

Copyright

by

Moo Kyoung Song

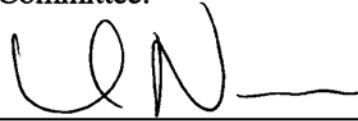
2002

The Dissertation Committee for Moo Kyoung Song

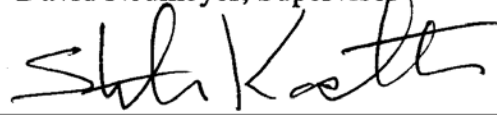
Certifies that this is the approved version of the following dissertation:

**The Evolution of Sonata-Form Design in Ludwig van
Beethoven's Early Piano Sonatas, WoO 47 to Opus 22**

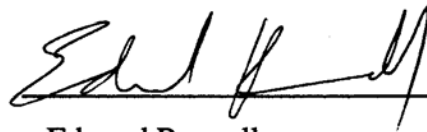
Committee:



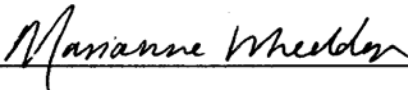
David Neumeyer, Supervisor



Stefan Kostka



Edward Pearsall



Marianne Wheeldon



William Koch

The Evolution of Sonata-Form Design in Ludwig van
Beethoven's Early Piano Sonatas, WoO 47 to Opus 22

by

Moo Kyoung Song, M. M.

Dissertation

Presented to the Faculty of the Graduate School of
the University of Texas at Austin
in Partial Fulfillment
of the Requirements
for the Degree of
Doctor of Philosophy

The University of Texas at Austin

August, 2002

Soli Deo
(To the Glory of God)

Acknowledgements

I am grateful for the help of many people who contributed to the undertaking of this dissertation. First, I would like to thank my supervisor, Dr. David Neumeyer, for his tremendous contribution to the planning, writing, and revising of the dissertation. From the initial stage of this work, Dr. Neumeyer has understood my intentions and helped me to concretize them. Furthermore, he has always been supportive of my theoretical approach and analysis. Without his encouragement and support, the completion of the dissertation would not have been possible.

I also would like to thank my committee members—Professor Stefan Kostka, Edward Pearsall, Marianne Wheeldon, and William Koch—who read my first draft thoroughly and gave me invaluable suggestions. In addition, I am grateful to Professor Michael Klein and Roger Graybill, who gave much inspiration about Schenkerian theory as my first Schenker teachers. I also would like to acknowledge my undergraduate professors, who encouraged me to start my career as a theorist.

My beloved wife, Su-Kyoung Choi Song, deserves endless thanks for her assistance and support. She gave invaluable help in reproducing and scanning all the musical examples, as well as offering encouragement and confidence whenever I felt fatigue and frustration. Last, I thank my family and Rev. SungHan Kim, who have given much support and always prayed for me.

I also thank the following publishers, who kindly gave me permission to reprint the analytic graphs contained in their publications:

Cambridge University Press

Columbia University Press for *Music Forum*

Intégral

Journal of Music Theory

Music Analysis

Oxford University Press

Prentice Hall

Studies in Music from University of Western Ontario

Universal Edition A. G., Wien for *Free Composition*

University of California Press for *Music Theory Spectrum*

University of Nebraska Press for *Beethoven Forum*

W.W.Norton & Company, Inc.

Yale University Press

The Evolution of Sonata-Form Design in Ludwig van
Beethoven's Early Piano Sonatas, WoO 47 to Opus 22

Publication No. _____

Moo Kyoung Song, Ph.D
The University of Texas at Austin, 2002

Supervisor: David P. Neumeyer

This dissertation is an analytic and stylistic survey of sonata-form movements in Ludwig van Beethoven's early piano sonatas. Schenkerian theory is adopted as the primary methodology to illuminate questions of design and tonal structure posed by Beethoven's sonata-form movements. The dissertation takes the middle-period sonatas as a core repertoire and traces how Beethoven's compositional traits as seen in the early-period works evolve toward the middle period. Detailed analyses of

sonata-form movements in the Bonn and early Vienna period incorporate available sources (such as analyses by Schenker, Roger Kamien, Janet Schmalfeldt, and others) and serve as the basis for stylistic generalizations about Beethoven's handling of sonata-form design and other compositional devices. This work shows that the structural designs and compositional devices in the early-period works evolve or innovate toward the middle-period models. Critiques of views on sonata form by Schenker, Charles Smith, Peter Smith, David Neumeyer, and others are integrated into a discussion that seeks a reconciliation of the traditional theory of sonata form and a generation of "ideal" Schenkerian formal models.

The examination of this repertoire through the Schenkerian analytic method produces the following conclusions: 1) Beethoven had a limited set of prototypes for deep-level sonata-form structure, but diversified them through various compositional devices eventually to create polished and unique sonata-form designs; 2) from his youth toward manhood, Beethoven's tendency to rely on a limited number of compositional devices and to use them insistently becomes more and more obvious; and 3) Beethoven's striking handling of formal, tonal, and motivic aspects in the middle-period sonatas, which distinguishes them not only from the earlier ones, but also from works by other contemporary composers, has deep roots in the early Viennese and even Bonn-period works.

Table of Contents

Chapter 1: Introduction

1.1 : Thesis-----	1
1.2 : Research Method-----	2
1.3 : Literature Review of Ludwig Van Beethoven's Piano Sonatas -----	3
1.4 : Sonata Form in the Middle Period-----	17
1.5 : Heinrich Schenker's Sonata-Form Theory and Post-Schenkerian Revisions-----	46
1.6 : First-Level Middleground Models for Sonata Forms-----	59
1.7 : Chapter-by-Chapter Summary-----	68

Chapter 2 : Analyses of Sonata-Form Movements in the Bonn Period

2.1 : Introductory Remarks on Formal Designs and Primary Compositional Devices -----	70
2.2 : First Movement of WoO 47, no. 1, E ^b major-----	71
2.3 : First Movement of WoO 47, no. 2, F minor-----	83
2.4 : First Movement of WoO 47, no. 3, D major-----	93
2.5 : First Movement of WoO 51, C major-----	106

Chapter 3 : Analyses of Sonata-Form Movements in the Early Vienna Period I

3.1 : Introductory Remarks on Formal Designs and Primary Compositional Devices -----	115
3.2 : First Movement of op.2, no. 1, F minor-----	117
3.3 : Fourth Movement of op. 2, no. 1, F minor-----	132
3.4 : First Movement of op. 2, no. 2, A major-----	138
3.5 : First Movement of op. 2, no.3, C major-----	157
3.6 : First Movement of op. 49, no.1, G minor-----	170
3.7 : First Movement of op. 49, no.2, G major-----	179
3.8 : First Movement of op. 7, E ^b major-----	193

Chapter 4 : Analyses of Sonata-Form Movements in the Early Vienna Period II

4.1 : Introductory Remarks on Formal Designs and Primary Compositional Devices -----	209
4.2 : First Movement of op. 10, no. 1, C minor-----	210
4.3 : Third Movement of op. 10, no. 1, C minor-----	223
4.4 : First Movement of op. 10, no. 2, F major-----	233
4.5 : Third Movement of op. 10, no. 2, F major-----	245
4.6 : First Movement of op. 10, no. 3, D major-----	253

Chapter 5 : Analyses of Sonata-Form Movements in the Early Vienna Period III

5.1 : Introductory Remarks on Formal Designs and Primary Compositional
Devices -----271

5.2 : First Movement of op. 13, C minor-----272

5.3 : First Movement of op. 14, no. 1, E major-----291

5.4 : First Movement of op. 14, no. 2, G major-----302

5.5 : First Movement of op. 22, B^b major-----316

Chapter 6 : Conclusion-----327

Bibliography----- 337

Vita----- 347

Chapter 1: Introduction

1.1 : Thesis

One of the firmest assumptions in musical scholarship is that Ludwig van Beethoven's piano sonatas are among the most significant collections of musical compositions in the history of European music. Because this repertoire spans almost his entire life as a composer, it has also been valuable for insightful illumination of the development and evolution of Beethoven's compositional techniques.

There have been many substantial studies of Beethoven's piano sonatas from diverse perspectives. However, most studies have concentrated on Beethoven's middle- and late-period works. The central task of the present dissertation is to compare Beethoven's early-period piano sonatas in sonata allegro form to what will be called here the "core repertoires," or the middle-period works, through examination of his treatment of structural and formal design and of other primary compositional devices as they evolved and developed from the early toward the middle period. This systematic study of his handling of sonata form from a harmonic, voice-leading, and formal point of view is based on the Schenkerian approach. The dissertation takes the middle-period sonatas as a core repertoire, illuminates the formal aspects and first-level middleground characteristics of the middle-period sonata-form movements, and then provides detailed analyses of Beethoven's sonata-form movements in the Bonn and early Vienna period. These analyses serve as the basis for stylistic generalizations about his handling of sonata-form design and other compositional devices.

1.2 : Research Method

Schenkerian theory has been adopted as the principal methodology for this study. Schenkerian analytic method provides a very useful tool by which analysts may efficiently examine the interrelation between tonal structure and formal design. It also lets the analyst focus on deep-level compositional techniques that can be clarified exclusively by Schenkerian analytic techniques, while allowing a systematic study of surface-level motivic features, thus providing the possibility of interrelating these two levels of observation to illuminate the aesthetic and artistic points that a musical composition poses.

Although Schenker proposes a deep-level middleground schema for sonata form, he does not suggest more detailed criteria that consistently determine the relationships between structural events and their preferred locations. Allen Forte, David Neumeier, Charles Smith, Janet Schmalfeldt, Allen Cadwallader, and others have pointed out this weakness in Schenker's sonata-form theory and have proposed additions and modifications. In particular, Neumeier provides pragmatic schemata which demonstrate how Schenker's *Ursatz* can be embedded in the traditional view of sonata form. Similarly, Smith insists on the necessity of a reconciliation between Schenker's theory of form and traditional formal theory and shows how Schenker's structural elements, such as a *Kopfton*, *Unterbrechung*, or neighbor-note figure, can force a different choice for the formal model.

Comparing the tonal structure embedded in Schenker's *Ursatz* with the thematic design assumed by traditional form theorists, I will provide several "ideal"

Schenkerian formal models, and I will trace Beethoven's own treatment of the sonata form by comparing the ideal models with readings of Beethoven's individual movements in sonata form in the early and middle periods and will identify the evolutionary process involved. I will illuminate (1) how pieces can be diversified through various ways of superimposing formal sections on a simple *Ursatz* model, and (2) how a variety of compositional devices which are not part of the background but which affect formal design – such as neighbor notes, modal mixture, and register – diversify the musical material beyond the limited figures of the *Ursatz* models, and as a result lead to distinctive foreground forms.

1.3 : Literature Review of Ludwig van Beethoven's Piano Sonatas

According to William Newman, “more than fifty authors have devoted whole books exclusively to Beethoven's piano sonatas or certain aspects of them.”¹ In addition to the old but still useful books of Donald F. Tovey and Eric Blom that Newman discusses, more recent and appropriate material out of this large literature, especially that covering formal aspects, such as books by William Kinderman and Carl Dahlhaus and sections by Joseph Kerman and Alan Tyson in the *New Grove* article on Beethoven, is adopted as a starting point to generalize common tendencies

¹ William S. Newman, *The Sonata in the Classic Era*, 3rd ed. (New York: W.W. Norton & Company, Inc., 1983), 508.

and characteristics as seen in each period, in particular, the evolution from the early toward the middle period.²

In their well-known textbook, Donald J. Grout and Claude Palisca cite the traditional three-period classification of Beethoven's works and include the first ten piano sonatas (up to op. 14) in the first period, those from op. 22 through op. 90 in the second, and the last five in the third period.³ They report the formal elements as seen in the individual movements of several selected sonatas, but do not make general comments on the form and structure in each period's sonatas. They point out early influences from contemporary figures: thematic outlook and its treatment from Franz Joseph Haydn, and some harmonic features, as well as the thick and full texture of the piano writing, from Muzio Clementi and Jan Ladislav Dussek.

William Newman, on the other hand, classifies Beethoven's piano sonatas into five periods: the first or "Student" period (WoO 47, nos. 1-3, WoO 50 and WoO 51) in Bonn, the second or "Virtuoso" period (Opp. 2-22, but also including Op. 49, nos. 1 and 2), the third or "Appassionata" period (Opp. 26-57), the fourth or "Invasion" period (Opp. 78-90), and the fifth or "Sublimation" period (Opp. 101-111).⁴ The

² Donald F. Tovey, *A Companion to Beethoven's Pianoforte Sonatas: Bar-by-Bar Analysis* (London: Associated Board of the Royal Schools of Music, 1931), Eric Blom, *Beethoven's Pianoforte Sonatas Discussed* (1938; reprint, New York: Da Capo Press, 1968), William Kinderman, *Beethoven* (Berkeley: University of California Press, 1995), Carl Dahlhaus, *Ludwig van Beethoven: Approaches to His Music*, trans. Mary Whittall (Oxford: Clarendon Press; New York: Oxford University Press, 1991), and Joseph Kerman and others, "Beethoven, Ludwig van," in *The New Grove Dictionary of Music and Musicians*, 2nd ed. (2001), 3: 73-140.

³ Donald J. Grout and Claude Palisca, *A History of Western Music*, 5th ed. (New York: W.W. Norton & Company, Inc., 1996), 535-536.

⁴ Newman, *The Sonata in the Classic Era*, 511-537.

main differences from the customary division lie in that Newman included the “Student period” and that he divided the middle period into two. He discusses briefly only one of the Bonn-period sonatas without a comprehensive comment on these student-period sonatas. He evaluates the F-minor Sonata, WoO 47, no. 2 as a forerunner of the macabre and serious mood that pervaded Beethoven’s minor-mode sonatas and also points out that the handling of the slow introduction in the first movement affects the later works:

In Sonata 2 in f, anticipations may already be noted both of the main allegro idea in Op. 13/i and of the way by which this later movement interlocks with its introductory material. Moreover, the early piece in f already helps to illustrate that association of mood and key by which are related Beethoven’s further sonatas in f, Opp. 2/1 and 57, Opp. 10/3, 13, and 111 in c, or Op. 2/3 and 53 in C, and so on.⁵

On the other hand, in dividing Beethoven’s career into four stylistic periods,⁶ Maynard Solomon remarks on the importance of the Bonn-period three piano sonatas of WoO 47 and WoO 51, although he admits that the early works were basically imitations of contemporary Classical styles:

None of Beethoven’s Bonn works in sonata form are studied as landmarks in the development of the form. They are essentially imitative examples of contemporary Classic sonata-style works, to which we listen in the hope of catching a glimpse of the mature Beethoven, a motif utilized in a later work, an intimation of future greatness. Nor are we disappointed in these respects. The three “Electoral” Sonatas for Piano, WoO 47 (1782-83), are unadventurous three-movement works, with little development, utilizing simple rondo and variation techniques. Some claim they are modeled on the music of C. P. E. Bach; others hear in them echoes of Neefe, Haydn, Stamitz, or Sterkel. However, in the Sonata in F minor can be heard anticipations of the Sonata, op. 13 (*Pathétique*), of 1798-99, and Schieder mair noted that main theme

⁵ Ibid., 511.

⁶ Solomon’s categorization includes the Bonn period, the Vienna period (Early Years), the heroic period, and the final phase. See Maynard Solomon, *Beethoven* (New York: Schirmer Books, 1977).

of its third movement contains an idea that reappears in the Sonata, op. 10 no. 2, as well as in the scherzos of the Third and Fifth Symphonies. In the third “Electoral” sonata, in D, Prod’homme observed a motif reminiscent of the introduction to the Seventh Symphony of three decades later. The later, fragmentary Sonata in C, WoO 51, composed for Eleonore von Breuning, makes little attempt at thematic development; it is transparent and undemanding, with the lovely ornamental passagework of its Allegro reminiscent of the Italian style of Galuppi or Domenico Scarlatti. The graceful Adagio, however, recalls the early sonatas of the Viennese school.⁷

Joseph Kerman and Alan Tyson also mention influences on Beethoven’s Bonn-period sonatas, especially calling attention to Mozart. It is certainly true that the young Beethoven received and synthesized diverse musical practices of the time from his teachers and other composers and that he experimented with these practices in his works:

The most substantial of the earliest compositions are sets of three piano sonatas and three piano quartets. The main musical influences on the boy have been seen as, first, Neeffe and Sterkel, and then Mozart; each of the piano quartets is modeled on a specific work by Mozart, from the set of violin sonatas published in 1781 (K379/373a, 380/374f, 296). Beethoven looked to Mozart again and again during his first decade in Vienna (see opp.3, 16, 18 no.5).⁸

Most studies deal with Beethoven’s early Viennese, middle, and late period works, but none has paid much attention to his early piano sonatas written in the Bonn period, although the study of the Bonn period sonatas might serve as a point of departure for understanding Beethoven’s entire piano-sonata repertoire that occupies the center of his compositions. William Kinderman devalues the artistic worth of Beethoven’s Bonn-period works by praising the *Cantata on the Death of Emperor*

⁷ Ibid., 46 (footnote citations deleted).

⁸ Joseph Kerman and others, “Beethoven, Ludwig van,” in *The New Grove Dictionary of Music and Musicians*, 2nd ed. (2001), 3: 96.

Joseph II written in 1790 as the single true forerunner of the mature style: “In some respects, the challenge to analytic criticism is greatest when we confront the immature work of an artist, in which an authentic, original voice is not yet heard, or not clearly heard. Many of the piano pieces, songs, and chamber works that Beethoven composed at Bonn show relatively little of the skill and power that distinguish his mature music.”⁹

Although the Bonn sonatas are dismissed, many scholars agree with the importance of studying Beethoven’s early Viennese sonatas. Classifying Beethoven’s first twenty piano sonatas written in the early Viennese period into two groups, Solomon provides a penetrating description of each group:

Thirty-two piano sonatas bear Beethoven’s opus numbers. The first twenty were composed in the eight years ending 1802, and it is in them that Beethoven’s first unquestioned masterpieces are to be found. These sonatas fall readily into two groups: thirteen sonatas written prior to 1800—opus 2 to opus 22, plus two “easy sonatas,” opus 49—which explore and expand the possibilities of sonata form; and seven sonatas—opus 26 to opus 31—which are simultaneously an epilogue or farewell to the standard high-Classical sonata and a transition toward a new line of development, whose potentialities would be realized in the works of Beethoven’s later years. Beethoven’s earliest sonatas, broadly conceived, spacious in design, rich in detail and invention, were clearly intended as major efforts. Where Haydn and Mozart had relied almost exclusively on the three-movement design, six of Beethoven’s first sonatas (including his first four) used the four-movement scheme usually reserved for symphonies and quartets, through the addition of a minuet or scherzo; these sonatas were, on the average, almost one and a half times as long as those of his predecessors. The sonatas run the full gamut of *Strum und Drang* sentiment—passion, reverie, exuberance, heroism, solemnity, nobility, and dramatic pathos—but they are also full of abrupt harmonic and dynamic effects, piquant episodes, unusual rhythms, syncopation, and brief departures for distant keys, all of which signify that this young composer was not content merely to remain a dutiful exponent of a great tradition. Tovey observes that Beethoven’s “epigrammatic” manner was characteristic “not of immaturity, but of art in which problems are successfully solved for the first time.” It is Beethoven’s unification of two opposing

⁹ William Kinderman, *Beethoven*, 19-20 (footnote citation deleted).

trends—the epigrammatic tendency along with an overall striving for spaciousness—that is a distinguishing characteristic of his early Vienna style.¹⁰

Kinderman thinks highly of the artistic value of Beethoven's early Viennese piano sonatas, too. He sees these piano sonatas as a leading genre demonstrating the progress. He points out “symphonic ambition” as a new factor toward Beethoven's maturity, although he does not offer a general description of this repertoire:

It would be a serious error to underestimate Beethoven's sonatas from the 1790s. Whereas his first published examples of the concerto, quartet, and symphony are generally inferior to Haydn's and Mozart's masterpieces in those genres, the same cannot be said of his early sonatas, especially those for solo piano. It was in the piano sonata that Beethoven first revealed the full expressive range and power of invention that he was to demonstrate only years later in some other musical forms. In their broad scale and structural grandeur, his early sonatas and chamber music with piano show signs of a symphonic ambition. Characteristic, for instance, is his use of the four-movement form then associated more with symphonies or quartets than with these more intimate genres; each of the three piano trios of op. 1 and sonatas of op. 2 adds a minuet or scherzo to the conventional three-movement plan.¹¹

Newman also avoids comprehensive comment on the early Viennese sonatas and points out the influences from contemporary masters, Clementi, Dussek, Haydn, and Mozart. Lewis Lockwood is more definite in tracing Haydn's influence on Beethoven's early period. Lockwood attributes Beethoven's audacious tonal excursions to Haydn:

In early works Beethoven makes ample use of many of the same deviations from expectation that Haydn had perfected; witness Beethoven's use of surprising tonal shifts, especially in codas, in the Piano Trio, Op. 1 No. 1 (finale, mm. 337-360) and the similar effect in the First Piano Concerto, Op. 15, finale, mm. 462-477. If these

¹⁰ Maynard Solomon, *Beethoven* (New York: Schirmer Books, 1977), 104.

¹¹ William Kinderman, *Beethoven*, 30.

deviations still seem within Haydn's aesthetic range, Beethoven's later excursions into the eccentric and grotesque go well beyond it.¹²

James Webster poses an unusually positive view of Beethoven's early period, although he admits aesthetic limits of the young composer: "During the 1790s, he gradually mastered the Viennese modern style and then, in works like the *Eroica* and the Fifth Symphonies, further developed and extended it. But neither his heroic style nor his ensuing lyric phase around 1810 fundamentally altered it; nor did this music 'surpass' that of Haydn or Mozart."¹³ Kerman and Tyson specifically point out the stylistic and technical evolution in the early Viennese works. In addition to the expansion of the sonata by the addition of the fourth movement, they remark on Beethoven's competence of integrating and controlling musical material over audacious tonal excursions as early as around 1795:

Probably the best-known movement from this impressive group of six pieces is the opening Allegro of the Piano Sonata in F minor op.2 no.1, a remarkable precursor of Beethovenian concentration and intensity (and the more remarkable in that the sketches go back to Bonn). In 1795, however, this movement was an exception. Most of the early music is scaled very broadly, weighty and discursive, even overblown. Thus for many years Beethoven most often wrote sonatas in four movements, rather than three, as was common with Haydn and Mozart, and it seems indicative that his op.3 was a string trio in six movements, modeled on the large Divertimento K563 by Mozart...

...As for movements in sonata form, most of them contain a great deal of musical material – and a great many modulations in the second group. Though Beethoven's still emerging powers of organization were sometimes overtaxed, sometimes they were not and there are passages of authentic Beethovenian power, especially in the matter of long-range control over bold harmonic action. Cases in point are the

¹² Lewis Lockwood, *Beethoven: Studies in the Creative Process* (Cambridge, Mass.: Harvard University Press, 1992), 169.

¹³ James Webster, "The Concept of Beethoven's 'Early' Period in the Context of Periodizations in General," *Beethoven Forum* 3 (1994), 25. Tackling the problem of periodization of Beethoven's works, he assesses and criticizes many descriptions of Beethoven's stylistic trends.

passing modulations in the first movement of the A major Sonata op.2 no.2, and the expanded recapitulation in the Adagio of the G major Trio op.1 no.2.¹⁴

They assert that “piano virtuosity is always used in the service of a musical idea, never for its own sake” and that Beethoven did not lose his personal sound and individuality in the course of absorbing diverse styles and techniques from other pianist-composers of the time.¹⁵ In discussing Beethoven’s approach to and handling of sonata form, they mention the enhanced recapitulation that requires a new interpretation as a true sign of distinctive Beethovenian practice:

The first movements, in sonata form, of the C minor Trio and the F minor Sonata have quiet main themes which are designed to return fortissimo at the point of recapitulation. This is a characteristic Beethoven fingerprint. In the early works it often makes for a rather blustery effect. Yet it adumbrates a new view of the form whereby the recapitulation is conceived less as a symmetrical return or a climax than as a transformation or triumph. The sonata style is always inherently ‘dramatic’, in the special sense expounded and illuminated by Tovey. Tovey also pointed out that at their most characteristic Haydn and Mozart use the style to project high comedy, the musical equivalent of a comedy of manners. Beethoven was already groping for ways of using it for tragedy, melodrama or his own special brand of inspirational theatre of ideas.

This radical approach to sonata form (which encompasses all its aspects, of course, not only the enhanced recapitulation) becomes clearer in the piano sonatas of 1796–9: op.7, op.10 nos.1–3 and op.13. In op.13 and in the fine Sonata in D op.10 no.3, although the main theme does not return loudly, there is still a compelling impression that something urgent is at stake in the musical dialectic. Broadly speaking, it was this sense of urgency in dealing with what became known as the Classical style that Viennese aristocratic circles found most novel and impressive in the ‘grand Mogul’, as Haydn called him, from the provinces.¹⁶

Most scholars agree that, although Beethoven espoused diverse influences from many prominent figures, he was not satisfied with those, but further

¹⁴ Joseph Kerman and others, “Beethoven, Ludwig van,” in *The New Grove Dictionary of Music and Musicians*, 2nd ed. (2001), 3:97.

¹⁵ *Ibid.*

¹⁶ *Ibid.*, 97-98.

personalized and elevated them into a complicated and artful level. They assume that the significant characteristics, which mark middle-period sonatas, such as symphonic ideal, reworking of the recapitulation, and expansion of the second-theme area through many bold modulations were already in circulation in the early Viennese sonatas.

Kerman and Tyson list the tonal and formal characteristics of the middle period. Chief among them is the initiation of the second theme in the mediant as a significant foretoken indicating middle-period Beethoven. They claim that this replacement of the mediant key with the usual dominant resulted in expansions of the Classical form:

According to Czerny, his young pupil in those years, Beethoven spoke of a 'new path' he was following, a path which later Czerny associated with the important op.31 sonatas of 1802. Mention has already been made of op.31 no.2. Another novelty of conception was the key plan of the first movement of the Sonata in G op.31 no.1, which has the second group not in the dominant but in the mediant key (major and minor; cf the String Quintet op.29 of 1801). This looks ahead to Beethoven's thorough exploration and extension of the tonal range of Classical music, a process that was to run parallel with his expansion of all aspects of Classical form in the next years. In the late period it is the exception rather than the rule to have the second group in the dominant.¹⁷

Charles Rosen also remarks on this significant innovation found in the middle-period Beethoven. He points out the maximization of structural dissonance through the embracing of the mediant and submediant keys:

Beethoven's escape from the classicizing process is confirmed in the sonatas opus 31 and in the *Eroica*. Before that, his works were frequently based clearly on Mozartean models, such as the Piano Concerto no. 1 and the Quartet in A major, op. 18 no. 5. Some of the early works are constructed loosely by contrast of theme, the

¹⁷ Ibid.,99.

relation of tonic and dominant weakened by long chromatic transitions, as in the Piano Sonata in A major, op. 2 no. 2. The *Eroica* reaffirms the direct tonic-dominant binary opposition, which he thereafter retained. He experimented, however, for the rest of his life, with substitutes for the dominant: generally the mediant and submediant (e.g., opus 53, opus 106, opus 127). But these mediants and submediants function within the large system as dominants; that is, they create a long-range dissonance against the tonic and so provide the tension for a move towards a central climax. In addition, their appearance is always prepared so that the modulation creates a dissonance of greater power and excitement than the usual dominant without disturbing the harmonic unity.¹⁸

Rosen refers specifically to the role of the mediant and submediant in Beethoven's

Waldstein:

His [Beethoven's] careful resolution of the mediant and submediant substitutes for the dominant is characteristic. The exposition of the *Waldstein* goes from C major to E major. The process of resolution in the recapitulation is elaborate; the opening of the second group is played first in the submediant A major (as a symmetrical balance to the mediant E), then in A minor, and finally in C major, making the resolution absolute. The opening of the recapitulation, moreover, contains, at the second phrase, the traditional secondary development with a move to the subdominant side quoted above (p. 290).¹⁹

Kerman and Tyson also regard the weighted function of the coda as another feature of Beethoven's middle-period works. The coda does not function simply as a "tail" added for rhetorical completeness, but as a structural designation resolving the accumulated tension and instability:

Such codas now become very common. They tend to assume the important function of finally resolving some melodic, harmonic or rhythmic instability in the first theme – an instability that has infused the movement with much of its energy up to the coda. This new weighting of sonata form towards the coda is associated, and sometimes coordinated, with another tendency, that of withholding full rhythmic or even harmonic resolution at the moment of recapitulation.²⁰

¹⁸ Charles Rosen, *Sonata Forms* (New York: W.W. Norton & Company, Inc., 1980), 354.

¹⁹ *Ibid.*, 354-355.

²⁰ Joseph Kerman and others, "Beethoven, Ludwig van," in *The New Grove Dictionary of Music and Musicians*, 2nd ed. (2001), 3:101.

Kerman and Tyson's third characteristic is "the symphonic ideal." They see that Beethoven's symphonic style appears in diverse forms of musical elements in piano and chamber music other than symphony, although there is a difference in the degree. They say:

The symphonic ideal inspires most of the non-symphonic pieces written between 1803 and 1808. That is true to an extent even of the Kreutzer Sonata, composed in early 1803, just before the 'Eroica'. The Waldstein Sonata, composed just after the 'Eroica', adopts an idea for the groundplan of its opening paragraph from an earlier piano sonata, op.31 no.1 in G. But there is all the difference in ambition, scale and mood; what served in the earlier piece as a witty constructive device becomes in the later one an earth-shaking, or at least a piano-shaking, declaration. The slow movement was originally going to be the somewhat bovine piece now known as the 'Andante favori' (compare the Kreutzer and op.31 no.1). When Beethoven replaced this by the *adagio* 'Introduzione' which makes momentous preparations for the finale, he gave the sonata the characteristic 'symphonic' sweep even while shortening it, and also motivated (or validated) the grandiose coda of the finale. Planned on broader lines still, the 'Appassionata' Sonata (1804-5) is an even more imaginative work, a work of the greatest extremes – as witness the *fortissimo* chord handfuls that shatter the brooding quiet of the very first page.²¹

Kinderman also notes the symphonic ideal and other characteristics of the middle-period works, including the *Waldstein* Sonata.²² In addition to the formal expansion of the second-theme group, he points out Beethoven's interest in musical parameters that have been overlooked such as texture and register and in the variation technique as a developmental means:

²¹ Ibid., 101-102.

²² Kinderman evaluates the three sonatas of op. 31 as forerunners of Beethoven's new path, which will be soon consolidated in the *Eroica* Symphony. He assigns distinctive comment on the three sonatas of the same opus: he sees the true Beethovenian "air of paradox and comedy" in the G-major Sonata, whereas he characterizes "striking harmonic ambiguities and tensions" in the D-minor and E^b-major Sonatas as "a hallmark of his innovative approach" (75). See William Kinderman, *Beethoven* (Berkeley: University of California Press, 1995), 74-75.

In the wake of the *Eroica* Beethoven showed a strong inclination to reshape his sonatas and quartets on a grand scale, introducing innovations in texture, sonority, register, and colour. Also essential is a sense of deepened contrast or conflict—a quality present in op. 54 but largely absent in the contemporaneous Triple Concerto in C major op. 56, with its superficially brilliant yet rather conventional rhetoric. Wilhelm von Lenz once described the *Waldstein* Sonata in C major op. 53, of 1804, as ‘heroic pianistic deeds’ (‘Klavierheldenthaten’) with a ‘symphonic essence’ (‘symphonistischen Wesen’). In its opening *Allegro con brio* Beethoven goes beyond the harmonic experiments of earlier sonatas such as op. 31 no. 1 to create an enlarged sense of tonal space. The quietly pulsating tonic chords with which the sonata begins lead up a third to the dominant; moments later, a restatement of the opening phrase beginning a step lower carries the music to the submediant. Within this broadened tonal spectrum it is natural that Beethoven should choose the remote key of E major for his second subject-group, which begins with a serene, chorale-like subject marked *dolce e molto legato*. He develops this lyrical subject through variation, embroidering its sustained notes in a rhythmic texture of triplets that gradually reasserts the brilliant pianistic textures so characteristic of this sonata.²³

Webster also cites the symphonic ideal seen in the middle-period sonatas and attributes it to the synthesis of the sonata and symphonic styles with French-revolutionary and other extramusical influences.²⁴ He comments on the distinctive character of Beethoven’s middle-period music: “Beethoven’s middle period music is seen as qualitatively different not only from that of Haydn and Mozart but his own earlier music as well.”²⁵ By pointing out that music scholars’ criticism of Beethoven’s early Viennese period “oscillates between the poles of ‘not yet quite Beethoven’ and ‘despite everything, already Beethoven’,” Webster states:

On the one hand, many works by Haydn and others from ca. 1770 on exhibit all the features of Kerman’s “Symphonic ideal”; some are as through-composed, end-oriented, and radical as anything in Beethoven’s middle period. On the other hand,

²³ *Ibid.*, 97.

²⁴ James Webster, “The Concept of Beethoven’s ‘Early’ Period in the Context of Periodizations in General,” *Beethoven Forum* 3 (1994), 22

²⁵ *Ibid.*, 2.

his middle-period music exhibits manifold intertextual links to his own earlier music and that of Haydn and Mozart from the 1780s and 1790s.²⁶

Associating the new tendencies with his unique term “new path,” Carl Dahlhaus understands formal ambiguity and profound transformation of sonata form as a significant facet marking the middle-period Beethoven (his example is the first movement of the D-minor Sonata, op. 31, no. 2). He vividly delineates Beethoven’s radical handling of sonata form:

The argument as to whether the ‘real’ first subject is stated at the opening of the movement—the arpeggiated triad in the ‘largo’ and the ‘bald’ scalar motion in the ‘allegro’—or in bars 21 ff. is a waste of time; it requires a decision when the whole point is that decision is impossible. The opening contains the thematic material of the movement in a rudimentary form. The second subject is there as well as the first, yet the passage is not a subject itself, in either a syntactic or a ‘gestural’ sense. The ‘largo’ motive contains a ‘protoform’ of the first subject, which appears more clearly shaped in bars 21 ff.; the ‘allegro’ motive contains a ‘protoform’ of the second subject, which is presented in bars 42 ff. The ‘gesture’ made by the opening, however, is like that of an introduction.²⁷

In Dahlhaus’s words, the sonata form was, for Beethoven, no longer a “protoform,” but a “process” containing “developmental elaboration” and “goal-directedness.”²⁸ The collapse of the traditional concept of a theme is a concrete element in the achievement of what he calls “processual” form.²⁹ “What underlies the movement is less a ‘theme’ than a ‘thematic configuration’, a grouping of

²⁶ Ibid., 4.

²⁷ Carl Dahlhaus, *Ludwig van Beethoven: Approaches to His Music*, trans. Mary Whittall (Oxford: Clarendon Press; New York: Oxford University Press, 1991), 169-170.

²⁸ Ibid., 170-171.

²⁹ Carl Dahlhaus, *Nineteenth-Century Music*, trans. J. Bradford Robinson (Berkeley: University of California Press, 1989), 13-15. Leon Plantinga also in his textbook describes Beethoven’s clever manipulation of sonata form by comparing the formal aspects of the D-minor Sonata, op. 31, no. 2 with the prototypical sonata-form schema. See Leon Plantinga, *Romantic Music: A History of Musical Style in Nineteenth-Century Europe* (New York: W. W. Norton & Company, Inc., 1984), 32-38.

elements—the arpeggiated triad and the ‘bald’ scalar motion—which are in effect ‘pre-thematic’ at the opening, and already ‘post-thematic’ in bars 21 ff. and 42 ff.: consequences, not premisses.”³⁰

The literature review above confirms that Beethoven’s middle period is the time when he took pianistic techniques and compositional devices that he espoused in the earlier stages and individualized and perfected them into the artful and distinctive mature style. To recapitulate the principal features of this practice are: 1) formal expansion of sonata form, in particular, the second-theme area and coda, through invitation of striking tonal excursions or replacements of the normal dominant with non-dominant tonal goals, 2) growing interests in register and texture toward achievement of symphonic ideal, 3) deviation from the normal concept of form, specifically speaking, the shift from ‘protoform’ toward ‘form as process’, and finally 4) substitution of thematic configuration or motif for the theme and insistent reliance upon the motive as a major developmental factor. In the next section, assessment of published analyses of the core-repertoire from the Schenkerian point of view will present a more substantial picture of how Beethoven realizes these techniques, including our primary concern, aspects of sonata form.

³⁰ Carl Dahlhaus, *Ludwig van Beethoven: Approaches to His Music*, 171.

1.4 : Sonata Form in the Middle Period³¹

Janet Schmalfeldt explores Beethoven's realization of Hegelian aesthetics, a process of "becoming," as it is realized over the musical time-space of the first movement of the *Tempest* Sonata, op. 31, no. 2. Her method is to reconcile Schoenbergian form theory and the Schenkerian *Ursatz* model.³² Criticizing the vagueness of Carl Dahlhaus's use of the terms—"beginning," "introduction," and "theme,"³³ she says that Dahlhaus "defends [Hugo] Riemann's seemingly 'bizarre' but ultimately 'useful' idea" of a theme, that is, "the tonally closed sections in a sonata exposition are simultaneously thematic, whereas sections that modulate—transitions and developments—are nonthematic..."³⁴ She then challenges Dahlhaus's idea that "the Allegro passage is not 'thematic in character'" and further criticizes him because "he regards the tonic harmony at mm. 3-4 as only 'provisional

³¹ This chapter begins with a critical summary of the Schenkerians' discussions of what I call Beethoven's "core-repertoire," first movements of the *Tempest* Sonata, op. 31, no. 2, the *Waldstein* Sonata, op. 53, and the *Appassionata Sonata*, op. 57. Because the authors have their own peculiar topics, our central issue of the overall sonata-form design has been less or never dealt with in these discussions. Thus, I have collected and put together their partial voice-leading graphs to exploit them toward an interpretation and assessment of Beethoven's handling of sonata form.

³² Janet Schmalfeldt, "Form as the Process of Becoming: The Beethoven-Hegelian Tradition and the 'Tempest' Sonata," *Beethoven Forum* 4 (1995): 37-71.

³³ *Ibid.*, 56. Schmalfeldt says: "Each of the primary terms of this claim assumes a collective understanding. But even Dahlhaus's first term—beginning—cannot be taken for granted: he sometimes refers only to mm. 1-2, at other times to the passage at mm. 1-20, as the apparent introduction. It must also be noted that Dahlhaus treats the terms *introduction* and *theme* dialectically, in the sense that an introduction *is* what a theme *is not*—'loosely constructed', 'harmonically and syntactically open-ended', and thus *not* 'thematic in character'."

³⁴ *Ibid.*, 57. Schmalfeldt later admits that Dahlhaus's seemingly equivocal use of the terms was intentional to clarify Beethoven's "bizarre" formal process.

and not fixed’.”³⁵ For her, the introduction-like passage of mm. 1-21 is seen as the primary theme.

Schmalfeldt argues that both the Schoenbergian periodic structure of antecedent and consequent and Schenker’s *Ursatz*-model are suited to this amorphous primary theme (see Example 1-1). She demonstrates that Schoenberg’s “sentence” paradigm—consisting of what Caplin calls the “presentation” and “continuation”—is at work in the compact four-measure antecedent (see annotations above the analytic graphs).³⁶ At the same time, she proves that her *Ursatz*-model, in which the $\hat{3} - \hat{2} - \hat{1}$ descent supported by the $i-V \frac{6}{4} - \frac{7}{3} - i$ harmonic motion unmistakably makes the problematic passage of mm. 1-21 function as a theme. Proposing the brief tonic of mm. 3-4 as a true *Stufe* governing all the subsequent tonal events,³⁷ she summarizes the distinctive characteristics of the primary theme’s *Ursatz* (mm. 1-21):

³⁵ Ibid., 61. Roger Kamien offers a different interpretation, in which one views mm. 1-21 as a prolongation of a dominant and the structural tonic as arriving only at m. 21 (Roger Kamien, “Non-Tonic Settings of the Primary Tone in Beethoven Piano Sonatas,” *The Journal of Musicology* 16, no. 3 (1998): 385-388). He summarizes the pros and cons well: “This reading is supported by the beginning on a V^6 chord, the weak articulation of the tonic in mm. 3-4, and the return to the dominant in m. 6. Also favoring this interpretation is the registral connection between the low bass tones $C^\#$ in m. 1 and D in m. 21, and the motivic relationship between mm. 1-2 and 21-22. Nevertheless, I believe this reading is not completely satisfactory. For example, it does not take into account the upbeat quality of mm. 1-2, the downbeat character of mm. 3-4—which articulate the tonic—and the importance of the climactic cadential $\frac{6}{4}$ chord in m. 13... Measures 3-4 are heard as a weak, but structural tonic and the high f^3 of the climactic $\frac{6}{4}$ chord in m. 13 functions as the delayed primary note $\hat{3}$ reached through arpeggiation from the a^1 of m. 2” (385).

³⁶ Schmalfeldt, “Form as the Process of Becoming: The Beethoven-Hegelian Tradition and the ‘Tempest’ Sonata,” 60. For a detailed definition of the sentence paradigm, see William Caplin, *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven* (New York: Oxford University Press, 1998), 9-13.

³⁷ Schmalfeldt does not give the specific rationale for choosing the D-minor triad as a real *Stufe*, although she implies that the choice of the tonic ensues the syntactic logic of the

There are two characteristically Schenkerian but controversial features of the graphs: (1) the $\hat{3} - \hat{2} - \hat{1}$ descent of the fundamental line (the *Urlinie*-replica) is delayed until the last minute, at the cadence in mm. 20-21, and it is more than somewhat concealed, for motivic reasons discussed below; (2) only the unstable, nontonic six-four supports the arrival of the primary tone.³⁸

Example 1-1. Schmalfeldt's annotated voice-leading graphs for the exposition
(mm. 1-41)

INTRO. ⇒ MAIN THEME (MT)
 ANTECEDENT
 2: intro.?

SENTENCE
 1: BI 1: ~~HC~~ 2: continuation
 presentation

"CONSEQUENT" (sequential; tremendously expanded)
 1: model 1: seq. 1: fragmentation

(expanded cad. prog.)

subsequent harmonic progressions: “After all, the thematic content of the first measure of the Allegro—the D-minor triad prolonged by a voice exchange (ex. 1, graph A [Example 1-1-A])—now strives to clarify the key and the mode” (60).

³⁸ Schmalfeldt, “Form as the Process of Becoming: The Beethoven-Hegelian Tradition and the ‘Tempest’ Sonata,” 62.

Example 1-1. continued

MT ⇒ TRANSITION

sentential (but modulatory)

3: CBI

8: pres.

4:

13: continuation

(2: frag. as model)

Reproduced from BEETHOVEN FORUM, volume 4, edited by Lewis Lockwood and James Webster, by permission of the University of Nebraska Press. Copyright © 1995 by the University of Nebraska Press.

The motivic logic, working at manifold structural levels and, according to Dahlhaus, eventually integrated into the formal process, infiltrates into both the transition and the second theme. Schmalfeldt illustrates the ascending arpeggiation and the turn figure as motives, which take part in that formal process. She vividly describes the course by which the arpeggiation—whose first prominent emergence is the initial arpeggiation to the *Kopfton* $\hat{3}$ (A4-C5-F6)—becomes concretized, not only in the foreground “through the continued dialogue between the treble and the bass” (mm. 21-41), but also in a deep level as an inner-voice event, A3-D4-F4-A4

(Example 1-1).³⁹ The role of the turn-figure is more prominent: it was “foreshadowed at mm. 3-6, then realized at mm. 22-24,” and ultimately becomes the second theme, especially at mm. 55-59 (see Example 1-2).⁴⁰

Schmalfeldt’s graph shows that fifth-line descents, which are an essential element of Schenker’s sonata-form description,⁴¹ fill the musical space saturated by the turn-figure network at multiple structural levels. The primacy of $\hat{5}$ remains intact through m. 70 while a lower-level descent is made over the dominant prolongation in mm. 41-54. She delays the structural descent to $\hat{1}$ until the codetta: the $\hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1}$ descent takes the stereotypical harmonic support, i-V⁷-i-V-i, as if to express Beethoven’s powerful will to cancel out all the harmonic vagueness and tension accumulated thus far. The descent is rhetorically echoed by what Schmalfeldt calls the “one more time technique.”⁴²

³⁹ Ibid., 64-65.

⁴⁰ Ibid., 65. Schmalfeldt says: “By tracing the path of the turn motive over the course of the secondary theme group, as shown at ex. 4 [Example 1-2], we can assess Dahlhaus’s view that the uniqueness of a work arises from the composer’s blending of motivic logic with the functions and stations of a formal process.”

⁴¹ Schenker regards a fifth-progression in the dominant key as a principal element prolonging $\hat{2}/V$. The presence of a fifth-line, which prolongs $\hat{2}$ in the second-theme area, will be a central assumption of our sonata-form models.

⁴² The “one more time technique” is represented here by “the repeated $\hat{5} - \hat{4} - \hat{3} - \hat{2}$ descents [that] are again prevented by evaded cadences from closing to $\hat{1}$ ” (Schmalfeldt, “Form as the Process of Becoming: The Beethoven-Hegelian Tradition and the ‘Tempest’ Sonata,” 67-68). For a detailed discussion of the ‘one more time technique’, see Janet Schmalfeldt, “Cadential Processes: The Evaded Cadence and the ‘One More Time’ Technique,” *The Journal of Musicological Research* 12, no.1-2 (1992): 1-52, as cited by Schmalfeldt.

Example 1-2. Schmalfeldt's graph of the second theme

Secondary theme group

ST 1

4: CBI pres. 4: 4: 5: contin. (frag.) cadential (itself sentential)

2 = 5 of v 45 55 6-6-6-6 6 6-10 8-7-6- 6-6 in v(a): V iv⁶ 5/3 V

ST 2

codettas pres. contin. cadential

63 83 4mm 5 4 3 2 5 4 3 2 1

(EC) (EC) (EC) (EC?) (PAC)

IV⁷ III V⁷ i ii⁶/₅ V

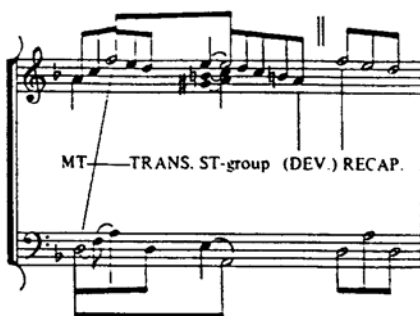
Reproduced from BEETHOVEN FORUM, volume 4, edited by Lewis Lockwood and James Webster, by permission of the University of Nebraska Press. Copyright © 1995 by the University of Nebraska Press.

Schmalfeldt, however, encounters a problem in explaining the transformed return of the main theme in the recapitulation, and admits that “Neither the periodic view of the opening passage nor the *Ursatz* form of the graph at ex. 1 [Example 1-1] manages to capture the formal ambiguity that Dahlhaus astutely addresses.”⁴³ She does not give an analytic graph clarifying the formal and tonal role of this metamorphosed return, although her background graph seems to espouse that the

⁴³ Schmalfeldt, “Form as the Process of Becoming: The Beethoven-Hegelian Tradition and the ‘Tempest’ Sonata,” 70.

normal sonata-form *Ursatz* resides in the fundamental structure of the movement (see Example 1-3).

Example 1-3. Schmalfeldt's background summary of op. 31, no. 2, first movement



Reproduced from BEETHOVEN FORUM, volume 4, edited by Lewis Lockwood and James Webster, by permission of the University of Nebraska Press. Copyright © 1995 by the University of Nebraska Press.

Roger Kamien, on the other hand, provides analytic graphs, which elucidate Beethoven's "bizarre" process of transformation in the recapitulation (see Example 1-4). He demonstrates that the recapitulation takes the same fundamental structure as the exposition, even though the two differ tonally and thematically:

The opening twenty-eight bars of the recapitulation are in many ways an expanded variation of the opening thirteen bars of the exposition. In both sections there is a structural tone, f^3 , which is immediately preceded by f^2 (Examples 31a and 31b [Example 1-4-(a) and (b)]). The f^3 in the recapitulation, however, is supported by a diminished-seventh chord on G^\sharp , not by a $\frac{6}{4}$. This same diminished-seventh chord served as prefix to the $\frac{6}{4}$ in the exposition. The use of a diminished-seventh chord at this point also creates a harmonic parallel with the three bars immediately preceding the second theme in the exposition (see music, bars 38-40). The implied F-minor chord of bar 158 is analogous to the F-major chord of bar 9. The a^{b1} of bar 158 prepares the g^\sharp bass of the diminished-seventh chord in bar 169 (Example 31b [Example 1-4-(b)]).⁴⁴

⁴⁴ Roger Kamien, "Aspects of the Recapitulation in Beethoven Piano Sonatas," *Music Forum* 4 (1976): 229-230.

Example 1-4. The first movement of op. 31, no. 2, (after Kamien)

(a) Exposition, mm. 1-21

(b) Recapitulation, mm. 143-171

(c) Recapitulation, mm. 143-158

Highlighting structural similarity in the relationship between the exposition and the recapitulation, Kamien sees the first and second recitatives of the reprise (mm. 144-148 and mm. 155-158) as originating from the falling third-line A-G-F in mm. 2-3 of the exposition. He further stresses the motivic parallelism, by asserting that the third-line was prepared in advance of the entry of the recapitulation (mm. 133-143).⁴⁵ His points support and concretize Schmalfeldt's view of motivic logic.

Edward Laufer's voice-leading graph for the development also supports Schmalfeldt's notion that "old motives take on new formal functions as the movement unfolds" (see Example 1-5).⁴⁶ Laufer categorizes the voice-leading scheme of the development in question into one of a set of patterns that he presents, conversion from the minor to major dominant (v-V). He shows how the two important motives of the movement—what he calls "the three-note arpeggio figure c#-e-a" and "the turn

⁴⁵ Ibid., 231. For a detailed discussion of motivic parallelism, see Charles Burkhart, "Schenker's 'Motivic Parallelism,'" *Journal of Music Theory* 22 (1978): 145-175.

⁴⁶ Schmalfeldt, "Form as the Process of Becoming: The Beethoven-Hegelian Tradition and the 'Tempest' Sonata," 64. See Edward Laufer, "Voice-Leading Procedures in Development Sections," *Studies in Music from the University of Western Ontario* 13 (1991): 69-120, especially, 102 and 104.

figure around a¹”—infiltrate not only into the musical foreground, but also into the deep-level structure of the development.⁴⁷ The first level of his graph reveals the underlying role of the turn-figure in the long span of the upper voice (see ① in Example 1-5). The second level demonstrates not only the turn-figure motive—which acts in the foreground (marked with circles in Example 1-5)—but also the arpeggio motive (indicated by “motivic” on the graph). Laufer describes Beethoven’s “poetic idea” achieved by the ambiguous beginning of the recapitulation. Although he admits the tonic at m. 148 technically as a real *Stufe*, he offers a radical hypothetical reading, in which the tonic at m. 148 might be “parenthetical enclosure” and the subsequent events are interpreted in a very innovative way:

The tonic returns at m. 148. In a poetic if not technical sense, however, this I is evaded, for (as in Example 23-3 [dotted parentheses of Example 1-5-③]) the two V chords (mm. 121 and 171) appear to be connected. If so, the I of m. 148 would be a parenthetical enclosure, not really the final tonic. Thus the recapitulation arises indefinitely out of the preceding material, with the motives once again finding their shape and the tonic in a shadow. Even the chord built on f# (m. 161) seems to pick up the previous F# (m. 99) as if now finally finding the “right” way; it marks the V of m. 171 as a goal (not the I of m. 148) and thereby again expresses the poetic idea of arising out of an indistinct, distant point.⁴⁸

⁴⁷ Laufer, “Voice-Leading Procedures in Development Sections,” 102.

⁴⁸ *Ibid.*, 104.

Example 1-5. Voice-leading graph of the development (after Laufer)

The image displays a voice-leading graph for a development section, spanning measures 83 to 179. The notation is organized into three systems, each with a circled number (1, 2, 3) at the beginning. The first system (measures 83-121) includes a 'turn fig.' annotation at measure 83 and a 'motivic' label with a dashed line connecting notes across measures 83, 99, and 121. The second system (measures 121-144) features a 'motivic' label with a dashed line connecting notes across measures 121, 133, and 144, and a 'V#' label. The third system (measures 144-179) includes a 'motivic' label with a dashed line connecting notes across measures 144, 158, and 161, and a 'V#' label. A 'NB' (Nota Bene) circled annotation is present in the second system. The graph uses various musical symbols including notes, stems, beams, and slurs to show the relationships between different voice parts (VI and V#) and motifs. Measure numbers are indicated at the top of the staves: 83, 99, 121, 133, 144, 158, 161, 169, 171, 175, and 179.

There is a consensus in the analyses by all three Schenkerians: they focus on Beethoven's aesthetic goal, which is successfully attained through his skillful compositional techniques, first, to conceal the normal phrase structure through phrase expansion and harmonic ambiguity; second, to avoid literal repetition by means of thematic transformation and variation; and, finally, to create a diversified but motivically coherent musical foreground.

The first movement of the C-major Sonata, op. 53 is another monument of Beethovenian motivic logic, by which a motive participates in formal process. Roger Kamien pays special attention to the enharmonic connections and modal mixture which play a significant role in the developmental processes of the movement.⁴⁹ He asserts that the audacious handling of tonal procedures, such as the direct shift to ^bVII in the exposition and what he calls "the tonal excursion" to ^bIII (a tonicization of E^b major) in the recapitulation, are foreshadowed and also confirmed through subtle enharmonic connections at different structural levels, thereby creating the sense of motivic parallelism: for example, A[#]5, which occurs in the course of moving toward the mediant key in the exposition (m. 22), and D[#]4, which is a member of an augmented-sixth chord at the corresponding place of the recapitulation (in the tenor voice of m. 183), are, according to Kamien, subtle enharmonic transformations of B^b and E^b respectively.

⁴⁹ Roger Kamien, "Subtle Enharmonic Connections, Modal Mixture, and Tonal Plan in the First Movement of Beethoven's Piano Sonata in C Major, Opus 53 ("Waldstein")," *Beethoven Forum* 1 (1992): 93-110.

Example 1-6. Modal mixture as a main compositional device (after Kamien)⁵⁰

(a) Modal mixture between C-major and C-minor in the opening theme (mm. 1-14)

Musical score for Example 1-6(a) showing modal mixture between C-major and C-minor in the opening theme (mm. 1-14). The score is in treble and bass clefs. Measure numbers 1, 3, 5, 7, 8, 9, 12, 13, and 14 are circled above the staff. Fingerings are indicated below the notes: 5, 4, 6, 5, 4, 6, 6, 7. Chord symbols below the bass staff are I, V⁷, (1), V⁷, and I.

(b) Modal mixture in the development (between F-major and F-minor in mm. 90-104 and between C-major and C-minor in mm. 112-132)

Musical score for Example 1-6(b) showing modal mixture in the development. The score is in treble and bass clefs. Measure numbers 90, 96, 99, 100, 103, 104, 105, 106, 107, 108, 109, 110, 111, and 112 are circled above the staff. Fingerings are indicated below the notes: 10, 10, 10, 10, 10. Chord symbols below the bass staff are (IV), (I II V I), and V. A dashed line indicates a section from measure 112 to 136. Fingerings 5-6 and 5-6 are indicated below the notes in measures 120-124 and 126-130. Chord symbols N and V are indicated below the bass staff.

Reproduced from BEETHOVEN FORUM, volume 1, edited by Lewis Lockwood and James Webster, by permission of the University of Nebraska Press. Copyright © 1992 by the University of Nebraska Press.

⁵⁰ Ibid., 104-106 (his Examples 13 and 16).

The structural role of modal mixture is more obvious than the enharmonic connection. The modal mixture, which emerges first in the exposition in the form of the descending bass motion C-B^b-A^b-G (see Example 1-6-(a)), plays a decisive role, not only in the second theme (E-major and E-minor), but also especially in the development section (see Example 1-6-(b)). Kamien relates the middleground modal mixture seen in the exposition (between E-major and E-minor in mm. 35-78 in Example 1-7-(b)) to that in the development (between F-major and F-minor in mm. 90-104 and between C-major and C-minor in mm. 112-132), and he shows how Beethoven depends exclusively upon a single compositional device, modal mixture, to create a coherent, unique musical structure.

Although Kamien does not directly mention the overall formal structure, a main focus of our concern, we can read the *Ursatz* design of the movement through a juxtaposition of his partial graphs. He sees $\hat{5}$ at m. 3 as the *Kopftön* of the piece and then assumes that $\hat{5}$ has been chromatically raised ($\# \hat{5}$) in the second theme (see Example 1-7-(a)). Furthermore, he admits the possibility of the chromatic member of the *Urlinie*: notice that he elevates the raised $\hat{4}$ ($\# \hat{4}$), which is a part of a first-order linear descent, into the background (see Example 1-7-(b)). This contradicts Schenker's *Ursatz* paradigm, which allows diatonic, stepwise descent exclusively.⁵¹

Although these anomalies are not found in Beethoven's earlier works, one must be

⁵¹ Schenker has noticed the problem in the *Free Composition*. He states: "When, in *major*, $\hat{5}$ is the primary tone, a progression to $\hat{3} / \text{III}^{\#3}$ creates difficulties; such a progression also requires a raising of the primary tone, and it must be approached logically through auxiliary harmonies, as in Beethoven's op. 53, first movement, measures 35-42..." See Heinrich Schenker, *Free Composition*, 135.

prepared to modify the Schenkerian paradigm to accept those anomalies where necessary in analyzing Beethoven's middle and later works and even other nineteenth-century works whose tonal schemes deviate from the eighteenth-century assumed norm.⁵²

Example 1-7. Kamien's middleground graph of op. 53, first movement

(a) Transition to the second theme (mm. 14-37)

(b) Middleground graph of the exposition and the development

Reproduced from BEETHOVEN FORUM, volume 1, edited by Lewis Lockwood and James Webster, by permission of the University of Nebraska Press. Copyright © 1992 by the University of Nebraska Press.

⁵² Charles Smith, "Musical Form and Fundamental Structure: An Investigation of Schenker's *Formenlehre*," *Music Analysis* 15, nos. 2-3 (1996): 259-264. By suggesting that one should be more open to or ready to modify Schenker's dogmatic principles, Smith presents various radical *Ursatz* models. He says: "[T]he range of fundamental structures Schenker allowed in his theory must be broadened, if we are to do justice to a full repertoire of formal stereotypes" (259).

Beethoven completely changes the prolongational status of the development: by substituting what Rosen calls “the tonic-to-dominant polarity” for the mediant,⁵³ the development no longer prolongs the structural dominant, which is supposed to arrive at the second-theme area. Instead, the development section becomes part of the first segment of the interrupted *Ursatz*, in which the long-range tonal motion from the tonic to the ultimate goal (the dominant)—which will be located at the end of the development—will be followed by an interruption, as in the minor-mode sonata form. As Cadwallader and Gagné have already pointed out, the fundamental structure of this problematic sonata-form movement, in fact, looks very similar to a sonata-form piece in the minor mode.⁵⁴ In the minor mode, the mediant key instead of the dominant usually serves as a secondary key and finishes the exposition, and the dominant arrives as late as the end of the development.

Michael Spitzer tackles the role of the “substitute dominant” in the *Waldstein* Sonata.⁵⁵ Espousing Charles Rosen’s view that “Beethoven’s use of dominant substitutes raises the tension to a higher level of dissonance than would be achieved by the dominant itself,”⁵⁶ Spitzer focuses on structural change in the recapitulation. Pinpointing Beethoven’s dilemma, in which he has to restate the second theme “in the complimentary substitute dominant” for tonal balance—in which a mediant

⁵³ Charles Rosen, *The Classical Style: Haydn, Mozart, Beethoven* (New York: W. W. Norton & Company Inc., 1998), expanded ed, 383.

⁵⁴ Allen Cadwallader and David Gagné, *Analysis of Tonal Music: A Schenkerian Approach* (New York: Oxford University, 1998), 376.

⁵⁵ Michael Spitzer, “The Significance of Recapitulation in the ‘Waldstein’ Sonata,” *Beethoven Forum* 5 (1996): 103-117.

⁵⁶ *Ibid.*, 107.

relationship between C and E is counterbalanced by that between C and A— but must not sacrifice “the tonic’s integrity,” the basic premise of the recapitulation, Spitzer then clarifies Beethoven’s bold statement of the second theme.⁵⁷ Unlike the more or less conservative treatment in the recapitulation of op. 31, no. 1, first movement, where Beethoven arrives at the ultimate goal (tonic) through a gradually modulating procedure originating from the theme’s sequential nature, in the *Waldstein*, he exploits a simple means—modal mixture—to modulate from A-major to C-major.⁵⁸

The unusual tonal plan of the recapitulation characterized by the modulation to the submediant and the instant return to the home key through the modal mixture seems to affect the middleground structure of the section seriously. However, Roger Kamien demonstrates that the deep-level structure of the recapitulation remains identical to that of the exposition, despite the audacious tonal and thematic experiment in the foreground.⁵⁹ He shows that the I-V harmonic progression in mm. 12-13 is expanded into the I-III-V progression in the recapitulation (the brackets in his Example 11-(a) and (b) show this) and that the modal mixture between C-major and C-minor, which has marked the primary theme of the exposition and generated

⁵⁷ *Ibid.*, 114.

⁵⁸ *Ibid.*, 114-115. In addition to the distinctive ways of handling the second themes between op. 31, no. 1 and the *Waldstein* Sonata, Spitzer contests the meanings of the mediant in the expositions: “Opus 31, no. 1, is a perverse sonata, because its mediant modulation consciously subverts a drive to the dominant. Opus 53 is a normal sonata, because the mediant is heard as a ‘superdominant’ rather than as a faulty dominant” (Spitzer, 114).

