences. This would be a *retrospective cancellation*: a medial caesura has been *proposed* but the subsequent music has *declined* to accept it—has declined, that is, to initiate the second part of a two-part exposition, preferring instead to

[52] One may choose to understand the arrival of the dominant as the MC and the ensuing standing on the dominant as an example of caesura-fill, but it would be an exceptional example because there is not a decrease in energy. Hepokoski and Darcy point to the first movement of Beethoven's Piano Trio in G, op. 1, no. 2 as an example of this non-normative treatment; see Hepokoski and Darcy, "Medial Caesura," 129. Additionally, unlike Hepokoski and Darcy's Beethoven Trio example, a *piano* S does not emerge after the supposed caesura-fill is completed.

> continue unfolding under the structural categories of the first part (P + TR). In general, we consider a medial caesura accepted if what follows it is a satisfactory S-theme. When what follows it is not, there arises the situation that we call *medial caesura declined.*[53]

Hepokoski and Darcy enumerate three subclasses of medial caesura declined. The first two deal with proposing and declining a I:HC MC, then moving forward to a V:HC MC that is eventually achieved and accepted. The third situation deals with changing the exposition-type from a two-part to a continuous strategy, which I propose applies to the exposition in Haydn's Symphony No. 87. According to Hepokoski and Darcy, in this third type of medial caesura declined the music following the proposed V:HC MC adopts the new key but remains in the TR zone, refusing to present a satisfactory S. They do not define what constitutes a satisfactory S, but earlier in their essay, they suggest that S is introduced almost invariably by "a rhetorical drop to *piano* marking the onset of a gentle, usually contrasting *secondary-theme zone* in the second key-area."[54]

Even though a convincing argument would need to be made for understanding the dominant prolongation in bars 31 through 36 as a proposed medial caesura, this third subclass of medial caesura declined seems to describe the situation in example 3.12. This S candidate (example 3.11) challenges traditional notions of S rhetoric. It continues the *forte*, busy texture of the P and TR zones, and its rhetoric is decidedly

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[53] Hepokoski and Darcy, "Medial Caeusra," 138.

[54] Hepokoski and Darcy, "Medial Caesura," 117.

cadential. Combining the absence of a clear caesura with the lack of traditional S rhetoric clarifies the status of the theme in example 3.11: it is a tight-knit theme in the new-key area that does not fulfill the function of an S.[55]

One might also interpret this problematic theme as an example of Hepokoski and Darcy's *bait-and-switch* tactic. In this strategy, the arrival of a medial caesura is imminent, but the transition zone continues past the point for a successful medial caesura. At this point, the exposition-type is reassessed. Hepokoski and Darcy enumerate three subclasses of the bait-and-switch tactic, the second of which best describes the situation in Haydn's Symphony No. 87: "(2) The composer may create the expectation of an imminent MC only to veer away from it for more *Fortspinnung* or other elaboration."[56] This accurately describes the effect of shying away from a medial caesura that occurs while standing on the dominant, but does not capture the confusion presented by the tight-knit theme that arises as further elaboration of the transition.

In sum, Haydn's Symphony No. 87 presents a theme in the new-key area that engages differences in the analytical approaches of Hepokoski, Darcy, and Caplin. While Caplin would simply understand this theme as S, Hepokoski and Darcy cannot do so because the exposition has not achieved a medial caesura. Two of their

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[55] Rothstein has also recognized the problem of labeling this type of theme, stating "it would be a mistake to use the term 'closing theme' to denote a new or striking melodic idea that appears shortly before, and that leads to, the closing cadence. For this purpose the term *cadential theme* suggests itself," *Phrase Rhythm in Tonal Music*, 118.

[56] Hepokoski and Darcy, "Medial Caesura," 134.

proposed special cases, "medial caesura declined" and the "bait-and-switch tactic," provide methods for addressing the standing on the dominant before the theme in question begins. However, no single paradigm accurately sums up the situation. The analysis of the exposition as a whole still remains incomplete. Since the music following the V:PAC has not been discussed, the exposition has not yet been clarified as two-part or continuous; the V:PAC closing the tight-knit theme in example 3.11 can be interpreted as either a V:PAC MC of a two-part exposition or the EEC of a continuous exposition.

Haydn, Symphony No. 87: Problem #2, continuous exposition or two-part exposition?

The second analytical problem from a Sonata Theory perspective involves deciding whether there is a medial caesura anywhere in this exposition. The distinction between a continuous and a two-part exposition depends solely on the existence of a medial caesura. I have already discussed reasons why the arrival on the dominant of the new key in bar 31 (example 3.12) does not constitute a V:HC MC. However, the V:PAC concluding the theme in example 3.11 is also an MC candidate. V:PAC medial caesuras, a rare third-level default for medial caesuras, present analytical difficulties that Hepokoski and Darcy treat in a distinct section of their 1997 *Spectrum* article.

> Obviously, PAC MCs are stronger tonal gestures than are HCs. ... Because they alter the expressive norms of the MC, they present special problems of understanding. The tonal task of the exposition is to modulate to the dominant or mediant and to cadence decisively with a satisfactory PAC in this second key. This decisive cadence ... signals the completion of essential expositional closure (EEC). In a two-part exposition this

> PAC terminates S; tonally, it is S's *raison d'être*. But if TR itself produces a PAC in the second key—before the onset of S—we have a premature arrival of that which is normally reserved to signal the attainment of the EEC.[57]

Since the first caesura of Symphony No. 87's exposition occurs relatively late and in conjunction with a V:PAC, the analysis of the exposition becomes complicated.

The V:PAC arises from the following sequence of events. After the primary theme closes with a PAC in the original key of A major, the transition begins, quickly modulating and achieving a strong arrival on the dominant of the new key (example 3.12). In the process of prolonging this dominant harmony, Haydn effectively bypasses this dominant arrival as a medial caesura. Upon reopening the transition zone, Haydn introduces a tight-knit theme, shown in example 3.11. The next candidate for a medial caesura is the new-key PAC in bar 47 that concludes this tight-knit theme. This cadence arrives—emphatically—seventy percent of the way through the exposition. As figure 3.1 shows, the point of arrival is late for a medial caesura of this type, but is still within the range for effective medial caesuras.

The events following this medial caesura candidate are shown in example 3.13 and compound the problem of interpreting a late, structurally ambiguous V:PAC: the music drops to *piano*, presents a new theme, and drives to another emphatic PAC. The rhythmic and registral similarities of the two PACs highlight the shared strong cadences.[58]

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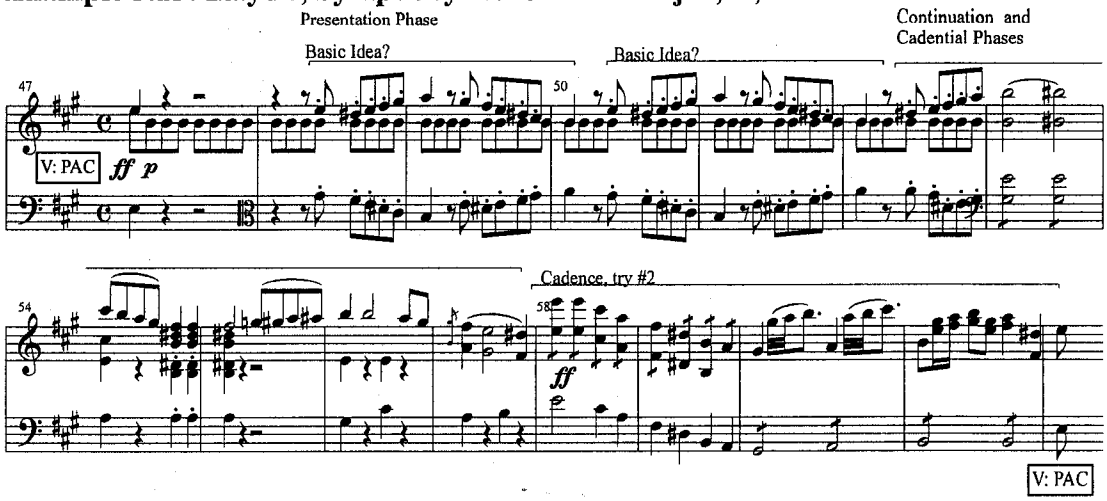
[57] Hepokoski and Darcy, "Medial Caesura," 151.

[58] Cf. example 3.13, bars 60–62 and example 3.11, bars 46–47.

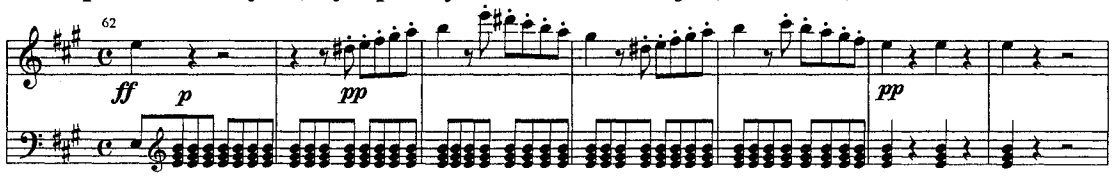
Example 3.13: Haydn, Symphony No. 87 in A Major, C, bars 47–58



Following a caesura, the entrance of a new theme coupled with a *piano* dynamic typically signals the entrance of S. While this description parallels the order of events in this exposition, it is problematic to understand this *piano* theme as S for two reasons: (1) the opening motive does not support a tonic prolongation, and (2) the opening motive returns as the last codetta of the movement. The opening prolongation challenges describing example 3.13 as a theme because, according to Caplin, sentences—the theme-type that best describes this theme—should open with a tonic prolongation. Additionally, from a Sonata Theory perspective, without a signal such as the return of P material in the new key, S's opening gesture bears much of the weight for providing a beginning to the second part of the exposition. By opening with a dominant prolongation, this theme delays the statement of a root-position tonic until its cadence. This avoidance of the new-key tonic hinders this theme from successfully opening a second part of the exposition.

As discussed in the previous analysis of Beethoven's Symphony No. 1, the presence of S's opening gestures at the beginning of post-S music indicates that the S-zone has not yet been closed.[59] In Beethoven's Symphony No. 1 this guideline helped to identify the medial theme as belonging to the S-zone; in Haydn's Symphony No. 87 the situation is more complex. It is already unclear whether the theme in example 3.13 belongs to the S or C zone. Thus, by looking to the end of the exposition and using the principle that S's opening gestures should not appear in the C zone, I come to the conclusion that it is less effective to label example 3.13 as S. Example 3.14 presents the codettas that close the exposition. These codettas clearly belong to the C zone. If we understand the theme in example 3.13 as S, these codettas would still technically have to belong to the S zone because their opening motives come from S. I resolve this contradiction in favor of interpreting the codettas as belonging to the C zone. This interpretation implies that the theme in example 3.12 also belongs to the C zone. Therefore, I claim this exposition would best be considered a continuous exposition-type since there is not a medial caesura before the first tight-knit theme and since the second theme is not an S.

Example 3.14: Haydn, Symphony No. 87 in A Major, codettas, bars 62–68



[59] Hepokoski and Darcy, *Elements of Sonata Theory*, 113.

This continuous exposition is unusual because there are two themes in the new-key area. Of the thirty-six first movements encompassed by the time frame of this study, five are clearly of the continuous type: Haydn's Symphonies Nos. 88, 96, 102, and 103, and Beethoven's Symphony No. 7. The exposition of Haydn's Symphony No. 87, a less clear example of a continuous exposition, differs from the other five continuous expositions because there is a tight-knit theme *before* the essential expositional close. Even though there is no S zone in continuous expositions, the C zone provides musical space for cadence-confirming themes and/or codettas. Table 3.1 lists the contents of the C zones for each continuous exposition. The table also shows that none of these symphonies has more than one C, making Symphony No. 87 striking because it has two themes in the new-key area, one each before and after the essential expositional close.

Table 3.1: Contents of the C zone in continuous expositions

Haydn, Symphony No. 87	C theme, codettas
Haydn, Symphony No. 88	Theme-like codettas
Haydn, Symphony No. 96	Codettas
Haydn, Symphony No. 102	C theme, codettas
Haydn, Symphony No. 103	C theme, codettas
Beethoven, Symphony No. 7	Codettas

Two other symphonies in this study have a theme-candidate before the essential expositional close. Haydn's Symphonies Nos. 89 and 97 both provide

unsatisfactory medial caesuras followed by brief themes. Identification of the exposition-type depends on the analyst's interpretation of the MC candidate. If the candidate is found unconvincing, then these themes occurring before the essential expositional close are not subordinate themes and the exposition is continuous. Alternatively, if the MC candidate is found convincing, then the exposition is of the two-part type and the themes are subordinate themes. However one decides to interpret these symphonies, they differ from Haydn's Symphony No. 87 because neither has more than one new-key theme.

While both of the new-key themes in Symphony No. 87 have fairly tight-knit structures, the first new-key theme is more tight-knit than the second because its phases are clear and ideally proportioned. This relationship between the two themes adheres to my suggestion in chapter 2: in non-monothematic expositions with multiple themes in the new-key area, a tight-knit theme—if there is one—tends to appear in the first position.

In conclusion, assigning this exposition to an analytical paradigm is complicated by the introduction of four new theoretical concepts: temporal appropriateness of medial caesuras, continuous exposition types, "bait and switch" tactic, and medial caesura declined. The need for this extensive theoretical foundation reflects the unusual construction of this exposition. Sonata Theory provides a sense of what is normative in sonata practice. Only by understanding common practices can one accurately describe the unusual, such as this exposition. Similar to many

continuous expositions, this exposition often makes feints toward a two-part strategy. However, this exposition takes this game further than most expositions do. The ambiguities make it difficult to fit the exposition-type, cadential functions, and thematic functions into Hepokoski and Darcy's paradigms.

Mozart, Symphony No. 41: Three candidates for themes

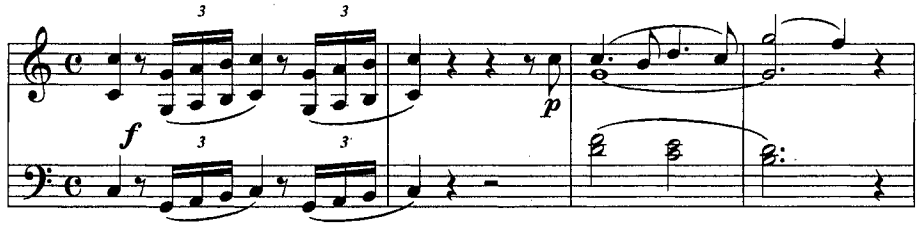
The first-movement exposition of Mozart's Symphony No. 41 in C Major is extraordinary. There are three caesuras in the new-key area, and, while the first of these caesuras is the expected medial caesura, the last two caesuras occur within a phrase rather than between phrases. Additionally, the way that Mozart arrives at these latter caesuras complicates identifying the EEC and creates ambiguities of formal functions. I will show that there is an unusual tension between the caesuras and the formal structure of the new-key area—resulting in a surprising overall organization for the new-key area.

The exposition opens simply with a twenty-three-bar P zone organized as a grand antecedent. A grand antecedent features "a lengthy, typically *multimodular* antecedent idea of more than twelve-to-sixteen measures containing several sub-phrases or subparts linked together, often arranged in some variant of sentence-form (aa′b)."[60] This label aptly describes the P zone. It begins with a four-bar basic idea, Hepokoski and Darcy's "a", that provides most of the motivic material for the movement. Shown in example 3.15, this basic idea is next repeated on the dominant,

[60] Hepokoski and Darcy, "Medial Caesura," 139.

developed in the continuation phase, and eventually reaches a half cadence in the original key.

Example 3.15: Mozart, Symphony No. 41 in C Major, P's basic idea, bars 1–4

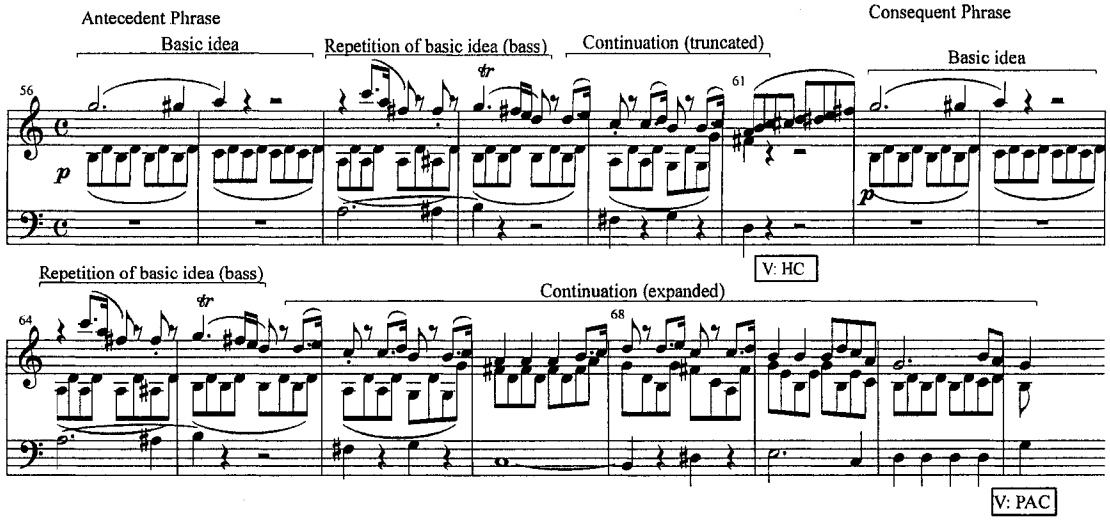


P is followed by a thirty-two-bar parallel grand consequent of the dissolving type. Grand consequents of the dissolving type are "marked by a restatement of the incipit of P in the tonic … [and] soon [dissolve] into more normative TR rhetoric."[61] The TR zone parallels the organization of the P zone; it states a basic idea, repeats it, develops it, and eventually arrives at a cadence. This time, however, the cadence is a half cadence in the new key and functions as the medial caesura (V:HC MC). Together, these two zones create a large-scale modulating parallel period that dissolves into TR rhetoric, smoothly leading to the medial caesura, and opening up musical space for additional formal areas of similar breadth. While a loose structure is inherent in each of the grand antecedent and consequent phrases, the interaction of the two phrases leads to a tight-knit version of the original-key area—it is organized like a parallel period, albeit an unusually long one that dissolves.

[61] Hepokoski and Darcy, "Medial Caesura," 139. In the process of dissolving into TR rhetoric, the parallel period structure is also dissolved. This change of formal function allows the TR zone, no longer a consequent phrase to P's antecedent, to conclude on a half cadence.

The tight-knit structure that the P and TR zones project is paralleled by the tight-knit structure of S. S, shown in example 3.16, is organized as a parallel period with antecedent and consequent phrases of uneven lengths. The four-bar basic idea that opens the antecedent phrase (bars 56–61) projects an eight-bar overall length. However, the truncated contrasting idea arrives at a half cadence after only two bars—half of its projected four-bar length—creating a six-bar antecedent phrase. The consequent phrase balances the antecedent phrase in ways beyond providing the "answer" to the antecedent phrase's "question." Rather than having a truncated contrasting idea, the consequent phrase has an expanded contrasting idea, bringing the overall length of S to the sixteen bars projected by the antecedent phrase's first four-bar basic idea.

Example 3.16: Mozart, Symphony No. 41 in C Major, S, bars 56–71



The PAC concluding the consequent phrase is a proposed EEC—and in every other symphony, barring those that repeat S or provide a codetta to S—this EEC is accepted and leads to the C zone. However, Mozart's Symphony No. 41 takes a

different path. Specifically, the codettas following the proposed EEC in bar 71 reopen the exposition instead of confirming its close. By returning to rhetoric appropriate to the TR zone—which creates an increase of energy—and then dramatically halting on an inconclusive harmony, the codettas recreate the effect of an arrival at a half-cadence MC. This destruction of EEC candidates occurs twice. This situation models Caplin's paradigm for the new-key area because each rejection of an EEC candidate loosens the subordinate theme group. However, this view does not capture the expressive effect of the events in this new-key area.

It is somewhat uncommon to have two caesuras in the new-key area. In addition to the MC, one place that a second caesura could arise is between S and C. More often, however, S and C overlap because S's cadence becomes C's initial tonic.[62] Three caesuras in the new-key area are surprising, and Hepokoski and Darcy's Sonata Theory only nominally addresses the specific situation. The previously discussed situation of "medial caesura declined" describes the rejection of a proposed medial caesura and the acceptance of the next caesura as the medial caesura. Another method by which multiple caesuras could arise is through the "mid-expositional trimodular block," a sub-case of medial caesura declined.

> The production of the first (rejected) MC candidate through the attainment of the EEC can be that of a single multipartite block set apart from the remainder of the exposition and laid out in *three distinct rhetorical*

[62] The use of phrase overlap at the junction between the EEC and the C zone is discussed in chapter 2 (pp. 97–8).

> *modules*: … S-like theme (but not S), new TR and real MC/real S.[63]

While the trimodular block represents a useful tool for understanding many difficult expositions, it does not describe the situation in this exposition.

The three caesuras arise as follows. The first caesura, in bar 55, is the medial caesura and is followed by the characteristic drop to *piano* and statement of S. However, the following two caesuras—each following an emphatic dominant seventh sonority—interrupt codettas, create opportunities for more themes, and demonstrate the exposition's strong reluctance to close.

It is not simply the number of new-key caesuras that is problematic; it is also their placement. Each of these caesuras serves to re-open the exposition and undo a previously proposed EEC. Hepokoski and Darcy allude to this exposition in discussing exceptions to the "first PAC rule."

> It is possible to encounter a situation in which a cadential figure seems to conclude S (to attain, we initially presume, the EEC), whereupon a seemingly new phrase begins—only once again, before too long, to fall into a (perhaps slightly varied) repetition of the melodic material surrounding the earlier-presumed EEC cadence. … This recapturing of the EEC-formula shortly after a presumed EEC should usually be taken as *undoing the earlier EEC-effect and deferring the "real" EEC to that moment of restatement*. But each case needs to be assessed individually. Issues of this nature—along with other sorts of issues—complicate the analysis of the first-movement exposition of Mozart's Symphony No. 41 in C Major, "Jupiter."[64]

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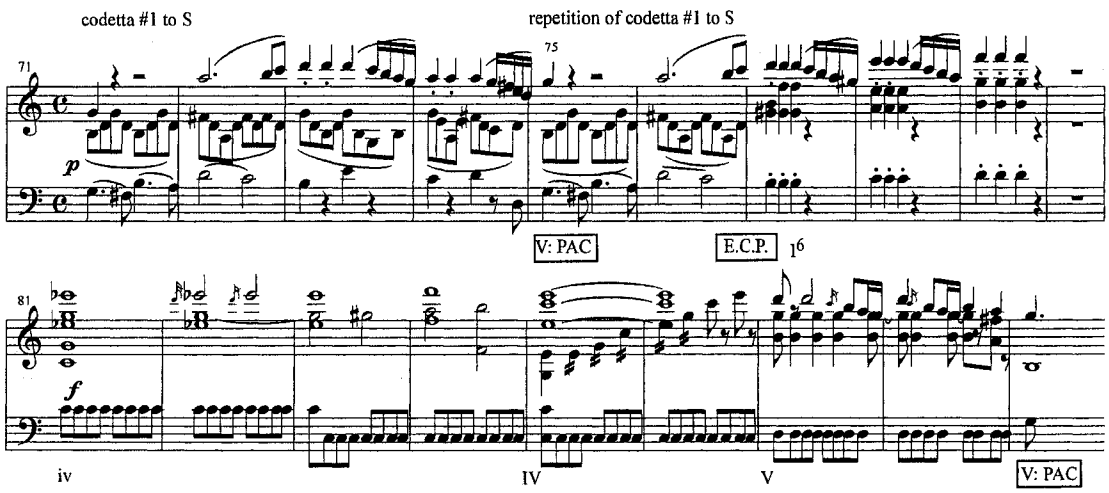
[63] Hepokoski and Darcy, "Medial Caesura," 146.

[64] Hepokoski and Darcy, *Elements of Sonata Theory*, 113.

The analysis that follows relies on perfect authentic cadences to parse the musical surface since PACs are essential to confirming the new key. There are six clear PACs (bars 71, 75, 89, 94, 111, 114). Combining PACs with motivic connections leads to parsing the new-key area into three potential themes, the first of which is the previously discussed S (example 3.16).

S is followed by a five-bar codetta, given as the first five bars of example 3.17. The codetta is repeated but, similar to the emergence of C^2 in Beethoven's Symphony No. 3, the repetition opens up new musical space by sequencing its third bar up by step until the chordal seventh of a dominant chord is reached. This dominant seventh chord is an applied chord to the subdominant, which enters after the caesura with a change in mode, dynamic, and orchestration. The minor mode affects only this subdominant chord, which eventually leads to the cadence closing the codetta.

Example 3.17: Mozart, Symphony No. 41 in C major, 2nd potential theme, bars 71–89



Taken as a unit, the structure of example 3.17 could be seen as a sentence that reopens the exposition and moves the EEC to bar 89. The basic idea is the first codetta, and its repetition changes at the end (bars 77–89) to initiate an expanded cadential phase. This sentential reading requires hearing the formal function of the first codetta change from codetta to basic idea (codetta → basic idea). While understanding example 3.17 as a sentence nicely organizes the musical material that occurs between two important perfect authentic cadences (bars 71 and 89), three factors work against identifying it as a theme. First, the prominence of the caesura complicates hearing bars 71 through 89 as one phrase. Second, the cadence in bar 75, while weaker than the cadence in bar 89, is too strong to close a basic idea. Finally, the expanded cadential progression overlaps the proposed presentation phase; however, expanded cadential progressions signify a cadential phase, which cannot overlap with a presentation phase.

After the second EEC candidate arrives in bar 89, a second pair of codettas, given in example 3.18, begins.[65]

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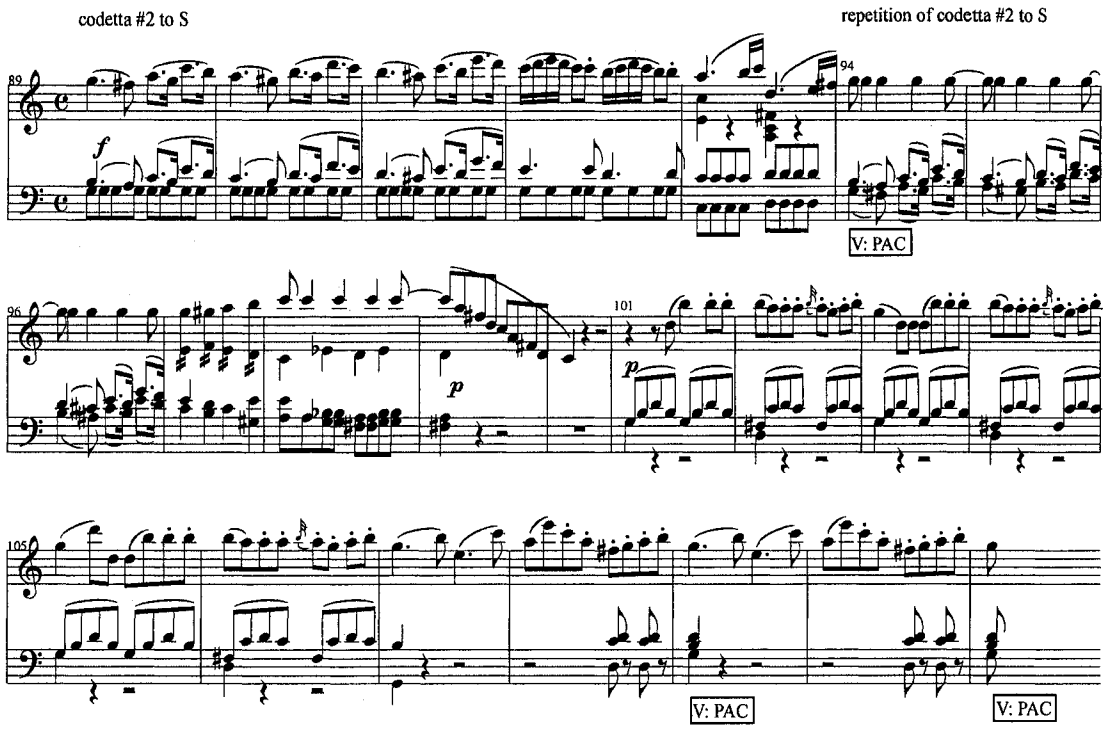
[65] In an October 23, 2003, conversation with Warren Darcy, he pointed out that this codetta's use of material from the TR zone immediately signals that the previously proposed EEC has been rejected. The use of P's second motive (bars 3–4) in a rising melodic sequence in TR (bars 39–44) returns at bar 89. Two additional similarities connect bars 39–44 and bars 89–92: the shadowing of the melody at a lower sixth and the tonic pedal point. In Beethoven's Symphony No. 1 and Haydn's Symphony No. 87, I discussed the ramifications that use of S motives in codettas had on the placement of the EEC. Darcy seems to suggest that the use of TR motives has the same effect of postponing the EEC until all potential new-key material is no longer involved. The situation in this exposition is complicated because this motive originates in P, and P motives *do* frequently return in C. In an alternate analysis, the return of P motives at bar 89 could support reading that bar as the onset of C. Perhaps the way that this motive is

Example 3.18: Mozart, Symphony No. 41 in C Major, 3rd potential theme, bars 89–111



The first codetta lasts for six bars, concluding with the fourth PAC of the new-key area. The repetition of the new codetta overlaps this cadence and again reaches a dominant seventh chord followed by a prominent caesura. This time, the chord is in $\frac{6}{5}$ position and is not an applied chord. The music following this caesura drops to piano—often a signal of a new theme—initiates a clear duple hypermeter achieved by binary alternations of tonic and dominant, and reaches its cadence in bar 111. Overall, this second pair of codettas could also be interpreted a sentence that reopens the exposition and would move the EEC to bar 111. The basic idea is the first codetta and its repetition leads to a prominent caesura that is followed by closing rhetoric.

