ANALYZING BEETHOVEN'S EROICA SKETCHES:

A Form-Functional Perspective on the First-Movement Exposition

VOLUME 1: TEXT

By

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ABSTRACT

This dissertation studies Beethoven's compositional process to the first movement of his third symphony, Op. 55, the *Eroica*, through the analysis of its sketches. Using the complete transcription of the *Eroica* sketchbook developed by Lewis Lockwood and Alan Gosman (2013a; 2013b), the single-voice exposition sketches are reconstructed by interpreting their implied harmonies and bass voices. Thereafter, the reconstructed sketches are analyzed with a theory of formal functions (Caplin 1998; 2013) and Beethoven's developing compositional intentions are interpreted. What results is a new approach for Beethoven sketch studies that grants insights into his compositional process for the *Eroica*.

Throughout this study, Beethoven's continuity sketches are viewed as viable alternatives rather than problematic experiments. This perspective reappraises commonly held views about Beethoven's compositional process for the piece that were advanced by Gustav Nottebohm in the late nineteenth century. In essence, this dissertation reframes the analytical objective from one that uses ill-defined sonata theories and the final piece as a type of procrustean bed to find weaknesses in the sketches, to one that uses the well-formed and aesthetically neutral categories of the theory of formal functions to search for, and explain, their strengths. Such a perspective affords a more complete view into Beethoven's workshop that improves our understanding of his compositional process and style.

EXTRAIT

Cette thèse étudie le processus de composition de Beethoven pour le premier mouvement de sa troisième symphonie, Op. 55, l'*Eroica*, à travers l'analyse de ses esquisses. En utilisant la transcription complète du cahier d'esquisses de l'*Eroica* développée par Lewis Lockwood et Alan Gosman (2013a; 2013b), les esquisses de l'exposition à une voix sont reconstruites en interprétant leurs harmonies implicites et leurs lignes de basse. Ensuite, les esquisses reconstruites sont analysées à l'aide d'une théorie des fonctions formelles (Caplin 1998; 2013) et les intentions compositionnelles de Beethoven sont interprétées. Il en résulte une nouvelle approche pour l'étude des esquisses de Beethoven qui donne un aperçu de son processus de composition pour l'*Eroica*.

Tout au long de cette étude, les esquisses de continuité de Beethoven sont considérées comme des alternatives viables plutôt que des expériences problématiques. Cette perspective réexamine les idées reçues sur le processus de composition de l'œuvre de Beethoven, avancées par Gustav Nottebohm à la fin du XIXe siècle. Essentiellement, cette thèse reformule l'objectif analytique, passant d'un objectif qui utilise des théories de la sonate mal définies et la pièce finale comme une sorte de lit de Procuste pour trouver des faiblesses dans les esquisses, à un objectif qui utilise les catégories bien formées et esthétiquement neutres de la théorie des fonctions formelles pour rechercher et expliquer leurs forces. Une telle perspective offre une vision plus complète de l'atelier de Beethoven qui améliore notre compréhension de son processus de composition et de son style.

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To my mother, Joanne Elaine Posen

ABBREVIATIONS AND TERMINOLOGY

Harmonic and Cadential Designations

HK = Home Key
SK = Subordinate Key
ECP = Expanded Cadential Progression
PAC = Perfect Authentic Cadence
IAC = Imperfect Authentic Cadence
HC = Half Cadence
DC = Deceptive Cadence

Section Functions

Exposition
Development
Recapitulation

Thematic Functions

MT = Main Theme
Tr = Transition
    P1 or **P2** = Part 1 (non-modulating), Part 2 (modulating), e.g., Tr P1 = Transition, Part 1
ST = Subordinate Theme
    P1, **P2**, etc. = Part 1, Part 2, e.g., ST2 P2 = Subordinate Theme 2, Part 2
SotD = Standing on the Dominant (can be appended with a number, i.e., SotD-1 or SotD-2)

Phrase Functions

Pres. = Presentation
CBI = Compound Basic Idea
C. Pres. = Compound Presentation
Cont. = Continuation (note that, when "c" is lowercase, as in "cont." it refers to "continued" and not the continuation function)
Ant. = Antecedent
    C. Ant = Compound Antecedent
Cons. = Consequent
    C. Cons = Compound Consequent

Idea Functions

b.i. = basic idea
c.i. = contrasting idea
frag. = fragment
mod. = model
seq. = sequence (copy of a model)

Framing Functions

Thematic Introduction
Closing Section
Codetta
Introduction
Coda

Function Agnostic

Member = refers to a grouping structure of 4-m. or more. The term "member" does not have any temporal or functional meaning. The term is useful for segmenting parts of thematic functions into smaller workable parts for comparison between sketches.

Analytical Style

This study adopts the analytical style developed in Caplin's (2013) *Analyzing Classical Music*. I additionally add circled Arabic numbers below the bottom staff that label the bass scale-degrees (in reference to the underlying key). Numbers prefixed by up and down arrows indicate that the scale-degree is altered by a semitone in the direction specified. If a circled number has an "applied arrow" written after, the scale-degree is interpreted in reference to the next scale-degree, much like an applied dominant in roman numeral analysis. Blackened scale-degree numbers represent applied degrees that are outside the current key. Finally, figured bass is appended to the circled Arabic numbers as superscripts in the text. For example, ③^{6} refers to bass-scale degree 3 with the figured bass "6/3," where "3" is implied per the usual conventions of figured bass. Similarly, ⑤$^{6/4=5/3}$ implies scale-degree 5 in the bass with the upper figures 6/4 resolving to 5/3—i.e., a cadential six-four harmony that resolves to the five-three.

Harmonic Functions

T	Tonic built on ①
T^6	Tonic built on ③
PD	Pre-Dominant built on ②, ④, ↑④, ⑥, or ↓⑥
D	Dominant built on ⑤, ⑦, ②, ④
SD	Subdominant built on ④
S	Substitute for Tonic built on ⑥ (submediant)

Prolonging Bass-Melody Abbreviations

P	Passing
N	Neighboring
H	Harmonic Prolongation
S	Substitute
Sus	Bass Suspension
IN	Incomplete Neighbor
DN	Double Neighbor
NC	Nota Cambiata

Other Abbreviations

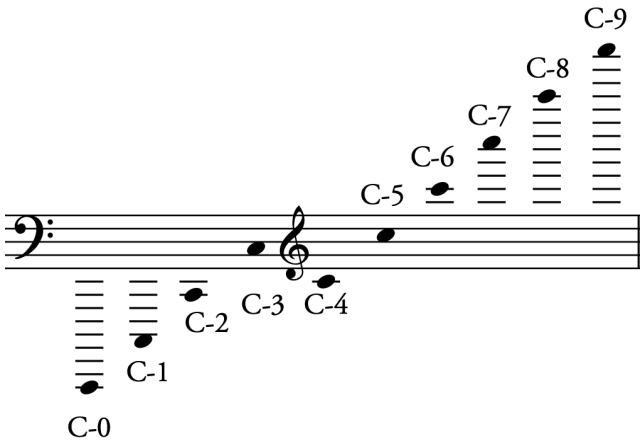
ES = *Eroica* Sketchbook

CS = Continuity Sketch

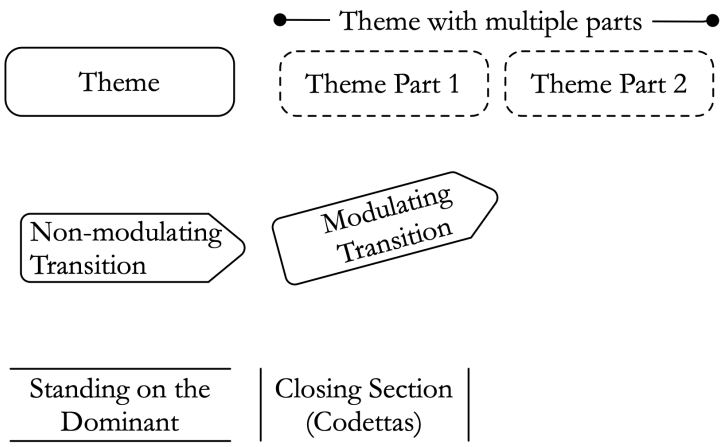
st. = Staff

Pitch Reference

This study adopts the International Pitch Notation (IPN), where middle C is referred to as "C-4."

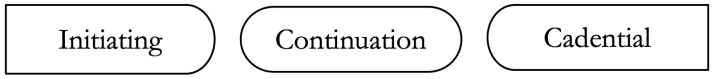


Theme Function Shapes

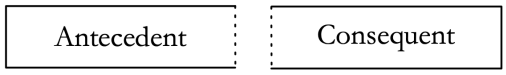


Phrase Function Shapes

Sentential Functions



Period Functions

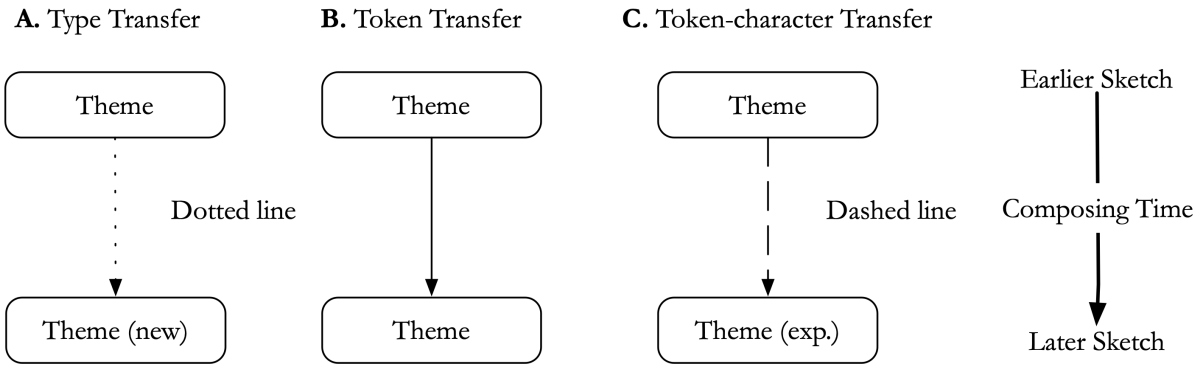


Compound Functions





Function Transfer/Inheritance Diagrams



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INTRODUCTION

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In this dissertation, I explore Beethoven's compositional process to the first movement of his third symphony, Op. 55, the *Eroica*, by analyzing his sketches. Using the complete transcription of the *Eroica* sketchbook developed by Lewis Lockwood and Alan Gosman (2013a; 2013b),[1] I reconstruct the single-voice exposition sketches by interpreting their implied harmonies and bass lines. I then analyze and compare the phrase structure of the sketches using a theory of formal functions (Caplin 1998; 2013) to interpret Beethoven's developing compositional intentions. What results is a new approach for Beethoven sketch studies that provides insights into his compositional process for the *Eroica*.[2]

Throughout this study, Beethoven's sketches are viewed as viable alternatives rather than problematic experiments. This perspective reappraises commonly held views about Beethoven's compositional process for the piece that were advanced by Gustav Nottebohm in the late nineteenth century. In essence, this dissertation reframes the analytical objective of sketch study from one that uses ill-defined sonata theories and the final piece as a type of procrustean bed to find weaknesses in the sketches, to one that uses the well-formed and aesthetically neutral categories of the theory of

[1] The *Eroica* sketchbook was previously known as "Landsberg 6," owing to the collector Ludwig Landsberg (1805–1858). He obtained the sketchbook from the Viennese publishing firm Artaria, who bought the sketchbook from Beethoven's estate upon his passing.