⁵⁹ Roger Kamien, “Aspects of the Recapitulation in Beethoven Piano Sonatas,” *Music Forum* 4 (1976): 195-235.

many remarkable events in the development, contributes to the transformation of the recapitulation.

Example 1-8. Comparison of the exposition and recapitulation⁶⁰

(a) Exposition (mm. 1-13)

(b) Recapitulation (mm 156-174)

Reproduced from BEETHOVEN FORUM, volume 1, edited by Lewis Lockwood and James Webster, by permission of the University of Nebraska Press. Copyright © 1992 by the University of Nebraska Press.

Kamien points out that the third-line, which generates the second theme, is prepared and subsequently confirmed in several places: B5-A5-G[#]5 in mm. 23-35, E6-D6-C[#]6 in mm. 184-196, and finally E6-D6-C6 in mm. 204-211. Explaining that

⁶⁰ Ibid., 207. These are Kamien's Example 11-a and b.

the transition sections in both the exposition and the recapitulation are very similar except for the significant treatment of an augmented-sixth chord and its dominant resolution, he clarifies how Beethoven's distinctive ways of reaching the augmented-sixth chords—a passing approach (A-A[#]-B in mm. 20-23) and an arpeggiated approach (A-C-D[#]-E in mm. 180-184)—achieve tonal motions toward different goals, E-major in the exposition and A-major in the recapitulation.

In order to find Kamien's reading of the overall tonal and voice-leading scheme for this sonata-form movement, we must juxtapose partial graphs from two of Kamien's articles.⁶¹ Despite his profound and insightful analytic points on motive, Kamien seems less interested in showing where the structural descent of the *Ursatz* will be located. None of his recapitulation graphs shows the exact location of the *Ursatz* members of the second part, $\hat{4} - \hat{3} - \hat{2} - \hat{1}$. Although he puts the structural importance on the straightforward fifth-line descent at the end of the coda (mm. 295-300), he does not specify whether this descent is the background event (see Example 1-9).

⁶¹ For the production of the overall graph, I put together Kamien's Examples 13-18 in his article, "Subtle Enharmonic Connections, Modal Mixture, and Tonal Plan in the First Movement of Beethoven's Piano Sonata in C Major, Opus 53 ("Waldstein")," *Beethoven Forum* 1 (1992): 93-110, and Examples 11-12 in "Aspects of the Recapitulation in Beethoven Piano Sonatas," *Music Forum* 4 (1976): 195-235.

Example 1-9. Kamien's graph of the coda⁶²

Reproduced from BEETHOVEN FORUM, volume 1, edited by Lewis Lockwood and James Webster, by permission of the University of Nebraska Press. Copyright © 1992 by the University of Nebraska Press.

Not only the absence of $\overset{\wedge}{4}$ in the recapitulation, but also the structural importance of the coda section seems to justify the analyst's choice to find the structural descent in this concluding section (see Example 1-10). Kamien notes the weighted function of the final section: "In the gigantic coda, the major mode triumphs over minor, first-theme motives develop in new ways, and a cadenza-like passage leads to a magnificent concluding section in which the second and opening themes are juxtaposed."⁶³

⁶² Roger Kamien, "Subtle Enharmonic Connections, Modal Mixture, and Tonal Plan in the First Movement of Beethoven's Piano Sonata in C Major, Opus 53 ("Waldstein")," 110 (his Example 19).

⁶³ Ibid., 108.

Example 1-10. Overall middleground graph of the first movement of op.53

The musical score is annotated with a middleground graph showing chord progressions and melodic lines. Key annotations include:

- Exp (1-136):** Measures 1-13, 14, 23, 35, 42, 73, 74, 112, 136. Chords: $\overset{\wedge}{5} \overset{\wedge}{4}$, $\hat{b}3 \overset{\wedge}{2}$, $\overset{\wedge}{4} \overset{\wedge}{3} \overset{\wedge}{2} \overset{\wedge}{1}$, $\overset{\wedge}{4} \overset{\wedge}{3} \overset{\wedge}{2} \overset{\wedge}{1}$, $\overset{\wedge}{4} \overset{\wedge}{3} \overset{\wedge}{2} \overset{\wedge}{1}$. Melody: 5-6, 8, 7, 10. Labels: C: I, V7 i V, III D, V I, IV(PT), V.
- Dev (90-112):** Labeled "Incomplete Neighbor to 2".
- Recap (156-300):** Measures 173, 174, 184, 203, 235, 249, 259, 282, 284, 290, 295, 300. Chords: $\overset{\wedge}{5} \overset{\wedge}{4}$, $\hat{b}3 \overset{\wedge}{2}$, $\overset{\wedge}{4} \overset{\wedge}{3} \overset{\wedge}{2} \overset{\wedge}{1}$, $\overset{\wedge}{4} \overset{\wedge}{3} \overset{\wedge}{2} \overset{\wedge}{1}$, $\overset{\wedge}{4} \overset{\wedge}{3} \overset{\wedge}{2} \overset{\wedge}{1}$, $\overset{\wedge}{4} \overset{\wedge}{3} \overset{\wedge}{2} \overset{\wedge}{1}$, $\overset{\wedge}{4} \overset{\wedge}{3} \overset{\wedge}{2} \overset{\wedge}{1}$, $\overset{\wedge}{4} \overset{\wedge}{3} \overset{\wedge}{2} \overset{\wedge}{1}$. Melody: 5-6, 5-#6, 8, 7, 10[#+], reg, 6, 7, 6, 7, 4, 3, 6, 7, 4, 3, 4, 5. Labels: V7 i V, V, V7/IV, bII, V-7 I, V7 I V, I.
- Coda (249-295):** Labeled "3-line".

*This part is my interpretation.

Joseph Kerman has also noticed the structural importance of the huge coda section of the *Waldstein* Sonata and stated: “In the ‘Waldstein’ Sonata Op. 53 the real (modulating) sequence at the opening is normalised in the first part of the coda as a tonal sequence; then the coda ends with a compressed version of the theme, dashing upwards and clarifying the original registral discontinuity between its two components.”⁶⁴

The most obvious presence of $\hat{4}_4$ is undoubtedly at mm. 282-283, the climactic point of the cadenza-like passage of the coda (mm. 259-283) (see Example 1-10, marked with *b*). The *sf* dynamics as well as three register transfers rhetorically assert the significance of the pitch-class F. Beethoven’s solution to the problem, the absence of $\hat{4}_4$ in the recapitulation, is striking. He first integrates the coda into a strategic part of the *Ursatz*, not only by expanding the size, but also by including all the necessary harmonic ingredients to support the higher-level descent. The most obvious place for $\hat{4}_4$ over the stretched-out dominant is secured through insertion of the newly composed cadenza passage (mm. 259-283). The advent of $\hat{3}_3$ coincides with the initial point of the second-theme statement (m. 284), and the third-line closes the *Ursatz* and thus cancels all the structural tensions. This third-line descent, which generates the second theme in the exposition and finishes the exposition, is now transposed into the home key and closes off the entire *Ursatz* over the second-theme material of the coda: compare mm. 35-74 (marked with *a*) with mm. 284-295

⁶⁴ See Joseph Kerman, “Notes on Beethoven’s Codas,” *Beethoven Studies* 3, edited by Alan Tyson (New York: Cambridge University Press, 1982): 150.

(marked with *c*). Beethoven thus achieves formal and structural coherence in the *Ursatz* design.

This ideal combination of the primary-and second-theme material in the coda is a remarkable characteristic. Beethoven launches the coda in the flattened supertonic key and reaches the dominant via an augmented-sixth chord after presenting the rhythmically foreshortened primary-theme material over the parallel sixth sequence (Example 1-10). The cadenza contributes to the expansion of the coda, finally bringing it to culmination on the long dominant.

As many scholars have agreed, Beethoven challenges the conventional function of each formal section. In the *Waldstein* Sonata, the coda is a fourth formal section, in which a dialectical synthesis of thematic material is achieved, while the development could be legitimately described as an integral section that carries the tonal motion from mediant to dominant, rather than a subsidiary one that prolongs the dominant already reached. In the first movement of his *Appassionata* Sonata, op. 57, Beethoven's innovation in traditional formal functions is seen in a lower-level formal unit. This work begins with an introduction-like primary theme, rather than with what William Caplin calls a "tight-knit theme."⁶⁵ The large-level neighbor-note motion (C-D^b-C), which compensates for the absence of a descending line that exists usually in primary themes of the eighteen-century sonata-form movements, serves as

⁶⁵ Kerman says: "Another exceptional feature of the 'Appassionata' is the introductory quality of the first theme ..." (Kerman, *Notes on Beethoven's Codas*, 157).

a generator of the entire movement as well as of the primary theme.⁶⁶ Schenker noted the neighboring motive in the primary theme and the role of the “5-6 exchange,” adopted to avoid the parallel fifths, which might occur when the upper-voice $\hat{5} - \hat{6}$ is counterpointed by the F-G^b bass motion (see Example 1-11).⁶⁷

Example 1-11. Schenker’s graph of the primary theme of op. 57, first movement

Beethoven, Sonata op. 57, 1st mvt.

f minor: I — 5 — 6 (=^bII) — V

© With kind permission by Universal Edition A.G., Wien

Kamien expands the motivic role in the movement in question to the domain of form and structure:

The relation between motivic detail and tonal structure is particularly close in Beethoven’s music. For example, in the opening movement of the Piano Sonata in F Minor, op. 57, the neighboring-tone motive C-D^b-C ($\hat{5} - \hat{6} - \hat{5}$) appears on many different structural levels and influences that tonal plan of the development section, as Heinrich Schenker demonstrated.⁶⁸

⁶⁶ Heinrich Schenker, *Free Composition*, 135. Schenker himself points out the absence of the line, which prolongs the *Kopftön* in the primary theme: “This example [the first movement of the *Appassionata*] follows the same procedures as does Ex. 3 [the first movement of Beethoven’s op. 10, no. 1], except that in the preceding example auxiliary harmonies appear and the primary tone is prolonged by a fifth-progression (mm. 1-30), whereas here it is prolonged by neighboring notes.” However, a close examination of the primary theme reveals that there is a fourth-line descent, which directs toward an inner-voice G. The presence of a first-order progression in the primary theme will serve as a central principle of the “ideal” *Ursatz* design of the sonata form that I will concentrate on below.

⁶⁷ Heinrich Schenker, *Free Composition*, 59.

⁶⁸ Roger Kamien, “Subtle Enharmonic Connections, Modal Mixture, and Tonal Plan in the First Movement of Beethoven’s Piano Sonata in C Major, Opus 53 (“Waldstein”),” 94.

Laufer also agrees with Kamien and Schenker by pointing out the structural role of the neighbor-note and other motives in the development:⁶⁹

Here too the beginning of the recapitulation is bridged over and is enclosed within the V at the end of the development (Example 27-1 [Example 1-12-①]) for cogent compositional reasons. These reasons have to do with the pervasive neighbor-note figure and arpeggio motive (Example 27-2 [Example 1-12-②]); and also with the juxtaposition of minor and major modes in the exposition and the problem of recomposing this feature in the recapitulation. (Note the tonal return of the recapitulation in m. 152 on I-natural!). Examples 27-3 to 27-6 [Examples 1-12-③ to ⑥] sketch out, step by step, the voice-leading which composes out the D^b chord (mm. 109-123).⁷⁰

Example 1-12. The development of op. 57, first movement (after Laufer)

⁶⁹ Heinrich Schenker, “Beethoven: Sonate Op. 57,” *Der Tonwille* 7 (1924): 3-13. Schenker discusses the role of the neighbor motive embedded in manifold different structural levels. During the course of comparing Schenker’s analytic methodology with Schoenbergian approach by Patricia Carpenter, Barbara Hampson provides an English translation of Schenker’s comment on the *Appassionata* Sonata in *Tonwille*. See Barbara Hampson, “Schenker and Schoenberg: A Critical Comparison of Two Analytical Methods, with Reference to the First Movement of Beethoven’s *Appassionata* Sonata” (Master’s thesis, McMaster University, 1993).

⁷⁰ Edward Laufer, “Voice-Leading Procedures in Development Sections,” 109 (his Example 27).

As Laufer's detailed voice-leading graph demonstrates (Example 1-12-①), the neighbor-note figure—which approaches the neighbor D^b at m. 109 by leap and resolves down to the dominant (C) at m. 132—projects the development section. Beethoven's treatment to avoid parallel fifths in this strategic motion (between VI and V) is remarkable. He anticipates the upper three voices over the incomplete neighbor D^b and thus prevents the parallels (Example 1-12-③ and ④). To put it another way, he first moves the upper voice toward the dominant seventh chord but delays the bass, thereby creating a diminished seventh chord, which perfectly matches the dark and pessimistic mood of the movement. This late shift of the bass formulates the incomplete neighbor-note figure, which recalls the foreground D^b -C motive at mm. 12-13. The characteristic sonority change above the D^b -C motive—from vii_2^{o4} (D^b -E-G- B^b) to V^7 (C-E-G- B^b)—coincides precisely with the large-level one made at the end of the development, as Laufer's graph (Example 1-12-④) shows. The neighbor-note motion is confirmed once again in the same part: the dominant carried over to the recapitulation moves to D^b , which creates a ${}^bII_4^6$ chord, unlike the exposition, where bII in the root position supports the upper-voice D^b . The use of a second-inversion chord is quite startling, as it produces octave doubling that emphasizes the neighbor-note motion more effectively than in the exposition (see the outer-voice counterpoint of mm. 132-143 in Example 1-12-①).

The recapitulation begins over the dominant prolongation. This contrapuntal displacement between the *Kopfton* and the late return of its harmonic support, the tonic *Stufe*, blurs the demarcation among the formal sections, promoting a sense of

goal-directedness that shifts the architectonic stresses to the ending by means of intentional temporal displacement and avoidance of cadence. However, Schenker seems to have a different idea. He devalues the recovery of the *Kopfton* with the late return of the tonic *Stufe* in the recapitulation as a lower level (see Example 1-13). Unlike most of his analytic graphs in *Free Composition*, where he indicates the return of the *Kopfton* and its subsequent descent to $\hat{1}_1$ in the recapitulation with open-head whole notes and beams, Schenker here notates the event of the recapitulation with black notes without beams, giving the impression that he devalues the hierarchical status of the recapitulation.

Example 1-13. Schenker's overall graph of op. 57, first movement

The image shows a musical score for Beethoven's Sonata op. 57, 1st movement. The score is in G major and 3/4 time. It features a treble and bass clef. The notation includes various musical symbols such as notes, rests, and beams. Overlaid on the score is Schenker's overall graph, which consists of a series of notes and beams connected by dashed lines. The graph is drawn with black notes and beams, indicating a devaluation of the recapitulation's hierarchical status. The graph is labeled with 'Exp.', 'Dev.', and 'Recap.' sections. The graph shows a sequence of notes and chords across the score, with labels for 'Exp.', 'Dev.', and 'Recap.' sections. The graph is drawn with black notes and beams, indicating a devaluation of the recapitulation's hierarchical status.

© With kind permission by Universal Edition A.G., Wien

Such a notational inconsistency could be modified as in Example 1-14, to demonstrate Beethoven's plan and handling of sonata form. The slanted diagonal in the graph indicates the temporal displacement between the upper voice and its counterpoint, which closely relates the development and the recapitulation harmonically. Notice the presence of a fourth-line, which acts under the neighboring motion, which in turn leads to the primary theme. This linear progression, although

as a motion to an inner voice, satisfies a structural condition for the primary theme to be heard as a theme. Modal mixture, which is embedded in the *Ursatz* as an underlying motive in the exposition—the flattened C (C^b at m. 51) is the first result of the modal mixture in the mediant key—reappears as a complementary relation in the recapitulation, where the major tonic of the second theme overcomes the pessimistic mood of the primary theme.

Example 1-14. Schenker and Laufer's reading of the recapitulation (my elaboration added)

Recap

Laufer's reading Elaboration over Schenker's reading

Schenker sees the coda as beginning from m. 204; he assigns the subsequent passage a separate name, “stretta” (Example 1-15).⁷¹ Whether or not one sees mm. 204-239 as a coda (like Schenker), the analyst would agree that this passage is so structurally significant that it deserves to contain members of the *Urlinie* ($\hat{2} - \hat{1}$) as in

⁷¹ Schenker, “Beethoven: Sonate Opus. 57,” *Der Tonwille* 7 (1924): 3-33.

the *Waldstein* Sonata. The long expansion of the Neapolitan chord,⁷² which supports $\hat{4}$ (neighbor-note) in the cadenza section, and the rearticulation of $\hat{3}$ over the cadential $\hat{6}$ support the claim that the structural $\hat{3}$ remains in force until m. 232. This tendency for Beethoven to incorporate the concluding sections into the *Ursatz* could be one of the most important characteristics of his middle-period works.

Example 1-15. Alternative reading of the recapitulation integrating the new part into the *Ursatz* (mm. 190-239)

(Recap) continued Coda Cadenza Stretta

190 200 218 231 233 239

$\hat{3}$ $\hat{2}$ $\hat{1}$

$\hat{6}$
3

$\hat{4}$
3

(N6 V_3/iv iv_6)

Fm: i ii6 V $\begin{matrix} 6-5 \\ 4-43 \end{matrix}$ i

⁷² Deirdre O'Donohue in her dissertation evaluates the role of the Neapolitan chord: "An inevitable consequence of the use of the Neapolitan is the stress on the D^b ; not only is it important as the fifth on the G^b triad (bar 7, I), but it is the minor sixth in the f minor tonality of the composition which falls repeatedly and violently to the 'c' in the Propulsive Motive. The key of D^b major then provides stability in the middle movement. A tight and forceful harmonic structure audibly permeate Op. 57, and this unique interaction of the tonic and Neapolitan chord strongly contributes to the unity of this work ..." (Deirdre O'Donohue, "The Concept of Unity and Uniqueness in the Multi-Movement Works of Beethoven: An Analysis of the Selected Piano Sonatas-Opus 31, No. 3 and Opus 57" (Ph.D. diss., New York University, 1987), 153-154).

We have seen that Beethoven challenged the assumed norm of sonata form in his middle-period works. He conceals the clear advent of the structural descent and blurs the formal zones by deliberate conflict between voice-leading structure and traditional formal sections. He created very distinctive, coherent musical foregrounds through a limited set of compositional techniques and significantly diversified the music through unusual transformational processes. In order to observe how Beethoven deviated from an assumed norm to create his peculiarly artful music, we should examine that assumed norm in terms of sonata-form theory.

1.5 : Heinrich Schenker's Sonata Form Theory and Post-Schenkerian Revisions

As many scholars have noted, the final chapter of Schenker's *Free Composition* is his single systematic discussion of musical form. Schenker defines form as "the ultimate manifestation of that structural coherence which grows out of the background, middleground, and foreground."⁷³ He rejected many traditional concepts and terminologies of musical form and proposed a new theory of form based exclusively upon his own ways of interpreting the *Ursatz*. For him, musical form is the unique manifestation of the higher-level voice-leading path, which conforms to the most typical contrapuntal harmonic structure and thus leads to certain conditions and qualifications that require his specific nomenclature.

⁷³ Heinrich Schenker, *Free Composition*, 130.

In *Meisterwerk*, Schenker elucidates his basic idea of sonata form in terms of organicism.⁷⁴ By pointedly criticizing A. B. Marx's evolutionary form theory pervasive at that time,⁷⁵ Schenker addresses sonata form's origination from a composing-out (*Auskomponierung*) process of the primary harmony (tonic), more specifically, the *Urlinie* and *Bassbrechung*.⁷⁶ He states that the foreground elements of music, such as melodies, themes, and motives, which account for musical form in traditional form theory, do not organize sonata form. Instead, he asserts that growth and unity of his *Urmotif* produce the organic structure of sonata form.⁷⁷

Schenker's new theory based on the *Ursatz* and its organic expansion explains sonata form essentially as a bipartite structure, in which the interruption in the middle and its prolongation serve as the crucial factor to differentiate it from song form.⁷⁸ However, he was not totally indifferent to traditional factors such as conventional sectionalization, phrase construction, cadential orientation, etc., in considering formal

⁷⁴ Heinrich Schenker, *Das Meisterwerk in der Musik* (Jahrbuch II) (Munich: Drei Masken Verlag, 1926), 45-54. The English translation of the essay on sonata form by Orin Grossman appears in *Readings in Schenker Analysis and Other Approaches*, ed. by Maury Yeston, (New Haven: Yale University Press, 1977), 38-53.

⁷⁵ Schenker criticizes A. B. Marx's thematically-oriented view of form, in which *Satz*, *Gang*, and period evolve toward a larger-level formal unit. For a detailed discussion of A.B. Marx's sonata-form theory, see Scott Burnham, "The Role of Sonata Form in A.B. Marx's Theory of Form," *Journal of Music Theory* 33, no. 2 (1989): 247-272.

⁷⁶ Heinrich Schenker, "Organic Structure in Sonata Form," in *Readings in Schenker Analysis and Other Approaches*, ed. by Maury Yeston, trans. by Orin Grossman, (New Haven: Yale University Press, 1977), 39.

⁷⁷ *Ibid.*, 182. Schenker explains musical form from a purely organicist standpoint. William Pastille summarizes the transformation process by which the early Schenker, who was an anti-organicist, becomes gradually an organicist. See William A. Pastille, "Heinrich Schenker, Anti-Organicist," *Nineteenth-Century Music* 8, no. 1 (Summer 1984): 29-36.

⁷⁸ Heinrich Schenker, *Free Composition*, 134.

aspects of a musical composition. He uses the traditional tripartite division of sonata form, although he replaces the customary terminologies—exposition, development, and recapitulation—with main section, middle section, and repetition. In other words, Schenker understands sonata form as “a ternary form working delicately on the binary structure.”⁷⁹ David Beach pinpoints a subtle difference between the traditional three-part division of sonata form and Schenker’s three-fold division:

The traditional view (setting aside the early descriptions from the late eighteenth and early nineteenth centuries) is that the macro-form is ternary, consisting of the familiar divisions into exposition, development, and recapitulation, with various subdivisions into primary and secondary themes, and so forth. Schenker also understood the form as ternary, but for very different reasons. In his view, the first section of a sonata movement in the major mode is defined by a motion to $\hat{2}/V$, the second is a working-out of the dominant, often involving the introduction of the seventh (for instance V^{5-7}), and the third, the restatement, completes the motion to closure. As noted before, the origin of this “form” lies in a two-part division of the structure, the first part of which has been extended by an elaborate working-out of the dominant. The extension is indeed a formal unit, but hardly equivalent to the other two, and thus it seems more logical—and, in fact, more consistent with Schenker’s view of structure—to consider sonata form as fundamentally binary in nature and perhaps ternary only at some lower level. One might say it is binary in structure, but ternary in design.⁸⁰

Peter Smith tackles the concept of interruption and the hierarchical inconsistency existing in Schenker’s theory of sonata form.⁸¹ Stressing the necessity

⁷⁹ This conception is close to Leonard Ratner’s sonata-form description as “two-and three-part plans of sonata form.” Ratner summarizes two distinctive viewpoints to describe the sonata form—the nineteenth-century view espousing the thematic contents as the primary factor and thus describing it as tripartite and the classic theorists explaining it as bipartite by the long-range harmonic scheme—and reports that the scholastic dispute on the “two-part versus three-part division continued through the nineteenth-century. See Leonard Ratner, *Classic Music: Expression, Form, and Style* (New York: Schirmer Books, 1980), 220-221.

⁸⁰ David Beach, “Schubert’s Experiments with Sonata Form: Formal-Tonal Design Versus Underlying Structure,” *Music Theory Spectrum* 15 (1993): 4.

⁸¹ Peter Smith, “Brahms and Schenker: A Mutual Response to Sonata Form,” *Music Theory Spectrum* 16, no. 1 (1994): 77-103. See 79-86 in particular.

of a determination of the more hierarchically important dominant out of two dominants in the first-level middleground structure of sonata form, he proposes two sonata-form models: type-1 derivation, what Smith calls the goal-directed model, in which the latter portion of a sonata form after the interruption generally has structural importance because the $\hat{2}$ in the recapitulation is usually chosen as a part of the *Urlinie*; and type-2 derivation, in which $\hat{2}$ in the exposition is more significantly interpreted than the second $\hat{2}$ appearing in the recapitulation (see Example 1-17). Smith points out that sketches supporting both of his models are found in *Free Composition*.⁸²

Example 1-17. Peter Smith's sonata-form models

(a) Type-1 derivation



(b) Type-2 derivation



Smith's type-1 can show effectively the thematic and tonal parallelism between the exposition and recapitulation, whereas Type-2 does not show this parallelism well because the $\hat{3}$ to $\hat{2}$ motion of the recapitulation becomes a lower level

⁸² Schenker himself sees the first movement of Beethoven's Sixth Symphony, and the first movement of the piano sonata, Op.14/2, as what Smith calls type-1 derivation (these Beethoven's works are sketched in Schenker's *Free Composition* 154-5a) and 154-6 respectively), in which the more structural $\hat{2}$ comes after the interruption and thus both the exposition and the development are interpreted as prolonging the initial $\hat{3}$ supported by the initial tonic. He then views Beethoven's piano sonatas, Op.27/2, third movement, Op.26, third movement, Op.22, third movement, and Mozart's piano sonata, K.545, first movement as type-2 derivations (See *Free Composition*: 40-4, 40-6, 82-2, and 47 respectively).

event than that of the exposition. Smith says, “Schenker’s interruption paradigm encounters problems when scrutinized from the perspective of the axiomatic and hierarchical basis of his theory,” but does not give a solution to the problem.⁸³ According to Smith, Type-1 has the problem because only $\hat{2}$ of the recapitulation would be elevated into a higher-level, even though the $\hat{3}$ and $\hat{2}$ are hierarchically in the same level, while, in the type-2 derivation, the $\hat{3}$ and $\hat{2}$ of the recapitulation are clearly at the same level.

Charles Smith agrees that Schenker was not clear about the interruption and structural hierarchy.⁸⁴ More specifically, he criticizes Schenker because he was not consistent with the location of the interruption or even with its presence in the sonata-form graphs. However, unlike Peter Smith, he implies that the adoption of Schenker’s first-level middleground (his type 3, in which the first part of the *Ursatz* has a $\hat{3} - \hat{2}$ motion, and the second part brings about the return of $\hat{3}$ and completes its descent to the goal $\hat{1}$) as the ultimate, final model can free us from the theoretical inconsistencies related to the interruption and hierarchy.⁸⁵ He seems satisfied with the first-level middleground, implying that the analyst does not need to worry too much about the hierarchical inconsistency that occurs, as Peter Smith has pointed out, if one moves from the first-level middleground to the background.

⁸³ Ibid., 80.

⁸⁴ Charles Smith, “Musical Form and Fundamental Structure: An Investigation of Schenker’s *Formenlehre*,” *Music Analysis* 15, nos. 2-3 (1996): 231-237.

⁸⁵ Ibid., 269.

Charles Smith asserts the necessity of adjustment and modification of Schenker's graphs in *Free Composition* to reflect formal aspects. He points out that Schenker himself depends upon traditional criteria of form in deciding form, although Schenker pretends not to:

I have concluded, after considering several such reformations, that there is no *structural* distinction between sonata form and three-part/division form. How then did Schenker distinguish between them, as he clearly did in §310 and §312? If structural criteria were all he allowed himself, what grounds did he have for thinking them separate forms? It appears yet again that Schenker must have worked with a prior notion of form - in this case, of which pieces are in 'sonata form' and which are not. In other words, he already *knew* which was which, by means of some kind of descriptive theory based on non-structural criteria. There is nothing wrong with that procedure: it is the normal strategy for working with form. Nevertheless, it belies the novelty of the 'Formenlehre' and its rejection of traditional theory; the purported structural criteria seem to have been devised after the fact, in an attempt to support (and perhaps even to conceal) traditional formal classifications.⁸⁶

Smith asserts that one cannot negate attempts latent in Schenker's account of form to reconcile traditional theory and his theory, and thus that it is reasonable that analysts consider formal aspects delineated by conventional theory and reflect the analytic results into the graph. By pointing out the formal drawbacks found in Schenker's theory, he more concretely stresses the necessity of a reconciliation with a descriptive theory:

The second reason for the formal inconsistencies of Schenker's theory is the conflict between explicit structural criteria and implicit formal instincts, which we can often infer from his classifications. Sometimes he seems to have used unacknowledged descriptive criteria to identify forms, and then sought to support and justify them structurally – as demonstrated above in the discussions of three-part/ neighbour, three-part/division and sonata form. We see the effect of these descriptive criteria when we try to apply his structural criteria consistently; the only way to arrive at many of

⁸⁶ Ibid., 233.

Schenker's formal classifications is to have already determined the forms before applying the structural criteria.⁸⁷

Smith classifies Schenker's *Ursatz* models according to his new paradigm: the concept of "open/closed form" and of "reprise." He points out a dichotomy between what he calls a conformational approach (a traditional, thematically oriented view), in which one distinguishes form from its content or structure, and a particularist approach such as Schenkerian theory, which identifies form as the unique shape of a specific work. Smith then insists that two assumptions should be accepted for a solution to the conflict: first, that traditional forms are trustworthy guides to large-scale shape; second, where a Schenkerian background contradicts a trustworthy traditional form, we should be as ready to reconsider the background as we are to reject the form. He suggests the analyst's adopting aspects of traditional form, such as cadential orientation and thematic design, as an accessible and dependable guide in constructing the Schenkerian *Ursatz*.

James Hepokoski and Warren Darcy stress the role of the cadence in sonata-form theory.⁸⁸ They develop Koch's idea of varying degrees of rhetorical articulation, especially hierarchically ordered cadences, pauses, and breaks, but they also often try to reconcile their position with the Schenkerian perspective. They point out that a structural caesura/punctuation served as a significant criterion in Ratner's, Rosen's, and even Schenker's sonata-form description. They imply that the structural descent

⁸⁷ Ibid., 239.

⁸⁸ James Hepokoski and Warren Darcy, "The Medial Caesura and Its Role in the Eighteenth-Century Sonata Exposition," *Music Theory Spectrum* 19, no. 2 (1997): 115-154.

in the Schenkerian *Ursatz* is decided by structural cadences, accentuating the implicit connection between traditional formal theory and Schenkerian theory of form.

David Neumeyer and Susan Tepping also seek to reconcile Schenkerian models and traditional formal design:

Schenker does not actually discard traditional formal design types. Instead, he radically reinterprets traditional form theory, grouping designs according to the character and disposition of the fundamental line. Thus, he constructs ideal form categories analogous to the ideal tonal structures of the fundamental structure; traditional form design types are simply surface manifestations of these ideal forms. Much of the interpretation of “inner form” is based on the presence or absence of two of the most common features of the first middleground: interruption and mixture. Forms are classified according to the divisions generated by these middleground phenomena.⁸⁹

Neumeyer and Tepping provide *Ursatz* models for the ideal sonata form as a result of reconciling Schenker’s form theory and traditional categories of form. However, they present only two distinctive *Ursatz* models in the major mode by a single criterion, whether the *Kopftón* is $\hat{3}$ or $\hat{5}$, and provide an exemplar analysis of the first movement of Beethoven, Piano Sonata, op. 14, no. 2. In fact, one could think of more possible *Ursatz* models for sonata form according to manifold criteria by which individual formal sections in the *Ursatz* can be diversified.⁹⁰

Unlike Neumeyer and Tepping, who present paradigmatic models based on reconciliation between traditional and Schenkerian form theories, Allen Forte and Steven Gilbert do not propose any concrete *Ursatz* models or admit a systematic

⁸⁹ David Neumeyer and Susan Tepping, *A Guide to Schenkerian Analysis* (Englewood Cliffs, N.J.: Prentice Hall, 1992), 102.

⁹⁰ The plausible models will be introduced and adopted below as the central theses for the analyses of Beethoven’s handling of sonata form in his early piano sonatas.

connection between the traditional sonata-form description and a Schenkerian paradigm.⁹¹ Pointing out the debate on sonata form, bipartite versus tripartite, they show how the three-part division (exposition, development, and recapitulation) works in the two-part tonal structure and then how Schenkerian theory reflects this tonal structure, but they do not go beyond this. Nor do they suggest the structural criteria on which the analyst should depend in order to find the *Ursatz* model for a sonata-form movement.

Allen Cadwallader and David Gagné in their textbook stand midway between Neumeyer and Tepping and Forte and Gilbert. Avoiding a formulation of standard formal types, they first present exemplary analyses of several sonata-form works and then relate analytic observations to Schenker's sonata-form principles.⁹² Instead of explaining sonata-form structure as an assumed norm, they try to elucidate it from an empirical point of view. Their analyses, however, assume very positively a reconciliation with the traditional form theory. Although Cadwallader and Gagné do not present in advance paradigmatic *Ursatz* models as a norm or take them as the firm basis for an analysis, they elaborate Schenker's form theory in a separate chapter on "tonal structure." They explicate the process by which Schenker's abstract *Ursatz* evolves toward musical form by means of tonal expansion and elaboration: they

⁹¹ Allen Forte and Steven Gilbert, *Introduction to Schenkerian Analysis* (New York: W.W. Norton & Company, Inc., 1982).

⁹² Allen Cadwallader and David Gagné, *Analysis of Tonal Music: A Schenkerian Approach* (New York: Oxford University, 1998). See Chapter 11 and 12 in particular. They basically stand in the position that, although theory can guide analysis by providing appropriate criteria and guidelines, but theoretical generalizations cannot discover the aesthetic values of individual works (362).

describe the first-order linear progressions as a means to generate musical form: “This general pattern illustrates an essential characteristic of tonal expansion: linear progressions give ‘life’ (content) to the *Ursatz* by expanding its tones and harmonies.”⁹³ They then illustrate two typical linear progressions that prolong members of the *Urfinie*, but do not describe them as preliminary elements required in specific formal sections: “In this case, we find two linear progressions: the first expands $\hat{3}$ and the initial tonic, while the second expands $\hat{2}$ and the dominant of the *Ursatz*.”⁹⁴

Attempts toward reconciliation between traditional and Schenkerian theories of form have also been made in another direction. Janet Schmalfeldt presents the possibility of such a reconciliation but focuses on a lower-level formal unit.⁹⁵ Her central interest resides in proposing a formal theory at a phrase-and-period level through a reconciliation of traditional phraseology based on the Schoenbergian “sentence” paradigm with Schenker’s harmonic contrapuntal structure. She points out that Schenkerian form theory mainly stresses large-scale form and pays less attention to subtle interactions among small formal units:

The Schenkerian analyst also tends, like Schenker, to address primarily the large-scale, or middleground, units of forms (e.g. A-B-A; first theme, second theme; exposition/development/recapitulation). Notions of foreground *process* such as ‘fragmentation’ (see below) and ‘cadential evasion’ are rarely explored; the terms

⁹³ Ibid., 367.

⁹⁴ Ibid.

⁹⁵ Janet Schmalfeldt, “Towards a Reconciliation of Schenkerian Concepts with Traditional and Recent Theories of Form,” *Music Analysis* 10, no. 3 (1991): 233-287.

that describe the functions of ideas and phrases within the thematic process are notably eschewed.⁹⁶

Schmalfeldt paraphrases William Caplin's explanation of what Erwin Ratz calls the "tightly-knit construction" and "loose construction." In her words, "the 'tightly-knit' theme will be non-modulating (that is, harmonically stable within a single tonal region), that its internal grouping structures will be more or less symmetrical and regular in length, that each formal component within the whole will clearly express a specific formal function, and that the theme will close with a cadence."⁹⁷ On the other hand, the concept of "loose construction" could be understood better as a relative continuum. In other words, the second theme is usually more tightly knit than the transition or the development, although all three formal units are more loosely constructed than the primary theme. Pinpointing the fact that a theme is closely related to the concept of cadence in both Schenkerian and Schoenbergian form theory, she reaches a more concrete conclusion: "when the 'complete musical complex' he [Caplin] defines is a harmonically stable, non-modulating theme, then, in Schenkerian terms, a theme frequently projects a complete middleground harmonic-contrapuntal structure."⁹⁸

Schmalfeldt's concluding remark implies that, if a theme—whether it is a primary or second theme—has a 'tightly-knit' construction (as in most of mid-to-late eighteenth-century sonata-form works), then it has a complete middleground line supported by a cadential harmonic progression. This observation coincides quite well

⁹⁶ Ibid., 234.

⁹⁷ Ibid., 238.

⁹⁸ Ibid., 237-238.

with first-order lines in a sonata-form exposition: the one within the primary theme that appears very frequently in Schenker's graphs of sonata-form works (even though he did not require it as a preliminary condition for sonata form) and the other within the second theme that Schenker has directly designated as a significant condition in *Free Composition*.

Neumeyer and Tepping admit the first-order fifth-line prolonging the second-theme area ($\hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1}$) as a significant element of sonata form (by citing Schenker's statement about the second theme,⁹⁹ but they allow a variety of possibilities to prolong the *Kopfton* within the primary theme: "The exposition or main section has two essential prolongations—Ex. 8. 10, these are $\hat{3}$ over I and $\hat{2}$ over V. The entire range of possibilities exists to prolong the former, but the prolongation of $\hat{2}$ over V is a middleground fifth-line in the key region of V (shown with a bracket in the example)."¹⁰⁰

As Edward Laufer has pointed out, most sonata-form theories focus on the exposition. He contributes to the study of development sections in sonata form by reducing voice-leading patterns of classical sonata development sections into a small

⁹⁹ Schenker's original statement about the second theme follows: "The composing-out of $\hat{2}/V$ or $\hat{5}-\hat{3}/I-III$ 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 one or even two closing themes...A fifth-progression in itself suffices for the prolongation of $\hat{2}/V$ without necessarily involving a 'lyrical' or 'contrasting' theme" (Schenker, *Free Composition*, 135).

¹⁰⁰ Neumeyer and Tepping, *A Guide to Schenkerian Analysis* (Englewood Cliffs, N.J.: Prentice Hall, 1992), 108.

number of patterns.¹⁰¹ Emphasizing motivic connection as a decisive parameter for the choice of a governing pattern in the development section, he divides the patterns into two: standard patterns, in which the development section unmistakably prolongs the dominant, and anomalous patterns that deviate from the assumed norm. He stresses that the choice of an underlying voice-leading pattern should be carefully made to interpret a motivic connection to the other sections. In other words, Laufer suggests that the analyst focus on revealing the composer's motivic reworking, by assuming that "organic cohesiveness" guides the entire movement. He also adds that the analyst must not stop at finding the voice-leading pattern, but must proceed to illuminate the composer's poetic idea latent in such a motivic reworking.

Thus far, we have examined Schenker's and post-Schenkerians' ideas on sonata-form theory. Many observations in traditional formal theory serve as significant criteria for a decision of Schenkerian *Ursatz* for sonata form as well. Traditional formal categorization, cadential orientation, and the presence of linear progressions that generate small formal units within the entire sonata-form schema all affect the *Ursatz* significantly. I will proceed to proposing our concrete sonata form models for examination of Beethoven's handling of sonata form as seen in his early piano sonatas under the firm hypothesis that analysts can obtain satisfactory analytic details through reconciliation of the traditional view of sonata form and the Schenkerian conception as revised by post-Schenkerian theorists.

¹⁰¹ Edward Laufer, "Voice-Leading Procedures in Development Sections," *Studies in Music from The University of Western Ontario* 13 (1991): 69-120.

1.6 : First-Level Middleground Models for Sonata Forms

In this section, I will present the “ideal” *Ursatz* models together with manifold possibilities for distributing these models over the formal sections of a sonata-form movement—exposition, development, and recapitulation—and, more specifically, the lower-level segments of the larger sections, such as the primary theme, transition, second theme(s), closing theme, and codetta. The two essential parameters are whether a musical composition is in major or minor mode and what the *Kopftön* is for the sonata-form movement in question. The important historical fact that sonata form arises from the binary form encourages us to look at its *Ursatz* model and adjust it to sonata form. In this regard, Neumeyer and Tepping’s binary and ternary form models serve as a foundation in considering the multiple formal models of sonata form.¹⁰²

The following hypothetical models are divided according to two decisive factors: dichotomies between major and minor modes and between *Kopftöne* $\hat{5}$ and $\hat{3}$. The presence or absence of the first-order progression within the primary theme then determines the next subdivision of each large category. More detailed sub-derivations would be possible by various criteria, by how each formal section is shaped and by how the multiple formal sections are superimposed and distributed over the *Ursätze*. In order to make decisions about the subtle interactions between the foreground form and the *Ursatz*,¹⁰³ I will use the following checklist of questions:

¹⁰² Neumeyer and Tepping’s numerous *Ursatz* models for binary and ternary forms inspired my production of sonata-form models. See Neumeyer and Tepping, *A Guide to Schenkerian Analysis* (Englewood Cliffs, N.J.: Prentice Hall, 1992), 102-107.

¹⁰³ Numerous authors have discussed this topic, “the subtle interaction between the foreground form and the Schenkerian *Ursatz*.” David Beach emphasizes that the analyst

1. If there is no linear progression generating the primary theme, what structural device shapes the primary theme?
2. What voice-leading phenomenon projects the transition?
3. Does the second theme consist of a fifth-line or not? If not, which manipulation makes the second theme consist of some other line than the fifth-line?
4. How many fifth-line descents are there in the second-theme area? In which section is the most structural descent made if there are multiple fifth-line descents in the second-theme area? S_1 , S_2 , K (closing theme), or even C (codetta)?
5. What structural device generates the development section?
6. Does the recapitulation consist of a repetition of the exposition with the second-theme material transposed? Or is there some radical transformation procedure?

should investigate interactions between structure and formal design to illuminate a large-scale articulation of a work and encapsulates the debate about form and structure, by pointing out that many theorists do not reach a consensus. According to Beach, Felix Salzer defines inner form as a surface compositional design and outer form as an underlying voice-leading or contrapuntal-harmonic organization. On the other hand, William Rothstein interprets inner form as “the large-scale harmonic and linear layout” which coincides with Schenker’s fundamental structure and outer form as “the thematic aspect of a piece, as well as its layout into phrases and periods.” See David Beach, “Schubert’s Experiments with Sonata Form: Formal-Tonal Design versus Underlying Structure,” *Music Theory Spectrum* 15 (1993): 1-4; Felix Salzer, *Structural Hearing* (New York: Dover Publications, 1962), 221; and William Rothstein, *Phrase Rhythm in Tonal Music* (New York: Schirmer, 1989), 104. I will here adopt Rothstein’s terminology.

Several preliminary conditions are assumed. The models that I produce are for the mid-to-late eighteenth-century sonata-allegro-form movements, especially for Beethoven's early sonatas. Thus, a sonata form whose large-level tonal scheme deviates from the normal one is excluded from our consideration. These normal models are: 1) tonic-to-dominant (I-V) in major; and 2) tonic-to-mediante (i-III) in minor and tonic-to-dominant minor (i-v) in minor. Although there are some tonal excursions in the transition and the second theme in the exposition and thus the tonal goal looks ambiguous, the ultimate tonal goal of the exposition is the dominant in the major mode and the mediant or dominant in the minor mode.

The possibility of an $\hat{8}$ -line *Ursatz* has been eliminated.¹⁰⁴ As many Schenkerians point out, because of the interruption and thematic parallelism, the $\hat{8}$ -line is not appropriate for sonata-form design. The following figure summarizes the *Ursatz* models that I adopt for the discussion of Beethoven's early sonatas (Figure 1-1). All the models from Figure 1-1 are shown in musical notation in Example 1-18.

¹⁰⁴ Although Schenker's $\hat{8}$ -line sketch for sonata form does exist, most of the post-Schenkerians suggest excluding the possibility from sonata-form *Ursatz*. See David Neumeyer and Susan Tepping, *A Guide to Schenkerian Analysis*, 109; Allen Cadwallader and David Gagné, *Analysis of Tonal Music: A Schenkerian Approach*, 366-367; and Charles Smith, "Musical Form and Fundamental Structure: An Investigation of Schenker's *Formenlehre*," *Music Analysis* 15, nos. 2-3 (1996): 231-237. David Neumeyer has pointed out the problem in providing consonant harmonic support for all the members of the $\hat{8}$ -line descent. David Neumeyer, "The *Ursatz* from $\hat{8}$ as a Middleground Phenomenon," *In Theory Only* 9, nos. 5-6 (1987): 3-25. David Smyth otherwise claims the possibility of the $\hat{8}$ -line reading in sonata form, by enumerating Neumeyer's objections and then contradicting them. See David Smyth, "Schenker's Octave Lines Reconsidered," *Journal of Music Theory* 43, no. 1 (1999): 101-133.

Figure 1-1. Sonata-form models

Mode	Tonal motion	<i>Kopf</i> <i>-ton</i>	Linear progression within the primary theme	Model Label	Comment
Major [Minor]	I-V [i-v]	$\hat{3}$	Presence	I-1 [III-1]	Most ideal sonata form in $\hat{3}$ - line
			Absence	I-2 [III-2]	Rondo-like character
		$\hat{5}$	Presence	I-3 [III-3]	Most ideal sonata form in $\hat{5}$ - line
			Absence	I-4 [III-4]	What I call the “primitive type”
Minor	i-III	$\hat{3}$	Presence	II-1	Theoretical model (rarely used)
			Absence	II-2	Theoretical model (rarely used)
		$\hat{5}$	Presence	II-3	Most ideal sonata form in $\hat{5}$ - line
			Absence	II-4	What I call the “primitive type”

The first and second columns are the fundamental criteria, whether the sonata-form movement is in major or minor mode and whether, in the case of the minor mode, the large-level tonal motion is tonic-to-median (i-III) or tonic-to-dominant minor (i-v). The third column shows the next significant criterion, the choice of the *Kopft*on ($\hat{5}$ or $\hat{3}$), whereas the fourth indicates the presence or absence of a first-order linear progression. The fifth column assigns a model label, which I will refer to when I discuss individual pieces in the subsequent chapters, and the last column gives a brief

comment on each model. Models II-1 and II-2 are theoretical, rarely adopted in Beethoven's sonata-form movements; they are presented here for completeness. In minor, the $\hat{5}$ -line model is more favorable because it guarantees that a first-order line is generated from the *Kopfton*, not as a prefix-type from an inner voice.¹⁰⁵

Example 1-18. Ideal sonata-form models

(a) Model I-1 [Model III-1]

The image shows a musical score for Model I-1 [Model III-1] in C minor. The score is divided into three sections: **Exp** (Exposition), **Dev** (Development), and **Recap** (Recapitulation). Above the staff, the sections are further divided into **P** (Presentation), **T** (Transition), and **S** (Statement). The **Exp** section contains P, T, and S. The **Dev** section is a single block. The **Recap** section contains P, T, and S. The **P** section of the Recap is labeled as **or (P+T)**. The score includes a treble clef and a bass clef. The bass clef part has a **C[Cm]: I** label. The **Exp** section has a **V** label. The **Dev** section has a **Prolongation of V** label. The **Recap** section has a **V** label. The score includes Schenkerian analysis with $\hat{3}$ and $\hat{2}$ lines, and a $\hat{5}$ -line model. The **Exp** section has a $\hat{3}$ line with notes 3, 2, 1 and a $\hat{2}$ line with notes 5, 4, 3, 2, 1. The **Dev** section has a $\hat{5}$ -line model with notes 3, 2, 1 and a $\hat{3}$ line with notes 3, 2, 1. The **Recap** section has a $\hat{3}$ line with notes 3, 2, 1 and a $\hat{2}$ line with notes 2, 1. The **Recap** section also has a $\hat{5}$ -line model with notes 3, 2, 1. The **Recap** section has a **ct** label. The **Recap** section has a **V** label.

¹⁰⁵ Charles Smith statistically reports that Schenker tends to analyze sonata forms in one and only one way: “Major-mode forms modulating to V are always depicted as $\hat{3}$ -line (Ex. 32). Major-mode forms modulating to the minor dominant are also always $\hat{3}$ -lines (Ex. 31). Minor-mode forms modulating to the relative major are always represented with $\hat{5}$ -lines (Ex. 33a).” Charles Smith, “Musical Form and Fundamental Structure: An Investigation of Schenker’s *Formenlehre*,” *Music Analysis* 15/2-3 (1996): 235.

(b) Model I-2 [Model III-2]

Exp P T S Dev Recap P T S or P+T

The score is written for piano in C minor. It is divided into three sections: Exposition (Exp), Development (Dev), and Recapitulation (Recap).
Exposition (Exp): Labeled with 'P T S'. The melody starts with a half note G[^]3, followed by a dotted half note F[^]2. The bass line consists of a half note C[^]1, a dotted half note G[^]1, and a half note F[^]1. Chords are I, V7, I, V, I.
Development (Dev): Labeled 'Dev'. It features a 'Prolongation of V' in the bass line, which is a dotted half note G[^]1. The treble clef is empty.
Recapitulation (Recap): Labeled 'Recap P T S or P+T'. The melody starts with a half note G[^]3, followed by a dotted half note F[^]2, and then a half note E[^]1. The bass line consists of a half note C[^]1, a dotted half note G[^]1, and a half note F[^]1. Chords are I, V, I.
 Fingerings are indicated with numbers 1-5 and accents (^) above notes. A 'ct' (crescendo) marking is present above the first note of the recap melody.

(c) Model I-3 [Model III-3]

Exp P T S Dev Recap P+T S

The score is written for piano in C minor. It is divided into three sections: Exposition (Exp), Development (Dev), and Recapitulation (Recap).
Exposition (Exp): Labeled with 'P T S'. The melody consists of a dotted half note G[^]5, followed by a dotted half note F[^]4, and then a dotted half note E[^]3. The bass line consists of a half note C[^]1, a dotted half note G[^]1, and a half note F[^]1. Chords are I, V7, I, V, I.
Development (Dev): Labeled 'Dev'. It features a 'Prolongation of V' in the bass line, which is a dotted half note G[^]1. The treble clef is empty.
Recapitulation (Recap): Labeled 'Recap P+T S'. The melody consists of a dotted half note G[^]5, followed by a dotted half note F[^]4, and then a dotted half note E[^]3. The bass line consists of a half note C[^]1, a dotted half note G[^]1, and a half note F[^]1. Chords are I, V7, I, V, I.
 Fingerings are indicated with numbers 1-5 and accents (^) above notes.

(d) Model I-4 [Model III-4]¹⁰⁶

The score for Model I-4 is divided into three sections: **Exp**, **Dev**, and **Recap**.
Exp (Exposition):
 - **P** (Phrase): Treble clef, notes G[^]5, A[^]4, B[^]3, C[^]2. Bass clef, notes G, F, E, D.
 - **T** (Transition): Treble clef, notes C[^]5, B[^]4, A[^]3, G[^]2. Bass clef, notes C, B, A, G.
 - **S** (Structure): Treble clef, notes G[^]5, A[^]4, B[^]3, C[^]2, B[^]1, A[^]1, G[^]1. Bass clef, notes G, F, E, D, C, B, A, G.
 - Chord progression: I V7 I V.
Dev (Development):
 - **Prolongation of V**: Treble clef, notes G[^]5, A[^]4, B[^]3, C[^]2. Bass clef, notes G, F, E, D.
Recap (Recapitulation):
 - **P** (Phrase): Treble clef, notes G[^]5, A[^]4, B[^]3, C[^]2. Bass clef, notes G, F, E, D.
 - **T** (Transition): Treble clef, notes C[^]5, B[^]4, A[^]3, G[^]2. Bass clef, notes C, B, A, G.
 - **S** (Structure): Treble clef, notes G[^]5, A[^]4, B[^]3, C[^]2, B[^]1, A[^]1, G[^]1. Bass clef, notes G, F, E, D, C, B, A, G.
 - Chord progression: I V7 I V I.

(e) Model II-1

The score for Model II-1 is divided into three sections: **Exp**, **Dev**, and **Recap**.
Exp (Exposition):
 - **P** (Phrase): Treble clef, notes G[^]3, A[^]2, B[^]1. Bass clef, notes G, F, E, D.
 - **T** (Transition): Treble clef, notes C[^]3, B[^]2, A[^]1. Bass clef, notes C, B, A, G.
 - **S** (Structure): Treble clef, notes G[^]3, A[^]2, B[^]1, C[^]2, B[^]1, A[^]1, G[^]1. Bass clef, notes G, F, E, D, C, B, A, G.
 - Chord progression: Eb:I V I.
Dev (Development):
 - **Prolongation of V**: Treble clef, notes G[^]3, A[^]2, B[^]1, C[^]2. Bass clef, notes G, F, E, D.
Recap (Recapitulation):
 - **P** (Phrase): Treble clef, notes G[^]3, A[^]2, B[^]1. Bass clef, notes G, F, E, D.
 - **T** (Transition): Treble clef, notes C[^]3, B[^]2, A[^]1, C[^]2, B[^]1, A[^]1, G[^]1. Bass clef, notes C, B, A, G.
 - **S** (Structure): Treble clef, notes G[^]3, A[^]2, B[^]1, C[^]2, B[^]1, A[^]1, G[^]1. Bass clef, notes G, F, E, D, C, B, A, G.
 - Chord progression: i V i.

¹⁰⁶ Charles Smith has pointed out that there is a tendency for the initial third descent ($\hat{5} - \hat{4} - \hat{3}$) in the first part of the fundamental structure to act as a “superfluous prefix to the form-generating descent to $\hat{2}$ ” (Ibid., 249).

(f) Model II-2

Exp P T S Dev Recap P+T S P+T S

Prefix or Prefix

Eb:I V I or I V7 I V I

Cm: i III V i V i i V i

Detailed description: This musical score for Model II-2 is in C minor. It consists of two systems. The first system is the Exposition (Exp), divided into Presentation (P), Transition (T), and Statement (S) sections. The piano part features a melodic line with fingerings 3, 2, 1, 2, 1 and two 'Prefix' markings. The bass part has a simple accompaniment with chord symbols Eb:I, V, I, or I, V7, I, V, I. The second system is the Development (Dev) and Recapitulation (Recap). The Dev section has a double bar line. The Recap section is divided into P+T and S sections, with fingerings 3, 2, 1 and 3, 2, 1. The bass part continues with chord symbols i, V, i, i, V, i.

(g) Model II-3

Exp P T S Dev Recap P T S **

i V7 i V i Eb:I V I

Cm: i III *[iv] V i V7 i V i

Detailed description: This musical score for Model II-3 is in C minor. It consists of two systems. The first system is the Exposition (Exp), divided into Presentation (P), Transition (T), and Statement (S) sections. The piano part features a melodic line with fingerings 5, 4, 3, 2, 1, 3, 2, 1. The bass part has a simple accompaniment with chord symbols i, V7, i, V, i, Eb:I, V, I. The second system is the Development (Dev) and Recapitulation (Recap). The Dev section has a double bar line. The Recap section is divided into P, T, and S sections, with fingerings 5, 4, 3, 2, 1. The bass part continues with chord symbols i, V7, i, V, i. A double asterisk (**) is placed above the Recap section.

*In the minor-mode sonata form, the use of passing subdominant harmony is one of Beethoven's typical ways to reach the structural dominant.

**In this and the next models (Models II-3 and II-4), $\hat{4}_4$ in the exposition is supported by a local dominant of the mediant key, but the recapitulation requires a new tonal procedure to harmonize $\hat{4}_4$ in the home key. Usually, the transition of the recapitulation carries this function in Beethoven's early sonatas: the transition tonally stresses the subdominant as if it were a temporal goal of the passage, but finally reaches the dominant seventh, which secures $\hat{4}_4$.

(h) Model II-4

The image displays a musical score for Model II-4, consisting of two systems of staves. The first system is divided into three sections: 'Exp', 'Dev', and 'Recap *'. Above the staves, the sections are labeled with 'P', 'T', and 'S' (likely representing Phrasing, Theme, and Section). Fingerings are indicated by numbers 1-5 above notes. In the 'Exp' section, the right hand has a sequence of notes with fingerings 5, 4, 3, 2, and the left hand has notes with fingerings 3, 2, 1. A bracket labeled 'III' spans the first three notes of the left hand. The 'Dev' section features a double bar line. The 'Recap *' section shows a sequence of notes with fingerings 5, 4, 3, 2, 1 in both hands. Below the staves, chord symbols are provided: 'Cm: i' for the first section, and 'i V7 i V i' for the second section.

Beethoven mainly adopted six *Ursatz* models, all of them in Figure I-1 excluding Model II-1 and II-2, in his early-period sonata-form movements, but diversified them through his idiosyncratic compositional techniques to create very distinctive and unique individual pieces. My principal argument does not reside in the claim that all the Beethoven's sonata-form movements are rigidly based on our ideal models and their transformations, but instead in the belief that one can illuminate efficiently through this comparison procedure how Beethoven achieves his own aesthetic and poetic effects.

1.7 : Chapter-by-Chapter Summary

I will devote the following chapter (Chapter 2) to discussing four Bonn-period works and then the subsequent three chapters (Chapter 3-5) to examining the early Viennese works in sonata allegro form. I have sorted the early Viennese works into three groups: Chapter 3 includes op. 2, op. 7, and op. 49; Chapter 4 covers op. 10; and Chapter 5 takes up op. 13, op. 14, and op. 22.¹⁰⁷ The reason for the separation of Chapter 3 from Chapter 4 is simply practical: to avoid having a single chapter become too long. On the other hand, the separation of Chapter 5 from the previous two chapters is based on Kerman and Tyson's lucid observation that "Beethoven began to show signs of dissatisfaction with some of the more formal aspects of the Classical style and reached towards something new."¹⁰⁸ They see the initiation of this new tendency from the *Sonate Pathétique*, op. 13 in 1798 and the first movement of the Quartet in F, op.18, no. 1.

In each chapter, introductory comments cover, first, the general tendency of the formal *Ursatz* models adopted in these sonata-form movements, and, second, a summary of the primary compositional devices accepted in each piece. Detailed analyses of each piece follow: this narrative will focus on interpretation of the Schenkerian voice-leading graphs and, where appropriate, will make connections to

¹⁰⁷ There is a useful index that served as a point of departure for my research of Schenkerian analyses of Beethoven's piano sonatas. See David Neumeier and Rudy Marozzi, "An Index to Schenkerian Analyses of Beethoven Piano Sonatas and Symphonies," *Indiana Theory Review* 6, nos. 1-2 (1982-83): 101-17.

¹⁰⁸ Joseph Kerman and others, "Beethoven, Ludwig van," in *The New Grove Dictionary of Music and Musicians*, 2nd ed. (2001), 3: 98.

other sonata-form movements by Beethoven or other composers. For sonata-form movements without existing analytic graphs, I discuss their analytic problems, relying upon my own voice-leading graphs. I examine any entire or partial graphs of the movements in question that appear in Schenker's various sources, as well as graphs by other theorists contained in published articles.

In Chapter 6, I provide a comprehensive commentary on the handling of the sonata allegro form in Beethoven's early period sonatas and on its influence upon the middle-period works.

Chapter 2: Analyses of Sonata-Form Movements in the Bonn Period

2.1 : Introductory Remarks on Formal Designs and Primary Compositional Devices

Beethoven wrote the three sonatas in WoO 47 (*Kurfürstensonaten*) prior to 1783. Another early sonata, WoO 51, has a more complicated history: it existed (in incomplete form) no later than 1797-1798, but it was finished (by Ferdinand Ries) and only published posthumously in 1830.¹ Despite the late completion date, I include the discussion of the C-major Sonata in this chapter because most of its structural features are close to the Bonn-period sonatas of WoO 47. Although these sonatas are frequently described as juvenilia, many features foreshadow his stylistic fruition of the early Viennese and even middle-period works. In particular, Beethoven's ingenious handling of formal aspects can be seen in the three sonatas of WoO 47, whereas the D-major and C-major Sonatas of WoO 47 and 51 reveal his stylistic tendency to restrict a work to a limited number of compositional devices.

Beethoven adopts the $\hat{5}$ -line *Ursatz*, in which the *Urlinie* ($\hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1}$) is supported by two bass arpeggiations (I-V⁷-I-V-I), in all the Bonn-period sonata-form movements. Furthermore, Beethoven's rational control of the tonal structure and thematic material leads to instances of what Cadwallader and Gagné call "*Ursatz*

¹ This information comes from the work list of the *New Grove* article on Beethoven. Joseph Kerman and others, "Beethoven, Ludwig van," in *The New Grove Dictionary of Music and Musicians*, 2nd ed. (2001), 3: 119-120.

parallelism,” in which fundamental structures of smaller-level formal units are identical to the background fundamental structure, thereby producing *Ursatz* replicas.² Another common structural feature found in these four pieces is that $\hat{3}$ is rearticulated over the structural dominant at the final cadence before moving by step to $\hat{2}$, creating the V_{4-3}^{6-5} motion. Despite these common traits in the large-scale voice-leading schema, the D-major Sonata of WoO 47 is quite distinctive from the others in that it shows a tendency toward the “textbook” sonata-form model (our model I-3), while the others adopt the “primitive-type” fundamental structure (model I-4), which lacks a first-order line within the primary theme. The analyses below will divulge 1) how Beethoven creates distinctive musical surfaces from the ideal fundamental structure through his unique composing-out process and 2) what compositional devices help achieve this artistic goal in each movement.

2.2 : First Movement of WoO 47, no. 1, E^b major

One of the most remarkable features of WoO 47-1 is that the return of the primary theme is missing in the recapitulation, which begins instead with the second theme in the tonic key, following transition material at the end of the development (m. 55). In fact, the return of the primary theme was not omitted altogether: it appears at the beginning of the development section in the dominant key. These formal features match what Rey Longyear calls “binary sonata form,” which was

² Cadwallader, Allen and David Gagné. *Analysis of Tonal Music: A Schenkerian Approach* (New York: Oxford University, 1998), 189.

avored earlier in the eighteenth century by Italian composers such as Domenico Scarlatti and later by North German composers, such as C. P. E. Bach, Anton Filtz, and others.³ The lack of this sonata-form principle, what James Webster calls “simultaneous return,” forces the development and the recapitulation to act as a closely related unit.⁴

Supplementing descriptions by William Newman and Roger Kamien, Longyear enumerates formal characteristics of the binary sonata form. First, the second half of the movement initiates the primary-theme material in some other key than the home key. Second, “the return of the tonic coincides with the reprise of second-theme material. Often this return is prepared by the coincidence of the transition motive of the exposition with the beginning of a transition to the home tonic.”⁵ According to Longyear, the recapitulation of the binary sonata form shows one of the following three characteristics which distinguish it from the “simple” binary form: 1) a non-tonic return of the primary theme in the reprise; 2) a mirror recapitulation, in which the primary theme and the second theme are reversed although both of them appear in the tonic; and 3) a recapitulation that begins with second-theme material in the tonic after an extensive development.