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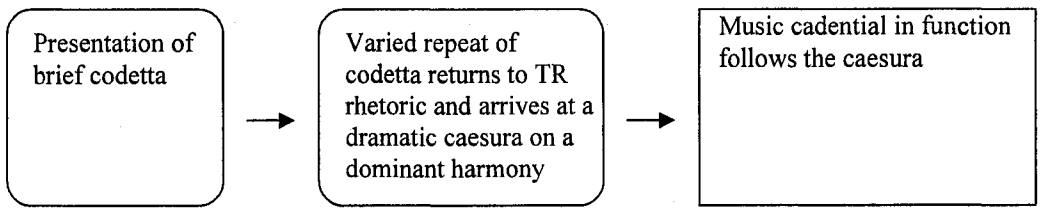
used in TR—as a forward-moving gesture—overwhelms the stability it has in P and therefore prevents it from functioning as a gesture of closing.

However, hearing example 3.18 as a sentence is even more difficult than hearing example 3.17 as a sentence owing to the thematic content of the proposed cadential phase. The last eleven bars of example 3.18 display the rhetoric of a closing theme through the use of a drop to *piano*, simple harmonies, and a new thematic idea.

It is interesting to note that the structure of the codettas in example 3.18 is remarkably similar to that given in example 3.17. Figure 3.2 illuminates the similarities. This is strikingly reminiscent of the parallel organizations described in Mozart's Symphonies Nos. 39 and 40.[66]

Figure 3.2: Similar constructions of codettas to S in Mozart's Symphony No. 41



An additional reason I do not accept the theme candidates in examples 3.17 and 3.18 is because understanding the new-key area as consisting of three themes does not parallel my experience of the movement; I find that understanding the dramatic caesuras as dividers between continuation and cadential phases is unconvincing and unmusical. Rather, I hear two themes: S and the "closing phase" of the last proposed theme (example 3.18, bars 101–111). Interpreting this second new-key theme as S^2 or

[66] See chapter 2, pp. 88 and 92. It is also interesting to note a weak similarity to the structure of S. S's antecedent feels truncated because it stops short of the expected eight bars. The consequent parallels the antecedent up to the point where the antecedent broke off. Then, the consequent provides a convincing cadential phase that was not present in the antecedent. The overall sense is almost one of trying to restate the theme rather than one of providing the consequent of a parallel period.

C depends on identification of the EEC. I feel that bars 101 through 111 should be C, owing to its late placement in the exposition, but cannot satisfactorily locate the EEC prior to bar 101 owing to the rejection of previous EEC candidates. From a strict Hepokoski and Darcy point of view, the second new-key theme is S^2 because the EEC does not occur until the last bar of this theme. In a sense, this label captures part of what makes this exposition unusual: S^2's late placement reflects the exposition's reluctance to close.

Perhaps a useful way of describing the unusual interaction in this new-key area between caesuras and formal areas is that they are "out of phase" with each other.[67] Caesuras tend to occur between formal areas, not within them. Following S's conclusion, caesuras after inverted dominant seventh chords interrupt the progression from one PAC to another on two separate occasions. These dramatic caesuras draw one's attention away from the zone-defining power of PACs and create an awkward and unusual situation. As I have just shown, this out-of-phase relationship expands the S zone and complicates understanding the form.

Finally, reminiscent of the chapter 2 analyses of Mozart's Symphonies Nos. 39 and 40, both themes in Symphony No. 41 are tight-knit. S^1 is more tight-knit because it displays more efficiency of functional expression. Even though the EEC that is "supposed" to close S^1 takes unusually long to materialize, it is delayed by post-

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[67] Lerdahl and Jackendoff introduce this concept in *A Generative Theory of Tonal Music*, 30.

cadential units, not by loosening agents within S^1. S^2 has some redundancy of functional expression in its presentation phase. The ordering of multiple new-key themes in this exposition supports my suggestion that tight-knit themes in non-monothematic expositions tend to occur first.

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Conclusion

In this chapter, I looked at the remaining five symphonies that had multiple themes in the new-key area, yet not one S and one C. Each exposition had at least one formal unit with ambiguous function. In three of the symphonies, a third new-key theme emerged in an ambiguous manner. In Beethoven's Symphony No. 1, this theme, S^2, is an insertion that creates a tight-knit–loose–tight-knit pattern of intrathematic organizations. In Haydn's Symphony No. 94 and Beethoven's Symphony No. 4, the "extra" new-key theme arises from changing its formal function. For these analyses, I reached beyond Caplin, Hepokoski, and Darcy to find tools that more accurately described the new-key areas. While Caplin, Hepokoski, and Darcy recognize that formal functions can change—Caplin in his hybrid themes where "continuation" becomes "cadential" and Hepokoski and Darcy in their concepts of "rejecting S," "medial caesura declined," and "bait-and-switch"—they do not describe how formal areas above the intra-thematic level can be linked together by changing formal functions.

The remaining two symphonies are unusual in the context of this study owing to the presence large passages of music with unclear formal function. Haydn's Symphony No. 87 presents a continuous exposition that is remarkable because the feints it makes toward expressing a two-part exposition complicate understanding the two new-key themes. The pre-EEC theme highlighted differences in the approaches of Caplin and Hepokoski and Darcy—a *Formenlehre* approach would identify this theme as a subordinate theme owing to its tight-knit construction and use of "one-more-time technique." However, Sonata Theory leads to a different interpretation—that of a pre-EEC theme—because a medial caesura has not opened up the S zone. In the remaining symphony, Mozart's Symphony No. 41, the concept of ambiguous formal function applies to this new-key area's six perfect authentic cadences and the musical passages between them. A Sonata-Theory analysis reveals that the EEC was twice delayed and twice rejected. These actions cause codettas to invoke both gestures of closing and ones of reopening, which challenges their traditional formal function. This analysis also benefited from a new concept to describe how the S-zone was greatly expanded. I suggested the idea of being "out of phase," taken from Lerdahl and Jackendoff, as a way of summarizing the tension between the caesuras and the formal areas.

Finally, four of these five expositions support my suggestion put forth in chapter 2: when there is a tight-knit theme, it occurs first in non-monothematic expositions and last in monothematic ones. The one exception to the hypothesis is

Beethoven's Symphony No. 3, where the only tight-knit theme occurred in the medial position. Furthermore, of the fifteen symphonies with multiple themes in the new-key area, there are only two exceptions to my observation: Beethoven's Symphony No. 3 and Haydn's Symphony No. 104. This shows that Caplin's suggestion was essentially on track; it simply needs refinement to account for monothematic expositions.

Chapter 4

Schenkerian Viewpoints on Multiple New-Key Themes

My final contribution to the understanding of multiple new-key themes examines their impact on the voice leading of the new-key area. I will suggest that—in this repertoire—the first new-key theme's voice leading has a problematic aspect that allows for the presence of further themes with unproblematic voice leading. I do not mean to suggest that later new-key themes exist to "correct" the voice-leading problems of the first; rather, I demonstrate than an aspect of the first new-key theme's voice leading creates a situation that enables, or sets the stage for, further new-key themes.

I also find a correlation between voice leading and intrathematic organization. Specifically, tight-knit themes have clearer middleground graphs than loose ones. This connection results from the characteristics of tight-knit themes: harmonic-tonal stability, cadential confirmation, unity of melodic-motivic material, efficiency of functional expression, and symmetrical grouping structure. When one of these characteristics is loosened, middleground levels of the voice-leading graph accrue extra details.

The typical middleground voice leading in the new-key area of a major-key exposition involves a prolongation of $\hat{2}$ through descending fifth-progressions, which

secure the key of the dominant. For Schenker, the subordinate theme is defined purely by the voice leading:

> The composing-out of $\hat{2}$/V or $\hat{5}$–$\hat{3}$ /I–III [in minor] is designated by conventional theory as the second theme, the subordinate theme, the lyrical theme, or the like; occasionally there is reference to two subordinate themes, to a new section, a dissolution of the subordinate theme, to one or even two closing themes. Once more I must emphasize that these are in every respect inadequate terms and concepts which afford no insight into sonata form.... A fifth-progression in itself suffices for the prolongation of $\hat{2}$/V without necessarily involving a "lyrical" or "contrasting" theme.[1]

As discussed in chapter 1, Schenker's placement of this fifth-progression's conclusion tends to coincide with the cadence of the subordinate theme, the first PAC in the new key.[2] However, Schenker acknowledges that there can be more than one linear progression from $\hat{2}$, providing examples showing two fifth-progressions in the first movement of Beethoven's Piano Sonata op. 14, no. 2 and four fifth-progressions in the first movement of Beethoven's Symphony No. 3.[3] Conceptually, all of these fifth-progressions are a prolongation of $\hat{2}$. Therefore, multiple themes in the new key area have no effect on the high-level middleground voice leading since a single fifth-progression can represent all of them.[4] However, the levels of voice leading between

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[1] Heinrich Schenker, *Free Composition*, trans. and ed. Ernst Oster (New York: Longman, 1970), 135, section 313.

[2] See chapter 1, p. 61.

[3] Schenker, *Free Composition*, 136, figures 26a and 26b.

[4] I use the term high-level middleground to refer to middleground analyses that are close to the background. Low-level middlegrounds are those that are close to the foreground.

this high-level middleground and the foreground highlight differences between the multiple linear progressions.

For minor-mode expositions, Schenker presents two paradigms in *Free Composition*, recopied as graphs 1A and 1B; all graphs for this chapter are found in the Appendix. Both figures show a $\hat{5}$-line interrupted form, but with differences in the arrival of $\hat{2}$. In graph 1A, $\hat{2}$ arrives immediately before the recapitulation. This late placement results from the use of the relative major as the exposition's new key. The only pitches of the *Urlinie* that could be prolonged by III are $\hat{5}$ and $\hat{3}$. Therefore, the arrival of $\hat{2}$ must wait until the development's dominant preparation occurs. Graph 1B portrays an *Ursatz* that parallels a $\hat{5}$-line *Ursatz* in a major-mode work. In this paradigm, $\hat{2}$ arrives before the development. The important difference between the major- and minor-mode versions of the *Ursatz* in graph 1B concerns the mode of the new-key area. In a major-mode work, the new-key area is in the major dominant; in this type of minor-mode work, the new-key area is in the minor dominant. The remainder of the form is the same for both minor-mode paradigms: the recapitulation's entrance is prepared by its dominant, made active in the minor mode by the use of the leading tone.

Only one of the six minor-mode works in this study has multiple new-key themes: Mozart's Symphony No. 40 in G Minor. Nearly half, or fourteen out of thirty, of the major-mode expositions have multiple new-key themes. This observation suggests that minor-mode works from this period do not tend to have multiple new-

key themes. Since Mozart's Symphony No. 40 is an exceptional case and since Schenker has addressed the impact of the multiple new-key linear progressions on the voice leading, I will summarize Schenker's discussion of this exposition's new-key area.

Schenker's Analysis of Mozart, Symphony No. 40 in G Minor

This movement corresponds to the minor-mode paradigm given in graph 1A, which prolongs $\hat{3}$/III in the new-key area. However, Mozart's subordinate theme begins on the local key's $\hat{5}$, F♮, which is ♮$\hat{7}$ of G minor and does not fit into the *Urlinie*. According to Schenker, the presence of $\hat{5}$ in the new-key area is a feature "fraught with implications."[5] Since this pitch does not participate in the *Urlinie*, it is "superfluous and must therefore be abandoned; for even the new diminution can in reality start only from D5."[6] The process of abandoning this offending pitch involves several new-key linear progressions. Schenker's analysis of the new-key area is recopied in graphs 2 through 5.

Schenker highlights three linear progressions in the new-key area. Shown in graph 2, the first linear progression corresponds to S and shows that he understands S as a $\hat{3}$-line preceded by $\hat{5}$ and $\hat{4}$—F5 and E♭5. These first two pitches are integrated

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[5] Heinrich Schenker, *The Masterwork in Music,* vol. 2, ed. and trans. William Drabkin (Cambridge: Cambridge University Press, 1996), 62.

[6] Schenker, *The Masterwork in Music*, 62. I have changed Schenker's register notation to match the style in the rest of this dissertation. The one-octave ascending scale beginning at middle C corresponds to the notation C4–D4–E4–F4–G4–A4–B4–C5.

in the voice leading since S clearly begins on $\hat{5}$ and descends by step toward $\hat{1}$. S's voice leading presents a problem: F5 and E♭5 obscure the expected third-progression. The second of Schenker's three third-progressions, which corresponds to C and is shown in graph 3, "frees itself from the F6, so that the remaining E♭6 represents a neighbour note."[7] In this P-based C, the symphony's opening motive returns. The prominent neighbor-note motion occurs first between $\hat{1}$ and $\hat{7}$, then between $\hat{4}$ and $\hat{3}$ at the cadence. The $\hat{4}$ at the cadence appears as a neighbor note, without $\hat{5}$. The final third-progression occurs in the exposition's codetta and is shown in graph 4. "Finally the neighbour note drops away, and the last repetition of the third-progression stands in its bare outline as the outcome of a quasi-human struggle towards the purest manifestation of its own form."[8] While the previous third-progressions were composed out, this final third-progression occupies a level of the middleground close to the foreground. In this codetta, quick alternations between tonic and dominant harmonies support $\hat{3}$ and $\hat{2}$, respectively. The codetta's close corresponds to the arrival of $\hat{1}$ and the end of the only third-progression unencumbered by $\hat{5}$ or $\hat{4}$.

In this analysis, Schenker argues that the linear progressions associated with S, C, and C's codetta participate in a goal-oriented process: freeing S's third-progression from F5 and E♭5. A situation in which later new-key linear progressions respond to problems presented by the first new-key linear progression describes the voice leading

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[7] Schenker, *The Masterwork in Music,* 62.

[8] Schenker, *The Masterwork in Music,* 62.

of many expositions in this study. For instance, Haydn's approach to monothematic expositions lends itself well to this analytical method: in exploring new paths the symphony's head motto can take, surprising events occur in S that loosen the theme and impact the voice leading by introducing tones foreign to the local tonic or borrowed from the opposite mode. C balances the instability of S, providing a tight-knit theme for the new-key area and voice leading that only uses tones from the expected tonic and mode.

Schenker's analysis is elegant because the "problem" is solely related to making the voice leading conform to his paradigm for the new-key area of a minor-mode exposition. However, other types of problems can occur. In my survey of the fourteen major-mode new-key areas with two or three themes, three types of problems arose with clarity or frequency: (1) the first new-key theme engages the minor mode, introducing foreign tones into the first fifth-progression; (2) the cadence of the first new-key theme does not function as the essential expositional close, and the method through which the delay is caused impacts the voice leading; (3) the first new-key theme opens up two registers, but descends completely through only one of them.

Problem No. 1: Addressing S^1's Voyage into the Minor Mode

In monothematic expositions, Haydn frequently uses the minor mode in S to lead the head motto in a new direction. In four of his symphonies, Nos. 91, 92, 94, and 99, the first new-key theme borrows chords from the minor mode. Since the new-key area is secured through linear progressions before the development begins, the introduction

within S of prominent tones borrowed from the minor mode creates instability in the first linear progression and leaves voice-leading room for future linear progressions to affirm the new key. These tones are prominent when they impact S's voice leading in the high-level composings-out of S's fifth-progression. The instability they create is problematic because they question the new key rather than confirm it.

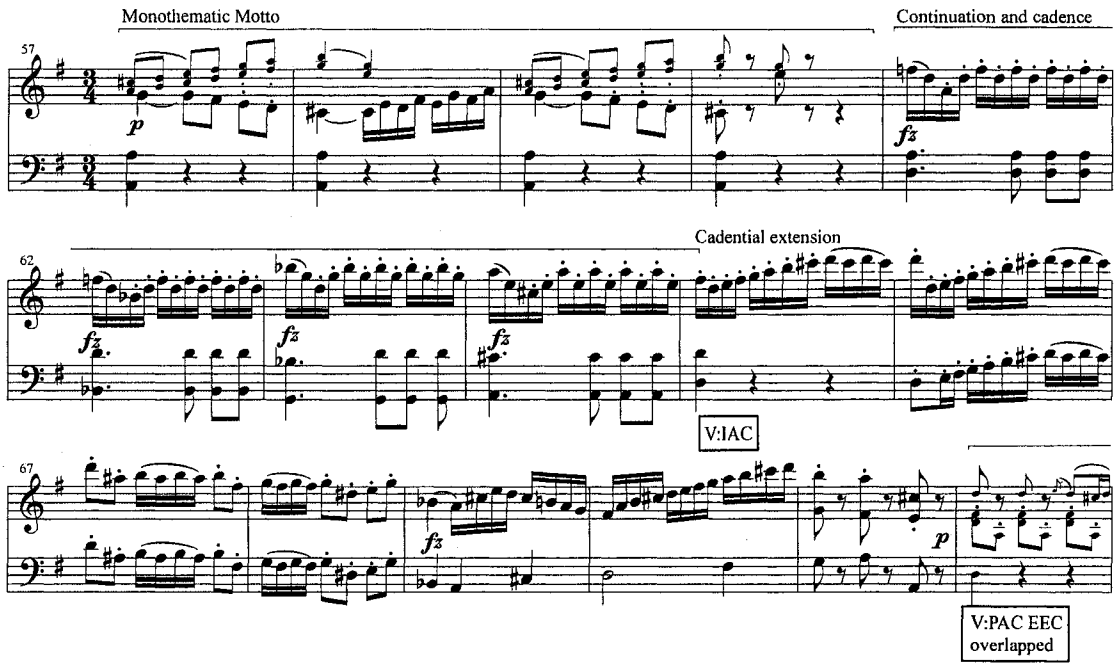
In these expositions, C's voice leading responds to S's use of the minor mode. In three of these symphonies, Nos. 92, 94, and 99, C has a tight-knit organization and remains within the major mode. In other words, C's well-behaved construction—exemplified by middleground graphs that resemble an *Ursatz*—fulfills the responsibility for confirming the new key. Using Symphony No. 92, I will show how S's voice leading is impacted by the minor mode and how C "corrects" the minor-mode pitches that occurred in the outer voices. In Symphony No. 91, C capitalizes on S's early allusions to the minor mode. This remarkable exposition stands out from the rest of Haydn's monothematic symphonies because both S and C begin with the head motto and there is no tight-knit theme in the new-key area. With voice-leading graphs, I will detail how S prepares the way for C's remarkable voice leading and organization.

Haydn, Symphony No. 92 in G Major

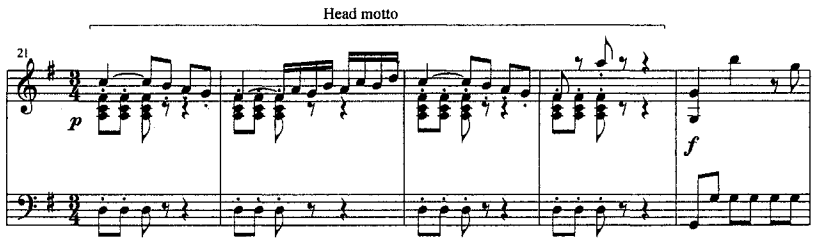
In Haydn's Symphony No. 92, S's middleground voice leading integrates both $\hat{3}$ and $\hat{6}$ from the minor mode. Example 4.1 and graph 6 provide a score reduction and voice-leading graph of S. Level A of graph 6 shows that $\hat{3}$ first arrives as F♮ in bar 61. Prior

events in the exposition project the arrival of $\hat{3}$ at this point, but within the major mode. In this monothematic symphony, Haydn uses the head motto three times to initiate each of three zones: P, TR, and S. The head motto, shown in example 4.2, prolongs the dominant, ending with a minor-tenth leap between $\hat{7}$ and $\hat{2}$. In the P and TR zones, the dominant prolongation of the head motto leads to tonic harmony in the zone's fifth bar. The entrance of tonic harmony is separated from the head motto by an increase of energy, accomplished through the contrasting *forte* dynamic, full orchestration, and a sixteenth-note accompanimental pattern. Despite these striking changes, the head motto and its continuation are connected by consecutive leaps of tenths; the tenth between $\hat{7}$ and $\hat{2}$ that concludes S is immediately paralleled by a leap between $\hat{1}$ and $\hat{3}$ in continuation of the head motto.

Example 4.1: Haydn, Symphony No. 92 in G Major, S, bars 57–72



Example 4.2: Haydn, Symphony No. 92 in G Major, monothematic motto, bars 21–25



The first five bars of S have more similarities than differences with the corresponding bars of P and TR. After opening with a strict transposition of the complete head motto, S parallels the events of P and TR with changes in dynamic, orchestration, and accompanimental pattern. However, the arrival of $\hat{3}$ in its fifth bar is changed. Haydn's use of the minor mode causes S's *Kopfton*, $\hat{3}$, to be F♮5 rather than F♯5. This pitch is further accented because it occurs on the first beat, rather than the second; the fifth bar's answering tonic-triad leap is condensed to its top note. This important pitch impacts the voice leading at all levels shown in graph 6.

S's voice leading quickly "corrects" $\hat{3}$ to its diatonic position at the end of a simple cadential progression in bars 61 to 65, and $\flat\hat{3}$ does not impact the outer voices for the rest of the theme. The cadential progression's initial tonic and predominant chords, I♭, ♭VI and IV♭, are borrowed from the minor mode, but the final tonic harmony (bar 65) reclaims the major mode and features the diatonic $\hat{3}$, F♯5, in its upper voice. Bars 65 through 70 reaffirm the major mode by transferring F♯ down one octave to initiate the final cadential progression in bars 70 through 72. The octave transfer is accompanied by dissolution of polyphonic texture and regular meter; the texture changes to one line scored for strings, flute, and bassoon, and the notated triple

meter is challenged by a binary alternation created through melodic, rhythmic, and articulation patterns (bars 67–68). The return of $\hat{3}$ in bar 70 coincides with the return to polyphonic texture and clear triple meter. Finally, S's cadential phase, bars 70 through 72, regains the register of its *Kopfton* and completes the descent.

$\hat{6}$ plays an important role in S, both in its diatonic and chromatically inflected positions. $\flat\hat{6}$ occurs at a level closer to the foreground, but its outer-voice prominence in the first two cadential progressions (bars 61–65 and 65–70) clearly marks it as more important than a surface-level embellishment. The return of the head motto in S is accompanied—for the first time—by an obbligato line. Even though eighteenth-century theorists and composers were aware of ninth chords, they are not a common occurrence in Haydn's harmonic vocabulary. The obbligato line arrives at this ninth, $\hat{6}$, through a scale, but $\hat{6}$ is left unresolved on the musical surface because the head motto's dominant prolongation prevents the scale from completing its ascent to $\hat{1}$.

The one upper-voice occurrence of $\flat\hat{6}$ happens in bar 63. This pitch is accented by two factors: it is approached by an upward leap, and it occurs on a strong bar of the four-bar hypermeasure, the third bar. B♭5 adds to the drama of S's continuation of the head motto because the pitch belongs to the minor mode and neither P nor TR's continuations reached pitches above $\hat{3}$. Furthermore, it occurs in the same register as the flute obbligato's ninth, but it is now chromatically inflected. This prominent pitch needs to be "corrected" to its diatonic position before S's major

mode is fully accepted. Unlike the treatment of ♮$\hat{3}$, ♭$\hat{6}$ permeates S's voice leading until its cadential phase.

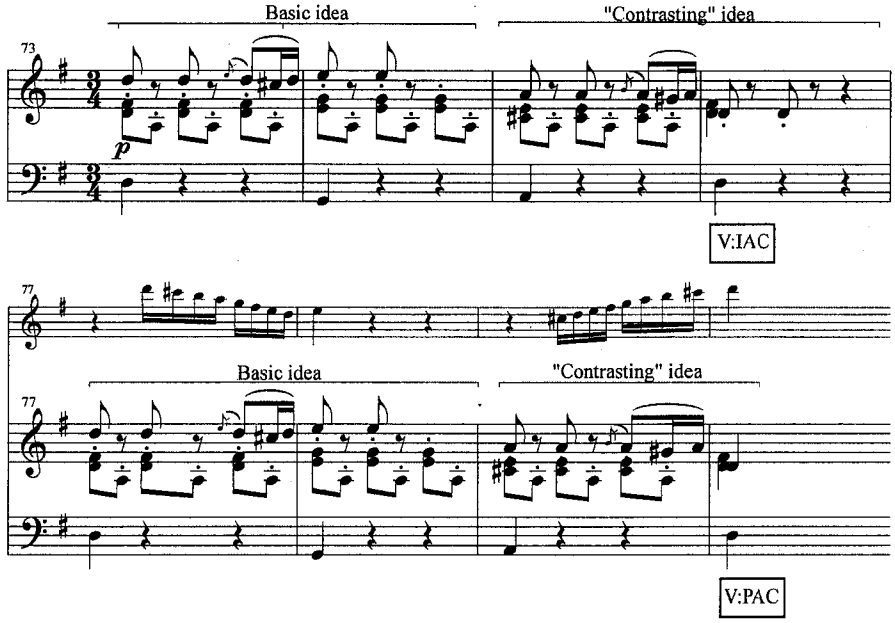
There are two bass-line occurrences of B♭. The first cadential progression features the bass arpeggiation D–B♭–G in bars 61 through 63. This bass line introduces B♭ to the outer-voice counterpoint, albeit at a level close to the foreground, since B♭ is the middle note of the arpeggiation and disappears in levels closer to the background. The second occurrence takes place within the previously discussed octave transfer of S's *Kopfton*, F♯. In this passage, bars 65 to 70, Haydn reduces the texture to one line. Shown in the bass clef of graph 6C, the lower line jumps an octave in bar 66 before initiating S's second bass arpeggiation. The arpeggiation, which corresponds to the binary meter implied by articulation and melodic patterns, drops by thirds from the tonic to the subdominant and remains within the major mode. Although the pattern continues towards the supertonic, it breaks at the supertonic's arrival and returns to the subdominant pitch. After this return to the subdominant pitch, the bass line dramatically leaps down to ♭$\hat{6}$, which is accented by a *sforzando* and its strong-beat placement. Followed immediately by its expected resolution to $\hat{5}$, these two pitches are connected through register with the lower tonic pitch, D3 in bar 65, that initiated this segment of S. I understand this B♭ as the middle chord's bass note for the implied harmonic progression I–iv^{6} (or ii$^{\varnothing 6}_{5}$)–V. Even though the bass arpeggiation in bars 66 through 68 "corrects" the minor-mode arpeggiation in bars 61

through 63, the arrival in bar 69 of the accented B♭2 shows that the minor mode has not yet relinquished its hold on S.

♮$\hat{6}$ is once again restored to the musical surface at the final cadence, where it prominently occurs in the upper voice on the downbeat of bar 71. Shown at the ends of graph 6C, the upper voice reaches above the expected $\hat{3}$–$\hat{2}$–$\hat{1}$ motion to state $\hat{6}$ in its major-mode position. This leads to a sequence of pitches stated previously in S: $\hat{6}$–$\hat{5}$–$\hat{7}$–$\hat{1}$. These pitches, with a different contour, occurred in the last bass use of ♭$\hat{6}$ in bars 69 through 70. The motion ♭$\hat{6}$–$\hat{5}$ was also featured in the first upper-voice occurrence of this non-diatonic tone. Graph 6B shows how Haydn's fixation with the motion from $\hat{6}$ to $\hat{5}$ affects the outer voices of the first two cadential progressions (bars 61–65 and 65–70). Only at the final cadential progression (bars 70–72), however, does $\hat{6}$ occur within the major mode. Since $\hat{6}$ is not restored until the penultimate bar of S, further harmonic progressions follow to confirm the mode.

C confirms S's cadence by repeating it without any minor-mode intrusions. Shown in example 4.3 and graph 7, C is an eight-bar theme constructed as a parallel period. The antecedent phrase ends on an authentic cadence made imperfect by voice crossing; the second violins' accompaniment is higher than the melody's conclusion. The addition of an obbligato flute in the consequent phrase overcomes the voice crossing and provides stepwise motion to the final tonic pitch. Furthermore, its scalar passages clearly define the mode as major.

Example 4.3: Haydn, Symphony No. 92 in G Major, C, bars 73–80



Outside of its presence in small embellishments, $\hat{6}$ is avoided in C's outer voices. This avoidance allows for different voice leading at the cadence—in S, Haydn's fixation on the motion $\hat{6}$–$\hat{5}$ causes these pitches to appear in the upper voices for cadences' predominant and dominant chords, respectively. This upper voice necessitates a leap in the approach to the final tonic pitch, which results in the implied tones that appear in S's voice-leading graphs. By avoiding $\hat{6}$ in the outer voices, C's version of the cadence explicitly states $\hat{2}$ over the predominant harmony, ii^6. Although an implied tone is still needed over the dominant harmony to approach the final $\hat{1}$ by step, a strong sense of $\hat{2}$ moving to $\hat{1}$ is created. This motion can be heard to connect to the previous $\hat{3}$ of S, presenting a complete $\hat{3}$-line.

