ASPECTS OF COMPLETION IN BEETHOVEN'S MIDDLE PERIOD CODAS

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A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF MUSIC

Music Theory

2012

ABSTRACT

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Codas are often viewed as unnecessary to the movements that they conclude. From a tonal perspective, codas are superfluous since the movements they follow have closed harmonically just before their onset. Ludwig van Beethoven's Middle Period codas call for a reexamination of the concept of coda. Codas composed before Beethoven's Middle Period are often elided with the final Perfect Authentic Cadence; thus, they prolong the final tonic without significantly adding to the drama of the piece. A broadened understanding of the Middle Period codas exhibits the variety of completion functions these codas can serve.

In line with Joseph Kerman's thoughts regarding Beethoven's codas, I pinpoint the types of closure codas provide to movements that would otherwise end somehow unresolved. For example, a coda can provide a location for the final structural cadence to occur when the movement had previously avoided closure. I ask the following questions: How does the coda tie up what has happened before it? What kind of resolution does each particular coda provide? What would be the consequence of omitting each coda? I will focus on the codas of the following Beethoven movements: the Piano Sonatas op. 31, no. 1, movement 1; op. 53, movements 1 and 3; op. 57, movement 1; op. 81a, movement 1; and op. 90, movement 2; the String Quartet in E Minor, op. 59, no. 2, movement 1; the Piano Trios op. 70, no. 2, movement 1; and WoO. 39, no. 7; the Sonata for Violin in G Major, op. 96, movement 1; and the Andante for Piano in F Major, WoO. 57.

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INTRODUCTION

Codas are often viewed as unnecessary to the movements that they conclude. From a tonal perspective, codas are superfluous since the movements they follow have closed harmonically just before their onset. The term "coda" is derived from the Italian word for "tail." A tail is an unnecessary appendage that serves no vital function for the organism to which it is attached. While codas are often understood as unnecessary, one must consider that the said organism would be out of balance should the tail be removed. The missing segment alters the sense of proportion established by existing whole organisms. Ludwig van Beethoven's Middle Period codas motivate a reexamination of the concept of coda prior to this time. Codas composed before Beethoven's Middle Period (i.e., those composed before 1803) are often elided with the final Perfect Authentic Cadence; thus, they prolong the final tonic without significantly adding to the drama of the piece. A broadened understanding of the Middle Period codas, established by pieces with varied instrumentations, exhibits the wide variety of functions these codas can serve. To claim that Beethoven's codas are unwarranted ignores these phenomenal closing sections, bristling with function. Instead, understanding the aspects of completion capable of these codas confirms that Beethoven's Middle Period codas indeed have a purpose.

Joseph Kerman, who wrote influentially about the phenomenal aspects of Beethoven's codas (e.g., completion function, location for new material), states that most theories of form fall short when attempting to generate a single definition for coda. He states, "One simply cannot find a common function for codas." Analysts must rather consider their "wide variety of function."[1] Scholars writing before Kerman have labeled Beethoven's codas as "terminal

[1] Joseph Kerman, "Notes on Beethoven's Codas," in Alan Tyson, ed. *Beethoven Studies 3* (New York: Cambridge University Press, 1982), 141.

developments," "second developments," and "extended codas."[2] Since Kerman believes that a primary function of these codas is completion, he refutes these labels. He states that codas can be developmental in character, as they often cycle a main theme through various keys. However, applying a single label, such as "terminal development," generates little attention for the exceptional roles these codas can serve; also, "development" implies that the movement requires conclusion following the coda.[3] Using the *Waldstein* and *Appassionata* as examples, Kerman states, "there seems to be some kind of instability, discontinuity, or thrust in the first theme which is removed in the coda."[4] The deviation may involve a number of factors, such as harmonic, rhythmic, or registral to name a few, but Beethoven's Middle Period codas have a function greater than prolonging the concluding tonic harmony.

In line with Kerman's thoughts regarding Beethoven's codas, I pinpoint the types of closure (e.g. tonal, thematic, textural, hypermetric) that codas provide to movements that would otherwise end somehow unresolved. A coda can provide a location for the final structural cadence to occur when the movement had previously avoided closure; it can also reinstate thematic materials that were texturally manipulated during recapitulation, thus returning the materials to their original texture. As well, the coda can clarify previously occurring cadences by rewriting material into a more appropriate setting. I ask the following questions: How does the coda tie up what has happened before it? What kind of resolution does each particular coda provide? What would be the consequence of omitting each coda? I will focus on the codas of the

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[2] Robert Hopkins, "When a Coda is More than a Coda: Reflections on Beethoven," in Eugene Narmour and Ruth A. Solie, eds. *Explorations in Music, the Arts, and Ideas: Essays in Honor of Leonard B. Meyer* (Stuyvesant: Pendragon Press, 1988), 403-4.

[3] Kerman, "Notes on Beethoven's Codas," 152-53.

[4] Kerman, "Notes on Beethoven's Codas," 149.

following Beethoven movements: the Piano Sonatas op. 31, no. 1, movement 1; op. 53, movements 1 and 3; op. 57, movement 1; op. 81a, movement 1; and op. 90, movement 2; the String Quartet in E Minor, op. 59, no. 2, movement 1; the Piano Trios op. 70, no. 2, movement 1; and WoO. 39, no. 7; the Sonata for Violin in G Major, op. 96, movement 1; and the Andante for Piano in F Major, WoO. 57. These movements all belong to Beethoven's Middle Period, and were composed within eleven years of each other.[5] They exemplify an especially abundant phase of Beethoven's manipulation of form.

The majority of the selected movements are cast in sonata-allegro form; the rest are sonata-rondos. Codas of sonata-rondo movements function differently from those in sonata-allegro form. The former contain the final occurrence of the refrain, which is tonally unnecessary, given the structural closure of the movement proper within the final B section. However, the sonata-rondo codas discussed in this thesis contribute aspects of closure that parallel and complement those provided by the codas of movements in sonata form proper. Therefore, the two sets of codas should be regarded as facets of a single process of formal experimentation.

Scholars have explored several aspects of Beethovenian codas relevant to my thesis. Some scholars have understood codas primarily as expansions of a final cadence on tonic. William Rothstein, for example, applies Hugo Riemann's phrase-expanding technique suffix to codas: "The essential quality of a suffix is the extension of a goal already reached."[6] Although most of the movements analyzed for this thesis indeed arrive at a cadence just before the onset of

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[5] The dates of the pieces are as follows: op. 31-1801-1802, op. 53-1803, WoO. 57 - 1804, op. 57-1805, op. 59 - 1806, op. 70 - 1808, op. 81a - 1810, WoO. 39-1812, op. 96-1812, and op. 90-1814.

[6] William Rothstein, *Phrase Rhythm in Tonal Music* (New York: Schirmer Books, 1989), 73.

the coda, the endings of these movements are packed with greater responsibility. William Caplin demonstrates this through his identification of the "compensatory functions" of codas, such as the "restoration of deleted material from the recapitulation."[7] Caplin's methodology identifies the several loose ends that can be tied up by the coda. The loose ends range from a striking idea occurring late in the movement proper that warrants later realization, to closure occurring in an extreme range unlike the original closure from the exposition. I analyze several movements in terms of Caplin's compensatory functions.

Other scholars, such as Robert Morgan and Robert Hopkins, have examined Beethoven's codas in terms of harmonic and registral completion. A coda can provide restoration by placing thematic materials in a different setting; the setting can then clarify or reestablish a primary harmony. As well, the coda can return thematic materials to the register that was established initially in the exposition, but then overwritten by a different register in the recapitulation. Morgan and Hopkins both survey movements from Beethoven's Middle Period, justifying the culmination of thematic materials that may occur during the codas. Morgan examines the *Eroica* through a viewpoint held by Richard Wagner. Wagner believed that Beethoven's sonata-form movements possess evolutionary traits with "the entire structure unfolding toward a final, predetermined conclusion."[8] Each Beethovenian movement, then, contains a single melody that can close during the coda rather than the recapitulation. Keeping this in mind, Morgan demonstrates that the first movement of *Eroica* closes during the immense coda with a return to thematic material. Hopkins, much like Caplin, surveys several movements from the early

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[7] William Caplin, *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven* (New York: Oxford University Press, 1998), 186.

[8] Robert Morgan, "Coda as Culmination: The First Movement of the 'Eroica' Symphony," in Christopher Hatch and David W. Bernstein, eds. *Music Theory and the Exploration of the Past* (Chicago: The University of Chicago Press, 1993), 357.

nineteenth century, including a few movements from Beethoven's Middle Period. Hopkins hopes to influence other scholars to broaden their model of sonata form, taking into account the significance of nineteenth-century codas. In addition Hopkins advocates the necessity of codas during this time period, as they can serve a structural function such as "thematic completion," "final recapitulation," or "harmonic resolution."[9]

Warren Darcy and James Hepokoski expand on Kerman's ideas and describe the lengthier and complex Beethoven codas as discursive codas; the codas of the *Waldstein* and the *Appassionata* sonatas are *par excellence* examples of this type. In the authors' terminology, these codas often lose the tonic confirmed by the Essential Structural Closure; instead, the codas develop material in non-tonic keys before closing in the tonic.[10] Like Kerman and Hopkins, Darcy and Hepokoski believe that these discursive codas give "the impression of a removal of difficulties or obstacles set up earlier in the movement."[11] The concept of discursive codas guides my analyses, particularly my work on the final movement of the *Waldstein* and the first movement of the *Appassionata*. Both of these movements contain large codas that transpose thematic materials into a variety of tonal areas.

Caplin, like Darcy and Hepokoski, describes codas as both expressing an "after-the-end" quality and completing "unfinished business."[12] For Caplin, codas can serve the following five compensatory functions that the recapitulation alone may not effect: recollection of main-theme ideas, restoration of deleted material from the recapitulation, reference to the development

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[9] Hopkins, 398.

[10] James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late-Eighteenth-Century Sonata* (New York: Oxford University Press, 2006), 284.

[11] Ibid., 286.

[12] Caplin, *Classical Form*, 186.

section, shaping a new dynamic curve, and realization of unrealized implications.[13] I have analyzed several movements for this thesis using the following compensatory functions noted by Caplin: recollection of main-theme ideas, restoration of deleted material from the recapitulation, and realization of unrealized implications.[14] The compensatory function of recollection of main-theme ideas, for example, serves a key role in several Middle Period codas. The function occurs in the codas where the recapitulation alone fails to resolve the tonal conflict established during the exposition.

The three chapters of this document are organized according to the types of completion served by the codas. Chapter 1 explores codas that compensate for off-tonic recapitulations by restating themes in the tonic. Chapter 2 discusses codas that restore music appearing early in the movement, but is absent from subsequent restatements. Chapter 3 illustrates various other compensatory functions that do not fit within the categories discussed in chapters 1 and 2, which range from the postponement of tonal closure to the coda, to the elaboration upon an anomalous tonal detour hinted at within the movement proper. Beethoven's Middle Period is a compositional time bristling with formal experimentation. Therefore, a detailed consideration of Middle Period codas is valuable to our understanding of form in Beethoven's work.

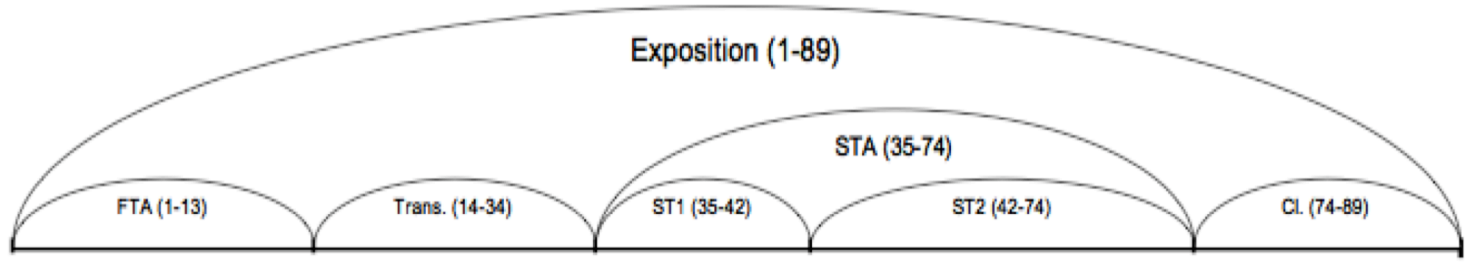
[13] Ibid., 186.
[14] Caplin, 186.

CHAPTER ONE: CODAS THAT TRANSPOSE MATERIALS TO TONIC

Op. 53, movement 1, *Waldstein*

In the first movement of Beethoven's *Waldstein* Sonata, op. 53, written in 1803, the coda fully realizes a tonal-thematic expectation of sonata-allegro form that is only barely accomplished by the recapitulation. While the secondary theme manages to secure cadential closure in tonic during the recapitulation, a full statement of the theme in tonic is noticeably absent. Figure 1 (shown on next page) summarizes the formal layout of this movement.

The transition connecting the exposition's primary and secondary themes begins as expected in the tonic, C major. The music then proceeds to a submediant triad (A-minor triad) that could easily lead to the dominant of the normative secondary key area, G major. The root of this triad is chromatically altered at measure 22, transforming the triad into an Italian augmented sixth chord through the replacement of A-natural with A-sharp. Attaining a predominant chord during the transition section is standard; this predominant chord, however, yields not to the expected G major but to the dominant of E, the major mediant. The augmented sixth chord (m. 22) proceeds to a dominant pedal on B. This transition leads inevitably to a second tonal area occurring in the major mediant, E major.


Exposition (1-89)
STA (35-74)
FTA (1-13)
Trans. (14-34)
ST1 (35-42)
ST2 (42-74)
Cl. (74-89)

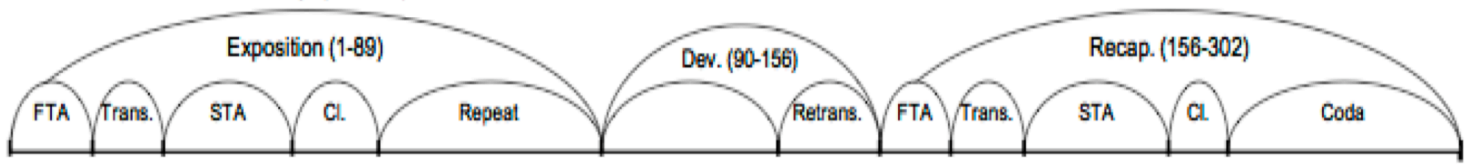

Exposition (1-89)
Dev. (90-156)
Recap. (156-302)
FTA
Trans.
STA
Cl.
Repeat
Retrans.
FTA
Trans.
STA
Cl.
Coda

Figure 1

The anomalous key area of the secondary theme in the exposition presents a problem to be solved later in the movement: the customary descending-fifth relationship between the subordinate themes of the exposition and recapitulation would land on A major, not on the tonic. The norms of the common-practice sonata dictate that this subordinate theme will return in the tonic during the recapitulation. When this theme returns at m. 196, it begins not in C major, but rather A major, preserving the customary descending fifth relationship with the E-major subordinate theme in the exposition. During the second phrase of this theme, the music turns towards the tonic of this movement, C major. The theme achieves the dominant of A major in m. 199; however, the music proceeds to an A-minor triad securing a cadence in C major just four measures later. The modal shift from A major to A minor allows the phrase to achieve a weaker cadence in the movement's tonic key at m. 203. The coda, however, compensates for this weak cadence by providing a location for the first subordinate to wholly occur in C major. The return of secondary thematic materials in the recapitulation is expected to preserve melodic material from the exposition and occur in the tonic. The return in this movement (m. 196) indeed preserves melodic material, but begins in the incorrect key, forfeiting the potential for the tonal-thematic return.