³ Rey Longyear, “The Binary Variants of Early Classic Sonata Form,” *Journal of Music Theory* 13 (1969): 162-185. He takes Gluck’s overture to *Alceste*, C.P.E. Bach’s keyboard sonatas (third movement of Wq 57/6, first movement of Wq 55/3, etc.), Rutini’s keyboard sonata, Op. 5/5, Anton Filtz’s second movement of the Second Symphony, J.C. Bach’s keyboard sonata, Op. 17/2, and Franz Beck’s *Sinfonia* in D minor, Op. 3/5 as the binary variant sonata-form examples.

⁴ James Webster, “Sonata Form,” in *The New Grove Dictionary of Music and Musicians*, 2nd ed. (2001), 23: 691.

⁵ Rey Longyear, “The Binary Variants of Early Classic Sonata Form,” 165.

All three features of the binary sonata form are present in the movement in question. First, the primary theme initiates the second half of the movement after the double bar in the dominant key (m. 31). The thematic-tonal hierarchy existing between the primary theme and the second-theme group in the exposition is reproduced in reverse in the second part and thus creates the symmetrical tonal structure typical of a binary form, as Figure 2-1 shows.

Figure 2-1. A symmetrical tonal structure in the first movement⁶

	First Half	:	Second Half	
Themes: P	S		P	S
Keys: E ^b	B ^b		B ^b (Modulation to C minor)	E ^b
Mm: 1	11		31	56

Second, the return of the tonic also coincides with the reprise of second-theme material at m. 56. Furthermore, this return is unmistakably prepared by the coincidence of the exposition's transition motive with the beginning of a transition to the home key. This passage substitutes for a retransition passage, which would secure the dominant of the home key by a long dominant pedal.

⁶ These formal labels are introduced by Jan LaRue, *Guidelines for Style Analysis*, 2nd ed. (Warren, Mich.: Harmonie Park Press, 1992): *P* = primary theme; *T* = transition; *S* = second theme; *K* = closing theme (154). However, I use *C* for the coda and *Intro* for the slow introduction. For a reference to multiple second themes, I utilize the subscript Arabic numbers in the left side of the abbreviation: *S*₁ and *S*₂.

A direct tonal shift to the secondary key in the exposition without a proper modulatory bridge is not unusual in Classical period sonatas. The relationship between the two themes arises from the half cadence *on* the dominant of the home key at m. 10. This half cadence projects a harmonic neutrality that permits the instant modulation to the dominant key. Beethoven directly initiates the second theme on the same chord, which carries a different function here: not as a dominant of the home key, but as a tonic of the dominant key. The half cadence is again utilized in the recapitulation, but in a different context: it bends the same dominant chord back to the tonic, not to a tonicization of the dominant. Because of the binary sonata-form quality, the direct tonal shift in the exposition appears in a slightly different place, a strategic place between the development and the recapitulation.

The role of the half cadence adopted at m. 10 coincides precisely with what Robert Winter calls the “bifocal close.”⁷ This is the place where one can detect Mozart’s influence on the early Beethoven. Winter describes four criteria that determine the bifocal closes:

⁷ Robert Winter, “The Bifocal Close and the Evolution of the Viennese Classical Style,” *Journal of the American Musicological Society* 42, no. 2 (1989): 275-276. Winter provides a literature review tracing the historical origin of the bifocal close. He attributes the bifocal close to Mozart’s early musical style, although he mentions the contribution of Mannheim School to the technique, such as Johann Stamitz and Anton Filtz. Discussing Mozart’s influence on the young Beethoven, Winter also points out Beethoven’s adoption of the bifocal close: the first movement of op. 2, no. 3 (330-331). He also includes the first movement of Beethoven’s F-minor Sonata, op. 2, no. 1, and the finale of the C-minor Sonata, op. 10, no. 1 into works adopting the bifocal close in minor mode (331-332). I add this movement (WoO 47, no. 1), the F-minor Sonata, WoO 47, no. 2, and the G-major Sonata of op. 49, no. 2. For a detailed discussion of Mozart’s legacy on the young Beethoven, see Lewis Lockwood, “Beethoven before 1800: The Mozart Legacy,” *Beethoven Forum* 3 (1994): 39-52.

1) a diatonic first group that reaches a half cadence on the dominant, 2) the articulation of this half cadence by a prominent rest immediately after, 3) the continuation and immediate tonicization in the second group of the local dominant harmony of the half cadence, and 4) a parallel structure in the recapitulation in which the half cadence now functions as a local dominant to the second group in the tonic.⁸

The primary theme (mm. 1-8) and the brief transition passage (mm. 8-10) have been integrated to a single entity. The lack of a transition as an independent formal unit in this movement reflects the sonata-form practice of the 1760s and 1770s, which still lacked the stable features of the “textbook” sonata form which had evolved by the 1780s. From a Schenkerian point of view, the minimal separation between the primary theme (mm. 1-8) and the brief transition (mm. 9-10) result in what I call the “primitive-type” *Ursatz* (model I-4), in which the two formal sections altogether participate in the first part of the *Ursatz* (Example 2-1).⁹ In this model, the single line ($\hat{5} - \hat{4} - \hat{3} - \hat{2}$) generating the primary theme and the transition becomes the first part of the *Urfinie*. The primary theme contains the voice-leading path of $\hat{5} - \hat{4} - \hat{3}$, whereas the brief bridge passage includes $\hat{3} - \hat{2}$. A single harmonic motion—from tonic via a dominant back to the tonic (I-V⁷-I)—removes the possibility of an independent first-order fifth-line within the primary theme.

⁸ Robert Winter, “The Bifocal Close and the Evolution of the Viennese Classical Style,” 278.

⁹ In our sonata-form assumption, the textbook sonata-form model requires the presence of a first-order line within the primary theme. Beethoven’s first movements in sonata allegro form written after op. 2, no. 1, all have first-order lines within their primary themes.

Example 2-1. A middleground graph of the first movement

Exp			Dev	Recap	C														
P	T	S	P in the dominant key																
	3	5	8	9	10	14	15	24	25	31	41	50	56	59	60	69	70		
	$\hat{5}$	$\hat{4}$	$\hat{3}$	$\hat{2}$	$\hat{5}$	$\hat{4}$	$\hat{3}$	$\hat{2}$	$\hat{1}$	$\hat{5}$	$\hat{4}$	$\hat{3}$	$\hat{2}$	$\hat{1}$	$\hat{5}$	$\hat{4}$	$\hat{3}$	$\hat{2}$	$\hat{1}$

As I have pointed out earlier in the introductory remarks, this movement has a *Kopftón* $\hat{5}$ like the other piano sonatas written in Beethoven's Bonn period. An initial arpeggiation to the *Kopftón* (E^b - G - B^b) leads to a temporal displacement between the *Kopftón* and the opening tonic harmony. The interruption on $\hat{2}$ causes a derivation of a first-order linear progression generating the second theme. This first-order fifth-line from $\hat{2}$ in this case guarantees the higher-level fifth-line from the *Kopftón* $\hat{5}$ in this peculiar recapitulation. If the primary theme and the second theme were not unified as a fifth-line and the second theme consisted of a third-line, then one might encounter a hierarchical inconsistency caused in the course of adjusting the

recapitulation as a third-line. Although by no means unknown, such adjustments are more difficult with a third-line than with a fifth-line.

Example 2-2. Primary and second themes

(a) Primary theme (mm. 1-4)

(b) Second theme (mm. 11-13)

*Brackets indicate melodic similarity between the two themes.

Melodic similarity between the primary and second themes offers the possibility of merging the two themes into one in the recapitulation (Example 2-2). Both begin with their primary note ($\hat{5}$), briefly touch a cover tone ($\hat{8}$), and return to the primary note with the light elaboration of an upper neighbor note.¹⁰ The simple, phrase-oriented primary and second themes, which recall song and *opera buffa*, seem

¹⁰ Although, in the primary theme, an initial arpeggiation prepares the melodic path to the head tone B^b, the subsequent melodic event parallels the second theme.

attributable not only to Beethoven's earlier musical training from a German composer of *Lieder*, Christian Neefe,¹¹ influence from Johann F. Sterkel,¹² who was interested in vocal works including Italian arias with orchestra, Italian songs and ensembles, and a series of lied collections, and also from Mozart, but also to his own early interest in vocal genres.¹³

The first-order fifth-line within the second theme is also supported by lower-level paired bass arpeggiations, creating an "Ursatz parallelism." These *Ursatz* parallelisms are so frequent that the *Ursatz* of the movement is nested in the multiple lower-level formal units. The lack of multiple strong articulations within the second-theme area prohibits a division of the second theme into smaller units (S_1 , S_2 , or K) and suggests a single full descent. The neighbor-note figures prolonging $\hat{3}$ contribute to an integration of the entire structure into a single fifth-line descent (Example 2-3). This neighbor-note motion is not a newly introduced motivic device. It has already been asserted in the foreground in a very straightforward way (see m. 16 and 18 in the score). Furthermore, the incomplete neighbor note appears in the deep-level middleground, where it generates the entire development section ($F-A^b$ in Example 2-1), creating a motivic parallelism. The compositional cliché of putting structural

¹¹ Lothar Hoffmann-Erbrecht, "Neefe, Christian Gottlob," in *The New Grove Dictionary of Music and Musicians*, 2nd ed. (2001), 17: 734-735.

¹² Theodor Wohnhaas, "Sterkel, Johann Franz Xaver," in *The New Grove Dictionary of Music and Musicians*, 2nd ed. (2001), 24: 363-364.

¹³ For a discussion of the interrelation between themes and melodies from song and *opera buffa*, see James Webster, "Sonata Form," in *The New Grove Dictionary of Music and Musicians*, 2nd ed. (2001), 23: 691. For Beethoven's earlier training, see Joseph Kerman and others, "Beethoven, Ludwig van," in *The New Grove Dictionary of Music and Musicians*, 2nd ed. (2001), 3: 96.

importance on $\overset{\wedge}{2}$ by means of trills makes persuasive an assumption that the young Beethoven might have used Mozart's keyboard works as model.¹⁴ This stylistic cliché is confirmed by emerging again in the recapitulation: this time the trill emphatically emphasizes the advent of the background $\overset{\wedge}{2}$ at m. 69 (see Example 2-1).

Example 2-3. A middleground graph of the exposition (mm. 1-25)

Exp (P) T S Codetta)

1 3 5 8 9 11 14 19 23 24 25 30

$\overset{\wedge}{5}$ $\overset{\wedge}{4}$ $\overset{\wedge}{3}$ $\overset{\wedge}{2}$ $\overset{\wedge}{5}$ $\overset{\wedge}{4}$ $\overset{\wedge}{3}$ $\overset{\wedge}{2}$ $\overset{\wedge}{1}$ ||

Initial Arp. 3-line Mozartian cliché indicating the advent of the structural $\overset{\wedge}{2}$

Eb: I V7 I V Bb: I V₅⁶ I V₄₋₃⁶⁻⁵ I

Focus on the development section reveals Beethoven's surprisingly developed compositional techniques (Example 2-4). Among them is a complex voice-leading interaction between the primary note and a cover-tone. The development begins with primary-theme material presented in the dominant key. As in the exposition, the initial arpeggiation establishes F at m. 34 as the primary note of the development. However, the presence of the cover-tone threatens the monopoly of the primary note F. The cover-tone B^b introduces B-natural at m. 35, while the primary note F remains

¹⁴ As in many Mozart's keyboard sonatas, the advent of the structural $\overset{\wedge}{2}$ is made on the trills at m. 24 and 69 of the movement.

concretely present through an octave transfer and a series of unfoldings (the unfoldings have already been verticalized in the graph (Example 2-4)). Example 2-4 interprets F as belonging to two different levels. In one level, the F, which has become a dissonance because of the local harmonic support by V^7 in C-minor, resolves to E^b at m. 38. The transition material, which led to a shift of the *Urlinie* from $\hat{3}$ to $\hat{2}$ in the exposition, appears at this point, but at a different pitch level, bringing about now another shift from E^b to D in mm. 38-40. This third-line ($F-E^b-D$), which is a motion to an inner voice, serves as a lower-level event. At another level, F remains valid, although not explicit, as it is prolonged throughout the transition material until it ascends to G at m. 40.

Example 2-4. A middleground graph of the development (mm. 31-40)

The musical score for Example 2-4 is presented in two systems. The first system covers measures 31-35, and the second system covers measures 38-40. The treble clef staff shows a melodic line with annotations: 'reg.' (regular) and '3-line' (third line). The bass clef staff shows a bass line with annotations: '7', '5', and '8'. The score is divided into two systems. The first system covers measures 31-35, and the second system covers measures 38-40. The harmonic structure is indicated by Roman numerals: Eb: V, III, V, and III (V in C minor).

Another interesting feature of the development section is the appearance of new thematic material in C- minor (Example 2-5). This passage (mm. 41-48) is a closed unit with a stereotypical complete descent from $\hat{5}$ and a regular, articulated four-plus-four phrase structure characterized by a thematic parallelism between the two phrases. Nevertheless, according to how one reads the voice leading of this self-

contained passage (mm. 41-48) nested oddly in the middle of the development, two interpretations of the passage are possible (Example 2-5-(a) and (b)).¹⁵

Example 2-5. Two plausible readings of mm. 34-52

(a) $\hat{5}$ -line reading without an interruption

45 43 45 46 47 50 52

Ascending 3-line
(F - G - A)

N N

Cm: i Eb: vi -6 iv V6/4 - 5/3 I V7

(b) $\hat{3}$ -line reading with an interruption

34 40 43 45 46 47 48 52

F - Eb - D - C - Bb - Ab

ct ct N ct N

8 --- 7

Cm: i Eb: V V 16 iv V6/4 - 5/3 i 7

*Notes with tall stems in the graphs above indicate hierarchically higher level.

¹⁵ Carl Schachter discusses using multiple readings of a single passage to help discover the best reading. The analyst considers the musical context and various musical parameters for a final decision on the best analytic reading. See Carl Schachter, "Either/Or," in *Schenker Studies*, ed. Hedi Siegel (Cambridge: Cambridge University Press, 1990), 165-179.

The first reading (Example 2-5-(a)) elevates G, the local head tone of the C-minor passage, into a higher-level passing tone that fills up the tonal space between F ($\hat{2}$) and A^b ($\hat{4}$). This reading assumes that the rising third-line (F-G-A^b) generates the entire development section, and includes upper-voice contrapuntal interactions in two dimensions, both arising from a dual function of F: one dimension shows the third-line descent from F (F-E^b-D); and the other sees F ascending by step to G, outlining a 5-6 contrapuntal motion to avoid the parallel fifths that would occur if the B^b-major triad moved directly to the C-minor triad. However, this reading fails to reflect the thematic parallelism existing between the two phrases (mm. 41-44 and 45-48).

The second reading (Example 2-5-(b)) solves this problem: G articulated by the staccatos serves as a cover-tone, while a third-line descent with interruption governs the C-minor passage. However, this second reading fails to highlight the very obvious higher-level ascending third-line and is restricted to foreground voice-leading phenomena: it incorporates almost all the descending lines into the highest level. The choice of the first reading, Example 2-5-(a), provides not only the best explanation of voice-leading events active in the development, but also the most convincing large-level scheme (F-G-A^b), which is close to one of Edward Laufer's voice-leading patterns for development sections, his category (vii).¹⁶ Furthermore, it also gives clear and detailed explanations of the lower-level voice leading of the

¹⁶ Although the supporting harmony here does not coincide precisely with that of Laufer's model (vii), this development voice-leading scheme is similar to his model (vii) in that the upper voice ascends from $\hat{2}$ to the neighbor note $\hat{4}$ via a passing tone $\hat{3}$. See also Edward Laufer, "Voice-Leading Procedures in Development Sections," *Studies in Music from the University of Western Ontario* 13 (1991): 71-73.

development through the interaction of the upper two voices, in spite of its failure to reflect the surface thematic parallelism. The C-minor passage has been subsumed as an intervening section interpolated between the dominant prolongations in this reading. The ascending third-line based on the interaction between the upper two voices therefore generates the entire development. It is remarkable that the young Beethoven planned such complex voice-leading interactions in this development section.

Example 2-6. A middleground graph of the development

The image shows a musical score for Example 2-6, a middleground graph of the development. It consists of two systems of music. The first system covers measures 31 to 52. The second system shows a continuation of the melodic line. Annotations include '3-line(F - G - Ab)' above the first system, '3-line' above the second system, and various figured bass notations like '5(---10---5)-8 5' and '(vi)'. An arrow points from the first system to the second.

2.3 : First Movement of WoO 47, no. 2, F minor

Like its companions, the first movement of Beethoven's WoO 47, no. 2 begins with a *Kopftön* $\hat{5}$, and two-bass arpeggiations provide harmonic support for the background fifth-line. The arrival at $\hat{2}$ and its dominant support at the end of the development brings about an interruption of the *Ursatz*, and the recovery of the

Kopfton in the reprise initiates the final descent. These structural characteristics place this movement under our model II-4 (Example 2-7).

Example 2-7. A deep-level middleground graph of the first movement of

WoO 47-2

Intro Exp Dev Recap Coda)

(P S) (P S)

1 3 8 9 10 15 17 30 31 37 41 46 55 56 63 73 75 76 77 82

5 5 4 3 2 N N 5 4 3 2 4 3 2 1 5 4 3 2 3 2 1

Initial Arp. Fourth-line as a motive 3-line

i i V⁶⁻⁵ 4-3 i V⁶⁻⁵ 4-3 I iv V i iv V⁶⁻⁵ i 4-3

Most of the notable features in the movement could be associated with its outset, which is reminiscent of an operatic overture. The slow introduction to a sonata-form movement in itself has a general source of the French overture in the Baroque era. Furthermore, the achievement of the tempo alternation by return of the slow introduction in the brief development section makes possible such an association of the piece with the operatic overture. One can recall that there is a brief return of the slow passage serving almost as the extended cadence which one often finds after the fast section in the French overture. Besides the formal characteristics as seen in the large-scale scheme, the running scalar figure in the primary theme (reminiscent of

Italian violinistic virtuosity), the repeated tonics arousing the gradual *crescendo*, the frequent shifts of dynamic markings, the turn-figures assigned to F, A^b, and C, and the characteristic interval of the augmented second in the slow introduction, all contribute to the operatic overture-like characteristics of the piece.

As Rey Longyear points out, the presence of the slow introduction represents Beethoven's inclination toward a pre-Romantic fervor.¹⁷ Moreover, the return of the slow introduction between the development and the recapitulation at m. 46 shows Beethoven's atypical treatment of the sonata form. This unexpected return might arouse confusion for the listener, who might, on the one hand, hear the return as still belonging to the development that prolongs a dominant harmony, or, on the other hand, understand its role as a prelude to the reprise of exposition material. Although partial and shorter returns of introductory material are found in Beethoven's later piano sonatas, such as op. 13, *Pathétique* and op. 31, no. 2, *Tempest*, the expanded return at the end of the development as seen in this piece is still a relatively rare treatment in Beethoven's piano sonatas.¹⁸

The primary theme also anticipates that of his piano sonata op. 13, *Pathétique*, not only because the theme ascends, outlining a triadic motion encompassing two octaves with a supporting tonic pedal, but also because the augmented second gives the same motivic flavor to both movements. Although the melodic contour conforms

¹⁷ Rey Longyear, "The Minor Mode in Eighteenth-Century Sonata Form," *Journal of Music Theory* 15 (1971): 186.

¹⁸ I will focus on the different role of the introductions in Beethoven's Piano Sonatas in Chapter 5.2.

to that of the Classic period by forming an arch-shape in which an aggressive ascent is counterbalanced by several descending fourths, the phraseology does not follow a regular four-plus-four structure.

Beethoven's well-known interest in motivic development is apparent already in this movement. Both ascending and descending melodies highlight the fourth as a principal motive, which occurs in the foreground as well as the deep-level middleground (Example 2-8).¹⁹ The fourth also acts as a principal higher-level motive in the form of a descending line, unifying the entire movement. Its largest-scale appearance is the fourth-line that generates the first portion of the *Ursatz* prior to the interruption (see Example 2-7).

Example 2-8. Fourth serving as a motive in the primary theme (mm. 10-15)

Allegro assai.

The brackets show many instances of the fourth active as a motive in the foreground.

¹⁹ For the fourths active in the deep level, see brackets in the previous example (Example 2-7).

The absence of a transition is explicated by the affinity existing between a tonic minor and its mediant major.²⁰ Longyear offers two explanations regarding this affinity: “(1) the two triads share two common tones and (2) a tradition arising from the Hypodorian mode, whose finalis is D and whose reciting tone (so-called “dominant”) is F.”²¹ In spite of this affinity, the young Beethoven seems concerned about the foreground tonal conflict that might arise between the local dominant on a half cadence (m. 17) and the mediant harmony of the following measure initiating the second theme. He omits the third and fifth of the dominant, E and G, and then leaves only the common tone between the two harmonies, C (Example 2-9).

Example 2-9. A large-level harmonic synopsis of mm. 10-18

	Primary theme		Second theme
	m. 10	17	18

Omission of E and G cancels out
the foreground conflict, which might
arise between E and Eb and G and Ab.

Fm: i (V) III

Long-range harmonic relationship between i and III
shares two common tones: C and Ab.

The development is quite compact and contains a limited number of harmonies. It begins with primary-theme material in the mediant key (mm. 37-40),

²⁰ This is another example of the bifocal close in the minor mode. Beethoven moves to the mediant key in the exposition immediately after the half cadence at m. 17, whereas he stays in the home key in the recapitulation.

²¹ Rey Longyear, “The Binary Variants of Early Classic Sonata Form,” *Journal of Music Theory* 13 (1969): 197.

but the harmony immediately moves in the return of the slow introduction toward a subdominant key, which clears the way for the structural dominant by connecting the incomplete neighbor-note (B^b at m. 46) directly to $\hat{2}$ at m. 55 through unfolding (Example 2-10).

Example 2-10. A middleground graph of the development of WoO 47-2

Dev **(Larghetto)**

37 40 41 44 45 46 54 55

$\hat{2}$
2

III iv V6/4 - 5/3

In the minor-mode sonata form, the long-range harmonic status of the development section deserves some detailed discussion because the development could offer two possible tonal structures, in contrast to the major-mode sonata form, which, in most cases, prolongs a dominant already reached at the second-theme area.²² Two hypothetical models (Examples 2-11 and 2-12) clarify the issue of the middle section's prolongational status.

²² In sonata-form movements in the minor-mode, Beethoven occasionally adopts the same tonal structure, in which the tonic reaches the dominant via various types of subdominant harmony: the first and fourth movements of op. 2, no. 1, first movement of op. 13.

Example 2-11. First hypothetical model

(a) Original version

Exp Dev Recap

$\hat{5}$ $\hat{4}$ $\hat{3}$ $\hat{2}$ $\hat{5}$

Fm: i III V_4 i

Monopoly of $\hat{3}$ and III in the development

(b) Embellished version²³

The role of the $\hat{6}$ chord should be unambiguous metrically and syntactically to rearticulate $\hat{3}$!

Exp Dev Recap

$\hat{5}$ $\hat{4}$ $\hat{3}$ N $\hat{5}$

Fm: i III $(iv) V_{4-6-5}$ i

Lower-level passing chord

*Monopoly of $\hat{3}$ and III in the development

In the first model (Example 2-11-(a)), the III harmony governs almost the entire development with $\hat{2}$ coming at the end usually arriving at the retransition

²³ I left the parallel octaves as seen between A^bs and B^bs. In actual compositions, they would have been avoided by various kinds of elaborations. One of the common ways is by an interpolation of a dominant of B^b.

passage. An embellished version of this model (Example 2-11-(b)) takes almost the same prolongational status. The upper neighbor-note B^b and the passing harmony iv are just embellishing voice-leading events. In this embellished version, the $\hat{3}_3$ undergoes a prolongation through an upper neighbor-note, returns to the original $\hat{3}_3$ supported now by a cadential $\frac{6}{4}$ and reaches the $\hat{2}_2$ supported by V. In this case, the cadential $\frac{6}{4}$ should be unambiguous in its metrical status in order to provide a legitimate harmonic support to the prolonged $\hat{3}_3$.

The second hypothetical model (Example 2-12) sees the development section as consisting of an equal participation of the III and V. The iv or ii^6 here belongs to the domain of the dominant because it leads to the dominant. The incomplete neighbor signals that $\hat{2}_2$ is active from this point because A^b in between is supported by a $\frac{6}{4}$ chord and serves as a passing tone.

Example 2-12. Second hypothetical model²⁴

This A^b is a passing note between B^b (incomplete Neighbor) and G ($\hat{2}$).

$\hat{2}$ starts here!

Exp Dev Recap

$\hat{5}$ $\hat{4}$ $\hat{3}$ $\hat{2}$ $\hat{5}$

(A^b : I V I) iv or ii^6 V i

Fm: i III *Equal participation of III and V

²⁴ As mentioned before, the parallel octaves could be adjusted in similar ways.

Determination of the syntactical status of the $\frac{6}{4}$ chord at m. 54 would serve as a key factor in interpreting the prolongational status of the development section (Example 2-10). The $\frac{6}{4}$ chord at m. 54 is too weak to support the primacy of $\hat{3}$, by carrying a cadential function, because it creates the offbeat sound as if it acted as a *portamento*.²⁵ This offbeat sound is not responsible simply for the metric position of the $\frac{6}{4}$ chord alone, but also the gradual break of the harmonic rhythm, which has been steadily maintained throughout the slow passage. The harmonic rhythm, in which the chord changes occur on the strong beat every two measures and then one, is disrupted at this point. The $\frac{6}{4}$ chord on the third beat creates the effect of this being an offbeat.

The cadential $\frac{6}{4}$ on the offbeat makes possible an interpretation that most of the development section in this piece consists of a goal-directed motion toward the dominant through the leading function of the incomplete neighbor-note and its harmonic supporter iv, rather than an ongoing prolongation of the $\hat{3}$ and its harmonic support III. In other words, the harmonic event from m. 41 tonicizing the passing key B^b-minor should be understood as an initiation toward the harmonic goal of the development.

The interpretation above places the development under the second model, in which the subdominant belonging to the domain of the dominant leads directly to the dominant, despite its resemblance to the first model (Example 2-11-(b)), assuming the extreme primacy of $\hat{3}$ and its harmonic support III. The metrically awkward status of

²⁵ David Beach, "The Cadential Six-Four as Support for Scale-Degree Three of the Fundamental Line," *Journal of Music Theory* 34, no. 1 (1990): 81-98.

the cadential $\hat{4}_4$ strongly supports this interpretation. Thus, the B^b-minor *Larghetto* section (mm. 46-54) serves as a large-scale passing event leading to the goal V. The similar tonal, voice-leading design of the development—characterized by this collaboration of the two harmonies, III and V—is also found in op. 2, no. 1, first movement, where a voice-exchange encompassing the first-half of the development prolongs the III, and the $\hat{2}_2$ comes later through the predominant harmony ii⁶ leading ultimately toward V and in the first movement of the *Pathétique*, op. 13, where the passing subdominant leads to the ultimate goal V.

Beethoven's treatment of the codetta (mm. 31-36) and the coda (mm. 77-82) leads to a significant observation. The tendency to avoid a literal repetition, which is a well-known stylistic hallmark in his middle period, is witnessed here also in his early stage. At first glance, the coda in the recapitulation looks simply like a restatement of material from the exposition's codetta. However, a close examination of each passage reveals that different voice-leading ideas govern them. In the exposition, the repercussions of $\hat{1}_1$ mark the codetta, by emphasizing the arrival at the goal of the mediant key. The ending figure (mm. 35-36) touches the lower-level primary note $\hat{3}_3$ and forms a third-line. On the other hand, the coda establishes $\hat{3}_3$ as a lower-level primary note simultaneously with the arrival of the background $\hat{1}_1$. This third-line finishes off the movement by carrying out a typical post cadential function to add conclusiveness to the preceding strong cadence.

Example 2-13. Foreground graphs of the codetta (mm. 31-36) and the coda (mm. 77-82)

(a) Codetta (mm. 31-36)

(b) Coda (mm. 77-82)

2.4 : First Movement of WoO 47, no. 3, D major

As mentioned before, Beethoven inclines toward a “textbook” sonata-form model in this movement (Example 2-14). Like the other two works in WoO 47, a fifth-line with two bass arpeggiations generates the *Ursatz* of the piece. Furthermore, this fifth-line acts as a motivic bearer unifying the tonal structure of the piece at multiple structural levels. Beethoven unifies not only the primary theme, but also the second theme and even the development section through fifth-lines. The first-order linear descent from the *Kopftön* $\hat{5}$ within the primary theme is one of the important features that distinguishes this piece from the other two of WoO 47. This feature categorizes this movement into our model I-3, what I call the “textbook” sonata-form model.

Example 2-14. A deep-level middleground graph of the first movement of WoO 47-3

Exp 1 9 14 50 73 95 99

Dev 50 5 4 3 2 1 4 3 2 1 4 3 2 1

Recap 73 5 4 3 2 1

Exp 1 9 14 50 73 95 99

Dev 50 5 4 3 2 1 4 3 2 1 4 3 2 1

Recap 73 5 4 3 2 1

Modal mixture infiltrated into the 5-line

Absence of 7th of V7 securing the return of the home key

HC still in the home key, D-major

D: I V7 I ii6 V7 I V6-5 I V7 I V6-5 I V7 I VI

*Brackets indicate the fifth-line descents act as a significant motive

The phrase design of the primary theme conforms to the simplest Classical prototype, an antecedent-and-consequent phrase construction. The thematic parallelism and the half-cadence in the middle lead to a lower-level interruption, which contributes to the more independent status of this fifth-line as a self-contained entity (see Example 2-15).²⁶

Example 2-15. A foreground graph of the primary theme (mm. 1-8)

The image shows a musical score for the primary theme in D major, measures 1-8. The score is written in treble and bass clefs. Above the staff, a foreground graph shows pitch contours with labels: $\hat{5}$ above measure 1, $\hat{4}$ $\hat{3}$ $\hat{2}$ above measures 2-3, $\hat{5}$ above measure 4, and $\hat{4}$ $\hat{3}$ $\hat{2}$ $\hat{1}$ above measures 7-8. A 'div' label is placed above measure 5. A '5-line' label points to the E4 note in the bass staff at measure 3. Harmonic analysis below the staff shows: I, ii6, V, I, ii6, V6/4-5/3, I. The key signature is D major (one sharp).

The *Kopfton* $\hat{5}$ descends in mm. 2-3 to $\hat{2}$, which then leads to the interruption in the following measure, as the harmony shifts from tonic to dominant. The turn-figure assigned to E4 at m. 3 seems to indicate rhetorically that the descent has been temporarily interrupted at that note and thus the E4 is structurally important. The $\hat{2}$ remains intact until the *Kopfton* $\hat{5}$ is recovered at the beginning of the consequent, by generating a lower-level fifth-line descent, which recalls a motivic connection to the

²⁶ In the fifth-line *Ursatz*, the presence of the first-order fifth-line progression ($\hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1}$), which projects the primary theme, is a relatively rare structural feature in Beethoven's piano sonatas. Another example is found in the A-major Sonata, the first movement of op. 2, no. 2.

Ursatz. The consequent, although begun by the parallel thematic idea, undergoes a different voice-leading journey (marked with asterisks in Example 2-15). The recovered *Kopfton* $\hat{5}$ does not launch its descent until the $\hat{4}$ enters with its predominant harmony ii^6 at m. 7. The superimposed inner-voice conceals this fifth-line descent supported by a typical conclusive cadence (mm. 7-8).

Unlike the other two WoO 47 works, whose transitions are short or even absent, the third has an adequate transition, which is distinguishable from the primary theme not only because of the definite cadence at the end of the primary theme, but also because of the dissimilarity in their rhythmic configurations (Example 2-16). From a Schenkerian point of view, the transition contains a *Urlinie* descent to $\hat{2}$, which precedes the second theme's first-order fifth-line. This means that, for the young Beethoven, the transition began to gain more structural importance that can deserve legitimately embodying the background descent.²⁷ However, the transition does not entirely carry a modulatory function, although the raised $\hat{4}$, signaling a tonal shift toward the dominant key, appears at m. 15. This signal is too weak to establish the dominant firmly as a key because the passage does not take any further harmonic action although it briefly tonicizes the dominant by means of a $\hat{4} - \#4 - \hat{5}$ schema. This is a stereotypical Mozartean exposition model that Beethoven favored in his early period and thus used frequently in first movements of WoO 47, no. 1; op. 2, no. 3; and op. 49, no. 2, as well as in the movement under discussion.

²⁷ The assignment of the structural emphasis on the transition is a remarkable characteristic to show Beethoven's stylistic tendency toward his early Viennese period.

Example 2-16. A foreground graph of the transition (mm. 9-16)

P Transition

1 9 10 12 13 14 15 16

This is from the tenor voice

Weak foreground support for $\hat{4} : V^4_3$

D: [I] V7 I ii6 V

Despite the manifold strong presence of the fifth-line, one of the drawbacks of this fifth-line reading lies in a weak support for $\hat{4}$ at m. 9 (Example 2-16). A tiny-level unfolding assumed here would marginally provide an explanation for the problematic weak support (Example 2-17-(a)). However, the same unfolding, which appears later in the recapitulation (m. 93), but this time has been metrically expanded and embellished by arpeggiations (Example 2-17-(b)), provides a justification that one thinks of A3 as a support for $\hat{4}$.

Example 2-17. Harmonic supports for $\hat{4}$ s in the exposition and the recapitulation

(a) Unfolding at m.9

(b) Expanded unfolding at m. 93

The conclusive cadence in mm. 36-37 achieves the structural descent and leads us to have two separate second themes (second and closing theme), unlike the preceding two sonatas. As the following voice-leading graph shows (Example 2-18), the first descent generates the second theme, whereas the second makes the closing theme (mm. 37-43) and the following codetta (mm. 44-49), which are distinguished from each other not only by the foreground pause dramatized by the *fermata* at m. 43, but also by the difference of the underlying rhythmic figurations, act as a single entity. Beethoven ignores the voice-leading logic of V_2^4 at m. 43: the chord seventh in the bass does not resolve to C^\sharp , but rather leaps to A, creating the extreme point of the distortion.

Example 2-18. Foreground graph of the second themes and codetta (mm. 17-49)

The image displays a musical score for Example 2-18, covering measures 17 to 49. The score is divided into three sections: S (measures 17-22), K (measures 23-36), and C (measures 37-49). The notation is presented on two staves, with the upper staff in treble clef and the lower staff in bass clef. The key signature is two sharps (F# and C#). Various annotations are present throughout the score, including '5-line', '3-line', and '8^{mezza}' markings. Chord symbols such as V7, V6-5, and V4-3 are used to indicate harmonic structure. A note in the bass staff at measure 43 is marked with an asterisk and the text: '* awkward voice leading in the bass: omission of a proper resolution'. The section labels S, K, and C are positioned above the score at measures 17, 37, and 44 respectively.

It seems noteworthy that this movement has two equal higher-level fifth-line descents within the subordinate-key area. Both descents contain satisfactory harmonic supports in the two-bass arpeggiations and enough length to function as a self-contained line. Multiple identifiable second themes, which are a remarkable evolution in terms of Beethoven's handling of the second-theme area, might be understood as the end result of the process leading toward the standardized sonata form.²⁸

Beethoven begins the development section with primary-theme material, which appears transposed into the dominant key, as in the previous works. Such an initiation of the development, a compositional cliché seen in Beethoven's Bonn-period piano sonatas, reflects the compositional practice of the 1780s, as James Webster has pointed out.²⁹

A typical foreground fifth-line (E-D-C-B-A), containing the transformed $\hat{3}_3$ by modal mixture, generates the development section (Example 2-19).³⁰ Modal mixture first appeared in the second theme (Example 2-18). The three measures transformed by modal mixture not only prolong the tonic harmony, but also serve as a precursor to a later passage colored entirely by the same technique (mm. 37-41). This modal

²⁸ This is a significant feature, which distinguishes the movement from the previous two companions of WoO 47, which entail only a single fifth-line descent in the second-theme area. Beethoven's early sonatas as well as his middle-period sonatas have multiple fifth-lines, although they belong hierarchically to different structural levels and are embellished by various compositional techniques.

²⁹ James Webster, "Sonata Form," in *The New Grove Dictionary of Music and Musicians*, 2nd ed. (2001), 23: 693.

³⁰ It is noteworthy that this is the first appearance of modal mixture in his early piano sonatas.

mixture becomes meaningful in the development because it is placed into the middleground and controls the structural features of that section. The counterpoint that supports the fifth-line projected throughout the development is quite unusual. After a lower-level fifth-line descent within the primary-theme material (mm. 50-53) in the expected dominant key, the unfolding on the local dominant of B-minor (E to C[#] in mm. 54-56) leads to D as a next member of the fifth-line ($\hat{4}$). Oddly enough, the C-natural (lowered $\hat{3}$) which originates from modal mixture is supported by a dominant of G-major, which is just a passing key between B-minor and E-minor.

Example 2-19. A middleground graph of the development (mm. 50-72)

***Mode mixture as a primary compositional device governing the development**

Despite its use in the second theme and the development, the modal mixture falls short of displaying an unusual compositional dexterity. There is no advanced clue or sign indicating that modal mixture would serve as a crucial element of the

second theme and the development. Nor is there a confirmation by use of the technique in the recapitulation. This is one of the places leading to a critical judgment that, although the young Beethoven introduced modal mixture as a structural basis for the second theme, he failed to elevate it as a developmental element unifying the whole piece.³¹

A careful examination of the deep-level middleground scheme of the development (Example 2-19) indicates that Beethoven does not concentrate on a transformation of the dominant triad into the dominant seventh, but substitutes a new cadential gesture for the usual process securing the return to the home key. This cadential gesture, which consists of a $\frac{7}{3} \cdot \frac{6}{4} \cdot \frac{5}{3}$ figure on the dominant, has a historical origin. A knowledgeable listener might recall the similar use in Palestrina's sacred music of the late sixteenth century, where the accented $\frac{7}{3}$ moved to the unaccented $\frac{6}{4}$ and then to the accented $\frac{5}{3}$. Beethoven might have been aware of this cadential gesture from his early training in counterpoint and applied it to the cadential closure in order to substitute it for a commonly assumed cadential gesture.

The self-contained fifth-line, although unstable because it is transformed by modal mixture, and the absence of the secured seventh in the development contribute to the tripartite division of the movement—the three formal sections in the sonata form clearly articulated by two strong cadences—by emphasizing the tonal independence of the middle section from both the preceding and following sections.

³¹ Beethoven adopts the modal mixture more insistently in the first movement of the F-major Sonata, op. 10, no. 2. The modal mixture in the F-major Sonata functions as a principal means of expanding formal sections and of achieving the dramatic tensions.

Oddly enough, this structural characteristic contradicts Beethoven's later tendency to integrate the development and the recapitulation by means of diverse devices, such as the neighbor-note figure and the delayed resolution of the seventh.³²

The reworking in the recapitulation is unmistakably Beethovenian. The recapitulation in question is no longer a restatement of the exposition with an appropriate transposition of the second theme. Beethoven attempts to create a new interesting section instead of merely restating the previous material. The reprise begins without the strong magnetic power of the dominant seventh impinging on the home tonic. Its initiation recalls that of the second theme in the exposition, where a new melody enters after the half cadence followed by a rest. The most interesting feature of the recapitulation lies in a distinctive reordering of the themes and transition. Beethoven combines the primary and second theme, by switching the ordering of the transition and the second theme. He does not discard the transitional material, but uses it for a different purpose. The transition material appears as an appendix extending and confirming the structural tonic reached earlier in the second theme (m. 95), rather than as bridge material connecting the primary and second themes as in the exposition (Figure 2-2). This might be regarded as an early example

³² One of the advanced devices to integrate the two formal sections into a closed unit is witnessed in the first movement of Beethoven's op. 53 (*"Appassionata"*), where the late return to the tonic *Stufe* results in a temporal displacement and tight connection between the two sections. For a detailed discussion, see Chapter 1.4 on "Sonata Form in the Middle period."

foreshadowing Beethoven's reworking and reinterpretation of the recapitulation, a significant feature in the middle period.³³

Figure 2-2. Thematic procedures of the recapitulation (mm. 73-111)

Thematic procedure:	P	S ₁	TR material	S ₂	Coda
Cadence:	IAC	PAC (Strongest)	PAC		PAC
Mm:	76	95	99	105	111

The simplified and reduced primary theme appears on a tonic pedal and then the second theme enters directly without a transition (Example 2-20). The analyst might encounter a difficulty to decide the locus of the structural descent, which closes the entire *Ursatz*, because of Beethoven's peculiar reordering of the formal sections. The second theme, which usually contains the structural descent in the recapitulation, has appeared too early: it precedes the transition material. Nevertheless, three measures (mm. 93-95) can be located as the place containing the background descent ($\hat{4} - \hat{3} - \hat{2} - \hat{1}$). There are two clues. First, the strong cadence articulated by the ii⁶-V⁶⁻⁵-I harmonic progression marks mm. 94-95 as a significant place and allows us to interpret the subsequent passage as a lower-level event, which simply prolongs the tonic. Second, as discussed earlier, Beethoven replaces the weak harmonic support

³³ Compare William Drabkin, "Understanding of 'Sonata Form': The Evidence of the Sketchbooks," in *Beethoven's Compositional Process*, ed. William Kinderman (Lincoln: University of Nebraska Press in association with the American Beethoven Society and Ira F. Brilliant Center for Beethoven Studies, San Jose State University, 1991), 14-19. Drabkin suggests that Beethoven's initial approach to sonata form was not organic ("establishing patterns of growth"), but "a process of defining sections" (15).

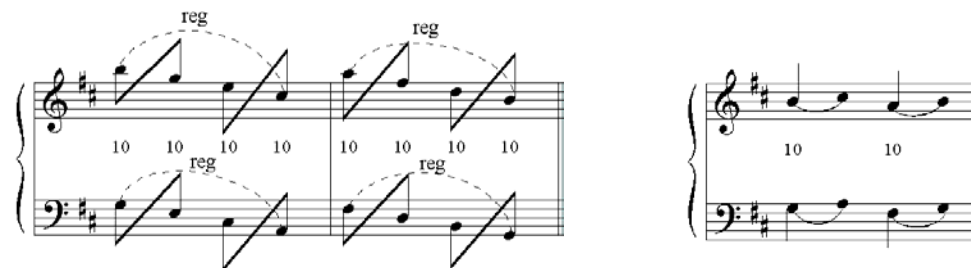
for $\hat{4}$ in the exposition (by V_3^4 at m. 9) with the stereotypical, satisfactory support (by V^7 at m. 93), stressing this place as a strategic point (Example 2-17).

The idea of register transfer comes to the forefront as an underlying compositional technique (mm. 81-99 on the score). The register transfer first appears in the transition of the exposition (mm. 8-12) and was adopted as a means of prolonging the second theme (mm. 23-37 in Example 2-18). Notice the metric expansion by octave transfers. This is an important moment where the register transfer comes to its full fruition by being combined with exuberant pianistic figuration, foreshadowing its later fruition in the first movements of op. 2, nos. 2 and 3. The register transfer might have been an appropriate compositional means for the young Beethoven who wanted to show off his talent as a pianist composer.

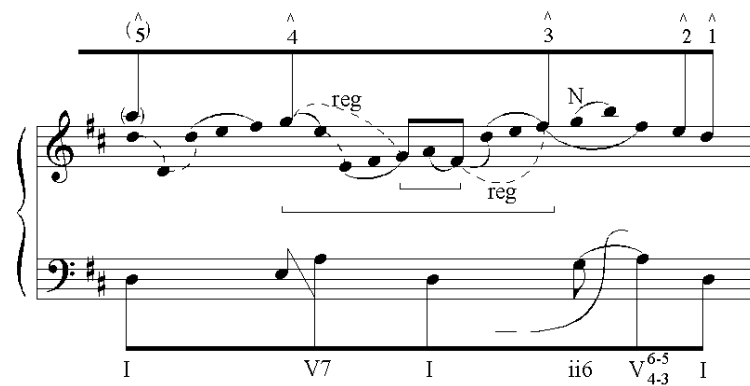
Beethoven's interest in register becomes more concrete in this early-period work. The technique of distributing melodies into different registers is markedly seen after the recapitulation's second theme. Beethoven's polished compositional skill does not stop here: the idea of register transfer appears as combined with unfolding and forms an escape-tone figure in mm. 91-92, creating a distinctive musical foreground (Example 2-20). One can also find a similar idea in mm. 95-98, where several octave transfers make the structural descent locate in the same register.

Example 2-20. Register transfers playing greater roles in the piece

(a) Register transfer combined with the unfolding (mm. 91-92)



(b) Octave transfers in the transition (mm. 95-98)



2.5 : First Movement of WoO 51, C major

The young Beethoven's preference for fifth-line *Urlinien* with two bass arpeggiations also appears in this charming C-major Sonata.³⁴ Beethoven sets up the most usual tonal structure. A tonal shift from tonic to dominant marks the exposition. The arrival at $\hat{2}_2$ in the second theme area causes an interruption, and this interrupted

³⁴ As mentioned in the introductory remarks, the approximate year when the work was written has been ascribed, but not precise. I include the discussion of the C-major Sonata into this chapter because its structural features are close to those of the Bonn-period sonatas.

structure generates the entire development section. The recovery of the *Kopfton* $\hat{5}$ with the simultaneous thematic return completes the *Ursatz*.

Example 2-21. A deep-level middleground graph of the first movement

Exp	Dev	Recap
(P T S)		(P+T S Coda)
1 15 16 19 24 27	29 32	48 56 63 70 78 83 86 88

However, the outlook of the movement based on arpeggiations poses analytic difficulties in deciding the placement of the structural lines and presents possibilities for multiple readings. The primary theme has enough length (16 measures) and fulfills the harmonic conditions to contain a first-order linear progression. It not only ends on a conclusive perfect authentic cadence, but also has appropriate harmonies such as ii^6 or $V_4^6 \frac{5}{3}$ to support the fifth-line from the *Kopfton* $\hat{5}$. Thus, one could legitimately conceive of an analytic graph of the primary theme in which a fifth-line from the *Kopfton* is embedded, if he considered only the primary theme. The

presence of the first-order fifth-line prolonging the *Kopfton* within the primary theme results in the *Ursatz* of the “textbook” sonata form (model I-3).

Example 2-22. An analytic graph of the primary theme as a $\hat{5}$ -line

1 8 10 12 15 16

$\hat{5}$

$\hat{5}$ $\hat{4}$ $\hat{3}$ $\hat{2}$ $\hat{1}$

3-line

N

7 10 10

I V7 I V $\frac{6}{4}$ $\frac{5}{3}$ I

C: I

A close examination of the transition, however, leads us to reject this first interpretation and instead to offer an alternative. The alternative reading (Example 2-23) becomes more convincing if one considers that the brief transition (mm. 17-18) carries only a minimum role of modulation toward the dominant key. This compactness of the transition makes it difficult for the transition itself to have an independent line directly from the *Kopfton* and furthermore undermines the previous reading, in which one tends to interpret the primary theme as a self-contained structural entity, by finding a normal first-order linear progression.

Example 2-23. An analytic graph of the first theme and transition

The image shows an analytic graph of a musical passage. At the top, measure numbers 1, 8, 10, 11, 14, 15, 16, 18, 19, and 21 are marked. A thick black line spans from measure 1 to 21, with a circled '5' below it at measure 1 and a circled '2' below it at measure 21. The musical notation consists of two staves: a treble clef staff on top and a bass clef staff on the bottom. In the treble staff, notes are connected by dashed lines, with 'N' labels above notes at measures 10 and 14. Two '3-line' labels are placed below the treble staff at measures 10 and 14. In the bass staff, notes are also connected by dashed lines, with '7 10' and '6 5' labels above notes at measures 10 and 18 respectively. Below the bass staff, harmonic changes are indicated: 'C: I' at measure 1, 'V7' at measure 14, 'I' at measure 16, and a circled 'V' at measure 19. A box at the bottom right contains the text 'HC still in the home key' with an arrow pointing to the circled 'V'.

The second reading (Example 2-23), in which both the primary theme and the brief transition collaborate in deriving the first-level middleground line, has another advantage because it consistently reflects a motivic parallelism, as seen at m. 10 and 14 in the graph. The reading chooses A as an upper neighbor note, not F as a member of a lower-level third-line (compare Example 2-22 and 2-23). The resolution note G remains intact through m.13 although it undergoes a lower-level third-line descent. This third-line is a foreground figure because there is no separate support for F at m.12. It allows us to have A at m.14 as a neighbor note to the following G, which is the final recovery of the *Kopfton* prior to the structural descent to $\overset{\wedge}{3}$ at m.16. The motivic parallelism of m. 10 and 14 finally leads us to discard the first reading, in which the self-contained fifth-line generates the primary theme.

The foreground-level unfolding techniques have an influence on the thematic shapes of the second-theme area. Detailed consideration of the voice-leading journey of this passage provides two plausible readings:

Example 2-24. Two plausible readings of the second theme area

(a) Reading 1

S-theme
19 21 24 25 26 27 Codetta
28 29

G:I V7 vi ii6 V I

C: V

(b) Reading 2

S-theme
19 21 24 27 28 Codetta
29

I V7 I ii6 V I

C: V

There are two main differences in these readings. One concerns harmonic support for $\hat{3}$ and the other a locus of the $\hat{1}$ and its structural tonic. Example 2-24-(a) sees the structural ending of the second theme at m.27, by degrading the role of the repetition (mm.27-29) to a simple rhetorical assertion to emphasize a structural ending which has been already made. Accordingly, it forces us to find the fifth-line descent prior to m.27 and finally to choose a vi as harmonic support for $\hat{3}$. This reading provides a foreground-like fundamental structure, in which the fifth-line descent $\hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1}$ is supported by the I—V⁷—vi—ii⁶—V—I progression, not by two bass arpeggiations. Furthermore, the reading fails to reflect a formal division between the second theme and the codetta. On the other hand, the alternative overcomes such problems. By integrating the repetition—rearticulated by the textural reinforcement through the octave doubling and the supplementation of an inner voice as well as by the *forte* dynamics—into the structural descent, the second reading (Example 2-24-(b)) not only brings the formal division into the graph, but also obtains an *Ursatz* parallelism: the two bass arpeggiations supporting the *Urlinie* of the entire movement are parallel to those of the second-theme area.

The fourth-line (G-F-E^b-D) colored by modal mixture generates the development section (see Example 2-25). Beethoven's tendency to adopt modal mixture as an underlying compositional device is found in WoO 47, no. 3, as well as in this movement. Interestingly, this fourth-line from G at m.32 is supported by two bass arpeggiations as in the first and second theme (as well as the entire piece). The tonal space between $\hat{5}$ and $\hat{4}$ is filled with a series of parallel tenths. However,

Beethoven does not do anything beyond this counterpoint-exercise-like setting. He neither adds interesting motivic flavor to the middle section, appropriate for display of a composer's rhetoric, nor combines the motivic idea with other compositional devices to lead to a dramatic juncture as we might expect in the development sections of his early Viennese or middle-period sonatas. The advent of $\hat{2}$ has been made over the predominant ii^6 and later V. The retransition introduces the seventh as an elaboration of the goal and its resolution is made in the beginning of the recapitulation as late as m. 63, passing through the recovery of the *Kopft*on $\hat{5}$ at m. 55.

Example 2-25. Foreground graph of the development (mm. 32-54)

The image shows a musical score for Example 2-25, which is a foreground graph of the development section (measures 32-54) from a sonata by Beethoven. The score is written in C major and 2/4 time. It consists of two staves: a treble staff and a bass staff. The treble staff contains a melodic line with various annotations, including a circled '5' above the first measure, a '5-line' label above a group of notes, and a '4-line' label below a group of notes. There are also fingerings indicated: '4' above a note at measure 44, '3' above a note at measure 47, and '2' above a note at measure 50. A dashed line connects the notes at measures 47 and 50. The bass staff contains a bass line with a '10' below the first measure, a '[10 10 10 10 10 10 10]' sequence below measures 32-38, and '5 10' below measures 47-48. Chord symbols are provided: 'ii6' below measure 47, 'V' below measure 50, and 'I' below measure 63. Measure numbers 32, 40, 44, 47, 50, 53, 55, and 63 are indicated above the staff. A circled '5' is also present above measure 63.

The recapitulation, however, reveals Beethoven's distinctive transformation procedure. He first restates almost the entire primary theme (only the last three measures have been dropped), but later expands it by tonicizing the harmony IV with

much emphasis on $\hat{4}$ through genuine voice-leading interactions with an inner voice.³⁵ The fifth-line (C-B^b-A-G-F), a motion from an inner voice, serves as a prefix to the goal $\hat{4}$. The long stay on the subdominant is merely a stepping-stone to move the ultimate support for $\hat{4}$, the dominant seventh (V⁷). Beethoven soon connects the IV to the V₅⁶ by means of unfolding and prepares orthodox counterpoints for the subsequent descents ($\hat{3} - \hat{2} - \hat{1}$). As a result, Beethoven creates a first-order fifth-line, which was absent in the exposition, by expanding and transforming the primary theme. Instead of omitting the brief bridge passage from the exposition, he lets the primary theme be directly followed by the second theme, achieving better musical continuity. The first-order fifth-line within the primary theme is followed by another fifth-line descent in the second theme, which finishes the *Ursatz* as a background descent (see Example 2-26).

³⁵ As mentioned before, the emphasis on the subdominant harmony in the recapitulation is Beethoven's typical means of transforming the recapitulation.

Example 2-26. A middleground graph of the recapitulation (mm. 55-93)

First-order fifth-line

56 67 70 72 77 78 83 86 87 88 93

Prefix type

5-line

3-line

5-line

3-line

3-line

7 10 10 5 10 10

IV V₅⁶ I V I

V7 I I V_{4.3}^{6.5} I

C: I

Emphasis on the subdominant :
 Primary means to secure
 the home key as well as
 to transform the recapitulation

Chapter 3: Analyses of Sonata-Form Movements in the Early Vienna Period I

3.1 : Introductory Remarks on Formal Designs and Primary Compositional Devices

The piano sonatas in this period offer two contrasting tendencies. The three piano sonatas of op. 2 and the Grand Sonata of op. 7 show formal expansion and pianistic virtuosity and display more complexity of structural design than his pre-opus works, whereas the two sonatas of op. 49 demonstrate compactness in size and the stylistic simplicity of the Bonn-period sonatas.

As Charles Rosen has mentioned, the Viennese sonatas are far more advanced in manifold aspects than those of the Bonn period.¹ Douglas Johnson encapsulates the characteristics of the early Vienna works, especially written in 1794-5—A-major and C-major Sonatas of op. 2—by evaluating them in relation to the advanced works of Haydn and Mozart and by contrast to other contemporaries:²

- 1 The distribution of thematic material throughout the texture and the natural and easy use of polyphony anywhere in a movement;
- 2 control in the handling of remote key relationships, especially those of the mediant and submediant in both modes;

¹ Charles Rosen, *The Classical Style: Haydn, Mozart, Beethoven*, expanded ed. (New York: W. W. Norton & Company Inc., 1998), 380.

² Douglas Johnson, "1794-1795: Decisive Years in Beethoven's Early Development," in *Beethoven Studies* 3, edited by Alan Tyson (New York: Cambridge University Press, 1982), 1-28. Besides the piano sonatas of op.2, nos. 2 and 3, he includes the Piano Trios in G-major and C-minor, op. 1, nos. 2 and 3, the C-major Piano Concerto, op. 15, etc. However, I add that these characteristics are applied to the Grand Sonata of op. 7.

3 concern with the organic relationships among the parts of a movement and among the movements of a work;

4 the creation of instability within thematic statements as a way of sustaining momentum.³

These formal, tonal, and motivic characteristics are confirmed and verified efficiently by the Schenkerian analytic paradigm. The expansion of the second-theme area through audacious tonal excursions, the foremost feature of the first group of sonatas, brings about multiple first-order fifth-lines of the second-theme area and their sophisticated distribution over the sonata-form design (opp. 2 and 7). The development also brings in remote keys to create a distinctive voice-leading picture. Despite the experimental handling of the second theme and the development, the presence of the first-order line within primary themes leads to an observation that Beethoven evolves toward the “textbook” sonata form model, in which strong cadences articulate each formal section. Beethoven moves away from his obsession with the primitive sonata-form model and the $\hat{5}_3$ -line *Ursatz* of the Bonn period. The $\hat{3}_3$ -line *Ursatz* is first chosen for first movements in op. 2, no. 3, and in op. 7: this model appears continuously as the structural basis for all the early Viennese sonatas in the major mode (op. 2, no. 3, through op. 22).

The advanced compositional devices seen in Beethoven’s middle and late sonatas, such as register transfer and motivic saturation, are adopted as early as op. 2, no. 1: the register transfer is adopted for formal expansion and display of pianistic

³ Ibid., 2.

virtuosity, while motivic reworking is present for attainment of affinity and coherence among formal sections or movements.

On the other hand, the two compact sonatas of op. 49 in G-minor and G-major resemble the earlier sonatas in Bonn, but recall that both are out of the chronological sequence because they were published later (1805), although the *New Grove* authors assign the written date of the works to 1797 with a question mark.⁴ The fundamental structure of the G-minor Sonata is close to WoO 47, no. 2 ($\hat{5}$ -line with two bass arpeggiations), while the G-major Sonata has a primitive $\hat{5}$ -line *Ursatz*, as in all the Bonn sonatas. However, the skill of handling and distributing thematic material over the *Ursatz* is more polished than in the earlier works.

3.2 : First Movement of op. 2, no. 1, F minor⁵

The movement begins with the classic phrase structure that Caplin calls a “sentence.”⁶ As Caplin has pointed out, the sentence design—the presentation consisting of a basic idea on tonic and its repetition over a dominant chord (mm. 1-4), the continuation by fragmentation of the basic idea (mm. 5-6), and the cadential

⁴ Joseph Kerman and others, “Beethoven, Ludwig van,” in *The New Grove Dictionary of Music and Musicians*, 2nd ed. (2001), 3: 119-120.

⁵ Schenker discussed the first movement of the F-minor Sonata, op. 2, no. 1 in his *Der Tonwille* with a special attention to motivic unity. Heinrich Schenker, “Beethoven: Sonate Opus 2, Nr. 1,” *Der Tonwille* 1 (1921): 25-48. For a detailed analysis of each formal section of the movement, see Allen Cadwallader and David Gagné, “Introduction,” chap. 1 in *Analysis of Tonal Music: A Schenkerian Approach* (New York: Oxford University Press, 1998), 4-12.

⁶ William Caplin, *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven* (New York: Oxford University Press, 1998), 9-11.

gesture leading to a half cadence (mm. 7-8)—satisfies all the conditions for the eight-measure unit to be heard as a theme. Despite this thematic quality, the primary theme does not seem to contain a first-order linear progression, not only because the descent is too quickly made, but also because the members of the descent are not supported individually by satisfactory bass counterpoints. Furthermore, the prominent sixth-line motive generates some tension between two ways of interpretation: the one perceiving the figure as a unified entity and the other breaking it into the obligatory theme-generating fourth-line and a subsidiary leading-tone third-line.

Example 3-1. An annotated score of the primary theme (mm. 1-8)

The annotated score for the primary theme (mm. 1-8) is presented in two systems. The first system (mm. 1-4) features the 'Presentation: Basic idea (tonic version)' and its 'Repetition (dominant version)'. The second system (mm. 5-8) includes 'Continuation (fragmentation)', 'Initial Ascent', and a 'Cadential idea'. Annotations include 'Tonic prolongation', 'N', 'LIT 3-line', and '6-line'. Harmonic analysis below the staff shows chords: Fm: i, V⁶/₅, i, viio⁶, i⁶, ii⁶, and V.

A careful examination of this passage, however, reveals that the primary theme has a first-order fourth-line despite all the deficiencies mentioned above (see Example 3-1).⁷ The triple grace-note on the first beat of m. 8 (E-F-G) plays a significant role in dividing the foreground sixth-line figure into a fourth-line and a leading-tone third-line, by touching and accentuating G again. This quickness of the primary-theme descent and the lack of firm counterpoints are partly compensated for by the initial ascent (A^b5-B^b5-C6) and the long tonic prolongation (i - V₅⁶ - i -vii^{o6} - i⁶) in the presentation and continuation process. A stereotypical phrase construction favored by contemporary masters takes place in the primary theme, but in a very distinctive way: the structural line, which generates a theme in the Schenkerian sense, appears quickly at the end of the unit. What Alfred Brendel calls “metrical foreshortening” efficiently reinforces Beethovenian intensity as seen in this stereotypical eight-measure theme.⁸

One of the most salient problems lies in adjusting the hierarchical levels of the structural events of the piece to fit into one of our standard sonata-form models in the

⁷ Leslie Black presents middleground graphs of various formal sections of this F-minor Sonata, op. 2, no. 1. The reading of the exposition (his Example 9) is quite similar to mine in that the first-order fourth-line is embedded in the primary theme, and the voice-leading expedition from the cover-tone E^b to the local *Kopfton*₃[^] (in the mediant key) generates the transition. However, the later part of his reading (for the development) in the same graph seems troublesome: it poses a series of parallel octaves prior to the arrival at ₂[^]. Leslie Black, “Syntactic Irregularities in the Early and Middle Period Works of Beethoven,” (Ph.D. diss., Yale University, 1998), 19. Marston also provides a graph of the primary theme, where he breaks the sixth-line into a fourth- and a third-line (his Example 6.1). Nicholas Marston, “‘The Sense of an Ending’: Goal-Directedness in Beethoven’s Music,” in *Cambridge Companions to Beethoven*, ed. Glenn Stanley (Cambridge, UK; New York: Cambridge University Press, 2000), 87.