The flute obbligato added in C's second half provides an additional connection between S and C. First, the change of texture returns to the same orchestration as Haydn provided for S's head motto. Second, the flue obbligato added to C's repetition

is in the same register as the head motto's oboe obbligato. Finally, both obbligato lines state scalar gestures. When $\hat{6}$ occurs in the continuation of the head motto, it shares the same register as the oboe obbligato's $\hat{6}$ and adds to the dissonant treatment of this pitch. Although this connection is overshadowed by the dramatic changes in dynamic and mode, the status of the obbligato line's $\hat{6}$ is left unanswered until the delicate texture of S's head motto is regained in C. The addition of the flute obbligato in C's consequent phrase not only strengthens its second cadence but also connects C with S's opening. Finally, if one hears S's arrival at the dominant ninth as a thwarted scale, the C's obbligato line can be heard as completing it.

This exposition shows how Haydn introduces two members of the minor mode, $\hat{3}$ and $\hat{6}$, near S's beginning. $\hat{3}$ is quickly restored to its diatonic (major-mode) position, but after $\hat{6}$ is set up as a dissonant ninth in the head motto, $\hat{6}$ permeates the voice leading until the final cadential progression. Owing to $\hat{6}$'s late restoration to S, S's mode is unstable and voice-leading space remains open to affirm the major mode's rightful place as the mode of the new-key area. A tight-knit, modally stable C answers S's loose and modally unstable organization.

Haydn, Symphony No. 91 in E-flat Major

In chapter 2, I showed that this exposition is exceptional because it is a monothematic exposition in which there is no tight-knit theme.[9] Haydn begins the P, S, and C zones with the head motto, a strategy for the exposition unique in his post-1785 symphonies.

[9] See chapter 2, pp. 118–22.

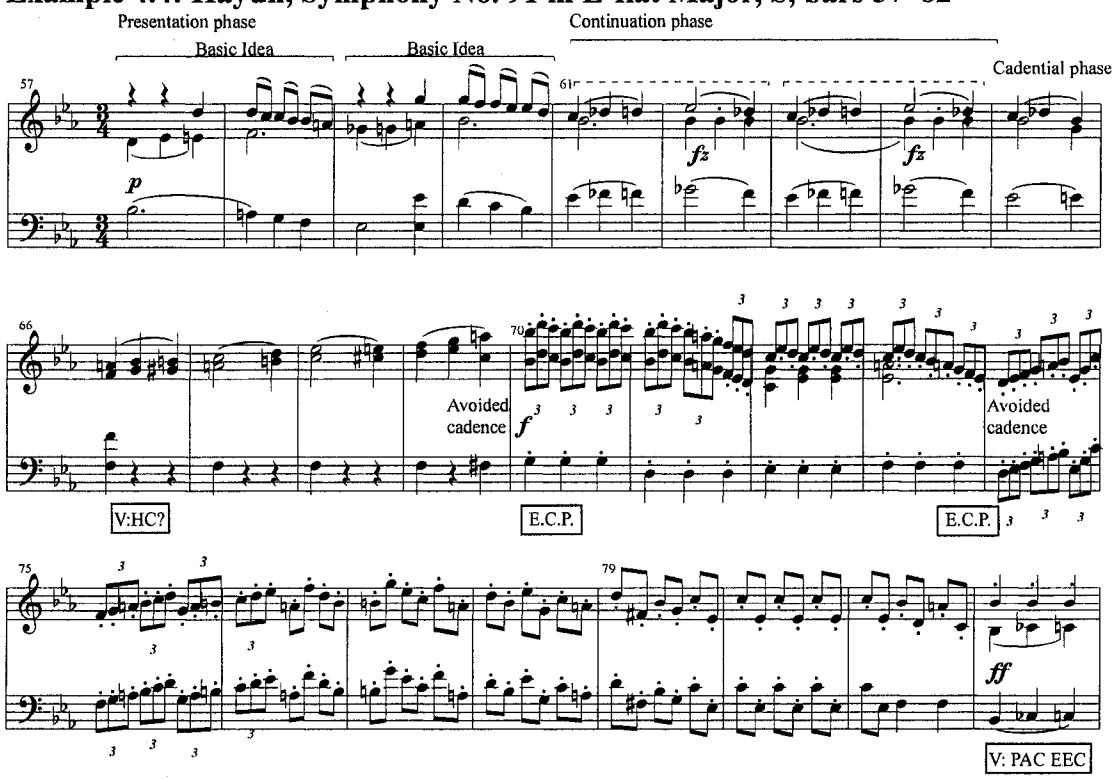
In each of his monothematic expositions, Haydn develops the head motto differently upon each return. In P, the head motto tends to lead to a tight-knit structure. Therefore, when it returns at S's beginning, leading it in new directions causes S to be less tight-knit than P. In seven out of the eight monothematic expositions with closing themes in this study, S's loose organization is balanced by a tight-knit C-zone. Haydn's Symphony No. 91, however, contains a P-based C. Based on the notion that subsequent iterations of the head motto should be developed differently, I showed that even though neither S nor C is tight-knit, S is more tight-knit than C owing to C's responsibility for exploring musical space that neither P nor S had explored. C fulfills this responsibility by taking the head motto to a distant tonal region. It is further loosened by a five-bar hypermeter in its continuation phase.

One way that S explores new musical space is by invoking the minor mode in its presentation and continuation phases. Its expanded cadential phase restores the major mode and, unlike S from Symphony No. 92, maintains the major mode for its entire cadential phase. C, however, seems to capitalize on S's early minor-mode hints, entering into a full-fledged modulation to the ♭III key area. In other words, small inner-voice chromaticisms in S influence C's outer voices.

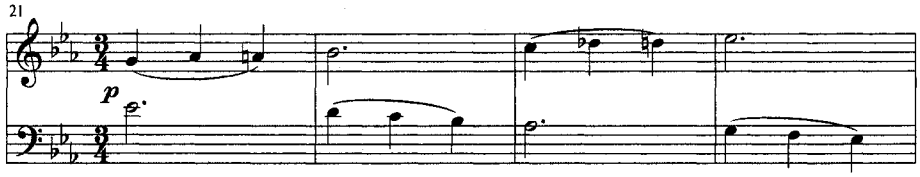
S, shown in example 4.4 and graph 8, features two incursions of the minor mode. The first one results from a prominent change to the head motto. In P, the head motto, shown in example 4.5, highlights two minor thirds: $\hat{3}$ to $\hat{5}$ and $\hat{6}$ to $\hat{8}$. By filling in P's minor thirds with two passing tones, Haydn immediately introduces two non-

diatonic pitches—$\hat{\sharp 4}$ and $\hat{\flat 7}$. This chromaticism helps disguise a small change Haydn makes to the head motto when it returns as S: the second third begins on $\hat{\flat 6}$ instead of the major-mode $\hat{6}$. The use of $\hat{\flat 6}$ contrasts with the use in P of $\hat{\sharp 4}$ and $\hat{\flat 7}$ because $\hat{\flat 6}$ does not function as a passing tone. Furthermore, $\hat{\flat 6}$'s appearance is metrically accented: it occurs on a strong beat of a strong bar—the third bar (bar 59) of a four-bar hypermeasure. The melodic effect of this accented $\hat{\flat 6}$ is short-lived; the countermelody Haydn adds to S's head motto restores $\hat{\natural 6}$ in the highest voice on the third beat of the same bar. However, in terms of the voice leading, $\hat{\flat 6}$ has affected the opening tonic prolongation. Shown at the opening of graph 8D, the minor subdominant is briefly implied by the presence of G♭.

Example 4.4: Haydn, Symphony No. 91 in E-flat Major, S, bars 57–82



Example 4.5: Haydn, Symphony No. 91, monothematic motto, bars 21–24

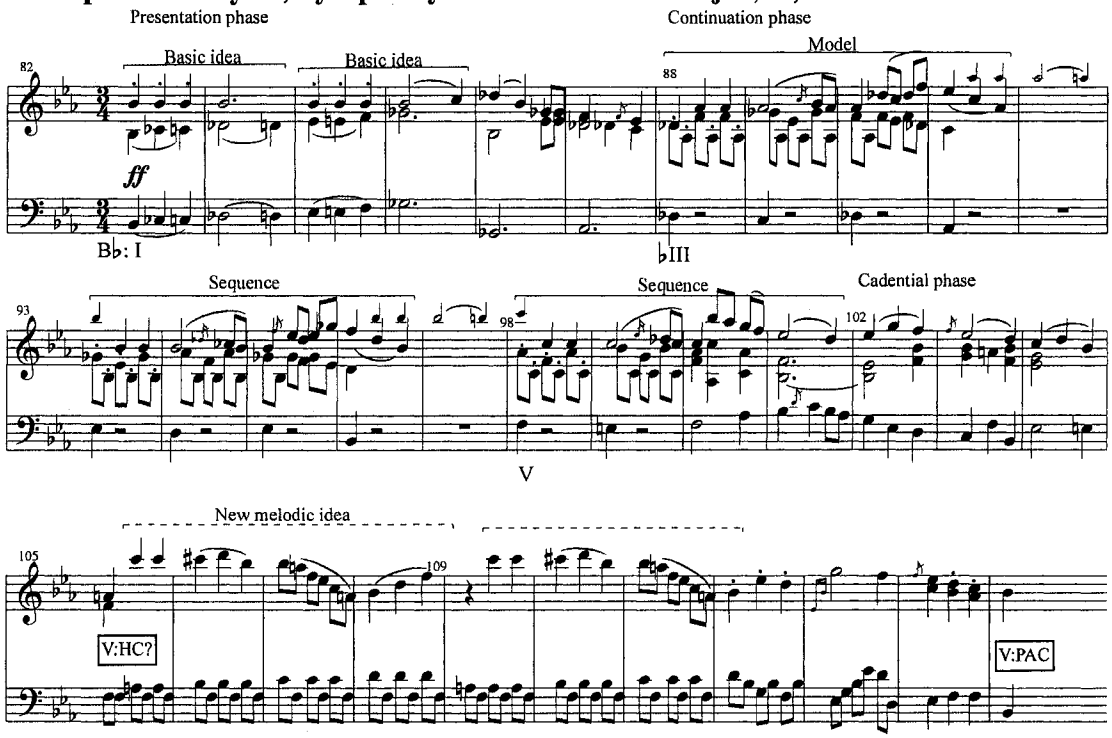


The second occurrence of the minor mode occurs in the predominant prolongation in bars 61 through 65. This prolongation is set apart from the surrounding music by the absence of the bass register. Instead, a tenor voice supplies the lowest pitches. The outer voices move in parallel sixths and are based on the head motto; they move through an ascending minor third with two passing tones. However, the upper voice's return to the original tone, C5, hints at the minor mode because of its use of $\flat\hat{3}$, D♭. In the ascent from C5 to E♭5, D♭5 is a chromatic passing tone between C5 and D5. In the descent, D♭5 is used as a non-chromatic passing tone between E♭5 and C5. The tenor voice further clarifies the use of the minor mode because it moves between E♭4 and G♭4, which is $\flat\hat{6}$ in the new-key area. Since G♭ is one of the boundary tones of the minor third, it makes use of the minor mode explicit. The borrowing of the minor mode's $\hat{6}$ causes this predominant chord to have a half-diminished quality. This chord impacts the voice-leading in levels B, C, and D of graph 8.

The expanded cadential phase of S (bars 70–79) remains within the major mode and balances the effect of G♭. The expansion is accomplished by evading S's final cadence twice. After the half-diminished predominant, S reaches a dominant sonority in bar 66, which coincides with the return of the bass register and is prolonged in order to expand the upper register into a higher octave. This dominant

chord resolves deceptively in bar 70, a resolution enhanced by a chromatic passing tone in the bass. The resolution corresponds to the conclusion of S's first third-progression, shown at the opening of graph 8C, which moves the opening tonic harmony to the submediant. The second evaded cadence occurs in bar 74. An expanded cadential progression follows the deceptive cadence, but the final dominant harmony resolves to a I^6 instead of a root-position tonic chord. This I^6 becomes the initial tonic harmony of a second expanded cadential progression—the expanded cadential progression that will finally result in a fully realized PAC.

Example 4.6: Haydn, Symphony No. 91 in E-flat Major, C, bars 82–115



S only hinted at the minor mode in its presentation and continuation phases; C, shown in example 4.6, uses these hints to explore new musical areas. For example, in

S, the third bar of the head motto featured the minor mode's $\hat{6}$ on a strong beat. In C, the head motto starts on $\hat{1}$ instead of $\hat{3}$ and borrows two pitches from the minor mode: $\flat\hat{3}$ and $\flat\hat{6}$. These borrowed pitches allow for the large-scale harmonization of a chromatic passing tone. Shown in graph 9A, C's upper voice descends from $\hat{3}$ to $\hat{2}$ through a chromatic passing tone, D♭. As is shown in graph 9B, this D♭ is harmonized by a ♭III chord, which divides the perfect fourth from the tonic bass pitch to a predominant one into a minor third and a whole step.

The approach to ♭III through an auxiliary cadence is elegantly accomplished through the head motto's borrowed pitches. The downbeats of each bar of the motto, B♭, D♭, E♭, and G♭ correspond to $\hat{1}$, $\hat{3}$, $\hat{4}$, and $\hat{6}$ in B-flat minor. Previously, the head motto prolonged tonic harmony, filling the minor sixth between $\hat{3}$ and $\hat{1}$. Therefore, the pitches in C's head motto also fit into the key of G-flat major if one reinterprets the first pitch as the third of the chord—the function that it had in all previous statements of the head motto. In G-flat major, these downbeats correspond to $\hat{3}$, $\hat{5}$, $\hat{6}$, and $\hat{8}$. Haydn does not provide a harmonization for C's opening, instead accompanying the head motto with only B♭. In graph 9D, I have indicated the harmonization a listener is likely to infer owing to the strong signals for a B♭ tonic. Although the phrase elision with S causes C to clearly begin in B-flat major, the possibility of understanding the accented pitches in two keys explains the smooth transition to ♭III. If one understands the head motto as moving between the third and root of a G♭-major triad, then the emergence of the auxiliary cadence's first chord makes sense: it is a G♭ chord with an

added sixth, ii^{6}_{5} in D-flat major. This predominant harmony then leads through the dominant harmony to the D♭ tonic. This interpretation is represented by the notation of an unfolding between B♭ and G♭ in the opening of graphs 9C and 9D.

♭III, borrowed from the minor mode, coincides with the use of new melodic-motivic material, a sequence, and a five-bar hypermeter. These features fulfill part of what I propose are normative responsibilities for C in a monothematic exposition.[10] The new melodic-motivic material supplies thematic contrast in the exposition, and the simple harmonies Haydn uses in the sequence suggest the popular style of many of his closing themes. Even though sequences are a loosening technique, the clearly delineated iterations contrast with the tonal instability of C's opening and the metrical instability of S's closing, which challenges the listener's sense of the notated meter.

The sequence, which uses a linear intervallic pattern to break up parallel fifths, moves the harmony from ♭III in bar 88 to the predominant chord in bar 102. Shown in graph 9D, the sequence's soprano voice begins with an inner voice of the ♭III chord and ascends until it rejoins the soprano line. The goal of the sequence, D♮5, occurs in bar 101 and functions as a chromatic passing tone between the upper voice's $\hat{\flat 3}$ (bar 88) and $\hat{4}$ (bar 102); graph 9C most clearly shows D♮5's function. This passing tone is supported harmonically by an applied dominant to the subdominant chord, which appears as IV^{6} at bar 102. After the arrival of the predominant, C remains within the major mode.

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[10] See chapter 2, pp. 100–02.

Striking similarities between C and S's voice leading strengthen the relationship between these two contrasting themes. As I have shown, S's early feints toward the minor mode in the head motto are realized in C. Second, both themes feature a similar approach to the first important dominant chord. In S, bars 65 and 66 contain an unfolded third from C5 to A4 counterpointed by motion in the bass from the predominant to dominant through a chromatic passing tone, ♯4. In C, bars 104 and 105 contain a gesture that differs from this in only two respects: C's harmonic progression occurs within the major mode while S's occurs within the minor mode, and C provides a bass line in the traditional register while S's bass line occurs in a tenor register. Owing to the ♭III excursion, the arrival of C's first dominant harmony is considerably later than the arrival of S's first dominant harmony; V arrives forty-three percent of the way through S and sixty-eight percent of the way through C. This placement helps explain why S's dominant harmony occurs within a larger motion from I to vi while C's dominant harmony fulfills dominant function for its *Ursatz*. It is interesting that although C uses borrowed pitches from the minor mode to modulate, its arrival at the dominant harmony has fewer problems than were found in S since the modulation in C has a "real" bass and occurs in the "correct" mode.

The events following these dominant harmonies trace similar paths. The dominant chord is prolonged and resolves deceptively in both S and C. Additionally, these submediant harmonies lead to the initial I^6 of a cadential progression. In S, this cadential progression is expanded, lasting from bars 74 to 82. In C, the cadential

progression assumes normal proportions, lasting from the final beat of bar 113 to bar 115.

These similarities in the voice leading of S and C highlight the different roles that the minor mode plays in each. In S, the expanded cadential phase (bars 66–82) counters the effect of the minor-mode hints in S's presentation and continuation phases. In C, the expanded continuation phase (bars 88–105) results from the presence of the minor mode on a relatively high level of the middleground—♭III passes between I and IV. This exposition contrasts with the other three expositions that feature the minor mode in S because C integrates the minor mode instead of avoiding it. This contrast results from the relationship between the structures of these themes. Since C is looser than S, its voice leading has more freedom to engage the minor mode.

Problem No. 2: EEC Issues

While minor-mode excursions in S may impact the perceived effectiveness of the EEC, each of the EECs for the four Haydn expositions that explored the minor mode was accepted and followed by the C zone. In the second type of problem, details of the musical surface make fitting the first proposed EEC into the expected paradigm difficult. Three subclasses of problems arise: (1) S is followed by a codetta or a second S, delaying the EEC; (2) the EEC takes the form of an IAC instead of a PAC; (3) the expected *forte* EEC is overlapped by a *piano* C.

Moving EECs: Beethoven, Symphony No. 1

In a two-part exposition, S's cadence typically functions as the EEC. However, the EEC can be delayed to a later point if S has a codetta or if there is a second S.[11] Five of the fifteen expositions with multiple new-key themes have a delayed EEC. In four of these examples, the music between S's cadence and the EEC adds instability to the S zone through the use of the minor mode or relatively prominent chromaticism. This instability raises problems similar to those just discussed: the introduction of chromatic pitches makes additional musical space available for more themes. However, when the foreign pitches are introduced by a middle passage instead of the new-key area's first theme, the effect on the new-key area is different; in this new case, S successfully closes within the major mode, and the instability that follows its cadence questions whether the exposition has achieved essential closure. The presence of three new-key themes, which can arise when this middle passage supports a theme instead of a codetta, adds further dimensions to the exploration of the relationships between these themes. Since the middle theme tends to engage chromatic pitches, it presents a "problem" that opens musical space for the third theme. I will use Beethoven's Symphony No. 1 as an example.

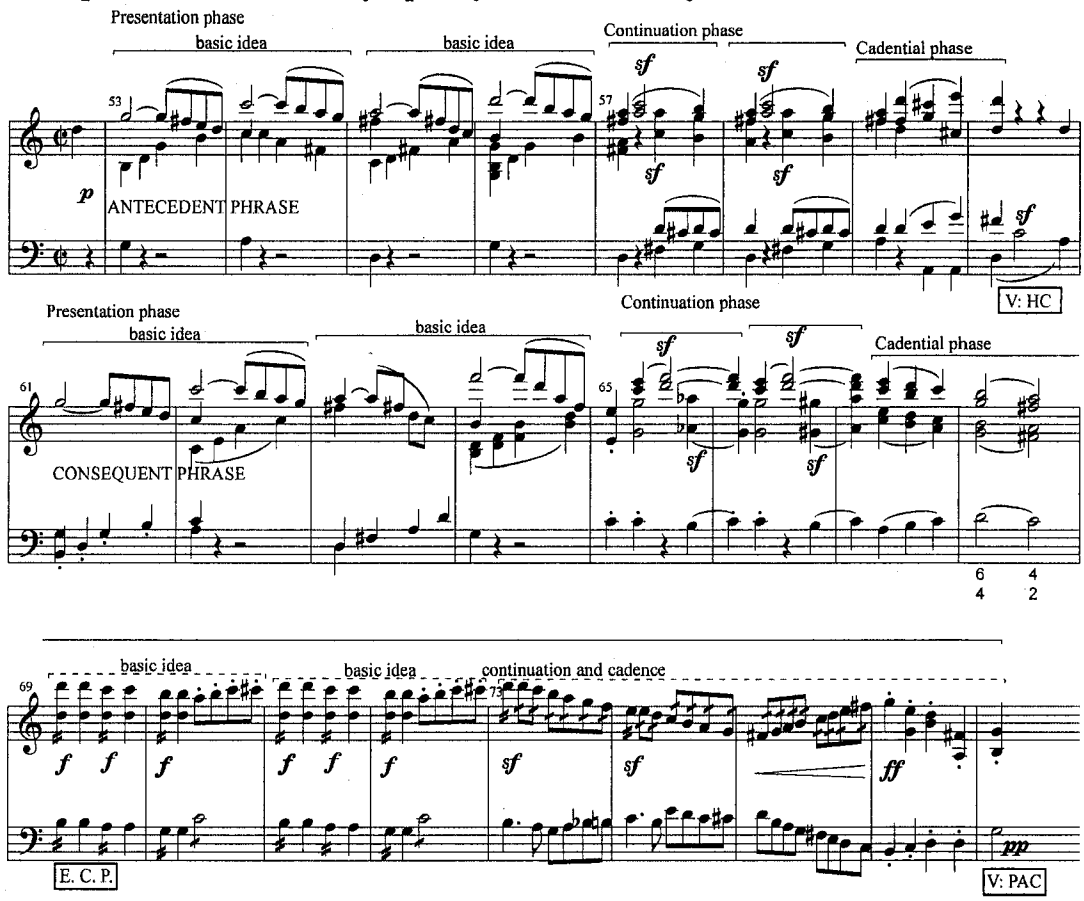
In chapter 3, I interpreted the middle theme as a second S owing to its motivic connections with the first subordinate theme. Thus, S^2's presence delays the EEC until the second PAC of the new-key area. I examined the structure of this new-key

[11] For a discussion about why a new theme at this point in the exposition might be a second S rather than a closing theme, see chapter 3, pp. 130–31.

area in three additional ways. (1) For William Caplin, this exposition has three subordinate themes, which are organized as a ternary form in which a contrasting middle is sandwiched by two tight-knit themes. (2) William Kinderman's work on insertion in late Beethoven inspired an interpretation of S^2 as an insertion between S^1 and C. This analysis is supported by the removability of S^2 and its "otherness," which is also as captured by Caplin's term *contrasting middle*. (3) G. Cook Kimball's views on possible connections between Riepel and A. B. Marx suggest a three-phase view of this new-key area. It alternates between states of rest, motion, and rest, which corresponds to Marx's view of a new-key area alternating between states of *Ruhe*, *Bewegung*, and *Ruhe*.

A Schenkerian view adds a fourth alternative interpretation for these themes. S^1, shown in example 4.7 and graph 10, opens with a tight-knit structure. However, the theme's organization is loosened at its end by the resolution of the cadential $\frac{6}{4}$ to a $\frac{4}{2}$ chord in bar 68. This evasion leads to an expansion of the cadential phase that builds anticipation for the cadence and, especially, the soprano line's arrival on $\hat{1}$. The unexpected appearance of the $\frac{4}{2}$ chord initiates an upper-voice descent from B into an inner voice, G, in parallel sixths. Shown in graphs 10B and 10C, the first two sixths are the cadential $\frac{6}{4}$ and its $\frac{4}{2}$ resolution in bar 68. In bar 69, the resolution of the $\frac{4}{2}$ chord to the expected I^6 is counterpointed in the top voice by a leap from $\hat{2}$ to $\hat{5}$. This jump adds to the sense of an evaded cadence since it avoids the expected arrival of $\hat{1}$.

Example 4.7: Beethoven, Symphony No. 1 in C Major, S[1], bars 53–77

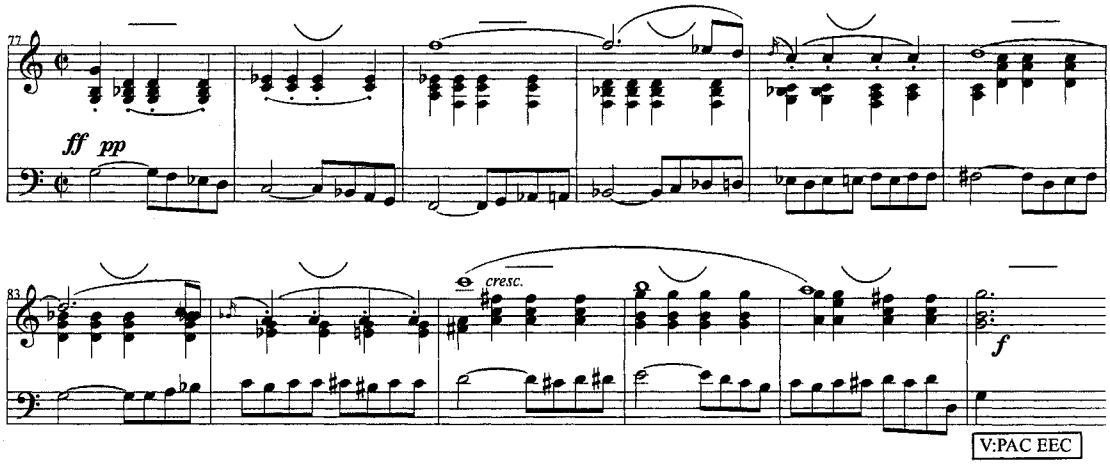


In bars 69 and 70, which are repeated in bars 71 and 72, the upper voice attempts to reach $\hat{1}$ through descending stepwise motion from $\hat{5}$ to $\hat{2}$. However, on each of the two arrivals at $\hat{2}$, the bass line returns to the $\frac{4}{2}$ chord from bar 68 and the resolution of this chord to I^6 is again counterpointed by a jump in the upper voice from $\hat{2}$ to $\hat{5}$. The third time the $\frac{4}{2}$ harmony arrives, the second half of bar 72, its resolution to I^6 initiates new musical material. The soprano, again, avoids $\hat{1}$ by jumping to $\hat{5}$, but instead of descending through the perfect fourth from $\hat{5}$ to $\hat{2}$, it ascends by step through the perfect fourth from $\hat{5}$ to $\hat{1}$. This arrival of $\hat{1}$ is harmonized by I^6, and represents the third sixth of the upper voice's interior third-progression from $\hat{3}$ to $\hat{1}$.

As shown in graphs 10B and 10C, I hear this descent in parallel sixths as a prolongation of the cadential $\frac{6}{4}$. Finally, the F♯ at the end of bar 76, which completes the 4–3 motion of the cadential $\frac{6}{4}$, continues the motion into the inner voice that started in parallel sixths, creating a B–A–G–F♯ line.

One reason for my interpretation of a prolonged cadential $\frac{6}{4}$ in bars 68 through 76 is that I find it difficult to hear S's predominant and dominant harmonies occurring solely in bar 76 rather than where I have indicated them in graph 10. Additionally, the extensive prolongation of the cadential $\frac{6}{4}$ corresponds to the eight-bar expansion of S's cadential phase. The voice leading—particularly the soprano line—builds anticipation for $\hat{1}$'s arrival, which is fulfilled in two ways: the goal of an ascending line from $\hat{5}$ to $\hat{1}$ as part of the expanded cadential $\frac{6}{4}$; and the goal of S's *Urlinie*, which is realized in bar 77.

Example 4.8: Beethoven, Symphony No. 1 in C Major, S^2, bars 77–88



The effect of finally arriving at $\hat{1}$ in bar 77 is immediately overshadowed by the dramatic entrance of S^2, shown in example 4.8. Along with the aforementioned

problematic drop in dynamic to *piano*, the use of the minor mode and change of orchestration to lower strings undermine the sense of $\hat{1}$'s role as the goal of S^1. These strong contrasts also support hearing a rejection of the EEC candidate in bar 77. However, the use of the minor mode and irregular phrase rhythm in S^2 leaves room for a third theme to further confirm the new key.

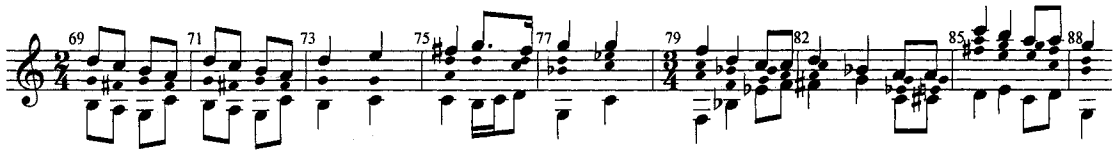
S^2's voice leading takes the form of a fifth-progression. The influence of the minor mode can be seen in the beginning of graphs 11A and 11B, which show how S arrives at B♭ major through a descending-fifths progression from G minor. As the theme slowly emerges from the minor mode, the dynamic, orchestration, and upper-voice register parallel the setting of S^1's conclusion (bars 85–88). However, the intrusion of the minor mode at this theme's opening adds an element of instability to the new-key area.