The obligation of the recapitulation is to resolve the tonal conflict presented in the exposition. However, as Caplin states, sometimes the composer may be unable to fulfill this tonal-thematic return within the recapitulation and must, therefore, place the return in the coda.[15] In the case of the *Waldstein,* materials occurring away from tonic during the recapitulation are just barely transposed to tonic during the recapitulation. Although secondary thematic materials eventually achieve closure in the tonic, the transposition of these materials to A major averted

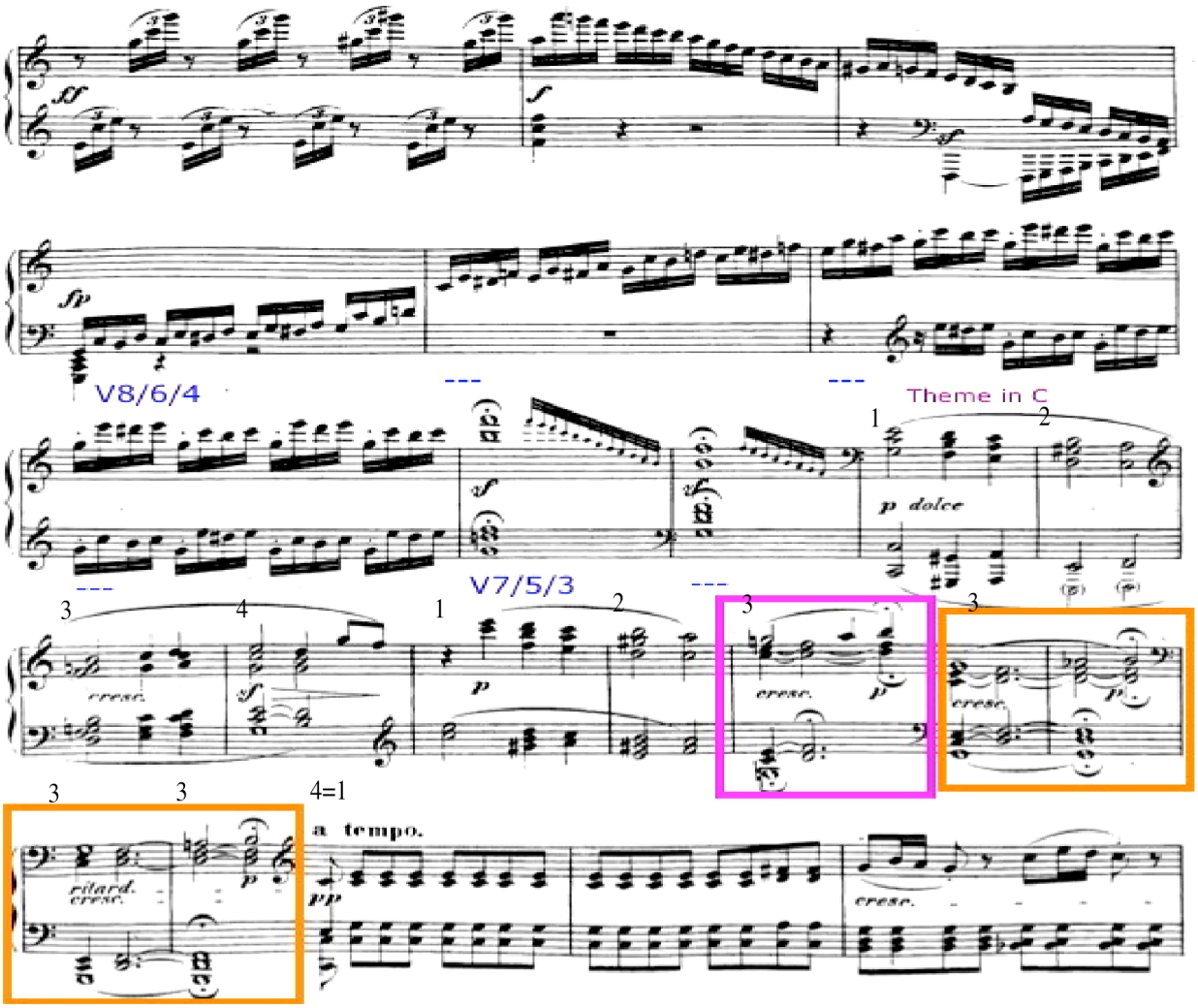
[15] Caplin, *Classical Form*, 186.

the chance for a tonal-thematic return. Therefore, the tonal conflict is not entirely resolved until the coda of this movement, where the first subordinate theme returns melodically preserved and harmonically adjusted. When finally the first subordinate theme appears in C major, the music achieves a cadence stronger than what was possible earlier in the movement.

Another way in which the *Waldstein's* coda provides more secure closure is through hypermetrical phrase expansion; the expansion occurs at the point of cadence during the return of the first subordinate theme allowing an emphatically stronger resolution than earlier in the recapitulation. Also, the return of the first subordinate theme during the coda aligns with a strong hypermetric beat, adding to this closure. An example of each of the following techniques occurs during the return: composed-out deceleration and expansion with repetition.[16] Rothstein cites the theorist Johann Philip Kirnberger, and his successors, for the technique of composed-out deceleration, which typically occurs just before a cadence. Rothstein cites Kirnberger again and Heinrich Christoph Koch for the technique of expansion with repetition, which occurs simultaneously with cadential material, often delaying the cadence. Example 1 presents the section of the coda containing these phrase expansion techniques (m. 275). Just before the return of the first subordinate theme in C major, a cadential six-four in m. 278 occurs, eliding its resolution with the start of the thematic return. This cadential material does not occur within a single measure, but rather is expanded over six bars decelerating the established harmonic rhythm. Also, the dominant seventh chord occurring between m. 282 and 283 receives accentuation through the addition of fermatas. Thus, our attention is drawn to the thematic return via a composed-out deceleration. Also intensifying this passage is an expansion with repetition. Within the first subordinate theme is a motive in m. 289 (boxed in magenta in Ex. 1); this is the

[16] Rothstein, *Phrase Rhythm in Tonal Music*, 63-87

prototype that will soon be transformed. Two expansions of that idea follow (see orange boxes), generating urgency toward the impending resolution.



Example 1. Beethoven, Piano Sonata in C Major, op. 53, mvmt. 1, mm. 275-97. For interpretation of the references to color in this and all other figures, the reader is referred to the electronic version of this thesis.

The first subordinate theme from the exposition, and its return during the recapitulation, yield the same phrase rhythm. These themes are both eight measures long, and contain two equal hypermetric measures. Therefore, the perfect authentic cadences of m. 42 and m. 203, respectively, occur on the weak hypermetric beat 4. The return to the first subordinate theme during the coda is altered, causing the cadence to occur on a strong hypermetric measure. As the

second phrase commences in m. 288, the above-mentioned expansion with repetition occurs. The expansion draws out the hypermetric beat 3, causing the phrase to grow by five measures; the hypermetric adjustment calls attention to the next strain of music. Here, the dominant seventh chord of m. 294 resolves to a tonic triad on the downbeat of m. 295. The tonic triad actually elides with another return of the primary theme, causing a phrase overlap. The overlap strengthens the resolution by transforming the hypermetric beat 4 into the downbeat of the next phrase, or hypermetric beat 1 (see the above diagram). The three attempts at this cadence combined with the emphatically strongest resolution of the first subordinate theme occurring in tonic provide great closure to this movement.

The recapitulated first subordinate theme of the first movement of the *Waldstein* does attain cadential closure in the tonic at m. 203; however, this thematic return began in the major submediant, continued in the minor submediant, and reached the tonic key barely in time for the cadence. Though cadential closure in tonic was secured prior to the coda, the reinstatement of the *entire* first subordinate theme in tonic at m. 284 reinstates the tonal-thematic connection that had gone missing in the recapitulation, and renders the cadence stronger than was possible in the recapitulation alone. The phrase expansion that occurs just before the point of cadence draws attention to this structural moment that, though redundant in a strict sense, closes the movement far more emphatically than the half-hearted cadence at measure 203.

Sonata no. 10, op. 96, movement 1

Beethoven's Violin Sonata, op. 96, composed in 1812, recapitulates material in a non-tonic key and then restores the previously absent tonic key during the coda. The first movements of the *Waldstein* sonata and op. 31, no. 1 (Chapter Two) recapitulate secondary thematic material in the major submediant due to the normative transposition of materials down-a-fifth during the

recapitulation. Opus 96, on the other hand, explores the chromatically lowered submediant during the recapitulation section. Unlike the *Waldstein* and op. 31, no.1, the exposition of op. 96 moves from tonic to dominant, therefore generating an expectation for secondary thematic materials to occur in tonic during the recapitulation. Figure 2 (shown on next page) presents the form of this movement.

The first tonal area of the exposition begins much like a parallel sectional period. Beethoven has written a six-measure long phrase that arrives at a perfect authentic cadence in m. 6. As the music restarts in m. 8, we begin to lose grasp on the tonic, due to the secondary dominant chords occurring in m. 9. The music moves away from any chance at a parallel structure, entering a parenthetical insertion instead at m. 11. This material is pictured below in example 2.

Example 2. Beethoven, Violin Sonata in G Major, op. 96, mm. 7-20.

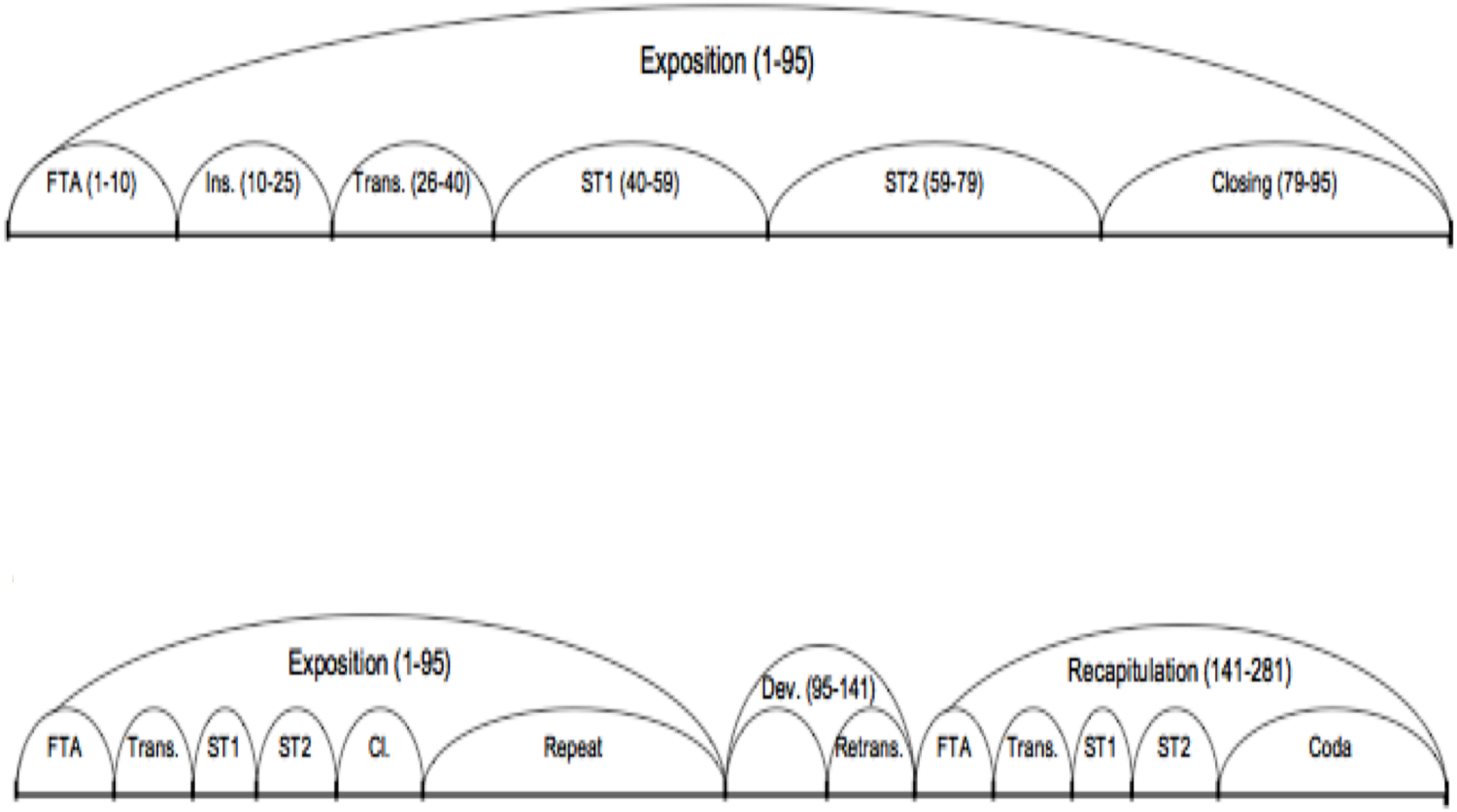

Exposition (1-95)
FTA (1-10)
Ins. (10-25)
Trans. (26-40)
ST1 (40-59)
ST2 (59-79)
Closing (79-95)
Exposition (1-95)
FTA
Trans.
ST1
ST2
Cl.
Repeat
Dev. (95-141)
Retrans.
Recapitulation (141-281)
FTA
Trans.
ST1
ST2
Coda

Figure 2

During the recapitulation, the parenthetical insertion returns in an incorrect key: the chromatically lowered submediant. The coda, then, supplies material reminiscent of the parenthetical insertion; here, the section of music occurs in the tonic key, providing a sense of harmonic restoration to the movement. The insertion is an unnecessary passage of music that lengthens the course towards the first tonal area's closure. The insertion, occurring between mm. 11 and 20, connects the subdominant triad (m. 10) with the applied dominant seventh chord (m. 20); following the insertion are several attempts at closure. The cadential progression that begins as the parenthetical insertion comes to a close yields closure on a local level. The progression begins with the applied dominant seventh chord tonicizing D major. As the seventh chord resolves into m. 21, the C-sharp is altered to C-natural, producing a dominant seventh chord in third inversion. The unstable dominant sonority resolves appropriately into a tonic chord in first inversion, producing an evaded cadence. The music returns to the applied dominant in m. 23 to attempt this passage again; however, the music proceeds to another evaded cadence. Rather than returning back to the cadential material for one last attempt at cadence, the music proceeds to the transition section of the exposition (m. 26). Although no cadence occurs at the end of the primary theme, the transition begins with familiar material; the transition repeats material from the evaded cadence (mm. 24-25). The dynamically heightened beginning at m. 26 and the increasing harmonic instability confirm that this section is indeed moving forward to the next tonal area.