⁸ Alfred Brendel, “The Process of Foreshortening in the First Movement of Beethoven’s Sonata op.2, no.1,” in *Musical Thoughts and Afterthoughts* (London: Robson, 1976).

minor mode. The underlying recurrences of E^b within the transition and the second theme cause the problem (see Example 3-2). If we interpreted the second theme as a fifth-line, by taking the E^bs as a primary note, as Cadwallader and Gagné imply, then the local *Kopfton* E^b5 of the second theme does not have any direct connection to the members of the *Urlinie*, whereas only the last two members would be elevated to the higher level.⁹ In other words, although this interpretation could satisfactorily show a smooth foreground voice-leading path from the *Kopfton* C6 to E5 and then from E^b5 to A^b4, it deviates from the normal sonata-form formal design. In this reading, one would understand the second theme area as a foreground event coming from an inner voice E-natural at m.8, by interpreting the fifth-line as a prefix to the goal A^b.

Example 3-2. A middleground graph of the second theme as a $\hat{5}$ - line

The image shows a musical score with Schenkerian analysis. The score is in F minor, 3/4 time. It features a middleground graph with a 'P' (Präfix) section from m. 2-7, a 'T' (Transition) section from m. 11, and an 'S' (Second Theme) section from m. 16-41. The graph is based on a fifth-line (5) with various voice-leading lines (6-line, 6-line, 6-line) and a 'Hierarchical inconsistency' noted. Chords are labeled as Fm: i, Ab I, and V4. A 'ct' (coda) is marked at m. 11. A note at m. 11 is labeled 'Eb generating from an inner voice Eb(?)'. A bracket above the S section is labeled 'A prefix-type 5-line?'.

⁹ See Cadwallader and Gagné, *Analysis of Tonal Music: A Schenkerian Approach*, 4-12. Although they did not suggest an entire graph for the movement, Cadwallader and Gagné

The choice of an alternative reading for the second theme, which assumes C as a local *Kopfton* $\hat{3}$ and recurring E^bs as cover tones, solves the problem (Example 3-3). In this revised graph, which conforms to our sonata-form model II-3, the local primary note C5 is prolonged through a register transfer from the *Kopfton* C6. Right after the sixth-line descent from the *Kopfton*, which completes the primary theme, the transition brings in primary-theme material over a C-minor chord at mm. 9-10. This juxtaposition of major and minor triads on C brings about a tonal conflict between E-natural and E^b. As Cadwallader and Gagné have pointed out, this tonal conflict resonates repeatedly in the second-theme area in enharmonic guise, as F^b to E^b.¹⁰ This is Beethoven's delicate expression of a motivic idea through an enharmonic association.

Example 3-3. An alternative reading of the second theme as a $\hat{3}$ -line

The image shows a musical score for a piano piece, likely from Beethoven's Sonata Op. 10, No. 3. The score is presented in two staves: a treble clef staff and a bass clef staff. Above the treble staff, there is a graph with a horizontal line and several notes marked with a caret (^) and a subscript (3). The notes are labeled with numbers: 2, 4, 7, 11, 14, 39, 41, and 81. Below the graph, the letters 'Exp', 'P', 'T', and 'S' are written. The score itself has various annotations: 'Initial' and 'Ascent' are written below the first few notes of the treble staff. 'reg' and 'ct' are written below notes in the middle of the piece. 'N' is written below a note near the end. '6-line' is written below the treble staff in three places, indicating specific melodic lines. Below the bass staff, there are harmonic annotations: 'Fm: i', 'Ab: I', 'V 6-5 / 4-3', and 'V3'. A bracket spans from the beginning of the piece to the end of the 'V3' chord. Below the bass staff, there is a note: 'Location of the structural III: in the middle of the transition'.

presumably see E^b5 as a local *Kopfton* of the second theme area by emphasizing the prominent role of the falling sixth motive.

The E^b plays a significant role as a cover tone to the local *Kopfton* C5 within both the transition and the second theme: it not only leads to the *Kopfton* C5 through the stepwise descent E^b5-D^b5-C5, but also generates a foreground sixth-line motive through boundary play; this is reminiscent of the primary theme, thereby achieving a motivic unity of both themes. The tonic in A^b-major at m.14, although looking as if it were an intervening event in the middle of the foreground sixth-line (E^b-D^b-C-B^b-A^b-G in mm. 9-16), carries an important function: thematically, it serves as an ending point for presenting thematic material based on the primary theme, and, tonally, as a starting point launching a new harmonic journey of the second theme.

The multiple-level third-lines from the local primary note C5 and the voice-leading interaction with the cover-tone E^b decide the intricate voice-leading expedition of the second theme (see Example 3-4). This interaction between the *Kopfton* C and its cover-tone E^b is a principal compositional device in this movement. It creates a more sophisticated and distinctive foreground when elaborated by register transfer and boundary play (mm. 29-39 in Example 3-4). This boundary play is transposed in the recapitulation, creating a polished musical foreground, which originates from the voice-leading interaction between the *Kopfton* and cover-tone (*Kopfton* A^b and cover-tone C in Example 3-5, mm. 131-138). A stretched-out voice-exchange (mm. 14-26) prolonging the mediant and preserving the primacy of the *Kopfton* C5 appears in the middle of this interaction.

¹⁰ Ibid., 7.

Example 3-4. A middleground graph of the exposition

The image shows a musical score with two staves (treble and bass clef) and various annotations. The score is divided into sections labeled P, T, S1, S2, and K, with measure numbers 2, 7, 9, 14, 21, 26, 29, 33, 39, 41, and 48. Annotations include 'Initial Ascent' with notes 5, 4, 3, 2, 'N', 'ct', '3-line', '5-line(b.p.)', and '3-line'. Harmonic markers include Fm:i, V, Ab:I, I6, V6-5 I, and 4-3. A Roman numeral III is also present.

The $\hat{3}_3$, recovered by a lower-level voice-exchange in mm. 26-27, remains intact until it substitutes its harmonic support for the dominant at m. 39 and ultimately arrives at $\hat{2}_2$ in the next measure: $V_{4-3}^{\hat{6}-5}$. Beethoven employs the voice-exchange again to govern the development section.

The implicit advent of the structural mediant harmony in the middle of the transition (m. 14) and the long stay on the dominant in the second-theme area (mm. 16-25) could be understood as Beethoven's deliberate intention to blur the relationship between inner form and outer form in a delicate way.¹¹ The locus of the mediant does not align with the beginning of a new formal section, second theme. Although the inner form takes the mediant at m. 14 as a point of departure for a new formal section, the outer form will designate m. 21 as a strategic point, where the second theme begins. By putting the structural harmony in the middle of a section (in this case, transition), Beethoven blurs a relationship between outer form and inner form, thus articulating the transition and the second theme as a closely associated unit. This subtle conflict between inner-form and outer-form aspects serves as a remarkable characteristic, and it distinguishes the Viennese works from the Bonn-period.

Beethoven's restatement of the second theme in the recapitulation is noteworthy, too. After presenting the primary theme without a change, he begins the transition over tonic. Instead of a complex voice-leading interaction between the

¹¹ For a discussion of the interaction between inner form and outer form, see Eric McKee, "Auxiliary Progressions as a Source of Conflict between Tonal Structure and Phrase Structure," *Music Theory Spectrum* 18, no. 1 (1996): 51-76.

Kopfton and the cover-tone, as in the exposition, an unequivocal fourth-line descent generates the transition (mm. 109-119). This fourth-line seems to play a role of compensating for the weakness of harmonic support of the fourth-line in the primary theme.

The third-line from the local *Kopfton* C5 in the second theme of the exposition does not lose its essential unity, but is dispersed between $\hat{4}_4$ and $\hat{3}_3$ by taking new harmonic supports in the recapitulation (see Example 3-5). The lengthy stretch of $\hat{5}_5$ in the exposition is substituted for by the prolongation of $\hat{4}_4$ in the recapitulation. Beethoven adjusts a local third-line (C-B^b-A^b in mm. 21-26) from the second theme in the exposition, which was harmonized by the I-V-I⁶ bass motion in the mediant key with an extended dominant, and reshapes it as the third-line, B^b-A^b-G (in mm. 120-127), now deriving from $\hat{4}_4$. The recapitulation is not merely a restatement of the exposition with the second theme appropriately adjusted, but a result of Beethoven's reworking and reinterpretation of the tonal and voice-leading structure.

Example 3-5. The second theme in the recapitulation

The musical score for Example 3-5 is presented in two staves (treble and bass clef) with a key signature of one flat (F major). The score is divided into sections: P (measures 107-111), T (measures 116-119), S1 (measures 120-127), and S2 (measures 131-140). Above the staves, measure numbers and line numbers are indicated: 107 (5), 111, 116, 119, 120 (4), 127, 131 (3), 138 (2), and 140 (1). The score includes melodic lines with various annotations: 'ct' (cover-tone) above notes in measures 120 and 131; '3-line' and '5-line (b.p.)' (below the staff) indicating voice-leading lines; and '10 10 10' below the bass staff in measure 131. The harmonic analysis below the bass staff shows the following chords: Fm: i, V, i, V, i, V, i, V⁶⁻⁵/₄₋₃, i.

The development section is one of the most appropriate places revealing Beethoven's far more complex, artful handling of harmony and voice leading. The development begins by prolonging the mediant harmony and $\overset{\wedge}{3}$. He does not generate the section by the usual means, a neighbor-note or common linear progression, but sets up a large-level voice-exchange (mm. 50-74). Although the development contains modulations to B^b-minor and C-minor, the third-line (C-B^b-A^b) and its counterpoint (A^b-B^b-C), which fill out the tonal space secured by the voice-exchange, attain a level of tonal stability within the mediant key. The head note of the development (C) remains in force to m. 69, prolonged by means of lower-level third-lines (C-B^b-A) and a neighbor-note motion. The tonic of B^b-minor supports the neighbor-note D^b5 at m.69.

Example 3-6. A middleground graph of the development

7 50 61 69 74 76 81

$\overset{\wedge}{5}$ $\overset{\wedge}{4}$ $\overset{\wedge}{3}$ $\overset{\wedge}{2}$

*Untransposed Falling Sixth (C-B^b-A^b-G-F-E)

3-line(C-B^b-A^b) 3-line 3-line(G-F-E)

*Voice-Exchange 6 6

Ab: I 6

Fm: i III ii6 V^b

As Cadwallader and Gagné have noted, Beethoven has reworked the opening motive in the development: they call this motive the “untransposed falling sixth from bars 7-8.”¹² He enlarges and intersperses the falling sixth motive from C to E into the development prior to the retransition (m. 81) by manipulating the harmonic rhythm. The *sforzando* markings assigned to A^b (m. 74), G (m. 76), and F (m. 78) reinforce the presence of the falling sixth.¹³ This sixth-line motive parallels precisely that of the primary theme: the sixth is broken into a fourth-line and a leading-tone third-line.

In the retransition, which begins with the arrival of the structural dominant at m. 81, a goal-directed motion toward the tonic commences through a fifth-line in the bass (C4 to F3), while Beethoven prolongs the dominant and finally secures the seventh ($\hat{4}$) at m. 100 (Example 3-7). The reprise, which serves as a goal of the descent, articulates a climactic point, where accumulated tensions in the retransition are dramatically solved with the advent of the tonic. This emphatic return of the primary theme is marked by *forte* dynamics, which help articulate emphatically the reprise as a climax. Kerman and Tyson see the *fortissimo* return of the primary theme as a Beethovenian fingerprint. They say: “Yet it [the *fortissimo* return of the primary theme] adumbrates a new view of the form whereby the recapitulation is conceived less as a symmetrical return or a climax than as a transformation or triumph.”¹⁴ This descending fifth-line is reminiscent of the fifth-line descent in the *Ursatz* of the entire

¹² Allen Cadwallader and David Gagné, *Analysis of Tonal Music: A Schenkerian Approach*, 8.

¹³ *Ibid.*

¹⁴ Joseph Kerman and others, “Beethoven, Ludwig van,” in *The New Grove Dictionary of Music and Musicians*, 2nd ed. (2001), 3: 97.

movement.¹⁵ A series of parallel tenths guide the voice-leading path from the octave-transferred leading tone E5 at m. 93 to the starting tone, A^b5 at m. 102.

Example 3-7. Foreground graph of the retransition (mm. 81-102)

The musical score for Example 3-7 shows a retransition from mm. 81 to 102. The treble clef staff features a series of parallel tenths (labeled 'reg') and a '5-line' motive. The bass clef staff shows a '5-line' motive. The score is annotated with '10' and 'Arp' (Arpeggio). The key signature is Fm: V and the ending is marked with a coda symbol 'i'.

For the first time, Beethoven puts particular stress on the coda. He highlights the importance of the coda by setting the sixth-line motive with an emphatically chordal texture, which is distinctive in texture from the previous passages. I will cite two analytic readings of this concluding section by different authors. Although the readings are quite similar, they have been made for the different purposes. First, in their textbook, Cadwallader and Gagné propose a reading that highlights the concealed presence of the falling sixth-line. This didactic reading efficiently shows Beethoven’s elegant saturation of the score with the sixth-line motive. Despite its strength as a reflection of this motivic idea, their interpretation virtually neglects the

¹⁵ Marston has also noted the fifth-line in the retransition, but relates it to the fifth-line of the bass in the primary theme: “This stepwise bass motion c¹-f is the reverse of the ascending progression heard in mm. 5-8 and about to be repeated in mm. 105-08” (Nicholas Marston, “The Sense of an Ending’: Goal-Directedness in Beethoven’s Music,” 87).

harmonic supports for the upper voice: they do not provide a hint of which notes they choose for the counterpoint of the falling sixth, nor is it easy to locate a logical, legitimate counterpoint for each member of the descent (Example 3-8).

Example 3-8. Cadwallader and Gagné's interpretation of the coda (mm.140-152)¹⁶

The image displays three systems of musical notation for piano. The first system, labeled with a circled '140', shows a melodic line in the right hand with a falling sixth interval highlighted by a slur and a 'sf' dynamic marking. The second system, labeled with a circled '145', features a 'C' above the staff and 'ff' dynamics. The third system, labeled with a circled '149', shows 'sf' and 'ff' dynamics with 'E♭' and 'F' above the staff. The score is in a key with three flats and a common time signature.

Nicholas Marston reaches a similar interpretation for the purpose of illuminating Beethoven's goal-directedness, a tendency to put structural importance on the ending.¹⁷ He shows the falling sixth motive and its counterpoints with stems.

¹⁶ Allen Cadwallader and David Gagné, 11 (their Example 1-6).

¹⁷ Nicholas Marston, "The Sense of an Ending': Goal-Directedness in Beethoven's Music," 88.

However, his reading is also troublesome because of the problematic harmonic supports for each member of the sixth-line motive (Example 3-9). The parallel octaves between the two outer voices make this reading look illicit, although they are broken through the insertions of other intervening intervals in the foreground.

Example 3-9. Marston's interpretation of the coda (mm.140-152)

The musical score shows two staves. The treble staff contains a melodic line with notes marked with fingerings: 5, 4, 3, (2), and 1. The bass staff contains a bass line with notes marked with Roman numerals: i, iv, V, and i. The score includes dynamic markings (f) and articulation marks (accents). The measures are numbered 145 and 149.

© Reprinted with the permission of Cambridge University Press

The coda, which starts at m. 140, consists of the closing theme and its extension. A close examination of the voice-leading path of the extended passage (mm. 146-152) reveals that the sixth-line from C belongs to an inner voice and thus its hierarchical status is downplayed (Example 3-10). Behind the leading-tone third-line supported by the V-I-V bass motion (mm. 145-152), Beethoven presents here a very complex voice-leading path that brings renewed emphasis to the motivic sixth-line. Immediately after the final member of the *Urlinie* has been achieved at m. 140, the recovery of $\hat{3}_3$ initiates the coda, which brings in the closing-theme material. The Italian sixth- and German sixth-chords, which do not include $\hat{2}$ as a chord member, are a deliberate choice to lengthen the prolongational domain of this local primary note $\hat{3}_3$. The immediate third-lines (A^b-G-F) in mm.141-2, 142-3, and 144-5 are very lower-

level events, because the passing-tone G does not have a satisfactory counterpoint. A^b remains intact until the advent of the cadential $\frac{6}{4}$ and finally descends to G ($\hat{2}$) at m.145 over the dominant harmony.

This extended portion of the coda begins by prolonging this $\hat{2}$ in the next bar. The actual, logical voice leading of the upper voice outlines a stepwise descent ($E-E^b-D^b-C-B^b-A^b-G$), in which the last G confirms the presence of $\hat{2}$ at the last moment. Beethoven reinterprets this regular voice leading to add a motivic idea to the passage based on the circle-of-fifths sequence: he first picks up an inner-voice C and then puts it in the upper voice with the indication of *fortissimo* dynamics, marking the motive sixth very emphatically. During the course of this motivic saturation, Beethoven lets the fifth-line resonate in the bass, creating another form of motivic coherence, as at the end of the retransition (see mm. 93-102 in Example 3-7).

Example 3-10. Foreground graph of the closing theme and the coda (mm.140-

152)

3.3 : Fourth Movement of op. 2, no. 1, F minor

The fourth movement has many stylistic similarities to the first movement.¹⁸

One noteworthy structural trait is that the fourth movement has a fifth-line *Urlinie* supported by two-bass arpeggiations, like the first movement.¹⁹ More remarkable, Beethoven adopts the same motivic ideas in this fourth movement, thus creating a balance that the two outer movements are based on similar structural and motivic schemata: the neighbor-note figure and ascending sixth-line.

Beethoven adopts the neighbor-note figure (from the opening theme in the first movement) as the foremost salient motivic bearer, forming a network saturated exclusively by the neighbor-note (Example 3-11-(a)).²⁰ The neighbor-note figure is exploited not only as a melodic generator, but also as a basis for the foreground harmonic progressions, i- vii^{o7}- i and i- V₅^{o6} - i.²¹ This is an early example of a motive

¹⁸ This observation coincides with the third characteristic that Johnson enumerates as structural characteristics of two sonatas of op. 2, nos. 2 and 3: “concern with the organic relationships...among the movements of a work.” Douglas Johnson, “1794-1795: Decisive Years in Beethoven’s Early Development,” in *Beethoven Studies* 3, ed. Alan Tyson (New York: Cambridge University Press, 1982), 2.

¹⁹ Readers might remember that this feature is common to all four pre-opus piano sonatas WoO 47 no. 1-3 and 51. However, it is not surprising that the F-minor sonata of op.2, no. 1 shares the structural characteristics with the Bonn-period sonatas if we take it into consideration that the sketches of the F-minor piano sonata go back to the Bonn period. See Joseph Kerman and others, “Beethoven, Ludwig van,” in *The New Grove Dictionary of Music and Musicians*, 2nd ed. (2001), 3: 97.

²⁰ Edward Aldwell and Carl Schachter, *Harmony and Voice Leading* (San Diego: Harcourt Brace Jovanovich, 1989), 112. Aldwell and Schachter discuss the neighboring motive active in the two outer voices of the opening theme in the first movement. They note that $\hat{3}$, which is the starter of the initial ascent, is prolonged by means of the upper neighbor-note by being supported by a lower neighbor chord, V₅^{o6}.

²¹ In i-vii^{o7} -i progression, the tenor forms a neighbor-note figure, although the bass remains intact due to the use of the pedal-point tone, whereas, in i- V₅^{o6} - i, the bass outlines the neighbor-note figure.

that penetrates into harmony as well as into melody—eventually it will also participate in the formal process, as in the first movement of the *Tempest* Sonata. In addition to its frequent use in the foreground, the neighbor-note motive is also active in the high-level structure: the higher-level neighbor-note figure (G-A^b-G) generates the entire development section (Example 3-11-(b)). In addition, the ascending sixth-line E^b5-C6 as seen in mm. 6-9, which is the reverse form of the falling sixth-line that was the most prominent foreground motive in the first movement, plays a greater role of achieving motivic coherence among formal sections in this movement (Example 3-11-(a)). The rising sixth-line juxtaposes a lively melodic flavor to the stationary character of the opening theme.

Example 3-11. Neighbor-note and sixth motives

(a) Foreground graph of the opening theme

The image shows a musical score for the opening theme of the first movement of the *Tempest* Sonata. The score is in F minor, 3/4 time, and consists of two staves: a treble clef staff for the right hand and a bass clef staff for the left hand. The key signature has two flats (Bb and Eb). The score is annotated with several elements:

- Measure numbers 2, 4, 6, and 9 are indicated above the treble staff.
- A bracket labeled "Sixth Motive" spans measures 6 through 9 in the treble staff.
- A dashed line labeled "6-line" connects the notes in measure 6 to the notes in measure 9 in the treble staff.
- Neighbor-note figures are marked with "N" above notes in measures 2, 4, 6, and 8 in the treble staff, and "N" below notes in measures 2, 4, 6, and 8 in the bass staff.
- A bracket labeled "A 5" spans the first five measures of the piece.
- Harmonic labels "Fm: i" and "V" are placed below the bass staff at the beginning and end of the section, respectively.

(b) A middleground graph of the development

Dev. 59 94 126

The primary theme (mm. 1-9) does not contain a first-order linear progression,²² but consists of the *Kopfton* introduced by a local arpeggiation (F to C) and an ascending sixth-line from an inner voice E^b. The absence of the first-order fifth-line places this movement in our model III-4. However, Beethoven's manipulation of the standard sonata-form model leads to a very distinctive first-level middleground structure. The transition initiated by the sequential repetition of the ascending sixth motive (C5-A^b5 in mm. 9-12) prepares for the advent of the second theme by completing modulation to the dominant key and introducing $\hat{4}_4$ over the supertonic II. The *Kopfton* $\hat{5}_5$, which remains intact during the primary theme, now commences its descent. The structural descents in the transition contribute to a

²² The absence of the first-order progression within the primary theme is one of the interesting features as seen in Beethoven's rondo-character sonata-form movements (mainly in third or fourth movements). See the discussion of Beethoven's Piano Sonata, op. 10, no. 2 and no. 3, third movements, in Chapter 4.

descending sixth motive in the deep-level structure. Both hands reinforce the opening melodic line marked by the upper and lower neighbor-note figures (Example 3-13). Meanwhile, the head note of the second theme E^b is hidden in the inner voice and, later at m. 24, becomes prominent through the register transfer. In the recapitulation, Beethoven slightly reinterprets the voicing of the second theme: he puts the structural note $\overset{\wedge}{3}$ (A^b) in the top voice to suggest that it is unequivocally the structural note, rather than doubling the melody of the left hand as in the exposition.

Example 3-13. Neighboring motives in the second theme

(a) Second theme in the exposition (mm. 22-23)

C minor: i

(b) Second theme in the recapitulation (mm. 161-162)

F minor: i

The descending sixth-line, which first appears in mm. 31-34, becomes a structural basis of the S_2 -theme. Beethoven generates both the primary and second themes by means of a sixth-line. This is a moment when the motivic logic

participates in a projection of a theme. In fact, the entire theme consists of sequential repetitions of a sixth-line: E^b5-G4, C5-E^b4, and G4-B3.

Example 3-14. Motive sixth in the second theme area (mm. 31-42)



The strong tonal stability in the development (from m. 59) is not typical of the Classic sonata development section and momentarily calls into question our basic assumption that this fourth movement is in sonata form. The section does not contain the expected developmental process, but rather presents a lyrical theme in a stationary key, A^b-major, over and over. This singing melody in the mediant key takes up more than half of the development. William Kinderman comments on this development section:

In the development, by contrast, an expressive tune emerges in A^b major that is adorned in melodic variations. The development thus becomes the sonata’s last focus of lyricism before the music re-enters the turbulent dramatic idiom in F minor. The overall plan of this unusual movement distantly foreshadows Beethoven’s only other sonata in F minor, the “Appassionata” op. 57.²³

This tonal stability and classic arch-type melody taking a stereotypical harmonic progression lead to a middleground line in the middle section. The neighbor-note A^b generates and the fifth-line (E^b to A^b in mm. 59-94) serves as a prefix to it. This fifth-line prefix creates an *Ursatz* replica, in which the $\hat{5} - \hat{4} - \hat{3} - \hat{2}$

²³ William Kinderman, “The Piano Music: Concertos, Sonatas, Variations, Small Forms,” in *Cambridge Companion to Beethoven*, ed. Glenn Stanley (Cambridge, UK; New York: Cambridge University Press, 2000), 112-3.

- $\hat{1}$ descent is supported by two bass arpeggiations (Example 3-15). Thus, Beethoven confirms the underlying role of the motive sixth again: the entire development spans a large-scale falling sixth motive $E^b-D^b-C-B^b-A^b-G^b$, as in the first movement's development.

Example 3-15. Middleground graph of the development

59 85 86 92 94 118 126 137

6-line motive ($E^b-D^b-C-B^b-A^b-G$)

5-line prefix

5 4 3 2 N

3-line

Fm: III [A^b : I] V7 I V7 I] V

3.4 : First Movement of op. 2, no. 2, A major

The first movement of the A-major sonata op. 2, no. 2 is the first example of Beethoven's nascent interest in what Carl Dahlhaus calls "monumentality" in sonata-form design.²⁴ This monumentality results from Beethoven's efforts to expand each formal section audaciously, primarily through register transfers. The tonal space

²⁴ Carl Dahlhaus describes the tendency of maximization in size in Beethoven's Symphonies, especially in the *Eroica* Symphony, with his term, "monumentality." I borrowed his term here to describe a formal expansion in his piano sonatas. The term "monumentality" appears in Carl Dahlhaus, *Nineteenth-Century Music*, trans. J. Bradford Robinson (Berkeley: University of California Press, 1989), 152. Dahlhaus says: "It [*Eroica*'s] novelty resides in a combination of *monumental* form and a 'teleological' or goal-directed, structure that radically changed the traditional concept of theme" (Italics mine).

expanded by numerous register transfers is filled with arpeggiations, rapid scalar material, or a combination of both. The ways of realizing the register transfers in the actual composition allow a pianist to show off his or her pianistic virtuosity.

The fifth-line with two bass arpeggiations and the presence of the first-order fifth-line within the primary theme place the movement in our model I-3. The choice of $\hat{5}$ as a *Kopfton* is responsible not only for many instances of the fifth-line throughout the entire movement, but also for the lower-level roles of E in the primary theme (Example 3-16). Beethoven generates both the primary and second themes by fifth-lines, and he also adopts the fifth-line as a foreground motive, embedding it in multiple structural levels, thus achieving a depth of motivic parallelism. Straightforward examples of the fifth-line motive in detail are found in the form of a thirty-second-note figure at m. 1, 3, 21, 76 and 78.

In the primary theme, the *Kopfton* E5, introduced by a local cover-tone A5, is prolonged through a neighbor-note figure (E5-F[#]5-E5) and octave transfer to E4 to the end of the first phrase (see Example 3-16). The *Kopfton* E5 is recovered at m. 11 by a register-transferred cover-tone A, which encompasses three octaves (mm. 8-10), and remains influential prior to the fourth-line descent to $\hat{2}$ in mm. 15-16, although it undergoes a very local third-line descent E5-D5-C[#]5 in mm. 11-12. This third-line and its counterpoint, a rising fourth-line (E-F[#]-G[#]-A), in mm. 11-16, not only governs the remainder of the primary theme, but also is later adopted as a principal means of constituting the development.

Example 3-16. Primacy of the *Kopfton* E in the primary theme

The image displays a musical score for a primary theme, consisting of two staves: a treble clef staff on top and a bass clef staff on the bottom. The score is divided into measures, with measure numbers 1, 8, 11, 12, 16, 20, 21, 28, 31, and 32 indicated above the treble staff. The key signature is one sharp (F#), and the time signature is 3/4.

Key annotations and markings include:

- Measure 1:** Treble staff has a sharp sign (^) above the first note. Bass staff has a sharp sign (^) above the first note and a '5' below it.
- Measure 8:** Treble staff has 'ctN' above the first note. Bass staff has 'ct' above the first note.
- Measures 11-12:** Treble staff has '3-line' above the notes. Bass staff has '3-line' above the notes.
- Measures 16-17:** Treble staff has '4 3' above the notes and a sharp sign (^) above the second note. Bass staff has '3-line' above the notes.
- Measures 20-21:** Treble staff has '5' above the first note and a sharp sign (^) above the second note. Bass staff has '5' above the first note and a sharp sign (^) above the second note.
- Measures 28-31:** Treble staff has '4 3' above the notes and a sharp sign (^) above the second note. Bass staff has '4 3' above the notes and a sharp sign (^) above the second note.
- Measure 31:** Treble staff has 'N' above the first note. Bass staff has '(2) 1' above the first note.

At the bottom of the score, there are two boxes containing Roman numerals:

- The first box contains: I, V₂ I, V, I, V₅ I, V₅ I.
- The second box contains: I, V₅ I, V₅ I.

Below these boxes is the label 'A: I'.

Beethoven's manipulation of a simple linear progression through metric positioning is a remarkable compositional device. As Carl Dalhaus has pointed out, Beethoven lets each member of a rising fourth-progression locate in a different metrical position.²⁵ For instance, the rising fourth-progression of the right hand at m. 10 is situated differently from that of the left hand at mm. 11-12. The former implies a single harmony (tonic), while the latter poses a dominant-to-tonic motion. In addition to abundant instances of this "metrical repositioning" of the fourth-progression in the rest of the primary theme, the fourth-progression also recurs in the form of a retrograde in the transition (m. 33 and 38), thus articulating a motivic connection between the two formal sections.

In contrast to our choice of $\hat{5}$ as a *Kopftone*, Schenker picks $\hat{3}$ although he does not clarify where the structural descents are located.²⁶ However, we can construct a hypothetical reading, taking his choice of $\hat{3}$ as a point of departure (Example 3-17). In this hypothetical graph, A5, which serves as a cover-tone in our reading, becomes the starting note of the initial ascent toward the *Kopftone* $\hat{3}$, and B5 at m. 5, approached by a sudden register shift from B3 and supported by a supertonic at m. 4 and later by a dominant at m. 8, emerges as a passing note between the A5 and C[#]5 at

²⁵ Carl Dahlhaus, *Ludwig van Beethoven: Approaches to His Music*, trans. Mary Whittall (Oxford: Clarendon Press; New York: Oxford University Press, 1991), 92-93.

²⁶ As shown in Schenker's graph of op. 2 no. 2 (reproduced in Example 3-26), he focuses on the middleground voice-leading journey of the development (mm. 122-214) and simplifies the structural events prior to the section.

m. 16. C[#]5, the goal of the initial ascent, is gained at m. 12 through a lower-level unfolding from A4 (mm. 9-12).²⁷

Example 3-17. A hypothetical reading that assumes $\hat{3}_3$ as a *Kopfton*

The image shows a musical score for two staves (treble and bass clef) in D major. The score is annotated with Schenkerian analysis. Above the treble staff, a large bracket labeled "Initial Ascent" spans from measure 1 to measure 12. Below this, two smaller brackets labeled "5-line" are positioned under the first and second phrases of the treble staff. A vertical line at measure 12 is topped with a bracket and the number 3, labeled $\hat{3}_3$. The bass staff has a bracket labeled "A: I" underneath it. Measure numbers 1, 5, 9, and 12 are marked above the treble staff.

Schenker may have chosen $\hat{3}_3$ instead of $\hat{5}_5$ as a *Kopfton* because of the unclear status of $\hat{4}_4$ and its unsatisfactory harmonic support in mm. 34-35—in contrast to unequivocal emergences of $\hat{3}_3$ at m. 37 and $\hat{2}_2$ at m. 39. However, we should not downplay the dominant harmony in mm. 34-35 and its upper voice $\hat{4}_4$, which appears first in the left hand and is imported to the upper voice. Beethoven conceals the voice-leading path of the outer voices, in which $\hat{4}_4$ reaches $\hat{3}_3$ over a dominant-to-tonic progression through unfoldings.

²⁷ Compare Example 3-17 with Schenker's original graph (Example 3-26). He does not designate the measure number of specific events that he chose.

Example 3-18. Approach from $\hat{4}_4$ to $\hat{3}_3$ through unfoldings (mm. 34-38)

(a) Foreground graph

(b) Simplified version

The arrival of $\hat{2}_2$ at m. 39 is asserted by downward register transfers ranging four octaves (B5-B2 in mm. 39-46). The ascending arpeggiations (mm. 46-47) in the left hand transfer $\hat{2}_2$ into the middle register. The neighbor-note figure (B3-A[#]3-B3), which terminates the arpeggiation at m.48, serves as a motive to design the second theme, as well as of the remainder of the transition. (In fact, the neighbor-note motive, which appeared first in the opening theme as a means of prolonging the primary note (E5-F[#]5-E5 in mm. 1-8), will serve as a form-generating device in the

development.) Notice the multiple-level neighbor-note figures in the transition (Example 3-19). This is an important moment in which Beethoven concretizes the neighbor-note motive nested in the deep-level structure, also in the musical surface.

Example 3-19. Saturation of neighbor-note figure in multiple levels (mm. 47-57)

The image shows a musical score for Example 3-19, spanning measures 47 to 57. The score is in E major and 3/4 time. It consists of two systems of music. The first system (measures 47-52) shows a piano accompaniment in the bass clef and a vocal line in the treble clef. The piano part has a long stay on the bass B and a subsequent shift to D#. The vocal line features multiple-level neighbor-note figures. The second system (measures 53-57) shows the piano accompaniment continuing in the bass clef and the vocal line in the treble clef. The piano part has a long stay on the bass B and a subsequent shift to D#. The vocal line features multiple-level neighbor-note figures. The score is annotated with 'E: V' and 'i'.

The long stay on the bass B and the subsequent shift to D[#] establish E as a new tonal center by functioning respectively as a dominant and leading-tone. The E-minor opening of the second-theme group is an uncommon treatment, like the G-minor opening in the C-major sonata of op. 2, no. 3. William Kinderman describes the second-theme group, but he does not include a concrete discussion about

harmonic and voice-leading structure: “At the beginning of the second subject group, the music seemingly comes to rest in E minor, the dominant key. Instead of presenting a ‘theme’ at this juncture, Beethoven offers modulating sequences on a chromatically rising bass.”²⁸ On the other hand, Bathia Churgin’s description of the second-theme group vividly discusses Beethoven’s handling of tonal structure:

The modulation to the dominant key in [the transition] turns to E minor, and [the second theme] begins and ends in that key (mm. 58-83). The major mode is restored only in the succeeding cadential units. Beethoven underpins the rising sequence in [the second theme] with a bass that rises stepwise from e to f[♯]-sharp, the secondary dominants touching on keys a third apart: G—B-flat—D—f-sharp, with E appearing before and after f-sharp (the theme ends on V^o of e).²⁹

She seems to see four harmonic blocks—E to G, G to B^b, B^b to D, and D to F[♯]— as governing this restless passage.

A close look at this tonally unstable passage through the Schenkerian analytical technique brings us invaluable observations about Beethoven’s handling of the deep-level structure of the passage. The young Beethoven has tremendously expanded the second-theme area and filled out the tonal space with audacious tonal excursions. A series of overlappings and reaching-overs participates in the formal expansion of the second theme in combination with register transfers.

²⁸ William Kinderman, “The Piano Music: Concertos, Sonatas, Variations, Small Forms,” 113.

²⁹ Bathia Churgin, “Harmonic and Tonal Instability in the Second Key Area of Classic Sonata Form,” in *Convention in Eighteenth-and Nineteenth-Century Music: Essays in Honor of Leonard G. Ratner* (Stuyvesant, N.Y.: Pendragon Press, 1992), 45.

Example 3-20. Annotated voice-leading synopsis (mm. 58-84) of the second theme

58 62 66 70 72 75 (84)

8 ————— 6 ————— 6

4-line

Octave transfer

E: i^{\flat} $\#II$ vii°_5 I_6

Mode mixture!!

Modal mixture between E-minor and E-major and the octave transfer of the bass from E3 to E4 preside over this tonally ambiguous passage. Even though, as Churgin describes, four harmonic blocks seem to control the passage, nearly outlining a diminished triad, one should not ignore the brief but unequivocal presence of the tonic at m. 72 (Example 3-20). The E-major triad touched on at that moment gains harmonic status as a tonic with the help of a dominant seventh chord in first inversion (m. 71). This E-major triad serves as a temporary goal of the long and complex tonal detour. While the octave transfer filled by a chromatic ascent preserves the primacy of the tonic in the bottom voice, the upper voice confirms E as a primary note while a lower-level fourth-line (E-D-C-B in mm. 58-71) prolongs E. Churgin's harmonic blocks contradict the primacy of the E-major triad.

A long prolongation of tonic through I - vii^o₅ - I⁶ and its upper voice, a large-scale neighbor-note figure (E-D[#]-E), governs this passage and creates a typical counterpoint of an 8-6-6 (Example 3-21). Beethoven facilitates modulation to remotely related keys through the enharmonic reinterpretation of D[#] at m. 61 and F[#] at m. 65. As Kinderman notes, Beethoven does not present a ‘theme’ as the eighteenth-century listener would expect at that juncture. Instead, he offers a short motivic fragment repeated over chromatically ascending harmonies, thus creating the illusion of a transition or even development section. He might have anticipated the aesthetic effect resulting from listeners’ perceptual dilemma: he deliberately sets up a mysterious situation, where, because of tonal instability, listeners would suspect that they are hearing a transition or development.

Example 3-21. A middleground graph of the second-theme area (mm.58-116)

The musical score for Example 3-21 is presented in two staves (treble and bass clef) with a middleground graph above. The graph is divided into sections S1 (mm. 39-70), S2 (mm. 75-84), K (mm. 88-96), and C (mm. 103-116). Annotations include '4-line', '5-line', 'reg', 'r.o.', and 'N'. Harmonic analysis below the staff shows chords: E: I, vii^o₅, I⁶, V, I, V7, I, V⁶⁻⁵/₄₋₃, I. A note at the bottom states '* r.o. indicates the reaching-over'.

The $\hat{2}$, which has now become the primary note of the second-theme area $\hat{5}$, remains active until a dramatic descent to $\hat{4}$ is made at m. 94 (Example 3-21). Beethoven makes it clear through multiple clues that $\hat{5}$ is the primary note. Notice the pick-up note B5 at m. 83, which indicates that $\hat{5}$ has returned after it underwent several octave transfers: B5 at m. 39 has been imported into the tenor voice at m. 58 and appears here in the trivial form of a pick-up. This pick-up, although metrically brief, has an indicative function that points to the existence of $\hat{5}$.

The $\hat{3}$ is implied over the tonic at m. 96. The lower-level unfolding (mm. 94-96) explains the voice-leading path from $\hat{4}$ to $\hat{3}$. Although Beethoven requires $\hat{3}$ as an appropriate resolution for the dissonance A5, he does not put an appropriate note in the right hand. This deviation of normal voice-leading logic reflects Beethoven's choice to maintain a strict parallelism to mm. 92-93, rather than to follow normal voice-leading logic. The $\hat{3}$ is prolonged through a neighbor note A and its octave transfer (A5 at m. 98 to A3 in m. 102) until it is reclaimed over the $\hat{6}_4$ chord at m. 103. This is a striking moment in that the register transfer becomes marked again as an imperative compositional idea. The codetta very straightforwardly presents a fifth-line over the tonic, canceling out all the psychological tensions accumulated thus far.

The middleground graph (Example 3-21) under discussion, however, poses an analytic problem in that the fifth-line descent, which one expects within the second-theme group, is only completed in the closing theme (labeled *K*). The *Kopfton* $\hat{5}$ passes through the second-theme area without any descent and launches its descent only later, in the closing theme. Thus, the analyst should involve the closing theme,

which has served Beethoven thus far as a formal appendix, merely repeating the already-made structural descent rhetorically.

Two alternative readings could be made of this problematic second-theme area. Two factors make these readings deviate from the original (Example 3-21): first, how to interpret the prolongation status of mm. 58-75: and second, whether to involve the closing theme into the structural descent or not. If one hypothesizes that Beethoven generated the fifth-line descent within the second theme (mm. 59-92) and excluded the closing theme from the structural descent, he would possibly find out the first-order fifth-line descent prior to m. 92, where a structural cadence of the second theme area comes.

The first alternative (Example 3-22-(a)) seems convincing, not only because it involves the tonally unsettled passage (mm. 58-83) into the structural descent, but also because it enables us to understand the repetition (mm. 88-92) as being rhetorically added. Despite the drawback that this reading fails to provide perfectly satisfactory harmonic supports for each descent—notice that the descent from $\hat{5}$ to $\hat{3}$ is supported by a rather foreground-like harmonic progression (I-vii^{o7}-I)—this reading incorporates the second theme into the core of sonata-form design. Instead of interpreting the passage governed by the inner-voice E-D[#]-E, the analyst selects three members of the first-order fifth-line in the passage (mm. 58-84). The $\hat{4}$ comes at m. 68 in the same octave register as the *Kopft*on, but does not straightforwardly descend to $\hat{3}$. It rather ascends to B at m. 71 by means of an unfolding (A to C). This B means a commencement of $\hat{3}$ by initiating a large-scale unfolding, which connects to $\hat{3}$

at m. 84. Tonal space created by this unfolding is filled with an ascending fourth-line, which is reminiscent of rising fourth-progressions in the primary theme.

Example 3-22. Alternative readings of the second-theme area (mm. 58-104)

(a) Alternative reading 1 (detailed & simplified versions)

(b) Alternative reading 2

If the analyst negates the structural status of the E-major triad hinted briefly at m. 72, as Churgin has implied, and sees the measure as being in the middle of the unfolding of vii^{o7}, then he would have another alternative (Example 3-22-(b)). This second alternative is identical to the first, except that it does not admit a prolongation of tonic, but highlights the role of the diminished seventh chord. To take stereotypical harmonic support for the first-order fifth-line and cadential matter as important guides for choosing a better reading leads us to accept the original interpretation (Example 3-21) as our final choice. What matters more than the choice of the reading is the fact that Beethoven designs a very complex and distinctive musical foreground by means of diverse compositional devices, such as register transfer (reaching-over and overlapping), modal mixture, and audacious enharmonic modulation in this early sonata, and prevents the analyst from reaching and illuminating the structure.

Despite the fact that Beethoven has already used developmental process in an experimental way in the second theme, he does not therefore reduce or restrict the development section itself. He depends entirely on primary-theme material in the development. In fact, the section could be understood as a metrical enlargement of the primary theme (especially mm. 1-20): it expands thematic material introduced in the primary theme step by step (Example 3-23). (A plausible explanation for this monopoly of primary-theme material in the development is that Beethoven already worked on the motivic fragment of the second theme in the second-theme group and thus did not need to bring in second-theme material again.) He begins with a

transposition of the opening phrase (mm. 1-8) in C-major and contrasts two distinctive fragments in the phrase. The opening figure containing a fifth-line motive (marked with *a*) and descending arpeggiation of V⁷ (marked with *b*) are synthesized in a contrapuntal manner from m. 130. Beethoven again adopts the register transfer, which played a crucial role in the exposition, as a means not only of maximizing the size of the development, but also of giving to a pianist ample opportunity to show off his or her performance skill.

Example 3-23. Primary-theme material in the development (mm. 122-160)

123

a *b*

C:I ii V7

130

ff *a* *b*

Ab: I

135

ff *a* *b*

V7

140

ff *a* *b*

Fm: ii 7

Arrival at the harmonic goal of the first section → V7

- * a: Foreground motive from the opening theme (mm.1-4)
- b: Descending arpeggiation motive (mm.5-8): unfolding of 7th chords or triads

The *fermata* at m. 160 divides the development into two distinctive sections: the first serves as a prelude, not only harmonically but also thematically, and the second is a core section, in which thematic fragments of the primary theme are combined with rapid modulations based on sequences in a more delicate contrapuntal way. The sixteenth-note ostinato figure in the middle characterizes the first section; it is based on a contrapuntal combination of a fifth-line motive in the low register and an arpeggiation of each chord in the high register. The second section depends primarily on a third-line and rising fourth-line, which emerged first in the second phrase of the primary theme (mm. 9-20), and a fifth-line, which is a higher-level motivic bearer nested in the *Ursatz* as well as in both primary and second themes

(Example 3-24). Harmonically as well, the first section prepares for the advent of the following body, by marking a long stretch of the dominant of F-major. Beethoven's growing interest in counterpoint and fugue is foreshadowed here in the form of a combination of toccata and fugue-like passage.

Example 3-24. Third- and fifth-lines in the development (mm. 164-181)

Second Part of the Development

The musical score is presented in four systems, each with a treble and bass staff. Measure numbers 162, 168, 174, and 180 are indicated at the start of their respective systems. The score includes various musical notations such as triplets, slurs, and dynamic markings like *fp* and *f*. Schenkerian line analysis is overlaid on the score, with labels like '3-line', '5-line', and 'LT 3-line' indicating the structural lines. The key signature changes from one flat (F major) to two flats (D minor) at measure 174. The piece ends with a Roman numeral 'iv' at the bottom center.

Schenker gives a rough voice-leading synopsis of the development section, focusing mainly on mm. 122-160. His viewpoint coincides with mine in that he sees

a neighbor-note figure (B-C-B) transformed by modal mixture as a primary compositional schema that governs the entire development section. However, Schenker's graphic notation does not clearly support the interpretation suggested by the beginning of the graph. He does use a stem for D at m. 214, not for B. Thus, although he seems to regard C-natural as a neighbor note, his graph does not reflect such a viewpoint. Another inconsistency lies in his use of open-head notes in the bass. Schenker puts structural importance on the first section before m. 160 by using an open-head note for C, not for F: he seems to see that the neighbor note C is supported by the C-major triad originating from mode mixture, not by F, and to interpret the subsequent section (mm. 161-223) as subordinate to the dominant at m. 202. This contradicts our interpretation that assumes the first part as subsidiary to the following body.

Example 3-25. Schenker's graph of the first movement of Beethoven's A-major sonata op.2 no. 2³⁰

© With kind permission by Universal Edition A.G., Wien

³⁰ Heinrich Schenker, *Free Composition*, ed. and trans. Ernst Oster (New York: Longman, 1979), Fig. 100-Ex.5.

A close examination of the middleground graphs of the development (Example 3-26) reveals that a higher-level neighbor-note figure B-C-B decides the formal design of the entire section. This is the second instance in his piano sonatas where a higher-level neighbor-note figure serves as a form-generating device in the development.³¹ The neighbor C remains constant as a governing note by changing its harmonic supports from C to F. This reading confirms that the toccata-like passage (mm. 122-160) prior to the fermata is harmonically subsidiary to the following because the long stretch of C-major triad functions as a dominant of F. The harmonic support for the neighbor does not directly go to the dominant E, but slides into D, thus articulating a double-neighbor figure (Example 3-26-(b)). This practice reflects Beethoven's conscious choice to avoid parallel fifths between the outer voices.

Example 3-26. Analytic graphs of the development (mm. 122-224)

(a) A deep-level middleground graph of the development

³¹ The first example is the fourth movement of op. 2, no. 1, where the neighbor-note A^b is supported by the mediant harmony. See Chapter 3.3.

(b) A detailed middleground graph of the development

3.5 : First Movement of op. 2, no. 3, C major

The first movement of the C-major sonata, op. 2, no. 3 follows the A-major sonata of the same opus in revealing Beethoven's obsession with monumentality. The compositional means by which Beethoven achieved this monumentality in the C-major sonata can be expounded in terms of the following three facets: 1) the unusual handling of the transition and second-theme area; 2) the internal expansions of each formal section through register transfer; and 3) the formal manipulation by interpolating a cadenza-like passage between the closing theme and codetta. The most startling of these is undoubtedly the unusual handling of the transition and second-theme area. There is certainly a question regarding whether this unsettled passage (mm.27-46) is a part of the transition or the beginning of the second-theme group. Analysts would seem to agree that the brilliant pianistic passage starting from

the perfect authentic cadence at m.13 is a transition which carries the tonal function of a long-range shift from tonic to dominant (mm. 13-26).³² The problem lies in how we understand the following formal unit, a tonally restless passage (mm. 27-46) that contains several tonal excursions.

Donald Tovey sees m. 27 as the initiation of the second theme, as his expression “remarkably modulating theme” denotes, although he leaves room for defense by using “Transition and Second Group.”³³ On the other hand, by criticizing Tovey’s viewpoint, James Hepokoski and Warren Darcy describe this passage starting from m. 27 as what they call “the mid-expositional trimodular block.”³⁴ The mid-expositional trimodular block (TMB) refers to a passage occurring between the first medial caesura (m. 26) and the essential expositional closure (m. 77), which divides into three distinct rhetorical modules because of apparent double medial caesuras. The formal functions and characteristics that each module articulates can be summarized as follows:

³² Beethoven finishes off the transition on a half cadence of the home key (m. 26) and initiates the following event on the same chord, but in minor quality. This is another example of what Robert Winter calls “the bifocal closes.” He uses the movement as a typical example showing Mozart’s influence on the young Beethoven. Robert Winter, “The Bifocal Close and the Evolution of the Viennese Classical Style,” *Journal of the American Musicological Society* 42, no. 2 (1989): 330-332.

³³ Donald F. Tovey, *A Companion to Beethoven's Pianoforte Sonatas: Bar-by-Bar Analysis* (London: Associated Board of the Royal Schools of Music, 1931), 24-25.

³⁴ James Hepokoski and Warren Darcy, “The Medial Caesura and Its Role in the Eighteenth-Century Sonata Exposition,” *Music Theory Spectrum* 19, no. 2 (1997): 115-154. Especially, see 145-149.

Figure 3-1. Hepokoski and Darcy's description of mm.13-77

Formal labels	Mm	Tonal centers & Cadences	Functions
TR	13-26	C: HC Medial caesura 1	The Medial caesura prepares for the advent of S-theme, but is too weak to open the S-space: it is soon declined.
TM1 (S-like theme)	27-39	G minor to A minor: IAC	The passage serves as a “lyrical, <i>piano</i> , S-rhetoric theme, but one that begins in G-minor, not in the expected G-major.” Modulating sequentially from G-minor via D-minor at m. 33 to A-minor at m. 39
TM2 (New transition)	39-46	G: HC Medial caesura 2	Medial caesura divides the exposition into two and initiates the real second theme. Caesura fill (mm. 45-6): a lower-level fifth-line descent (D-C-B-A-G)
TM3 (Real second theme)	47-77	G: PAC Essential expositional closure	This is unequivocally the second theme: it suffices for tonal and rhetorical conditions as a true second theme. It begins with “classic, <i>piano</i> S-rhetoric.”

The situation around the restless passage of the C-major sonata coincides very well with what Hepokoski and Darcy propose as the “TMB condition.” As they point out, “One of the functions of the entire strategy, including medial and postmedial caesura and first and second S-themes, is to broaden S-space to cover a larger field of proportional time. It is a strategy of expansion, although it can also produce eloquent local effects.”³⁵ However, Hepokoski and Darcy do not ultimately resolve the quintessential question. They portray the passage in this way:

Beginning in the key of the dominant minor, the troubled TM1 either cannot or chooses not to sustain its G minor, the mark of its imperfection. It begins

³⁵ Ibid, 146. They classify Beethoven's piano sonatas in F-major, op. 10, no. 2, and D-major, op. 10, no. 3 as having the similar formal features in the transition and second-theme area.

to modulate sequentially, rising by fifths from G minor to a restatement on D minor (m. 33) to new material on A minor (m. 39). This new *forte* module at m. 39 reinvigorates a more characteristic TR-texture, a common sign of TM2, and leads to a first-level default (improved) V: HC postmedial caesura at m. 45. Two measures of caesura-fill introduce TM3, now in a sunny, expansive G major, and obviously heard as a corrective counterbalance of the earlier TM1 at m. 47. In typically Beethovenian fashion, securing the EEC [Essential Expository Closure] turns out to be a strenuous affair. TM3 (or S2) is prolonged through cadence postponement and vigorous textural and thematic shifts (sub-modules within the more generically normative category of TM3). The idea at m. 61, of course, brings back propulsive material from m. 14, and the EEC is attained only with the V: PAC at m. 77.³⁶

In order to decide where the most structural fifth-line descent would be located, an examination of this passage is necessary. Schenker gives a middleground graph of the passage including a detailed voice-leading path in mm. 25-47 (Example 3-27). He seems to exclude completely a possibility that the rhetorically second-theme-like passage (mm. 25-47) might be a second theme, as he nests under the open note head all the voice-leading events of the passage between the structural $\hat{3}$ at m. 15 and $\hat{2}$ at m. 43. Although he admits the control of G-minor throughout mm. 27-47, Schenker does not generate a fifth-line descent, as we expect in the second-theme area, despite the theme-like character of the passage. Instead, he sees the modally mixed third-line (D-C-B^b) and chromatically rising third-line (B^b-C[#]-D) as a principal upper voice (Example 3-28). The third-line is supported by a common bass counterpoint (5-10-7-10), whereas the augmented sixth-chord at m. 42 supporting the raised $\hat{4}$ (=C[#]) leads to a dominant in the next measure. The starting note of this third-line D5 goes through a register transfer to D6 before it moves to C6 at m. 39. This register transfer

³⁶ Ibid, 149.

is achieved by reaching-overs in succession (Example 3-27). The register transfer is adopted through a series of reaching-overs as a central compositional device in this second theme, as in the second theme (mm. 58-84) of the A-major sonata, op. 2, no. 2.

Example 3-27. Schenker's middleground graph of the exposition³⁷

Beethoven, Sonata op. 2 no. 3, 1st mvt.
 m. 1 5 15 25 27 39 41 42 43

© With kind permission by Universal Edition A.G., Wien

Example 3-28. Outer-voice counterpoint of mm. 27-47: a simplified version of

Schenker's graph

A comparison of Schenker's graph with an alternative reading of mine (Example 3-29) suggests Beethoven's elegant handling and the aesthetic intent behind

³⁷ Heinrich Schenker, *Free Composition*, Fig. 154-Ex.2.

it. Schenker chooses the three members of the structural descent (D-C-B^b) not in the theme-like initial passage (mm. 27-39ff), but in the transition-character posterior passage (mm. 39-43), whereas I place the four members of the fifth-line descent at the beginning (mm. 27-32) and see the remainder prolonging $\hat{2}_2$, which already arrived at m. 32. He downplays the voice-leading events (mm. 29-38) that a complex combination of sixths and fifths articulate at a lower level, while my reading highlights the descending fifth-line (mm. 27-41) within the parallel sixths as a higher-level event. This fifth-line creates a motivic mirror with a local-level fifth-line, which emerges as what Hepokoski and Darcy call “caesura fill” at the beginning of the G-major second theme (mm. 45-46).

Example 3-29. An alternative reading of the unsettled passage (mm. 27-46)

27 32 38 40 41 43 45 (48)

reg
5-line
3-line(A-G-F#)
5 6 6 6 6 - 5 6 6 reg
5-line
Atp
(k3) 3h)

C: v b3 V4

Thus, the expected fifth-line fulfills a structural condition by which one can regard legitimately the lyric-theme-like passage in G-minor as a second theme. I am not arguing that this fifth-line (D-C-B^b-A-G) is the most structural first-order fifth-line,

but am focusing on the aesthetic effect of this passage. Beethoven makes the listeners of the time misunderstand the passage as a second theme, by presenting a pseudo second theme, which has a very theme-like character both thematically and structurally, prior to the advent of the real second theme in G-major. What he ultimately achieves is the tremendous expansion of the second-theme area.

Example 3-30. A middleground graph of the exposition (mm. 1-90)³⁸

The image shows a musical score for a piano sonata exposition, specifically a middleground graph of measures 1-90. The score is in C major and features a complex melodic line with various ornaments and voice exchanges. The graph includes annotations for 'reg' (regular) and 'div' (divided) ornaments, and '3-line' and '5-line' voice exchanges. The harmonic structure is indicated by Roman numerals: C:I, V, (b3), G:I, V I, V7 I, V I. The score is divided into measures 1-13, 14-20, 27-55, 61-63, 76-77, 85-90.

There is another attractive reading of the exposition suggested in a footnote by Roger Kamien and Nathali Wagner. They see the G-minor theme as part of the course of prolonging the *Kopftón* $\hat{3}$, not as a point of departure initiating a new scale step.³⁹ They point out that a chromaticized voice exchange between the opening tonic (m. 1) and the augmented-sixth chord (m. 42) governs the voice-leading schema of the movement's exposition prior to the G-major second theme. They imply the

³⁸ This is Beethoven's first sonata-form work with a third-line *Urlinie*, which coincides with our ideal model I-1.

³⁹ Roger Kamien and Naphtali Wagner, "Bridge Themes within a Chromaticized Voice Exchange in Mozart Expositions," *Music Theory Spectrum* 19, no. 1 (1997): 5 (their footnote 7).

possibility that Beethoven modeled this piece after Mozart's Piano Concerto in B^b major, K. 595, which adopts the same tonal and voice-leading procedure. In contrast to our reading highlighting the thematic character of the G-minor passage, they stress the transitional character of the G-minor passage and admit only the G-major passage as a true second theme.

Even though their reading is plausible, I prefer mine for the following reasons. First, there is a passage (mm. 13-26) long enough to take a role as a transition, which finishes the obligatory tonal shift for the second theme.⁴⁰ More decisively, my reading reflects what seems to be a clear intention to expand the second-theme area by generating a lower-level fifth-line, which is a significant condition of Schenkerian sonata-form theory by which a passage can be regarded as a theme, and ultimately by stressing the thematic character of the G-minor passage.

Another salient feature of this unsettled passage (mm. 27-45) is that modal mixture between G-minor and G-major does more than offer contrast and diversity in color and mood in the course of extending the domain of the dominant prolongation. This modal mixture is adopted as a significant compositional device later in the development section (Example 3-31). The development section begins with motivic fragments from the codetta, which are transformed by modal mixture. The modal mixture comes into the forefront as a main compositional device after the false recapitulation (m. 109), where primary-theme material is reinterpreted by motivic

⁴⁰ This is a stereotypical example of what Robert Winter calls "the bifocal close." Robert Winter, "The Bifocal Close and the Evolution of the Viennese Classical Style," *Journal of the American Musicological Society* 42, no. 2 (1989): 275-337.

segmentation and contrapuntal treatment (mm. 113-132).⁴¹ Beethoven's obsession with a single compositional device does not stop here. The modal mixture returns in the recapitulation, where the second theme is transposed into C minor, not C major, and in the beginning of the coda (mm. 218-231), where ^bVI invites a fantasy-like aura. Beethoven's continuous use of a single compositional idea verifies that he is turning gradually away from his adolescent stage and steps into a mature period.

Example 3-31. Middleground graph of the development (mm. 91-138)

The image shows a musical score for Example 3-31, a middleground graph of the development section (mm. 91-138). The score is written in C major/C minor and features a 'False Recap' at m. 109. The score includes annotations for 'Modal mixture between C-major and C-minor' and '5-line'. The score is in C: V and ends with a -7.

91 97 109 117 121 129 135 138

False Recap

Modal mixture between C-major and C-minor

5-line

Modal mixture between C-major and C-minor

C: V -7

Beethoven's interest in monumentality is realized by another means: internal expansions of each formal section through register transfer. The tonal space expanded by register transfers is filled with arpeggiations and scalar material. One of

⁴¹ This passage shows Beethoven's nascent interest in the fugal writing in 1795-6 that Johnson has noted. Douglas Johnson, "1794-1795: Decisive Years in Beethoven's Early Development," in *Beethoven Studies* 3, ed. Alan Tyson (New York: Cambridge University Press, 1982), 12-13.

the foreground examples is the initial point of the transition, where octave transfers in multiple levels express pianistic virtuosity efficiently. Notice that, right after the third-line generating the primary theme, the first local arpeggiation recovers the *Kopfton* $\overset{\wedge}{3}$ an octave higher (E5 at m. 13), and a series of arpeggiations transfers it into a higher register (E6 at m. 14). The descending scalar material and its parallel-tenth support are instantly followed in mm. 15-16 to pull the *Kopfton* $\overset{\wedge}{3}$ down into the original register. Another launch repeats the same procedure until a large-level harmonic shift from tonic to dominant is made in mm. 20-21.

Example 3-32. Register transfers in the transition (mm. 13-21)

The musical score for Example 3-32 is presented in two systems. The first system covers measures 13 to 16, and the second system covers measures 17 to 21. The right hand part features a melodic line with arpeggiations and scalar passages, while the left hand part provides harmonic support with chords and arpeggiations. Annotations include 'reg.' for register transfers, 'ff' for fortissimo, and '3-line' for a specific melodic line. Harmonic analysis symbols like 'C:I', 'ii', 'ii6', and 'V' are present at the bottom.

The register transfer is adopted not only as a foreground event, but also as a higher-level middleground event in the form of coupling. As Example 5-32 shows, $\overset{\wedge}{3}$

shifts to an octave higher (E4-E5), once again to E6, and returns to the E5, thus realizing the idea of coupling. The $\hat{2}$ reached at m. 20 goes through several register-transfer processes (D5-D6-D5) over the prolongation of a dominant (see mm. 21-26 on the score). Such a register transfer is also witnessed in the G-major second-theme area (Example 3-33). The primary note D at m. 56 undergoes an octave transfer, is prolonged through a neighbor note (m. 61) and double-neighbor note (mm. 67-68),⁴² and finally returns to the original register by another octave transfer. Meanwhile, an unfolding pair in the bass—from B2 to G4 and from B4 to G1 (mm. 63-73)—preserves the primacy of the tonic, helping the original idea, the realization of a register transfer (see also Example 3-30). This register transfer not only expands the possibility of the piano as a virtuoso solo instrument, but also serves as a means to realize Beethoven's symphonic ambition, by incorporating a broad range into his musical space.