[2] The findings uncovered here may apply to his middle-period more broadly. For many writers, the *Eroica* is the piece that defines Beethoven's heroic "middle period." Lewis Lockwood, for example, writes, "Of all Beethoven's works, the Third Symphony, by virtue of its final title, its character, and its magnitude, has been the mainspring behind the notion of a 'heroic style' and the labeling of the years from 1803 to 1812 as the 'heroic period'" (Lockwood 2005, 213). See also (Burnham 1995; 2020).
~~~

formal functions to search for, and explain, their strengths. Such a perspective affords a more complete view into Beethoven's workshop that improves our understanding of his compositional process and style.

In this introductory chapter, I briefly trace the history of the *Eroica* drafts and Beethoven sketch studies more broadly. I then explain the rationale for studying the *Eroica* continuity sketches with a form-functional theory and comment on some of the additional approaches that will be developed. Finally, I detail the scope, intended audience, and underlying philosophy that guides this work and conclude with a summary of the chapters that follow.

1.1 A History of Beethoven *Eroica* Sketch Studies

Before we consider the history of the sketches, let us take into consideration the final work. Beethoven's *Eroica* symphony has been the subject of extensive technical analysis for over two centuries. Two years after its premier, Friedrich Rochlitz, an acquaintance of Beethoven, wrote a lengthy review of the symphony in the *Allgemeine musikalische Zeitung* (1807), which included a more detailed analysis of the work than was typical of the time:[3]

> The uniqueness and rich content of the work seem to demand that above all we seriously examine its technical aspects and in this regard, as well as in regard to its related mechanical aspects, follow the composer step by step. This is a procedure that the thorough working-out of this composition itself invites, and that would find its justification, if needed, in the usefulness that young artists draw from such analyses and in the heightened satisfaction that educated amateurs will hereafter be able to feel upon hearing the work itself (Senner, Wallace, and Meredith 2001, 20).

Rochlitz felt the need to warn his readers that such a technical analysis, while it might not immediately entertain the reader,[4] would help them understand and appreciate the work. Ever since, the *Eroica*—especially the first movement—has been one of the centerpieces of Western music analysis. Scott Burnham (1995, 4) remarked, for instance, that "The first forty-five bars of the *Eroica*

[3] For a complete English translation of Rochlitz's review, see (Senner, Wallace, and Meredith 2001, 20–32).
[4] Rochlitz explained: "The fact that the author will in the process deliver a series of individual observations and analyses that offer little to those who read only for entertainment, and will even seem dry to them, cannot be changed and lies in the nature of the thing. One must not always wish only to be entertained!" (Senner, Wallace, and Meredith 2001, 20).

Symphony comprise one of the most raked-over pieces of musical property in the Western hemisphere." Lewis Lockwood (1982) similarly quipped, that, "Surely no other Beethoven symphony, not even the Fifth or the Ninth, has evoked a wider flood of commentary—whether historical, analytical, or broadly interpretive—than the *Eroica*." In short, the work not only marked a turning point for Beethoven, but the history of music, art, and ideas (Ferraguto 2020).

In his 1807 analysis, Rochlitz explained that it was necessary to "follow the composer step by step" to understand the "working-out" of the composition. At the time, Rochlitz did not have access to Beethoven's sketches; he intended to reveal Beethoven's compositional intentions solely through analysis of the final piece. He could not have anticipated the newly emerging scholarship that would take his aims to new heights: sketch studies. Less than a century after the *Eroica*'s premier, Gustav Nottebohm published his pioneering monograph on the symphony's sketches, *Ein Skizzenbuch von Beethoven aus dem Jahre 1803*.[5] For the first time, scholars could peak into Beethoven's workshop and view the steps he took to create his watershed work.[6] Owing to Nottebohm's monograph, the sketchbook's complete nature, and the importance of the pieces it chronicles,[7] Beethoven's *Eroica* sketchbook has become the most famous of all his sketchbooks.[8]

In general, Nottebohm propagated a view of Beethoven's compositional process that Thomas Whelan (1990, 310) calls "progressive composition." Due to the widescale acceptance of this view by later scholars, Nottebohm's summary of the *Eroica* sketches and Beethoven's working method is worth quoting at length:

> The *Sinfonia Eroica* ranks as the first major work in which the specifically Beethovenian style broke forth. The sketchbook provides proof that, with very few exceptions, all those passages in the score which bear the stamp of Beethoven's own individual style and which have combined in them beauty and originality—all those

[5] Nottebohm's (1880) work has been translated to English by Jonathan Katz; see (Nottebohm 1979).
[6] In the recently published, *The Cambridge Companion to the Eroica Symphony*, William Drabkin remarked that "It hardly needs to be stressed in these pages that the *Eroica* is a watershed work in Beethoven's output" (Drabkin 2020, 81). On the topic of the *Eroica* as a watershed work, see (Ferraguto 2020)
[7] Among other pieces, the sketchbook contains sketches for the *Eroica* symphony, the Piano Sonata in C major, Op. 53, "Waldstein," *Leonore*, 1805 version, and some additional sketches for the Piano Concerto No. 4 in G major, Op. 58, the Symphony No. 5, Op. 67, the Oratorio *Christus am Ölberge*, Opus 85, and the Triple Concerto, Op. 56; see (Wade 1977; Beethoven, Lockwood, and Gosman 2013a, 3–4).
[8] See William Kinderman's introductory remarks in (Beethoven, Lockwood, and Gosman 2013a, ix).

> phrases and traits which, partly with their greatness and partly with their warmth, inspire us, shatter us, move us to tears—all of them were far from the creation of a moment; they were brought to light only after many repeated attempts and, for the most part, at the expense of considerable effort. This is true above all of those places where an established motive or theme was to be developed, realized or worked out. It is towards this kind of development that the majority of the sketches are directed, and it is very striking that the first sketches have in themselves little or even nothing at all of Beethoven's peculiar style and individuality; in fact they are often very ordinary and conventional. And yet they are, as it were, the soil in which the seemingly insignificant took root and bore fruit. An exception is found in those passages which one might call individual or original but perhaps not beautiful—those which have been called eccentricities or quirks (Nottebohm 1979, 96–97).

Nottebohm emphasizes three primary points: (1) Beethoven went to great lengths and spent tremendous effort to bring forth the *Eroica*; (2) the sketches show the gradual development of themes and motives; and (3) most importantly, earlier sketches were "ordinary and conventional"—even insignificant—but they somehow "took root and bore fruit." These three threads exemplify a "Beethoven as hero" narrative, an organic-inspiration perspective, and a progressive model of composition.

A year after Nottebohm's publication, Friedrich Chrysander, the Handel scholar and editor for the *Allgemeine musikalische Zeitung*, wrote a brief review of Nottebohm's monograph.[9] Notable in his review is his tempering of some of Nottebohm's claims about the struggle Beethoven must have endured while composing the piece. As this perspective has been largely forgotten in *Eroica* sketch studies and is not, to my knowledge, available in English, I quote from Chrysander's review at some length (English translation follows):

> Wenn die wiederholten Ansätze und Umarbeitungen lehren sollen, dass fast alle Hauptstellen dieser Symphonie "zum grossen Theil mit Mühe zu Tage gefördert wurden," so möchten wir doch glauben, dass die Skizzen in dieser Hinsicht nicht schlechterdings als einziger Beweis zu gelten haben. Man ist wohl berechtigt, die

[9] (Chrysander 1881).

Sache auch noch von der anderen Seite zu betrachten, nämlich nach den Impulsen oder Ideen, von welchen Beethoven ausging: dann würde alles Einzelne dastehen als Versuch, diesen Impulsen die entsprechendste musikalische Gestalt zu verleihen, und hierbei dürfte schwerlich Jemand entscheiden können, ob die verschiedenen Anläufe, welche in dem Skizzenbuche verzeichnet sind, dem Meister wirklich Mühe bereiteten, oder ob sie nicht vielmehr im Uebermuth höchster Schaffenslust zu Stande kamen.

. . . Er legte größere Gebäude an, als seine Vorgänger, demgemäß musste er seine Mittel wählen. Aus diesem Gesichtspunkte erklärt sich Alles. Je grösser der Bau werden soll, desto sorglicher müssen die einzelnen Glieder in der voraufgehenden Zeichnung durchgearbeitet werden. Ein Vergreifen in den Mitteln, eine Nachlässigkeit irgend welcher Art rächt sich um so schwerer, je umfassender das beabsichtigte Werk ist (Chrysander 1881, 54).

If the repeated beginnings and revisions are to teach us that almost all the main passages of this symphony "were, for the most part, brought to light at the expense of considerable effort" [Nottebohm] we would like to believe that the sketches do not have to be taken as the only proof of this. One is probably entitled to look at the matter from the other side, namely, according to the impulses or ideas from which Beethoven started out: in so doing, every detail would appear as an attempt to give these impulses the most appropriate musical form, and here it would be difficult for anyone to decide whether the various attempts recorded in the sketchbook really caused the master trouble, or whether they came about in the high spirits of the greatest joy in creating.

. . . [Beethoven] laid out larger buildings than his predecessors, so he had to choose his means accordingly. From this vantage point everything is clear. The larger the building is to be, the more carefully the individual elements in the previous drawing

> must be worked through. A mistake in the means, a negligence of any kind, takes revenge all the harder the more extensive the work is.[10]

Chrysander's position differs from the more common characterizations of Beethoven's compositional process that scholars adopted from Nottebohm and it generally coincides well with the analytical perspective developed in this study. Like Chrysander, I do not view the sketches as evidence of a laborious fight. Rather, the numerous sketches maybe show something else, namely, different approaches to expand the symphony to an unprecedented size. One does not get the sense that the sketches reveal a struggle unless they are read anachronistically and judged against the finished work.

One of the central aims of my study is to identify the strengths in the sketches—to treat them as alternative viable pieces that Beethoven wrote down because he enjoyed them for some reason—rather than identify their failings or his supposed blunders. To be sure, the sketches do show that Beethoven spent more time working on some parts than others, and perhaps he did become frustrated with these segments. Some passages in the sketches are also wanting—e.g., some sequences have excessive repetitions, some passages are built with overly static harmonic prolongations, and so forth. But despite these weaknesses, there are many interesting ideas that merit study irrespective of their similarity to the final piece. For now, however, let us temporarily table this discussion and return to the history of the *Eroica* sketches; we will return to develop alternative perspectives in greater detail further below and in Chapter 4.

After Nottebohm's 1880 monograph and Chrysander's review, the next study of the *Eroica* sketches appeared in the *Allgemeine Musik-Zeitung* by the theorist, organist, and composer Heinrich Riemann (not to be confused with Hugo Riemann). In his essay, *Beethoven's Skizzen zur "Eroica"* (1889), Riemann fortified Nottebohm's heroic, progressive-composition characterization of Beethoven's compositional process:

> Sie enthalten durchweg Skizzen und Entwürfe zu seinen bedeutendsten Werken und ermöglichen es, einen Blick in die geistige Werkstatt Beethovens zu thun, ihn zu beobachten bei seinem Ringen und Kämpfen, bei seiner unermüdlichen Sorgfalt in dem Entwerfen und Ausarbeiten seiner Meisterwerke (284). . . . Nicht leicht und frei,

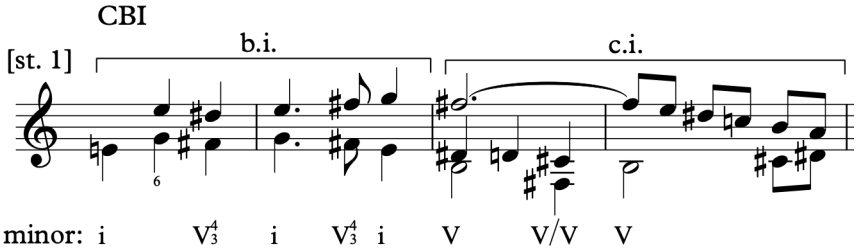
[10] All translations are mine unless otherwise noted.

> wie der Schmetterling seiner Hille entschlüpft, entstand die Beethoven'sche Sinfonie; ihr Entstehen war vielmehr dem titanischen Kampfe vergleichbar, durch den Prometheus den göttlichen Funken dem Reiche der Seligen entrang (344).
>
> [The *Eroica* sketchbook] contains sketches and drafts of his most important works and enables a glimpse into his intellectual (*geistige*) workshop, to observe him in his struggle and battles, by his tireless diligence in drafting and elaborating his masterpieces. . . Beethoven's symphony did not come into being as easily and freely as the butterfly slips out of its cocoon; its emergence was rather much more comparable to the titanic struggle through which Prometheus wrestled the divine spark from the realm of the blessed.

Apparently, Chrysander's suggestion (contra Nottebohm) that sketching for Beethoven was not a tireless battle did not seem to have gained much traction. Riemann echoed further Nottebohm's progressive composition narrative.

Riemann did not seem to engage with the *Eroica* sketch material very deeply. For example, after pointing out that "The first theme of the Eroica that the sketchbook presents is [the one shown in Example 1]," he noted that "it is strange that it is written in E minor instead of E-flat minor."[11] For whatever reason, he did not connect this excerpt to the highly marked, new lyrical theme in E minor that Beethoven introduced in the middle of the development in the final piece (mm. 284–287). Overall, Riemann seems to have been more concerned with giving a cursory overview of the type of material that the *Eroica* sketches contained in his essay because his analytical interpretations of this material were minimal.

Example 1: *ES* p. 4, st. 1 (corresponds to Op. 55, I, mm. 284–287)



[11] "Es ist merkwürdig durch die Notation in E-moll, anstatt in Es-moll" (Riemann 1889, 284).

Apart from bolstering the heroic, progressive composition narrative, the most important part of Riemann's brief essay for our purposes is his interpretation of the first-movement development sketches that Beethoven wrote on page 4 of the sketchbook. Having noticed that these sketches appeared before the first exposition sketch (written on page 11) he argued that "Beethoven had already sketched the first part of the first movement [the exposition] before using this sketchbook." But he admitted, "I have not yet been able to locate this first and original sketch."[12] Nottebohm was the first to suggest that Beethoven wrote the exposition first, then returned to earlier pages in the sketchbook to write out ideas for the development and the other movements.[13] Riemann's interpretation thus recapitulates Nottebohm's.

The chronology of the sketches depicted in the sketchbook influences greatly how we interpret Beethoven's compositional process. In this study, I do not ascribe to Nottebohm's view, namely, that Beethoven wrote the material on pages 3–9 after he wrote the exposition sketches on pages 10–27. Rather, I suggest that he wrote this material before the exposition, that is, in the same order as it is shown in the sketchbook. This interpretation, we will see, has major implications for how the exposition sketches are understood. For now, however, let us return review the literature.

Work on the *Eroica* sketches seems to have stopped for two decades after Riemann's essay but we find references to them scattered in various sources on broader topics. In his *Die innere Werkstatt des Musikers* (The Inside Workshop of Musicians) (1910), the music critic Max Graf summarized some of the issues that Nottebohm highlighted, including a topic that will be central in the analytical chapters that follow, namely, Beethoven's decision to introduce the main theme material in the subordinate key (B-flat major) before the subordinate theme group.[14] Graf hypothesized that Beethoven eventually removed the B-flat entry so that the "pure E-flat major harmony [i.e., the home key] could predominate as much as possible in the first part because this plain harmonic structure would emphasize the simple grandeur of the *Eroica* theme more."[15] As I

---

[12] "Allerdings beweist der auf S. 4 bei dem unten folgenden Thema notirte Zusatz: „2. Theil", dass Beethoven bereits den ersten Theil des ersten Satzes vor Gebrauch dieses Notirungsbuches skizzirt hatte. Diese erste und ursprüngliche Skizze aufzufinden, ist mir bis jetzt noch nicht möglich gewesen" (Riemann 1889, 284).

[13] See (Nottebohm 1979, 50).

[14] Graf, of course, did not use these formal terms.

[15] Graf's full explanation is as follows (translated portion underlined): In der ersten großen Skizze zur "Eroica" wird das Hauptthema bei seinem dritten Erscheinen—vor Eintritt des Seitensatzes—in B-Dur aufgezeichnet; in späteren Skizzen wird es dreimal in Es-Dur gebracht und überdies noch ein viertes Mal in B-dur. In der endgültigen Fassung wird es nur dreimal vorgeführt und immer in Es-Dur. Auch hier ist also

discuss in the analytical chapters below, however, I suggest that Beethoven likely removed the final entry of the main theme material for other reasons. The sketches detail a more complicated situation. Nevertheless, Graf summarized aptly that the *Eroica* sketches showed how Beethoven balanced parts, how the modification of one part often involved changes to another, and how later portions of the work develop out of the earlier parts (Graf 1910, 206).

Another interesting source on the *Eroica* sketches published after Graf's book was a brief essay by the Austrian-German Wagner scholar Alfred Lorenz (1868–1939) titled *Betrachtungen über Beethovens Eroica-Skizzen* (Reflections on Beethoven's Sketches) published in the *Zeitschrift für Musikwissenschaft* (1924). In his essay, Lorenz sought to prove, contra composer Hans Pfitzner, that "brilliant creativity does not always have to start from 'inspiration.'"[16] To do so, Lorenz relied upon Nottebohm's transcriptions to highlight how a few passages developed over the course of Beethoven's drafts. Despite his interest in musical form (particularly in Wagner's work), Lorenz said relatively little about the form of the *Eroica* sketches besides noting that the length of some units (in measure numbers) remained consistent in several sketches. This observation suggested to Lorenz that Beethoven "had the ability to feel so strongly the musical energies that were stored up within him that, before the composition of the movement, he could use the temporal extension of the rhythmic energy necessary for their release by measuring these explosions without a definite melodic line—[filling it instead] with some kind of energetic content."[17] In other words, he believed that Beethoven composed with broad formal dimensions in mind, then worked to fill those "frames" with the appropriate musical content. In some instances, this view holds, but generally the situation is more complex. I comment on Lorenz's specific observations where pertinent in the chapters that

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eine Kürzung dadurch, daß das Thema nur dreimal (statt viermal) gebracht wird, die Vereinfachung, daß der ganze erste Theil in Es-Dur steht, so daß B-Dur für den Seitensatz aufgespart bleibt. Beethoven legte besonderes Gewicht darauf, die reine Es-Dur-Harmonie im ersten Teile möglichst stark vorwalten zu lassen, weil durch diese schlichte harmonische Struktur [198] die einfache Größe der Eroica-Thematik starker hervorgehoben wird" (Graf 1910, 197–98).

[16] „Wir haben also genaue Betrachtung des Werdegangs mehrerer Stellen aus dem ersten Eroicasatze den Beweis erbracht, daß das geniale Schaffen nicht immer von „Einfall" ausgehen muß. Dies alles nach Pfiztner dem „kitt" zuzurechnen, ist bei Beethoven eine Ungereimtheit" (Lorenz 1924, 416–17).

[17] „Vielmehr muß man, in das Seelenleben dieses Genies sich versetzend, annehmen, daß er die Fähigkeit hatte, die musikalischen Energien, die in ihm vor Komposition des Satzes aufgespeichert waren, so stark zu empfinden, daß er die zeitliche Ausdehnung der zu ihrer Entladung nötigen rhythmischen Explosionen auch ohne bestimmte melodische Linie—nur mit irgend einem Energiegehalt angefüllt-abmessen konnte; anders ausgedrückt; daß er die formalen Wellen, in denen die Stimmung des Musikstückes ausschwingen mußte, manchmal vor allem anderen erkannte" (Lorenz 1924, 416–17).

follow.[18] Overall, Lorenz's brief essay rearticulated Nottebohm's observations, thereby further promoting the narrative of Beethoven's heroic labor and a progressive compositional process.

The next work that deals extensively with Nottebohm's transcriptions of Beethoven's sketches is Paul Mies's *Die Bedeutung der Skizzen Beethovens zur Erkennntnis seines Stiles* (1925).[19] Although the *Eroica* sketches are far from the sole focus of Mies's book, he comments briefly on a few sketch passages from each movement in the context of more general inquiries on topics like the melodic line (melodic apex, repetition, suspension, etc.), unity in the sketches, Beethoven's treatment of motive, rhythm, modulation, and so forth. Most notable for our purposes is his discussion of Beethoven's propensity for "sequence-contraction."[20] He finds a tendency for the composer to abbreviate sequences in successive drafts or in the final piece. Mies only mentions one instance of this sequence-contraction in relation to the last exposition sketch (i.e., CS 4) and the final Op. 55, I,[21] but we will find that this observation holds true in several places in the sketches.

At the end of his study, Mies concluded with a call for further research:

> The principles underlying the working-out must be investigated by extending our study of the sketch-books, such as that for the Eroica (N. 80) [Nottebohm's 1880 Monograph], where much valuable material is to be found. . . But so long as nothing has been published corresponding to N. 80, this line of research, based as it must be on the original sketch-books, presents special difficulties (Mies 1969, 187).

Mies recognized that the *Eroica* sketches offered tremendous potential for improving our understanding Beethoven's approaches to form, but such a study would need access to a complete transcription of the sketchbook. Fortunately, this transcription is now available.

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[18] In addition, Lorenz briefly noted some of the motivic relationships between the main theme and the first standing on the dominant (i.e., mm. 23–30 in Op. 55), and some ascending arpeggios that were present in the earliest sketches. I discuss aspects of these relationships in the last chapter.

[19] Mies text was translated into English in 1929 as *Beethoven's Sketches: An Analysis of His Style Based on a Study of His Sketch-Books* by Doris Mackinnon. The English text was reprinted in 1969 by Oxford University Press. The present work cites exclusively from the reprint.

[20] See (Mies 1969, 76–84).

[21] See (Mies 1969, 60–61 & 76–84). Mies mentions Beethoven's contraction of what is analyzed in this work as the internal SotD between the subordinate theme 2, part 1 and 2, i.e., the music corresponding to mm. 99–102 in Op. 55, I.

The next discussion of the *Eroica* sketches appeared in Donald Tovey's (1936) Glasgow lecture series, "The Integrity of Music," later published in *A Musician Talks*.[22] In his brief, almost passing, mention of the *Eroica* sketches, he characterized Beethoven's process as one that began with crude ideas, but progressed to versions that were altered "in the right way" (80).[23] Like the scholars before him, Tovey further solidified the prevailing narrative of Beethoven progressing from "blunders" to works of art.

After Tovey's lecture, there was another drought of *Eroica* sketch studies for nearly fourty years. Scholars remained limited by Nottebohm's incomplete and selective transcriptions. If one wanted a more thorough and comprehensive view of the sketchbook, they would have had to visit the Berlin library where the sketchbook was kept. This limitation was exacerbated during World War 2 when researchers lost access to the physical sketchbook because it was moved out of the Berlin library for safekeeping. For over two decades, the complete sketchbook could only be examined on microfilm, which was not widely distributed.[24] Fortunately, the sketchbook—presumed to be lost—resurfaced at the Biblioteka Jagiellonska in Kraków, Poland in 1977, and the process of newly transcribing the sketchbook began thereafter.[25]

The next concentrated look at the *Eroica* sketches seems to have taken place in a seminar directed by Lewis Lockwood at Princeton University in the fall of 1975.[26] In this seminar, Lawrence Earp developed the foundations of what would become his article, "Tovey's 'Cloud' in the First Movement of the Eroica: An Analysis Based on Sketches for the Development and Coda" (1993).[27] As his title suggests, Earp did not discuss the exposition sketches, favoring instead to study the development and coda. He chose these sketches instead because Nottebohm spent less time on

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[22] For Tovey's discussion of the *Eroica* sketches, see (Tovey 1941, 79–81).

[23] I comment on Tovey's claims in Chapter 4. Tovey seems to have been greatly influenced by Beethoven's continuity sketches, as he presented several works using a similar, single-voice style in several articles for the *Encyclopaedia Britannica*. These essays are collected and reprinted in (Tovey 1944).

[24] For the microfilm versions, see Jonathan Katz notes in his translation of Nottebohm's, *A Sketchbook of 1803*; (Nottebohm 1979, 47), and Rachel Wade's discussion of the sketchbook in (Wade 1977, 255). Wade notes that copies of the microfilm were available at the Beethoven-Haus, Bonn, the Archiv für Photogramme musikalischer Meisterhandschiften of the Österreichische Nationalbibliothek, Vienna, and the Music Collection of Princeton University Library, Princeton, New Jersey.

[25] For more on the history of the sketchbook, see (Wade 1977) and (Beethoven, Lockwood, and Gosman 2013a, 5).

[26] Early transcription of the *Eroica* sketchbook seems to have started in these seminars; see (Beethoven, Lockwood, and Gosman 2013a, xi).

[27] On the Eroica first movement seminar at Princeton, see (Earp 1993, 57 fn. 6).

these parts.[28] Nevertheless, Earp highlights some important chromatic pitch class relationships that seem to have influenced parts of the exposition. I comment on these connections as they arise in the chapters that follow.

The 1970s saw an explosion of Beethoven sketch research. With enormous enthusiasm, scholars began to collect, reconstruct, and transcribe Beethoven's sketchbooks. This process spanned multiple continents and led to a proliferation of new Beethoven sketch research.[29] Many of these studies appeared in the 1980s. William Meredith, writing in 1985, listed 13 completed dissertations and 12 in progress on Beethoven's sketches.[30] None, however, focused on the *Eroica* sketches.

At the seeming apex of the Beethoven sketch studies fervor, the discipline was dealt a strong blow by one of its central arbiters. In his widely read article, "Beethoven Scholars and Beethoven's Sketches" (1978), Douglas Johnson questioned the scholarly value of analytical sketch studies and expressed serious skepticism about the role of sketch analysis. Johnson argued, relying heavily on Nottebohm to support his position, that Beethoven's sketches were irrelevant for the analysis of final works. Instead, he suggested, the sketches belonged exclusively to studies of biography.[31] Despite swift rebuttals from prominent sketch scholars including William Drabkin and Sieghard Brandenburg in a follow-up publication with Johnson (1979), analytical work on Beethoven's sketches began to slow.

Although the 1980s and 90s saw some dwindling interest in the analysis of Beethoven's sketches, curiosity in the *Eroica* sketches mostly persisted. After the sketchbook became available at the Biblioteka Jagiellonska in Kraków, Poland, it was studied by a number of scholars including Alan Tyson, Sieghard Brandenburg, Lewis Lockwood, Lawrence Earp, Katherine Syer, and Alan Gosman among others for a variety of purposes.[32] Of interest here are the four articles that Lockwood wrote from this study: "Beethoven's Earliest Sketches for the 'Eroica' Symphony" (1981), "'Eroica'

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[28] Earp explained, "Nottebohm's discussion of the first-movement exposition sketches omits many variant passages and important details, but it is quite a bit more thorough than his discussion of the sketches for the development and coda. These two sections are the subject of this essay" (Earp 1993, 57).

[29] Writing in 1978, Douglas Johnson noted, for example, that there were "no fewer than eight American dissertations involving first-hand study of the manuscript sources have been written or are now in progress" (Johnson 1978, 3).

[30] (Meredith 1985, 2–4).

[31] (Johnson 1978, 5). On the larger context and response to Johnson's essay, see (Sallis 2015, 163–69).

[32] See (Beethoven, Lockwood, and Gosman 2013a, 4).

Perspectives: Strategy and Design in the First Movement" (1982), "Planning the Unexpected: Beethoven's Sketches for the Horn Entrance in the 'Eroica' Symphony, First Movement" (1991a), and "The Compositional Genesis of the 'Eroica' Finale" (1991c).[33] These articles constitute the most substantive discussion of the sketch materials after Nottebohm's landmark monograph and elements from each of these essays will be discussed in the analytical chapters that follow. In general, Lockwood covers important aspects of Beethoven's compositional process for the piece, but his remarks are limited to selected parts of the exposition sketches.

Most recently, Lockwood and Gosman completed their transcription of the entire *Eroica* Sketchbook (2013a; 2013b). This excellent, two-volume transcription and high-resolution photo facsimile has opened new avenues for analysis and provides the groundwork for this dissertation. Apart from some minor differences, all the sketch materials in this dissertation are based on Lockwood's and Gosman's transcription and editorial interpretations. Throughout, I have carefully compared their transcription with the accompanied high-resolution, photo-facsimile of the original sketchbook; I suggest very few emendations to their transcription in the analytical chapters that follow.

In addition to their transcription, Lockwood and Gosman provided some commentary on the first movement sketches. I discuss how their findings relate to my own throughout this dissertation. In many respects, their commentary does not differ substantially from Nottebohm's or deviate from Lockwood's previously published essays, but their wider purview has opened new questions. As Nicholas Marston has suggested, their commentary appears more as a series of proto articles that were intended to promote new scholarship.[34] Indeed, I pursue many of the threads they open.

Despite all of the scholarly advancements in the last 140 years associated with Beethoven's *Eroica* sketches, Nottebohm's 1880 monograph has remained the authoritative study.[35] Lockwood,

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[33] See also (Lockwood 2015b, 57–77) for a synthesis of some of these ideas targeted at a more general audience.

[34] In his review, Nicholas Marston explained that "whereas the text is on the one hand frequently verbose and overdone . . . on the other it frequently does not go far enough: several of these discussions are in effect proto-articles, adumbrations of just the sort of scholarship that the appearance of this edition of Landsberg 6 is presumably intended to promote. But they remain just that: adumbrations" (N. (Reviewer) Marston 2014, 291).

[35] (Nottebohm 1880; 1979). Translated into English in (Nottebohm 1979, 47–125). For Lockwood and Gosman's commentary on the *Eroica* sketches, see (Beethoven, Lockwood, and Gosman 2013a, 29–48).

writing before the publication of his new transcription, noted that "Nottebohm's transcriptions and commentary . . . opened up a larger body of genetic material for the *Eroica* than anyone could have anticipated, and laid a basis that has yet to be seriously challenged or drastically modified" (Lockwood 1982, 119). Apart from the articles discussed above and Lockwood's and Gosman's brief commentary,[36] Nottebohm's interpretations have endured.

Given the paucity of any new advancements, challenges, or alternatives to Nottebohm's interpretations of the *Eroica* exposition sketches, one might wonder what the grounds are for pursuing such a study today. A more pertinent question, however, is this: why has Nottebohm's analytical work on the exposition persisted as the sole and authoritative summary of these sketches? Nottebohm's work undoubtedly reflects impressive scholarship,[37] but considering that the complete *Eroica* sketches are now transcribed and our analytical methodologies have improved, it is unusual that his findings have not been seriously confronted, amplified, or expanded. Thus, with a new complete transcription, new theories, and questions, the time is ripe for a reappraisal.

1.2 Analytical Perspectives: From Radical Blunders to Viable Variants

As we have seen, scholars have tended to view the *Eroica* sketches through a heroic, progressive composition narrative. Whelan (1990, 373–74) summarizes this issue more broadly (emphasis in the original):

> Only the musical faults of versions, sketches, and drafts of finished works seem to be a topic for scholarly discussion . . . When the music of the sketches is discussed, it is often only to explain what the composer did wrong in the sketch and got right in the published version; whatever musical value the sketch or draft has tends to get lost in this frankly teleological approach. Since the published version of the work is usually assumed to be superior in value, the music in of the sketches or drafts is seen as superseded.

[36] Articles that focus on the *Eroica* sketches include (Lockwood 1982; 1991a; Earp 1993). Some additional articles invoke the *Eroica* sketches to fortify an argument that was developed independently of them; see (Tovey 1941; Horne 2006; Caplin 1991). For Lockwood and Gosman's commentary, see (Beethoven, Lockwood, and Gosman 2013a, 29–48).

[37] See (Beethoven, Lockwood, and Gosman 2013a, 3–4). Cooper (1990, 9) suggests that little work was done on the original sources of Beethoven's sketchbooks for years after Nottebohm's study because his "work was of such a high standard."

As Whelan emphasizes, Beethoven's earlier sketches are generally assumed to be laden with compositional problems and subsequent drafts supposedly show how Beethoven revised or excised these difficulties to transcend the failings of his earlier musical experiments. This characterization initially appears logical: it would make sense, that, if Beethoven changed a passage, he must have found it problematic. But while this reasoning appears sound, it can inadvertently confuse our understanding of his compositional process, or worse, greatly mischaracterize it. Ultimately, this progressive-composition perspective clouds our ability to understand the sketches as Beethoven himself would have seen them. Sketches will always be incapable of fitting into the bed of Procrustes if that bed is narrowly delimited by the final work or ill-defined sonata theories.

Considering Beethoven's widely acknowledged improvisational abilities,[38] it seems sensible to appraise the early written sketches with higher regard. If his improvisations were as good as the numerous accounts suggest, then perhaps we should look at the sketches not as defective experiments but as advanced compositions that solidified prior improvisations.[39] Barry Cooper advances this position:

> The fact that he was capable of producing such on-the-spot compositions in the form of improvisations—and ones of very high quality—serves as a useful counterweight to the frequently held notion (derived from the laboured appearance of the sketches) that he found composition a slow and difficult process. He clearly found it all too easy to compose something, and the difficulty lay in trying to produce works that would surpass anything previously written (Cooper 1990, 14).

In many respects, Cooper's view matches Chrysander's review of Nottebohm's monograph highlighted above, which coincides well with my own perspective. Once we consider that most of

[38] See (Skowroneck 2010, 146–49).

[39] Cooper similarly notated that, "It appears, then, that Beethoven's improvisations give rise to the same sort of music as his written compositions, and that they reflect essentially the same creative process. His compositions, and in particular his lengthy sketching process, were apparently sometimes attempts to pin down and refine movements that he had already improvised complete at the piano. Thus when composing at the piano he did not just, in Czerny's phrase, 'try out a given passage countless times' before going on to the next fragment, but was capable of improvising, without interruption, a whole movement, which would differ from a later, written version of it only in matters of detail" (Cooper 1990, 13).

the sketches were part of a larger process involving prior improvisation, it makes sense to interpret them as their own pieces of music, or at the very least, partial works (e.g., an exposition of a sonata movement).[40] Thus, instead of viewing the sketches as part of a teleological process towards the final, we could approach them on their own terms as Beethoven would have done when he composed them.

Another way to understand the value of the sketches as independent pieces is to draw upon a distinction between a work's *meaning* and *impact* in relation to the time of its origin.[41] A work can be said to have a fixed meaning that we attribute to the composer's intentions. The impact of that work changes, however, depending on the aims or aesthetic preferences of the interpreter or interpretive community, their cultural context, and so forth. Our view of the sketches is hampered mostly because we see them from a skewed temporal perspective that focuses more on the impact of the final piece rather than its original meaning. We know the final work and its legacy, then work backwards. Of course, Beethoven did the opposite, so if we want to get closer to understanding his compositional process, we must also reverse the timeline and work alongside the composer. We should aim to interpret the sketches from the beginning as interesting musical utterances that he was happy to write, not solely in reference to what he would eventually compose.

The long-form sketches of a work afford us something we do not normally have: they allow us to trace the work's developing meaning—they enable us to see Beethoven's changing intentions. The sketches afford additional insights into a work's meaning, broadly conceived, because they

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[40] Whelan (1990, 372–73) advocates for this position: "Even though the continuity drafts do not contain an entire musical texture, they do capture the conception of a version of the published work . . . [they] can have a value independent of the completed work, in the same way completed versions can." Barry Cooper similarly notes that "It is better . . . to think of the final version of a melody as one possible realization, and the best Beethoven could think of at the time, of the ideas contained in the sketches, rather than as the only possible outcome, which his sketches had gradually revealed to him. This conclusion is probably best appreciated by studying sketches for melodies that never reached a final version, or by examining the sketches for a work before one has encountered the final version . . . Again, studying the sketches of a work one knows well can give a rather distorted impression of them, since everything that is familiar from the final version will automatically seem better than what is unfamiliar in the sketches, and Beethoven's struggles will seem unduly laboured. Undoubtedly the final version of a passage is normally the best; but to imagine that one can tell it is, when it is really just the most familiar, is self-deception" (Cooper 1990, 10–11).

[41] My distinction between a work's meaning and impact is inspired directly upon John Farrell's formulation of these terms for literature developed in his book, *The Varieties of Authorial Intention: Literary Theory Beyond the Intentional Fallacy* (2017). Farrell's *meaning* and *impact* are based closely on E. D. Hirsch's *meaning* and *significance*; see (Farrell 2017, 56–59). For Hirsch's prior and related formulation of these ideas, see (Hirsch 1979, 6–9).

require us to creatively navigate between something analogous to Meyer's "critical" analysis and "style" analysis.[42] Following Meyer, we can take for granted that studying and comparing many of Beethoven's piano sonatas is valuable if we want to better understand any one sonata. Could we not say the same about the different versions of the *Eroica* exposition?

Although the distinction between style analysis and critical analysis is helpful in many instances, it is not always clear how to separate the two, and they seem to be more intrinsically related that we might initially assume. If we want to do a style analysis of all of Beethoven's piano sonatas, we must analyze each individual sonata. But if we have not established the style because we have not yet analyzed all the sonatas, how can we possibly analyze any single sonata? Although style and critical analysis can be neatly defined and separated, in practice they are symbiotic and co-determinate. The idea that we can interpret a single work in isolation, i.e., perform a critical analysis independent of examining other works and the composer's own history, would lead to impoverished analyses. Sketches, especially when they are numerous like those of the *Eroica*, offer a unique opportunity to study a work from both critical and stylistic perspectives without resorting exclusively to works beyond the one in question because there are many versions of the same work.

To further understand the value of analyzing the *Eroica* sketches as variants rather than malformed drafts on a teleological path, consider an example outside music. Imagine that we have been tasked with cooking a Ragù Bolognese—a popular Italian meat sauce. Not knowing what constituted such a dish, we might turn to cookbooks. A search would quickly reveal many variants of the recipe. Which one should we choose? We might debate what the best recipe is, but eventually we would recognize that this would be based on our own taste or cultural concept of the dish. One way to figure out its essence, however, would be to examine multiple recipes. We might discover that some ingredients or quantities are critical to the recipe, whereas others are stylistic variations attributable to a specific region or culture. This type of study would, presumably, greatly enhance our impression of what a Ragù Bolognese is, and what could be varied to achieve different effects. Such an investigation might also teach us about the various people who came up with alternative versions of the dish. Perhaps northern Italians favor one spice, whereas southern Italians choose another, and so forth.

Now let us consider this analogy in reference to Beethoven's *Eroica* sketches. If we analyze these sketches like an expert chef would analyze numerous Ragù Bolognese recipes, we might come

[42] (Meyer 1973, 7–9).

to a better understanding about the essence of the work and composer who wrote it. Whereas many chefs write Ragù Bolognese recipes, the *Eroica* and its sketches have a single creator. This difference affords new opportunities for us to understand better the composer and the stylistic norms within which he operates.

The exposition sketches, reveal, for instance, Beethoven's changing intentions for the C-sharp and D-flat enharmonic relationship that manifest in the final work. As I demonstrate in the analytical chapters that follow, the sketches suggest that Beethoven did not initially plan to reinterpret the C-sharp as a D-flat in the recapitulation until a later stage in his drafts. In his first sketch, this relationship played out in a more pronounced way in the exposition alone. This observation is enormously useful for both our understanding Beethoven's intentions for the piece and its reception history. Some audiences may miss the long-range relationship between the C-sharp in the exposition and the D-flat in the recapitulation—or at the very least, Rochlitz thought it was necessary to point out this connection in his review.[43] In this light, therefore, it would seem that some of Beethoven's earlier intentions for the C-sharp and D-flat relationship, as revealed in the sketches, may have made a greater impact on the audiences that missed the long-range connection between these pitch classes in the published work. This is not to say that the sketches are superior, or that he made a mistake in changing some of his initial impulses, but rather that they show alternative viable possibilities that have intrinsic artistic value. It is apparent that Beethoven himself was concerned about where the enharmonic relationship would be revealed.

We will discover, as Cooper (1990) noticed more generally, that Beethoven did not always select his last sketch as the basis for the final piece;[44] he often vacillated between several different choices. We will see many instances where he writes an idea in one sketch, abandons it in the next, then returns to it again in a later sketch. Consequently, we should not characterize Beethoven's compositional process as one that develops in a gradual, linear way. Rather, the sketches show a process of him trying variants, merging them in various ways, and experimenting with alternatives.

To summarize, by examining the *Eroica* sketches as viable variants rather than problematic experiments in a teleological process towards the final piece, we may produce a better understanding

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[43] See (Senner, Wallace, and Meredith 2001, 22).

[44] Cooper notes: "For later works there are sometimes even more than four drafts [compared to the Eroica] which do not necessarily appear to supersede each other in order. *Meeresstille und glückliche Fahrt*, for example, has at least nine for its first movement, and it was not the last one that was selected as the basis for the autograph but one of the earlier ones" (Cooper 1990, 106).

of Beethoven's compositional process.[45] As Cooper (1990, 11) suggests: "Beethoven's mental processes between his sketches have to be deduced by inference and extrapolation—an uncertain process at best . . . Yet the sketches do contain evidence that is strongly suggestive of the underlying thought, and taken as a whole they provide very great insights into the workings of Beethoven's mind and his creativity." And despite Johnson's negative evaluation of the analytical value of the sketches, he too recognized that "What [Beethoven] rejected is, after all, what he was willing to try" (Brandenburg, Drabkin, and Johnson 1979, 279). Our job is to interpret those attempts.

1.3 Methodology

1.3.1 Transcription and Realization

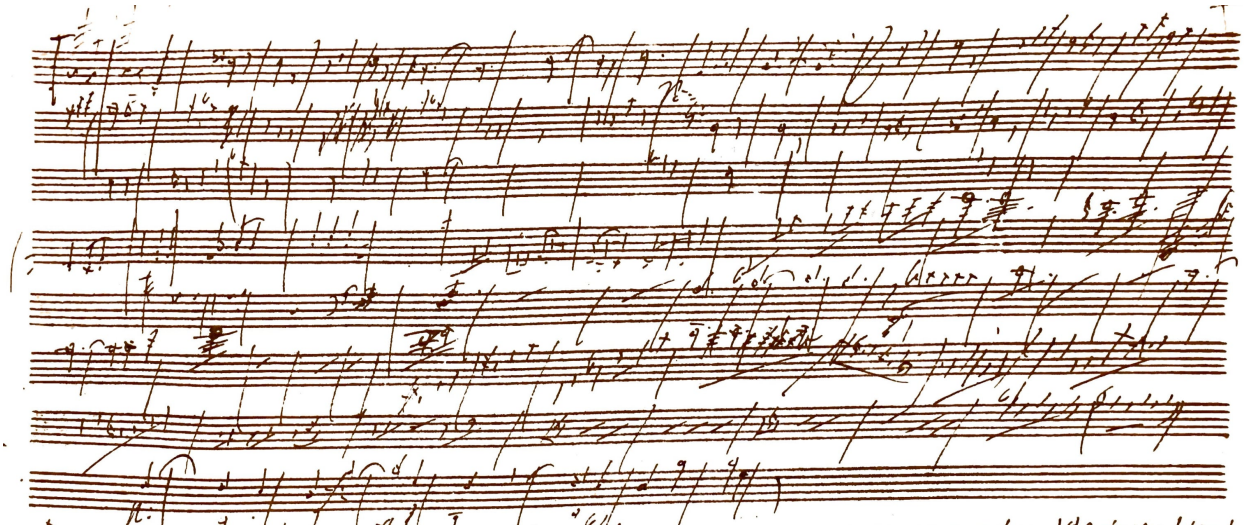
Now that we have a general historical overview of the scholarship on the *Eroica* sketches and the underlying analytical perspective adopted in this study, let me explain how the sketches will be studied in greater detail. Nicholas Marston (1995, 3–4) describes three stages of interpretation necessary for Beethoven sketch studies: (1) transcription of Beethoven's handwriting, (2) realization—i.e., adding bass lines, harmonies, and so forth, and (3) interpretation or analysis, or as he puts it, "the application to a given musical text of certain analytical or interpretative operations." In this study, I focus predominantly on the second and third stages of interpretation. For the transcription, I rely extensively upon Lockwood and Gosman's (2013a; 2013b) new edition.

One might question the validity of a sketch study that does not develop its own transcription. In his study of the sketches to Beethoven's Piano Sonata in E major, Op. 109, for instance, Marston (1995, 4) emphasized that "two differing sketch transcriptions will yield differing results under the same analytical operation." As the sketches to that sonata were also transcribed by Allen Forte and William Meredith, Marston rationalized why he re-transcribed the sketches: "it is not overstressing the case greatly to say that Forte, Meredith, and I have each analyzed essentially different bodies of music and that extended comparison of individual analytical conclusions is unlikely to prove fruitful" (4). More generally, according to Marston, "any sketch study of a Beethoven work will be based on source material which is 'interpreted' in this sense, and which is therefore already one degree removed from the original. To put it more radically, any Beethoven

[45] Cooper (1990, 16) makes precisely this claim: "By watching a great composer at work through his sketches, we may learn something about the creative process and the art of composition *per se*, as well as increasing our historical knowledge about Beethoven himself and the music he created."

sketch study begins with the virtual creation of its own source material" (N. Marston 1995, 3). What then, does this mean for this study, which does not transcribe the source it studies?

Sketchbook Excerpt 1: *ES* p. 11



Beethoven's handwriting is difficult to parse. A cursory glance at his first *Eroica* exposition sketch (Sketchbook Excerpt 1) demonstrates this challenge well. But to claim that multiple transcriptions of this music would result in "different bodies of music" seems hyperbolic. To be sure, it is fair to say that Lockwood's and Gosman's transcription is an interpretation of the *Eroica* sketches. But their reading coincides strongly with the music that Nottebohm's transcribed, and it has withstood detailed realization and analysis in this study. In the end, the art of transcribing Beethoven's sketches—at the very least, the *Eroica* sketches—has matured to become more objective than Marston would like us to believe.

Lockwood and Gosman's transcription of the *Eroica* sketches is of the highest quality and merits detailed analysis. Creating a new transcription of this material would not only be a waste of time but would deny their scholarly contribution, and worse, would undervalue what is gained by transcription scholarship more broadly. Although this study does suggest some different interpretations of Beethoven's handwriting from that of Lockwood's and Gosman's transcription,

these variances are minimal in number and scope.[46] It is hoped that future studies of Beethoven's sketches will analyze and interpret the many high-quality transcriptions that are now available.[47]

1.3.2 Caplin's Theory of Formal Functions

The next issue I must address here is the type of analysis that I will use to study the transcribed *Eroica* sketches. The rise of Beethoven sketch studies in the 1970s and early 80s coincided with the codification and further propagation of Schenkerian methodologies as one of the core systems for the analysis of tonal music.[48] It is no surprise, therefore, that scholars turned to Schenkerian analysis to interpret Beethoven's sketches during that same time.[49] Beginning in the 1990s, however, some researchers began to question this approach. Consider Lockwood's view:

> in general, it seems to me fair to say that it is precisely *not* layer analysis [i.e., Schenkerian analysis] that is likely to be enriched or intensified by sketch study. Rather, sketch study may help us better understand dimensions such as (1) proportions and sectional design and the relation between sections of a larger movement; (2) melodic, motivic, contrapuntal, and developmental structure over spans ranging from the very brief to those between far-flung sections; (3) rhythmic and metric features of phrase, period, and section; and (4) large-scale harmonic goals, as established for a given moment or section, and the alternatives that could have been considered and at times can be shown to have been considered (Lockwood 1991b, 11).

As Lockwood summarizes, the study of Beethoven's sketches did not lend to Schenkerian analysis as well as was hoped.

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[46] I comment on these differences when they occur both in the text and highlight alternative readings in all the examples and scores in Volume 2.

[47] It is important that scholarly transcriptions are coupled with high-resolution facsimiles to facilitate comparison. Future digital methods and Music Encoding Initiatives (MEI) may improve these endeavors; for one such project, see https://beethovens-werkstatt.de.

[48] On the rise of Schenkerian analysis in post-World War 2 USA, see (Bent 2001)

[49] Although Nicholas Marston's study of Beethoven's Piano Sonata in E major, Op. 109 sketches was published in 1995 (and reprinted in 2001), he notes that it arose from a reworking of his doctoral dissertation that he began in the summer of 1980 (N. Marston 1995, v).

One of the strengths of Schenkerian analysis is what is revealed when a complex texture or structure is reduced into a more simple, structural contrapuntal framework. As Whelan (1990, 377) observes, however, "Beethoven's continuity drafts do not reduce the published work in the same way that a Schenkerian reduction does." Because Beethoven's sketches are already significant reductions of a fuller imagined texture and contrapuntal-harmonic framework, it is less evident what is gained when we reduce this shorthand further.

As the primary purpose of continuity sketches, which dominate in Beethoven's sketchbooks, is to map out larger formal structures and provide the basic material that generates those structures, this study adopts an new analytical approach that has proven highly effective for analyzing Beethoven's finished works, but has not yet been applied to the study of his sketches: Caplin's theory of formal functions (1998; 2013). This theory provides an ideal framework for analyzing and comparing the sketches for three primary reasons. First, it prioritizes the role of *local* harmonic progressions as a determinant of form. In most instances, we can realize the harmonies that Beethoven implies in his single-voice continuity sketches with a high degree of objective accuracy. By contrast, other musical parameters such as texture, dynamics, or instrumentation, which are vital criteria for other recent theories of form (e.g., Hepokoski and Darcy 2006), are very sparse in the sketches and therefore difficult to reconstruct without substantial subjective interpretations.

Second, the theory minimizes motivic content as the basis of formal function. This feature is important for describing how Beethoven uses the same musical material for different formal functions in successive drafts, and conversely, how he preserves a given formal function while changing its musical content. Third, and most importantly, the theory establishes well-defined formal categories that can be applied flexibly at all levels of analysis of the sketches (Caplin 1998, 4).[50] These strictly defined categories enable an analyst to elucidate Beethoven's formal and phrase-structural strategies in individual sketches and compare them across drafts with firm theoretical foundations free of aesthetic judgement. As most Beethoven's continuity sketches concern the development and revision of phrase- and thematic-level structures, it is essential that we adopt an approach that theorizes at this level of detail.[51]

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[50] These three features are strengths of his form-functional theory more generally; see (Caplin 1998, 3–5).
[51] James Hepokoski remarks that "Sonata Theory's distinctiveness…lies in its theory of larger, action-zone or rotational norms, not of the structures of their smaller thematic constituents" (Hepokoski 2021, 17). Consequently, he explicitly adopts Caplin's theory of formal functions at the phrase level.

By adopting a theory of formal functions, we do not need to eschew aspects related to motive, tonal relationships, and even some Schenkerian ideas. On the contrary, this theory of form enriches these pursuits because it grounds them within a well-defined account of phrase structure. For example, the theory enables us to show how Beethoven repurposes certain motives to achieve different formal functions. We will see, for instance, his remarkable attempts to use the main theme material as initiating, medial, and ending functions in the subordinate theme group. In other instances, we will discover how he establishes a formal function—say, a continuation—but experiments with building it with different material. In a similar vein, we will observe how he realizes certain tonal relationships in different parts of the form, and how these change in successive sketches. We will similarly trace the development of several chromatic pitch classes and their formal position throughout the sketches. Finally, the reader will undoubtably notice the influence of some Schenkerian thought, especially at the level of the middle- to foreground. There are some sequential passages that suggest that he was thinking about constructing linear ascents, descents, and so forth that sometimes correspond with Schenkerian principles, albeit ones that are not limited to particular scale-degrees or harmonies. I additionally advance a theory of "bass-melody" prolongation that is inspired by ideas established in Felix Salzer's and Carl Schachter's Schenkerian-influenced *Counterpoint in Composition* (1989). But my dissertation does not produce Schenkerian voice-leading graphs.

Finally, let me briefly discuss how Beethoven's single-voice continuity sketches are reconstructed. In general, it is assumed that Beethoven composes in a way that is reflected in his final works. Thus, the process of reconstructing the sketches into more complete frameworks with bass voices and harmonies is influenced by, and symbiotic with, the theory of formal functions. The theory, and thus my approach to sketch realization, adopts a blend of top-down and bottom-up processes. For example, at the end of a thematic unit, we expect something cadential, so our choice of harmonies may lead us towards reconstructing a cadential progression. In other instances, the continuity voice may readily imply certain harmonies, but the formal situation might appear less obvious, so our interpretation of formal function may rely more on a bottom-up reconstruction of the harmonic, contrapuntal syntax. In short, the process reconstructing the *Eroica* sketches depends on interpreting the sketch at hand, its relation to subsequent sketches, the final finished piece, and Beethoven's style more broadly.

In his own work, Marston suggested that "it is well-nigh impossible to avoid reversing Beethoven's procedure and filling out the implied 'aural context' of the notes on the page" (N.

Marston 1995, 3). It is not clear to this author what Marston meant by "reversing Beethoven's procedure," for it is assumed here that Beethoven imagined—or more likely improvised at the keyboard—a more complete musical texture, then notated the leading, continuity-voice as a shorthand to solidify what he had done. Thus, the procedure of adding a bass line, implied harmonies, counterpoint, and so forth is not about "reversing" Beethoven's process, per say, it is about reconstructing it by interpreting his compositional intentions.[52] It should be evident, therefore, that this dissertation does not ascribe to the intentional fallacy.[53] To this end, all the reconstructions upon which the interpretations are based are made readily available.[54] In every example and score in Volume 2, smaller notes indicate additions by this author and regular sized notes are transcribed from Lockwood and Gosman's transcription unless otherwise noted.

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[52] In other words, I adopt "composer intentionality." For a similar position in literary criticism, authorial intentionality, which opposes anti-intentionality, see (Hirsch 1979; Farrell 2017). See also (Dipert 1980; 1993). A full exposition of composer intentionality is outside the scope of this study. For a brief survey of the intentional fallacy, see footnote 53.

[53] The intentional fallacy was popularized in a landmark essay, "The Intentional Fallacy"; (Wimsatt and Beardsley 1946). In their piece, Wimsatt, a literary critic, Beardsley, a philosopher, argued that "the design or intention of the author is neither available nor desirable as a standard for judging the success of a work of literary art" (Wimsatt and Beardsley 1946, 468). Consequently, the literary critic, they argue, should aim to interpret an autonomous, self-contained text irrespective of its author's intentions. The "intentional fallacy" perspective began to gain prominence in music scholarship in the 1970s, rose to widespread acceptance by music analysts in the mid 80s, and has detrimentally become the most dominant philosophical position in music analysis. For direct references to Wimsatt's and Beardsley's "The Intentional Fallacy" in music scholarship, see (Meyer 1973, 73; Gossett 1974, 260). A debate between Richard Taruskin and Allen Forte highlights the intensity that the debate reached in the 1980s. Taruskin argued that "A piece of music is not a phenomenon of nature, but the product of human volition and the agent of human communication" (Taruskin 1986, 318). Allen Forte responded, "Let the weary reader take hope. I will be brief. The issue here is intentionalism, a very tired issue, indeed, certainly in the field of literary criticism. I submit that we can never know with any certainty 'what the composer thought he was about' and that to attempt to do so to validate an analysis is an empty pursuit" (Forte 1986, 335). For a slightly more recent and mostly positive take on composer intentionality in the analysis of mid twentieth-century music, see (Haimo 1996). Haimo concludes that, "this is not to state an imperative that analyses must invoke the composer's intentions as their basic assumption. It merely asserts that they can, and that analyses might well be enhanced by starting from the composer's viewpoint" (Haimo 1996, 199). Finally, this dissertation does not adopt Seth Monahan's idea of a "fictional composer," an agent that he connects with the "Foucauldian author construct," that is, an "explanatory tool, postulated by the reader [or analyst] to render a text's [or music's] events intelligible" (Monahan 2013, 330). When I refer to Beethoven in this dissertation, I intend the actual composer that once lived, that is, what Monahan calls the "historical composer." Put simply, I seek to render Beethoven's compositional intentions understandable, not my subjective experiences thereof.

[54] Previous scholars seem to have been more reticent to provide their realizations.

1.4 Scope and Audience

Before I conclude this introduction with a summary of the chapters that follow, let me briefly delimit the scope of this study and describe its intended audience. This dissertation analyzes Beethoven's *Eroica* exposition sketches that he wrote on pages 10–27 of his sketchbook. The earlier materials written on pages 4 and 5 are also studied for their influence on the exposition sketches. Finally, reference is made to music outside these sketches and the final *Eroica* when pertinent.

One might wonder how nineteen pages of sketches led to a study of this size. We must remember, however, that the majority of Beethoven's *Eroica* drafts are single-voice continuity sketches that compress the symphony's material into a highly condensed form. These pages do not contain full-score layouts and even grand staff sketches are rare. Put simply, Beethoven encodes an enormous amount of information in his shorthand drafts. As Meyer (1973, 15) reminds us, "A simple melody of, say, sixteen measures, which takes less than a minute to perform, may require several pages—five or six minutes worth—of explanation." What then, would it take to explain Beethoven's thousands of measures of continuity voice sketches, which compress an entire symphonic texture into a single voice?

This study originated out of a desire to analyze all the *Eroica* sketches found in the *Eroica* sketchbook. But as the reader will soon discover, such a study could fill many dissertations. To enable greater focus and a deeper interpretation of Beethoven's compositional process, this work narrows the scope of study to the first movement exposition sketches. This smaller scope enables a much more extensive investigation of the material than would have otherwise been possible. In addition, this approach interfaces well with *Eroica* scholarship more generally: the first movement—and especially the exposition—has dominated scholarly interest for over two centuries. Still, I am hopeful that future studies will analyze the rest of the symphony's sketches, especially with a theory of formal functions, as numerous insights are surely left to be discovered.

Finally, this work is intended for an audience that wishes to better understand Beethoven's compositional process not only for the *Eroica*, but also for his middle-period works and his overall style more generally. It is also likely that many of the processes discussed here would apply equally well to his earlier and later periods and perhaps even to the work of other composers roughly

contemporaneous to Beethoven.[55] The reader may also come to view the final *Eroica* in a new way, but this is not the primary goal of this study.

It is assumed that the reader has a firm grasp of eighteenth- and early nineteenth-century tonal harmony, thoroughbass, harmonic progression, and Caplin's theory of formal functions.[56] Interpretation of Beethoven's compositional process proceeds from description of his implied harmonies, analysis of the formal functions, and explanation of his intentions, underlying compositional logic, and goals.

1.5 Organization of Chapters

This study is organized into nine chapters. After developing a framework for referencing and comparing the sketches in the first two chapters, I analyze and interpret the final exposition in chapter 3, then study the sketches in the order that they appear in the remaining chapters (4–9). Broadly, the sketches are organized into four "series" that roughly correspond to four stages in the exposition's formation. As the first series sketches dramatically influence all that follows, their analysis is split into two chapters (4 and 5). Thereafter, the second, third, and fourth series continuity sketches are each discussed in their own chapters (5–8). Finally, in chapter 9, Beethoven's overall compositional process for the exposition is interpreted and future research directions are suggested. Let me conclude this chapter with a summary of each chapter.

In chapter 2, I develop three tools to improve how the sketches are referenced and compared. First, to assist with labeling the sketch material, I repurpose terminology and methodologies (*semantic versioning*) originally created for tracking complex software development. This labeling system ties a sketch both to its spatial location in the sketchbook and its temporal position within Beethoven's compositional process. Second, I establish a robust approach for visualizing the form-functional layout of a sketch that allows a viewer to visualize how functions from one sketch are "transferred" or "inherited" in another sketch. Third, and finally, I advance Caplin's (2008) notion of a "bass-melody" as a foundational principle to the theory of formal functions. I summarize how the structural bass-melody interfaces with the rule of the octave and the theory of formal functions, then develop a theory of bass-melody prolongation.

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[55] It is well known, for example, that Haydn and Mozart also wrote continuity sketches—see (Bonds 1991)—but the extant sources are limited in comparison to Beethoven's. For a study of Mozart's sketches, see (Konrad 1992a; 1992b). For additional information on Haydn's sketches, see (Somfai 1972; Feder 1977).
[56] Caplin's (2013) *Analyzing Classical Form* offers an excellent and detailed introduction to the theory.

In chapter 3, I analyze the final Op. 55, I, *Eroica* exposition with the theory of formal functions. I present this analysis in three ways: with a piano reduction of the exposition, a single-voice, "cue staff reduction" of the complete movement,[57] and a durational, bass-melody reduction of the exposition. In addition to a more traditional form-functionally analyzed piano reduction of the symphony, a *cue-staff* reduction presents the score as a single, continuity-like voice that is useful for comparing the final version with the continuity sketches. Finally, the durational, bass-melody reduction compresses the exposition into a structural bass-voice, where one quarter-note is equivalent to one measure in the score.

In the first half of chapter 4, I analyze and interpret Beethoven's first two exposition sketches written on page 11 of the sketchbook. I observe that these sketches work to obscure the juncture between the transition and the subordinate theme group and problematize the typical rhetoric and tonal features of the subordinate theme group. I posit that he built the exposition in this way to subvert the thematic and tonal forces normally ascribed to a subordinate theme function in order to motivate the new lyrical, E minor theme that he planned to introduce in the development. In addition, I suggest that Beethoven modeled his first exposition sketch after the solo exposition of the first movement to Mozart's last piano concerto in B-flat major, K. 595.

In the second half of chapter 4, I analyze the first revision branch (1.1). Although Nottebohm briefly mentioned this sketch in his monograph,[58] it has received considerably less attention in the literature. I posit that this sketch was an essential part of Beethoven's compositional process. Analysis reveals a clever but unusual formal plan: Beethoven creates the impression that the exposition is ending and is repeating, before revealing to the listener that the exposition is not over. In short, he stages a "false exposition repeat." I show how traces of this design persist in different ways in subsequent sketches and the final exposition.

In chapter 5, I explore how Beethoven integrates elements from both his first sketch (CS 1.0) and his first revision branch (1.1) to craft another long exposition sketch (branch 1.2). In this revision, he clarifies the seam between the transition and the subordinate theme group, and he

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[57] Lockwood explains that "the 'cue-staff' is a sketch-line that has, in effect, been transferred from sketchbook to rudimentary score. It looks like a kind of "missing link" between the two types of sources and consequently between the two types of work areas" (Lockwood 1970b, 46). He discovered the "cue-staff" in the autograph score of the projected first movement of a Piano Concerto in D major that Beethoven worked on in 1815; see (Lockwood 1970b, 44–46).

[58] See (Nottebohm 1979, 63–64).

refashions the "false exposition repeat" to be a false ending followed by an exposition "reboot." I explain how Beethoven expands the subordinate theme group and show that some of the material that he introduces in this sketch, which is abandoned in subsequent sketches, sets the stage for future designs.

In chapter 6, I analyze the second continuity sketch (CS 2.0) written on page 12 and the fragments written on page 13. Here, the main theme, transition, and first subordinate theme begin to resemble more closely the final version, but the second subordinate theme still differs considerably. Beethoven *extends* the subordinate theme group by writing three independent themes instead of *expanding* it by enlarging its constituent parts. Notably, the exposition reboot begins with main theme material in the subordinate key.

In chapter 7, I analyze the third complete exposition continuity sketch (CS 3.0) and the numerous revisions that Beethoven wrote on pages 14–18 of the sketchbook. I trace two main threads in these sketches. The first involves the role of main theme material, and the second involves how the second subordinate theme is expanded. Rather than extend the subordinate theme group, as he had done in CS 2.0, he expands both the first and second subordinate themes by enlarging their constituent phrase functions. I conclude this chapter by interpreting the alternate approaches he tries for expanding the second subordinate theme.

In chapter 8, I briefly comment on the similarities the final exposition continuity sketch (CS 4.0) shares with the prior CS 3.0, then discuss how Beethoven refined the second subordinate theme. I focus on two main changes to the exposition. First, I explain how he modified the first part of the second subordinate theme by building a more distinctive continuation. Second, using evidence from the sketchbook, I hypothesize that he consulted examples in C.P.E. Bach's *Zwei Litaneyen* to help him achieve certain tonal goals in this part of the form. I conclude by interpreting how and why he revised the second part of the second subordinate theme.

Finally, in Chapter 9, I summarize aspects of Beethoven's compositional process for the exposition more generally, suggest future research directions, and comment on what is gained by analyzing Beethoven's sketches with the theory of formal functions. I conclude that, with the additional tools developed in this study, Caplin's theory of formal functions proves to be a viable and productive theory for analyzing and interpreting Beethoven's sketches.

ANALYTICAL FRAMEWORK

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In this chapter, I establish three additional tools, that with the theory of formal functions, will be essential in the analytical chapters that follow. These tools include a system for labeling all of the exposition sketch material, a method for diagramming the formal functions of sketches, and an introduction and further development of Caplin's theory of a bass-melody (2008).

2.1 Referencing and Naming Sketches

The sketch material for the *Eroica* symphony is vast and complicated to parse. To improve how the sketches will be referenced and compared, this study repurposes terminology that was originally developed for tracking complex software development. In short, the exposition sketches can be divided into *trunks*, *branches*, and *twigs* (Figure 1).[59] Beethoven wrote four complete continuity sketches of the exposition on pages 11, 12, 15, and 21–22, respectively. These sketches will be called the trunks. When Beethoven revises a fragment of the trunk, say the subordinate theme group, we can refer to the revised material as a branch. If he revises a portion of a branch, we can call that material a twig.

[59] In software development, "twigs" are usually referred to as software "patches" or smaller bug fixes.
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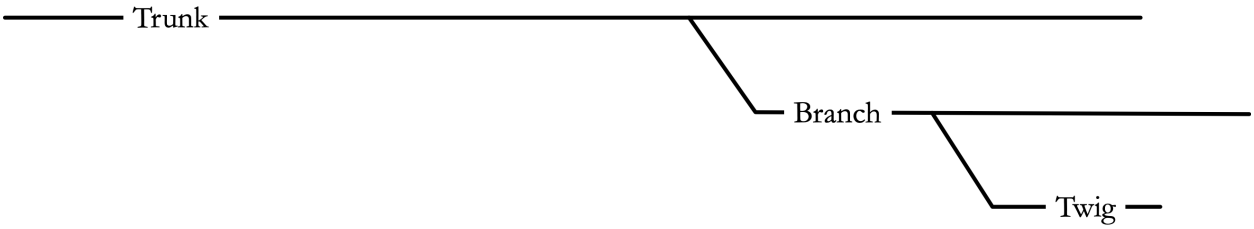
Figure 1: Trunk, Branch, Twig



This study labels and refers to trunks, branches, and twigs with a system of numbers inspired by the "Semantic Versioning Control" model used for software development.[60] Sketches are labeled with up to three numbers separated by periods, e.g., X.Y.Z, where X refers to a complete exposition sketch or trunk, Y denotes a revision or branch of the complete X version, and Z indicates a twig that replaces a portion of the revised Y branch.[61] I refer to the four complete exposition continuity sketches (trunks) by writing "CS" and the trunk number (X) and append a zero in the Y position (e.g., CS 1.0 refers to the first exposition sketch). To refer to branch material, I write "branch X.Y" where X indicates which trunk the branch is associated with, and Y refers to the specific branch.

In many instances, Beethoven writes a symbol (e.g., "+") or "Vi" to indicate where he intends to replace previously written material. He then links the new material to this position with the same symbol ("+") or "=de." He thus connects old material to new material with, say, "Vi=de," a reference to *Vide* (Latin for "refer to" or "see"). In these types of revisions, Beethoven explicitly replaces everything in the trunk after the insertion point. In software development parlance, we can say that he merges a branch into the original trunk with a delete and replace operation. When this type of revision occurs, a new complete exposition sketch is formed.

Consider a few examples. CS 1.0 refers to the first complete continuity sketch written on page 11, staves 1–8 and branch 1.1 describes the revision material that was sketched on the bottom-half of the same page (st. 9–10 and 14) (Figure 2). When the branch 1.1 material is merged into CS 1.0 trunk, CS 1.1 results (Figure 3). This merged CS 1.1 sketch comprises mm. 1–60 in the original CS 1.0 trunk (p. 11, st. 1–4a) with the branch 1.1 material replacing everything after m. 60 (i.e., mm.

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[60] I follow a modified version of the "Semantic Versioning 2.0.0" scheme (https://semver.org) developed by Tom Preston-Werner (cofounder of Github, the most widely used platform for distributed version control and source code management).

[61] Although this system is defined rigorously, it should be used flexibly in practice. It is sometimes helpful to refer to sketch material as a branch, even though it revises a portion of another branch and could therefore be interpreted as a twig.

61–99). For another example, consider CS 3.1.1, which is constructed by merging the 3.1 branch (p. 15, st. 15) and the 3.1.1 twig (p. 16, st. 2–7) into the trunk of the third continuity sketch (p. 14, st. 1–10) (see Figure 4 and Figure 5). In each case, the merger involves a delete-and-replace operation, that is, the new material replaces previously written music.

Figure 6 shows all the exposition sketches that will be discussed in this dissertation. As was discussed in Chapter 1, the sketches can be segmented into four "series" based on the four complete trunks CS 1.0, 2.0, 3.0, and 4.0. Each of these series have several branches, and the third and fourth series sketches also include additional twigs. Most of the exposition sketches focus on the latter part of the exposition, primarily the end of the transition and the subordinate group, although we will also find significant changes to the latter portion of the transition and the beginning of the subordinate theme group.

Figure 2: CS 1.0 and branch 1.1 diagram

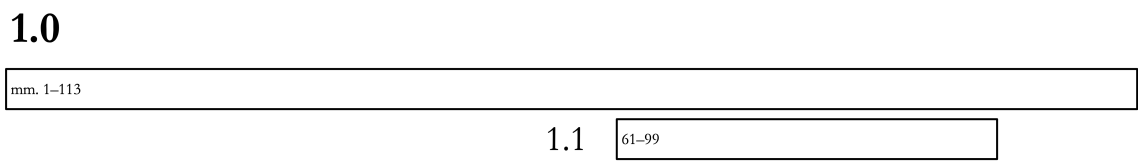


Figure 3: CS 1.1 (CS 1.0 with branch 1.1 merged)

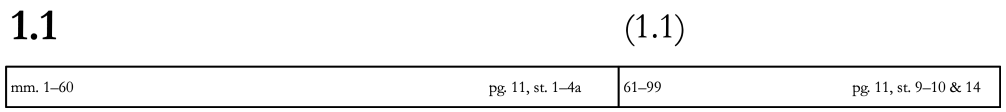


Figure 4: CS 3.0 trunk, branch 3.1, and twig 3.1.1

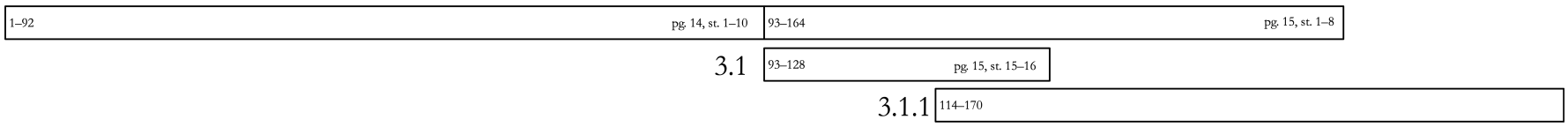


Figure 5: CS 3.1.1 Merged

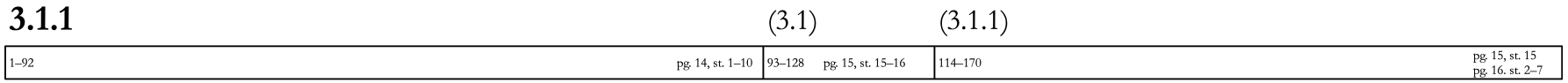
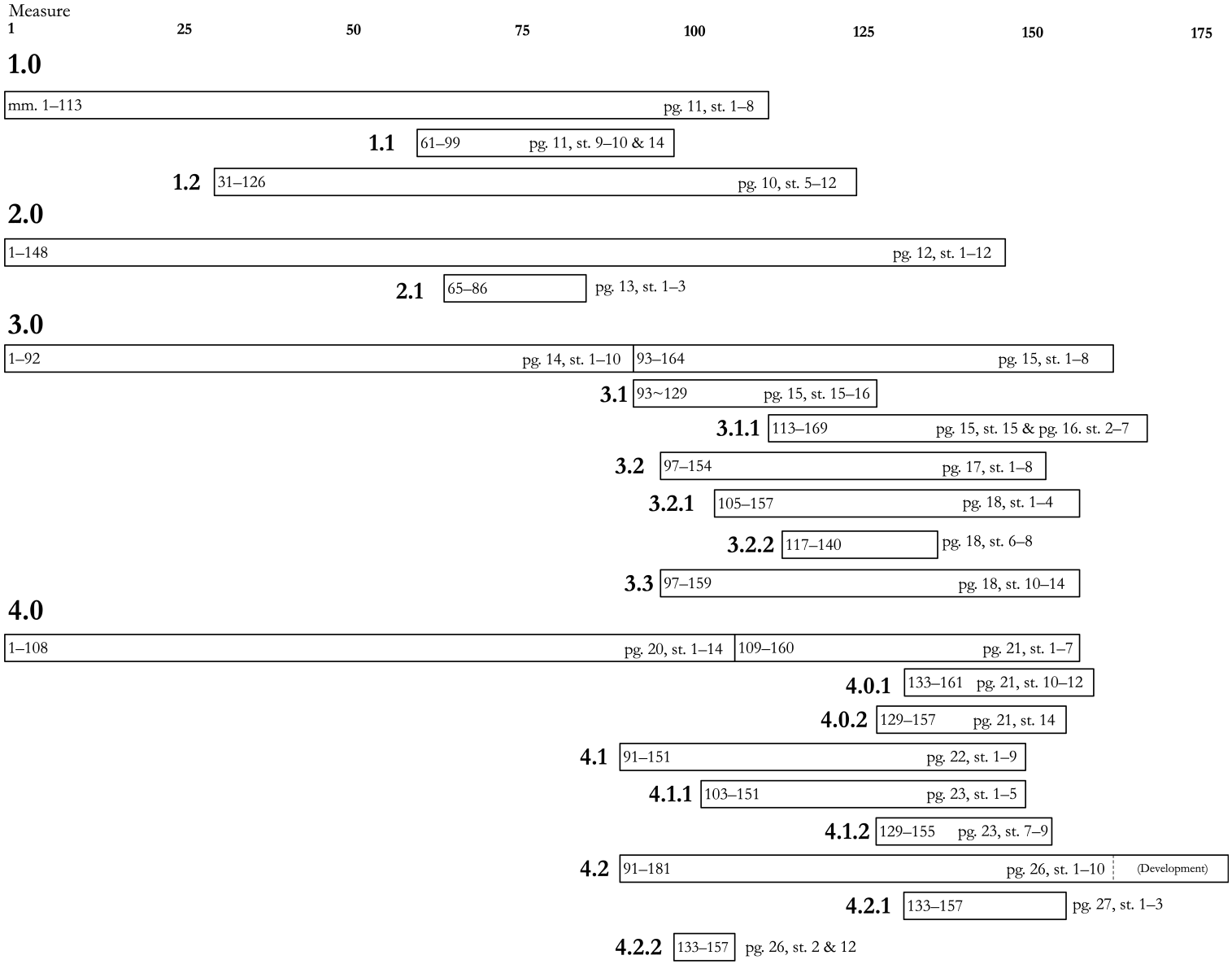


Figure 6: *Eroica* Exposition Sketches

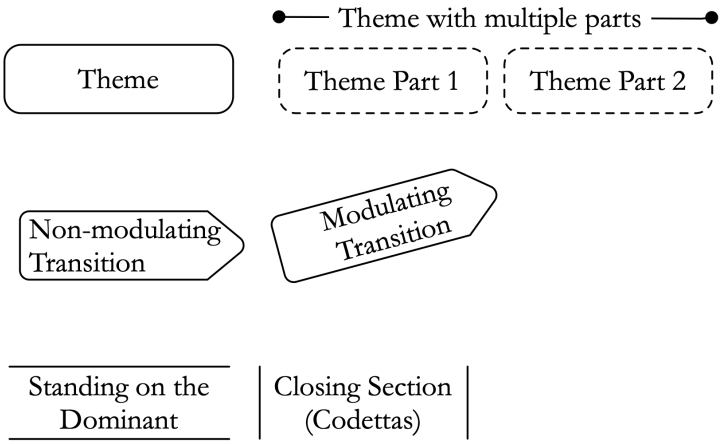


2.2 Form Function Diagrams

Given the four exposition sketches and the vast number of branches and twigs, it can be difficult to compare how the form in one sketch relates another sketch. To simplify how these complex relationships are recalled, I develop a visual way of representing functions with *form-function diagrams*. These diagrams depict the phrase structure of a sketch with a set of simple shapes (see Figure 7). The shapes of one sketch are then compared with another sketch with *function transfer diagrams* (discussed below), which show how the functions in one sketch are *transferred* into, or *inherited* by, another sketch. These diagrams are intended to be intuitive and easy to understand without a legend. Still, it is helpful to define some of the theoretical framework that supports them. In what follows, I define theme and phrase function shapes, then offer an approach for visualizing how these functions are transferred or inherited in successive sketches using language repurposed from semiotics.

2.2.1 Theme Function Shapes

Figure 7: Theme Function Shapes



Theme functions (e.g., main theme, subordinate theme), see Figure 7, will be represented with a set of simple labeled shapes or *nodes*.[62] Themes that close with a *perfect authentic cadence* (PAC) are represented with rectangles that have rounded corners to reflect their closed nature. For themes with multiple parts, I use the same shape as theme functions (a rounded rectangle) but style the border with dashed lines to represent the dependent nature of each part. When these dependent

[62] Shapes have been generated with OmniGraffle 7.20.

parts together form a complete theme, I draw a line above the parts and label them with the theme name (e.g., "Subordinate Theme with 2 Parts"). As expansion and compression are important parts of Beethoven's compositional process, the width of the shapes is drawn to reflect the size of the sections they represent. With some exceptions, the shapes are scaled so that 1-measure is equal to 10 relative pixels.[63] If a shape would be too small with this mapping, it is realized with as narrow a width as possible.

Transitions (Figure 7) are depicted with an arrow-like shape that has a curved rectangle shape on the left-hand side and a triangular shape on the right-hand side. Non-modulating and modulating transitions are distinguished by the angle of the shape, which is rotated 15 degrees counterclockwise or clockwise to reflect a modulation in the sharp direction "upwards" or to the flat direction "downwards" respectively. A *standing on the dominant* function is represented with horizontal lines above and below the corresponding "SotD" label to reflect the static nature of the underlying dominant prolongation.[64] Finally, a *closing section* is shown with two vertical lines around the label to symbolize an "after the end" function, which further distinguishes this shape from theme and transition shapes that represent complete functions that have a beginning, middle, and end. In most instances, the measure numbers of each element are included within the shape labels to simplify cross referencing the shape with the music they represent.

2.2.2 Phrase Function Shapes

Now that we have a way to represent thematic-level functions, consider an additional set of shapes to represent their phrase-level functions (Figure 8).[65] These shapes help to summarize how Beethoven changes phrase functions in successive sketches and allow us to show different parts of the function hierarchy. Sentential functions are represented with three shapes to symbolize beginning, middle, and ending: the initiating function (e.g., CBI, Presentation, etc.) is depicted with a

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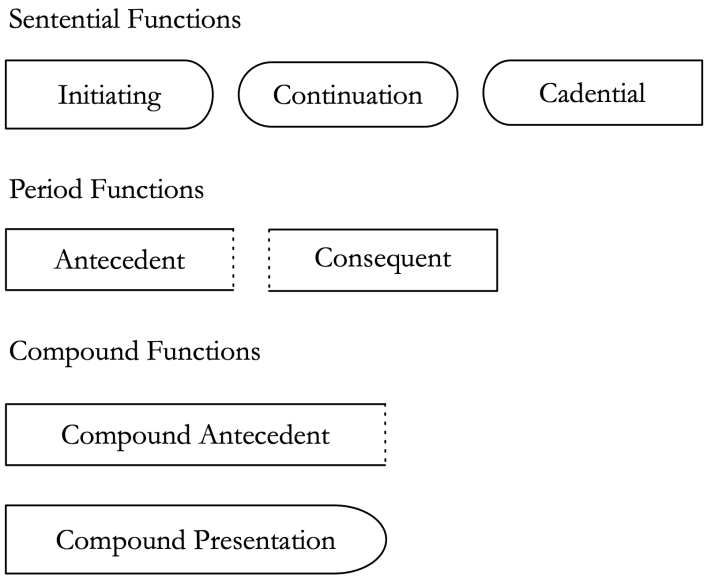
[63] I use "relative pixels" because diagrams are rescaled to fit within the text. This rescaling breaks the 1-to-1 mapping, but the relative scale remains.

[64] In Caplin's theory, a standing on the dominant and closing section are understood as a phrase functions because they do not have the characteristics of a theme (for instance, they do not close with a cadence). For our purposes, however, it will be useful to place these functions in the theme function diagrams because these parts of the form are especially large in the *Eroica* first movement.

[65] Note that these shapes are different than the ones Caplin uses in his chapter, "What are Formal Functions?"; see (Caplin, Hepokoski, and Webster 2010, 25 & 27). It should be noted that Caplin's goal was to demonstrate the hierarchical relationship between functions in this essay, not establish a unique set of shapes for each function as is done here.

rectangle shape that has hard corners on the left side and curved corners on the right-hand side; the medial, continuation function is represented with a rectangle with both corners curved; and the cadential function is shown with a rectangle that has a curved left-hand side and a straight right-hand side. Periodic theme functions are depicted with a rectangle; an antecedent is differentiated from a consequent with a dashed line to show that the two parts connect and depend upon each another. (Although shapes for this theme type are offered here, we will not find them in the *Eroica* exposition sketches). Finally, compound function shapes maintain the same function shape as non-compounded functions but are elongated to reflect their greater size. In general, these shapes occupy a different hierarchical level than theme function shapes, but for some sketches, it is beneficial to show the phrase function shapes at a higher level to depict more broad beginning, middle, and ending functions. Diagrams will sometimes mix theme and phrase function shapes when it proves insightful.

Figure 8: Phrase Function Shapes

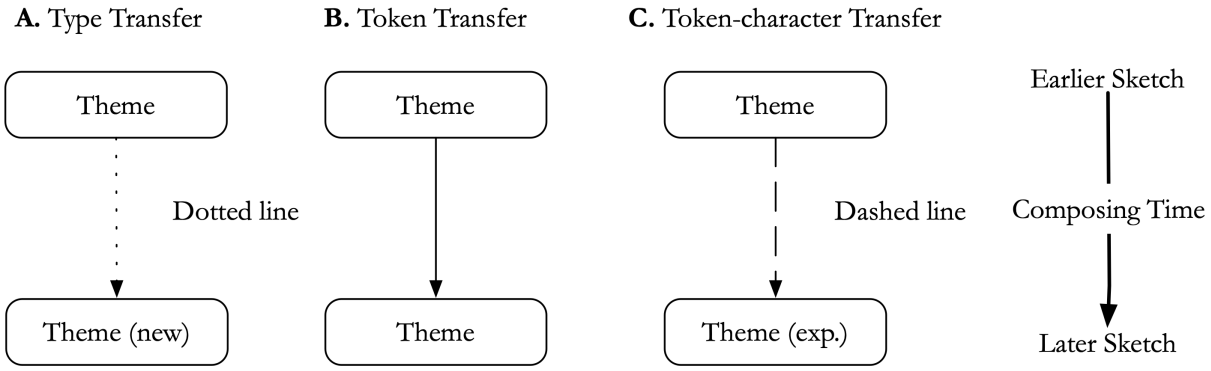


2.3 Function Transfer/Inheritance Diagrams

One of the central challenges with analyzing and comparing the *Eroica* sketches is tracking and remembering how one sketch relates to another. To simplify this process, this study visualizes how the functions in one sketch compare to another with three kinds of *function transfers* (Figure 9). In these function-transfer diagrams, the vertical axis represents Beethoven's *composing time*, i.e., shapes

that represent functions at the top of the diagram were written before those on the bottom of the diagram, and the horizontal position refers to the position of the material in the sketch in reference to its measure numbers. When a function from one sketch reappears in another, we can speak of a sketch *inheriting* a function from a previous sketch or we can depict the process as Beethoven *transferring* a function from an earlier sketch into a later sketch.

Figure 9: Function Transfer/Inheritance Diagrams



It is useful to distinguish how a function is transferred. First, we can differentiate between function *types* and *tokens*. A function type represents an abstract formal function that can be built in many ways with a variety of material. For example, Beethoven might write a continuation function in one sketch, then bring that function back in the next sketch but change dramatically the material that generates that function. In this scenario, we can say that he transfers the function type—the generalized "continuation," for instance—but not the specific function token, that is, the specific material that he used to generate that function. Function *type transfers* (Figure 9A) are represented with a dotted arrow between function shapes. The dotted line is meant to symbolize a function that is transferred from one sketch into another, but without its constituent material.

Frequently, Beethoven transfers both the function (e.g., "compound presentation") and the specific material that generates that function. In these situations, we can speak of a function *token transfer* (Figure 9B) because he transfers the function and its material from an earlier sketch into a later sketch. Token transfers are represented with a solid line to symbolize a function that is copied almost verbatim from one sketch into another.

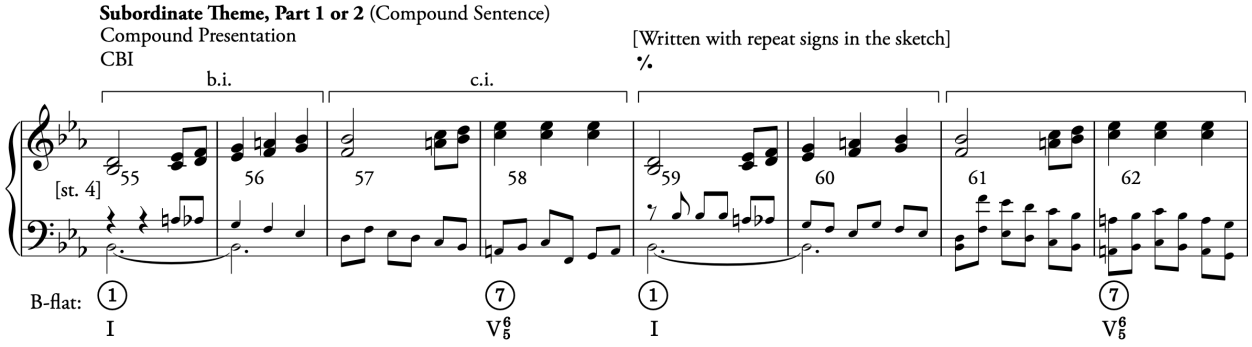
Many aspects of Beethoven's compositional process can be visualized with type- and token-transfer function diagrams. There are more times, however, when a more complex transfer arises that lies somewhere between a type or token transfer. This occurs when Beethoven revises or adjusts

the materials that generates the function that is transferred, either by expanding, compressing, or altering it in some other way. To diagram these "fuzzier" transfers, I define a *token-character transfer* (Figure 9C). When we recognize that the material in the transferred function is closely related to the material in the corresponding function that he wrote in a previous sketch, we can indicate this likeness with a token-character transfer line, even though the function may be altered in the successive sketch to articulate different harmonic functions or other musical goals. Token-character transfers are symbolized with a dashed-line between shapes to suggest that the transfer brings the function and its modified but still characteristic material. This kind of transfer is the most common in Beethoven's *Eroica* exposition sketches.

Type, token, and token-character function transfers are defined strictly, but applied flexibly in analysis. Consider, for example, the compound presentation that Beethoven writes in the first exposition sketch on page 11, st. 4 (Example 2, CS 1.0, mm. 55–62). The compound function is implied because Beethoven added repeat signs to the first CBI—he did not write out the varied repeat voice shown in the sample, mm. 59–62. In the next sketch (Example 3, CS 2.0, mm. 57–64), he writes a similar compound presentation to the first one, but explicitly notates the CBI repeat one octave higher (mm. 61–64). Although we could say that Beethoven transferred the token-character of the compound presentation from CS 1.0 into CS 2.0, because the second version of the compound presentation is not a verbatim repeat of the first, we recognize that these two passages are very similar in content and function. In such a case, therefore, the relationship is best diagrammed as a simpler token-transfer (i.e., a solid line, Figure 10). This diagram depicts a situation that differs slightly from the strict definition of a token transfer, but it allows us to reserve fuzzier token-character transfers for situations that truly warrant it.