S^2's voice leading, shown in graph 11, opens by moving from the minor tonic to ♭III. The arrival at ♭III is confirmed by a cadential progression that resolves deceptively to vi/♭III, G minor, in bar 83. G minor is taken as the new local tonic and, similar to ♭III, is confirmed by a cadential progression that resolves deceptively to vi, E minor, in bar 86. This chord adopts its expected function within the new-key area as the submediant and leads to the second PAC of the new-key area. In graph 11A, the overall harmonic progression is shown as i–vi–ii^6–V^7–I. Graph 11D shows that the motion from i to vi is accomplished through a descending-fifths sequence (bars 77–80) and two cadential progressions that resolve deceptively (bars 80–85).

The change of register shown in graph 11D at bar 85 reflects a conflict between outer and inner form.[12] I view the C6 as a passing tone between D and B. However, this passing tone is accented because it occurs on a strong beat of the hypermeter and corresponds to a change of register and orchestration. An examination of S^2's phrase rhythm will support this interpretation of it as an accented passing tone.

S^1's hypermeter regularly alternates between strong and weak measures. The first four hypermeasures of example 4.9 show a durational reduction of S^1's expanded cadential phase to illustrate the regular phrase rhythm. Beginning with its third bar, S^2's hypermeter switches from triple (three-bar) instead of duple (two-bar). The continuation of example 4.9 shows that three-bar hypermeter persists through S^2's cadence and that each hypermeasure has the same rhythm. S^2's irregular hypermeter is one characteristic that causes it to be loosely organized.

Example 4.9: Beethoven, Symphony No. 1 in C Major, durational reduction

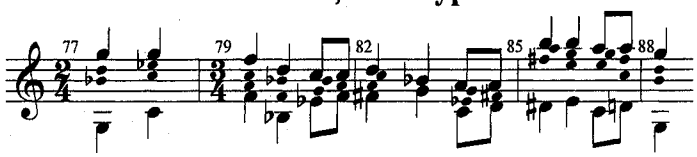


Despite its irregular phrase rhythm, S^2's voice-leading events occur at evenly spaced intervals owing to the pair of deceptively resolving cadential progressions. This characteristic provides an additional contrast with S^1, in which the expanded

[12] These terms are introduced by Rothstein in *Phrase Rhythm in Tonal Music* (New York: Schirmer, 1989), 104.

cadential phase skewed the pacing of voice-leading events by prolonging the cadential $\frac{6}{4}$.

Example 4.10: Beethoven, Symphony No. 1 in C Major, alternate durational reduction, with hypothetical continuation



Shown in example 4.10, the pattern started in bars 79 through 81, and repeated in bars 82 through 84, projects a slightly different beginning to bars 85 through 87. The pattern consists of a harmonic progression, V–I–ii$^6_5$–V, that resolves deceptively through an applied dominant to vi. This deceptive vi is then reinterpreted as the new tonic and, combined with its dominant, restates the harmonic progression V–I–ii$^6_5$–V. Each iteration of the pattern has the same harmonic rhythm: one bar for each of the first two harmonies and half a bar for each of the final two harmonies. This creates the three-bar hypermeter and is further supported by the woodwind entrances in the strong bars. Since this three-bar hypermeter continues in bars 85 through 86, I propose that the main harmony for bars 85 through 87 is vi, not the V^7 that occurs on the strong bar. This parallels the metric placement of the previous iterations' goal harmonies, in which the first bar was an applied dominant that delayed the arrival of vi. Example 4.10 shows an alternate composition for bars 82 through 87 that conforms more closely to this pattern. The absence of C6 at bar 85 of example 4.10 supports my interpretation of it as an embellishment—a passing tone between D and B (see graph 11B, bars 80–86).

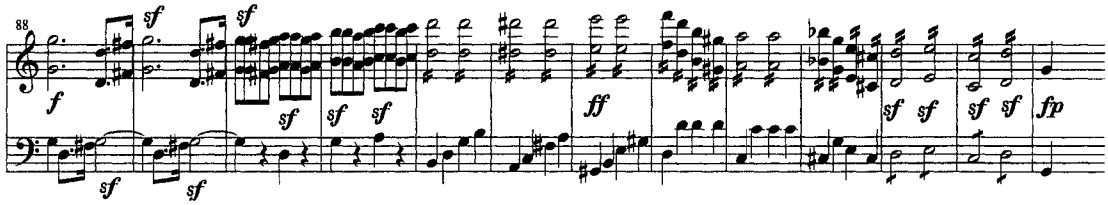
The interaction between voice leading and hypermeter also illustrates S^2's loose characteristics and the contrast between S^1 and S^2. Throughout S^1, voice-leading events correspond to relatively strong metric events of the hypermeter. For instance, in example 4.9 the resolution of each of the first two $\frac{4}{2}$ chords in S^1 occurs on a hyper-downbeat. The occurrence of the third $\frac{4}{2}$ chord in bar 75 is treated as a suspension, providing consonant preparation for the bass note C, suspending it on a strong hyperbeat as the dissonant bass of a $\frac{4}{2}$ chord, and resolving it on a relatively weak hyperbeat. S^2's rhythmic reduction, however, shows several accented dissonances that are not suspensions. Most striking is the chromatic passing tone in bar 82, which occurs on the strongest beat of the hypermeasure. This pitch supports an applied dominant to the next chord, G minor, and delays the deceptive resolution of B♭'s dominant, F. In a deeper level of reduction, one might choose to omit the embellishing chord and restore the G minor chord to its implied strong-beat position.

S^2 uses the minor mode, which creates a situation similar to the first topic discussed in this chapter. When the first subordinate theme engages the minor mode, it impacts the voice leading and leaves room for a C to rectify the minor-mode excursions. In Beethoven's Symphony No. 1, the existence of three new-key themes adds nuances to this situation. First, S^1 has already presented a linear progression in the new-key area that did not use the minor mode. However, the presence of S^2, which is based on a motive from S^1, delays the EEC. In S^2, the use of the minor mode

helps both to negate the previous EEC candidate in bar 61 and to open further musical space for C.

C, bars 88 through 100, immediately "corrects" two of the problems presented by S^2: it establishes a duple hypermeter and begins in the major mode. Graph 12 and example 4.11 present C. The return of P's motive as C's beginning is a signal associated with the closing zone and implies that the new-key area's exploration of the minor mode is done and the EEC accepted. C's voice leading, shown in graph 12, has several implied tones in the upper voice. This situation results from its cadence, which has a texture that collapses to one bass-line voice. This line, D–E–C–D–G (bars 98–100), retraces S's bass line from its cadence in bars 85 through 88. However, the voice-leading interpretation in C differs because of the way in which this bass line is approached.

Example 4.11: Beethoven, Symphony No. 1 in C Major, C, bars 88–100



As graph 12 shows, I hear one small change between the harmonization of S^2's and C's cadences: the chord supported by the first D (bar 98) is a cadential $\frac{6}{4}$ rather than a V^7. This hearing results from the second similarity between S^2 and C: the prominent use of chromatic tones. C's chromatic tones arise from applied diminished-seventh chords in bars 95 and 97. Graph 12B shows that these chromatic tones participate in a chromatic ascent from an inner to an outer voice.

Shown in graph 12C, after opening with a tonic prolongation (bars 88–92) that moves the soprano from $\hat{1}$ to $\hat{5}$ and the bass from I to I^6, the outer voices move in contrary motion towards the fully diminished-seventh chord of ii. After arriving on $vii^{o\frac{4}{3}}$/ii in bar 95, the upper voice leaps from F6 to G♯5, returning it to the register of the closing theme's first G(♮), which is an inner voice underneath $\hat{5}$ (see graphs 12A and 12B). The arrival at G♯5 initiates an inner-voice motion from the tonic chord's G5. Shown in graphs 12B and 12C, this ascent continues, tracing four steps of a rising chromatic line: G5–G♯5–A5–B♭5. The B♭, however, is left unresolved on the musical surface because the upper voice abandons its line to join the bass line through a second diminished-seventh leap, this time from B♭5 to C♯5. As vii^{o7}/V, this chord moves to the dominant in bar 98, and B♭ is expected to descend to A. However, the bass line D–E–C–D in bars 98 and 99 suggests a cadential $\frac{6}{4}$ and its resolution since it implies a corresponding soprano line of $\hat{3}$–$\hat{3}$–$\hat{2}$–$\hat{2}$.[13] Therefore, the seventh of vii^{o7}/V implicitly rises one more chromatic step to B♮ before making its descent.

This analysis demonstrates how the process of deferring the EEC can open up musical space for additional themes. It also shows that similarities in voice leading can occur between themes of different functions. The shared bass line at the cadences connects the voice leading of S^2 and C; the voice leading of S^1 and S^2 has no similarities as clear as this shared bass line. This shows the potential for voice leading to override boundaries erected by formal function.

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[13] This interpretation of the soprano line's pitches is supported by the fact that it recaptures S^2's soprano-line approach to its cadence.

V:IAC EEC: Haydn, Symphony No. 86

The subordinate theme in Haydn's Symphony No. 86 in D Major ends with an imperfect authentic cadence, which has a profound effect on the voice leading. Sonata Theory recognizes that imperfect authentic cadences can function as an EEC. Hepokoski and Darcy state:

> These cases require subtlety: frequently the effect is that of a PAC in the structural voices with a mere "**cover tone**" in one of the decorative upper voices. It may be that the clear sense of a structural-voice PAC carries the day. It may also be the EEC proper is somewhat weakened through the IAC-effect, which casts even more of a burden on the subsequent C-space.[14]

I argue that the EEC in this exposition is "somewhat weakened" by the conclusion of the primary melodic voice. I will demonstrate how this weakened EEC allows for two voice-leading interpretations. The score and voice-leading analysis are shown in example 4.12 and graph 13.

As a monothematic symphony, the primary and subordinate themes in this exposition begin with the same gesture: an auxiliary cadence. After reaching the local tonic in bar 57, the theme closes in bar 64 with an authentic cadence. However, the orchestration of this cadence causes it to be imperfect; the woodwinds, which provide the pitches for the expected perfect authentic cadence, are overwhelmed by the first violin section, which falls away from the tonic by a descending arpeggiation to the

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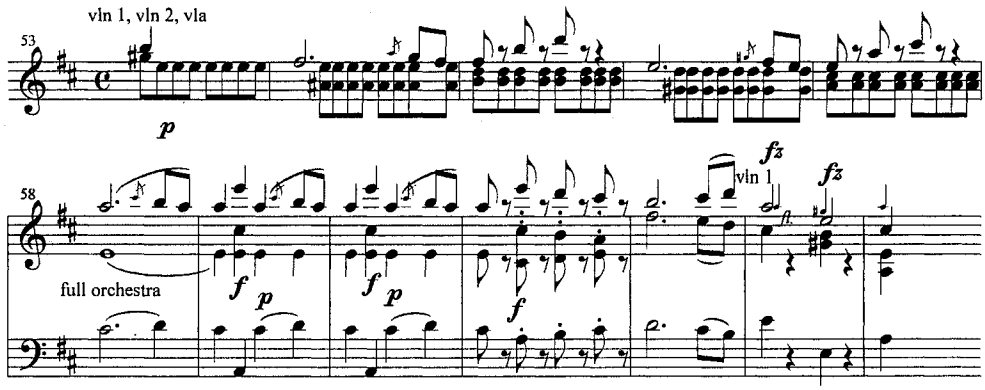
[14] James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late-Eighteenth-Century Sonata* (New York: Oxford University Press, forthcoming; Departments of Music Theory, Yale University and Oberlin College Conservatory, 1999, photocopy), 120.

third of the tonic triad. The combination of the timbre of an entire violin section with Haydn's *sforzandos* implies that the violin section controls the primary voice. This deviation from the expected voice leading creates ambiguities, as might be shown in a Schenkerian interpretation of this passage: does it descend from the local $\hat{5}$ to $\hat{3}$ as shown in graph 13.1, or does it descend from the local $\hat{3}$ to $\hat{1}$ as an inner-voice third-progression under a hypothetically prolonged E ($\hat{2}$ of the original key) as shown in graph 13.2? Although I choose the interpretation in graph 13.1 because it best captures the sense of the imperfect authentic cadence, it is important to recognize that the ambiguity present at this important cadence leaves the door open for a later linear progression to clarify the situation.

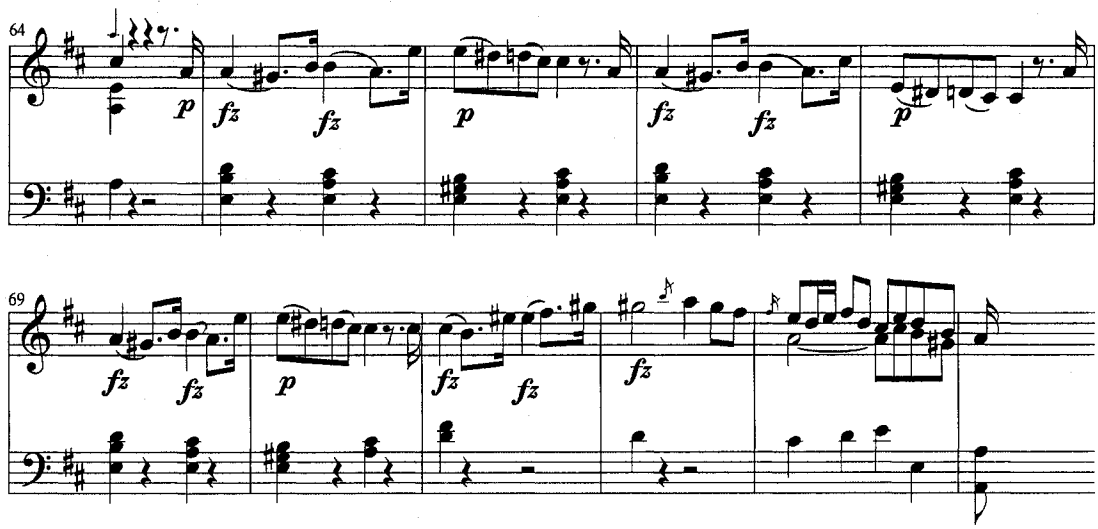
Example 4.12: Haydn, Symphony No. 86 in D Major, S, bars 53–64



The next theme is a closing theme, rather than a second subordinate theme, because of the new melodic material and the caesura that separates them. The voice leading of the closing theme, shown in example 4.13 and graph 14, begins with a dominant prolongation. After this dominant harmony finally resolves to tonic on its third iteration, the voice leading makes a clear descent from the local $\hat{3}$. C's voice

leading interacts with S's because it either completes the fifth-progression begun in graph 13.1 or clarifies the third-progression shown in graph 13.2. Graph 15 presents both versions of the complete voice leading for the new-key area. Thus, the second theme in the new-key area—this closing theme—is able to clarify the voice leading of the subordinate theme because it is substantial enough to support a second linear descent.

Example 4.13: Haydn, Symphony No. 86 in D Major, C, bars 64–74



The two possibilities for the new-key area's voice leading reflect the ambiguity of the EEC. If the EEC is an imperfect authentic cadence, then the cadence in bar 64 connects to the arrival of tonic harmony in bar 70. In C, $\hat{5}$–$\hat{4}$–$\hat{3}$ occurs three times (bars 66, 68, and 70); the final iteration concludes with C's first root-position tonic triad. One could hear this approach to $\hat{3}$ as a surface-level retracing of S's voice leading, which helps to connect C's voice leading to S's.[15] One barrier to hearing a

[15] Strictly speaking, $\hat{4}$ is the chordal seventh that resolves to $\hat{3}$, and $\hat{5}$ is an embellishment of $\hat{4}$.

V:IAC EEC is the strong sense of renewed beginning at bar 65, the onset of C. This situation is created by a caesura between S and C and the new melodic-motivic material that introduces C. Reading the EEC as a perfect authentic cadence, with an implied final $\hat{1}$, captures the sense of a new theme in bar 65. However, this interpretation does not account for S's odd conclusion. The disjunct line, D6–A5–E5–C♯5, that closes S leaves the listener with a sense of expectancy that is usually not associated with an EEC, especially a PAC EEC. This ending, therefore, opens up musical space for C to answer these expectations.[16] The ambiguities that arise in the new-key area's voice leading correspond to S's ambiguous ending.

Problematic Overlap: Beethoven, Symphony No. 4

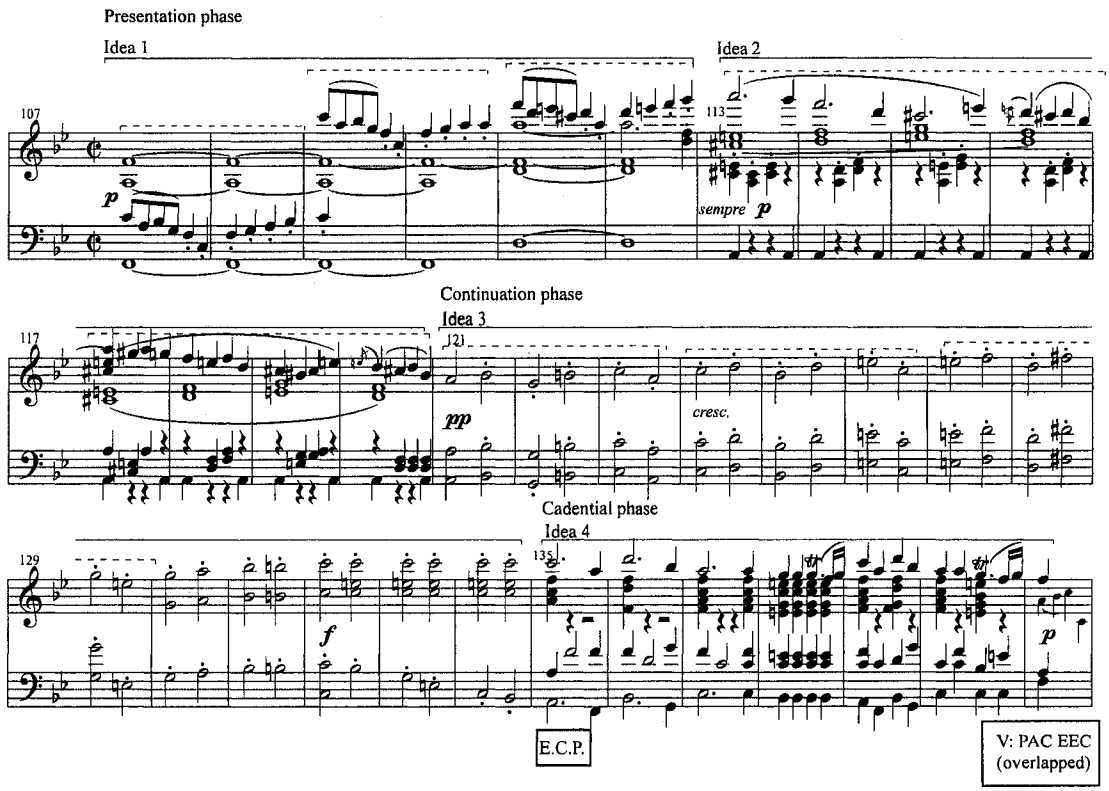
Overlapping a *forte* EEC with a *piano* C is unusual in the context of this study.[17] In chapter 2, I suggested that the effect of having a *forte* cadence hidden behind a *piano* initiation of the C zone may open up musical space for more themes. While there is often dynamic contrast between the end of S and the beginning of C, there is usually a caesura, sometimes filled by accompanimental texture, before the onset of C. In Beethoven's Symphony No. 4, the combined effects of the intense build-up to the EEC, phrase overlap, and contrasting dynamics generate a situation rhetorically

[16] It is interesting that the first codetta following C is unusually volatile in its rhetoric (*forte* sixteenth notes) and harmony (use of a G-sharp-minor chord). This unusual C-space material may be a reaction—as implied by Hepokoski and Darcy—to the weakened EEC.

[17] For a more detailed description, revisit the discussion in chapter 2, pp. 96–8.

similar to the end of the first part of the exposition. During the TR, there is an increase of energy which halts with the medial caesura. This combination opens up musical space for the subordinate theme. Through the build-up to the EEC and sudden drop of dynamic, a similarly dramatic situation occurs in which new musical space has been opened up for a C theme. This does not guarantee the presence of a C, but it does create fertile ground for one to appear.

Example 4.14: Beethoven, Symphony No. 4 in B-flat Major, S, bars 107–141



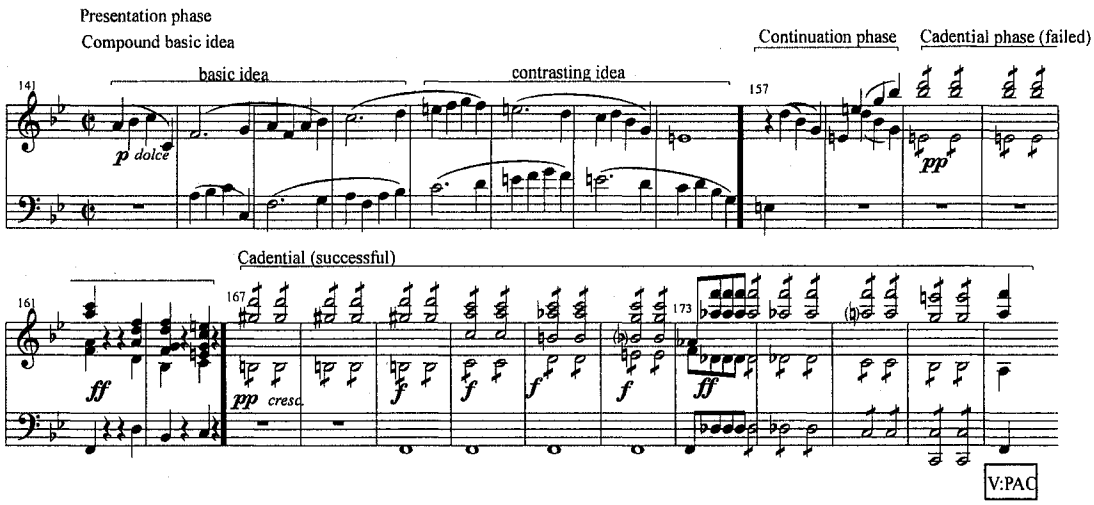
In terms of voice leading, phrase overlap of this type obscures the final note of S's fifth-progression. In Beethoven's Symphony No. 4, this effect is pronounced because S seems to struggle to achieve its EEC, a common situation in Beethoven's

expositions. Example 4.14 and graph 16 present S. In this S, which supports a fifth-progression from the original key's $\hat{2}$ or C, the local *Kopfton* is transferred up two octaves through an arpeggiation in bars 107 to 135. Shown in graph 16B, this arpeggiation is harmonized by a tonicization of the relative minor, D minor. D minor proceeds to its dominant but never goes any further, causing the A-major prolongation in bars 113 through 121 to act as a back-relating dominant.

The path from A major to F's dominant, C major, corresponds to the difficult passage in bars 121 through 135. Discussed in chapter 2, this passage contradicts the notated meter and seems to have no clear tonal center. As shown in graph 16B, A5 moves to C6 through chromatic motion. However, A5 is first transferred down an octave (bar 121); the first step from A4 to B♭5 is accomplished through a series of four rising thirds rather than one step. These thirds return the top line to its original register. The arrival at $\hat{5}$ in bar 132 coincides with a dominant that prepares the onset of S's cadential phase: it leads to the initial I^6 of an expanded cadential progression (bars 135–138). Beginning in bar 135, this harmonic progression evades its cadence by resolving the cadential $\frac{6}{4}$ to a dominant $\frac{4}{2}$ chord. An unexpanded cadential progression follows in bars 139 through 141, and the cadence is not evaded. However, when $\hat{1}$/I is finally realized in bar 141, Beethoven marks it with a *piano* dynamic and begins a new melody in the clarinet. The listener can hear the final tonic pitch, but it is overshadowed by the carefully set entry of a new melody.

In terms of the voice leading, the overlap allows an inner voice to gracefully emerge from the texture and complete an inner-voice descent. The entrance of the clarinet (bar 141) on $\hat{3}$ occurs in a relatively low register, which strengthens the sense that it is an inner voice of the previous cadence.

Example 4.15: Beethoven, Symphony No. 4 in B-flat Major, C, bars 141–177



C's *Kopfton*, the inner-voice $\hat{3}$, tries to descend to $\hat{1}$ five times and only realizes a full descent the last time. Example 4.15 and graph 17 present C.[18] C's basic idea, a four-bar tonic expansion (bars 141–144), is answered by a dominant statement of the same idea (bars 145–148). The tonic expansion supports $\hat{3}$, and the dominant expansion supports $\hat{2}$, although $\hat{7}$ substitutes for $\hat{2}$ on the musical surface. This inner-voice motion is shown in graph 17B by the beamed notes. This pair of basic ideas is then repeated in a higher register with a *forte* dynamic in bars 149 to 156 (not shown

[18] The thickened barlines in example 4.15 represent repetitions that were removed from the score reduction.

in example 15). These sixteen bars initiate two descents from $\hat{3}$, shown at the opening of graph 17B.

The third attempt at a descent occurs in the first attempt at a cadence. Bars 157 and 158 restate and then invert the last four notes of the dominant statement, which form the half-diminished seventh chord E♮–G–B♭–D. This harmony resolves to a tonic triad at a contrasting *fortissimo* dynamic and a two-bar cadential progression attempts to achieve a perfect authentic cadence in bars 161 to 163. Furthermore, the outer voices have regained the registers of S's overlapped cadence, linking this cadence to S's frustrated cadence. However, the final tonic harmony of the cadential progression is avoided. The half-diminished seventh chord returns, creating a type of one-more-time technique, but far more dramatic owing to the use of contrasting dynamics; a predicted *forte* conclusion to the cadence is interrupted by the *piano* return of the half-diminished seventh chord in bar 163. During this aborted cadential progression, a third attempt to descend in an inner voice from $\hat{3}$ to $\hat{1}$ begins. This motion is highlighted by beams in graph 17B. The fourth attempt is similar, occurring in bars 165 and 166. Once again, the final tonic pitch is not realized.

The fifth attempt at the descent is finally successful. Its beginning parallels the third and fourth attempts, but the one-more-time treatment is greatly expanded and begins on a fully diminished-seventh chord instead of the half diminished chord. These two chords are connected by their shared dynamic and the top pitch, D6. The

complicated inner-voice descent occurs in the lower second violins when they split off from the top voice in bar 170.

The passage from bars 167 to 173 moves from a fully diminished seventh chord to a briefly stated tonic triad. Inner voices move by step while outer voices are mostly stationary, forming the defining fifth of the tonic triad: a pedal-point F and a held tone in the top voice, C (bars 170–173). The addition of the triad's third, A, would complete this initial tonic harmony of C's cadential progression. Graph 17B traces this path in the last set of beamed notes. This small omnibus-like progression begins by once again completing the neighbor motion between D6 and C6 in bars 167 through 170, although with a new harmonization. C6's arrival occurs with an F-major chord, but this chord is merely a passing chord in a prolongation of vii^{o7}/V. The diminished-seventh chord resolves to V (over a pedal F) in bar 172, which then leads to tonic triad in bar 173. However, the minor tonic is only briefly stated on the musical surface—occurring for one eighth note—before the outer voices quickly shift, creating a ♭VI chord in bar 173, which becomes the predominant chord of the cadence.

This shift in the outer voices also coincides with an octave transfer of the inner voice's A♭ (bar 173). By rising an octave, the inner voice regains the register of S's fifth-progression. This fifth attempt at a descent (bars 173–177) finally completes the previous two interrupted cadences, and the expanded cadential phase adds an element of drama to the first unimpeded PAC of the new-key area.

Problem No. 3: Register

The third type of relationship between the voice leading of new-key themes concerns obligatory register. Schenker addresses obligatory register in sections 268–70 of *Free Composition*:

> No matter how far the composing-out may depart from its basic register in ascending or descending linear progressions, arpeggiations, or couplings, it nevertheless retains an urge to return to that register. Such departure and return creates content, displays the instrument, and lends coherence to the whole. … In the upper voice it is usually the register of the first tone of the fundamental line which is later confirmed as the true register.[19]

The voice leading of S is an *Ursatz* replica, and the *Kopfton* of S's *Urlinie* is the tone established at the medial caesura.[20] In Mozart's Symphonies Nos. 39 and 41, the medial caesura and initial notes of S occur in a higher register than S's descent.

Ernst Oster also addresses this concept in his article "Register and the Large-Scale Connection," which aims to "show a number of instances where register contributes in an essential way to clarifying certain contrapuntal, structural, or thematic-motivic connections and relations."[21] The analysis of these two Mozart

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[19] Schenker, *Free Composition*, 107.

[20] The term "*Ursatz* replica" comes from Schmalfeldt, "Towards a Reconciliation of Schenkerian Concepts with Traditional and Recent Theories of Form," *Music Analysis* 10 (1991): 268.

[21] Ernst Oster, "Register and the Large-Scale Connection" in *Readings in Schenker Analysis and Other Approaches* ed. Maury Yeston (New Haven and London: Yale University Press, 1977), 56. Originally published in *Journal of Music Theory* 5 (1961): 54–71.

expositions adds "clarifying certain *formal* connections and relations" to the list of contributions that can be made by a study of register.