The second tonal area of this movement contains two subordinate themes; the first occurs between the downbeat of m. 40 and m. 59, and the second begins at m. 59 and closes on the downbeat of m. 79. The first subordinate theme is a large parallel interrupted period, which arrives on a half cadence in m. 47. The music recommences on the tonic in m. 49, and the melody has been shifted from the piano to the violin. The first subordinate theme gives way to

the second subordinate theme through deceptive resolution, with a root position dominant seventh chord in D major moving to a bVI triad. The B-flat major triad introduced in m. 59 permeates the next few measures, causing the second subordinate theme to oscillate between B-flat major and D major tonalities. At times, the music strives to achieve a cadence in D major; however, the closure gives way to B-flat major. For example, the music arrives at a cadential dominant in m. 62, but the music resolves deceptively, again, to a B-flat triad.

Example 3. Beethoven, Violin Sonata in G Major, op. 96, mm. 57-70.

The second subordinate theme begins and closes in D major; however, the early exploration of the chromatically lowered submediant generates an expectation to be examined later in this movement. Finally, the music arrives on the dominant of D major in m. 67; the dynamic weight of the *crescendo* and *sforzando* markings, and the repeatedly struck dominant in the right hand of the piano, confirm this arrival. The music remains in G major, though the pitch B-flat reappears

as a neighbor tone at the end of the codetta (mm. 91-94). The return of this chromatic pitch, shown below, instills a sense that the music has not ceased exploring remote tonal areas.

Example 4. Beethoven, Violin Sonata in G Major, op. 96, mm. 91-96.

The recapitulation begins mostly unaltered when compared with the exposition section; the melody is shifted around slightly within the violin and piano voices. As the parenthetical insertion is set to commence, the music quickly abandons G major and transposes this section of music to E-flat major, or the chromatically lowered submediant. The exploration of the chromatically lowered submediant during the recapitulation recalls the second subordinate theme's shift to B-flat major, confirming the music had not yet ceased exploring remote tonal regions. The implication of the insertion section during the recapitulation is different when compared to its appearance during the exposition. Just before the insertion begins, the music has modulated to E-flat major (mm. 148-149). As well, the music following the end of the insertion section (the transition) continues in the nontonic key. The insertion section is now a part of the current tonal force, E-flat major. The recapitulation promptly breaks away from E-flat major in m. 171 with the presence of the pitch C-sharp (shown in Example 5); the C-sharp prepares the upcoming dominant in m. 172, helping the music to transition and remain in the tonic, G major. Example 5 presents the excerpt:

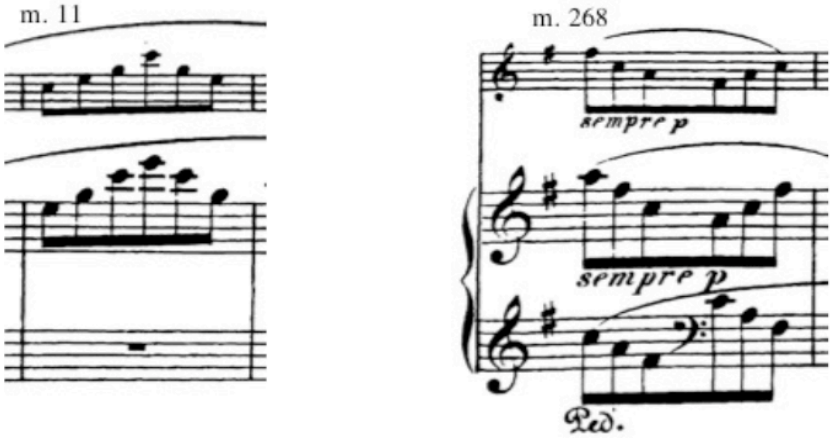
Example 5. Beethoven, Violin Sonata in G Major, op. 96, mm. 147-73.

The coda of this movement primarily develops material from the exposition and recapitulation sections. Some of Beethoven's codas serve as second developments to their movements. However unlike the true development section of a sonata-form movement, closure and stability are attained. Though I am hesitant to apply the label "secondary development" to codas, I believe these large closing sections exemplify some developmental characteristics. During the first part of this section (mm. 230-37), the pitch E-flat is introduced in the melody as a neighbor tone (shown below).

Example 6. Beethoven, Violin Sonata in G Major, op. 96, mm. 225-36.

The accompaniment, however, alternates between tonic and dominant triads. The addition of the lowered sixth scale degree is reminiscent of the exposition's second subordinate theme that explored E-flat major (mm. 59 through 66). The last 14 measures of this movement (m. 268 and on) are similar in the following ways to the parenthetical insertion from the exposition: tonal center, harmonic motion, and texture. The end of this movement is grounded in the tonic, as expected, much like the beginning of the exposition where the parenthetical insertion occurred; the music does not reference chromatically altered keys. The diatonic harmonies progress slowly

through this section, with certain chords occurring over several measures (e.g., the tonic triad in m. 271-75). The stagnant harmonic motion late in the coda is reminiscent of the earlier insertion section. Finally, the three voices move in similar motion through arpeggiated skips, maintaining the texture of the insertion section. However in the concluding section, the melody is inverted. The music in the coda (m. 268 and on) arpeggiates down through the tonic and dominant harmonies and then climbs up to the next measure; the pitches from the exposition's parenthetical insertion arpeggiate up first and then dip down (example 7).



Example 7. Beethoven, Violin Sonata in G Major, op. 96, mm. 11, 268.

Also, the left hand of the piano is alternating with the right hand of the piano and the violin. See example 8:

Example 8. Beethoven, Violin Sonata in G Major, op. 96, mm. 268-81.

Beethoven's violin sonata, op. 96, dispels the expectation that materials will occur in tonic during a movement's recapitulation. The parenthetical insertion from the exposition of this movement did not remain in tonic during the recapitulation. Rather, this section of music occurred in a chromatically altered key: the lowered submediant, E-flat major. Exploring this unrelated key late in the movement is reminiscent of the unexpected tonal area achieved during the second tonal area in the exposition. The coda, then, provides an opportunity for the insertion to appear transposed to the tonic. Though the melody of the return occurring between mm. 268-75 is altered by instrument pairings and melodic direction, the related tonal center, harmonic motion, and texture recall the parenthetical insertion from the exposition. The return to this material in a setting similar to the exposition allows a sense of harmonic conclusion to the movement not achieved by the recapitulation.

Op. 70, no. 2

Beethoven composed two piano trios during 1808; the second of these, an example of sonata-form, features another instance of harmonic adjustment during the coda. While the majority of this movement adheres to sonata-theory expectations, the recapitulation occurs off-tonic opening the door for the coda to correct the key of the primary theme later. Figure 3 presents the form of this movement.

In addition to the off-tonic return occurring during the recapitulation, this movement presents the two primary types of external expansions noted by Rothstein: introduction and coda. In fact, the theme from the introduction occurs during the coda beginning at m. 224, synthesizing these two sections of the movement. The return of introduction material so late in this trio has not occurred in any of the pieces analyzed for this paper. The thematic material development and harmonic exploration of this coda allows for various paths to be recalled as this section of music unfolds; here, the introduction can make one last appearance calling attention to the return to material based on the first tonal area.

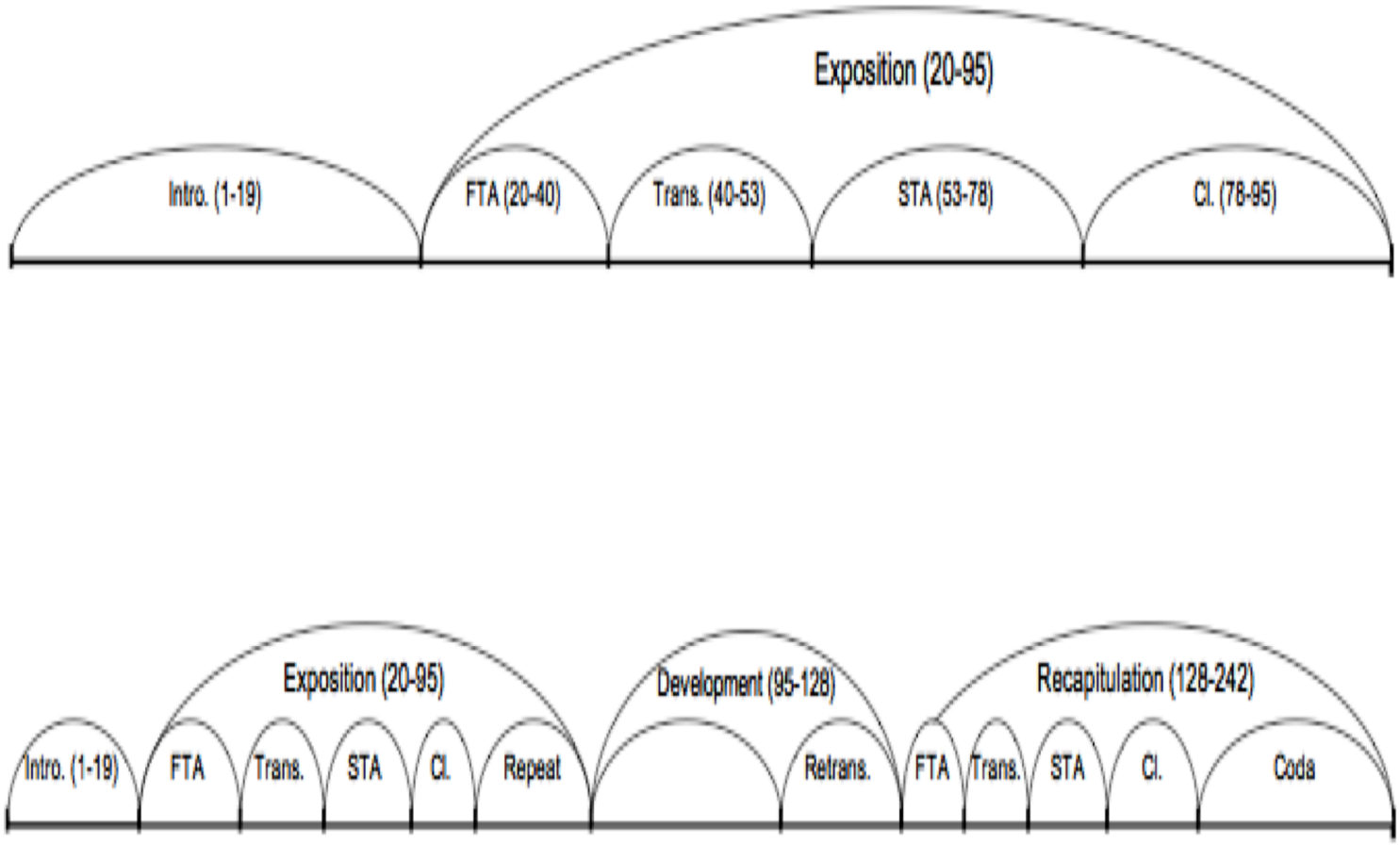

Exposition (20-95)
Intro. (1-19)
FTA (20-40)
Trans. (40-53)
STA (53-78)
Cl. (78-95)
Exposition (20-95)
Development (95-128)
Recapitulation (128-242)
Intro. (1-19)
FTA
Trans.
STA
Cl.
Repeat
Retrans.
FTA
Trans.
STA
Cl.
Coda

Figure 3

The off-tonic return of thematic material during the recapitulation is anticipated early in this movement. The minor dominant, B-flat minor, presents itself just seven measures into the introduction with addition of the pitch D-flat; the off-tonic return occurs in the relative major key, D-flat major. The music in m. 7 provides a smooth introduction of the pitch D-flat through an applied dominant chord tonicizing the subdominant, or A-flat major. The harmonic action taken so early in this movement promises further exploration; the return to this tonal area occurs during the recapitulation. A retransition in preparation for the return of the primary theme begins in m. 124 with a diatonic dominant seventh chord in first inversion. The transition continues with an alternation of dominant and minor tonic harmonies. Just before the point of recapitulation, a tonic triad is transformed into an applied dominant seventh chord tonicizing the subdominant; the chromatically lowered third of the minor tonic triad becomes the chordal seventh of the applied chord. This chord drives the music into a return beginning in the subtonic, or D-flat major; this harmonic decision alludes to the exploration of B-flat minor that occurred during this movement's introduction. Though the music eventually proceeds to E-flat major, this disruption calls for harmonic adjustment.

Beethoven and other composers used off-tonic returns throughout their compositional careers. Burstein taking note of this classical period tendency has generated four categories in which off-tonic returns may be organized. This movement exemplifies category IV with its recomposition of primary theme materials in the coda.[17] The coda of this movement is divided into three sections: the first section beginning in m. 208 recalls material from the exposition, the next section beginning in m. 224 reinstates material from the introduction, and the final section

[17] L. Poundie Burstein, "The Off-Tonic Return in Beethoven's Piano Concerto No. 4 in G Major, Op. 58, and Other Works," *Music Analysis* 24/3 (2005), 324-328.

beginning in m. 233 cycles material from the primary theme. Though the primary theme does not return in full, the fragmentation of these materials occurring in the tonic key corrects the earlier off-tonic recapitulation providing the listener one last chance to hear the movement's primary theme in the correct key. Also, the return to this salient introduction so late synthesizes the use of external expansions in this movement.

CHAPTER TWO: CODAS THAT RESTORE MISSING MATERIALS

Op. 31, no. 1, movement 1

The coda of Beethoven's piano sonata, op. 31, no. 1 is an intriguing instance of compensatory function in the form of restoration of material omitted from the recapitulation. Caplin states that some recapitulations erase passages that occurred during the exposition, though they still fulfill their own formal functions. The coda is then given the role of "recapitulating" this material.[18] I believe op. 31, no. 1 exemplifies this compensatory function, and I have analyzed this movement with that idea in mind. This movement, in sonata-form, was composed in 1802, just a year shy of his Middle Period (see figure 4).

At the conclusion of the primary theme in the exposition (m. 30), a sixteen-measure extension of a perfect authentic cadence begins. It is motivically derived from the opening three measures. A tonal foreshadowing arises as the extension begins, with the G-A#-B melodic motion. This chromatic pitch references the forthcoming secondary leading tone, which points to a second tonal area in B major. The A# occurring at the beginning of the extension (m. 30) is incidental, since the pitch is functioning as a chromatic lower neighbor to the pitch B. However, as the music enters the transition section, the appearance of A# is greater, since the pitch is now structural; the A# is a leading tone to the secondary key of the exposition, B major. The second measure of this extension (m. 31) contains a D# at the same metrical location as the A# in the previous measure. This pitch is more than just a chromatic passing tone; it foreshadows E major, the key in which the secondary theme will begin during the recapitulation.

[18] Caplin, *Classical Form*, 186.