Consider, for instance, the relationship between the first standing on the dominant written in CS 1.0 (Example 4A) with the corresponding passage in CS 2.0 (Example 4B). Because we recognize that the material that generates the SotD in the latter is greatly modified compared to the previous version, it is better to model the relationship as a token-character transfer (with a dashed line; Figure 11). The token-character transfer helps us visualize that Beethoven transferred the same function into the new sketch but modified its material more substantially.

Example 2: CS 1.0, mm. 55–62 (*ES* p. 11, st. 4)



Example 3: CS 2.0, mm. 57–64 (*ES* p. 12, st. 4–5)

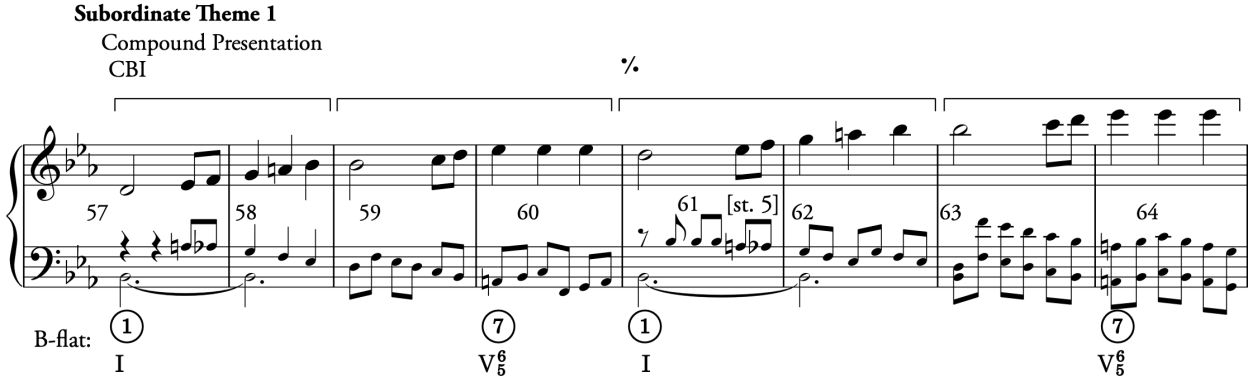
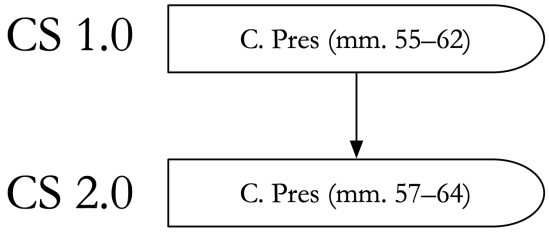
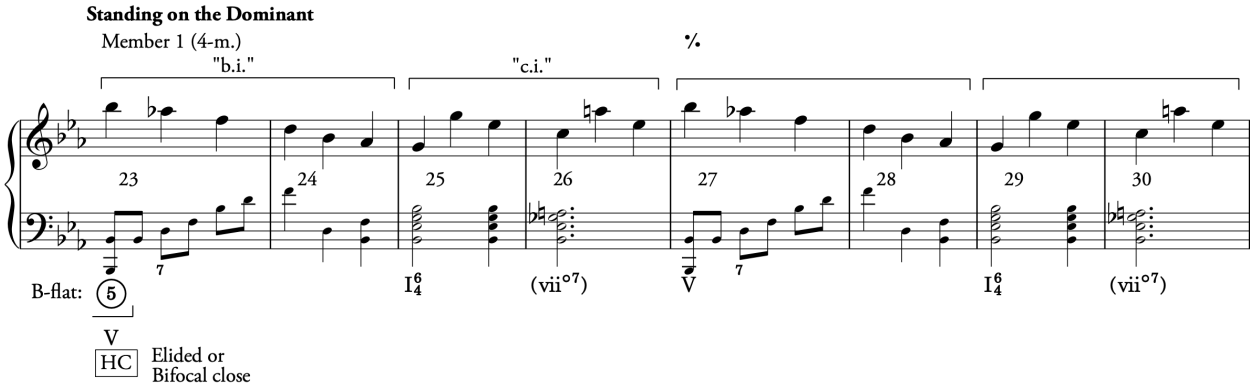


Figure 10: Compound Presentation Token Transfer Diagram; from CS 1.0 to CS 2.0



Example 4: Standing on the Dominant (1) in CS 1.0 to CS 2.0

A. CS 1.0, mm. 23–30; Standing on the Dominant (1) (*ES* p. 11, st. 2)



B. CS 2.0, mm. 21–32; Standing on the Dominant (1) (*ES* p. 12, st. 2)

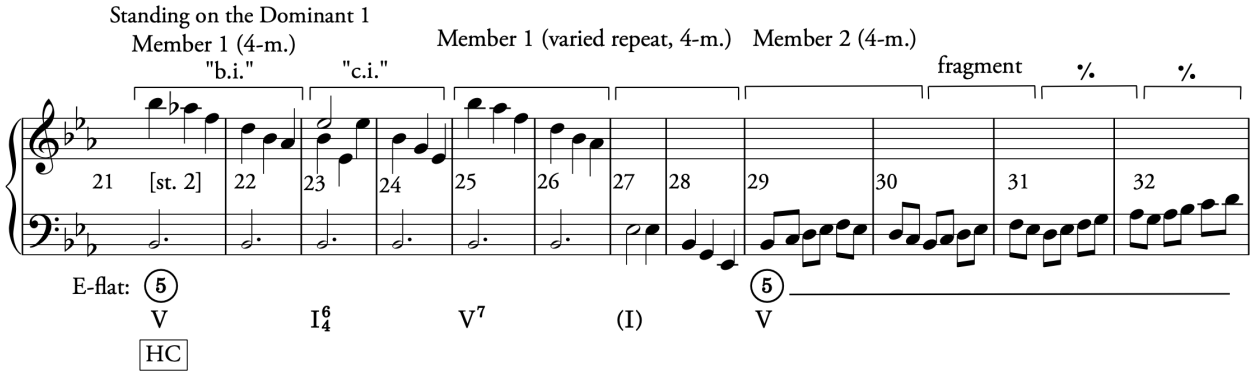
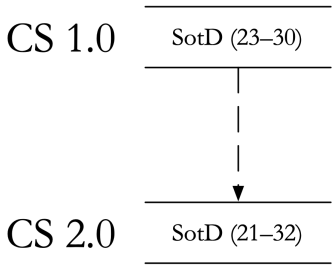


Figure 11: Function Transfer Diagram of SotD; from CS 1.0 to CS 2.0



Finally, it will prove helpful to diagram the functions of a trunk with a merged branch as a complete continuity sketch (e.g., CS 1.1 shown in Figure 12). When this occurs, the function shapes that belong to the trunk are highlighted in grey (Figure 13). As CS 1.1 is a composite of the CS 1.0 trunk (mm. 1–60) and the 1.1 branch (mm. 61–99), the main theme and two-part transition (mm. 1–

54) are shaded grey because they do not change when the merge occurs because they also belonged to the CS 1.0 trunk. [66]

Figure 12: CS 1.1 (CS 1.0 with branch 1.1 merged)

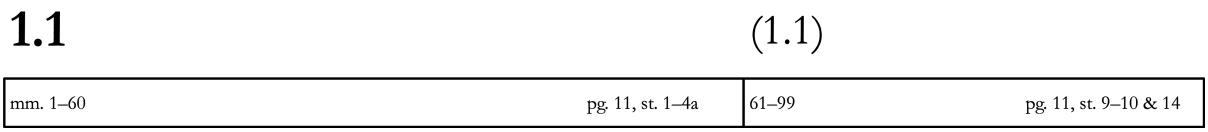
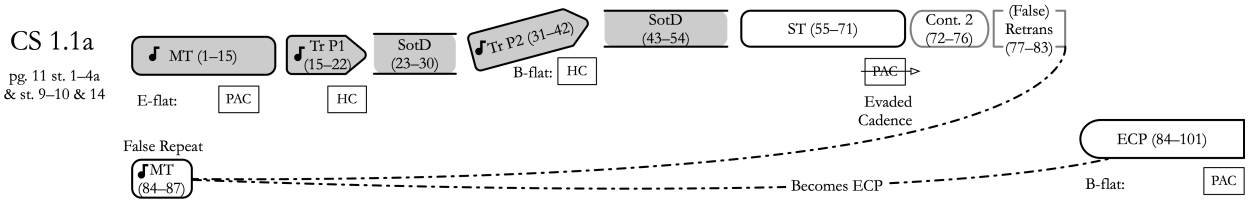
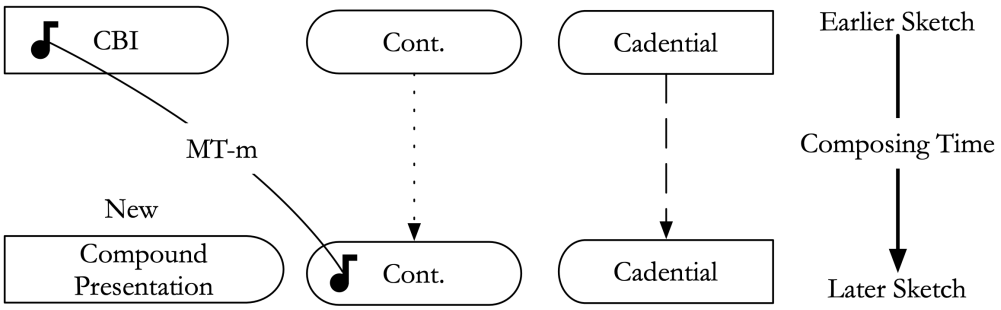


Figure 13: CS 1.1 Theme Diagram



So far, we have prioritized functional agency by treating the material that generates those functions as modifiers of the transfer kind, that is, type, token, and token-character transfers. Sometimes, however, it is helpful to trace how specific materials propagate into later sketches. Just as Beethoven develops functions, he sometimes creates a particular musical object (e.g., a 4-m. idea) that expresses a particular function (e.g., CBI) in one sketch, but projects a different function in another sketch (e.g., the beginning of a continuation). This compositional process is not easily modeled with function transfer diagrams because they foreground more how functions are transferred. To account for these situations, I augment function transfer diagrams with icons that represent certain musical content, for example, the main theme CBI material.

Figure 14: Function and Material Transfer Diagram



[66] Other annotations in this diagram will be explained in chapter 4.

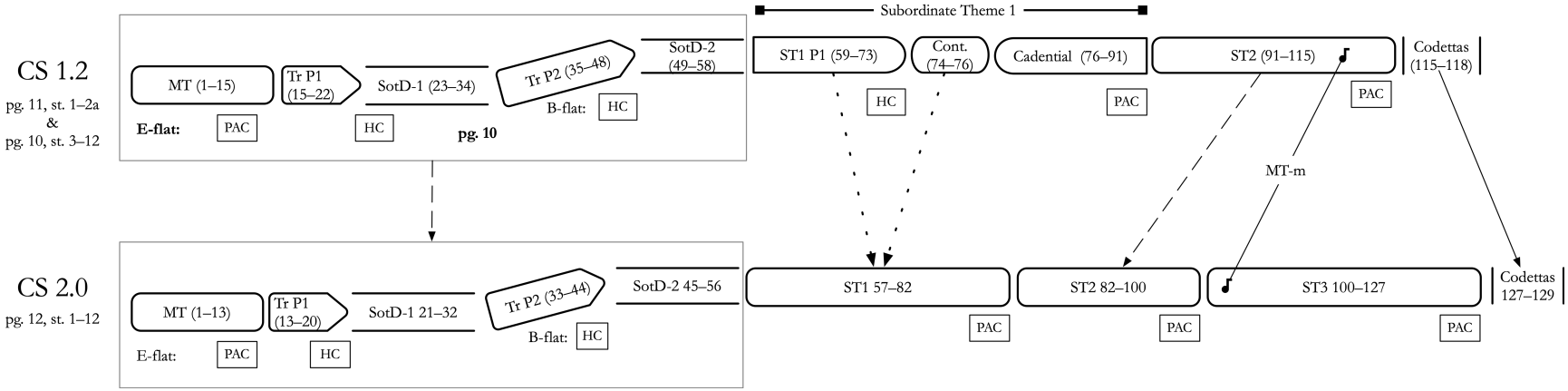
To depict how musical content can be transferred within the context of function transfer diagrams, musical material is represented with a small "note" icon and embedded within a function shape. The transfer of this material into a later sketch is shown by a solid line without arrows that connects the icon to its new location in a successive sketch. See Figure 14, a hypothetical transfer diagram. In an earlier sketch (the shapes at the top of the diagram), we find a hybrid theme that is diagrammed with three shapes, which symbolize its CBI, continuation, and cadential functions. The CBI contains a 4-m. idea that resembles the main theme material (henceforth, MT-m in the diagrams; the "m" after the hyphen denotes main theme material, not main theme function), so a musical icon is embedded within the CBI shape. In a later sketch, Beethoven transfers parts of the hybrid theme into the new sketch, but with several modifications. First, he writes a new compound presentation to replace the main theme-based CBI. As the compound presentation is new, no transfer has occurred and therefore no arrow connects the two shapes. Second, he transfers the continuation function-type from the earlier sketch into the new sketch but builds the start of this continuation with the main theme material that was previously in the CBI of the previous sketch; to graphically represent this change, we connect the continuation function shapes with a dotted line to represent a type-transfer and also connect the icon that represents the MT-m in the CBI of the first sketch with the icon in the continuation in the second sketch. Finally, Beethoven revises somewhat the cadential function but maintains its general character, so the cadential shape in the earlier sketch is connected to the same shape in the next sketch with a dashed-line to represent the token-character transfer.

A glance at Figure 14 shows that the later sketch (bottom), besides the new initiating function, was based roughly off the first (top), but Beethoven repositioned some of the material and altered some of its content. Although this diagram might seem obstruse in the abstract, we will see how it models part of Beethoven's compositional process in the first two complete continuity sketches and elsewhere. Ultimately, these augmented transfer diagrams are intended to serve as a type of map of the form of a piece to help one visualize complex processes and compare large stretches of music at a glance.

Up to this point, we have worked through a function transfer diagram that depicted phrase-level function transfers. Let us turn now to larger thematic functions that together build a complete exposition. Consider the theme function diagram shown in Figure 15. This diagram represents the relationship between the theme functions in CS 1.2 (the merged exposition sketch Beethoven wrote

on p. 11 and 10) and CS 2.0 (on p. 12). Although I will discuss this diagram in greater detail in Chapter 6 when examining the complete CS 2.0 sketch, note broadly how it shows that the main theme and transition are mostly similar between the two sketches, whereas the thematic functions of the subordinate theme group are altered substantially. When many functions are transferred without significant change, they are subsumed in a larger box and a transfer is depicted between the boxes to simplify the diagram. To conclude, function-transfer diagrams offer an abstract "map" of sketches that help to visualize the form-functional relationship of one sketch with another.

Figure 15: Theme Function Transfer Diagram



2.4 Caplin's Theory of Formal Functions and the Structural "Bass Melody"

In addition to Caplin's theory of formal functions (1998; 2013), this study adopts Caplin's theory of bass-melody (2008). It is assumed that readers will be comfortable with the former theory, but perhaps less familiar with the latter, so this section offers a brief introduction to Caplin's approach to bass-melody and details how it interfaces with his theory of formal functions. At the end of the chapter, I additionally detail how the bass-melody relates to Caplin's prolongational, cadential, and sequential progressions and develop a theory of bass-melody prolongation. This model corresponds well with how Beethoven was likely taught to improvise and compose.

2.4.1 The Rule of the Octave and Caplin's Bass-Melody Theory

Caplin's theory of a bass-melody is rooted firmly in the Rule of the Octave (RO). In the thoroughbass tradition, the RO was taught as the outgrowth of a simple cadence (Sanguinetti 2012, 114).[67] Consider the four-stage model in Example 5. In the first stage (a), a student was introduced to a simple ① ⑤ ① cadence. Thereafter (b), they learned how to expand the cadence with a predominant embellishment of the dominant (i.e., ④^{6}–⑤$^{4\text{-}3}$–①). In the third stage (c), they elaborated the cadence further, forming a complete cadential progression (③^{6}-④$^{6/[5]}$-⑤$^{4\text{-}3}$-①; this pattern is known as the *cadenza lunga* in partimento sources).[68] To connect the initial ① to the cadential progression (see c), an intervening ②$^{5/[4]/3}$ (dominant harmony) was introduced as a passing (*transitus*) chord between ① and ③. Finally, in the fourth and last stage (d), a student would learn the entire RO, which was conceived as filling in the space between the pillars of the tonic and dominant poles (i.e., the harmonies built on ① and ⑤ with "5/3" figures) with passing harmonies built atop each intervening bass-scale degree.[69] In short, the RO is an outgrowth of the basic tonic-dominant-tonic cadence that underpins tonal harmony.

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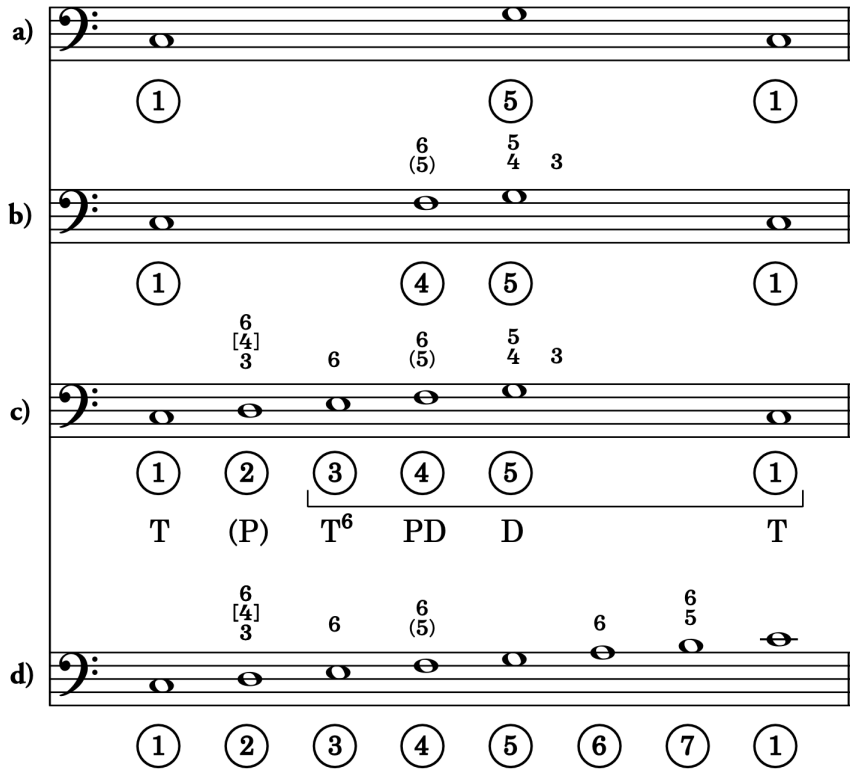
[67] Sanguinetti speaks of the Neapolitan model, but this general approach applies equally well to the thoroughbass tradition more generally. On the close relationship between thoroughbass and partimento, see (Remeš 2019b, 137) and (Diergarten 2017, 6–10).

[68] On the complete cadential progression in the classical style, see (Caplin 2013, 14–17). On the *cadenza lunga*, or "long cadence," see (Sanguinetti 2012, 24).

[69] Evidence from several Neapolitan composition workbooks exemplify this pedagogical approach; see (Sanguinetti 2004).

Example 5: Generating the Rule of the Octave, based on (Sanguinetti 2012, 114 Example 9.10).



In his 2008 article, "Schoenberg's 'second melody', or, 'Meyer-ed' in the bass," Caplin draws inspiration from Leonard Meyer's melodic implication-realization model, Arnold Schoenberg's idea of the bass as a *second melody*, and Schenkerian theory to theorize a bass melody that partitions the RO into two *streams*, *cadential* and *prolongational*. Example 6 presents Caplin's two-stream model of the RO (his Example 6.4) with some modifications. (I have swapped the vertical position of the streams,[70] replaced the roman numerals with circled Arabic scale-steps, added figured bass above each system, and labeled the harmonic function of the scale-steps). Table 1 lists the five harmonic functions in relation to their bass scale-degree associations. Any scale-degree not shown on the table is assumed to operate as an intervening harmony (e.g., ②$^{6/4/3}$ serves as a passing harmony between the tonic harmonies expressed by ① and ③^{6} in the prolongational stream).

[70] That is, the prolongation stream is placed on the bottom and the cadential stream on the top, whereas Caplin presents the two streams in the reverse position. In addition to these changes, the note stems have been removed on all the notes except for ①, ③, and ⑤ to reduce visual clutter.

Example 6: The Rule of the Octave in Prolongational and Cadential Streams; based on (Caplin 2008, 163)

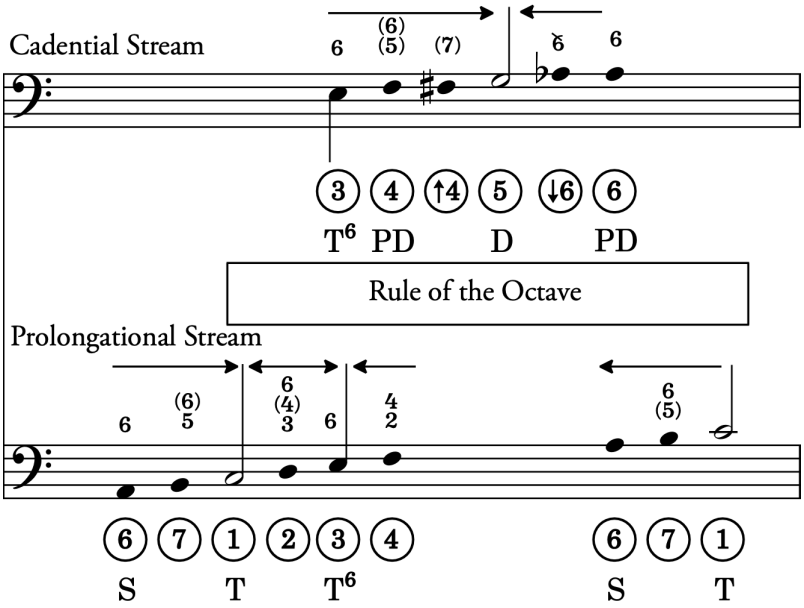


Table 1: Harmonic functions rooted in the bass scale-degree of the RO

T	Tonic built on ①
T⁶	Tonic built on ③
PD	Pre-Dominant built on ②, ④, ↑④, ⑥, or ↓⑥
D	Dominant built on ⑤, ⑦, ②, ④
SD	Subdominant built on ④
S	Substitute for Tonic built on ⑥ (submediant)

In Caplin's two-stream model (Example 6), the prolongation (bottom) and cadential (top) streams articulate the RO's tonic and dominant poles. Caplin (2008, 164) explains: the "bass is anchored in the harmonic relationship of tonic and dominant. But as harmonic constituents, these two notes can be thought to reside in two different [streams], and each note can become the focal point of melodic activity within its own [stream],"[71] The arrows above each system show how the

[71] Caplin first refers to the two streams as "voices" before he replaces this term with "stream." In contrast to the idea of "voices," bass *streams* are understood to be temporally separate. That is, the streams cannot coexist

bass-melody can move within a given stream. For example, if the bass moves upwards, e.g., ⑥–⑦–①, we understand it to reside in the prolongation stream. Alternatively, if the bass articulates ③-④–⑤ (or the embellished ③–④–♯④–⑤), we interpret it within the cadential stream. To link the cadential stream back to the prolongational stream to form an authentic cadence, the bass must leap from the dominant ⑤ back to the tonic ①. Or, alternatively, the bass can return to the prolongational stream after a cadential deviation (e.g., an evaded or abandoned cadence). As we will see, however, such deviations usually result in the bass-melody returning to an earlier position in the cadential rather than prolongational stream.

Caplin establishes the basis of how this two stream RO model (Example 6) connects to the theory of formal functions. He explains:

> For a given thematic unit within a movement, such as a main theme or a subordinate theme, the bass line behaves roughly as follows. It begins with the tonic then explores various melodic motions within the prolongational stream. Eventually, it attains the third degree, which then pivots the line into the cadential stream for further ascent to the dominant, the melodic goal of that stream. Bass-line closure is achieved when, in the context of a formal authentic cadence, the dominant leaps back to the tonic, thus creating a harmonic connection linking the two streams and purging the bass of all melodic tendencies that might generate further continuation (Caplin 2008, 164).

It is perhaps little surprise that this explanation corresponds well with how the RO was taught as a model for preluding.[72] C.P.E. Bach, among others, introduced improvising fantasy themes in essentially the same way as Caplin's model: one begins with an opening tonic prolongation (i.e., a pedal), then rearranges the scale with conjunct and disjunct bassline (i.e., exploring melodic motions within the prolongational stream), and finally closes the theme with a cadence (usually a complete

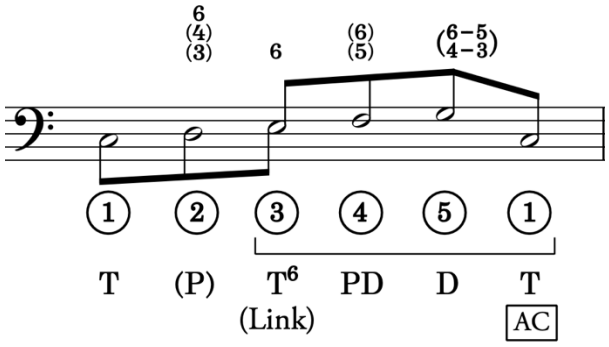
as voices might: the bass melody exists either within the prolongational stream or the cadential stream. (The boundary near the link can be blurred, however.)

[72] On the RO as a model for preluding, see (Sanguinetti 2004; 2012, 99–174).

cadential progression, i.e., ③–④–⑤–①).[73] Caplin's model likely describes themes well because composers learned how to craft themes in a way that is roughly analogous to the model.

Caplin produces a basic, bass-melody model of a theme (Example 7).[74] In essence, the model describes a structural bassline that articulates Sanguinetti's third stage of generating the RO (Example 5c), that is, it moves in a stepwise motion from ① up to ⑤ followed by a leap back to ①. In greater detail, Caplin's basic model begins by expressing the prolongational stream indicated lower-beam under ①–②$^{6/(4)/(3)}$–③^{6}. When the bass-voice moves to ③^{6}, the *tonic link*, it moves into the cadential stream and a complete cadential progression unfolds thereafter (③^{6}–④$^{(6)/(5)}$–⑤$^{(6/4—5/3)}$). Finally, the model concludes with an authentic cadence that harmonically connects the prolongational and cadential streams with a leap from ⑤ (dominant) to ① (tonic). In more complex versions of this model, composers elaborate the prolongational and cadential streams with more intervening harmonies, discussed next.

Example 7: Caplin's Basic Model; from (Caplin 2008, 164)



2.4.2 The Bass-Melody, The Theory of Formal Functions, and Harmonic Progressions

Now that we have a better understanding of the bass-melody, let us consider how it relates to the theory of formal functions. Caplin (2013) opens his introduction to the theory of formal functions with a chapter on harmony. He anticipates student (and perhaps even teacher) objections to this gambit: "An opening chapter on harmony? Haven't we studied enough harmony?" He insists, however, that "analyzing classical form necessarily involves analyzing harmony as well" (Caplin

[73] See (Bach 1948, 431–32). On this topic, see (Remeš 2019b).

[74] I have modified Caplin's model by placing the figures above the staff, replacing his roman numerals with bass scale-degree numbers and functions, and inverting the stem directions to match the modified model.

2013, 1).[75] The chapter then provides a brief overview of standard late twentieth- and twenty-first-century terminology including roman numerals with figured bass and the harmonic functions of tonic, pre-dominant, and dominant. Thereafter, he establishes three types of harmonic progressions that are foundational to the theory: prolongational, cadential, and sequential.

If we wish to elevate Caplin's bass-melody concept as the foundational underpinning of the theory of formal functions, we must be able to account for each of the three progressions within this new framework. Before we establish this connection, however, let us first consider Caplin's harmonic, roman numeral-based approach. Caplin (2013, 3) notes that a prolongational progression "sustain[s] in time an individual harmony" with intervening subordinate harmonies. These intermediate harmonies prolong another harmony in three ways: with passing, neighboring, or substitute motion. He clarifies what these terms mean within a harmonic framework (underline added):

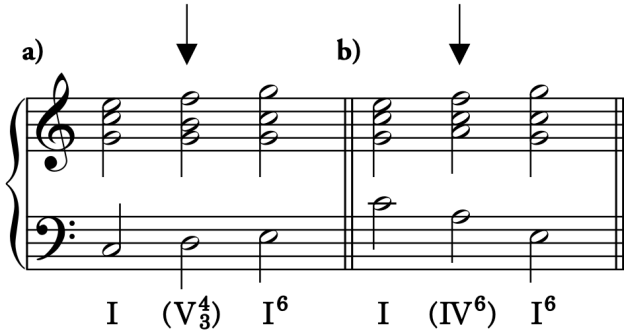
> The terms neighboring and passing were originally used in music theory to refer to the motion of embellishing tones in a single voice. In extending these concepts to harmonies, the presence or absence of literal neighboring or passing motions in the various voices is no longer the main issue. Rather, the distinction is based exclusively on the positions of the prolonged harmony: if the prolonged harmony remains in the same position, the subordinate harmony is neighboring, and if the prolonged harmony changes position, then the subordinate harmony is passing (Caplin 2013, 13).

To understand Caplin's harmonic conception of passing, neighboring, and substitute motion, it is helpful to visualize his explanation with concrete examples. In Example 8, both intermediate harmonies, indicated with arrows in (a) and (b), are considered "passing" because they occur between I and I^6, that is, a tonic expressed in two different positions (more specifically, root position and first inversion). In Example 9, both intermediary harmonies (a) and (b) are neighboring because the tonic chord does not change position (i.e., it remains in root position). In Example 10, the harmonies marked with an arrow all function as substitute harmonies: in (a), the submediant

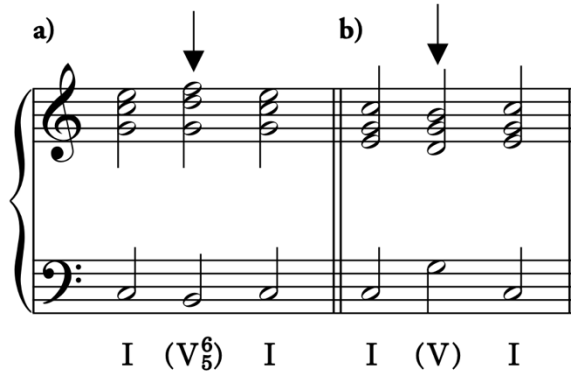
[75] Some might overlook Caplin's introductory harmony chapter under the assumption that students learned the principles it details in prior tonal harmony classes. This would seem to be a mistake.

substitutes for the tonic, in (b) the mediant substitutes for tonic (to harmonize ⑦), and in (c), an intermediary passing harmony labeled with an asterisk connects the tonic harmony to the submediant, which acts as its substitute.

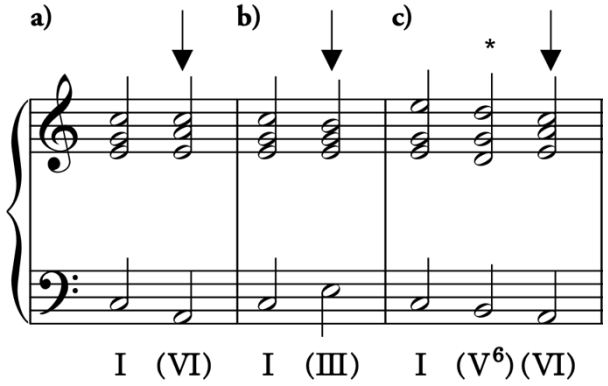
Example 8: Caplin's "passing" harmonies; from (Caplin 2013, 12 Example 1.9),



Example 9: Caplin's "neighboring" harmonies; based on (Caplin 2013, 12 Example 1.8)



Example 10: Caplin's "substitute" harmonies; based on (Caplin 2013, 14 Example 1.10)



2.4.3 Roman Numerals and Bass-Melody Scale-Degree Functions

In Caplin's treatise and textbook, the theory of formal functions employs roman numeral analysis. This style of analysis has remained the *de facto* standard for the analysis of eighteenth and nineteenth-century music since the early nineteenth century. Already in the mid 1970s, David Beach (1974, 299) noted that "One need only thumb through the standard textbooks on harmony published in the past twenty-five years to see this. In fact, one would find that, with few exceptions, there has been little change in the approach to harmony and harmonic analysis since Weber's time." Roman numerals, as theorized by Georg Joseph Vogler (1749–1814) and further systematized and promoted by Gottfried Weber (1779–1839), characterize harmony in terms of fundamental-bass scale steps. They invite us to view the fundamental bass as the agent or actor of the harmonic motion. This perspective affords several advantages, but these benefits come at a cost.

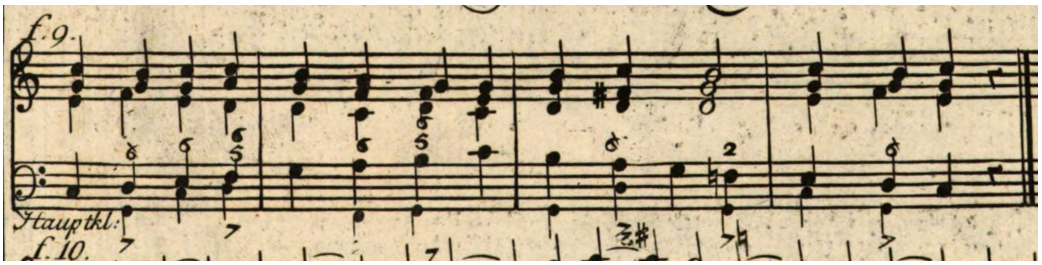
Consider again Example 8a. Roman numerals clarify that the first and third harmonies in this example have the same root (identified by "I") whereas the second chord has a different one (i.e., "V"). By identifying the shared roots, it becomes easier to recognize that the intervening dominant harmony serves to prolong the framing tonic harmonies. Note, however, that the roman numerals—without figured bass—do not tell us about the function of the actual bass scale-degree, i.e., the basso continuo or bass-melody. If we wish to know the actual bass scale-degree, we must "unflip" the Roman numeral, which we can only accomplish if we also have the figured bass. Fortunately, this task is usually possible because modern roman numeral analysis mixes two different systems: figured bass, which corresponds to the basso continuo, and the roman numeral, which refers to the fundamental bass that may or may not be the lowest bass voice. Unfortunately, however, roman numeral analysis with figured bass subordinates perhaps the most important element for the theory of formal functions: the function of the actual bass scale-degree, i.e., the basso continuo. To infer this component with roman numeral analysis, one must know which figures correspond with each inversion. For instance, one learns that a $V^{6/4/3}$ has ② in the bass. Note, however, that there is nothing about the figure "6/4/3" that, in and of itself, says "second inversion"—this knowledge must be learned by rote (i.e., "6/4/3 indicates the second inversion of the triad indicated by the roman numeral"). Put simply, the actual bass-degree is subordinated in modern roman numeral annotations.

Given eighteenth-century composers training in thoroughbass and the importance of the bass-scale degree for the theory of formal functions, I foreground the bass scale-degree, i.e., the basso continuo, as the agent of harmonic motion in my analytical notation by including circled

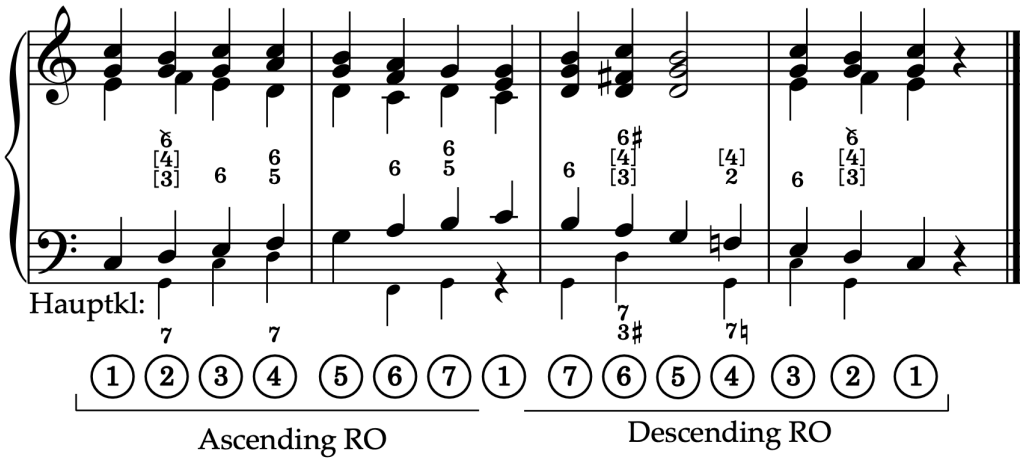
Arabic numbers (e.g., ③) below the bass staff. To understand the value of these circled numbers, consider again the RO. In Vogler's RO from his small book of examples, *Gründe der Kuhrpfälzischen Tonschule in Beyspielen* (1776; 1778) (Example 11)—a version Beethoven may have encountered[76]—it is visually apparent that the fundamental bass is subordinate to the underlying basso continuo voice because it is written in smaller notes (compare Vogler's original, A, with my transcription, B). Vogler's RO contrasts with his later Roman numeral system because that approach conceived each scale-step as having a root-position triad. In short, in a system that foregrounds the bass-melody function—the basso-continuo as agent—not every scale-degree is associated with a root-position triad. Rather, each bass scale-degree has a function that depends on the context of its position and the figures it is assigned.

Example 11: Vogler Rule of the Octave; (Vogler 1778, VII Fig. 9).

A) Facsimile



B) Transcription with additional annotation below bass staff



[76] Nottebohm suggested that Beethoven may have read Vogler's *Gründe der kurpfälzischen Tonschule* while in Bonn; see (Nottebohm 1873, 1–18; Kramer 1975, 73–92).

If we wish to build an analytical system that is rooted in the RO, then we should treat the basso continuo as the primary agent of action, then the fundamental bass. Rameau expressed exactly this perspective when he introduced the RO in his *Traité* (1722) (underline added): "The fundamental bass should be used only to prove what we have just said [i.e., all the chords consist of the triad and seventh chord], for this bass is of no practical use. The chords do not follow the rules with relation to this [fundamental] bass, but are arranged only with respect to the basso continuo which should be played with the left hand" (Rameau 1971, 395). In other words, the eighteenth-century composer that learned the RO associated each scale degree with a limited set of figures; they did not initially link each scale-degree to root-position triads and seventh chords as is done in roman numeral analysis. This distinction is not to say that composers did not also learn the fundamental bass and harmonic equivalency (i.e., a I has the same root as I^6). Still, if the basso-continuo scale degree is the primary "agent" of the harmonic action, then perhaps we should reorient our analytical approach to foreground this element.

In my analysis of the sketches, I label the basso continuo scale-step with circled Arabic numbers in addition to the fundamental bass as expressed in roman numerals. Such an approach does not mean we must abandon the concept of the fundamental bass altogether, as this concept is crucial for understanding prolongation: by elevating the status of the structural, bass scale-degree, we are merely changing what the notation prioritizes.

The fundamental bass simplifies thoroughbass pedagogy (see Christensen 1992). But for most eighteenth-century trained composers, it does not serve as a regulative concept in the same way as the scale degree of the basso-continuo. Therefore, in what follows, I offer an approach that marries Caplin's three progression types, prolongational, cadential, and sequential with his theory of a bass-melody. Fortunately, the fundamental framework of this approach has already been established in Caplin's theory of the bass melody, but we can further formalize the relationship of the basso-continuo to the theory of formal function by establishing the notion of a *bass-melody function*. This idea reframes how we understand intervening harmonies.

2.4.4 Prolongation

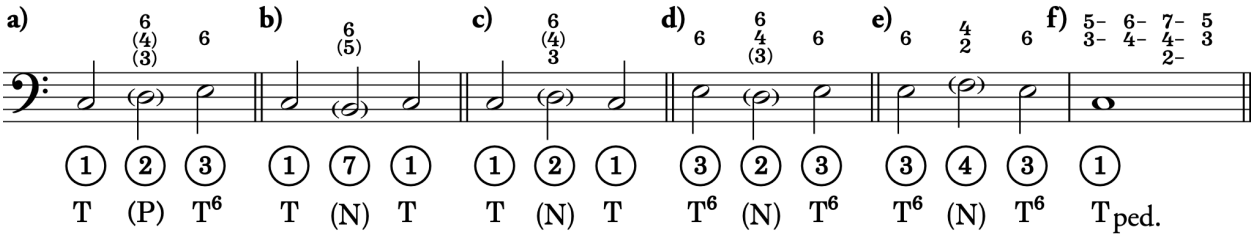
The first relationship between the basso continuo and Caplin's theory of formal functions that we must establish is a bass-melody theory of prolongation. Given Caplin's bass melody, we can conceive of an intervening harmony in the same way that we conceptualize embellishing tones for melodies using Fuxian terminology, namely, by categorizing the nature of the intervening basso-

continuo step. This approach has the added benefit of connecting with how late eighteenth- and early nineteenth-century composers were taught.

At its most basic, one can embellish a bass-melody (the structural basso-continuo) with *conjunct* and or *disjunct* motion. These types of motion can be further distinguished based on the embellishing function of the intervening basso-continuo harmony: passing ("P"; Example 12a), neighboring ("N"; shown in b, c, d, e), pedal ("ped."; in f) arpeggiating ("ARP"; Example 13a), and what I will call harmonic ("H"; in b, c, and d) motion. In a bass-melody focused approach, passing prolongations require that the basso-continuo scale-degree change (e.g., from ① to ③), whereas (complete) neighboring embellishments maintain a bass melody function. Note the differences here with Caplin's Roman numeral approach: leaping bass motions such as Example 8b are not understood as passing in the same way that Caplin describes in his roman numeral-based approach. Instead, the intervening chord in this example is characterized as an arpeggiating (ARP) embellishment of the underlying tonic bass-melody function (see Example 13A).

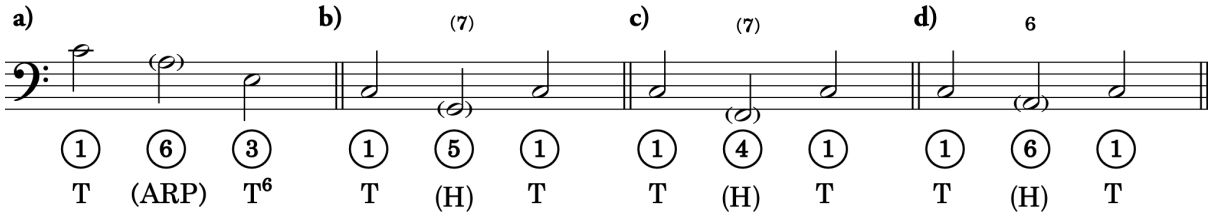
In addition to the basic embellishments outlined above, a bass-melody, scale-degree function can be prolonged with additional embellishment patterns such as an incomplete neighbor ("IN"; Example 14a), a double neighbor ("DN"; b), and a nota cambiata ("NC"; c and d).[77] Table 2 lists all the abbreviations for intermediary bass-melody prolongation functions.

Example 12: Stepwise tonic prolongations



[77] For simplicity, I have restricted the examples to tonic prolongations, but many of the models apply for predominant and dominant prolongations if one uses the appropriate figures. Note also that Beethoven introduced the nota cambiata in the context of fourth species counterpoint in his materials assembled for teaching Archduke Rudolph; see (Beethoven 1853, 73–74).

Example 13: Leaping tonic prolongations



Example 14: Combined stepwise and leaping tonic prolongations

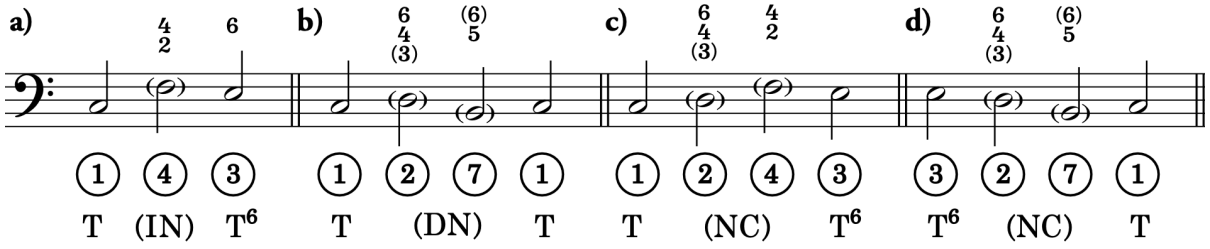


Table 2: Abbreviations for Bass-Melody Function Embellishments

P	Passing
N	Neighboring
S	Substitute
H	Harmonic Prolongation
Sus	Bass Suspension
IN	Incomplete Neighbor
DN	Double Neighbor
NC	Nota Cambiata

Although we have reconceptualized prolongation in terms of embellishing a bass-melody function, the models presented here maintain parity with Caplin's, roman-numeral-oriented versions in his 2013 textbook (compare Examples 12, 13, and 14 with his examples 1.8, 1.9, and 1.10).[78] In the end, reformulating prolongational progressions in terms of the bass-melody does not dramatically change how we understand the formal function of the passage. Rather, a bass-melody approach foregrounds the functional agency of the basso continuo over the fundamental bass. This framework corresponds well with how composers learned elaborate the basic model expressed within the RO with intervening harmonies.

[78] See (Caplin 2013, 12 & 14).

2.4.5 Cadential Progressions

The next type of progression that Caplin summarizes in his textbook is cadential progressions. These progressions express ending function by confirming a tonal center (Caplin 2013, 4). He defines three types: authentic (Example 15a), half-cadential (b), and deceptive (c). To simplify future comparisons, I have collapsed Caplin's three variations of the authentic cadential progressions into one (Example 15a) and provided the possible figures that each scale-degree can take above (with "or" or using parenthesis).[79] The bass scale-degree ④, for example, can be harmonized with a 6/3, 6/5, or 5/3 figure, but all three produce a pre-dominant function. Bass scale-degree function ⑤ communicates either a penultimate cadential dominant or a cadential six-four that resolves downwards to a five-three.[80] The 7-figure indicated in parenthesis over ⑤ (forming a dominant seventh) is optional but is common in Beethoven's music.[81] The boxed "AC" at the bottom of example (a) stands for "authentic cadence" (usually expressed as a perfect authentic cadence, PAC, but an imperfect authentic cadence, "IAC," is also possible). The "HC" in (b) stands for half-cadence, and the "(DC)" in (c) stands for deceptive cadence.[82] Finally, I have additionally added "cadential function brackets" underneath the harmonies of the cadential progression to make the analytical system in these prototypes consistent with future examples and analysis.

---

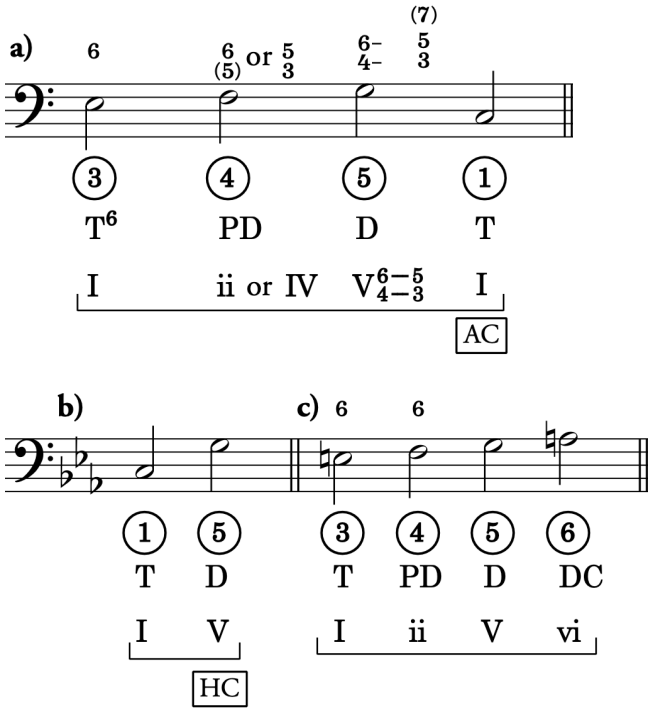
[79] Caplin's example (a) and (b) differ in that ④ is harmonized as ii6 in the first instance and as IV in the second, and he adds the chordal seventh above ⑤ in the second instance but not the first. His example (c) merely varies example (a) by adding a cadential six-four on ⑤. In other words, all the variations he provides in (a), (b), and (c) are encapsulated in my example (a).

[80] I have kept the $V^{6/4\text{-}5/3}$ in the roman numeral to make it clear that the example expresses a cadential six-four and not a second inversion tonic six-four.

[81] Frequently, the 6 above the bass moves up to the 7 instead of down to the 5.

[82] The term deceptive cadence is a misnomer because it does close a theme. Despite the name, a deceptive cadence does not function as a cadence, it introduces a cadential deviation.

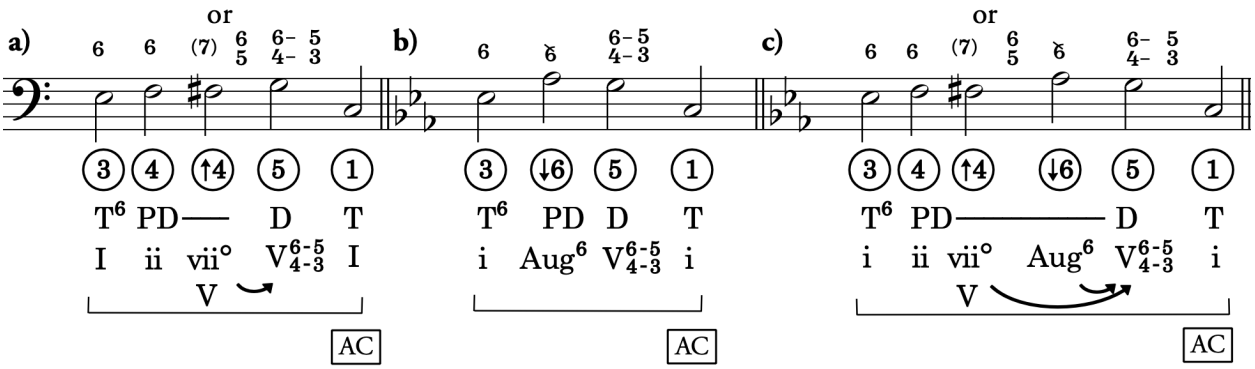
Example 15: Cadential Progressions from (Caplin 2013, 4)[83]



In addition to the basic cadential prototypes expressed in Example 15, Caplin adds several examples with cadential "pre-dominant embellishments" (Caplin 2013, 16). For our purposes, these examples can be reduced to two bass scale-degree patterns with a third that is a combination of the first two. Consider Example 16. In (a), the cadential progression is expanded when the bass moves stepwise from ③ (T, i.e., I^6) to ⑤ (D, i.e., V) with an intervening ④ (PD) and ↑④ (PD). In (b), it moves from ③ (T) to ⑤ (D) with an intervening ↓⑥ (PD) (note that this latter pattern is more common in minor keys due to the ↓⑥ in the scale). Both chromatic bass scale-degrees ↑④ and ↓⑥ are understood to function as a pre-dominant harmony with the given figures. Note that Beethoven sometimes combines the two patterns of (a) and (b) to form (c), a pattern with both ↑④ and ↓⑥ as intervening scale-steps that create a double neighbor around ⑤. "Aug6" over ↓⑥ in (b) and (c) represents any of the augmented sixth variants, e.g., It6, Ger6/5, and Fr4/3.

[83] I have collapsed Caplin's examples a, b, and c, into a alone.

Example 16: Cadential progressions with pre-dominant embellishments from (Caplin 2013, 16)



Finally, consider how this bass-melody focused system interfaces with Caplin's cadence axiom: "dominant harmony can acquire cadential status only when it initially appears in root position and retains that position until its resolution to tonic. Any inversion of the dominant automatically destroys its cadential potential" (Caplin 2013, 14). In other words, a cadence does not occur merely when a dominant resolves to a tonic harmony. A cadence arises when the dominant is expressed first and exclusively with ⑤, then resolves directly ①. As bass-melody approach further foregrounds this postulate.

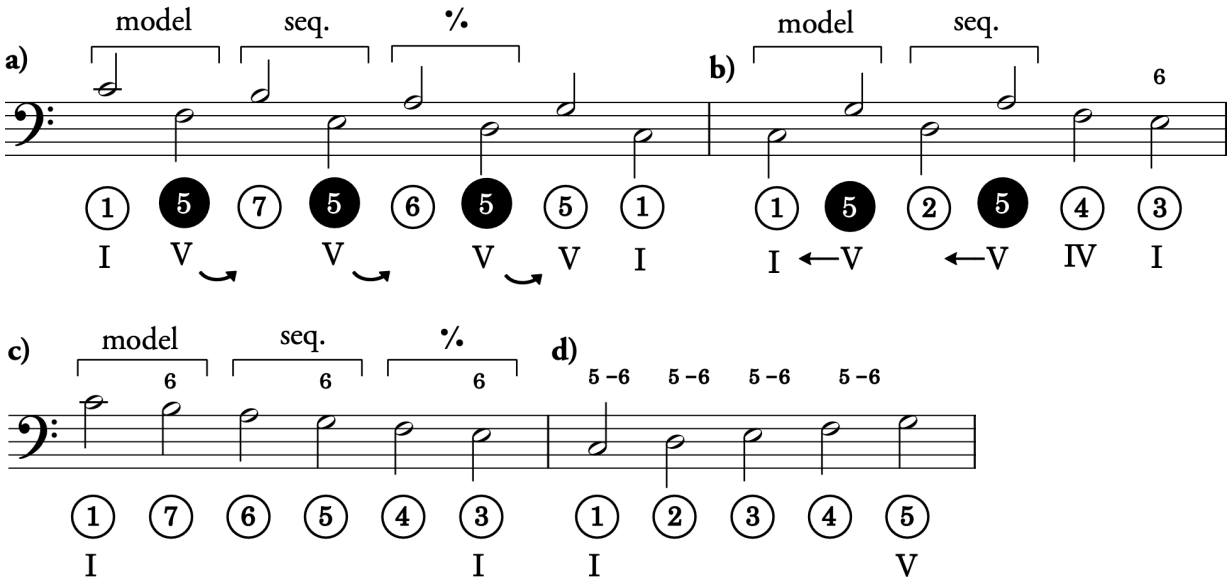
2.4.6 Sequential Progressions

In his (2013) textbook, Caplin concludes his summary of harmonic progressions with sequential progressions (Example 17). These "destabilize harmonic activity" (Caplin 2013, 5). Caplin's notion of sequential harmonies requires a figured bass analysis, since its patterns are projected by the sequence. In contrast to the prior two progression types, the harmonies in a sequential progression are typically not functional. This is to say, the normal order of tonic, pre-dominant, and dominant harmonic functions is suspended temporarily. To indicate this suspension, Caplin places the roman numerals for these harmonies in parenthesis. In some instances, I have chosen to omit non-functional harmonies and to label the underlying bass movement with bass scale-degrees instead.[84] The black-circled Arabic numbers indicate applied scale-degree functions; for example, the second half-note in Example 17a is labeled with ❺ to indicate that the note functions as the fifth scale-

[84] My approach is inspired by (Holtmeier 2012, 472). Holtmeier uses a sequence example like Example 17c to make a connection with Emmanuel Aloys Förster's Arabic step annotation method. He explains that the foreground determining event of the sequence is not a fundamental bass matrix, but rather the descending bassline with figures.

degree in relation to the note that follows (i.e., ⑦). These applied bass-melody functions are similarly represented with the applied dominant roman numeral.

Example 17: Sequential Progressions from (Caplin 2013, 5)



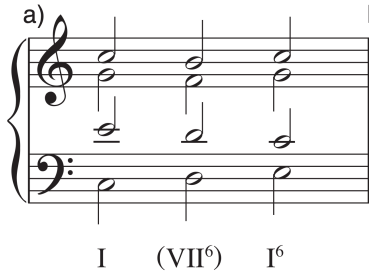
Before we see how these examples coincide with common thoroughbass patterns, there are a few more analytical details worth mentioning before we leave sequential progressions. In Example 17a, note how the circled Arabic numbers alternate from white to black except for the last two (i.e., ⑤ and ①). These labels suggests that we think of the descending fifth sequence as an elaboration of an underlying descending bassline from ① down to ⑤ with intermediary applied dominants emphasizing each descending scale degree (written with ❺) as harmonic embellishments. We could also see the underlying descending line to be from ④ (the F3) down to ① (C3) with intervening back-relating dominants (this would require that we flip the white and black scheme). We find this pattern of back-relating dominants expressed in (Example 17b), albeit with an ascending fifths sequence instead of a descending fifths pattern. In both (a) and (b), the alternating up- and down-stems on the notes draw attention to the two interlocking descending and ascending stepwise lines.

Finally, note how the sequential prototypes in Example 17c and (d) do not have alternating black and white bass scale-degree functions. Here, the descending and ascending basslines are understood to be the generating elements of the pattern (i.e.., stepwise patterns of ① down to ③ or ① up to ⑤). These sequences do not have intermediary or subordinate harmonies, in other words, that expand the underlying stepwise ascent or descent. This notation therefore reflects a

different interpretation of the sequence. Rather than conceptualize Example 17c as a descending thirds pattern, it is interpreted as a stepwise, descending scale.

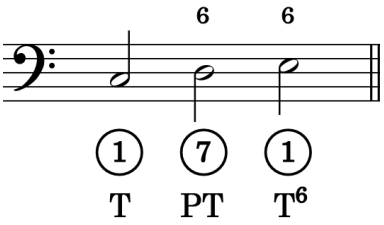
To summarize, these sequence prototypes cover only some of the sequence types—there are six in total. Although the analytical labels and descriptions developed here differ somewhat from Caplin's approach in his textbook, they are intrinsically linked. One can easily derive, for instance, the I^6 harmony from ③ with a "6/3" figure.[85] Moreover, the consolidation of multiple examples into single models (with figure variants) does not distort Caplin's underlying harmonic theory. Caplin does not intend for the specific voicings he presents in his textbook examples to be restrictive (e.g., see Example 18). These examples are fully "realized" in chorale style to encourage the reader to play and sing them; one could (and should) realize the intervening harmony with different voicings. A thoroughbass realization such as Example 19 makes this goal more explicit, but at the expense of placing additional burden on a reader to be familiar with thoroughbass figures. Nonetheless, the bass-melody reconfiguration of prolongational, cadential, and sequential progressions developed above maintains congruence with Caplin's roman numeral-oriented presentation. The only change is the underlying taxonomy for categorizing intervening (prolonging) harmonies, which are conceptualized as embellishments of a structural bass-melody function.

Example 18: Caplin's Example 1.9 (a); (Caplin 2013, 12)



[85] There are, of course, differences between a *Rameauian* or Neo-Riemannian *Funktionstheorie* inspired version of harmony and its thorough-bass cousin. *Rameau*'s theory can be seen as a pedagogical simplification of thoroughbass because it reduces many unique instances into a reduced set. On this topic, see (Christensen 2010).

Example 19: Caplin's Example 1.9 (a) as a bassline model with figures



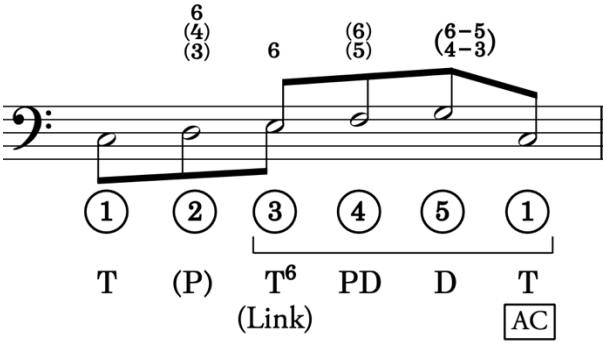
2.5 Bass-Melody Models and Formal Functions

Now that we have established Caplin's two-stream bass-melody model and a framework for prolongation, cadential progressions, and sequences, let us now briefly explore how this theory of bass-melody interfaces with the theory of formal functions. Consider again the basic bass-melody model (Example 20; note that examples will be frequently repeated because it is cumbersome to search back for an earlier example). The basic model is a prototype of a complete thematic unit with a single cadence. As the model includes only one cadence, it can be the structural underpinning of a sentence or hybrid theme type, but not a period.

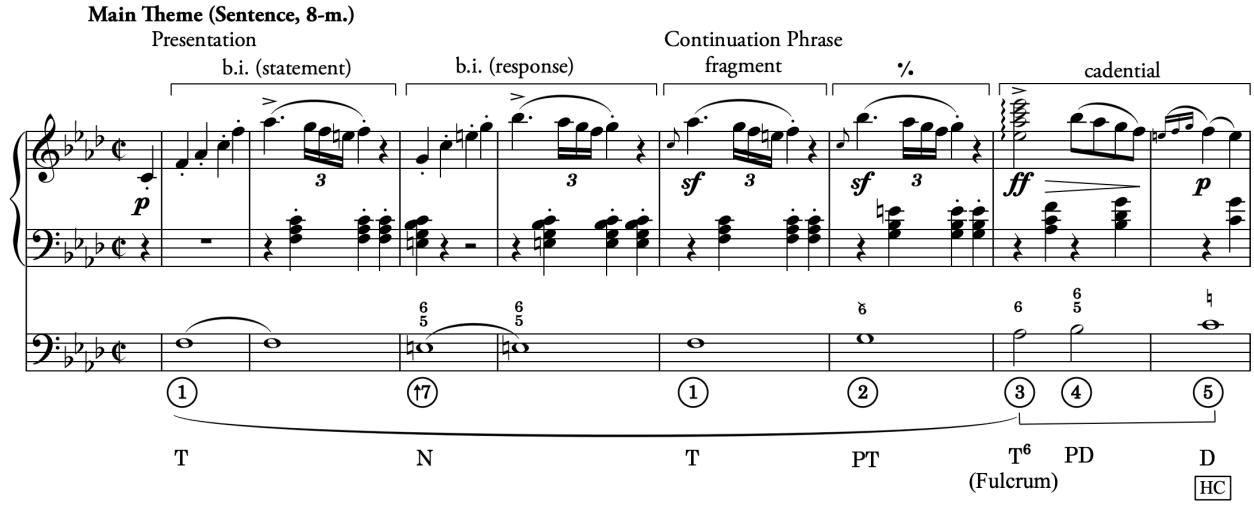
The basic model can be embellished in different ways. Caplin notes, for example, that the ② can be omitted to form a "gapped" version of the model that usually results in the ② appearing later, usually after the theme.[86] We could also embellish parts of the model by using one of the prolongational patterns described above (refer to Example 12, Example 13, and Example 14). For instance, the initial tonic ① could be prolonged with a lower-neighbor ⑦ (harmonized as a dominant functioning $V^{6 \text{ or } 6/5}$ or $vii^{o \text{ or } 7}$). Notably, this embellished bass-melody model exemplifies the main theme of Beethoven's first piano sonata, Op. 2 No. 1, movement I, mm. 1–8, the *locus classicus* of a sentence (Example 21). The only difference in the bass-melody pattern in Beethoven's sentence is that it ends on ⑤ to articulate a half-cadence. Otherwise, the bass-melody is identical to the embellished basic model. In Beethoven's theme, the presentation function coincides with a tonic ① (i.e., basic idea statement) and a dominant ⑦ (its response), the continuation's fragmentation starts on the subsequent tonic ① and continues to the passing ②, and the cadential function is expressed with a linking tonic ③, a pre-dominant ④, and the dominant ⑤.

[86] Caplin's "gap fill" idea in the bass is inspired by Meyer's implication-realization model of melodies; see (Caplin 2008, 161–62). For Meyer's theory of "gap-fill" in melody organization, see (Meyer 1973, 145–57).

Example 20: Caplin's Basic Model; from (Caplin 2008, 164)



Example 21: Beethoven, Op. 2 No. 1, I., mm. 1–8; Analyzed



Ultimately, Caplin's theory of a bass-melody interfaces seamlessly with the theory of formal functions. The only change a bass-melody approach introduces is how we classify certain prolongations. In general, I adopt a strategy that specifies the type of prolongation in terms of the bass-melody embellishment. Still, in the analyses that follow, I supply the bass-melody scale degree and traditional roman numeral analysis. Although this approach introduces some redundancy in the analytical depiction, it is believed that elevating the bass melody by labeling the scale-degree of the structural basso continuo offers considerable advantages both for reconstructing Beethoven's basslines and for interpreting formal functions.

ANALYSIS OF THE FINAL OP. 55, I. EXPOSITION

3.1 Main Theme (mm. 1–15) 65
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In this chapter, I highlight analytical features of the final, *Eroica*, Op. 55 first-movement exposition that inform analysis of the sketches in the chapters that follow. The reader is encouraged to view the analyzed **Piano Reduction** in Volume 2 (pp. 2–8) alongside this text. The reader may also find it advantageous to cross reference the piano reduction with the complete, analyzed **Cue Staff Reduction** (Vol. 2, pp. 9–26) of the first movement.[87] The cue staff reduction reduces the entire movement into a form that more closely resembles Beethoven's continuity sketches. Finally, the reader may compare these reductions with a compressed **Bass-Melody Durational Reduction** of the exposition (Vol 2., pp. 27–28). In this analytical reduction, one quarter-note is equivalent to one measure in the score.[88] (A small portion of the rhythmic reduction is approximate to avoid unnecessarily complex representations—these instances will be identified in the text). Many examples from this durational reduction are extracted, placed inline, and discussed below, but the reader may still find it easier to view these passages within the context of the complete exposition in Volume 2. It is vital to develop a firm understanding of the form of the final exposition as it will be referenced in every subsequent chapter.

[87] On the notion of a "cue staff," see Lockwood (1970a, 640–46). Lockwood suggests that "it is not too much to say that the cue-staff *is* a species of sketch line that has been transferred, in effect, from sketchbook to autograph score; it is a kind of "missing link" between the two types of redactions and, consequently, between the two types of work areas" (641).

[88] The durational reduction is different from, but inspired by Schachter (1999, 54–78).
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The exposition in the first movement is enormous. It is composed of a relatively concise main theme (mm. 1–15), a large two-part transition (mm. 15–56), and a massive subordinate theme group (mm. 57–144). The subordinate theme group comprises a large subordinate theme 1 (ST1, mm. 57–83) and an even more expansive second subordinate theme (ST2, mm. 83–144), which is divided into two parts (part 1, mm. 83–108 and part 2, mm. 109–144). In general, Beethoven expands each thematic unit by enlarging their medial and ending functions. Let us examine how he achieves this expansion in greater detail, beginning with the main theme.

3.1 Main Theme (mm. 1–15)

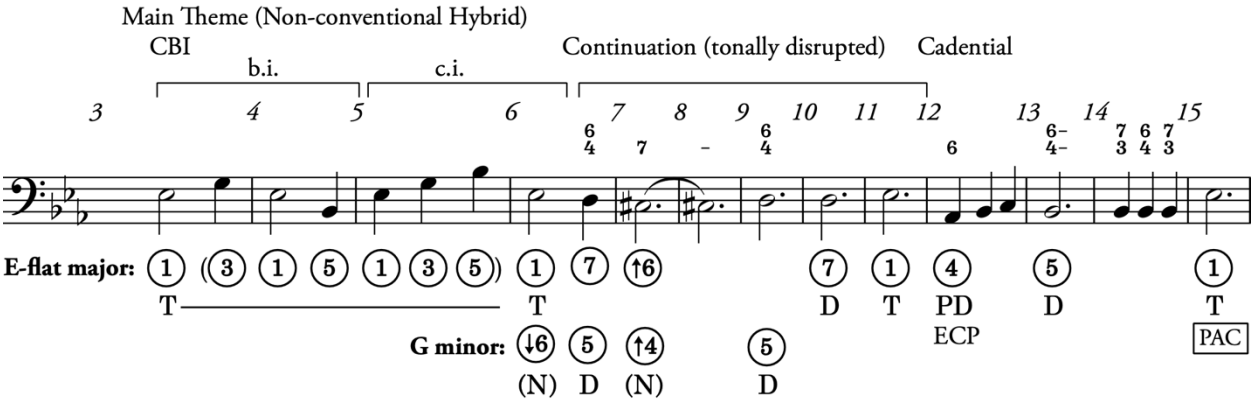
The main theme (Example 22, mm. 3–15) is fixed and stable in every exposition sketch; it is one of the invariant ideas in the sketches.[89] Although we will not find any changes to this theme in the sketches, it is important to spend some time on it here because it influences the design of everything that follows. The most notable element of this theme is the marriage between the thematic content—the melody we might sing when we recount the movement—with the structural bass, that is, what Caplin (2008) calls the bass-melody.[90] As Lewis Lockwood has suggested, the main theme in the first movement was likely motivated by the finale's *Basso del Tema* (Example 23) in the last movement, which was the first part of the symphony that Beethoven conceived.[91] By coupling the thematic content of the main theme with the structural bass-melody in the first movement, Beethoven ties the theme's motivic features to the underlying tonal syntax. This coupling informs the weight we should ascribe to an important feature in the theme: the move to C-sharp in m. 7 (Example 22). This chromatic change brings both a "melodic" embellishment and a harmonic disruption that has profound implications for the rest of the movement and symphony.

[89] Lockwood (1992, 199) has explained that Beethoven often starts with an invariant idea around which he tests a variety of compositional possibilities.

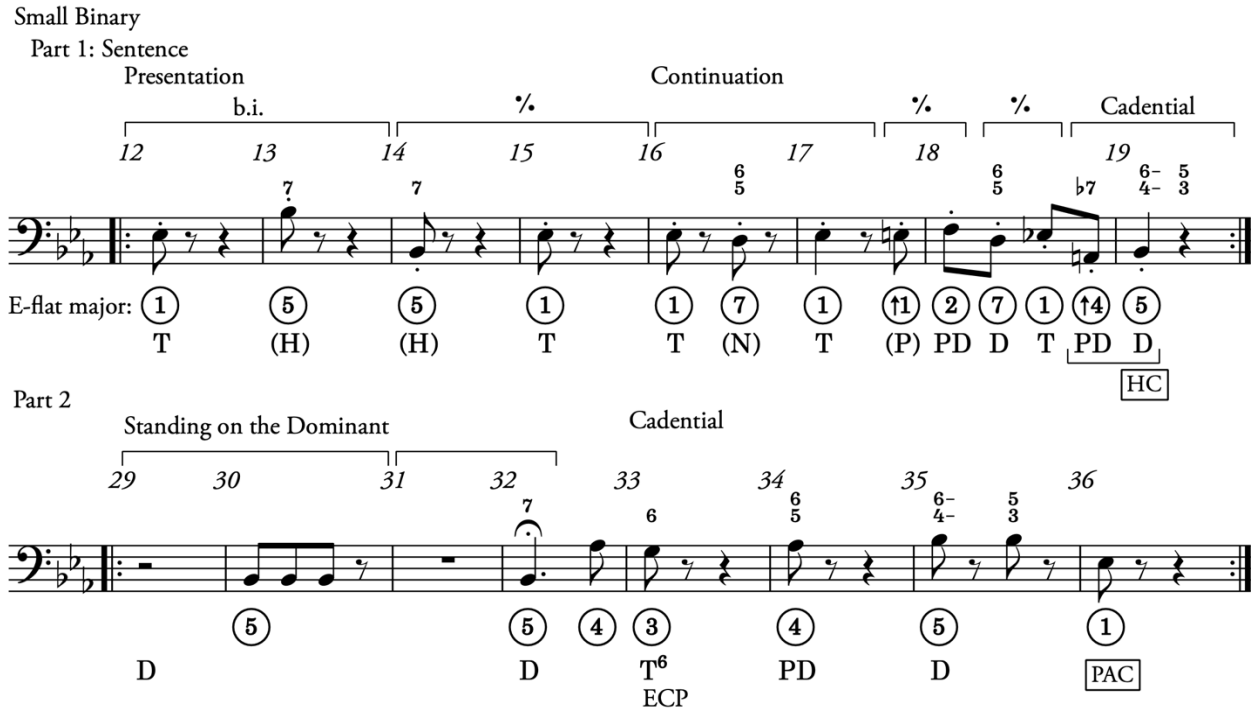
[90] For a theory of bass-melody and the basic theme models, see Caplin (2008).

[91] Lockwood does not speak of the bass, per se, but he explains that the main theme's triadic contour derives from the *Basso del Tema* by drawing on sketches in the Wielhorsky sketchbook; (Lockwood 1981, 469).

Example 22: Op. 55, I., mm. 3–15; Main Theme



Example 23: Op. 55, IV, mm. 12–36, *Basso del Tema*; Small Binary Form



Before we examine the role of the C-sharp, consider first the opening CBI (Example 22, mm. 3–6). This function partitions into a 2-m. basic idea (a triadic "turning figure" around the tonic E-flat),[92] and a contrasting idea (rising triad from mm. 5–6; E-flat, G, B-flat) that ends on the tonic. This simple, triadic, and tonic prolonging CBI invokes characteristics of the German *Ländler* and pastoral topics (Byros 2020, 119–20). It is against this simple, idyllic opening that the disruptive C-sharp emerges.

[92] On the turning figure and its relationship to the Finale's *Basso del Tema*, see Lockwood (1981, 469).

Much has been written about the *Eroica's* C-sharp; let us focus here on some of the most important elements that will influence how we understand the sketches. First, as Rochlitz explained in his review of the symphony, the C-sharp engenders a tonicization of G minor.[93] To understand how this occurs, we need to interpret the bass melody. Vasili Byros (2009; 2020) has traced the turn to C-sharp as a type of thoroughbass scale pattern that articulates ↓⑥–⑤$^{6/4}$–↑④^{7}–⑤$^{[6/4] \text{ or } 5/3}$. He calls this pattern the "*le-sol-fi-sol*" schema-topic owing to the solfege of the scale-degrees that the bass articulates (see Example 24).[94] To interpret the C-sharp in reference to this schemata—see Example 22, mm. 6–9—we must recognize that the move to C-sharp induces a scale mutation from E-flat major to G minor. In thoroughbass terminology, a scale mutation occurs when the structural bass-melody scale-degree is reinterpreted in another key's scale. The moment of the scale-mutation is reminiscent of a pivot harmony.[95]

Three elements suggest the G minor tonicization in the main theme. First, the home-key leading-tone D is destabilized with a "6/4" figure (Example 22, m. 6), which causes the chord it supports to function as a dissonant passing chord (a *transitus* in thoroughbass terminology). Second, when D moves to C-sharp (mm. 6–7), the C-sharp is harmonized with a seventh and fifth (m. 7).[96] This dissonant harmonization causes the C-sharp to function as ↑④ in the new key of G minor. Finally, when C-sharp moves up to D with a "6/4" harmonization (m. 9), we perceive the D to function as ⑤ in G minor as a cadential six-four harmony. At this point, we expect the cadential six-four to resolve to the cadential five-three and "be led predictably to G minor" as Rochlitz suggested (Senner, Wallace, and Meredith 2001, 21). This modulation does not occur, however. Rochlitz clarifies: "in place of the resolution of the 6/4 chord [to "5/3", see Example 22, m. 9] [one] finds the fourth led upward to a fifth, and so, by means of the 6/5 chord [m. 10], [one] finds oneself unexpectedly back at home in E♭ major [m. 11]." To summarize, C-sharp functions as the "fi" in the "le-sol-fi-sol" thoroughbass pattern, which causes a tonicization of G minor.

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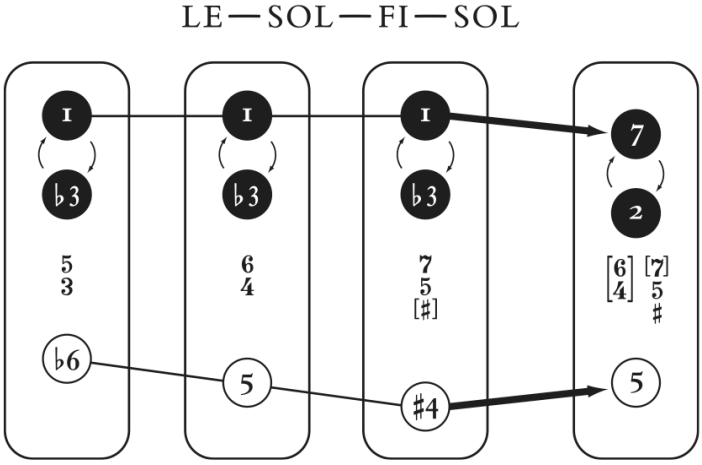
[93] (Senner, Wallace, and Meredith 2001, 21). Note that Rochlitz does not speak of a "tonicization" in the modern sense of the word, but a pattern of deceptive harmonic resolutions. On the G minor tonicization, see Lockwood (1982, 124). Vasili Byros (2020) explores the ramifications of Rochlitz's explanation further in the context of tonality as situated cognition with a case study of the *Eroica*.

[94] See Byros (2020, 112–19).

[95] For more on scale-mutation in the thoroughbass and partimento tradition, see Sanguinetti (2012, 158–64).

[96] Note that Beethoven does not include an E-flat or E-natural with these figures, which prevents us from interpreting this harmony as a fully-diminished seventh chord.

Example 24: *Le-sol-fi-sol* schema-topic; from (Byros 2020, 116, Ex. 6.4)



The fleeting tonicization of G minor in the main theme becomes an important compositional element throughout the first movement and the entire symphony.[97] On the largest scale, it connects the first movement to the beginning of the last movement, which starts on the dominant of G minor. On smaller scales, G minor features prominently in the exposition. I discuss some of the most important of these tonicizations below.

The intimate connection that Beethoven forges between motives, key structures, and form are emblematic of his compositional style more generally. In his study of Beethoven's sketches, Cooper noted, for example, that "The first and most fundamental feature of any instrumental composition was the question of subsidiary keys—both those in the first movement and the main keys of middle movements. . . The character of a work was determined as much by its combination of keys as by any thematic feature" (1990, 124). An analysis of the *Eroica* and its sketches similarly requires that we consider how Beethoven couples the tonal plan—including brief tonicizations—with the underlying formal structure. This connection is even more apparent in the *Eroica* because the main theme content *is* the structural bass-melody.[98]

Let us return to the main theme. After the G minor tonicization, everything that follows is normative. Measure 11 re-establishes the home key tonic (E-flat major) and in the following

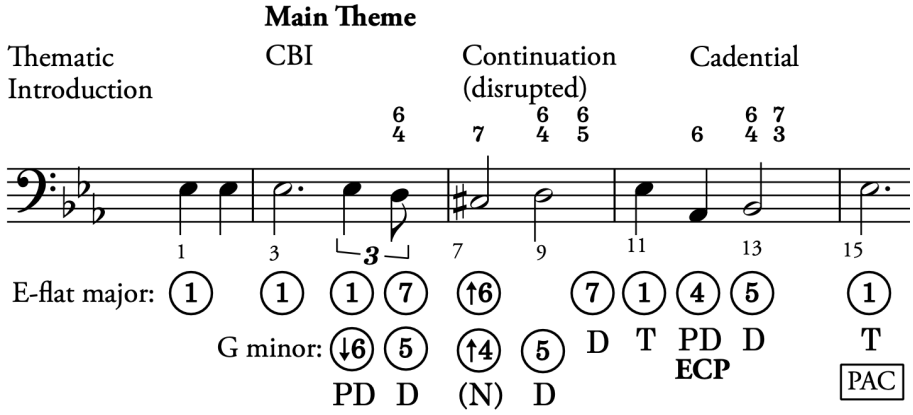
[97] On the topic of G minor, see Byros (2009, 18–26). Byros has pointed out connections with the opening G minor tonicization in the MT with the finale, the Wielhorsky sketches, the first movement development, the scherzo, and the funeral march.

[98] The nineteenth-century composer Felix Draeseke reported to have heard Richard Wagner sing the "melody" of the first movement to the *Eroica* until the end of the exposition while he was visiting him in Lucerne in 1859; see Lockwood (1982, 120–21).

measure, the bass leaps down to A-flat (④, m. 12) to begin an ECP (mm. 12–15). Finally, the theme closes with a PAC in m. 15 that elides with the transition that follows. Note that ③^{6} is absent from the ECP. Perhaps Beethoven left out this initial tonic of the cadential progression because he tonicized G minor in the continuation and wanted to reserve the pitch class "G" (as ③ in the bass-melody) for other purposes, or maybe he felt that the tonic in m. 11 provided sufficient tonic emphasis for the simple ECP that followed.

Example 25 shows a reduction of the MT's bass melody, where one quarter note represents one measure in the score. The opening CBI (a tonic prolongation) and concluding ECP are very conventional, but the intervening continuation is highly characteristic. The move to C-sharp in the main theme functions as both a disruptive and generative element in the first movement. In sum, the main theme is modest in size compared to what follows, but it introduces important motivic and harmonic features that have profound implications for the rest of the movement and the symphony as a whole.

Example 25: Op. 55, I., mm. 1–15; Main Theme, bass-melody durational reduction (1 quarter note = 1 measure)

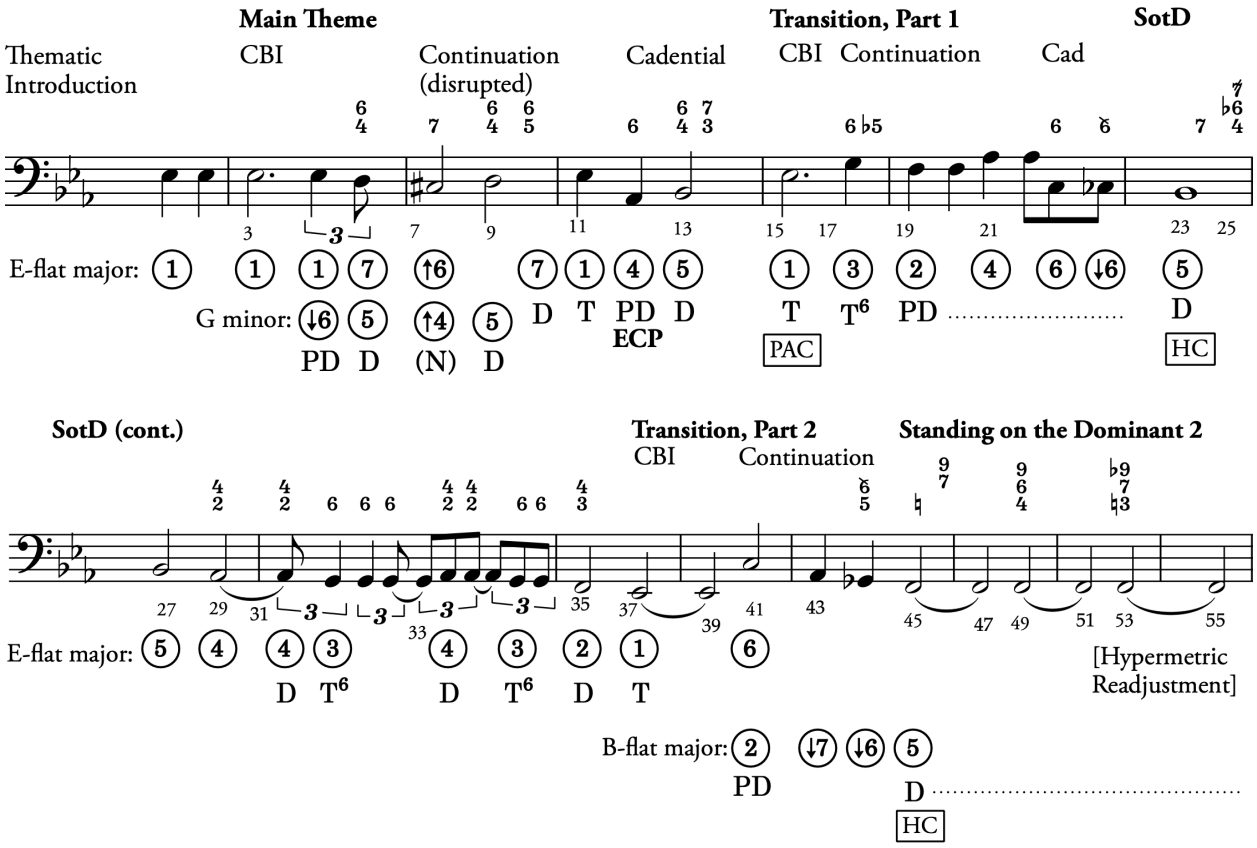


3.2 Transition (mm. 15–56)

The transition (mm. 15–56) that follows the main theme is substantially larger. It is built in two parts, a non-modulating part 1 (mm. 15–36) and a modulating part 2 (mm. 37–45), both of which have appended post-cadential standing on the dominants (SotDs). Seeing as Beethoven works on both parts of the transition in his sketches, let us examine each in some detail. For reference, Example 26 provides a compressed bass-melody durational reduction of the main theme and two-

part transition (mm. 15–56). The reader is encouraged to compare this reduction[99] with the **Analyzed Piano Reduction** in Volume 2 (pp. 2–8).

Example 26: Op. 55, I., mm. 1–56; MT and Tr P1 and P2, bass-melody durationally reduced



3.2.1 Transition Part 1, Non-Modulating (mm. 15–36)

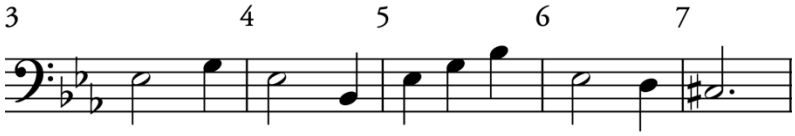
Refer now to the **Cue Staff Reduction** in Volume 2 (p. 9), beginning in m. 15. The non-modulating transition, part 1 (mm. 15–36) expresses a hybrid theme structure (CBI + Cont) that ends on a home key HC in m. 23, which is prolonged with a SotD (mm. 23–36). In greater detail, the transition begins with the same triadic CBI material as the main theme (mm. 15–18), which is now placed in the top-voice instead of the bass. At the end of the CBI (m. 19–20), Beethoven uses the contrasting idea as a model for a sequence. This sequence causes the continuity-voice to move chromatically from E-flat through E-natural to F in mm. 18–19. As this chromatic motion occurs in the same position as the chromatic disruption to C-sharp in the main theme, we can understand it to function as a chromatic "counterbalance" to the comparable moment in the main theme. Whereas the main

[99] I am using "reduction" in two different ways, instrumental and analytical.

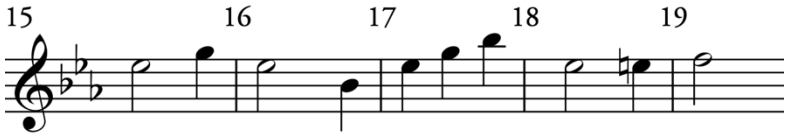
theme material moves *down* by two half-steps from the tonic to get to C-sharp, the transition moves *up* by the same amount to arrive at F (compare Example 27A, mm. 6–7 with B, mm. 18–19). This design seems to have been an invariant idea in Beethoven's mind as it was fixed in the first sketch.[100]

Example 27: Comparison of main theme and transition part 1 content

A. Main Theme



B. Transition



In m. 19, Beethoven uses the contrasting idea material to bring the supertonic harmony. Thereafter, the bass ascends to A-flat in m. 21 (see the **Analyzed Piano Reduction** in Vol. 2, p. 2) and the contrasting material (mm. 21 to beginning of mm. 22) articulates a sequence of subdominant harmony (IV). Finally, the bass leaps down in m. 22 on the second beat from A-flat to C and we begin to anticipate a HC. To achieve this cadence, the bass moves chromatically downward through C-flat as ↓⑥ (an augmented Italian sixth, m. 22), which resolves to B-flat as the home key HC ⑤ in m. 23. In total, the first part of the transition articulates a mostly chromatic ascent in the leading voice—the upper voice that Beethoven would normally sketch in his continuity draft—from E-flat to B-flat; only the pitch class F-sharp/G-flat is missing.

When the home key HC arrives in m. 23, it elides with the beginning of the first standing on the dominant (mm. 23–36). To compare the different versions of the first standing on the dominant in the sketches ("SotD-1"), let us partition the final SotD-1 into three 4-m. *members*:[101] the first

[100] A similar principle can be found in the first movement of his Piano Sonata, Op. 53 "Waldstein" that he sketched after writing the *Eroica* in the same sketchbook. In the Waldstein sonata, a descending chromatic line in the bass-melody of the MT (C in mm. 1–2, B-flat in mm. 5–6), is "counterbalanced" by an ascending chromatic line in the transition (C in mm. 14–15 and D in mm. 19). This parallel suggests that Beethoven worked to build these relationships in his works written during this time.

[101] The word "member" is not intended to project any form functional role. It is meant solely to identify different parts of larger formal functions within units that do not divide easily into smaller formal functions.

member (mm. 23–26) is a four measure group that has a grouping structure like a CBI; the second (mm. 27–31) functions like a varied repeat of the opening four measures; and the last member (mm. 32–36) brings a fragmented, continuational grouping structure.

In the second and third members of the SotD-1, the underlying dominant is called into question because the structural ⑤ moves to a dominant functioning ④$^{4/2}$ and then a tonic ③^{6}. One might wonder at this point whether the dominant that established the SotD-1 succumbed to tonic harmony. The end of the SotD-1 in m. 35 reasserts the dominant harmony as primary, however, when the bass moves from the tonic ③^{6} to the dominant ②$^{4/3}$ in m. 35. Finally, Beethoven smooths the juncture at end of the SotD-1 to the second part of the transition (m. 37) that follows by moving the dominant ② to the tonic ① in m. 37 with a diverging diatonic wedge.

The drama between the tonic and dominant in member 3 of the SotD-1 is enhanced with a grouping structure hemiola (mm. 28–35). (The tied notes in the durational reduction of Example 26 mm. 28–34 visualize this hemiola well.) Locally, this hemiola dramatizes the rhythmic structure of the entire standing on the dominant. At a larger scale, it causes a hypermetric disruption that cascades through the second part of the transition and its standing on the dominant (i.e., "SotD-2). Ultimately, the hemiola in the SotD-1 causes the subordinate theme group to begin on a hypermetrically weak beat (hyperbeat 3) if we view this music with a quadruple hypermeter. Perhaps this hypermetric displacement is one of the factors that weakens the beginning rhetoric of the subordinate theme group. We will find that Beethoven tries several different approaches to blur the boundary between the beginning of the subordinate theme group and the end of the transition in the sketches, so this interpretation seems plausible.

3.2.2 Transition Part 2, Modulating (mm. 37–56)

The modulating, part 2 of the transition begins in essentially the same way as the first part, but with the main theme CBI content in the bass voice instead of the upper voice (mm. 37–40). After this CBI, Beethoven uses the contrasting idea (mm. 39–40) as a model for a sequence in a similar way to the first part of the transition, but in this case, the sequence moves to submediant harmony (vi, mm. 41–42). Finally, mm. 43–44 bring ↓⑦ (A-flat as ♭VII), ↓⑥ (G-flat, harmonized as a German augmented sixth) and the HC's ⑤ arrives on the downbeat of m. 45 in the subordinate key (B-flat major). Overall, the modulation to B-flat major is realized somewhat retrospectively—it is as though we are forced into the new key with the augmented sixth chord, which arrived through a stepwise,

bass-melody pattern ↓⑦–↓⑥–⑤. Compared to the prior first part of the transition, the second part is considerably more compressed. Overall, the function of the first part seems to have been more motivic—it did not bring the subordinate key, but it expressed a chromatic counterbalance to the main theme in the leading voice. By contrast, the second part does not introduce any new chromatic motion until the moment of the HC, when G-flat moves to F. This chromatic motion, we will find, also plays an important role in the exposition, but the primary function of the second part of the transition is to modulate into the subordinate key.

After the subordinate key HC on the downbeat of m. 45, a new, 12-m. SotD-2 (mm. 45–56) begins. As before, it is helpful to partition this SotD-2 into three members. The first and last members articulate dominant "9/7" harmony and the middle member, a neighboring "9/6/4".[102] Compared to the harmonic and metric disruption of the SotD-1 (when the bass-melody left ⑤ and oscillated between ④$^{4/2}$ and ③^{6}) the SotD-2 projects a more stable harmonic and hypermetric structure.

The most significant element of the SotD-2 is the neighboring motion that occurs in the upper voice between G (in m. 45, and m. 49), and G-flat (in m. 53 and m. 54), which act as chordal ninths to the underlying dominant. These pitches in the SotD-2, we will see in the next chapter, were one of the first elements that Beethoven wrote down in his first sketches.[103] We also saw them at the end of the second part of the transition in the bass-voice (mm. 44–45), mentioned above.

3.3 Subordinate Theme Group (mm. 57–147)

Compared to the main theme, the transition is considerably larger. But this latter function is dwarfed by the enormous subordinate theme group that follows. In contrast to the subordinate theme group in his first symphony, which he *extended* by adding additional self-contained themes, Beethoven *expands* this part of the form in the *Eroica* in several ways (see Caplin 1991, 52–53). Broadly, the subordinate theme group is organized into two themes, each closed, as required, by a subordinate key PAC. The first theme is structured as a greatly expanded compound sentence. The second subordinate theme consists of two dependent parts, both with their own unique compound

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[102] Although the 9ths resolve back to the tonic, I have chosen to highlight them here to highlight the important relationship between G and G-flat that Beethoven emphasized in his early sketches when drafting this SotD.

[103] It is common for transitions to feature modal shifts in the new key. If the SK is to appear as major, then the transition will often shift to the minor, and vice versa. This procedure allows the new material in the SK to appear more "fresh." Still, the G and G-flats are notable on account of the sketches.

presentations and continuations. As my form-functional interpretation of this music does not differ from Caplin's (1991, 36–44), the rest of this chapter will focus on highlighting features of the subordinate theme group that inform analysis of Beethoven's sketches.

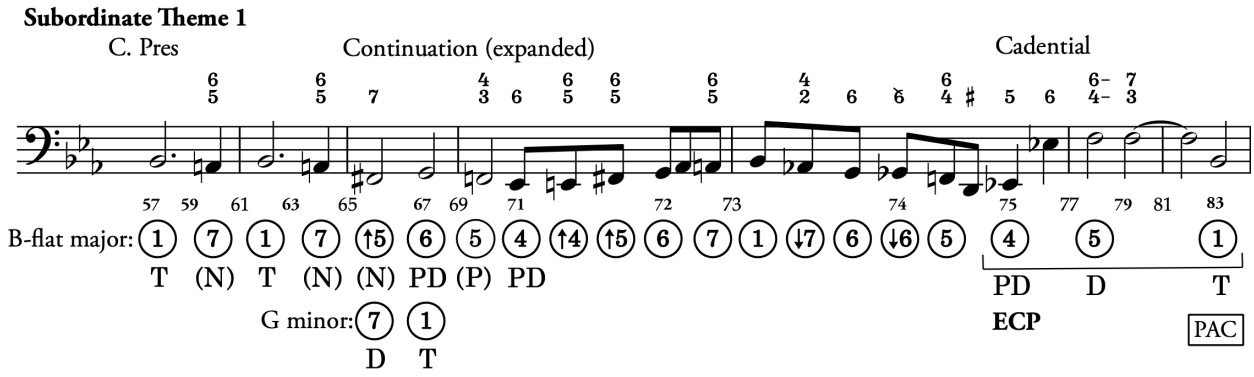
If we count the subordinate themes in terms of the formal units that contain a compound presentation and continuation, we can speak of there being three *theme-segments*.[104] At the highest level of the group's hierarchy, these three, subordinate theme-segments project characteristics of a higher-level hyper-theme that consists of what we might call "hyper-" beginning, middle, and ending functions. To understand how this occurs, consider the bass-melody reduction of each theme's compound presentation and subsequent continuations in Example 28. The first (A) and third (C) theme-segments begin with a compound presentation that is built with a simple repetition of a CBI that prolongs the tonic ① with a neighboring ⑦ dominant. By contrast, the compound presentation of the middle theme-segment (B) is built with a sequential repetition of the CBI (i.e., ①–④ repeated as ②–⑤). This sequential expression of the initiating function projects more medial characteristics than the initiating functions of the first and third theme-segments. In addition, the continuation of the second theme-segment (subordinate theme 2, part 1, i.e., B) is more tonally adventurous than the continuations in the framing theme-segments (A) and (C). It includes tonicizations of D-flat major and F major, whereas the first and third theme-segments' continuations only briefly tonicize G minor.

Finally, the third theme-segment (C, i.e., ST2 P2) could be interpreted as the higher-level hyper-ending function because its cadential function, not shown, is greatly expanded (it includes two cadential progressions). Thus, at the highest level of the hierarchy, the first theme-segment (A, ST1) functions as a hyper-initiating function, the middle theme-segment (B, ST2 P1) serves more as a medial function, and the last theme-segment (B, ST2 P2) brings a kind of "hyper-" ending function to the complete subordinate theme group. In short, the three theme-segments cohere into a beginning, middle, and end hyper-theme. With this upper-level, three-segment structure in mind, let us examine how Beethoven constructs the subordinate theme group in more detail.

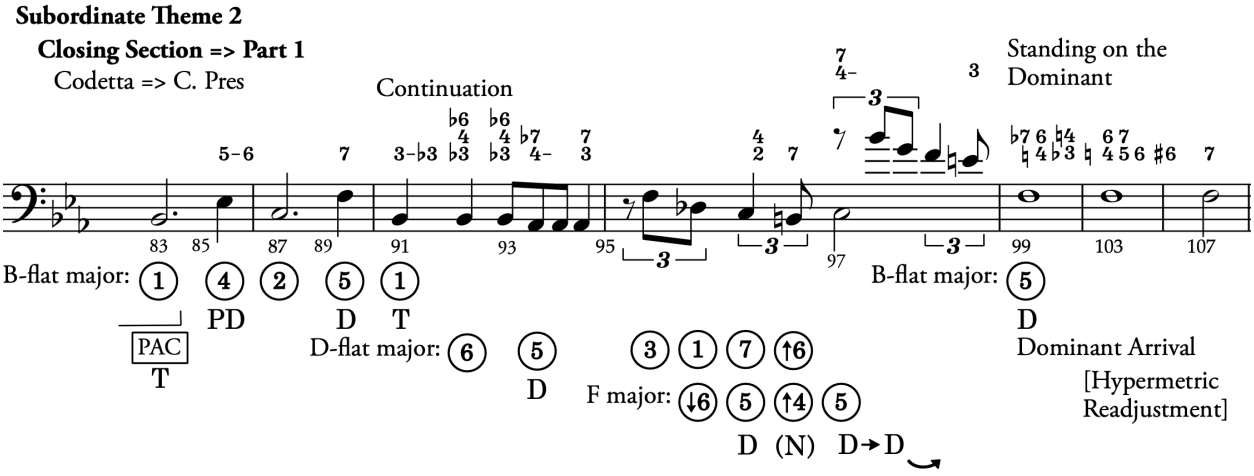
[104] I have chosen to use "theme-piece" to avoid confusion with "part" and "segment" which are a reserved and well-defined terms in Caplin's theory. To be clear, the first subordinate theme also includes a cadential function that closes with a PAC. Thus, there is a first subordinate theme, and a second subordinate theme with two parts.

Example 28: Comparison of Subordinate Themes (Reduced Bass-Melody Analysis)

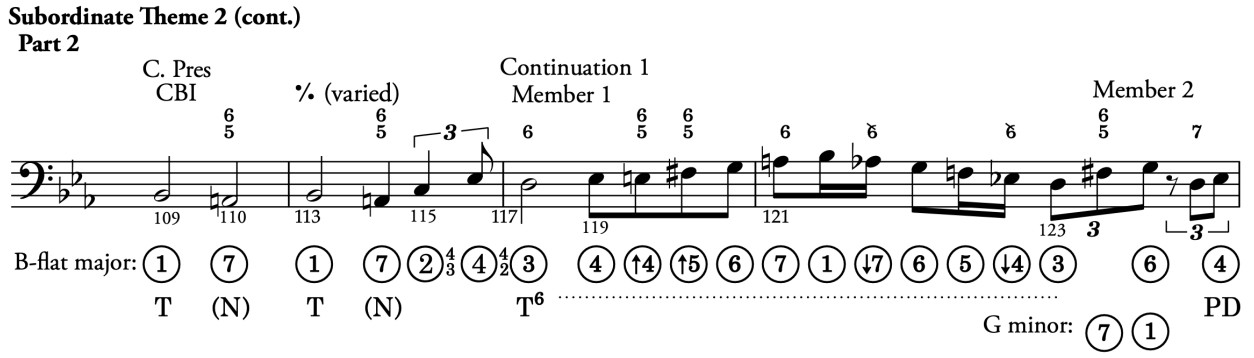
A. Segment 1, mm. 57–81



B. Segment 2, mm. 83–108



C. Segment 3, mm. 109–124[105]

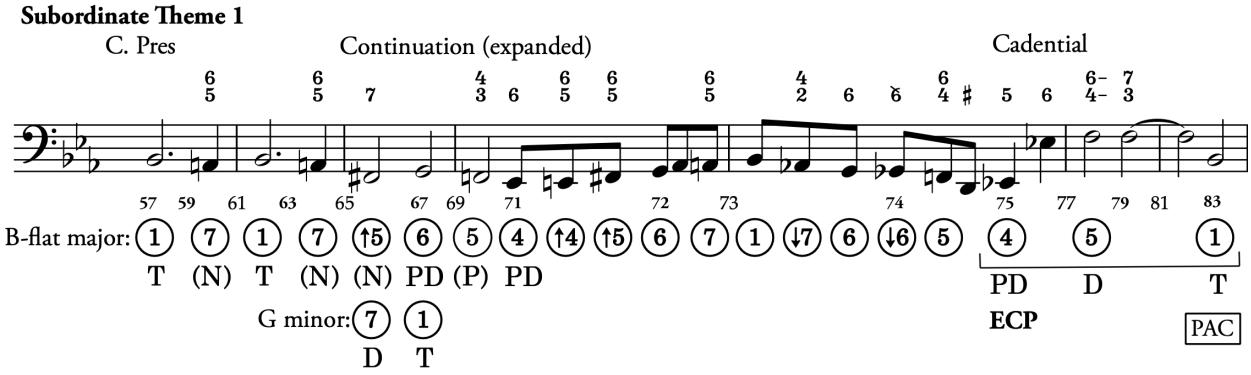


[105] The durational reduction of mm. 117–122 has been simplified. If reduced verbatim, the shifting rhythm pattern would have created a more complicated expression of the underlying scalar ascent.

3.3.1 Subordinate Theme 1 (mm. 57–83)

Overall, the first subordinate theme is structured as a compound sentence with a greatly expanded continuation (see Example 29). The opening 8-m. compound presentation (mm. 57–64) is invariant in the sketches (see Lockwood 1982, 131–33), but the following continuation (mm. 65–83) changes substantially. The first element that Beethoven experimented with was the juncture between the end of the compound presentation and the beginning of the continuation. In the final version, there is an abrupt and surprising dissonance between these functions. At the end of the CBI repeat in m. 64, one expects the bass-melody ⑦$^{6/5}$ (dominant) to resolve back to the tonic ① in m. 65, as it did in first CBI statement (mm. 60–61). Instead, ⑦$^{6/5}$ leaps downward a minor third to ↑⑤ (F-sharp), which is harmonized with a fully diminished seventh harmony. Beethoven resolves this dissonant harmony in m. 67 to G minor. In essence, he tonicizes the submediant, a tonic substitute in B-flat major so the continuation of the first subordinate theme begins with a similar tonal disruption as the main theme's continuation.

Example 29: Op. 55, I., mm. 57–83; Subordinate Theme 1; Bass-melody Durational Reduction

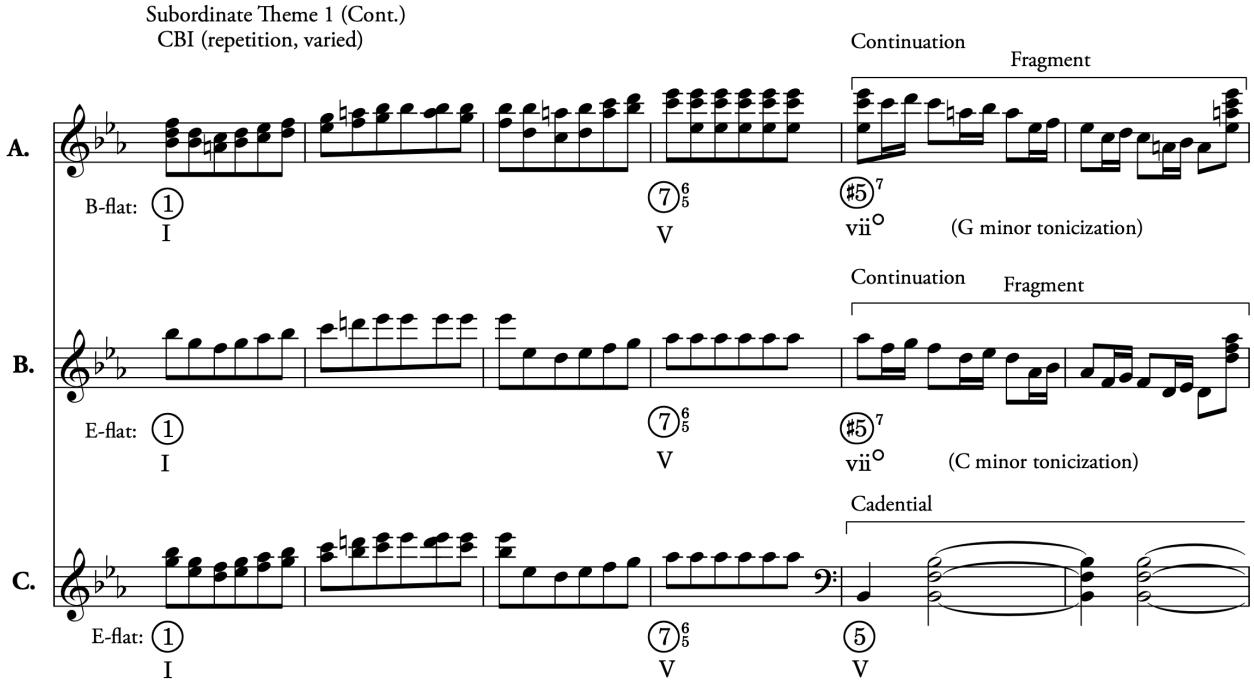


The dissonant juncture between the compound presentation and continuation in the first subordinate theme becomes a compositional "problem" that Beethoven "solves" in the coda. As Lockwood (1982, 130–33) summarizes, Beethoven places the first subordinate theme's compound presentation in the coda one final time, then, when the compound presentation completes, he changes the juncture to bring an ECP instead of the dissonant tonicization of G minor.[106] Compare the three versions of the juncture between the end of the compound presentation and the continuation in Example 30 in the exposition (A), recapitulation (B), and coda (C). Given the

[106] Lockwood does not use form-functional terminology in his explanation.

importance of this design, the juncture between the first subordinate theme's compound presentation and continuation will be a central topic in the chapters that follow.

Example 30: Comparison of subordinate theme 1 in exposition, mm. 61–66 (A), recapitulation, mm. 464–469 (B), and coda, mm. 677–582 (C)

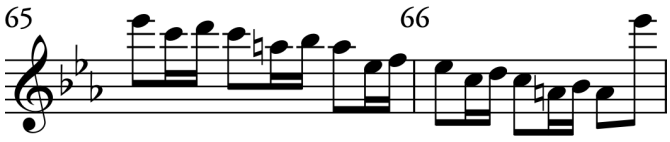


The G minor tonicization that begins the continuation causes some additional compositional challenges in first subordinate theme. Refer to Example 29. In the final version, the music transitions out of G minor by replicating the tonicization in mm. 69–71 to bring a C minor harmony in first inversion (i.e., ii^{6}). This move restores ⑤ in m. 69 (from ↑⑤) and brings ④ (m. 71) as a pre-dominant in the bass-melody, which establishes the cadential bass stream. At this point, Beethoven could have written an ECP and closed the theme. Instead, the bass ascends chromatically from ④ to ① and then (mostly chromatically) back to ④ (see Example 29, mm. 71–75). He builds immense tension by harmonizing the scalar ascent and descent with sequential motion and by increasing the harmonic rhythm (see the triplet eighth notes in the durational reduction of Example 29, mm. 71–74). Finally, the end of the descending scalar pattern re-establishes ④ in m. 75 as a pre-dominant harmony in the cadential stream and an ECP in mm. 75–82 brings a PAC in m. 83.

In the chapters that follow, we will see that Beethoven had to work on two elements in the first subordinate theme: he was not sure how he would stage the junction between the compound presentation and continuation, and he was not certain about how he would expand the continuation

after entering the cadential bass stream (i.e., ④). But despite these issues and the different variants that arise in the sketches, he seems to have decided on the basic *material* that he would use to build a continuation (see Example 31), that is, the basic texture and figuration. It seems, therefore, that he knew the general character he wanted at an early stage, but he was not sure how it would manifest syntactically.

Example 31: Subordinate Theme 1, Continuation Material



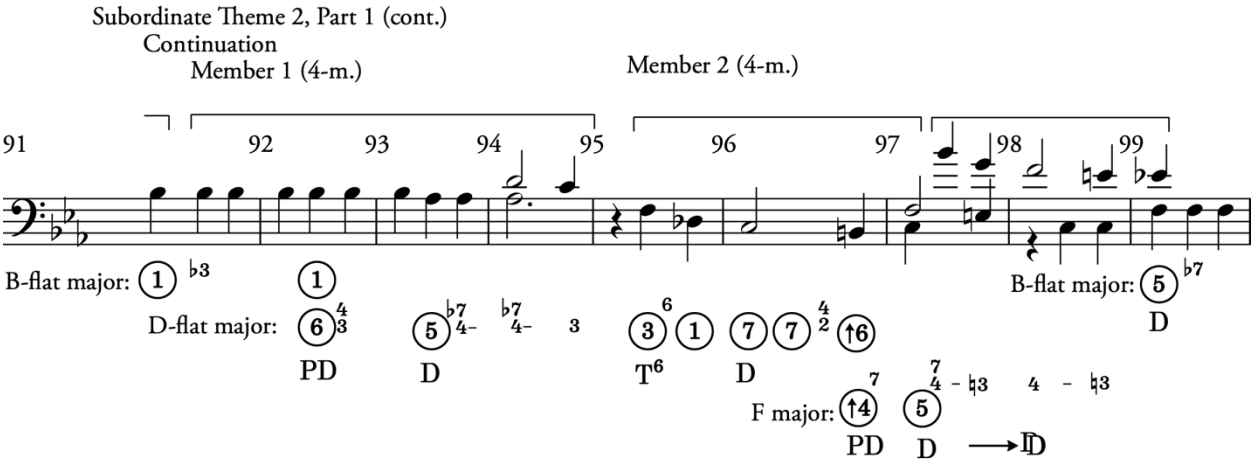
3.3.2 Subordinate Theme 2, Part 1 (mm. 83–108)

Overall, the second subordinate theme has a more complex organization than the first because it is structured into two parts that are separated by an extensive standing on the dominant (mm. 99–107). The first part does not achieve the required PAC closure, so it depends on the second part for its structural ending. In the chapters that follow, we will focus three distinct features of the subordinate theme 2, part 1: first, the theme part begins with closing section rhetoric; second, its continuation is tonally adventurous; and third, the continuation contains motivic parallelisms that relate closely to the disrupted continuation in the main theme. Let us examine each of these elements in the final version in turn.

First, as Caplin (1991, 41) explained, the music that follows the PAC in m. 83 is often falsely regarded as the "true" beginning of the subordinate theme group. Rather, this music gives more the impression of a closing section that follows the (first) subordinate theme (mm. 57–83), which could have led back to the exposition repeat. We do not have the impression that a new theme is unfolding until the opening four measures (mm. 83–86) repeat sequentially in the measures that follow (mm. 87–90). Only here, when the initiating function is almost over, do we recognize that a new subordinate theme is underway. In other words, the beginning of the second subordinate theme is heard retrospectively. We should remember this unusual formal design (closing section becomes compound presentation) because it manifests in interesting and surprising ways in the early exposition sketches.

The second and third features of this subordinate theme 2, part 1 concern the complex tonal structure of its continuation (mm. 91–99). Example 32 provides a bass-melody, functional analysis of this part of the theme. The continuation (mm. 91–99) parses further into two 4-m. members. The first member (mm. 91–94) is structured like a highly varied repeat of the theme part's CBI. The second member (mm. 95–99) introduces fragmentation and motivic parallelisms with the main theme's C-sharp turning figure (C-sharp is expressed as D-flat in m. 95). Although the first member of the continuation (mm. 91–94) starts with the repeating quarter-note pattern that that we heard in the prior compound presentation, its underlying harmonic syntax is considerably more loose and therefore more emblematic of a medial, continuation function (mentioned at the start of this section). As this part of the theme changes considerably throughout the sketches, let us examine it in greater detail.

Example 32: Op. 55, I. mm. 91–99; Subordinate Theme 2, Part 1, Continuation



At the beginning of the continuation (m. 91), Beethoven destabilizes the subordinate key (B-flat major) by changing its mode from major to minor on the second beat of the measure (see the ♭3 figure). Thereafter, in the next measure (m. 92), second beat, he re-harmonizes the B-flat in the bass with a "4/3" dissonant figure. This figure causes ① to be reinterpreted as a pre-dominant ⑥ in D-flat major—in other words, a scalar mutation arises.[107] In the next measure (m. 93), the dissonant B-flat resolves downwards to A-flat, which is treated as a dominant ⑤ with a seventh and suspended fourth (in D-flat). Once the suspended fourth resolves to the chordal third in m. 94 from D-flat to C, we expect the dominant-seventh harmony to resolve to a D-flat major tonic in m. 95. This tonic

[107] Sanguinetti calls this reinterpretation a scale mutation; (Sanguinetti 2012, 158–64).

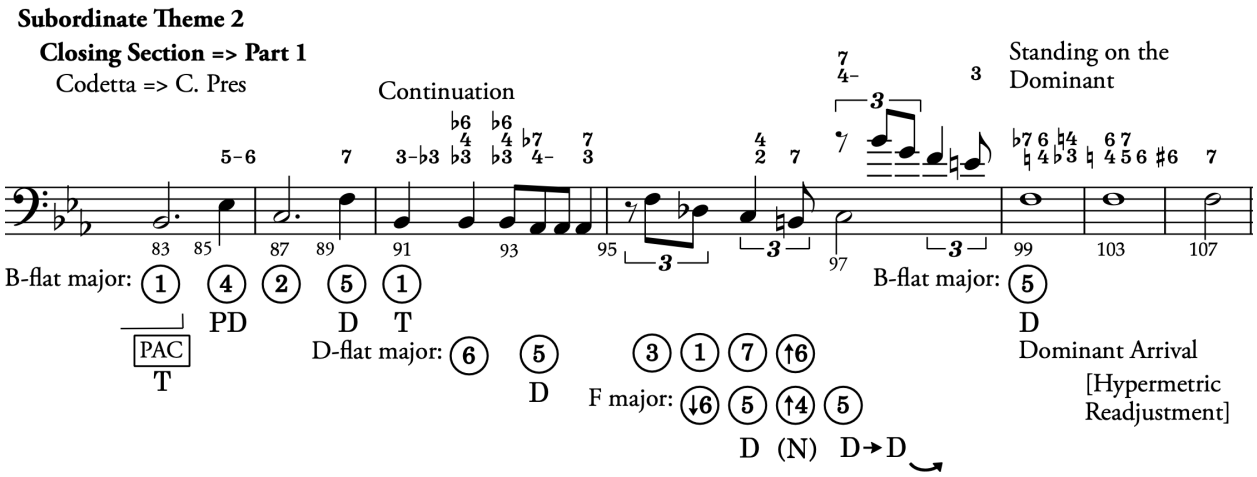
appears, but it begins on the second beat of m. 95 instead of the first, and on the third of the harmony (③) instead of the root (①). These features destabilize the tonic function and cause it to project more of a medial, intermediate role that will lead elsewhere.

In essence, Beethoven manages to tonicize D-flat major in the continuation, but without overly emphasizing its arrival. We will see in successive chapters how this key arises in different ways in the sketches; it frequently appears in a more prominent way. In short, the key seems to have been an invariant idea in Beethoven's plan and it likely results from a desire to express the initial main theme's C-sharp (m. 5) in different and more substantial ways throughout the movement.

After the D-flat major tonicization in m. 95, the music begins to modulate to F major (see Example 32, mm. 95–99). Beethoven accomplishes this key change by destabilizing ⑦ in D-flat major (i.e., C in m. 96) with the figure "4/2" on the second beat. This dissonant "4/2" causes the ⑦ in the bass to function as a suspension that must resolve downwards by half step. When the bass suspension C resolves in m. 96 to B-natural on the third beat, Beethoven harmonizes it with a "7" figure, which causes it to function as a fully-diminished seventh chord expressing ↑④ in F major (i.e., a vii^{o7} of V). This fully-diminished ↑④^{7} then resolves to ⑤ in m. 97 as the dominant of F major. In the next measure, the suspended fourth resolution is repeated, which builds anticipation for a resolution of the dominant seventh to an F major tonic in m. 99. This harmony never appears, however, and instead the E-natural in the leading-voice of m. 98, moves to E-flat on the downbeat of m. 99 and the F major tonic becomes a dominant seventh in B-flat major. In sum, we are led to anticipate a tonicization of F major in mm. 97–98, but the tonic is transformed into a dominant of the subordinate key at the last moment (m. 99).

In a nutshell, Beethoven tonicizes D-flat major (mm. 92–95) and F major (96–98) in the continuation before re-establishing the subordinate key tonic (B-flat major) with a dominant arrival in m. 99 and subsequent standing on the dominant (mm. 99–108) (see the bass-melody reduction in Example 33). Remember how Beethoven returns to B-flat after the D-flat major tonicization: the music moves a fifth past the subordinate key to suggest the dominant of the dominant, that is, he moves to a C major seventh as the dominant of F major, or V/V in B-flat major (m. 97–98). We will find this harmonic "overshoot" to be expressed in a more extreme way in the sketches of the third continuity series (CS 3). Ultimately, it seems that the D-flat tonicization was the invariant element for Beethoven. The tonicization appears very prominently in early drafts and is gradually attenuated in successive sketches.

Example 33: Op. 55, I., mm. 83–108; Subordinate Theme 2, Part 1; Bass-melody Durational Reduction (1 Quarter Note = 1 Measure)

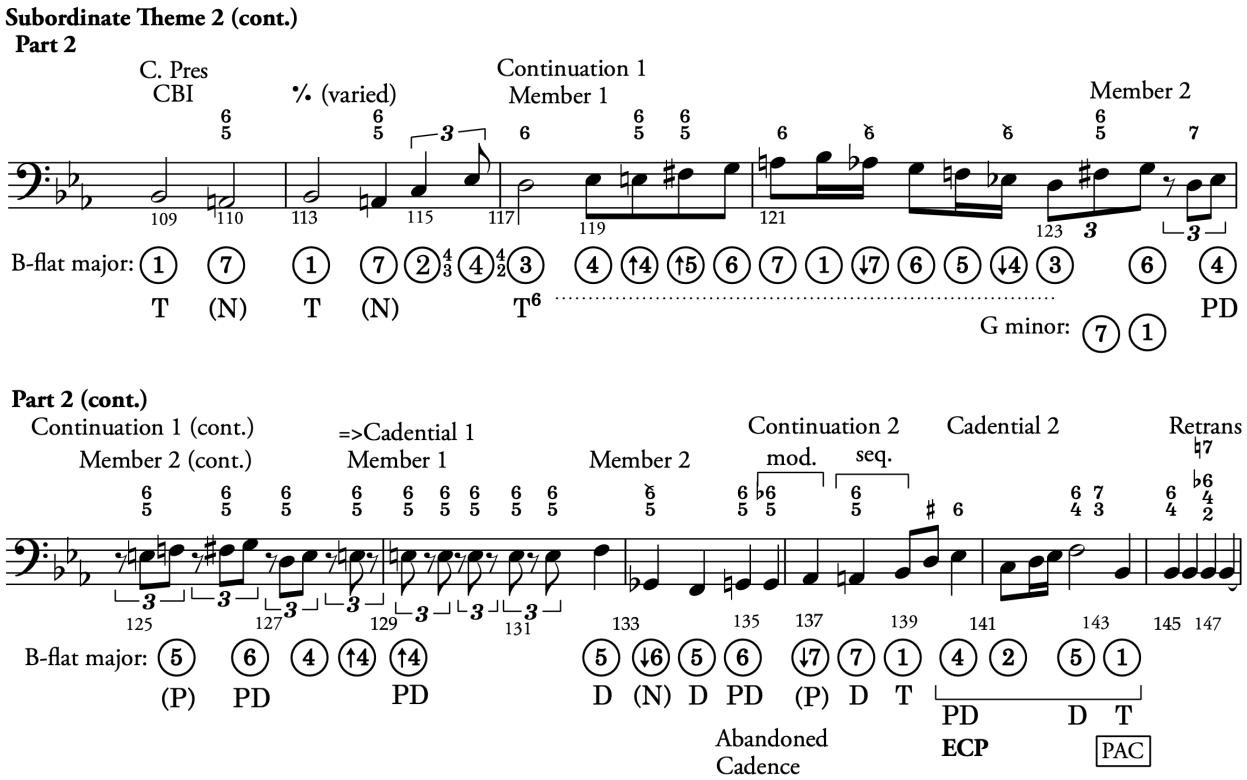


3.3.3 Subordinate Theme 2, Part 2 (mm. 109–144)

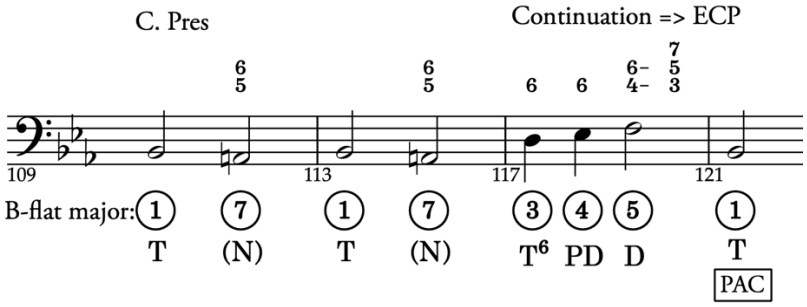
Having analyzed the first part of the second subordinate theme, let us now turn to the second part (ST2 P2). This second theme-part was the last to solidify in Beethoven's exposition sketches and will be a central topic of the CS 3 and CS 4 series sketches in Chapters 7 and 8. At a high level of hierarchy, this theme part functions like an enormous, hyper-ending function to the entire subordinate theme group. It comprises a compound presentation, and two continuations and cadential functions. Let us examine each of these in greater detail to facilitate future comparisons with the sketches for this theme part.

The opening compound presentation (mm. 109–116, **Piano Reduction**, Vol. 2, p 7) has the same basic bass-melody structure as the first subordinate theme (i.e., ①–⑦$^{6/5}$ repeated. (Compare Example 34, mm. 109–114 with the first subordinate theme's compound presentation in Volume 2, **Bass-Melody Durational Reduction**, p. 27, mm. 57–64). After this initiating unit (see Example 34), a continuation begins in m. 117 when ③ (as T^{6}) is obtained. At this point, Beethoven could have continued the theme with an ECP that ended with a PAC, as shown in the hypothetical durational reduction in Example 35, mm. 117–121. Instead (return to Example 34, m. 117) he returns the bass-melody back into the prolongational stream by pushing through ④ in m. 119 and ascending chromatically until ① (B-flat) on the last beat of m. 121 (see the eighth notes in Example 34, mm. 119–121). The continuation's structural, bass-melody ascent is harmonized as a sequence (see Example 36, mm. 119–122).

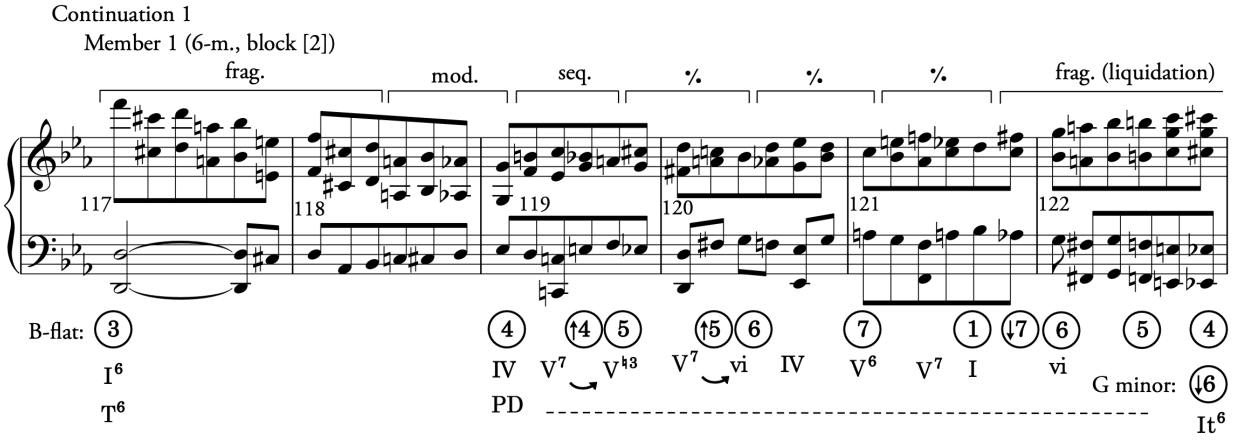
Example 34: Op. 55, I., mm. 109–148; Subordinate Theme 2; Bass-melody Durational Reduction



Example 35: Hypothetical version of Subordinate Theme 2 Part 2



Example 36: Op. 55, I., mm. 117–122, piano reduction; ST2 P2, Continuation 1

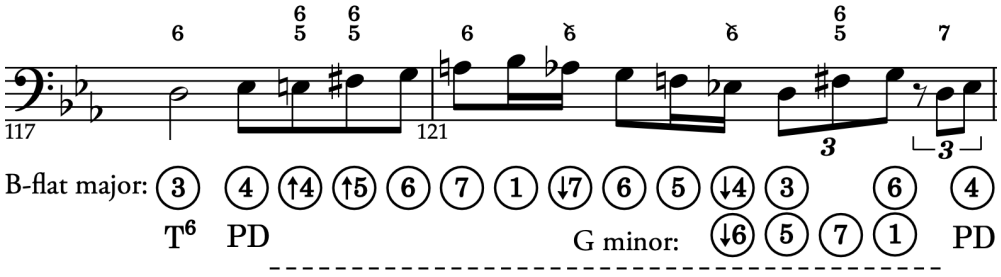


In many respects, the bass-melody structure of part 2's first continuation is similar to the underlying structure of the first subordinate theme's continuation. Compare the durationally reduced bass-melodies in Example 37A, mm. 119–123 with B, mm. 72–74. In both instances, the underlying pre-dominant ④ is prolonged with ascending and descending scalar motion that moves from ④ to ①. The main difference is the end of each stepwise pattern. In the subordinate theme 2, part 2's continuation, Beethoven could have ended the scalar pattern by re-establishing ③ as T^6 and writing an ECP as shown in the hypothetical bass-melody reduction in Example 38. Instead (see the notes with arrows in Example 39), he introduces ④, harmonized as an augmented sixth chord, which causes D to function not as ③ in B-flat major, but as ⑤ in G minor. Thus, he uses a G minor tonicization to disrupt the continuation phrase yet again.[108]

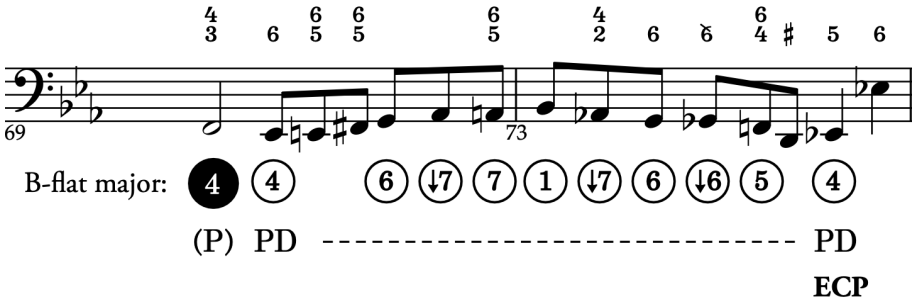
[108] The listener is primed to hear the G minor tonicization in part because it was anticipated in the model sequence at the end of m. 119 into m. 120.

Example 37: Comparative durational, bass-melody reduction of the first continuation of ST2 P2 (A.) with the continuation ST1 (B.)

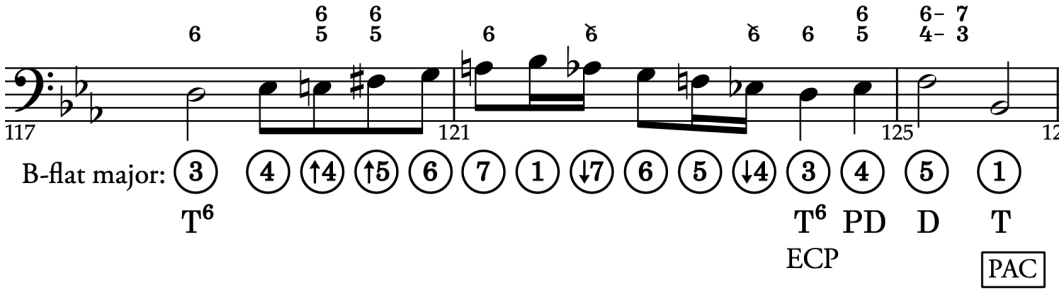
A. ST2 P2 Continuation 1 (mm. 117–124)



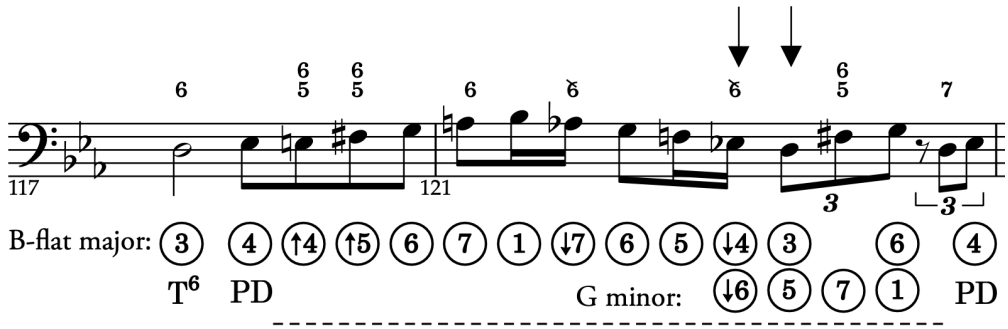
B. ST1 Continuation (mm. 69–74)



Example 38: Hypothetical ST2 P2 Continuation and ECP

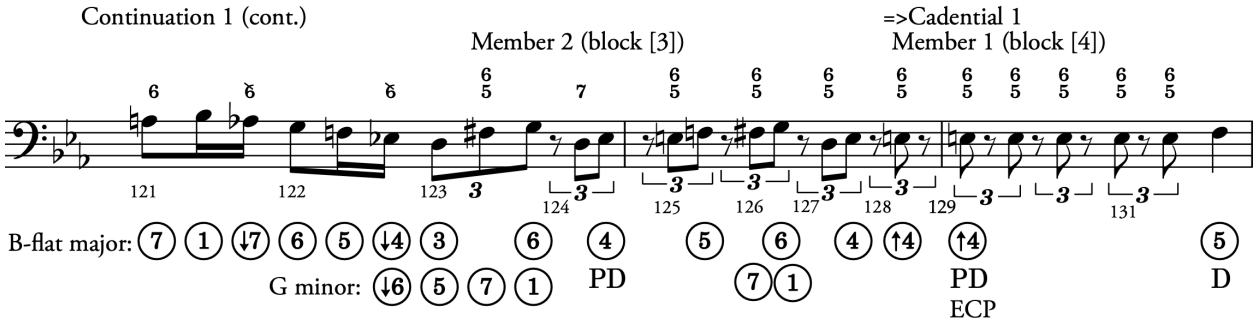


Example 39: ST2 P2, Continuation, mm. 117–124; arrows show tonicization of G minor

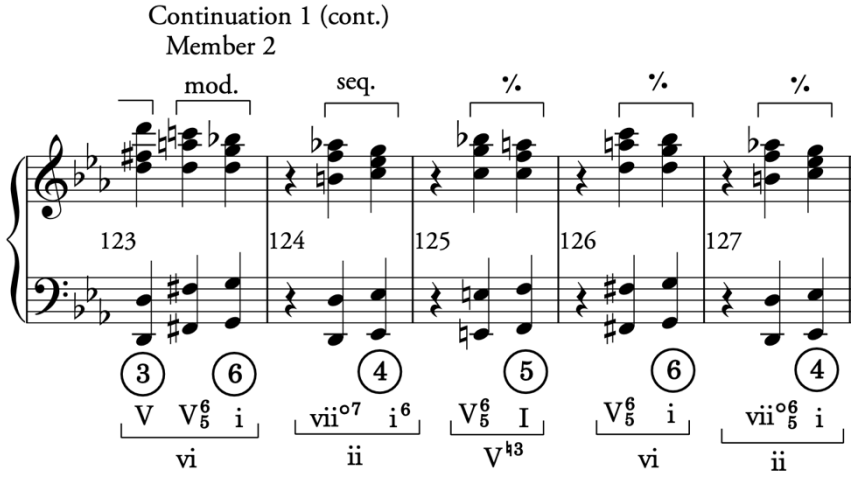


By mutating from ③ in B-flat to ⑤ in G minor (refer to Example 40, m. 123), the submediant G minor functions as a substitute to the B-flat major tonic, which reopens the prolongational bass stream in G minor. Beethoven must, therefore, move back into the cadential stream of B-flat major to close the theme. He accomplishes this move with a 5-m. sequence that articulates a higher-level bass-melody of ④–⑤–⑥ in B-flat major (compare the reduction in Example 40, mm. 125–128 with the full-voice version in Example 41, mm. 123–127). This passage plays on an interesting ambiguity between cadential and sequential progressions (see Caplin 1991, 42). In effect, Beethoven manages to delay the cadence further, but without undue emphasis of an addition medial function because it also expresses characteristics of a cadential progression with a deceptive resolution.

Example 40: Bass-melody reduction of mm. 121–132



Example 41: Op. 55, I. mm. 123–127; ST2 P2, Continuation 1, Member 2

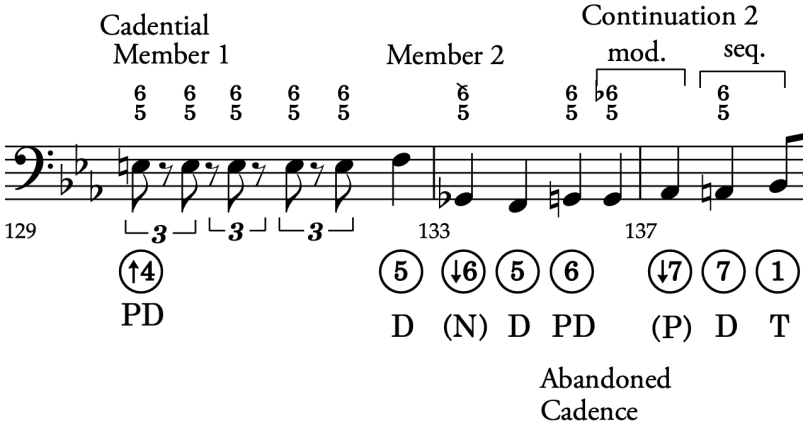


At the end of the sequence in m. 128 (Example 40), he re-establishes the cadential bass stream with ④ (E-flat, m. 127), which moves to ↑④$^{6/5}$ in m. 128 (E-natural, harmonized as an applied dominant seventh in first inversion, i.e., $V^{6/5}$/V in B-flat major). At this point, we

understand ↑④$^{6/5}$ to function as an embellishing chromatic step within a complete cadential progression. He delays further the cadential dominant ⑤, however, when the bass gets "stuck" on ↑④ (E-natural) for four measures (mm. 128–131). The rhythmic expression of this moment creates a hemiola that dramatizes further the delayed arrival of the subordinate key dominant. Finally, in m. 132 (see the **Piano Reduction**, Vol. 2, p. 7) he resolves the ↑④ to the cadential ⑤ harmonized as a cadential six-four and we begin to expect an imminent resolution to the cadential five-three and subsequent PAC.

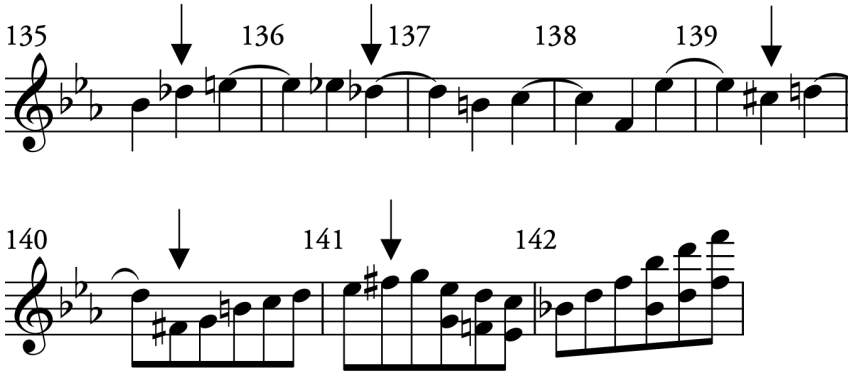
Although the cadential-six four in m. 132 could resolve to a five-three and the theme could close thereafter with a PAC, Beethoven has several more surprises in store. In the measure that follows the cadential ⑤ in m. 132 (Example 42), the bass-melody moves up to a neighbor ↓⑥ (G-flat, m. 133), harmonized as a German augmented sixth. At this point, we understand the bass-melody ↓⑥ to prolong the dominant ⑤ as a chromatic neighboring embellishment. The resolution of this augmented-sixth harmony to the cadential six-four in the next measure (m. 134) confirms this interpretation and suggests once more an imminent resolution to the cadential five-three in the measure that follows (m. 135). Instead, Beethoven abandons the penultimate dominant when the bass ascends once again to ⑥ (G-natural) harmonized with "6/5" (m. 135). This harmony functions as an applied fully-diminished seventh to of the subdominant (i.e., vii^{o7} of IV^{6}). Once again, we are thrown out of the cadential stream and placed back into the prolongational stream with another model sequence that brings an ascending stepwise motion in the bass-melody ⑤–⑥–↓⑦–⑦–① (see the durational reduction in Example 42, mm. 134–139).

Example 42: Bass-melody reduction of mm. 129–137

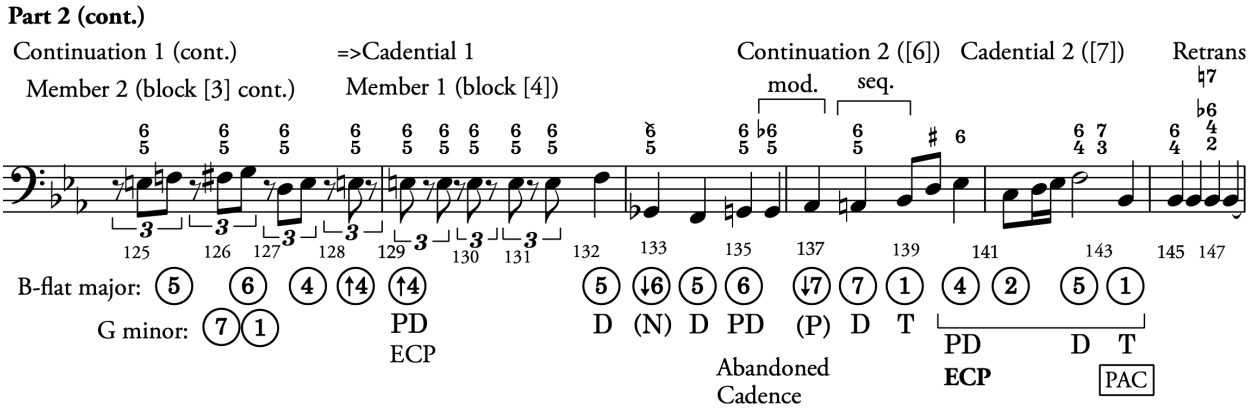


Beethoven creates immense tension by delaying the arrival of the cadence that will close the second part of the greatly expanded second subordinate theme. He likely chose to delay the last cadence one final time to express some of the important pitch class relationships that he has been developing in the exposition (see Example 43). Note, for instance, that the upper-voice completes the chromatic aggregate between B-flat up to G (B-flat, B, C, C-sharp/D-flat, D, E-flat, E, F, F-sharp, and G) and the melody emphasizes the enharmonic relationship between D-flat and C-sharp and F-sharp and G (indicated with arrows in the example). The clear juxtaposition of D-flat and C-sharp in this final part of the exposition foreshadows the enharmonic relationship that will play out on a larger scale between the main theme in the exposition and recapitulation. As Rochlitz summarized in his 1807 review, Beethoven uses the enharmonic D-flat in the recapitulation main theme to move from E-flat into F major. Thereafter, as Rochlitz put it, "the composer proceeds quickly and invasively into F minor and D♭ major, where the oboe once again takes up the same idea [the CBI] and carries it forward agreeably" (Senner, Wallace, and Meredith 2001, 22). The final expression in mm. 135–139 with the important chromatic pitch classes so far developed functions like a compact window into the larger harmonic design that Beethoven develops with these pitch classes. At the completion of these motivic and pitch-class, cross references, he returns the music to the cadential bass-stream in mm. 140 and an ECP (mm. 140–143) concludes with an emphatic PAC in m. 144 (compare Example 44, mm. 130–144 with the corresponding measures in the **Piano Reduction**, Vol 2., pp. 7–8).

Example 43: Op. 55., I. mm. 135–138, Leading Voice



Example 44: Op. 55., I. mm. 125–148, durationally-reduced bass-melody



3.4 Conclusion

To conclude, let me summarize how the main theme's chromatic turn to C-sharp manifests throughout the exposition. As a unit, the chromatic pattern from E-flat through D to C-sharp creates a 012 trichord (E-flat, D, C-sharp; boxed in red in Example 45A). As we saw in the transition, part 1 (see Section 3.2.1), the initial descending trichord is counterbalanced by an ascending version (i.e., E-flat, E, F; boxed in mm. 15–19 in the *ossia* staff in A). At the end of the transition, part 1, the trichord appears once more to bring a home key HC (mm. 22–23). Thereafter, the 012 bass-melody motive appears in every subordinate theme's continuation: in the first subordinate theme, (B) Beethoven tonicizes G minor once again with the 012 trichord (F-sharp, G, F) and in the first part of the second subordinate theme he tonicizes D-flat major (C). Finally, in the second part of the second subordinate theme (D), he uses the gesture to obtain the subordinate key dominant (B-flat), prolong it, and subvert the final cadence. In short, the chromatic bass-melody gesture features prominently in the movement and it functions both as a disruptive and generative force for its expansion.

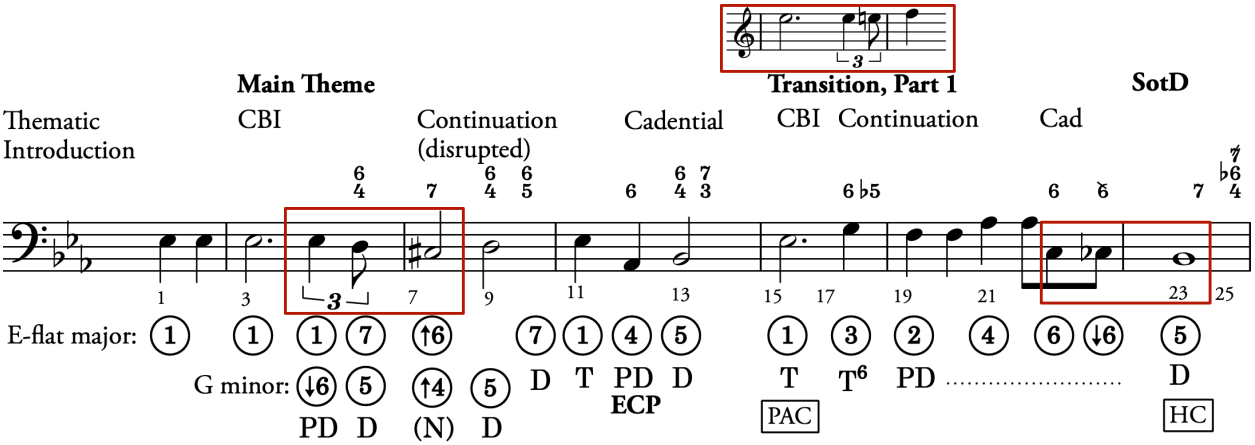
It is also notable that, when we connect all the 012 trichords together, they complete the twelve-tone aggregate. Given that these trichords all appear in the continuations of the themes and are expressed in the structural bass-melody—with the exception the last trichord in the main theme material (i.e., C, C-flat, and B-flat at the end of the transition, part 1 shown in A)—this underlying plan seems to have been a structural goal in Beethoven's compositional process and, therefore, one we will explore in the sketches.[109]

[109] On the topic of the twelve-tone aggregate in classical music, see (Burnett and O'Donnell 1996).

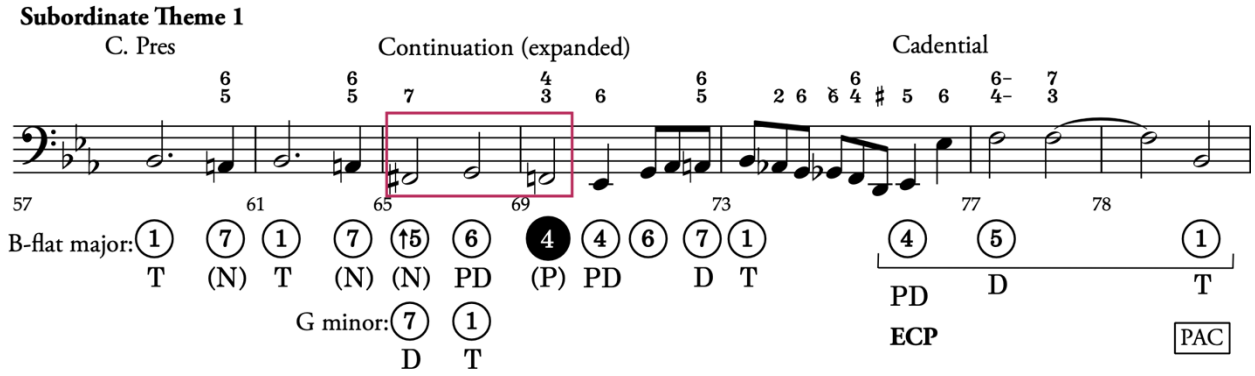
To summarize, Figure 16 provides a form-function diagram of the thematic functions of the exposition. The diagram reflects well the distribution of the thematic functions: the subordinate theme group is the most substantial part of the exposition, followed by the two-part transition and the opening main theme, which is the smallest. In the chapters that follow, we will trace how this design arises.

Example 45: (012) Trichords in the Exposition

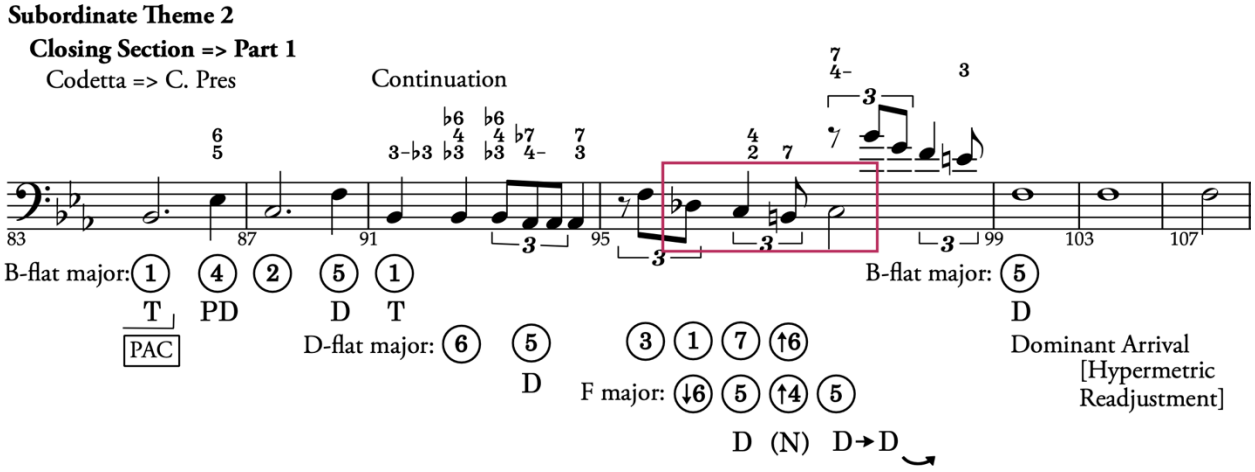
A. Main Theme, Transition Part 1, SotD (E-flat, D, C-sharp; E-flat, E, F; and C-C-flat, B-flat)



B. Subordinate Theme 1 (F, F-sharp, G)



C. Subordinate Theme 2, Part 1 (D-flat, C, B)



D. Subordinate Theme 2, Part 2 (E-flat, E, F; F, G-flat, G; and A-flat, A, B-flat)

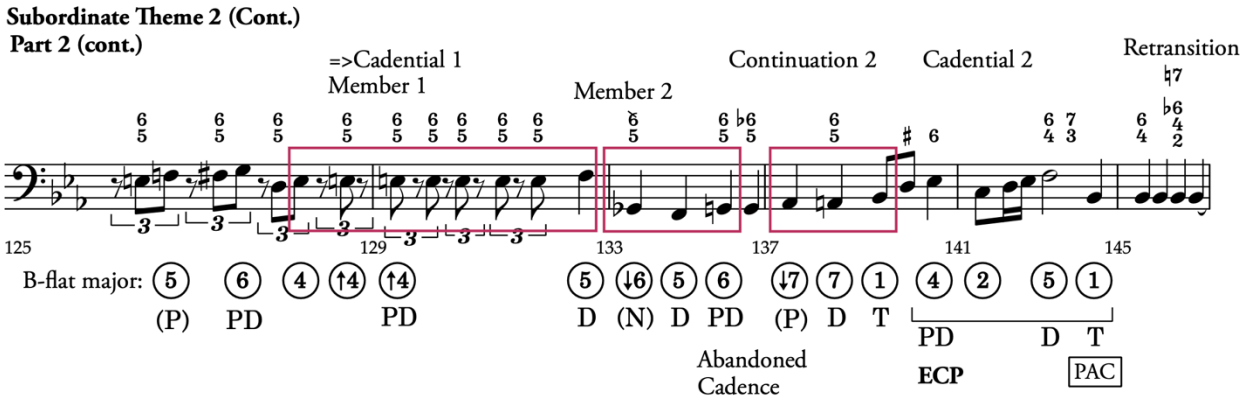
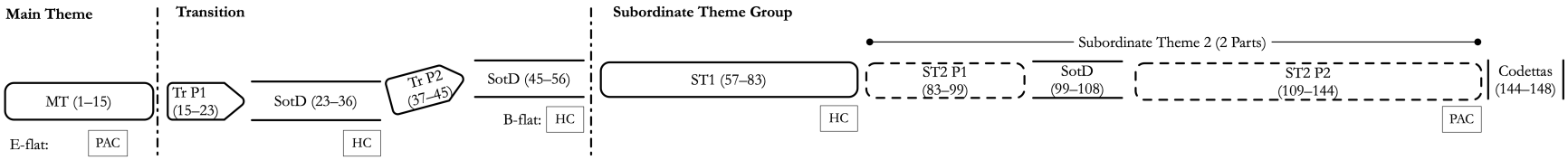


Figure 16: Final Exposition Form-Function Diagram



1 Series Sketches: The First Two Continuity Sketches CS 1.0 and Branch 1.1 (Page 11)

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4.6 Conclusion 140

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In this chapter,[110] I detail Beethoven's compositional process for the first exposition continuity sketch (CS 1.0) and its first revision branch 1.1 by reevaluating two supposed compositional "problems" with them. Contrary to prior approaches that have interpreted these reputed compositional problems as "failed experiments" or "crude" mistakes, I suggest that Beethoven intentionally crafted these designs in the service of a greater compositional goal. I begin by discussing the origin of the first problem and highlight how some prominent theorists framed and propagated the fault. I then reassess it by closely analyzing the phrase structure of the first sketch (CS 1.0). Such an analysis reveals fascinating tonal relationships that Beethoven uses to expand the exposition and to downplay the typical rhetoric of a subordinate theme by subverting a lyrical theme. With this analysis and additional evidence drawn from the first few pages in the *Eroica* sketchbook, I hypothesize that Beethoven worked on ways to displace typical elements of a subordinate theme in the exposition to rhetorically elevate the arrival of a new lyrical theme late in the development. I

[110] An article based closely on this chapter is published in the relaunched, peer-reviewed *The Beethoven Journal*; (Posen 2022). Section 4.4.1 offers a new interpretation of *ES* p. 4, st. 5; see Example 69 and Example 71.
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then reevaluate the second compositional "problem" in the context of his first branch of the continuity sketch (branch 1.1) and show how it similarly problematizes the rhetoric of a subordinate theme while expanding the exposition with a distinctive false exposition repeat.

4.1 The Two "Problems"

In the analytical commentary to their transcription of the *Eroica* sketchbook (henceforth *ES*), Lewis Lockwood and Alan Gosman summarize the form of Beethoven's first exposition continuity sketch and explain how he "disrupts" certain sonata conventions:

> Not surprisingly, the initial continuity draft (page 11, st. 1–8) has the elements of traditional sonata form: a first theme group beginning at st. 1, m. 3; a second theme group in the dominant key beginning at st. 4; and a closing theme in the dominant key on st. 8. However, Beethoven seriously disrupts these conventions by another aspect of this early sketch. The opening theme is introduced explicitly or implicitly, six times throughout the draft, frequently suggesting keys that are out of place" (Beethoven, Lockwood, and Gosman 2013a, 33).