Mozart, Symphony No. 39 in E-flat Major

In Mozart's Symphony No. 39, the medial caesura establishes F6 as S's *Kopfton.* The arrival at the V:HC in bar 83 and the events between this cadence and S's beginning in bar 97 are shown in example 4.16. In this passage the highest voice, the flute, and most active voice, the violins, occupy different registers. In bar 89, the arrival of the medial caesura, these two voices are on F6 and F5, respectively. Bars 90 through 97, discussed by Hepokoski and Darcy in their "Medial Caesura" article, fill in the caesura with stepwise motion in the strings from $\hat{5}$ to $\hat{1}$.[22] This descent changes registers on the last note, moving from C5 to B♭3 in bars 96 and 97. This stepwise motion is counterpointed by the flute, which rises from B♭5 to D6 in bars 93 through 97. The arrival at D6 is highlighted by the written-out turn preceding it in bar 96. Since the violins' descent from $\hat{5}$ to $\hat{1}$ involves two descending register transfers and since the flute maintains its high register, drawing attention to it with an embellishment in bar 96, I interpret the flute register as the primary register and understand F6 as S's *Kopfton.*[23]

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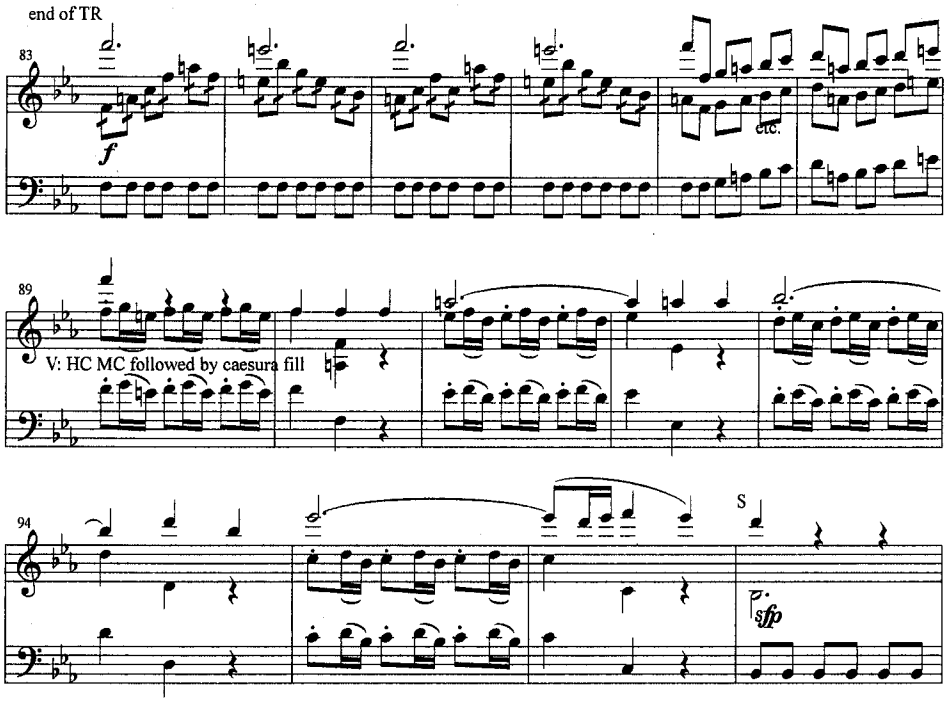
[22] Hepokoski and Darcy, "The Medial Caesura and Its Role in the Eighteenth-Century Sonata Exposition," *Music Theory Spectrum* 19 (1997): 129–30.

[23] Schenker's graph of the introduction also interprets the flute's high pitches as the main voice; these pitches open up register 6—the same register I take as primary at the medial caesura. See Oswald Jonas, "Der Nachlaß Heinrich Schenkers," *Der Dreiklang* 1 (April, 1937): 20.

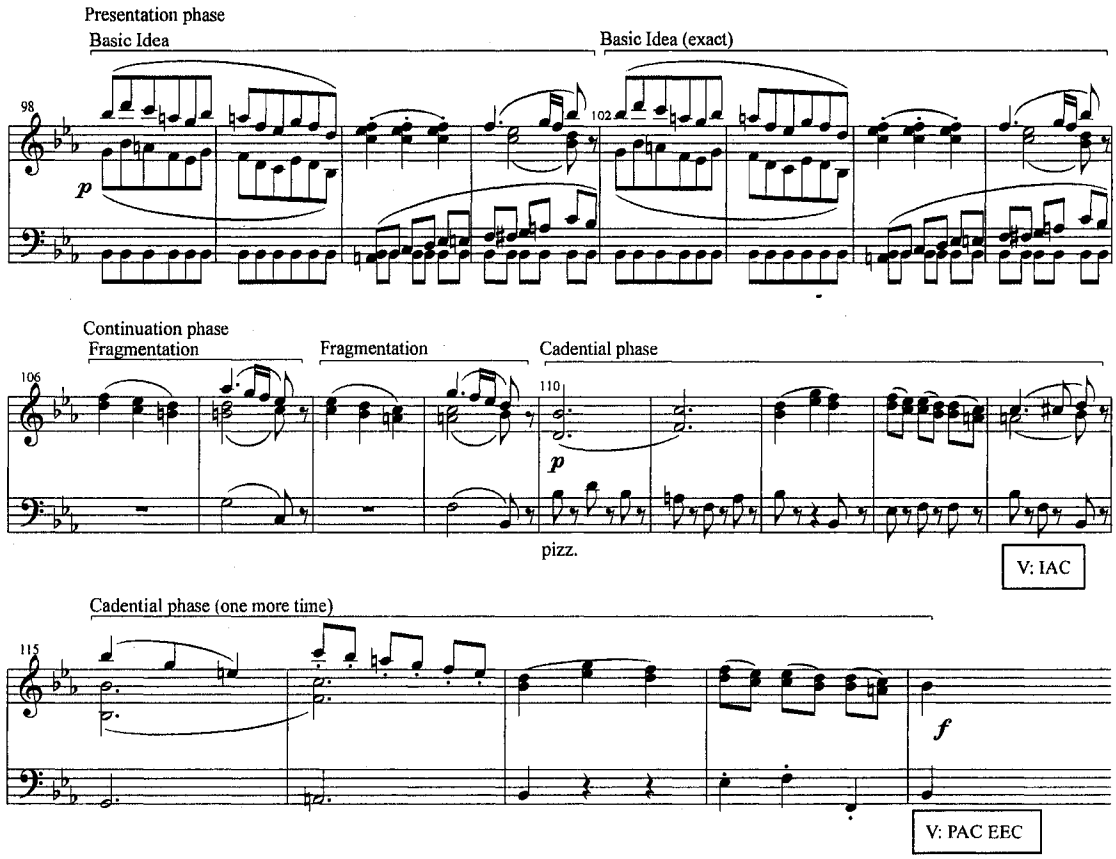
Example 4.16: Mozart, Symphony No. 39 in E-flat Major, approach to the MC, bars 83–97



S is a $\hat{5}$-line in the secondary key, B-flat major. Its descent starts from F5, one octave lower than its *Kopfton*, F6. S's score and graph are shown in example 4.17 and graph 18. The octave transfer from F6 to F5 is accomplished through a division at B♭5, the primary tone for bars 98 through 105. A tonic prolongation that corresponds to S's presentation phase supports this pitch. $\hat{4}$ and $\hat{3}$ result from the falling-fifths progression in bars 106 through 109, S's continuation phase. S's expanded cadential phase, bars 110 through 119, arises from an inner voice. The emergence of the inner voice is felt in the thinning of the texture from strings and winds to strings alone. The first cadence is evaded at the last minute when the melody rises from $\hat{2}$ to $\hat{3}$ in bar 114,

effecting an imperfect authentic cadence.[24] Thus, the cadential phase is attempted "one more time." In the second attempt, the $\hat{5}$-line is completed by its last two members, $\hat{2}$ and $\hat{1}$. The entire $\hat{5}$-line occurs between F5 and B♭4, an octave lower than the F was initially stated.

Example 4.17: Mozart, Symphony No. 39 in E-flat Major, S, bars 98–119

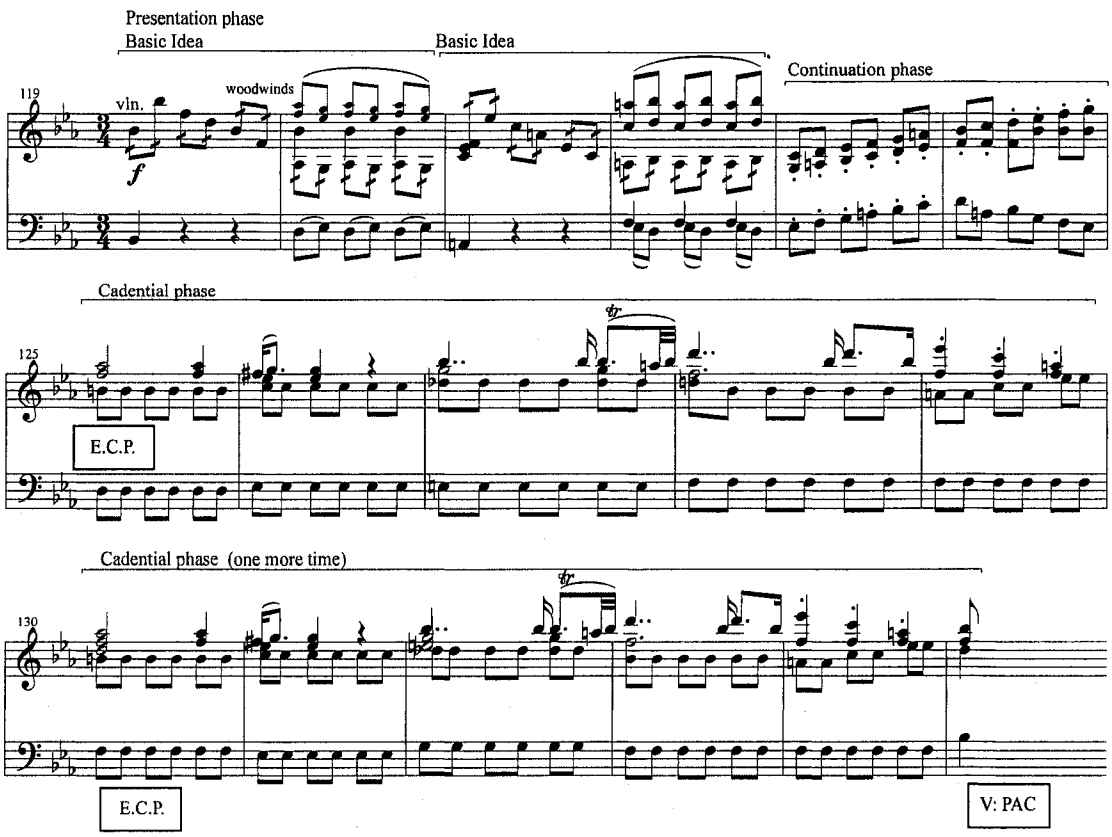


C, shown in example 4.18 and graph 19, recaptures the register opened up by the medial caesura. Issues of register are confusing during C's presentation phase,

[24] Even though I argued for a V:IAC EEC in the previous analysis of Haydn's Symphony No. 86, this situation differs in at least two aspects. The "one-more-time" treatment of the cadence guarantees that the EEC is still forthcoming. Furthermore, the approach to $\hat{3}$ at the cadence in Mozart's symphony is a last-minute deflection, not the implied goal of the melody.

bars 119 to 122. Although the upper strings are the most prominent voice, the winds are the highest voice. Since these two lines are coupled at a distance of two octaves, there is no question which pitch classes are primary. However, determining the register for this register-dependent analysis is difficult. I chose the higher register because the octave leap in the violins in bar 119 draws attention to this register and the winds join that register in bar 120.

Example 4.18: Mozart, Symphony No. 39 in E-flat Major, C, bars 119–135



C is a $\hat{3}$-line, and the approach to $\hat{3}$ is the most dramatic part of the theme. C's presentation phase, bars 119 through 122, supports a tonic prolongation that moves from I to I^6. The line $\hat{8}$–$\flat\hat{7}$–$\hat{6}$ that occurs during this phase returns in C's cadential phase on a higher structural level. After a scale transfers the violins' register up

almost two octaves in bars 123 and 124, the entrance of a motive from the transition (bars 64 and 65) in bar 125 coincides with the beginning of an expanded cadential progression. This motive features ♭7, A♭, in its top voice. As the chordal seventh of vii$^{o6}_{5}$/ii, its downward resolution pulls the violin line further away from the *Kopfton*, D6. Through two ascending thirds, the violins finally arrive at D6 in bar 128. After evading the cadence once in bar 130, C's $\hat{3}$-line finally completes its descent in the register of the medial caesura in bar 135.

The arrival at $\hat{3}$, D6, is further dramatized by two additional features. First, it features a chromatic inner-voice motion, B♭–B♮–C, in the viola line (bars 124 through 126). This line continues its ascent with D♭, which is the seventh of the vii^{o7}of V in bar 127. As a chordal seventh, this pitch is supposed to resolve down by step. However, this motion is delayed by the cadential $^{6}_{4}$ in bar 128. Since the cadential $^{6}_{4}$ occurs in the major mode, D♭ must move to D♮ before resolving down by step to C. The combination of the chromatic line and the upper-voice arrival at D6 makes the register of C's descent clear—it is the same as the register of the medial caesura. Second, at the cadential $^{6}_{4}$ in bar 33, the flute regains F6, the primary tone at the medial caesura, through a chromatic ascent.

Mozart, Symphony No. 41 in C Major

The exposition of Mozart's Symphony No. 41 is notable because proposed EECs are consistently delayed or rejected. Examples 4.19 through 4.21 provide score reductions of each main part of the new-key area. Two pairs of codettas follow S in bars 71

through 89 and 89 through 111. The first pair of codettas begins by retracing S's cadence. The second pair of codettas is slightly more difficult to interpret. One important reason, discussed in chapter 3, for the codetta status of the second pair concerns its opening motive.[25] These codettas are based on a motive from TR, bars 39 through 44. In particular, the second pair of codettas shares the setting in parallel sixths and a G3 pedal point with the TR motive. Since this TR motive occurs on the dominant, these motives are not allowed—according to Hepokoski and Darcy—to occur after the EEC.

S's cadence in bar 71, the first proposed EEC, is followed by a codetta that retraces S's cadence and thus defers the EEC to the codetta's cadence in bar 75. The codetta takes the three-quarter-note motive from S^1's cadential phase (bar 67 and 69) and uses it to repeat S^1's cadence one octave higher. The codetta supports a third-progression that shares harmonies similar to the last three notes of S^1's fifth-progression, which are harmonized by I^6–vi–ii^6–V^7–I. The codetta's linear progression exists on a different—lower—structural level than the first because it echoes S^1's descent. It does, however, complete a linear progression in the first register that Mozart used in the new-key area.

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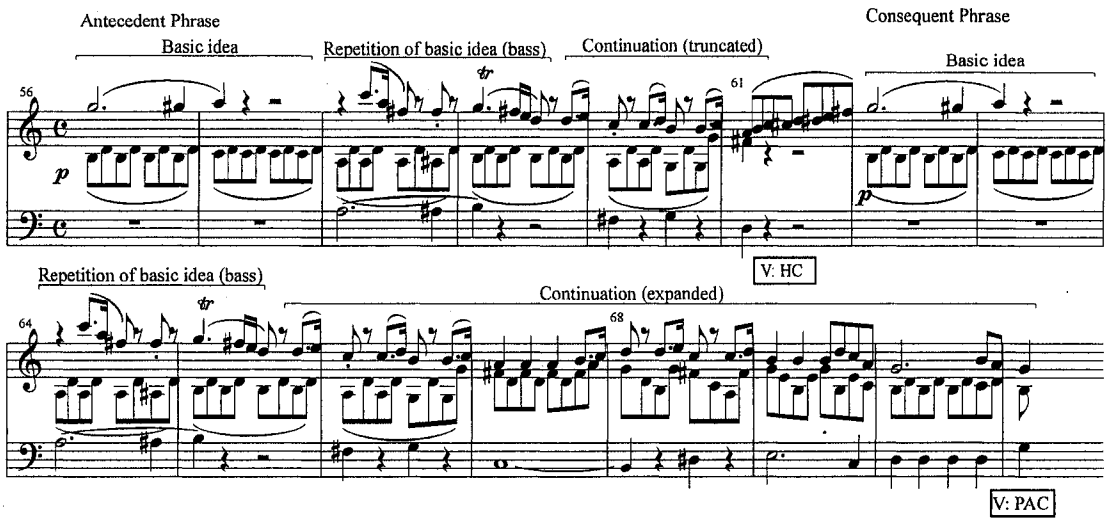
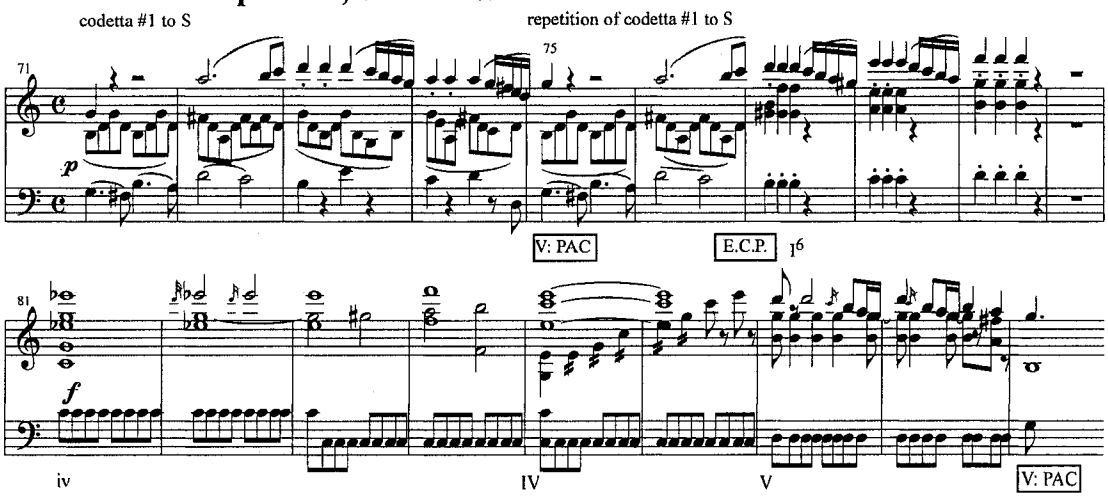
[25] See chapter 3, p. 175, footnote 65.

Example 4.19: Mozart, Symphony No. 41 in C Major, S[1], bars 56–71

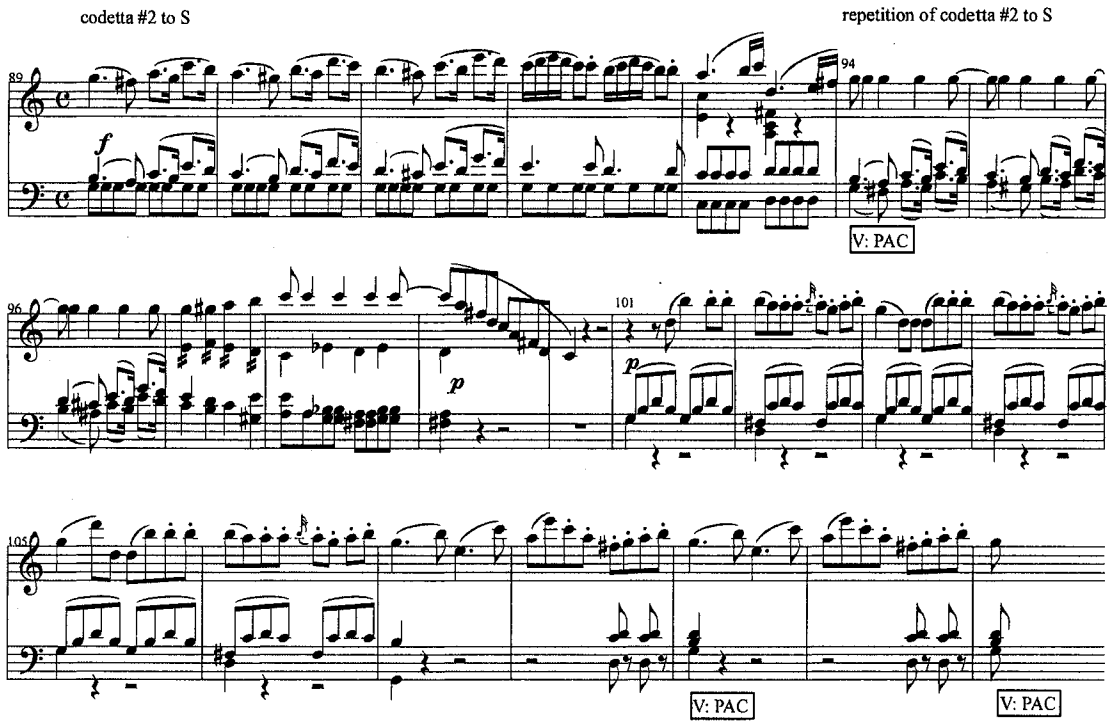


Example 4.20: Mozart, Symphony No. 41 in C Major, first codetta and its repetition, bars 71–89



When the codetta is repeated, however, it resoundingly rejects the previously proposed EEC by reopening the S zone. The sense of rejecting an EEC contrasts with deferring it because the actions needed for a rejection are considerably more dramatic. The use of a grand pause on a dominant-seventh sonority in bar 80 and the minor mode in bars 81 and 82 cause the S zone to reopen. The minor subdominant initiates a cadential progression that presents the third EEC candidate at its cadence in bar 89.

Example 4.21: Mozart, Symphony No. 41 in C Major, second codetta, its repetition, and S^2, bars 89–111

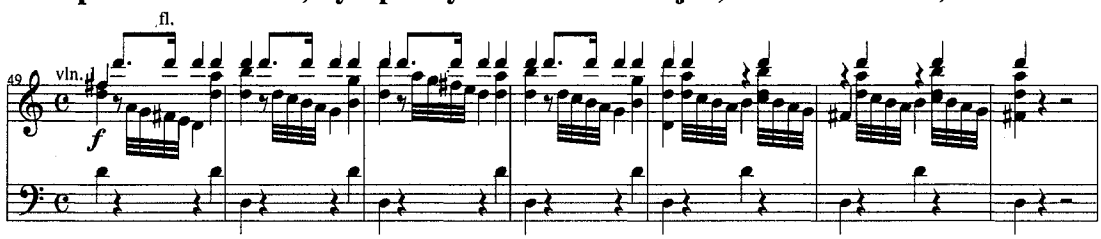


However, this EEC candidate is deferred to bar 94 by a new codetta. This fourth EEC candidate is then rejected by the changes made to it in its repetition. These changes reject the EEC candidate in bar 94 by making a grand pause on a dominant-seventh sonority. In the first pair of codettas, the grand pause was followed by a dramatic use of mixture. In the second pair of codettas the grand pause is followed by a new theme, S^2. The cadence concluding S^2 is finally accepted as the EEC—after four deferrals or rejections of the previous EEC candidates.

Several voice-leading factors drive the events of this unusual S zone. However, I will focus primarily on the role played by register. Similar to Mozart's Symphony No. 39, this exposition's first subordinate theme descends in a register lower than the one opened up by the medial caesura and S^1's opening melody.

Example 4.22 provides the arrival at the medial caesura's half cadence. The register of the primary tone at the medial caesura is not clear; the violins are the most prominent voice but the flute is the highest voice. Since the flute states $\hat{2}$ of C major, D6, and since the violins touch upon that pitch several times, I interpret it as the primary pitch at the medial caesura.

Example 4.22: Mozart, Symphony No. 41 in C Major, medial caesura, bars 49–55



S^1's presentation phase begins in the same register as the medial caesura, but its *Urlinie* descends in a lower register. Similar to S in Mozart's Symphony No. 39, S^1's opening gesture prolongs the tonic harmony, and the soprano tone divides the octave from the medial caesura's D6 to the D5 that initiates S^1's descent. S^1 is organized as a parallel period, and its voice leading presents the expected interrupted structure. The antecedent and consequent phrases, which take Caplin's form of *presentation* + *continuation*, begin with a double-neighbor figure in the soprano and tenor voices that prolongs I^6 in bars 56 through 59 and 62 through 65, respectively. The end of this tonic prolongation quickly descends from G5 to D5, the initial tone of the *Urlinie*. In the six-bar antecedent phrase, the motion $\hat{4}$–$\hat{3}$–$\hat{2}$ is harmonized by a dominant prolongation in which $\hat{3}$ is a passing tone harmonized by an apparent tonic.[26]

[26] The root-position tonics in bars 60 and 66 are "apparent tonics"; they harmonize passing motion that prolongs the dominant.

In the ten-bar consequent phrase, however, the descent is more thoroughly worked out, and each pitch of the fifth-progression is equally important. In both phrases, the *Urlinie*'s pitches occur in a lower register than the respective presentation phases and the *Kopfton* established by the medial caesura.

One additional characteristic, unrelated to register, helps propel the events in the S zone. With the exception of the apparent tonics in bars 60 and 66, there is no root-position tonic chord until S^1's cadence (see example 4.19). One reason for the lack of a root-position tonic triad is the missing bass line at S's opening. The first two bars of S^1's antecedent and consequent phrases begin in a two-voice texture in which the lower voice is stated by a tenor line. The bass line enters in bar 58, highlighting the transfer of the basic idea from the top voice to the bottom voice. The consequent phrase begins with the same voicing as the antecedent phrase; there is no bass voice to state a root-position tonic triad. Only at the consequent phrase's cadence does a root-position tonic triad finally appear in the new-key area. This feature of the first subordinate theme contrasts with the second subordinate theme, which begins with a traditional grounding in tonic harmony, and one could understand the S zone's reluctance to close as a response to this lack of a root-position tonic in S's presentation phases.

The two pairs of codettas that occur between S^1 and S^2, analyzed in graph 21, return to S^1's initial register and provide root-position tonic chords. Shown previously in example 4.20, the first codetta (bars 71–75) descends in the initial register Mozart

uses in the new-key area, and subsequent codettas continue to fill this register abandoned by S^1. For instance, in the repetition of the first codetta (bars 75–89), the soprano line reaches even further upwards, surpassing its previous achievement of $\hat{5}$, D6, to reach $\flat\hat{7}$, F♭6, which becomes part of an applied dominant seventh to the cadential predominant of the next cadence. The attainment and resolution of F♭6 propels the upper voice higher than necessary for a statement of its *Urlinie* in this register; therefore, much of this descent occurs in an inner voice, as can be seen by comparing the upper voices of graphs 21A and 21B. Whereas the first codetta simply moved the EEC to its end by extending the S zone, the second codetta rejects the previous EEC by reopening S-space. This reopening is achieved through the use of a grand pause and the surprising entrance of the minor mode at a *forte* dynamic in bar 81. The borrowed $\hat{6}$ from the minor mode is prominently placed in the highest voice, thus drawing attention to this higher register. As the voice leading in graphs 21A, 21B, and 21C shows, the predominant harmony is prolonged through the use of mixture; it first takes the form of the minor subdominant, which eventually moves to the major subdominant. The instability created by these features rejects all previously proposed EECs and reopens the S zone.

The next pair of codettas, shown previously in example 4.21, share a similar relationship: the first defers the EEC and the second rejects all previous EECs, reopening the S zone. Shown in graph 22, bars 89 through 94 present a third-progression that descends into an inner voice. Similar to the previous pair of codettas,

the repetition of the codetta in bars 89 through 94 is changed to ascend further into the higher register. However, this repetition does not result in an additional linear progression. Instead, it prolongs a $\hat{3}$–$\hat{4}$–$\hat{3}$ neighboring motion. The first two steps of this figure are composed out through a pair of unfolded thirds: B5–D6 in bars 94 through 96 and E6–C6 in bars 97 through 98. The arrival at C6, the neighboring $\hat{4}$, is further linked to the previous $\hat{3}$/I by a leap in the bass to G♯3 in bar 97, which connects the G3 in bar 94 to the A3 in bar 98. Through a reaching-over in bar 98, D6 becomes the highest pitch, but the arpeggiation in bar 99 allows C to re-emerge from the texture as the primary melodic pitch. The repetition of the second codetta also rejects all previous EECs. Similar to the previous repeated codetta, there is a grand pause separating a dominant seventh chord from its resolution. This grand pause contributes to the sense of a reopening of S space. This time, however, the grand pause leads to a new theme, S^2, which begins with $\hat{3}$/I, as shown at the end of graph 22.

S^2, which begins in the second system of example 4.21 and is analyzed in graph 23, presents no fewer than five third-progressions, all *Urlinie* replicas, all in the same register as the medial caesura, and some more worked-out than others. While the harmony and voice leading are relatively simple, S^2 does not include either of S^1's oddities: all tonic chords are explicit and in root position, and the melody remains in one register. Even though the intervening codettas supply these missing characteristics, their linear progressions were on a level of the voice-leading close to

the foreground. In a typical subordinate or closing theme, however, there is a working-out of the *Ursatz* replica. Even though S^2's voice leading closely corresponds to the foreground, its first tone, B5, is prolonged through a series of third-progressions. These third-progressions are easily perceived because they are close to the foreground.

Although S^2 finally provides descents in the register opened by the medial caesura, it does so through a third-progression, not a fifth-progression. Therefore, this new-key area is still left without a theme supporting a fifth-progression in the obligatory register. The codettas in the C zone, which are not shown in the examples, provide fifth-progressions in the obligatory register.