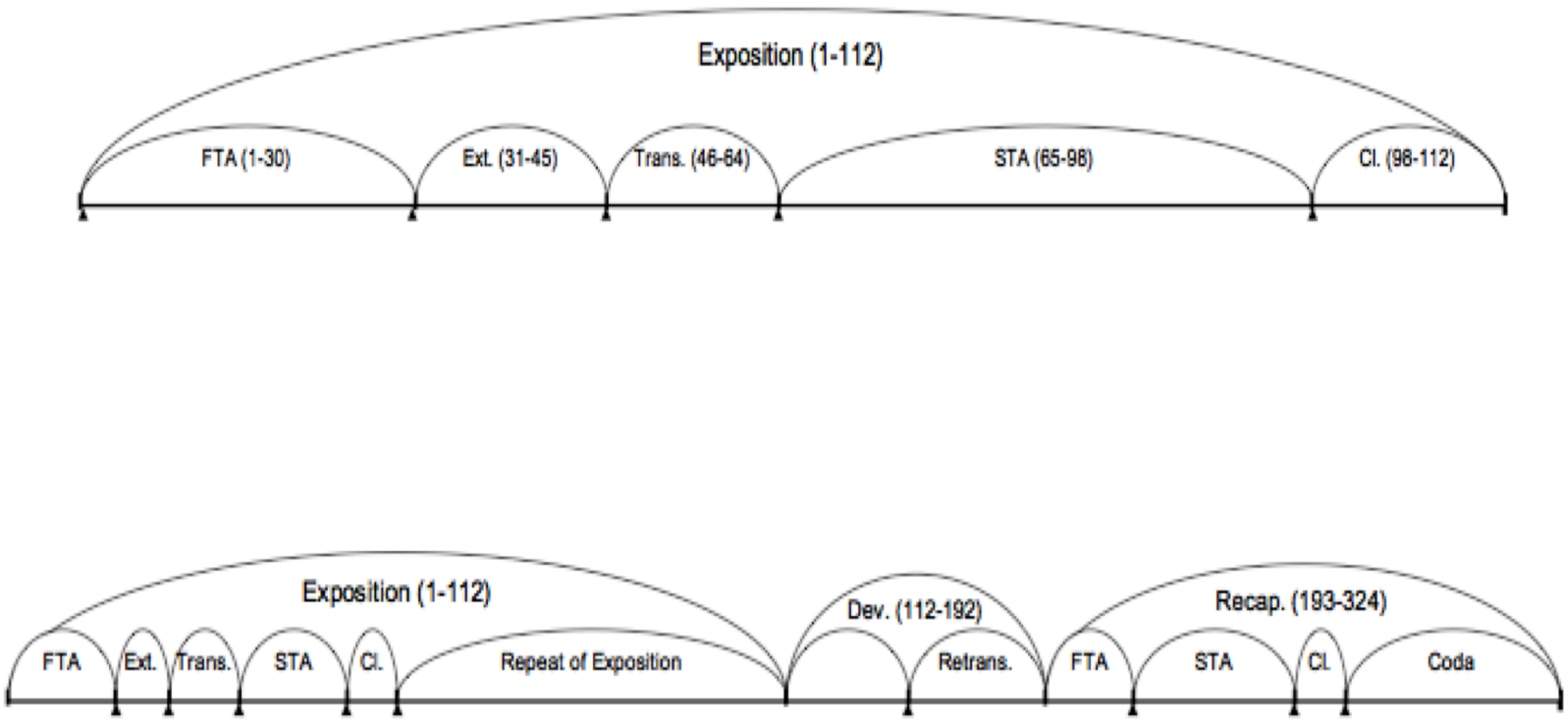

Exposition (1-112)
FTA (1-30)
Ext. (31-45)
Trans. (46-64)
STA (65-98)
Cl. (98-112)
Exposition (1-112)
Dev. (112-192)
Recap. (193-324)
FTA
Ext.
Trans.
STA
Cl.
Repeat of Exposition
Retrans.
FTA
STA
Cl.
Coda

Figure 4

Opus 31 is similar to the first movement of the *Waldstein* in that they both present anomalous secondary key sections during their expositions. Inevitably, their recapitulations contain off-tonic beginnings to secondary themes in order to preserve the normative transposition of materials to a fifth below (B major to E major in this case). The recapitulation of this movement omits both the extension material and the majority of the transition section from the exposition, maintaining only the written-out trill at m. 216; here, an alternation of A# and B lead directly to the return of the secondary theme at m. 218. Here, Beethoven provides another instance of the A#-B melodic connection that first occurred during the extension section of the exposition. The music occurring between mm. 216 and 217 is an exact transposition of the corresponding section of the exposition, where E# served as a chromatic lower neighbor to F# (mm. 64-65). The result of the normative down-a-fifth transposition during the recapitulation provides a third instance of this melodic connection, now in a different context. The first A#-B appeared in a context where A# served as a chromatic lower neighbor to the local scale degree three (m. 30). During the second tonal area of the exposition, the pitches E#-F# tonicized the dominant of the anomalous secondary key, B major. During the recapitulation, the A# is now the chromatic lower neighbor to B, scale degree five in the initial secondary key to this section of music. Thus, even with the secondary theme transposed during the recapitulation, the small detail of that written-out trill allows for yet another reference to the pitch-class motive A#-B, which appeared during the seemingly incidental extension of the cadence following the primary theme in the exposition. The lengths of both the primary theme and the secondary theme during the recapitulation are altered: the primary theme is seven measures shorter, and the secondary theme is fifteen measures longer. That is, the abbreviated primary theme provides space for the E-major secondary theme to transpose thematic material into the tonic, G major.

The coda compensates for the absence of music by beginning with an exact copy of the extension material from the exposition. The material returns as a summation of the movement. The pitch-class motives A#-B and D#-E both return within the stable context of the tonic, G major. The appearance of the motives introduced so early in op. 31, no. 1 recalls the anomalous tonal plan of this movement. An exposition's second tonal area harmonized in the major mediant that returns in the major submediant during the recapitulation is a noteworthy facet of Beethoven's music, since this harmonic process also occurred in the first movement of the *Waldstein*. Unlike the *Waldstein,* however, the restoration of this material in the coda through pitch-class motives recalls the unusual tonal trajectory taken by op. 31, no. 1.

Opus 31, no. 1 does not contain a structural dominant arrival during the exposition due to the anomalous tonal motion to the mediant. Beethoven instead establishes the dominant through a large retransition and a brief tonicization during the coda. During the development, the music arrives on the dominant at m. 150; the retransition of this movement actually makes up over half of the development. Though the music arrives on a D minor triad, Beethoven quickly adjusts the F-natural to F-sharp in m. 154, confirming this music is indeed functioning as the dominant to G major. During the coda, the material occurring after the return of the extension briefly alludes to D major. Measures 300 and 302 yield a triplet figure that appears to tonicize D major. The figure is boxed below in example 9:

Example 9, Beethoven, Sonata for Piano in G Major, op. 31, no. 1, mm. 299-303.

The normative procedure of a major mode sonata-form movement generates a second tonal area in the dominant. Opus 31, no. 1, instead, moved to the major mediant, B major, and remained in that tonality for the entire duration of the second tonal area. Though the recapitulation did cadence appropriately in G major at the conclusion of the secondary theme, the restoration in the coda of both the omitted extension and a hint at the absent dominant key justify this coda as a means for summation.

Beethoven's op. 31, no. 1 contains a coda that recalls several facets of the movement. First, the compensatory function "restoration of deleted material" is exemplified by the coda's return to the extension material missing during the recapitulation. The extension introduced early during the exposition exploited the anomalous tonal plan of this movement; the notable pitch-class motive A#-B played a key role in the dramatic development of op. 31, no. 1. Therefore, the return to the extension material during the coda provides one last instance of the features forming the premise of the movement.

WoO 57

Reinstatement of missing materials and reference to an earlier tonal path are provided not only by Beethoven's sonata-form codas, such as the first movement of op. 31, but indeed also by the codas of other forms. Beethoven's piano work WoO 57, a seven-part rondo composed in 1804, contains the two above forms of summation during the coda. The following figure provides the form of this movement.

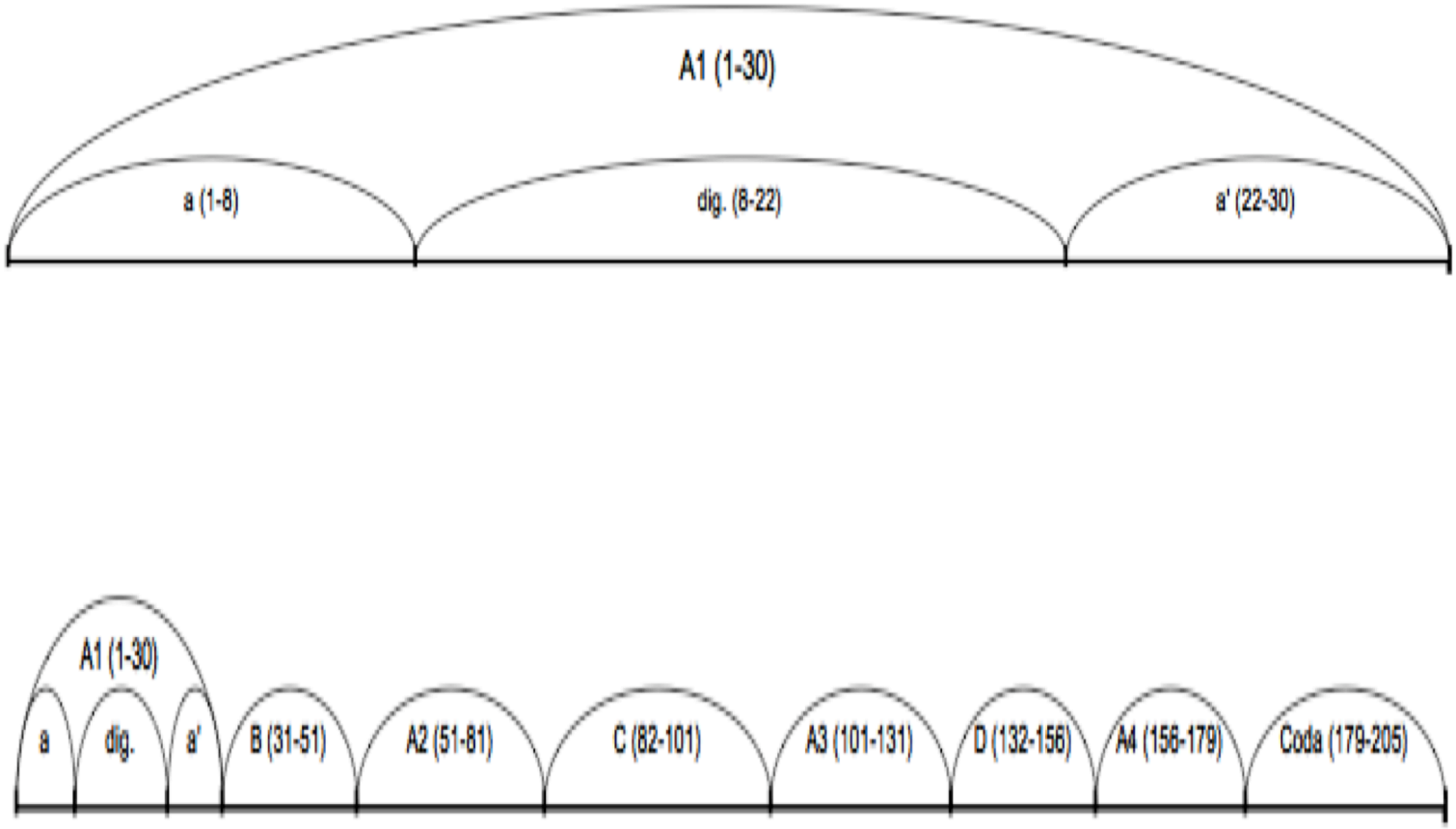

A1 (1-30)
a (1-8)
dig. (8-22)
a' (22-30)
A1 (1-30)
a
dig.
a'
B (31-51)
A2 (51-81)
C (82-101)
A3 (101-131)
D (132-156)
A4 (156-179)
Coda (179-205)

Figure 5

The refrain of this movement, which is itself in rounded binary form, returns four times over the course of the rondo. During the first three refrains, each section of the rounded binary form returns. During the final return (A4), the digression and a' sections are omitted; they are later reinstated during the coda, which begins after the return of the refrain (m. 179). The opening refrain, A1, and the final refrain, A4, are shown in Example 10:

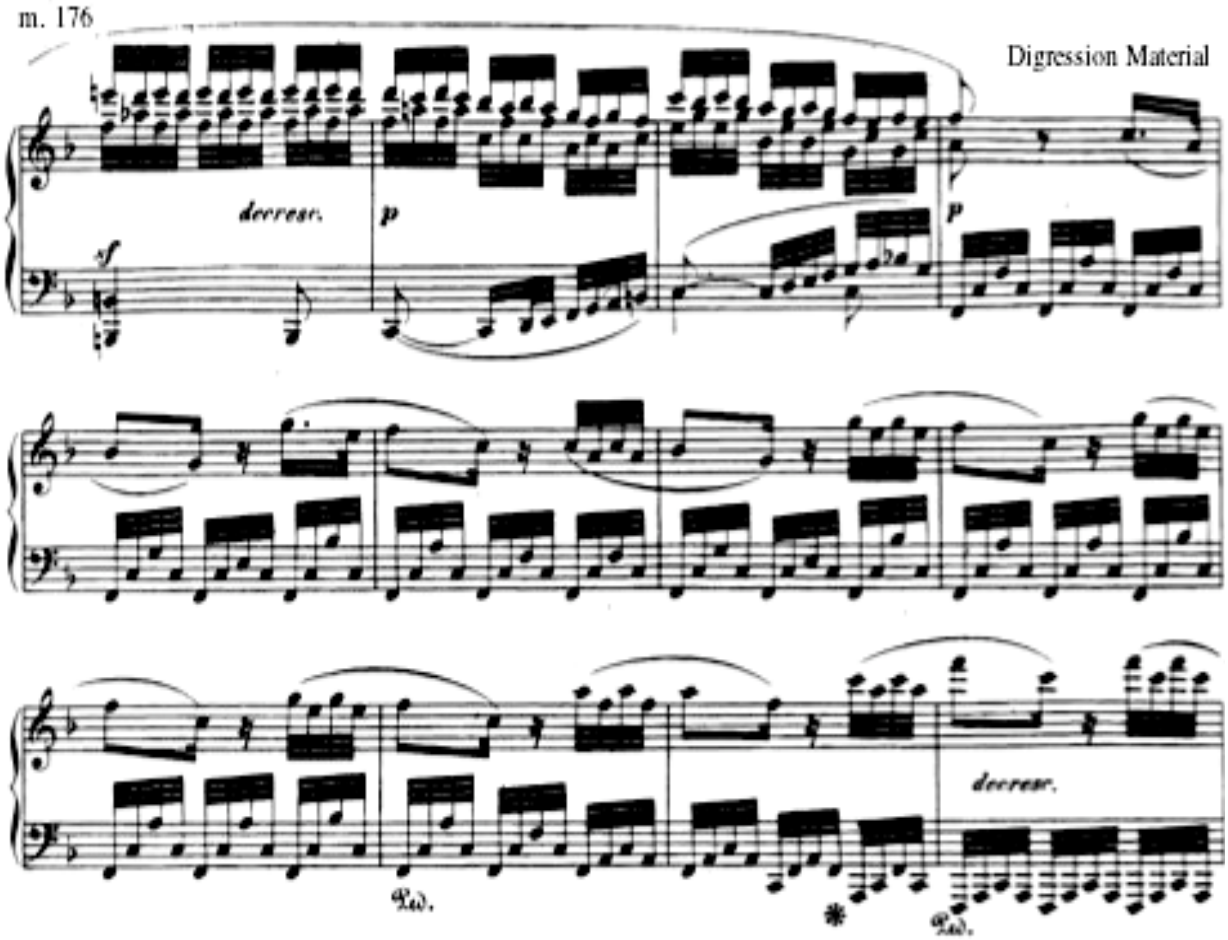
Example 10. Beethoven, WoO 57 in F Major, mm. 1-26, 154-69.