Transcription 1.0 in Volume 2 (pp. 29–30) reproduces Lockwood and Gosman's transcription of the first exposition, adds measure numbers, overlays their analytical formal labels, and marks each entry of the main theme material with large-boxed rehearsal numbers.[111] Main theme entries 1–3 (beginning in mm. 3, 15, and 31) are explicitly notated, while entries 4–6 (beginning in mm. 72, 79, and 86) are implied by the upper-voice figuration and confirmed by subsequent exposition sketches.[112] Lockwood's and Gosman's transcription of the first continuity sketch follows

[111] The transcription also includes Alan Gosman's analytical labels from Gosman (2016), shown without quotes.

[112] Lockwood and Gosman explain that "the last three entries of the theme occur, by implication, three times in succession, although Beethoven writes out only the repeated eighth-note accompaniment" (Beethoven, Lockwood, and Gosman 2013a, 33). They base their analysis in part on parallels with the final version, mm. 408–423, which also has repeating eighth notes accompanying the main theme material. Lockwood and Gosman's views are consistent with Nottebohm, who also believes that main theme material is implied under the repeating eighth-notes: "Under the quaver passage, which in the variant follows the second part of the second group, is to be supplied a bass part formed from the third bar of the principal subject" (Nottebohm

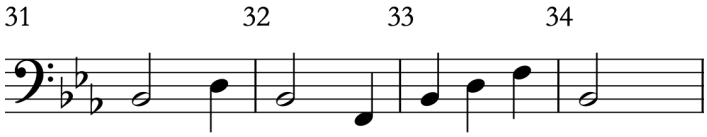
Nottebohm's closely, except they include the music that Beethoven sketched on staff 8 (mm. 107–115), which Nottebohm does not include in his continuity sketch transcription.[113]

In their commentary, Lockwood and Gosman highlight two supposed compositional problems with the first exposition continuity sketch:

> Two entries [of the main theme material] are particularly at odds with the conventions of sonata form. Beethoven's third entry [Transcription 1.0, p. 29, m. 31] disregards the convention that the second theme should be the earliest statement in the dominant key. Here the opening theme appears in the dominant, prior to the second theme's arrival [m. 55]. The harmonic import of the second theme is weakened because it simply stays in, rather than announces the dominant key. The final entry [p. 30, m. 86] is also problematic because with it Beethoven ignores the principle that the second theme group should remain in a subordinate key (here the dominant key B-flat) and not modulate back to the tonic key. The problem is exacerbated here since the tonic material is the opening theme" (Beethoven, Lockwood, and Gosman 2013a, 33).

The first problem they identify, the main theme entering on dominant harmony before the "second theme" (Example 46, mm. 31–34), has a long history beginning with Nottebohm (1880). The second problem they point out, the main theme "modulating back to the tonic key" in the subordinate theme, appears to be newly identified.[114] Let us turn now to the first problem.

Example 46: CS 1.0, mm. 31–34; Main Theme material on the dominant (*ES* p. 11, st. 2b)

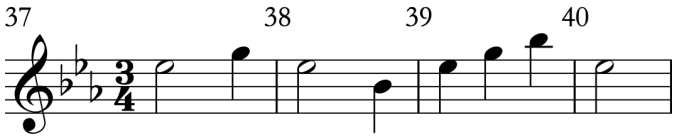


1979, 63); in German: "Den in erwähnter Variante dem Theme des zweiten Seitensatzes folgenden Achtelnoten ist eina us dem dritten Takte des Hauptthemas gebildet Bassgang unterzulegen" (Nottebohm 1880, 19).

[113] (Nottebohm 1880, 6–7); Nottebohm's sketch constitutes mm. 1-104 of the transcription shown in Volume 2.

[114] For Lockwood and Gosman's discussion of this second problem, see pp. 34–35.

Example 47: Op. 55, I., mm. 37–40; cue staff reduction of Transition, Part 2 Compound Basic Idea (final)



4.2 Problem #1: B-flat major Main Theme Material Before the Subordinate Theme

In his seminal monograph on the *Eroica* sketches, Nottebohm explained that it was "not hard to surmise" why Beethoven revised the dominant entry of main theme material (Example 46, mm. 31–34) to start (in the final work) with tonic harmony instead (Example 47), because "the modulation to B-flat major would simply have weakened the ensuing entry of the second group melody [i.e., Example 48] in the same key" (Nottebohm 1979, 54).[115] This seemingly logical explanation for why Beethoven revised this passage has been adopted by numerous scholars since. For example, after summarizing Beethoven's compositional approach as "a method of a man who thoroughly knows his own mind, and who needs no alcohol to encourage him to put down a crude sketch of his thoughts before he is ready to present them accurately," Tovey stated that "Beethoven could cheerfully make the most radical blunders in his first sketches with the certainty that the next day five minute's work would substitute, if not the right thing, something altered in the right way" (Tovey 1941, 80). The "radical blunder" referred to here is, in Tovey's words, the "persistent intrusion of a passage on the dominant for which there was no room in the exposition," that is, the dominant entry of main theme material that Nottebohm first highlighted (Example 46, mm. 31–34). According to Tovey, Beethoven may not have been drunk when he wrote the passage,[116] but writing the main theme material in B-flat major before the subordinate theme in the same key was an obvious gaffe in need of correction.

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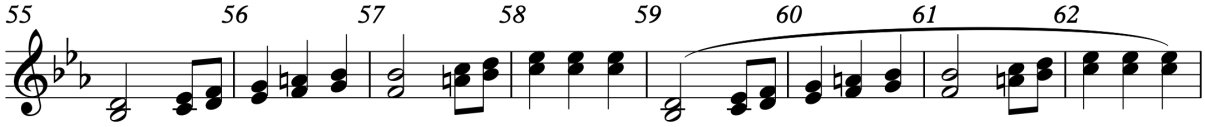
[115] Beethoven revised this passage with his typical "Vi = de" notation, where the "Vi" marks the point that the material indicated by "=de" should be inserted. "Vide" in Latin means "see" or "refer to." See (Beethoven, Lockwood, and Gosman 2013a, 11 staff 2 & page 10 staff 5).

[116] Tovey preceded his discussion of Beethoven's *Eroica* sketches with a discussion of inhibitions and the creative process. He casually lectured: "A sober man is afraid of making a fool of himself, and a sober artist whose self-criticism checks his inspiration will at all events start his work, if not continue it, more easily if this check is removed. But there is no reason to resort to drugs to remove the check. Beethoven has left us the record of innumerable sketches of almost all his works, from the smallest to the greatest" (Tovey 1941, 79).

Example 48: CS 1.0, mm. 55–62; Compound Basic Idea (*ES*, page 11, st. 4)



More recently, Gosman reinvigorated the discussion about this B-flat major main theme material in a 2016 conference presentation. He recapitulated Nottebohm's and Tovey's observations:

> I worry about the repercussions of having a dominant presentation of the opening theme [Example 46] prior to the entry of the second theme [Example 48]. There is no need to foreshadow the expected dominant key of the second theme in such a heavy-handed manner. As a result, the dominant version of the opening theme undermines the second theme's arrival.[117]

In other words, Beethoven tried to bring back the main theme material on the dominant before the arrival of the subordinate theme group in the first sketch, but this experiment was ultimately rejected because it weakened the harmonic contrast of the subordinate theme. As Lockwood and Gosman put it, much like Tovey did half a century earlier, "The original B♭ entry of the theme . . . is unsuitable for its originally intended place in the exposition" (Beethoven, Lockwood, and Gosman 2013a, 34).

At first glance, Nottebohm's, Tovey's and Gosman's explanation for why Beethoven revised this so-called "errant" entry of dominant main theme material seems cogent. But further inquiry into subsequent sketches reveals that this explanation twists Beethoven's compositional process into something more puzzling and mysterious. As Tovey observed, "Beethoven wrote several sketches of this opening before he could get rid of a tiresome tendency of the main theme to appear on the dominant before its proper third statement."[118] Lockwood and Gosman expressed similar surprise

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[117] I am grateful to Alan Gosman for sending me the script of his conference presentation, "Before its Time: Beethoven's Experiments with the Dominant Key Early in Sonata-Form Movements" given at the New Beethoven Research Conference on November 2–3, 2016 in Vancouver, British Columbia (Canada).

[118] (Tovey 1941, 82). For a similar instance of the main theme material entering on B-flat major before the start of the passage that corresponds to the final version's subordinate theme (i.e., the theme starting in m. 57 in the piano reduction in Volume 2), see CS 3.0, mm. 43–46 (*ES*, p. 14, st. 5) and CS 4.0, mm. 43–46 (*ES* p. 20, st. 6).

when they discovered Beethoven's resistance to revise the problems they identified in the first sketch:

> It is difficult to imagine that these untenable thematic assertions had any chance of surviving through to the final version. Yet a surprising number of future drafts stubbornly maintain the opening theme's intrusion into domains typically reserved for other themes and other keys . . . These 'errant' sketches are not simply deleted from later drafts of the final version. Instead, Beethoven struggles to preserve some, if not most, of their features in a variety of ways (Beethoven, Lockwood, and Gosman 2013a, 33).

The general sentiment in these statements attest to the challenges that scholars have encountered while trying to understand Beethoven's compositional process for these early exposition sketches. Why did he keep writing the seeming "errant" entries of the main theme material in subsequent drafts? If we accept Nottebohm's explanation for why Beethoven revised the dominant entry of main theme material before the arrival of the subordinate theme, we face a serious dilemma: the explanation for Beethoven's revision makes sense, but his large-scale compositional process becomes inexplicable because he doesn't revise the passages as we would expect.

To overcome the dilemma of creating logical explanations that do not agree with what we find in later sketches, I propose that we change our perspective from one that critiques the dominant entry to one that valorizes it. In other words, let us treat the problem as if it were a solution to some greater plan. Our question can turn from "why did Beethoven remove or revise this passage?" to "what was Beethoven trying to achieve with this initial design?". In what follows, I try to answer this new question by reexamining the first continuity sketch (CS 1.0) by means of a detailed phrase-structural analysis.

4.3 Reevaluating Problem #1: B-flat major Main Theme Material

4.3.1 Analysis of Continuity Sketch 1.0 (ES 6, p. 11, st. 1–8)

To help keep track of the different sketch variants and view examples in context, the reader should view **CS 1.0** in **Volume 2** (pp. 31–33) alongside this section. Examples that are not from this continuity sketch will be provided in the text. (Note too that some examples from CS 1.0 have been

placed in the text to fasciliate comparisons and simplify some explanations). Every extracted example placed in the text includes a reference to the location of the sketch in the sketchbook written as *ES* (for *Eroica Sketchbook*) followed by the page number and staff number. In some cases, the position of the material on the staff is indicated with "a" and "b," where "a" refers to the left-hand side of the staff and "b" refers to the right-hand side.

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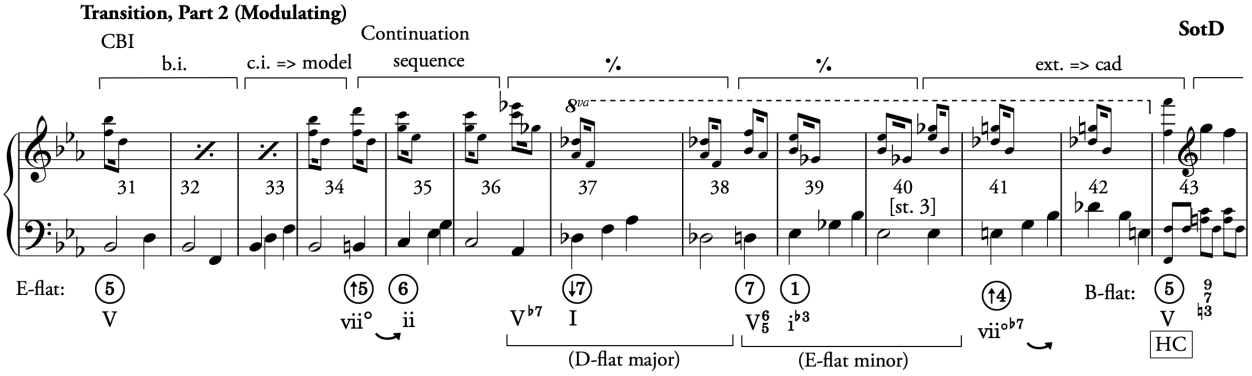
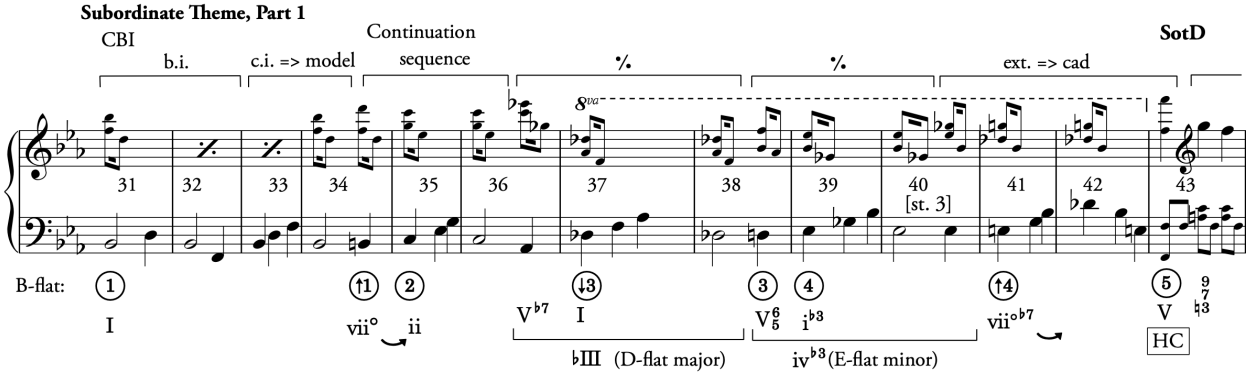
From a form-functional perspective, the B-flat major main-theme material is built as a CBI (CS 1.0, mm. 31–34); in this context, it can be analyzed in two different ways. In the first reading, the CBI expresses dominant harmony in the home key, which begins the second part of a two-part transition (Tr P2) (reproduced in Example 49, mm. 31–34). In the second reading, the CBI brings tonic harmony in the subordinate key, which starts the first part of the subordinate theme (ST P1) (as alternatively annotated in Example 50, mm. 31–34).

Example 49: CS 1.0a, mm. 31–43; interpreted as Modulating Transition, Part 2 (*ES* p. 11, st. 2)



Example 50: CS 1.0b, mm. 31–43; interpreted as Subordinate Theme, Part 1 (*ES* p. 11, st. 2)



It might seem as though having two separate but equal form-functional readings of this passage—transition on the one hand and subordinate theme on the other—owes to the passage's lack of formal clarity, which could point to a weakness in Beethoven's design.[119] On the contrary, I hypothesize that these dual interpretations are crucial to understanding the larger goals of this material that he may have intended. Before we entertain this hypothesis, however, let me first flesh out both form-function interpretations and detail the formal consequences that result.

4.3.2 Interpretation #1: mm. 31–42 as a Modulating Transition, Part 2; "CS 1.0a"

In this section, I develop the first interpretation of mm. 31–43 as a modulating, second part of the transition (Tr P2). To understand how this analysis arises, let us turn to the beginning of the sketch (Vol. 2, p. 31). After a main theme (mm. 1–15) that matches exactly the final version, the music that precedes the dominant entry of main theme material (mm. 15–30)—which also corresponds closely with final version of the piece—can be unambiguously read as a non-modulating transition (mm. 15–22) with a post-cadential standing on the dominant (mm. 23–30). Because this transition does not modulate by confirming the subordinate key with a SK: HC (i.e., F major as V of B-flat major), a listener may anticipate a subsequent modulating second part of the transition to accomplish this task. Thus, when the B-flat major main theme material arrives in m. 31, we can hear it continuing the dominant harmony prolonged in the prior standing on the dominant. This home key dominant CBI (mm. 31–34) is therefore understood to begin the second, modulating part of the exposition's two-part transition.[120] For future comparisons, we will refer to this interpretation (a two-part transition) in reference to the complete sketch as CS 1.0a, and will call the other interpretation CS 1.0b.[121]

The home key dominant B-flat major harmony that starts the modulating, second part of the transition (mm. 31–34) is unusual, given that the tonal goal of the transition is to modulate into B-

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[119] Form-functional theory does not require there to be a single reading of a passage and multiple interpretations for a single passage do not carry any negative associations. Varying form-functional interpretations merely reflect the complexity of some passages' intrinsic temporal expressions.

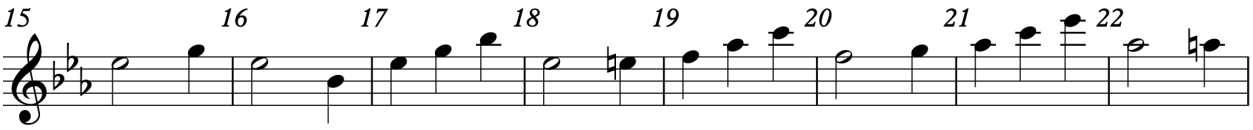
[120] Caplin (1998, 137) observes that in a two-part transition, "frequently, the second part of a two-part transition begins with the basic idea of the main theme supported by the home-key tonic." Thus, although the dominant harmony is unusual, the re-entrance of main theme material is typical for the second part of a two-part transition.

[121] The "a" and "b" here are not to be confused with the staff labels "a" and "b," which refer to the location of material on the staff.

flat major. Nevertheless, the clear standard pivot harmony (submediant becomes the supertonic in the subordinate key in m. 35) and subsequent subordinate key HC (m. 43) projects additional characteristics of a modulating part of a two-part transition.[122] A listener could hear the second, modulating part of the transition as a transposed version of the first, non-modulating part (compare part 1, A. with part 2, B. in Example 51). In the second part (B), the stepwise sequencing of the contrasting idea signals a modulating continuation (mm. 35–40, see CS 1.0 in Volume 2, p. 31), which is followed by a subordinate key half cadence (SK: HC) in m. 43 (p. 32), and a post-cadential standing on the dominant (mm. 43–54). Figure 17 summarizes the form of CS 1.0a's mm. 1–54 in a form function diagram.

Example 51: CS 1.0, Transition Part 1 (A. top system, mm. 15–22) compared to Transition Part 2 (B. bottom system, mm. 31–38)

A.



B.

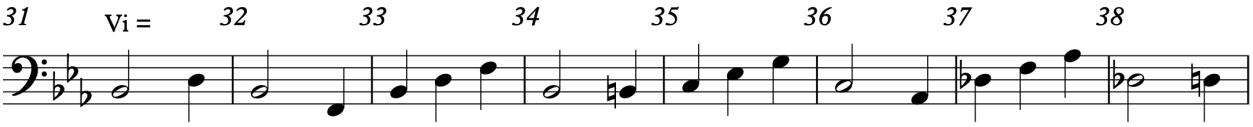
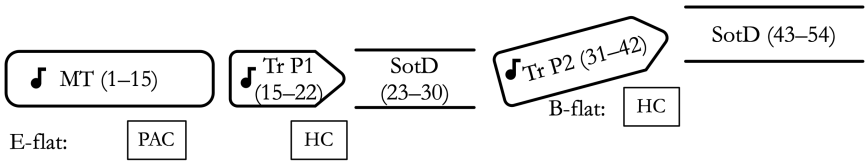


Figure 17: CS 1.0a, mm. 1-54; Form function diagram (music icon indicates main theme material)

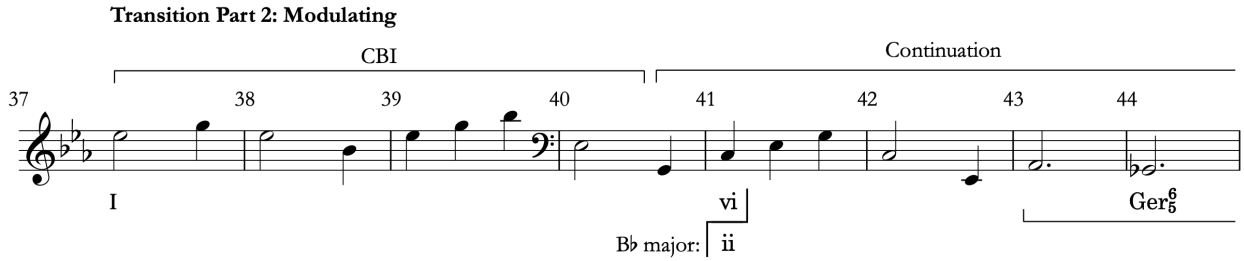


In addition to the unconventional B-flat major beginning, the second part of the transition is distinctive for its unusual continuation (Volume 2, p. 31, mm. 35–42). After the customary pivot

[122] Caplin remarks that the move to the submediant, which pivots to become the supertonic in the subordinate key, is so common that it is akin to "waving a flag" to a listener to inform them that the modulation is about to take place; (Caplin 2013, 317; see also 1998, 127).

harmony (i.e., vi => ii in mm. 35–36), Beethoven chromatically sequences the contrasting idea to tonicize the remote keys of D-flat major (mm. 37–38) and E-flat minor (mm. 39–40). Compared to the corresponding passage in the final piece, the additional stepwise ascent in the sketch is longer and more harmonically and contrapuntally complex (compare mm. 31–42, with the final version of this passage in Example 52). It is challenging to realize a fully successful figuration to place atop the bass voice of the sketch, for instance, because the chromatically ascending stepwise triadic pattern exposes parallel motion. In my reconstruction of this sketch (mm. 31–42), the upper voices follow a leapfrog-like motion in mm. 34, 36, 38, and 40 to avoid parallel octaves with the bass. As he could have easily modulated to the subordinate key after the pivot (as he does in the final version shown in Example 52, mm. 41–44), what was he trying to accomplish with this unconventional chromatic stepwise ascent in the sketch?

Example 52: Op. 55 I., mm. 37–44 (final)



To understand why he may have crafted this atypical transition that tonicizes D-flat major and E-flat minor in the first sketch, we need to better understand what happens afterwards in the subordinate theme group. At the beginning of the fourth staff on page 11 of the sketchbook, Beethoven writes a clear compound presentation by repeating a 4-m. CBI that initiates the start of the subordinate theme, part 1 (Volume 2, p. 32, mm. 55–62). An excerpt of this function extracted from Beethoven's sketchbook is shown in Sketchbook Excerpt 2.[123] A continuation follows this compound presentation in mm. 63–65 with a new 2-m. idea that brings a faster surface rhythm. Thereafter, another 2-m. fragment follows (mm. 65–66) that expresses supertonic harmony. Finally, a cadential progression (mm. 67–70) concludes the first part of the subordinate theme with an internal HC in m. 70 that is prolonged one additional measure (m. 71). In my reconstruction of the continuation (mm. 63–71), I harmonize Beethoven's ascending upper line in mm. 66–69 with a

[123] In Sketchbook Excerpt 2, the faint vertical line and two messy dots at the beginning of the staff indicate the repetition of the Compound Basic Idea, which builds a Compound Presentation.

descending ⑥–⑥–⑤motion in the bass (i.e., G in mm. 66–68, G♭ in m. 69, and F in m. 70) and use a German augmented sixth chord in m. 69 as a pre-dominant to confirm the ultimate dominant HC (F major as V of B♭ major) as Beethoven commonly does in other pieces and earlier in the transition, part 1 in mm. 22–23. In sum, the music in mm. 55–71 forms a tight-knit compound-sentence theme type that closes with a HC.[124] Figure 18 summarizes the formal layout of the music in CS 1.0a analyzed up to this point (mm. 1–71).

Sketchbook Excerpt 2: *ES*, p. 11, st. 4 (Subordinate Theme, Part 1)

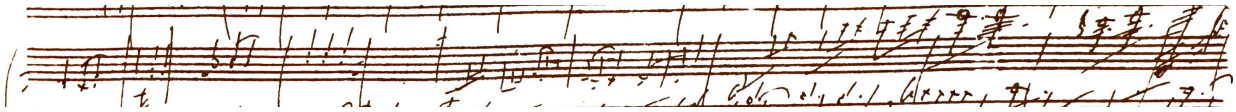
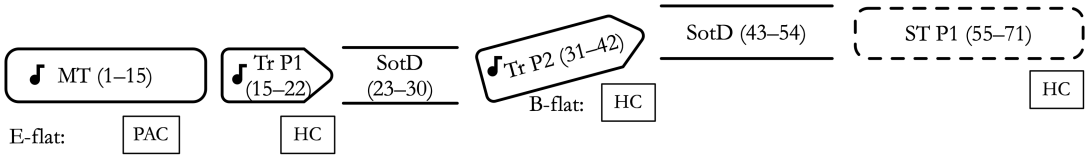


Figure 18: CS 1.0a, mm. 1–71 diagram (music icon indicates main theme material)



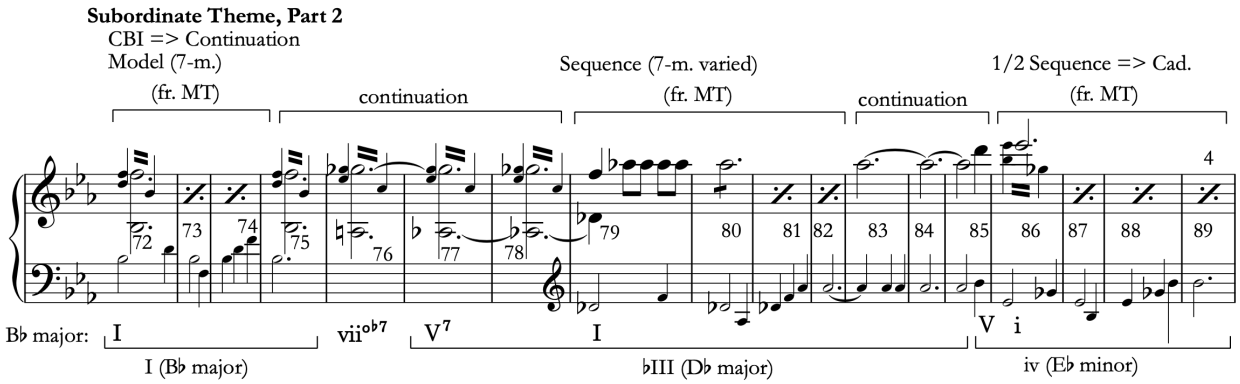
After hearing the internal SK: HC in mm. 70–71, we would expect additional music to lead the subordinate theme to close with a stronger PAC. In pieces published before the *Eroica*, Beethoven employed one of two main strategies after an internal HC: he would write new continuational or cadential material and thus resume the theme; or, he would establish a new basic idea and corresponding initiating function that would initiate a second part of the subordinate theme.[125] In this sketch (mm. 72–89, reproduced in Example 53), Beethoven adopts the second strategy by establishing a new initiating function, but he surprises us by using the main theme

[124] The half cadence is understood to be "internal" because it does not satisfy the formal goal of the subordinate theme to close with a perfect authentic cadence; (Caplin 2013, 376).

[125] See Caplin (2013, 377). In all the first movements to the piano sonatas that precede the *Eroica*, Beethoven only wrote two subordinate themes that are split into two parts with an internal half-cadence: Op. 2 No. 3, i (ST P1 = mm. 27–43, ST P2 = mm. 47–77) and Op. 10 No. 2, i (ST P1 from mm. 18–36, ST P2 from mm. 36–55). The subordinate theme group in every other sonatas' first movement is expanded primarily by other means, usually through the addition of self-contained subordinate themes that each close with their own PACs (i.e., Op. 2 No. 2, Op. 7, Op. 10 No. 3, Op. 13, Op. 14 No. 1, Op. 14 No. 2, Op. 22, Op. 28, Op. 31 No. 1, Op. 31 No. 2, Op. 31 No. 3, and Op. 49 No. 2), or by cadential deviations, usually evaded or abandoned cadences (e.g., in Op. 10, No. 1 and Op. 49 No. 1).

material to accomplish this task. After the CBI (m. 76), we expect a continuation or cadential function. What follows, however, is unusual, because he sequences the initial CBI (mm. 79–82 and mm. 86–89), which leads us to retrospectively understand this passage as a large continuation function (Example 53, mm. 72–89).[126] For clarity, I have labeled this material the second part of the subordinate theme. This function is remarkable because it uses main theme material and it tonicizes the same three keys that were prominently emphasized earlier in the second part of the transition (compare Example 53, mm. 72–89 with Example 54, mm. 31–40): B-flat major, D-flat major, and E-flat minor.[127] Compared to the first part of the subordinate theme (mm. 55–72), a tight-knit compound sentence, the beginning of second part of the subordinate theme (Example 53, mm. 72–89) is considerably more loose-knit because it is built as an enlarged continuation.

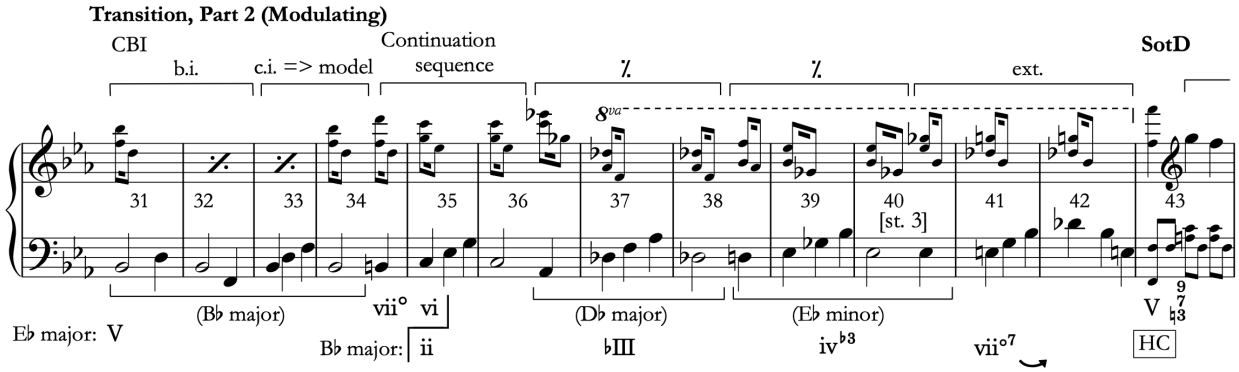
Example 53: CS 1.0, mm. 72–89; Subordinate Theme, Part 2, Continuation (*ES* p. 11, st. 5–6a)



[126] Beethoven does not explicitly write the main theme material in mm. 72–89, but subsequent sketches strongly confirm this hypothesis. I thus follow Lockwood's and Gosman's interpretation that Beethoven implies main theme material in this passage; (Beethoven, Lockwood, and Gosman 2013a, 33).

[127] Lockwood and Gosman suggest that Beethoven brought back the main theme in E♭ *major*. I propose instead that Beethoven brings back the main theme material in the *minor* subdominant of B♭ major, that is, E♭ minor. As I will discuss below, G♭ plays an important role in this sketch and it seems likely that Beethoven would have wanted to make the cross reference with the prior second part of the transition and its corresponding standing on the dominant. Moreover, a G♮ (if the theme is realized in E♭ major) sounds out of place following the prior D♭ major entry in mm. 79–85 (Example 53).

Example 54: CS 1.0, mm. 31–43; interpreted as Modulating Transition, Part 2 (*ES* p. 11, st. 2)



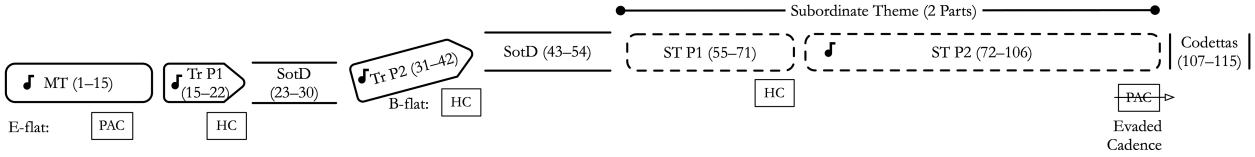
When we consider the tonal scheme found in the second part of the subordinate theme (mm. 72–89) in relation to the modulating, second part of the transition (mm. 31–43), the dominant harmony that starts the latter does not appear to be a "blunder," as Tovey would have it, but rather a striking design choice in the service of a greater compositional goal. In the context of the theory of formal functions, Beethoven's choice to start the transition's second part (mm. 31–34) with main material expressing dominant harmony, while unorthodox, poses no existential threat to the following subordinate theme. Form-function theory requires that a subordinate theme start in a key besides the home key and end with a PAC in the subordinate key; the theory does not posit any restrictions for the *material* that begins the subordinate theme.[128] Moreover, the musical material that makes up the second part of the transition clearly fulfils the three primary transition formal-functions: it destabilizes the home key by providing the customary pivot and confirming the modulation with a subordinate key HC, loosens the formal organization through accelerating and sequential fragmentation, and liquidates the characteristic melodic material of the main theme function through the subsequent post-cadential standing on the dominant.[129] In short, the B-flat entry that starts the second part of the transition (mm. 31–34), along with the subsequent tonicizations of D-flat major (mm. 36–38) and E-flat minor (39–40) helps to unify and further motivate the unconventional tonal excursions and thematic design of the second part of the subordinate theme (mm. 72–89), which reiterates these same harmonies.

[128] Caplin, *Analyzing Classical Form*, 353–54. Other recent sonata theories, e.g., Hepokoski and Darcy, 2006, place additional restrictions on what must precede the beginning of the Subordinate Theme, such as the "Medial Caesura," a theoretical position not adopted in the present study.[129] Ibid., 308.

[129] Ibid., 308.

Let us return to subordinate theme, part 2 (Volume 2, pp. 32–3, mm. 72–94). After leading the listener through the re-emergence of main theme material in the keys of D-flat major (♭III) and E-flat minor (iv), Beethoven breaks out of the main-theme dominated passage with a two-measure model-sequence of a diminished-seventh harmony voiced at registral extremes (mm. 90–93).[130] The chromatic ascent from F-sharp (↑⑤) to G (⑥) in the bass voice moves ultimately to a strong penultimate cadential 6/4 over ⑤ in m. 94. The upper-voice descending patterns (mm. 94–95) and subsequent figuration in mm. 99–106 that resembles trills—characteristic features of a soloist's final trill cadence in a concerto[131]—strongly suggest an impending PAC. Surprisingly, however, the PAC never materializes and an energy reducing passage that imparts closing section rhetoric ends the sketch (mm. 107–115). The subordinate theme group thus fails to secure a subordinate key PAC, which greatly problematizes the function. Figure 19 summarizes the complete form-functional reading of the first sketch with the dominant entry of main theme material interpreted as the start of the second part of the transition (i.e., CS 1.0a).

Figure 19: CS 1.0a, mm. 1–115; Form function diagram, interpreted as main theme, two-part transition, two-part subordinate theme (music icon indicates main theme material)



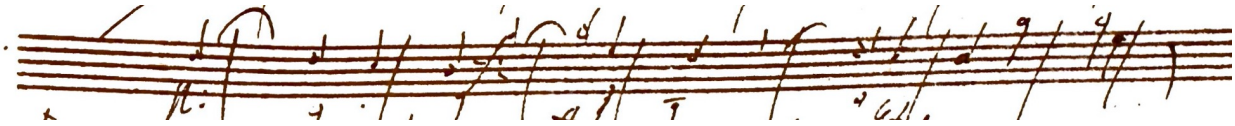
Nottebohm's transcription suggests that Beethoven ended the sketch on a dominant harmony in m. 106 (see the transcription in Volume 2 by Lockwood and Gosman, which matches Nottebohm's transcription). I follow instead Lockwood and Gosman's parsing of this page in the sketchbook, which includes the closing-section material Beethoven wrote on staff 8 (mm. 107–115;

130 In my piano reconstruction of this passage, I have the upper voice continue the E♭6 (see m. 90 in Volume 2) that was established in m. 86, which moves chromatically upwards to connect with the F6 in m. 94 that starts a cadential gesture.

131 On the concerto soloist's cadential trill that characteristically ends the exposition, see Danuta Mirka, "The Cadence of Mozart's Cadenzas," *Journal of Musicology* 22, no. 2 (2005): 292–325. See also Caplin, *Classical Form*, 247.

a facsimile excerpt of this passage is provided in Sketchbook Excerpt 3).[132] The whimsical descending gestures that make up this closing section expands the grouping structure from 2-m. in the preceding measures (mm. 101–106) to two 4-m. groups (mm. 107–111 and mm. 111–115), and the straightforward cadential bass motions (in m. 108– 111),[133] which would normally function to dissipate the energy accumulated in reaching the subordinate theme PAC, strongly implies a post-cadential closing section, even though the requisite PAC was evaded. It is also possible that Beethoven envisioned ending the theme with a cadence but did not sketch it.

Sketchbook Excerpt 3: *ES*, p. 11, st. 8 (Codetta-like material)



The closing section material in mm. 107–115, which follows the cadential trill, does not return in any of the subsequent drafts of the exposition, but Beethoven uses this energy reducing tactic after a cadential trill in his next sketch, discussed further below, and he employs this same strategy at the end of the exposition and recapitulation in his Cello Sonata, Op. 69, I (an excerpt from the end of the exposition of Beethoven's cello sonata is shown in Example 55).[134] Compare the trill and closing section material in the sketch (mm. 105–115) with the corresponding similar passage in the Op. 69 Cello Sonata in Example 55, mm. 89–95. Given that this closing section material does not fit elsewhere, it seems likely that Beethoven wrote it to be part of the first exposition sketch (CS 1.0), but quickly abandoned the idea in subsequent sketches.

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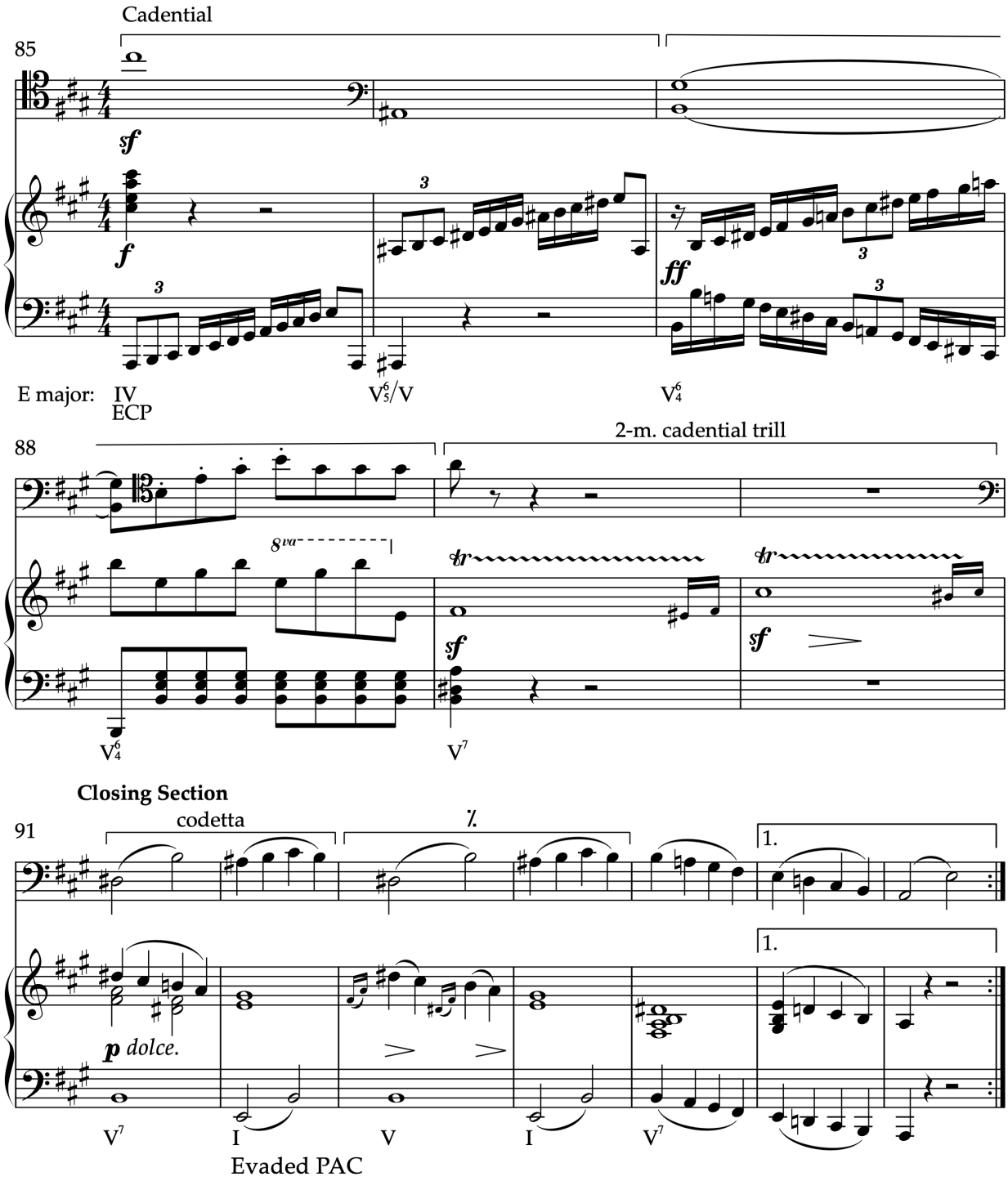
[132] Although Lockwood and Gosman (2013) use the word "theme" for this closing material in their commentary, they did not intend to suggest that the material in mm. 107–115 formed another theme in a form-functional sense of the word. I thank Alan Gosman for clarifying further their view with me. Caplin 1998 argues that no functional distinction between a "closing theme" and "subordinate theme" exists. Form-function theory uses the term closing *section* to denote material that functions as codettas after a structural PAC that ends the subordinate theme function; (Caplin 1998, 122).

[133] For a discussion of the bass motion ③–④–⑤–① projecting cadential function, see (Caplin 1998, 247).

[134] I thank Alan Gosman for showing me the parallel construction between this Eroica sketch and Op. 69.

Example 55: Beethoven, Op. 69 I., mm. 85–97

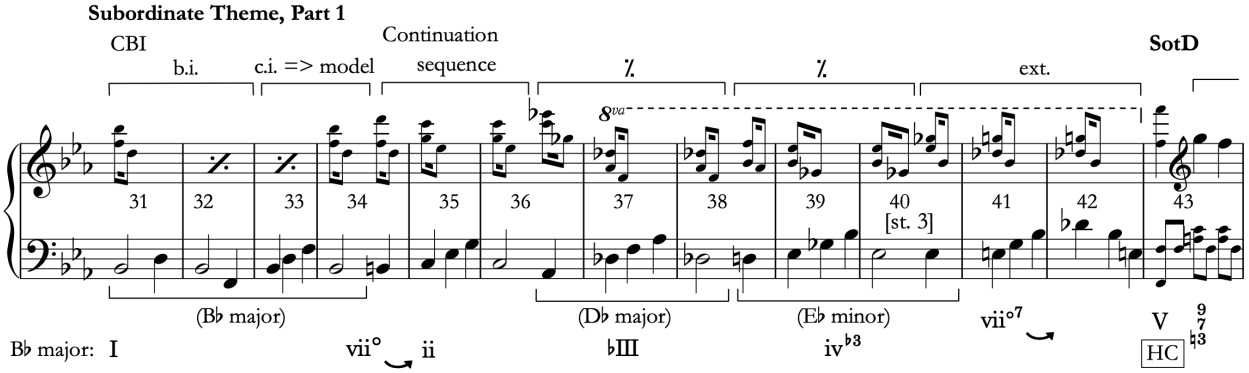


For both form-function theory and more traditional theories, like those espoused in Ratner 1980, the final evaded PAC in the sketch dramatizes the subordinate theme in multiple ways. In addition to the irregular start of second part of the transition with dominant harmony before the

subordinate theme, which does weaken the *harmonic* import of the start of the subordinate theme, the final evaded cadence, which is supposed to confirm the subordinate key, is even more remarkable.[135]

4.3.3 Interpretation #2: Measures 31–42 as the Subordinate Theme, Part 1 (CS 1.0b)

Example 56: CS 1.0, mm. 31–43; interpreted as Subordinate Theme, Part 1 (*ES* p. 11 st. 2)



Now that we have explored the interpretation that considers the dominant entry of main theme material to start the second part of a two-part transition, let us turn now to the alternate interpretation, which I will name CS 1.0b. Instead of hearing the B-flat major harmony in mm. 31–34 (Example 56) as dominant harmony of E-flat major, we can alternatively perceive it as tonic harmony in B-flat. If we interpret the B-flat major main theme material as a tonic harmony, then there is strong evidence for reading the CBI and the material that follows (mm. 31–42) as the subordinate theme, part 1 (ST P1).

If the B-flat version of main theme *material* starts the subordinate theme, part 1 then the music that precedes the ST P1 (mm. 15–30) functions as a non-modulating transition that ends with a "bifocal close" (m. 23) whose dominant is prolonged through a standing on the dominant (mm. 23–30).[136] In this scenario, the dominant harmony concluding the non-modulating transition immediately becomes tonic harmony in the subordinate key (i.e., V of E-flat in m. 23 becomes I of B-flat major in m. 31). Beethoven thus plays with the dual "bifocal time-spans" (harmonic

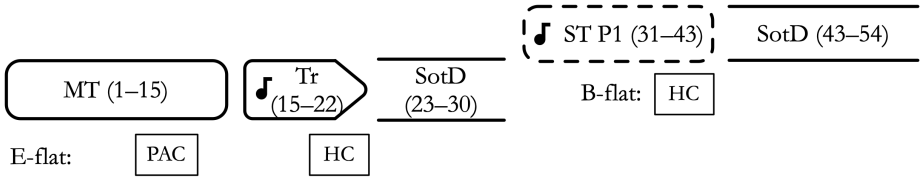
[135] Ratner notes, for example, that "Delay in establishing the second key at the beginning of key area II can dramatize its final confirmation at the end of the exposition" (Ratner 1980, 225).

[136] For more information on non-modulating transitions, see (Caplin 1998, 127). On the term "bifocal close" see (Winter 1989).

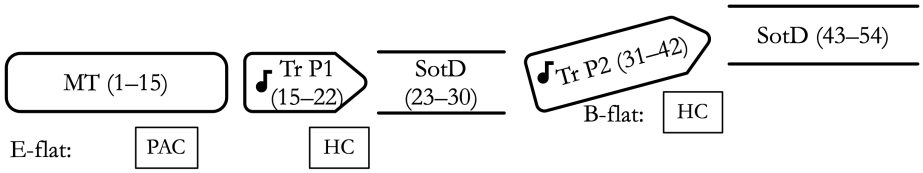
interpretations) of the B-flat major harmony that ends the non-modulating transition: when we "focus" backwards (mm. 23–30), the B-flat harmony functions as an ultimate dominant, but when we look forwards (mm. 31–34), it functions as an initiating tonic in the subordinate key (B-flat major). Figure 20 depicts this new form-function reading of mm. 1-54 (CS 1.0b, top of the figure, A.) compared to the prior form-function interpretation (CS 1.0a, bottom of the figure, B.).

Figure 20: Two form-function diagrams of Beethoven's first exposition sketch, CS 1.0 mm. 1–54 (*ES* p. 11, st. 1–3)

A. CS 1.0b, mm. 31–43 as the Subordinate Theme, Part 1



B. CS 1.0a, mm. 31–42 as the modulating, Transition Part 2

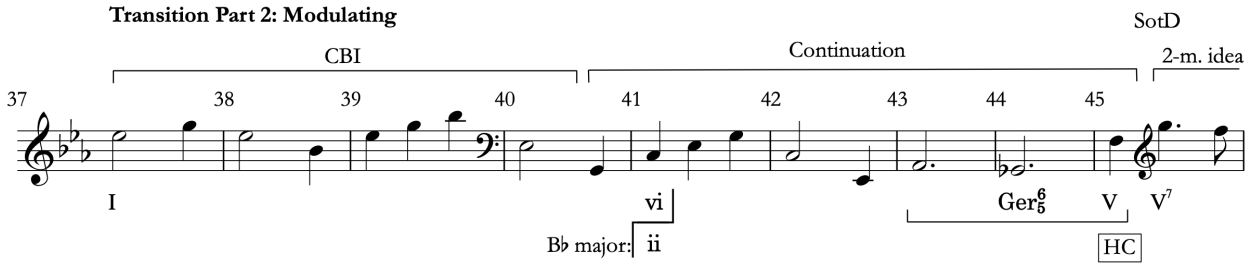


In this alternate reading of mm. 31–42, the subordinate theme (part 1) starts with main theme *material* in the subordinate key (B-flat major). It seems plausible that prior studies would not have considered hearing this passage as the start of the subordinate theme group because traditional sonata theories do not distinguish between musical material—rhythmic ideas, figuration, texture, and so forth—and function—how those material contents are formally deployed (e.g., their harmonic organization and grouping structure). This lack of distinction does not completely explain, however, why this interpretation has been overlooked. Given that mid twentieth-century sonata theories purport to emphasize key relationships above thematic or melodic differentiation to distinguish the so-called "first theme group" from the "second theme group," we might expect scholars to consider this passage as the start of the subordinate theme, given that it can be interpreted to reside in the subordinate key (B-flat major).

Additional factors have likely contributed to scholars overlooking the possibility of the subordinate theme group beginning with the B-flat entry of main theme material. The passage that

corresponds to this material in the final Op. 55, I (Example 57, mm. 37–45) clearly projects transition function. Additionally, it must have seemed inconceivable to understand this passage as the start of the subordinate theme group considering how scholars debate about where it begins in the final version of the piece.[137] Finally, the passage does indeed have characteristics of transition function, as I discussed above (it includes the standard submediant pivot harmony and it includes extensive sequencing, see section 4.3.2): still, if we restrict our purview to the sketch and hear a prior bifocal close in m. 23, the B-flat version of main theme material can be viably interpreted as starting the subordinate theme group.

Example 57: Op. 55 I, mm. 37-45; Modulating Transition, Part 2 (final)

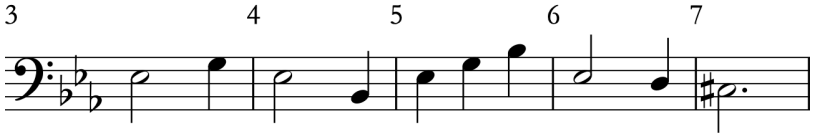


Measures 31–42 have several interesting pitch-class features that have not yet been discussed. After completing the B-flat major CBI, the principal voice steps upwards from B-flat through B-natural to C. This chromatic ascent mirrors the same chromatic descent of the CBI in the main theme. As shown in Example 58A, the material in the main theme function (mm. 6–7) moves chromatically downwards from E-flat through D to C-sharp, whereas the later, subordinate theme, part 1 version of the main theme material (B, mm. 34–35) moves upwards from B-flat through B-natural to C. With these two chromatic moves, Beethoven completes the chromatic hexachord between pitch classes E-flat down to B-flat (Example 59). Remember these six pitch classes as we will return to them again.

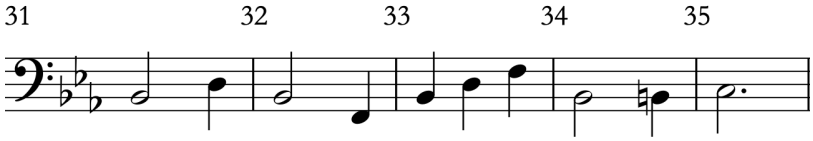
[137] For a summary of scholars' different views on where the subordinate theme starts in the final version of the first movement, see (Drabkin 2020, 82–86).

Example 58: Main Theme Material in Main Theme Function as mirroring the same material in the Subordinate Theme Function

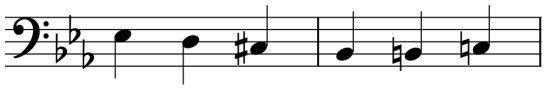
A.) Mm. 3–7



B.) Mm. 31–35

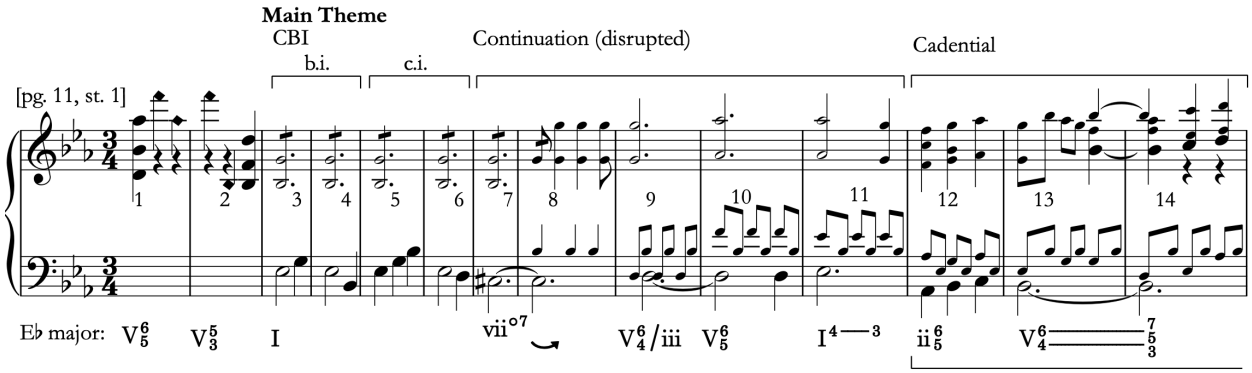


Example 59: Chromatic hexachord between E♭ and B♭

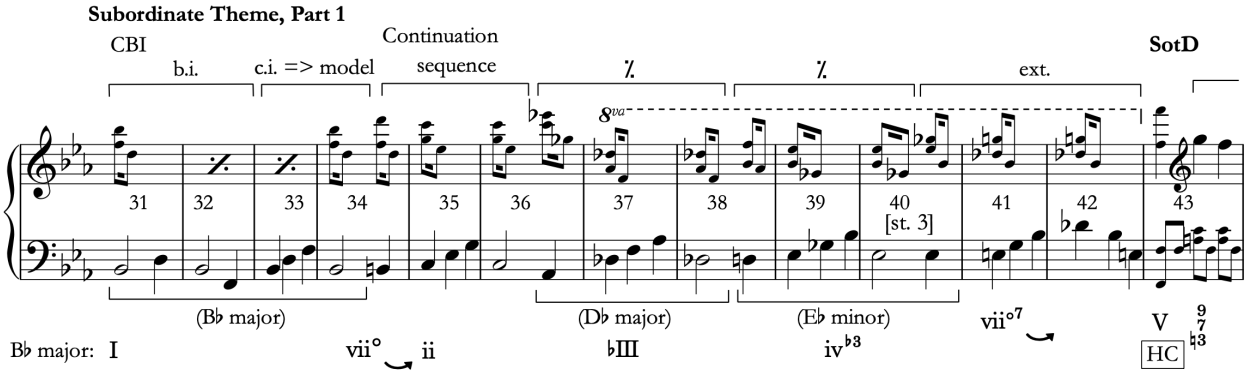


In contrast to the main theme (function), whose continuation gets disrupted by the C-sharp before correcting upwards to start a cadential progression (Example 60, mm. 7–14), the music that follows the CBI in the subordinate theme, part 1 (Example 61, mm. 35-40) brings a chromatic sequential progression that sequences the contrasting idea into 2-m. units, which concludes with an internal HC in m. 43. In sum, the first part of the subordinate theme can be characterized as a hybrid CBI + continuation theme, with a loose, chromatic continuation that ends with a HC.

Example 60: CS 1.0, mm. 1–14; Main Theme (*ES* p. 11, st. 1)



Example 61: CS 1.0b, mm. 31–43; interpreted as Subordinate Theme, Part 1 (*ES* p. 11 st. 2) (Reproduced example)

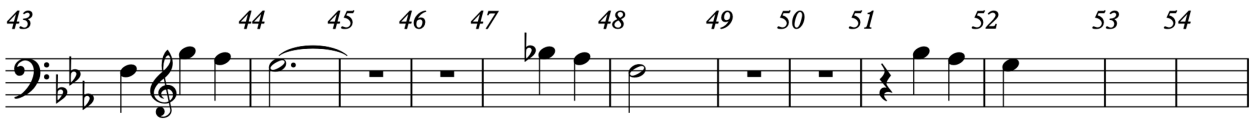


After the internal HC in m. 43, Beethoven builds a 12-m. post-cadential SotD (mm. 43–54) that prolongs the subordinate key dominant. He structures the post-cadential SotD in three 4-m. groups that each start with germinal stepwise descending gestures (G, F, E-flat, and G-flat, F, D over an implied ⑤). His use of blank measures in the sketch (the facsimile is shown in Sketchbook Excerpt 4 and a transcription of this passage is shown in Example 62) suggests that he knew the formal dimensions of this passage, but he may not have yet known the figuration or texture.[138] Subsequent sketches provide more elaborate figuration and different grouping structures, but the harmonies, which strongly imply a prolonged dominant, always project a SotD function.

Sketchbook Excerpt 4: Facsimile excerpt from *ES*, p. 11, st. 4 (corresponds to CS 1.0, mm. 43–54; Standing on the Dominant)



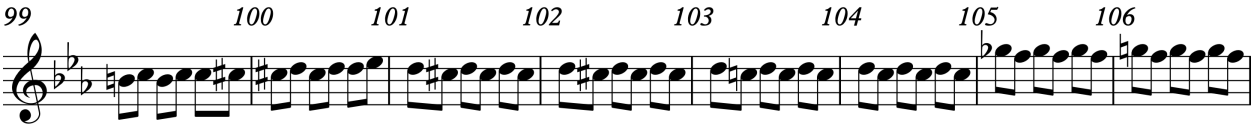
Example 62: Transcription of *ES*, p. 11, st. 4 (corresponds to CS 1.0, mm. 43–54; Standing on the Dominant)



[138] As Lorenz (1924, 412–13) noted, this passage is 12-m. in all of the continuity sketches and in the final Op. 55, I.

The sparse details of this SotD (Example 62, mm. 43–54) emphasize G and G-flat as important pitch classes. These two pitch classes, along with the pitch classes of the chromatic hexachord discussed above (B-flat, B-natural, C, C-sharp, D, E-flat; refer to Example 58 and Example 59) reappear prominently at the end of the sketch as part of a cadential trill (Example 63, mm. 99–106). Observe how Beethoven starts the trill on B-flat (not shown in Example 63), then moves chromatically upwards through C-sharp (mm. 97–100) to D with C-natural (mm. 103–104), which signals an impending cadence with an upper-voice descending ^3, ^2, ^1 (i.e., D, C, B-flat) gesture. Before providing the cadence, however, the continuity-voice leaps to G-flat (m. 105) and steps up to G-natural (m. 106) and the final PAC is evaded. What might have seemed like a conventional trill-like figuration is carefully crafted to cross-reference chromatic pitch classes that appeared prominently earlier in the sketch.

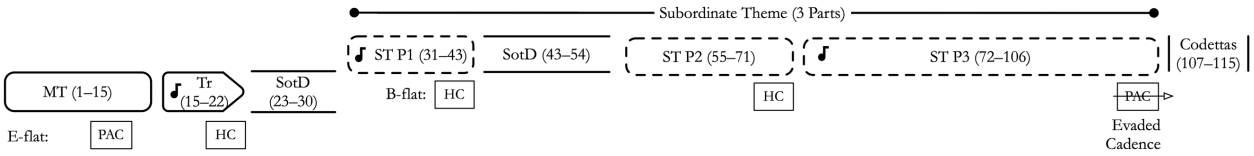
Example 63: Transcription of *ES*, p. 11, st. 7 (corresponds to CS 1.0, mm. 99–106)



In summary, the transition in this second interpretation is now one part and the subordinate theme is three-parts: the first part of the subordinate theme includes mm. 31–54, the second part consists of mm. 55–71, and the third encompasses the material in mm. 72–115. As before, the subordinate theme fails to secure the subordinate key with a PAC and the subsequent closing section (discussed above) implies that the exposition has ended.

Figure 21 provides a form-function diagram of the second form-functional reading of the sketch, which interprets the dominant entry of main theme material (mm. 31–34) as the beginning of the subordinate theme group (i.e., CS 1.0b). The second part of the subordinate theme (mm. 55–71), with its clear compound presentation, continuation, and internal HC, is the most tight-knit of the three subordinate theme parts. This second theme part corresponds with the first subordinate theme in the final Op. 55, I exposition, which closes with a PAC instead of an internal HC.

Figure 21: CS 1.0b, mm. 1–115; Form function diagram, interpreted as Main Theme, non-modulating Transition, and 3-Part Subordinate Theme; musical icon represents MT material



4.3.4 The Bifocal Close and Mozart's Piano Concerto in B-flat major, K. 595, I, solo exposition as a formal model for the first Eroica exposition sketch

The second form-functional interpretation, CS 1.0b—a main theme, one-part non-modulating transition, and a three-part subordinate theme (refer to the diagram in Figure 21)—is extremely rare in the music of Haydn, Mozart, and Beethoven. To date, I have found only one other piece that has this design: the solo exposition of the first movement to Mozart's last piano concerto in B-flat major, K. 595. Mozart's piece is especially relevant to this study, as Beethoven quoted the main theme from the third movement early in the *Eroica* sketchbook. It may be that Beethoven had Mozart's piece in mind when he wrote the first *Eroica* exposition sketch. Let us now explore these formal parallels between the first movement of Mozart's concerto and Beethoven's first exposition sketch in greater detail.

To interpret the dominant entry of main theme material as the start of the subordinate theme function in CS 1.0, it was necessary to recognize that the prior non-modulating transition (mm. 15–30) ended with a bifocal close in m. 23. This bifocal close is not unprecedented in Beethoven's music: it can be found in some of his published music written before the *Eroica*, for example, in the first movement of his Piano Sonata, Op. 2 No 3 in C major, in his Piano Sonata, Op. 7 in E-flat major, and other pieces.[139] The bifocal close has carried a stigma, however, which

[139] Although Beethoven's C major Piano Sonata, Op. 2 No 3, has a bifocal close, its design is slightly different than the one I propose in the first *Eroica* sketch. In the sonata's exposition, the transition ends with a HC in the home key in m. 21, i.e., G major as V of C major, which is prolonged by a SotD in mm. 21–26. The subordinate theme starts immediately with a modal shift in m. 27 to G minor. The modal change from the previous dominant to the subsequent minor tonic contributes to hearing the subordinate theme in the tonic, rather than a prolonged dominant. Winter identifies other Beethoven pieces that have a bifocal close, most notably his Symphony in C major, Op. 21, and the overture to *Die Geschöpfe des Prometheus*, see (Winter 1989, 331–32).

along with the transition characteristics of mm. 31–42 (see section 4.3.2) may have contributed to scholars overlooking the dominant entry of main theme material (mm. 31–34) as the beginning of the subordinate theme group.[140]

Beginning with Carl Czerny (1848), nineteenth- and twentieth-century theorists denigrated the bifocal close as something appropriate for sonatinas, not grand sonatas (Winter 1989, 284–90). For example, Tovey called it a "pun bridge," a "practical joke," and a "quaint primitive device." Hugo Riemann declared that Beethoven's use of the tactic in his Piano Sonata, Op. 2, No. 3 was a "well-known little mistake" (Winter 1989, 285–87). Perhaps it was inconceivable to imagine that Beethoven would use this strategy to expand the dimensions of the *Eroica*, when so many theorists erroneously thought that the device was used solely for simplistic or smaller forms.

Ultimately, negative views of the bifocal close are misguided. As Winter (1989) has convincingly stated, "it is simply erroneous to speak of the bifocal close as a quaint primitivism" (Winter 1989, 319). While the device can be found in sonatinas, it also appears in greatly expanded sonata forms, despite what Tovey or Riemann would have us believe. Winter observes, for example, that Mozart's imaginative re-application of the bifocal close late in his career served as a "critical structural link in the expansiveness of the new style" (Winter 1989, 325). In particular, he cites Mozart's last Piano Concerto in B-flat major, K. 595 as an exemplar, and explains that, "By preparing a mild modulation with the bifocal close and a more polarized one via the ensuing chromaticism," Mozart "succeeds in nearly doubling the length of the exposition" (Winter 1989, 325). Thus, rather than being a primitive device reserved for sonatinas, the bifocal close could be used to *expand* the dimensions of a sonata.

Let us return now to the sketches. On the second page that contains material for the *Eroica* (*ES*, p. 5), and in the midst of sketching material for the development of the first movement,

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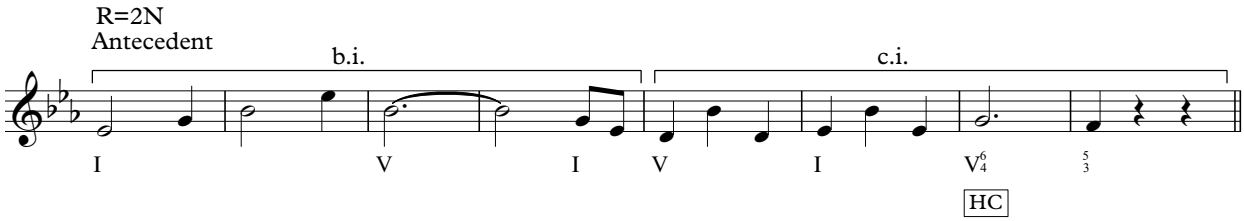
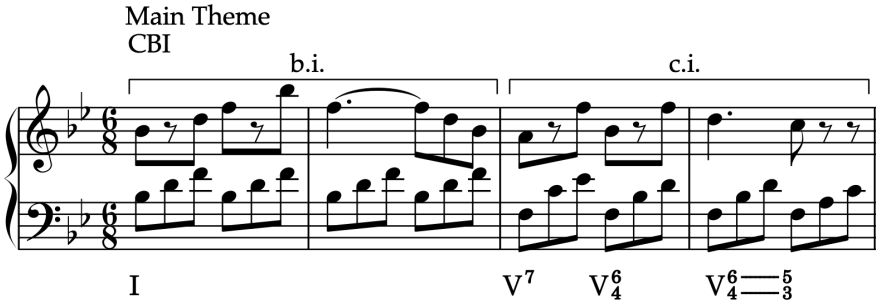
[140] For example, William Horne (1992), who uses Beethoven's *Eroica* sketches to support his argument for where the subordinate theme begins (namely, at m. 45), suggests that composers may have used the bifocal close to write in an uncomplicated or accessible style and suggests that the bifocal close was "particularly characteristic of short sonata forms" (Horne 2006, 113–14). He discusses the bifocal close of Beethoven's Piano Sonata, Op. 7 in relation to the *Eroica* to make the claim that the "second group" begins at m. 45 in the *Eroica* and lasts until m. 54. The harmonies of this passage, he argues, "mimick" the rhetoric of a Standing on the Dominant, but they do not invoke a Standing on the Dominant function (Horne 2006, 124). Given that it is difficult to differentiate between something "mimicking" the rhetoric of a function and *being* that function, I am not persuaded by Horne's suggestion. I thus understand mm. 45–54 in the final piece as a Standing on the Dominant that ends Transition, part 2, not the start of the subordinate theme, per Horne's analysis. I discuss this matter in greater detail in Section 5.3.3.

Beethoven wrote a slightly altered version of mm. 1–4 of the third movement to Mozart's, B-flat major concerto, K. 595 (Example 64; that is, an excerpt from the same piece that Winter cited as an exemplar). An excerpt of Mozart's piece is shown in Example 65.[141] Scholars have noted the affinity of Mozart's triadic theme with the *Eroica* main theme but have not explained how the concerto might relate to Beethoven's sketches. Given that Beethoven was interested enough to quote the concerto in the earliest stages of working on the *Eroica*, it seems sensible to look for more parallels between the two works.

Example 64: Excerpt of Mozart, Piano Concerto K. 595, III, mm. 1–4 (modified) quoted by Beethoven (*ES* p. 5, st. 7)



Example 65: Excerpt of Mozart, Piano Concerto K. 595, III, mm. 1–4



To understand a possible connection, let us consider the form of the first movement of Mozart's exposition, which we will see to have remarkable similarities to one of my interpretations of the CS 1.0b exposition. The second, viable form-functional interpretation of the first exposition sketch (CS 1.0b), "CS 1.0 interpreted as main theme, non-modulating transition, and three-part subordinate theme" (discussed in 4.3.3) matches the form-functional design of the solo exposition

[141] This correspondence was first discovered by Rachel Wade. She notes that "Beethoven jotted down the theme of the Rondo transposed down a fifth and notated in ¾ instead of 6/8, which probably accounts for why the quotation has gone unrecognized in the past" (Wade 1977, 272). See also (Lockwood 2015a, 81–83).

of Mozart's concerto, excluding the concerto specific functions.[142] Compare Beethoven's first sketch schematized in Figure 22 with Mozart's solo exposition in Figure 23. The solo exposition to Mozart's concerto mm. (81–177) is analyzed in Volume 2, pp. 34–40 (the orchestral parts are depicted in the piano reduction). Both Mozart's exposition and Beethoven's *Eroica* exposition sketch contain an expanded main theme, a non-modulating transition that ends with a bifocal close HC, prolonged by a SotD, and a 3-part subordinate theme, whose first and second parts lead to internal HCs and SotDs.

While subordinate theme groups with three self-contained themes (i.e., formal units that close with PACs) are common in the classical style, subordinate themes with three co-dependent parts (i.e., formal units that close with HCs dependent on subsequent PACs) are very rare.[143] It seems unlikely, therefore, that the form-functional similarity of Mozart's solo exposition with Beethoven's first exposition sketch is mere coincidence, especially when we know that he had this piece on his mind while sketching the *Eroica* exposition. Thus, although the *Eroica* is cast as the piece that epitomized Beethoven's "new path" (Ferraguto 2020), perhaps he turned "backwards" to Mozart's greatly expanded exposition in his last piano concerto as inspiration for his first *Eroica* exposition sketch. As others have noted, Beethoven often looked to Mozart's pieces as models for his own; we should not discount this possibility for the *Eroica* too.[144]

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[142] On the concerto specific "bravura theme" and the Ritornello, see (Caplin 2013, 688–92). The solo exposition differs from the opening ritornello in Concerto Form as it parallels the design of a regular sonata exposition with the same formal functions of main theme, transition, and subordinate-theme group; see (Caplin 1998, 145).

[143] Caplin notes that, while multiple subordinate themes that each close with PACs are common, two-part subordinate themes are relatively rare in the music of Haydn, Mozart, and Beethoven. He does not discuss three-part subordinate themes, presumably because they are even more uncommon (Caplin 1998, 117; 2013, 380–81).

[144] On the relationship of Mozart's pieces to Beethoven's works more generally, see (Lockwood 2015a). Several other studies show Beethoven borrowed or modeled ideas after Mozart works, see especially (Churgin 1987; Kamien 1990; Schachter 1991)

Figure 22: Form-function diagram of Beethoven's first exposition sketch, CS 1.0b, mm. 1–115 Interpreted as Main Theme, non-modulating Transition, and 3-Part Subordinate Theme (not drawn to scale)

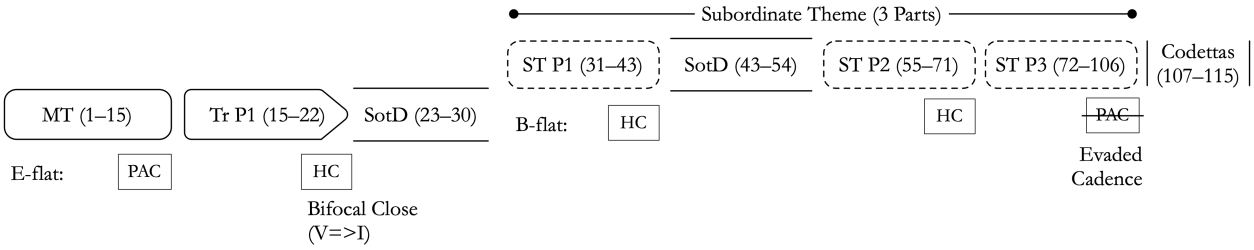
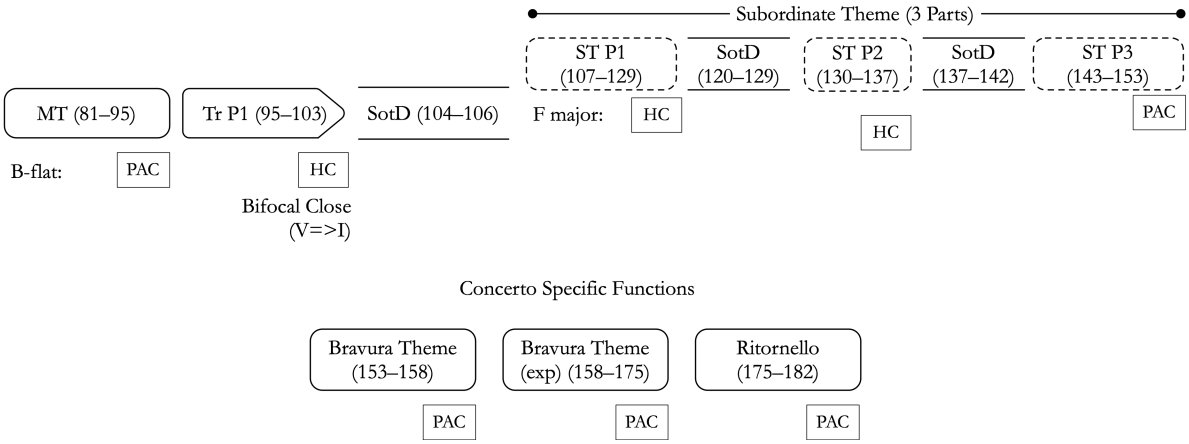


Figure 23: Form-function diagram of the solo exposition to Mozart's Piano Concerto in B♭ major, K. 595, i, mm. 81–182 (not drawn to scale)



4.4 Theorizing Beethoven's Large-Scale Plan for the First Movement

Up to this point, we have explored two separate but valid interpretations of the B-flat major main theme material (as the transition, part 2 or the subordinate theme, part 1), which, with the final evaded PAC, diminish the rhetorical power of the subordinate theme group. A listener (of the realized sketch) would likely remember the subordinate theme for the bold re-emergence of main theme material late in the group, not for strongly launching the new subordinate key tonic (à la Haydn), for establishing new melodic material, or for securing the subordinate key through a requisite PAC. The exposition therefore has the monothematic characteristics common to Haydn's music with the clearly demarcated subordinate theme parts like Mozart's concerto, but with a clash of dominant and tonic harmonies placed in crucial parts of the form. Thus, although a form-functional analysis of this sketch identifies standard characteristics of a subordinate theme, the normal thematic and tonal forces of this function are downplayed.

If we valorize the material in the first exposition sketch instead of denigrating it, we can conclude that Beethoven sought to problematize the subordinate theme while expanding the dimensions of the exposition to achieve some other compositional goal. What was this compositional goal? In what follows, I suggest that Beethoven worked to subvert the normal forces of a subordinate theme in the exposition in order to rhetorically elevate the appearance of a new lyrical theme in E minor that he planned to introduce in the middle of the development. My analysis of the sketches thus parallels Theodore Adorno's unpublished analysis of the final piece.[145]

4.4.1 Sketches Before the First Exposition Sketch (CS 1.0)

We might intuitively expect Beethoven to start sketching the *Eroica* at the beginning in the exposition. But this is not what the sketchbook suggests. The pages before the first exposition sketch (pages 4–9) include material for the development, recapitulation, and coda of the first movement, and several "movement plans"[146] for the second and third movements. These pages do not contain any exposition sketches. It is possible that Beethoven wrote some early exposition drafts on the pages before these—Nottebohm (1880, 3) reported that there were five leaves torn out near the beginning of the *Eroica* sketchbook.[147] But until these pages surface, which seems unlikely, we must interpret the sketchbook as it remains. Beethoven seems to have had some idea of the materials he would use in the first movement and maybe a basic plan for its tonal structure,[148] but he appears to have decided to notate crucial parts of the development before working more exclusively on the exposition. If the chronology in the sketchbook is accurate, which I suggest it is, then we could interpret the material he wrote on pages 4–9 as establishing compositional goals that would influence how he would structure the exposition. To better understand how this earlier material (pages 4–9) may have impacted Beethoven's early exposition sketches, therefore, let us interpret these sketches in greater detail.

In the top left-hand corner of the first page that contains *Eroica* material (p. 4) of the sketchbook (see Sketchbook Excerpt 5), Beethoven wrote a mature version of the new development

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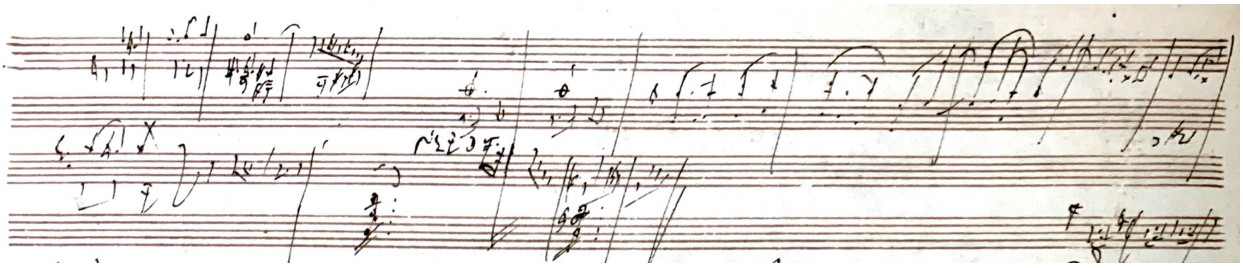
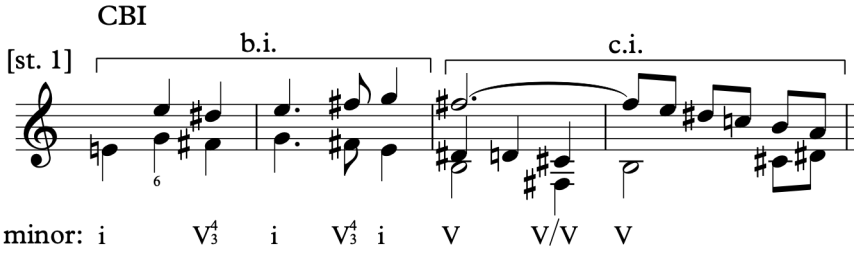
[145] For an explanation of Adorno's unpublished analytical notes, see (Vande Moortele 2015, 425–26).
[146] For more on "movement plans," see (Lockwood 1991b, 6–13). For an overview of various terms used to describe these multi-movement sketches, see (Cooper 1981, 265) and (Buurman 2013, 29–34).
[147] On the missing five leaves, see also (Wade 1977, 256).
[148] The MT and beginning of the ST group are invariant in every sketch and may have therefore been in Beethoven's mind before he began sketching in the *Eroica* sketchbook.

theme material in E minor (Example 66).[149] Compared to much of the single-voice sketch material that pervades the sketches, the lyrical E minor concept sketch"[150] is distinctive for having two voices in the first two measures (in the basic idea), and three voices in the second two measures (in the contrasting idea.). The placement of this material and the completeness of its design suggests that it occupied an important position in Beethoven's compositional process.

Sketchbook Excerpt 5: *ES*, p. 4, st. 1–4 excerpt; note the new development thematic material in top left-hand corner of the page



Example 66: New development theme material (*ES*, p. 4, st. 1, top left-hand corner)



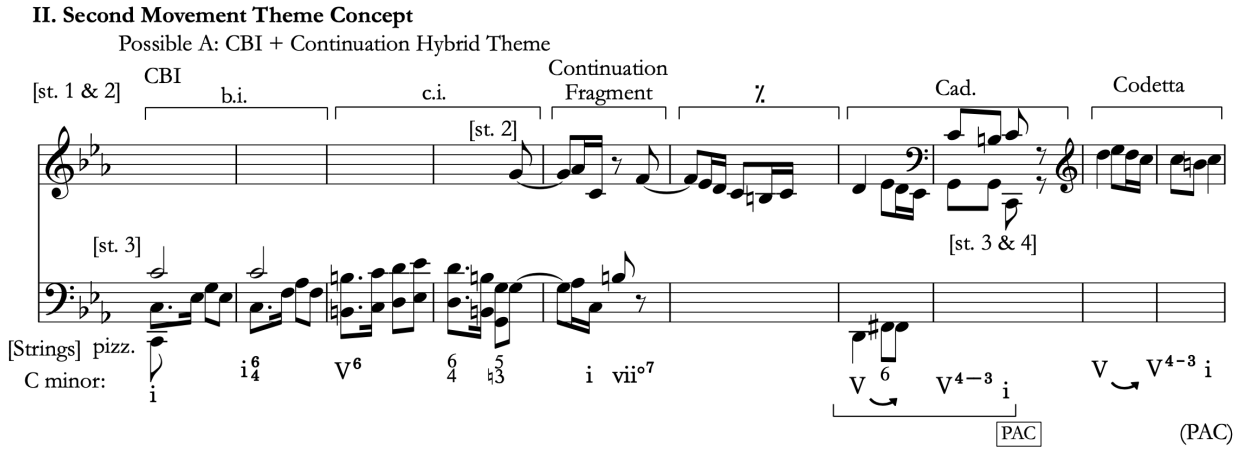
After the new development theme (see Sketchbook Excerpt 5), Beethoven sketched a hybrid theme in C minor on staves 1–4 (Example 67) whose theme type (CBI + Continuation), key center, and rhythmic profile is akin to the first refrain of the second movement (Example 68). Immediately thereafter, he wrote a synoptic overview of the end of the first movement's development (Example 69), which he indicated with the shorthand, "2ter Theil" (see the left-hand side of Sketchbook

[149] Nottebohm was the first to show that Beethoven wrote this theme, but he suggested that he wrote it after the exposition sketches; (Nottebohm 1979, 71–74). Lewis Lockwood has discussed this passage in more detail; (Lockwood 1991a). As mentioned in the introduction, Heinrich Riemann found it "strange that the theme was notated in E-minor instead of E-flat major"; (Riemann 1889, 284).

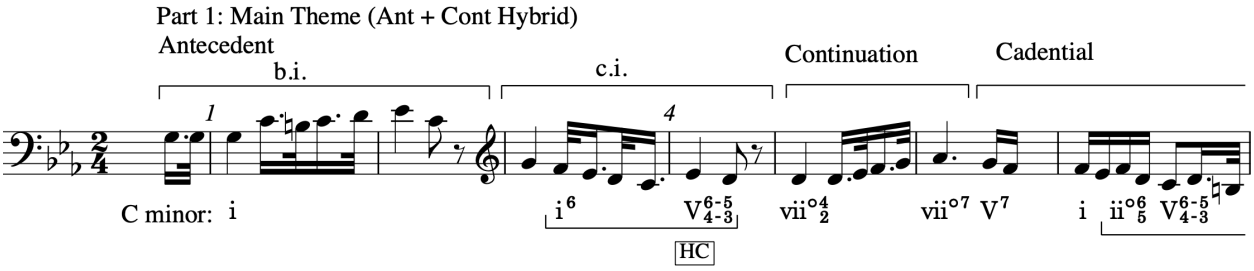
[150] The term "concept sketch" was coined by Alan Tyson (1970, 570–71) and subsequently adopted by Lewis Lockwood (1991b, 8).

Excerpt 6).[151] A complete formal overview of the material on page 4 is summarized in Table 3. (In the table, columns represent the left- and right-hand sides of each staff and rows represent the sixteen staves.) In essence, page 4 exemplifies Beethoven's large-scale planning for the first and second movements. As this material precedes the first exposition sketches, perhaps the development plan influenced his design for the exposition.[152] Let's now explore this possibility in greater detail.

Example 67: Second movement theme concept sketch (*ES*, p. 4 st. 1–4)



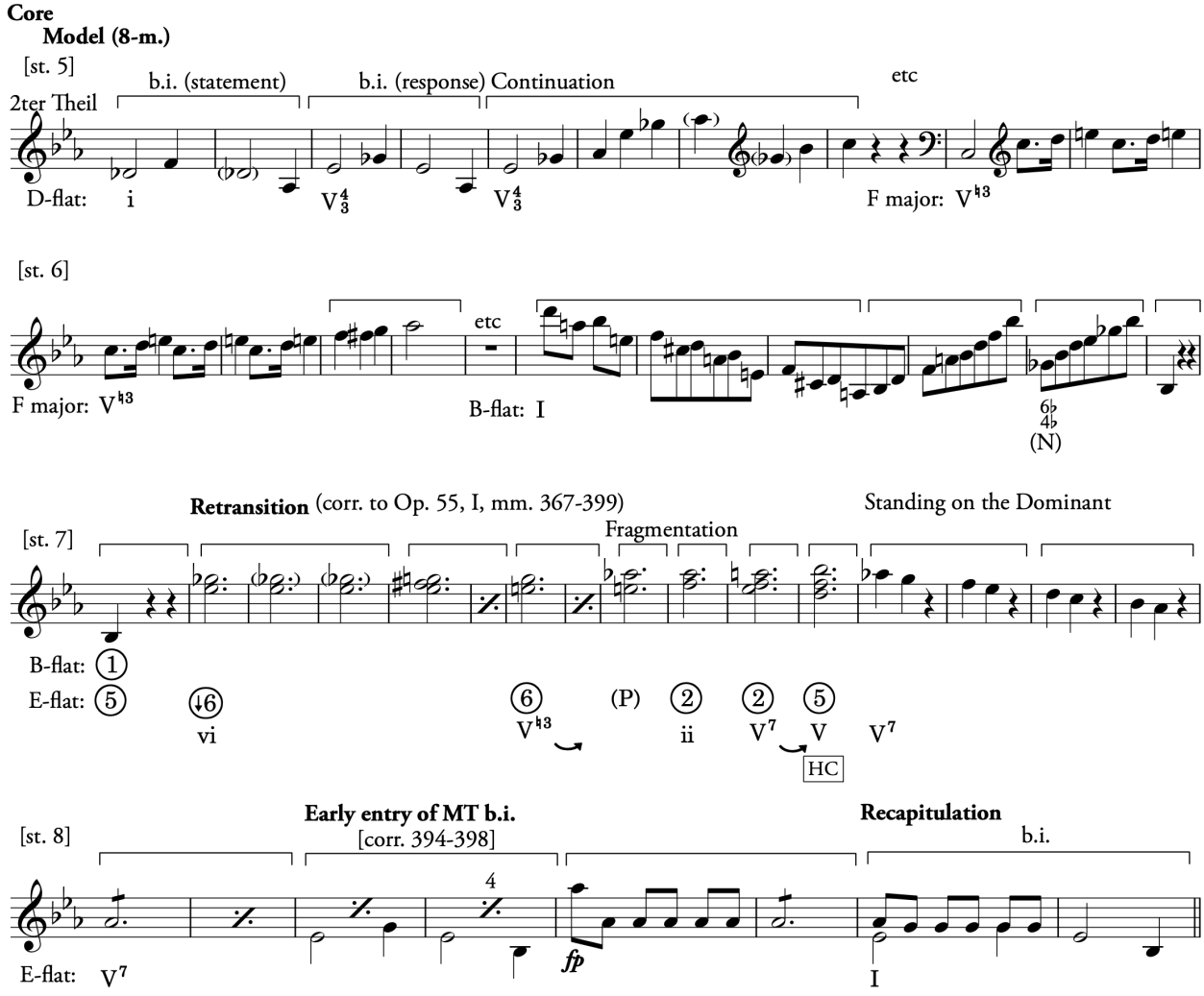
Example 68: Op. 55 II., mm. 1–7; Second movement refrain, main theme, part 1



[151] Beethoven used "2ter Theil" (German for "Second Part") to indicate the beginning of the development and presumably the recapitulation together; (Drabkin 1991).

[152] Alan Gosman and Lewis Lockwood recognize the plausibility of p. 4 being written before p. 11, but it remains a possibility that Beethoven wrote p. 4 at a later stage. Alan Tyson, for example, observes that Beethoven seems to have "used the earlier pages first and later pages later, so that the order of the pages is on the whole the order in which the sketches were made," but the presence of blank pages in the *Eroica* Sketchbook suggests that "he sometimes leaped far ahead, leaving gaps which might or might not be filled" (Tyson 1970, 571). I thank Alan Gosman for drawing these alternate possibilities to my attention. As it is impossible to know whether Beethoven completed page 4 after or before writing page 11, I have adhered to the order of the pages in the sketchbook unless strong evidence suggests otherwise. For example, it is highly likely that Beethoven sketched the *Eroica* material on page 11 before page 10, given that page 10 provides a revision of the material on page 11. The material on page 4, however, does not offer clear evidence that it was sketched after pages 10–11.

Example 69: First movement development synoptic sketches (*ES*, p. 4, st. 5–8)



Sketchbook Excerpt 6: *ES* p. 4, st. 5–6; "2ter Theil"

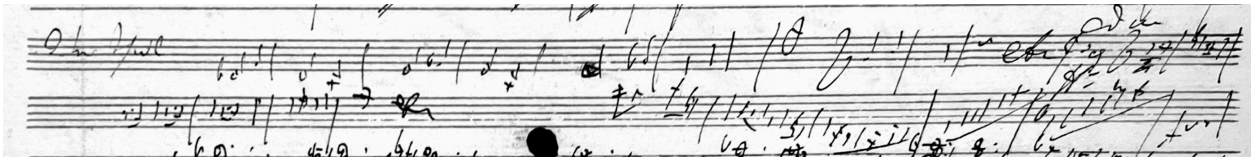


Table 3: *Eroica* Sketchbook, p. 4 Contents Summary

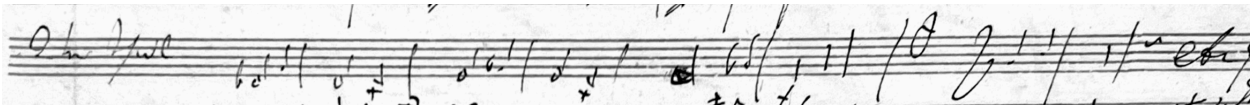
ST.	LEFT SIDE OF THE PAGE	RIGHT SIDE OF THE PAGE
1	I. Dev: New Lyrical Theme in E minor	
2		II. MT Concept (Treble)
3	II. MT Concept (end)	II. MT Concept (Bass)
4	II. MT Concept (end)	
5	I. Dev (2ter Theil) Core, Model (8m)	
6	I. Dev: Core ext (?) V of F	I. Dev: B-flat M prolongation (tonic)
7	I. Dev: End to final HC (G-flat to B-flat ascent in top voice)	I. Dev: Final SotD
8	I. Dev: Retransition (Early Entry of MT CBI)	I. Recapitulation: End of MT (?), Transition P2 or Subordinate Theme, P1 (fusion)
9	I. Recapitulation: MT Continuation, Dominant Arrival, Continuation	
10	I. Recapitulation: Continuation (vii° Ascending Seq.)	CBIs in D-flat major and E-flat minor
11	I. Unidentified Transition (starts with E♭m)	I. Transition from B♭M to E♭M (st. 11, 13, 14)
12	I. B-flat M CBI + Cont	
13	I. B-flat M CBI + Cont (bassline)	See st. 11 Right
14		See st. 11 Right
15	I. B-flat major C. Pres (CBI x2) + Cont (I => V7)	
16		

Before we analyze Beethoven's development plan, consider the first staff (*ES* p. 4, st. 5) of the development sketch. Lockwood and Gosman transcribe this staff (see Sketchbook Excerpt 7) differently: compare their transcription in Example 70 with my interpretation in Example 71. As Beethoven does not write a clef for this passage, they suggest a bass clef, whereas I provide a treble staff.[153] The choice of clef causes two different readings of this passage. They interpret the flat sign that Beethoven writes in front of the first half note (see Sketchbook Excerpt 7) "to indicate that this

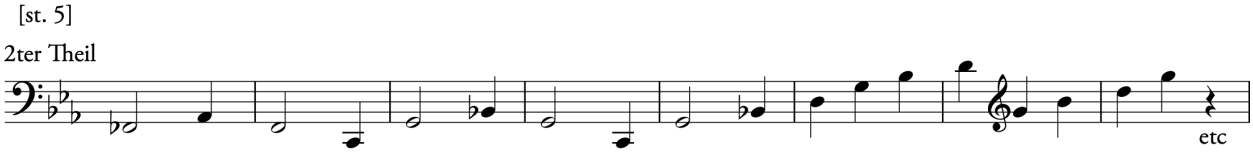
[153] My reading (Example 71) accords with Heinrich Riemann's transcription of this passage.

section starts in F minor" but they also note that "It does not inflect the note that follows."[154] This type of notation would be highly unusual for Beethoven. Their decision to add an editorial bass clef was likely due to the treble clef that Beethoven writes in the middle of the same staff thereafter (see Sketchbook Excerpt 8, which is extracted from Sketchbook Excerpt 7); normally, he would write a clef when he intended a clef change; if the clef was to change to a treble, then perhaps, as Lockwood and Gosman interpreted this staff, it began with a bass clef.

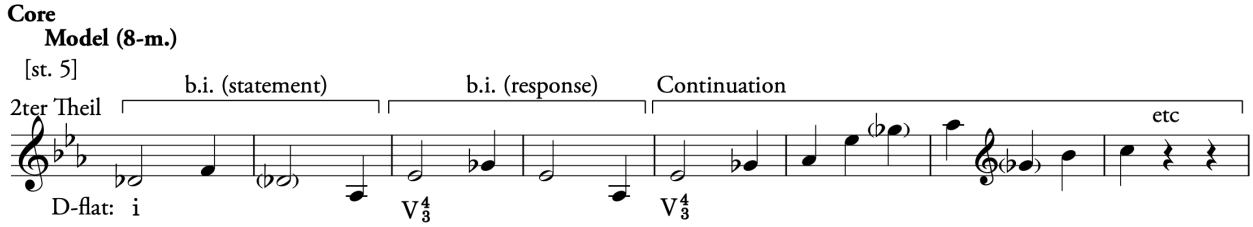
Sketchbook Excerpt 7: *ES* p. 4, st. 5 snippet (incomplete staff)



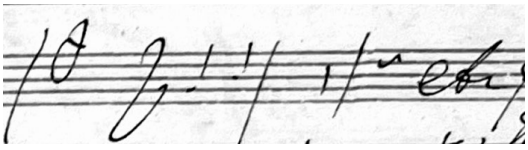
Example 70: *ES* p. 4, st. 5 Transcribed in (Beethoven, Lockwood, and Gosman 2013a, 4)



Example 71: *ES* p. 4, st. 5 Transcribed and analyzed by this author



Sketchbook Excerpt 8: *ES* p. 4, st. 5 snippet (middle of staff)



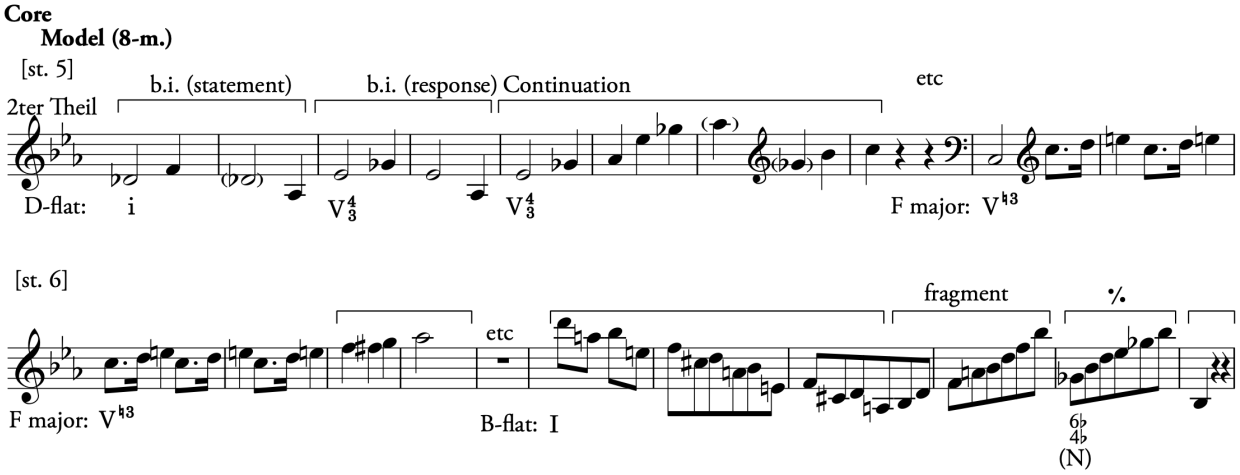
In my reading of the first staff (Example 71), I interpret the passage to start with a treble clef. This reading solves two problems in Lockwood's and Gosman's transcription. First, the first flat in front of the half note (refer to Sketchbook Excerpt 7) suggests a D-flat instead of an unusual way to notate a key of F minor. Second, the next flat (third measure) indicates a G-flat rather than a

[154] (Beethoven, Lockwood, and Gosman 2013a, 4 fn. 2).

B-flat; an accidental B-flat would have been especially odd here if Beethoven was thinking in F minor. When we add a treble clef instead of a bass clef, we avoid these issues because the passage expresses D-flat major (tonic in mm. 1–2 and dominant in the measures that follow). It seems more likely that Beethoven was still imagining an E-flat major key signature, so the D-flat and G-flat would need to be notated. Correspondingly, the treble clef that Beethoven writes in the middle of the staff (see Sketchbook Excerpt 8) does not change the clef; perhaps we can interpret it instead to function like an *8va* sign, that is, it suggests that the continuity voice continues an octave higher than written. Thus, if staff 5 is interpreted to begin with a treble clef, the music brings an 8-m. model in D-flat major that may have been intended for a development core. This model corresponds approximately with a sequence in the Op. 55 I, development's Core #4 (see the Cue Staff reduction, mm. 350–353 in Volume 2). Consequently, the passage still resides in the development, as Lockwood and Gosman suggested, but it does not begin in F minor.

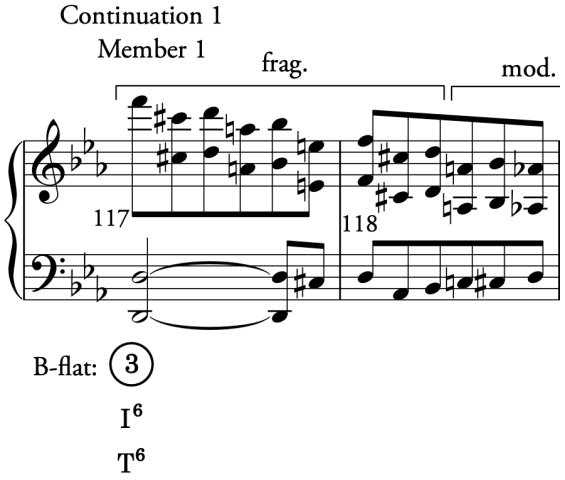
Overall, the synoptic development sketch expresses the keys of D-flat major (Example 69, st. 5), F major (through its dominant on st. 5b–6a), B-flat major (st. 6b), and E-flat major (st. 7–8). Let us examine each of these tonicizations in some detail. The material that follows the D-flat music on staff 1 and the begins staff 2 (see Example 72) is difficult to place. The surface rhythm of this music accelerates and suggests the dominant of F major. Also note the chromatic ascent through F-sharp to A-flat (st. 6, mm. 3–4). Beethoven's use of "etc." at the end of this passage in the sketch (st. 6, m. 6) suggests that he intended to write additional material thereafter.

Example 72: First movement development synoptic sketches (*ES*, p. 4, st. 5–6) (reproduced part of of Example 69)

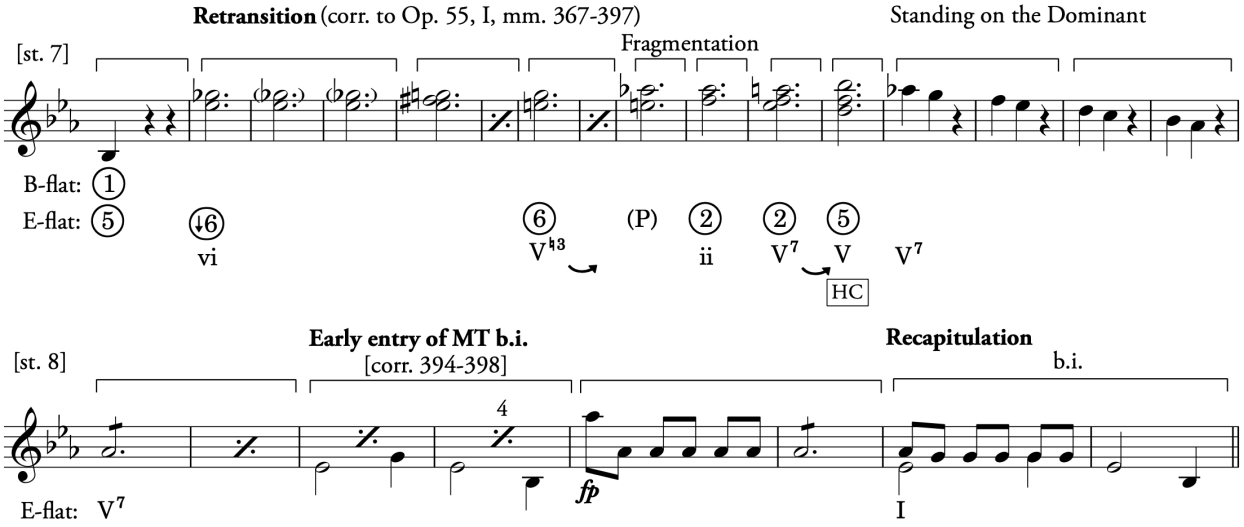


The music that follows the dominant of F major on the right-hand side of staff 6 (Example 72, staff 2, right hand side) brings a prolongation of B-flat major harmony that is reminiscent of a passage in the final exposition, namely, the second part of the subordinate theme's continuation, see an excerpt of this music in Example 73. As the music in the sketch continues (Example 72, staff 2, right hand side), the descending neighboring pattern ends (st. 6, m. 9) and Beethoven writes two, 1-m. fragments; the first emphasizes B-flat major harmony, and the second suggests a neighboring "6♭ /4♭" harmony with G-flats. Ultimately, it is challenging to know what Beethoven was intending with this fragment as there is very little context in the surrounding material. Given that he wrote "2ter Theil" on before the staff above, however, it does seem like this material was intended for the development—perhaps near its end—despite the similarities it shares with the subordinate theme 2, part 2, continuation. Overall, the sketch suggests that he sought to approach E-flat major through a circle of fifths progression (i.e., F major, B-flat major, E-flat major), and he knew he wanted to feature prominently D-flat major in the development.

Example 73: Op. 55, I., mm. 117–118; Subordinate Theme 2, Part 2, Continuation 1, Member 1



Example 74: First movement development synoptic sketches (*ES*, p. 4, st. 5–6) (reproduced part of of Example 69)



The music written on staff 7 (see Example 74, staff 1) is easier to place because this material resembles the end of the development (compare with Op. 55, I., mm. 367–396). Here, Beethoven writes a chromatic upper-voice line from G-flat to B-flat (staff 3, mm. 2–12) that brings the development's final HC in the home key and subsequent retransition to prepare the recapitulation (staff 4). The pitch classes of this upper chromatic line (G-flat, G, A-flat, A, B-flat) may have some connection to the pitch classes I highlighted above (section 4.3.3) that play prominent roles in the first exposition sketch, that is, the chromatic hexachord pitches B-flat, B, C, C-sharp/D-flat, D, E-flat with G and G-flat (refer to Example 58, Example 59, Example 62, and Example 63). The only two pitch classes that are missing from the twelve-tone aggregate are E and F. Finally, as

Nottebohm first showed (with different terms), Beethoven sketches the main theme CBI material in E-flat major before the completion of the dominant that ends the development (Example 69, staff 4)—the so-called "wrong-note" horn entry that many nineteenth century conductors (e.g., Hans von Bülow) and composers (e.g., Richard Wagner and Arnold Schoenberg) tried to correct.[155] Although the material on page 4 is fragmentary, the brief material he wrote down must have been significant for his overall compositional plan.

Given that the well-developed the concept sketch of the new development thematic material and the synoptic overview of the development that follows precedes the first exposition sketch, it seems plausible that Beethoven could have started the first movement with the pre-determined plan of introducing the new E minor lyrical theme in the middle of the development, and this may have influenced the design of the exposition. Similarly, the early tonic entry of main theme material that clashes with the final dominant of the development might suggest that he worked to create a conflict between the tonic and dominant harmonies at important parts of the form.[156] Perhaps the tonic and dominant versions of main theme material that start the main theme (function) and first part of the subordinate theme (see 4.3.3) in the first exposition sketch "unfold" the tonic and dominant clash over a larger formal area in the exposition, and then "fold" it back together at the crucial moment before the recapitulation begins.[157] Finally, the prominent appearance of D-flat major in the sketch suggests that Beethoven was thinking about this key at an early stage, perhaps even before he wrote the first exposition sketch.

After Beethoven closes the development sketch with a double bar on staff 8, he sketches the music shown in Example 75 (staves 8–10 in the sketchbook). Lockwood and Gosman identify this material as a "development sketch" (Beethoven, Lockwood, and Gosman 2013b, 193). But given that this material *follows* the double bar that ends the prior synoptic overview of the development (shown in Example 69; refer the page layout of the sketchbook page in Table 3), I propose that this material is an early sketch for the recapitulation. The sketch appears to start *in media res* with prolonged dominant harmony that suggests a standing on the dominant, which would likely mark

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[155] (Nottebohm 1979, 72). For a more detailed discussion of the early entry of main theme material, see (Lockwood 1991a). For Ferdinand Ries famous statement on this passage, see (Sonneck 1954, 54).

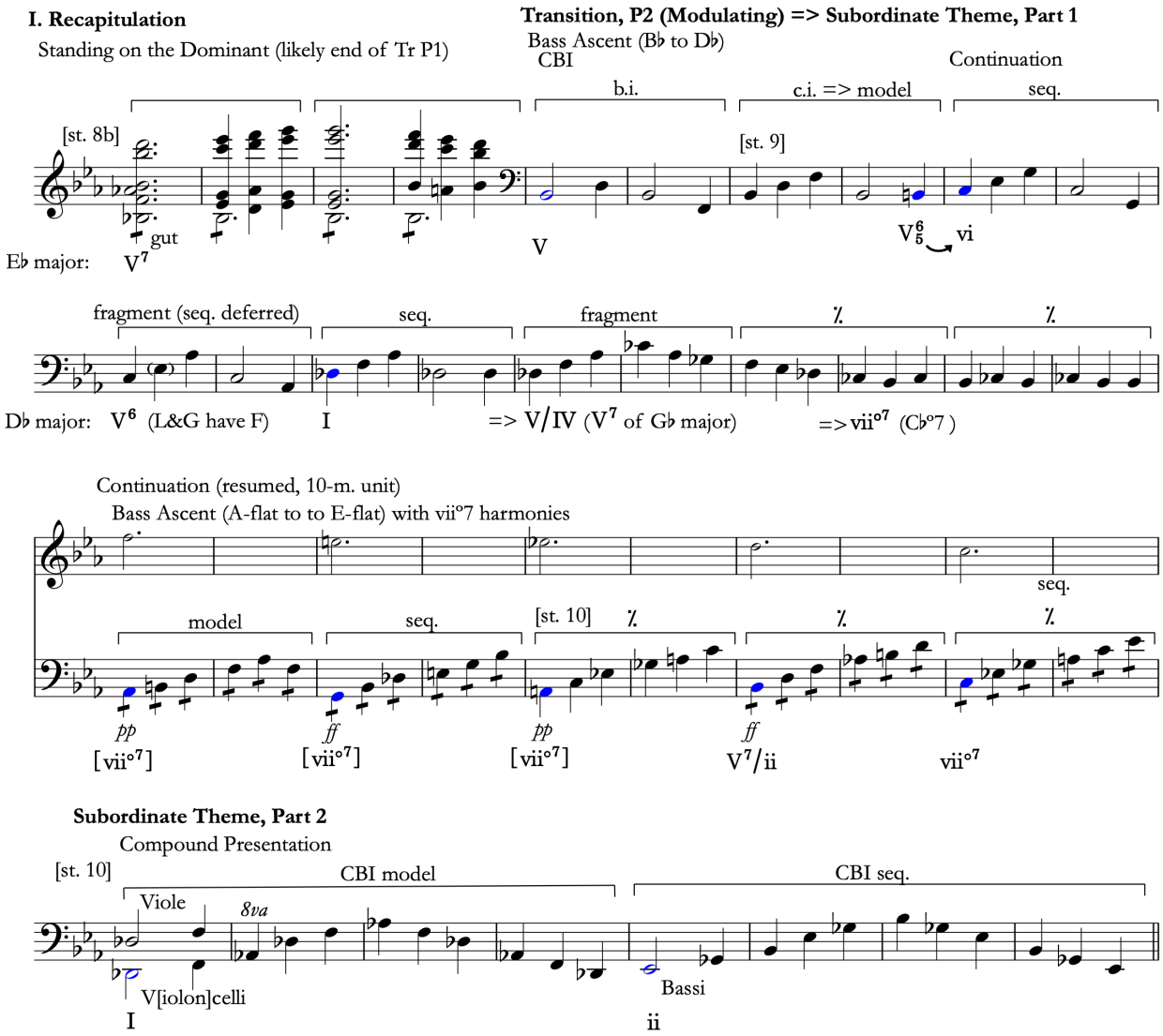
[156] Lewis Lockwood elaborates on David Epstein's observation that there are several moments in the first movement where tonic is juxtaposed against dominant in the final version of the piece; (Lockwood 1991a, 169–72).

[157] I use the terms "unfold" and "fold" in reference, but not exact equivalence, to the Schenkerian concept of *unfolding*; see (Schachter 1999, 168).

the ending of a non-modulating transition. Given that Beethoven had presumably not written an exposition sketch when he wrote this sketch, it seems plausible that he had something in mind for the main theme but did not yet feel the need to write it down. The material for the main theme (mm. 3–14) remains invariant in every exposition sketch, so this invariance suggests that it was fixed in Beethoven's mind at some early point, perhaps before he wrote the music on page 4 of his sketchbook.

There are many fascinating formal and tonal similarities between this seeming recapitulation sketch and the first exposition sketch that follows seven pages later in the sketchbook. In the recapitulation sketch (Example 75), Beethoven writes material from staff one (in the example), measure 5 to the staff 2 (in the example), that presents the CBI of main theme material. Following the CBI, Beethoven sequences the contrasting idea until reaching D-flat major (staff 2, m. 3). The shorter grouping structure and sequencing project a clear continuation function. Given the formal and tonal similarities of this material to what follows seven pages later in the first exposition sketch, the material written on page 4 (Example 75, staves 1 and 2) strongly suggests either the beginning of a second part of a two-part transition, and or the beginning of the first part of the subordinate theme in the recapitulation.

Example 75: Analysis of *Eroica* Sketchbook, page 4, staves 8–10



Once D-flat major is reached in the seeming recapitulation sketch (Example 75, staff 2, third measure) Beethoven breaks out of the sequence by turning the D-flat material into an applied dominant seventh of G-flat major, the subdominant of D-flat major. The grouping structure remains at two bars, but the harmonic rhythm slows down. After stalling out the sequence when D-flat major arrives in staff 2, Beethoven restarts the continuation by sequencing fully diminished seventh arpeggios in the first system below. This sequence leads ultimately back to D-flat major on the next staff (*ES* p. 4, st. 10), whereupon Beethoven expands the prior 2-m. grouping structure into 4-m. units. This musical material suggests a soaring variation of the main theme material, as if it were set free from its prior triadic constraints. He also notates a texture change at this point by assigning the material to the violas and cellos in octaves, followed by a statement in E-flat minor with the

addition of the basses. These features suggest hearing the material on the last staff of Example 75 as a compound presentation, which further supports hearing the beginning of a recapitulatory first part of the subordinate theme.

To summarize, the overall formal and tonal design of the seeming recapitulation sketch (Example 75) resembles parts of the first exposition sketch's subordinate theme (CS 1.0, mm. 31-89), but its looser overall construction suggests a recapitulation function. Consider, for example, how the music reaches D-flat major through an ascending sequence in the second system of Example 75, how it leaves D-flat major through an ascending sequence that uses fully diminished seventh harmonies, and the way it turns triumphantly to D-flat major in the fourth system with material that is suggestive of an expanded version of the main theme material. This tonal circulation is common in recapitulations, which reformulate the tonic and dominant conflict that plays out in the exposition. As the subordinate theme appears in the tonic in the recapitulation, the transition must be reformulated so as not to modulate. These sketches suggest that Beethoven planned important moments in the development and recapitulation before he planned out all the details of the exposition. In a sense, he seems to have established where the piece was going; in his exposition sketches, he would have to figure out how to get there.

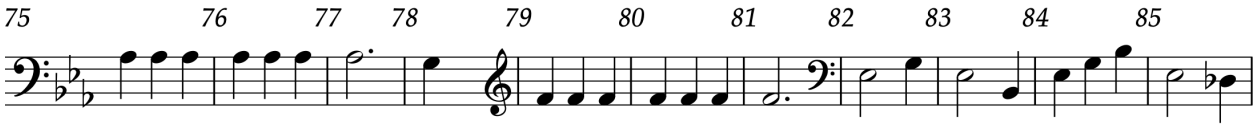
Although placing new thematic material into the development was not unprecedented when Beethoven began working on the *Eroica* (Churgin 1998), his exotic key choice for the new thematic material (E minor in an E-flat major work) and unprecedented formal approach for setting it up was novel. Perhaps Beethoven worked on ways in his early exposition sketches to subvert a strongly contrasting, lyrical subordinate theme in order to elevate rhetorically the dramatic appearance of a new lyrical theme in the middle of the development. The unconventional subordinate theme in the first exposition sketch, which destabilizes the thematic and tonal content in multiple ways, works to "displace"—as Adorno put it in his analysis of the final piece—the rhetorical forces of the subordinate theme out of the exposition. This displacement motivates the dramatic new lyrical theme late in the development, which is recapitulated in the coda. If this hypothesis is correct, we can test it further by examining subsequent exposition continuity drafts: if Beethoven was working to problematize a lyrical subordinate theme, then we would expect to find further irregularities with this part of the form in the second exposition continuity sketch (branch 1.1).

4.5 Reevaluating Problem #2: "Tonic" Main Theme Material in the Subordinate Theme

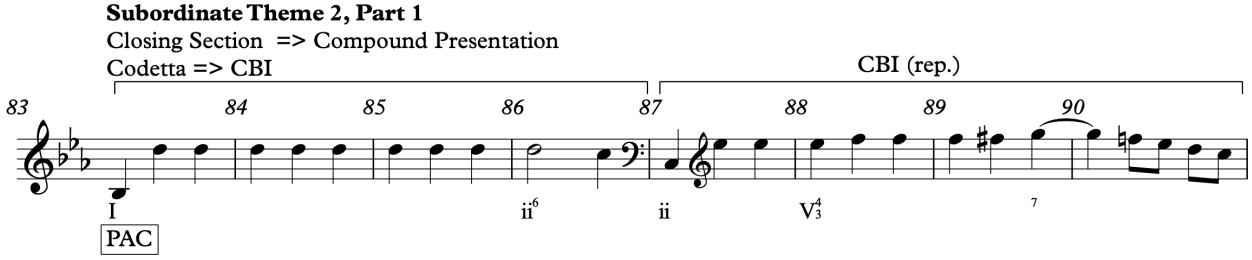
Up to this point, I have focused exclusively on the first supposed problem with main theme material of the exposition entering on B-flat major. Let us turn now to the second problem—main theme material that returns late in the subordinate theme in E-flat major, the home key. In their discussion of Beethoven's revisions to the first sketch (CS 1.1), Lockwood and Gosman remark that it is "even more surprising . . . that during Beethoven's revision of the first continuity draft, he retains only the E-flat entry [of main theme material] (at page 11, st. 10, m. 11) from the original group of B-flat, D-flat, and E-flat entries" (see entries 4-6 in Vol. 2, pp. 29-30: CS 1.0 Transcription) (Beethoven, Lockwood, and Gosman 2013a, 33–34). They continue:

> This premature return to the tonic [in CS 1.1] is strengthened even further because it is preceded by the introduction of a new theme at page 11, st. 10, m. 4 (associated with mm. 83ff, of the final version) in the tonic E♭ [Example 76, mm. 75–81]. Beethoven's compositional impulse at this stage seems to be divided between writing a "proper" exposition and exploring the possibilities of his opening theme, whether the resulting passages belong in an exposition or not (Beethoven, Lockwood, and Gosman 2013a, 34).

Example 76: Transcription of *ES* p. 11, st. 10; corresponds to branch 1.1, mm. 75–85



Example 77: Final Op. 55 I., mm. 83–90



Lockwood and Gosman label the material (Example 76, first 7 measures) that precedes the re-entry of main theme material on the tonic as a "theme" owing, it seems, to the correspondence of this

passage with a similar one in the final version of the piece (compare the sketch in Example 76 with the final corresponding passage in Example 77, mm. 83–90).

Lockwood and Gosman find it interesting "that the B♭ entries of the opening theme, which would be harmonically consistent with the surrounding sections, do not extinguish the repeated intrusion of the E♭ entries" of the main theme material in subsequent continuity sketches.[158] Thus, although it might seem logical to suggest that Beethoven ultimately removed the E-flat entry of main theme material late in the subordinate theme because it wreaked havoc on the tonal organization of the subordinate theme, this explanation is at odds with what we find in later sketches (i.e., CS 2.0 and the 3 series sketches), where Beethoven brings back the main theme material in E-flat in the subordinate theme group in several different ways; we will see how he fashions the main theme material to function as an initiating, medial, and cadential function in the subordinate group. For now, let us explore this supposed problem further in the context of the second exposition sketch (branch 1.1).

4.5.1 Analysis of CS 1.1 (Landsberg 6, Page 11, staves 1–4a, 9–10, and 11b)

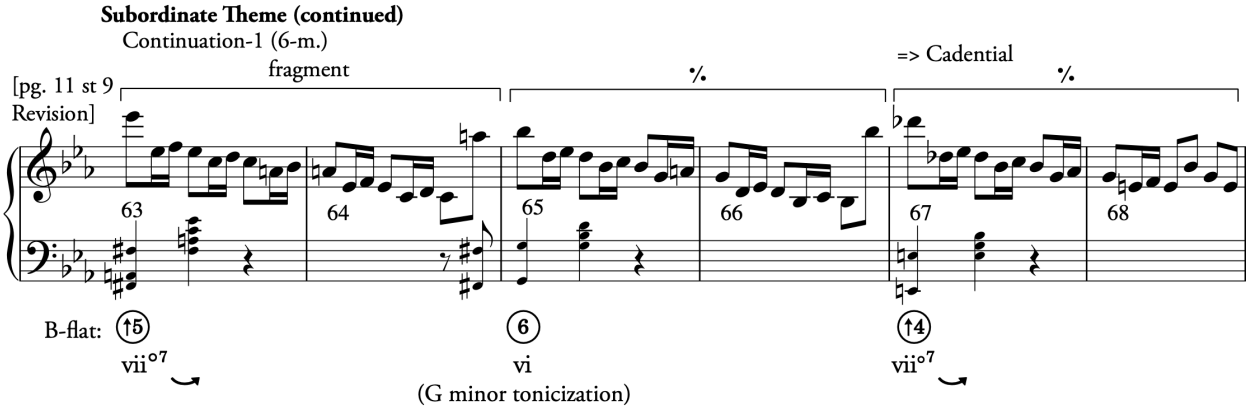
CS 1.1 consists of from the material on staves 1–4a, 9–10, and 11b of page 11 in the *Eroica* sketchbook. The sketch includes mm. 1–62 of the first sketch but everything that follows is replaced with material on page 11. As the second sketch retains material from the first draft but branches off its design in m. 63, I label this revision as branch 1.1. To simplify the prose in this section, I refer to material that starts in m. 55 as the beginning of the subordinate theme, part 2 (my "second," CS 1.0b interpretation) following the discussion developed in section 4.3.3. I encourage the reader to look at the complete Branch 1.1 in Volume 2, p. 41 alongside this text. Measure numbers referenced alongside examples refer exclusively to branch 1.1 unless otherwise noted.

In his branch 1.1 revision of the material beginning m. 63 (Example 78), Beethoven sketches a more aggressive continuation to the second part of the subordinate theme group, by starting it with an implied diminished-seventh harmony rather than tonic (compare the diminished-seventh harmony in Example 78, mm. 63–64 with the first, tonic-based continuation from the first sketch in Example 79, CS 1.0b, mm. 63–64). The reader might notice that this new continuation bares a

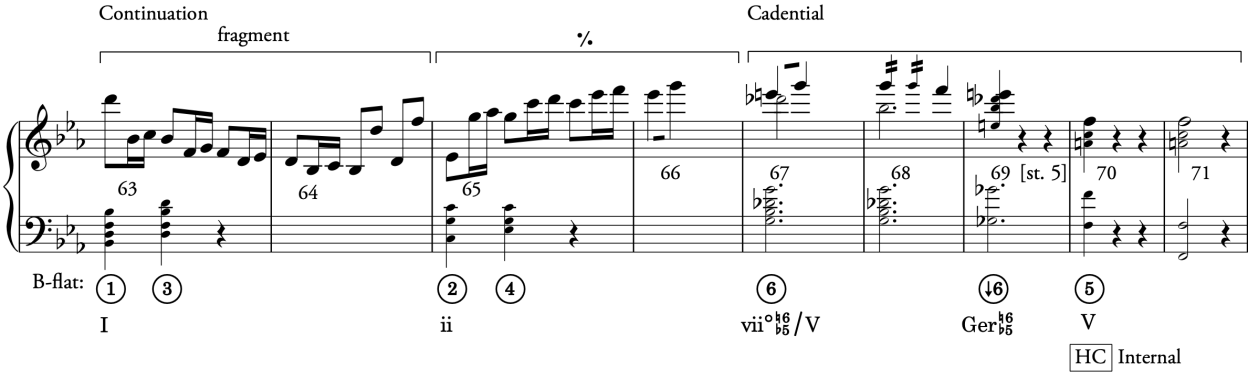
[158] For an overview of where the E♭ entries appear in the sketchbook continuity sketches, see Figure 13 in (Beethoven, Lockwood, and Gosman 2013a, 35). Using the sketch naming conventions developed in this study, Beethoven brings back the main theme material in E♭ in Continuity Sketches 3.0, 3.2, and 3.2.

strong resemblance to the corresponding continuation in the final version of the piece (compare Example 78 with a cue staff reduction of the final version in Example 80). Although we might intuitively think that Beethoven was getting closer to the final version in this second, 1.1 sketch, this is a misconception. The sketches detail a different process: throughout the drafts, the basic material (the basic rhythmic design, melodic figuration, and implied texture) that first appears in the continuation function reappears in subsequent sketches, but Beethoven experiments with alternate ways to express the continuation function (its harmonic syntax, grouping structure, and so forth).

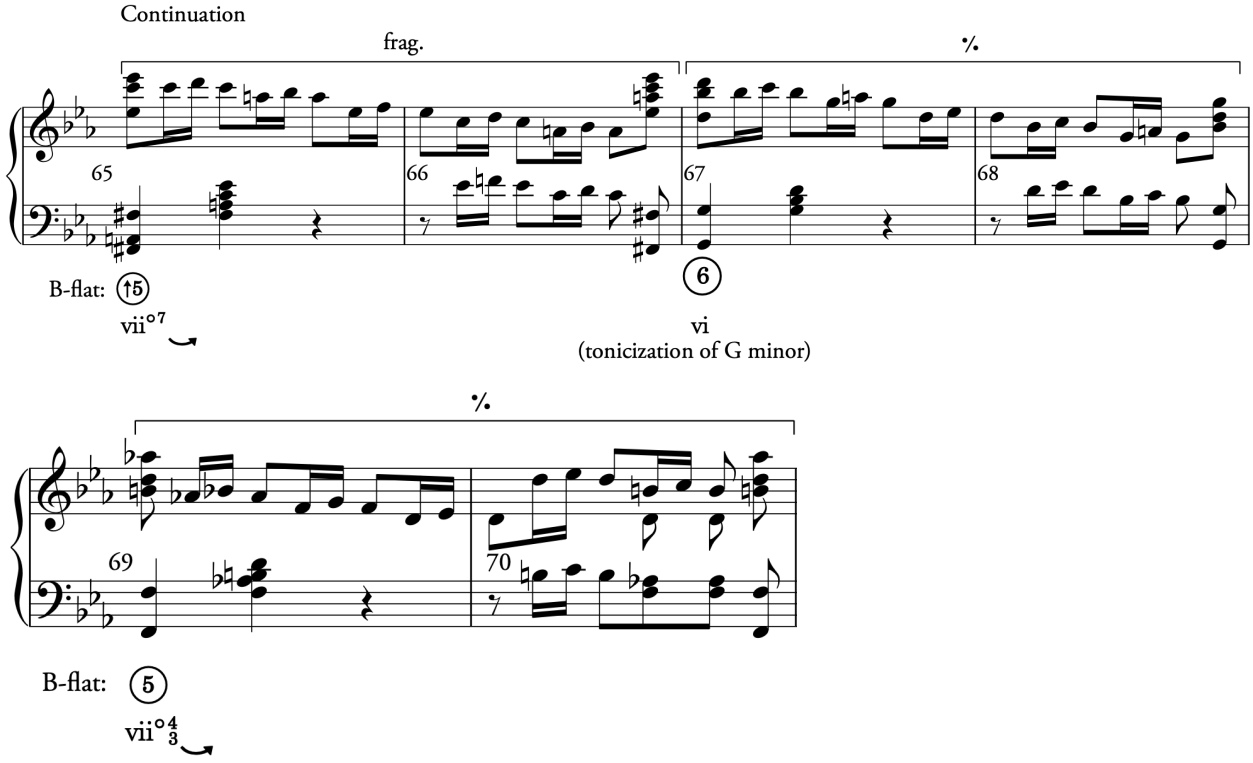
Example 78: Branch 1.1, mm. 63–68; Subordinate Theme, Part 2: Continuation (*ES* p. 11, st. 9)



Example 79: CS 1.0b, mm. 63–71; Subordinate Theme, Part 2, Continuation (*ES* p. 11, st. 4b) [Reproduced Example]

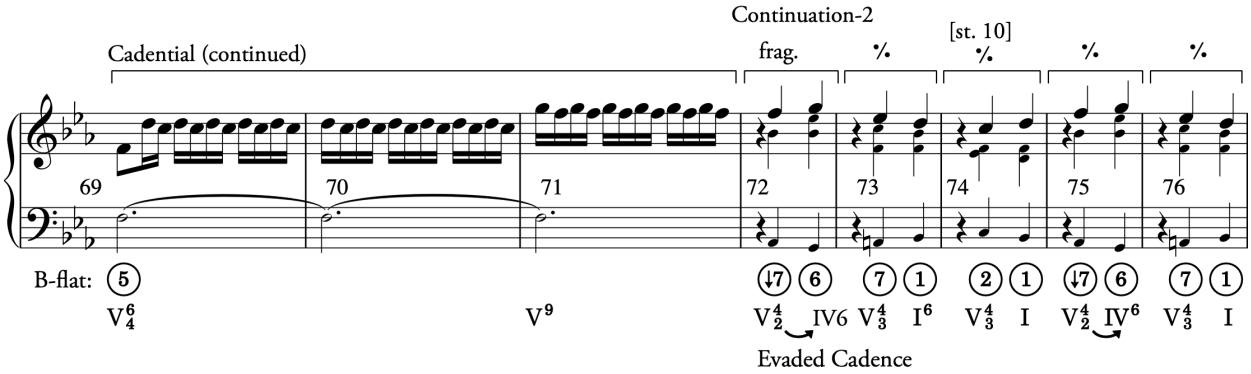


Example 80: Op. 55, I., mm. 65–70; Subordinate Theme 1, Continuation

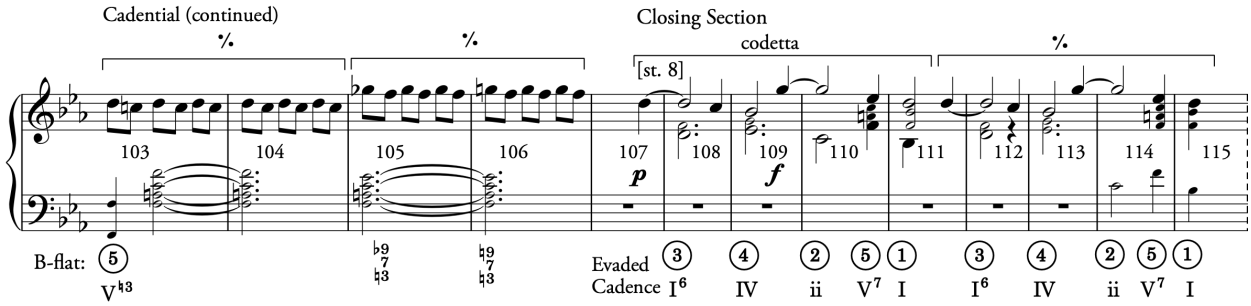


Compared to the first version of this continuation (Example 79, CS 1.0b, mm. 63–71), which led to an ultimate dominant signaling a HC, the revised 1.1 version (Example 78, mm. 63–68) leads to a penultimate dominant with a faster trill on ^2 and ^3 (Example 81, mm. 69–71) that strongly projects an impending PAC. As before, however, the music leaps upward before ending the trill to emphasize a trill on G and F and then evades the expected PAC in the measure that follows (compare CS 1.1 in Example 81 with CS 1.0 in Example 82). A new, energy reducing continuation follows in mm. 72–76 (Example 81) that is somewhat reminiscent of the closing section material found in the first sketch, and the end of the subordinate theme group in the final version. Like the first sketch (Example 82, mm. 107–115), the placement of the subdominant and dominant harmonies in this new continuation (Example 81, mm. 72–76) suggest that the exposition is ending, even though the subordinate theme group did not achieve a SK: PAC.

Example 81: Branch 1.1, mm. 69–76; Subordinate Theme, Part 2: cadential deviation, new codetta-like Continuation (*ES* p. 11, st. 9b–10a)

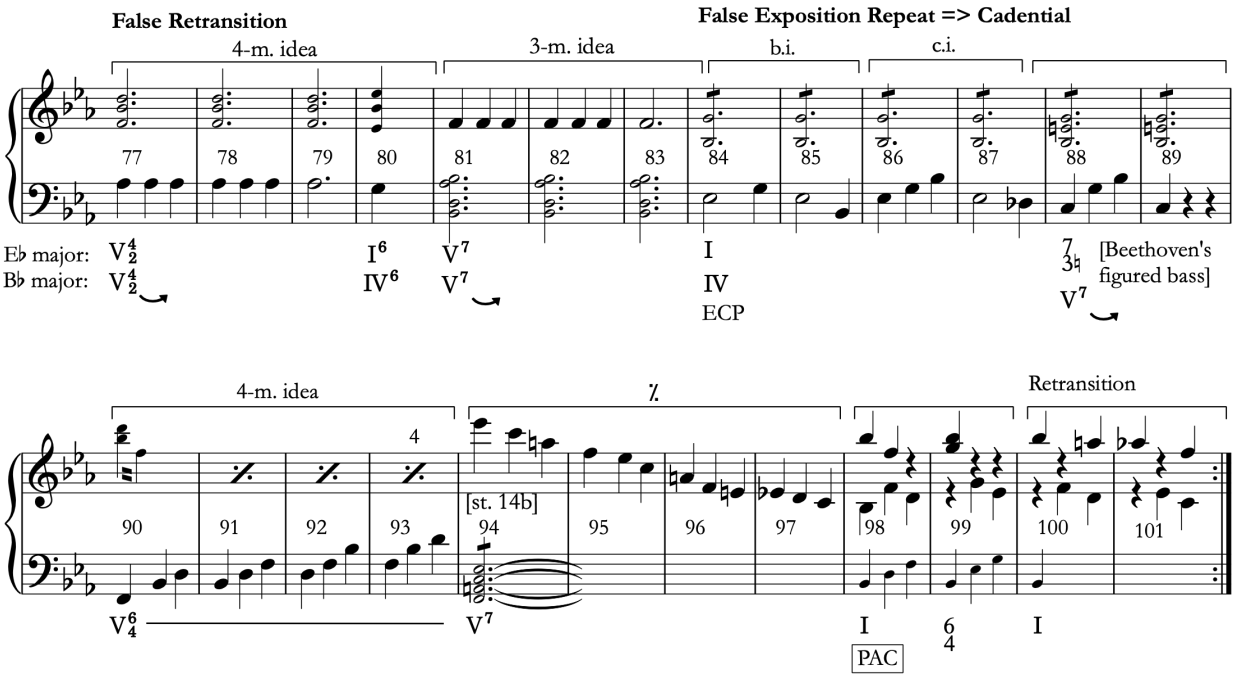


Example 82: CS 1.0, mm. 103–115; Subordinate Theme, Part 2 Cadential Trill, Evaded Cadence, and Codettas (*ES* p. 11, st. 7b–8)



After the codetta-like continuation fragments (Example 81, mm. 72–76), Beethoven writes an 8-m. passage that strongly resembles an exposition retransition by turning the B-flat tonic into a dominant-seventh harmony of E-flat major (Example 83, mm. 77–89). The repeating notes bear some textural similarities to the compound presentation of the final piece's subordinate theme 2, part 1, but the different pitch classes create a different function—retransition instead of initiating. At this moment in the sketch, a listener might begin to anticipate the exposition repeat given the energy reducing continuation in mm. 72–76 and the seeming retransition to the home key. Beethoven leads the listener further along this path by reintroducing the main-theme's CBI in the home key thereafter (E-flat major) in the original register that it first appeared (Example 83, mm. 84–87). But when the listener anticipates the thematic material to move by half-steps down to C-sharp (as in the main theme), here it moves directly to a D-flat instead, which resolves chromatically downwards to C (mm. 88–89).

Example 83: Branch 1.1, mm. 77–101; False Retransition and Cadential Material (*ES* p. 11, st. 10 & 14b)



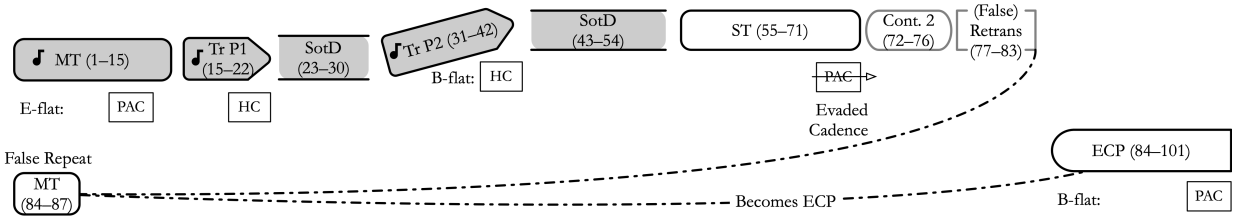
Beethoven reinterprets the C-sharp as D-flat to great effect. Whereas C-sharp served as a tonally disorienting device in the beginning of the exposition in the main theme (m. 7–8), its enharmonic equivalent D-flat at the end of the exposition (m. 87) serves as a reorienting element; for it is at this moment that a listener recognizes that the music is still at the end of the subordinate theme group as part of an ECP and not repeating the exposition, as signaled by its main theme![159] In m. 88 (Example 83), Beethoven writes the figures 7/♮3 which reinforces reading an applied dominant of the subordinate key dominant (i.e., CMm7 as V of V of B-flat major), which resolves to the final cadential dominant in m. 90. A cadential gesture over a prolonged dominant harmony (mm. 90–97) formed by two, 4-m. units leads ultimately to the first and only SK: PAC in m. 98.

To summarize, when a listener first hears the material in mm. 77–86, they likely believe that the music has modulated back to the home key (E-flat major) and think they are hearing a repeat of the exposition. But when a D-flat appears instead of a D in m. 87 and moves downwards to C, they retrospectively interpret the passage as a strong tonicization of the subdominant harmony in the SK

[159] Nottebohm considers this statement of the main theme material to be employed in a medial, transitionary way. He remarks that the part of the principal subject employed here is used as a *"gangartig"*—a passage that connects between two other parts; see Jonathan Katz's translation and commentary on the word *gangartig*, (Nottebohm 1979, 63–64). Nottebohm's use of the word *gangartig* owes to A.B. Marx's use of the term.

(i.e., E-flat major as IV of B-flat major). Consequently, they realize they are at the end of the exposition instead of the beginning. Figure 24 provides a form-functional diagram of CS 1.2 that models a listener's perception of the false exposition repeat.

Figure 24: CS 1.1, mm. 1–101; Form function diagram (represents *ES* p. 11, st. 1–2a and p. 10, st. 3–12)



Analysis of CS 1.1 highlights the important role that the first chromatic note, C-sharp, plays in Beethoven's early compositional process for the movement. Compared to the final version of the piece, which, in the recapitulation of the main theme the C-sharp moves as a D-flat downwards to allow the main theme material to emerge in F major (mm. 403–409), CS 1.1 foregrounds this move over a shorter formal timespan to tonicize F major as the dominant of the subordinate key (B-flat major). There is nothing syntactically wrong with this idea in the sketch, but Beethoven ultimately decided to expand this rhetorical ploy over a much greater timespan in the final version. The C-sharp to D-flat enharmonic relationship in the final version's recapitulation does not work to orient the listener in the form as it does in the second sketch, but instead enables him to expand the dimensions and tonal design of the main theme function. In other words, while Beethoven does ultimately use the C-sharp to D-flat enharmonic reinterpretation that he designed in the revision branch 1.1 in the final version of the piece, the relationship creates alternate formal consequences that yield different experiences for a listener. The first and second sketches attest to Beethoven's interest in expressing the enharmonic relationship between C-sharp and D-flat and exploring their related harmonies at important parts in the form.

Compared to CS 1.0, branch 1.1 introduces an entirely different formal plan in the subordinate theme group. Instead of saturating the subordinate theme group with main theme material in the tightly integrated keys of B-flat major, D-flat major and E-flat minor, Beethoven expands the dimensions of the subordinate theme group by staging a false exposition repeat. While the overall rhetorical effect of branch 1.1 is vastly different than CS 1.0, it also has features that make it equally difficult for a new lyrical theme to emerge. The second exposition sketch fully

confirms the subordinate key with a PAC, but this only occurs after the main theme material re-appears with its original harmony (E-flat as IV), which starts an ECP that concludes with a PAC. It is almost as though the subordinate theme group could not close until the main theme material re-emerged.

4.6 Conclusion

The first two exposition sketches subvert the thematic and tonal forces normally ascribed to a subordinate theme group while simultaneously expanding that function. In the first sketch, Beethoven undermines the thematic and tonal content of the subordinate theme by obscuring where it starts, by expanding it with the remote keys of D-flat major and E-flat minor, and by failing to confirm the subordinate key with a requisite PAC. In the second sketch (1.1), he omits the tonal expansion into the keys of D-flat major and E-flat minor from the first sketch (CS 1.0) and instead writes a false exposition repeat—a remarkable rhetorical ploy, whereby the new subordinate theme, part 2 material sounds like a codetta, a retransition, and a seeming restart of the exposition. The overall effect of these sketches motivates and leaves space for a new independent lyrical theme in the development, which Beethoven may have planned very early in his compositional process.

Although it intuitively makes sense to look for passages in the sketches that Beethoven revised or purged and try to explain what was wrong with them, we can develop new insights into these sketches if we try to understand the role that these passages play within the sketches that they emerge. Since Beethoven did not know the final version of the exposition when he wrote the first two drafts—we too should analyze the sketches for what they are, not solely for what they will become.

In some cases, there is nothing fundamentally wrong with the passages that Beethoven revises. Sometimes he alters elements to amplify certain relationship in a greater timespan. For example, in the second sketch, the enharmonic relationship of C-sharp and D-flat appears prominently in exposition, but in the final Op. 55, I, it plays out over the exposition and recapitulation. Other times, the designs that he removes in successive drafts might end up in other pieces. For instance, the cadential trill followed by closing section that was cut from the *Eroica*'s first exposition sketch may have provided the inspiration for a similar design at the end of the first movement to his Cello Sonata, Op. 69 that he wrote several years later. Finally, he may discard an idea in a subsequent sketch, but return to it at a later time before finishing the piece; we will find numerous instances of this procedure in the chapters that follow.

When we approach analysis with the intent of valorizing the sketches instead of trying to explain why passages were changed or removed, many supposed compositional "problems" turn out to be clever compositional solutions that grant new insights into the origin of the piece. In short, the early *Eroica* sketches are anything but "radical blunders"; they are exciting designs that are worthy of close analysis.

BRANCH 1.2

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5.1 Overview of CS 1.2 as it relates to CS 1.0 and CS 1.1

5.1.1 Sketch page layout

In this chapter, I analyze the phrase structure of CS 1.2. This sketch includes the material written on page 11, staves 1–2a, and page 10, staves 5–12 of the *Eroica* Sketchbook. Although Beethoven usually sketches from left to right—that is, he begins on the *verso* page and continues on the *recto* page—the "de" on page 10 suggests strongly that this material was written after the music he wrote on page 11, because the "Vi," written on page 11 (st. 2) indicates the point where the new material, indicated by "=de," (p. 10, st. 5), should be placed (*Vide* is a Latin term for "see" or "refer to") (see
~~~
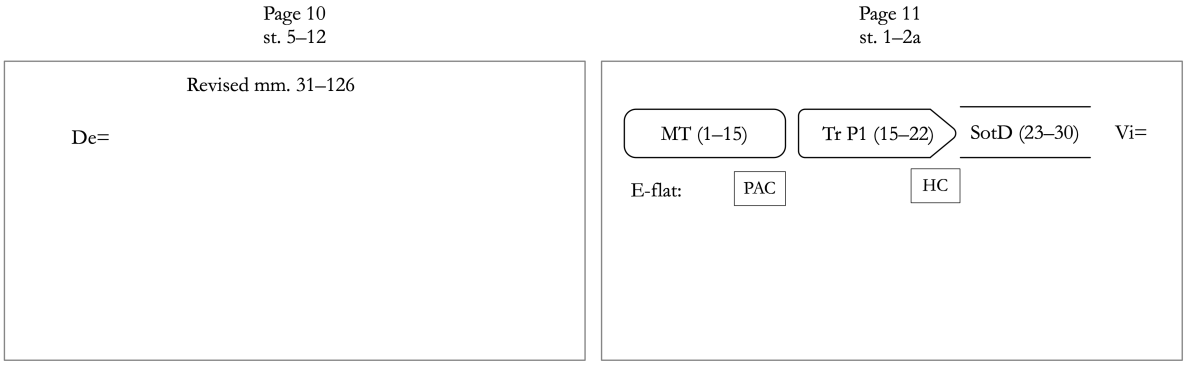