These analyses of Mozart's Symphonies Nos. 39 and 41 have showed that unusual aspects of the first new-key theme's voice leading are worked out in the ensuing codettas and themes. In particular, the treatment of register is sharply divided between this first new-key theme and the rest of the new-key area. This division of register is striking because it seems as though the higher register—the one in which Symphony No. 39's C and Symphony No. 41's S^2 occur—is the "true" register of the new-key linear progression.

Conclusion

It is perhaps puzzling to use a voice-leading perspective to consider why there might be two new-key themes. After all, the voice leading of the concluding theme serves no purpose if it shares the same goal as the subordinate theme—securing the new-key

area through fifth-progressions. I suggest that one goal for a new-key theme is to present voice leading that resembles an *Ursatz* replica. When the voice leading of the first new-key theme falls short of fully accomplishing this goal, the stage is set for further new-key themes to emerge. Usually, these later new-key themes present voice leading closer to that of an *Ursatz* replica. When later new-key themes do not accomplish this goal, as is the case in Haydn's Symphony No. 91, it is a non-normative case, and reasons can be traced to other factors of the musical surface. This theory helps to explain why there is clearly a drive to continue presenting themes in the new-key area even after a first new-key theme achieves essential expositional closure.

By examining the relationships between the voice leading of multiple new-key themes, I presented three types of problems that arose with clarity or frequency in the fourteen major-mode expositions in this study with multiple new-key themes. A consistent aspect of Haydn's approach to monothematic symphonies is the introduction of borrowed tones into prominent levels of S's voice leading. This feature in the first new-key theme introduces tones foreign to the mode or key into its voice leading and often leads to a second new-key theme with voice leading free of minor-mode impositions. In the next section of this chapter, I examined expositions with EECs that were undermined by one of three situations: a codetta or second S that defers the EEC to a later PAC; a non-PAC EEC; and a *piano* overlapping of a *forte* EEC. Finally, I examined two Mozart symphonies that clearly associated distinct

registers with themes. Their new-key area opens up two registers, and each theme occurs in one of these registers. While register played an important role in many details of previous analyses, the clear presentation of a linear progression in each register generated two new-key themes in each of these expositions.

This chapter also demonstrates a connection between intrathematic organization and voice leading. In these analyses, the themes with voice leading closest to *Ursatz* replicas had more tight-knit characteristics than the other new-key themes because cadences were confirmed, the minor mode tended to be absent, and the phrase rhythm was more regular. This situation leads to clearer and simpler voice leading.

Most important, we learned that the relationships between these themes are not dependent on their functions as S, C, or codetta. This observation supports Caplin's idea that all new-key themes are subordinate themes, and that they can be considered a theme group. On the other hand, once there is a complete linear progression in the new-key area, future linear progressions simply retrace the same ground, usually with fewer middleground complications; this would support identifying these themes with different functional labels, such as S and C, following the approach of Sonata Theory. Either way, looking for relationships between multiple new-key themes can be a meaningful goal of Schenkerian analysis.

Epilogue

This study has addressed important issues in the organization of classic sonata-form movements. I began by recognizing the comparative ease with which a new-key area can support more than one theme. When multiple new-key themes occur, the exposition thus contains more characteristic material than one without multiple new-key themes. I have shown that this diversity of melodic material does not complicate achieving a sense of coherence, but rather fosters interesting and meaningful relationships between multiple new-key themes, tying them together as part of a larger whole.

I began by showing that even though recognition of both closing rhetoric and closing melodies has existed since Mattheson, scholars have never reached a consensus on the closing-theme concept. When theories of sonata form began to emerge, the theoretical trend was to focus on melody. While these writings reflect awareness of multiple new-key themes, a diversity of terms was used to label these themes. Instead of codifying and refining these terms, twentieth-century scholars returned to a more abstract and harmonic view of a sonata form, and the connection between melody and its placement in a sonata form was left unexplored. With the emergence of new theories—especially those of Caplin, Hepokoski, and Darcy—we now have strong analytical tools for exploring the relationship between melody and formal function.

This exploration has helped to distinguish what constitutes a subordinate theme and what constitutes a closing theme. Subordinate themes tend to occur before the

tonal motion of the exposition is complete and are more complexly organized than closing themes. Subordinate themes often present some type of problem that opens musical space for a closing theme. Closing themes occur after the tonal motion of the exposition is complete and have simpler organization and voice leading; they tend to be based on musical material that contrasts with the subordinate theme. Despite these differences, close examination of these theme-types shows that their internal organization and voice leading exhibit relationships that extend deeper than just a shared key area.

One result of my investigation is a refinement of Caplin's suggestion concerning the ordering of new-key themes according to their intrathematic organization. Caplin puts forth the idea that when a new-key theme is tight-knit, it tends to occur first. I argued that Caplin is correct for sonata forms with contrasting second themes. For monothematic expositions, however, I show that the most tight-knit theme tends to occur last.

In chapter 3 I demonstrated how the concept of "changing formal function" benefits four sonata-form analyses. Without this concept, a melody-based analysis of these expositions would be unsuccessful. I used the theories of Caplin, Hepokoski, and Darcy as a starting point but required additional concepts and approaches to address the issues raised in these "mainstream" symphonies.

In chapter 3 I also analyzed two difficult expositions that engage fundamental differences in the approaches of Caplin, Hepokoski, and Darcy. These analyses show how Sonata Theory enables a musically informed and technically sound foundation for sonata-form analyses. In particular, by developing a set of generic norms, Sonata

Theory provides a theoretical base for describing exceptional treatment of sonata form. For example, my discussion of Mozart's Symphony No. 41 showed how the essential expositional close is twice delayed by the return of motives from the transition. I also described how the essential expositional close is twice rejected by codettas that re-open the new-key area through dramatic grand pauses. For me, this is a convincing analysis because explaining this new-key area as a process of delaying and rejecting the essential expositional close corresponds to my musical experience of this exposition.

In chapter 4 I reached two conclusions about voice leading. First, the intrathematic organization of a theme impacts its voice-leading graph: tight-knit themes lead to simple graphs, and loosely organized themes lead to complex graphs. Second, when there are multiple new-key themes, aspects of the first new-key theme's voice leading open up "voice-leading room" for further themes. The problem presented by the first new-key theme can take several forms, and I explored three types that arose frequently in this study: usage of the minor mode, problems with the EEC, and abandonment of the obligatory register.

Avenues for further research

These conclusions and observations form a starting point for further exploration. There are, of course, dozens of avenues for future research. I single out the following four suggestions because they seem as though they would be logical first steps.

(1) *Broaden the exploration of multiple new-key themes to genres beyond symphonic first movements.* This could provide additional support for the stylistic

generalizations proposed in chapters 2 and 3, which suggest that in Haydn, Mozart, and Beethoven's symphonic writing, each composer had distinctly different approaches to the new-key area. However, these observations are based on data from only fifteen first movements. By including analyses of string quartets, overtures, and sonatas, an argument could be made for the stylistic tendencies of each composer. Concertos and sonata rondos are sonata-like forms that could also be added to the study. However, these forms introduce new dimensions of interrelationships between new-key themes owing to the different overall melodic pattern.

(2) *Research how multiple new-key themes affect the proportions of the exposition.* The majority of this dissertation uses two techniques, Schenkerian analysis and the Schoenbergian distinction between tight-knit and loose, to explore how multiple new-key themes interact with each other. A third approach could adopt Hepokoski and Darcy's four zones of the two-part exposition and study the proportions of each zone. This may help address questions such as "How do multiple new-key themes affect the pacing of the exposition?," "What can a proportional analysis tell us about Haydn's tendency to repeat his subordinate themes in non-monothematic expositions but not to repeat them in his monothematic expositions?," and "What can a proportional analysis tell us about Beethoven's tendency not to write closing themes in the first movements of his symphonies?"

(3) *Explore Hepokoski and Darcy's categories of new-key themes.* In their manuscript, Hepokoski and Darcy lay groundwork—unexplored in this study—for classifying new-key themes. In particular, they describe a "generic system of melodic S-conventions," five C-theme types, and at least two other new-key theme-types with

closing function.[1] These categories could further strengthen the stylistic generalizations of chapters 2 and 3.

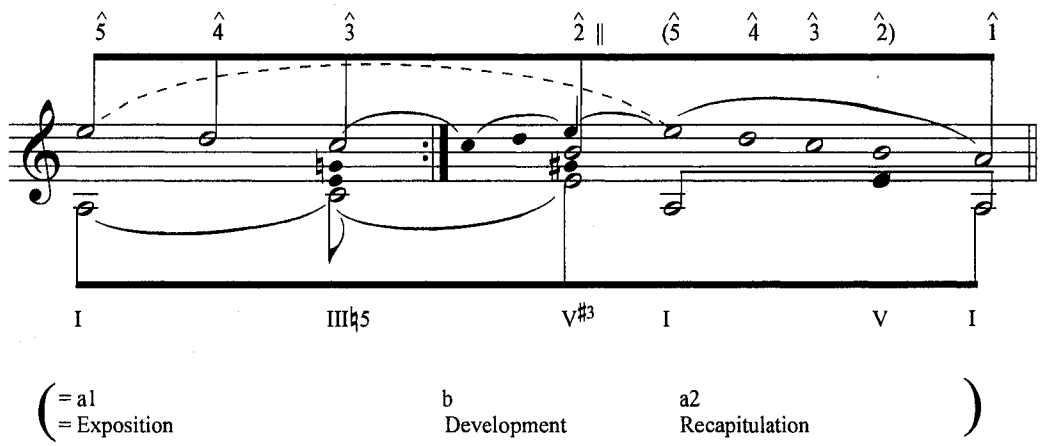
(4) *Investigate the recapitulation of new-key themes.* An important avenue for further research involves the recapitulation of new-key themes because composers sometimes change new-key themes in the recapitulation. Using Sonata Theory, *Formenlehre*, and Schenkerian analysis, one could explore how, and if, the relationships between these themes change when they are recapitulated.

[1] James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late-Eighteenth-Century Sonata* (New York: Oxford University Press, forthcoming; Departments of Music Theory, Yale University and Oberlin College Conservatory, 1999, photocopy), 97–104 (melodic S-conventions), 62 ($C^{pre\text{-}EEC}$), 151–5 (C-theme types).

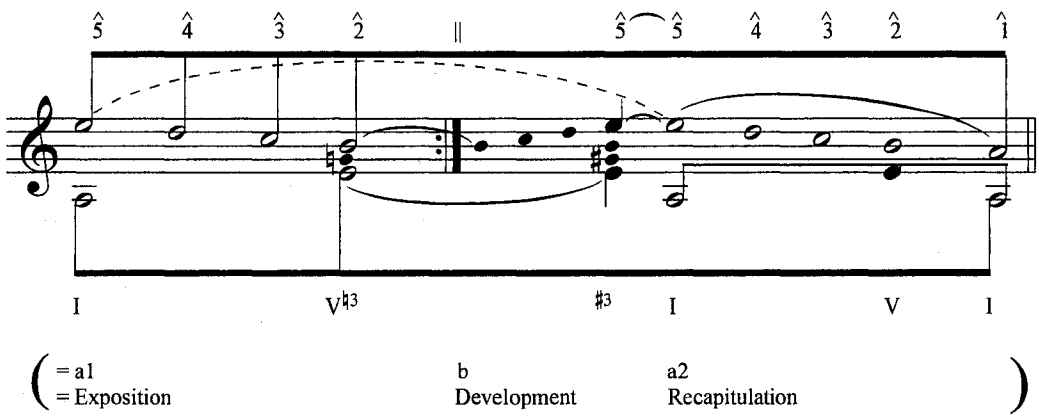
APPENDIX

Schenkerian Graphs

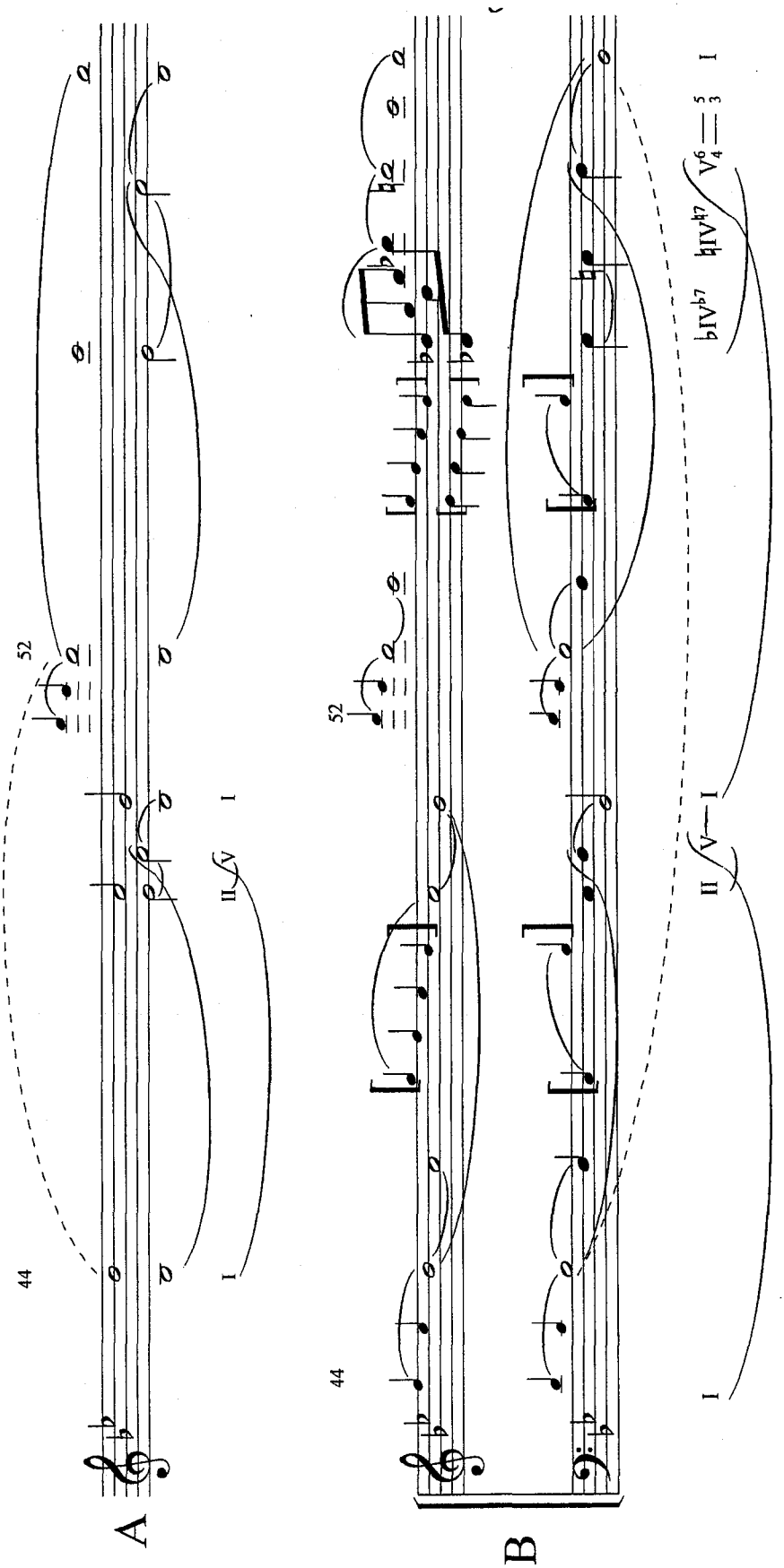
Graph 1A: Paradigm 1, Schenker, fundamental forms for minor-mode sonata form



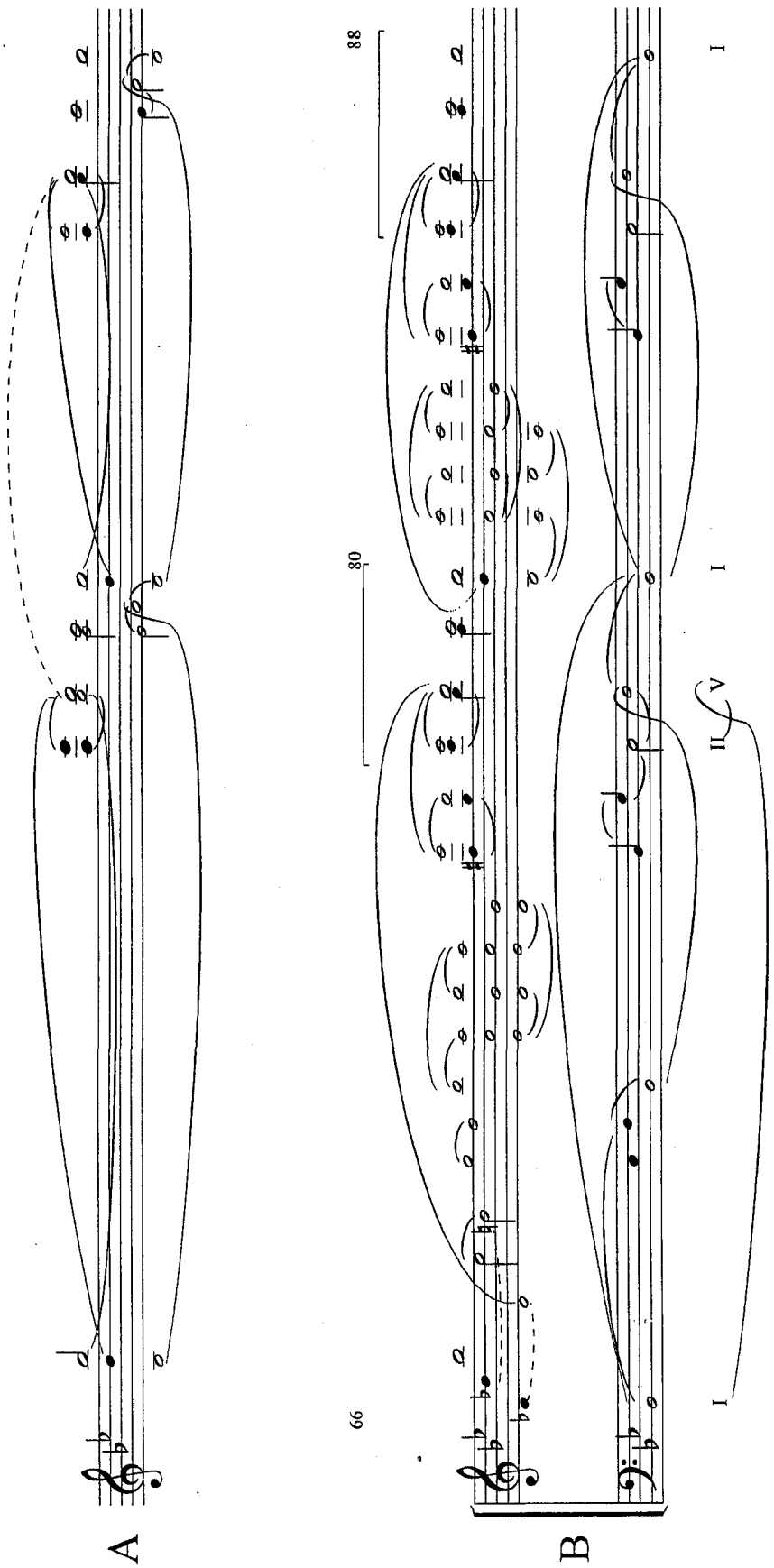
Graph 1B: Paradigm 2, Schenker, fundamental forms for minor-mode sonata form



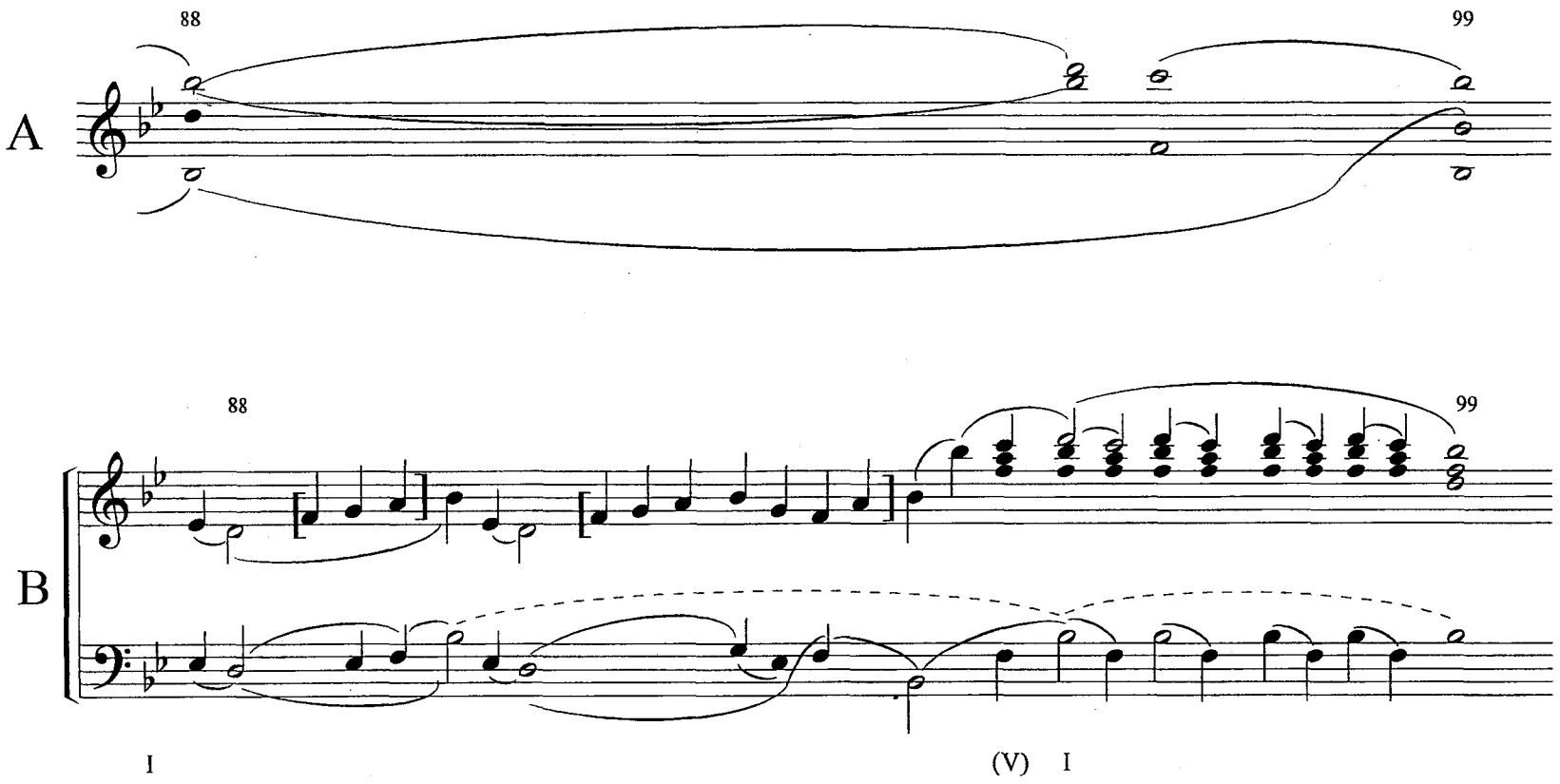
Graph 2: Mozart, Symphony No. 40 in G Minor, first mvt., S (Schenker's graph)



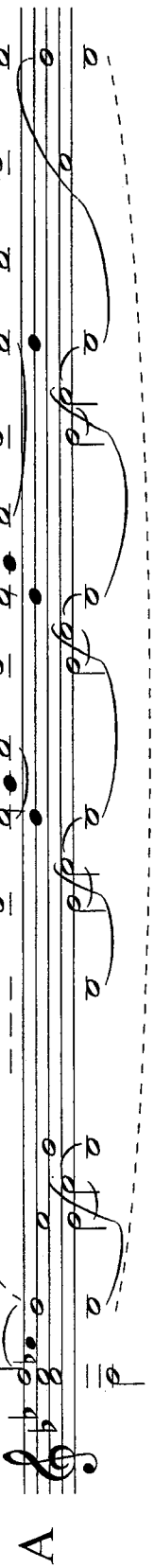
Graph 3: Mozart, Symphony No. 40 in G Minor, C (Schenker's Graph)



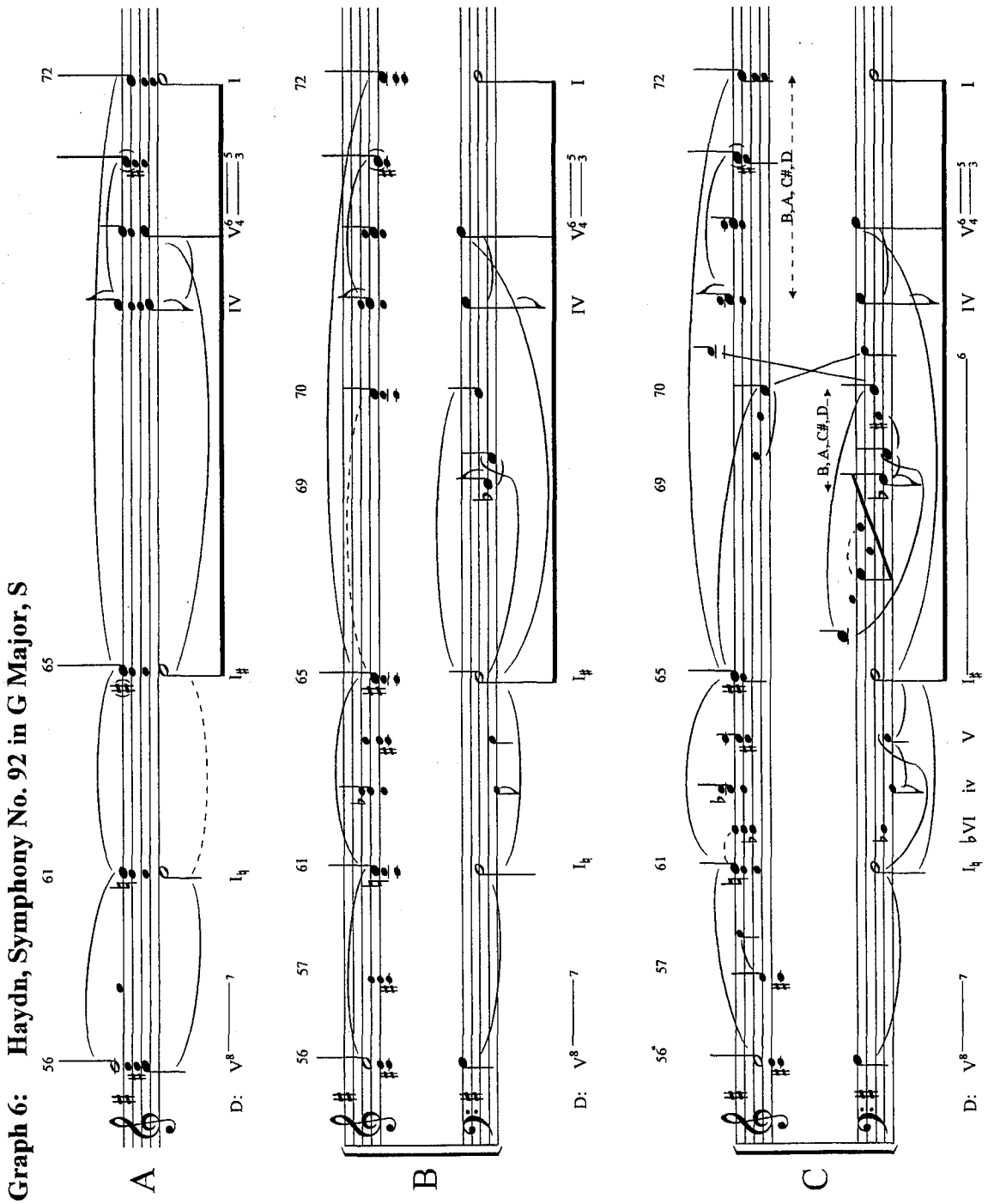
Graph 4: Mozart, Symphony No. 40 in G Minor, codetta to C (Schenker's graph)



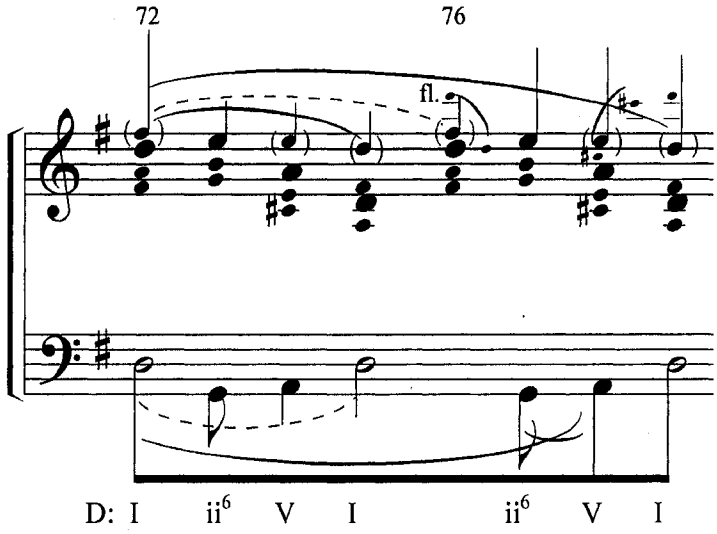
Graph 5: Mozart, Symphony No. 40 in G Minor, new-key area (Schenker's graph)