Example 10 (cont'd).

The refrain of this movement, or the a section of the embedded rounded binary, begins with a parallel interrupted period. Following the authentic cadence in m. 8 is a digression, notable in terms of its tonal plan. Rather than achieving the dominant in preparation for the a' section, the

digression's music moves through a common-tone modulation from tonic F major to the chromatically lowered submediant, D-flat major; the F, shown in the previous example, is retained in the soprano between m. 16 and m. 17. The tonal area moves to a half cadence (m. 22) through an augmented-sixth chord in the tonic key, F major. The return of the a section, or a', follows the digression and closes the refrain at m. 30; the a' section maintains the same length as the opening a section.

The final return of the refrain, or A4, (m. 156) omits material while melodically and harmonically expanding other material. At the point where the digression of the embedded rounded binary should occur, the music is missing; also, the music does not lead to a return of the a' section. Instead, the tonal area D minor is explored beginning in m. 167 and new material that was not included in the first refrain unfolds. The refrain's opening parallel interrupted period begins in m. 156; excluding the transfer of material by octaves, the a section remains unchanged through the half cadence in m. 160. During the consequent of the period, the rhythmic values are stretched out between mm. 162 through 166, altering the sense of pulse established by the previous three refrains (shown in boxes X and Y). A composed-out deceleration begins in m. 165 over a cadential six-four moving to dominant seventh chord (shown in box Z). Rather than yielding this movement's fundamental closure, the cadential phrase moves to a major mediant triad, an A major chord. The unexpected sonority is functioning as the dominant to the local tonic, D minor. The music proceeds with new rhythmic material in m. 167; the combination of sixteenth notes against thirty-second notes, articulated in a *legato* style, did not occur earlier in the movement. The interpolated section of music leads to this movement's structural closure, occurring in m. 179; a coda begins shortly after. This coda begins with material derived from the digression of the refrain; the melody remains unchanged for six measures (mm. 179-185).



Example 11. Beethoven, WoO 57 in F Major, mm. 176-87.

Following the reinstatement of digression material, the theme from the opening refrain occurs briefly in the key of the Neapolitan at m. 193. The choice to tonicize a key area a diatonic fifth below the lowered submediant (flat VI) provides a sense of relief for the refrain's early chromatic exploration. Beethoven calls attention to the reinstatement of this theme by recalling a motive native to the digression section, three *staccato* eighth notes (e.g., m. 21). Much like other Beethoven movements discussed thus far, these remote key areas lying a fifth apart from one another emit the impression of a dominant-to-tonic relationship. The unexpected tonal area established during the movement's refrain is, in a sense, resolved in the coda.

The harmonic closure of this movement occurs in m. 179, providing little justification for the necessity of the coda. However, at the moment of closure, several loose ends still remain. The final return of the refrain had been altered; the missing digression and a' sections were replaced by a brief interpolation, reducing the length of the A section of this rondo. Also, the digression of the embedded rounded binary from the refrain, occurring in D-flat major, lacks any sort of revisiting during this movement, such as an episode or tonal area exploring this chromatic region. The coda, beginning with digression material, recalls the missing section. Following this section of music is the primary theme, now occurring in the Neapolitan. The final appearance of this theme so late in the coda closes this movement by recalling and, in a sense, resolving the chromaticism that occurred so early in the refrain.

Waldstein, movement 3

The third movement of the *Waldstein* sonata presents another rondo that exemplifies reinstatement of missing materials in the coda. The refrain of this movement is a rounded binary, with a parallel period leading a pause on the dominant beginning at measure 23. When the final return of the refrain occurs, the original a section and its digression from the opening theme are omitted. The coda presents materials similar to these missing sections of music. This movement, a five-part rondo, also explores tonal areas in its coda that were introduced during the strikingly developmental C section. The enormous coda, comprising over a third of the movement, can be viewed as closure to entire the multi-movement *Waldstein* sonata. The following figure presents the form of this movement.

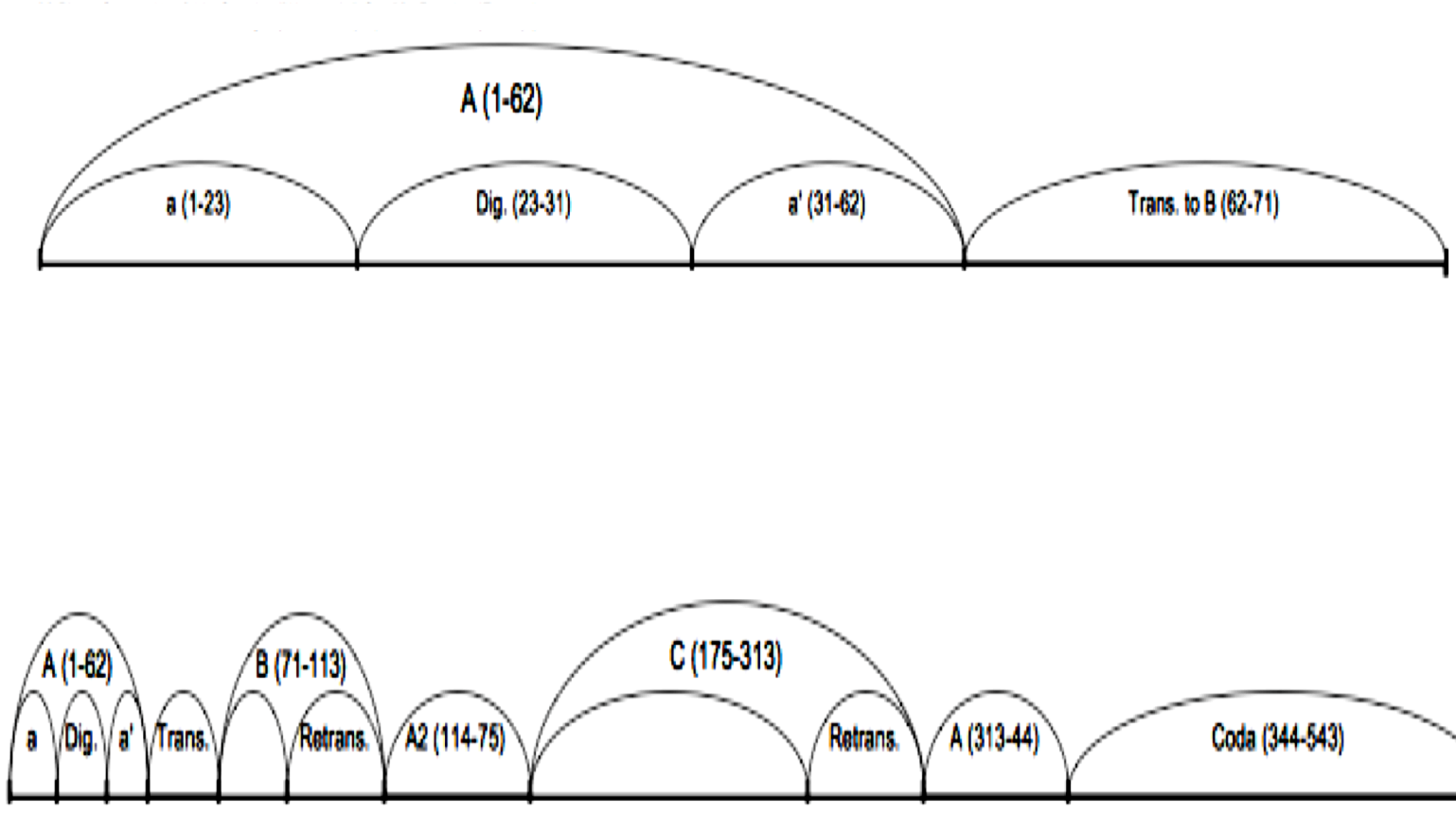

A (1-62)
a (1-23)
Dig. (23-31)
a' (31-62)
Trans. to B (62-71)
A (1-62)
a
Dig.
a'
Trans.
B (71-113)
Retrans.
A2 (114-75)
C (175-313)
Retrans.
A (313-44)
Coda (344-543)

Figure 6

Due to the absence of sequences or a strong arrival on the dominant, the refrain of this movement does not contain a standard digression. The section of music between measures 23 and 31, however, does indeed connect occurrences of the primary theme. The emphasis on the dominant during this span of music confirms the labeling choice as digression. The a' section begins in measure 31, with the melody doubled in octaves. As in the original appearance, the music moves to a passage that emphasizes the dominant just before the melody returns once more in measure 54.

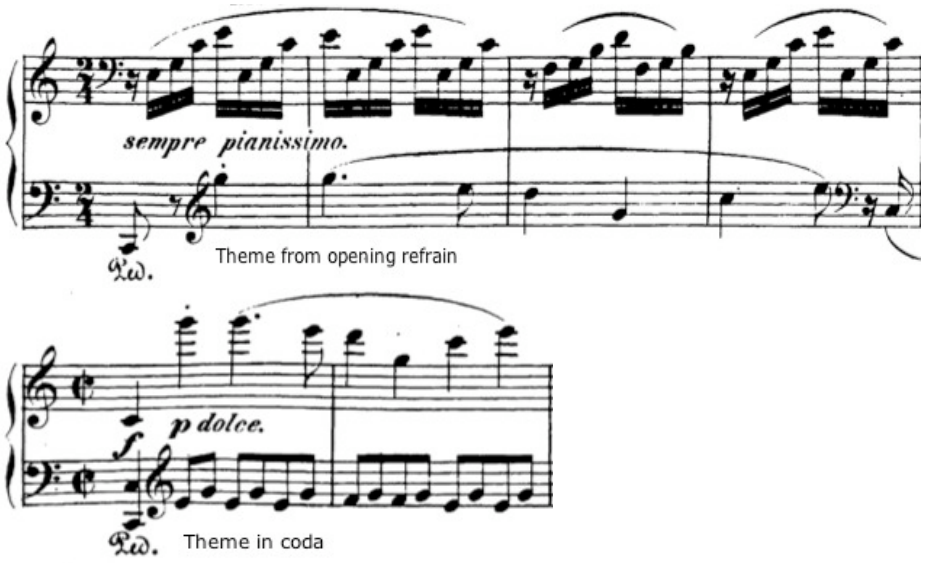
The final return of this movement's refrain is abbreviated compared to its first appearance: the opening refrain is 62 measures in length and its final return occurs over 32 measures. The a section and digression appear to be missing as this movement comes to a close. The refrain beginning in m. 313 is truncated; the original a section that begins this movement has been removed. Instead, the material beginning this final appearance of the refrain is similar to the return of thematic material from the opening rounded binary (a'). The theme occurs in octaves, much like the return in m. 31. Also, this section of refrain moves to the trill beginning in m. 332 emulating the material from m. 50. The normative procedures of form dictate a return to the a section and digression should have occurred in m. 313, but instead the music skips this part of the refrain and moves directly to its own a' prime section.

The immense coda of this rondo movement begins in m. 344. The large closing section explores several different tonal areas, develops thematic material from earlier in the movement, and contains a distinct section beginning at m. 403. The coda, which can be described as discursive, begins by returning to material that occurred earlier in this movement. The transitional section that connected A and B (mm. 62-70) is expanded through fragmentation and development early in this coda (m. 344-78), and is transformed in length from eight measures to

thirty-four measures. The triplet figures, during the coda, now occur simultaneously creating a thicker texture compared to the appearance just after the refrain. The expanded section of the coda arrives on the dominant in m. 378.

The subsequent section of music briefly recalls a harmonic decision made earlier in this movement. Each appearance of the refrain contains an instance of modal borrowing from the parallel minor: e.g., the use of e-flat in m. 15. This stretch of music in the coda (mm. 386-94) exposes a collection of pitches that could only exist diatonically in C minor. The stack of pitches analyzed as a G major-minor ninth chord is shifted through these measures.

The second passage of this coda, beginning in m. 403, reinstates deleted material from the refrain. As the coda commences, the refrain of this movement has occurred three times. However, as the movement proper achieved structural closure, the form of the refrain was disrupted. The formal structure of the opening refrain is rounded binary. When this theme made its final return, the a section and digression were missing. Because this final section of the coda extensively develops the primary theme from the opening refrain, a sense of melodic completion is achieved (see example 12).



Example 12. Beethoven, Piano Sonata in C Major, op. 53, mvmt. 3, mm. 1-4, 463-64.

Though the rhythmic values are diminished and the melody appears in a different register, the motivic similarity is evident.

Discursive codas often cycle musical material through a variety of non-tonic keys. The coda of this movement yields that characteristic. The section beginning in m. 442 explores the following tonal regions: A-flat major, F minor, D-flat major, and B-flat minor. The use of these keys is reminiscent of the tonal areas explored during this movement's C section. Several markedly dynamic false returns of the refrain occurred in the C section, beginning at m. 221; these refrains are harmonized in A-flat major, F minor, and D-flat major.

CHAPTER THREE: OTHER VARIOUS FUNCTIONS OF CODAS

Op. 90, movement 2

Codas of movements in sonata-rondo form can also provide a sense of resolution, as is the case in Beethoven's op. 90. The codas of sonata-form and sonata-rondo movements serve different procedural roles. Often, codas of sonata-rondo movements contain the final appearance of the refrain. In the case of op. 90, the four appearances of primary thematic material in the tonic key leave a different role for a sonata-rondo coda to play, as opposed to the fewer and more spread out occurrences in sonata form proper. While all secondary thematic material is properly transposed to tonic, the fundamental closure of this movement occurs only after the coda has begun. Figure 7 presents the form of this movement.

The refrain of this sonata-rondo movement is complicated in its formal design. It is a small binary with an additional return of the A section after the close of the form proper. At first, however, this complicated main theme appears to be a small ternary. Small ternaries are comprised of three main sections: the exposition (A), the contrasting middle (B), and the recapitulation (A'), a viable explanation of how this main theme is formally divided. However, according to Caplin, the "contrasting middle" of a small ternary never closes with an authentic cadence in the home key," which is exactly what happens in m. 16 of this movement.[19] In fact, the first phrase of the B section (from mm. 9-16) is even repeated, reiterating this cadential closure in m. 24. Thus, the opening refrain is actually a small binary: A (mm. 1-8) and B (mm. 8-24). The repeated perfect authentic cadence in m. 24 is the close of the small binary; a slightly ornamented and anomalous return of the A section follows in mm. 24-32.

[19] Caplin, *Classical Form*, 75.