Figure 25).[160] As in previous chapters, all measure call out numbers refer to CS 1.2 in Volume 2 unless noted otherwise.

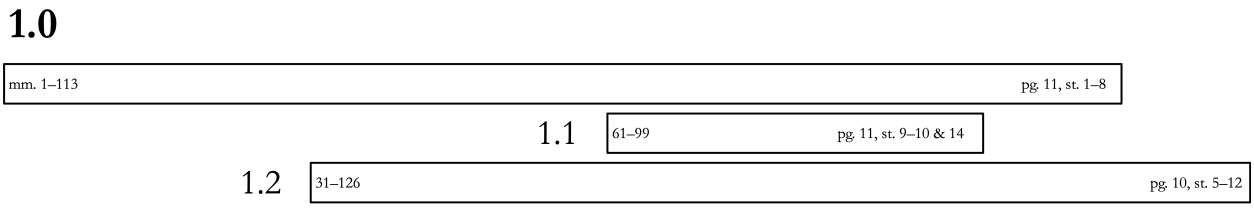
Figure 25: Page layout for CS 1.2 (*ES* p. 11 st. 1–2A, p. 12, st. 5–12)



5.1.2 Revisiting Trunks, Branches, and Merges

Up to now, I have referenced the first continuity sketch as CS 1.0 and treated the revision of that sketch as a separate continuity sketch CS 1.1 to simplify the narrative. As the number of sketches that we are working with expands, it will be useful to adopt more robust terminology for referencing each version. Consider Figure 26. This image diagrams the three long continuity sketches that Beethoven wrote on page 11 (CS 1.0 and 1.1) and page 10 (1.2) as three rectangles. Each rectangle is scaled and positioned according to their measure numbers where 1 measure maps to 10 (relative) pixels of horizontal distance. This diagram helps to visualize the parts of the exposition that Beethoven was working with on the first two pages.

Figure 26: Overview diagram of CS 1.0 with branches 1.1 and 1.2

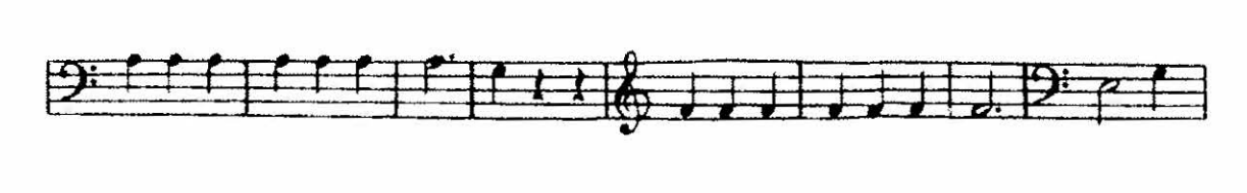


[160] Lockwood and Gosman suggest a similar of the order of sketches, but without the intervening revision sketch on page 11 that I have called CS 1.1; (Beethoven, Lockwood, and Gosman 2013a, 33). Although Lockwood and Gosman do not include the revisions on page 11 (staves 9–10 and 14) in their exposition continuity sketches, they do recognize this material as a revision to the first sketch in their inventory; (Beethoven, Lockwood, and Gosman 2013b, 193).

In the interpretation so far developed, the first exposition sketch that Beethoven drafted was CS 1.0 on p. 11, staves 1–8 first (i.e., Figure 26, top rectangle). As this is the first and longest sketch, we can consider it to be the "trunk." Sometime after he wrote this trunk, Beethoven composed music on the same page that he intended to replace mm. 61–99 of the trunk (middle rectangle). We refered to this replacement material (solely mm. 61–99) as the 1.1 "branch." Finally, after he wrote this branch, he turned to the *verso* page 10 and sketched new material that he likely intended to replace mm. 31–126 in the CS 1.0 trunk. We can refer to this material on page 10 (and not the complete exposition) as the 1.2 branch.

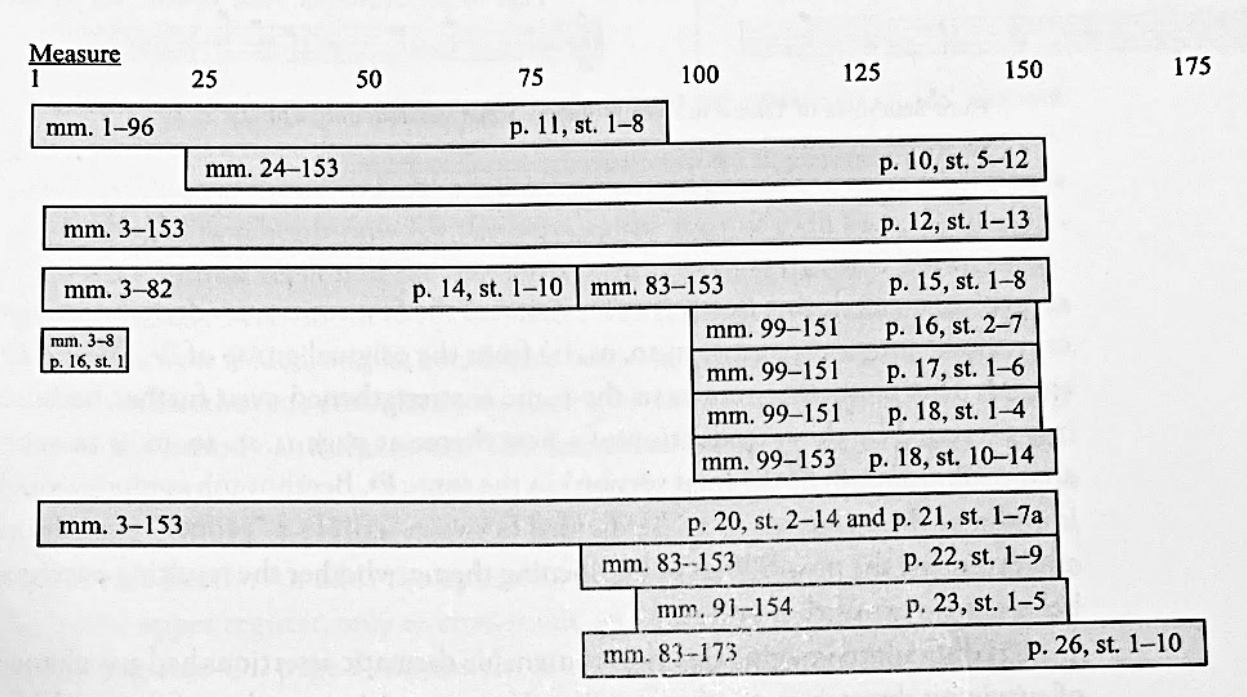
The chronology of the first three sketches suggested here accords mostly with the order suggested by Nottebohm, Lockwood, and Gosman, but this study deviates somewhat from prior descriptions because it assigns greater import to the 1.1 branch. This branch, while not completely slighted in the literature, has received considerably less attention than other sketches. Nottebohm, for instance, did not provide a complete transcription of this branch, but he did reproduce a fragment from it (Example 84) to show that Beethoven spent some time trying to base the "end-section" [*Schlusspartie*] on the "principal subject" or parts of it.[161] In a similar way, Lockwood and Gosman briefly reference this branch in their commentary, but they do not place this branch into the diagram that summarizes the longer exposition sketches (see Figure 27; compare with Vol. 2, p. 1).

Example 84: Nottebohm's Fragment of Branch 1.1; (Nottebohm 1880, 19)



[161] "Beethoven ist einige Zeit dabei geblieben, den Schlusssatz hauptsächlich auf das Hauptthema und auf Theile desselben zu gründen. Man sieht das in einigen Skizzen, in denen jedoch das Hauptthema nicht, wie in der zweiten Skizze, in B-dur, sondern in Es-dur eingeführt wird, zunächst in dieser abgebrochenen Skizze (S. 11)" (Nottebohm 1880, 19). For a translation, see (Nottebohm 1979, 63).

Figure 27: Lockwood and Gosman's diagram of longer sketches of the first-movement exposition; (Beethoven, Lockwood, and Gosman 2013a, 33)



The top-most rectangle in Figure 26 (CS 1.0) represents a complete exposition continuity sketch; to create CS 1.1 and 1.2, it was necessary to separately merge branches 1.1 and 1.2 into the 1.0 trunk. Figure 28 shows this operation for CS 1.1., and Figure 29 for CS 1.2. Previous studies may have missed the CS 1.1 merge because Beethoven did not use any signs or words (e.g,. "Vi=de") to explicitly indicate this intention. I performed this merge because the 1.1 branch material was written on the same page as the trunk and the content and function of the material suggested that Beethoven intended for it to replace earlier written music. By contrast, Beethoven explicitly indicated the CS 1.2 merge with "Vi=De." This marking was likely necessary because the revision material was written on the *verso* page and would replace material written first on the *recto* page.

Figure 28: CS 1.1, i.e., CS 1.0 merged with branch 1.1

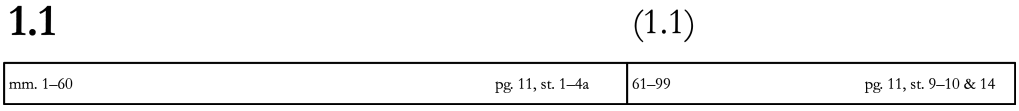
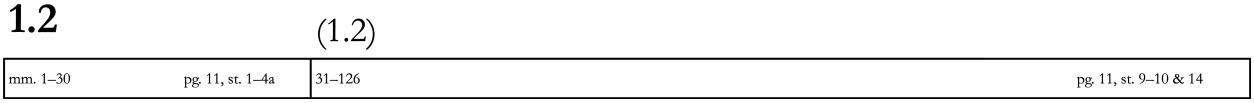


Figure 29: CS 1.2, i.e., CS 1.0 merged with branch 1.2



As we progress in the sketchbook, we will have to interpret how and which branches should be merged into which trunks because Beethoven does not always mark these operations with explicit signs or words (e.g., "Vi=de"). For the most part, most merges are readily apparent and easy to perform because the replacement material is proximally close to what it succeeds and the juncture at the point of insert is appropriately similar in content and function. Although it is possible that he could have intended for some passages to be inserted in-between pre-existing material, or in different trunks, this "insert" operation (and not "delete and replace") appears to be exceedingly rare in Beethoven's sketches. Accordingly, this study focuses on merging revisions into the trunks they are most closely associated with, with delete-and-replace operations in the vein of CS 1.1 and 1.2 discussed above (e.g., Figure 28 and Figure 29).

5.1.3 CS 1.2 Thematic Functions Overview

CS 1.2 combines elements from both CS 1.0 and branch 1.1 but cannot be viewed as a simple linear evolution of either prior version. To visualize how the new 1.2 material relates to the previous two sketches, therefore, it is necessary to compare CS 1.2 with each previous sketch separately. First, however, consider the theme function structure of CS 1.2 shown in Figure 30. When we include mm. 1-30 from the CS 1.0 trunk (see the shapes highlighted in grey), this sketch comprises a main theme, a two-part transition, and two large subordinate themes. The first subordinate theme (ST1) is expressed as an unusual sentential design with greatly expanded phrase functions. For reasons that will become apparent, this theme projects characteristics of a two-part theme. Finally, the sketch ends with a large second subordinate theme (ST2, mm. 92–115) that that sets up the material that will become the first part of the second subordinate theme in the final version.

Figure 31 shows the relationship between CS 1.0a (i.e., the interpretation that saw a two-part transition instead of a three-part subordinate theme) and CS 1.2 (bottom) in a form-function transfer diagram. Beethoven "transferred" many of the thematic functions that he designed in the original 1.0 trunk into the 1.2 branch, but he altered each of them in different ways. Recall that the dashed lines represent token-character transfers—i.e., a transfer of the function and general content—and the solid lines denote token transfers—i.e., a near or exact transfer of function and content. In the transition, he modified the end of the SotD-1 and changed completely the harmonic structure of the transition, part 2. In the subordinate theme group, he altered the design substantially. We will examine these changes in greater detail below.

Figure 30: CS 1.2 Form Function Diagram

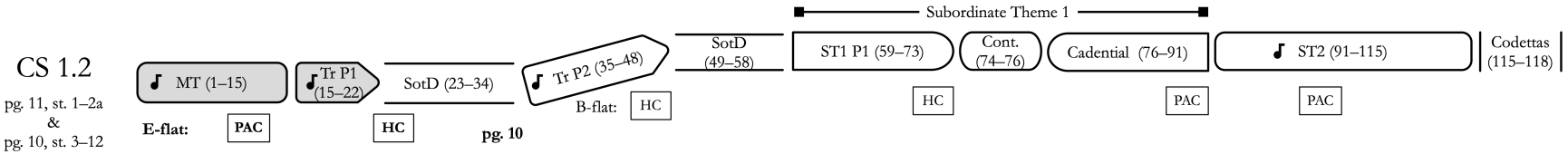
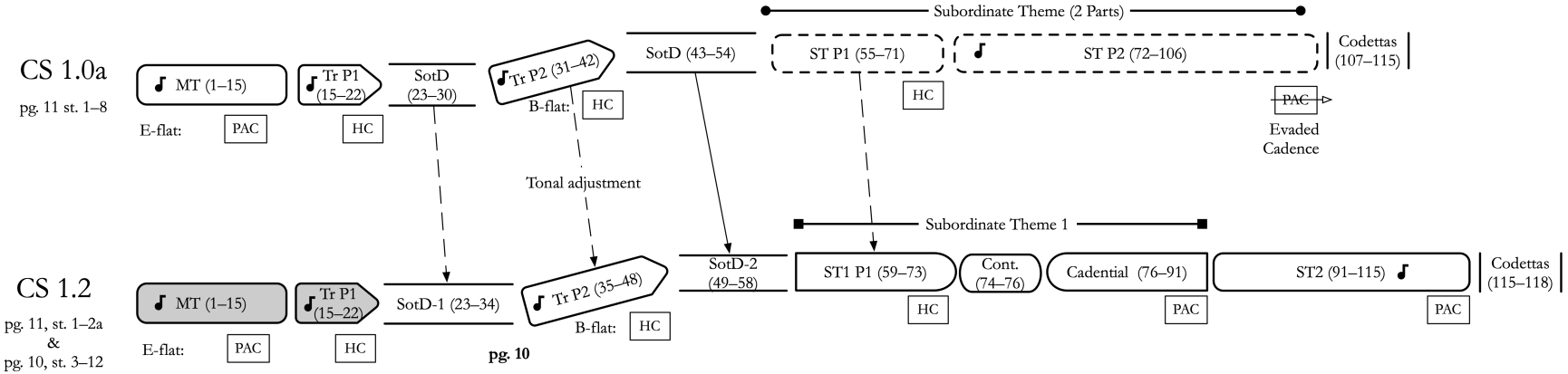


Figure 31: Form Function Transfer Diagram: CS 1.0a (top) to CS 1.2 (bottom)



Let us now compare the theme functions in CS 1.2 with CS 1.1. Before we do, however, recall that CS 1.1 merged trunk 1.0 with branch 1.1. We saw that part of the 1.0 trunk material (mm. 15–54) could be interpreted in two different ways, either as a two-part transition (the "a" interpretation of CS 1.0)[162] or as a one-part transition and start of the subordinate theme (the "b" interpretation).[163] To simplify comparisons in this chapter, we will use the "a" interpretation of the trunk material (i.e., the two-part transition labeled CS 1.0a). Therefore, when we merge the 1.1 branch with the 1.0a trunk, we form CS 1.1a (Figure 32 the greyed-out shapes are inherited from CS 1.0a). In brief, CS 1.1a combines the two-part transition from CS 1.0a but has a subordinate theme group that includes a false exposition repeat. To clarify further how CS 1.1a compares to CS 1.2, Figure 33 shows the same diagram as Figure 32, but with the false repeat functions repositioned to their real, chronological positions on the right-hand side of the diagram.

With the new form diagram of CS 1.1a in mind, consider how its thematic functions transfer to CS 1.2 in Figure 34. Because the first 60 measures of CS 1.1a are part of CS 1.0a (refer to Figure 28), we are most interested in contrasting everything that follows m. 60, that is, the subordinate theme group. In brief, observe that Beethoven significantly alters the structure of the subordinate theme group in CS 1.2 by repurposing some of the material that he originally devised for the false exposition repeat in CS 1.1 to create a new, second subordinate theme in CS 1.2. The main theme material also reappears in CS 1.2 in the subordinate theme (observe the music icon transfer in Figure 34), but now it brings a medial function to a new subordinate theme instead of a false main theme function. We will discover how Beethoven accomplishes these changes in greater detail in what follows.

[162] Refer to section 4.3.2

[163] Refer to section 4.3.3

Figure 32: CS 1.1a Function Diagram (represents *ES* p. 11, st. 1–2a and p. 10, st. 3–12)

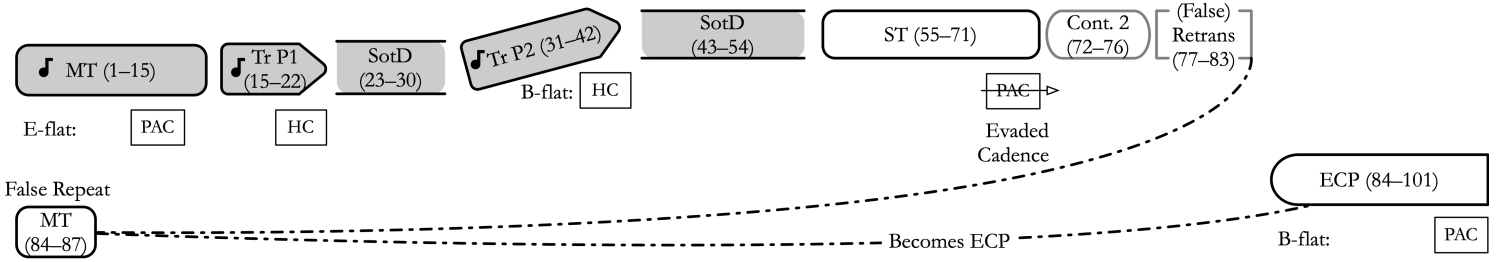


Figure 33: CS 1.1a (with CS 1.0a, mm. 1–60 imbedded), Form Function Diagram (modified to reflect real positions)

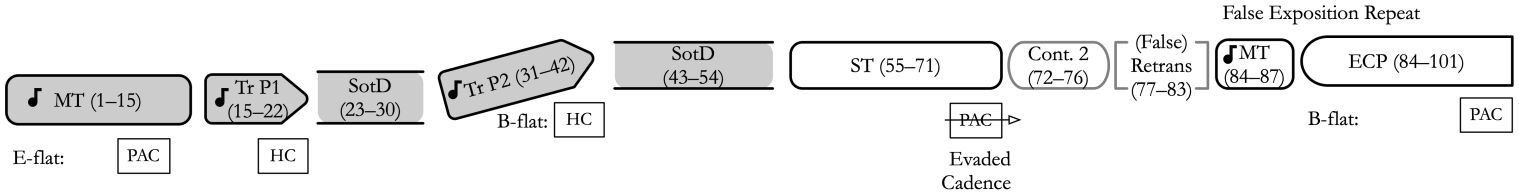
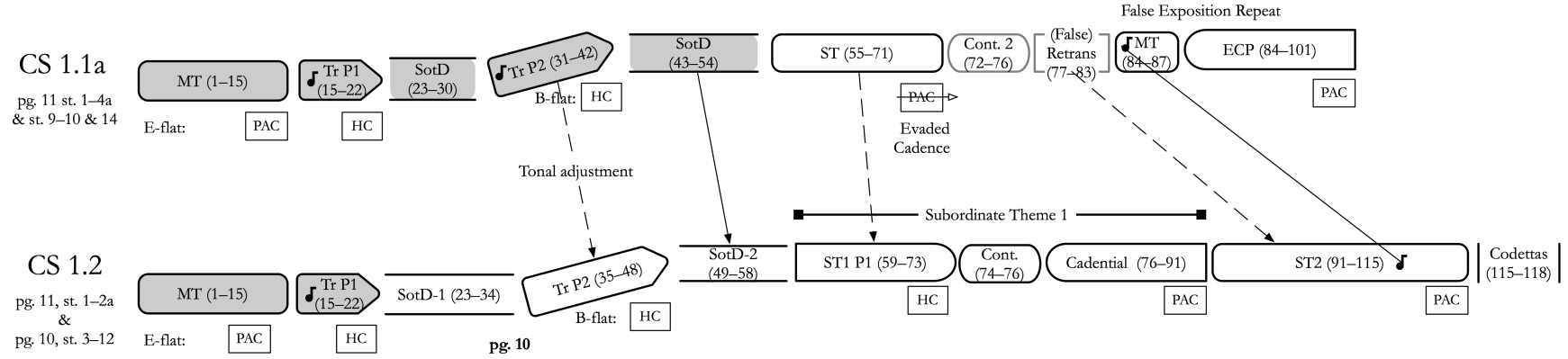
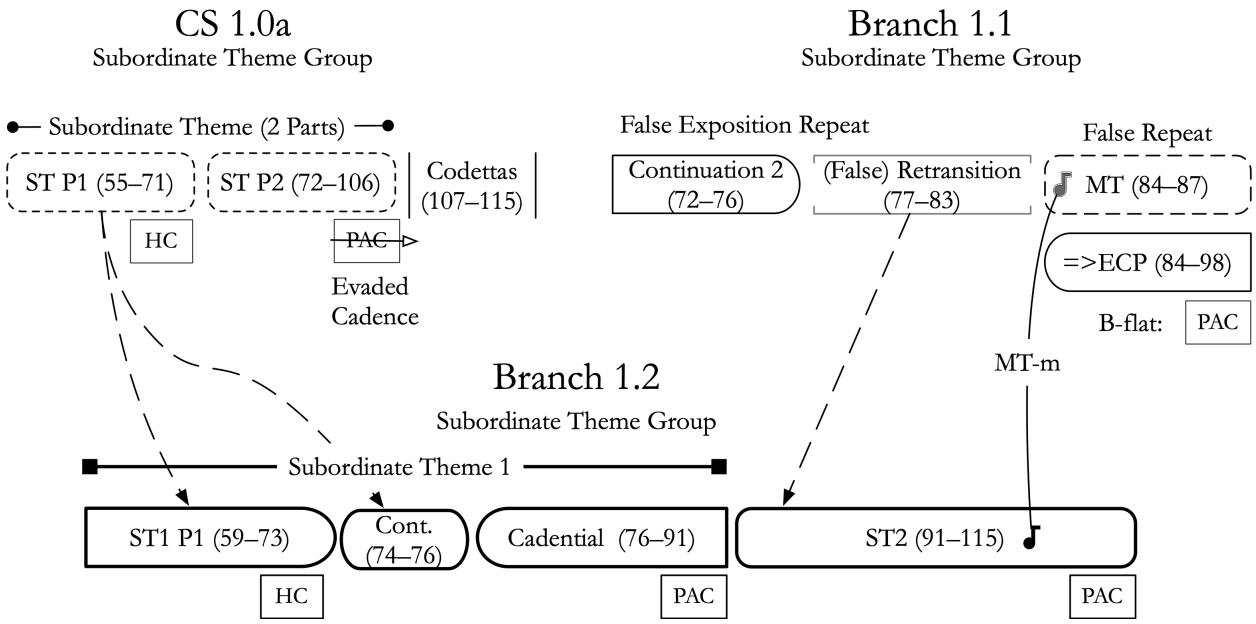


Figure 34: CS 1.1 (top) to CS 1.2 (bottom), Function-Transfer Diagram

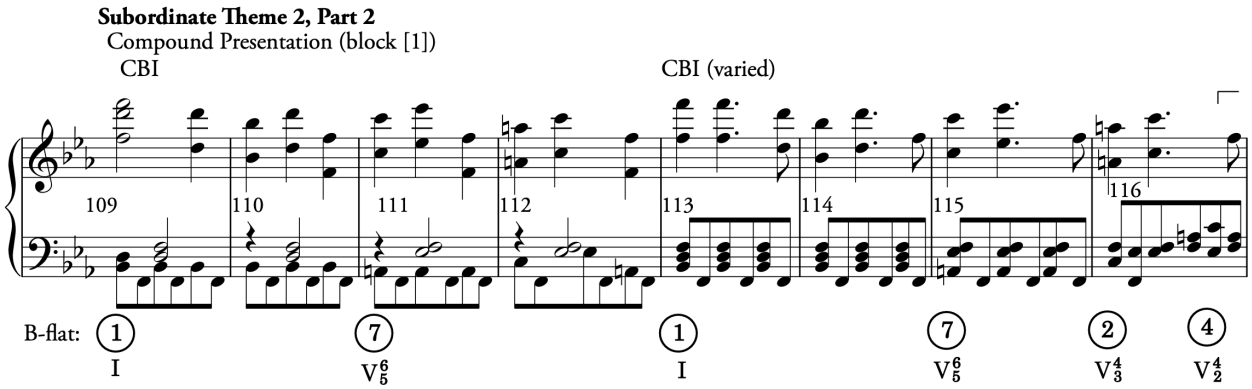


To summarize these comparisons, CS 1.2 combines elements from both the CS 1.0 trunk and the 1.1 branch, and the most substantial changes in CS 1.2 occur in the subordinate theme group. Figure 35 diagrams how functions and material from the subordinate theme group in CS 1.0a (top left) and branch 1.1 (top right) are merged and transferred into the subordinate theme group in branch 1.2 (bottom). The initiating part of subordinate theme 1 in branch 1.2 (bottom) derives from the subordinate theme, part 1 function in the CS 1.0a trunk (top-left), and the last part of the subordinate theme group is built from repurposed material that was originally developed for the false retransition and exposition repeat in the 1.1 branch (top-right). The material that I have called "Cadential" in branch 1.2's first subordinate theme is completely new. As Lockwood and Gosman (2013a, 35) suggest, this material seems to anticipate some of the features of the subordinate theme 2, part 2 in the final version (compare mm. 77–84 in CS 1.2, Vol. 2, p. 44) with Example 85, final, mm. 109–116). We will return to this passage and its similarities with the final subordinate theme 2, part 2 further below. For now, it is sufficient to understand that the subordinate theme group in the 1.2 branch combines functions and materials from the previous two sketches.

Figure 35: Subordinate Theme Group Function-Transfer Diagram (CS 1 series)



Example 85: Op. 55, I., mm. 109–116, Subordinate Theme 2, Part 2, corresponds with ST1 P2 in 1.2 branch



With the general overview of how the thematic functions in CS 1.2 relate those in the previous two sketches, let us analyze the differences in the sketches in greater detail. We will discover how Beethoven alters the transition to build a clearer, two-part transition, then examine the new subordinate theme group to understand where it begins, how the themes relate to previous material, and how the large cadential function of first subordinate theme anticipates elements of what will become the second subordinate theme, part 2 in the final version. As mentioned above, the reader is encouraged to examine CS 1.2 in Volume 2 alongside this text (pp. 42–45).

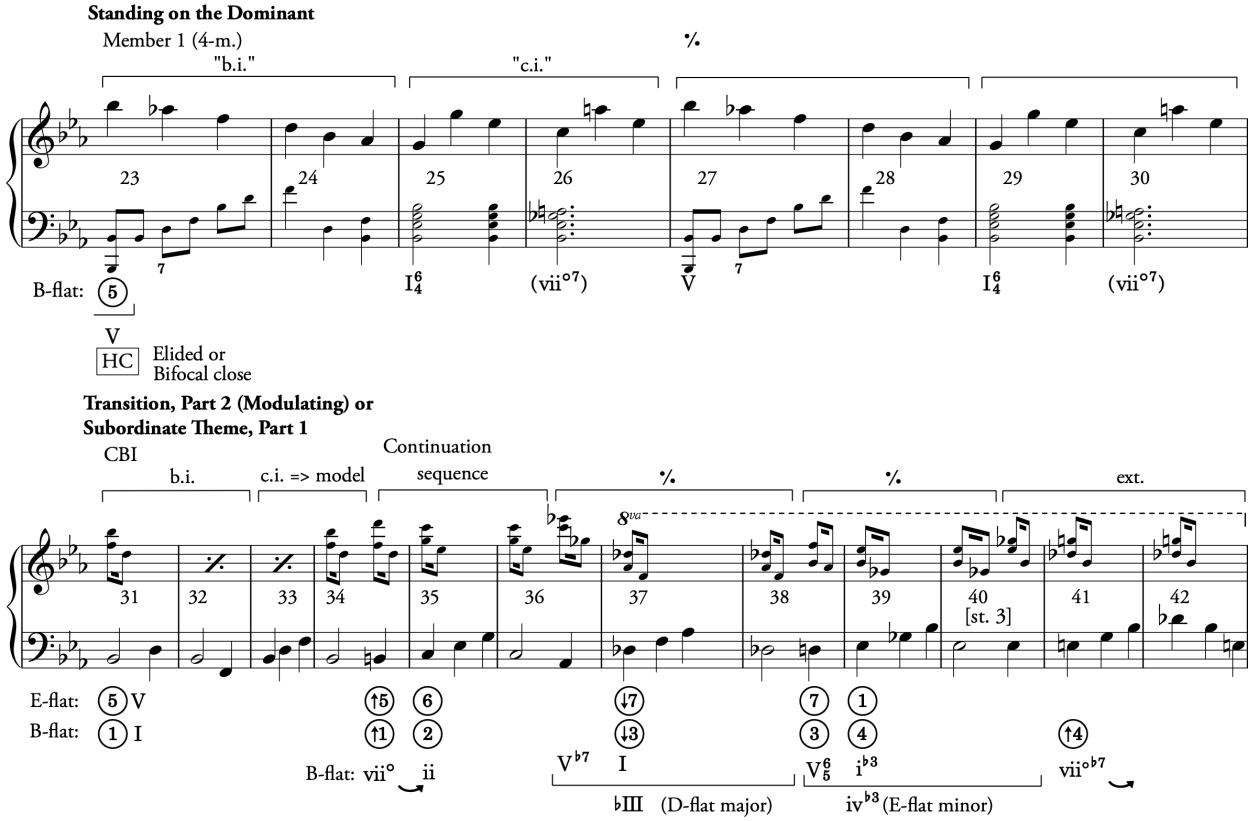
5.2 Transition (mm. 15–58)

5.2.1 Transition, Part 1 (mm. 15–34)

Beethoven starts the 1.2 branch by extending the first SotD (mm. 23–34) with a leaping bass (mm. 31–34) that creates a duple-against-triple hemiola. This hemiola builds further anticipation for what follows. When the SotD ends, the next material (mm. 35ff) starts in the home key (E-flat major) rather than the subordinate key (B-flat major), as it did in the first two sketches (i.e., CS 1.0 and 1.1 shown in Example 86, mm. 31ff).[164]

[164] When the tonic arrives in m. 35, a PAC does not occur because the dominant harmony that preceded it acted as an ultimate dominant in a post-cadential SotD, not a penultimate dominant within a cadential progression.

Example 86: CS 1.0, mm. 23–42 (*ES* p. 11, st. 2–3)

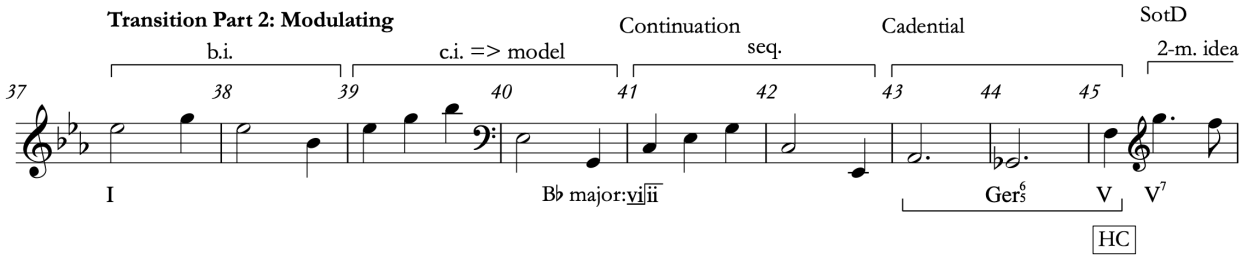


5.2.2 Transition Part 2 (mm. 35–58)

Let us turn now to the material that follows the first SotD beginning in m. 35. Recall that, in the 1.0 trunk, Beethoven followed the first SotD with the main theme material in B-flat major (Example 86, mm. 31–34; recall that CS 1.0 and branch 1.1 have the same mm. 1–60). This music was interpreted in two ways depending on whether we viewed the HC in m. 23 as a bifocal close. If we did not read a bifocal close, then the main theme material in mm. 31–34 began the transition, part 2 (refer to section 4.3.2). On the contrary, if a bifocal close was recognized, then the main theme material started the subordinate theme, part 1 (see section 4.3.3). It was hypothesized that the two different interpretations were not a weakness inherent in the material but rather that Beethoven deliberately sought to obscure the beginning of the subordinate theme group, perhaps to motivate the arrival of a new lyrical theme in the development. The 1.2 branch eliminates some of this ambiguity by stating the main theme material (mm. 35–38) in the home key (E-flat major) just as it appears in the final version. This change therefore removes the possibility of a bifocal close, and consequently, we hear an unambiguous transition, part 2. Although Beethoven will experiment with alternate solutions in

the sketches that follow, the home key statement of main theme material that starts the transition, part 2 matches the final version.

Example 87: Op. 55 I., mm. 37–45; Transition Part 2, Modulating

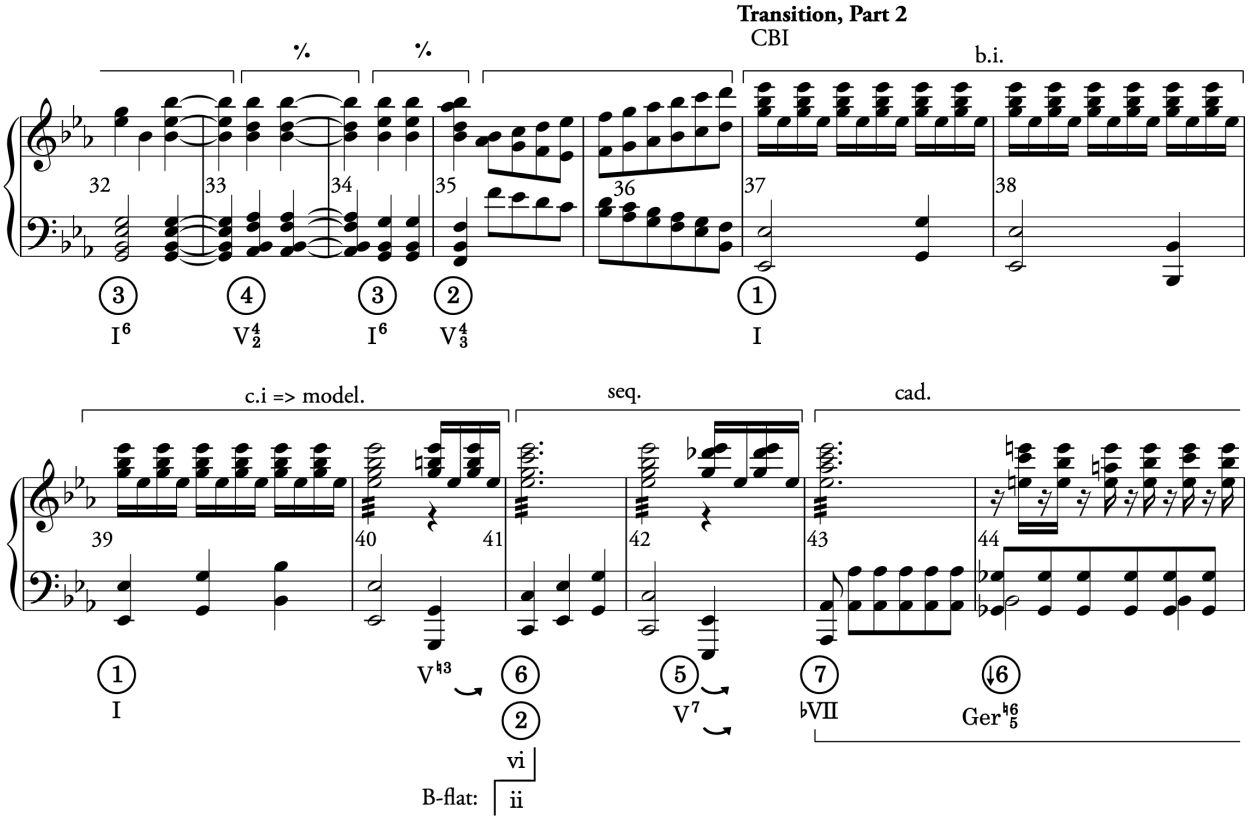


Although the transition, part 2 in the sketch starts in the same way as the final, Op. 55 version, the rest of the function differs. The most significant difference between the two versions is the length: the transition, part 2 in CS 1.2 (mm. 35–49) is seven measures longer than the final version's corresponding function (compare with Example 87, final, mm. 37–45). In the 1.2 branch, Beethoven sequences the contrasting idea (mm. 37–38) one and a half times (mm. 39–41), then breaks the sequence with two measures of dominant harmony (mm. 41–42). He then resolves this dominant harmony to a tonic statement of the contrasting idea material (m. 43–44), which becomes the model for a second sequence, now by descending thirds (mm. 45–48). This second sequence brings the usual submediant pivot (vi in the home key becomes ii in the subordinate key, mm. 45–46). After one and a half copies of the sequence model, it breaks in m. 48 and a brief cadential progression (i.e., ↓⑦-⑦-↓⑥-⑤ as ♭VII – vii° – Ger6 – V in B♭ major, mm. 47–49) concludes with a SK: HC (m. 49) that confirms the modulation to the subordinate key (B-flat major).

The transition part 2 in the 1.2 branch is somewhat clunky because it repeats material from the first part of the transition and is itself structured like a small, two-part transition: a brief, non-modulating sequence leads to dominant harmony (mm. 37–42), and modulating sequence follows with the same contrasting idea material (43–49). It is almost as though Beethoven copied and pasted the first part of the non-modulating, first part of the transition (mm. 14–22) to start the beginning of the second part in this sketch. The next sketch (CS 2.0) resolves some of these deficiencies, but the chromatic redundancy—both parts 1 and 2 of the transition move from E-flat to E-natural and F (see mm. 18–19 and 38–39)—remains until later sketches. Ultimately, he eliminates these problems in the final version (Example 88) by sequencing the contrasting idea down a third (m. 41). In so doing, he compresses considerably the second, modulating part of the transition. Whatever his

rationale might have been in this 1.2 sketch, his process of designing the final version of this modulating transition part was more circuitous than we would expect.

Example 88: Op. 55, I., mm. 32–44; Transition, Part 2



5.2.3 Transition, Part 2, Standing on the Dominant

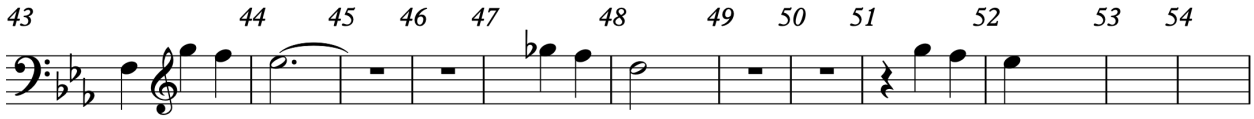
Now that we have examined the changes that lead to an unambiguous start of the transition, part 2, let us turn to the second SotD that follows (mm. 49–58). This music has the same post-cadential SotD function as the prior version of this passage in CS 1.0 and 1.1, but the underlying formal context changes because we now hear this SotD-2 as post-cadential material at the end of a two-part transition, not the end of a potential subordinate theme, part 1. This design corresponds with the final version, but we will see that Beethoven experiments with alternatives in successive sketches.

The SotD-2 has two surface level changes (compare each version so far discussed in Example 89). The first difference in the 1.2 branch version is the new ascending scalar gesture in the middle of the passage (Example 89, second system, m. 52). The second change is the new location of the descending gesture that begins with G-flat (mm. 55–56), which is now placed towards the end of the SotD-2 instead of in the middle as it was in CS 1.0.

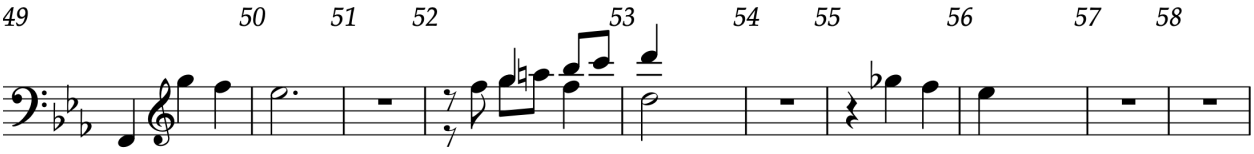
Before we move to the subordinate theme group, consider in greater detail some of the differences that appear in the skeletal structure of the SotD-2 (1.2, mm. 49–58). Given that Beethoven writes "etc." above m. 51, I hesitate to place too much emphasis on the different grouping structure (i.e., 4+4+2 versus 4+4+4 in prior sketches) or the new 1.2 SotD's shorter length (10-m. instead of 12-m.) because it is likely that he intended for the SotD to be 12-m. as it is in every other sketch and Op. 55, I. Nevertheless, the new, eighth-note ascending gesture in the middle of the SotD-2 (mm. 52–53, from F to D) sheds some light on the nature of Beethoven's continuity voice. This gesture, which does not appear in any successive sketches or in the final version in either the exposition or recapitulation, suggests that he did not yet have a clear idea about how he would elaborate the texture of this SotD-2 beyond the descending third or fourth motive that he established in the first sketch (i.e., G-F-E-flat or G-flat-F-D in the top system of Example 89). This is not to say this melodic ascent idea developed in branch 1.2 went to waste, however, as he eventually used this material in the development as a counter melody (Example 90, mm. 168, played by Violin I). But as this counter melody does not return in any of subsequent exposition sketches, it seems as though he was primarily concerned with laying out the general dimensions of this SotD-2; as with the 1.0 version, he appears to have been less concerned or certain about its melodic and contrapuntal details at this stage.

Example 89: Standing on the Dominants of CS 1.0, mm. 43–54, CS 1.2, mm. 49–58, and CS 2.0 mm. 51–55

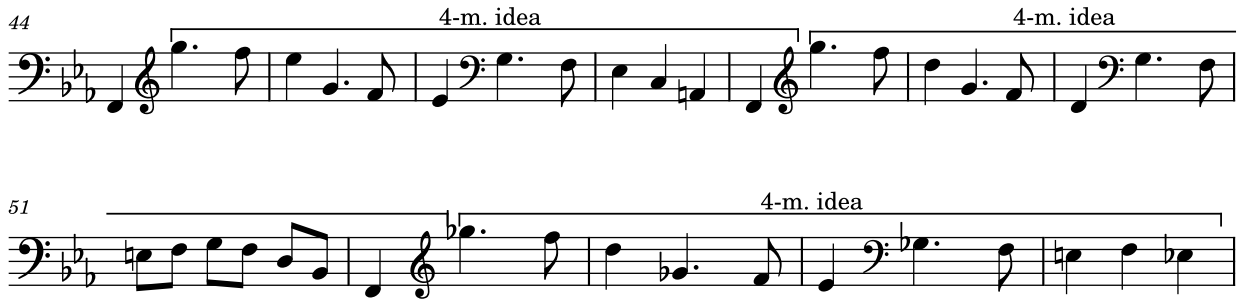
CS 1.0 Trunk



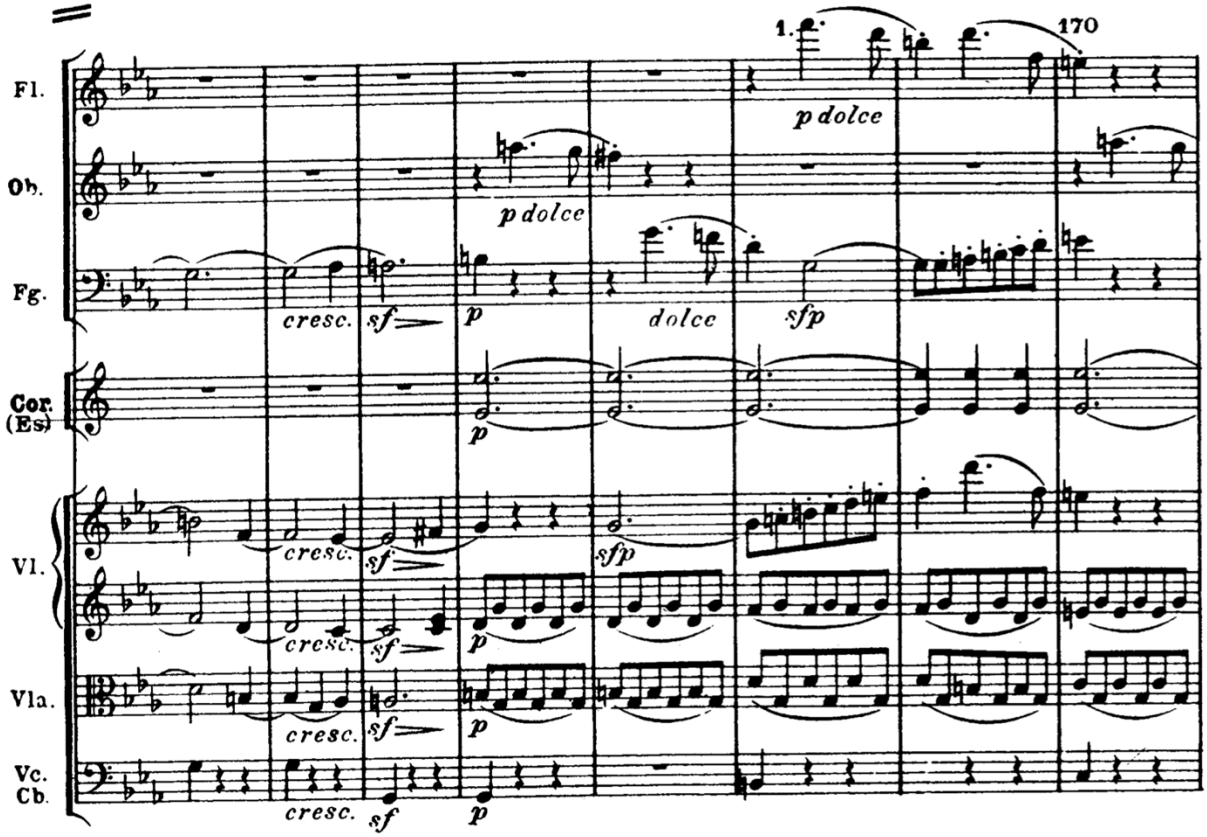
Branch 1.2 (page 10)



Branch 2.0 (page 12)



Example 90: Op. 55, I., mm. 163–170, ascending gesture in m. 168 (Violin 1) and m. 169 (bassoon)



One might suppose that the first and second versions of the, subordinate key SotD-2 (see the top two staves of Example 89) lacked detailed figuration in the sketches because the passage was clear in Beethoven's mind. The continuity sketches that follow on the next pages suggest otherwise, however (e.g., see the bottom-most two staves of Example 89). Subsequent versions have far more detailed figuration that moves between registers (refer to the *ES*, page 14 st. 5–6 and p. 20 st. 7–8a). It seems unlikely, therefore, that he omitted the figuration in first two sketches purely for

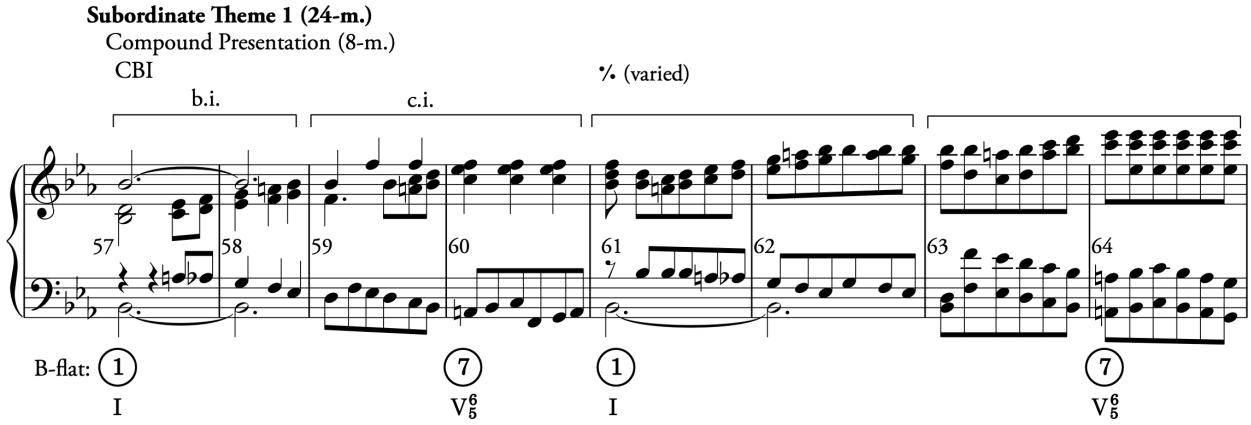
convenience; perhaps he wasn't yet sure how he would structure the constituent components and complete texture.

Like an architect, Beethoven seems to have recognized that he wanted a subordinate key SotD and built a frame for that function, but he moved on to design other parts of the movement before he filled it with more surface level details. In the end, the surface level details are derived from his initial three-note motives sketched in CS 1.0 (see Example 89, CS 1.0 trunk).[165] Beethoven therefore seems to have sometimes conceived of larger, theme-length functions before he knew the precise nature of the content that would generate those functions.

5.3 Subordinate Theme Group (mm. 59–118)

Now that we have examined the phrase structure of the two-part transition, let us move to the subordinate theme group that follows beginning in m. 59 (Vol. 2, p. 43). Recall that this part of the form in the sketch includes two subordinate themes. In what follows, we will discover that the sketches provide additional evidence that the subordinate theme group starts in m. 57 in the final version (see Example 91, final, mm. 57–64), and we will see how the cadential function of this theme anticipates the music that corresponds to the subordinate theme, part 2 in the final piece.

Example 91: Op. 55, I., mm. 57–64; Subordinate Theme 1



[165] Paul Mies similarly observes that "The beautiful episode in the first movement of the Eroica [i.e., the SotD-2, mm. 45–56] is derived form a threefold repetition of the motive with the initial notes G–G-flat–G or G–G–G-flat" (Mies 1969, 134).

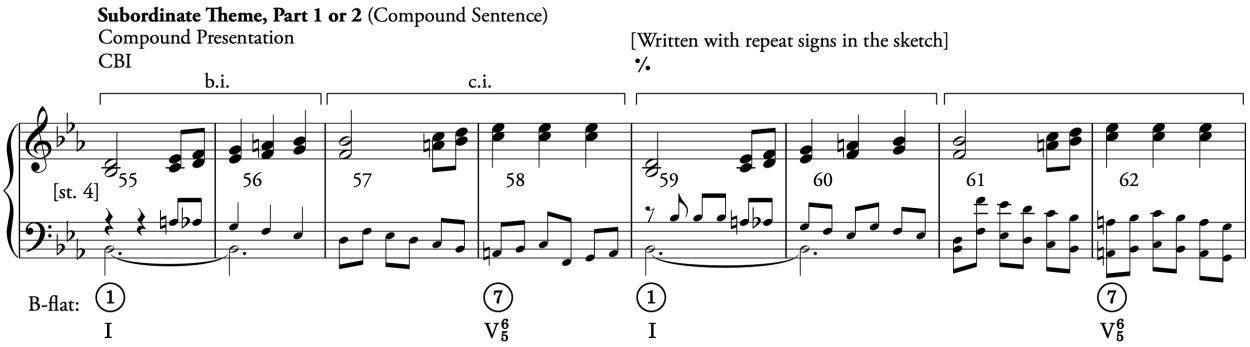
5.3.1 Subordinate Theme 1 (mm. 59–73)

The first subordinate theme in CS 1.2 (mm. 59–91) is constructed as a large, beginning–middle-end structure whose beginning (mm. 59–73) and ending functions (mm. 77–91) are themselves structured as sentences. A modest 3-m. continuation (a medial function) appears between these two larger functions with the rapid, eighth-sixteenth texture that characterized the continuations of the first subordinate theme in CS 1.0a and 1.1. As the design of this theme differs considerably from the previous two sketches and the final version, let us examine it in some detail.

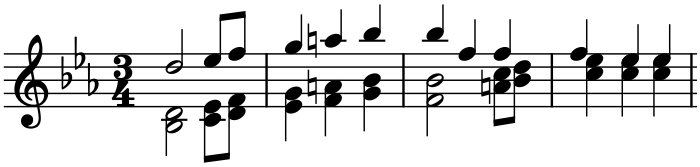
5.3.1.1 Compound Presentation (mm. 59–66)

The large-scale initiating function of the first subordinate theme begins in m. 59 with the same compound presentation that he wrote in prior sketches, albeit written one octave higher than before (compare mm. 59–66 with Example 92, CS 1.0, mm. 55–62). Although the function of this passage remains invariant throughout the exposition sketches into the final version, there are some subtle differences in this new 1.2 version compared to the first 1.0 draft. If we overlay the continuity voice from the first 1.0 version of the compound basic idea sketched on page 11 (Example 92, CS 1.0, mm. 55–58) with the new 1.2 version sketched on page 10 (mm. 59–62), the resulting combination begins to look like the final version of this passage. Compare the overlayed sketches of the CBI shown in Example 93 with the compressed reduction of the final version shown in Example 94. The upper-voice B♭-F-F-F-E♭-E♭ motion in the continuity-voice of CS 1.2 (mm. 59–62 corr. to final mm. 57–60) eventually becomes the top-voice of this passage, while the ascending gesture written in harmonic thirds that was first sketched in CS 1.0 becomes an inner-voice.

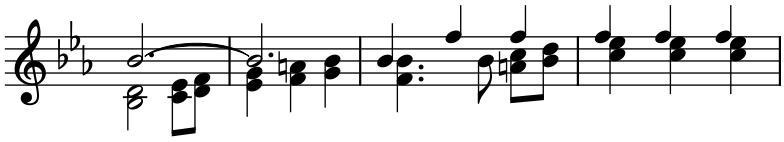
Example 92: CS 1.0, mm. 55–62: Subordinate Theme, Part 1 or 2 (*ES* p. 11, st. 4)



Example 93: CS 1.0 and 1.1 with CS 1.2 Overlayed (corr. to final mm. 57–60)



Example 94: Op. 55 I., mm. 57–60

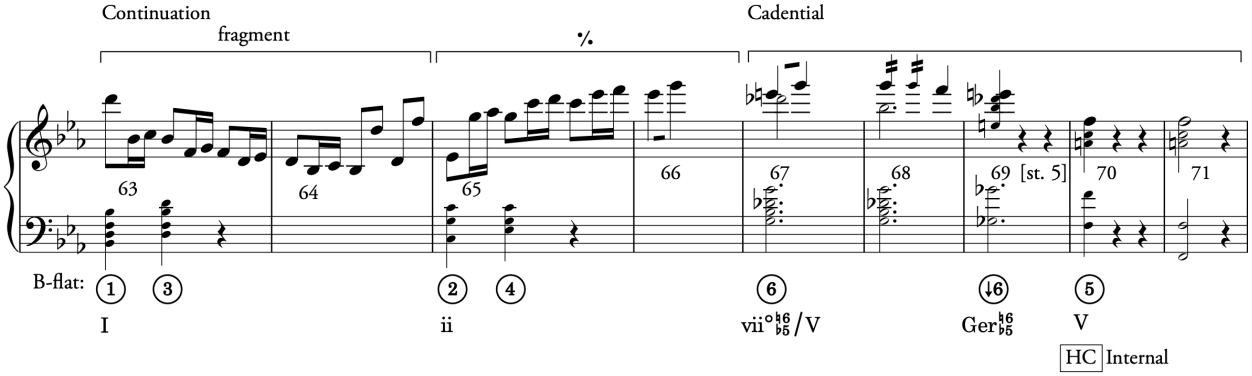


Although the similarities between the final version and the combined first and second versions may be coincidental, the contrapuntal combination reinforces the idea that Beethoven had a more complex structure in mind while he was notating the continuity voice. Perhaps he wrote the bottom-voices of the CBI in the first sketch and the top-voices in the second but played both voices at the piano. Alternatively, he designed the passage in two different ways, then realized he could have the best of both by combining them.