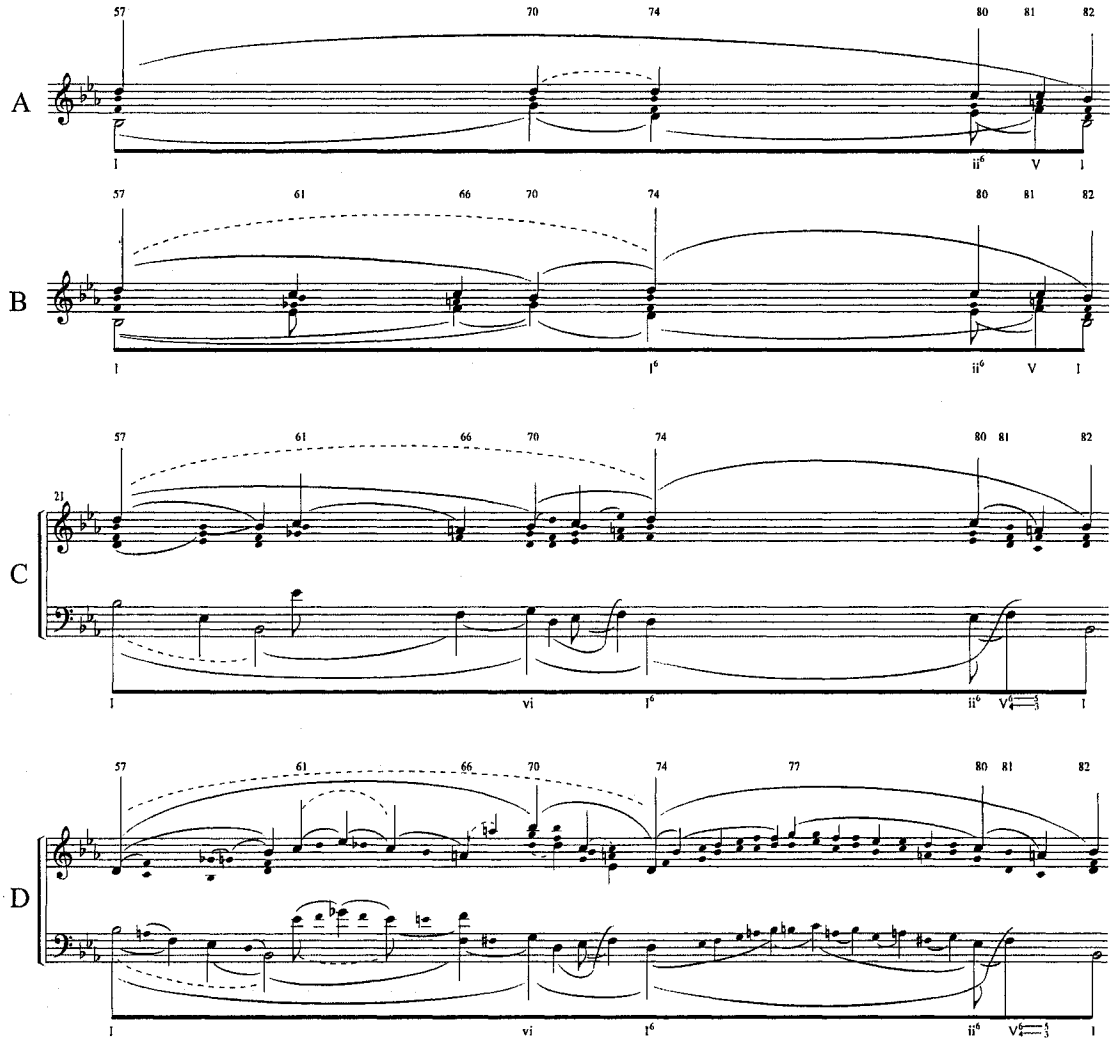
Graph 6: Haydn, Symphony No. 92 in G Major, S



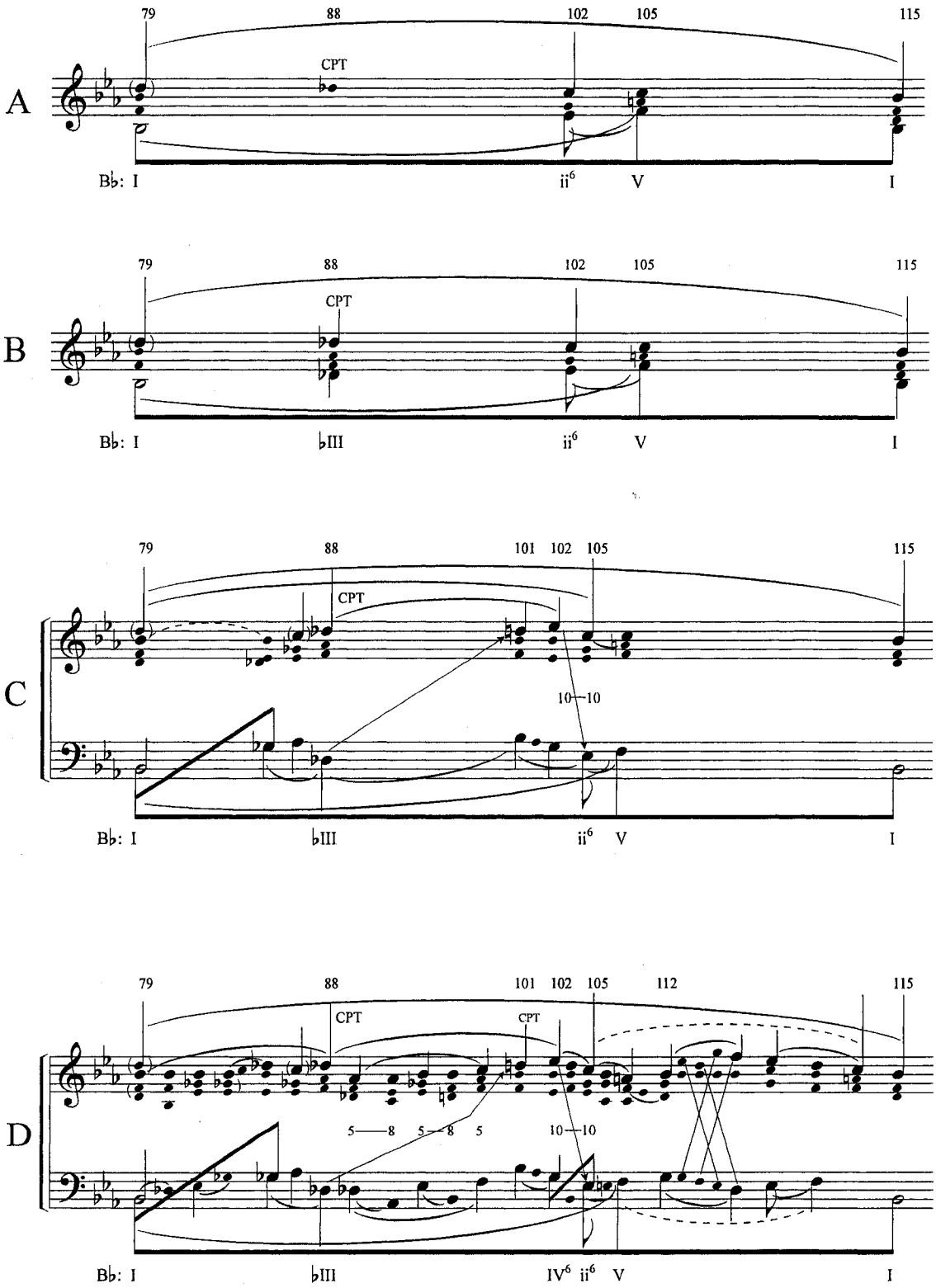
Graph 7: Haydn, Symphony No. 92 in G Major, C



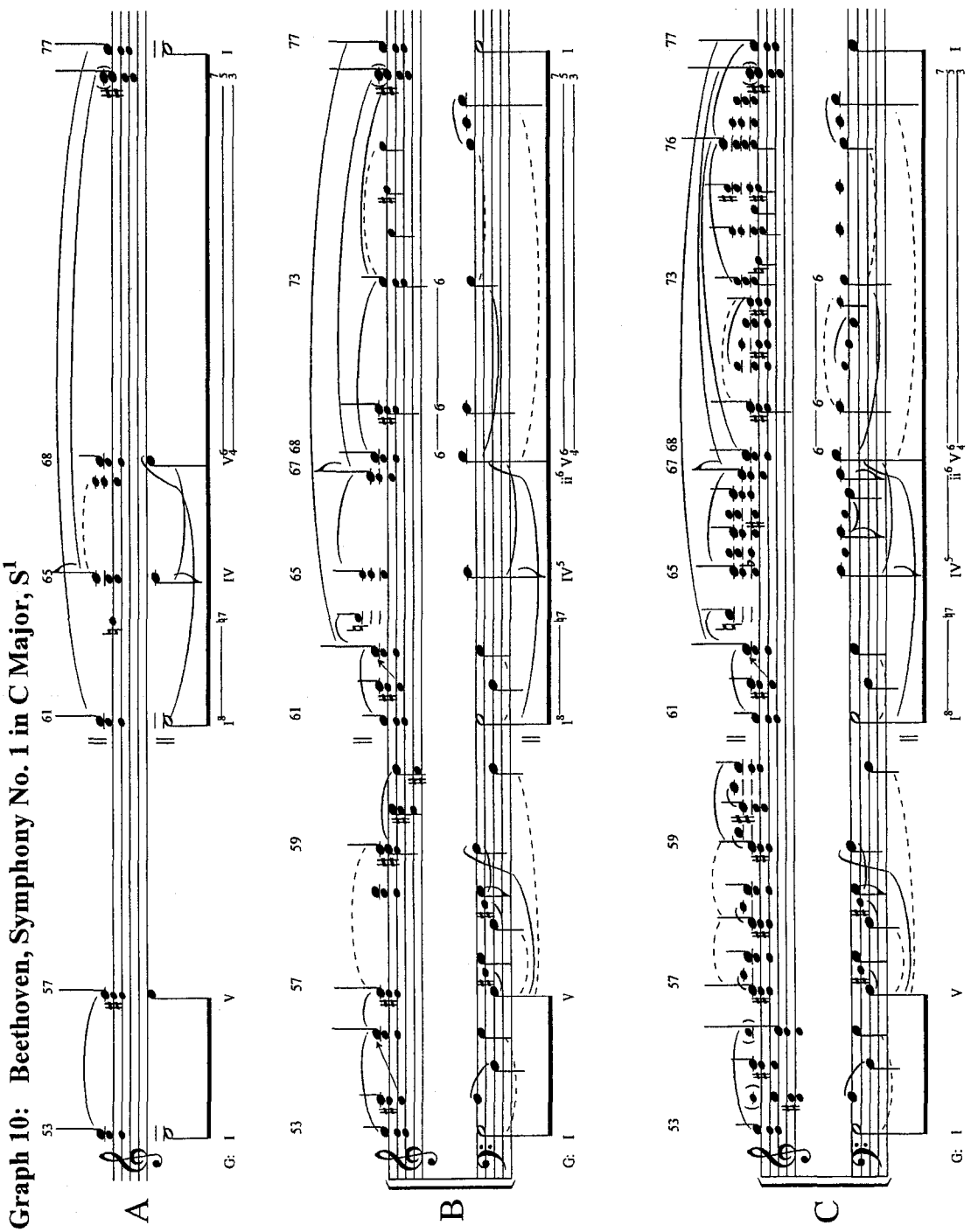
Graph 8: Haydn, Symphony No. 91 in E-flat Major, S



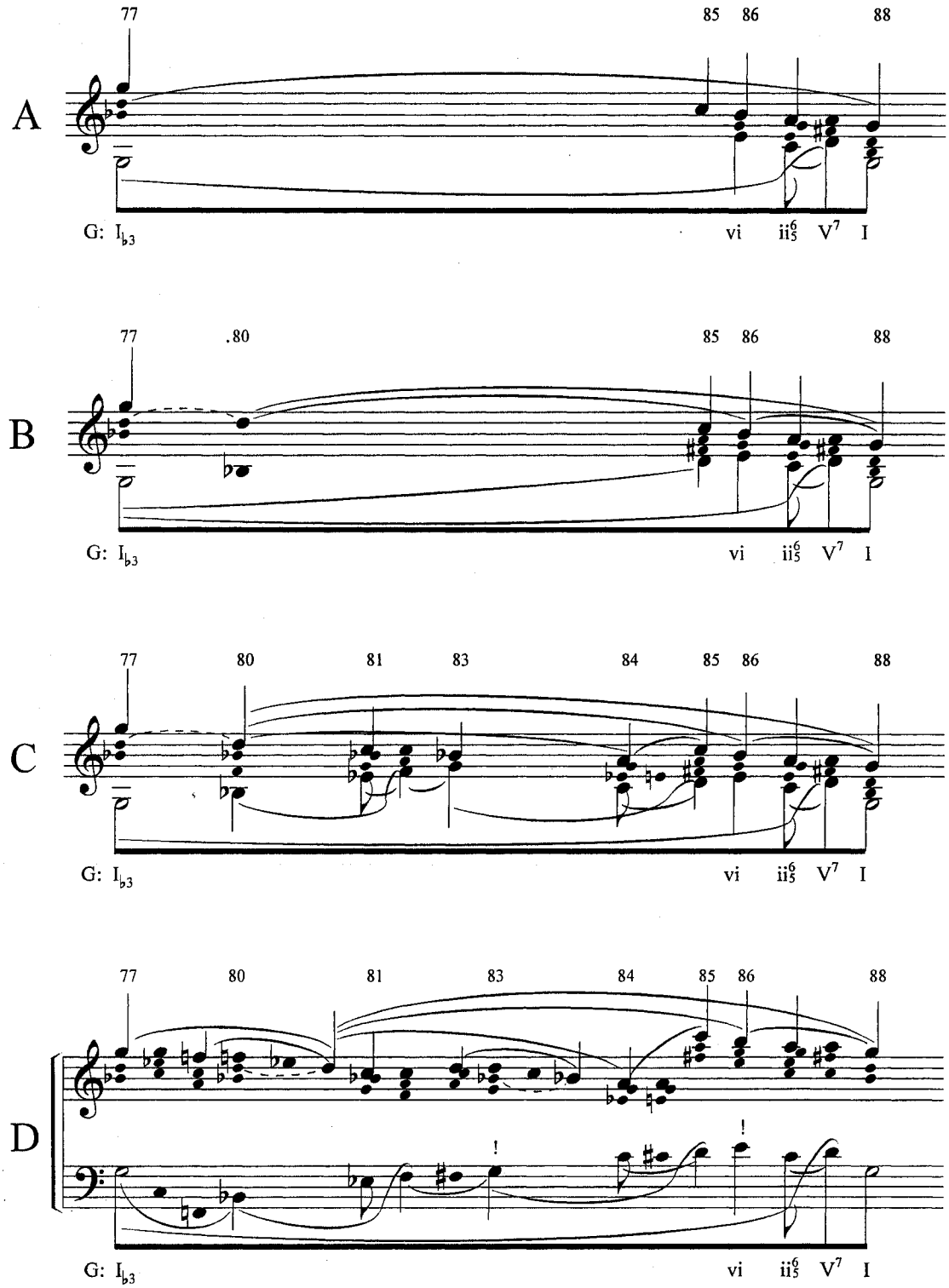
Graph 9: Haydn, Symphony No. 91 in E-flat Major, C



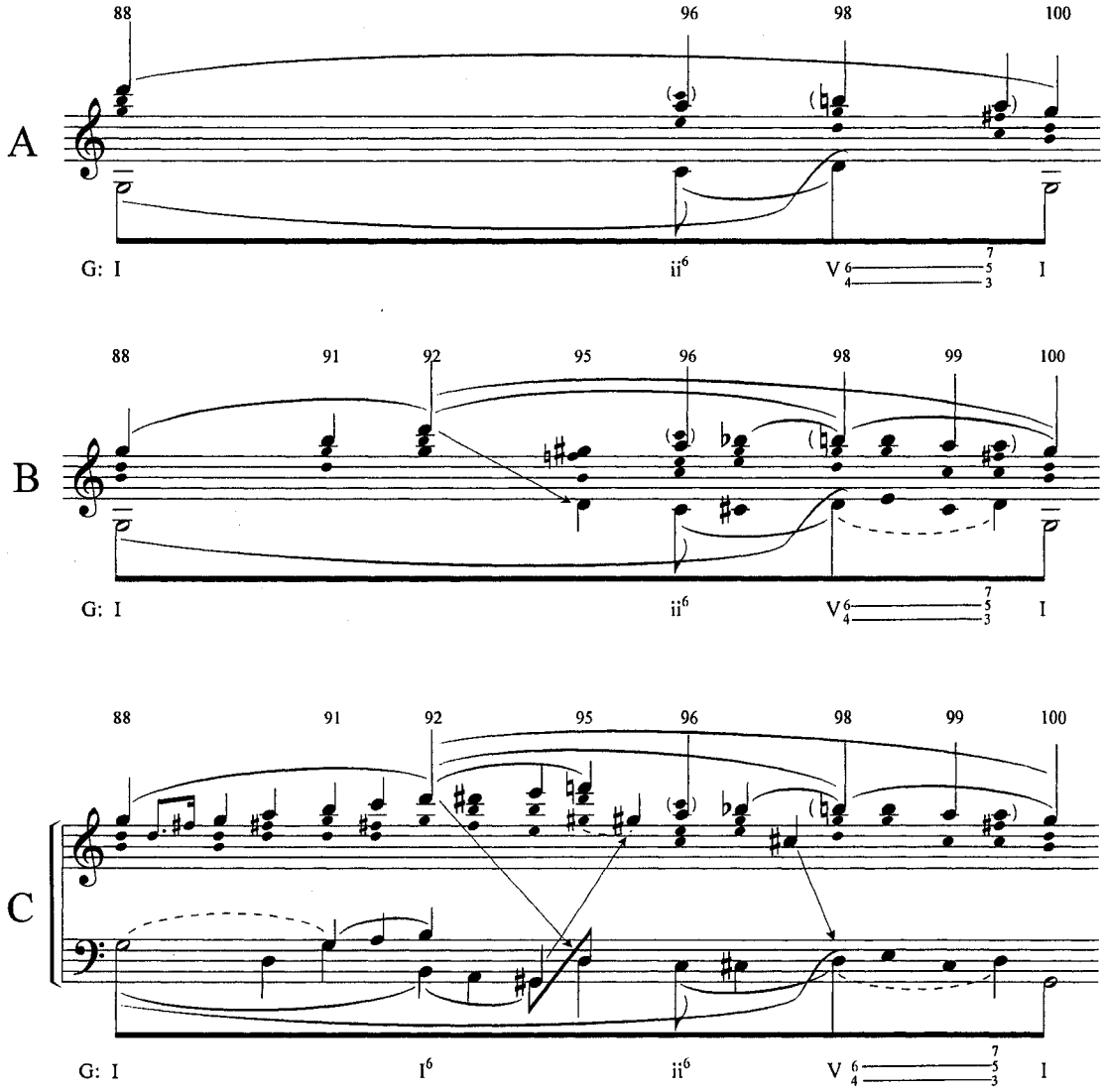
Graph 10: Beethoven, Symphony No. 1 in C Major, S[1]



Graph 11: Beethoven, Symphony No. 1 in C Major, S^2

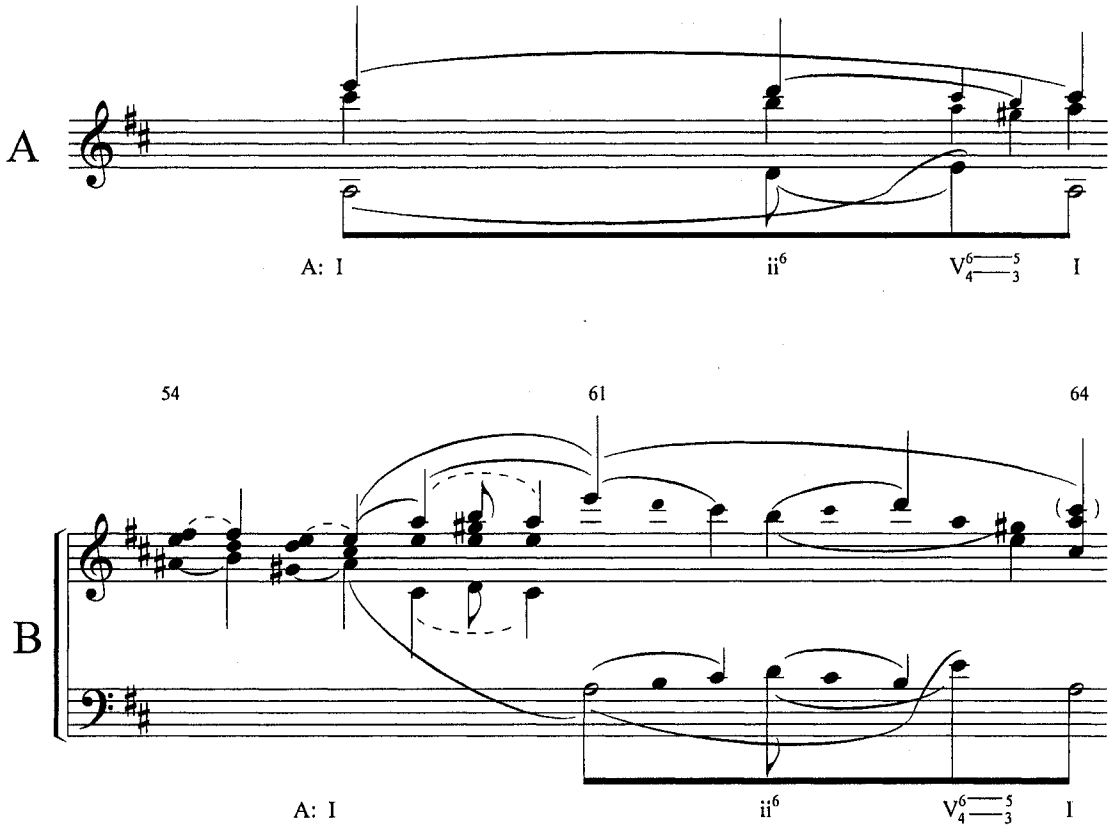


Graph 12: Beethoven, Symphony No. 1 in C Major, C

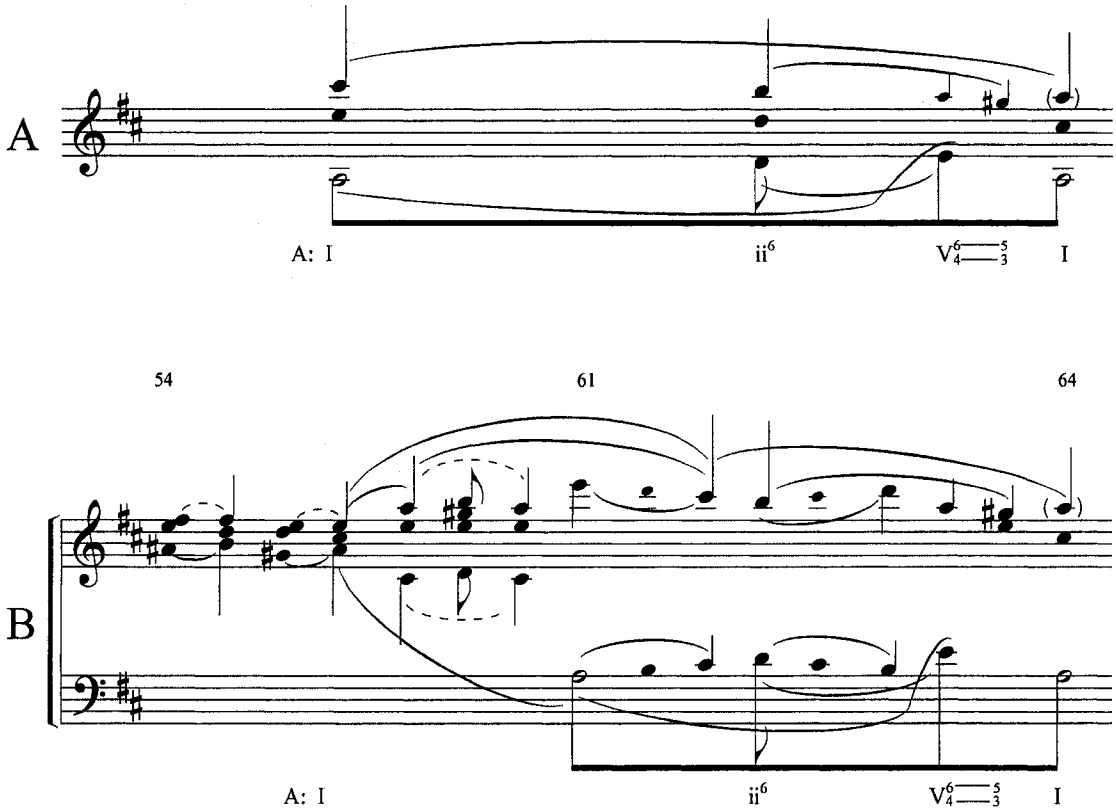


Graph 13: Haydn, Symphony No. 86 in D Major, S

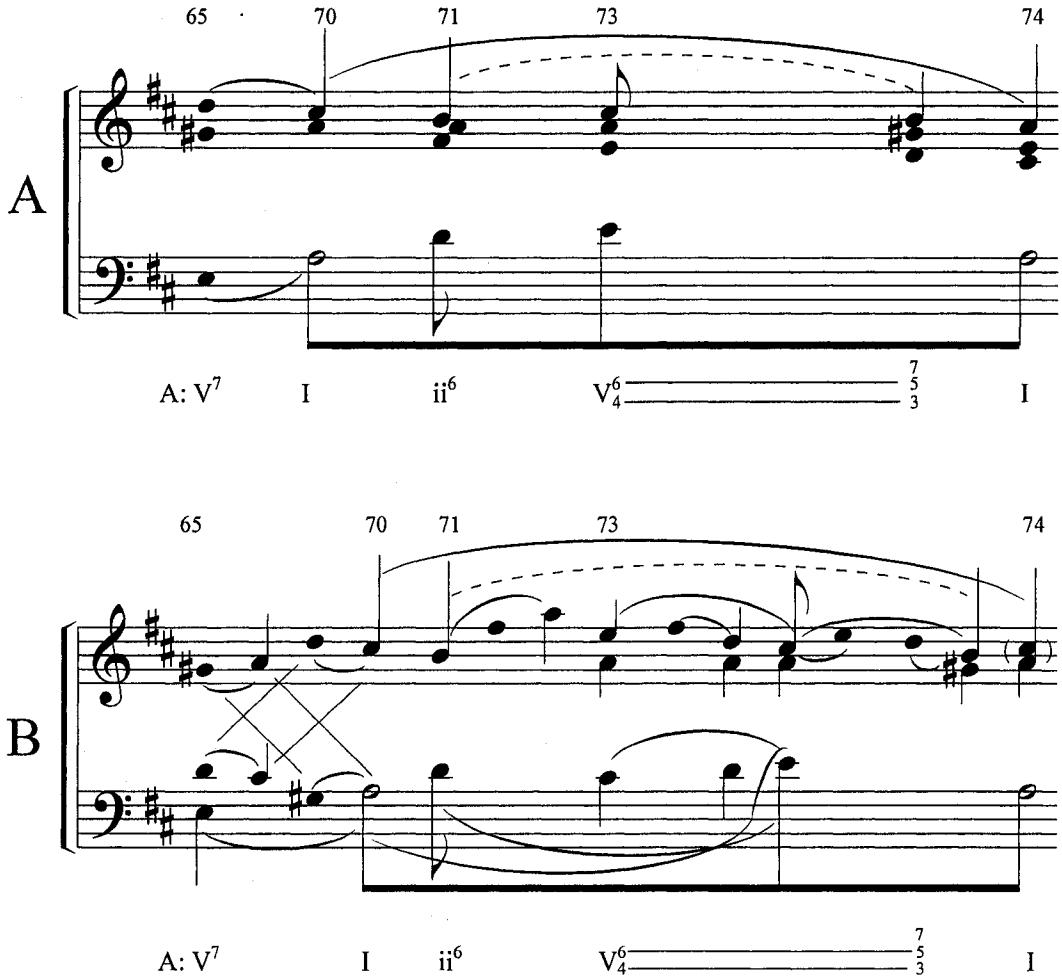
Graph 13.1: Version 1 of the voice leading



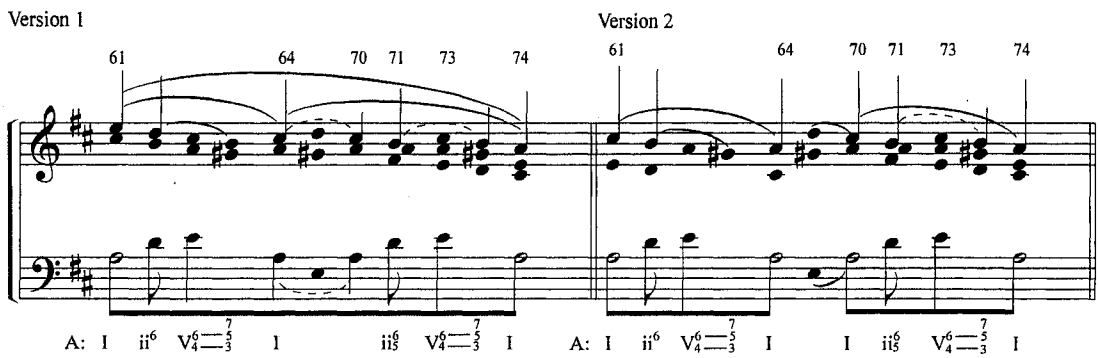
Graph 13.2: Version 2 of the voice leading