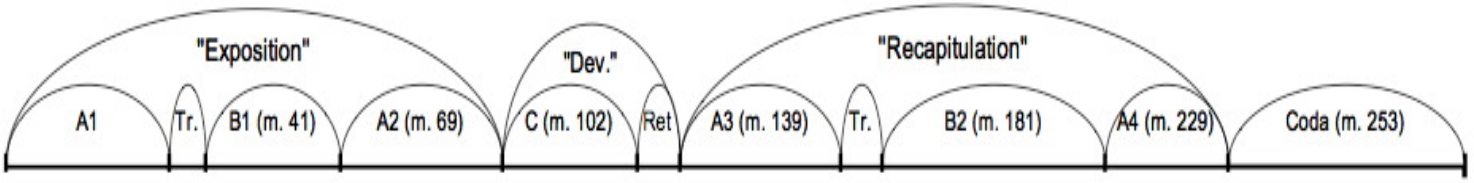

"Exposition"
"Dev."
"Recapitulation"
A1
Tr.
B1 (m. 41)
A2 (m. 69)
C (m. 102)
Ret
A3 (m. 139)
Tr.
B2 (m. 181)
A4 (m. 229)
Coda (m. 253)

Figure 7

The refrain returns three times over the course of this movement. A2 (m. 69) and A3 (m. 139) remain unchanged compared to the opening refrain. A4 returns at m. 229 almost in full, lasting for a total of twenty-three measures. At the moment when the perfect authentic cadence that occurred in the exposition at m. 24 would have repeated itself in the recapitulation, it does not occur. No sense of cadential closure occurs in this region of the music due to the retention of the dominant in the bass even as the soprano resolves to the tonic pitch E; however, a coda does indeed begin in m. 252.[20]

While tonal closure has been denied the material that follows is at least thematically extraneous, if not tonally so, because it is distinct from the previous section, the return of the primary theme. Though the exact location of this coda's outset can be difficult to determine, motivic development confirms that this music is serving as a coda. This motivic development (discussed below with score) did not occur in the exposition; also, thematic material is often developed in codas. In Rothstein's terminology, this section of music that is evading authentic cadential closure can be understood as a "parenthetical interpolation"; the music from measure 253 through 275 could be omitted in preparation for the forthcoming cadential closure.[21] Caplin states that in some sonata-rondo movements, "a subordinate theme that was closed in the exposition is left open in the recapitulation and then merges into the beginning of the coda."[22] With that in mind, this final return of the refrain is not functioning, then, as the cadential closure of this movement; this structural close occurs later in the coda.

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[20] Donald Francis Tovey, *The Forms of Music* (New York: Meridian Books, 1957), 199.
[21] Rothstein, *Phrase Rhythm,* 80.
[22] Caplin, *Classical Form,* 239.

The two returns of the refrain preceding this appearance both reinstate the ornamented A section from the end of primary theme. The absence of the extra, ornamented A section during the final refrain at m. 229 retrospectively confirms that the opening form of this movement is indeed a small binary, since the coda begins at the point where a normative small binary would end and the previously heard extra phrase would have begun. On the other hand, having heard the refrain three times with this extra A section, one might expect to hear it in the final iteration as well; the coda provides an opportunity for this loose end to be tied up.

Codas of sonata-rondo form movements typically contain the final return of the refrain, due to the A-B-A-C-A-B-A form. These codas, then, begin right after the recapitulation of the subordinate themes.[23] In this movement, however, the final return of the refrain appears just before the coda; in fact, the final refrain dissolves into the coda without a clear demarcation in the form of a cadence or textural break. This extensive coda is exceptional in its treatment of motives and tempo. Three motives from earlier in the movement are developed in the coda: the cadential figure that closed the second phrase of the opening refrain (mm. 15-16), the first phrase from the second subordinate theme (mm. 60-63), and the close to the first phrase of the opening refrain (mm. 7-8).[24] Measures 253 through 261 begin the coda by fusing with the ending of the final return of the refrain. Here, the material from the close of the second phrase of the opening refrain (mm. 15-16) is developed for two measures in the upper voice, then for two measures in the tenor voice, and finally again in the right-hand octaves for six measures before ending on the dominant. The original phrase that will soon be expanded, or prototype, is contained in box A. Soon following, the material appearing in the bass clef during the next three measures is similar

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[23] Caplin, *Classical Form*, 239.

[24] Donald Francis Tovey, *A Companion to Beethoven's Pianoforte Sonatas* (New York: AMS Press Inc., 1976), 214-15.

to the second subordinate theme (boxes labeled B). Finally, the material contained within box C, and the nine measures following, is an imitative development section of the music from the close of the first phrase of the first refrain (mm. 7-8); this all appears over a dominant pedal, which leads to a return of the primary theme from the refrain. Fragmentation promptly disbands the likelihood of a full return. The prototype in m. 278 initiates an expansion with repetition; the idea is repeated in both m. 280 and m. 282. Similar to the first movement of the *Waldstein*, the repetition just before a cadence generates a sense of urgency for harmonic and melodic resolution. The final perfect authentic cadence of this movement occurs on the downbeat of m. 283 (example 13):

Example 13, Beethoven, Piano Sonata in E Minor, op. 90, movement 2, mm. 252-90.

Regarding Beethoven's codas, Kerman states that a movement contains "'the story of a theme'-the first theme-and the exciting last chapter of that story is told in the coda."[25] This coda takes three attempts to acquire cadential closure, forfeiting the first two opportunities and succeeding on the third. The first of these begins at m. 253, with the merge of the end of the refrain with the beginning of the coda. As noted above, the expected cadential closure is thwarted due to the presence of a dominant pedal. A brief tonicization of the supertonic (F-sharp minor) begins in m. 257 with its leading-tone diminished-seventh chord. The original dominant pedal remains in the bass, but its setting as the bass pitch of a fully diminished seventh chord drives the music down into the local tonic triad appearing in first inversion. Following this tonicization is a chromatic ascent through an applied chord leading to the dominant of the home key, E major. Cadential closure is possible between mm. 261-62; however, this is yet again avoided. The music returns to the supertonic, and proceeds similarly through an applied chord leading to the dominant of E major. Measure 265 presents an imitative section, discussed above, that regains the dominant pedal.

The dominant pedal initiates the next path taken through this coda. Prior to this movement's closure, three dominant-to-tonic motions occur; however, they each yield scale degree three in the soprano voice rather than the melodically sound scale degree one. The first occurs with the return to the primary theme between mm. 275-76. In m. 278, a cadential progression with the expectation of harmonic closure begins. However, the melody progresses to scale degree three, avoiding any structural closure. The music avoids melodic closure once more in m. 281. Finally, this movement's structural closure occurs in m. 283, intensified by the high soprano register (E-6). The final path taken by this exceptional coda is the lack of further perfect

[25] Kerman, "Notes on Beethoven's Codas," 150.

authentic cadences following the structural closure. Imitation between mm. 283-85 leads to a dominant pedal. This pedal resolves not to a structural tonic, but deceptively to the submediant (m. 287). The final cadence of this movement is rhythmically weak: the dominant occurs on the second half of beat one, and the tonic occurs on beat two.

The second movement of Beethoven's op. 90 confirms that fundamental closure can indeed occur in the coda. Furthermore, its motivic development and cadential evasion instill greater necessity for the impending moment of resolution. Although no preceding tonal closure occurred before the onset of the coda in m. 253, the music that follows displays characteristics of a Middle Period Beethovenian coda. The span of music develops several segments of previously occurring material. Also, the coda makes several attempts at closure before finally achieving the structural final cadence of this movement. Without the coda, this movement would not have achieved fundamental closure, therefore justifying the necessity of this grand suffix. When the movement achieves closure at m. 283, the music seems to engage in a moment of release, dismissing the need for additional convincing cadences.

Op. 57, movement 1, *Appassionata*

While the coda of op. 90 provided a location for structural closure to occur, the coda of the first movement of the *Appassionata* provides a different kind of resolution: modal restoration of material. The recapitulation of secondary thematic material in the tonic major, rather than minor, is a common move in minor-mode sonata movements, presumably because it preserves the modal character of a theme that is first stated in the mediant major key. However, this approach to recapitulation still leaves the secondary theme separate from the character of the modally specific tonic key of the piece, leaving an opportunity for restoration in the coda.

Beethoven composed this sonata shortly after the *Waldstein,* in 1805. This F-minor movement features a normative exposition with a secondary theme in the relative A-flat major (figure 9).

When the secondary theme returns in the recapitulation (m. 174), it is in the tonic major, thus preserving the mode of the secondary theme from the exposition. In fact, the first subordinate theme does not occur in the tonic key, F minor, until late in the coda (figure 8). The return of the second subordinate theme (m. 190) and closing section following the return of the major-mode first subordinate theme occurs appropriately in F minor.

Figure 8: Main occurrences of the first subordinate theme throughout the movement

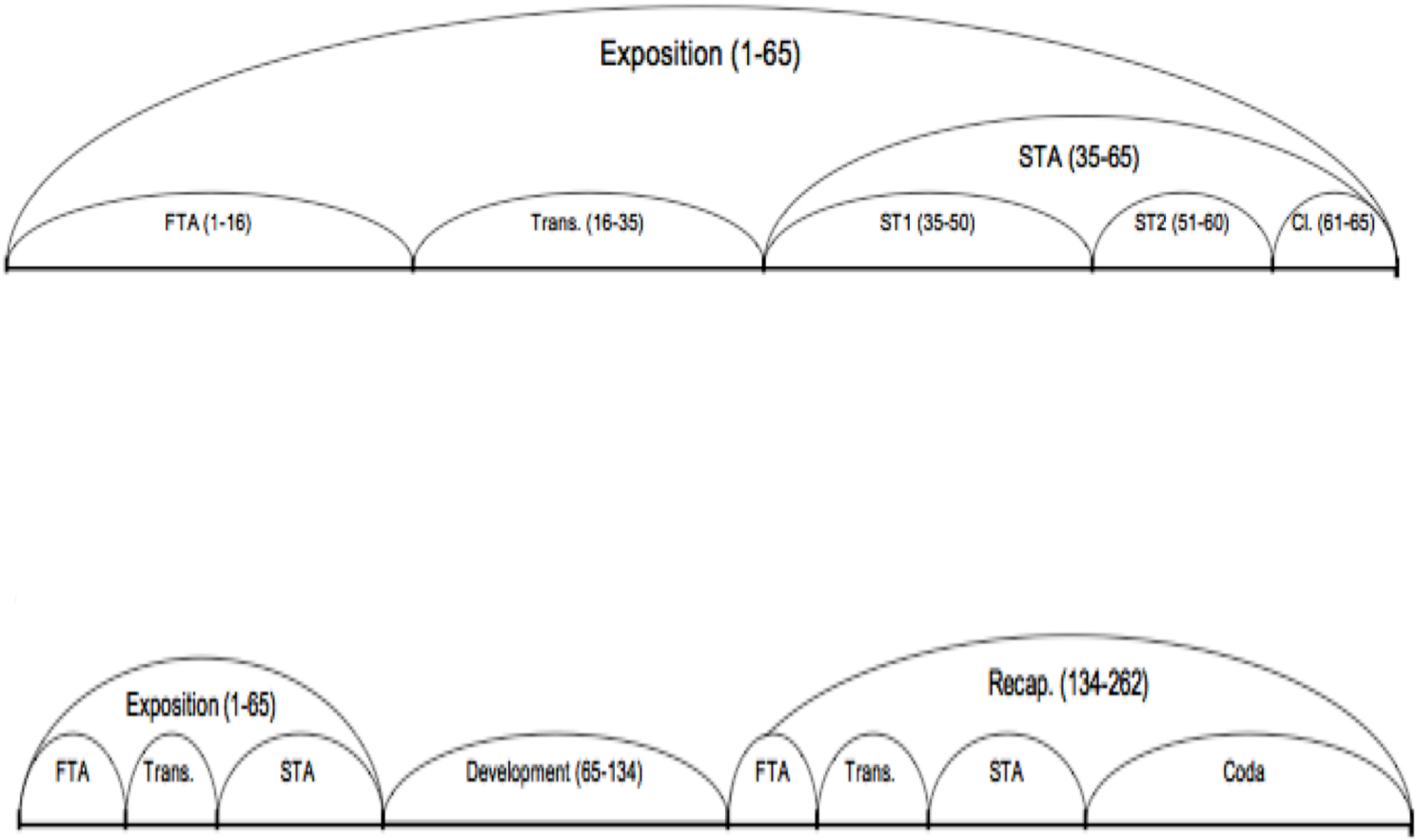
Exposition (1-65)
STA (35-65)
FTA (1-16)
Trans. (16-35)
ST1 (35-50)
ST2 (51-60)
Cl. (61-65)
Exposition (1-65)
Recap. (134-262)
FTA
Trans.
STA
Development (65-134)
FTA
Trans.
STA
Coda

Figure 9

This discursive coda in particular is one Darcy and Hepokoski have described as containing a full rotation of material from the secondary theme, or "S-based materials."[26] Rotational structures, as they observe, are the thematic patterns of a piece that are recycled throughout the work, and appear with modifications and adjustments. The primary motive of the modally altered first subordinate theme is cycled through the coda several times, including once on the submediant (m. 210). Rotations of the primary motive finally in the tonic key begin at m. 239. The thematic material appears harmonically and thematically adjusted compared with the original appearance within the exposition. Rather than moving directly to the subdominant in m. 242, the music is first expanded through fragmentation. This adjustment allows space in which to tonicize the subdominant before achieving the structural harmony in m. 247 in preparation for the forthcoming cadence in m. 249. After the brief subdominant tonicization, the music moves to a cadential six-four figure in m. 245. Harmonic closure is avoided, however, as the cadential six-four moves to a dominant seventh chord in third inversion causing an evaded cadence. The music attempts to cadence again after repeating the fragment boxed in example 14, further lengthening this phrase.

[26] Hepokoski and Darcy, *Elements of Sonata Theory*, 284.

Example 14, Beethoven, Sonata for Piano in F Minor, op. 57, mm. 236-48.

At the point of cadence, the listener has heard secondary thematic materials a number of times; the majority of these instances have been away from the movement's tonic. Beethoven employs fragmentation and expansion to thematic material that has remained fairly intact throughout this movement. The adjustments give weight to these late instances finally occurring in expected key and mode.

The coda returns to this thematic material again at m. 257, also in the tonic, just before the end of this movement, a fragment that provides one last excursion through a theme

dramatized by this movement. Kerman speaks briefly about the striking manipulation of the first subordinate theme throughout this coda: "the outstanding exception to everything that has been said about the use of second themes in codas is the *'Appassionata'* sonata. In the coda of the opening movement the second theme comes not within the quasi-cadenza, but before it, and then again after it."[27]

Both at the beginning of the development section and early in the coda, thematic material derived from the first subordinate theme appears. Both of these points in the music yield thematic material in non-tonic keys. The modally transformed return of this theme during the recapitulation combined with the above instances of thematic material generates expectation for correction later in the movement. Though the secondary themes did attain the tonic, F minor, the return to the modally corrected first subordinate theme late in the coda (m. 239) provides a sense of melodic resolution to this movement not achieved through the recapitulation alone.

Op. 81a, movement 1

The next example, taken from the first movement of op. 81a, is similar to op. 57 in that the coda is exceptional in its harmonic treatment of thematic material. Rather than modally altering material, the coda of op 81a further elaborates on a harmonic trajectory taken during the exposition. Opus 81a, written in 1809, is cast in sonata-allegro form. The following diagram presents the form of this movement. Scholars have examined this "characteristic" movement from the perspective of "sadness," noting the use of sigh figures (i.e. scale degree 6 falling to scale degree 5), modal juxtaposition, and references to the Baroque lament bass during the introduction.[28]

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[27] Kerman, "Notes on Beethoven's Codas," 157.