⁴² The movement is saturated by neighbor-note figures at multiple structural levels. The opening theme embeds abundant instances of the neighbor note and the development section also is generated by a neighbor-note motion D-E-D (see Example 3-31). Furthermore, this neighbor-note motive serves as a motivic bearer to unify among movements. Naphtali Wagner points out the motivic connection present commonly in the first and second movements of op. 2, no. 3. See Naphtali Wagner, "Tonic Reference in Non-Tonic Key Areas," *Israel Studies in Musicology* 4 (1987): 69-70.

Example 3-33. Register transfers in the second-theme area (mm. 48-90)

Beethoven's third means of attaining monumentality is the enormous expansion of the coda, as Joseph Kerman has pointed out.⁴³ Beethoven begins the concluding section with \flat VI, which is the final instance of modal mixture. He does not merely add a coda at the end, as usual, but inserts it between codetta materials that he splits into two (Example 3-34): this new coda material, which consists of a fantasia-like passage (mm. 218-232) followed by a cadenza-like figuration over a cadential $\frac{6}{4}$ chord and the return of primary-theme material, appears between mm. 212-217 and mm. 252-257.

Beethoven here interprets this final section in a new way.⁴⁴ He situates the section on a dominant prolongation (it begins with a deceptive cadence) and generates

⁴³ Joseph Kerman, "Notes on Beethoven's Codas," in *Beethoven Studies 3*, ed. Alan Tyson (New York: Cambridge University Press, 1982), 154.

⁴⁴ David McGuire agrees that the concluding section poses the background descent ($\hat{2}-\hat{1}$), although his analytic details (his Example 37) are different from mine. He chooses $\hat{2}$ at m. 232 and $\hat{1}$ at m. 236 as members of the *Urlinie*. (His choice of $\hat{1}$ is troublesome because he selects C in the second beat of m. 136.) See David McGuire, "Revisiting the Return: The

a leading-tone third-line over the large-scale V-^bVI-V harmonic motion. Over the leading-tone third-line (D-C-B), Beethoven sets up another voice-leading path to prepare for and dramatize the return of the primary theme at m. 233. An incomplete neighbor (F) introduced by means of the unfolding from $\hat{2}$ (m. 217) leads to $\hat{3}$, which initiates the primary theme.

Example 3-34. A middleground graph of the codetta and coda (mm. 210-257)

Codetta1 **Coda (**)** P-theme Codetta2
(Inserted between Codetta 1 and Codetta 2)

[139] 210 211 212 217 218 232 233 245 250 252

ii6 V⁶⁻⁵₄₋₃ I
 There are background *Urfinie*,
 which cancels out
 all the structural tensions.

This recollection of the primary theme is significant because this passage embodies the last two members of the structural descent ($\hat{2} - \hat{1}$). Beethoven emphasizes this passage appropriately as the moment that resolves all structural dissonance and tensions accumulated thus far. (This newly added passage serves as a strategic place to hold the background descent ($\hat{2} - \hat{1}$), because the end of the second theme (mm.

Structural Dilemma of the Recapitulation in the Schenkerian Account of Classical Sonata Form” (Ph.D. diss., State University of New York at Buffalo, 1996), 56-57.

210-211) is too weak to bear such a weighted $\hat{2} - \hat{1}$ descent.) Beethoven's solution is clever. He reintroduces the primary theme, which satisfies all rhetorical and harmonic conditions to contain the background descent, including a grand pause (m. 248), rhythmic slowdown (mm. 245-248), and a very strong cadence articulated by a subdominant and long dominant ($\begin{smallmatrix} 6 & -5 \\ 4 & -3 \end{smallmatrix}$).

Beethoven assigns the newly interpolated section a structural function, as he does in his middle-period sonatas, *Waldstein* and *Appassionata*. For the young Beethoven, the coda has served as an appendix or an afterbeat formal unit simply to recall the structural descent that has already been made. However, now the coda serves as an integral section to participate in the *Ursatz*.

3.6 : First Movement of op. 49, no.1, G minor⁴⁵

As mentioned before, the G-minor Sonata of op. 49 with its companion, G-major Sonata, is out of chronological sequence because both of them were published later (1805), although the date of composition is 1797. In that year, Beethoven was also working on the piano sonata of op. 7 and the three sonatas of op. 10. However, the structural characteristics and ways of handling the material do not resemble these works, but rather are much closer to the F-minor Sonata of op. 2, no. 1 (1793-5) and

⁴⁵ I include the G-minor Sonata of op. 49 in my discussion for the following reasons: first, although *Andante* is indicated at the beginning, most pianists play it in a faster tempo; second, this movement occupies the position of the fast first movement of a sonata design; lastly, it hardly has the character of a slow sonata-form movement, like the second movement of a Grand Sonata, or even a sonata movement in a rondo type. In other words, the characteristics of form and tonal and thematic procedures correspond to the fast tempo sonata-form movement.

even the earlier work in F minor, WoO 47, no. 2. The latter is recalled, not only by the half-cadence ending of the primary theme (mm. 1-8), but also by the immediate shift toward the mediant-key region after the fourth-line generating the primary theme is completed (Example 3-35).

Example 3-35. Middleground graph of the first movement of op. 49, no. 1⁴⁶

The image displays a musical score for the first movement of op. 49, no. 1, with a middleground graph. The score is divided into three main sections: **Exp** (Exposition), **Dev** (Development), and **Recap** (Recapitulation). Each section is further divided into **P** (Primary), **T** (Tertiary), and **S** (Secondary) themes. The **Recap** section includes an **Extended passage of the S-theme** and a **C** (Coda). The score is written in G minor (one flat) and common time. The graph shows various musical elements such as notes, rests, and accidentals, along with Schenkerian symbols like 'i', 'V', 'ii6', 'V7', 'I', 'V4/3', and 'VI'. A box labeled 'Extended passage of the S-theme' is drawn around the S-theme in the Recap section. A note at the bottom right indicates '* 8-7 motion over iv'.

However, despite these traits shared with the Bonn-period sonata, this G-minor Sonata has a crucial, distinctive structural feature: the fifth-line *Urfinie* is not

⁴⁶ Felix-Eberhard von Cube provides quite detailed voice-leading graphs of the first movement of op. 49, no. 1 with a summary of major events, which appear in five different structural levels. My analytic graphs are based on his, but I improved his notation to demonstrate the relationship between the *Ursatz* and traditional formal divisions of a sonata form in the graph. See Felix-Eberhard von Cube, *The Book of the Musical Artwork: An Interpretation of the Musical Theories of Heinrich Schenker*, ed. and trans. David Neumeier, George R. Boyd, and Scott Harris (Lewiston, New York: The Mellen Press: 1988), 314-315.

supported by two bass arpeggiations as in all the Bonn-period works (including the F-minor), but by a $i-iv^{8-7}-V^6_{4-3}-i$ harmonic progression.⁴⁷

The fourth-line descent generates the primary theme, as in the first movement of op. 2, no. 1, where the initial ascent to the *Kopfton* and the subsequent fourth-line descent generate the primary theme (compare Example 3-36-(a) and Example 3-1). The rhythmic foreshortening technique characterizes the primary themes of both sonatas. The *Kopfton* of op. 49, no. 1 is delayed through an unfolding which carries a significant role in the movement,⁴⁸ and also through an incomplete neighbor-note, but it is finally reached at m. 5 over the i^6 .

Example 3-36. Foreground graphs of the primary theme

(a) Primary theme in the exposition (mm. 1-8)

The musical score for Example 3-36(a) shows the primary theme in the exposition (mm. 1-8) in G minor. The treble staff contains the melody, and the bass staff contains the bass line. Annotations include:

- Pick-up: anticipating the advent of the Kopfton**: A box pointing to the first measure.
- *Unfolding as a motive**: A dashed line spanning measures 1-4.
- Theme generating 4-line**: A thick line spanning measures 5-8.
- 3-line**: A bracket spanning measures 6-8.
- Inc. N**: A bracket spanning measures 4-5.
- 10**: A bracket spanning measures 5-6.
- Harmonic analysis**: $Gm: i$, i , V^6_5 , i , ii^o6 , V .
- Graph**: A sequence of notes with accents: $\hat{5}$, $\hat{4}$, $\hat{3}$, $\hat{2}$, with an arrow pointing to the $\hat{2}$.

⁴⁷ Readers might recall that the sonata-form movements of all the Bonn-period sonatas and another early sonata, WoO 51, have fifth-line *Urlinien* supported by two bass arpeggiations. See Chapter 2.1.

⁴⁸ I will discuss unfolding, which serves as a crucial motive in the movement, later in this chapter.

(b) Primary theme in the recapitulation (mm. 62-71)

Recap starts here!

62 64 65 66 67 68 69 71

Gm: i

However, one should not overlook the role of the pick-up D4. It does not serve merely as a simple anacrusis to the following strong beat, but anticipates the advent of the *Kopfton* an octave higher, and thus suggests the possibility that the primary tone of the movement is $\hat{5}$. Beethoven's way of distributing the voice leading at mm. 1-5 makes clear a registral connection between the lower D and the upper one. The pick-up D is prolonged by serving as an alto voice and appearing very briefly in the tenor voice, and it is actualized as a primary note by being placed in the same register at m. 5 as other members of the higher-level descent.

This interpretation highlighting the importance of the pick-up D4 gains more power if one examines carefully the modified return of the primary theme at its expected place in the reprise (see Example 3-36-(b)). There, the *Kopfton* $\hat{5}$ emerges not only as a goal of the foreground rising fourth-line (A-B-C-D), but also as the head

of the lyric primary theme (m. 64). The $\hat{5}$ has been prolonged by means of a lower-level third-line (D-C-B^b) and a neighbor-note (E^b), whose role is confirmed by the return of $\hat{5}$ at m. 68.

Eric Blom has noticed this subtle change in the head of the recapitulation, although he did not concretize the structural difference caused by the alteration: “This [the recapitulation] begins exactly like the exposition, except that the opening note after the up-beat is now D instead of B^b, this being the logical response to the leading C[#] that precedes it by way of a link. Even in so early a work Beethoven knew how to refine the organization of a movement by smoothing the corners round which the music turns from one division into the next.”⁴⁹ The early presence of the *Kopftou* in the first bar of the recapitulation generates a third-line (D-C-B^b in mm. 64-66) in the recapitulation, instead of the unfolding that encompasses mm. 1-5 in the exposition, and the incomplete neighbor-note (m. 4) transforms into a complete one (m. 67).

Returning to the exposition, the transition begins with the melody of the primary theme after the half cadence at m. 8,⁵⁰ suggesting that we are hearing the consequent phrase of the primary theme, but Beethoven moves soon towards the mediant by means of a pair of unfoldings (B^b to D in mm. 9-13 and C to E^b in mm.

⁴⁹ Eric Blom, *Beethoven's Pianoforte Sonatas Discussed*, (1938; reprint, New York: Da Capo Press, 1968), 142.

⁵⁰ Charles Rosen attributes this compositional treatment to Mozart. He says: “The recapitulation follows a Mozartean model (see, for example, the first movement of the Sonata in A minor for Piano K. 310) in which the opening theme, after a playing of the initial eight bars, is restated in the bass with a new counterpoint in the right hand.” See Charles Rosen, *Beethoven's Piano Sonatas: A Short Companion* (New Heaven and London: Yale University Press, 2002), 178.

13-16), followed by a neighbor-note (m. 16), and thus an antecedent-consequent design is illusory (see Example 3-36-(a) and 3-37-(a)). On the other hand, in the recapitulation, such an implication comes true (Example 3-37-(b)).

Example 3-37. Middleground graphs of the transitions

(a) Transition in the exposition

9 13 16 17

$\hat{5} = \hat{(3)}$

N N 3-line 6 8 5 6

Gm: ii6 V 7 I
of Bb (=III)

(b) Transition in the recapitulation

72 75 77 78 81

* Small note shapes are superimposed counterpoints

$\hat{5}$ $\hat{4}$ $\hat{3}$ $\hat{2}$ $\hat{1}$ $\hat{5}$

4-line 4-line

Gm: i V_5^6 i ii6 V i

Motivic parallelism

The fifth-line descent, taking the same harmonic supports as the primary theme ($i-V_5^6$ $-i-ii^{06}-V-i$ in mm. 72-81), concludes the interrupted fundamental structure. This fifth-line descent combines the primary theme punctuated by a half cadence and the following transition closed by a conclusive one into a single unit, thus assigning them the sense of completeness that an antecedent and consequent pair offers. Notice also the $G-F^\#-G$ bass motion with a third-line ($D-C-B^b$), which is embedded in multiple levels, thus achieving a motivic parallelism. In the consequent, Beethoven adopts a new counterpoint in the top voice, but still leaves the four-line descent in the alto voice: the small note values in the graph denote the superimposed countermelody over the underlying fourth-line descent.

In the recapitulation, Beethoven smoothly connects the transition to the second theme, which is built of two fifth-line descents (marked with a and b in Example 3-35). The second of these will be elevated into the background, as an extended passage (mm. 90-97) of the second theme provides appropriate places for the members of the background-level descent. The advent of the background $\hat{4}_4$ is prepared and dramatized by a secondary dominant seventh chord leading to iv at m. 90 (not shown in the graph). The background $\hat{3}_3$ then arrives over a diminished seventh chord (vii^{07}/V), which is an applied chord over iv , thus forming an 8-7 motion (see the asterisk in Example 3-35). This $\hat{3}_3$ is delayed over the dominant and is rearticulated as a cadential $\hat{6}_4$, giving the impression of a large-level rhythmic displacement. It finally descends via the structural $\hat{2}_2$ at m. 94 to the goal $\hat{1}_1$. This

arrival point corresponds to the beginning of a brief coda section, which brings in the second-theme material.

As mentioned before, unfolding serves as an important motive. It not only contributes to the projection of the primary theme in the exposition, but also governs the voice-leading scheme of the development (see Example 3-38). The G at m. 36, which originates from the unfolding (B^b—G) from $\hat{3}$, serves as a principal upper voice during most of the development. Meanwhile, the submediant key E^b-major supports the upper voice, producing two I—V—I harmonic progressions, which in turn generate lower-level neighbors in mm. 38-46. The music then moves to the home key through a VI-iv-V-i harmonic progression in mm. 48-53. This foreground harmonic progression might make us assume that the true key has already shifted to the home key G-minor. However, that interpretation does not hold up at the middleground. In a higher level, the G-minor chord at m. 53 is not a structural tonic implying that a new *Stufe* commences here, but a surface-level event which still belongs to the prolongation of VI. In other words, the preceding E^b major (VI) still governs this passage (mm. 46-53) and eventually enters smoothly the region of the dominant through a French sixth chord at m. 54. The upper voice G, which remains in force through this harmonic motion from VI to Fr.⁺⁶, now moves by step to F[#] in the retransition (m. 54), a strategic point where the prolongation of the dominant begins. A lower-level rising third-line (F[#]-G-A) interspersed in two octaves (mm. 54-63) recovers the $\hat{2}$ (A at m. 56).

Example 3-38. Middleground graph of the development

The image shows a musical score for a development section in G minor, measures 36 to 58. The score is annotated with a middleground graph. A large horizontal line spans from measure 36 to 58, with a '3' above it at measure 36 and a '2' above it at measure 58. Below this line, a VI chord is indicated from measure 36 to 54. At measure 53, a French sixth chord is labeled as $iv V_5^6 i Fr.+6$. A box below this chord contains the text: "Not Structural Tonic, but a lower-level event, which prolongs VI". The score includes treble and bass staves with various annotations: "reg" (register), "I - V - I in E^b", and "N" (neighbor notes). The key signature is G minor, indicated by "Gm: III".

The structural dominant is approached in the development section in a way that resembles the G-major Sonata, op. 14, no. 2, which was composed in 1799. Both pieces prolong the E^b-major harmony, which serves as a VI, for quite a long time, and the shift to the structural dominant happens through an augmented sixth chord: op. 14, no. 2 adopts a German sixth, whereas the G-minor Sonata approaches the retransition via a French sixth. Furthermore, the musical spaces filled up between these two harmonies (VI and an augmented sixth chord) are very similar to each other. This similarity in the large-level voice-leading and harmonic structure lets us reach a conclusion that Beethoven might have duplicated a single harmonic and voice-leading scheme in the course of designing the development sections of op. 49, no. 1 and op. 14, no. 2.

Example 3-39. Voice-leading synopsis of the development of op. 14, no. 2

99 104 106 107

3-line(A-G-F#)

bVI iv V6 i Ger.+6 V

G: V

3.7 : First Movement of op. 49, no.2, G major

Allen Cadwallader and David Gagné provide quite a detailed analysis of the first movement of op. 49, no. 2 together with many voice-leading graphs in multiple levels.⁵¹ They choose the third-line *Urlinie* supported by a single I-V-I bass arpeggiation (Example 3-40). The choice of the third-line assumes the presence of a first-order third-line within the primary theme (mm. 1-12). In their voice-leading graph of the primary theme (Example 3-40), the *Kopfton* $\hat{3}_3$ is established by a brief tonic arpeggiation (G4-B4 at mm. 1-4). This *Kopfton* is then prolonged by shifting to a higher register within the repetition of the phrase, which is extended by the

⁵¹ Allen Cadwallader and David Gagné, “Sonata Principles,” chap.11 in *Analysis of Tonal Music: A Schenkerian Approach* (New York: Oxford University Press, 1998), 311-329. They analyze the first movement thoroughly as a stereotypical example in the course of explaining the sonata principle.

Kopfton's rising to the cover-tone D6; this note remains influential to m. 10 through boundary play containing a lower-level upper neighbor-note E6 at m. 9. This cover-tone D6 moves through scalar material to an incomplete neighbor (C at m. 11), which slides to $\hat{2}_2$ and eventually to the goal $\hat{1}_1$ in the following bar.

Example 3-40. Cadwallader and Gagné's voice-leading graph of the primary theme (mm. 1-12)

a) Foreground graph

The image displays two musical staves with voice-leading graphs. The top staff covers bars 5-7, and the bottom staff covers bars 10-12. Both staves are in treble clef with a key signature of one sharp (F#). The graphs use various annotations to show voice-leading relationships:

- Staff 1 (bars 5-7):**
 - Bar 5: Treble clef has notes G4, A4, B4, C5. Bass clef has notes G2, A2, B2, C3. A circled '1' is above the G4 note.
 - Bar 6: Treble clef has notes A4, B4, C5, D6. Bass clef has notes A2, B2, C3, D3. A circled '1' is above the A4 note. A circled '4' is above the staff.
 - Bar 7: Treble clef has notes B4, C5, D6, E6. Bass clef has notes B2, C3, D3, E3. An 'N' is above the C5 note. A circled '3' is above the E6 note.
 - Chord symbols: I (below bar 5), 6 (below bar 6), and I (below bar 7).
- Staff 2 (bars 10-12):**
 - Bar 10: Treble clef has notes G4, A4, B4, C5. Bass clef has notes G2, A2, B2, C3. A circled '8' is above the staff.
 - Bar 11: Treble clef has notes A4, B4, C5, D6. Bass clef has notes A2, B2, C3, D3. A circled '12' is above the staff.
 - Bar 12: Treble clef has notes B4, C5, D6, E6. Bass clef has notes B2, C3, D3, E3. An 'N' is above the C5 note. A circled '2' is above the B4 note, and a circled '1' is above the C5 note. A circled '3' is above the E6 note.
 - Chord symbols: I (below bar 10), I⁶ (below bar 11), IV (below bar 12), V (below bar 12), and I (below bar 12).

b) Middleground graph

In *Der Tonwille*, Schenker provides quite a different interpretation (Example 3-41-(a)).⁵² He sees the movement as having a fifth-line *Urfinie* in what I call the “primitive type,” where the higher-level descent to $\hat{3}$ projects the primary theme, as in the first movements of Beethoven’s WoO 47, no. 1 and WoO 51. Because he does not offer an analytic graph of the recapitulation, it is hard to know precisely what the overall *Ursatz* design of the movement would look like.

⁵² Schenker provides a bar-to-bar analysis of the exposition and development of the movement in question in his *Der Tonwille*. See Heinrich Schenker, “Beethoven: Sonate Opus 49, Nr.2,” *Der Tonwille* 4 (1923): 20-21.

Example 3-41. Voice-leading graphs of the exposition

(a) Schenker's foreground graph of the exposition

The image displays three systems of musical notation, each representing a voice-leading graph for a specific range of measures in the exposition. Each system consists of a musical staff with notes and rests, and a corresponding graph of intervals and chord symbols.

- System 1 (Measures 1-10):** The graph shows intervals $\hat{6}$ and $\hat{4}$ at the beginning, followed by $\hat{4}$ and $\hat{6}$. Chord symbols $(\hat{4})$ and $(\hat{6})$ are indicated. Measure numbers 5 and 10 are boxed. Roman numerals I , IV , V , and I are shown at the bottom.
- System 2 (Measures 15-25):** The graph shows intervals $\hat{6}$, $\hat{4}$, and $\hat{6}$. Chord symbols $(\hat{6})$, $(\hat{4})$, and $(\hat{6})$ are indicated. Measure numbers 15, 20, and 25 are boxed. Roman numerals II , V , I , IV , V , and I are shown at the bottom.
- System 3 (Measures 30-50):** The graph shows intervals $\hat{6}$, $\hat{4}$, and $\hat{6}$. Chord symbols $(\hat{6})$, $(\hat{4})$, and $(\hat{6})$ are indicated. Measure numbers 30, 35, 40, 45, and 50 are boxed. Roman numerals II , V , I , IV , V , and I are shown at the bottom.

(b) A middleground graph based on Schenker's interpretation of the exposition

The image displays a musical score with a middleground graph. The score is in G major and 3/4 time. The graph is divided into four levels: P (Pitch), (T?) (Tonic?), S1 (Subordinate), and K (Klein). The P level shows the actual notes, with annotations for 'reg' (registral), '3-line', '4-line', and '5-line'. The (T?) level shows the tonic, with a '2' above it. The S1 level shows the subordinate, with annotations for 'ct' (contour), 'N' (Neume), and '10'. The K level shows the Klein, with annotations for 'V7 I ii6', 'V HC still in G-Major', 'D:I', and 'Tonic of the dominant key starts here!!'. Measure numbers 1, 4, 9, 11, 12, 15, 19, 21, 24, 29, 36, 43, 45, 48, 49 are indicated. The graph shows a '3-line-4-line' relationship between measures 11 and 12, and a '3-line-5-line' relationship between measures 21 and 24. A 'reg' annotation is placed above measures 11 and 12. A 'ct' annotation is placed above measure 15. A 'N' annotation is placed above measure 19. A '10' annotation is placed above measure 21. A 'V7 I ii6' annotation is placed above measure 29. A 'V HC still in G-Major' annotation is placed above measure 36. A 'D:I' annotation is placed above measure 43. A 'Tonic of the dominant key starts here!!' annotation is placed above measure 45. The graph shows a '3-line-4-line' relationship between measures 11 and 12, and a '3-line-5-line' relationship between measures 21 and 24. A 'reg' annotation is placed above measures 11 and 12. A 'ct' annotation is placed above measure 15. A 'N' annotation is placed above measure 19. A '10' annotation is placed above measure 21. A 'V7 I ii6' annotation is placed above measure 29. A 'V HC still in G-Major' annotation is placed above measure 36. A 'D:I' annotation is placed above measure 43. A 'Tonic of the dominant key starts here!!' annotation is placed above measure 45.

Furthermore, Schenker's way of notation here does not demonstrate clear hierarchies among the structural events of the movement (This is typical of the early *Tonwille* graphs.) However, despite this notational inefficiency in Schenker's graph, his interpretation is quite convincing.

The primary theme (mm. 1-12), according to Schenker, establishes $\hat{5}$ through a small-scale arpeggiation over the strongly stated tonic at m. 1 (Example 3-41-(a)). This *Kopfton* is prolonged through a local third-line (mm. 1-4), undergoes an octave transfer in the repetition of the first phrase, and arrives at $\hat{4}$ over ii^6 and V^7 at m. 11. The $\hat{3}$ is then reached over the foreground perfect authentic cadence; however, in a deep level, an imperfect authentic cadence should be interpreted as being at work because the background $\hat{3}$ remains intact here.

This reading from $\hat{5}$ gains more power if the analyst considers that the second extended phrase (mm. 5-12) sounds like an immediate repetition of the first phrase (mm. 1-4), which has a lower-level third-line descent ($\hat{5} - \hat{4} - \hat{3}$). Beyond this structural reason admitting of the priority of $\hat{5}$, the compact sonatina-like design gives another license to accept the $\hat{5}$ -line reading (in particular, "the $\hat{5}$ -line primitive type").⁵³ Readers might recall that the stylistic trends of Beethoven's early sonatina-like piano sonatas, such as WoO 47 and 51, are structured by the $\hat{5}$ -line primitive type.

⁵³ Forte and Gilbert discuss the sonatina design in their textbook. Allen Forte and Steven Gilbert, *Introduction to Schenkerian Analysis* (New York: W.W. Norton & Company, Inc., 1982), 313-319.

The omission of the transition through an extension of the primary theme and its ending on the dominant and the direct shift toward the tonic of the dominant key recall a treatment peculiar to several expositions of Mozart's piano sonatas.⁵⁴ Schenker also points out in his table of the formal divisions for this movement that a transition carrying out a tonal shift is missing.⁵⁵ Schenker himself describes the exposition lucidly and pinpoints a structural affinity to Mozart's Sonata, K. 545.⁵⁶ He asserts the validity of the *Urlinie* from $\hat{5}$ by emphasizing the underlying role of the reiterated descents to $\hat{3}$ within the primary theme:

In the first theme, the *Urlinie* really moves from $\hat{5}$ to $\hat{2}$, but the $\hat{6}$ interpolates itself in the manner of a neighbor note (similarly to the sonata by Mozart [K.545] discussed earlier). The *Urlinie* shows four segments: two descents $\hat{5} - \hat{4} - \hat{3}$ in mm. 1-8 and again two descents from $\hat{6}$ ($\hat{6} - \hat{3}$ and $\hat{2}$). But already in mm. 1-4 the figure $\hat{5} - \hat{4} - \hat{3}$ over the tonic achieves repetition: the first composing-out is strengthened by lower thirds, artistically concealed through arpeggiations (m. 1) and through a broader unfolding (mm. 2-3), but the second [composing-out of $\hat{5} - \hat{4} - \hat{3}$] wins greater meaning because it is supported by a complete cadence [in m. 4]. The registral shift for the second phrase (mm. 5-8) brings the third repetition with it; only with the $\hat{4} - \hat{3}$ [in mm. 11-12] is the lower register regained, and another repetition occurs. It is noteworthy that the $\hat{3}$ is reached three times but only descends to $\hat{2}$ in the fourth phrase [m. 19]. The

⁵⁴ Schenker mentions the first movement of Mozart's Piano Sonata, K. 545 as an example. I will add first movements of Mozart's Piano Sonatas, K. 280 in F major, K. 281 in B^b major, K. 283 in G major, K. 284 in D major, K. 311 in D major, K. 330 in C major, where transitions do not carry a modulatory function, but end on the dominant of the home key.

⁵⁵ In his form table, Schenker assigns the primary theme to mm. 1-20, the second theme to mm 21-36, and the closing theme to mm. 37-52. Schenker does not separate a transition from the primary theme, whereas Cadwallader and Gagné see the transition as beginning at m.12. See Schenker, "Beethoven: Sonate Opus 49, Nr. 2," *Der Tonwille* 4 (1923): 20.

⁵⁶ This is another example of the bifocal close suggesting Mozart's influence. Robert Winter, "The Bifocal Close and the Evolution of the Viennese Classical Style," *Journal of the American Musicological Society* 42, no. 2 (1989): 275-337. The arrival of $\hat{2}$ is made in the dominant of the home key and a modulation to the dominant key follows later. Thus, in this type of the exposition, the launch of the first-order fifth-line descent within the dominant key does not correspond to the advent of $\hat{2}$, but is delayed.

change of meaning for $\hat{2}$ — becoming $\hat{5}$ in the new key — happens in the same way as in the Mozart sonata.⁵⁷

Schenker's reading of the second-theme area coincides with Cadwallader and Gagné's. He sees the second theme as projecting a third line ($\hat{3} - \hat{2} - \hat{1}$) while $\hat{5}$ remains intact in the background.

The second theme is an antecedent-consequent pair (mm. 21-28 and 29-36). Under the $\hat{5}$ is a motion from $\hat{1}$ to $\hat{3}$ in the manner of an unfolding. The outer voices here show a particular beauty in the voicing of the principal intervals (see the dotted lines in the *Urlinie-Tafel*):

$$\begin{array}{c} d^2 \text{ — } e^2 \text{ — } f\#^3 \\ d \text{ — } a \text{ — } d^1 \\ 8 \text{ — } 5 \text{ — } 3 \end{array}$$

The first-octave D in the bass comes from measure 15 and sounds again only in m. 36. After that E2 and F#2 appear in m. 22 and 25 with anticipations. The motive in mm. 21-22, and 23-24 does not lack a certain relationship to the diminutions of mm. 1-4. Certainly the $\hat{5} - \hat{4} - \hat{3}$ in the upbeat to m. 25 is related to the figures of mm. 22 and 24.

Above the $\hat{1}$ appears $\hat{5}$, from which the other tones of the fifth-line follow only in mm. 43-44 (the $\hat{5} - \hat{4} - \hat{3}$ descent in mm. 36-40 is only an advance notice), then two repetitions follow, connected but at the same time distinguished by the change in register (compare mm. 36-60 of the Haydn Sonata in C major discussed earlier). Both repetitions employ the $\hat{6}$ as a neighbor note.

Cadwallader and Gagné do not mention Schenker's graphs, but their interpretation can be understood as clarifying and elaborating his interpretation. They delineate clearly the local, but theme-generating third-line descent, which works within the higher-level fifth-line schema.

Example 11.7 [Example 3-44] shows a foreground analysis of the antecedent and consequent phrases (level a); the entire period is represented by a middleground synopsis (level b). In the first part of the antecedent phrase, the upper voice leads to $\hat{3}$ in D major and is rhythmically articulated into two subphrases (bars 21-22 and 23-24). Notice that the line ($\hat{1} - \hat{2} - \hat{3}$ in D) is elaborated by reaching-over motions, indicated by the unfolding signs in the graph. In the second part of the phrase (bars 25-28), the large-scale descending motion $f\#^2 - e^2$ is elaborated by motions into an

⁵⁷ Heinrich Schenker, "Beethoven: Sonate Opus 49, Nr. 2," *Der Tonwille* 4 (1923): 20. I am indebted to Professor David Neumeyer, who has kindly translated the German text.

inner voice. Thus, as often happens at cadences, e^2 remains present by implication as the melody descends to the leading tone at the half cadence (Example 11. 7 [Example 3-44]). Our perception of an interruption is confirmed: the antecedent phrase is the first branch of an interrupted structure in D major, where $\hat{3}_3$ moves to $\hat{2}_2$ over a larger motion from I to V.

We mentioned that the second theme develops from $\hat{2}_2$ of the *Ursatz* (a^2 is also $\hat{2}_5$ in D major). Why, then, do we show a local, interrupted structural line from the more local $\hat{3}_3$ of the dominant area? In fact, a^2 remains active in the phrase, but it appears only sporadically in bars 24-26. Because of the strong ascent to F^\sharp , both in the antecedent and in the consequent phrases, we interpret the top-voice line in this passage as leading to and from f^\sharp^2 . The structural $a^2, \hat{2}_2$ of the *Ursatz*, seems to “hover” in the background, occasionally sounded, but not participating in the local structure.

Example 3-42. Cadwallader and Gagné’s graphs of the second theme

(a) Foreground graph of the second theme (mm. 21-36)

The image displays two systems of musical notation for the second theme, measures 21-36. Each system consists of a treble and bass clef staff with piano accompaniment. Above the treble staff, structural tones are indicated with circled numbers and hats: $\hat{1}$, $\hat{2}$, $\hat{2}$, $\hat{3}$, $\hat{3}$, $\hat{2}$, and $\hat{1}$. A dashed line connects the $\hat{2}$ tones in the first system and the $\hat{2}$ tones in the second system. Chords are labeled as $D: I$, V , ξ , I , Π^6 , and V in the first system, and $D: I$, V , ξ , I , Π^6 , V_{4-3}^6 , and I in the second system. The $G:$ line shows $\hat{2}$ and $\hat{2}$ tones. The ξ symbol is used to denote a specific structural element. The piano part includes markings for P (piano) and f (forte).

(b) Middleground graph of the second theme

The image shows a musical score for the second theme with Schenkerian annotations. The score is divided into two systems. The first system (measures 8-28) is labeled "antecedent" and features a higher-level fifth-line descent from measure 8 to 28. The second system (measures 29-36) is labeled "consequent" and features a higher-level fifth-line descent from measure 29 to 36. Annotations include circled measure numbers (8, 21, 24, 28, 29, 32, 36), hat symbols (^) over notes, and Roman numerals (G: I, V, =D: I, I, II⁶, V) indicating harmonic structure. A dashed line connects the start of the antecedent to the start of the consequent.

The higher-level fifth-line descent that we normally expect in the second-theme area comes late in the closing theme (mm. 42-43)—both Schenker and Cadwallader and Gagné read this in the same way. This descent satisfies the structural condition of Schenker's sonata-form schemata. Cadwallader and Gagné

describe Beethoven's handling of the second-theme area as seen in the movement in question with a middleground synopsis of the exposition (Example 3-43):

In Beethoven's exposition, the same fundamental tonal pattern occurs, but the region associated with the fifth-progression in the dominant is greatly expanded. Notice that the first tone, \hat{a}^2 , is prolonged from bar 15 before the descent begins. Consequently, we understand structural $\hat{2}$ and the fifth-progression that prolongs it as governing a span of 38 measures (bar 15-52)...Beethoven's movement is more characteristic of sonata expositions, where the prolongation of $\hat{2}$ over V may embrace one or more second themes, followed by closing material and possibly a codetta.⁵⁸

Example 3-43. Middleground synopsis of the exposition (after Cadwallader and Gagné)

A middleground third-line (A5-B5-C5) generates the development section.⁵⁹

In this third-line, B serves as a passing tone between $\hat{2}$ and the seventh of the dominant ($\hat{4}$), which secures the arrival of the home key. In the foreground, the local dominant of E-minor is emphasized as if it were a tonal goal of the development. This interesting treatment, in which a note other than the dominant of the home key has been highlighted in the development, but later moves rapidly to the real goal (the

⁵⁸ Cadwallader and Gagné, *Analysis of Tonal Music: A Schenkerian Approach*, 320-321.

⁵⁹ My interpretation of the development is based on Cadwallader and Gagné's voice-leading graphs. For their detailed analysis of this part, see 320-325.

dominant), is also found in Beethoven's op. 7, where the dominant of D-minor is emphatically asserted, giving the impression that it is a tonal goal, but, at the last moment, shifts to the inverted dominant seventh of the home key. In the final measures of the development of op. 49, no. 2, first movement, the circle-of-fifths motion in the bass (B-E-A-D in mm. 59-66) guides the path of the upper voice from the passing tone B to the seventh C.

Example 3-44. Middleground graph of the development (after Cadwallader and Gagné)

Schenker offers quite a different interpretation of the development (Example 3-45). He sees the development section as initiating from D ($\hat{5}$ over the minor dominant). Schenker says: "The development, despite its key changes, essentially exhibits a descent D-C-B. In mm. 53-55 and also in 56-58 is the motive of the second theme. In mm. 59ff, a falling series of tones prepare the falling figures of the

Urlinie.”⁶⁰ He interprets this third-line as governing the development section in order to emphasize the motivic connection of this third-line to other appearances of the second theme.

However, a careful examination of the section must disallow Schenker’s reading, even if we accept his beginning point of the note D: the development would have to be read as a fourth-line, not as a third-line. Therefore, in a higher level, the upper voice would create a large-level 8-7 motion over the structural dominant while the stepwise descent D-C-B-A is subsumed as a motion to an inner voice into a lower level. This reading would accordingly devalue the hierarchical status of the underlying note B, which lasts for five bars and asserted by the reiterated pedal B.

Example 3-45. Schenker’s reading of the development

The recapitulation contains much reworking of exposition material, especially in the primary-theme group. After the minimal exact statement of the primary theme, Beethoven transforms the following phrase, which was a repeated extended phrase in the exposition. He does this by quickly moving to the region of the subdominant. Schenker has noted this tonicization: “In the recapitulation, mm. 74ff bring a turn to

⁶⁰ Schenker, “Beethoven: Sonate Opus 49, Nr.2,” 21.

the subdominant, which nevertheless cannot be called a C-major tonality, since G-major is firmly established at the beginning of the recapitulation.”⁶¹ This motion from subdominant to dominant (C to D in the bass) could be understood as a very extended version of m. 11, where the same harmonic motion appears in half-note values. A 5-6 contrapuntal motion over the subdominant (mm. 74-81) elaborates the musical space of the extended version, by bringing in closing-theme material. This voice-leading treatment parallels that in the recapitulation section of the C-major Sonata of WoO 51, where the subdominant region supporting $\hat{4}$ is extended and finally leads to the dominant (IV-V⁷). Example 3-46 shows the structural voice-leading events in the recapitulation, which serve to clarify the sonata-form scheme.

Example 3-46. Middleground graph of the recapitulation

A large-level antecedent and consequent relationship

⁶¹ Ibid.

Because the second theme appears in the tonic key and cadences on the tonic, the recapitulation articulates a large-level antecedent and consequent structure: the primary theme ending on a half cadence corresponds to the antecedent (mm. 71-87),⁶² whereas the second and closing themes together form the consequent. This way of reworking was already seen in the G-minor Sonata of op. 49, no. 1, where the return of the second theme in the home key leads to a large-level antecedent and consequent relationship. As Roger Kamien has pointed out, the reworking in the recapitulation—not merely a restatement of the exposition with the second-theme group transposed—is a true sign, indicating that Beethoven is ready to move to this middle-period maturity.⁶³

3.8 : First Movement of op. 7, E^b major

The first movement of op. 7 represents a culmination of that striving for “monumentality” that began with the A-major sonata, op. 2, no. 2. As William Newman has observed, opus 7 is “Beethoven’s first piano sonata to be called a ‘Grande Sonata,’ his first to be published singly, and his first that may be rated a consistent masterpiece.”⁶⁴ This monumentality comes from Beethoven’s extension of

⁶² This large-scale antecedent-and-consequent phrase structure with the half cadence in the middle comes from the harmonic neutrality of the half cadence in mm. 82-87. As mentioned before, this is a result of the bifocal close. Robert Winter, “The Bifocal Close and the Evolution of the Viennese Classical Style,” *Journal of the American Musicological Society* 42, no. 2 (1989): 275-337.

⁶³ Roger Kamien, “Aspects of the Recapitulation in Beethoven Piano Sonatas,” *Music Forum* 4 (1976): 195-235.

⁶⁴ William Newman, *The Sonata in the Classic Era*, 3rd ed. (New York: W.W. Norton & Company, Inc., 1983), 512.

the second-theme area and the unusual expansion of the concluding section, both of which are hallmarks of the middle-period Beethoven.

Beethoven seems to do everything expected in the “textbook” sonata-form model, as in the first movement of the A-major Sonata op. 2, no. 2. The background third-line from the *Kopfton* $\hat{3}$ is supported by the I-V-I harmonic progression (Example 3-47). The first-order third-line generates the exposition’s primary theme, creating the *Ursatz* replica.⁶⁵ The arrival at $\hat{2}$ in the second-theme area causes the expected interruption, and this interrupted structure generates the development section, but in a very unusual way. The recovery of the *Kopfton* with a simultaneous thematic return completes the entire *Ursatz*. However, as Example 3-47 shows, the first-order fifth-line from $\hat{2}$ is divided into two third-lines: $\hat{5} - \hat{4} - \hat{3}$ and $\hat{3} - \hat{2} - \hat{1}$ by two distinctive second themes (written as S_1 and S_2 in the figure above the graph). In all the sonata-form movements that we have examined thus far, the second themes projected multiple fifth-line descents and thus we had to decide which descent was more structural than the others. However, despite its length, the first movement of op. 7 possesses only a single fifth-line descent within the second-theme area.

⁶⁵ David McGuire provides a different reading of the exposition, in which the *Kopfton* comes as late as m. 17, by suggesting the dual possibility that both $\hat{5}$ and $\hat{3}$ (located respectively at m. 15 and m. 17) could be chosen as a *Kopfton*. His graph not only bypasses the first strong presence of $\hat{3}$ at m. 1, the first candidate of the *Kopfton*, but also ignores the third-line within the primary theme (his Example 19). His reading of the second-theme area seems troublesome. His graph does not reflect the thematic parallelism as seen in the lyric second theme (mm. 60-67 and mm. 68-93). David McGuire, “Revisiting the Return: The Structural Dilemma of the Recapitulation in the Schenkerian Account of Classical Sonata Form” (Ph.D. diss., State University of New York at Buffalo, 1996), 49-50.

Example 3-47. A middleground graph of the first movement of op. 7

Two S-themes (S1 and S2) are divided into two 3-lines!

Exposition		Development		Recapitulation					
(P	T	S1	S2	(P+T	S1	S2			
1	25	41	59	137	179	221	239	272	273

Annotations in the score include: 3-line, N, I.O., Ascending 3-line (B1-C-D), ii6 V I, Bb: I, V/V -7 V, and ii6 V I.

* r.o. : reaching-over

This rather irregular design of the second-theme area enables us to have all the primary and second themes coherently unified within the third-line. The pervasive use of the third-line—which has been adopted for all the themes of the movement—demonstrates structural unity and coherence of the movement.

As he did in the A-major and C-major sonatas of op. 2, Beethoven sets up two distinctive themes in the second-theme area. What Dahlhaus calls a “scherzando-character” second theme (S_1 in mm. 41-59) is tonally stable and closed, although it lacks a rhetorically theme-like character, if compared with the true lyric second theme (S_2) at m. 61.⁶⁶ As Dahlhaus points out, this scherzando second theme (S_1) contrasts with the problematic passages in the A-major and C-major sonatas, which, as we have seen, cause controversies about where the transition ends and the second theme begins. While the problematic passages in the A-major and C-major sonatas possess a rhetorically theme-like quality, they lack tonal stability. The second theme of this E^b -major sonata, however, deserves to be called a theme because it is unfolded on a stable tonality, B^b major.

⁶⁶ Carl Dahlhaus, *Ludwig van Beethoven: Approaches to His Music* trans. Mary Whittall (Oxford: Clarendon Press; New York: Oxford University Press, 1991), 92-93.

Example 3-48. Two second themes that contrast with each other in character

(a) S₁ (mm. 41-59)

(b) S₂ (mm. 60-93)

The ultimate effect of Beethoven's treatment allows the second themes, each of which is governed by a third-line, to be reproduced in the recapitulation as separate third-lines; this prevents the hierarchical inconsistency caused when the fifth-line of the second theme is replicated in the third-line of the recapitulation.⁶⁷ In the

⁶⁷ Schenker himself was aware of the phenomenon which arises when the first-order fifth-line within the second-theme area in the exposition is transposed into the home key in the recapitulation, but did not seem to recognize it as a theoretical problem: "Even a reordering of the original sequence of the material is possible in the recapitulation, since the fundamental line and the bass arpeggiation ultimately restore the balance. In the case of $\hat{3} - \hat{2} \parallel \hat{3} - \hat{2} - \hat{1}$, a fifth-progression is frequently superimposed on the final third-progression. There is no doubt that the primary tone remains the $\hat{3}$; the fifth-progression is merely a final reinforcement" (Schenker, *Free Composition*, 138, footnote citation deleted). Ernst Oster briefly agrees with Schenker's explanation in a footnote (his footnote 16). Peter Smith criticizes both Schenker and Oster because they overlooked the hierarchical problem that the first three members ($\hat{5} - \hat{4} - \hat{3}$) of the descent should be interpreted as a different level from the remaining descent, in

recapitulation, the first incomplete third-line descent ($\hat{5} - \hat{4} - \hat{3}$) of the exposition is transformed into a neighboring motion and only the second third-line descent ($\hat{3} - \hat{2} - \hat{1}$) is transposed and adjusted into E^b-major (Example 3-49).

Example 3-49. Reproduction of the second themes in the recapitulation

Prolongations through neighboring notes and multiple-level unfoldings contribute to the proportional extension. The scherzando second theme (S_1) is a stereotypical example of Beethoven’s “composing out (*Auscomponierung*)” of third-line descents ($\hat{5} - \hat{4} - \hat{3}$). The passing $\hat{4}$ is stretched out through register transfers

other words, the first three members are downplayed as a lower level, whereas the next three ($\hat{3} - \hat{2} - \hat{1}$) are elevated into the background in the recapitulation. Peter Smith, “Brahms and Schenker: A Mutual Response to Sonata Form,” *Music Theory Spectrum* 16, no.1 (1994): 79-86. David McGuire tackles the same problem. He discusses that there are expositions, in which $\hat{3}$ and $\hat{5}$ pose the possibility to serve as a *Kopfton*, and that such a “rivalry” is settled in the recapitulation and thus gives a solution of the sonata-form problem. David McGuire, “Revisiting the Return: The Structural Dilemma of the Recapitulation in the Schenkerian Account of Classical Sonata Form” (Ph.D. diss., State University of New York at Buffalo, 1996).

and complicated voice-leading interactions with inner voices. This $\hat{4}$ is introduced in the tenor voice, but is highlighted by the accents located in rather unexpected metric positions. Example 3-52 reveals the composing-out process step by step, as Beethoven accomplishes a complex voice-leading path over a simple $\hat{4} - \hat{3}$ motion supported by V^7-I . Notice the governing role of the *V Stufe* while the sequential progressions of the left hand are interpreted as being made in the tenor voice.

Example 3-50. Composing-out process of mm. 41-59

(a) A middleground graph

(b) Annotated voice-leading synopsis

The lyric second theme contains another fair example of proportional expansion (Example 3-51). This S_2 -theme has a large-level period structure in which the consequent phrase is extended by means of an internal expansion over the dominant.⁶⁸ Meanwhile, a neighbor-note E^b5 at m.69 is prolonged through a downward octave transfer; it then ascends to E-natural by being enharmonically respelled ($E^b=D^\sharp$), thus suggesting the sharpened note's license to rise. The diminished seventh chord in mm. 79-80, which was originally adopted to embellish a vi chord, establishes C-major as a temporary key (this is a brief tonicization of II), by functioning as a vii^{07}/V .⁶⁹ The E-natural is prolonged by a lower-level neighbor (F) over V_{4-3}^{6-7} in the local key, C-major, and finally ascends to F, which is a cover-tone in this passage.

⁶⁸ The consequent is also expanded by a variation technique, which is a major compositional device since Beethoven's middle period. The adoption of variation as a means to present an expanded consequent is also seen in the first movement of op. 22.

⁶⁹ Schenker discusses the illusory status of the C-major key in this passage (mm. 59-93) during the course of explaining the relationship between the "scale-step" and "chromatic change." He gives reasons why the C-major fails to act as a real independent key and also criticizes A. B. Marx, who saw the inserted C major as an independent entity. See Heinrich Schenker, *Harmony* (Chicago: University of Chicago, 1954), 294-298. Like Marx, Donald Tovey also seems to understand C-major as a real key challenging the status of the home key: "This [$\frac{6}{4}$ to $\frac{5}{3}$ alternation over G] is not an enhanced dominant but an intrusive key *violently opposed to the present B^b* " (*italics mine*) (Donald F. Tovey, *A Companion to Beethoven's Piano Sonatas: Bar-by bar Analysis*, 36).

Example 3-51. A middleground graph of the lyric second theme (mm.60-93)

The image displays a musical score for the lyric second theme, divided into two main sections: **Antecedent** (measures 59-67) and **Consequent (expanded)** (measures 69-93). The score is written in a grand staff with a treble clef on the upper staff and a bass clef on the lower staff. The key signature has two flats (Bb and Eb).

Antecedent (mm. 59-67): This section begins with a measure rest at m. 60. The melody starts at m. 61 with a note marked 'N' and a slur over measures 61-63 labeled '3-line'. A fermata is placed over measure 67. The bass line has a slur over measures 61-63 labeled '10'.

Consequent (expanded) (mm. 69-93): This section starts at m. 69 with a note marked 'N'. It contains several annotations:

- Measure 72: A slur over measures 72-74 labeled '6'.
- Measure 73: A slur over measures 73-74 labeled '4'.
- Measure 74: A slur over measures 74-75 labeled '3'.
- Measure 75: A slur over measures 75-76 labeled '7 5'.
- Measure 76: A slur over measures 76-77 labeled '6 6'.
- Measure 77: A slur over measures 77-78 labeled '3'.
- Measure 78: A slur over measures 78-79 labeled '5'.
- Measure 80: A slur over measures 80-81 labeled '6'.
- Measure 81: A slur over measures 81-82 labeled '4'.
- Measure 82: A slur over measures 82-83 labeled '3'.
- Measure 83: A slur over measures 83-84 labeled '7'.
- Measure 84: A slur over measures 84-85 labeled '6'.
- Measure 85: A slur over measures 85-86 labeled '3'.
- Measure 86: A slur over measures 86-87 labeled '5'.
- Measure 87: A slur over measures 87-88 labeled '6'.
- Measure 88: A slur over measures 88-89 labeled '3'.
- Measure 89: A slur over measures 89-90 labeled '5'.
- Measure 90: A slur over measures 90-91 labeled '6'.
- Measure 91: A slur over measures 91-92 labeled '3'.
- Measure 92: A slur over measures 92-93 labeled '5'.

Other annotations include 'E=D#' at m. 74, 'ct' at m. 90, and 'N' at m. 69, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92. The score concludes with a fermata at m. 93.

At the bottom of the page, the following text is present: **Bb: I**, **V I**, **vio7/vi**, **V/V V6**, **ii6 V**, **I**. The text **C: vio7/V V⁶ V₄ I** is also present, with a slur over measures 7-9 and a '3' below it.

The development section is worthwhile to discuss, not only because Beethoven daringly plays with remote keys, but also because he does not set up the retransition in the expected way. Instead of moving to the home key near the end of the development, he reaches a remote key, A-minor (m. 167), which articulates a tritone relationship to the home key, E^b-major. He then undermines this key by superimposing an accented $\frac{6}{4}$ chord above the tonic bass (m. 177), and prepares the ultimate tonal shift to D-minor (see Example 3-52-(c)).

The absence of a retransition, which is undoubtedly an innovative formal procedure through his piano sonatas,⁷⁰ is evidence that Beethoven does not conceive the development section simply as a bridge, whose origin is a rounded binary form, but as a “fantasy,” an experimental section, where he can try out and show off his advanced compositional techniques. The music passes through C, F, G, and A-minor, by stating the main themes on different pitch levels, and dramatically moves to D-minor as if that key were a final tonal goal.⁷¹ The development thus seems to end in the wrong key, D-minor. However, Beethoven begins the recapitulation in the correct key by adopting an inverted dominant-seventh chord over the tonic of D-minor (E^b-

⁷⁰ Historically, there are sonata-form movements whose development sections end without retransitions. Their origins could be traced in C. P. E. Bach’s sonatas and the *Da capo aria*. These are related to later cases, in which the tonal goal of the development section is not the dominant, but other harmony with or even without a brief dominant as a connecting chord at the end. David Beach discusses such development sections of Mozart’s sonata-form works, K. 280 (I), K. 280 (III), K. 332 (I), K. 333 (I), and K. 590 (I), whose tonal goal is a mediant (III#), so that harmonic surprise (III-I) resulting from a sudden entrance to the recapitulation strikes listeners, as in this Beethoven’s op. 7. See David Beach, “A Recurring Pattern in Mozart’s Music,” *Journal of Music Theory* 27, no.1 (1983): 1-29.

⁷¹ Tovey enumerates the same key succession. Donald Tovey, *A Companion to Beethoven’s Pianoforte Sonatas*, 36-37.

major :V₅⁶). This is a very unusual way to introduce the seventh of the dominant harmony ($\hat{4}$). Although a similar procedure, in which Beethoven implies a typical progression leading toward the dominant, but moves toward a wrong key, is found in later sonatas, namely, the first movements of op. 10, no. 2, and op. 28, here the way that Beethoven uses it is far more bold and experimental. In op. 10, no. 2, the emphasis on the dominant of a wrong key leads to what I call the “pseudo recapitulation,” whereas, in op. 28, the second half of the development prolongs the subdominant key and finally ends on a perfect authentic cadence in that key. Only a brief link is adopted to prepare the return of the tonic *Stufe* in the reprise.

The voice-leading path of the development is typical of foreground-level phenomena on the grounds of successive appearances of remote keys as well as of the absence of the dominant at the end of the section. Thus, sonata-form theory, which assumes a prolongation of the dominant reached at the second-theme area in the middle section, seems called into question. The keys that Beethoven adopted in the development do not seem to integrate into a single *Stufe*, dominant. Schenker also describes this idiosyncratic key change as a “real modulation,” which lacks the governing of a diatonic *Stufe*, not as a series of illusory keys prolonging a single *Stufe* (dominant). He says:

In the development of the first movement of Beethoven’s piano Sonata in E-flat major, op. 7, for example, the keys are real keys, and their sequence is: C minor, A-flat major, F minor, G minor, A minor, D minor. It would be illicit to do violence to this situation by explaining all these keys or part of them as consequences of the B-flat major diatonic system which concluded the first part of the movement. Beethoven quite intentionally uses here this change of keys, in contrast to the

exposition and the recapitulation, where such unrest would endanger the definiteness of the diatonic system and of our impression.⁷²

Carl Schachter provides a very convincing reading for this peculiar development section (Example 3-52).⁷³ Criticizing Schenker's view on the development, Schachter sees all the key successions as governed by a single *Stufe*, the dominant. The upper voice consists of a series of reaching-overs, which decide the voice-leading path from $\hat{2}$ to the neighbor-note $\hat{4}$, while the bass presents a rising third-line (B^b-C-D) from dominant to the leading-tone, which confirms the dominant prolongation (Example 3-52). As he has pointed out, the first four keys—C minor, A^b major, F minor, and G minor—form “diatonic elements of C-minor,” which serves as a large-level passing tone of the rising third-line.⁷⁴ Schachter then portrays the subsequent tonal path as follows:

With the D chord of b. 163, we have arrived (a bit prematurely) just one step away from our goal E^b. Nothing would be easier than to transform the D harmony into a dominant $\hat{5}$ of E^b, more or less as actually happens at the end of the development. But the music, as though unable to see the path directly before it, stumbles and gets lost. Instead of reaching E^b, the bass rises through its enharmonic equivalent, D[#], to E. (The movement has displayed a kind of fatal weakness for E—witness the C major episode in the exposition, as well as other passages.) The A minor that ensues is seemingly at the furthest remove tonally from the home key of E^b, but it represents in fact a step in the journey back. Inflected to become a dominant chord, it leads to D minor, and this time the D is transformed into a leading note and takes us home.⁷⁵

⁷² Schenker, *Harmony* (Chicago: University of Chicago, 1954), 299-300.

⁷³ Carl Schachter, “Analysis by Key: Another Look at Modulation,” *Music Analysis* 6, no.3 (1987): 303 (his Example 10).

⁷⁴ *Ibid.*, 302.

⁷⁵ *Ibid.*

This interpretation tells that “the ‘keys’ that begin and end the development—C minor and D minor—crystallize around notes of a linear progression leading up from V to I. The other ‘keys [A^b-major, F-minor, G-minor, and A-minor]’ serve either to extend the C minor chord (not key) at the beginning of the development or to lead into the D minor at the end...”⁷⁶ Schachter’s stratification of the foreground keys efficiently highlights the primacy of the dominant, as outlined by the rising third-line in the bass.

Although this development does not fit into any common voice-leading pattern that Edward Laufer lists for the Classical sonata form developments,⁷⁷ the dominant *Stufe*, which recedes into the background and governs the foreground key succession, suffices as the tonal requirement for this ‘bizarre’ section to function as a middle section of a sonata form. Beethoven obscures an assumed norm, the tonal status of the development, through the dramatic contrast and daring handling of remote keys. This is a good illustration of the great progress in Beethoven’s compositional dexterity: Beethoven creates a polished tonal and voice-leading structure, in which a very complex musical foreground is governed ultimately by a single background tonality, the dominant key, as in the second-theme area of the A-major Sonata, op. 2, no. 2.

⁷⁶ Ibid.

⁷⁷ Edward Laufer, “Voice-Leading Procedures in Development Sections,” *Studies in Music from the University of Western Ontario* 13 (1991): 69-120.

Example 3-52. Schachter's graphs of the development (3 levels)

(a)

(b)

(c)

Reproduced from *Music Analysis* 6/3 © With kind permission

The huge concluding section deserves to be mentioned. Despite the enormous length of the coda, the coda serves as an afterbeat event: the structural tonic and descent to $\hat{1}$ are accomplished with the second-theme closure (m. 273).⁷⁸ Unlike the gigantic coda of op. 2, no. 3, which has the background descent ($\hat{2} - \hat{1}$), Beethoven does not give a clear structural clue that its final section is integrated into the *Ursatz*: as a reminder, the coda of the C-major Sonata appears between the closing-theme material split into two, is asserted rhetorically by an emphatic trill (m. 232), and finally has an obvious (although brief) recollection of the primary theme and the strongest cadential formula (extended $ii^6 - V \frac{6}{4} \frac{5}{3} - I$ progression in mm. 245-252). Joseph Kerman's observation seems to support my viewpoint:

Beethoven does not mark any fermata or *rallentando* and he writes neither a trill at the end of the dominant nor a $\frac{6}{4}$ chord at the beginnings—only a strange, weak I_3^6 chord (Example 5). Yet this passage too has the 'manner of an improvisation', at least to my ear, and the presentation of the second theme sounds much less emphatic than that of the first theme at the very end, after the dominant has finally resolved.⁷⁹

⁷⁸ There is an alternative reading, which suggests the coda's weighted role. David McGuire incorporates the $\hat{2} - \hat{1}$ descent into the *Ursatz*, but does not give a persuasive rationale: "The formal-structural role of the coda is to delay the final Tonic rather than prolong it, so that the eventual strong cadence onto the delayed Tonic really does provide structural closure. In mm. 323 f. Beethoven revisits some of the second key material, modified so that it continues to project structural $\hat{3}$ through m. 333. M. 333 is the beginning of a cadential $\frac{6}{4}$ which extends through m. 339, an elaborate anticipation of structural $\hat{2}$. Structural $\hat{2}$ finally appears in mm. 339-350 and in mm. 351-362, structural $\hat{1}$ is projected in a rousing finale." David McGuire, "Revisiting the Return: The Structural Dilemma of the Recapitulation in the Schenkerian Account of Classical Sonata Form" (Ph.D. diss., State University of New York at Buffalo, 1996), 52-53.

⁷⁹ Joseph Kerman, "Notes on Beethoven's Codas," in *Beethoven Studies* 3, ed. Alan Tyson (New York: Cambridge University Press, 1982), 155-156.

As Kerman points out, both themes appear in the coda, but in a different manner from that in the *Waldstein*. The coda here begins with the closing-theme material (tonal continuity integrates the closing theme and the following coda into a single entity); the recollection of the second theme occurs over the prolongation of V (mm. 324-327) (Example 3-53). The recollection of the primary theme emerges over the final tonic: its rhetorical function is purely nostalgic. There is no tight connection between the two themes or dialectical reworking to combine them harmonically and thematically. This is quite a different instance from the C-major Sonata, op. 2, no. 3, in the handling of the coda and the middle-period sonatas, *Waldstein*, op. 53, and *Appassionata*, op. 57. Although the large-scale formal function is not structural enough to be integrated as a part of the *Ursatz*, the coda not only contributes to the expansion of the piece, but also provides an opportunity to display the virtuosity of the pianist-composer.

Example 3-53. A middleground graph of the coda

The image shows a musical score for the coda of a piece, with a middleground graph overlaid. The score is in E-flat major (Eb: I) and consists of two staves (treble and bass clef). The graph is divided into four sections: 'K' (measures 273-298), 'Coda' (measures 313-315), 'Recollection of S-theme (mm. 324-327)', and 'Recollection of P-theme (mm. 352-355)'. The graph includes various annotations such as 'ET 3-line', 'reg', 'N', and 'Simplified'. The harmonic analysis below the score shows the following chords: Eb: I, V, (vi), V, -7, -6, -4, -7, 3, I, Eb: I, V, -6, -4, -7, 3, I.

Chapter 4: Analyses of Sonata-Form Movements in the Early Vienna Period II

4.1 : Introductory Remarks on Formal Designs and Primary Compositional Devices

Beethoven composed the three sonatas in op. 10 during 1798. For the first time, he adopts sonata form not only in the first movements, but also in the third movements of nos. 1 and 2. In the first movements, the structural and thematic characteristics conform to the “textbook” sonata-form model (Model I-1 or I-3 in major and II-3, III-1, or III-3 in minor); as a reminder, in these models, the primary theme, punctuated clearly by a perfect authentic cadence in the home key, generates a first-order linear progression. None uses the “primitive type” *Ursatz* (Model I-4 in the major mode and II-4 in the minor mode). In addition, the primary themes of the C-minor and F-major Sonatas have an appendix to secure the thematic status of the primary theme.

On the other hand, quite a different sonata-form *Ursatz* is adopted for the third movements. In both, the primary theme, which has a light and rondo-like character, does not generate a first-order line. The brief development section of the third movement of the C-minor Sonata articulates a sonatina-like character, whereas the F-major Sonata has quite a long middle section, whose tonal scheme is very close to that of the first movement’s development, thus producing a rare parallelism in tonal structure between movements.

The three sonatas have very distinctive characters.¹ The C-minor and D-major Sonatas show a very strong interest in motivic unity; the F-major Sonata embodies the comic and ironic characteristics at the outset, but we will also find this feature embedded in the deep-level middleground structure. The D-major Sonata presents formal expansion through the introduction of a B-minor episode and idiosyncratic motivic reworking techniques. The analyses below will clarify Beethoven's skillful handling of sonata form over the ideal *Ursätze* ("textbook" models) and diverse compositional devices that contribute to that process.