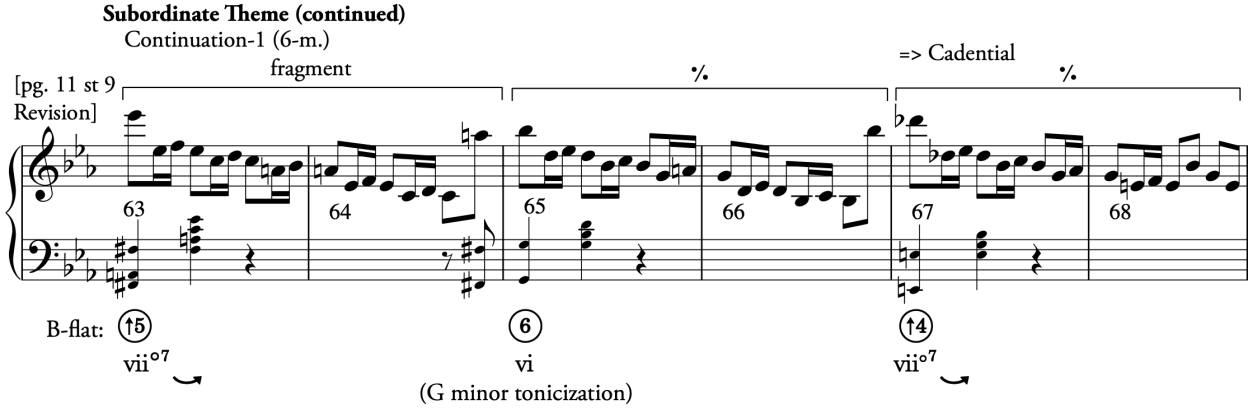
5.3.1.2 Continuation (mm. 67–73)

The opening compound presentation of the first subordinate theme is invariant in all the continuity sketches (mm. 59–66) but what follows differs considerably (mm. 67–73). Here, Beethoven builds a new continuation by fragmenting the initiating CBI (mm. 67–70). This design replaces the faster eighth-sixteenth note gestures he used to craft the continuation in the CS 1.0 trunk (Example 95) and the 1.1 branch (Example 96) and differs considerably from the final version (Example 97, mm. 65–72). He seems to have experimented with building the continuation exclusively with CBI-based material to reserve the faster eight-sixteenth note gesture that he designed in the first two sketches for a later position (i.e., mm. 74–76).

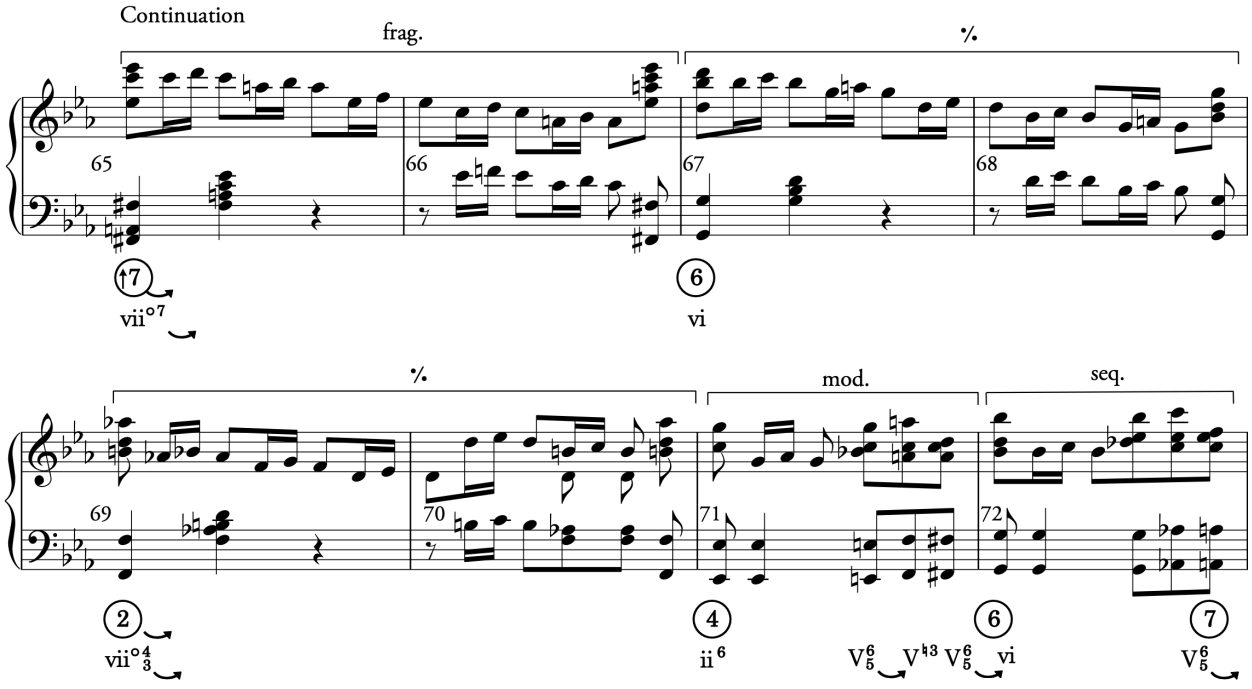
Example 95: CS 1.0, mm. 63–71 (*ES* p. 11, st. 4)



Example 96: Branch 1.1, mm. 63–68 (*ES* p. 11, st. 9)



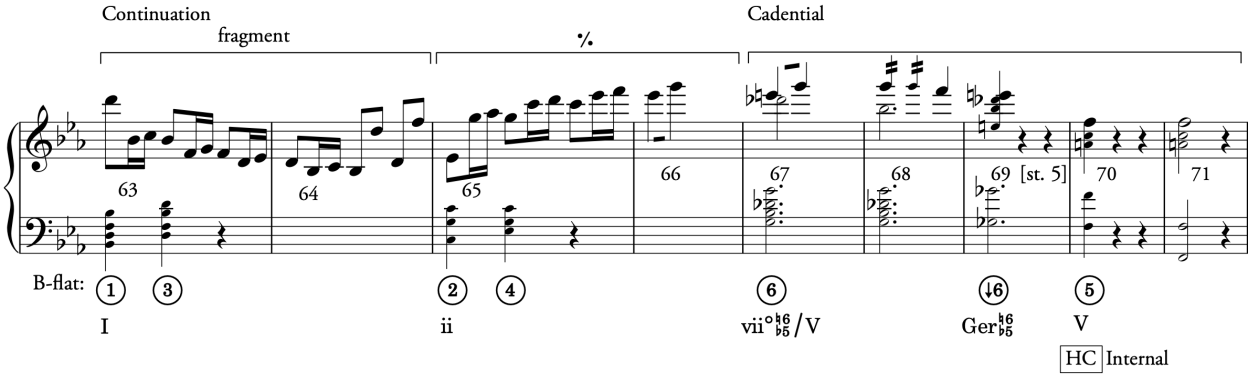
Example 97: Op. 55 I., mm. 65–70; Subordinate Theme 1, Continuation



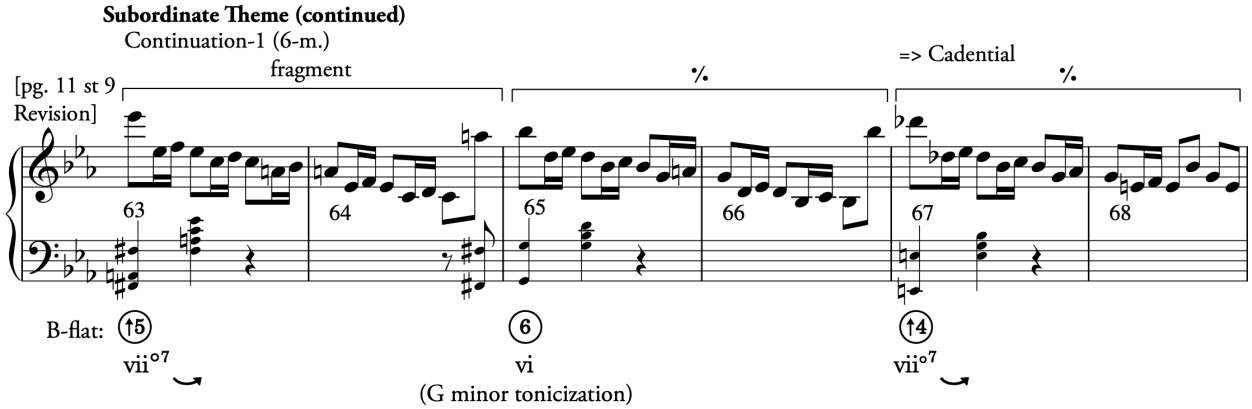
When we compare the continuations that follow the compound presentation in the CS 1 series (i.e., CS 1.0, with branches 1.1 and 1.2) with the final version (see Example 98), we might conclude that Beethoven took a step backwards in branch 1.2. The first continuation that he sketched in CS 1.0 (system 1) begins with the eighth-note, two-sixteenth note figure (henceforth the "sixteenth-turn"), which matches the material used in final version (system 3). It would seem, therefore, that the basic design material that governs the continuation in the final version was forged in the first sketch. Similarly, the second revision to this continuation material in CS 1.1 (system 2) also gives the impression of forward "progress" because it begins with the same diminished seventh harmony (mm. 61–62) that tonicizes G minor, which appears in the final version (compare the second system with the third in Example 98). It is surprising, therefore, that he changed the continuation so dramatically in branch 1.2.

Example 98: Comparison of Subordinate Theme Continuation Functions: CS 1.0, mm. 63–71; CS 1.1 mm. 63–68; final version, mm. 65–73; and CS 1.3 mm. 65–73

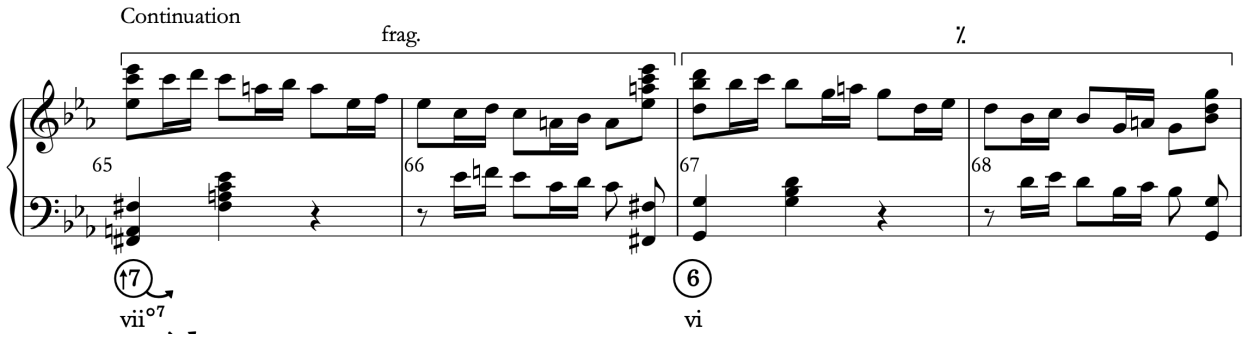
CS 1.0, mm. 63–71



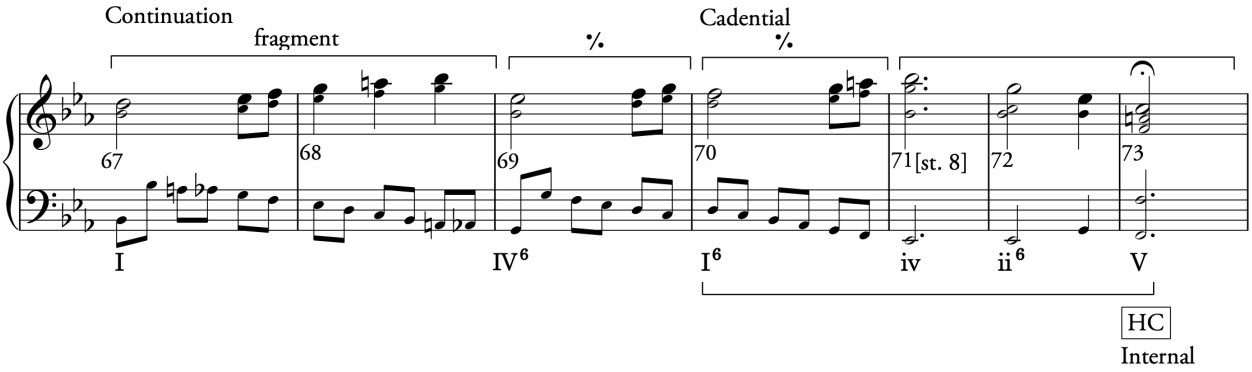
Branch 1.1, mm. 63–68



Op. 55, I., mm. 65–68



Branch 1.2, mm. 67–73



Tovey and Lockwood have shown that new texture and the strong tonicization of G minor in the first subordinate theme's continuation in the final version—features that Beethoven sketched first in branch 1.1 (Example 98, system two)—are important compositional elements in first movement.[166] Lockwood (1982) observed that the fully-diminished harmony in m. 65 (of the final version) creates a disjointed harmonic element in the exposition (Example 99) and recapitulation (Example 100, m. 468), which resolves only in the coda when Beethoven removes the diminished-seventh harmony and replaces it instead with a cadential dominant (Example 101, m. 681).[167] We also saw in the analysis of the final piece (**Chapter 3**) that this harmonic disjunction tonicized G minor, thereby creating a parallel with the same tonicization that characterizes the main theme's continuation. Why then, did Beethoven displace the characteristic sixteenth-turn material and change the harmony from a diminished harmony—as it is in the final version—to tonic harmony in CS 1.2 (see m. 74)?

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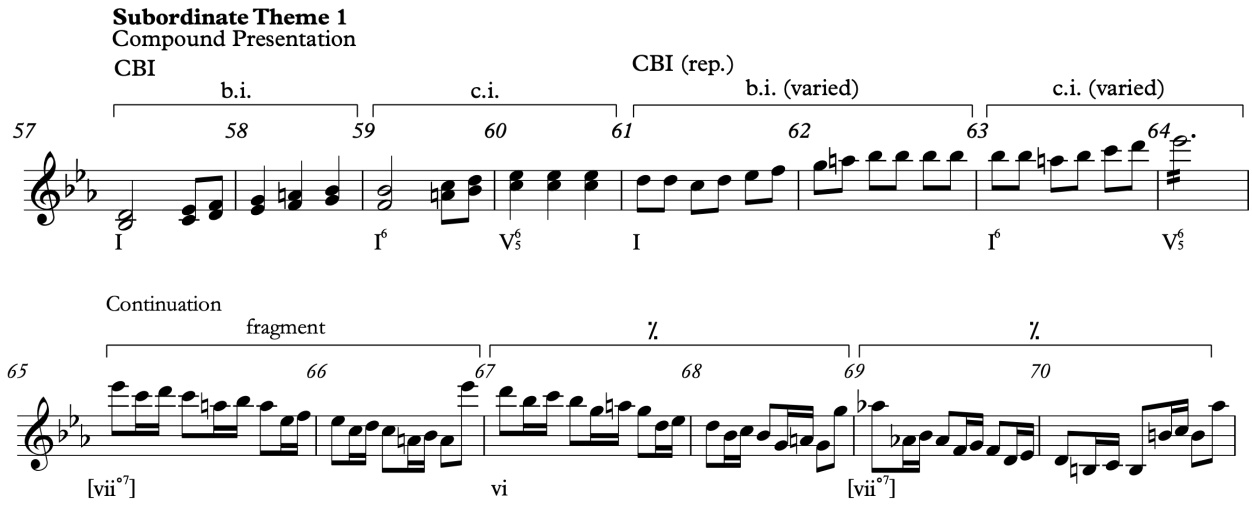
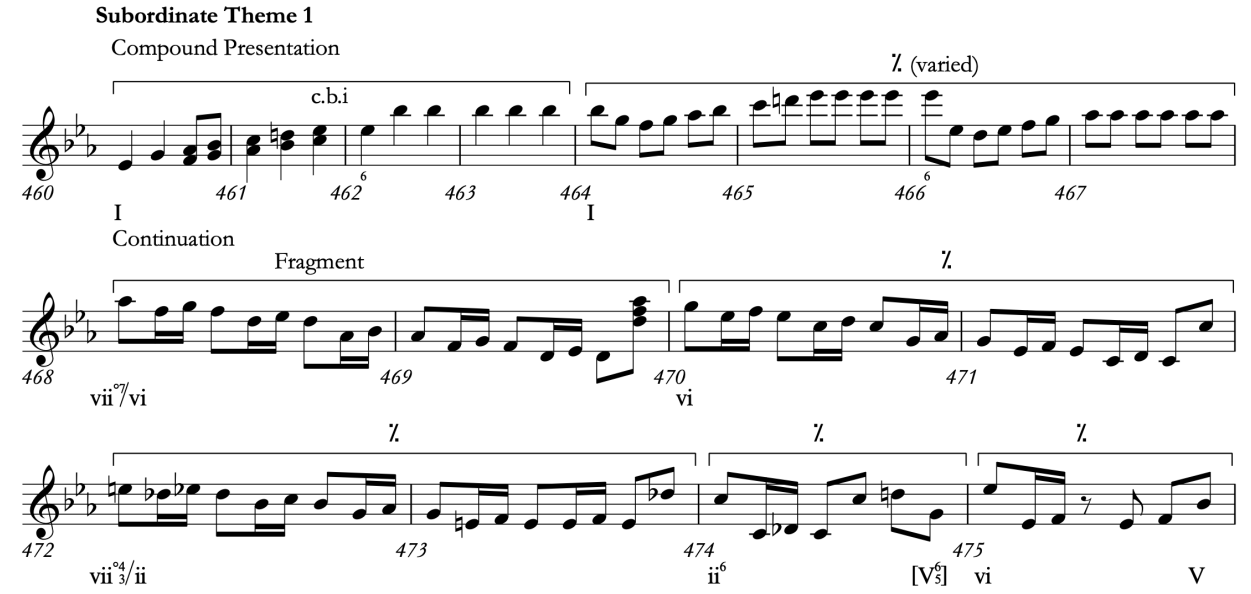
[166] See (Lockwood 1982, 126–33; Tovey 1955, III Concertos:31). Lockwood and Tovey do not use the form-functional terms used here.

[167] Lockwood does not refer to the material that I have identified as a continuation in form-functional terms. He instead segments this material in terms of what he calls "cadential figures"; (Lockwood 1982, 127–28).

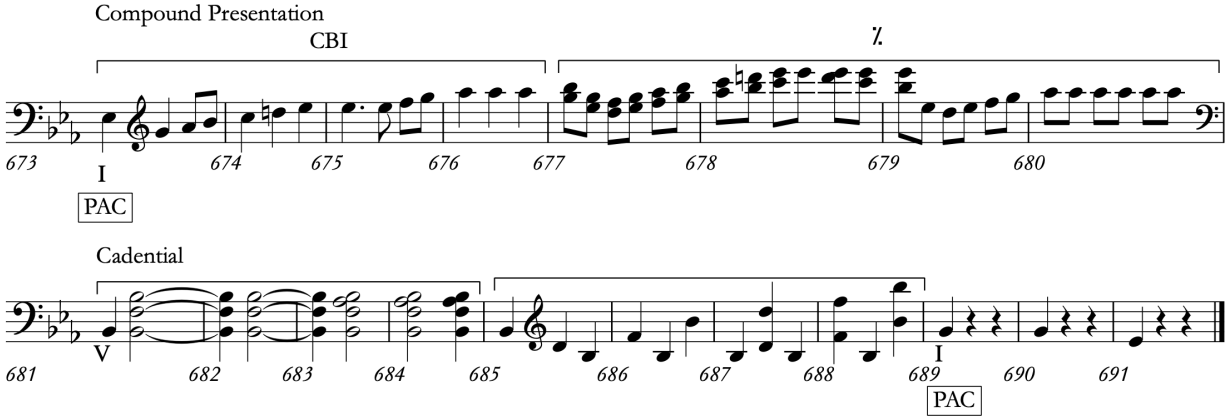
Example 99: Op. 55 I., mm. 57–70; Exposition, Subordinate Theme 1



Example 100: Op. 55 I., mm. 460–475; Recapitulation, Subordinate Theme 1



Example 101: Op. 55 I., mm. 673–691; Coda



Although the diminished-seventh harmony that starts the continuation does seem to be an important element of design in the final version of the piece, we should avoid viewing compositional progress towards this plan on a singular linear continuum. The continuation that Beethoven crafts in branch 1.2 (mm. 67–69), which differs considerably from the prior versions and the final piece, strongly suggests that his compositional process was not one of mere successive and linear improvement. Rather, the different continuations demonstrate how he maintains a formal function (a continuation) but with different materials and harmonic strategies. Presumably, he had not yet conceived the large-scale design of "resolving" the agitated, diminished-seventh-based continuation passage in the coda that Lockwood identified, even though some of the kernels of this design that enable this strategy were written at an early stage (in branch 1.1). Nevertheless, aspects of the disjunction that Lockwood identified in the final version manifest in a different way in branch 1.2: in place of using the diminished-seventh harmony to start the continuation, which creates a type of harmonic schism after the stable, tonic-based compound presentation, Beethoven rhetorically separates the continuation material he intended to use by writing a new, CBI-based continuation that ends with a HC. In other words, he attenuates the harmonic schism but amplifies the temporal separation between the material devised for the compound presentation and the sixteenth-turn figuration. It is not so much a step "backwards," but rather a new compositional approach that achieves a similar rhetorical effect in a new way.

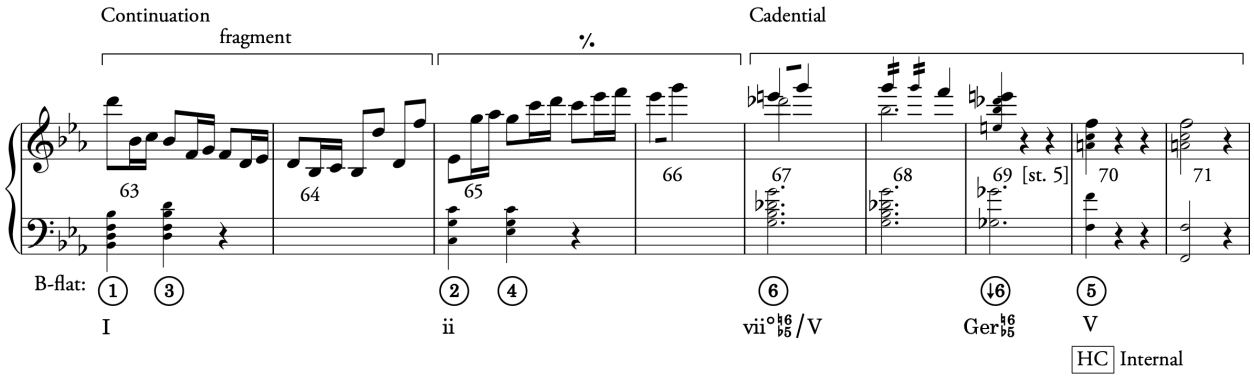
The accelerated surface rhythm gesture formed by three groups of an eighth note followed by two sixteenth notes that characterizes the continuations in the first two sketches (the "sixteenth-turn"), which can also be found in the final version, does return in branch 1.2, but after the internal HC (mm. 74–76). Because these sixteenth-turn gestures and accelerated harmonic rhythm create

fragmented, one-measure units, this music projects a new, second continuation that resumes the first subordinate theme after the internal HC in m. 73. Beethoven's desire to pause the subordinate theme before rebooting it appears to have been an invariant design of sorts, because the basic premise of this rhetorical ploy can be found in subsequent sketches in different ways, and it prefigures the eventual design of the second subordinate theme in the final piece, albeit at a much smaller scale.

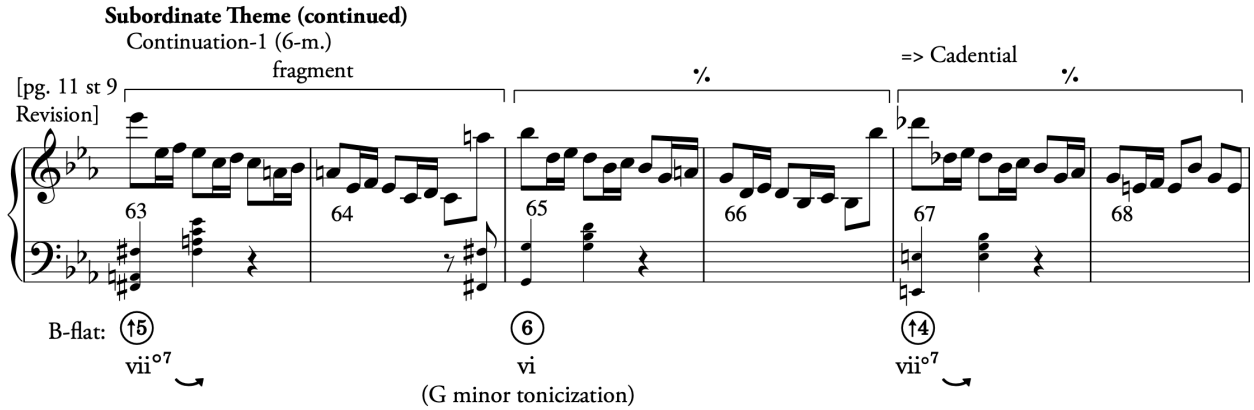
Beethoven's choice to pause the first subordinate theme with an internal HC is somewhat unusual from a harmonic perspective. As Caplin explains, an internal HC in the subordinate theme is often motivated by how the prior transition ends (Caplin 1998, 115). If the prior transition ends with a HC in the home key, thus forming a one-part non-modulating transition with a bifocal close, the presence of a strongly emphasized subordinate-key dominant amends the insufficiency of the prior HK: HC that ended the non-modulating transition. That is, an internal HC in the subordinate theme often functions as a compensatory device. This situation does not occur in branch 1.2, however, because the second, modulating part of the two-part transition achieves a strong HC in the subordinate key. Moreover, the SK: HC is further emphasized with a post-cadential SotD. Thus, while the classical composers do not exclude the possibility of an internal HC and subsequent SotD, it is unusual for there to be three HCs in a row (m. 23, m. 49, and m. 73). The internal HC articulated by the first subordinate theme is therefore more likely motivated by other factors. As I suggested in Section 4.3.4, he may have borrowed this design from Mozart's solo exposition in his last piano concerto in B-flat, K. 595, which similarly has multiple subsequent HCs.

The sketches suggest that the compound presentation was fixed in Beethoven's mind but the music that followed was not. It is also apparent that the texture of the sixteenth-turn material was something of an invariant element, but its precise position and harmonic context were not yet fully established. In the early sketches on pages 10–13, which include the first and second continuity sketch series (CS 1 and 2), he uses this material to articulate different harmonies. Compare, for example, several versions of the continuation in Example 102. Surprisingly, the diminished-seventh version that first appears in branch 1.1 on page 11 (second system of Example 102)—the version that most closely matches the final version—takes a hiatus for several continuity sketches thereafter and doesn't return until CS 3.0 on page 14 (not shown in the example). In the interim, Beethoven experiments with starting the continuation with the subordinate key's dominant harmony (i.e., F major, see staves branch 1.2, and CS 2.0 in Example 102).

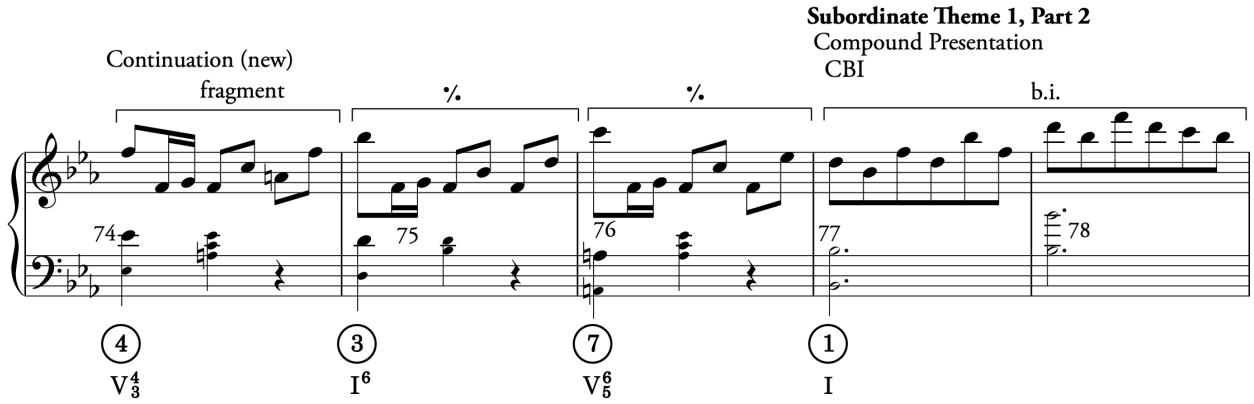
Example 102: Different harmonies articulated by the Subordinate Theme 1, Continuation CS 1.0, mm. 63–71 (*ES* p. 11, st. 4)



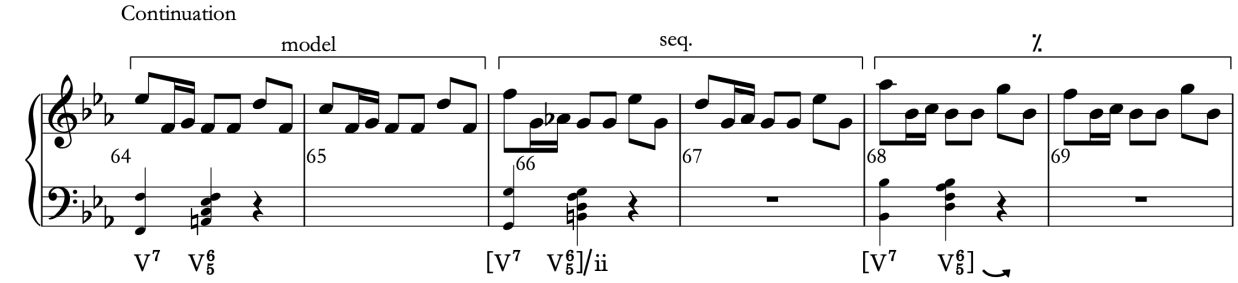
Branch 1.1, mm. 61–66 (*ES* page 11, st. 9)



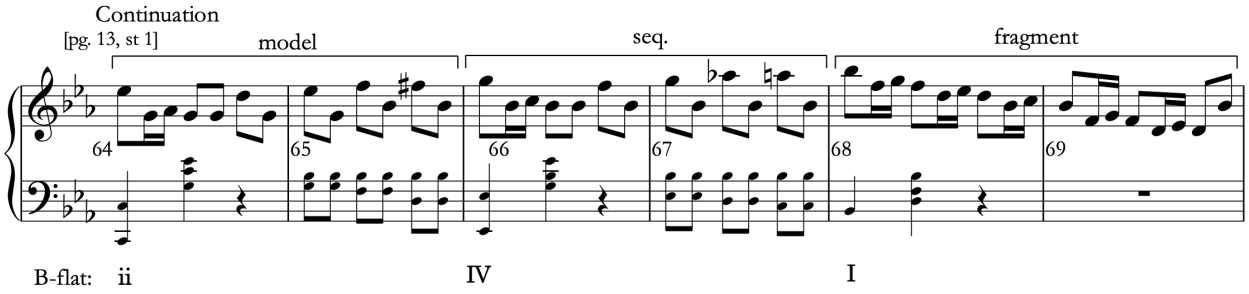
Branch 1.2, mm 74–78 (*ES* p. 10, st. 8)



CS 2.0, mm. 64–69 (*ES* p. 12, st. 5)



CS 2.1.1 (*ES* p. 13, st. 1)



5.3.2 Cadential (mm. 77–91)

The music that follows the second continuation in branch 1.2 (Vol. 2, p. 44, mm. 77–91) is new. This material forms a greatly expanded cadential function with a sentential grouping structure. Although Beethoven did not write the bass voice for this material, it seems likely that he intended to resolve the ⑦ (V6/5) from the continuation (m. 76) to a root position ① tonic (m. 77). If this assumption holds, then mm. 77–78 brings a 2-m. group that suggests the characteristics of a new basic idea in the subordinate key tonic (B-flat major), which is followed by another 2-m. group that projects a contrasting idea (79–80) with dominant harmony (likely a root position dominant). In total, then, mm. 77–80 brings a CBI-like unit, that, when it is repeated immediately thereafter (mm. 81–84), creates a new compound presentation grouping structure. In the measures that follow (mm. 85–91), the grouping structure is accelerated into 1-m. units that I have harmonized with parallel tenths in the bass voice. Given these likely harmonizations, mm. 85–91 project characteristics of a continuation that lead to a PAC on downbeat of m. 91.

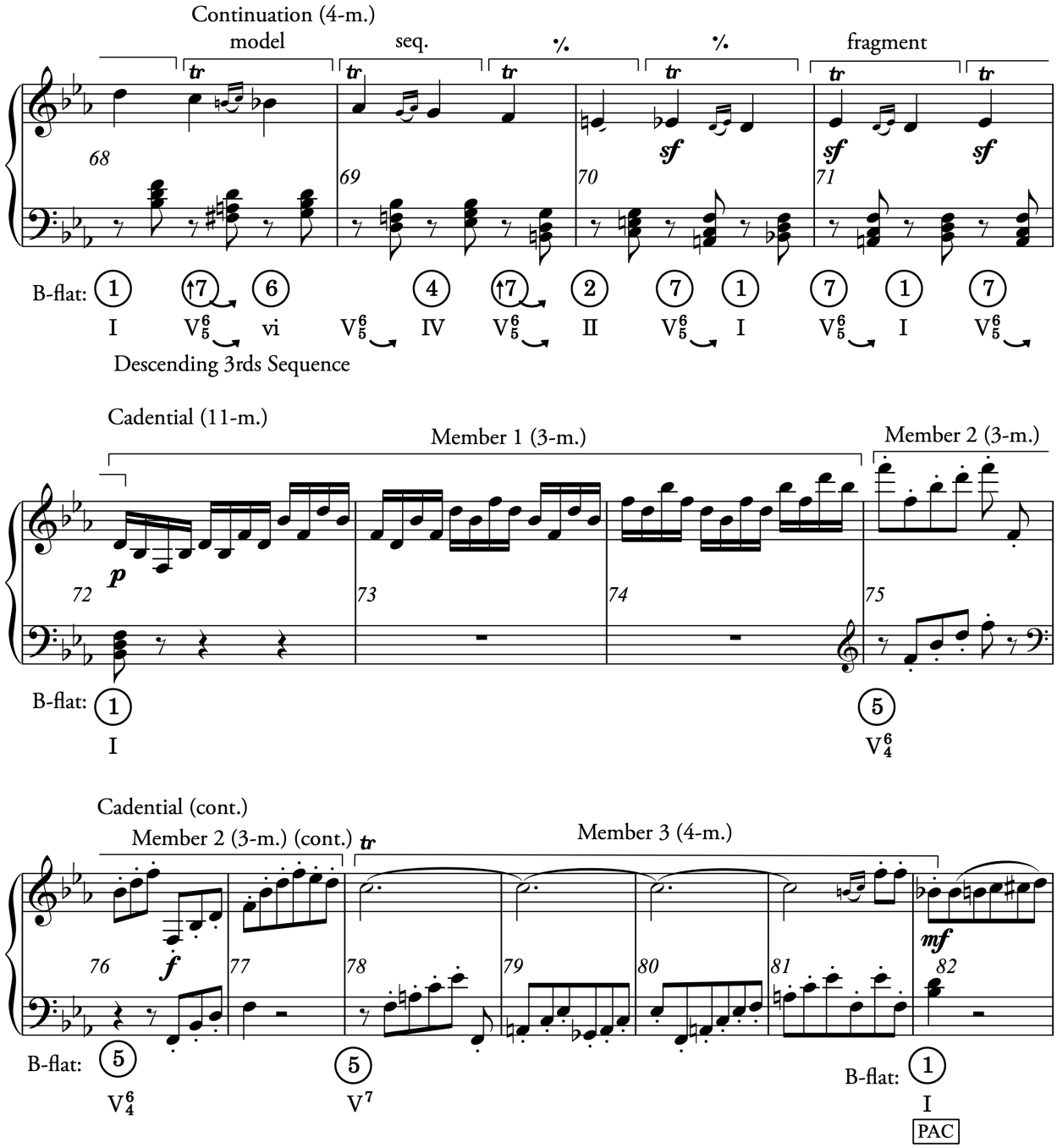
Although the music expressed in mm. 77–91 has many characteristics of a sentence theme part, it is better to interpret it as a cadential function organized with a sentential structure for two reasons. First, the passage is constructed almost entirely with conventional, arpeggiating material. This figuration does not evoke the suggestion that a new theme is unfolding but rather seems more

to liquidate the characteristic material that we previously heard in the initiating unit (mm. 59–73) and the brief continuation (mm. 74–76). Such a texture is more common in functions that prepare for new sections, such as a SotD or expanded cadential function (as here). Second, the music in mm. 77–91 follows a 3-m. continuation (i.e., mm. 74–76). If this material had followed the internal HC in m. 73, it would be more convincing to interpret this material as a theme part. But this unit follows a continuation, so it is better to understand it as a large-scale cadential function.

To be sure, it is somewhat unusual to start a cadential function with a root position tonic (m. 77), but Beethoven's design is not completely unprecedented. The cadential function in mm. 77–91 is akin, for example, to the ECP that ends the subordinate theme group in the first movement of Beethoven's Piano Sonata, Op. 31 No. 3 (Example 103, mm. 72–82).[168] In this sonata, a large (11-m.) cadential function (Example 103, mm. 72–82), which follows a sequential continuation (mm. 68–71), uses conventional arpeggiating gestures that are similar to the ones we find in the 1.2 branch (Volume 2, p. 44, mm. 77–89). The root position tonic that starts the cadential function in the piano sonata (m. 72) is motivated by the unusual structure of the subordinate theme, which is itself structured as an ECP (see Op. 31 No. 3 Exposition Analysis in Vol. 2, p. 46–50). In the 1.2 branch, the subordinate theme does not begin with an ECP as it does in the piano sonata, but perhaps Beethoven drew inspiration from this earlier piano sonata to build the large cadential function in the 1.2 branch.

[168] One might also compare the cadential function in this 1.2 branch to Beethoven's Piano Sonata, Op. 53 I., "Waldstein" mm. 50–74. On the foreground, this music projects a second subordinate theme, but in the background, it brings a large, "hyper" cadential function to the larger hyper-presentation (mm. 35–50). Each of these functions are structured as lower-level sentence themes.

Example 103: Beethoven, Piano Sonata Op. 31 No. 3, I. mm. 68–82; Continuation and Cadential



We could also compare the large cadential function in the sketch to the cadential function of the first subordinate theme in his first symphony, Op. 21 (Example 104). In that piece, he ended the first subordinate theme with a large cadential function that has a sentential grouping structure. Measures 69–72 form a presentation-like unit, and mm. 73–77 an ECP (for an analysis of the subordinate theme, see Caplin 1991, 33–36). Thus, while the tonic beginning and sentential grouping

structure of mm. 77–91 in branch 1.2 project characteristics of a theme part, it is best to view this material as forming a large cadential function to the unfolding expanded first subordinate theme. Figure 36 summarizes the overall structure of this large theme with a form-function diagram linked to musical incipits.

Example 104: Beethoven, Symphony No. 1, mm. 69–77

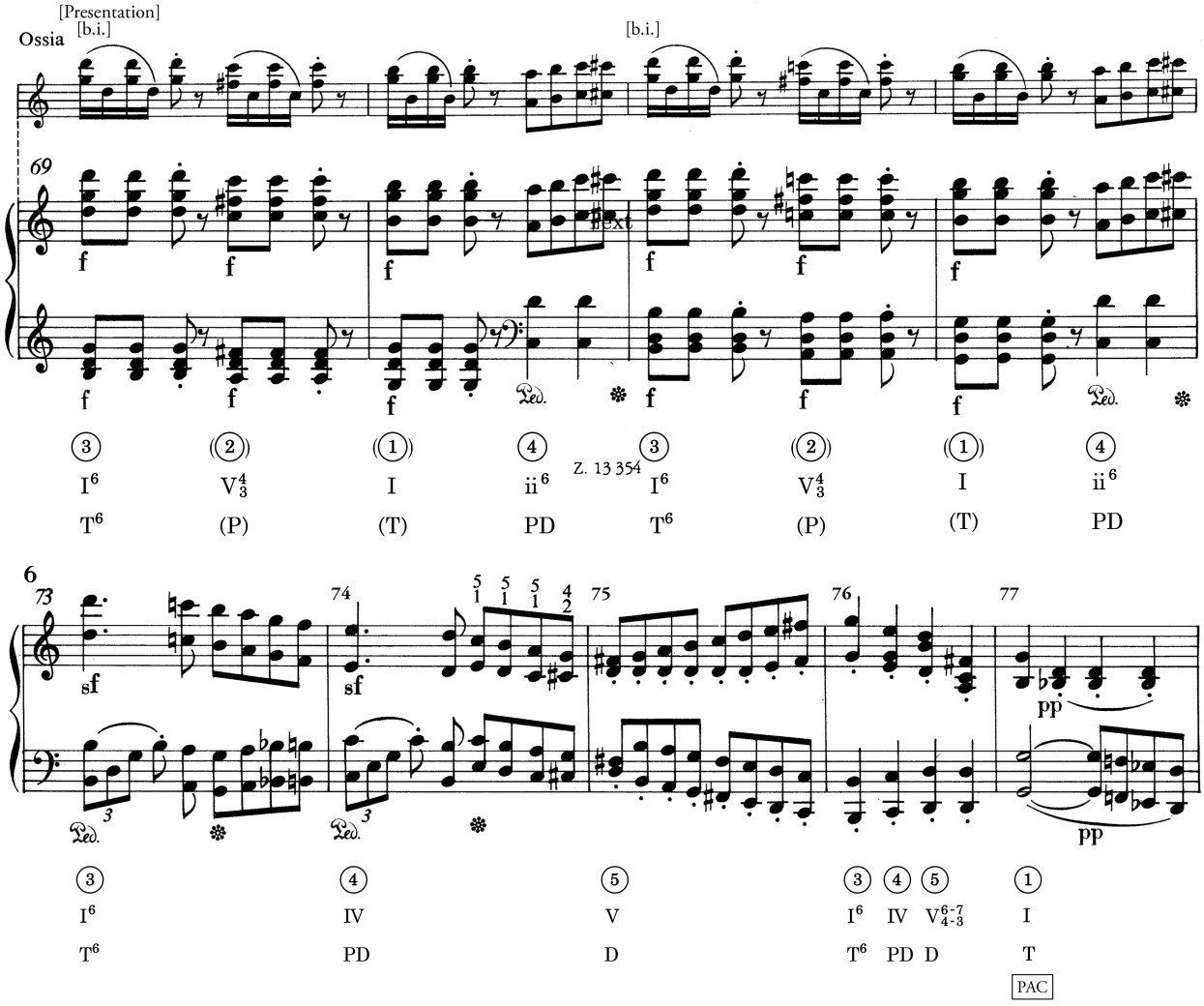
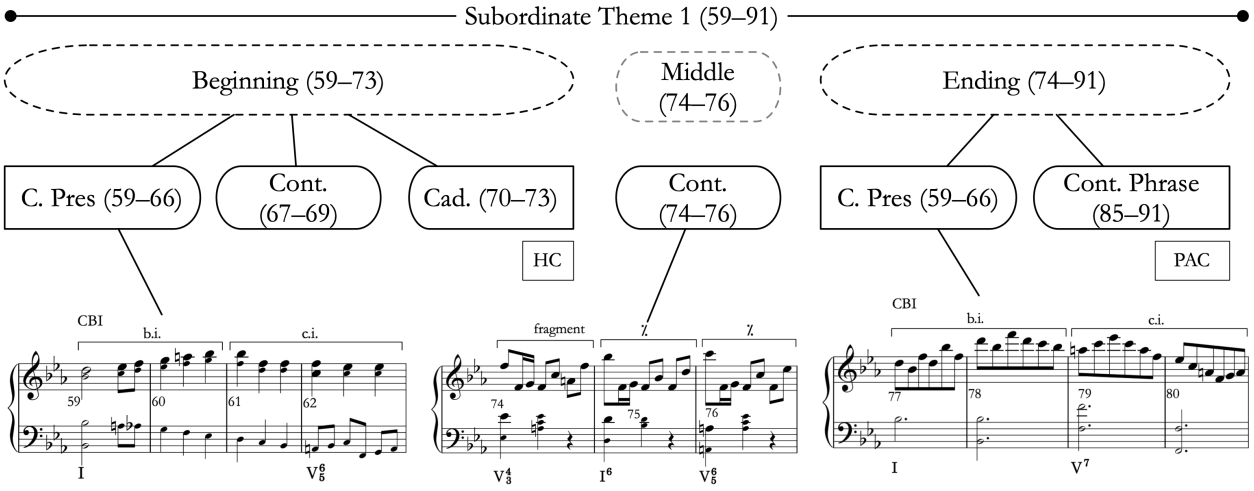


Figure 36: Phrase diagram for branch 1.2, mm. 59–91, Subordinate Theme 1 with incipits (represents *ES* p. 10, st. 7–9)



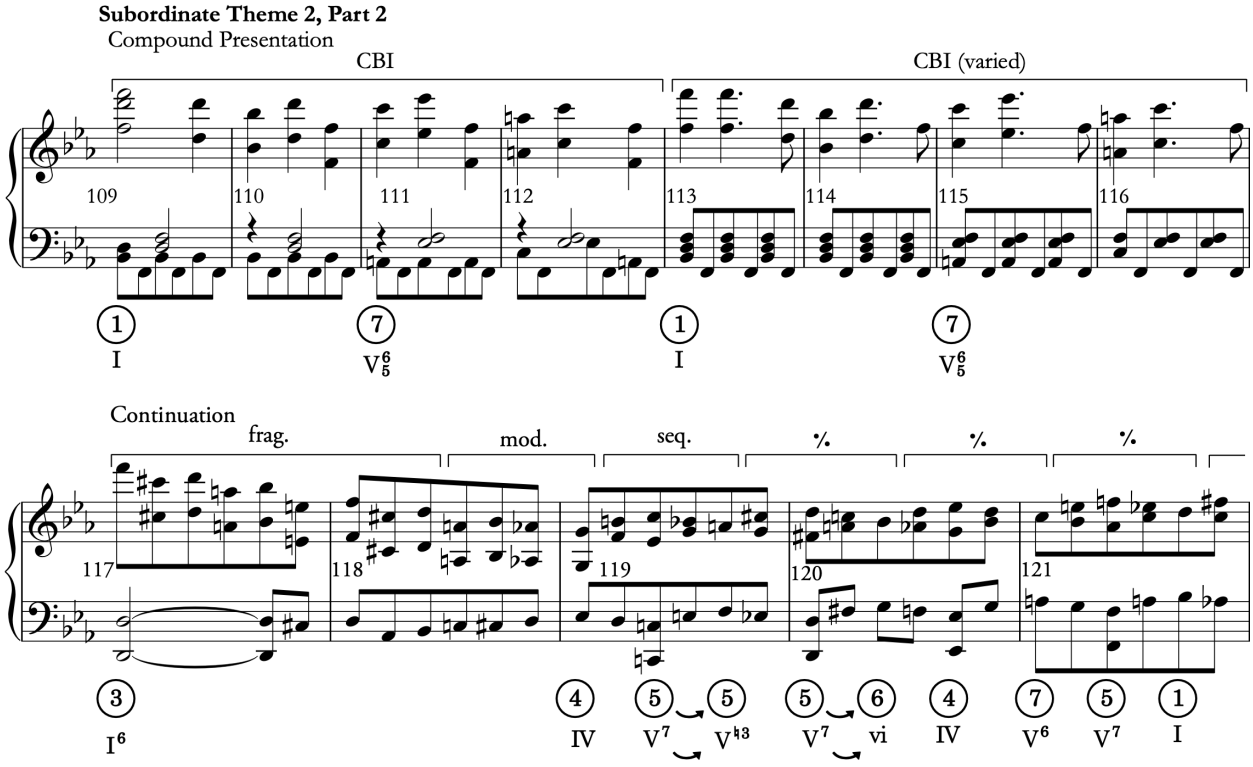
Lockwood and Gosman suggest that Beethoven's new cadential material (CS 1.2, mm. 77–91) is the earliest progenitor of the final version's subordinate theme 2, part 2 (compare mm. 77–91 with Example 105, final, mm. 109–121) even though the material appeared in a different part in the form in the sketch (that is, in the first subordinate theme instead of the second).[169] Broadly, I agree with this suggestion because the harmony, sentential grouping structure—especially the compound presentation—and the re-energizing nature of this music in the sketch matches the sentential and re-energizing nature of the subordinate theme 2, part 2 in the final piece. Moreover, the cadential function in the sketch arises after an internal HC within a subordinate theme, much in the same way that the subordinate theme 2, part 2 arises after an internal HC in the final piece. The two structures are similar but are placed in a different location.

Despite the similarities of this new, sententially structured cadential function with the subordinate theme 2, part 2 in the final version, however, Beethoven abandons this material in the next sketches that follow. He seems to have explored the concept of introducing a new energetic subordinate theme 1 part (on page 10) but did not return to this design until much later, and in a different part of the form (on page 18). This compositional approach—trying a design, leaving it in the next sketch, and returning to it later—is common for Beethoven. We will see other instances where he returns to designs that he temporarily moved away from in order to integrate elements from them in new contexts. For now, we should recognize that he had characteristics of a new,

[169] (Beethoven, Lockwood, and Gosman 2013a, 35)

more energetic, subordinate theme-part in the back of his mind by page 10, but it went dormant in the immediate sketches that followed. The process that led to the new subordinate theme 2, part 2 is not merely a matter of moving material, however: we will explore how this theme part arises in chapters 6 and 7 (especially section 7.5.4).

Example 105: Op. 55, I., mm. 109–116; Subordinate Theme 2, Part 2



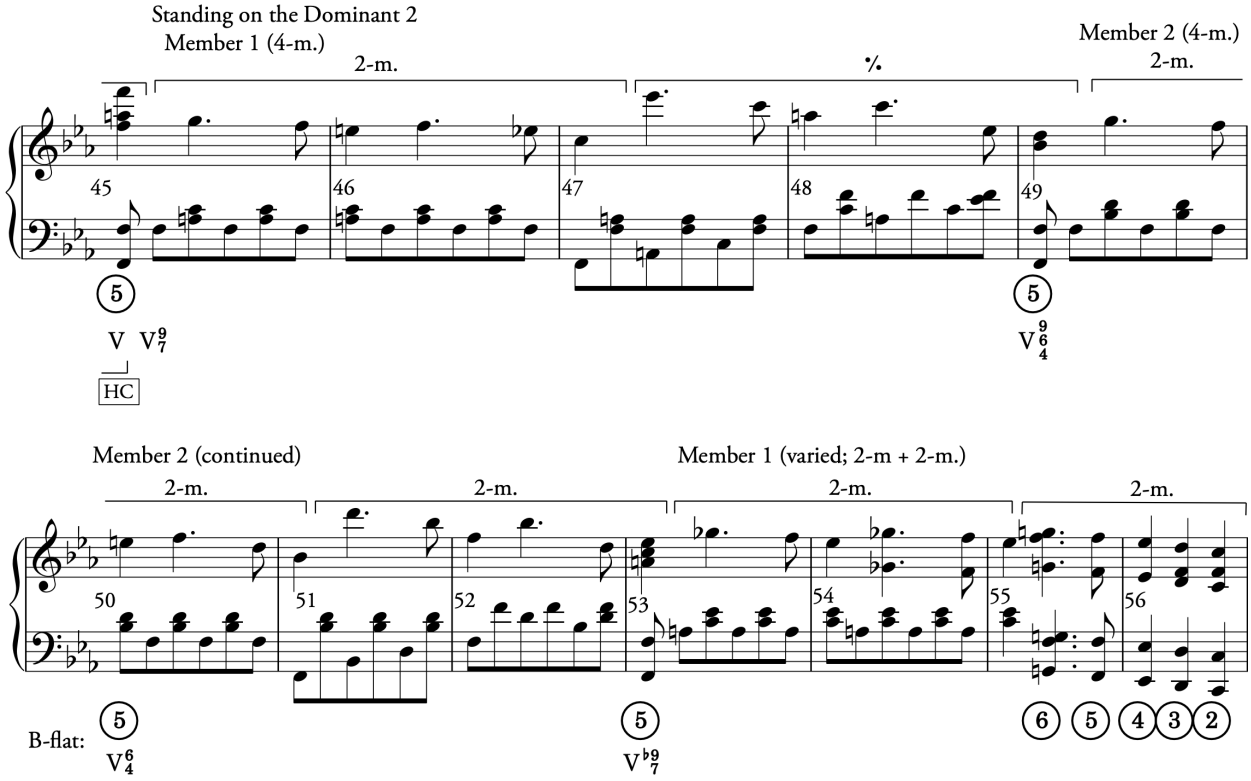
5.3.3 Where does the subordinate theme begin? Evidence in the sketches

So far, we have seen the form-functional differences in branch 1.2 that lead us to perceive to a clearer two-part transition structure and a large, subordinate theme 1 that closes with a PAC. Before we analyze the rest of the subordinate theme group, allow me first to re-address a long-standing question that we have so far ignored. Scholars have long disagreed about where the subordinate theme group starts in the final version of the piece.[170] Do the sketches provide us with any information that might shed light on this issue? Are the sketches clear as to where the group starts?

[170] For a recent survey on this topic, see (Drabkin 2020, 82–86).

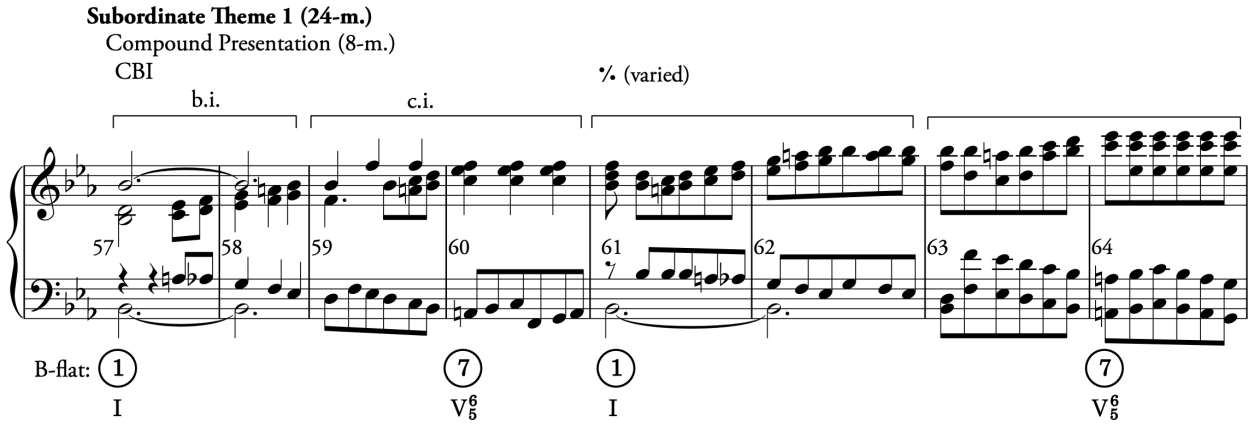
To contextualize where the subordinate theme group begins in the sketches, let me first detail my interpretation of the final version. From a form-functional perspective, mm. 45–56 (Example 106) form a 12-m. SotD that prolongs the subordinate key dominant obtained by the HC in m. 45. What follows in mm. 57–64 (Example 107) then forms a compound presentation, which contains a CBI (mm. 57–60) and its elaborated repetition (mm. 61–64). Consequently, m. 57 begins the subordinate theme group.[171]

Example 106: Op. 55 I., mm. 45–56; Subordinate Key Standing on the Dominant



[171] My interpretation follows Caplin's (1991, 35–41) analysis of this music.

Example 107: Op. 55 I. (Piano Reduction), mm. 57–64; Subordinate Theme 1, Compound Presentation



William Horne (2006) objects to viewing m. 57 as the start of the subordinate theme group on the grounds that the "radically varied treatment of the basic idea [i.e., Example 107, mm. 61–62] leads seamlessly into the chromaticizing model-sequence process so that these units form virtually a single musical gesture" (Horne 2006, 137). Said another way, he proposes that the material in mm. 61–64—what I have interpreted as a varied repeat of the CBI—varies too much from the initial CBI, which causes it to group forward with the following sequential material instead of group backwards with the initiating CBI. By grouping the repetition of the CBI forward, Horne limits the size of the initiation function to four measures instead of eight. At only four measures long, he contends that the first CBI is insufficient to serve as the beginning of the subordinate theme and therefore suggests instead that the subordinate theme starts earlier in m. 45 (see Example 106) with a threefold repetition of a "basic idea" (Horne 2006, 138).[172] In short, Horne posits that the subordinate theme starts with what I have identified as a post-cadential SotD (i.e., Example 106). Although the underlying dominant harmony poses trouble for his interpretation, he argues that this passage is akin what Beethoven had done in other compositions (e.g., Opus 31 No. 2), that is, to place the start of the subordinate theme over a dominant pedal.[173]

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[172] A threefold repetition of an initiating idea is very rare in the classical style. Mark Richards calls a threefold repetition of a basic idea in a sentential structure a "trifold sentence"; see (Richards 2011, 192–96). Although Richards adopts the idea of a trifold sentence from Horne's analysis of the *Eroica* first movement, Richards does not include Beethoven's *Eroica* first movement in his list of trifold sentences in his appendix of trifold sentences (2011, 224).

[173] For example, see Beethoven's subordinate themes in Opus 2 No. 1, beginning in m. 20 and Opus 31 No. 2 beginning in m. 41, (Horne 2006, 124). Horne nevertheless recognizes some differences between the passage in the *Eroica* from Beethoven's prior pieces: "it is clear that the *Eroica*'s first movement contains a strong-

In my own stricter form-functional view, which places more emphasis on cadential arrivals, harmonic syntax, and grouping structure, I interpret m. 45 (Example 106) as the start of a 12-m., post-cadential SotD that prolongs the HC obtained in m. 45, not the beginning of the subordinate theme group. Although it is true that the material in mm. 45–56 groups into three, four-measure units that have descending "melodic" characteristics, this interpretation causes problems for what follows in at m. 57 (Example 107). If mm. 45–56 form an initiation function as Horne suggests, then what function does the material in mm. 57–64 bring? It is troublesome to view the material in mm. 57–64 as another, second initiating function; moreover, this music does not bring the characteristics of a continuation. Recall too that the theory of formal functions minimizes the role of thematic content for determining formal function. Thus, although the SotD (mm. 45–56) might contain lyrical characteristics, these features are insufficient for defining the passage's formal function. Instead, the four-measure units group the underlying dominant prolongation into three members, not initiating CBI's (i.e., V^9, V^6_4, $V^{\flat 9}_7$; Example 106). Consequently, the harmonic syntax, grouping structure, and dominant prolongation found in mm. 45–56 do not lead me to interpret this music as the initiating function of a subordinate theme, but rather suggest that this music functions as a post-cadential SotD.

Let us now turn back to the sketches. Horne argues that Beethoven's continuity drafts support his view that the subordinate theme starts in m. 45. He recognizes that his view is at odds with Nottebohm's claim that the sketches suggest that the subordinate theme starts in m. 57.[174] Horne proposes that the sketches show that Beethoven attenuates the initiating qualities of the material that plays out from mm. 57–64. He suggests that the composer starts with a two-fold repetition of a "presentation area," (Example 108a), extends it into a trifold repetition in the second sketch (Example 108b), gradually reduces the trifold presentation to a two-fold repetition in successive sketches (Example 108c and d), and then changes the second repetition of the first four

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dominant complex at m. 45 that is completely in keeping with well-established patterns in Beethoven's sonata-form practice. It is only that, in the *Eroica*, the strong-dominant complex has become so compressed, and its distinguishing rhetorical features of standing-on-the-dominant and caesura have been so worn away, that it is easy not to accord it due significance in the unfolding of the form. The opening of the second group over a dominant pedal in the new key, by now a well-established Beethovenian ploy, makes the formal articulation of the second-group beginning at m. 45 nearly seamless" (Horne 2006, 127). For a form functional perspectives on subordinate themes over a dominant pedal, see (Caplin 2009, 100–103).

[174] See (Horne 2006, 140).

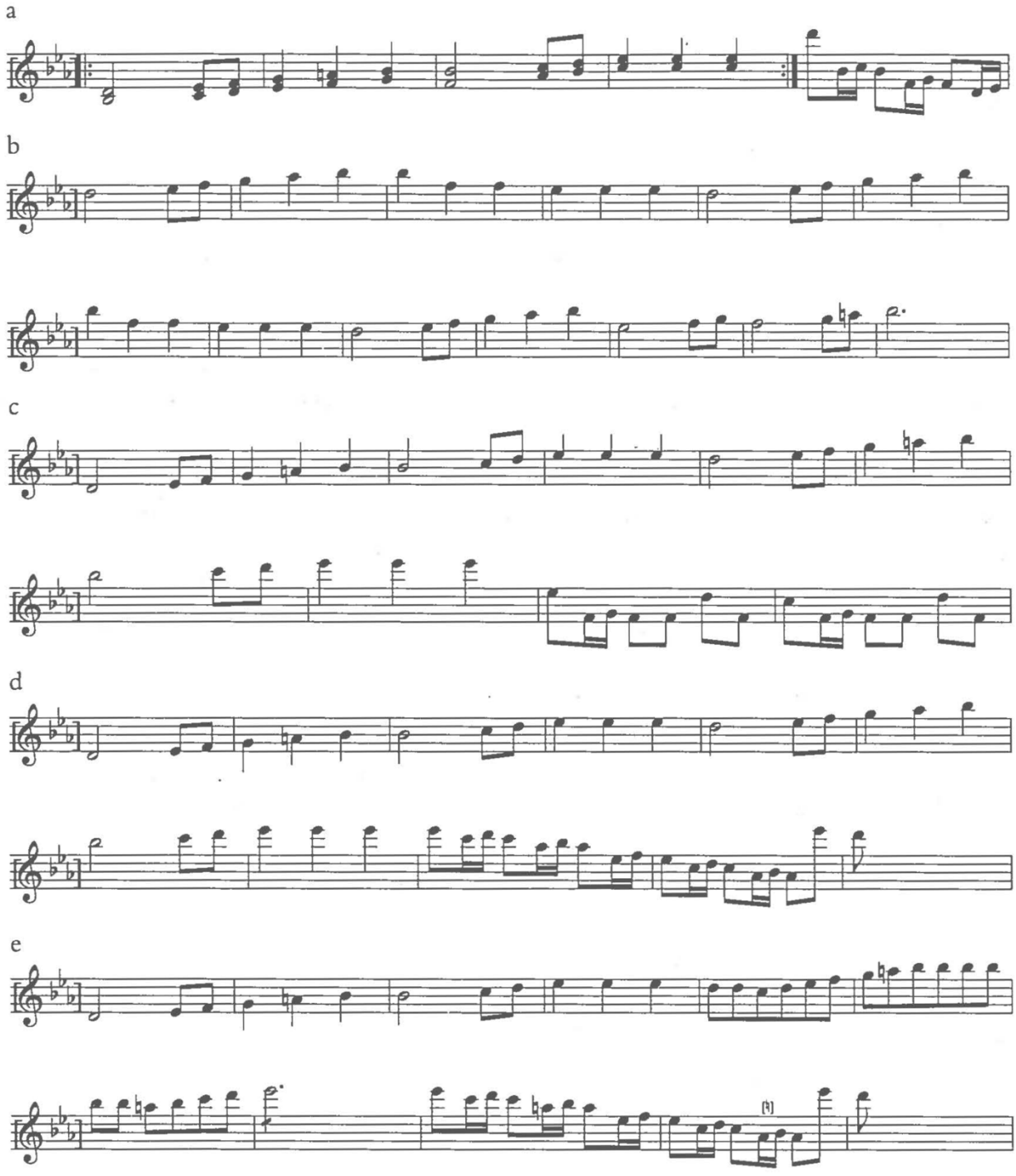
measures (what I have identified as the CBI) into something that no longer can be characterized as a repetition (Example 108e) (Horne 2006, 140).

I view Beethoven's compositional process for compound presentation material differently. I do not recognize a trifold repetition of the CBI in the second sketch (Example 108b). Instead, I interpret the material that follows the two-fold repetition of the CBI in mm. 67–70 (Example 108) as fragmentation, which suggests a continuation function that follows a compound presentation. Thus, at no point in the sketches does Beethoven write a three-fold repetition of the CBI, which becomes attenuated in subsequent drafts.

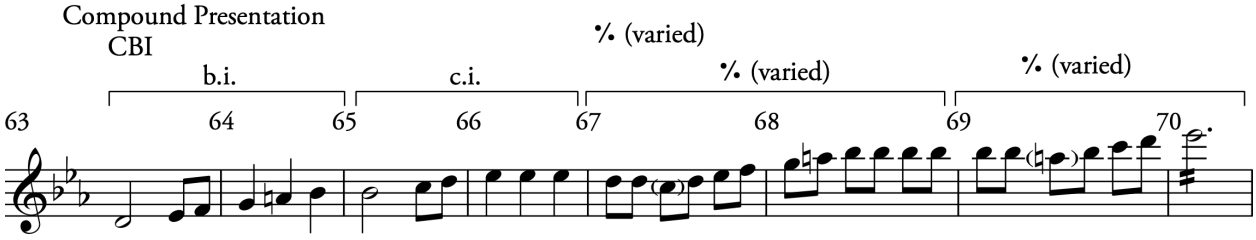
The parallel that Horne draws between a threefold repetition of a CBI in branch 1.2 with a threefold repetition of a 4-m. idea does not hold. Instead, the sketches suggest that the two-fold repetition of the CBI that starts the subordinate theme was planned from the beginning. Only later in his compositional process did he vary the second statement with faster eighth notes. Thus, the sketches suggest the opposite of what Horne posits: as Nottebohm first proposed, the sketches support the notion that the subordinate theme begins in m. 57 in the final exposition.

Finally, I do not consider the additional eighth-note figuration that Beethoven writes in the final CS 4.0 sketch (Example 108e) as sufficient to change the formal function of this passage as the underlying harmonies and melodic skeleton that govern this material remain the same. It is a stretch to consider the varied repeat as a "radically varied." Beethoven merely adds note repetitions in place of held notes, and two lower-neighbor embellishments (placed in parenthesis in Example 109). To summarize, the sketches support a reading that views m. 45 as the start of a SotD, and m. 57 to begin the subordinate theme group.

Example 108: Horne (1992, 141), sketches of the material that corresponds to mm. 57–64; a. Continuity Draft 1; b. Continuity draft 1, variant; c Continuity draft 2, d. Continuity draft 3; e. Continuity draft 4.



Example 109: CS 4.0, mm. 63–70; Subordinate Theme, Compound Presentation



Despite the support the sketches bring to identifying the beginning of the subordinate theme group, long-standing disagreements about where this group starts in the final piece persist. At issue, it seems, is the figuration and harmonic beginning of the continuation that follows the compound presentation in the final version (Example 110, mm. 65–70). The continuation's off-tonic beginning and strongly contrasting material seems to surprise and complicate some listeners' conception of a subordinate theme. Horne's argument about why one should disregard mm. 57–64 as the start of the subordinate theme thus essentially follows Walter Riezler's analysis of the published piece, as Riezler also questions whether the theme that begins at m. 57 can be called a true "second subject" due to the "agitation introduced by the semiquavers in the ninth bar of the passage" (Drabkin 2020, 84). Thus, although Horne tries to diminish the presentation qualities of mm. 57–64 in the final piece (see Example 110), the underlying issue seems to be more about the juncture immediately thereafter in m. 69.

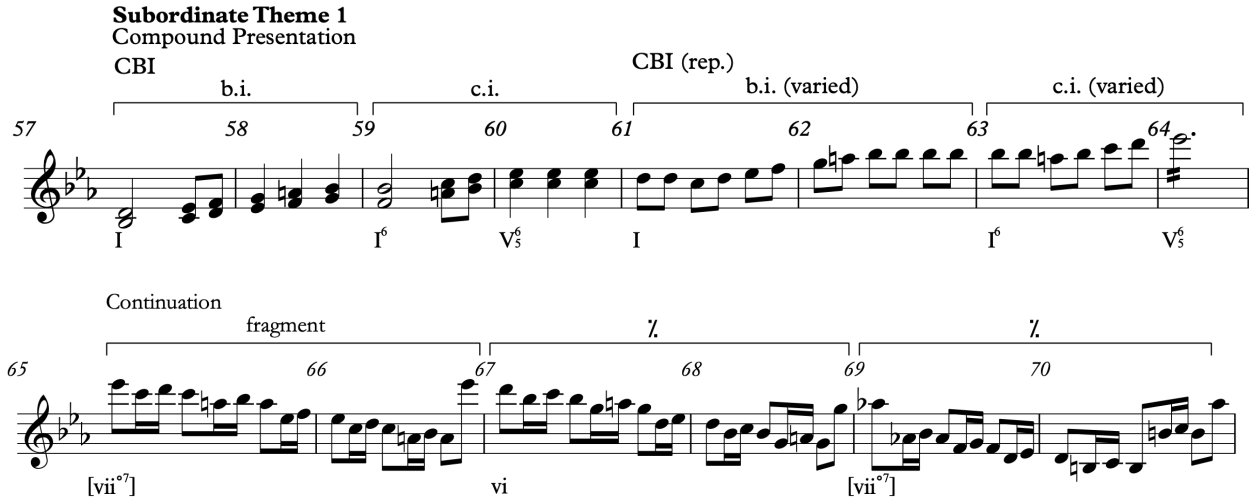
Riezler's analysis is by no means unique and difficulties in identifying the start of this theme have persisted for some time. In his 1948 *Essays on Musical* Analysis, for example, Tovey holds that the start of the subordinate theme (i.e., m. 57 in Example 110) "has escaped the notice of analysts" (Tovey 1948, 1 Symphonies:30).[175] Tovey was onto something, as it even escaped Schenker, who, in his poorly titled "Beethovens Dritte Sinfonie zum erstenmal in ihrem wahren Inhalt dargestellt" (Beethoven's Third Symphony for the first time portrayed in its true content) suggested that the "second subject" starts in m. 83.[176] Thus, while I believe the start of the subordinate theme is clearly marked in the final version from a form-functional perspective, the widescale and century-old disagreements about where the subordinate theme starts suggest that Beethoven managed to

[175] William Drabkin (2020), who cites Tovey on this passage, identifies the wrong measure numbers (mm. 44-51 instead of mm. 57-64), see (Drabkin 2020, 84). Tovey clearly refers to mm. 57-64 and also provides an illustrative example that includes this material (Tovey 1948, 1 Symphonies:30). Presumably Drabkin's error results form a typo.

[176] Drabkin notes that Schenker assigns mm. 57-82 to the modulatory section, and assigns the material that begins in m. 83 as the "so-called second subject" (Drabkin 2020, 85).

obscure the first subordinate theme for many listeners. Perhaps it is not surprising then, that the beginning of the subordinate theme in the first two sketches was even more nebulous. We will see in CS 3.0 how he obscures, yet again, the beginning of the subordinate theme group with a fourth entrance of main theme material. In this 1.2 branch, however, the beginning of the subordinate theme group is clear.

Example 110: Op. 55 I., mm. 57–70

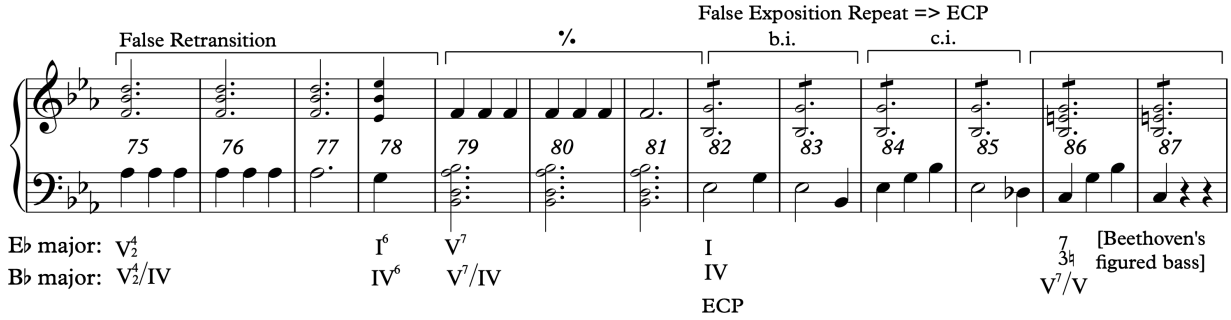


5.3.4 Subordinate Theme 2 (mm. 91–118)

Let us move now to the music that follows the first subordinate theme, beginning in m. 91 (Volume 2, p. 44). In branch 1.2, Beethoven revises significantly the material that previously functioned as a false retransition in branch 1.1 (Example 111, 1.1, mm. 75–81). First, he refashions the same quarter note repeating pattern, which he first introduced in the 1.1 branch to function as an initiating gesture, by repeating D5 instead of A♭3 (mm. 91–94). This D5 eventually descends to C♯ instead of G (mm. 91–94). It is straightforward to harmonize the new D5's with a B♭ tonic harmony, whereas the repeating A♭ branch 1.1 strongly implied dominant-seventh harmony in the home key (i.e., B♭ major as V of E♭ major; see Example 111, mm. 75–77). By altering the beginning of this material to imply tonic harmony in the subordinate key instead of dominant in the home key, Beethoven changes the formal function of this material from a false retransition to the beginning of a potential closing section that, when repeated in mm. 95–98, projects a compound presentation for a new,

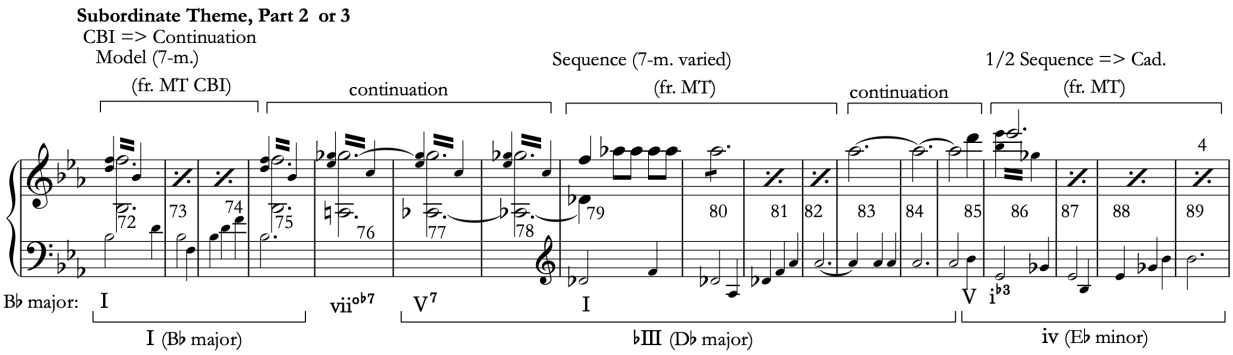
second subordinate theme (ST2). This design more closely matches what occurs in the final exposition.

Example 111: CS 1.1, mm. 75–87, False Retransition and Exposition Repeat (*ES* p. 11, st. 10) (Reproduced Example)



At the end of this function beginning in m. 99 (Vol. 2, p. 44), I propose, following Lockwood and Gosman's interpretation of this musical material,[177] that the repeating, eighth-note E-flats in the continuity-voice stand in for, and harmonize main theme material (not the main theme function); see the small notes in the left-hand staff in CS 1.2, mm. 99–102. This suggestion is consistent with Lockwood and Gosman's interpretation, but only from a material, rather than functional, perspective.

Example 112: CS 1.0, mm. 72–89; Subordinate Theme, Part 3 (*ES* p. 11, st. 5–6)



Despite the textural and content similarities at the end of the subordinate theme group in branch 1.2 with branch 1.1, the return of main theme material in the former serves a different function. Whereas the repeated quarter notes in branch 1.1 strongly suggested a retransition, which

[177] See (Beethoven, Lockwood, and Gosman 2013a, 35).

lead us to interpret the main theme material as tonic harmony in the home key to mark the beginning of the main theme in the exposition repeat, the same material in CS 1.2 projects a subdominant harmony in the subordinate key. Consequently, the main theme material in CS 1.2 now carries characteristics of a continuation becomes cadential function (i.e., continuation => cadential), rather than a (false) main theme function.

If the very high, repeated E-flat eighth notes in mm. 99–102 signal the re-entrance of the main theme's CBI, then Beethoven's *pianissimo* marking in m. 99 suggests that he also intended a different rhetorical effect for this main theme material (compared to branch 1.1). To accentuate the *pianissimo* marking, I have placed the implied main theme material in the upper register (beginning on E-flat-5), which creates the effect that this material emerges in a more remote and shimmering manner. Overall, the main theme material that arrives late in CS 1.2 combines aspects from the first two sketches: on the one hand, it appears distant with repeating eighth-notes, as it did in in the first sketch (CS 1.0), but on the other, it reappears in E-flat major, much like it did in branch 1.1, albeit with a different function (i.e., continuation => cadential instead of appearing to initiate the main theme after a false exposition repeat).

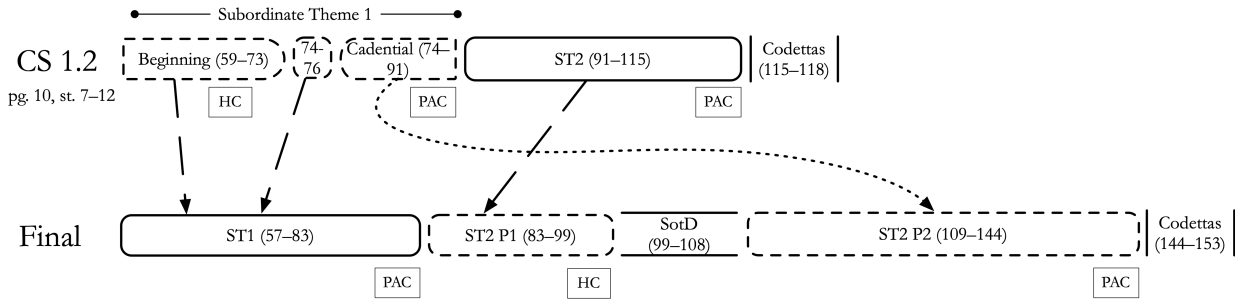
At the end of the implied main theme material (m. 103), Beethoven continues the cadential function (mm. 103–115) with a 4-m. ascending arpeggio that brings ⑥ harmonized as vii^{o7}, which resolves to ⑤ (m. 107), harmonized as a cadential six-four. Finally, the six-four resolves in m. 111, and after four measures the promised PAC arrives in m. 115.

5.3.5 Summary of the Subordinate Theme Group in Branch 1.2

Now that we have summarized how Beethoven combined elements from the subordinate theme groups that he wrote in CS 1.0 and branch 1.1 to form the new subordinate theme group in branch 1.2, let us compare the latter with the final version (Figure 37). The final exposition's subordinate theme group inherits parts from CS 1.2, but in a different order. As Lockwood and Gosman suggested, the cadential function of the first subordinate theme in the 1.2 branch does seem to prefigure the subordinate theme 2, part 2 in the final version, but as we will see in the next two chapters, it takes Beethoven some time to return to this design. The emergence of this theme part required substantial changes to the subordinate theme group. (Recall that a dotted transfer-line denotes a "character" transfer—that is, the general energetic and sentential structure corresponds, but the material and precise deployment differs). In short, Beethoven does not merely rearrange the

material as the diagram might suggest, but it does seem that parts of the second subordinate theme were originally devised for the first subordinate theme.

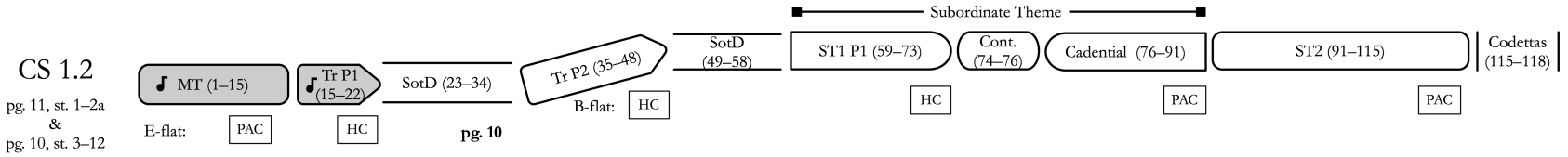
Figure 37: Function Transfer Graph: Subordinate Theme Group from CS 1.2 (top) to Final (bottom)



5.4 Summary of CS 1.2

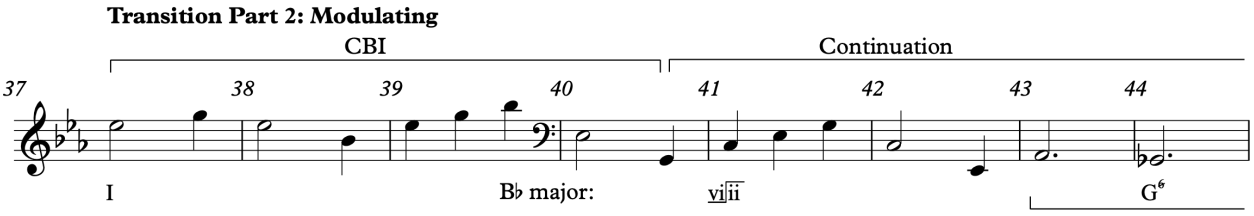
Now that we have discussed the phrase functions that make up the thematic functions of the exposition, let me return to summarize the entire design of the third sketch (Figure 38). CS 1.2 has the same main theme and non-modulating transition as the prior two sketches (mm. 1–30, shown with grey shapes) but diverges at the end of the SotD (m. 31). In the material that follows, Beethoven writes a clear, modulating transition, part 2 (mm. 35–48) whose concluding SK: HC (m. 49) dominant is prolonged with a SotD (mm. 49–58). Following the SotD, he sketches two subordinate themes. The first (mm. 59–91) is structured as an unconventional theme. Its beginning (mm. 59–73) is itself built as a sentence that ends with an internal HC in m. 73. Thereafter follows a brief, 3-m. continuation (mm. 74–76) and a large cadential function that is also organized like a sentence (mm. 76–91). After this first theme closes with a PAC in m. 91, a second subordinate theme begins. This theme uses the repeating quarter-note material, which previously functioned as a "false" retransition in CS 1.1, as an initiating compound presentation (mm. 91–98). Main theme material follows in mm. 99–102 to express the cadential, predominant (i.e., IV) and finally, a large cadential function (mm. 103–115) built in three 4-m. members concludes the subordinate theme group with a final PAC in m. 115. Closing section codettas follow in mm. 115–118 and a retransition (mm. 119–126) sets up the exposition repeat.

Figure 38: CS 1.2 Theme Function Diagram



CS 1.2 combines rhetorical elements that Beethoven introduced in the first two sketches and establishes several functions that will remain in the final version. These functions include the main theme and a two-part transition with their home and subordinate key SotDs. The sketch also establishes the threefold repetition of main theme material in the home-key tonic that we find in the final version of the piece: it begins the main theme (mm. 3–6), transition part 1 (mm. 15–18), and part 2 (mm. 35–38). In subsequent sketches, he trims the additional sequencing in the second part of the transition (Example 113, mm. 38–46), which removes some of the redundancy that is present between the two parts in CS 1.2. Still, we will see that Beethoven, having arrived at the three-fold repetition, was not finished experimenting with alternatives. In a later sketch (CS 3.0, discussed in section 7.2), he will try four consecutive entries of main theme material! Thus, while he arrived at something close to the final design for these formal functions in CS 1.2, he was still willing to try alternatives.

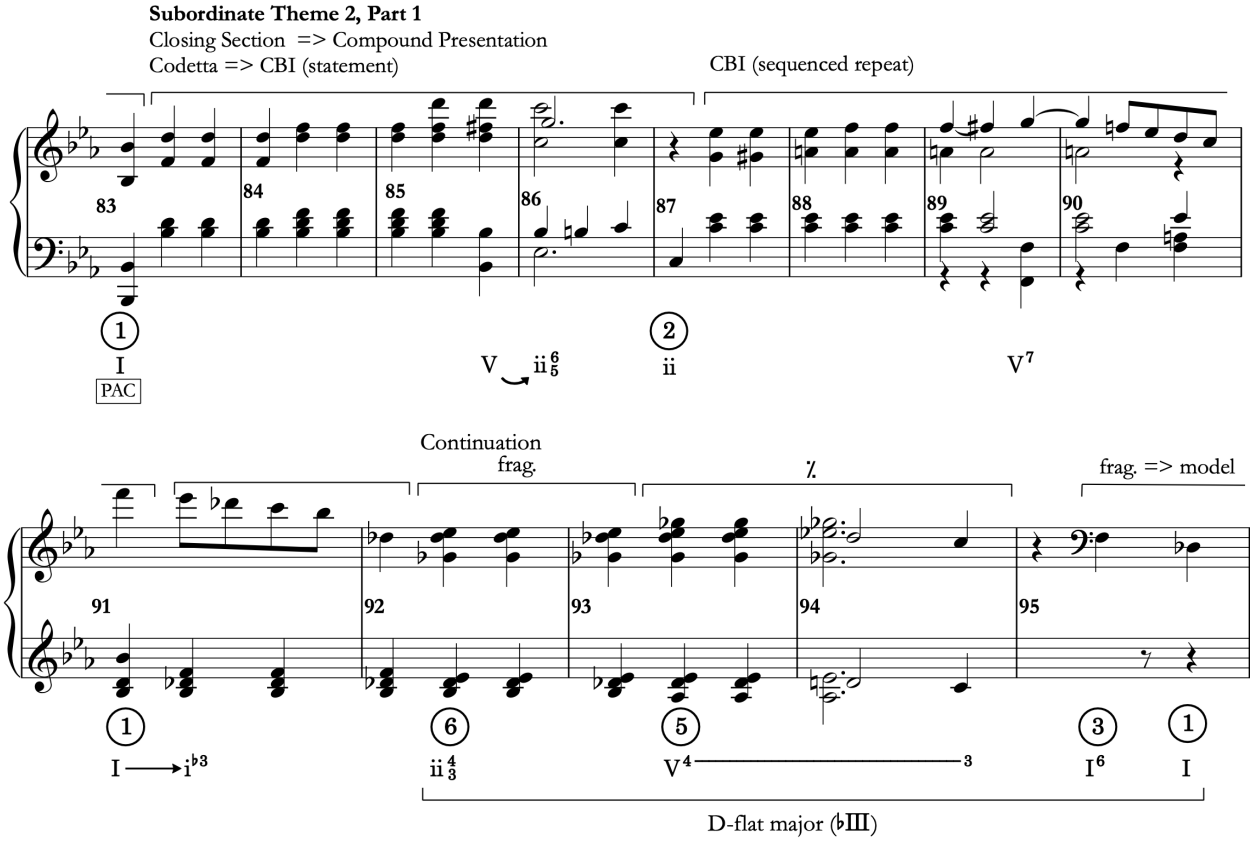
Example 113: Op. 55 I., mm. 37–44; Transition Part 2

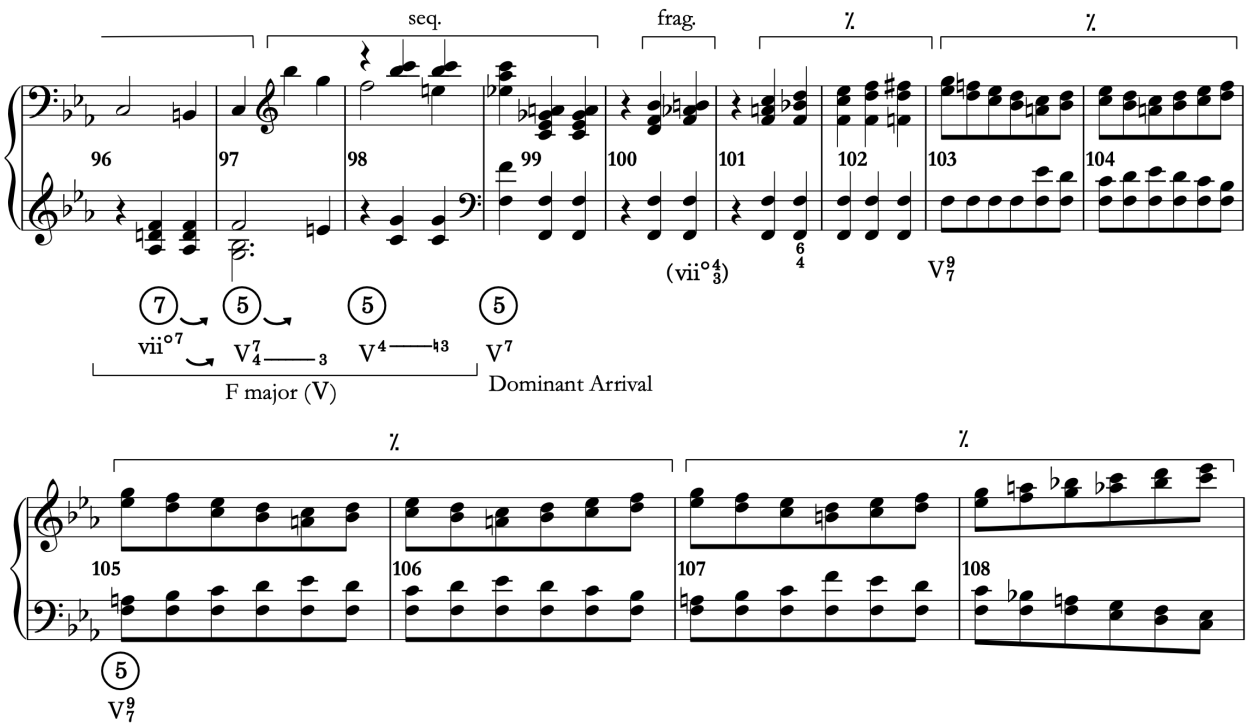


Although the main theme and two-part transition of CS 1.2 match the corresponding parts in the final version of the exposition, the subordinate theme group undergoes significant changes in subsequent sketches. The first alteration involves the new continuation material that was built by fragmenting the CBI (mm. 67–73). This continuation cannot be found in later sketches, but the general concept of creating a rhetorical pause in the subordinate theme group becomes an important part of the subordinate theme group, albeit in a different place. In the finished piece (Example 114), the exposition appears to be leading towards a close at m. 83. Immediately after the PAC, a low-energy passage of repeating quarter-notes suggests a closing section (mm. 83–86). When the four-measure idea is repeated (mm. 87–90), the presumed closing section becomes retrospectively reinterpreted as a compound presentation to a new second subordinate theme, part 1. After a brief continuation (mm. 91–99), the new theme stalls out on a dominant prolongation (99–108), which

gains energy and leads to a rhetorical "exposition reboot"—the triumphant, triadic part 2 that begins in m. 109 (refer to Vol. 2, p. 7). After several cadential deviations, the second subordinate theme concludes with a PAC in m. 144. As we saw above (Vol. 2, p. 44), the rhetorical "reboot" (m. 77ff.) occurs in the first subordinate theme, not the second in the CS 1.2 sketch. Nevertheless, maybe this early concept inspired the internal pause in the second subordinate theme in the final piece. Perhaps we can envision Beethoven "transferring" or repurposing the internal HC that he devised in CS 1.2 for the first subordinate theme into the second in the final version.