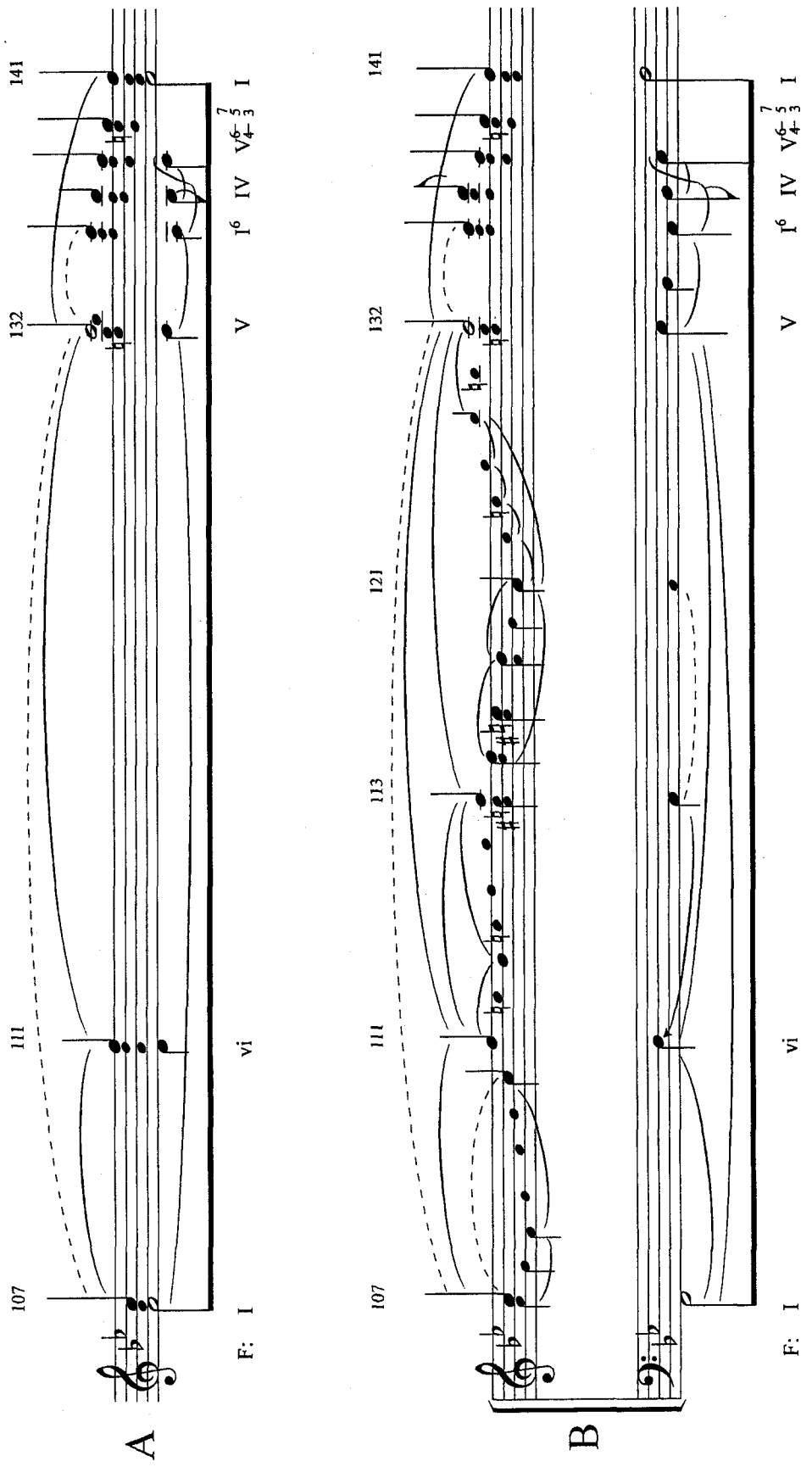
Graph 14: Haydn, Symphony No. 86 in D Major, C



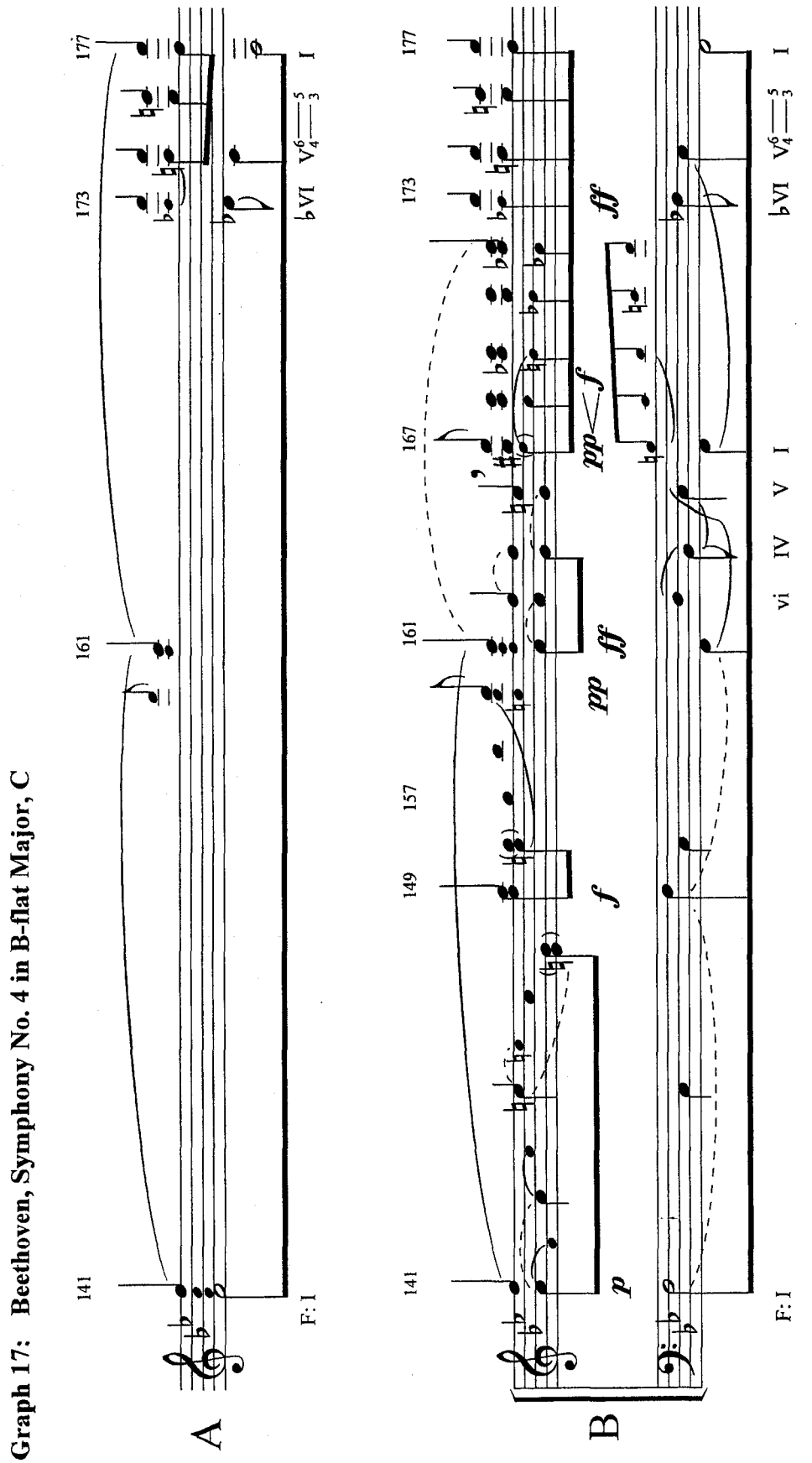
Graph 15: Haydn, Symphony No. 86 in D Major, new-key area



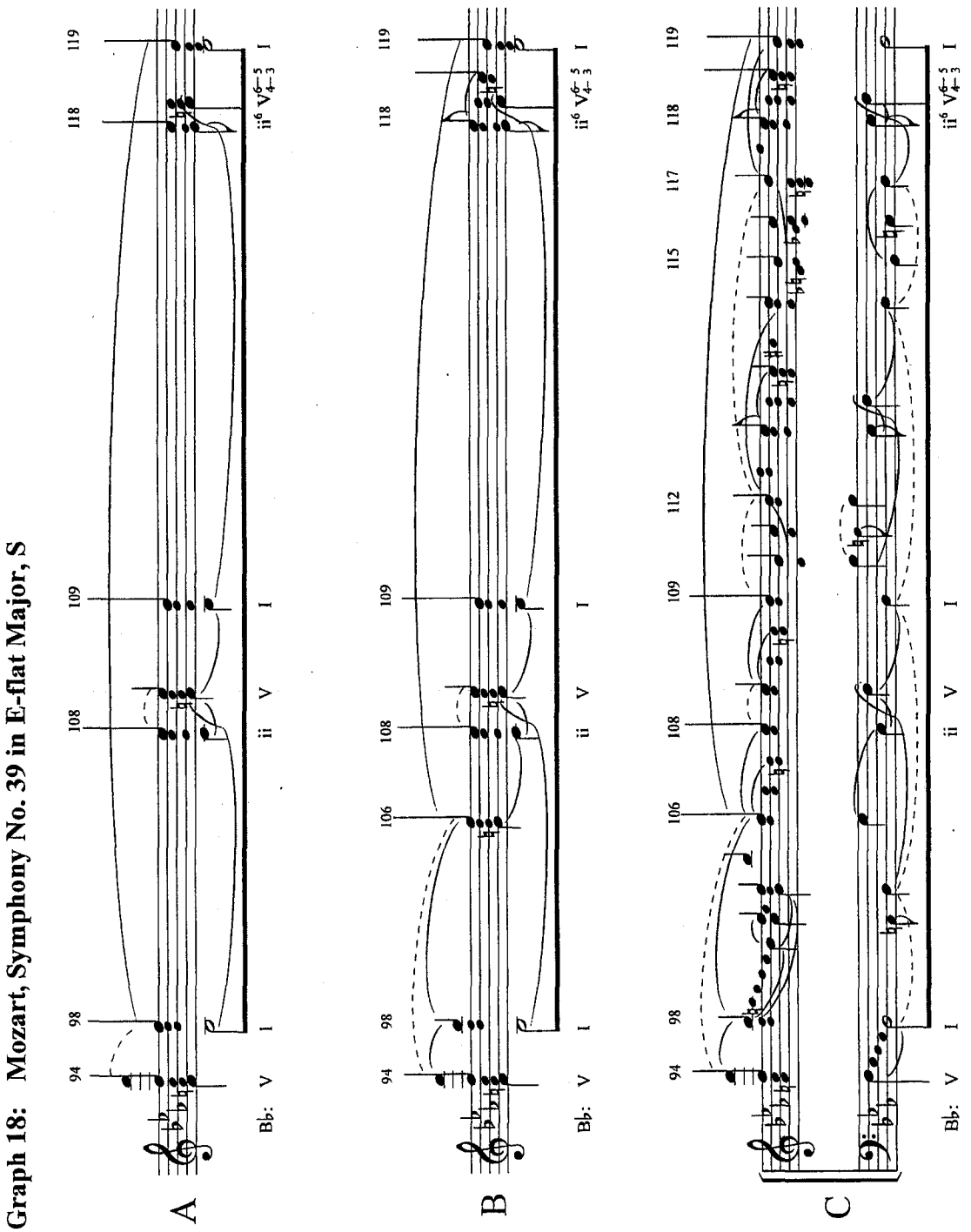
Graph 16: Beethoven, Symphony No. 4 in B-flat Major, S



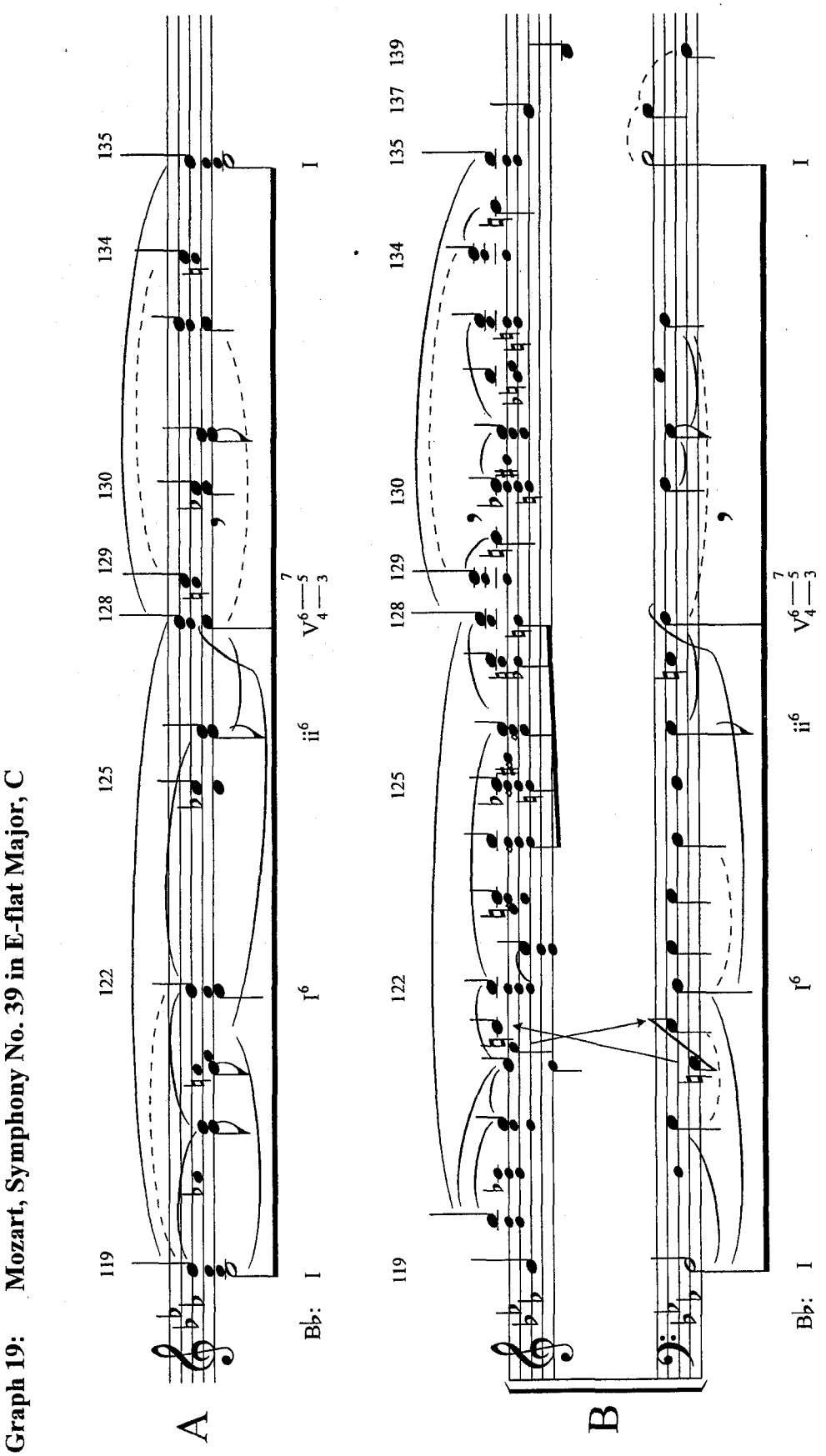
Graph 17: Beethoven, Symphony No. 4 in B-flat Major, C



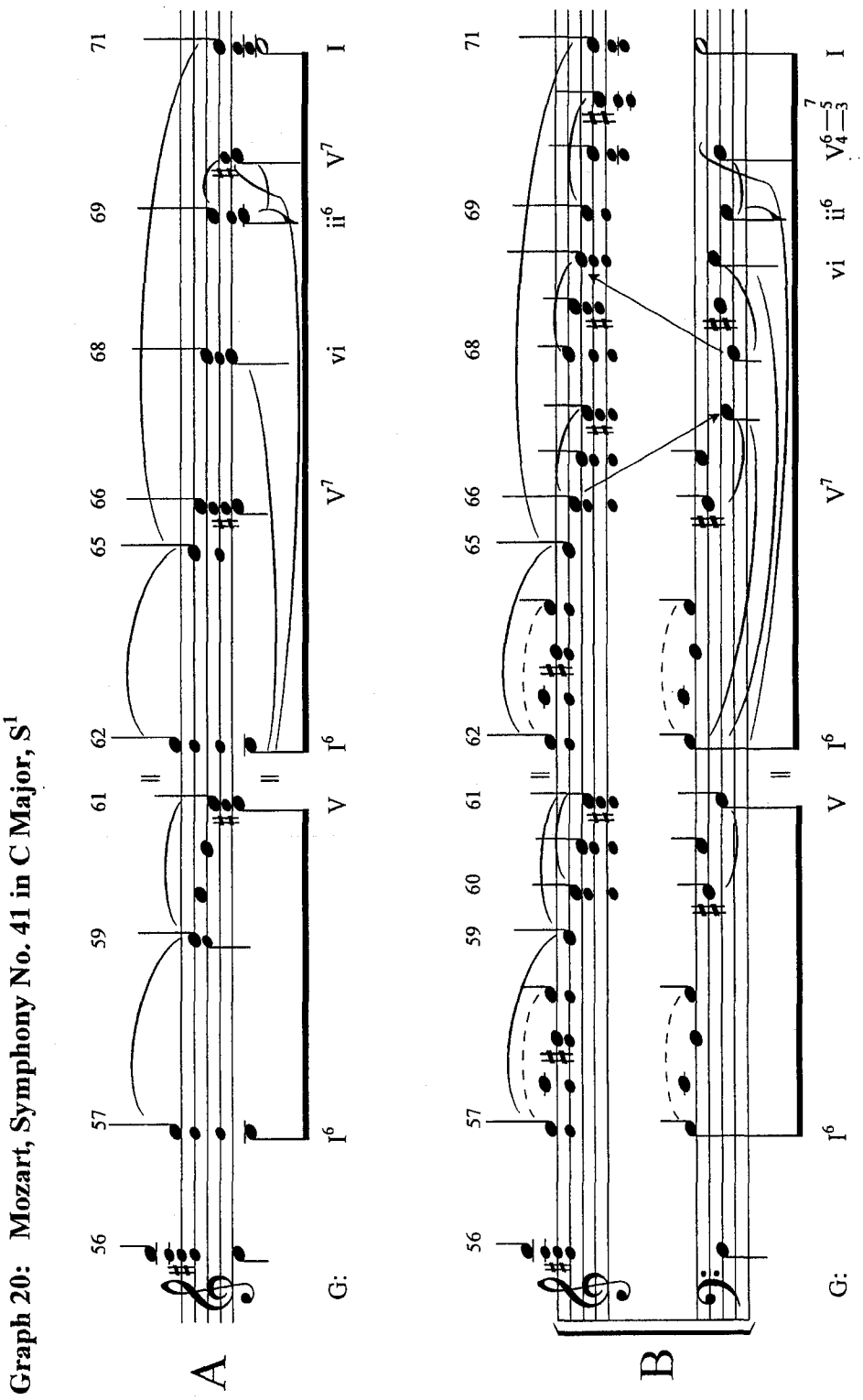
Graph 18: Mozart, Symphony No. 39 in E-flat Major, S



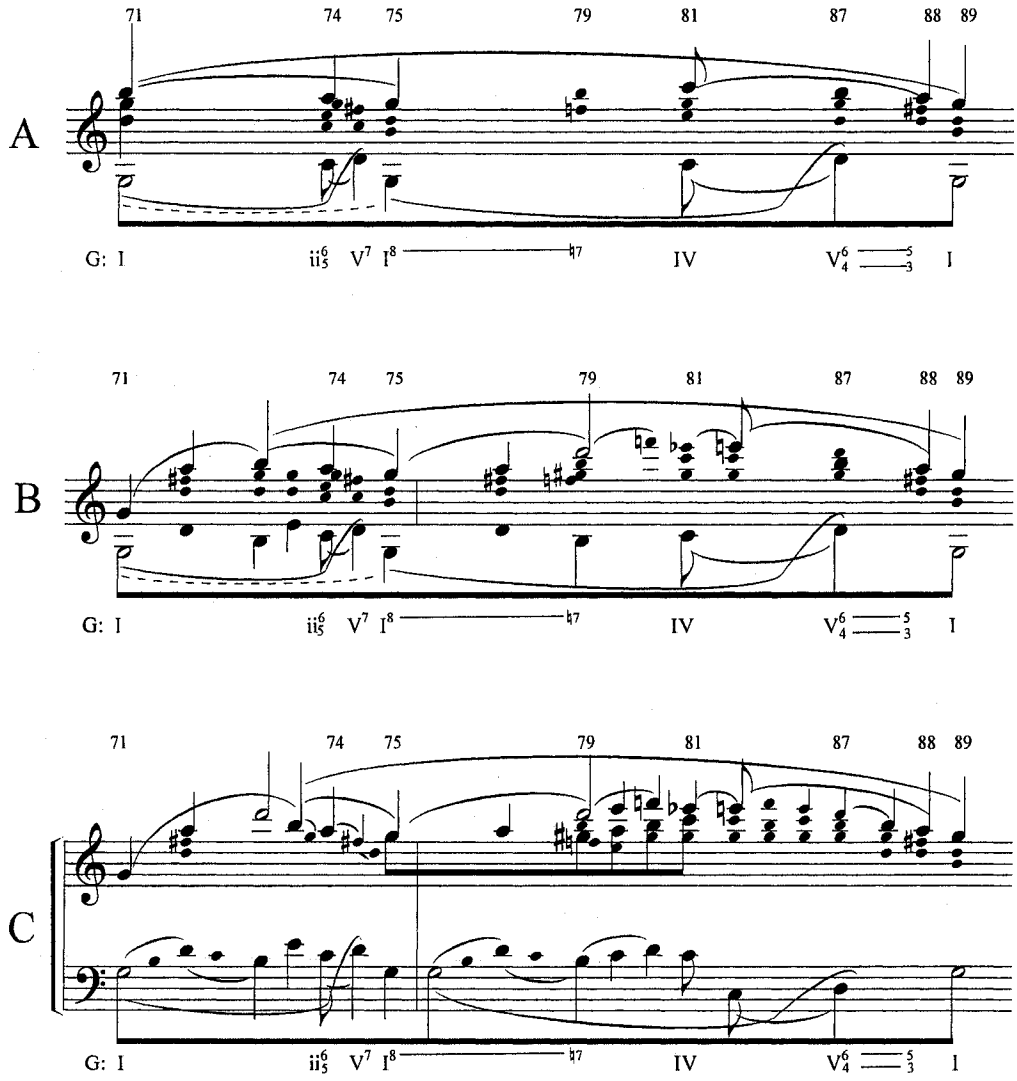
Graph 19: Mozart, Symphony No. 39 in E-flat Major, C



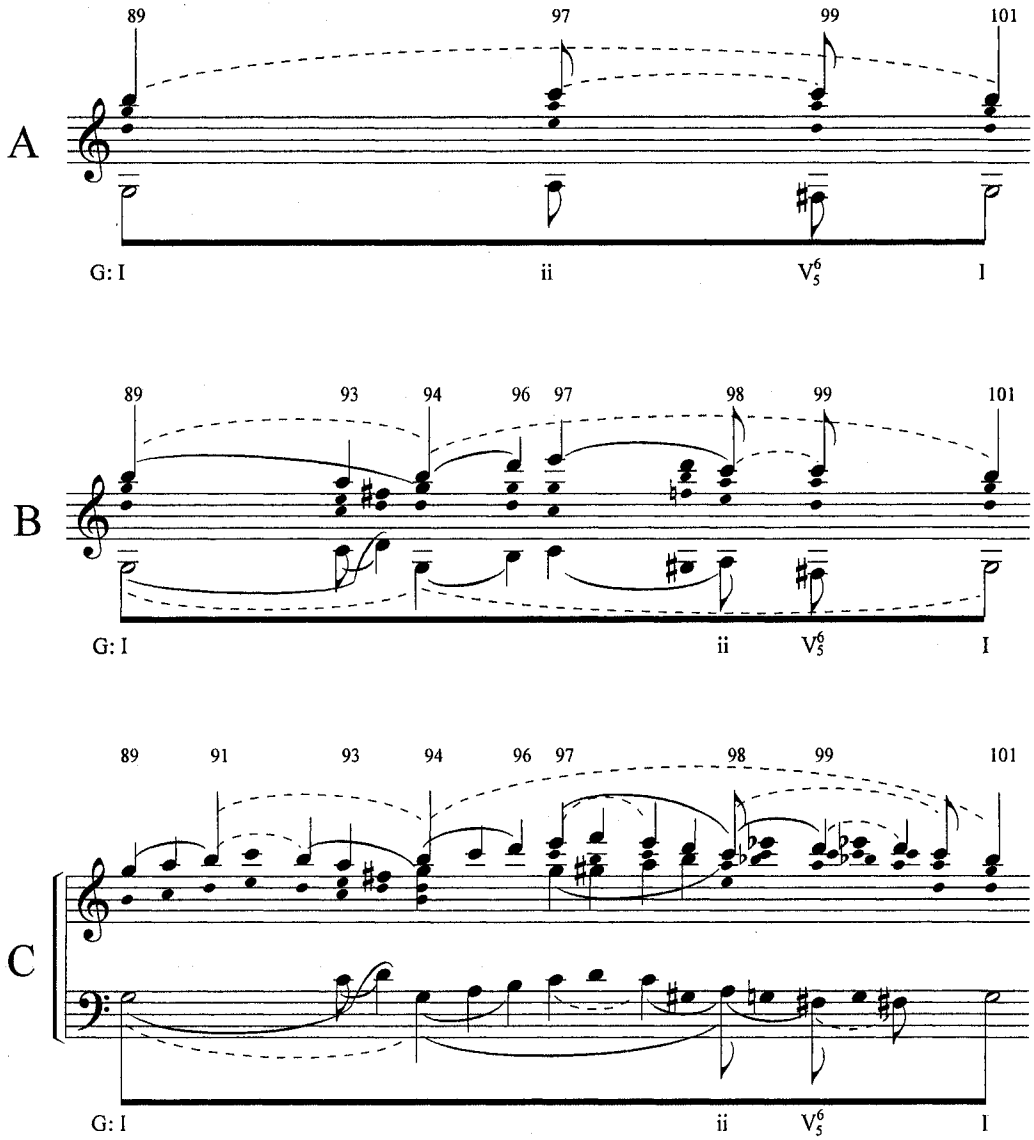
Graph 20: Mozart, Symphony No. 41 in C Major, S[1]



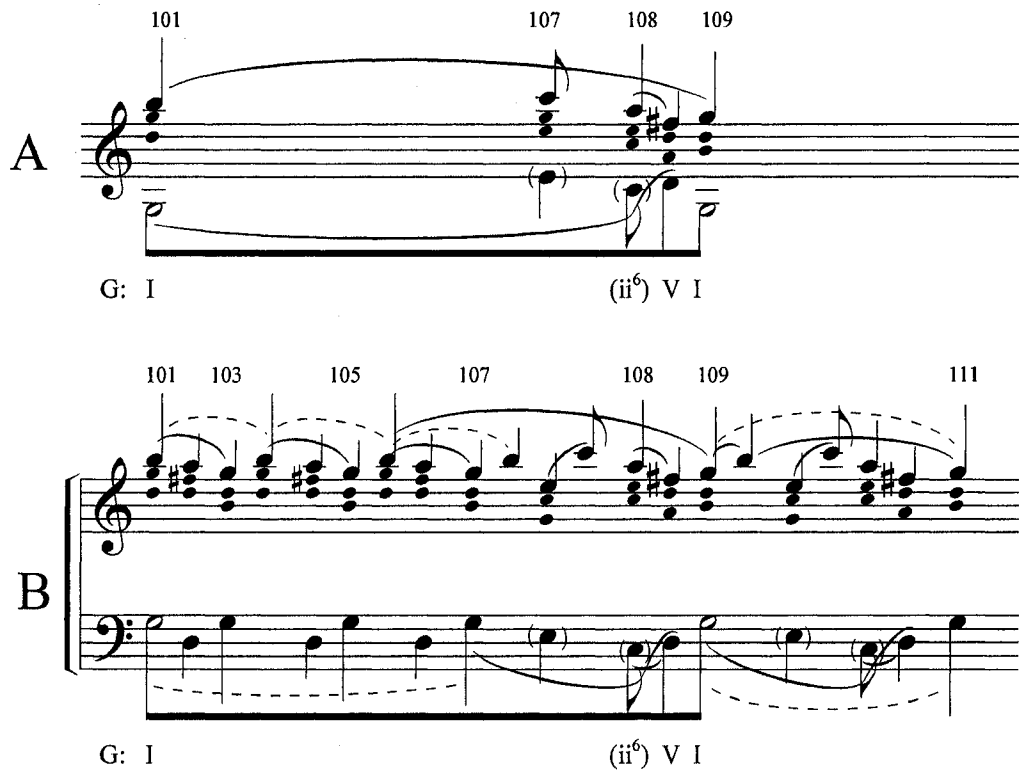
Graph 21: Mozart, Symphony No. 41 in C Major, first codetta and its repeat



Graph 22: Mozart, Symphony No. 41 in C Major, second codetta and its repeat



Graph 23: Mozart, Symphony No. 41 in C Major, S^2



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