4.2 : First Movement of op. 10, no. 1, C minor

The first movement of Beethoven's piano sonata in C-minor, op. 10, no. 1 shows a tendency to turn away from his obsession with monumentality (in contrast to the grand sonata-form movements of op. 2 no. 2 and 3 and op. 7) and to limit and handle thematic materials in a tightly coherent way. The stylistic tendency toward motivic unity, as Janet Schmalfeldt has noted, is witnessed in multiple formal sections, in which Beethoven manipulates the sixth-motive (G-E^b) at every important juncture.² He manipulates the motivic sixth heard in the primary theme in the form of

¹ Despite this individuality, William Kinderman points out that there are some common extrovert characteristics among these sonatas: "The sharply profiled individuality of the op. 10 sonatas nevertheless admits some common features among them, such as the presence of comic music abounding in sudden contrasts and unexpected turns" (William Kinderman, *Beethoven* (Berkeley: University of California Press, 1995), 37).

² Janet Schmalfeldt, "Towards a Reconciliation of Schenkerian Concepts with Traditional and Recent Theories of Form," *Music Analysis* 10, no.3 (1991): 266-267. She points out the motivic coherence that the motive sixth provides in the first movement in her annotated score.

the angular triadic ascent, at the opening of the transition, and finally in the second theme as a head motive, and still later as a varied form of the head motive (Example 4-1). However, this sixth serves as a foreground motive—it does not have a structural connection to the first-level middleground.

Example 4-1. Motive sixth that unifies multiple formal sections (after Schmalfeldt)

(a) Primary theme (mm. 1-3)

Musical notation for Example 4-1(a) showing the primary theme (mm. 1-3). The score is in 3/4 time with a key signature of two flats. The treble clef contains a melody starting with a half note chord, followed by quarter notes. The bass clef contains a bass line starting with a half note chord. Brackets labeled "Motive Sixth" are placed under the first and second measures of the treble staff. The dynamic marking *f* is present in the first measure.

(b) Transition (mm. 32-34)

Musical notation for Example 4-1(b) showing the transition (mm. 32-34). The score is in 3/4 time with a key signature of two flats. The treble clef contains a melody starting with a half rest, followed by quarter notes. The bass clef contains a bass line with a half note chord, followed by quarter notes. A bracket labeled "Motive Sixth" is placed over the second and third measures of the treble staff. The dynamic marking *fp* is present in the first measure.

(c) Second theme (mm. 56-57)

Musical notation for Example 4-1(c) showing the second theme (mm. 56-57). The score is in 3/4 time with a key signature of two flats. The treble clef contains a melody starting with a half note chord, followed by quarter notes. The bass clef contains a bass line with a half note chord, followed by quarter notes. A bracket labeled "Motive Sixth" is placed under the first and second measures of the treble staff.

(d) Varied second theme (mm. 76-78)

The outlook of the primary theme resembles a rocket type, which recalls the melodic clichés of the Mannheim School.³ Not only this rising triadic theme, but also the radical change of dynamics from *f* to *p* as seen in the primary theme leads to such an implication. In addition to these exterior characteristics, the approach to the *Kopftón* $\hat{5}$ through the initial ascent impels us to associate this piece with the F-minor sonata, op. 2, no.1, whose primary theme is constructed in very similar ways as that of the movement in question. Both movements have an energetically rising triadic primary theme and delay the arrival of the *Kopftón* $\hat{5}$ by means of an initial ascent. However, there is an important distinction between the primary themes of the two movements: whereas, in the F-minor sonata, the primary theme ends on a half cadence, generates a fourth-line punctuated by a half cadence, and thus lacks more or less independent character as a complete formal unit, the primary theme of the C-

³ Eugene Wolf, "Mannheim School," in *The New Grove Dictionary of Music and Musicians* 2nd ed. (2001), 15: 776-777. Other characteristics seen in the movement, such as homophonic texture, slow harmonic rhythm, and the use of a contrasting secondary theme, could be roughly associated with musical styles of the Mannheim School that Wolf refers to. Initiation of the transition recalling a horn call could be another influence in the realm of orchestration. In addition to the horn call, contrast in texture leads to an implication that Beethoven was thinking of orchestra in the course of writing this sonata.

minor sonata is more conclusive because it embodies a fifth-line closed by a perfect authentic cadence. This fifth-line descent of the primary theme corresponds to that of the entire *Ursatz*, thus creating an *Ursatz* replica. This is the first time that Beethoven treats the primary theme as an autonomous unit in the minor-mode sonata form.⁴ One might recall that in both F-minor sonatas—WoO 47, no. 2 and op. 2, no. 1—primary themes cadenced on the dominant and thus failed to project such completeness.

In addition to the tonal completeness that the strong cadence provides, the primary theme is enhanced by an appendix-like passage.⁵ It is not surprising that this appendix is omitted in the recapitulation, because its main function—to add to the primary theme rhetorical completeness—is sufficient in the exposition. As the following foreground graph shows, this passage does not echo the structural descent ($\hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1}$), although it uses a stereotypical harmonic progression, $i-i^6-V-i$. The *Kopfton* $\hat{5}$ at m. 9 begins its downward launch right after lower-level fifth-line descents and a register transfer in mm. 13-16.

⁴ The first movement of the A-major Sonata, op. 2, no. 2 is the first sonata-form movement in the major mode, in which the primary theme articulated by a perfect authentic cadence in the home key generates a fifth-line, creating the *Ursatz* parallelism.

⁵ Janet Schmalfeldt, “Towards a Reconciliation of Schenkerian Concepts with Traditional and Recent Theories of Form,” *Music Analysis* 10, no. 3 (1991): 268. Schmalfeldt calls this passage as a “codetta,” but I will label it as an “appendix to the primary theme” because the term codetta is already used to denote the formal unit following the closing theme. The appendix to the primary theme is also seen in the D-major sonata, op. 10, no. 3.

Example 4-2. A foreground graph of the primary theme and its appendix (mm. 1-30)

The transition begins with a rather sudden tonal shift toward A^b -major: it introduces D^b at m. 33. The one-measure grand-pause (m. 31) and the common-tone E^b between the two keys reduce the conflict created by the chromatic note. Schenker gives a fairly detailed graph of the transition (Example 4-3). Although the harmonic excursion based on circle-of-fifth progressions generates a complex musical surface, the underlying structure picks up F and B^b as a diatonic basis to prepare tonally for the commencement of the second-theme area in the mediant key. As Schmalfeldt has pointed out, F in the bass (m. 40) is important because it supports the neighbor-note A^b , which generates this bridge section.⁶ Schenker interprets the entire transition as

⁶ Ibid., 270.

prolonging the neighbor, which undergoes a lower-level third-line (A^b -G-F in mm. 40-48) and an octave transfer (A^b5 to A^b4 in mm. 40-51).

Example 4-3. Schenker's graph of op.10, no. 1, first movement

Beethoven, Sonata op. 10 no. 1, 1st mvt. (see Fig. 154,7)

m. 3 30 40 56 105 158

(arpeg.) (Dev.) (Recap.)

Fgd. (=Eb major: VI) II V⁷ III I - V - I

© With kind permission by Universal Edition A.G., Wien

As shown in Example 4-3, Schenker projects the third-line descent (mm. 56-105) in the second-theme area (G-F-E^b). He interprets the entire development section as prolonging $\hat{3}$ and its harmonic supporter, the mediant harmony; $\hat{2}$ arrives at the end of the development (m. 158). However, this interpretation rarely takes into account the underlying role of the iv chord in the development (prolonged through mm. 118-147). If one sees the prominent presence of the subdominant key in the development and also recognizes that the same structure is used in the recapitulation, then he might propose a decidedly different first-level middleground graph for this movement.

As Jack Adrian pointed out, the development begins with what he calls an “apparent tonic,”⁷ which, according to him, is a deliberate means to “give one pause

⁷ Schenker discusses this notion using the term, “simulated key [Scheintonart].” See Heinrich Schenker, *Harmony*, ed. Oswald Jonas, trans. Elizabeth Mann Borgese (Chicago: University of Chicago, 1954), 299-300. Carl Schachter also provides a penetrating discussion of

to wonder about exact meaning and structural function.”⁸ The major tonic, which initiates the development, soon proves to be an applied chord to the following iv at m. 118, by taking B^b and D^b as a seventh and ninth respectively (Example 4-4). The iv harmony is prolonged to m. 147, and in the next measure it moves to a dominant through a local unfolding (B3-G3). Eventually, the upper-voice F5, which has been supported by the iv harmony for a long time, takes a new harmonic support V⁷ in mm.148-149, articulating an 8-7 contrapuntal frame; it then resolves down to E^b4 at m. 150. The E^b4 is prolonged through a neighbor-note F6 and reappears at an octave higher, which is the obligatory register of the piece, the same register as the *Kopfton* $\hat{5}$. It moves to $\hat{2}$, the goal of the development, in mm. 157-158 over ii⁶-V.

“illusory key,” in his article, “Analysis by Key: Another Look at Modulation,” *Music Analysis* 6, no.3 (1987): 300.

⁸ Jack Adrian, “The Function of the Apparent Tonic at the Beginning of Development Sections,” *Integral* 5 (1991): 8. For a detailed discussion of the concept, “apparent tonic,” see in particular 1-8. Adrian compares the concept of apparent tonic to that of true tonic. The apparent tonic serves as a subsidiary harmony to some other chord and as a transient chord to some other harmonic goal. On the contrary, the true tonic as a real scale step governing a certain passage initiates the important motion to the structural dominant. Adrian goes on to say that only when the development section in a sonata form movement begins on the true tonic, not on the apparent tonic, the analytical problem does arise. Furthermore, he emphasizes the importance of illuminating the meaning of the tonic presented in the development section and points out several elements that contribute to making an interpretation in regards to apparent tonic chords. He enumerates and discusses a variety of ways, by which the apparent of the tonic occurs, by illustrating specific pieces: parallel major or minor, I=V/IV, mock parallel openings, 5-6 contrapuntal motion over III, arpeggiations between III and VI, tonic support of a foreground motive, and parenthetical insertions.

Example 4-4. Voice-leading graph of the development (mm. 106-167)

Schenker also gives a quite detailed voice-leading graph of the development. A comparison of Example 4-4 with Schenker's (Example 4-5) is helpful to illuminate Beethoven's artistic ideas. Schenker interprets the ascending third-line (E^b5-F5-G5) as governing the development section, despite the problem in counterpoint: the third-line forms parallel octaves with its harmonic supporter. He sees that an insertion of the applied chord (secondary dominant to iv) and a large-level unfolding (F-A^b encompassing in mm. 118-146) break the parallel octaves between the outer voices (E^bs to Fs and Fs to Gs). On the other hand, my graph solves the voice-leading problem arising out of the parallel octaves, by elevating the prominent role of $\hat{4}_4$ and the subdominant in this middle section as a next member of the *Urlinie* (Example 4-

6). It interprets $\hat{4}$ (F5) as prolonged to m. 149, first as a consonance (supported by iv) and later as a dissonance (supported by V^7); it finally moves down to $\hat{3}$ at m. 150. All the voice-leading events within the F prolongation are subsumed as inner-voice events.

Example 4-5. Schenker's voice-leading graph of the development

Beethoven, Sonata op. 10 no. 1, 1st mvt., Development (see Fig. 154,3)

The image shows a musical score for the development section of Beethoven's Sonata op. 10 no. 1, first movement. The score is in G major and 3/4 time. It includes measures 106, 118, 126, 136, 146, 148, 153, and 158. The score is annotated with Schenker's voice-leading graph, which includes various symbols and lines indicating voice-leading events. Key annotations include:

- Measure 106: $\hat{5}$ above the staff.
- Measure 118: $\hat{4}$ above the staff.
- Measure 126: $\hat{3}$ above the staff.
- Measure 136: $\hat{2}$ above the staff.
- Measure 146: $\hat{4}$ above the staff.
- Measure 148: $\hat{3}$ above the staff.
- Measure 153: $\hat{3}$ above the staff.
- Measure 158: $\hat{2}$ above the staff.
- Measure 106: $(8 - 10 - 8 -)$ below the staff.
- Measure 148: $(- 10 - 8)$ below the staff.
- Measure 136: $(3\text{-prg.: } eb^4\text{-}f^4\text{-}g^4)$ above the staff.
- Measure 106: I Exp. below the staff.
- Measure 118: III^b5 (p.t.) Dev. below the staff.
- Measure 148: V^b3 below the staff.
- Measure 158: $Recap.$ below the staff.

© With kind permission by Universal Edition A.G., Wien

The primary difference between Schenker's graph and mine lies in how to interpret the tonic status at m. 150. Schenker sees the tonic at m. 150 at a lower level, *within* the prolongation of the dominant reached at m. 148. However, I argue that the tonic has enough qualifications to be elevated to a structural status. Beethoven gives clues for the analyst to recognize the significance of this tonic. First, the structural tonic at m. 150, which supports $\hat{3}$, resolves a dissonance caused by the preceding V^7 . Second, a local dominant-to-tonic motion in mm. 150-155 allows the $\hat{3}$ to reappear in the obligatory register by means of a neighbor note F6 at m. 153. Last, most convincingly, if one chooses the tonic as a *Stufe*, then he would obtain a more

satisfactory syntactic logic, in which the subsequent passage after the tonic is characterized by the prototypical $i-ii^{o6}-V$ progression (Example 4-4).

Schenker's requirement that the sonata-form development prolongs the dominant is valid for the major mode. He did not tell us directly how we should understand the harmonic status of the development in the minor mode, but we can infer models from his graphs and their discussion. The mediant carried over from the exposition and governing the section prior to the advent of the dominant is only one option. Thus, the analyst has freedom to decide the voice-leading scheme of the development section in the minor mode, within the framework of the background harmonic motion from III to V. My argument resides not in proposing a new analytic paradigm for sonata-form model in minor, but in stressing Beethoven's poetic ideas, where he intentionally makes some harmonic statuses blur to leave the analyst room for challenging the assumed norm.

My interpretation of the development section (Example 4-4) offers perhaps the most radical option (Example 4-6). In this reading, both first-order linear progressions in the primary and second themes remain in the same level, in contrast to the normal model, in which the third-line descent in the second-theme area is elevated into the background level. A striking feature of this design is that the first part of the sonata form before the interruption precisely matches the second part. Notice that both descents are supported by two-bass arpeggiations, in which the $\hat{4}$ s are in common supported by a long-stretched iv, but ultimately by a dominant-seventh harmony.

Example 4-6. Middleground graph of the entire movement

Exp P T S Dev Recap P T S

5 4 3 2 1 5 4 3 2 1 5 4 3 2 1

P-theme and S-theme remain in the same level

8-7 8-7

Cm: i III V7/iv iv V7 i V i V7 i V6/4-5/3 i

The first and second portions have the same voice-leading structure: i - V7 - i - V.

The compositional devices adopted by Beethoven in the movement are mode mixture and neighbor-note figure. Mode mixture shows up concretely only in the recapitulation. By presenting the second theme in F-major, Beethoven evokes modal contrast that he attained by contrasting C-minor and E^b-major in the exposition. The long stay on the subdominant (mm. 215-230) and eventual shift to the structural dominant in mm. 231-232 recall, as mentioned before, the similar harmonic motion of the development in mm. 118-149, where $\hat{4}$ changes its harmonic support from iv to V⁷. Mode mixture has originally emerged at the beginning of the development, where the C-major triad at m. 106 brings about a modal mixture and an applied dominant.⁹

⁹ Cadwallader and Gagné explain a similar phenomenon as seen in the development of op. 13. Their expression “Both mixture and leading-tone chromaticism help us to understand this passage” makes clear a dual function of this chord (Cadwallader and Gagné, *Analysis of Tonal Music: A Schenkerian Approach*, 388).

Example 4-7. Modal contrast as seen in the recapitulation (mm. 207-233)

The neighbor-note figure serves as a more crucial means of achieving motivic coherence. One might recollect its first emergence in the transition, where A^b , a neighbor-note to G , embellishes and prolongs the background *Kopfton* $\overset{\wedge}{5}$. As Schmalfeldt has pointed out, the neighbor-note carries more prominent roles in the second theme by being combined with the idea of register transfers (Example 4-8).¹⁰ She interprets the entire second theme as projected by what Gjerdingen calls the $\overset{\wedge}{1} - \overset{\wedge}{7} - \overset{\wedge}{4} - \overset{\wedge}{3}$ schema, which is a synthesis of two neighbors and unfolding.¹¹ The turn-figure in the bass, a combination of an upper and lower neighbors which supports $\overset{\wedge}{7} - \overset{\wedge}{4}$ is embedded in other music surfaces as well as in the second theme.

¹⁰ Schmalfeldt, "Towards a Reconciliation of Schenkerian Concepts with Traditional and Recent Theories of Form," 264-274. She makes numerous sharp and valuable points regarding the neighbor-note figure, which generates the second theme by emerging in a straightforward or disguised form.

¹¹ Robert O. Gjerdingen, *A Classic Turn of Phrases: Music and the Psychology of Convention* (Philadelphia: University of Pennsylvania Press, 1988), as cited by Schmalfeldt (271).

Example 4-8. Neighbor-note figure emerging in the form of $\hat{1} - \hat{7} - \hat{4} - \hat{3}$

schema in the second theme

Eb: I

In addition to the turn-figures in the lead-in passage of the transition (top voice in mm. 53-55) and in the closing theme (bass voice in mm. 86-90), the memorable melody unfolding in F-minor is a prototypical example of voice leadings with the turn-figure in both outer voices and the large-scale $\hat{1} - \hat{7} - \hat{4} - \hat{3}$ schema in the upper voice (Example 4-9). Frequent adoptions of the neighbor-note motive express Beethoven's obsession with motivic logic.

Example 4-9. Turn-figures embedded in the outer voices (mm. 118-125)

Fm: i V4/3 6/5 i

4.3 : Third Movement of op. 10, no. 1, C minor

The third movement of the C-minor Sonata, op. 10, no. 1, has a typical sonata-form design for the minor mode, but the absence of the first-order fifth-line within the primary theme parallels our model II-4. The statement of the primary theme in the tonic key, the tonal shift to the mediant in the second-theme area, the expected arrival of the dominant at the end of the development, and, finally, the return of the primary theme followed by other subsequent themes in the tonic key, all conform to the tonal scheme of a normal sonata form. Most of the structural events, as the overall graph (Example 4-10) shows, follow the normal Schenkerian description of the sonata form, too.

Example 4-10. Overall graph of the third movement, op. 10, no. 1

However, the absence of the first-order structural line from the *Kopfton* within the primary theme distinguishes this work from Beethoven's first movements in sonata form that we have examined thus far (Example 4-11). What I call "the structural deficiency" within the primary theme originating from the lack of a

structural line is compensated for partially by an initial arpeggiation (C4-E^b4-G4) to the *Kopfton* and by a lower-level fifth-line descent at m. 7.

Example 4-11. Middleground graph of the primary theme and transition

*Brackets indicate the semitone motive

Absence of a structural descent from the *Kopfton* in the P-theme

P-theme

p

1st Arp.

5

V

Cm: i

Appendix to P-theme

5-line (very lower level)

i (prolongation of tonic)

TR

cresc.

i

13

f

sf

sf

sf

ff

V

It is hard to say that this fifth line satisfactorily fulfills a structural condition for the primary theme, not only because the descent is made very quickly (four eighth-notes), but also because, more significantly, its first four members are all supported by a single dominant (m. 4). However, it would be safe to say that this brief fifth line marginally helps to add a thematic character to the primary theme. The subsequent four-measure unit prolonging the tonic (mm. 9-12) does not generate a structural line, but adds emphatic completeness to the primary theme. This appendix to the primary theme is a formal device as seen in the first movements of op. 7, op. 10, nos. 1 and 3 as well as the movement under discussion.

The transition carries a rhetorical role of promoting a dramatic effect, achieving the sense of climax by means of rhythmic acceleration and rapid alternation of tonic and dominant chords. However, the transition does not take any tonal action toward a smooth modulation to the mediant key.¹² The music directly shifts from *i* to

¹² Leslie Black describes the direct tonal shift: “[T]he abrupt shift of key, creating a clash between the notes B-natural (the leading tone of the home key, C minor) and B-flat (scale degree 5 of the second key, E-flat major), is so sudden that the definition of mm. 8-16 as a transition seems almost to be in doubt. One would not expect the type of chromatic conflict that arises in m. 16 following a transition; transitions, by definition, are suppose to provide a smooth voice-leading connection between two contrasting tonal regions. In a major key context, a transition section that ends on the home dominant is not devoid of transitory qualities, since it takes the music to a chord from which the second key may emerge without the type of chromatic conflict found in the work at hand. This is not the case in a minor key context where the home dominant does not appear in the conventional second key, the relative major. Thus, the syntactic irregularity points out the fact that the ‘transition section’ has failed at its task; in the work at hand, it will only become a transition when it is recapitulated and leads instead to the tonic major” (Leslie Black, “Syntactic Irregularities in the Early and Middle Period Works of Beethoven” (Ph.D. diss., Yale University, 1998), 135-136).

III soon after a half cadence at m. 16.¹³ The fermata at m. 16 not only serves as a goal of the first event, but also lessens the abruptness which might be caused when the tonal shift from C minor to E^b major occurs. The semitone motive (marked with brackets) that is active in both the primary theme and transition associates these two formal sections as a single unit in a motivic sense.¹⁴

Example 4-12. Annotated scores of the second theme

(a) Second theme in the exposition (mm. 16-24)

The image shows a musical score for the second theme in the exposition (mm. 16-24). The score is in E-flat major and 3/4 time. It consists of two systems of music. The first system (mm. 16-19) features a fermata at m. 16. Annotations include 'Bb is an inner voice' pointing to a note in the treble clef, and '5 (= ^ 3)' above a chord. The second system (mm. 20-24) shows a melodic line with neighbor notes: 'C (Neighbor-note to the inner-voice Bb)' and 'Ab (Neighbor-note to the Kopfton G)'. Dynamics include ff, p, ffp, and fp. Chord symbols V, I, IV, V7, and I are indicated below the bass line.

¹³ This feature corresponds to the structural characteristics of what Robert Winter calls the “bifocal close,” as cited by Leslie Black (135).

¹⁴ Forte and Gilbert provide quite a detailed analysis of the movement in terms of motivic coherence. They show how these neighbor-note motives and the ascending third-line prevail in the entire movement and contribute to the motivic unity of the piece. However, they do not focus on the sonata form design itself, but rather on the motivic aspects, such as incomplete neighbors and register transfers, although they take this piece as an exemplar of sonata form. See Allen Forte and Steven Gilbert, *Introduction to Schenkerian Analysis* (New York: W.W. Norton & Company, Inc., 1982), 280-293.

(b) Second theme in the recapitulation (mm. 73-81)

The second theme in the mediant is based on a tuneful melody, in contrast to the motivically-based primary theme (Example 4-12-(a)). It begins with B^b3 , which is an inner voice, ascends by step to $G4$, the head note of the second theme, touches A^b , which serves as an upper neighbor-note, and eventually returns to the original inner voice. In other words, the *Kopfton* G is prolonged during the statement of the second theme through the neighbor-note A^b and the return to the inner voice. The lower level unfolding ($C5-A^b4$) at m. 22 offers a possibility that either G or B^b could be interpreted as the governing note, although Schenkerian sonata-form theory votes justifiably for the G as the primary voice. $C5$ and A^b4 respectively prolong B^b and G , by serving as neighbor-notes to each. (This dual possibility allows the analyst to choose G or B^b as a principal voice in the exposition and also provides a justification for choosing G ($\hat{5}$) out of E and G in the recapitulation (Example 4-12-(b)).)

Example 4-13. Middleground graph of the development

The compact development section recalls a sonatina. This condensed middle section presents the voice-leading path from $\hat{3}$ to $\hat{2}$ and an interruption (Example 4-13). The development section is not generated by a structural line or a neighbor-note, but by a chromaticized voice-exchange over III, veiled by boundary play in the upper voice, and by an approach to $\hat{2}$ through the unfolding of F to D over a horizontalized diminished seventh chord (B-D-F-A^b), which implies a dominant harmony (mm. 52-57). Forte and Gilbert state that B substitutes for the dominant G, attributing its cause to Beethoven's interest in motivic coherence: "The pitch B has an essential motivic role in this composition and is not merely the 'leading note.'"¹⁵ In other words, instead of G, which is an expected dominant *Stufe*, Beethoven deliberately chooses the pitch B to realize his motivic logic in a large-level: this B3 and the following tonic pitch C4 form the semitone motive once again at this strategic juncture.

¹⁵ Ibid., 287.

Forte and Gilbert's reading of the development, however, is troublesome (Example 4-14). They claim that a large-level unfolding G-B in the bass governs the entire development. They downplay the roles of III and iv by overemphasizing the status of V. Furthermore, they do not place $\hat{2}_2$ over the dominant and instead choose F ($\hat{4}_4$) as a governing upper voice. Thus, our paradigm of the sonata-form design is called into question. Readers might recall one of the important theoretical assumptions in our sonata-form theory, that $\hat{2}_2$ should come either early, at the beginning of the development, or later, near the end of the section.¹⁶ Forte and Gilbert are not interested in reflecting this sonata-form assumption into their reading, but focus on a foreground event, eventually undermining the fundamental sonata-form design.

Example 4-14. Forte and Gilbert's graphs of the development

(a) Foreground graph of the development

¹⁶ David Neumeyer and Susan Tepping and Charles Smith commonly agree with this assumption. See David Neumeyer and Susan Tepping, *A Guide to Schenkerian Analysis*, and Charles Smith, "Musical Form and Fundamental Structure: An Investigation of Schenker's *Formenlehre*," *Music Analysis* 15, nos.2-3 (1996): 233.

Example 4-14-(a) continued

The musical score consists of two staves. The upper staff is in treble clef and contains a melodic line with several notes marked with circled numbers 52, 57, and (5). A dashed line connects notes 52 and 57. Annotations include $(f^3 - f^1)$ above the staff, $(a^{b2} - a^{b1})$ below the staff, and β below the staff. The lower staff is in bass clef and contains a bass line. Annotations include $(f^2 \text{ superimposed})$ and $(\text{bass unf.: } g - B\flat)$ below the staff. A vertical line with the letter 'I' is positioned below the bass staff at the end of the passage.

(b) Summary of voice leading

The musical score consists of two staves. The upper staff is in treble clef and the lower staff is in bass clef. Above the upper staff, the measure numbers 47, 52, 54, and 57 are circled. Below the lower staff, the Roman numerals III, IV, V, and I are written, corresponding to the measures. The score shows voice leading between the two staves, with various notes and rests.

Many other scholars have commented upon the aesthetic value of the coda of this movement. William Kinderman describes the associative and rhetorical functions of the coda in relation to the opening theme and other movements:

What is the meaning of this striking gesture? The sound is familiar, being enharmonically equivalent to the first vertical harmony in the shadowy main theme of the movement. The point is that this sound *contains* the tonic sonority of the A^b major of the slow movement and can thereby serve both as a harmonic threshold to the finale and, later, as a subtle means of reference to the *Adagio molto*. Without making a direct thematic allusion, Beethoven thus evokes the aura of the slow movement, effectively setting off his final plunge into the *prestissimo*, which quickly dissolves into a silence of pregnant irony.¹⁷

Kerman discusses a “recollection” function of this coda. He describes the second-theme segment heard in the remote key as a “distant, nostalgic memory,” which is “enhanced initially by the use of a remote key and then dispelled by development.”¹⁸

¹⁷ William Kinderman, *Beethoven*, 39.

¹⁸ Kerman, Joseph. “Notes on Beethoven’s Codas,” in *Beethoven Studies* 3, ed. Alan Tyson (New York: Cambridge University Press, 1982), 155.

By pointing out Beethoven's general stylistic tendency, in which he brings in primary-theme material to the coda, Kerman puts this coda in a special category.

The rising third-line (C-D^b-E^b) over VI, which serves as a dominant of ^bII, initiates this interesting journey in the coda, which is quite extended (especially in comparison to the brief development). The unfolding of E^b to G^b introduces F as a principal voice, which generates the last statement of the second theme over the prolongation of the Neapolitan chord. F moves upward to G^b, which looks like an upper neighbor that will turn back to F. However, an enharmonic modulation reinterprets G^b as F[#] and thus permits an ascent to G, the last strong presence of the *Kopfton*.

Beethoven again adopts this polished voice-leading scheme in the huge coda of the *Waldstein* Sonata (see Example 1-10, mm. 249-267). There, he initiates the coda on a Neapolitan chord introduced by a deceptive resolution of a secondary dominant seventh chord (V⁷/IV—N). He then approaches the local dominant seventh chord by parallel tenths, but this dominant seventh chord soon changes its function. It serves now as a German sixth chord to quit the tonal excursion over the D^b-major and return the home key.

Although Beethoven depends upon a single large-level tonal scheme, there is a crucial difference between these two codas. In this C-minor Sonata, the coda carries simply an afterbeat function: in other words, it recollects the preceding structural event, which has already closed off at m. 94. On the other hand, in the *Waldstein*, the coda is integrated as an inner part of the *Ursatz*: the coda participates

in the *Ursatz*. Thus, the coda not only has what Kerman calls a “distant recollection” function, but also serves as a core, where a dialectical synthesis between the primary and second themes is made, much more than an appendix strengthening the large-scale cadence. This is a remarkable place where one can witness Beethoven’s evolution in handling and interpreting formal sections.

Example 4-15. The middleground graph of the coda

94 102 104 106 107 113 115 117

Cm: i VI7 (=V7/N) N V7/N (=Ger. +6) V I

4.4 : First Movement of op. 10, no. 2, F major¹⁹

The first movement of op. 10, no. 2 is a humorous and light-hearted piece, in contrast to the seriousness of C-minor of op. 10, no. 1.²⁰ Not only the primary theme, articulated by light staccatos, syncopations, and dotted rhythms, but also the second-theme group, which is extended by means of a witty deceptive cadence at m. 45, contributes to the comical character of the piece. Sudden dynamic contrasts as seen in the second theme and other passages are partly responsible for these foreground characteristics of the movement.

Example 4-16. Witty elements contained in the themes

(a) Primary theme (mm. 1-12)

The musical score for the primary theme (measures 1-12) is presented in two systems. The first system covers measures 1 through 6, and the second system covers measures 7 through 12. The music is in 2/4 time and F major. The piano part is marked 'p'. The score highlights three witty elements: 'Staccatos' in measures 1-4, 'Syncopations' in measures 5-6, and 'Dotted rhythms' in measures 7-12. The first system shows a treble clef with a melodic line and a bass clef with a harmonic accompaniment. The second system continues the melodic line in the treble clef and the accompaniment in the bass clef.

¹⁹ This is the piece that Schenker has analyzed in two different ways. He sketched the first movement as an $\hat{8}$ -line in *Meisterwerk*, essay on sonata form, but later reconfigured it as a $\hat{3}$ -line in *Free Composition*. I will discuss the latter in this chapter.

²⁰ William Kinderman points out the comic style found in both the first and third movements of op. 10, no. 2. William Kinderman, "Beethoven's High Comic Style in Piano Sonatas of the 1790s, or Beethoven, Uncle Toby, and the 'Muckcart-driver,'" *Beethoven Forum* 5 (1996): 130. He says that Beethoven's mastery to lead to musical humor through intentional incongruity and puzzlement was already evident in the 1790s (119).

(b) Second theme (S₂: 42-47)

Dynamic contrast

Deceptive cadence

In addition to the witty and amusing temperament infiltrated into the musical surface, one can witness irony in the deep-level musical structure as well. The tonal structure conforms to a stereotypical sonata-form model: the *Ursatz* of the movement takes our Model I-1 as a basis (Example 4-17).

Example 4-17. Middleground graph of the first movement of op. 10, no. 2

Exp	Dev	Recap
P	TR S1 S2	P
1	10 19 38	118 131
	55 67	137 145 170

3-line(G-A-Bb)
4-line
N

F: I V C: I V7 I V I vi V7 I V I

However, by stating the primary theme in advance at the end of the development, Beethoven achieves elegant aesthetic effects resulting from an illusory perception: he deliberately blurs the strategic point where the primary theme returns with the tonic

(Example 4-18). From a Schenkerian point of view, the reprise of the primary theme does not accompany the recovery of the *Kopft* $\hat{3}$ supported by the tonic, as we expect, but rather is made as early as in the middle of the vi prolongation: compare the graph and formal label above it. While pointing out the whimsical strain of the movement, William Kinderman portrays the early return of the primary theme in the development:

Another such passage [leading to “raised eyebrows of puzzled confusion”] is the false recapitulation, which begins innocently enough in D major. Remarkably, it is not the harmonized chords forming the head of the theme but rather its little ornamental turn whose repetitions stabilize the true recapitulation in F, conveying a sense of the tail wagging the dog.²¹

Example 4-18. Illusory recapitulation and real recapitulation (mm. 113-144)

The image displays three systems of musical notation for Example 4-18, illustrating Schenkerian analysis. The first system (mm. 113-120) is labeled "Pseudo Retransition" and "Illusory Recapitulation: P-theme in D major". It shows a treble clef staff with a melodic line and a bass clef staff with a simple accompaniment. Roman numerals V and I are placed below the bass staff. The second system (mm. 121-128) is labeled "of VI" and "Real Recapitulation: P-theme in F major". It shows a treble clef staff with a melodic line and a bass clef staff with a simple accompaniment. Roman numerals ii6, V6/4, and V7 are placed below the bass staff. The third system (mm. 129-144) is labeled "Real Recapitulation: P-theme in F major". It shows a treble clef staff with a melodic line and a bass clef staff with a simple accompaniment. Roman numerals I, ii, V7, and I are placed below the bass staff. Various musical symbols and annotations are present throughout the score, including "A", "N", "NN", "LT 3-line", and "3".

²¹ William Kinderman, *Beethoven*, 40.

Charles Rosen evaluates this idiosyncratic handling as a proof of Beethovenian originality. He sees Beethoven's originality in the delicate treatment of the passage, which articulates a stylistic influence from Haydn, but which distinguishes Beethoven from him:

The false recapitulation lasts twelve bars. Then there are six bars of a return to F major (with the usual descent of the harmony by fifths—D, G, C). The proper recapitulation appears to start with the second phrase of the exposition, but the six bars of return to the tonic have in fact secretly replayed almost every essential element of the first phrase at the correct original pitch although without yet quite resolving into the tonic. The whole process is Haydnesque in character—particularly in its delicate use of a short and slightly comic motif; although I do not think that Haydn ever turned the relative minor into major at a similar juncture, it is a surprise in keeping with his usual wit, and the passage firmly establishes Beethoven as a master of his teacher's style.²²

However, with the term, “false recapitulation,” we cannot fully explain the aesthetic roles of the primary theme (mm. 118-129), which encompasses the most dramatic place (between the development and recapitulation). The full statement of the primary theme in D-major and its preparatory passage—what I call the “pseudo retransition” prolonging the wrong dominant—impel listeners to perceive this passage as a strategic point initiating the recapitulation, although they would not realize that they have been caught by Beethoven's bait until they detect a modulation toward the home key and a clear statement of the primary theme in the right key (tonic). After a grand pause (m. 117), the fifth-line descent from A (mm. 118-129) in the primary theme in the wrong key gives the theme a more tightly organized theme-

²² Charles Rosen, *The Classical Style: Haydn, Mozart, Beethoven*, expanded ed. (New York; W.W. Norton & Company, Inc., 1998), 477.

like character. This is a prototypical example, in which a conflict between the tonal structure and thematic design is expressed in the domain of form and thus achieves polished aesthetic effects.

Example 4-19. Deep-level middleground graph of the development

1 19 67 77 91 112 113 118 131 136 137

The other salient characteristic is that the development section tends to stay within a single submediant key, D-minor, although this higher-level vi will be ultimately interpreted as a neighboring harmony interpolated between the structural dominant (m. 19) and the other dominant (m. 136) (Example 4-19). A long stay on vi in the development and a strong perfect authentic cadence at m. 129 might lead to an interpretation in which one sees the entire development as prolonging a submediant, not an expected dominant, if the brief modulation link (mm. 130-136) is what Heinrich Christoph Koch calls a “modulating suffix.”²³ A close examination of the development would be necessary to assess the validity of such an interpretation.

²³ Heinrich Christoph Koch, *Introductory Essay on Composition*, trans. Nancy Baker (New Heaven: Yale University Press, 1983), 237-244.

Example 4-20. Detailed voice-leading graph of the development

Illusory Recap Starts here!

19 67 77 83 88 91 99 112 113 129 131 137

3-line(A-G-F) 4-line(A-Bb-C-D) 3-line(D-C-Bb) 4-line(D-C-Bb-A)

vi [h] F: V iiV7I

10 7 6 5 4 # 3

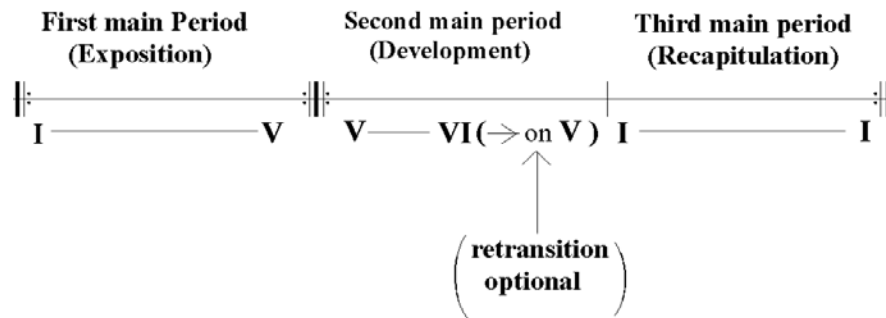
The development begins with a local dominant chord which prepares for the advent of the governing key, D-minor (see Example 4-20). Sequential techniques control the foreground key scheme—D-minor, G-minor, B^b-major, B^b-minor, F-minor, and D-minor—which basically prolongs a single key, D-minor (Example 4-22). Meanwhile, the upper voice A5 is prolonged through a lower-level third-line descent (A5-G5-F5 in mm. 67-81) and rises up to D6 at m. 91 through a stepwise fourth-line (A5-B^b5-C6-D6 in mm. 67-91).

The note D6, which belongs essentially to an inner voice, is prolonged through a local falling third-line (D6-C6-B^b5 in mm. 91-93), neighbor-note figure, and mode mixture, and eventually moves down to B^b4, which serves as a lower-level neighbor to A, at m.103 within the tonic prolongation. Beethoven breaks parallel octaves (between the bass motion VI-V and upper-voice B^b to A) through inserting a German-sixth chord (m. 112), and finally gets to the primary note A from the neighbor-note B^b. The shift to F-minor (m. 107) is to introduce the upper voice A^b, which will establish A as a dominant through the enharmonic reinterpretation of A^b (A^b=G[#]). The prolongation of the wrong dominant on A (mm. 113-116) not only makes this passage heard as if it were a retransition, which prepares for the dramatic return of the primary theme, but also firmly establishes the submediant key, D-minor.

Tonal stability of the development within the submediant in this piece calls to mind Koch's description of the sonata form, in which he divides the form of the

sonata and symphony into three main periods from a cadentially oriented viewpoint.²⁴ As Wayne Petty has noted, this highly sectional sonata form was a model for north-German composers such as C. P. E. Bach and Johann Gottlieb Graun.²⁵ Koch's view of the sonata form, which comports with the large-level formal scheme of the first movement in question, can be diagrammed as follows:

Example 4-21. Koch's view of the sonata and symphony (major-mode norm)²⁶



Not only the cadential and formal organization, but also other elements, such as abrupt shifts of harmony, daring modulations, and sudden *sforzando accents*, strongly implies that Beethoven modeled op. 10, no. 2 after this north-German practice. The transition is a stereotypical example, showing bold tonal treatment.

²⁴ Wayne Petty, "Koch, Schenker, and the Development Section of Sonata Forms by C. P. E. Bach," *Music Theory Spectrum* 21, no.2 (1999): 152-154. Petty points out the connection of Koch's sonata-form model to north-German School's sonatas.

²⁵ *Ibid.*, 151. Petty points out that there are different ways that the development section works out, although he admits that there is an obvious way, in which the dominant *Stufe* governs the entire section. He focuses on C. P. E. Bach's way of projecting the tendency toward the submediant (VI) instead of the dominant (V) in the development.

²⁶ *Ibid.*, 154.

Listeners might be confused when they hear the E-major resolution and they realize that the altered chord (mm. 14-15) has functioned as a German sixth chord, not as a secondary dominant seventh chord of IV. Beethoven's boldness does not stop here. He directly interlinks this brief transition to the second theme (m. 19). This foreground juxtaposition of an E-major triad and a G-major triad, which does not conform the syntactical indicator of a simple tonal relationship, must have puzzled the listeners of the time.²⁷ Charles Rosen describes Beethoven's striking handling of this passage and the poetic effects obtained from it:

Here it is not a return of the tonic that is prepared by the relative minor but the move to the dominant, and it is the more radical elliptical progression that Beethoven uses, going directly from the E major dominant of A minor into the otherwise unprepared C major. For the public of 1798, this passage would have come as a shock, and it was no doubt to the wild and uncontrolled humor that made up the essential part of Beethoven's early reputation.²⁸

Rosen thinks highly of the aesthetic value of the passage, adding "It still remains unique, as far as I know, as an approach to the dominant in a sonata exposition. In any case, the effect is too startling and eccentric to be used again by Beethoven." This is truly another instance of Beethovenian originality and a significant signal indicating his stylistic evolution.

²⁷ Leslie Black notes the temporal disappearance of the tonal, syntactical function of the passage. See Leslie Black, "Syntactic Irregularities in the Early and Middle Period Works of Beethoven" (Ph.D. diss., Yale University, 1998), 155-157.

²⁸ Charles Rosen, *The Classical Style: Haydn, Mozart, Beethoven*, 475.

Example 4-22. Schenker's graph of the first movement of op. 10, no. 2²⁹

© With kind permission by Universal Edition A.G., Wien

The second theme enters without tonal preparation, that is, without an appropriate modulation process. Schenker sees that the second theme as beginning later at m. 38, as his voice-leading graph of the exposition demonstrates (Example 4-22). He chooses $\hat{2}$ at m. 31 as a background event and then generates the first order fifth line from that point. He interprets the passage (mm. 21-30) as a part of the transition. However, the passage already shows strong tonal stability within the dominant key, and an initial ascent to the local *Kopftone* $\hat{5}$ indicates that the structural tonic (C) has already emerged at m. 21: the rising third-line (E6-F6-G6) supported by a I-vii^{o6}-I⁶ (C-D-E) articulates strong stability within the dominant key. As Carl Dahlhaus says, the second theme begins at m. 19.³⁰ Thus, the voice-leading graph requires a modification to reflect this formal aspect.

²⁹ Heinrich Schenker, *Free Composition*, ed. and trans. Ernst Oster (New York: Longman, 1979), Fig. 100-Ex.2. Schenker does not show how traditional formal sections are distributed over the voice-leading structure.

³⁰ When he points out that there was not a norm in the role of the closing-theme group in Beethoven's piano sonatas, Dahlhaus states "[T]he closing group (bar 56) acts a scherzando foil to the lyrical second subject (bar. 19), and the resulting character contrast is positively a stereotype, found in sonata expositions as early as Haydn" (Italics mine). Carl Dahlhaus, *Ludwig van Beethoven: Approaches to His Music*, trans. Mary Whittall (Oxford: Clarendon Press; New York: Oxford University Press, 1991), 100.

Example 4-23. Voice-leading graph of the exposition (mm. 1-66)

The image shows a voice-leading graph for the exposition of a piano sonata, covering measures 1 to 66. The notation is presented in two staves: a treble clef staff (top) and a bass clef staff (bottom). Above the staves, a horizontal line represents the voice-leading graph, with various annotations and brackets indicating thematic sections and structural elements.

Key annotations include:

- P** (Piano) at measure 1.
- TR** (Trill) at measures 10 and 12.
- S₁** (Second Theme 1) starting at measure 19.
- S₂** (Second Theme 2) starting at measure 30.
- K** (Key signature change) at measure 55.

Fingerings and other markings are provided throughout the score:

- Measure 1: Treble staff has a '3' above the first note; bass staff has 'reg' and 'N'.
- Measure 10: Treble staff has 'N' and '3-line'; bass staff has '10 10'.
- Measure 19: Treble staff has 'N' and '3-line'; bass staff has 'N'.
- Measure 30: Treble staff has 'N' and '3-line'; bass staff has '7 5 6 5 7' and '4 3 5 4 3'.
- Measure 41: Treble staff has 'N' and '3-line'; bass staff has 'mode mixture'.
- Measure 44: Treble staff has 'N' and '3-line'; bass staff has 'mode mixture'.
- Measure 47: Treble staff has 'N' and '3-line'; bass staff has 'mode mixture'.
- Measure 51: Treble staff has 'N' and '3-line'; bass staff has 'mode mixture'.
- Measure 55: Treble staff has 'N' and '3-line'; bass staff has 'mode mixture'.

At the bottom left, the text 'F: I' is written.

Beethoven divides the fifth-line into two third-lines and distributes them for two distinctive second themes (S_1 and S_2). This is Beethoven's unique treatment, in which he unifies the two themes of distinctive character into a single line to create structural integrity. Beethoven has adopted the same way of handling the second-theme area in the E^b -major Sonata, op. 7, where a single fifth-line generates two distinctive second themes, despite the huge length of the second-theme area. However, Beethoven here goes beyond that: he blurs the clear demarcation between outer form and inner form, by initiating the S_2 -theme from $\hat{4}_4$, not from $\hat{3}_3$. Thus, Beethoven intentionally expresses incongruity and irony at the formal level, not only at the surface.

Mode mixture is the main compositional device of the movement. Beethoven uses mode mixture not only as a rhetorical means of adding exotic color and enhancing expressive power, but also as a refined structural means of achieving modulation toward remote keys, as in the *Waldstein*. It first emerges as simple

formal section. For Beethoven, the recapitulation is no longer necessary for formal balance: it serves as an experimental section, which has various developing possibilities.

4.5 : Third Movement of op. 10, no. 2, F major

Like the first movement, the finale opens with a witty and humorous theme, lending the movement a scherzando quality. This opening, along with the formal simplicity and compactness seen in each section, suggests a rondo character, but the formal layout and tonal structure of the piece unmistakably follow the normal sonata-form design: the initial tonic in the exposition moves to the dominant in the second-theme area, the prolongation of the dominant generates the development section, and then the return of the tonic with the primary theme closes the entire tonal structure. However, the absence of a structural descent in the primary theme and the lack of a transition distinguish this piece from other sonata-form movements that we have examined (Example 4-25). This is a rare example, in which Beethoven assigns the *Kopfton* without any subsequent event elaborating it within the primary-theme area. There is, in other words, no structural descent in this brief theme, which consists of nothing but two statements of a triadic fugal subject. The choice of the fugal subject, as Eric Blom mentions, is reminiscent of Domenico Scarlatti's keyboard sonatas.³¹

³¹ Eric Blom, *Beethoven's Pianoforte Sonatas Discussed* (1938; reprint, New York: Da Capo Press, 1968), 43.

Example 4-25. Annotated score of the exposition (mm. 1-23)

The annotated score consists of four systems of music. The first system (measures 1-6) is labeled 'P-theme' and shows the 'Unfolding of a tonic triad' in the bass line and an 'Arp.' (arpeggiated) figure in the treble line. The second system (measures 7-12) is labeled 'S-theme' and notes the 'Absence of a structural line' in the bass line. The third system (measures 13-18) continues the S-theme with annotations for 'reg' (register), '3-line', and '3-line(E-D-C)'. The fourth system (measures 19-23) concludes the S-theme with annotations for 'N' (neighbor tone) and 'reg'. The score is annotated with various musical symbols such as ^, 2, 3, 4, 5, 7, 13, 19, and 23, indicating specific measures and structural elements.

The direct shift to the second theme without transition is another remarkable feature. The absence of thematic contrast between the primary and second themes arouses the suspicion that this piece is modeled after earlier sonata forms, in which thematic contrast is not yet considered as an essential factor of sonata form. Eric

Blom vividly describes the interaction between rondo-character and sonata-form design in the exposition:

We have not done with formal curiosities yet. The humorously blustering opening theme of the finale suggests a rondo (The concluding F is the implied ending of the phrase, but it rarely arises in that form, being as a rule dovetailed with the beginning of the next statement.) When the right hand enters with the same figure while the left continues a contrapuntal course, the rondo theory may be abandoned and the development of a fugue suspected. Only by those, however, who do not know that second entry of a fugue subject cannot, like the first, be in the tonic, as it is here. The third appears in the dominant, but by this time Beethoven has abandoned polyphony, so that the texture is no longer even suggestively fugal. Now, as we do not yet know that there is going to be no real second subject fails to arise, sonata form it is—of a kind. As far as the exposition goes, Beethoven may be said to have reverted here to the form of the old Italian harpsichord sonata or, if we like, to something like that of the very first sonatas actually written for the *pianoforte* by Lodovico Giustini of Pistoria, though it is conceivable that Beethoven can have known his work. The mock fugal opening reminds one strongly of Domenico Scarlatti. In feeling, as distinct from form, the piece is, of course, thoroughly Beethovenian. A new development of the theme towards the end of the exposition, with the tune in the bass, faintly suggests a second subject, but only because it is in the key of the dominant, for it does not assume a sufficiently independent character.³²

Thus, Blom sees a second theme as beginning at m. 23, but he does not give a further justification for his choice. A close examination of the tonal structure of the exposition (mm. 1-32), however, indicates that the dominant key has already been established, and therefore we might as easily argue that the second theme initiates with the same thematic material as the primary theme at m. 9. This dominant at m. 9, which has now become the tonic of the new key by means of the brief occurrence of the raised $\hat{4}_4$ at m. 8, remains in control until the end of the exposition. The alternations of tonic-to-dominant harmony (mm. 15-16 and 19-20) and strong

³² Ibid., 43.

authentic cadences prepared by the predominant harmony ii^6 (mm. 17-18 and 21-23) provide satisfactory harmonic conditions for the fifth-line descent usually expected in the second theme. The unequivocal presence of the fifth-line asserts that the passage in question should be considered the second-theme area. The scherzando passage (mm. 23-32) over the dominant pedal, which lacks a descending line, is hard to see as a second theme, but does fit well the characteristics of a codetta, including a tonic pedal point.

Example 4-26. Absence of the structural line in the codetta (mm. 23-32)

The image displays two systems of musical notation for piano. The first system, starting at measure 23, is labeled 'Codetta'. It features a treble clef with a melodic line that begins on the fifth line (G4) and a bass clef with a dominant pedal point (B3). The second system, starting at measure 28, is an exact repetition of the first system. Harmonic analysis below the staves shows C:I, [V7], and I for both systems. A dashed line connects the start of the first system to the start of the second system, indicating the structural line. A bracket under the second system is labeled 'Exact repetition of mm.23-27'.

The movement, thus, is monothematic, and in addition to downplaying the necessity of the transition in the exposition, leads readily to a genuine synthesis of the two themes in the recapitulation. There is no obvious presence of the second theme, but instead several repetitions of the primary-theme material in different pitch levels

are followed. Thus, at least one of the repetitions might be regarded as a “disguised” form of the second theme because it takes the correct position of the second theme. The *Kopfton* $\hat{3}$ moves up to the neighbor-note B^b at m. 95. Oddly enough, the fifth-line which generated the second theme in the exposition does not reappear in the recapitulation.

Example 4-27. Middleground graph of the recapitulation (mm. 87-125)

The image shows a musical score for Example 4-27, which is a middleground graph of the recapitulation (mm. 87-125). The score is written in F major and 3/4 time. It consists of two staves: a treble clef staff and a bass clef staff. The treble staff contains three themes: 'Theme in F' (m. 87), 'Theme in g' (m. 95), and 'Theme in B^b' (m. 103). The bass staff shows a middleground graph with notes 5, 6, and 7. The graph is annotated with asterisks at m. 95 and m. 116, and a 'N' above m. 116. The key signature changes from F major to B^b major at m. 116. The score ends at m. 125. The graph is labeled 'F: I' at the beginning and 'ii6 V I' at the end.

Instead, the second theme in the recapitulation is based on a middleground neighbor-note figure. Two neighbor-notes, the earlier one supported by the ii and vii⁰⁶ and the later by ii⁶ and V⁷, are substituted for the fifth-line descent of the exposition and preserve the primacy of the *Kopfton* (see asterisks in Example 4-27). This reworking in the recapitulation leads Beethoven to prevent the structural inconsistency that the Schenkerian sonata-form theory poses: in other words, the fifth-line descent in the exposition does not have to be adjusted into the third-line in the recapitulation.

Schenker has a convincing analytic graph of the development.³³ He briefly discusses the voice leading of the passage under the heading “Arpeggiation”: “Here are descending arpeggiations which develop into four-note harmonies.”³⁴

Example 4-28. Schenker’s graph of the development

© With kind permission by Universal Edition A.G., Wien

He demonstrates how the three local tonal centers (A^b, F, and D respectively at m. 33, 51, and 59) form a German sixth chord with B^b and eventually reaches the harmonic goal at m. 63, by simply omitting the upper-voice. He sees the ascending third-line (G-A-B^b) as generating the entire development section, although his notation does not efficiently show this. Each member of this third-line is counterpointed by C, D, and B^b. The parallel fifths occurring between the first two motions are broken by means of the interpolated A at m. 63. Schenker selects B^b as a counterpoint to the upper-voice B^b at m. 81 and thus sees an 8-7 contrapuntal motion introduce the neighbor note B^b. My voice-leading graph of the development (Example 4-29), which is an expanded version of Example 4-28, accepts most of Schenker’s interpretations.

³³ Schenker provides two analytic graphs of the development, one for the overall scheme of the development (reproduced here in Example 4-28) and the other as explanation of the voice-leading scheme in harmonic terms.

³⁴ Heinrich Schenker, *Free Composition*, 83.

Nevertheless, there is one discrepancy between Schenker's reading and mine: in contrast to Schenker, who selects B^b4 as the counterpoint for the upper voice, my interpretation chooses G as a counterpoint to the upper-neighbor B^b5, which is preceded by a series of fifth progressions.

Example 4-29. Middleground graph of the development (mm. 33-86)

It is remarkable that Beethoven adopts a single harmonic and voice-leading scheme for the development sections of both the first and third movements. The ascending third line from $\hat{2}$ to a neighbor note (G-A-B^b) projects the development section of the movement. A lower-level ascending third-line appears in a hidden form (G-A-B^b in mm. 23-47), adding to a sense of motivic unity.

In the large-level third line, the way the second member (A) is approached is notable. A^b3 is the first temporary goal of the development (m. 33). It shifts to A^b5 at m. 41 by register transfer and is prolonged through unfoldings, A^b5 to C6 and D^b6 to

B^b5. Meanwhile, the bass changes from A^b to F at m. 51. The circle-of-fifth sequences in mm. 51-59 (not shown in the graph) alter the local tonal center to D, while the A^b remains intact at a higher level.

The German sixth chord (m. 62) and its resolution harmony (V in D) confirm the establishment of this local key. The A^b, which has remained influential abstractly from m. 51, now takes license to ascend legitimately to A-natural, by being reinterpreted enharmonically as a G[#] in the German sixth chord.³⁵ This chord progression and the six-measure stay on the dominant through the alternation between $\frac{6}{4}$ and $\frac{5}{3}$ are enough to lead to an illusory aural implication that the music reaches the harmonic goal of the development and thus that this passage is the retransition. However, the statement of the codetta material over the D pedal proves that such an interpretation is misleading, and furthermore the bridge passage based on the circle of fifths indicates that the real recapitulation is near at hand. The upper-voice A, which is now supported by the D-major triad, ascends to the final goal B^b at m. 81 supported by ii and ultimately by V⁷. This work illustrates Beethoven's efforts to achieve a connection between movements: he unifies the first and third movements not only in terms of mood, but also in terms of a similar harmonic and voice-leading scheme.

³⁵ This interpretation is based on Schenker's graph (reproduced here in Example 4-28).

4.6 : First Movement of op. 10, no. 3, D major

The first movement of the D-major Sonata, op. 10, no. 3, poses its central analytical problem at the outset: determining the *Kopfton* of the *Urfinie*.³⁶ The spare, open sound of the octaves in the opening gesture offers options for $\hat{3}$, $\hat{5}$, or $\hat{8}$, but at the same time shows a lack of clear harmonic support. The immediate choice would be A5 ($\hat{5}$) at m. 4, because the A5 not only emerges at the significant accented position as a goal of the aggressive ascending gesture, but also gains additional weight from repetitions in mm. 6-7. The analyst might also choose F[#] at m. 22 as the third member of the structural descent ($\hat{3}$), because it is clearly articulated by the rhythmic slowdown and *ff* dynamics (Example 4-30). However, the analyst would then encounter the problem of finding $\hat{4}$ within the short bridge passage (mm. 17-22) and before the point where the $\hat{3}$ enters unambiguously (m. 22). The aggressively rising melodic line and lack of harmony in this bridge do not reserve a proper place for the $\hat{4}$ and its harmonic support. Thus, in spite of the initial prominence of A, the reading that takes $\hat{5}$ as a *Kopfton* is quickly called into question.

³⁶ I already have stressed the importance of determining the *Kopfton* for a sonata-form design in Chapter 1.5. and 1.6. See also Charles Smith, "Musical Form and Fundamental Structure: An Investigation of Schenker's *Formenlehre*," *Music Analysis* 15, nos.2-3 (1996): 274-276.

Example 4-30. Problematic reading of the primary theme and bridge passage

because of absence of $\hat{4}$ (mm. 1-22)

The musical score is divided into four systems, each with annotations and harmonic analysis:

- System 1 (mm. 1-6):** Labeled "P-theme Antecedent" and "Consequent". The antecedent is marked *p* and has the annotation "Lack of harmonic support". The consequent is marked *p*. A fermata is placed over the final note of the consequent, with the annotation "Asserting $\hat{5}$ as a Kopfton". An "Arp." (arpeggio) is indicated above the final note. The bass line is marked "D: 1" and "16 (a series of 6/3 sequences)".
- System 2 (mm. 7-12):** Labeled "Varied repetition of the consequent". It is marked *f*. The bass line includes the chords *ii6*, *V7*, and *I (PAC)*. A fermata is placed over the final note, marked *f*.
- System 3 (mm. 13-17):** Labeled "Bridge". It is marked *p* and has the annotation "Lack of harmonic support". The bass line includes the chords *(vi)*, *ii*, *V7*, and *I (PAC)*. An arrow points to the end of the first measure with the annotation "P-theme ends here".
- System 4 (mm. 18-22):** Labeled "(Where is $\hat{4}$?)". It is marked *crv.sc.* and *ff*. The bass line includes the chord *I* with a $\hat{3}$ above it.

One might argue that G5 supported by ii and V⁷ at m. 15 and F[#]4 which is in inner voice in the next measure serve as a background $\hat{4} - \hat{3}$ motion, if he accepts the absence of a self-contained structural entity within the primary theme. However, the

reasonable length of the primary theme (16 measures) and two perfect authentic cadences (mm. 9-10 and 15-16) do not seem to allow us to admit the absence of a first-order linear progression and to jump directly to the first-level middleground. Furthermore, if one recalls that Beethoven has placed structural weight on the primary theme since op. 2, no. 2, by generating the theme with a first-order linear progression, then he should question the validity of an interpretation that contradicts that plan.

Failure to find an appropriate place for $\hat{4}$ and the necessity of the first-order linear progression within the primary theme impel us to pursue an alternative interpretation, in which $\hat{3}$ serves as the *Kopftone* (Example 4-31). However, another analytic problem arises in this alternative reading: there is no satisfactory place reserved for the *Kopftone*. The primary theme starting from D ascends toward the goal A, which is articulated by the *fermata* and *sforzando*, after a single four-line fall. The choice of $\hat{3}$ at m. 3 (F[#]5) is not as immediately persuasive as $\hat{5}$: this F[#]5 is apt to be felt as a passing note midway between D and A. Nevertheless, it is not difficult to find a plausible justification that admits the F[#]5 as a *Kopftone* $\hat{3}$ and relegates A5 to the role of cover tone. The outset of the opening theme is reminiscent of orchestral or operatic overtures: the cover tone here distracts listeners' attention from the essential voice-leading path and serves as a rhetorical sign adding to the fanfare-like aura. It is a dictum in Schenkerian analysis that the most clearly articulated note does not necessarily occupy the most important voice-leading role and it is equally true that the meaning of an event can be altered by later events: here it is the arrival of F[#] as

the end result of an expansion of the opening phrase (mm. 1-4 becomes mm. 17-22) and the lack of a $\hat{4}$ that give ultimate structural priority to $F^\#$ as $\hat{3}$.

Example 4-31. Alternative reading of the primary theme and bridge passage

(mm. 1-22): as a third-line ($\hat{3} - \hat{2} - \hat{1}$)

The musical score for Example 4-31 is presented in four systems. The first system (mm. 1-6) features a piano (*p*) opening with a melodic line in the right hand and a bass line in the left hand. The melodic line is divided into an 'Antecedent' (mm. 1-4) and an 'Arpeggiated' ('Arp.') section (mm. 5-6). The bass line consists of a series of sixths, labeled '16 (a series of 6/3 sequences)'. The second system (mm. 7-12) continues the melodic line with a 'Varied repetition of the consequent' (mm. 7-12) marked *f*. The bass line includes chords labeled 'ii6', 'V7', and 'I'. The third system (mm. 13-16) is labeled 'Bridge' and features a piano (*p*) melodic line with chords '(vi)', '(ii)', and 'V7'. The fourth system (mm. 19-22) shows a crescendo (*cresc.*) in the bass line and a fortissimo (*ff*) melodic line. The score includes various annotations such as 'D: I', 'ii6', 'V7', 'I', 'V', and '16 (a series of 6/3 sequences)'. The key signature has two sharps (F# and C#), and the time signature is 4/4.