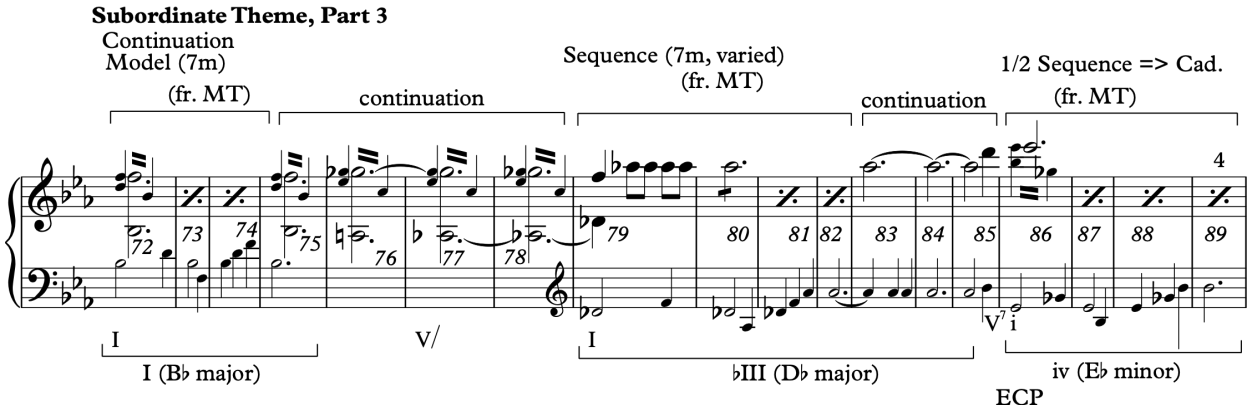
Example 114: Op. 55, I. mm. 83–90



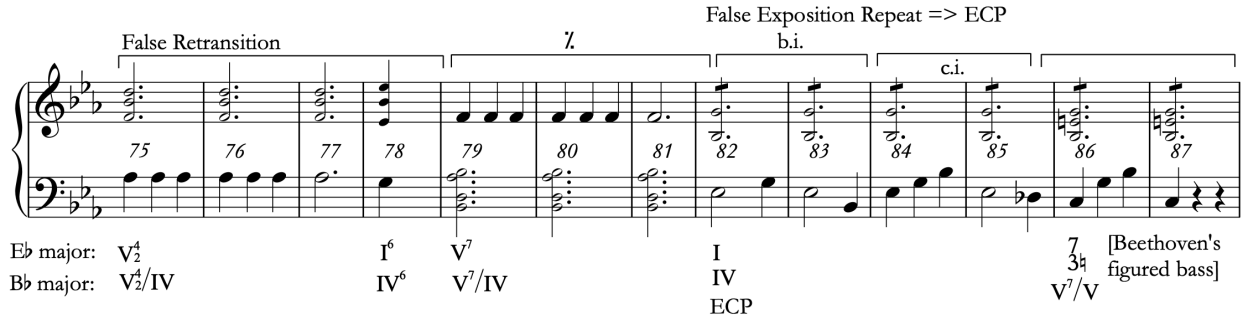


To summarize, Beethoven cleverly combines elements from CS 1.0 and branch 1.1 to create the new 1.2 branch. The manner in which the main theme material re-enters in the subordinate theme 2 in the home key (i.e., E-flat major; mm. 99–102) merges features of CS 1.0 and branch 1.1: the main theme material—set *pianissimo*—sounds distant, just as it emerged late in the subordinate theme group in the first sketch (Example 115, especially mm. 79–82), but the main theme material also enters in the home key (E-flat major), which reminds us of the false exposition repeat in CS 1.1 (Example 116, mm. 82–85). Overall, we have the impression that the subordinate theme group is moving towards a close after the first subordinate theme, then it reboots and the main theme material brings a more emphatic cadential function.

Example 115: CS 1.0, mm. 72–89; Subordinate Theme, Part 3 (*ES* p. 11, st. 5–6)

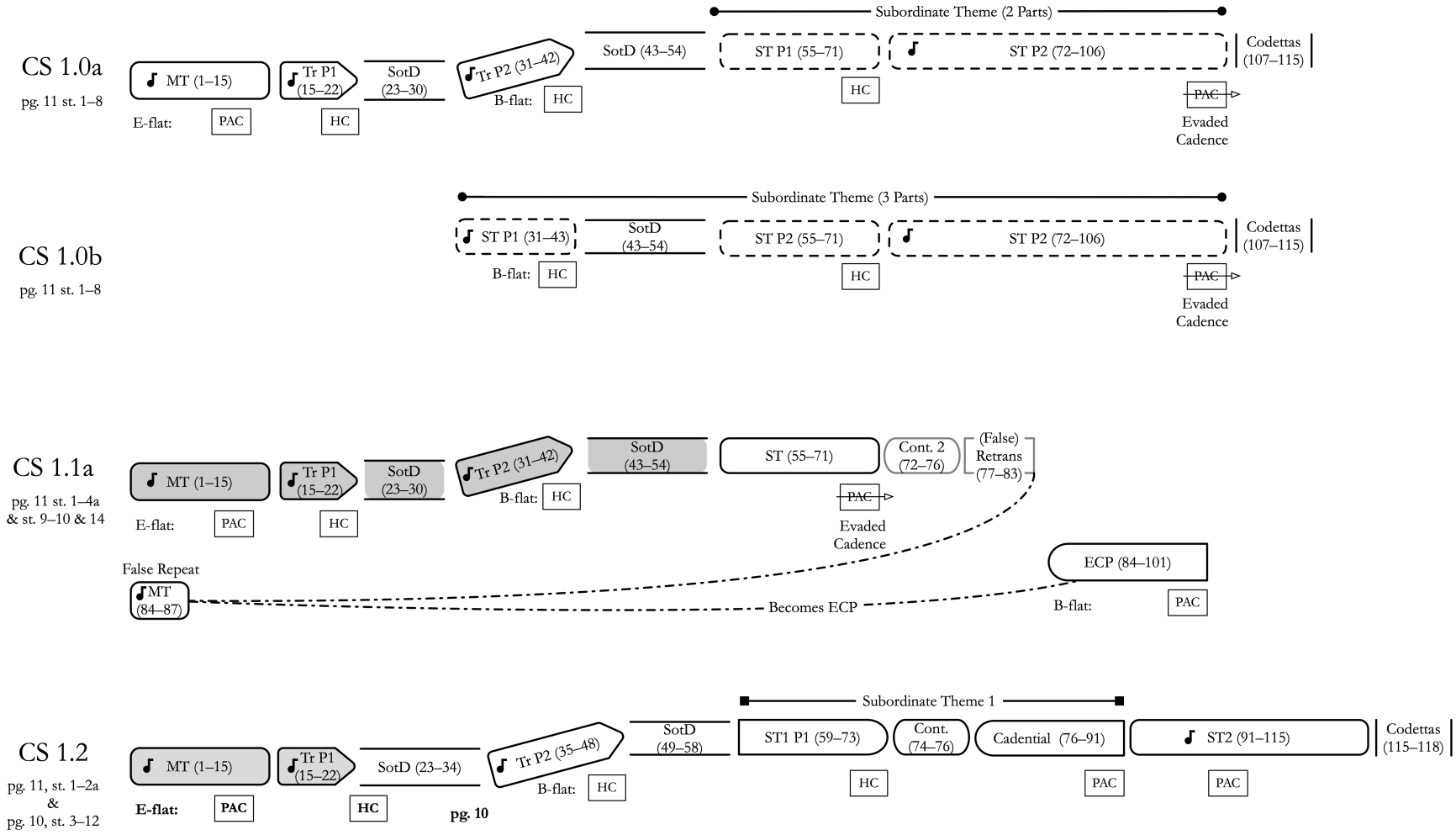


Example 116: Branch 1.1, mm. 75–87; False Retransition and False Exposition Repeat (*ES* p. 11, st. 10)



All three series 1 sketches suggest that Beethoven worked to bring back the main theme material at the end of the exposition in the subordinate theme group to express different functions, initiating, medial, and cadential. Consequently, integrating main theme material late in the subordinate theme group was, at least initially, an invariant idea in Beethoven's compositional process, but he was not sure what function that material would bring. We will see in Section 7.5 how this idea is phased out and several new designs lead him to design the subordinate theme 2 in a different way. Still, the fundamental idea of suggesting an exposition end before a reboot will persist. Figure 39 diagrams the thematic structures of CS 1.0 ("a" and "b"), CS 1.1a, and CS 1.2. The small music icons represent main theme material.

Figure 39: CS 1.0a and CS 1.0b, CS 1.1a, and 1.2, Theme Diagrams (music icon represents MT material)

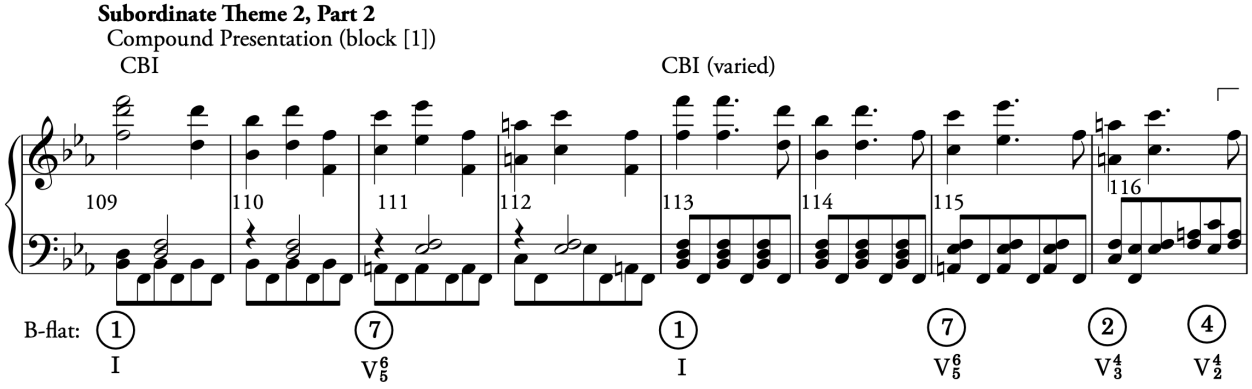


To conclude, there are essentially three compositional threads that we will trace in the subsequent sketches. The first concerns the role of the main material. Although Beethoven solidifies the main theme and transition, part 1 in the first sketch, everything that follows changes considerably. Broadly, Beethoven will introduce the main theme material in different parts of the form where it will express either the home key tonic (E-flat major) or the dominant (B-flat major).

The second thread involves the subordinate theme group. Beethoven will expand this part of the form in subsequent sketches in different ways. We will discover how he tries to enlarge this part of the form by writing multiple themes, how he refashions those themes to be theme parts, and how he eventually develops a version that combines the best elements from multiple prior designs.

Finally, the last primary thread concerns how the new subordinate theme, part 2 will emerge at the end of the subordinate theme group (an incipit from this theme is shown in Example 117). As we have seen, the first traces of this theme part appear in CS 1.2 but in a different position and function (i.e., cadential to the subordinate theme 1). The emergence of this theme part does not arise in a linear fashion, however. Compared to the rest of the themes, it was a late addition.

Example 117: Op. 55, I. Piano Reduction, mm. 109–116; Subordinate Theme 2, Part 2



In the next chapter, I will show how Beethoven synthesizes further several aspects from these first three sketches to create a new exposition, CS 2.0. The sketches so far discussed provided the composer with all the ingredients he needed for crafting the final version, apart from some of the extensive cadential deviations that typify the end of the subordinate theme group. Like a chef, Beethoven is still finalizing the distribution of the constituent ingredients, their ratios, and the order that they should appear in. But most of the essential flavors, to extend the metaphor, have been established in the series 1 sketches.

CONTINUITY SKETCH 2.0

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6.1 Introduction

In the previous two chapters, we explored the exposition sketches that Beethoven wrote on page 11 and 10 (CS 1.0 and branches 1.1 and 1.2). I hypothesized that, in CS 1.0 and branch 1.1, he worked to problematize the normal rhetorical forces of the subordinate theme group to motivate the new lyrical theme that he planned for the development. In his second revision branch 1.2, Beethoven clarified the beginning of the subordinate theme group by modifying the end of the modulating part of the transition. Thereafter, he expanded significantly the first subordinate theme by writing a new continuation that ended with an internal HC and resuming the theme with a small 3-m. continuation and a large, sententially structured cadential function. We saw, following Lockwood and Gosman, that the greatly expanded cadential function of the first subordinate theme bore some similarities to the subordinate theme 2, part 2 in the final version, but this sententially organized material was in a different formal position and expressed a different function (cadential instead of theme). Finally,
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Beethoven reconfigured the material that functioned in branch 1.1 as a retransition (the repeating quarter notes) to form the opening of a second subordinate theme. He therefore refashioned the false exposition repeat into a seeming false-ending followed by a "reboot."

Example 118: CS 1.2, mm. 77–84 Subordinate Theme 1, Cadential

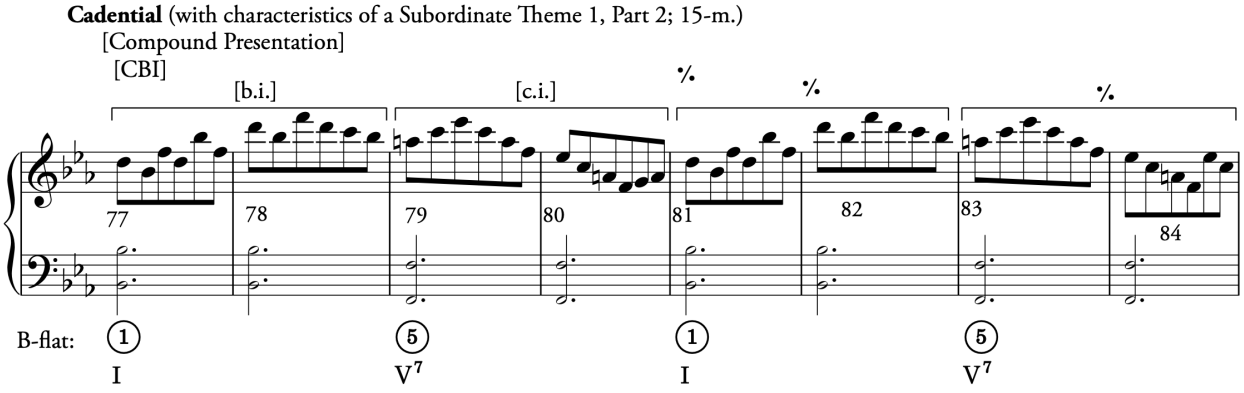
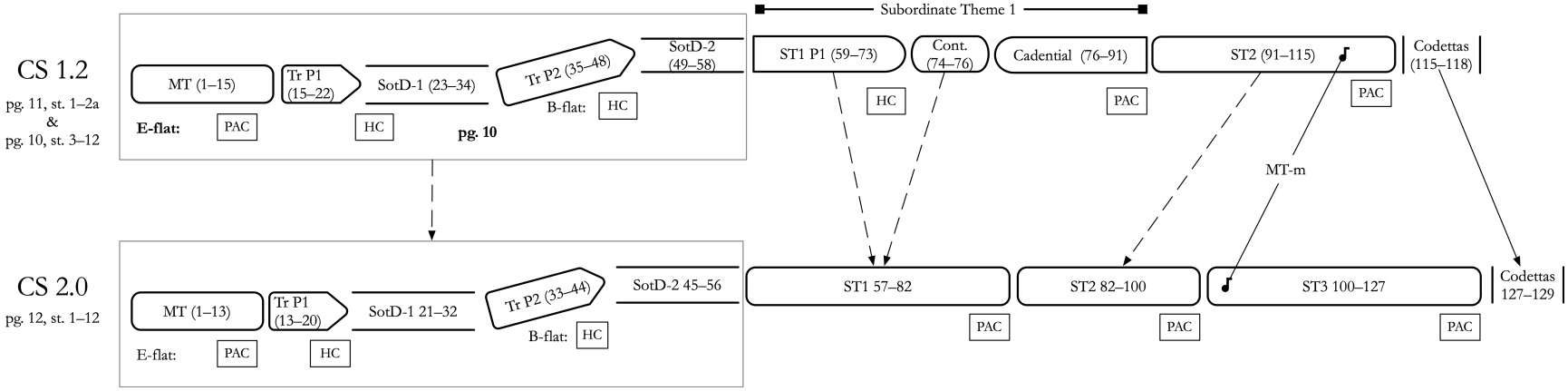


Figure 40: CS 1.2 (top) to CS 2.0 (bottom) theme-function transfer diagram



In this chapter, I analyze the continuity sketch written on page 12 (CS 2.0, Vol. 2, pp. 51–55), and the fragments on page 13 (branch 2.1, Vol. 2, pp. 56–57). To summarize broadly CS 2.0, Beethoven removes the large cadential function that he devised in the 1.2 branch (an incipit is shown in Example 118) and refashions the end of the subordinate theme group to foreground more the main theme material in a way that is more similar to what he had done earlier in CS 1.0 and branch 1.1. Figure 40 depicts an overview of how the theme-functions in CS 1.2 are inherited by CS 2.0. At this level of hierarchy, the main theme and transition functions are invariant, but the subordinate theme group differs considerably. As the subordinate theme group changes the most, we will analyze this part of the form first.

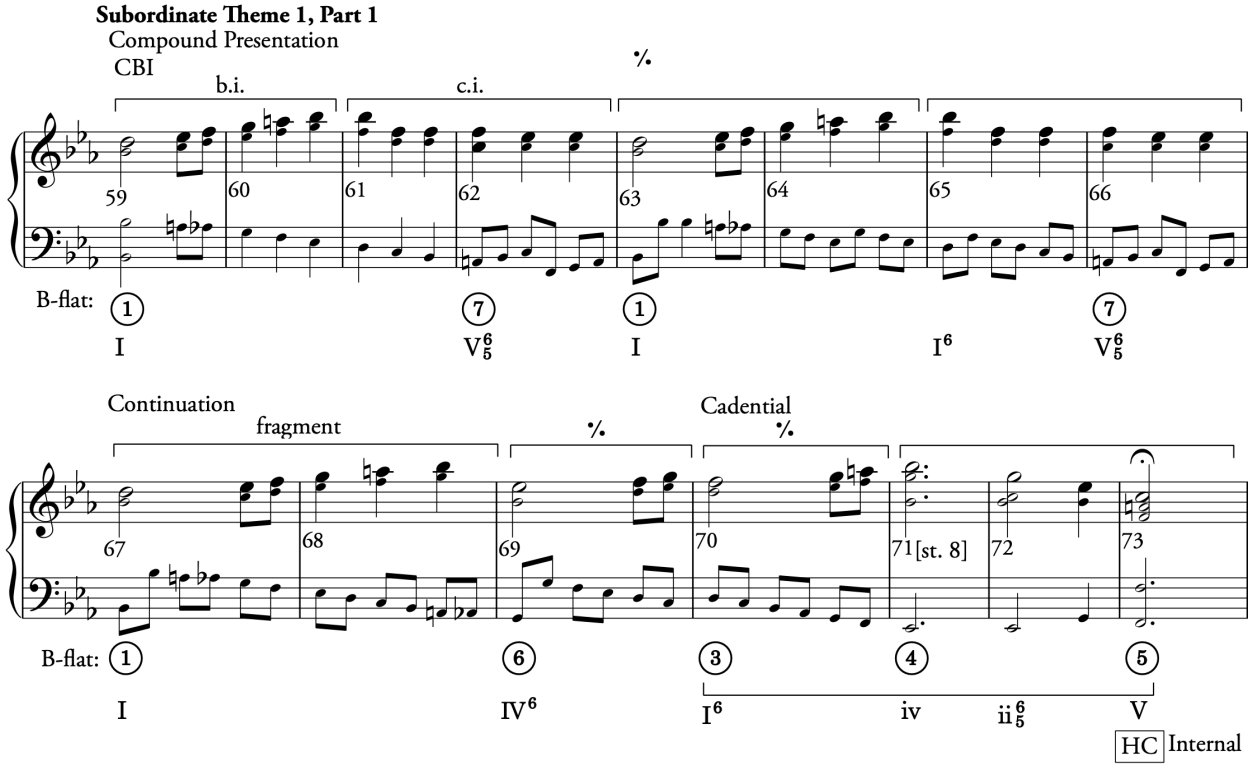
At this stage (CS 2.0), Beethoven enlarges the subordinate theme group primarily by extension rather than expansion: the group now consists of three subordinate themes instead of two. We will discover in later chapters how he reduces the number of themes to two and expands the second theme by splitting it into two parts. Finally, at the end of this chapter, we will return to the transition to examine some of its smaller changes, then examine the form-functional role of the fragments that he sketched on page 13.

6.2 Subordinate Theme Group (mm. 57–123)

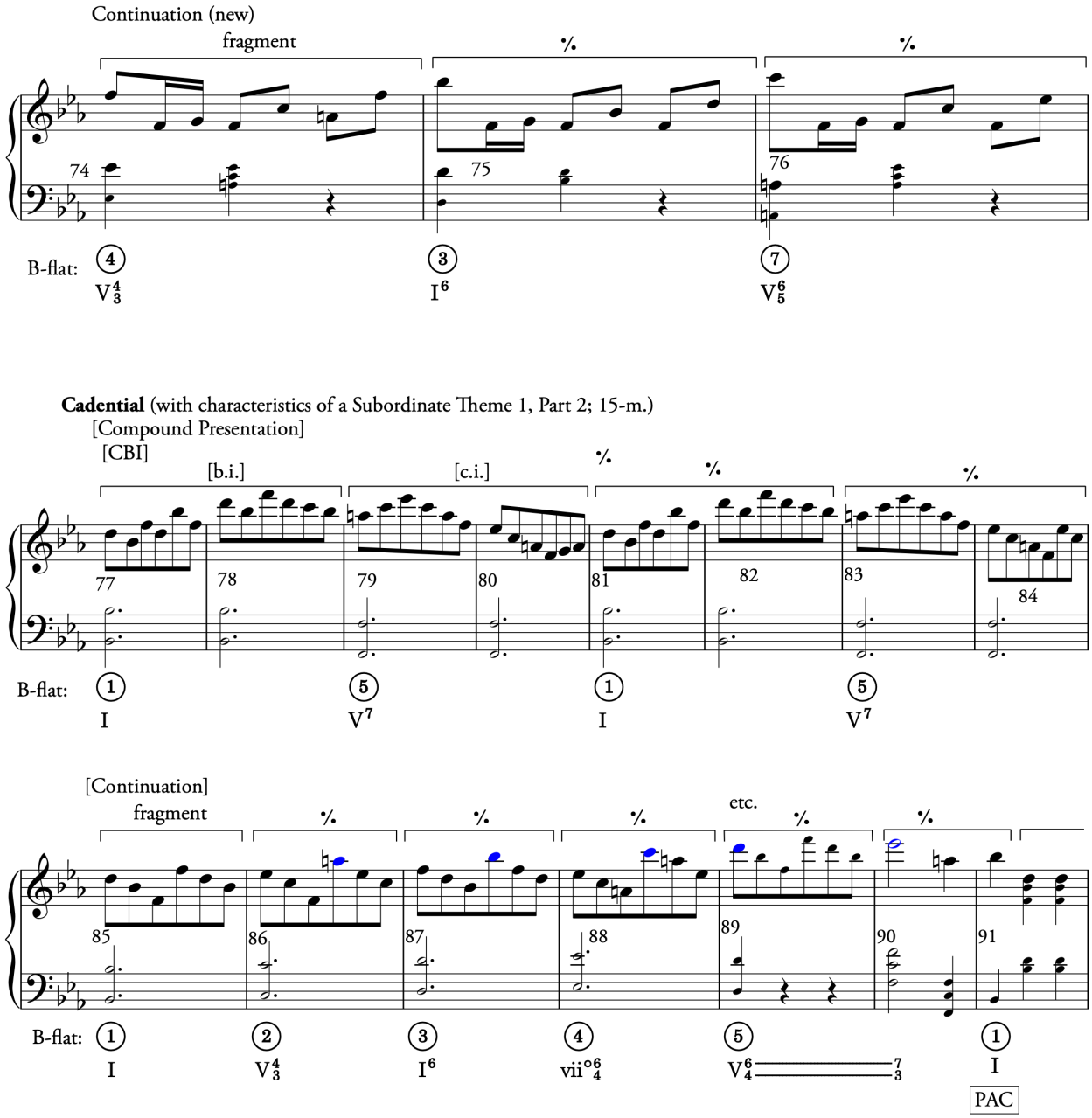
6.2.1 Subordinate Theme 1 (mm. 57–82)

Let us begin with the first subordinate theme (Vol. 2, CS 2.0, pp. 52–53, mm. 57–82). In the context of the sketches so far studied, the design of this version of the theme is surprising because Beethoven abandons his previous plan. Recall that in the 1.2 branch, the corresponding theme had an unconventional structure: the theme began with the invariant compound presentation (Example 119, CS 1.2, mm. 59–66), which was followed by a new continuation, built with fragmented CBI material (CS 1.2, mm. 67–73) and ended by an internal HC (CS 1.2, m. 73). Thereafter, the theme resumed with another, short 3-m. continuation (Example 120, CS 1.2, mm. 74–76), and finally a sententially structured cadential function (CS 1.2, mm. 77–91) concluded the theme with a PAC (CS 1.2, m. 91).

Example 119: CS 1.2, mm. 59–73; Subordinate Theme 1 (*ES* p. 10, st. 7–8a)



Example 120: CS 1.2, mm. 74–91; ST1 P2 (*ES* p. 10, st. 8–9)



In CS 2.0, Beethoven changes the first subordinate theme (Vol. 2, pp. 52–53, mm. 57–82) in two ways. First, he removes the CBI-based continuation in CS 1.2 (i.e., Example 119, mm. 67–73) and replaces it with the energy gaining continuation (CS 2.0, mm. 65–74), which uses the sixteenth-turn material that he first devised in CS 1.0. This change eliminates the internal HC and causes the revised theme to be functionally equivalent to the version sketched in CS 1.0 (i.e., a sentential design), albeit with expanded continuation and cadential function (compare CS 2.0, mm. 57–82 with Example 121, CS 1.0, mm. 55–71). Second, he writes a new ECP (mm. 75–82) that expands the

cadential function with a long penultimate dominant prolongation (mm. 77–81). This ECP concludes with a PAC (m. 82). By enlarging the continuation and cadential functions, Beethoven expands considerably the first subordinate theme: it is now 26 measures, whereas the 1.0 version was 17 measures.

Example 121: CS 1.0, mm. 55–71, ST1 Compound Presentation, Continuation and HC (*ES* p. 11, st. 4–5)

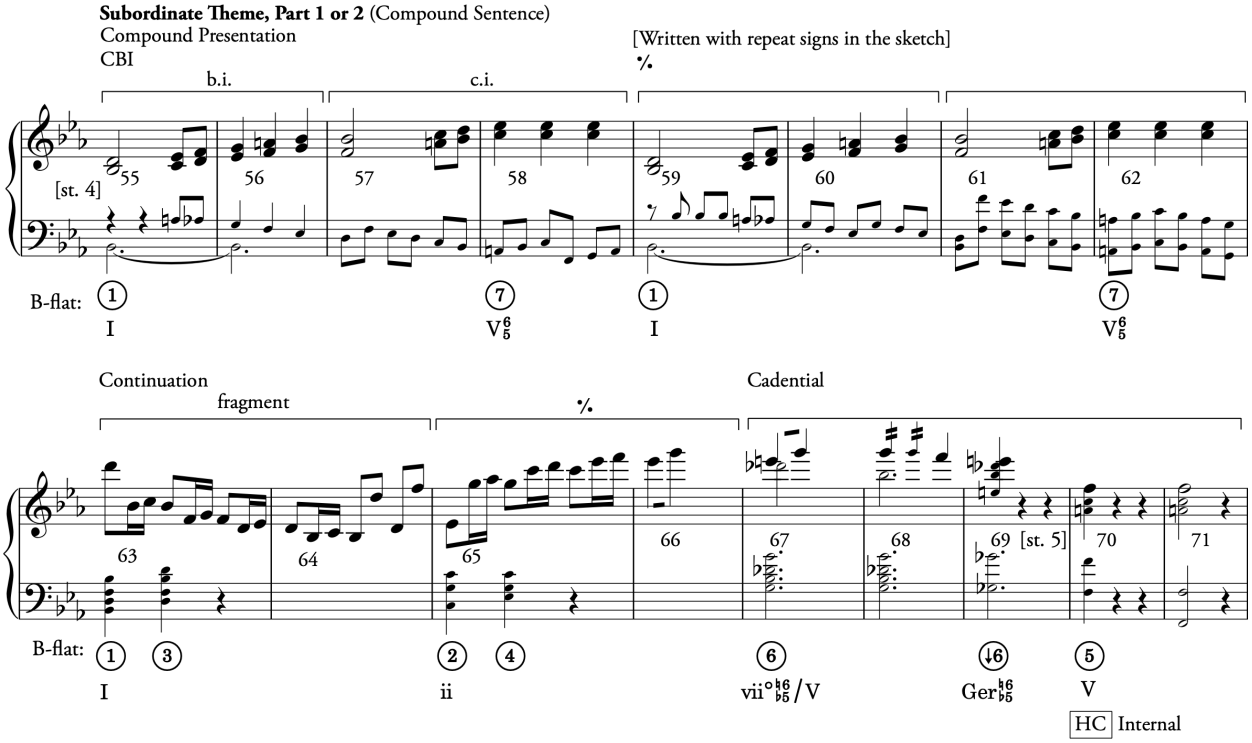
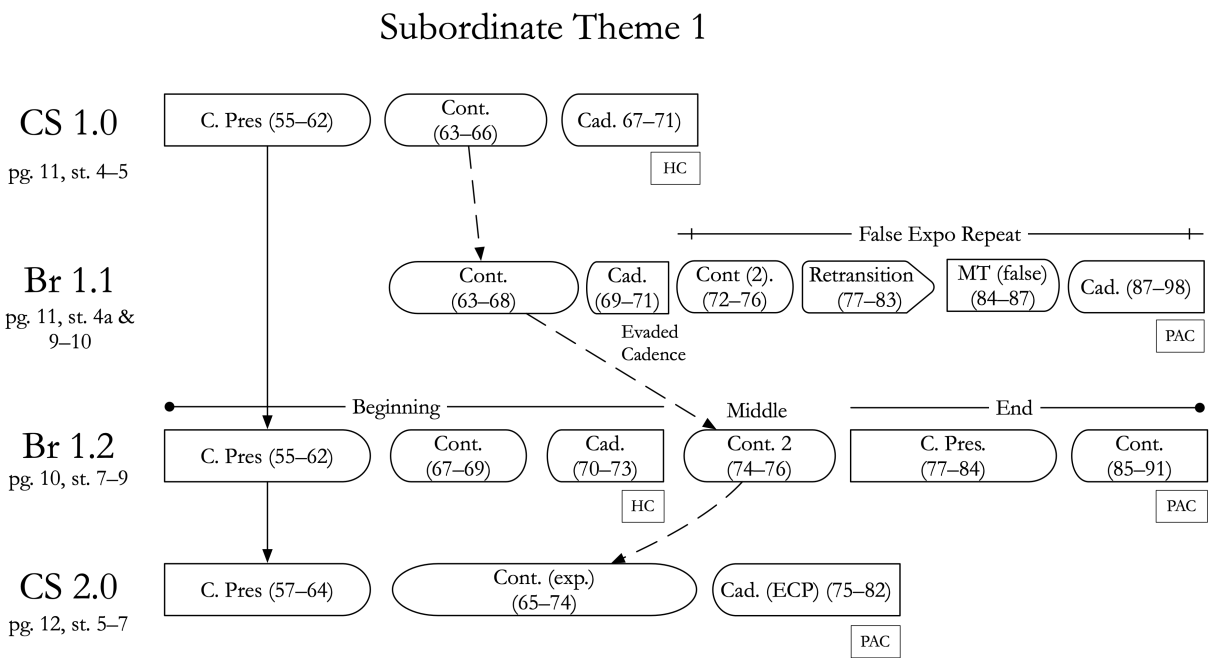


Figure 41 shows the development of the first subordinate theme up to this point. The diagram reveals the non-linear process that pervades Beethoven's method. Although the basic sentential design of the first subordinate theme in CS 2.0 closely matches the corresponding theme in CS 1.0—except for the cadence, which is a PAC instead of a HC—the path that the composer took before this parallel solidified was more indirect than we might have anticipated. Beethoven did not simply change the cadence that ended the theme from a HC (as in CS 1.0) to a PAC, nor was his initial impulse to expand the continuation and cadential functions (as in CS 2.0). As we saw in the previous chapters, before he tried this 2.0 design, he experimented with a variety of other ideas, including a false exposition repeat (branch 1.1) and an unconventional theme design that was punctuated with an internal HC (branch 1.2). In each case, he appears to have been striving to leave the first subordinate theme open or extend it by partitioning it into multiple parts. It was only after

he tried these alternatives that he returned to the original sentential design without internal punctuation. This change required him to abandon the new, CBI-based continuation that he tried in branch 1.2 and move the continuation material that that restarted the theme after the internal HC into its place (follow the dashed arrow in Figure 41). Thereafter, he realized that he could expand the first subordinate theme by enlarging its constituent parts, the continuation and cadential functions, instead of extending the theme with incomplete cadences or cadential deviations. In brief, the new 2.0 first subordinate theme expresses more clearly a greatly expanded sentential function in place of a theme bisected with an internal HC.

Figure 41: Function transfer diagram of the four different versions of Subordinate Theme 1 (approximately scaled)



The indirect transfers shown in Figure 41 are emblematic of Beethoven's compositional process for the *Eroica* more generally. Consider, for instance, the character-transfer path of the continuation (shown with dashed lines). He seems to have been willing to veer far from his initial conception and experiment with substantially different designs in subsequent sketches, but he often returned to something like his original conception at a later point, albeit one that was greatly influenced by his previous excursions. The intermediary designs between the first version and the last (branches 1.1 and 1.2) are far from irrelevant, because parts of their design also influence other areas of the form. We have already seen, for example, how Beethoven repurposed the material he

originally used as a false retransition in branch 1.1 to become a new subordinate theme in branch 1.2, which prefigures the second subordinate theme, part 1 in the final piece. In short, Beethoven did not follow a linear process, he tried variants, then either picked his favorite designs or integrated elements from multiple prior versions to form a new one.

Beethoven's practice of reverting to previous designs after trying alternatives seems to have been a feature of his compositional process more generally. Geoffry Block, in his study of Beethoven's sketches to the piano concertos in C major (Op. 15) and B-flat major (Op. 19), also noted the composer's tendency to return to his initial impulses:

> A crucial component of Beethoven's compositional process from the sketch stage to the autograph score for both Op. 15 and Op. 19 is his frequent and often persistent reluctance to discard his early ideas. Where the process from sketches to the final version can be accurately traced in detail, the strains of Beethoven's indecision can be observed at first hand. Ideas that have been seemingly discarded in a much earlier version, even passages from an early sketch, regularly reappear to disturb a smooth and straight progression of Beethoven's musical thought.[178]

Many of Block's observations for Op. 15 and Op. 19 also hold true for the *Eroica* exposition sketches. In this chapter and those that follow, we will find numerous instances where Beethoven returns to previous designs by reviving ideas that he temporarily discarded. Often, he figures out ways to repurpose earlier material in novel ways.

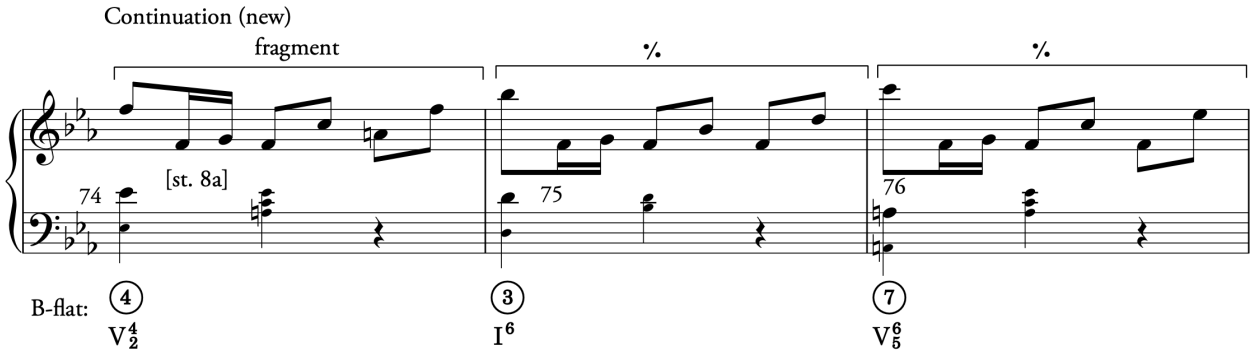
6.2.1.1 Phrase-Structure of the Subordinate Theme 1

Now that we have seen how the first subordinate theme in CS 2.0 inherits the sentential phrase structures from the corresponding theme in in the CS 1 series, let us explore its design in greater detail. Consider first the compound presentation (mm. 57–64). Although Figure 41 shows that this function is token-transferred (solid line) to each sketch without modification, Beethoven slightly alters it in CS 2.0 by shifting the repeated CBI one octave higher (mm. 61–64). This change does not alter the underlying function, but it seems to influence the music that follows.

[178] (Block 1979, 9–10)

At the end of the compound presentation, Beethoven writes a continuation (mm. 65–74) whose figuration is inspired by the continuation that he sketched in the 1.2 branch, which is itself a modification of the continuation he wrote in CS 1.0 (see the dashed transfer arrows in Figure 41). In the new 2.0 continuation, he changes the harmonic progression to a sequence (mm. 65–70) instead of the tonic prolonging neighboring motion in branch 1.2 (Example 122, CS 1.2, 74–76). In greater detail, the new CS 2.0 6-m. sequence is built with a 2-m. model (CS 2.0, mm. 62–63) and two copies of that model (mm. 67–68 and 69–70). The new sequence uses the same basic "sixteenth-turn" material as the second continuation in the previous sketch (compare with Example 122, CS 1.2, mm. 74–76), but its sequential design brings a greater forward drive and expansion.

Example 122: CS 1.2, mm. 74–76, Subordinate Theme 1, Continuation 2



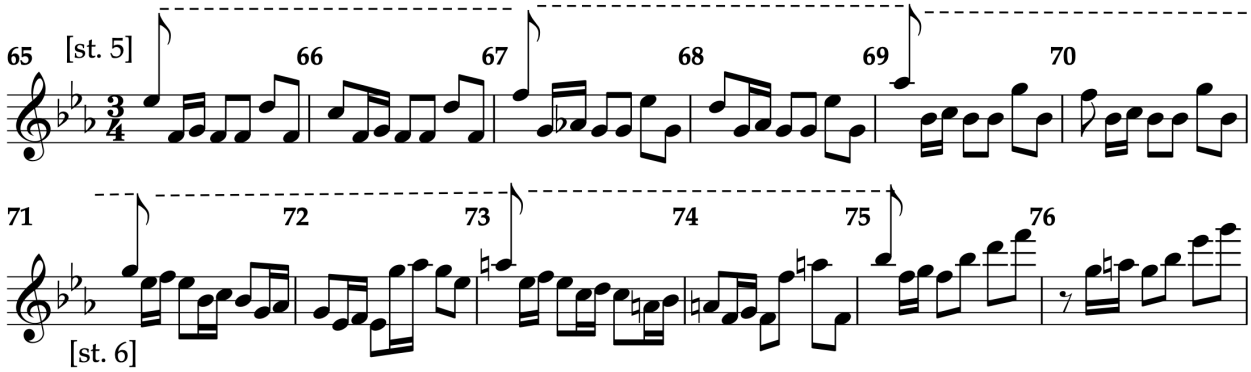
When Beethoven shifts the CBI of the compound presentation one octave higher in CS 2.0, a registral disjunction arises when the continuation begins in m. 65. He seems to have made this change so that he could fill this registral "gap" with a middleground linear ascent from E-flat-5 (m. 65) to B-flat-5 (m. 75) in the continuity voice. Example 123 highlights the middleground linear ascent with long stems that are connected with dashed lines above the staves. Once a B-flat-5 is obtained (m. 75), the music breaks out of the lower register and reinstates the upper register originally obtained by the compound presentation (in m. 64).

A disruption in the stepwise, linear ascent seems to have implications for future sketches. Note how the middleground-voice moves from F (m. 67) to A-flat (m. 69) instead of F to G. This disruption arises because the second copy of the model (mm. 69–70) had to be transposed a third higher instead of a whole step higher to be stylistically commensurate.[179] This modification brought an A-flat on the downbeat of m. 69 instead of a G. Example 124 shows what would have happened

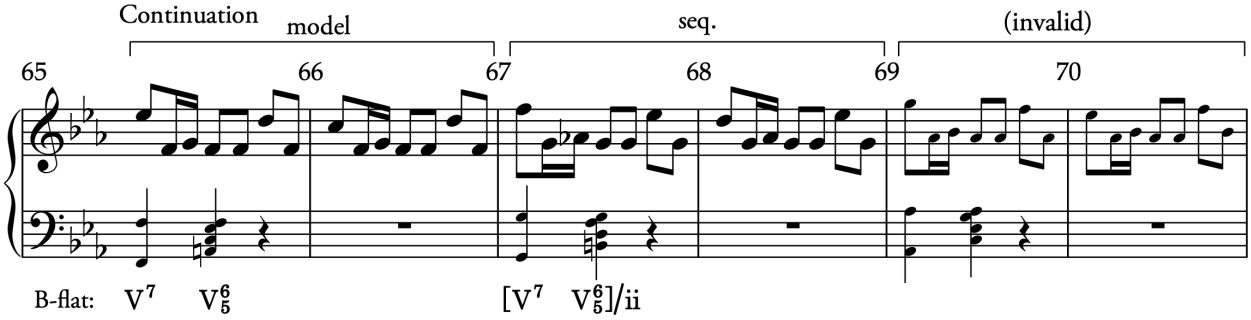
[179] It is common for an ascending stepwise sequence to bypass III and move from II directly to IV.

if he sequenced the model up a whole-step to achieve a smooth, stepwise ascent (E-flat in m. 65, F in m. 67, and G in m. 69): the resulting harmony (m. 69, A-flat major 7th) in this hypothetical sequence would be unstylistic, as it forms a major triad with a major seventh (instead of the minor seventh, which would create an applied dominant seventh of the flat mediant harmony). Put simply, Beethoven could not use the sequence he devised for this continuation if he wanted to prioritize the stepwise, linear ascent in the continuity voice, so he had to modify the linear ascent.

Example 123: CS 2.0, mm. 65–76; Linear Ascent (notes with long stems and dashed lines show a middleground linear ascent from E-flat to B-flat)



Example 124: Hypothetical CS 2.0, mm. 65–70; ST1 Continuation (mm. 69–70 modified)

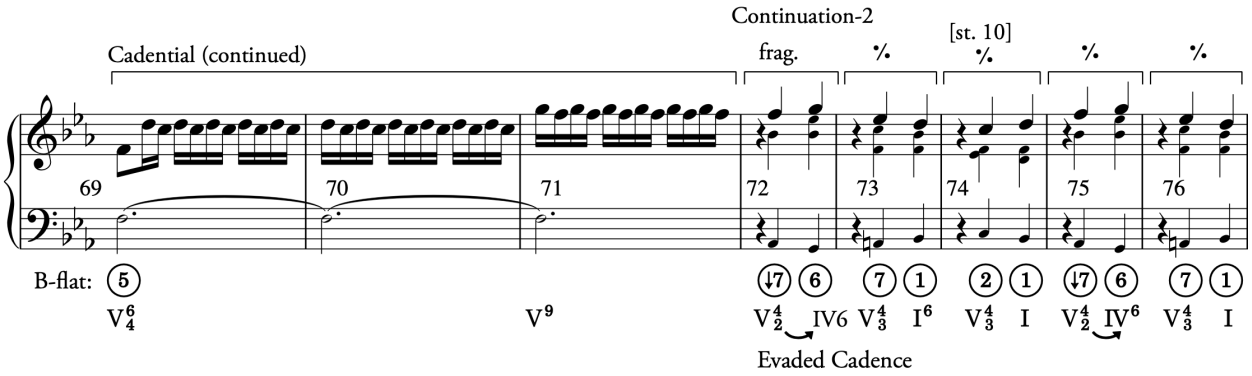


After the 6-m. sequence (m. 71ff.), Beethoven writes a 2-m. fragment that emphasizes subdominant harmony (mm. 71–72), followed by another 2-m. fragment that brings dominant harmony (mm. 73–74). At this point, this implied dominant (mm. 73–74) does not sound as a penultimate dominant because the phrase has not yet completed the linear ascent. Moreover, what follows (mm. 75–76) strongly suggests the first two measures of an ECP. To make this reading more apparent in my reconstruction, I have realized the implied dominant in mm. 73–74 in its third inversion ($V^{4/2}$, with ④ in the bass). This inversion creates diverging counterpoint in the outer voices of m. 75 that is characteristic of the classical tonal style: the top voice moves from ^7 to ^1

(A-flat to B-flat) and the bass resolves downward from ④ to ③ (E-flat to D). This realization works well with what follows.

The end of the linear ascent (mm. 75ff) elides with an ECP that begins with a first inversion tonic ③ (m. 75). I harmonize the second measure of the ECP with a subdominant harmony built on ④ that moves to the cadential dominant-six-four over ⑤ in the next measure (m. 77). Beethoven then prolongs the penultimate dominant (mm. 77–79) with a repeating, descending-pentachord gesture that creates a grouping structure hemiola. This rhythmic device builds anticipation for a PAC, but he delays it with a rapid trill on ^3 and ^2 in the top voice (mm. 80–81). The trill here seems to have been inspired from the trill in the 1.1 branch (Example 125, mm. 69–71), but he evaded the PAC in that sketch (m. 72). Finally, a brief escape gesture leads us out of the trill (CS 2.0, m. 81, E-natural to F), and a PAC arrives in m. 82.

Example 125: Branch 1.1, mm. 69–76; Subordinate Theme 1, Cadential



Overall, the new subordinate theme 1 is considerably larger than the first part of the corresponding theme in branch 1.2. To achieve this expansion, Beethoven significantly enlarged the continuation (mm. 65–74), namely, ten measures compared to the two measures in CS 1.0, six measures in CS 1.1, and three measures in CS 1.2. He also expanded considerably the cadential function by writing an ECP and prolonging the penultimate dominant (mm. 77–81). In the next two chapters, we will see how he enlarges the first subordinate theme further still. In total, the continuation and cadential function of the theme is now 18-m. long instead of 8-m.[180]

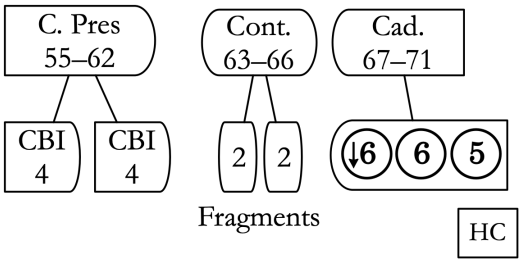
[180] Alfred Lorenz (1924, 414–15) noticed that the length of this music (i.e., the ST1 continuation and cadential function) sketched on p. 12, st. 5–7 (18-m.) matches the length of another version of this music that Beethoven wrote on p. 14, st. 11–13. As Beethoven wrote several different versions of this passage on p. 14 with multiple modifications, I am not fully convinced that the length was a guiding principle for this music.

Figure 42 summarizes the internal formal functions of the first four versions of the subordinate theme 1 (in CS 1.0, 1.1, 1.2, and 2.0) in diagrams. In essence, Beethoven returns the design of the theme to the compound sentence that he crafted in CS 1.0 and branch 1.1, but he expands significantly the continuation with sequential motion and a tonicization of the subdominant (④, m. 71) and he expands the cadential phrase by writing an ECP (③ ④ ⑤, mm. 75–77) in place of the descending bassline in CS 1.0 (i.e., ↓⑥, ⑥, ⑤, Example 126, CS 1.0, mm. 67–71).

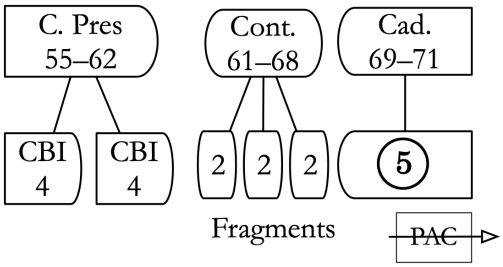
Still, it is evident that Beethoven was concerned with planning the overall dimensions of units, even though he did not always know what he would use to animate these frames.

Figure 42: Subordinate Theme 1 Form Diagrams

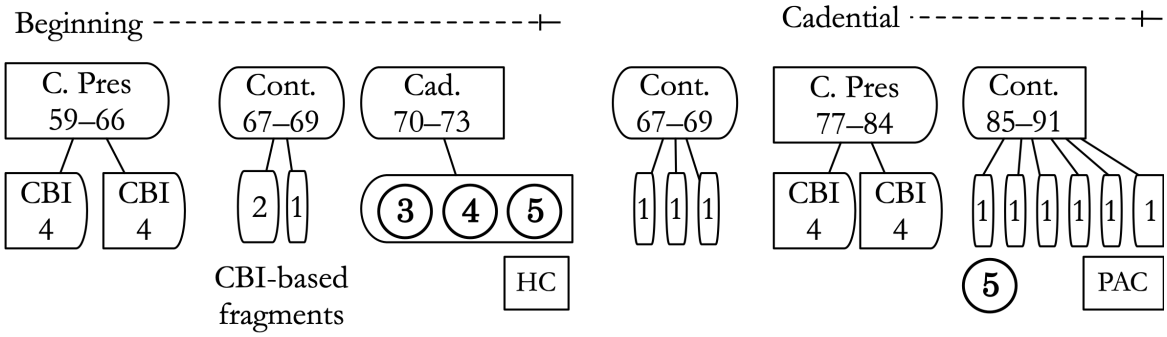
CS 1.0 (mm. 55–71)



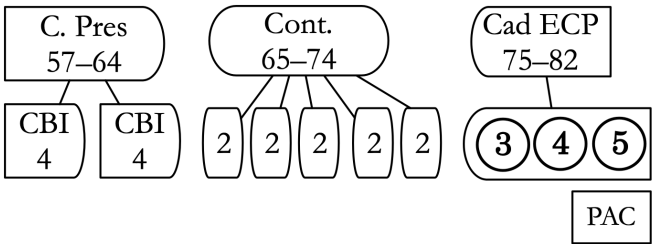
CS 1.1 (mm. 55–71)



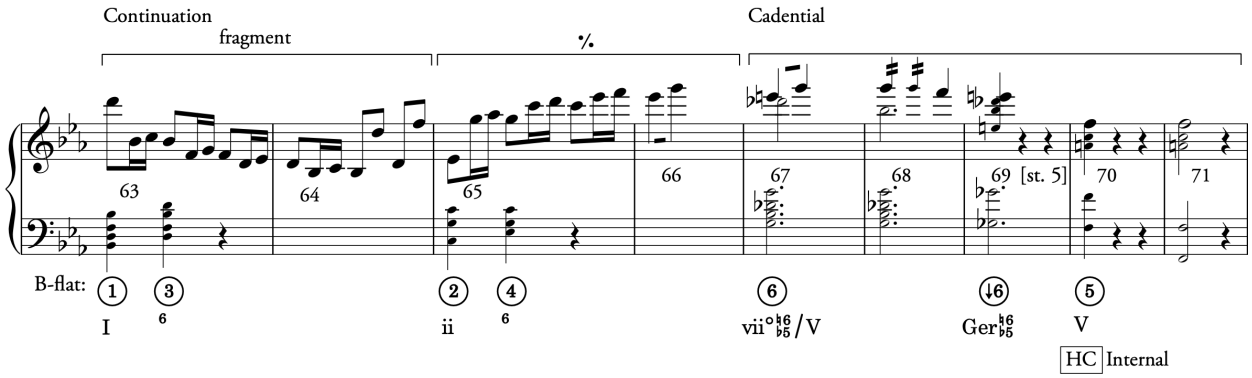
CS 1.2 (mm. 59–91)



CS 2.0 (mm. 57–82)

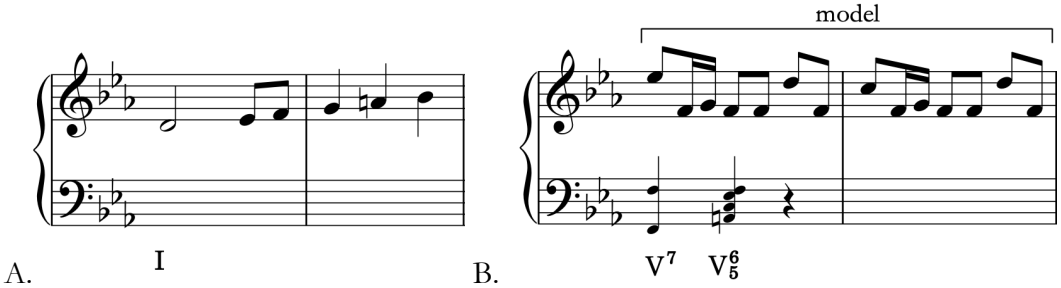


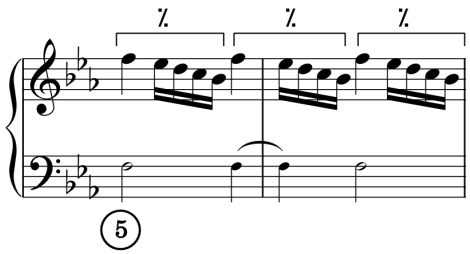
Example 126: CS 1.0, mm. 63–71; ST1 Continuation



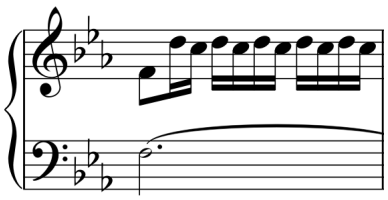
Although the functional design of the four different versions of the first subordinate theme differ, they have the same basic material plan. Consider Example 127. Each version—except the version sketched in branch 1.2—starts with an ascending gesture "A," which, when repeated forms a CBI and subsequent compound presentation. Thereafter follows a faster motive "B" that builds a continuation. Finally, Beethoven signals an impending cadence with a new gesture "C" (mm. 77–78) that prolongs the penultimate dominant, and a trill "D" (mm. 80–81) that articulates scale-degrees ^3 and ^2 suggests an imminent PAC. (In CS 2.0, the trill in mm. 80–81 is varied somewhat with repeating sixteenth notes.) Apart from the false exposition repeat in branch 1.1 and the new sententially-structured cadential function in 1.2 (see Volume 2, CS 1.2, mm. 77–91), Beethoven does not introduce widely different material to build the new subordinate theme 1 in CS 2.0. Thus, he seems to have been essentially content with the basic materials that he devised in earlier sketches but dissatisfied with how he was deploying them.

Example 127: CS 2.0, Subordinate Theme, Material Position





C.



D.

6.2.2 Subordinate Theme 2, 3 and the Role of Main Theme Material

Let us turn now to the second and third subordinate themes in CS 2.0. Recall that, in the previous two sketches (branches 1.1 and 1.2), Beethoven brings back the main theme material in the home key (E-flat major) at the end of the subordinate theme group. In branch 1.1 (Example 128), he reintroduces the main theme material (mm. 84–87) after a seeming retransition (mm. 77–83), which creates the effect of a (false) exposition repeat that greatly expanded the subordinate theme 2 (see the phrase diagram in Figure 43; refer to section 4.5 for more details). In the 1.2 branch that followed, he re-introduces the main theme material as a continuation=>cadential to a new subordinate theme 2 (Example 129, 1.2, mm. 91–102; refer to section 5.3.4). I concluded that Beethoven "transferred" the main theme material from the false exposition repeat in CS 1.1 to the continuation of the subordinate theme 2 in the 1.2 branch (Figure 44). That is, the main theme material functioned in two different ways, false-exposition-repeat on the one hand and continuation=>cadential on the other. In CS 2.0, the main theme material appears in mm. 100–105 (Vol. 2, p. 53; approximately in the same measures as it did in the 1.2 branch), but its context and key create a new function and rhetorical character. Again, Beethoven seems to have wanted to bring back the main theme material late in the subordinate theme group, but he wasn't sure how best to accomplish this. Whereas he abandons this idea in the end, it is fascinating to trace all the different approaches he tried before coming to that decision.

Example 128: Branch 1.1, mm. 77–89; False Retransition and False Exposition Repeat (*ES* p. 11, st. 10)

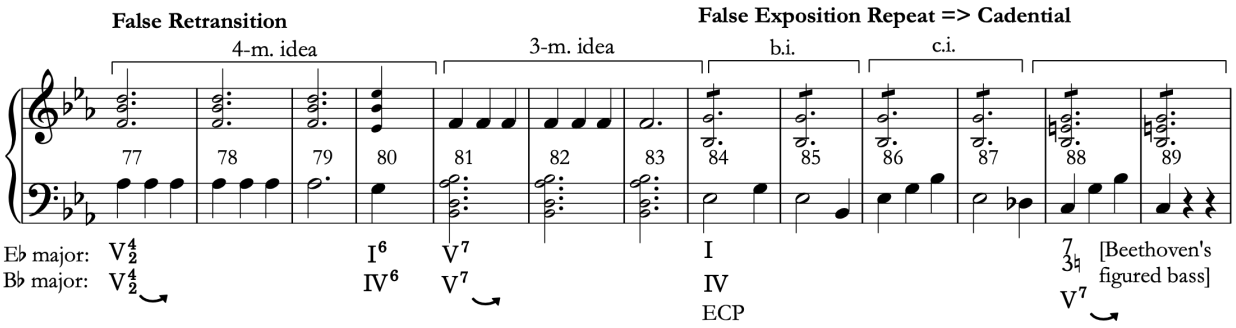
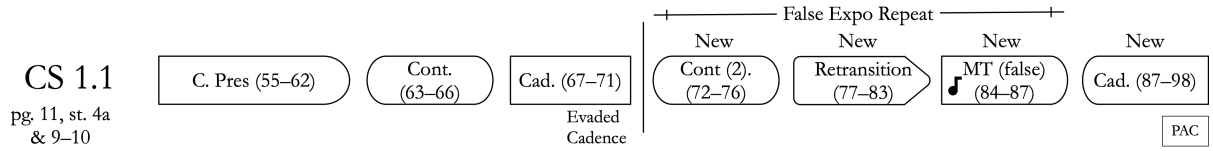


Figure 43: Phrase diagram of CS 1.1, Subordinate Theme 1, mm. 55–98



Example 129: CS 1.2, mm. 91–102; Subordinate Theme 2 (*ES* p. 10, st. 9–10)

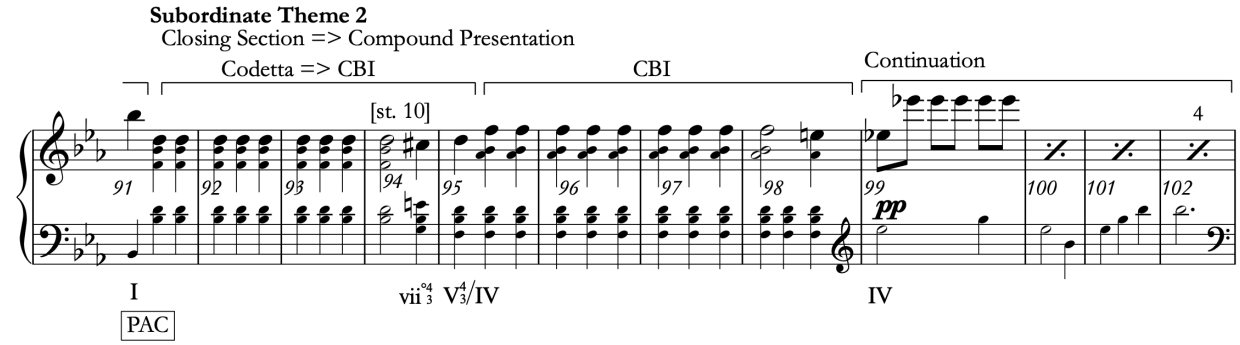
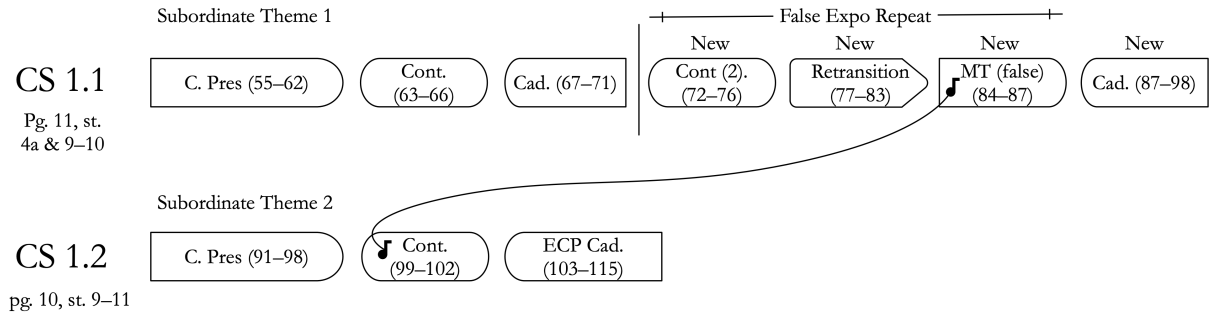


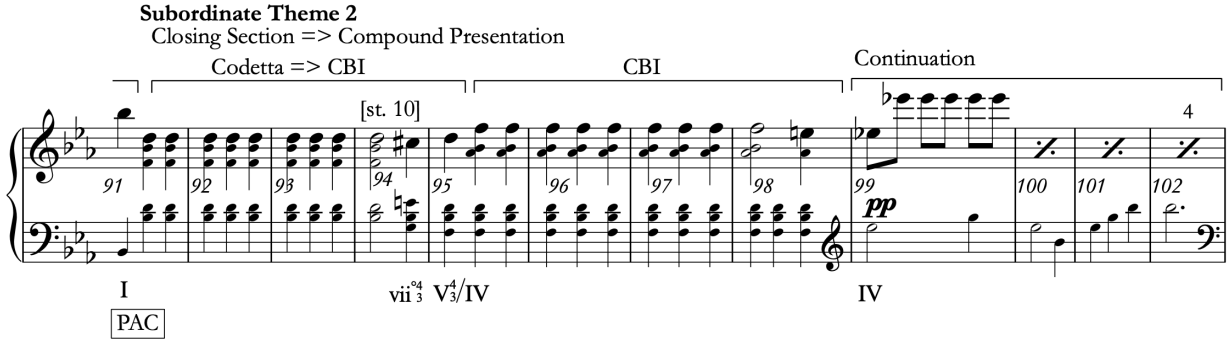
Figure 44: Phrase transfer diagram of CS 1.1 ST1 (top) to branch 1.2 ST2 (bottom)



To understand how the main theme material arises and functions in the subordinate theme 3 of CS 2.0, we must first analyze the preceding subordinate theme 2 (mm. 82–100). Here, Beethoven builds a compound presentation with repeating quarter notes (mm. 82–92), in a manner that mostly

matches the compound presentation sketched in the 1.2 branch (Example 129, CS 1.2, mm. 91–98). Thereafter, he writes a new continuation (CS 2.0, mm. 93–99). Instead of using the main theme material to articulate this function (like he did in branch 1.2, Example 130, mm. 99–102), he sketches a new chromatic descending line (CS 2.0, mm. 93–95): E-flat, D, D-flat, C, C-flat, B-flat. I have harmonized this line as a descending-fifth harmonic sequence, inspired by Robert Levin's orchestration of this passage.[181]

Example 130: CS 1.2, mm. 91–102; Subordinate Theme 2 (*ES* p. 12, st. 7–8) (Repeated Example)



At the end of the three-measure sequence (m. 96), he exits the continuity-voice's chromatic descent on B-flat by moving the voice down to A-natural (m. 98). At this point, we might interpret the implied dominant harmony (mm. 96–99) as an ultimate dominant in the subordinate key and thus recognize an internal HC. The cadential six-four and slowed harmonic rhythm, however, leads me to interpret this material as a penultimate dominant instead, which promises an imminent PAC. Indeed, when the subordinate key tonic arrives in m. 100, we can experience a PAC that elides with the beginning of a third subordinate theme. Notably, this theme begins with main theme material in the subordinate key (B-flat major).[182] (If we had interpreted an internal HC here instead, the second and third subordinate themes would be read instead as two theme parts). In full, mm. 82–100 forms a complete subordinate theme 2 that is structured as an expanded compound sentence (Figure 45).

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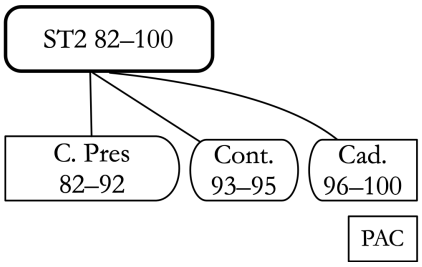
[181] The WDR Symphony Orchestra Cologne performed Robert Levin's reconstruction and orchestration on September 18th, 2020. I thank Alan Gosman for sharing a recording of this concert with me. Note that the sequence was transcribed by ear; Levin's score was not available, so my version may differ from his reconstruction.

[182] In their performance of Robert Levin's reconstruction of mm. 92–98, the WDR Symphony Orchestra of Cologne takes a *luftpause* after the dominant harmony in m. 98. This pause could suggest an HC, which would make what follows a subordinate theme part 2. In my own imagined realization, I do not envision a pause after the dominant harmony; rather, the dominant resolves directly to the subsequent tonic.

Figure 45: CS 2.0, ST2 Form Diagram



In his commentary of this sketch, Nottebohm interpreted the descending chromatic line in the continuity voice (mm. 93–99) differently:

> Nun konnte auf die Gestaltung der Schlusspartie die des zweiten Seitensatzes nicht ohne Einfluss bleiben. Eine Wendung ist schon bei der zweiten grossen Skizze wahrzunehmen. Der zweite Seitensatz hatte hier an Ausdehnung und an Bestimmtheit des Inhalts gewonnen, und der Schlusssatz gewann an Ausdehnung und an Verschiedenheit der benutzten Motive. Der zweite Seitensatz hatte durch den chromatischen Gang, in den er ausläuft, einen wehmüthigen Zug bekommen. Sollte er eine trübe Erinnerung an den abgeschiedenen Helden aussprechen? Es scheint fast so. Jener Gang drängte vorwärts zu einem festen Körper. Was konnte ihm Besseres entgegengebracht werden, als (wie es in erwähnter zweiter Skizze geschieht) das Hauptthema, der "Heldengedanke" selbst, der nun, gleichsam tröstend und leise mahnend, *pianissimo* eintritt?[183]

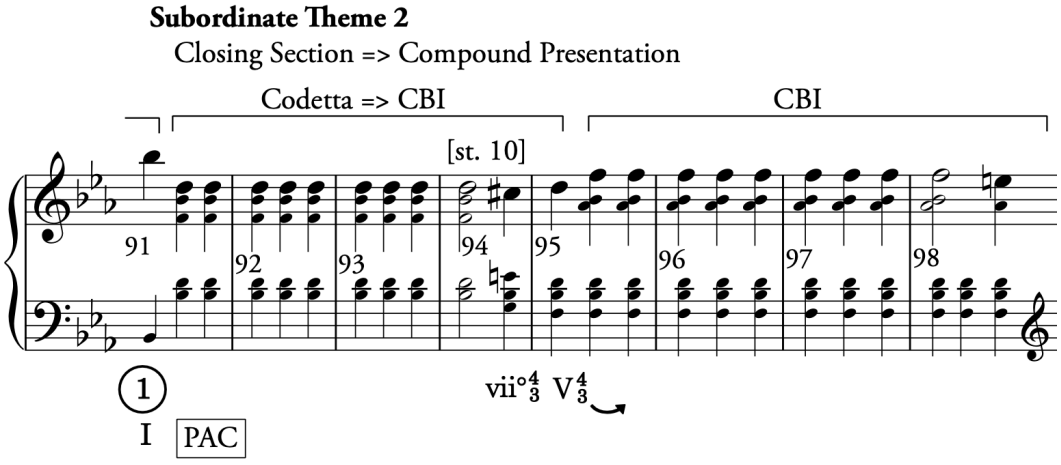
> The formation of the second part of the [subordinate theme] group could not fail to influence that of the end-section. This is already to be seen in the second long sketch [i.e., CS 2.0]. Here the second part of the [subordinate theme] group is more extended and more definite in content, while the end-section is similarly more extended and employs a greater variety of thematic material. The chromatic end of the second part of the subordinate theme group gives it a melancholic character. It seems almost to express a sad reminiscence on the departed hero. This chromatic passage urged forward toward something of firm substance; what better to

[183] (Nottebohm 1880, 19)

> counteract it than the *Hauptthema* [i.e., the main theme material] (as in the second sketch)—the 'heroic' motive itself, which now enters, *pianissimo*, as if comforting and softly stirring.[184]

I find Nottebohm's heroic, metaphorical reasoning compelling, but it is unclear what harmonization he had in mind for mm. 93–96 to achieve the preceding melancholic effect. Nevertheless, while the sequential progression I have chosen (drawing on Robert Levin's realization of this passage) brings less of a languid effect, the theme does appear to liquidate in the chromatic line. Moreover, the four measures of dominant harmony thereafter (mm. 96–99) creates anticipation for an upcoming tonic. Thus, when the main theme material re-enters in m. 100, it does seem to bring a comforting effect because it recenters us firmly in the subordinate key and abolishes the prior chromaticism with unambiguous characteristic content. Still, Beethoven has the main theme material enter pianissimo, as if it were entering from a great distance. It is therefore comforting in some respects, but also foreign and distant.

Example 131: CS 1.2, mm. 91–98; Subordinate Theme 2 (*ES* p. 10, st. 9–10)

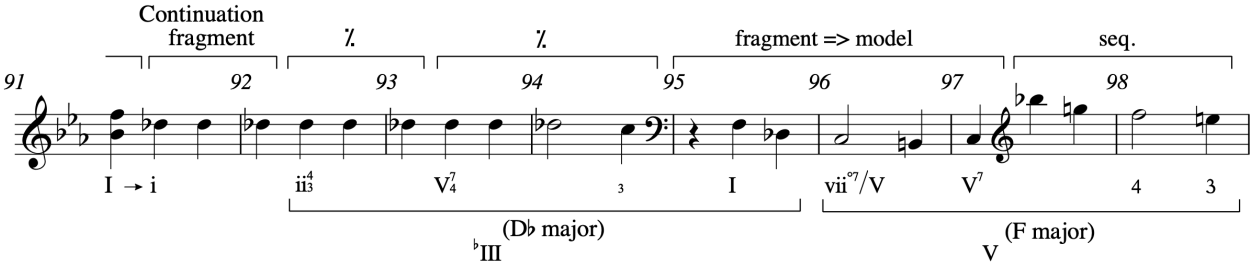


Before we move on to the third subordinate theme in the CS 2.0 sketch, consider first how Beethoven changed the role of the C-sharp in the subordinate theme 2's compound presentation (Vol. 2, p. 53, CS 2.0, mm. 87–88). When the D (in the continuity voice, m. 86) moves down to C-

[184] I have modified slightly Jonathan Katz's translation by substituting "second group" with "subordinate theme group"; (Nottebohm 1979, 63).

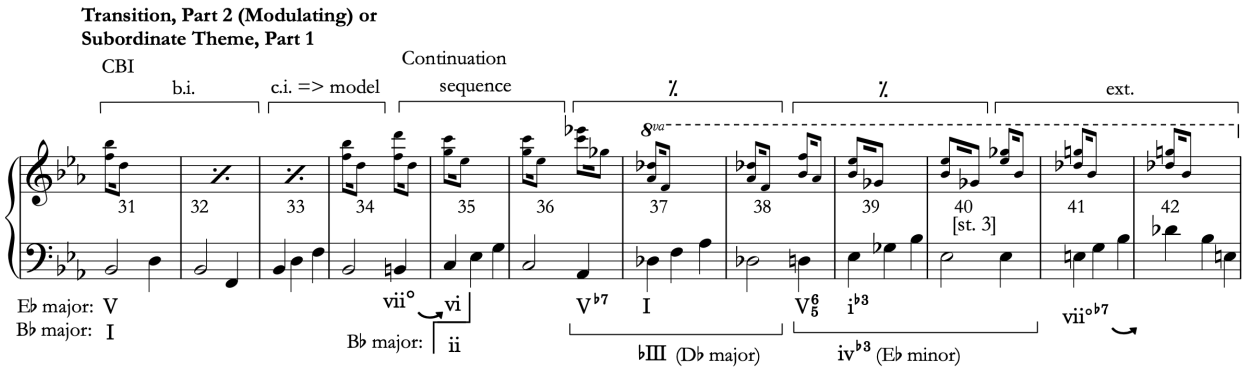
sharp at end of the first CBI group (m. 87), it descends to C-natural thereafter (m. 88) instead of resolving upwards to D like it did in the 1.2 branch (Example 131, mm. 94–95). Beethoven thus eliminates the motivic parallel this passage shared with the main theme and develops the new enharmonic D-flat relationship in its place. Ultimately, he rejects this idea in the final compound presentation, but he uses a similar move in the continuation that follows (Example 132, mm. 95–96; expressed as D-flat instead of C-sharp). We will return to this passage in greater detail when we explore the CS 4 series.

Example 132: Op. 55, I., mm. 91–98, Continuity Voice Reduction; ST2 P1 Continuation

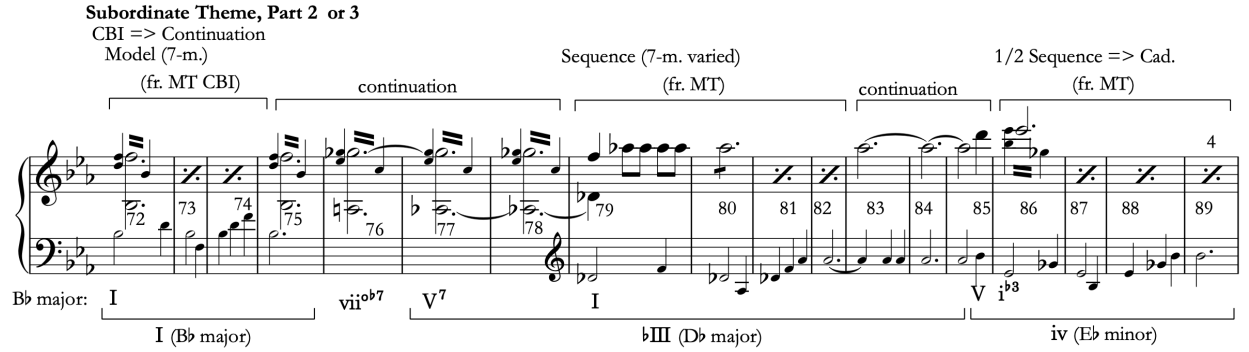


The sketches suggest that the C-sharp and D-flat relationship was a central idea in Beethoven's plan for the movement and he experimented with several ways to realize it in different parts of the exposition. In the first exposition draft (CS 1.0), he employed the D-flat to link the end of the transition, part 2 (as in CS 1.0a, or subordinate theme, part 1 as interpretted in CS 1.0b) to the end of the subordinate group. He accomplished this connection by developing a chromatic sequence early in the exposition (Example 133, CS 1.0, m. 37) that foreshadowed the harmonies that he used at the end of the subordinate theme group (Example 134, CS 1.0, m. 79–81, D-flat and E-flat minor). In the first branch (1.1), he used the D-flat in a different way to reorient the listener in the form (Example 135, Branch 1.1, m. 87; refer to section 4.5.1). Finally, in the 1.2 branch that followed, he eliminated the D-flat relationships altogether (Example 136, Branch 1.2, mm. 91–102), only to bring it back once more in CS 2.0 in the second subordinate theme, just discussed (CS 2.0, mm. 86–88). Needless to say, Beethoven's experiments with C-sharp and D-flat were far from complete: the way this enharmonic relationship is expressed in the final piece was one solution of many.

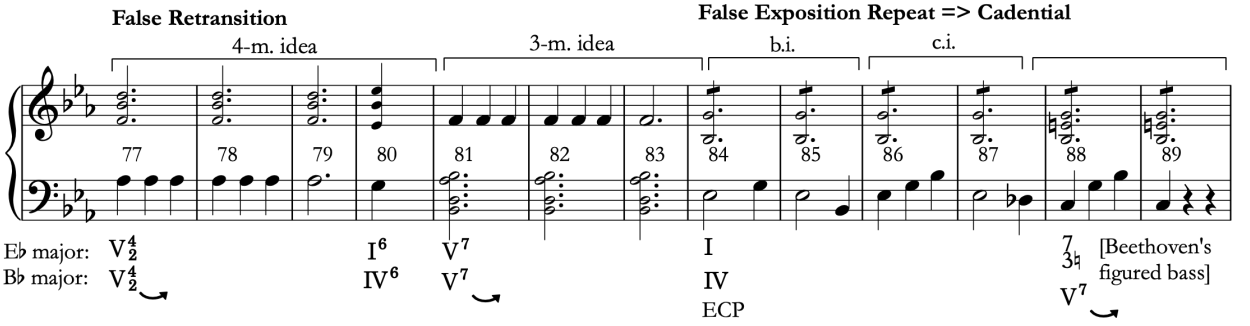
Example 133: CS 1.0, mm. 31–42; Transition Part 2, or Subordinate Theme Part 1 (*ES* p. 11, st. 2–3)



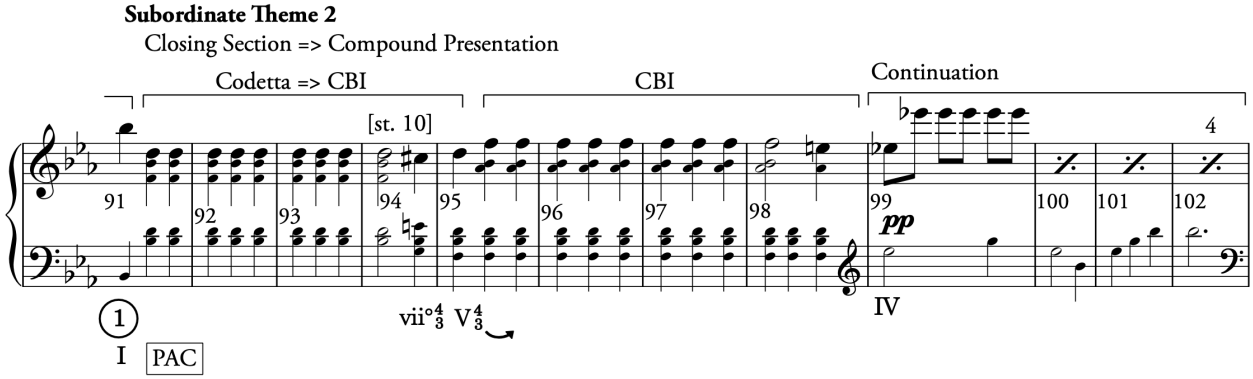
Example 134: CS 1.0, mm. 72–89; Subordinate Theme Part 2 or 3 (*ES* p. 11, st. 5)



Example 135: Branch 1.1, mm. 77–89; False Retransition and Exposition Repeat (*ES* p. 11, st. 10)

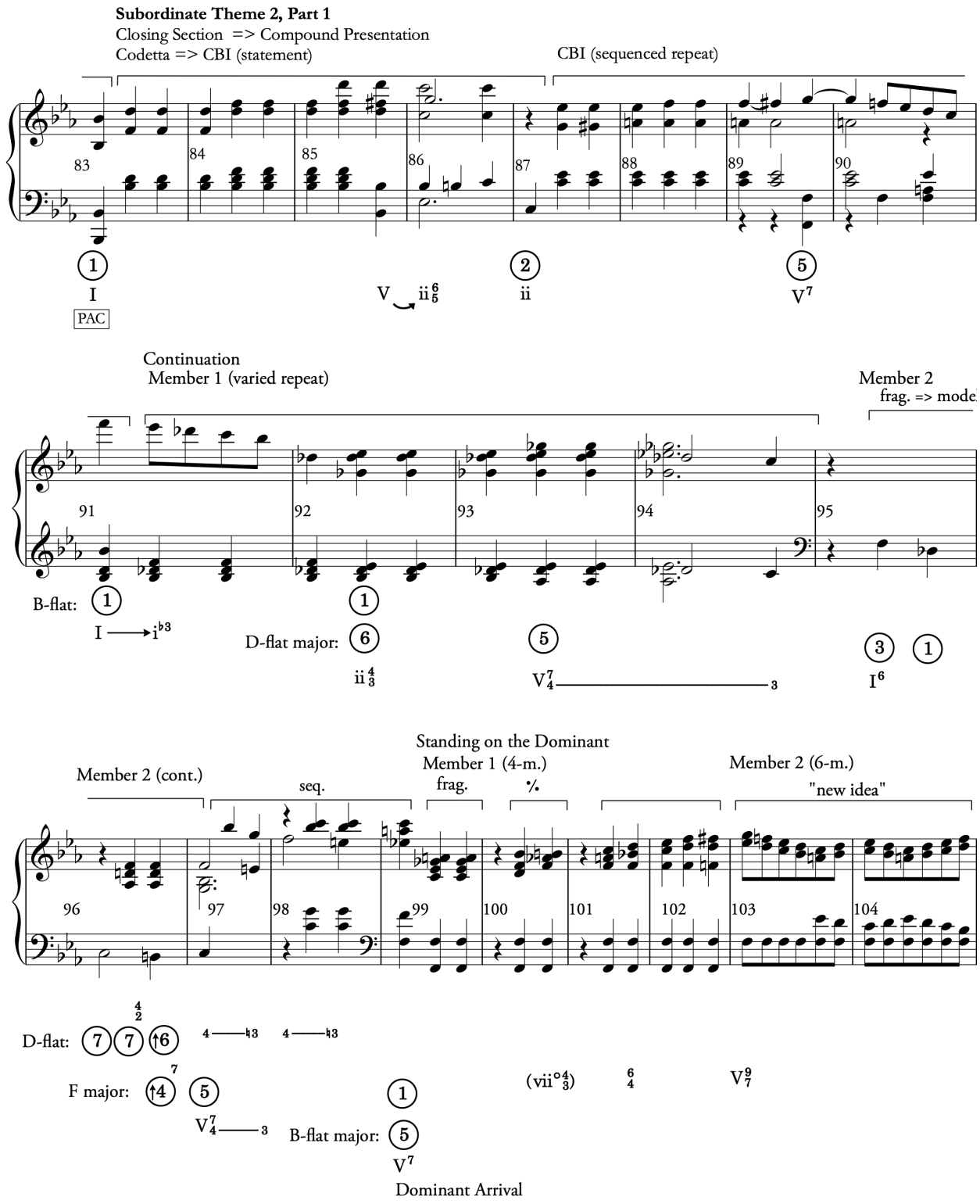


Example 136: CS 1.2, mm. 91–102 (*ES* p. 10, st. 9–10)

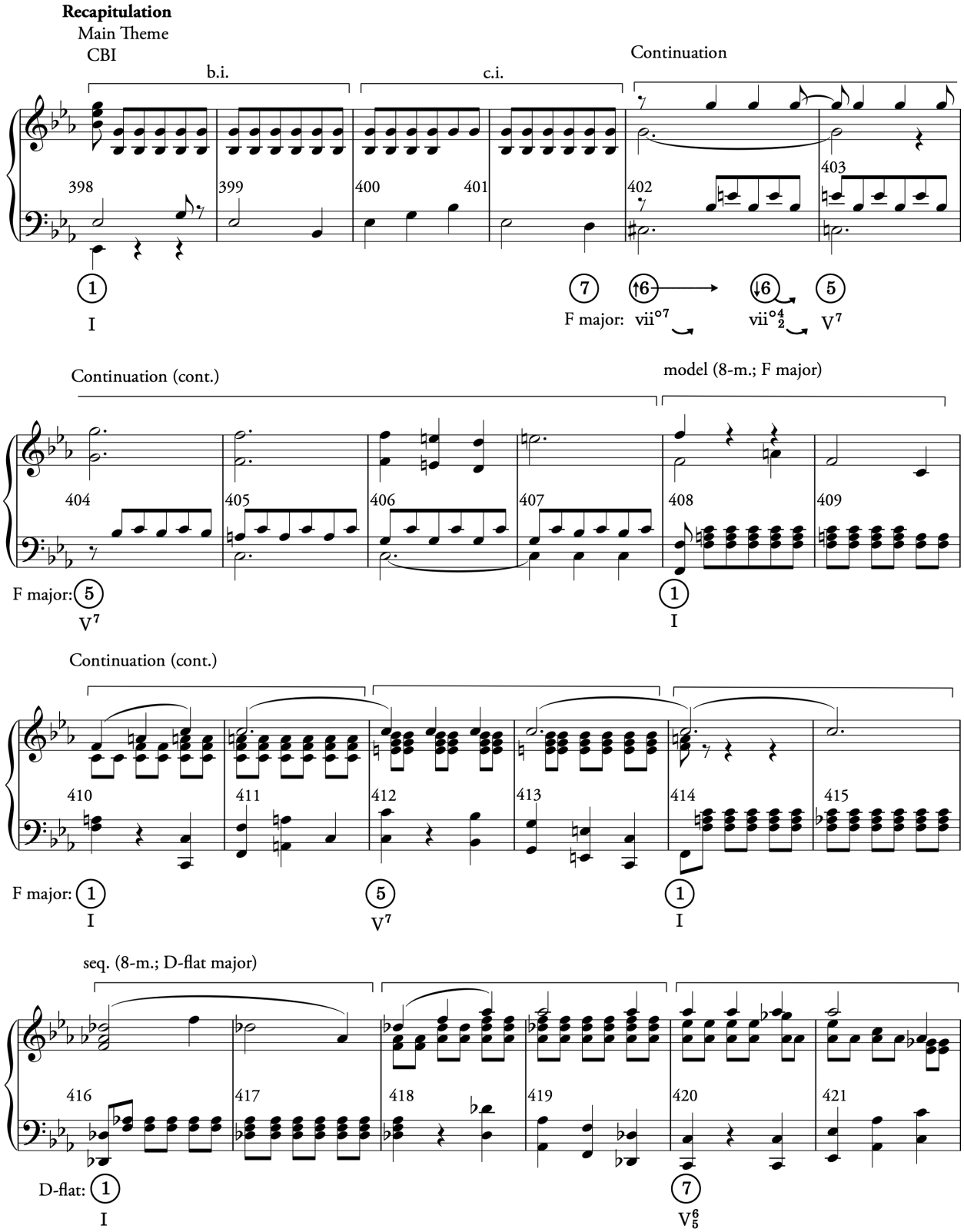


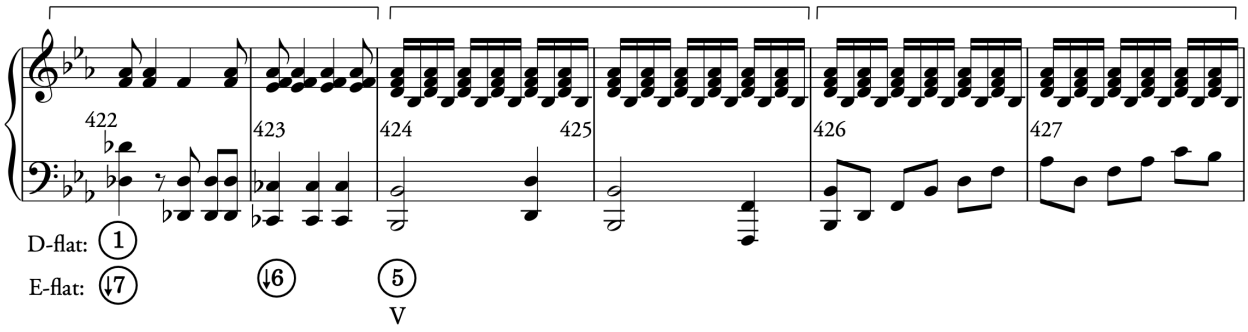
As was mentioned above, the C-sharp that resolves downwards to C within the compound presentation of the second subordinate theme (CS 2.0, m. 87–88) does not make it to the final version of the piece (Example 137, m. 86); instead, he replaces this move by a larger tonicization of D-flat major and F major in the subordinate theme 2, part 1's continuation (Example 137, mm. 92–98). The more complex tonicization of D-flat and F major in the final piece enables Beethoven to foreshadow the harmonic development that arises later in the recapitulation (see Example 138) when the C-sharp moves downwards (mm. 402–403). Thereafter, the main theme material appears in F major (mm. 408–415) and eventually D-flat major (mm. 416–422). The sketches show the many different variants he constructed before he established this longer range strategy.