[28] Burstein, "'Lebe wohl tönt überall,'" 396.

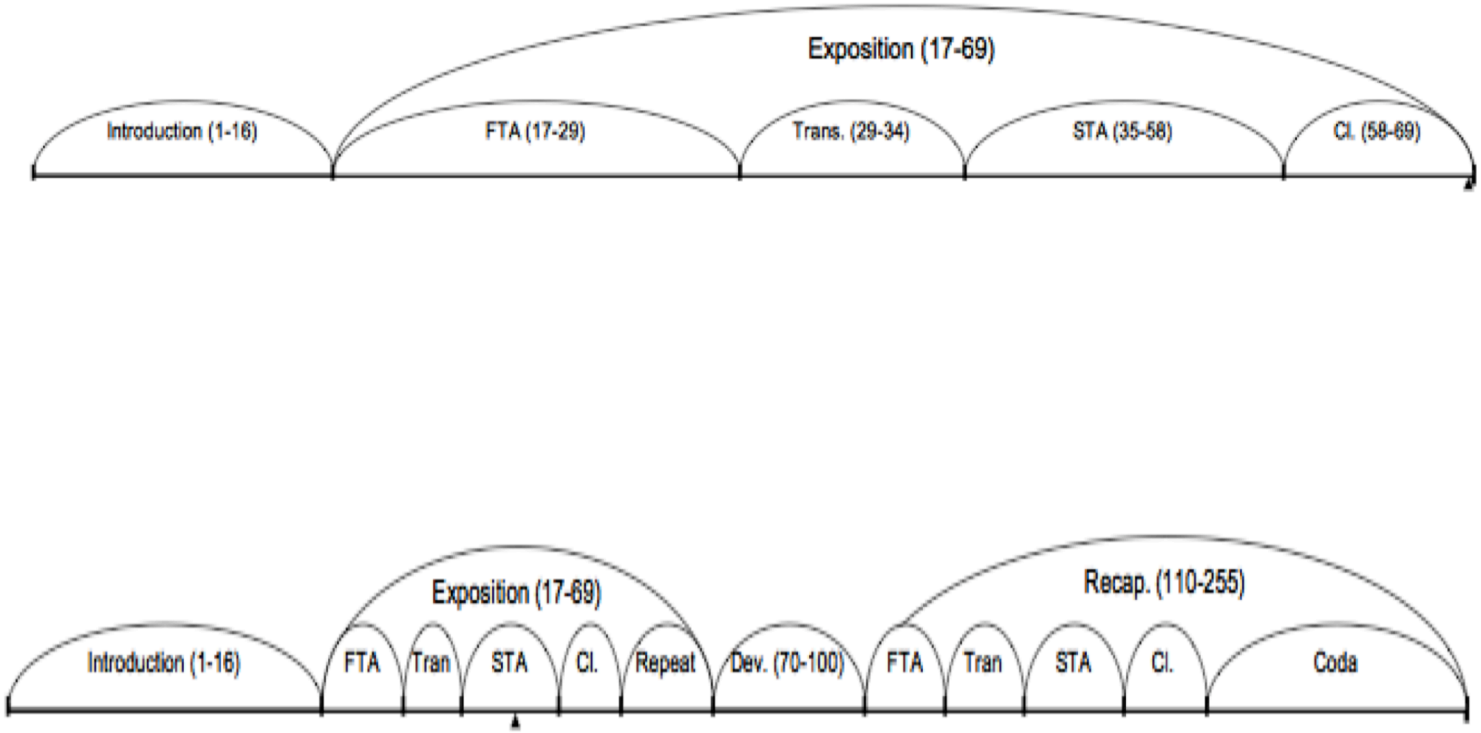

Exposition (17-69)
Introduction (1-16)
FTA (17-29)
Trans. (29-34)
STA (35-58)
Cl. (58-69)
Exposition (17-69)
Recap. (110-255)
Introduction (1-16)
FTA
Tran
STA
Cl.
Repeat
Dev. (70-100)
FTA
Tran
STA
Cl.
Coda

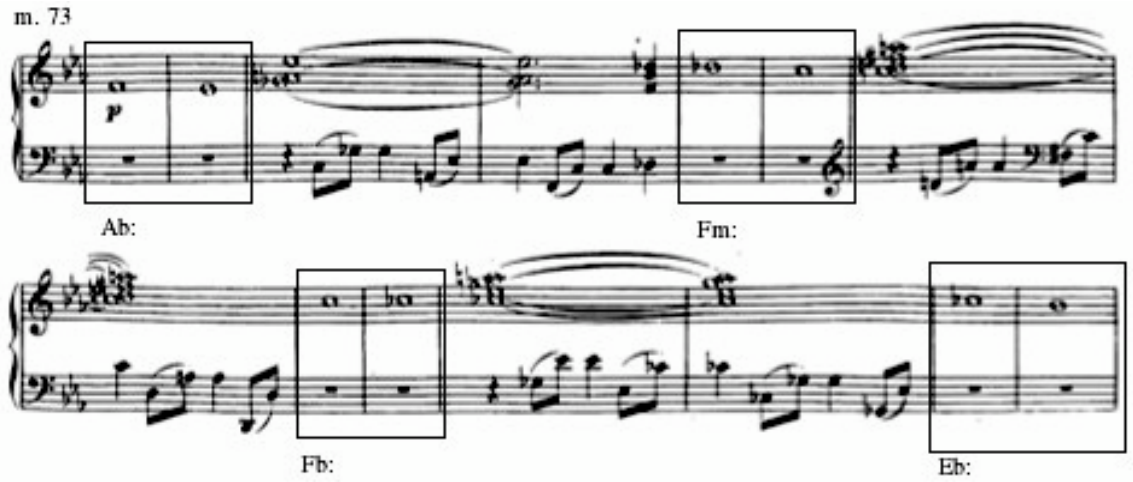
Figure 10

The introduction to this movement presents a melody harmonized in both the tonic key E-flat major and its parallel minor, E-flat minor. The passage of music that begins this movement is repeated beginning in m. 7 in the parallel minor. Though this melody retains a similar contour to the passage occurring in mm. 1-7, the underlying harmonies are altered. The deceptive motion to bVI at m. 8 introduces a brief excursion into the parallel minor. The music remains in E-flat minor until just before the beginning of the exposition. The music struggles to leaves E-flat minor, adding to the drama already suggested by this introduction. Beethoven provides dominant arrivals on the downbeats of mm. 13 and 14; however, the music retains the pitches G-flat and C-flat, preventing any motion to major. In m. 15, the dominant seventh chord in third inversion tonicizing the subdominant finally resolves to a major subdominant triad in m. 16, in preparation for the exposition.

The juxtaposition of parallel major and minor is fully realized during the exposition and coda, recalling what has happened earlier in the movement. In addition to the modal juxtaposition, the melodic setting of the sigh figure (with scale degree six often lowered to accommodate the parallel minor) occurs throughout each section of this movement. The exposition's primary theme contains an instance of lowered scale degree 6 falling to scale degree 5: the C-flat falling to B-flat in m. 24. The C-flat, realizing the juxtaposition suggested during the introduction, is a modally borrowed pitch that persists over the B-flat dominant chord. The transition to the second tonal area contains a motive derived from the sigh theme. The eighth-note motive occurring in the right-hand of m. 30 begins with a leap into the pitch C, which falls to B-flat; the motive is repeated in the following two measures. The second tonal area of the exposition begins with this combination of modal juxtaposition and the sigh figure. Though this section of music begins to unfold in B-flat major, the use of the pitch G-flat at m. 36 hints at *its*

parallel minor. As in the introduction to the movement, parallel modes are juxtaposed, now in even closer succession; the G-flat of m. 36 is overwritten by the uninflected G-natural in m. 38, which itself is usurped by the return of G-flat a measure later. The music beginning at m. 39 is repeated at m. 43, allowing the G-flat to fall to F once more before the close of this section.

The development of this movement contains instances of material similar to the sigh figure; one instance occurs in the tonic of the movement (mm. 85-86). The figure returns in m. 73, m. 77, m. 81, and m. 85. Though three of the returns occur in nontonic keys (A-flat, F, and F-flat), the augmented setting of the melodic motive as whole notes calls attention to the figure (see example below).



Example 15, Beethoven, Sonata for Piano in E-Flat Major, op. 81a, mm. 73-86.

The keys implied by the figures reveal a larger relationship reminiscent of the sigh figure: F/F-flat fall to the tonality of E-flat in m. 85, much like scale degree 6 falls to scale degree 5 within an A-flat tonality. The sigh figures occurring between mm. 77-78 and mm. 80-82 display a moment of modal juxtaposition: the first motive occurs with F as a local tonic, while the second motive occurs with F-flat as a local tonic. The development fails to proceed to a standard retransition prolonging the dominant of the movement's tonic. Rather, the music emphasizes the

keys of C and A-flat before arriving on A-flat at m. 99; the material from the beginning of the exposition (m. 17) also arrived on A-flat before the primary theme occurred.

The developmental coda begins at m. 161 with material from the development: the sigh figure occurring in F minor (mm. 77-78). Following this familiar idea is the movement's primary theme, first occurring first in F minor at m. 162, and then in E-flat minor at m. 174. Harmonizing a primary theme in the minor tonic key area alludes to the modal juxtaposition that occurred earlier in this movement; the minor mode recalls the tonal motion established during the introduction. Therefore, this coda can be understood as realizing what Caplin has termed as "unrealized implications."[29] Caplin states that common practice composers used the coda as a location to recall a key feature established early in the movement; I believe this movement of op. 81a exemplifies the compensatory function. The inclusion of material in the parallel minor so early in the movement is taken up and further developed in the coda. The subsequent section of the coda (beginning in m. 181) cycles the sigh figure through a variety of keys (see example below).

Example 16, Beethoven, Sonata for Piano in E-Flat Major, op. 81a, mm. 180-92.

The final passage of the coda (m. 197 and on) begins with an imperfect authentic cadence; the music develops a motive from the opening of the introduction. The first measure of this sonata begins with horn fifths in the right hand, consisting of a major third proceeding to a perfect fifth.

[29] Caplin, *Classical Form*, 187.

The intervals occurring over the same pitch classes, but through a variety of registers, appear between mm. 197 and 198. The music that follows develops the opening intervallic motive several times, first as whole notes and later as quarter notes (shown below on large excerpt, boxes X and Y). The final eight measures of this discursive coda yield scale degree six falling to scale degree five; this melodic movement, occurring three times, is harmonized in the tonic key without modal adjustment. A complete absence of parallel-minor inflection defines this section of music; in fact, the final hint at E-flat minor occurs in m. 183. The final two pages of this movement remain grounded in E-flat major preventing any modal inflection within the sigh figure-driven music. The modal juxtaposition suggested during the introduction generated a sense of drama that persisted through this movement. The coda briefly heightens the drama before the close of the movement. After the perfect authentic cadence between mm. 222 and 223, the horn fifths restart on tonic, similar to the introduction. As the music continues, the harmonies become misaligned; one hand of the piano part is on the tonic while the other is on the dominant. This misalignment occurs in mm. 231, 232, 233, and 234 (shown in Example 17, large box Z).

Example 17, Beethoven, Sonata for Piano in E-Flat Major, op. 81a, mm. 222-55.

The coda recalling the drama instigated by the introduction of this movement seems to alleviate the conflict by shedding the minor mode completely and remaining grounded in the tonic.

Op. 59, no. 2, movement 1

Much like op. 81a, the first movement of Beethoven's string quartet op. 59, no. 2 begins with an unexpected tonal motion that is later referenced and adjusted in the coda. Within the first six measures of this sonata-form movement, the opening phrase proceeds to a chromatic chord that does not resolve in a standard manner. The following figure provides the form of the movement.

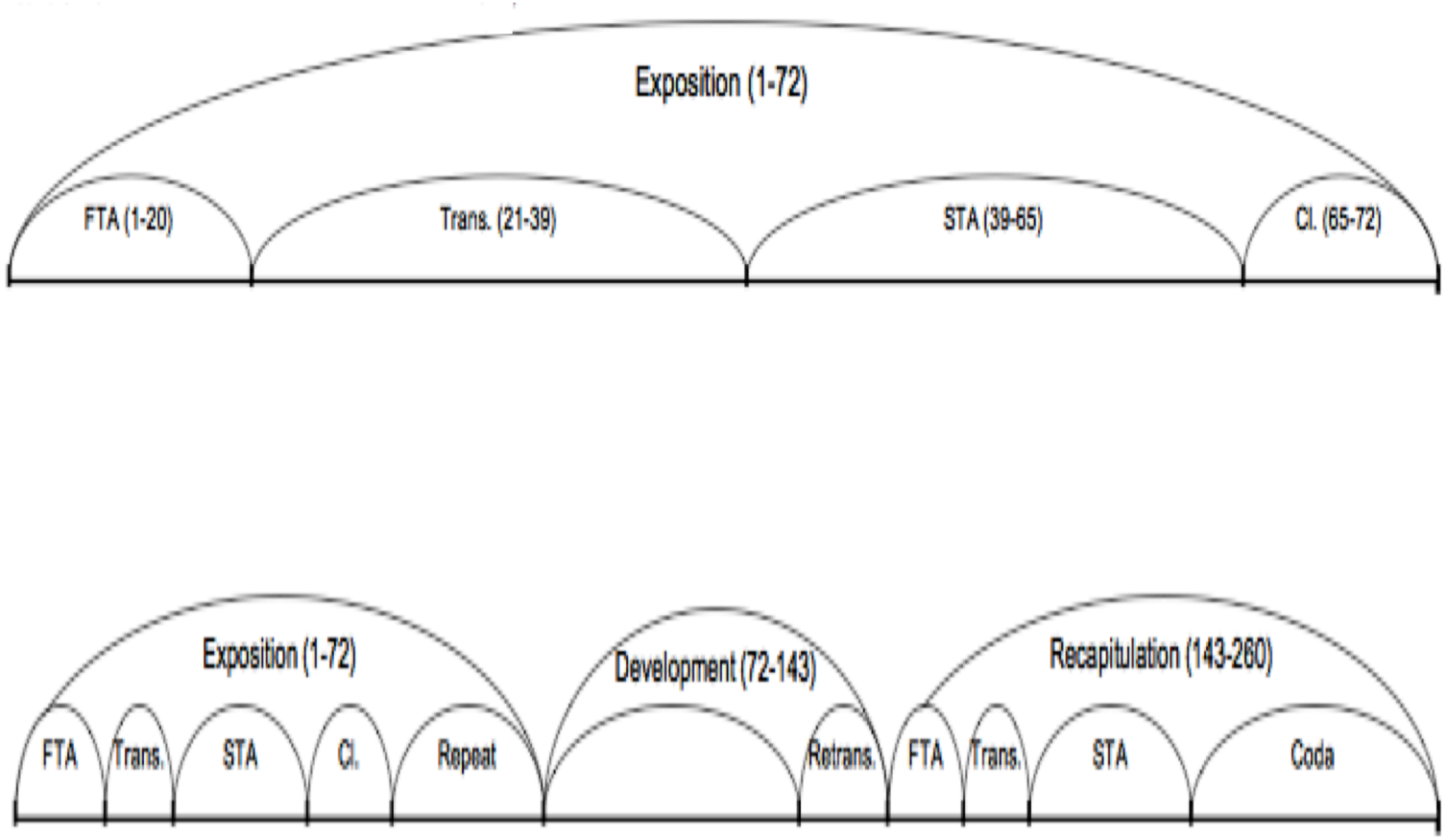

Exposition (1-72)
FTA (1-20)
Trans. (21-39)
STA (39-65)
Cl. (65-72)
Exposition (1-72)
Development (72-143)
Recapitulation (143-260)
FTA
Trans.
STA
Cl.
Repeat
Retrans.
FTA
Trans.
STA
Coda

Figure 11

The first tonal area of this movement presents an instance of chromaticism just five measures into the primary theme. This theme, a sentence, begins with a basic idea in tonic. The repetition of this basic idea moves to an unexpected tonality: the lowered supertonic, or the Neapolitan. Since this motion occurs so early in the movement, harmonic structure has been only briefly established, causing the listener to question his or her perspective of tonic. Though this predominant harmony leads to the dominant, the resolution of the chromatic tones does not occur as expected; lowered scale degree two (F-natural) rises to diatonic scale degree two (F-sharp) rather than resolving as expected to the leading tone (D-sharp). Also, the dominant harmony beginning in m. 9 is not in root position, forcing the Neapolitan sixth chord to resolve in an unstable manner. When this material returns in the recapitulation at m. 148, the Neapolitan chord progresses identically, leaving this voice-leading anomaly unsettled until later in the movement (see exposition and recapitulation excerpts on next page).