Roger Kamien offers a different reading, confirming the difficulty in identifying the *Kopfton* of the movement (Example 4-32).³⁷ He agrees with my choice of $\hat{3}$, but its locus raises a problem. He sees $\hat{3}$ only at m. 22 by evaluating the voice-leading events before that point as an initial arpeggiation; the descent to $\hat{2}$ is made later at m. 53, with the advent of the second theme. He then interprets a large-level chromaticized voice-exchange between I at m. 1 and vii^{o6}/ii at m. 46 as governing the exposition prior to the commencement of the second theme. He asserts the advantage of his reading, by stressing the recurrence of the ascending third-line motive, whose first presence has been the initial arpeggiation (marked with brackets in Example 4-32). Nevertheless, I believe that this reading is not perfectly satisfactory. First, this reading identifies the *Kopfton* too late: according to the reading, it appears as late as the middle of the transition (m. 22). Second, it ignores the possibility of generating a first-order linear progression from the *Kopfton* within the primary theme, although the primary theme has enough conditions to be heard as a theme, despite its unique outset.

³⁷ Roger Kamien, "Non-Tonic Settings of the Primary Tone in Beethoven Piano Sonatas," *The Journal of Musicology* 16, no.3 (1998): 382-385. His Example 4 is reproduced here (Example 4-32).

Example 4-32. Middleground graph of Beethoven's op.10, no.3, mm.1-53

The image displays a musical score for Beethoven's op.10, no.3, measures 1-53. A middleground graph is overlaid on the score, showing pitch classes and intervals. The graph consists of a horizontal line with vertical tick marks corresponding to measures. Above the line, pitch classes are indicated: 'D E F#' (measures 1-3), 'C# D E' (measures 35-37), and 'C# D D# E' (measures 51-53). Intervals are marked as '5-6' (measures 35-36) and '5-16' (measures 43-46). A fermata is placed over measures 43-46. Below the graph, there are annotations: 'VVI VI' under measure 1, 'V' under measure 37, and 'In V:(16) V' under measures 43-46. A bracket with a 'f' dynamic marking spans from measure 43 to the end of the score. Measure numbers 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, and 53 are circled along the top of the score.

The primary theme consists of three phrases, in which the first and second phrases conform to an antecedent and consequent relationship, thus projecting a first-order third-line, although the antecedent does not define a clear harmonic progression (Example 4-31). The third phrase (mm. 11-16) is an ornamented repetition of the consequent phrase, adding rhetorical conclusiveness to the primary theme. It generates a lower-level third-line, achieving what we might call an echo effect to the previous first-order third-line. The primary theme, punctuated by two perfect authentic cadences (mm. 9-10 and 15-16), has the harmonic and formal conditions to be regarded as a theme.

The first four notes create a motive (D-C[#]-B-A). This motive and its transformations set up the *Kopfton* at m. 3.³⁸ As Carl Dahlhaus has noted, the consequent phrase (mm. 5-10) is subject to “sequential treatment” of the opening four-note motive. A series of $\frac{6}{3}$ sequences achieve a downward octave transfer, thus prolonging the tonic harmony. Slurs in mm. 5-8 on the annotated score (Example 4-32) occasionally do not fit into the four-note segments articulating a foreground motive because they have been interpreted and slurred to reflect harmonic terms. One could also notice that the slurs in the upper voice do not connect members of a tonic

³⁸ Carl Dahlhaus describes the primary theme by emphasizing the motivic relationships of the four-note figure and its subsequent patterns: “The first subject of the first movement of the D major Piano Sonata, Op. 10 No. 3, is unmistakably articulated as 4 + 4 + 6 notes (Ex. 5.6). (The consequent clause begins with sequential treatment of the first motive, which leaves the articulation in no doubt.) The second motive is an inversion of the first, with the further change that the stepwise progression is replaced by an arpeggiated triad; and the third motive represents a middle course, in so far as it fills in the triad with seconds. See Carl Dahlhaus, *Ludwig van Beethoven: Approaches to His Music*, trans. Mary Whittall (Oxford: Clarendon Press; New York: Oxford University Press, 1991), 95.

harmony: for instance, D-B does not conform to the tonic harmony. This is a good example of what Schenker calls “upper sixths.”³⁹ In these $\frac{6}{3}$ sequences, the slurring of the upper voice follows that of the leading- bass voice because the upper voice here simply adds counterpoint to the bass’s linear progression. Schenker says under the chapter heading of “The concept of a leading linear progression”:

When two or more linear progressions are combined, it is essential to determine—from background, middleground, and foreground—which of them is the leading progression. In relation to this leading progression the others must be considered only as counterpoints, whether they proceed in parallel, oblique, or contrary motion, in outer or inner voices. Once one has decided whether the leading linear progression is in the lower or in the upper voice, one must understand the counterpointing progressions as upper or lower thirds, tenths, or sixths.⁴⁰

Ernst Oster clarifies this notion in a footnote by pointing out “tones resulting from the parallel motion, which are in opposition to the primary harmony.” See, for example, the asterisks in Figure 95-b1 and 2 from *Free Composition*, which is reproduced in Example 4-33.

³⁹ Heinrich Schenker, *Free Composition*, 78. One could find a similar example where the slurs of the upper voice do not confirm the governing harmony in Schenker’s sketch of J. S. Bach’s *Well-Tempered Klavier*, Prelude No. 1 in C major from *Five Graphic Music Analyses: With a New Introduction and Glossary by Felix Salzer* (New York: Dover Publications, 1969), 36-37. The descending fourth- and fifth-lines divide an octave prolonging the tonic. Meanwhile, the upper voice counterpointed by parallel 10ths does not fit into the tonic: E5-B4, B4-E4. Schenker provides an explanation by labeling the upper voice “upper tenths.”

⁴⁰ *Ibid.*, 79.

Example 4-33. Schenker's explanation of a way of interpreting parallel motion

The image shows two musical staves. The left staff, titled 'b) Fourth-progressions', features a treble clef with a melodic line containing notes 5, 6, 7, and 8. Below it, a bass line contains notes C and G, with an annotation '(lower 10ths)'. A '1 (leads)' annotation is placed above the first note. The right staff, titled 'D. Scarlatti, Son. in C Major (L. 104, K. 159)', features a treble clef with a melodic line starting at 'm. 8'. Below it, a bass line contains notes G and C, with an annotation '(lower 10ths)'. A '2 (leads)' annotation is placed above the first note. Both staves have a double bar line between them.

© With kind permission by Universal Edition A.G., Wien

Beethoven's display of compositional skill in the primary theme is noteworthy. In the third phrase, A5, which has served as a cover tone in the consequent phrase, now becomes the bass through invertible counterpoint and provides a harmonic background. It is quite challenging to decipher the harmonic and contrapuntal status of the passage because of the rhythmic displacement between the upper voice and its governing bass. The role of the inverted counterpoint adopted in the third phrase is intriguing because it invites listeners to perceive the third phrase as a repeated version of the second. As mentioned before, the second phrase prolongs the tonic: F[#]4 moves an octave lower to F[#]3 in the bass while the *Kopft*on also goes through a register transfer. On the other hand, the harmonic status of the third phrase seems ambivalent: is the basis tonic or dominant? Because of the inverted counterpoint, the third phrase prolongs the dominant with $\hat{2}_2$, which comes as early as in the beginning of the phrase (the first beat of m. 11). The $\hat{2}_2$ as a primary note of the phrase gains its harmonic support by entrance of the dominant pedal and is prolonged through a typical embellishing harmonic motion V-vi-ii-V. This

interpretation is advantageous and simpler in that members of the dominant chord are placed on the accented beats.

However, it is reasonable to ask if one can hear the pick-up (F^\sharp) as a prefix to the following E. Listeners, who are now familiar with the four-note descending pattern, may perceive the pick-up D as a strong beat or at least as an initiator of the successive four-note patterns and therefore interpret the subsequent passage to the second beat of m. 14 as prolonging $\hat{3}$. This way of hearing would lead to a plausible alternative reading (Example 4-34). Parallel sixths of the upper voice are controlled by the tonic at m. 10 and prolong $\hat{3}$ until it moves down to a lower-level $\hat{2}$ in the third beat of m. 14. In this reading, the dominant pedal becomes subordinate to the following vi. The I-V-vi harmonic progression supports a lower-level third-line (F^\sharp -E-D). This reading interprets the I-vi-ii-V-I harmonic motion as governing the phrase, in contrast to the previous reading, with its early arrival of $\hat{2}$ and control of most of the duration of the phrase (see Example 4-31).

Example 4-34. Alternative reading of the third phrase (mm. 11-16)

It is not difficult to find examples of Classic-period sonatas that imitate the open octave figures seen often in the fanfare-like openings of orchestral music. One could remember for example the masculine opening in the open octaves of both hands in Beethoven's A-major sonata, op. 2 no. 2.

Example 4-35. Mozart's piano sonata, K. 284, first movement (mm. 1-24)⁴¹

P-theme (orchestra fanfare-like outset)

D: I

TR (Tuneful)

⁴¹ This is a classic example whose transition section coincides with what Jan La Rue calls PT. The transition (mm. 9-21) has a combining function of the tuneful theme-character and then modulatory bridge. See Jan LaRue, *Guidelines for Style Analysis* 2nd ed. (Warren, Mich.: Harmonie Park Press, 1992), 157.

The image shows two systems of musical notation. The first system begins at measure 17 and consists of a right-hand melody with slurs and accents, and a left-hand accompaniment with a steady rhythmic pattern. The second system, labeled 'S-theme', begins at measure 20 and features a more melodic right-hand line with slurs and accents, and a left-hand accompaniment that includes some chordal textures.

One might also recall the first movement of Mozart’s piano sonata, K. 284, whose opera overture- or symphonic fanfare-like opening obscures determination of the *Kopfton* through intricate voice-leading interactions between the true *Kopfton* and cover tone (Example 4-35). Strong octave motions and tremolos make this sonata look like a piano reduction of orchestral music, and quite apart from the coincidence of key, this sonata resembles much of the opening of Beethoven’s op. 10 no. 3. Not only the orchestral fanfare-like outset, but also the thematic procedures resemble those of Mozart. Beethoven adopts lyric thematic material (mm. 23-30) for the place of the transition, as does Mozart in his sonata. Mozart precedes the overture-like opening characterized by octave motions to the singing tune clearly articulated over the reiterated D-major tonic. He saves more theme-like character for the transition. In the Beethoven, the character of the primary theme is not at all thematic: its overture-like nature indicates that the advent of the tuneful melody is necessarily near

at hand, with the illusory interpretation of making the primary theme sound as if it serves as an introduction to the B-minor episode (mm. 23-30) in the transition.

The harmonic stability of this unusual B-minor tune is unexpected. The tune itself supported by a stereotypical tonic-to-dominant motion is too tonally stable to fit a transition stereotype. It possesses satisfactory tonal and thematic characters to be called a theme. It consists of two phrases, which recall an antecedent and consequent phrase construction, although both phrases cadence on a dominant.⁴² It is interesting to see how Beethoven manipulates the voice-leading path of the episode. In the exposition, the local goal of the primary theme D is preserved until it moves down to C[#] at m. 37 (Example 4-36-(a)). D takes vi as its harmonic support but is able to resolve to C[#] after being supported by V⁷/V.

All the thematic events within the B-minor episode are subsumed into this simple contrapuntal frame: 10-7-10 (D5-D5-C[#]5 supported by B2-E3-A2). On the other hand, in the recapitulation, F[#]5 emerges as a primary note generating the episode (Example 4-36-(b)). Unlike the exposition, the F[#]5 moves up to G5, which serves as an upper neighbor to the *Kopftón* $\hat{3}$, after a lower-level third-line (F[#]-E-D[#]) and turns back to the original F[#]5 at m. 219. The F[#] serves as an arrival point in contrast to C[#] at m. 37 in the exposition, which serves as a stepping stone to move to the background $\hat{2}$ in the next measure. The contrapuntal frame of 5-10-7 (F[#]5-G5-G5-

⁴² Although both phrases cadence equally on a dominant, the hierarchical levels that they belong to are different. The second phrase, which carries modulation and thus can be understood as an authentic cadence in the dominant key, is in more remote level. For a more detailed discussion of dominants that belong to different levels, see Jack Adrian, "The Ternary-Sonata Form," *Journal of Music Theory* 34, no.1 (1990): 72-73.

F#5, supported by B2-E3-A2-D3) leads this time to the voice-leading frame of the passage in the recapitulation.

Example 4-36. Harmonic and voice-leading synopsis of the episode

(a) In the exposition

Episode and more (mm.23-38)

(b) In the recapitulation

Episode and more (mm.205-219)

The asterisks on the score (Example 4-36-(a) and (b)) indicate discrepancies in interpreting the portion around the advent of $\hat{2}$. These discrepancies show one of

the drawbacks of Schenker's sonata-form theory,⁴³ in which, in a third-line *Ursatz*, a fifth-line from the background $\hat{2}$ within the second-theme area of the exposition should be adjusted and reinterpreted into a third-line from the *Kopfton* $\hat{3}$ in the recapitulation. However, such a structural inconsistency emerges as a merit in interpretation in this movement. The significant structural characteristic of the movement, the cover-tone, which took place in the foreground of music as a means of adding overture-like rhetorical character, is embedded in the deep-level middleground of the recapitulation (Example 4-37) and thus leads to a motivic parallelism.

Example 4-37. Middleground graph of the first movement of op. 10, no.3

⁴³ As I already discussed in the introduction (Chapter 1.5), Schenkerian analysts encounter a theoretical problem, how they adjust a fifth-line in the second-theme area into a third-line in the corresponding passage of the recapitulation in the *Ursatz* whose *Kopfton* is $\hat{3}$.

Many authorities agree that the first movement of the D major sonata is rich in internal relationships which can legitimately be described as motivic.⁴⁴ The descending fourth-line in the opening recurs repeatedly in multiple places, thus asserting motivic unity of the piece. As Kinderman has noted, the second theme incorporates the opening four-note figure in smaller note values.⁴⁵ The hallmark of the piece resides not in the repetitive use of the four-note figure, but in delicate metric and harmonic reinterpretation of the opening motive. In contrast to the opening four-note figure, in which the first note (D) is a point of departure for arpeggiating the governing tonic despite its weak metric position, the first note of the four-note motive in the second theme serves as a true pick-up to the following note (C[#]) (Example 4-38). This is not the first instance of Beethoven's skillful handling of the harmonic and rhythmic aspect: in the A-major Sonata, op. 2, no. 2, he adopted the four-note motive (E-F[#]-G[#]-A), reinterpreted it metrically and harmonically, and achieved motivic unity in the primary theme as well as in the development.⁴⁶

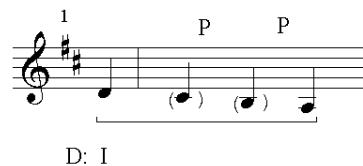
⁴⁴ Donald Tovey, William Kinderman, Carl Dahlhaus, Eric Blom, and Charles Rosen agree that the first movement of op. 10, no. 3 takes the opening four-note as a coherent motive. Carl Schachter also points out the repetitive emergences of the opening motive D-C[#]-B-A: "The first four notes of the movement, D-C[#]-B-A, form an important motive whose pitches are maintained intact (or almost intact) through two changes of key (Example 16a). The motive forms an important part of the highly original bridge theme in B minor; the only change in pitch is a chromatic adjustment of A to A[#] (Ex. 16b). A striking augmentation marks the climax of the harmonic transition from B minor to A major (Ex. 16c). A diminution begins the first strain of the dominant group (Ex. 16d); later on the motive is transposed to A-G[#]-F[#]-E (Ex. 16e). (Carl Schachter, "Beethoven's Sketches for the First Movement of op. 14, no. 1: A Study in Design," *Journal of Music Theory* 26, no.1 (1982): 15-16)."

⁴⁵ William Kinderman, *Beethoven*, 41.

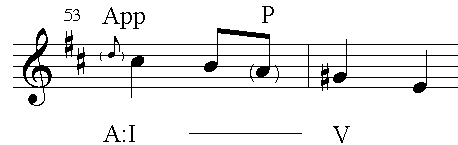
⁴⁶ For the discussion of the four-note motive, see Chapter 3.4.

Example 4-38. Metric and harmonic reinterpretation of the opening motive

(a) Opening theme (m. 1)



(b) Second theme (mm. 53-54)



Beethoven here expands the second theme by transforming the four-note motive in various ways (mm. 67-93) (Example 4-39). The four-note motive emerges on A4 twice, while supporting a lower-level fifth-line descent (mm. 67-70). There is a subtle metric and harmonic manipulation here. The expression “syncopation” would be inadequate to describe Beethoven’s remarkable treatment. In a motivic sense, the first note serves as an initiator of the characteristic four-note pattern, whereas, in a harmonic sense, the first note would be heard a pick-up to a tiny-level unfolding G[#]-E, prolonging a dominant. Oddly, $\hat{5}$ and $\hat{3}$ are supported by these brief A’s, thus telling that these A’s are significant despite their metric positions. Furthermore, Beethoven makes this metrically confusing situation worse by placing the *sforzando* dynamic indication on the second beat of m. 67. The four-note motive appears in three voices in the forms of transposition and inversion and thus asserts the motivic coherence of the piece. This is a good example, where Beethoven’s obsession with a single motivic idea leads to a very coherent musical foreground.

Example 4-39. Four-note motives in the second theme (mm. 66-78)

The musical score is divided into three systems, each with a grand staff (treble and bass clefs).

- System 1 (Measures 66-70):**
 - Measure 66: Treble clef has a whole note chord (A2, E5). Bass clef has a whole note chord (A2, E5). Dynamics: *p*.
 - Measures 67-70: Treble clef has a melodic line with slurs and accents. Bass clef has a rhythmic accompaniment. Dynamics: *sf*, *reg.*, *pp*.
 - Annotations: "S-line" spans measures 67-70. "Four-note motive" is bracketed under the bass line in measures 67-70. Harmonic analysis: A: I ii6 V I.
- System 2 (Measures 71-75):**
 - Measures 71-75: Treble clef has chords. Bass clef has a melodic line. Dynamics: *cresc.*, *sf*.
 - Annotations: "Transposed four-note motives" is bracketed under the bass line in measures 71-75. "Inverted four-note motive" is bracketed under the treble line in measure 75. A "10" with a rest symbol is in measure 75.
- System 3 (Measures 76-78):**
 - Measures 76-78: Treble clef has chords. Bass clef has a melodic line. Dynamics: *sf*.

Chapter 5: Analyses of Sonata-Form Movements in the Early Vienna Period III

5.1 : Introductory Remarks on Formal Designs and Primary Compositional Devices

Beethoven wrote the sonatas op. 13 and op. 14, nos. 1 and 2 in 1797-1799 and op. 22 in 1800. In op. 13, Beethoven uses a slow introduction which foreshadows the tonal structure of the movement and allows segments of the introduction to appear in the course of the movement, achieving a very idiosyncratic musical foreground, whereas his ascending primary theme gives the analyst a difficulty to find the locus of the *Kopftón*. On the other hand, the two sonatas of op. 14 shows an ongoing tendency toward the $\hat{3}$ -line “textbook” sonata form (Model I-1), in which the first-order linear progression within the primary theme, punctuated by a clear cadence, produces the *Ursatz* replica. Despite the adoption of the same higher-level voice-leading schema, Beethoven creates a very idiosyncratic foreground. In both sonata’s second themes, the third-line carries a theme-generating function: the hierarchical status of the first third-line ($\hat{5} - \hat{4} - \hat{3}$) is degraded as a superfluous prefix. This striking manipulation of the first-order fifth-line within the second-theme area makes both themes unified as a third-line, but also minimizes a drawback of Schenker’s sonata-form theory.

In op. 22, Beethoven first adopts an exposition different from his earlier sonatas in the major-mode. The exposition consists of two large-scale phrases, both

interrupted by half-cadences which are in different levels.¹ He expands the second-theme area through variation technique and register transfer, whereas he constructs the development section very symmetrically in terms of a harmony and voice leading.

5.2 : First Movement of op. 13, C minor

The first movement of the C-minor Sonata, *Pathétique*, poses a fundamental analytic problem: determination of the *Kopfton*.² The outset of the primary theme (mm. 11-19), which aggressively ascends two octaves (C4-C6) and then descends rapidly outlining a tonic triad with a passing note (C6-G5-E^b5-D5-C5 in mm. 15-17), does not immediately propose a distinctive *Kopfton*. In spite of the $\hat{8}$, which recurs as the most prominent note in the primary theme, one must first exclude the possibility of the $\hat{8}$ because of the problem of fitting the $\hat{8}$ - line's division into the sonata-form

¹ Adrain discusses this kind of a phrase structure, in which the antecedent ends on a dividing dominant and the following is a modulating consequent, which is in a higher level and generates a first-order linear progression. Jack Adrian, "The Ternary-Sonata Form," *Journal of Music Theory* 34, no. 1 (1990): 72-73.

² Many authorities have already discussed the first movement of op. 13 from various angles. Blom sees this piece as a stereotypical example, showing Beethoven's incessant efforts by which he attempted to unify the entire piece with the a limited number of foreground motives that will recur repeatedly in various forms in the developing process. Eric Blom, *Beethoven's Pianoforte Sonatas Discussed* (1938; reprint, New York: Da Capo Press, 1968), 57-60. Dahlhaus and Kinderman describe the piece as having thematic procedures over a more or less unusual tonal scheme. Carl Dahlhaus, *Ludwig van Beethoven: Approaches to His Music*, trans. Mary Whittall (Oxford: Clarendon Press; New York: Oxford University Press, 1991), 104-105 and William Kinderman, *Beethoven* (Berkeley: University of California Press, 1995). Rudolph Réti analyzes the motivic unity infiltrated in all three movements, by discussing the concept of what he calls "musical cells." Rudolph Réti, *Thematic Patterns in Sonatas of Beethoven*, ed. Deryck Cooke (New York: The Macmillan Company, 1967), Chapters 1-9. Agawu discusses three topics in the slow introduction of the piece. Kofi Agawu, *Playing with Signs: A Semiotic Interpretation of Classic Music* (Princeton, N.J.: Princeton University Press, 1991), 42-44.

design.³ The possibility of $\hat{3}$ is not convincing either, not only because its occurrence is not as strong as the $\hat{8}$ in the primary-theme area or in the slow introduction, but also because the choice of $\hat{3}$ in the minor-mode sonata form poses a drawback that the first-order fifth-line in the second-theme area must be generated from an inner voice.⁴

The choice of $\hat{5}$ secures a normal sonata-form design in minor mode, in which the traditional formal sections arise over the *Ursatz* in an orthodox way (Example 5-1). The implied $\hat{5}$ at m. 11 (G4 in parenthesis) becomes apparent as an instant resolution of the neighbor-note A^b4 at m. 10. The *Kopfton* undergoes an upward octave transfer (G4-G5 in mm. 11-15) and then generates the first-order fifth-line ($\hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1}$ in mm. 15-19) that is common in the primary theme. One could not negate the underlying role of $\hat{5}$ if he looked closely at the rising upper voice of mm. 11-15. The iv-vii^{o6}i harmonic motion over the rumbling bass pedal of the tremolo octaves admits the ongoing status of $\hat{5}$, prolonged by an upper-neighbor A^b (Example 5-2). The presence of G5 in mm. 27-35 with the *sforzando* dynamic marking and its octave transfer to G3 stresses efficiently the significance of this note.⁵

³ David Neumeyer and Susan Tepping, *A Guide to Schenkerian Analysis* (Englewood Cliffs, N.J.: Prentice Hall, 1996), 109.

⁴ See Chapter 1.6. for the preference of the formal *Ursatz* model in the minor mode. Ernst Oster analyzed the movement as the $\hat{3}$ -line, by ignoring the overall shape of the *Ursatz* that the eighteenth-century sonata form should ideally have. I will discuss later his reading.

⁵ Readers might think why I have excluded the introduction from the possible place for the choice of *Kopfton*. I will also discuss later the introduction of the movement.

Example 5-1. Foreground graph of the primary theme (mm. 11-27)

5

11

p

sf

cresc.

i V4/3

16

3

2

1

3-line

p

sf

i6 ii6 V6/4 7 i

22

4-line

3-line

cresc.

V4/3 i6 ii6 v6/4 (Ger.+6 viio7/V)

27

reg.

5/3 6/4 7/5 6/4 (It.+6) 5/3

Example 5-2. Implied presence of the *Kopfton* $\hat{5}$: voice leading of mm. 11-15

The musical score for Example 5-2 shows voice leading from measures 11 to 15. The key signature is C minor (Cm). The bass line features a large-scale motion from B^b to E^b. The notation includes a treble clef, a bass clef, and a grand staff. Measures 11, 12, and 13 are shown with chord symbols: Cm: i, [V7/iv], iv, viio6/5, and i. A dashed line connects the bass notes of these measures. Measure 14 is marked with a large '5' and an arrow, indicating the implied presence of the *Kopfton*. The notation for measure 14 includes a treble clef, a bass clef, and a grand staff. The bass line is marked with 'reg.' and 'N'. The treble line is marked with 'N' and 'reg.'

The large-scale bass motion B^b-E^b governs the second-theme area (Example 5-3-(a)). The unusual harmonic scheme of the second theme (mm. 51-87) is not particularly surprising if one recalls Beethoven's experimental treatment in the second-theme area in op. 2, nos. 2 and 3. The lyrical second theme is stated over the dominant (B^b) of the mediant key, rather than over the expected mediant (E^b).⁶ As Ernst Oster has noted, Beethoven initiates the second theme prior to the arrival of a mediant harmony and then launches the closing theme over the mediant key, achieving "a tighter connection between the different sections."⁷ Oster describes the voice-leading scheme of the lyrical second theme (mm. 51-88):

There can be no doubt that this section [mm. 51-88] is to be considered the second subject. This is because when we arrive at E-flat major, III of C minor (m. 89), we have the impression of already being at the beginning of the coda of the exposition.

⁶ The initiation of the second theme over the dominant of the mediant rather than on the tonic is the structural feature that Beethoven already has adopted in the F-minor Sonata of op. 2, no. 1. By doing thus in both movements, he achieves a very distinctive type of the second theme.

⁷ Ernst Oster, "Register and the Large-Scale Connection," in *Readings in Schenker Analysis and Other Approaches*, ed. Maury Yeston (New Heaven and London: Yale University Press, 1977), 68.

This impression is created mainly by the fact that the ascending chromatic line of mm. 89-98 bears a resemblance to the first subject. The resemblance becomes still closer in the analogous place in the recapitulation (at m. 253).

It is surprising that even Tovey considers the second subject to be written “in E-flat minor.” By no means can the six-four chord at its beginning be considered an inversion of an E-flat minor triad. Nor is there any E-flat minor triad or sixth chord to be found, except for one in m. 79. This, however, is merely a passing harmony between D-flat and F in m. 75 and in m. 83. The second subject should be understood as taking place within an extended prolongation of the B-flat harmony, the dominant of III which finally enters at m. 89.⁸

Example 5-3. Middleground graphs of the second theme (after Oster)

(a) Detailed middleground graph of the second theme (mm. 43-89)

(b) Second theme in the larger context (mm. 11-98)

Reproduced from *Readings in Schenker Analysis and Other Approaches*,
 edited by Maury Yeston, by permission of Yale University Press
 Copyright © 1977 by Yale University Press

Oster’s reading of the second theme is quite convincing (Example 5-3-(a)).

He sees all the brief dominant-to-tonic motions (A^b-D^b , B^b-E^b , and $C-F$) as belonging to an inner voice. Meanwhile, the upper-voice $\hat{4}$ ($F5$) remains influential throughout this passage (mm. 43-88) over the dominant *Stufe* of the mediant key. Oster’s further

⁸ *Ibid.*, 67-68.

comments about the second theme in the recapitulation explicate penetratingly how Beethoven generates the second part of the *Ursatz*, transforming the recapitulation in a striking way. Distinct treatment of the two $\frac{6}{4}$ chords, one in m. 51-62 (exposition) and the other in mm. 220-229 (recapitulation), leads to different voice-leading structures in these passages (Example 5-4). Oster sees the first $\frac{6}{4}$ chord syntactically as a pedal-point, which is used purely to embellish the B^b-harmony, whereas he evaluates the second as an arpeggiating $\frac{6}{4}$, commenting that:

In the recapitulation it was not possible for Beethoven to duplicate the effect he had created with his treatment of the second subject in the exposition. Obviously he could not base it on the dominant, G, and begin it with a six-four chord on this tone. To provide at least some harmonic contrast and achieve an effect similar to the suspense created by the B-flat harmony in the exposition, he begins the second subject on the F-minor six-four chord, the subdominant (m. 221), which then leads to V and to I. This six-four chord is, for once, a true inversion since it is followed by the F-minor-sixth chord.⁹

In contrast to the $\frac{6}{4}$ chord in the exposition, whose main function was as a neighboring harmony to embellish $\hat{4}$ over V/III (m. 43), the $\frac{6}{4}$ in the recapitulation moves to subdominant harmony in a first inversion (C-A^b = iv $\frac{6}{4}$ - $\frac{6}{4}$ in mm. 220-231) and eventually leads to the structural dominant at m. 232, which supports $\hat{4}$ in the second part of the *Ursatz*. The $\hat{4}$, which has been supported by the $\frac{6}{4}$ chord and then a consonant sixth A^b, changes its counterpoint to the seventh G and becomes a dissonance (Example 5-4-(b)).

⁹ Ibid., 69.

Example 5-4. Overall *Ursatz* designs of the exposition and recapitulation according to the different functions of the two $\hat{4}_6$ chords

(a) Exposition

(b) Recapitulation

Beethoven's unusual approach to the second theme, initiation by the dominant of the mediant, offers the possibility of two different readings (Example 5-5 and 5-6). The main difference in these two interpretations concerns how we interpret the hierarchical status of $\hat{4}_6$ and its harmonic support V/III in the second theme of the exposition. If we see $\hat{4}_6$ in the second theme as belonging to the highest level, as in Example 5-4-(a), then we would have the following graph of the exposition where the highest-level $\hat{3}_3$ comes at m. 88, and where a first-order third-line (G-F-E^b), originating from an inner voice, generates the closing theme (Example 5-5). The projection of the first-order third-line within the closing theme implies that Beethoven puts the structural significance there. While the upper-voice E^b ($\hat{3}_3$ in C-minor) undergoes a chromatic ascent recalling the forceful character of the primary theme (not shown in the graph), the inner-voice G ($\hat{3}_3$ in E^b-major) generates two third-line descents. However, this reading encounters a problem: the parallel fifths between the

first two counterpoints (G-F supported by C-B^b) makes the voice-leading troublesome. Furthermore, as mentioned in the introduction, this model has a disadvantage in that the first-order line of the second-theme area comes from an inner voice.¹⁰

Example 5-5. First plausible reading of the exposition

On the other hand, if one sees the $\hat{4}$ and its harmonic support at a lower level, then an alternative reading degrading the hierarchical status of the parallel fifths gains more power (Example 5-6). In this reading, the *Kopfton* remains influential through the closing theme and the higher-level descent ($\hat{4} - \hat{3}$) emerges in the closing theme. This reading is advantageous, not only because it assumes the parallel fifths as a lower-level event, but also because it lets the first-order third-line from the *Kopfton* appear in the expected place, the second-theme area. More than these strengths, the reading has another decisive merit: the two third-line descents ($\hat{3} - \hat{2} - \hat{1}$) of the exposition are reproduced consistently as belonging to different levels in the

¹⁰ See Chapter 1.6.

recapitulation (Example 5-6-(b)): the first third-line descent in mm. 252-276 is a lower-level event than the second one (mm. 264-276) notated in open heads in both the exposition and the recapitulation. These merits strongly supports the second reading, which assumes the primacy of the *Kopft* through the closing theme and downplays the $\hat{4}$ and V/III.

Example 5-6. Second plausible reading

(a) Exposition (mm. 1-130)

Intro	P	T	S	K
1	11	19	43 51	88 100 112 130

Cm: i Eb: I V I

(b) Recapitulation (mm. 194-276)

P	T	S	K
194	232	252	273 274 276

Closing theme (mm. 252-276)

Substitute for V/III in the exposition

Cm: i $\textcircled{V7}$ i V7 i V i

Two 3-lines in the exposition are reproduced: the first 3-line is lower than the second.

Unlike our fifth-line *Ursatz* models above, Oster provides a radical reading of the whole movement, putting his initial graph of the second theme (Example 5-3-(a)) into a different context (Example 5-3-(b)). He finds that a large-level initial ascent (C6-D6-E^b6 in mm. 15-98) precedes and elaborates the *Ursatz* of the movement. The lyric second theme is interpreted as an inner voice: the primary note of the second theme F serves as an alto voice of the D, a member of the initial ascent. Oster's interpretation contradicts our theoretical assumption that Schenker's *Ursatz* design could be reconciled with the traditional formal sections and thus reflect thematic procedures. His choice of C6 at m. 15 does not give an opportunity to generate the first-order line in the primary theme, although it replicates the foreground prominence of the note.

Example 5-7. Oster's graph of the first movement of op. 13

The image shows a musical score for the first movement of op. 13. The score is in G major and 3/4 time. The graph overlays the score, showing a large-scale ascent from m. 15 to m. 98, with a secondary ascent from m. 187 to m. 239. The background structure is labeled with Roman numerals: v7-6-5, I, III, V, I. Formal sections are labeled: Intro., Expos., (2nd subj.), end of Dev., Recap., etc.

Reproduced from *Readings in Schenker Analysis and Other Approaches*,
 edited by Maury Yeston, by permission of Yale University Press
 Copyright © 1977 by Yale University Press

Oster presents a higher-level graph of the entire movement (Example 5-7), in which he constructs the background of the movement by espousing a parameter which belongs to the middleground as a crucial criterion: his interpretation is based exclusively on register, which will be removed ultimately in the background although

it may serve as a decisive factor in the middleground. In choosing members of the *Urlinie*, he picks up notes occurring in a single register: this suffices very literally for Schenker's notion of the obligatory register. However, he entirely ignores traditional formal layouts which generally serve as the most reliable guide for the construction of the *Ursatz*. He bypasses the introduction and most of the exposition and finally chooses the *Kopfton* $\hat{1}_3$ at m. 98. His graph thus deviates far from Schenker's orthodox sonata-form description.

As mentioned before, this radical interpretation calls into question the reconciliation between traditional formal sections and voice-leading structure. The choice of $\hat{1}_1$ in the primary theme prevents us from generating the first-order line usually expected within the primary theme, and the absence of a structural line in the E^b-minor second theme renders the piece quite different from Beethoven's earlier sonata-form pieces. The necessity of a reconciliation between Schenker's *Ursatz* and traditional formal divisions leads to the following orthodox reading (Example 5-8).

Example 5-8. Overall graph of the first movement of op. 13

Intro	Exp P T S K	Dev	Recap P T S K
1	11 43 88	130	194 231 252 264 275 276

Cm: i III V I V i V7 i V i

In the slow introduction, Oster overemphasizes the role of F at m. 9 by degrading the status of the opening tonic (see Example 5-7). In his graph, the F6 occupies the most important position, so that it appears as an open head. Oster's reading sees that its ultimate resolution takes place as late as m. 98, in the middle of the closing theme, by downplaying the role of the structural dominant ($V \frac{7}{3} - \frac{6}{4} - \frac{5}{3}$) at mm. 9-10:

In a looser way even the introduction of opus 13 is connected to the Allegro by means of the high register. Its climax is also a V^7 chord with f^3 . This f^3 does continue to an e-flat³, but since e-flat³ appears in a six-four chord on the dominant, it is a passing tone moving to d^2 in the next measure, not a true resolution. In the strictest sense, then, f^3 resolves in the three-line octave only at m. 98, towards the end of the exposition.¹¹

However, F is not such a higher-level event, whose primacy remains through m. 98 and whose hierarchical status can be compared to that of the *Urlinie* members; it is merely a second component of the preliminary fifth-line descent (Example 5-9). The hierarchical status of $\hat{3}$ is efficiently stressed by means of its downbeat position and thus the $\hat{3}$ successfully carries the proper resolution function. The motion toward $\hat{3}$ is made twice to cancel the strong degree of the dissonance $\hat{4}$. The first resolution takes place over a deceptive cadence at the third beat of m. 9, which is enough to be perceived as a downbeat because of the slow tempo (see the alto-voice motion F-E^b) and because of Beethoven's regular accentuation on the third beat of each measure.¹²

¹¹ Ernst Oster, "Register and the Large-Scale Connection," 70.

¹² Beethoven treats the first and third beats as a downbeat in various ways although he uses 4/4. For instance, in mm. 1-3, he puts the accented type dissonance suspensions, whereas, in mm. 5-8, he changes harmony per two beats.

The ultimate resolution is then achieved (in the same register and the same voice) on the third beat of the next measure, over the $\frac{6}{4}$ chord, which has been rearticulated by the double-neighbor motion in the bass (G-A^b-F-G). This $\hat{3}_3$ is prolonged through an octave transfer filled by a chromatic scale and then reaches $\hat{2}_2$.

Example 5-9. The introduction and its middleground graph (mm. 1-10)

(a) Introduction

Grave

The musical score consists of six systems of staves. The first system is marked *sf*. The second system includes *sf*, *p*, *cresc.*, and *sf*. The third system includes *p* and *ff*. The fourth system includes *p* and *cresc.*. The fifth system includes *sf* and *p*. The sixth system includes *sf* and *sf*. The score concludes with the instruction *attaca subito il Allegro*.

(b) Middleground graph

The image shows a musical score for piano with a middleground graph. The score is in C minor, 3/4 time, and consists of 10 measures. The graph highlights several melodic lines: a 5-line (G-F-E^b-D-C) in the upper voice, a 3-line (G-A-B) in the middle voice, and a double-neighbor (G-A-F-G) in the lower voice. Annotations include "D-Ab unfolding" at measures 1-2 and 9-10, and "3rd beat" pointing to the third beat of measure 10. Chord symbols Cm: i, V/III III, and V ⁷/₃ are indicated below the bass staff.

Furthermore, to ignore the strong presence of the opening tonic with an emphasis on register as a decisive criterion commits a theoretical error. There is no reason to bypass the opening tonic (m. 1) (Example 5-9-(a)). Its crucial status, located in the very first measure, is asserted not only by long rhythmic value, but also by the *fp* dynamic indication and the distinctively thick texture. Furthermore, in a harmonic sense, it confirms the tonality through a subsequent harmonic motion (mm. 1-4), which establishes C-minor as a key, i-V-i⁶, and then enters a new harmonic domain, III, at m. 5. This structural tonic supports the *Kopfton* [^]/₅, which comes in the next measure, introduced by an incomplete neighbor note. A lower-level unfolding D-A^b leads magnetically to the advent of the *Kopfton*. This way of introducing the *Kopfton* by an incomplete neighbor note is later adopted in the lead-in passages to the exposition (m. 10) and to the recapitulation (mm. 186-193) over V⁹ chord.

This would be an appropriate place to compare the distinctive roles of the introduction in Beethoven's piano sonatas. Eric Blom points out the sparing presence of slow introductions in Beethoven's piano sonatas:

The optional slow introduction of the classical symphony and sonata form occurs remarkably rarely in Beethoven's piano sonatas. In his symphonies he followed the precedent of Haydn and Mozart, more or less, so far as the frequency of such introductions went. Four symphonies out of his nine have them. But among the thirty two sonatas only three have introductions prefixed to them, the present work, Op. 81*a* and Op. 111. The three and half bars of *adagio cantabile* which introduce Op. 78 are too rudimentary to count, and the *largo* incident in Op. 31 No.2 is not an introduction at all, but a thematic feature of the first movement itself.¹³

The structural roles of Beethoven's introductions as seen in Op. 81*a*, Op. 111, and op. 13 are quite different from one another. The slow introduction of op. 81*a* penetrates into the *Ursatz* as an inseparable entity. The opening tonic serves as an initial point generating the tonal structure because the primary theme does not begin with a tonic but still prolongs a neighbor-note A^b and its harmonic support, which comes as early as m. 6. The neighbor-note A^b, which is stretched out, passing through the primary theme, leads to a tight connection between the introduction and the *Allegro*. The role of the opening tonic gives the introduction tonal stability, but lack of a descending line prevents the section from serving as a self-contained entity. On the other hand, the introduction of op. 111 serves as a pure upbeat to the following exposition because of the absence of the structural tonic. Thus, the entire introduction prolongs a dominant harmony, which leads strongly to the dramatic

¹³ Eric Blom, *Beethoven's Pianoforte Sonatas Discussed* (1938; reprint, New York: Da Capo Press, 1968), 57

advent of the primary theme. Its role could be safely regarded as a prefix subordinate harmonically to the following exposition.

Example 5-10. Middleground graph of the introductions of op. 81a and 111

(a) Introduction of the first movement in E^b major, op. 81a

Intro 1 2 4 6 7 10 11 12 13 17 Exp. 21

3
NN
3-line
5-line
V7
I
Eb: I

(b) Introduction of the first movement in C minor, op. 111

Intro 1 2 4 5 9 10 11 19 Exp. 22

3-line
5-line
o7
6
Arp.
V
i
Cm: V

Unlike the two distinctive roles of the introductions of these later sonatas, the introduction in question serves as an independent self-contained entity. Not only is the opening tonic assertive enough to generate a *Ursatz*, but also the fifth-line descent

adds to the introduction satisfactory completeness to be regarded as an autonomous unit. Interestingly enough, the tonal structure of the introduction of op. 13 foreshadows the large-level tonal scheme of the exposition: the harmonic progression I—V/III—III—V seen in the introduction also forms the exposition, thus leading to the *Ursatz* parallelism. What leads to a tight connection between the introduction and the following exposition is a large-level elision: at the very point where the structural dominant ninth chord resolves to the tonic at m. 11, the primary theme commences.

Example 5-11. Middleground graph of the development (mm. 132-193)

The image shows a musical score for Example 5-11, a middleground graph of the development from measures 132 to 193. The score is in C minor and features a 5-line (G-F-E \flat -D-C) and a 3-line. The harmonic progression is Cm: v, V7/iv, iv, viio7/V, V, 9, i.

Most remarkable is that the partial return of the introductory material later brings about $\hat{2}$ and the dominant at the beginning of the development. Thus, the development section of the movement prolongs the dominant, unlike Beethoven's earlier sonata-form movements in the minor-mode, where the development prolongs the mediant and only reaches the dominant near the end of the section. Beethoven here synthesizes two sonata-form schemes in the minor mode: while he espouses the tonic-to-mediant type scheme in the exposition, he adopts the tonic-to-dominant type

development, in which a middleground conversion of minor to major takes place over the dominant.

The development generates a fifth-line as do the introduction, the primary theme in the exposition and recapitulation, and the entire recapitulation. The introductory material (mm. 132-135) establishes G as a primary note of the fifth-line descent. The masterly enharmonic modulation changes its harmonic support from dominant to mediant, which takes both functions as mixture and leading-tone chromaticism to anticipate the subdominant at m. 152, as Cadwallader and Gagné has pointed out.¹⁴ The skillful combination of the introductory material and primary-theme fragment over modulatory sequences leads to this subdominant harmony, which foreshadows the dominant of the retransition (m. 161). A large-level unfolding A^b -F over the subdominant harmony introduces $\hat{4}$ of the fifth-line descent, whereas $\hat{3}$ and $\hat{2}$ come over vii^{o7}/V and V respectively at m. 164 and m. 166.

A leading-tone third-line generates the retransition. Beethoven's emphasis on F6 in this passage marks this retransition (see the score in mm. 170-186).¹⁵ Listeners might notice the incomplete neighbor note A^b which leads to the *Kopfton* of the recapitulation. As mentioned before, the unfolding D- A^b bears resemblance to the earlier ones, which appear in mm. 1-2 when the *Kopfton* of the introduction is first

¹⁴ Allen Cadwallader and David Gagné, *Analysis of Tonal Music: A Schenkerian Approach* (New York: Oxford University Press, 1998), 388. Cadwallader and Gagné would agree with this interpretation although they give a higher-level graph of the bass voice only: they see the E-F-F[#]-G motion in the bass between III and V governs the entire section.

¹⁵ Oster has pointed out the parallel between the retransition and mm. 9-10 in the introduction. Ernst Oster, "Register and the Large-Scale Connection," 68.

introduced and at m. 10 when the *Kopft*on of the movement is confirmed. The role of this unfolding lies in connecting adjacent formal sections tightly.

Quite noteworthy is the idiosyncratic way of transforming the primary theme and the transition of the exposition in the recapitulation. The transition, of course, is not necessary for the tonal connection between the primary and second themes in the recapitulation. Beethoven transforms this section through his striking developmental process. Roger Kamien shows the transformational process in the recapitulation, stressing the motivic connection among the formal sections (Example 5-12).¹⁶ He argues for the primacy of $\hat{8}$ and sees a large-level neighbor-note figure C-B-C as prolonging the primary theme. He then shows that the same motivic idea, a neighbor-note motive, governs the transition: in the transition, the large-level neighbor-note figure takes the i-It.⁺⁶-I (=V/iv) harmonic progression.

Despite its emphasis on the motivic connection, this reading raises a problem in that it overlooks the presence of the first-order fifth-line within the primary theme as in the exposition's primary theme. This analytic problem is caused because, as Kamien claims in a footnote, his graphs support and elaborate Oster's reading, assuming the primacy of $\hat{8}$ in the primary theme.¹⁷

¹⁶ Roger Kamien, "Aspects of the Recapitulation in Beethoven Piano Sonatas," *Music Forum* 4 (1976): 225-227.

¹⁷ Kamien bases his analytic graph on the large-scale frame of Oster's "bizarre" reading, but further constructs his own detailed voice-leading graph for the primary theme and the transition.

Example 5-12. Kamien's middleground graph of the recapitulation¹⁸

a)

b)

5.3 : First Movement of op. 14, no. 1, E major

The first movement of the E-major Sonata, op. 14, no. 1, is a stereotypical example of a “textbook” sonata form (our Model I-1). The *Urlinie* third-line ($\hat{3} - \hat{2} - \hat{1}$) projects the entire fundamental structure of the piece, and the interruption at $\hat{2}$ generates the development section (Example 5-13). The recovery of the *Kopfton* with the return of the primary theme in the recapitulation initiates the second part of the

¹⁸ Ibid., 227. This is Kamien's Example 29-a) and b).

Ursatz. The first-order third-line leads to the primary theme, replicating the third-line of the *Ursatz*, whereas a fifth-line from $\hat{2}$ generates the second-theme area.

Example 5-13. Middleground graph of op. 14, no. 1, first movement

The reader might not agree immediately with our choice of the *Kopfton* $\hat{3}$, given the prominence of $\hat{5}$ within the primary theme (Example 5-14). However, such a reading as a fifth-line results in several problems. First, the analyst would have to have reason to accept the inconsistency of interpreting a simple repetition of a passage in a different way. Mm. 11-12 is an exact duplication of mm. 9-10: the only difference lies in the register. The analyst would choose $\hat{4}$ in the tenor at m. 10 and then $\hat{2}$ in the alto at m. 12, by regarding the third-line within the previous material (mm. 1-10) as a lower-level event. Second, the analyst would encounter another problem immediately thereafter: failure to find $\hat{4}$, a large-scale passing note in the transition (mm. 13-22).

Example 5-14. Annotated score of the primary theme and transition (mm. 1-

22)

The musical score is annotated with several key features:

- Measures 1-5:** Labeled as the "Prelude". The right hand has a melodic line starting with a $\hat{5}$ fingering. The left hand has a dense chordal accompaniment.
- Measures 6-8:** A "3-line" annotation is placed over a triplet in the right hand.
- Measures 11-12:** A trill (TR) is marked with the note "No place for $\hat{4}$ in TR".
- Measures 17-22:** The final section of the score, ending with a chord marked with a $\hat{2}$ fingering.

In particular, there is no plausible place reserved for $\hat{4}$ in the transition because the music proceeds speedily toward a modulation to the dominant key. The direct and

simple shift to the dominant of the dominant key (E2-E#2-F#2 in mm. 13-17) signals that the advent of the new key has taken place. This simple way of switching to the dominant key without a harmonic excursion, as seen in this movement and in the first movements of the G-major sonata, op. 14, no. 2, and the B^b-major sonata, op. 22, is a structural characteristic of sonata-form works of this period.

Despite the drawbacks of this $\hat{5}$ -line reading, there is still a possible alternative reading as a fifth-line if one puts $\hat{3}$ at the beginning of the transition (m. 13), where an elision technique weakens the identity of the cadence, and elevates the voice-leading event of the primary theme into the background level ($\hat{5} - \hat{4} - \hat{3}$). This sonata-form model, which does not contain the first-order fifth-line, is what I call a primitive sonata form (Model I-4) that Beethoven used in his pre-opus works and op. 49, no. 2. One might recall WoO 47-1, whose simple harmonic motion (I-V) in the primary theme as well as the absence of a transition results in the lack of a self-contained structural entity for the primary theme. Similarly, in WoO 51, the compact transition makes it difficult for the transition itself to have an independent line directly from the *Kopft*on and forces the analyst to jump directly to the first-level middleground. Allen Forte and Steven Gilbert advocate the reading from $\hat{5}$ although they do not specify where and how the structural voice-leading events happen.¹⁹

¹⁹ Allen Forte and Steven Gilbert provide a partial deep-level middleground graph for the development, where they choose $\hat{5}$ as the primary tone at the reprise. See Allen Forte and Steven Gilbert, *Introduction to Schenkerian Analysis* (New York: W.W. Norton & Company, Inc., 1982), 279.

Example 5-15. A hypothetical reading of the exposition: the $\hat{5}_5$ -line primitive

sonata form

The $\hat{5}_5$ -line interpretation (shown in Example 5-15) would gain more persuasive power if one looked carefully at the “mosaic” compositional process of the primary theme, whose attribute is essentially fragmentary (marked with *prelude*, *a*, *b*, and *c* in Example 5-14). The first four measures serves as if it were a prelude to the following “real” theme, not only because its thematic outlook is different from the remainder of the primary theme (mm. 5-13ff), but also the four-measure unit is conclusive in a harmonic sense enough to be felt as a unit separable from the remainder. It forms a self-contained entity, by having the I-ii⁷-V⁷-I harmonic motion, although the tonic pedal obscures such a clear harmonic motion. The subsequent passage (mm. 5-13ff) consists of three distinctive segments and their repetitions in another register.²⁰ The repetition technique expands the length of the brief primary

²⁰ This structural feature seems to provide a legitimate reason for Beethoven’s decision to arrange the movement for string quartet. Kinderman says: “There is a Mozartean flavour as well to the chromatic touches in the main subsidiary theme, and perhaps also to the transparent contrapuntal textures so evocative of chamber music. Op. 14 no. 1 is the only

theme. This repetition, however, does not affect the essential voice-leading structure: its role is rhetorically assertive. If one eliminated the duplicated fragments, then he would get a compact primary theme which supports the possibility of the primitive model as in WoO 47, no. 1, in which the highest-level $\hat{5} - \hat{4} - \hat{3}$ generates the primary theme. However, if one considers the historical fact that Beethoven gave up the primitive sonata-form model after his pre-opus works and, more decisively, the analytic fact that the possible *Kopftone* $\hat{5}$ remains intact throughout the primary theme and thus would be better to be interpreted as a cover-tone besides the main voice-leading activity, then this reading would be discarded.

One of the notable characteristics of this movement is Beethoven's treatment of the second-theme area (Example 5-16). Beethoven generates the lyric second theme through a neighbor-note figure (F[#]5-G[#]5-F[#]5) and incomplete third-line (F[#]5-E5-D[#]5) instead of the usual fifth-line. He compensates for this sense of incompleteness in the closing theme (mm. 47-57), by projecting there the first-order fifth-line descent that is normally expected in the second theme. As Carl Dahlhaus points out, the closing theme retains the qualities that a theme is supposed to possess.²¹ This means that the closing theme does contain thematic characters that are

sonata Beethoven ever arranged for string quartet, and his decision to undertake the transcription in 1802 was surely motivated by the special affinity of this sonata with the quartet medium" (Kinderman, *Beethoven*, 58). For comparison of these two versions, see Barbara Sturgis-Everett, "The First Movements of Beethoven's Piano Sonata in E major, Op. 14, No. 1 and His String Quartet in F major, Op. 14, No. 1: A Critical Comparison" (DMA diss., University of Cincinnati, 1986). In chapter 1, she provides a detailed analysis of the piano version.

²¹ Dahlhaus says: "In the E major Sonata, Op. 14 No. 1, the closing group (bar 47) is everything that Hugo Riemann required the first subject of a sonata to be: a complex structure

expected in the second theme. In terms of harmony and voice leading, the closing theme is more conclusive and self-confident than the second theme, punctuated as it was by imperfect authentic cadences. Beethoven seems deliberately to avoid a perfect authentic cadence in the second theme, by placing $\hat{3}$ or $\hat{5}$ on the top voice of the final chord (m. 30, 38, 41, and 46): listeners would perceive that $\hat{3}$ has been superimposed in the tonic chord of m. 46 because of the strong tendency of the seventh of V^7 in the previous measure.

Example 5-16. Middleground graph of the second-theme area (mm. 23-57)

The image shows a musical score for a piano piece in A major. It is divided into two sections: the 'Second theme' (measures 22-42) and the 'Closing theme' (measures 46-57). The score is written in treble and bass clefs. Above the staff, there are annotations for '3-line' and '4-line motive'. The '3-line' annotations are placed under the notes in measures 22, 25, 29, 34, 38, and 42. The '4-line motive' annotation is placed under the notes in measures 51, 52, 55, and 57. Below the staff, there are harmonic annotations: 'B: I' and 'E: V' at the beginning, '(IAC)' under measures 30 and 38, 'V7' under measure 46, 'I' under measure 51, 'ii6' under measure 55, and '(PAC)' under measure 57. There are also some other annotations like 'N', 'ct', and 'x' scattered throughout the score.

Attention to the closing theme is not new. Beethoven has improved the structural status of the closing theme in his earlier A-major Sonata, where the second theme (whose complex enharmonic modulation prevents generation of a line) is followed by the closing theme, which takes a clear fifth-line descent, and also in the

containing contrasts within itself" (Carl Dahlhaus, *Ludwig van Beethoven: Approaches to His Music*, 101).

Pathétique, where the closing theme led by V/III generates a first-order third line ($\hat{3} - \hat{2} - \hat{1}$).

The development section prolongs the dominant reached at the second theme at m. 23 (Example 5-17). The presence of a transition that modulates back offers an illusory impression that the section begins with a tonic. However, the quickly ensuing motion toward the key of A minor indicates that the key stated at the beginning is not a tonic in the longer range, but really a dominant. The development section mostly prolongs E, which is a long-range passing tone between F \sharp (m. 22) in the second theme and D \sharp in the retransition. This large-level leading-tone third line generates all of the development section. The long-range neighbor-note figure (B2-C3-B2) in the bass counterpoints the third-line descent.

Example 5-17. Middleground graph of the development (mm. 61-90)

Forte and Gilbert agree with our reading of the development, although they choose $\hat{5}$ as the primary tone of the entire movement, as mentioned before:

Against the bass, which prolongs the dominant harmony by means of a large-scale upper neighbor C (m. 65), the descant prolongs f \sharp^2 through a descending third: f \sharp^2

(m. 38)—e² (m. 65)—d^{#2} (m. 81). The inner voice descends from b¹ to f^{#1} in the retransition and the prolonged dominant harmony resolves to tonic at the beginning of the reprise, with d^{#2} in the descant moving to e¹ in the inner voice, as shown.²²

Example 5-18. Forte and Gilbert's reading of the development (mm. 61-90)

Beethoven uses this voice-leading scheme again in the recapitulation, thus achieving a parallelism: the leading-tone third-line (F[#]-E-D[#]) from [^]2 emerges in the transition of the recapitulation (mm. 102-107), a strategic place for Beethoven, where attractive transformational and developmental processes are adopted, thus creating the brief impression of a second development (Example 5-19).

Example 5-19. Foreground graph in the transition of the recapitulation (mm. 102-112)

²² Allen Forte and Steven Gilbert, *Introduction to Schenkerian Analysis* (New York: W.W. Norton & Company, Inc., 1982), 278-279.

Recall Beethoven's compositional plan that adopts a harmonic scheme for the development section again in the recapitulation (especially, in the transition of the recapitulation) in a reduced guise in the C-minor Sonata, op. 10, no. 1, where the large-scale i-iv-V⁷-i harmonic progression supporting $\hat{5} - \hat{4} - \hat{3}$ governs both the development and the recapitulation.

Carl Schachter does make a comment about motivic figures that arouse our interest, although he does not provide a complete graph.²³ As Schachter points out, the rising fourth and fourth-line serve as an underlying motive unifying thematic material of the movement. Schachter reveals Beethoven's consistent and persistent effort to relate several of the themes with the rising fourth motive B-E as seen in Beethoven's sketches for the movement in question. The fourth emerges as an untransposed form even through changes of key. He shows how Beethoven also develops a looser web of motivic relationships in order to carry through this plan in its rigorous, transformed, or transposed form. He penetratingly describes the opening passage (mm. 1-4) as a network of the fourth motive:

The idea that fills these four measures is a most remarkable one: both the larger shape and its most prominent component figure echo the rising fourth between the first two notes, b¹ and e². Thus the entire soprano line rises from the b¹ of measure 1 to the e³ of measure 4; the line, therefore, represents the initial fourth expanded in time from one bar to four and in size from a simple interval to a compound one. This expanded fourth is filled in by two passing tones, c^{#2} and d^{#2}, that fall on the downbeats of measure 2 and 3; because of the passing tones, the expanded fourth is expressed as a stepwise linear progression, b¹-c^{#2}-d^{#2}-e³. Nested within this overarching linear progression is a smaller filled-in fourth (m. 4), emphasized by a new and

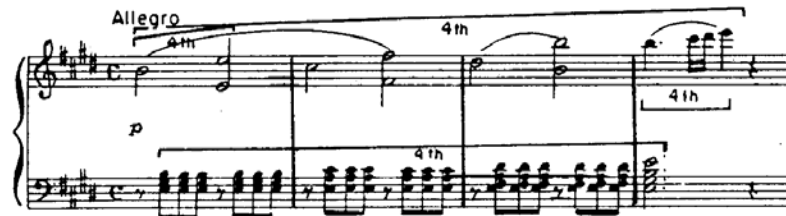
²³ Carl Schachter, "Beethoven's Sketches for the First Movement of op. 14, no. 1: A Study in Design," *Journal of Music Theory* 26, no. 1 (1982): 1-21.

characteristic rhythm. The small fourth helps to transfer the goal tone up to the three-line octave; through motivic association it also strengthens its connection to the initial tone, b^1 .

Note how the large fourth-progression of the right hand part is reinforced by the uppermost notes of the left hand, which double it at the lower octave. In addition, Beethoven's slurs help the player project both the large and the small fourth progressions. The new slur at the head of measure 3 emphasizes $d\#^2$ and thus helps to connect it to e^3 (measure 4), which is separated from it both in register and in temporal sequence. The slur over measure 4 isolates and defines the small fourth-progression.²⁴

Example 5-20. Network of the fourth motive in op. 14 no. 1 (mm. 1-4): after

Schachter



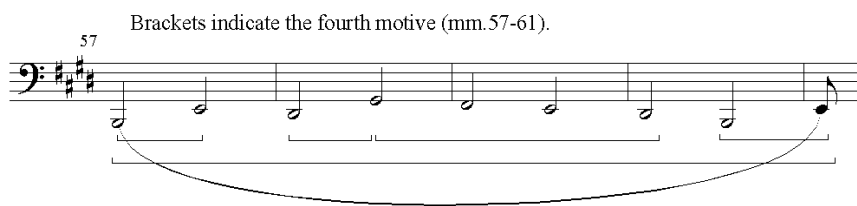
The fourth emerges in multiple places in a straightforward way, or occasionally in an expanded time span, with filled-in passing notes. The fourths as seen in mm. 39-40 ($F\#5$ - $B5$ in the upper voice), mm. 47-49 ($F\#2$ - $B2$ in the bass), and m. 50 ($F\#4$ - B in the upper voice) are easily audible instances.²⁵ On the other hand, a series of fourths as seen in the transition that modulates back (mm. 57-61) recall the web of motivic relationships of the opening (mm. 1-4) (Example 5-21). The most startling use of the fourth motive is heard in the closing theme (mm. 54-57 in Example 5-16). The rising fourth-line from the cover-tone $F\#5$ to $B3$ obscures the

²⁴ Ibid., 2-3.

²⁵ Beyond Schachter's fourth line, Neumeyer suggests that the entire movement could be saturated within the ascending fourth-line *Urlinie* ($\hat{5}$ to $\hat{8}$). See David Neumeyer, "The Ascending *Urlinie*," *Journal of Music Theory* 31, no. 2 (1987): 275-303. Especially, see 298-301. Neumeyer presents the possibility of the ascending *Urlinie* ($\hat{5}$ - $\hat{6}$ - $\hat{7}$ - $\hat{8}$) of the movement (his Example 22).

structural descent $\hat{3} - \hat{2} - \hat{1}$, by articulating an audible ascending fourth-line although its members are dispersed in several registers.²⁶ Beethoven achieves motivic unity efficiently through the pervasive use of the fourth motive in various places and levels.

Example 5-21. Web of the fourth motives in mm. 57-61



5.4 : First Movement of op. 14, no. 2, G major

The first movement of op. 14, no. 2 is another exemplary piece of the $\hat{3}$ -line “textbook” sonata form (Model I-1). Schenker also sees the movement as a third-line (Example 5-22).²⁷ The absence of an appropriate place for $\hat{4}$ in the transition seems to lead Schenker to exclude the possibility of the $\hat{5}$ -line in spite of the prominence of D in the primary theme. It is a remarkable feature witnessed since his C-major Sonata of op. 2, no. 3 that Beethoven preferred the $\hat{3}$ -line *Urlinie* in the major-mode sonata form (a design which also, of course, assumes $\hat{5}$ as a middleground-level cover-tone). This means that, as soon as the transition begins, Beethoven moves quickly to the new key region.

²⁶ Carl Schachter, “Beethoven’s Sketches for the First Movement of op. 14, no. 1: A Study in Design,” *Journal of Music Theory* 26, no. 1 (1982): 10-11. Schachter notes this fourth as a manifestation of the transposed fourth.

²⁷ Schenker produced five fragmentary graphs of this movement in *Free Composition*: Fig 47-2, 114-6, 122-1, 132-1, and 154-6.

The initial ascent (G4-A4-B4) to the *Kopfton* $\hat{3}$ and a first-order third line ($\hat{3} - \hat{2} - \hat{1}$) generates the primary theme.²⁸ Schenker then interprets the ii^6 reached at m. 14 as governing the entire transition section, passing through the key of D-major, which has already been established in the next measure (m. 15).

Example 5-22. Schenker's graph of the exposition

© With kind permission by Universal Edition A.G., Wien

However, the stepwise rising bass line, outlining the scalar members of the dominant key $\hat{1}$ to $\hat{5}$ (D-A in mm. 15-19), verifies that the music has already reached the new key through a chromatic modulation (C^\sharp at m. 14) and is now prolonging the tonic of the new key (see the square bracket in Example 5-23).²⁹ The same harmonic progression is exploited twice: first in order to modulate to the dominant key (G-A-B-C-C $^\sharp$ -D) and second to confirm the establishment of the dominant key through tonicizing the dominant harmony of the dominant key (D-E-F $^\sharp$ -G-G $^\sharp$ -A). Bar 15 is the strategic place, where a new tonal event legitimately commences, and bar 19 is an equally important point, where the arrival at the new key is securely confirmed.

²⁸ For a more detailed graph of the primary theme (upper voice alone), see Schenker's *Free Composition*, Figure 122-1.

²⁹ Beethoven has adopted the similar voice-leading scheme in the first movement of his G-major Violin Sonata, op. 30, no. 3.

Example 5-23. Middleground graph of the primary theme and transition (mm. 1-25) (after Neumeyer and Tepping)³⁰

The image shows a musical score for Example 5-23, which is a middleground graph of the primary theme and transition (mm. 1-25) from Beethoven's G-Major Sonata, op. 14 no. 2. The score is in G major and consists of two staves: a treble staff and a bass staff. The treble staff contains the primary theme and transition, with markings for 'c.t./p.p.', 'reg.', and 'over.'. The bass staff contains a middleground graph with Roman numerals and figured bass notation. The graph shows a sequence of chords: G: I, (V), I, ii⁶, V, I, V, and V/V. The figured bass notation includes '6', '6 6-5 4-3', '6 6 6 6 5-6 5-6 5-6 6', and '6'. The graph also includes a box around the first three measures (mm. 5-7) and another box around measures 15-17. The measures are numbered 5, 8, 15, 18, and 19.

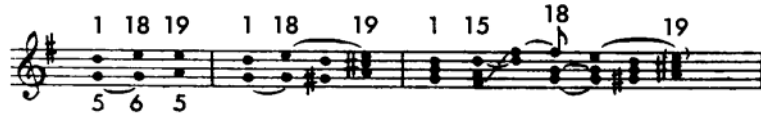
Oswald Jonas does not agree with Schenker's or with Neumeyer and Tepping's interpretation. He sees that the structural dominant arrives as late as m. 26, by implying the initial tonic as prolonged through m. 18 and emphasizing the role of the 5-6 contrapuntal motion, which breaks the parallel fifths. He describes this passage as follows:

The organic growth, from the background, of foreground diminution is vividly illustrated by the first theme [and modulation] from Beethoven's G-Major Sonata, op. 14 no. 2. In the motion toward the second theme group, which is in the dominant, the possibility of parallel fifths arises when the bass moves from G to A on its way to D. These fifths are averted by an anticipating sixth...³¹

³⁰ David Neumeyer and Susan Tepping, *A Guide to Schenkerian Analysis*, 109 (their Example 8.12).

³¹ Oswald Jonas, *Introduction to the Theory of Heinrich Schenker: The Nature of the Musical Work of Art* ed. and trans. John Rothgeb (New York and London: Longman Inc., 1982), 138.

Example 5-24. Jonas's reading of mm. 1-19³²



Edward Laufer also criticizes Schenker's reading of the transition and offers a detailed voice-leading graph, which is very close to Jonas's interpretation:

Mm. 8-19 are incorrectly read in Schenker's sketch (cf. Examples 25-26 [reproduced in Example 5-25-(a) and (b)]). The foreground shows mm. 8-18 to be a single unit: the left hand figuration, the octave rise characteristically set off by the chromaticism $g\#$, the motivic features of the top part, including the e^2-d^2 figure which binds together beginning and ending (m. 18) of the prolongation. To be noted are the crescendo, which also functions to mold the passage into one gesture, and the dynamic change at m. 19, along with the repeated motivic variant, marking the intermediate goal $II\#$ after I^{5-6}_5 , and the rhythmic acceleration (shown by the heavier bar lines in Example 26 [Example 5-25-b]). This example also shows how the opening motive gives rise to the continuation.³³

He sees that the tonic remains intact through the register transfer until m. 18 and that the predominant harmony leading to the advent of the dominant comes as late as m. 19, by incorporating into the decision of the voice-leading scheme foreground events such as motivic association and dynamic and rhythmic changes as significant factors for the determination of the tonal structure. Laufer's assertion that the foreground motivic connection of the right hand, the falling fourth line unifies mm. 14-19 as a single unit is agreeable, but poses a theoretical problem in that he tends to depend upon such surface factors as foreground rhythms and motive, rather than upon

³² Ibid., 138 (his Example 206).

³³ Edward Laufer, "Heinrich Schenker, *Free Composition*, translated and edited by Ernst Oster: Reviewed by Edward Laufer," *Music Theory Spectrum* 3 (1981): 173.

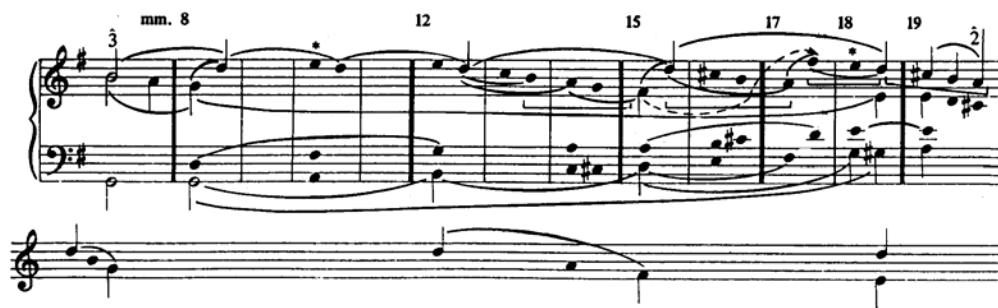
harmonic logic and syntax in the voice-leading structure. Recurrences of C^\sharp as a leading tone after m. 14 make D heard as the local tonic in this passage. Furthermore, Beethoven's choice of a $\frac{6}{3}$ chord instead of a $\frac{5}{3}$ chord serves as a decisive factor against Laufer's interpretation assuming that the octave transfer prolongs the initial tonic. Local 5-6 contrapuntal motions stop at m. 17. If there were a $\frac{5}{3}$ chord on G, then Jonas' and Laufer's readings might be plausible.

Example 5-25. Laufer's graph of the transition³⁴

(a) A higher-level graph of mm. 3-26



(b) A detailed vice-leading synopsis of mm. 3-19



Beethoven produces the second theme with a fifth-line descent prolonging $\hat{2}_2$ in the manner that we expect (Example 5-26). The emphatic cadence prepared by the predominant harmony and cadential $\frac{6}{4}$ chord (mm. 41-44) and reinforced rhetorically

³⁴ Ibid., 176 (his Examples 25 and 26).

by its repetition (mm. 45-46) concludes the second theme and thus leads to a clear separation from the following closing theme. The closing theme embodies harmonic and melodic characters which give the impression of a legitimate independent theme and generate a distinctive fifth line. In both second and closing themes, where two bass arpeggiations support the fifth lines, the descent to $\hat{3}$ is achieved early and most of the subsequent passages prolong this $\hat{3}$. The emphasis on $\hat{3}$ within the fifth-line descent ensures the superior status of the second third-line starting from $\hat{3}$ when the fifth-line of the second-theme area is broken into two separate third-lines in the recapitulation and thus minimizes this structural inconsistency in Schenker's sonata-form theory. Interestingly enough, the division of the fifth-line into two distinctive third-lines is seen within the second theme itself. The S_2 -theme (mm. 37-47) characterized by distinctive thematic outset is the strategic point of dividing the fifth-line. The primacy of $\hat{3}$ within the fifth-line is also proved in the closing theme. The closing theme distributes for $\hat{5} - \hat{4}$ two measures and for $\hat{3}$ five measures, thus emphasizing the primacy of $\hat{3}$. Thus, first three descent ($\hat{5} - \hat{4} - \hat{3}$) serves as a prefix to $\hat{3}$ in this closing theme.

Example 5-26. Neumeyer and Tepping's interpretation of the second-theme area³⁵

Lauer provides quite a detailed voice-leading graph of the second-theme area, with several annotations about the characteristic motive of the closing theme (F[#]-G-G[#]-A) embedded in the multiple-level voice-leading structure (marked with brackets in the graph). He sees that the fifth-line is supported by the I-ii⁶-V⁶₄₋₃-I harmonic progression by evaluating the third-line (A-G-F[#] in mm. 26-33) as a lower level, in contrast to Neumeyer and Tepping's reading, which assumes the primacy of $\hat{3}$ by interpreting the first three descent ($\hat{5} - \hat{4} - \hat{3}$) as a prefix (compare Example 5-26 and 5-27). Schenker's fragmentary graph of the closing theme (Example 5-27) seems to affect Lauer's reading assuming the primacy of $\hat{2}$ ($\hat{5}$ in the new key). Both of them elevate the straightforward descent ($\hat{4} - \hat{3} - \hat{2} - \hat{1}$) in mm. 57-58 into a higher level. The choice of Neumeyer and Tepping's reading gives a significant advantage that prevents the drawback of Schenker's sonata-form theory, in which the first-order fifth-line in the second-theme area of the exposition should be adjusted into the $\hat{3}$ -line

³⁵ Neumeyer and Tepping, *A Guide to Schenkerian Analysis*, 110 (their Example 8.13).

Urlinie. The primacy of $\hat{3}$ in the second theme lets the fifth-line be easily adjusted into the $\hat{3}$ -line with a prefix-type $\hat{3}$ -line from a cover-tone in the recapitulation.

Example 5-27. Laufer's graph of the second-theme area

Example 5-28. Schenker's graph of the closing theme

© With kind permission by Universal Edition A.G., Wien

Quite challenging is to interpret the development section because of the ambiguous role of the G-minor opening. Schenker gives a detailed graph of the section. He admits the primacy of D as a principal upper voice until the seventh of the dominant is introduced by step at m. 122 (8-7 motion) while the dominant *Stufe* reached at m. 26 is prolonged through the tonic minor that appears at the beginning of

the development section. In his reading, the tonic minor plays a significant role: two additional occurrences of this tonic at m. 86 and m. 106 elevate the status of the tonic minor. It remains intact until it moves at m. 107 to the structural dominant leading to the retransition through an augmented-sixth chord. He passes by the four-measure presence of the second theme in ^bIII (mm. 74-77) and the return of the ^bIII with its seventh (A^b) in mm. 96-98, which eventually leads to ^bVI by serving as a secondary dominant seventh chord ($V^7/^b\text{VI}$) in the false recapitulation beginning at m. 99. Thus, in Schenker's graph (first at m. 64 and later at m. 86), ^bIII and ^bVI are subsumed into a lower level than the two tonic minors.

Example 5-29. Schenker's graph of the development

© With kind permission by Universal Edition A.G., Wien

Neumeyer and Tepping basically agree with Schenker in that they admit the significant status of the minor tonic at m. 64 (Example 5-30). However, they generate a fourth-line descent with modal mixture ($\hat{5} - \hat{4} - \flat 3 - \hat{2}$), in contrast to Schenker's reading, which assumes the prolongation of D with a variety of lower-level scalar figures. Neumeyer and Tepping's interpretation of the bass almost coincides with Schenker's, except that they elevate the presence of ^bVI at m. 99 into a

higher level and see the subsequent passage as prolonging the bVI until the structural dominant arrives at m. 107 through an augmented-sixth chord. This discrepancy comes from how to interpret the status of the brief G-minor chord at m. 106. The presence of bVI with the primary theme is strong enough to establish this harmony as a local goal of the development section. Furthermore, Beethoven's slurring of mm. 103-106 seems intended to show that these four measures serve as a single unit. A drawback arises in Neumeier and Tepping's interpretation: parallel fifths occur when $D-C-B^b-A$ is counterpointed by $G-F-E^b-D$. Although these parallels are averted through insertions of the foreground events coming from the circle of fifths, they suggest the need for an alternative reading.

Example 5-30. Neumeier and Tepping's graph of the development

The image displays two systems of musical notation for piano accompaniment, likely from a development section. Each system consists of a grand staff with a treble and bass clef. The first system includes a fermata over the first measure and a second ending bracket over the last two measures. The second system also features a fermata and a second ending. Below the staves, harmonic analysis is provided. The first system's analysis shows a G major triad (G) followed by a sequence of chords: (i) - III - V - (i). The second system's analysis shows a bVI chord followed by V. Fingerings and fingering changes are indicated with numbers and arrows. A '2' is written above the first measure of the first system. A dotted line connects the two systems, indicating a continuation of the musical material.

G: (i - - - - III - - - - V - - - - i) (bVI - - - -) V

Edward Laufer proposes a totally different interpretation of the development section, in which a large-level neighboring motion (D-E^b-D) supports a leading third-line (A-G-F[#]) (Example 5-31). He elevates the tonal status of E^b major by interpreting the G-minor tonic at the beginning as a passing event. The expansion of B^b in mm. 74-93 leads strongly to the advent of ^bVI in m. 99, which at the level of the entire development serves as a neighbor-note between the dominants. The upper-voice supports this reading: a large-level leading-tone third line with a chromatically altered passing tone (A-[A^b]-G-F[#]) generates the entire development, as in the E-major sonata of op. 14, no. 1, where the leading-tone third line (F[#]-E-D[#]) from [^]₂ decides the voice-leading scheme of the section.

Laufer's reading becomes more convincing if one takes the aspect of register into consideration. All four members of the descent in the upper voice are located in a single octave register: A5 at m. 26, A^b5 at m. 93, G5 at m. 99 and F[#]5 at m. 107. Laufer relates this large-level leading-tone third line (A-G-F[#]) to the lower-level third-line in the second and closing themes, by stating "The top voice a²-ab²-g²-f^{#2} may well be a vast expansion of the a²-g²-f^{#2} motive which characterizes the second subject and closing section of the exposition."³⁶

³⁶ Edward Laufer, "Heinrich Schenker, *Free Composition*, translated and edited by Ernst Oster: Reviewed by Edward Laufer," *Music Theory Spectrum* 3 (1981): 179.

Example 5-31. Laufer's graph of the development

Jack Adrian agrees with Laufer's reading assuming the tonic minor as a passing sonority. He states:

In Beethoven's Piano Sonata Op. 14, No. 2, the development section begins in the parallel minor tonic. The material of the first four bars of the development section comprises a restatement of the opening material, now in G minor instead of G major. This parallelism is broken at bar 68, and in the ensuing measures it becomes clear that even though this passage refers to the opening of the work, the appearance of the tonic was misleading; the tonic sonority after the double bar was not an independent scale-step but a subsidiary part of a progression leading to the B^b sonority in bar 74 (see Figure 13 [reproduced in Example 5-32]). Not only is the tonic sonority misleading, so also is the return of the initial melodic material.³⁷

³⁷ Jack Adrian, "The Function of the Apparent Tonic at the Beginning of Development Sections," *Integral* 5 (1991): 37-39.

Example 5-32. Adrian's graph of the development

The image shows two systems of musical notation, (a) and (b), for a piano piece. System (a) consists of two staves (treble and bass clef) with a large slur over the first staff. Annotations include '2' above the first staff, 'XPN' and 'PN' above the second staff, and 'N' below the second staff. System (b) also consists of two staves with a large slur over the first staff. Annotations include '3' and '2' above the first staff, 'b. 68', '74', '99', and '107' above the first staff, 'N', 'XPN', and '5-6-7' above the second staff, and 'I', 'V', '[B^b: VI V I]', and 'N' below the second staff.

The choice of a better reading for the development depends upon the interpretation of the hierarchical status of the minor tonic at the beginning of the development and of its later return at m. 86. Neumeyer and Tepping, Laufer, and Adrian all see the initial minor tonic as belonging to a lower level than the dominant and thus agree that the development section prolongs the dominant reached at m. 26. The core difference is whether the initial tonic is an incomplete neighbor note which slides over to F a few measures later, or whether it is a structural entity which serves as a generator of the foreground fourth-line descent. A close examination of the development section suggests that the opening minor tonic does not fulfill tonal conditions to establish G-minor as an independent key. Although the G-minor chord is clearly stated, it soon moves to B^b-major through an enharmonic modulation. In other words, it is simply a chord, not a key. The key of B^b-major, although brief, is

established through a lower-level dominant-to-tonic alternation in mm. 70-77. Furthermore, the later return of the minor tonic at m. 86 appears in the middle of the sequential circle of fifths. These circle of fifths transform the B^b -triad into a B^b seventh-chord and make the latter serve as a dominant seventh chord to the following E^b -major. In fact, the attempt to establish E^b -major as a key was initiated as early as m 91, where the F-minor chord foreshadows the advent of the dominant B^b seventh-chord.

The choice of Laufer and Adrian's reading for the development has analytic advantages. First, it gives a more stereotypical scheme of the development section: the neighbor-note figure, V^bVI-V , is more general and usual prologational design than the $V-i-V$. Second, it dismisses the possibility of parallel fifths, the single drawback of Neumeyer and Tepping's interpretation. Lastly, the third-line of the upper voice supported by a neighbor-note figure does coincide with the development scheme of the E-major Sonata, op. 14, no. 2. Beethoven has adopted a large-level voice-leading scheme in the two development sections in the same opus. Neumeyer and Tepping's graphs efficiently demonstrate how Beethoven diversified his foreground formal aspects from our Model I-1, whereas the development graph by Edward Laufer not only indicates Beethoven's poetic effects—illusory hearing through initiation of the development by the tonic minor—but also makes possible a stylistic generalization that Beethoven adopted the leading-tone $\hat{3}$ -line commonly in the development sections of op. 14.

5.5 : First Movement of op. 22, B^b major³⁸

Charles Rosen regards the B^b-major Sonata of op. 22 as a typical example of Beethoven's mastery in handling unprepossessing musical material:

In the first movement, in particular, Beethoven uses material of a neutral character; the themes have little intrinsic attraction, and they can seem unprepossessing. The interest lies almost entirely in what the composer does with the musical material, in the handling. The first movement is not picturesque, and neither tragic nor humorous, and it lays no claim to lyricism. It is content simply to be masterly.³⁹

As Rosen has pointed out, the opening theme of the first movement consists of “a simple motto, a rising third and falling third,” and the second theme “is made up almost entirely of falling thirds or the inverse equivalent, rising sixths.”⁴⁰ Beethoven's mastery in achieving an aesthetic effect by manipulating and developing coherently with simple material is also mirrored in his handling of the large-level formal structure.

³⁸ Lewis Lockwood points out thematic similarity between the primary theme of the movement and Mozart's quartet, K. 464. Both are based exclusively on unfolding of triads: what he calls the “third chain.” Lewis Lockwood, “Reshaping the Genre: Beethoven's Piano Sonatas from op. 22 to op. 28 (1799-1801),” *Israel Studies in Musicology* 6 (1996): 1-3.

³⁹ Charles Rosen, *Beethoven's Piano Sonatas: A Short Companion* (New Haven and London: Yale University Press, 2002), 147.

⁴⁰ *Ibid.*

Example 5-32. Middleground graph of the first movement of op. 22

The image shows a musical score for the first movement of op. 22, annotated with a middleground graph. The score is divided into three sections: **Exp** (Exposition), **Dev** (Development), and **Recap** (Recapitulation). The measures are numbered as follows: Exp (11, 16, 22, 30, 33, 39, 51, 52), Dev (56, 69), and Recap (109, 113, 128, 138, 147, 153, 161, 182, 183, 187). The graph shows melodic lines (5-line, 4-line) and harmonic structures (V I V/V F:I, V7 I V I, I V I V, ii6 V I). Annotations include "High-level 2 leading to modulation" and "Lower-level 2 over a dividing dominant". The key signature is Bb.

The first movement of op. 22 possesses the design characteristics and thematic procedures of a “textbook” sonata form, but also shows the large-level tonal and voice-leading scheme that we would expect (Example 5-32). At first glance, the music seems to enter the dominant key region as early as m. 11, where the half cadence punctuates the first harmonic journey, and the subsequent passage seems to prolong the dominant already reached (Example 5-33). However, a close examination of the harmonic status reveals that the half cadence is simply a lower-level dividing dominant in the home key and thus the hierarchical status of the tonic initiating the transition (m. 12) is structural enough to extend the tonic prolongation to m. 15.

Example 5-33. A hypothetical reading of the movement as a primitive type

(Exposition only)

Eric Blom vividly describes this passage, in particular Beethoven's intention and its aesthetic effects obtained through Beethoven's maneuvering the expected tonal shift to the dominant:

The first bar shown above [m. 10] turns decidedly from B flat major into F major, with E-natural establishing itself as the leading note of the latter key. Yet Beethoven, by carefully refraining from strengthening the F major implication by means of harmony, still leaves us with a lingering impression that his two octave leap of Fs may possibly represent a dominant of B flat major. The entry in the bass of the motif from Ex. 99 [at m. 12] would seem to dispel all doubt; we are surely in B flat major again. All the same, the chromatic inflections that follow in the third of Ex. 101, with an E-natural again [at the second beat of m. 12], raise a suspicion that F major is after all not very far off. But still the composer goes on tantalizing us, for in the next bar he once again emphasizes E^b. However, just as we wonder what is at last to decide the issue between these two keys, he resolves to step entirely away from both of them for a moment, and then, surprisingly, to approach F major by quite another route. For in bars 5 and 6 [mm. 14-15] he now modulates circuitously to C major, only to make us realize an instant later—by introduction of a B^b—that this C is the dominant of F major, the key for his second subject. He has thus lingered on the threshold of his dominant tonality for some time, turned this way and that, and in the end reached his new subject by the back door, so to speak.⁴¹

⁴¹ Eric Blom, *Beethoven's Piano Sonatas Discussed*, 83.

The decision of a more persuasive *Ursatz* model (either Example 5-32 or 5-33) depends upon interpretation of the tonic status at mm. 12-13. The arpeggiation of the tonic triad encompassing these two bars and the use of E^b (marked with circles in Example 5-34) as a regular scale member (mm. 13-14) assert that the passage does not yet shift to the new key area. The analytic difficulty originates with Beethoven's deliberate avoidance of positioning $\hat{2}$ literally at m. 11. He replaces the expected $\hat{2}$ with an aggressively ascending figuration (D6-E6-F6) over the dominant: the appropriate place for $\hat{2}$ at m. 11 has been surrogated by the cover-tone F6 ($\hat{5}$). Furthermore, Beethoven does not show $\hat{3}$ unequivocally: he conceals its presence, which is supposed to be accompanied by the recovery of the structural tonic at m. 12. The implied return of $\hat{3}$ is confirmed by appearing an octave higher in the middle of the unfolding (F5-B4 in mm. 13-16) in the transition. This unfolding from the cover-tone F to B leads to its unfolding pair C to E and eventually contributes to establishing $\hat{2}$ (=C5) as a higher-level unit: a tritone between F and B resolves inward to a third. Notice how the B^b3-G4-C4 bass motion supports the large-level $\hat{3}$ - $\hat{2}$ motion. Example 5-35 shows the voice-leading path of the transition, which will be subject to reinterpretation and reworking in the recapitulation.

Example 5-34. Foreground graph of the transition (mm. 12-16)

The image displays a musical score for Example 5-34, showing a foreground graph of the transition in measures 12-16. The score is in B-flat major and includes annotations for implied accents, 3-line figures, and fingerings. A harmonic analysis below the score shows the progression: Bb: I (V/V) V (HC) Still in Bb I V/ii II (=V/V).

Beethoven's handling of the second theme area is also remarkable. In the first of the second themes (S_1 in mm. 22-30), Beethoven provides fast pianistic figuration in the left hand, which is the same rhythmic material as in the preceding transition. The unorthodox harmonic support for the fifth-line in this passage downplays the hierarchical status of this S_1 theme, despite the obvious presence of the fifth-line in the upper voice. Instead of the stereotypical harmonic progression for the fifth-line descent ($\hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1}$ supported by $I-V^7-I-V-I$), he presents the foreground-like harmonic support $I-\flat VII-V_5^6-I-V-I$. As a result, $\hat{4}$ takes an unsatisfactory harmonic support which does not equate hierarchically with other members of the descent.

Example 5-35. Foreground graph of the second theme (S_1) (mm. 22-30)

To compensate for sacrificing the structural importance of S_1 , Beethoven puts more emphasis on the following second theme (S_2 in mm. 31-56), by assigning the most stereotypical harmonic progression ($I-V^7-I-V-I$) to the fifth-line descent (see Example 5-37). This S_2 -theme consists of chordally-based sequences, whose thematic outlook unquestionably centers around the interval of thirds. The S_2 -theme has a repeated phrase structure. The second phrase (mm. 39-56), commencing as a rhythmic variation of the first, is expanded considerably by means of a rhythmic extension (mm. 44-47), a repetition of a characteristic gesture by voice-exchange (mm. 48-49), an emphatic cadential formula (mm. 50-52), and finally an appendix, which prolongs the preceding structural harmony (mm. 52-56), adding rhetorical completeness to the second theme. The first phrase has $\hat{4}$ and $\hat{3}$, whereas the second prolongs $\hat{3}$ for quite a long time through a neighbor-note motion and register

transfer—which are most recurrent compositional techniques since Beethoven’s early Viennese period—and finally approaches $\hat{2}$ and $\hat{1}$ at the final cadence.

Example 5-36. Middleground graph of the second-theme group (mm. 22-56)

S1 **S2 (1st Phrase)** **S2 (2nd Phrase)**

22 31 38 48 51 52

Bb: V

Beethoven conceals the presence of $\hat{4}$ by putting it in the middle of a sequence. Usually, composers in the tonal era have parallel tenths as a means of prolonging a main event that has already been achieved. However, Beethoven here uses parallel tenths as a stepping stone to introduce a new scale step ($\hat{4}$) in a concealed way. The temporary goal D, which is a goal of the parallel tenths, is connected to B^b ($\hat{4}$) by means of an unfolding D to B^b . The following voice-leading graph shows how Beethoven designed the second theme area (S_2) by distributing the fifth-line descent over the parallel-tenth sequence and thus put the structural weight on S_2 .

Example 5-37. Foreground graph of the first phrase of the second theme (S_2)
(mm. 30-38)

The closing-theme material, which consists of a simple scale in unharmonized unison octaves, also opens the development section.⁴² Circle of fifths sequences develop and combine the fortissimo rising octaves from the closing theme with a second idea based on a falling sixteenth-note figure, while the upper-voice F is prolonged through a register transfer. Pairs of unfoldings (F^\sharp -C and B-F in mm. 75-88) and a lower neighbor note (E5) explain well the lower-level journey of the upper-voice in mm. 69-93. The F then undergoes a fourth-line descent (F-E^b-D^b-C) to an inner-voice, whereas the higher-level F remains intact and approaches E^b via a passing tone E-natural, forming an 8-7 contrapuntal motion. The third member of the

⁴² William Rothstein discusses the hypermetrical aspects active in the first-movement development section of op. 22. William Rothstein, "Beethoven *with and without Kunstgepräg*': Metrical Ambiguity Reconsidered," *Beethoven Forum* 4 (1995): 175-177.

descent D^b, which is a byproduct of mode mixture, and E-natural, which serves as a passing tone between F and E^b, together delineate a dominant ninth chord, which lasts for 15 bars. Rosen notes the role of the dominant ninth chord in Beethoven's piano sonatas: "the minor dominant ninth harmony, which is a more dissonant and interesting heightening of the dominant seventh, is often used by Beethoven to prepare a return: e.g. op. 31 no. 1, op. 53 (finale), op. 57, op. 111, etc.)."⁴³

Example 5-38. Middleground graph of the development (mm. 69-127)

Interestingly, a careful examination of the middleground graph of the development discloses a quasi-symmetrical construction of the movement. The A^b-

⁴³ I would add the third movement of op. 10, no. 1 and the first movement of op. 13, both in C minor to the repertoire whose reprises are prepared and dramatized by a dominant ninth harmony. In these two sonatas, the recovery of the *Kopftón* $\hat{5}$ has been prepared by an upper neighbor A^b supported by a dominant, thus resulting in a dominant ninth harmony.

axis in the bass divides the entire section into two symmetrically. The unfolding of G to C fills out the musical space between F and A^b (mm. 69-93), whereas the subsequent passage is taken by another unfolding of G to C and the motion toward F (mm. 93-126). This might be understood as Beethoven's deliberate intention to construct this middle section with a single harmonic scheme and its retrograde (F—G/C—A^b and A^b—G/C—F).

The reworking of the transition in the recapitulation is also noteworthy (see Example 5-39). Although the surface outlooks of the sections in the exposition and recapitulation, such as the contrapuntal treatment of the beginning and syncopated rhythmic setting of the chordal passage, are similar to each other, the tonal scheme of the transition in the reprise has been totally changed. In contrast to the transition in the exposition, where I—V/ii—V/V—V progression directed the upper-voice motion of $\hat{3} - \hat{2}$, the transition in the recapitulation is governed by a large-level voice exchange of the outer voices, only reaching its goal thereafter, in the half cadence at m. 147 (Example 5-39-(b)). A higher-level passing tone C fills up the musical space between B^b and D in the bass. This passing tone takes stereotypical harmonic supports, ii and vii^{o6} articulating a 5-6 contrapuntal motion. The lower-level 6-5 sequences act within this ii-to-vii^{o6} harmonic motion, achieving an octave transfer in the bass (C4-C3).

Example 5-39. Foreground graph of the transition of the recapitulation (mm. 69-127)

(a)

139 142 143 146 147

3-line (Bb-Ab-G)

[6-5 sequence]

I ii6 viio6 I6 V

Bb: I V

(b)

3-line

I ii viio6 I6 V

I V

Chapter 6: Conclusion

Beethoven's early sonatas in sonata form—from WoO 47 to op. 22—have been examined in chronological order. Although I do not wish to suggest that Beethoven's way of handling sonata form evolved step by step throughout his creative life, I believe that the achievement of technical mastery was steadily progressed and that the initial notion of musical form was gradually formed and evolved during Beethoven's adolescence and early manhood (roughly 1780-1800). The examination through the Schenkerian analytic method has provided the following observations: 1) Beethoven had a limited set of prototypes for deep-level sonata-form structure, but diversified them through various compositional devices eventually to create polished and unique sonata-form designs that are distinctive; 2) from his youth toward manhood, Beethoven's tendency to rely on a limited number of compositional devices and to use them insistently becomes more and more obvious; and 3) Beethoven's unusual handling of formal, tonal, and motivic aspects, which distinguishes the middle-period sonatas not only from the earlier ones, but also from works by other contemporary composers, is deeply rooted in the Viennese and even Bonn works.

Beethoven's preference for specific sonata designs gradually changed: in his Bonn-period sonatas in the major mode (WoO 47, no. 1, WoO 51, and op. 49, no. 2, whose initial sketch goes back to Bonn), he adopted the primitive type *Ursatz* (our model I-4), whereas he used the “textbook” sonata-form type in WoO 47, no. 3, and

all the sonatas from op. 2, no. 2, to op. 22 (Model I-1 or I-3). This observation leads to several important stylistic generalizations about Beethoven's way of handling sonata form. First, after op. 2, no. 2, Beethoven places structural importance on the primary theme, not only by "theme-like" melodic shapes and rhetorical functions to be heard as a "theme," but also by a strong perfect authentic cadence at the end of the theme. Second, Beethoven secured a transition with enough length to be regarded as an independent section and one that possesses a clear modulating function.¹ Last, he chose the $\hat{3}$ -line *Ursatz* model for the major-mode sonata form and thus excluded the possibility of the model, what I call the "primitive type."

The general description of Beethoven's handling of sonata form in minor is a more complex matter. Beethoven preferred the minor-mode sonata form of the tonic-to-mediante type: the only exception is the fourth movement of op. 2, no. 1, whose large-scale tonal scheme is tonic-to-dominant.² Thus, development sections of the tonic-to-mediante type sonatas participate in construction of the *Ursatz*: they determine the voice-leading path from $\hat{3}$ to $\hat{2}$ over the mediant-to-dominant harmony. However, the *Pathétique* marks a synthesis of both tonal schemes: the exposition has the tonic-to-mediante schema, but the development prolongs the dominant, which was reached

¹ This feature reflects the sonata-form practice after 1780s. "More often, especially after 1780, a clear transition appears. The transition often develops out of a restatement of the main theme..." (James Webster, "Sonata Form," in *The New Grove Dictionary of Music and Musicians*, 2nd ed. (2001), 23: 692).

² A possible justification of this anomaly is that the movement has rondo-like characteristics simultaneously with sonata-form features. As discussed in Chapter 3.3, tonal stability in the development section and idiosyncratic formal scheme, in which the principal motive (neighbor-note figure) from the primary theme repeatedly appears in multiple formal sections, serve as instances adding to very rondo-like formal characteristics.

at the end of the exposition. Such a synthesis could be understood as Beethoven's attempt to deviate from the assumed norm of tonal structure in minor-mode sonata form. One could recall such an experimental use in a later sonata, *Waldstein*, where Beethoven applied the minor-mode sonata-form scheme to a movement in major.

Another observation deserves to be highlighted: Beethoven exclusively adopted a $\hat{5}$ -line *Urlinie* for sonata-form movements in the minor-mode (our models II-3 and II-4). In minor, the cadence type within the primary theme is another important characteristic. WoO47, no. 2, op. 2, no. 1, and op. 49, no. 1, have fourth-line descents within the primary theme, while the fifth-line, punctuated by a perfect authentic cadence, generates the primary theme in the C-minor Sonata, op. 10, no. 1 and op. 13. On the other hand, the fourth movement of op. 2, no. 1 and the third movement of op. 10, no. 1 do not include a first-order line, but possess only the *Kopfton*. Beethoven exploited the primary theme which does not contain a structural line only for movements other than the first.

The evolutionary process by which the young Beethoven gains his compositional dexterity and maturity can be detected through an examination of his ways of handling certain compositional devices, such as mode mixture and neighbor-note motive. As Charles Rosen has noted, Beethoven in Vienna shows far more progress than in Bonn. The deliberate blurring of the inner and outer form, which makes some sections tightly associated to each other and integrated into a single entity as in the *Appassionata*, op. 57, is adopted early in some Viennese sonatas. The first movement of op. 2, no. 1 is a good example, demonstrating the delicate

interaction between formal divisions and tonal structure. The tight connection between the transition and the second theme is achieved through the long dominant pedal of the mediant key. Another example is found in the *Pathétique*, where the second and closing themes form altogether a dominant-to-tonic relationship, achieving a close connection between the two sections.

Modal mixture is a good paradigm by which one can see Beethoven's progress in his compositional dexterity. The earliest use of modal mixture in his piano repertoire is found in the first movement of WoO 47, no. 3, where it does not grow as a structural compositional device, although it gives colorful variety to the restatement of the second theme: it first shows up in the second theme as a very foreground means of changing the mood of the second theme and then only briefly in the development section. On the other hand, modal mixture adopted in the first movement of op. 10, no. 2, governs the entire piece as a significant compositional device: it first appears in the second theme as a rhetorical means of adding colorful diversity to the second theme and briefly in the coda. The modal mixture, emerging later in the development, takes a more important role: it serves as a structural device to facilitate modulation to remote keys. Beethoven's obsession with a single device comes into full fruition in the recapitulation, where modal mixture contributes to the transformational process of the recapitulation. The modal mixture between F-major

and F-minor facilitates a brief tonal shift to ^bIII , which is a lowered version of the mediant key A-minor, implied in the exposition bridge passage (mm. 13-18).³

Beethoven's efforts to unify a movement are seen from his earlier stage in the form of *Ursatz* parallelism. The primary and second themes have a $\hat{5}$ -line, creating *Ursatz* replicas. Beethoven's strong interest in a unified line leads to an extremely coherent situation, in which even the development section is projected by the fifth-line: in the first movement of WoO 47, no. 3, the $\hat{5}$ -line is embedded in the primary, second, and closing themes and the development. Another example of *Ursatz* parallelism is the first movement of op. 13, in which the $\hat{5}$ -line generates the introduction, primary theme, and even the development section. Beethoven's efforts to unify movements are realized through the introduction of a single voice-leading scheme: op. 10, no. 2 has a single voice-leading scheme in developments of both the first and third movements.

Beethoven's interest in register, an important compositional element of the middle period sonatas, is found early in the Viennese sonatas of op. 2, nos. 2 and 3, and op. 7. The register transfer is adopted frequently as a device to show off the pianist-composer's talent, and does not threaten structural conciseness. In particular, in the C-major Sonata (op. 2, no. 3), the register transfer emerges in the form of coupling, achieving a connection to the deep-level structure, whereas, in the A-major

³ Michael Spitzer illustrates this movement as an example of Beethoven's treatment of the symmetrical third relationship. He sees the modulation to the mediant in the exposition (F to A) "is complemented at the end of the development by a false reprise shifting from D major back to the tonic" (Michael Spitzer, "The Significance of Recapitulation in the 'Waldstein' Sonata," *Beethoven Forum* 5 (1996): 109).

Sonata (op. 2, no. 2), it is elaborated by reaching-overs and a series of overlappings, creating a very idiosyncratic musical foreground.

Beethoven's reinterpretation of some formal sections is found in the early sonatas. The closing theme takes precedence over the second theme in op. 2, no. 2, op. 13, and op. 14, no. 1, not only because it is stated over a stable tonal mode, but also because it generates the fifth-line expected in the second-theme area. The retransition, which was conventionally a strategic passage to secure the dominant seventh of the home key and to prepare for the dramatic return of the tonic, drops out or is used for different purposes. The development of op. 7 totally dismisses the retransition: the development section briefly states very remote tonalities and, to the final moment prior to the recapitulation, stays in the wrong key, arousing dramatic tensions. The pseudo retransition and false recapitulation in the first movement of op. 10, no. 2 must have come as a surprise to listeners of the time.

The coda of the C-major Sonata, op. 2, no. 3, has a significant formal function like that in the *Waldstein* and the *Appassionata*: thematically, it contains a recollection of the primary theme and structurally it poses a background descent $\hat{2}$ to $\hat{1}$. Beethoven achieves this by splitting the codetta into two and inserting the coda section between them. Thus, the coda is no longer merely an appendix that emphasizes the sense of ending rhetorically, but serves now for Beethoven as a core part of the *Ursatz*.

One could find evidence telling that Beethoven's early practices served as the foundation of his mature progress and innovation. The subtle enharmonic association

as seen in Beethoven’s middle-period sonatas—the G-major Sonata, op. 31, no. 1, and the *Waldstein* Sonata, op. 53—is already foreshadowed in the first movement of op. 2, no. 1, where the tonal conflict between E and E^b in the transition reappears later in the enharmonic guise (F^b-E^b). Beethoven’s formal process, in which the motivic logic participates in the generation of themes as in the *Tempest*, op. 31, no. 2, is found earlier in the C-minor Sonata, op. 10, no. 1, in which the turn figure motive governs the second and closing themes as well as the development.

This study has attempted to trace ways of Beethoven’s handling of sonata form by basing the task on a reconciliation between Schenkerian form theory and a traditional theory of form. The major analytic results obtained through observations are summarized in Figure 6-1.

Figure 6-1. Summary of the structural features of Beethoven’s early piano sonatas from WoO47 to Op. 22

Opus & Key/mode	Tonal scheme	<i>Kopfton</i>	Linear descent in P-theme	<i>Ursatz</i> model	Upper-voice scheme of the development
WoO 47/1 in E ^b	I-V	$\overset{\wedge}{5}$	No	I-4 (Primitive type)	Ascending 3-line: ($\overset{\wedge}{2} - \overset{\wedge}{3} - \overset{\wedge}{4}$)
WoO 47/2 in f	i-III	$\overset{\wedge}{5}$	Yes (4th-line punctuated by HC)	II-4	Voice-leading path from $\overset{\wedge}{3}$ to $\overset{\wedge}{2}$: Incomplete neighbor to $\overset{\wedge}{2}$
WoO 47/3 in D	I-V	$\overset{\wedge}{5}$	Yes ($\overset{\wedge}{5}$ -line <i>Ursatz replica</i>)	I-3 (“Textbook” type)	Modally transformed 5-line ($\overset{\wedge}{2} - \overset{\wedge}{1} - \overset{\wedge}{7} - \overset{\wedge}{6} - \overset{\wedge}{5}$)
WoO 51	I-V	$\overset{\wedge}{5}$	No	I-4	Modally

in C				(Primitive type)	Transformed 4-line ($\hat{5} - \hat{4} - \hat{b}_3 - \hat{2}$)
Op. 2/1, I in f	i-III	$\hat{5}$	Yes (4th-line punctuated by HC)	II-3	Voice-leading path from $\hat{3}$ to $\hat{2}$: voice-exchange over III and passing ii ⁰⁶
Op.2/1, IV in f	i-v-V	$\hat{5}$	No	III-4	Prolongation of $\hat{2}$: a neighbor-note figure ($\hat{2} - \hat{3} - \hat{2}$) supported by v-III-V
Op. 2/2 in A	I-V	$\hat{5}$	Yes ($\hat{5}$ -line <i>Ursatz replica</i>)	I-3 (“Textbook” type)	A neighbor-note figure ($\hat{2} - \hat{3} - \hat{2}$) supported by V- ^b VI-V
Op. 2/3 in C	I-V	$\hat{3}$	Yes ($\hat{3}$ -line <i>Ursatz replica</i>)	I-1 (“Textbook” type)	A neighbor-note figure ($\hat{2} - \hat{3} - \hat{b}_3 - \hat{2}$)
Op. 49/1 in g	i-III	$\hat{5}$	Yes (4th-line punctuated by HC)	II-3	Voice-leading path from $\hat{3}$ to $\hat{2}$: an unfolding pair over the VI to V progression
Op. 49/2 in G	I-V	$\hat{5}$	No	I-4 (Primitive type)	Ascending 3-line ($\hat{2} - \hat{3} - \hat{4}$)
Op. 7 in E ^b	I-V	$\hat{3}$	Yes ($\hat{3}$ -line <i>Ursatz replica</i>)	I-1 (“Textbook” type)	A series of reaching-overs over V
Op. 10/1 in c	i-III	$\hat{5}$	Yes ($\hat{5}$ -line <i>Ursatz replica</i>)	II-3 (“Textbook” type)	Extreme emphasis on the submediant ($\hat{4} - \hat{3} - \hat{2}$)
Op. 10/1, III in c	i-III	$\hat{5}$	No	II-4	Voice-leading path from $\hat{3}$ to $\hat{2}$: Chromaticized voice-exchange over III
Op. 10/2	I-V	$\hat{3}$	Yes	I-1	Ascending 3-line

in F			($\hat{3}$ - line <i>Ursatz replica</i>)	(“Textbook” type)	($\hat{2} - \hat{3} - \hat{4}$)
Op. 10/2, III in F	I-V	$\hat{3}$	No	I-2	Ascending 3-line ($\hat{2} - \hat{3} - \hat{4}$)
Op. 10/3 in D	I-V	$\hat{3}$	Yes ($\hat{3}$ - line <i>Ursatz replica</i>)	I-1 (“Textbook” type)	A neighbor-note figure ($\hat{2} - \hat{3} - \hat{2}$) supported by V- ^b VI-V
Op. 13 in c	i-III	$\hat{5}$	Yes ($\hat{5}$ -line <i>Ursatz replica</i>)	II-3 (“Textbook” type)	Descending 5-line ($\hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1}$)
Op. 14/1 in E	I-V	$\hat{3}$	Yes ($\hat{3}$ - line <i>Ursatz replica</i>)	I-1 (“Textbook” type)	Leading-tone 3-line ($\hat{2} - \hat{1} - \hat{7}$)
Op. 14/2 in G	I-V	$\hat{3}$	Yes ($\hat{3}$ - line <i>Ursatz replica</i>)	I-1 (“Textbook” type)	Leading-tone 3-line ($\hat{2} - \hat{1} - \hat{7}$)
Op. 22 in B ^b	I-V	$\hat{3}$	Yes (2nd-line punctuated by HC)	I-1	8-7 motion ($\hat{5} - \hat{4}$) over V

The study represented in the dissertation could provide many possibilities for further research. It could be integrated with Beethoven’s other sonata-form works in his early period. Or it could go beyond the scope of the early period. The method could be adapted to assess and critique Beethoven’s late-period piano sonatas and other instrumental works in sonata form. For example, Beethoven challenged the normal formal procedure of sonata form by introducing fugue or aria in his late-period sonatas. He also forces the multiple movements to act as a single entity by use

of *attacca*. It would be an interesting topic to observe how Schenkerian form theory incorporates such a formal anomaly into the *Ursatz* and how the paradigm should be modified to incorporate such an anomaly. Last, this study could be put in a broader stylistic context: it can serve as a point of departure to illuminate whether the sonata-form models are relevant to composers contemporary with the young Beethoven, such as Clementi, Dussek, Schubert, and others, or whether changes in Beethoven's treatment of sonata form had an influence on late composers.

Bibliography

- Adrian, Jack. "The Function of the Apparent Tonic at the Beginning of Development Sections." *Intégral* 5 (1991): 1-53.
- . "The Ternary-Sonata Form." *Journal of Music Theory* 34, no. 1 (1990): 57-80.
- Agawu, Kofi. *Playing with Signs: A Semiotic Interpretation of Classic Music*. Princeton, N.J. : Princeton University Press, 1991.
- Aldwell, Edward and Carl Schachter. *Harmony and Voice Leading*. San Diego: Harcourt Brace Jovanovich, 1989.
- Beach, David. "The Cadential Six-Four as Support for Scale-Degree Three of the Fundamental Line." *Journal of Music Theory* 34, no. 1 (1990): 81-98.
- . "A Recurring Pattern in Mozart's Music." *Journal of Music Theory* 27, no. 1 (1983): 1-29.
- . "Schubert's Experiments with Sonata Form: Formal-Tonal Design Versus Underlying Structure." *Music Theory Spectrum* 15, no. 1 (1993): 1-18.
- Black, Leslie. "Syntactic Irregularities in the Early and Middle Period Works of Beethoven." Ph.D. diss., Yale University, 1998.
- Blom, Eric. *Beethoven's Pianoforte Sonatas Discussed*. 1938. Reprint, New York: Da Capo Press, 1968.
- Brendel, Alfred. "The Process of Foreshortening in the First Movement of Beethoven's Sonata Op. 2, No. 1." In *Musical Thoughts and Afterthoughts*. London: Robson, 1976.

- Burkhart, Charles. "Schenker's 'Motivic Parallelism.'" *Journal of Music Theory* 22, no. 2 (1978): 145-175.
- Burnham, Scott. "The Role of Sonata Form in A.B. Marx's Theory of Form." *Journal of Music Theory* 33, no.2 (1989): 247-272.
- Cadwallader, Allen and David Gagné. *Analysis of Tonal Music: A Schenkerian Approach*. New York: Oxford University Press, 1998.
- Caplin, William. *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven*. New York: Oxford University Press, 1998.
- Churgin, Barthia. "Harmonic and Tonal Instability in the Second Key Area of Classic Sonata Form." In *Convention in Eighteenth- and Nineteenth-Century Music: Essays in Honor of Leonard G. Ratner*. Stuyvesant, N.Y.: Pendragon Press, 1992.
- Cube, Felix-Eberhard von. *The Book of the Musical Artwork: An Interpretation of the Musical Theories of Heinrich Schenker*. Translated by David Neumeyer, George R. Boyd, and Scott Harris. Lewiston, New York: The Mellen Press, 1988.
- Dahlhaus, Carl. *Ludwig van Beethoven: Approaches to His Music*. Translated by Mary Whittall. Oxford: Clarendon Press; New York: Oxford University Press, 1991.
- . *Nineteenth-Century Music*. Translated by J. Bradford Robinson. Berkeley: University of California Press, 1989.

- Drabkin, William. "Understanding of 'Sonata Form': The Evidence of the Sketchbooks." In *Beethoven's Compositional Process*, edited by William Kinderman, 14-19. Lincoln: University of Nebraska Press in Association with the American Beethoven Society and Ira F. Brilliant Center for Beethoven Studies, San Jose State University, 1991.
- Forte, Allen and Steven Gilbert. *Introduction to Schenkerian Analysis*. New York: W.W. Norton & Company, Inc., 1982.
- Gjerdingen, Robert. *A Classic Turn of Phrases: Music and the Psychology of Convention*. Philadelphia: University of Pennsylvania Press, 1988.
- Grout, Donald J., and Claude Palisca. *A History of Western Music*. 5th ed. New York: W.W. Norton & Company, Inc., 1996.
- Hampson, Barbara. "Schenker and Schoenberg: A Critical Comparison of Two Analytical Methods, with Reference to the First Movement of Beethoven's Appassionata Sonata." Master's thesis, McMaster University, 1993.
- Hepokoski, James and Warren Darcy. "The Medial Caesura and Its Role in the Eighteenth-Century Sonata Exposition." *Music Theory Spectrum* 19, no. 2 (1997): 115-154.
- Hoffmann-Erbrecht, Lothar. "Neefe, Christian Gottlob." In *The New Grove Dictionary of Music and Musicians*, vol. 17, edited by Stanley Sadie, 734-735. 2nd ed. New York : Grove's Dictionaries Inc., 2001.
- Jackson, Timothy. "The Tragic Reversed Recapitulation in the German Classical Tradition." *Journal of Music Theory* 40, no. 1 (1996): 61-111.

- Johnson, Douglass. "1794-1795: Decisive Years in Beethoven's Early Development." In *Beethoven Studies*, vol. 3, edited by Alan Tyson, 1-28. New York: Cambridge University Press, 1982.
- Jonas, Oswald. *Introduction to the Theory of Heinrich Schenker: The Nature of the Musical Work of Art*. Translated and edited by John Rothgeb. New York: Longman, 1982.
- Kamien, Roger. "Aspects of the Recapitulation in Beethoven Piano Sonatas." *Music Forum* 4 (1976): 195-235.
- . "Non-Tonic Settings of the Primary Tone in Beethoven Piano Sonatas." *The Journal of Musicology* 16, no. 3 (1998): 379-393.
- . "Subtle Enharmonic Connections, Modal Mixture, and Tonal Plan in the First Movement of Beethoven's Piano Sonata in C Major, Opus 53 ('Waldstein')." *Beethoven Forum* 1 (1992): 93-110.
- Kamien, Roger and Naphtali Wagner. "Bridge Themes within a Chromaticized Voice Exchange in Mozart Expositions." *Music Theory Spectrum* 19, no. 1 (1997): 1-12.
- Kerman, Joseph. "Notes on Beethoven's Codas." In *Beethoven Studies*, vol. 3, edited by Alan Tyson, 141-59. New York: Cambridge University Press, 1982.
- Kerman, Joseph, Alan Tyson, Scott Burnham, Douglas Johnson and William Drabkin. "Beethoven, Ludwig van." In *The New Grove Dictionary of Music and Musicians*, vol. 3, edited by Stanley Sadie, 73-140. 2nd ed. New York : Grove's Dictionaries Inc., 2001.

- Kinderman, William. *Beethoven*. Berkeley: University of California Press, 1995.
- . “Beethoven’s High Comic Style in Piano Sonatas of the 1790s, or Beethoven, Uncle Toby, and the ‘Muckcart-driver.’ ” *Beethoven Forum* 5 (1996): 119-138.
- . “The Piano Music: Concertos, Sonatas, Variations, Small Forms.” In *Cambridge Companion to Beethoven*, edited by Glenn Stanley, 105-126. Cambridge, UK ; New York : Cambridge University Press, 2000.
- Koch, Heinrich Christoph. *Introductory Essay on Composition*. Translated by Nancy Baker. New Heaven: Yale University Press, 1983.
- LaRue, Jan. *Guidelines for Style Analysis*. 2nd ed. Warren, Mich. : Harmonie Park Press, 1992.
- Laufer, Edward. “Heinrich Schenker, *Free Composition*, Translated and Edited by Ernst Oster: Reviewed by Edward Laufer.” *Music Theory Spectrum* 3 (1981): 158-84.
- . “Voice-Leading Procedures in Development Sections.” *Studies in Music from the University of Western Ontario* 13 (1991): 69-120.
- Lockwood, Lewis. “Beethoven before 1800: The Mozart Legacy.” *Beethoven Forum* 3 (1994): 39-52.
- . *Beethoven: Studies in the Creative Process*. Cambridge, Mass.: Harvard University Press, 1992.
- . “Reshaping the Genre: Beethoven's Piano Sonatas from op. 22 to op. 28 (1799-1801).” *Israel Studies in Musicology* 6 (1996): 1-16.

- Longyear, Rey. "The Binary Variants of Early Classic Sonata Form." *Journal of Music Theory* 13 (1969): 162-185.
- . "The Minor Mode in Eighteenth-Century Sonata Form." *Journal of Music Theory* 15 (1971): 182-229.
- McKee, Eric. "Auxiliary Progressions as a Source of Conflict between Tonal Structure and Phrase Structure." *Music Theory Spectrum* 18, no. 1 (1996): 51-76.
- Marston, Nicholas. "'The Sense of an Ending': Goal-Directedness in Beethoven's Music." In *Cambridge Companions to Beethoven*, edited by Glenn Stanley, 84-101. Cambridge, UK ; New York : Cambridge University Press, 2000.
- McGuire, David. "Revisiting the Return: The Structural Dilemma of the Recapitulation in the Schenkerian Account of Classical Sonata Form." Ph.D. diss., State University of New York at Buffalo, 1996.
- Newman, William S. *The Sonata in the Classic Era*. 3rd ed. New York: W.W. Norton & Company, Inc., 1983.
- Neumeyer, David. "The Ascending *Urlinie*." *Journal of Music Theory* 31, no. 2 (1987): 275-303.
- . "The *Urlinie* from $\hat{8}$ as a Middleground Phenomenon." *In Theory Only* 9, nos. 5-6 (1987): 3-25.
- Neumeyer, David and Rudy Marcozzi. "An Index to Schenkerian Analyses of Beethoven Piano Sonatas and Symphonies." *Indiana Theory Review* 6, nos. 1-2 (1982-83): 101-17.

- Neumeyer, David and Susan Tepping. *A Guide to Schenkerian Analysis*. Englewood Cliffs, N.J. : Prentice Hall, 1992.
- O'Donohue, Deirdre. "The Concept of Unity and Uniqueness in the Multi-Movement Works of Beethoven: An Analysis of the Selected Piano Sonatas-Opus 31, No. 3 and Opus 57." Ph.D. diss., New York University, 1987.
- Oster, Ernst. "Register and the Large-Scale Connection." In *Readings in Schenker Analysis and Other Approaches*, edited by Maury Yeston, 54-71. New Heaven and London: Yale University Press, 1977.
- Pastille, William A. "Heinrich Schenker, Anti-Organicist." *Nineteenth-Century Music* 8, no. 1 (1984): 29-36.
- Petty, Wayne. "Koch, Schenker, and the Development Section of Sonata Forms by C. P. E. Bach." *Music Theory Spectrum* 21, no. 2 (1999): 151-173.
- Plantinga, Leon. *Romantic Music: A History of Musical Style in Nineteenth-Century Europe*. New York: W. W. Norton & Company Inc., 1984.
- Ratner, Leonard. *Classic Music: Expression, Form, and Style*. New York: Schirmer Books, 1980.
- Réti, Rudolph. *Thematic Patterns in Sonatas of Beethoven*. Edited by Deryck Cooke. New York: The Macmillan Company, 1967.
- Rosen, Charles. *Sonata Forms*. 1st ed. New York: W.W. Norton & Company, Inc., 1980.
- . *The Classical Style: Haydn, Mozart, Beethoven*. Expanded ed. New York: W. W. Norton & Company Inc., 1998.

- . *Beethoven's Piano Sonatas: A Short Companion*. New Haven and London: Yale University Press, 2002.
- Rothstein, William. "Beethoven *with and without* Kunstgepräg': Metrical Ambiguity Reconsidered." *Beethoven Forum* 4 (1995): 165-193.
- . *Phrase Rhythm*. New York: Schirmer, 1989.
- Salzer, Felix. *Structural Hearing*. New York: Dover Publications, 1962.
- Schachter, Carl. "Analysis by Key: Another Look at Modulation." *Music Analysis* 6, no. 3 (1987): 289-318.
- . "Beethoven's Sketches for the First Movement of Op. 14, No. 1: A Study in Design." *Journal of Music Theory* 26, no. 1 (1982): 1-21.
- . "Either/Or." In *Schenker Studies*, edited by Hedi Siegel, 165-179. Cambridge: Cambridge University Press, 1990.
- Schenker, Heinrich. *Five Graphic Music Analyses: With a New Introduction and Glossary by Felix Salzer*. New York: Dover Publications, 1969.
- . *Free Composition*. Translated and edited by Ernst Oster. New York: Longman, 1979.
- . *Harmony*. Edited by Oswald Jonas. Translated by Elizabeth Mann Borgese. Chicago: University of Chicago, 1954.
- . "Beethoven: Sonate Opus. 2, Nr. 1." *Der Tonwille* 1 (1921): 25-48.
- . "Beethoven: Sonate Opus. 49, Nr. 2." *Der Tonwille* 4 (1923): 20-21.
- . "Beethoven: Sonate Opus. 57." *Der Tonwille* 7 (1924): 3-33.

- . “Organic Structure in Sonata Form.” In *Readings in Schenker Analysis and Other Approaches*, edited by Maury Yeston, 38-53. New Heaven and London: Yale University Press, 1977.
- Schmalfeldt, Janet. “Cadential Processes: The Evaded Cadence and the ‘One More Time’ Technique.” *The Journal of Musicological Research* 12, nos. 1-2 (1992): 1-52.
- . “Form as the Process of Becoming: The Beethoven-Hegelian Tradition and the ‘Tempest’ Sonata.” *Beethoven Forum* 4 (1995): 37-71.
- . “Towards a Reconciliation of Schenkerian Concepts with Traditional and Recent Theories of Form.” *Music Analysis* 10, no. 3 (1991): 233-287.
- Smith, Charles. “Musical Form and Fundamental Structure: An Investigation of Schenker’s *Formenlehre*.” *Music Analysis* 15, nos. 2-3 (1996): 191-297.
- Smith, Peter. “Brahms and Schenker: A Mutual Response to Sonata Form.” *Music Theory Spectrum* 16, no. 1 (1994): 77-103.
- Smyth, David. “Schenker’s Octave Lines Reconsidered.” *Journal of Music Theory* 43, no.1 (1999): 101-133.
- Solomon, Maynard. *Beethoven*. New York: Schirmer Books, 1977.
- Spitzer, Michael. “The Significance of Recapitulation in the ‘Waldstein’ Sonata.” *Beethoven Forum* 5 (1996): 103-117.
- Sturgis-Everett, Barbara. “The First Movements of Beethoven’s Piano Sonata in E major, Op. 14, No. 1 and His String Quartet in F major, Op. 14, No. 1: A Critical Comparison.” DMA diss., University of Cincinnati, 1986.

- Tovey, Donald F. *A Companion to Beethoven's Pianoforte Sonatas: Bar-by-Bar Analysis*. London: Associated Board of the Royal Schools of Music, 1931.
- Wagner, Naphtali. "Tonic Reference in Non-Tonic Key Areas." *Israel Studies in Musicology* 4 (1987): 59-72.
- Webster, James. "The Concept of Beethoven's 'Early' Period in the Context of Periodizations in General." *Beethoven Forum* 3 (1994): 1-27.
- . "Sonata Form." In *The New Grove Dictionary of Music and Musicians*, vol. 23, edited by Stanley Sadie, 687-698. 2nd ed. New York : Grove's Dictionaries Inc., 2001.
- Winter, Robert. "The Bifocal Close and the Evolution of the Viennese Classical Style." *Journal of the American Musicological Society* 42, no. 2 (1989): 275-337.
- Wohnhaas, Theodor. "Sterkel, Johann Franz Xaber." In *The New Grove Dictionary of Music and Musicians*, vol. 24, edited by Stanley Sadie, 363-364. 2nd ed. New York : Grove's Dictionaries Inc., 2001.
- Wolf, Eugene. "Mannheim School." In *The New Grove Dictionary of Music and Musicians*, vol. 15, edited by Stanley Sadie, 776-777. 2nd ed. New York : Grove's Dictionaries Inc., 2001.

VITA

Moo Kyoung Song was born in Seoul, Korea in September 9, 1971, the son of ChunHo Song and JeongWon Kim. After completing his work at Soongsil High School, he entered Yonsei University in Seoul, Korea in 1991, majoring in music composition. After receiving the degree of Bachelor of Music from Yonsei University in February 1995, he came into the U.S. and was admitted into the Music Theory Program at The University of Texas at Austin in the Spring of 1997, where he received his M.M. in 1999 with his Master's thesis entitled "An Unresolved Conflict between Form and Structure: a Schenkerian Analysis of the First Movement of Brahms's Second Violin Sonata in A major." He continued his doctoral study and concentrated on the Schenkerian theory with Professor David Neumeyer.

Permanent Address: #2004 Sunkyoung Jongam Apt. 34-3 Jongam 1-dong,
Sungbuk-ku, Seoul, Korea 136-090

This dissertation was typed by the author and all the analytical graphs were produced in computer by his beloved wife, Su-Kyoung Choi Song.