Example 18. Beethoven, String Quartet in E Minor, op. 59, mvmt. 1, mm. 1-16, 148-156.

The coda of this movement presents material from the exposition; the opening sentence as well as the material that occurs just before the structural cadence of the second tonal area (m. 59 and on) are developed through fragmentation and extension. The Neapolitan chord that occurred so early in this movement returns in m. 251 calling attention to the movement's final

cadence. The music makes three attempts at achieving this harmonic closure; the first two attempts (m. 252 and m. 254) lead to evaded cadences forcing the music to back up and "approach the cadence 'one more time.'"[30] With each evaded cadence, the Neapolitan chord commences harmonic motion leading to a cadential six-four, allowing lowered scale degree two (F-natural) to finally fall to the tonic (E). However, each cadential six-four figure progresses to a dominant 4/2 chord. The third attempt successfully achieves the perfect authentic cadence, allowing lowered scale degree two to finally fall to the leading tone.

Example 19. Beethoven, String Quartet in E Minor, op. 59, mvmt. 1, mm. 247-61.

[30] Janet Schmalfeldt, "Cadential Processes: The Evaded Cadence and the "One More Time" Technique," *Journal of Musicological Research* 12, no. 1-2 (1992), 3-4.

Darcy and Hepokoski have noted the return to minor-mode occurring in sonata-form movements with secondary themes in the recapitulation returning in the parallel major, therefore preserving the original mode from the exposition. They have referenced this movement, stating that this harmonic trajectory taken with minor-mode sonatas yields a corrective coda, "darkly pessimistic in its implications."[31] The recomposition of the Neapolitan sixth chord during the coda enhances the distinction of this corrective closing section.

The opening of Beethoven's string quartet, op. 59, no. 2, exposes an instance of chromaticism within the first six measures. As well, the chromatic Neapolitan chord occurring so early in this movement proceeds to an inverted dominant seventh chord through improper voice leading. The return of the opening theme during the recapitulation progresses identically, leaving the coda to recall and adjust the unexpected harmonic motion. Though closure occurred before the onset of the coda, the adjusted Neapolitan chord occurring during this section of music summarizes the movement in two ways: attention is called to the "corrective" characteristic of this coda and the distinct chromatic opening of this movement is finally given the resolution it requires.

WoO 39, trio no. 7

The codas discussed thus far in chapter 2 primarily demonstrate harmonic adjustments and closure. The coda of Beethoven's trio for piano, violin, and cello, WoO 39 (1812), provides a different sort of resolution: textural restoration. The texture of thematic material established during the exposition returns altered during the recapitulation; the coda, then, provides a location for the theme to return in its original, unaltered state. Although restoration of texture is often not cited as a compensatory mechanism of codas, Beethoven's employment of this function

[31] Darcy and Hepokoski, *Elements of Sonata Theory*, 313.

demonstrates the flexible roles of these closing sections. When the primary theme of this piece returns in the recapitulation, it appears texturally altered. The left-hand part of the piano line presents accompanying sixteenth notes, while the original appearance in the exposition used eighth notes. Also, the melody of the primary theme occurs embellished with sixteenth notes. The coda provides a sense of restoration as the theme occurs in its original, unaltered texture. This return to the primary theme in the coda is reminiscent of thematic material. Although this function typically occurs when music has been omitted from the recapitulation, the return to material during this coda certainly recalls the primary theme of the movement, thus invoking a sense of formal completion. Caplin has identified this compensatory function in many full-movement forms. He states that when this reminiscence occurs, the recollection is generally not as "tight-knit" as its original form in the exposition.[32] This coda is certainly in congruence with Caplin's idea, since it also allows for some chromatic exploration that was only briefly presented during the exposition. Also, the coda synthesizes the several chromatic tonicizations that occur during the second tonal area of the recapitulation; Beethoven returns to the previously explored tonal areas late in the movement. The addition of chromatic notes during the return to thematic material late in the movement calls attention to the coda, substantiating the idea that this section of music provides textural restoration. Figure 12 provides the form of the movement.

[32] Caplin, *Classical Form*, 186.

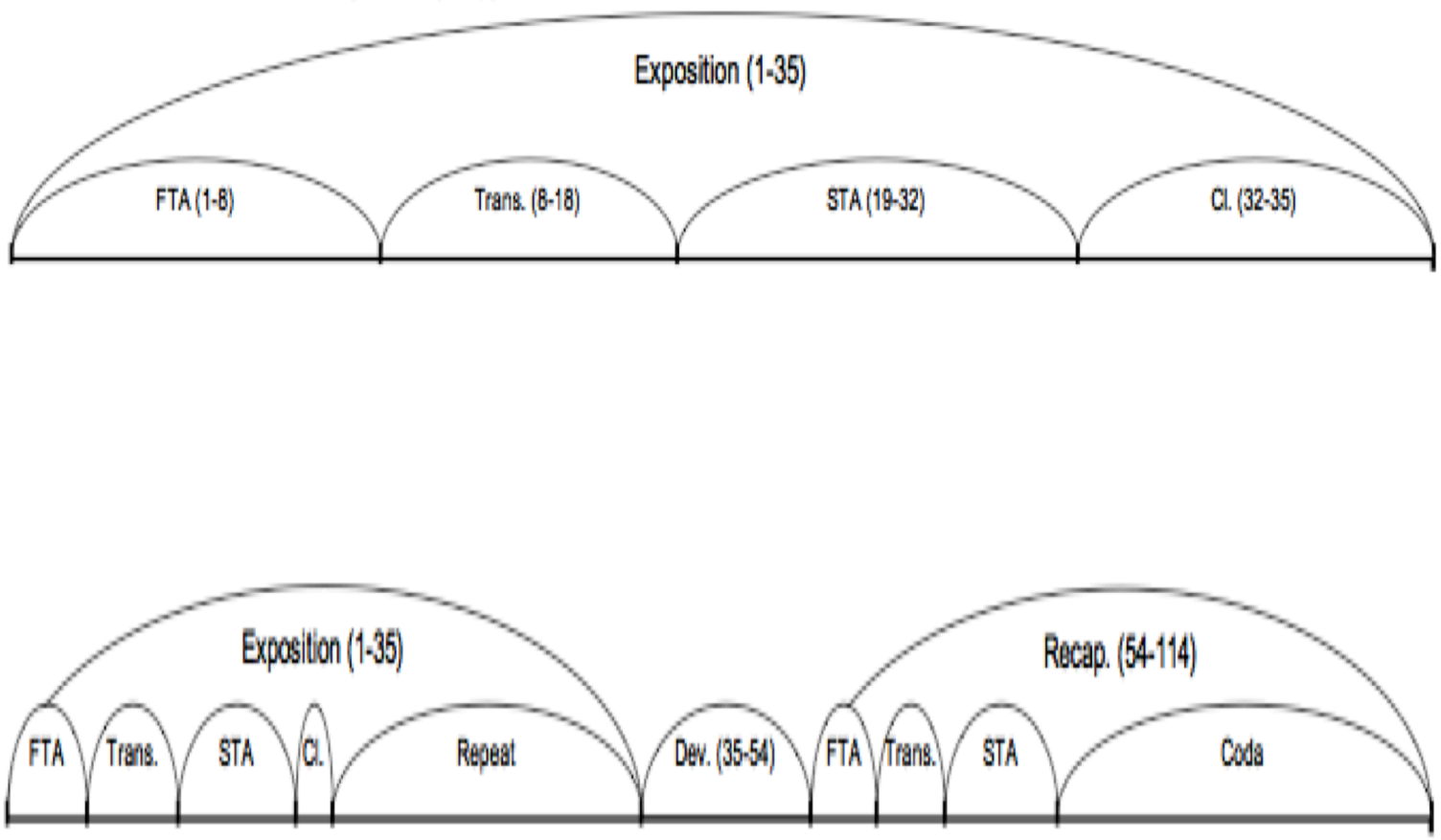

Exposition (1-35)
FTA (1-8)
Trans. (8-18)
STA (19-32)
Cl. (32-35)
Exposition (1-35)
Recap. (54-114)
FTA
Trans.
STA
Cl.
Repeat
Dev. (35-54)
FTA
Trans.
STA
Coda

Figure 12

The exposition of this movement opens with an eight-measure sentence that reaches a perfect authentic cadence in B-flat (m. 8). The passage appears in example 20.

Example 20, Beethoven, Trio for Piano, Violin, and Cello in B-flat Major, WoO 39, mm. 1-9.

When this material returns in the recapitulation (m. 55), it is altered texturally. The melody has shifted to other voices; rather than appearing only in the piano part as in the exposition, the theme is played by the two strings as well, although with faster surface rhythms than before. Additionally, the accompaniment in the left hand of the piano now features sixteenth notes leaping octaves. The slow and sustained accompaniment in strings at the beginning of the movement has succumbed to a more jagged texture in the recapitulation. Though the pitch content remains similar, the textural difference is striking. Example 21 reproduces the corresponding passage from the recapitulation.

Example 21, Beethoven, Trio for Piano, Violin, and Cello in B-flat Major, WoO 39, mm. 55-63.

The coda of this movement begins in m. 84 and, just four measures later, a statement of a melody similar to the opening theme occurs. Differences are apparent between the original melody from the exposition and this appearance in the coda. The melody of the later appearance (m. 87, violin part) begins on the local tonic of E-flat; the original melody began on the third of the tonic triad (D). The adjustment in starting pitch changes the melodic contour slightly since the ascent to the dominant requires crossing more pitch space to bridge scale degrees one and five. Additionally, the melody in the coda is cycled through several different tonicized keys (E-flat, A-flat, F), while the melody in the exposition remained grounded in B-flat major. Beginning in m. 87, the melody starts to unfold in E-flat major, confirmed by the addition of the passing tone A-flat. Shortly after, the local tonic triad is transformed into a dominant 4/2 chord with the addition of the D-flat in the bass. This key-defining harmony points to the next tonal region of A-

flat major, which occupies mm. 90 and 91. As the chordal seventh of the previous dominant seventh chord resolves to the local scale degree three (C), an elision occurs. Rather than moving to the expected first inversion triad, the seventh resolves into a root position dominant seventh chord tonicizing F major. The music remains in F major's tonality in preparation for the upcoming half cadence in m. 95. Though the thematic material appears "more loosely knit" in terms of melodic contour and tonal center, the appearance of this material in the coda is reminiscent of the primary theme of this movement's exposition. The return to the primary theme during the coda provides synthesis to the movement. The appearance during the coda is relatively calm, much like the initial passage during the exposition. However, the tension caused by the rapid tonicizations occurring between mm. 88 through 93 recall the angular and busier return from the recapitulation. The defining features of the various instances of the primary theme come together during the coda for one last passage through this, now familiar, music.

In addition to recalling the primary theme of this movement in its original texture, the coda synthesizes modally mixed tonicizations occurring earlier. The second tonal area of this movement's exposition, as well as its return in the recapitulation, both contain a brief moment of modal mixture. The return of the second tonal area, beginning at m. 70, occurs appropriately in B-flat major. The phrase beginning at m. 74 initiates the exploration of several different key areas. The music explores the following keys through root position tonic-to-dominant motion between mm. 75 and 77: B-flat minor, D-flat major, and E-flat minor (see example on next page).

Example 22, Beethoven, Trio for Piano, Violin, and Cello in B-flat Major, WoO 39, mm. 72-79.

Similar tonicizations return in the coda. A phrase in B-flat minor begins at m 102; in fact, the music confirms this key area with a perfect authentic cadence in mm. 103-04. Also, during the texturally altered return to thematic material during the recapitulation, Beethoven altered the pitches slightly in m. 57; the violin part now has an E-natural while the cello has a D-flat. The recapitulation's local inflections may have effected the coda's tonicization of F major and A-flat major, respectively. Exploring these tonalities so close to the end of this movement is, in a sense, a summary of the modal mixture that occurred earlier in this piece.

Although the fundamental tonal closure of this piano trio occurs just before the coda, in m. 83, the music that follows recalls earlier material. The primary theme returns in its original texture early in the coda; as well, notable keys from earlier in the movement are tonicized yet

again. The coda of this movement could theoretically be dismissed as extraneous to the tonal closure of the movement, but the textural restoration and the synthesis of previously visited key areas provides additional closure to this piano trio.

CONCLUDING THOUGHTS

Codas have often been understood as unnecessary to the movements that they follow. From a tonal perspective, this view is validated by the structural closure that occurs just before the beginning of the coda; the movement requires no additional music following this cadence. Ludwig van Beethoven's Middle Period codas, however, prompt a reexamination of the concept of coda. The codas from this time period do not simply prolong tonic, but contribute to the overall drama of the movement. Although several of the codas composed during this time begin just after the structural closure of the movement, the codas still serve to tie up several loose ends remaining following the cadence. The primary role of the Middle Period codas, then, is completion. Codas are capable of serving a wide variety of completion functions; the musical examples contained in this thesis demonstrate the possibilities. I have pinpointed the following types of completion: tonal, thematic, textural, and hypermetric.

Beethoven's Middle Period can be defined as a time of formal experimentation, as the role of the coda shifted from simply prolongation to serving completion function. Some of the codas discussed in this thesis provide a location for thematic materials to occur in tonic when the recapitulation could not fulfill this task. Other codas expand a prominent harmony that occurred earlier in the movement. Understanding the various completion functions capable of Beethoven's Middle Period codas is a valuable aspect of form study. Also, understanding the functions supports the perspective that Middle Period codas indeed have a purpose.

Current scholars, such as William Caplin, Warren Darcy, and James Hepokoski, have incorporated the completion aspects of Beethoven's codas in their research. However, several of the movements analyzed for this thesis have not been discussed. In addition to demonstrating the

several ways Beethoven's Middle Period codas can provide completion to their movement proper, I hope to have exposed several movements that deserve analytical attention.

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