Example 137: Op. 55, I, mm. 83–104; Subordinate Theme 2, Part 1



Example 138: Op. 55, I, mm. 398–427; Recapitulation, Main Theme





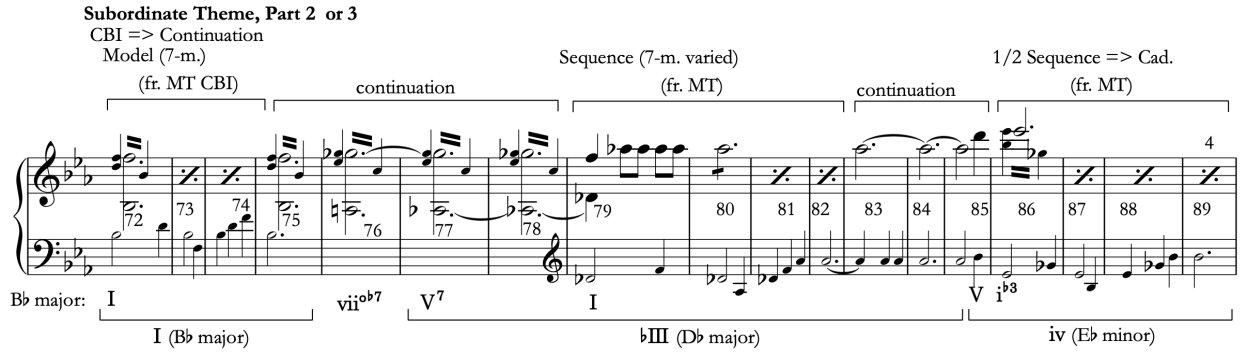
6.2.3 Subordinate Theme 3 (mm. 100–123)

Now that we have studied the subordinate theme 2 and the role of C-sharp, let us analyze the large subordinate theme 3 that follows (mm. 100–127). This new theme combines elements from parts of the first (CS 1.0) and second sketches (branch 1.1). Like CS 1.0 (Example 139, mm. 72–75), it starts with main theme material in the subordinate key tonic (B-flat major, mm. 100–103). The 2-m. implied V/V harmony that follows (mm. 104–105), however, seems to have been inspired by a similar design in branch 1.1 (Example 140, mm. 88–89). Thus, the beginning of the third subordinate theme is grafted from the subordinate theme part 2 in CS 1.0a and the false exposition in branch 1.1.

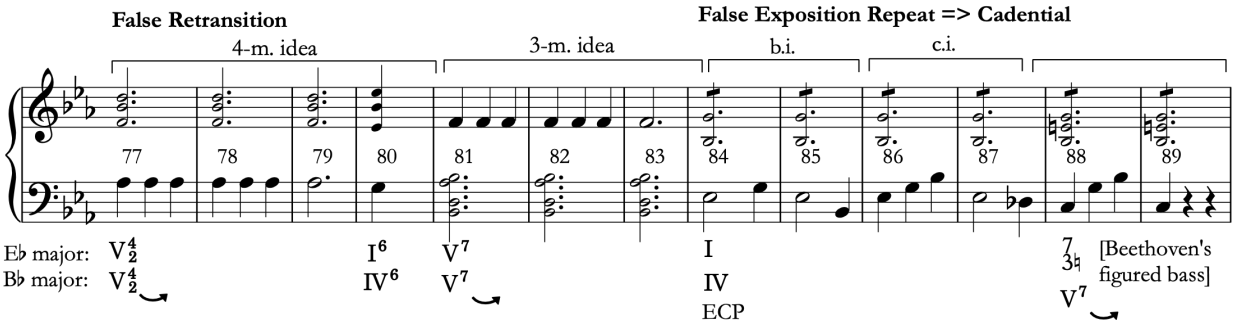
So far, Beethoven has brought back the main theme material towards the end of the subordinate theme group in four different ways. In the first (Example 139, CS 1.0, mm. 72–75), it was strongly implied in the subordinate key tonic (B-flat major) in the context of a large continuation function. In the second, (Example 140, Branch 1.1, 84–87) the listener heard the main theme material in the home key tonic as though it were the actual main theme function in a false exposition repeat. In the third (Example 141, CS 1.2, mm. 99–102), the main theme material appeared in the home key tonic, but this time E-flat functioned as a subdominant within the subordinate key and thus brought a continuation becomes cadential function (B-flat major). Finally, in CS 2.0 (mm. 100–103), Beethoven tries to foreground the material more by using it to start the third subordinate theme in the subordinate key tonic. Overall, then, the main theme has appeared in both the global tonic (E-flat) and dominant (B-flat) and has been used to build a CBI, continuation, and false exposition repeat becomes cadential functions. Thus, when we compare what happens in the sketches so far studied, adding main theme material in the subordinate theme group seems to have been the invariant idea. The problem for Beethoven was to figure out how to best achieve this goal. As we will see in the next chapter, he eventually found this idea untenable. The final design

should not, however, lead us to believe that that his initial plan was a poor idea, because it is evident that he tried many ways to bring it to fruition.

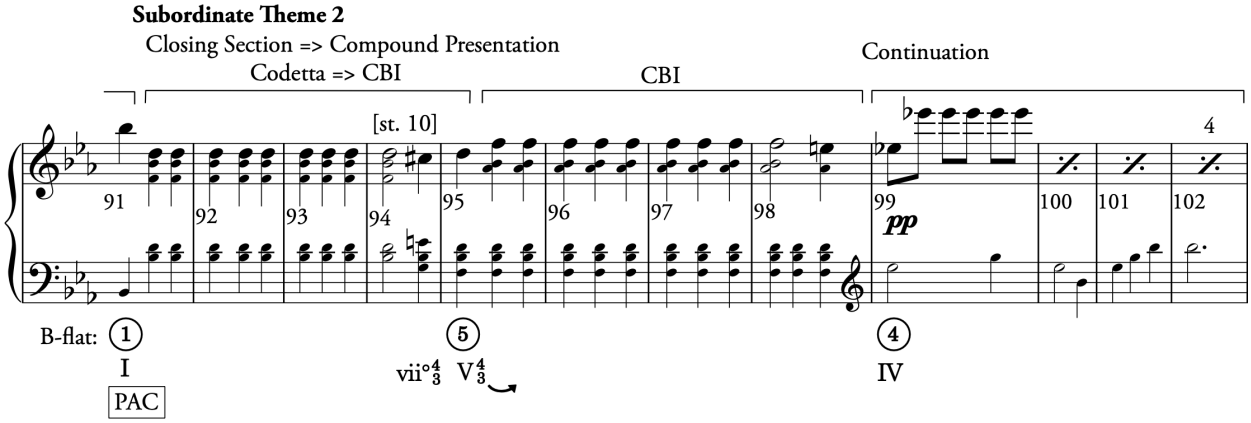
Example 139: CS 1.0, mm. 72–89; Subordinate Theme, Part 2 or 3 (*ES* p. 11, st. 5–6a)



Example 140: CS 1.1, mm. 77–89; False Retransition (*ES* p. 11, st. 10)



Example 141: CS 1.2, mm. 91–102; Subordinate Theme 2 (*ES* p. 12, st. 9–10)



Let us return to CS 2.0 (Vol. 2, p. 53). The first 6 measures of the subordinate theme 3 (mm. 100–105) combines elements from prior sketches, but the music that follows (mm. 106–109) is

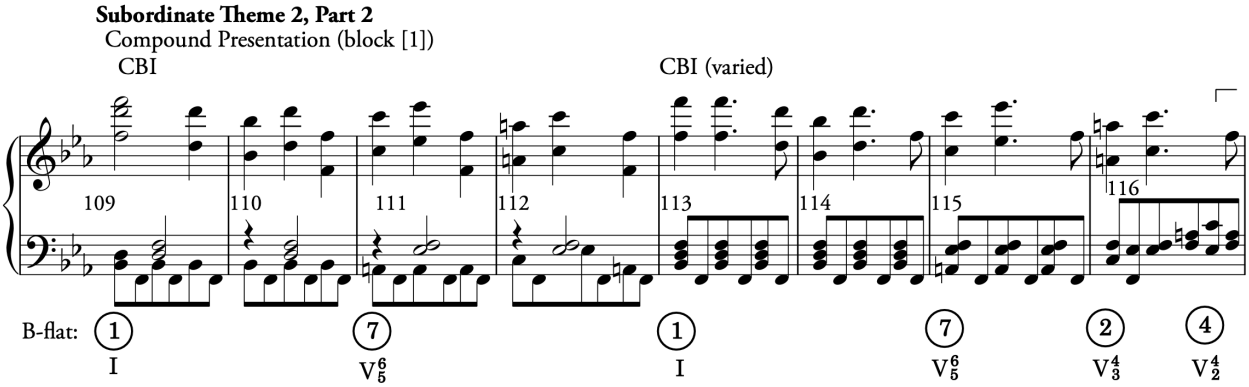
completely new. In addition, Beethoven drafts this music on a grand staff (p. 12, st. 9 & 10), which is unusual considering that everything up to this point was written on a single staff. Lockwood (1970b, 12) observes that Beethoven frequently used two staves "to make clear the relationship of upper line and bass or to work out a contrapuntal problem." But it is not clear why Beethoven felt the need to write on a grand staff for this music, because it does not seem that he was working out a contrapuntal problem. The underlying bass voice alternates simply between a dominant five-three and neighboring six-four, and the subordinate key dominant harmony is strongly implied by the applied harmony in mm. 104–105.

Why, then, did he feel the need to write out the bass voice here? What issue warranted a grand staff? Perhaps it is because the harmonic design and function of this music is unconventional for this part of the form. The applied dominant in mm. 104–105 could cause m. 106 to sound as a premature, internal dominant arrival. Consequently, the dominant prolongation that follows (mm. 106–109) projects the characteristics of a SotD. Thus, instead of writing a more conventional continuation or cadential function to lead the subordinate theme 3 to a moment of closure, Beethoven arrives at the dominant early. In addition, the new leaping gesture in the top voice reopens the melodic space and re-energize the music, which was previously *pianissimo* (the *pp* marking in m. 100, was written by Beethoven).

The rhetorical effect of the new music in mm. 106–109 might have been one of the seeds that set the stage for the new, energetic subordinate theme part 2 that he introduces in later sketches (Example 142). To be sure, the seeming premature dominant arrival and SotD in the 2.0 sketch (mm. 106–109) clearly expresses dominant harmony, whereas the compound presentation that begins the subordinate theme 2, part 2 in the final version (Example 142, mm. 109–116) articulates tonic harmony. The content of both passages is also considerably different. Still, it is common in the *Eroica* sketches for material to appear with one functional role in one sketch and another in the next. We saw, for instance, how Beethoven repurposed the false-retransition material that he designed in branch 1.1 to serve as a new compound presentation in branch 1.2 (see Section 5.3.4). In this instance in CS 2.0, the new material in mm. 106–109 seems to suggest a similar rhetoric to the subordinate theme 2, part 2 that he devises for the final version, but its size and function differ. We will see in the next chapter how he expands this dominant prolongation further, which may have inspired him to introduce new thematic material in a later sketch. In the end, the factors that lead to the new subordinate theme 2, part 2 in the final version are complex; we will see how it arises in

greater detail in the next chapter in the CS 3 series. For now, it is sufficient to recognize the irregularity of the internal SotD crafted in CS 2.0.

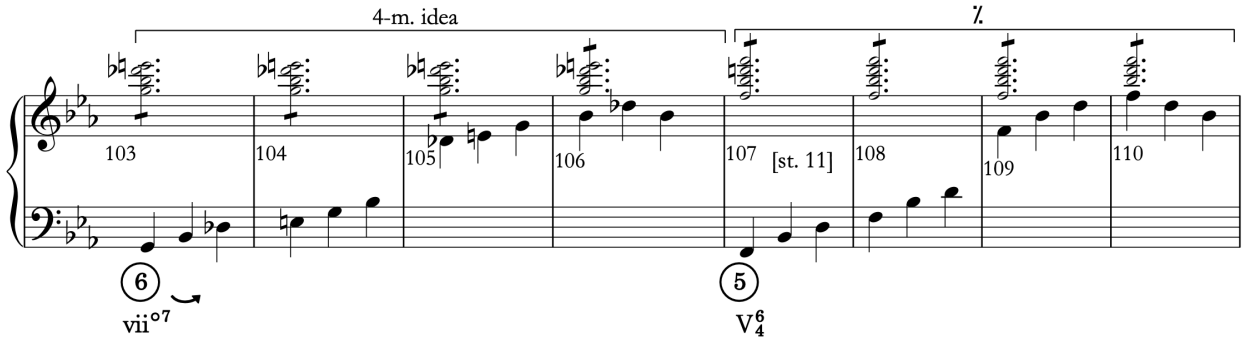
Example 142: Op. 55, I. mm. 109–116, Piano Reduction; Subordinate Theme 2, Part 2



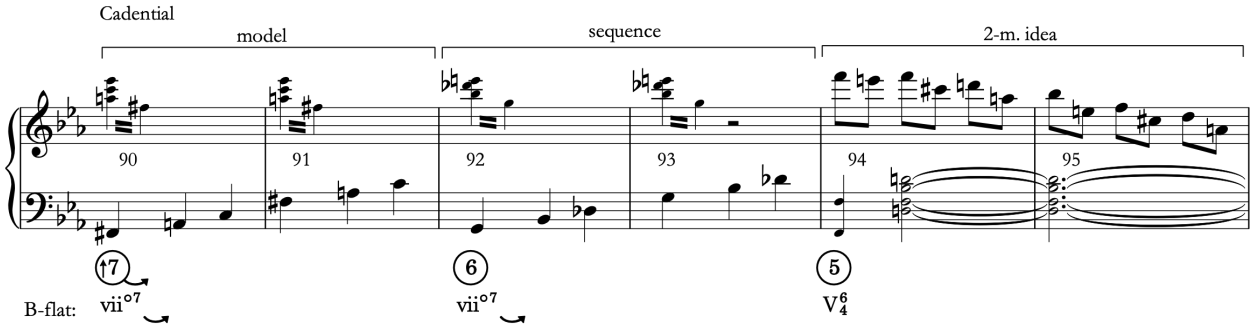
Let us turn to what follows the internal SotD in CS 2.0 (Vol. 2, p. 54, mm. 110–115). Having established the dominant prematurely, Beethoven must now move out of the dominant in order to reestablish it within the context of a cadential progression. To accomplish this move, he exits the SotD with a new continuation (mm. 110–115). Here, the bass begins a chromatic descent, from F as ⑤ in m. 110 to E-natural as ↑④ in m. 112 harmonized as a passing six-four, and E-flat as ④ in m. 114, which I realize with the standard RO "4/2" (thus $V^{4/2}$). A prominent chromatic ascent in the top voice (that Beethoven wrote) accompanies the descent in the bass voice, which results in a prominent voice-exchange (mm. 110–115). Finally, the $④^{4/2}$ moves to ③ in m. 116, which initiates a new cadential progression, one that finally yields the penultimate dominant.

The ascending arpeggiation texture in the bass voice of the continuation (mm. 110–115). reminds us of a corresponding passage in the prior 1.2 branch (Example 143, Branch 1.2, mm. 103–110) and also matches the texture in the first two versions of this music (Example 144, CS 1.0, mm. 90–93; and Example 145, branch 1.1, mm. 90–93). Although the quarter-note arpeggios are consistent, however, the underlying, structural bass-melody achieves different goals. In CS 2.0 (mm. 110–115), the bass moves chromatically downwards away from the cadential ⑤ towards ③, which starts an ECP. In the prior sketches (branches 1.1 and 1.2), the bass moved towards ⑤ to begin the cadential dominant. Thus, Beethoven uses essentially the same material in CS 2.0 that he devised in earlier drafts, but for a different purpose. Once again, it is important that we distinguish between formal function and the content that generates that function.

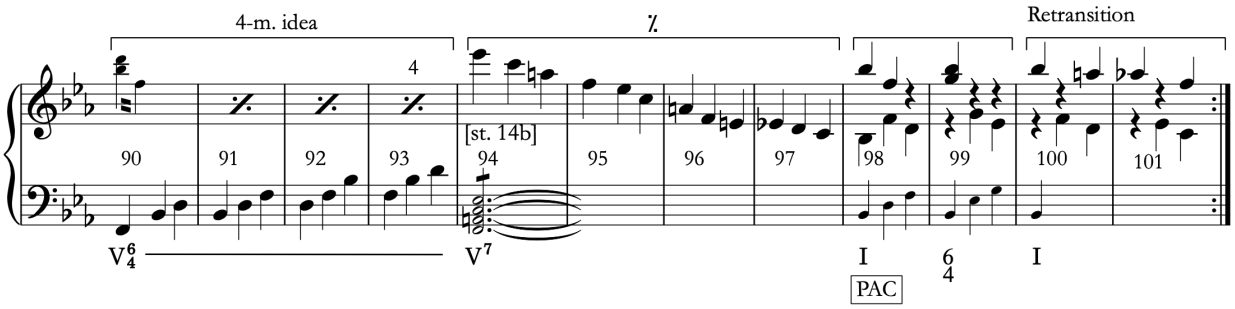
Example 143: Branch 1.2, mm. 103–110, Subordinate Theme 2, Cadential (*ES* p. 10, st. 10–11)



Example 144: CS 1.0, mm. 90–95; Subordinate Theme, Part 3, Cadential (*ES* p. 11, st. 6)



Example 145: Branch 1.1, mm. 90–101; Cadential After False Exposition Repeat (*ES* p. 11, st. 10 & 14b)

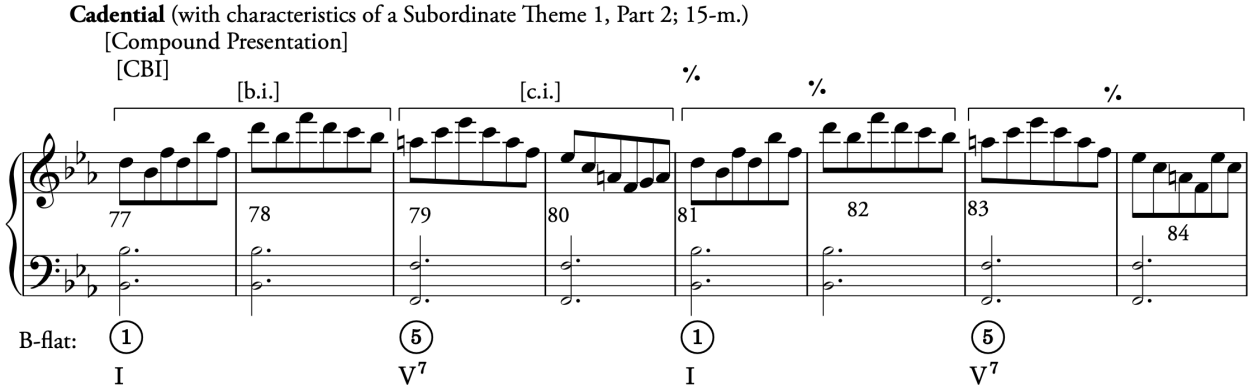


After the six-measure voice exchange (CS 2.0, mm. 110–115), Beethoven writes seven measures that prolong the subordinate key tonic ③ with descending and ascending eighth-note figuration (mm. 116–122). This eighth-note figuration further extends the beginning of the cadential stream by delaying even further the penultimate ⑤ dominant's arrival. Although different, the conventional eighth notes in mm. 116–122 bear some similarities to the more expansive eighth note arpeggios he wrote in branch 1.2 (Example 146). But whereas the 1.2 version brought a sentential structure, the arpeggios in CS 2.0 do not project a thematic grouping structure.

After 7-m. of eighth note figuration (i.e., mm. 116–122), the 2.0 run ends with a high E-flat-6 in m. 123 that coincides with the arrival of the penultimate dominant-seventh (mm. 123–126). At

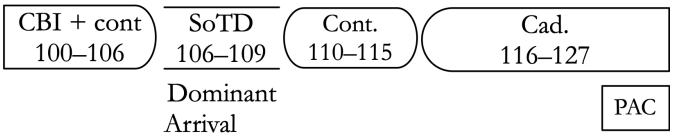
last, after a 4-m. quarter-note descent in the continuity-voice, a PAC arrives in m. 127 to close the exposition. In this sketch, Beethoven greatly delays the final PAC by expanding significantly the continuation and cadential functions of the third subordinate theme.

Example 146: CS 1.2, mm. 77–84 (*ES* p. 10, st. 8–9)



To summarize, Beethoven crafts a third subordinate theme by merging parts that he developed in the first two sketches (CS 1.0 and branch 1.1). Whereas he expanded the corresponding part of the exposition in CS 1.2 with a sententially-structured cadential function, he expands the third subordinate theme in CS 2.0 by arriving at a premature dominant arrival (m. 106). The music then reestablishes a new cadential progression by stepping out of ⑤ (i.e., ⑤-↑④-④-③) to re-establish ③ and thus the beginning of another cadential progression. Figure 46 summarizes the phrase structure of new third subordinate theme.

Figure 46: CS 2.0, Subordinate Theme 3 phrase diagram

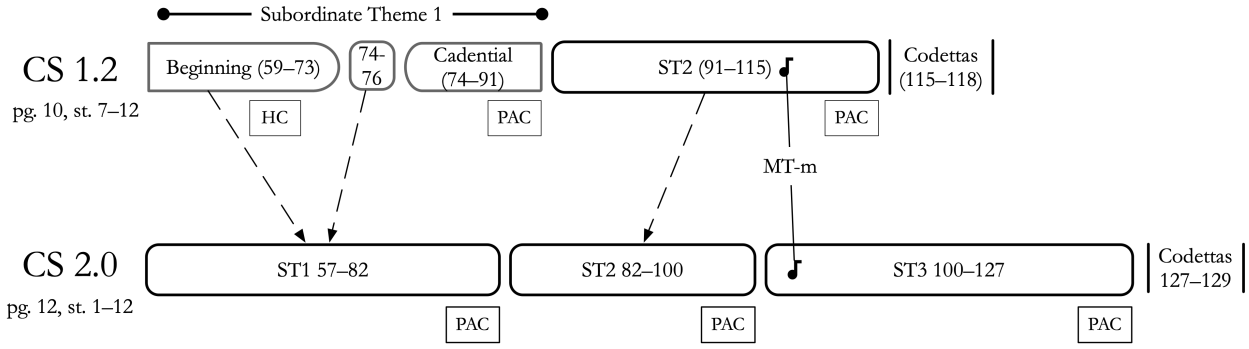


6.2.4 Summary of the Subordinate Theme Group (57–127)

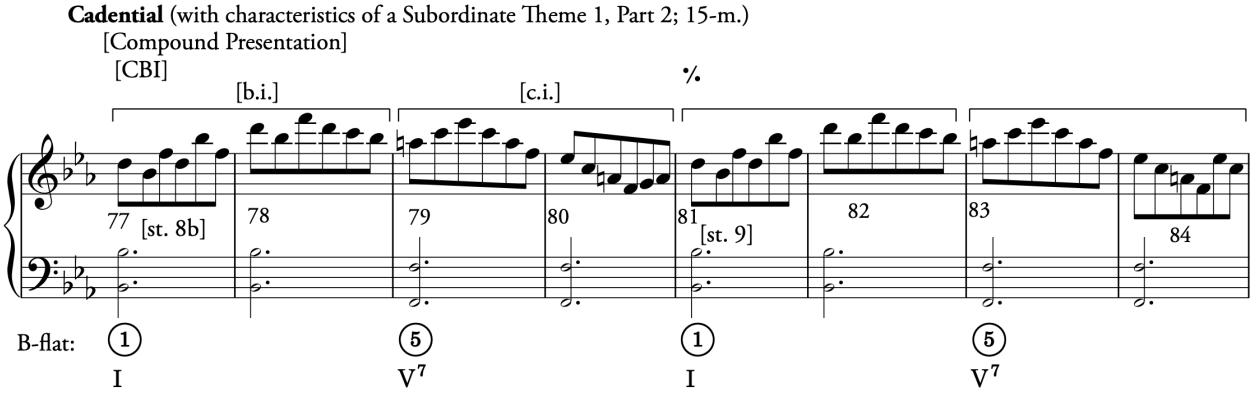
Let us conclude our discussion of the subordinate theme group. In CS 2.0, this part of the form is altered considerably compared to the previous version in branch 1.2. See Figure 47. Beethoven does not transfer the subordinate theme 1's sententially-structured cadential function that he sketched in the 1.2 branch (Example 147, mm. 77–84) into the new 2.0 sketch. Instead, he abandons this material and moves the second subordinate theme into the position it previously occupied (see the

bottom of Figure 47). He then writes a new, third subordinate theme that begins with the main theme material, instead of using that material in a medial, continuation function. In other words, he repurposes the main theme material (MT-m) by moving it from the end of the second subordinate theme in CS 1.2, to start the beginning of a third subordinate theme in CS 2.0. Thereafter, he expands considerably the subordinate theme 3 with a premature dominant arrival and internal SotD followed by an ECP.

Figure 47: CS 1.2 (top) to CS 2.0 (bottom) Subordinate Theme Group, form function transfer diagram



Example 147: CS 1.2, mm. 77–84; Subordinate Theme 1, Cadential (*ES* p. 10, st. 8–9)



At this point, Beethoven has built a subordinate theme group with three self-contained themes. We could interpret this design as a re-imagining of the original subordinate theme group in CS 1.0b; in that sketch, the subordinate theme group was comprised of three parts, but in CS 2.0 it consists of three complete themes. It seems, therefore, that Beethoven was exploring whether it would be more suitable to enlarge the subordinate theme group by extension (multiple themes) or

expansion (co-dependent theme parts).[185] Eventually, several changes lead to the elimination of the main theme material at the end of the subordinate theme group, the appearance of a new theme part in its place, and a consolidation of the second and third subordinate themes into a single, subordinate theme 2 constructed as two theme-parts. In all, the subordinate theme group will become more expanded rather than extended—that is, it becomes something of a hybrid of his CS 1.0 and 2.0 designs. It is striking to witness Beethoven's different approaches for expanding this part of the form. His process was far from linear and vacillated between two-poles, extension on the one hand, and expansion on the other. The final exposition unites these poles to great effect.

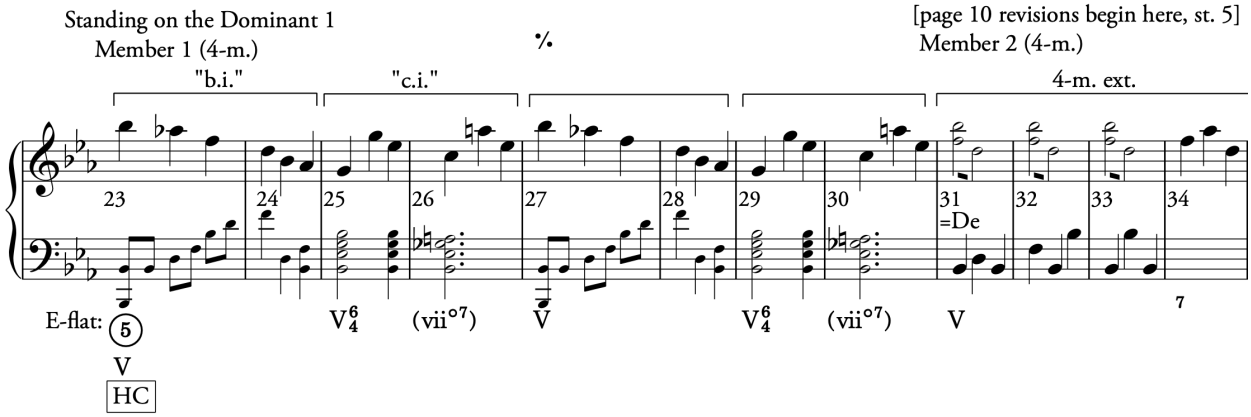
6.3 The Two-Part Transition and SotD-1 and 2 (mm. 13–56)

Now that we have discussed the most substantial changes in the CS 2.0 subordinate theme group, let us return to the transition (mm. 13–56). Although Beethoven does not alter the thematic functions of this part of the form—it is still a two-part transition with two SotDs—he reduces some of its harmonic complexity found in the previous sketches and rearranges some of its materials. These changes do not seem to greatly impact the subordinate theme group that follows but can teach us about Beethoven's compositional process.

As the non-modulating part 1 of the transition is unchanged, consider the first CS 2.0 standing on the dominant (SotD-1; Vol. 2, p. 51, mm. 21–32). Compared to the version he sketched in branch 1.2 (Example 148, 1.2, mm. 23–34), Beethoven simplifies the prolonging harmonies of the underlying dominant prolongation by removing the implied common-tone fully-diminished seventh harmony (over ⑤); that is, he eliminates the A-naturals in the continuity-voice (cf. CS 2.0, mm. 24 and 28 with Example 148, mm. 26 and 30). In their place, he writes the tonic pitch classes (B-flat, G, E-flat), which implies a prolongational tonic six-four harmony (mm. 23–24). This harmonic change removes the dominant tonicizations and eliminates the chromaticism that characterized previous versions of this first SotD.

[185] On the topic of extension and expansion in the subordinate theme group in Beethoven's symphonies, see (Caplin 1991).

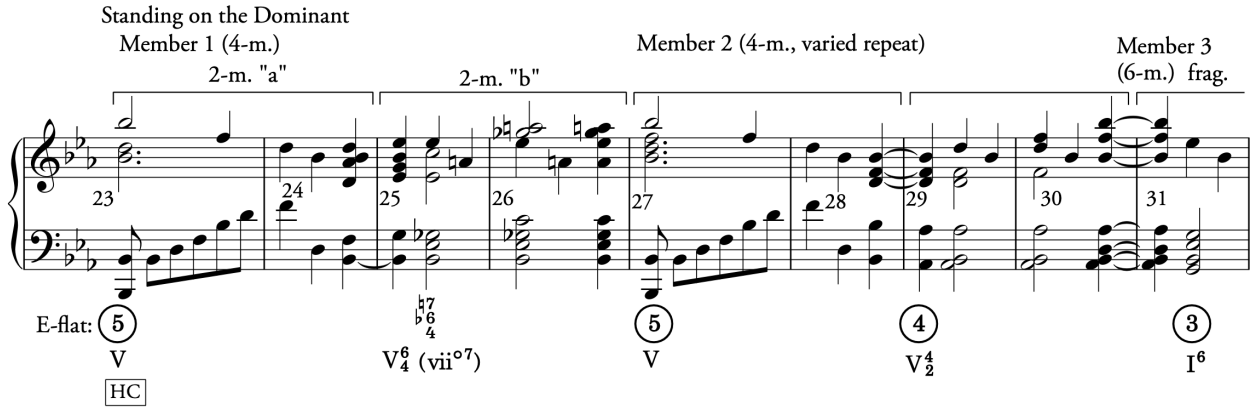
Example 148: Branch 1.2, mm. 23–34; Standing on the Dominant 1 (*ES* p. 11, st. 2 – p. 10, st. 3)



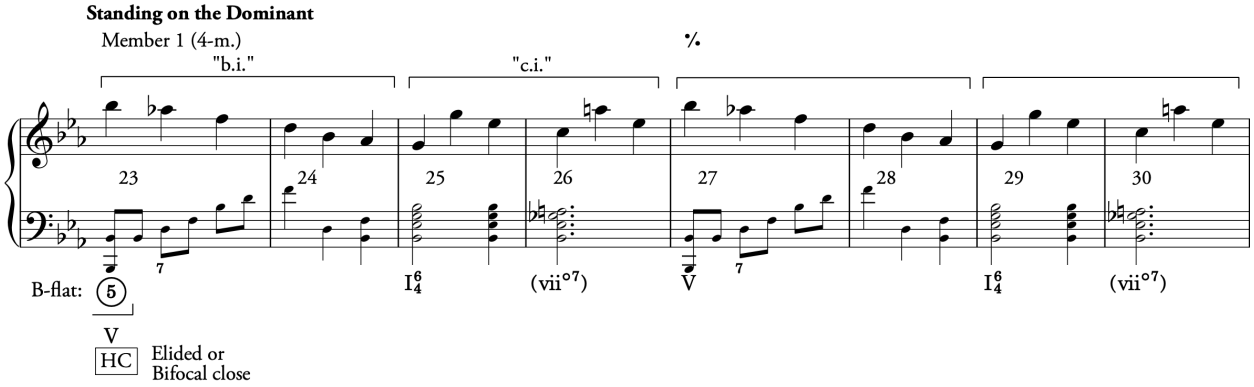
It is curious that Beethoven removes the A-natural from the SotD-1's continuity-voice in CS 2.0 (m. 24 and 28) because this is a regression from what appears in the final version (Example 149, final, m. 25–26). Recall that the first 1.0 sketch included A-naturals and the implied, characteristic common-tone diminished seventh harmony (Example 150, CS 1.0, mm. 26 and 30). As we have consistency seen before, however, Beethoven's compositional process does not always progress in a linear fashion towards the final. Perhaps he removed the A-natural in the 2.0 SotD-1 because he sought to downplay tonicizing the dominant at this point in the form or maybe he wanted to remove some of the chromatic pitches that previously were a part of this passage in order to reserve those pitches for later in the form. In its new configuration, SotD-1 remains more firmly in the home key.

At the end of the SotD-1 in member 2 (CS 2.0, mm. 29–32), he replaces the leaping bass notes he added in branch 1.2 (Example 148, mm. 31–34, bass voice) with an eighth note run in the bass voice. Given this change, the issue with the original version that he wrote in CS 1.2, it seems, was not the underlying harmony or function of this material, but its texture. Although the new running eighth notes do not make it into the final version, the grouping structure could create the impression of a metric "dissonance," as the pattern seems to shift the down beat. This rhythmic device, like the leaping bass voice in branch 1.2, is on the path to becoming a hemiola—an important rhythmic element in this part of the form in the final piece (Example 149, final, mm. 28–31).

Example 149: Op. 55, I., mm. 23–31; Standing on the Dominant



Example 150: CS 1.0, mm. 23–30; Standing on the Dominant (*ES* p. 11, st. 2)

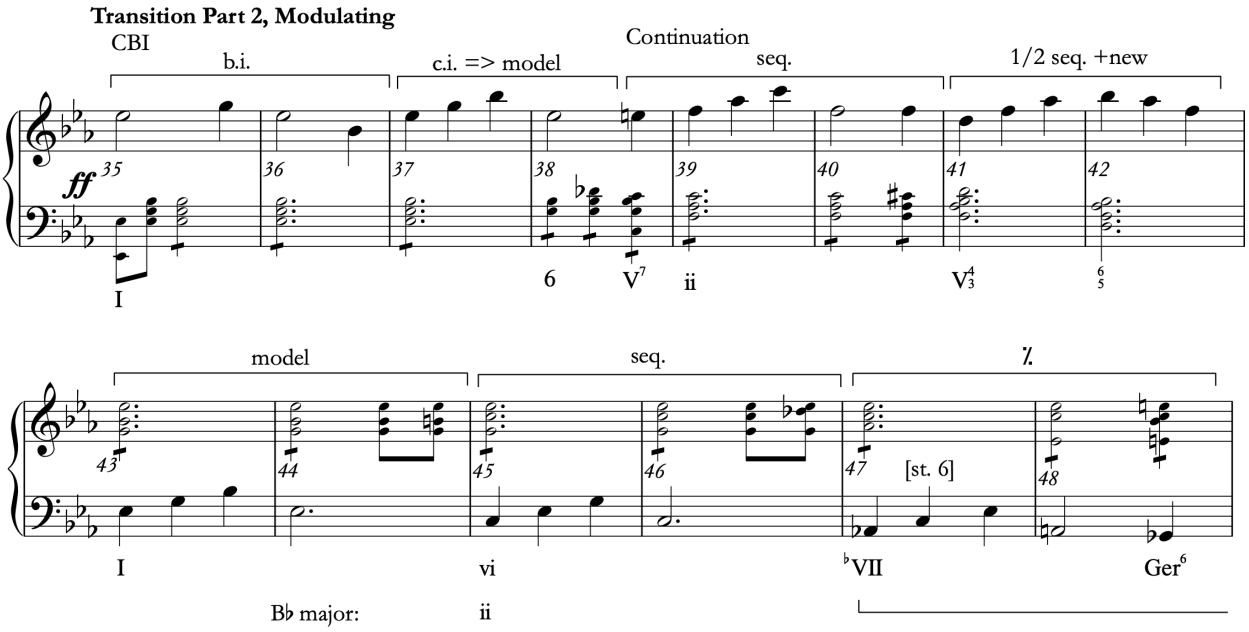


6.3.1 Transition, Part 2 (mm. 33–56)

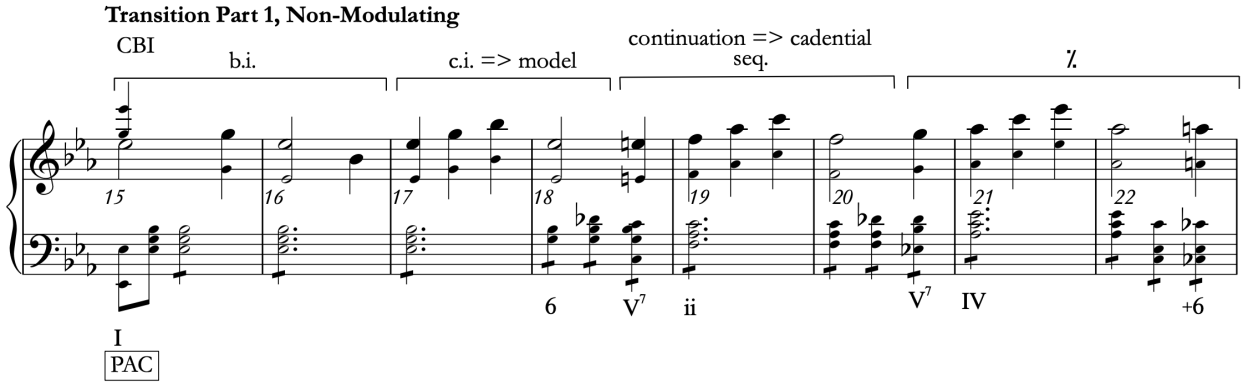
Consider now the second part of the transition that follows SotD-1 (mm. 33–43). Here, Beethoven eliminates the chromatic redundancy that this function shared with the first part of the transition in branch 1.2 (compare with Example 151, branch 1.2, mm. 35–48) and its prior clumsy two-part phrase structure. Recall that, in the 1.2 branch, he sequenced the main theme, contrasting idea material a whole-step upwards by moving chromatically from E-flat through E-natural in the continuity-voice (Example 151, branch 1.2, m. 38); this chromatic half-step duplicated the same motion in the non-modulating, first part of the transition (Example 152, branch 1.2, m. 19). After this move, Beethoven followed the supertonic tonicization with 2-m. of dominant harmony (Example 151, branch 1.2, mm. 41–42), then wrote another sequence (mm. 43–48) to modulate to the subordinate key. This design was unwieldy because the first sequence did not modulate and as a whole, it functioned itself like a miniature, two-part transition.

In the new CS 2.0 version (Vol. 2, p. 51, mm. 33–44), he avoids these problems by sequencing the entire CBI material (mm. 33–36) down a minor third to the submediant (mm. 37–40; C minor = vi). This transposition enables him to compress the transition, part 2 into a tighter-knit design. By eliminating the chromatic move, he shortens the new transition, part 2 by 6-m. Thus, while the SotD-1 morphed into something more distant from the final piece in CS 2.0, the second part of the transition began to resemble its final form. Both changes, however, seem to have been motivated by the same desire to remove chromaticism. Although it is difficult to pinpoint exactly why he may have sought to make the first part of the transition more diatonic, perhaps it was to keep the first E-natural isolated to that part (CS 2.0, m. 36), and to reserve the prominence of the A-natural for the subordinate theme group. Beethoven seems to have wanted to clarify somewhat the key centers of the main theme and subordinate in this 2.0 sketch.

Example 151: Branch 1.2, mm. 35–48; Transition, Part 2 (*ES* p. 10, st. 5–6)



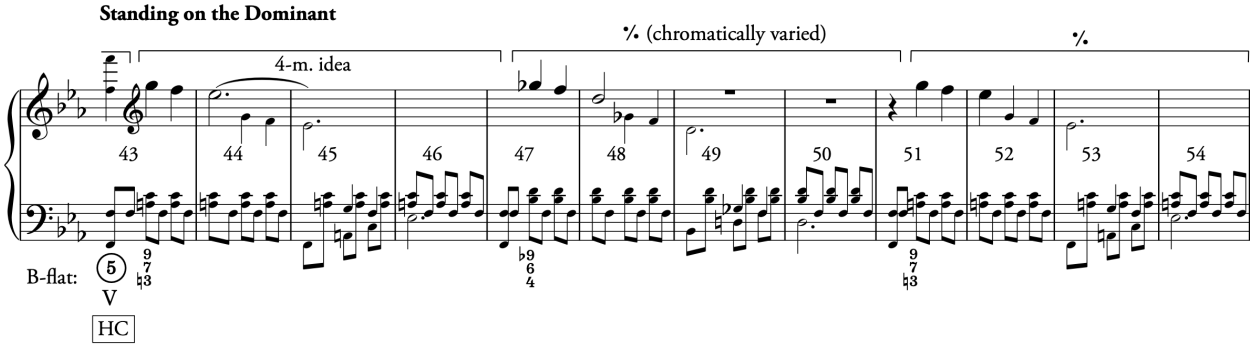
Example 152: Branch 1.2, mm. 15–22; Transition, Part 1 (*ES* p. 11, st. 1b–2a)



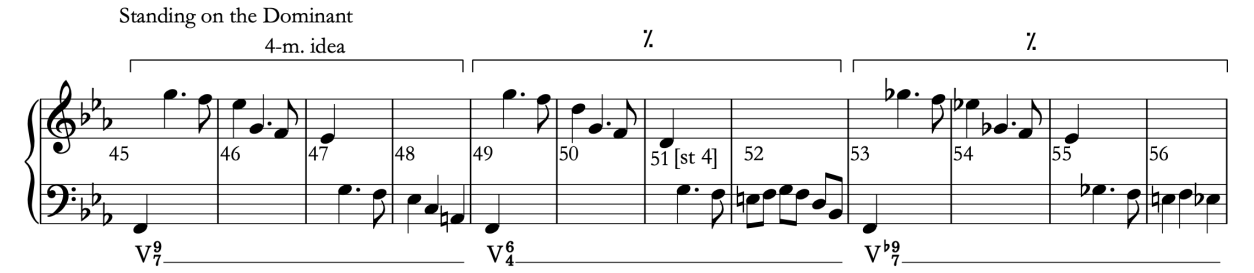
6.3.2 Subordinate Key, Standing on the Dominant 2 (mm. 45–56)

In addition to redesigning the modulating transition, part 2, Beethoven adds more details to the second standing on the dominant (SotD-2, Vol. 2, p. 52, mm. 45–56). For the first time, he fills out the complete texture of this function with three-note, stepwise-descending gestures that move through three registers (i.e., G, F, E-flat in mm. 45–47 followed by G, F, D, in mm. 49–51 and then G-flat, F, E-flat in mm. 53–55). The grouping structure of these gestures matches closely the version he wrote in the first sketch (i.e., three groups of 4-m. units in CS 1.1, Example 153) but their order changes. Recall that, in CS 1.0 (Example 153, m. 47), the G-flat appeared in the second four measure group. In CS 2.0 (Example 154, mm. 45–56), the G-flat appears in the last four-measure group. These differences suggest that the G and G-flat relationship was important to Beethoven, but their precise order in the SotD-2 was subject to change. In sum, the version in CS 2.0 is closer to the final piece (Example 155, final, mm. 45–56), but the figuration will undergo further changes in the next sketches.

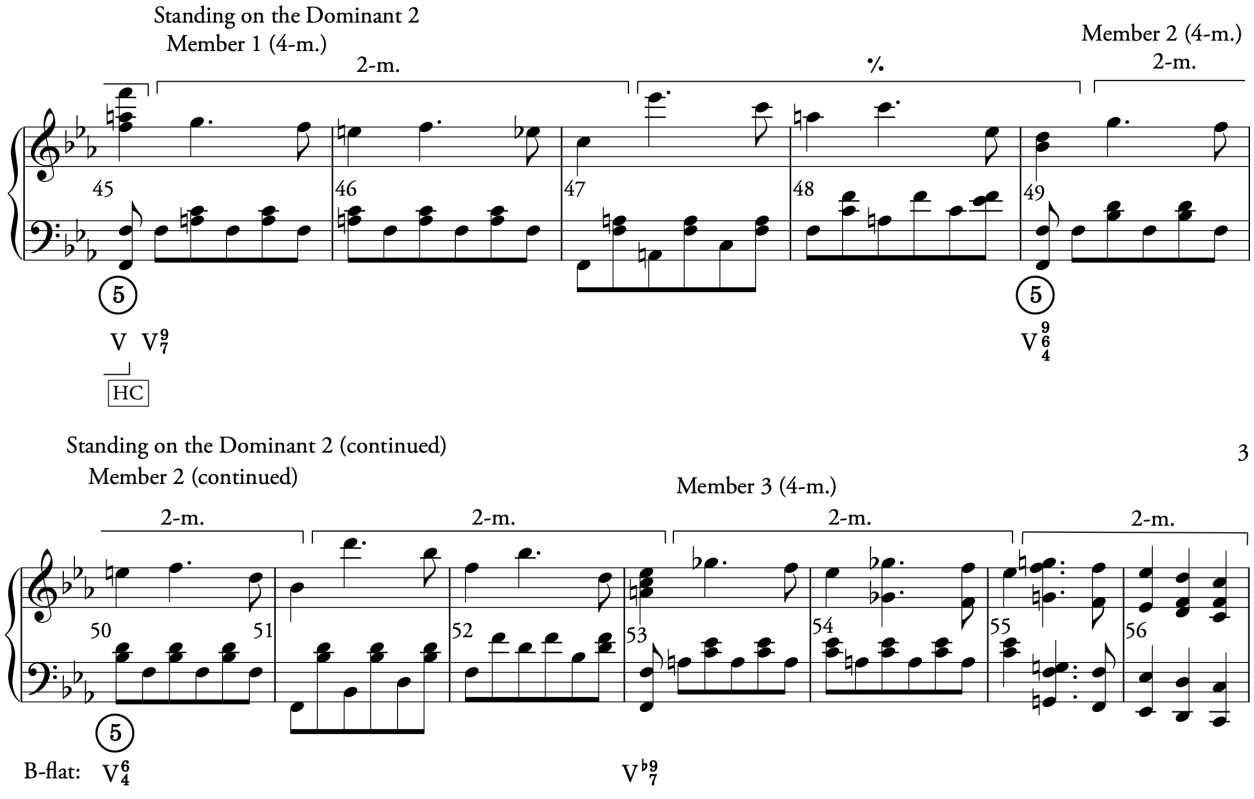
Example 153: CS 1.0, mm. 43–54; Standing on the Dominant (*ES* p. 11, st. 3)



Example 154: CS 2.0, mm. 45–56; Standing on the Dominant (2) (*ES* p. 12, st. 4)



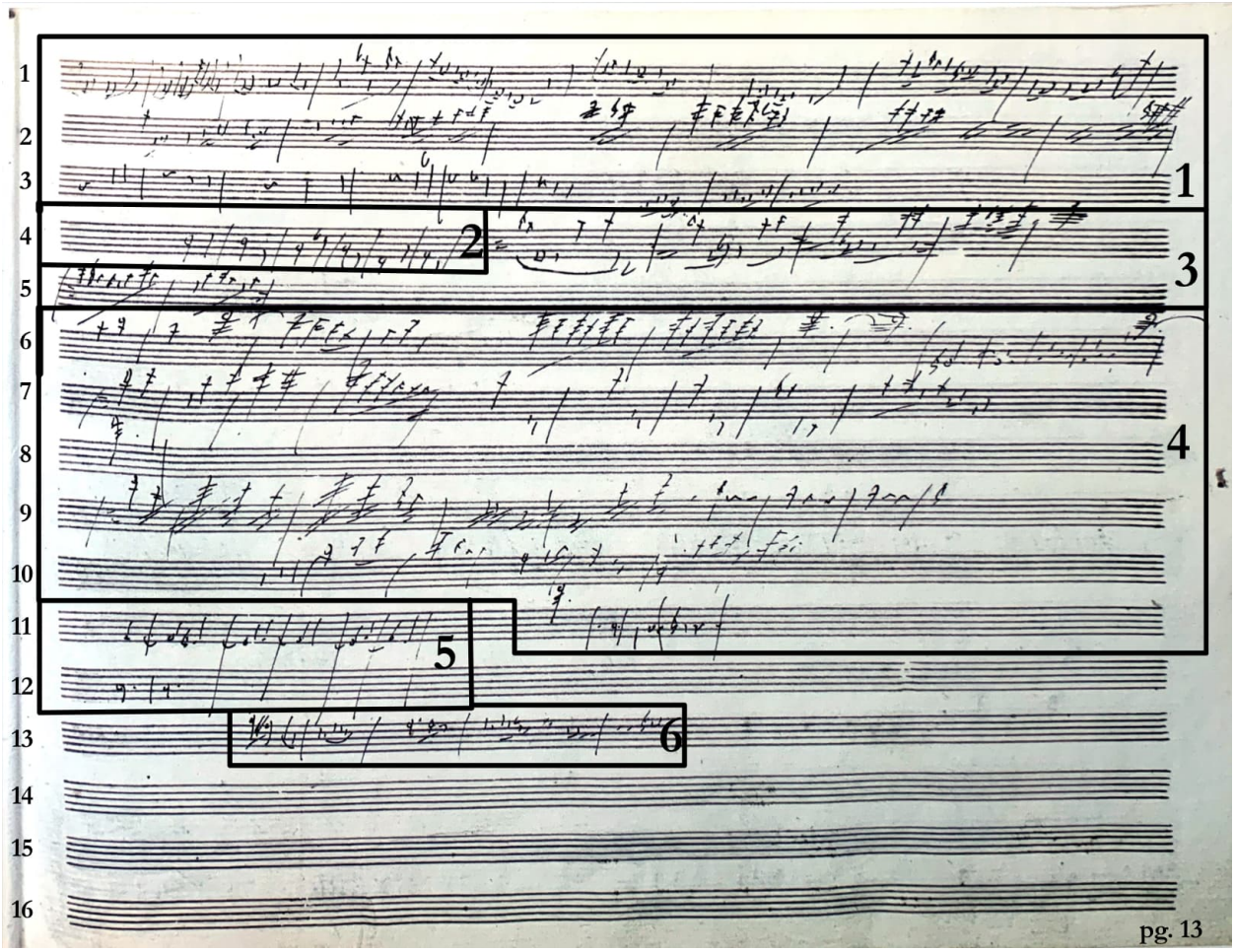
Example 155: Op. 55, I, mm. 45–56; Standing on the Dominant (2)



6.4 *Eroica* Sketchbook Page 13 Fragments

So far, we have examined the most significant changes to the exposition that Beethoven wrote on page 12 of the *Eroica* Sketchbook. Let us turn now to some fragments he wrote on the accompanying *recto* page 13. Sketchbook Excerpt 9 segments the material on this page into 6 parts. In what follows, I analyze each boxed fragment from top to bottom beginning with the first box that encapsulates the music written on staves 1–3 (see the left-hand side of the sketchbook excerpt).

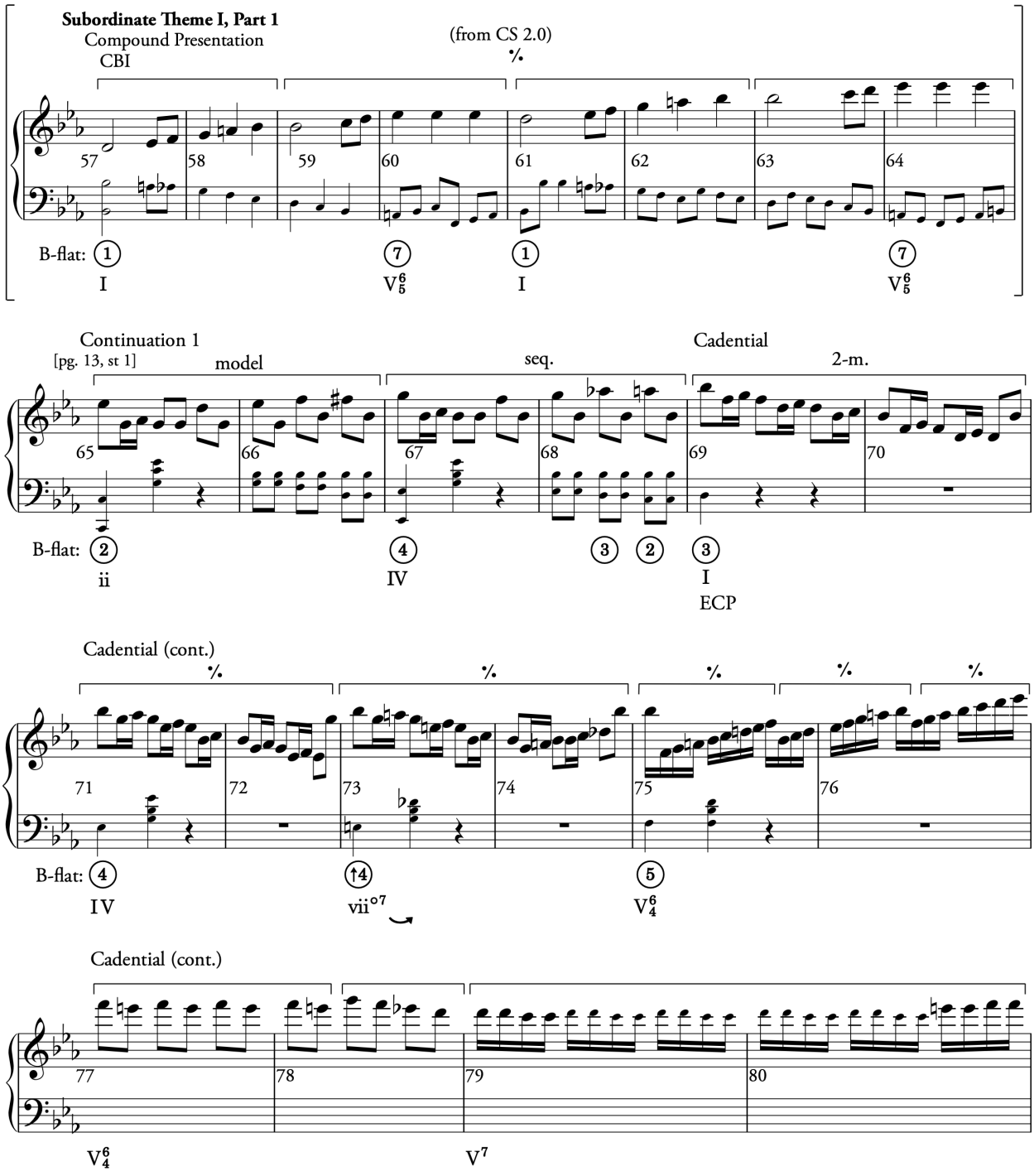
Sketchbook Excerpt 9: *ES* p. 13, Segmented into 6 parts

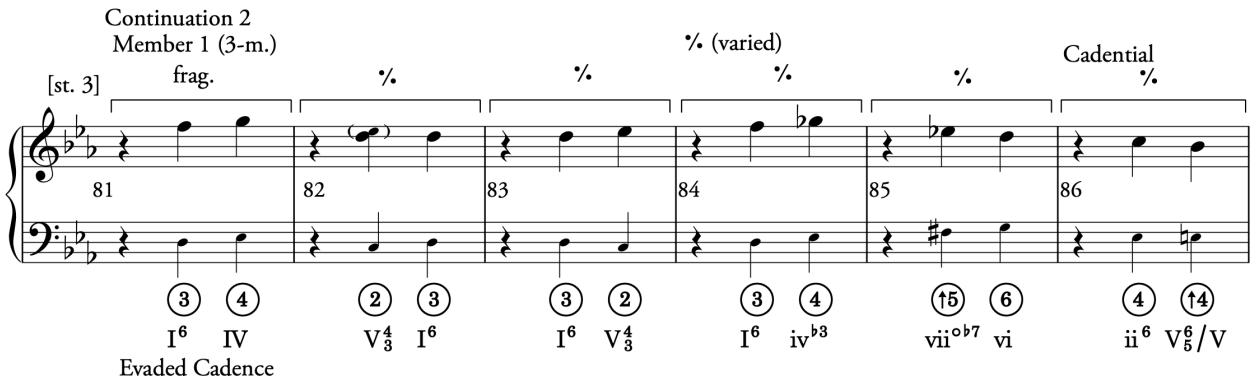


Example 156 replicates Lockwood and Gosman's transcription of the first fragment continuity voice, adds one possible bass realization, and labels the implied harmonies and formal functions. (The bracketed compound presentation, mm. 57–64 is from CS 2.0 and not present on page 13). Beethoven likely intended for this fragment to replace a large portion of the first

subordinate theme in CS 2.0 (i.e., Example 156 should replace mm. 65–81 in CS 2.0). Let us examine some of the changes he makes to this part of the form in what I will call branch 2.1.

Example 156: Branch 2.1, mm. 65–86; Subordinate Theme 1, Continuation (*ES* p. 13, st. 1–3a, Transcription and Realization)

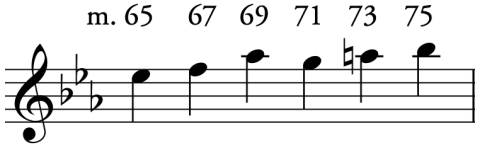




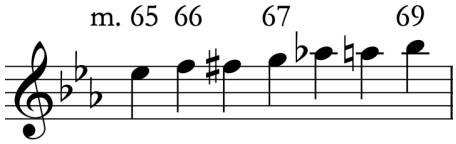
In the revised 2.1 continuation (Example 156, mm. 65–80), the function of the first 16 measures remains essentially the same as the previous 2.0 version (compare with Vol. 2, 52–53, CS 2.0, mm. 65–80). In both, the first 10 measures project a continuation that segments into five groups of 2-m. fragments. The main difference in the new 2.1 continuation (Example 156) is the additional chromatic notes in the middleground of the continuity-voice's linear ascent. Example 157 provides a middle-ground reduction of the CS 2.0 continuation (labeled A), and the revised, 2.1 continuation (labeled B). Numbers above each stave indicate the measure that each of the middleground notes appear in each sketch; cross reference this Example 157A and B with CS 2.0, mm. 65–75 and CS 2.1, mm. 65–69 in Example 156 respectively. In the 2.0 version (Example 157A), the continuity-voice embeds a diatonic linear ascent from E-flat to B-flat with only one chromatic note, A-natural (m. 73). As we saw earlier, there is a kink in the stepwise motion (in mm. 67–71), previously discussed (see section 6.2.1.1). By contrast, the 2.1 ascent is fully chromatic and does not contain any deviations (Example 157B). The revised continuation is also more compressed than the previous version: it unravels in 4-m. instead of 10-m (see mm. 65–69 in Example 156). In sum, the new continuation has a more pronounced upwards drive in a shorter time span. Beethoven seems to have wanted to create a more compact, conjunct, and accelerating continuation.

Example 157: Stepwise Continuity-Voice Middleground Reductions of the ST1, Continuation in CS 2.0 and 2.1

A. CS 2.0, ST1 (*ES* p. 12 st. 5–6), Continuation: Middleground Ascent



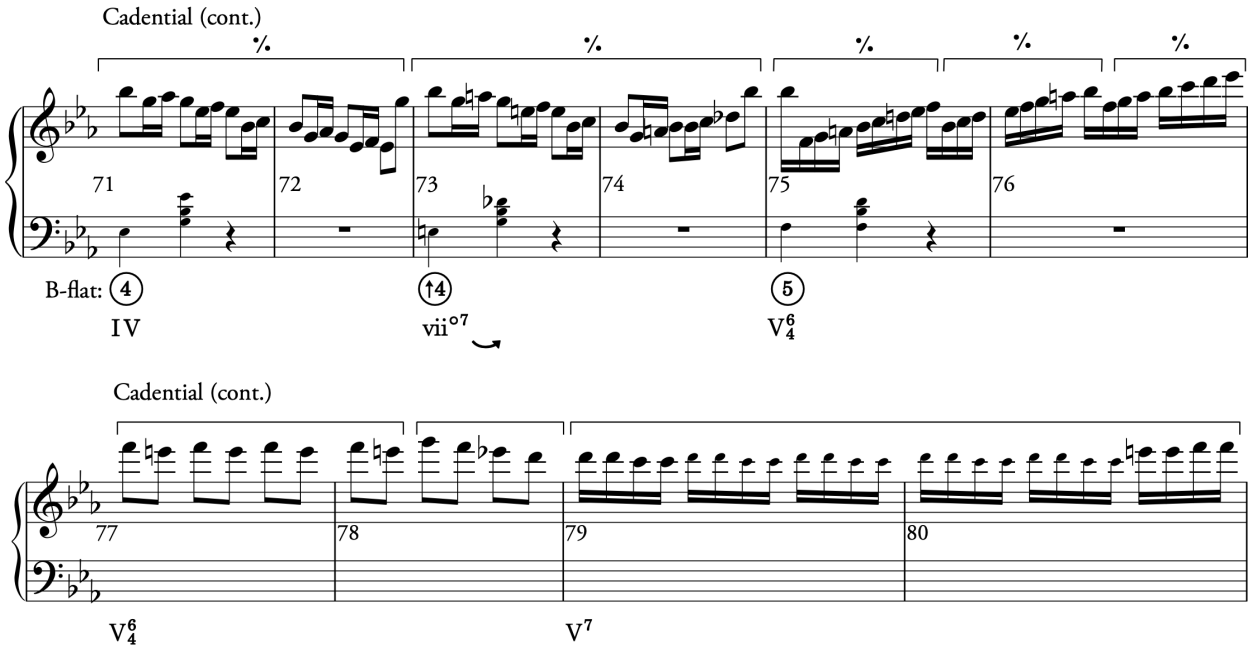
B. Branch 2.1, Revised ST1 (*ES* p. 13, st. 1), Continuation: Middleground Ascent



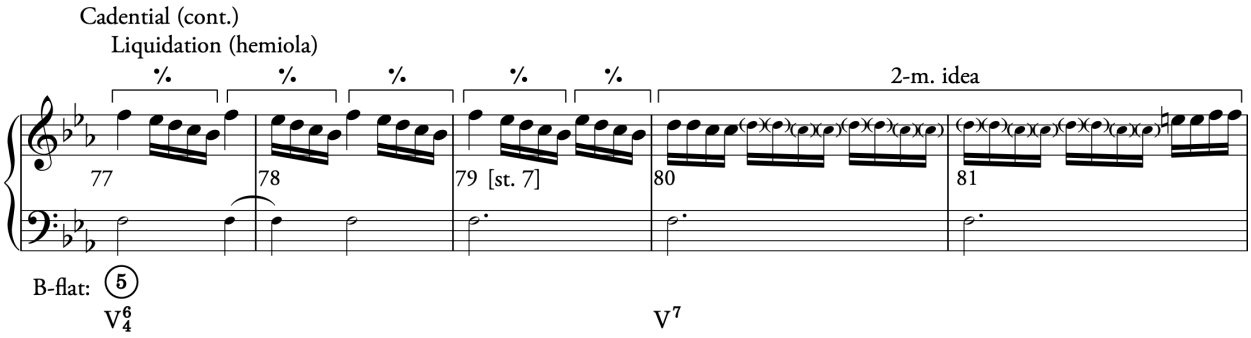
In both the new and old versions, the top note of the linear ascent, B-flat, coincides with the beginning of an ECP (m. 75 in CS 2.0 and m. 69 in CS 2.1). In CS 2.0, the ECP is mostly comprised of a dominant prolongation (mm. 77–81). The initial ③ and ④ only take one measure (m. 75 and 76 respectively). By contrast, the ECP in 2.1 (Example 156, 69–80 or Vol. 2, p. 56) expands each bass-melody scale-step two-fold (i.e., every bass-melody scale step is prolonged for two measures) and introduces a chromatic bass-melody embellishment (↑ ④) between ④ and ⑤. As a result, the 2.1 ECP is considerably larger than the 2.0 version and has a slower harmonic rhythm. Thus, to summarize the differences of the branch 2.1 subordinate theme 1 up to this point, Beethoven compresses the continuation but expands the cadential function.

The penultimate dominant in both 2.0 and 2.1 ECPs bring similar figuration. In both versions, an upper-voice trill on ^2 and ^3 (D and C in B-flat) in the subordinate key suggest an impending PAC (compare CS 2.1 in Example 158, mm. 75–80 with CS 2.0 in Example 159, mm. 77–81). The figuration that Beethoven uses to imply the penultimate dominant harmony differs, however: the 2.1 version (Example 158) eliminates the repetitions of the descending gestures that were in the 2.0 sketch (see Example 159, mm. 77–79) and introduces rising sixteenth-note runs in their place (Example 158, mm. 75–76). These new runs bring the music to a register that is one octave higher than the previous version. Ultimately, however, this change does not impact the underlying function of this music and the hemiola remains. In sum, then, Beethoven adds additional chromaticism to the continuation, intensifies its registral contrast, and expands the ECP. These changes cause the continuation to take on a more dramatic character, but do not alter its underlying medial function.

Example 158: CS 2.1, mm. 77–80; Subordinate Theme 1, Cadential (*ES* p. 13, st. 1–2)



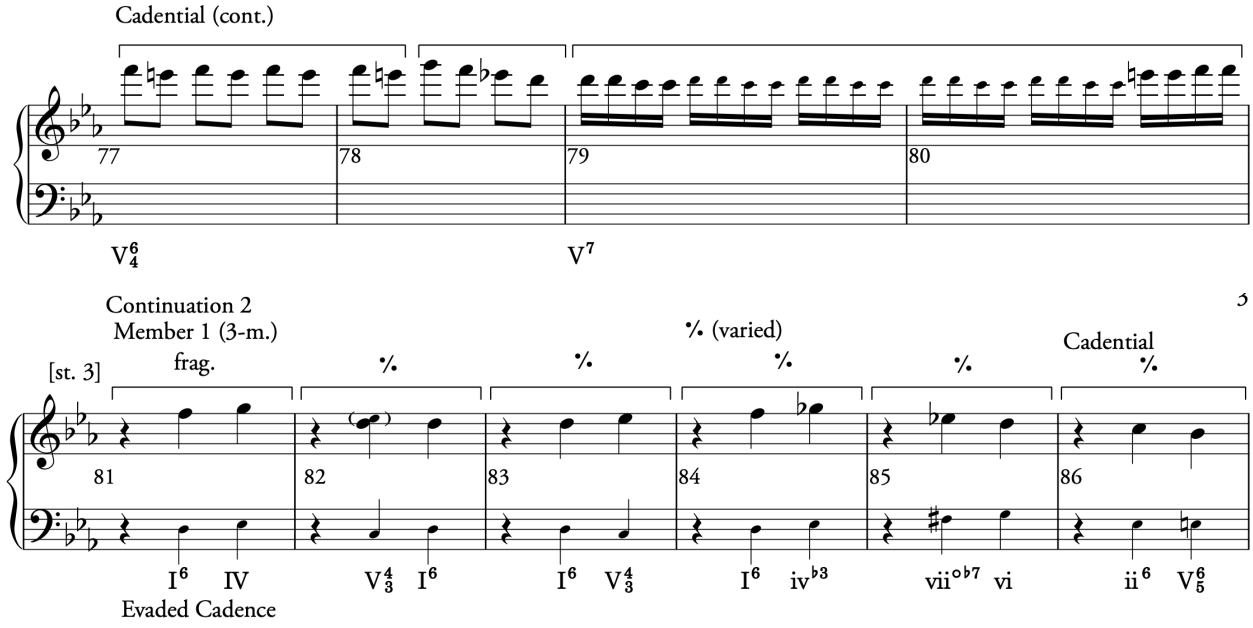
Example 159: CS 2.0, mm. 77–81; Subordinate Theme 1, Cadential (*ES* p. 12, st. 6–7)



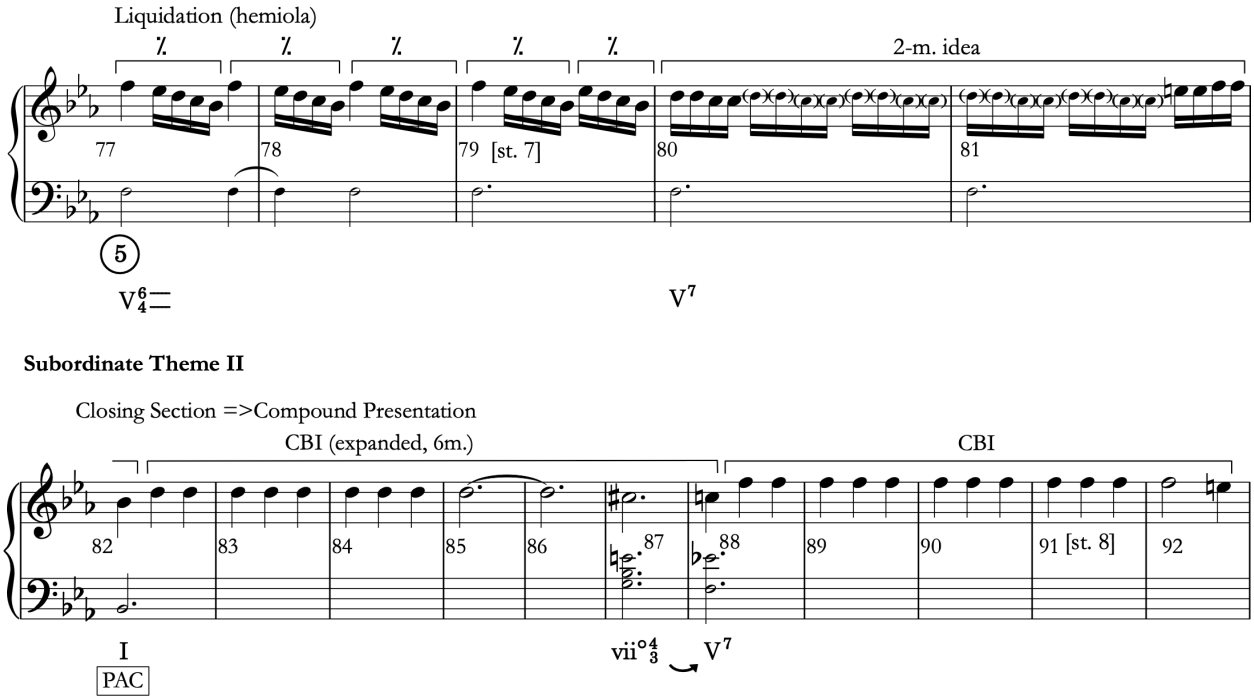
6.4.1 Subordinate Theme 1, New Continuation (mm. 81–86)

The material that follows the ECP in the new 2.1 continuation written on p. 13 of the sketchbook (see Example 160, mm. 81–86) differs considerably from the corresponding music that he wrote in CS 2.0 on page 12. In the 2.1 version, Beethoven reverts to an earlier design that he sketched before CS 2.0. Instead of closing the theme with a PAC and writing a new second subordinate theme (Vol. 2, p. 53, CS 2.0, mm. 81–92), he evades the PAC (Example 160, m. 81) and writes a second energy reducing continuation that emphasizes beats 2 and 3 of each measure (mm. 81–86).

Example 160: CS 2.1, mm. 76–86; New Continuation following ST1 Continuation (*ES* p. 13, st. 2–3)



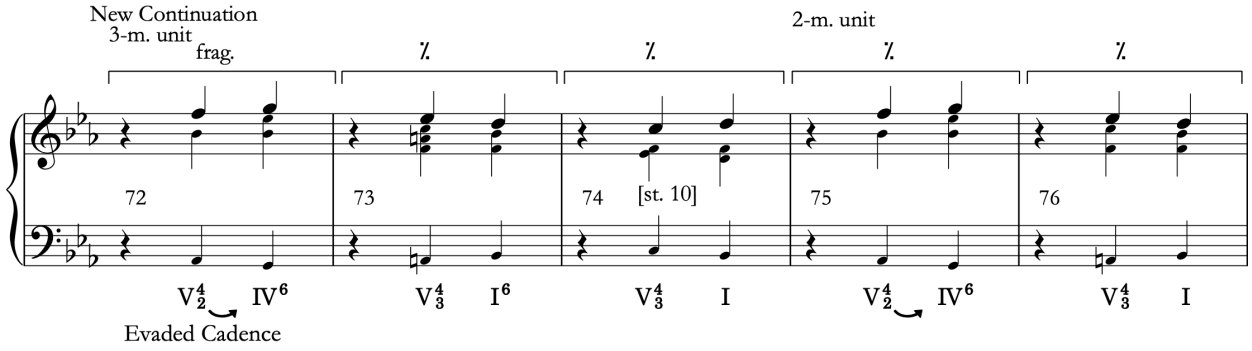
Example 161: CS 2.0, mm. 77–92; Subordinate Theme 2 (*ES* p. 12, st. 7–8)



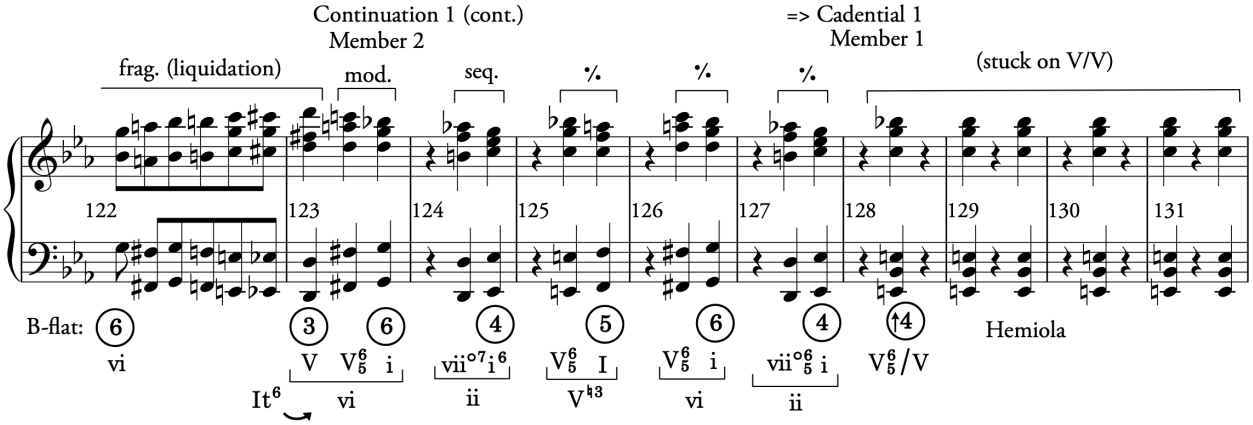
This new continuation 2 (Example 160, mm. 81–86) does not resemble any music that he wrote in CS 2.0 on page 12, but it is very similar to a passage that he sketched two pages prior in the 1.1 branch (Example 162, Branch 1.1, m. 72–76). Thus, while he sometimes omits passages that he drafted in prior sketches in later drafts, he often returned to these older ideas and attempted to re-

integrate them into subsequent versions. At this point, the material that he drafted in the 1.1 branch (Example 162) and reintroduced in the 2.1 branch (Example 160, mm. 81–86) is still far from its final state. We will see in the next chapter that Beethoven yet again abandons this material in the 3.0 continuity sketch. It is clear, therefore, that he was not yet certain how he would incorporate this idea, but he still believed it had some merit. Ultimately, he does not find a suitable place for this music until he alters its underlying harmonic structure. We will see how this arises for use in the subordinate theme, part 2 in the final version (Example 163, mm. 123–127) in the next two chapters.

Example 162: CS 1.1, mm. 72–76; New Continuation (*ES* p. 11, st. 9b–10a)



Example 163: Op. 55, I., mm. ; Subordinate Theme 2, Part 2, Continuation 1, Member 2

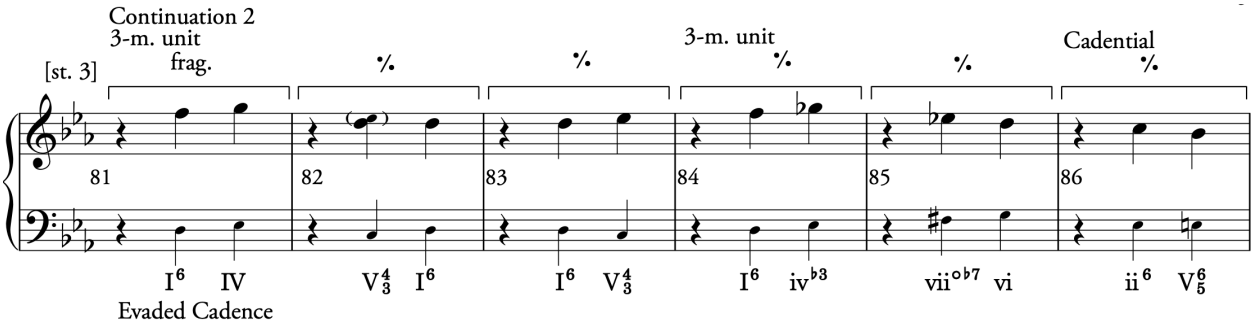


6.4.2 The Suggestive Role of G-flat

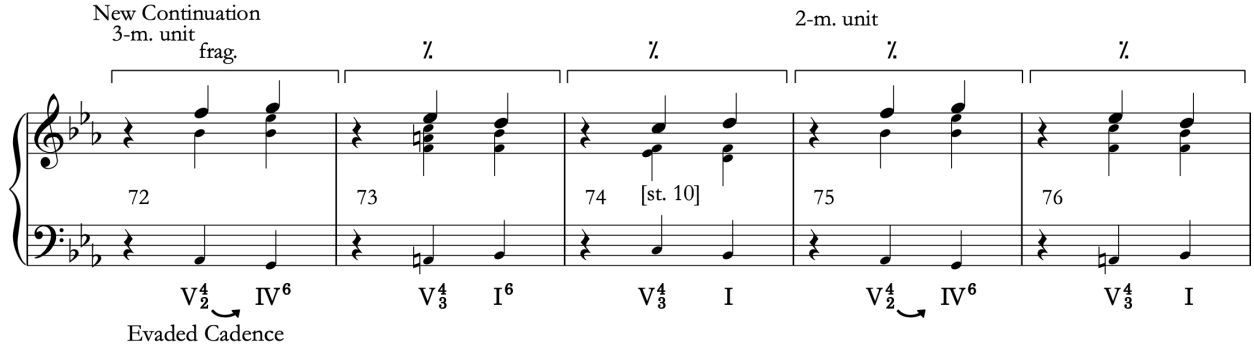
When we compare the new continuation 2 written in the 2.1 branch (Example 164, mm. 81–86) with the previous version in branch 1.1 (Example 165, mm. 72–76), we notice that Beethoven changed two pitch classes: the repeated D in the second measure (Example 164, m. 82), and the G-flat in the

fourth measure, third beat. The first difference may be an error but the second is worth further inquiry. Let us turn first to the repeated D5's.

Example 164: Branch 2.1, mm. 81–86; New Continuation 2 following ST1 Continuation 1 (*ES* p. 13, st. 2–3)

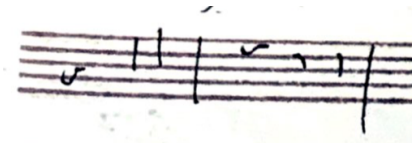


Example 165: CS 1.1, mm. 72–76; new continuation following ST1 (*ES* p. 11, st. 9b–10a)



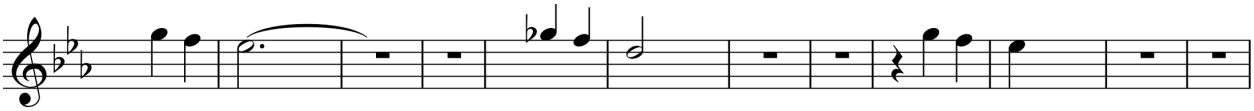
In their transcription of staff 13, measure 2 (Example 166), Lockwood and Gosman write two quarter-note D5's. I have written these notes with regular noteheads in my reconstruction (Example 164, m. 82). Their transcription of this material appears to be accurate, but Beethoven may have written the first D5 in error instead of an E-flat5 (see the smaller note in parenthesis in Example 164, m. 82). An E-flat5 would have made this passage correspond more closely with the previous design that he wrote on page 11 (Example 165, CS 1.1, m. 73), it would preserve the stepwise motion and harmonic rhythm of the entire 6-m. fragment, and it would cause this music to segment into two parallel 3-m. fragments. It seems likely, therefore, that the first D was a slip of the pen—perhaps he intended it to be a an E-flat5. In any event, if Beethoven intended the first D5, it does not invalidate the strong similarities that this passage shares with similar music he sketched in the 1.1 branch.

Example 166: *ES* p. 13, st. 3, first two measures

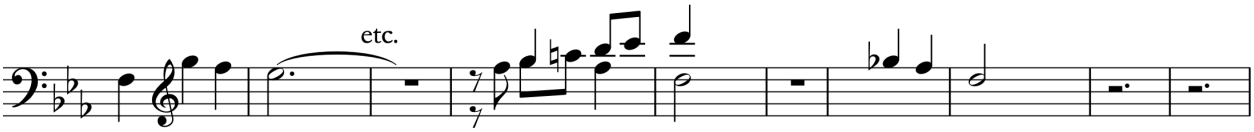


The repeated D5's may have been in error, but the G-flat in place of a G-natural in the fourth measure is deliberate (Example 164, m. 84). This subtle alteration—in addition to the prominent G-flats in the two versions of the second SotD's written in CS 1.0 and 1.2 on pages 11 and 10 previously discussed (Example 167A and B respectively)—provide additional evidence for what Philip Gossett calls the "suggestive" category of compositional intent. That is, "evidence for compositional intent with respect to relationships which, while present, we may have overlooked or undervalued" (Gossett 1974, 263). In short, the pitch class G-flat seems to have been an important generative element for Beethoven.

Example 167: Standing on the Dominants written on pages 11 and 10
CS 1.0, Standing on the Dominant (end of Transition, Part 2)



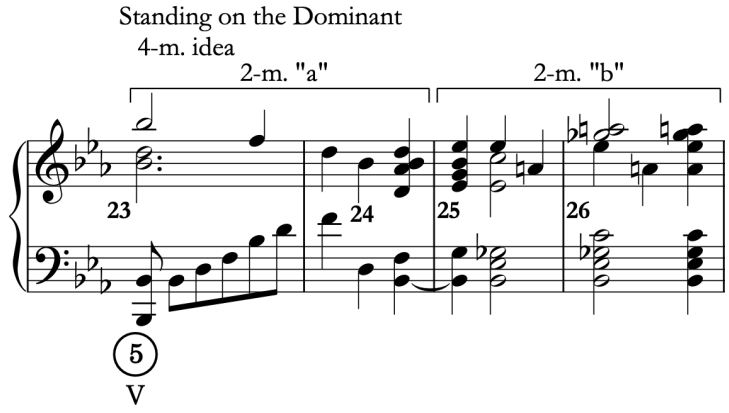
CS 1.2, Standing on the Dominant (end of Transition, Part 2)



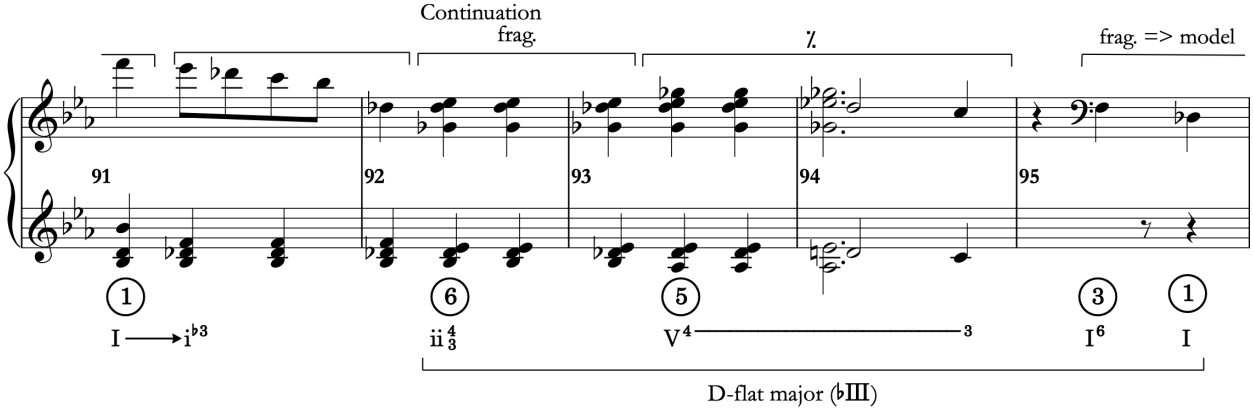
Although many analysts have discussed the role that C-sharp plays in the first movement, few have given much attention to G-flat. In addition to the prominent G-flat's in the second SotD in the final version, consider also the prominent G-flat in the first SotD (Example 168, final, m. 26), the G-flats in the continuation of the subordinate theme 2, part 1 (Example 169, final, mm. 92–94), and the prominent G-flat neighbor in the expanded cadential function of subordinate theme 2, part 2 (Example 170, final, mm. 133). Might the G-flats in the exposition have also motivated the new development theme that appears in E-flat minor and G-flat major after the initial E minor statement (Example 171, final, mm. 322–355)? Consider too the prominent G-flats in the top-most register at the end of the development (Example 172, final, mm. 366–377), and recall that this design was

conceived on page 4, st. 7–8 of the *Eroica* sketchbook (Example 173). Were these early G-flats in the sketches seeds for later development?

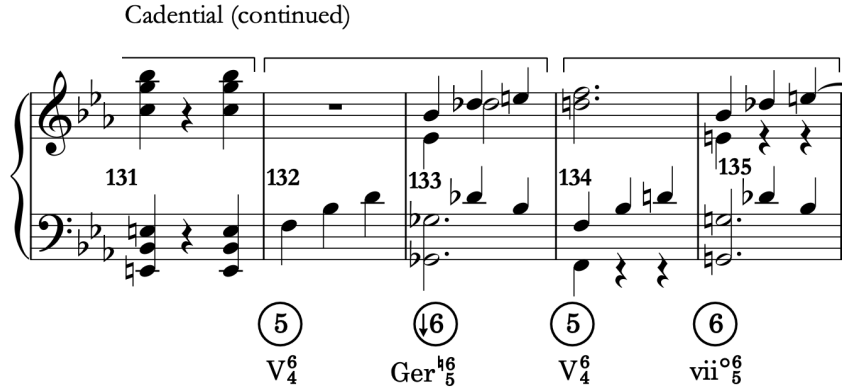
Example 168: Op. 55, I., mm. 23–26; Standing on the Dominant



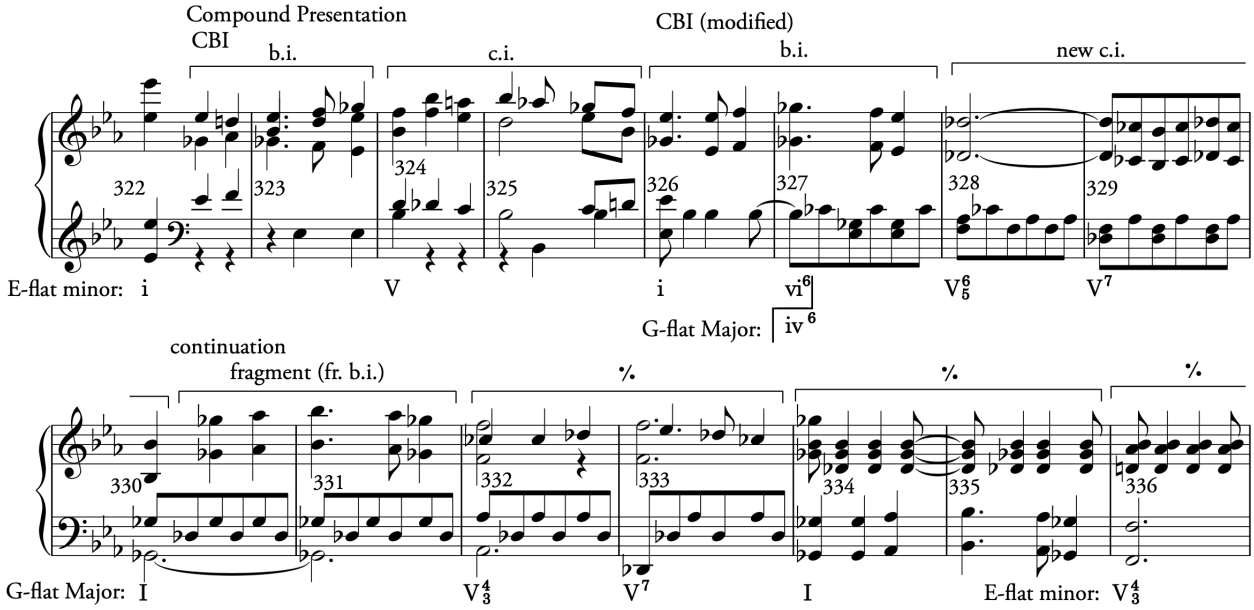
Example 169: Op. 55, I., mm. 91–95; Subordinate Theme 2, Continuation



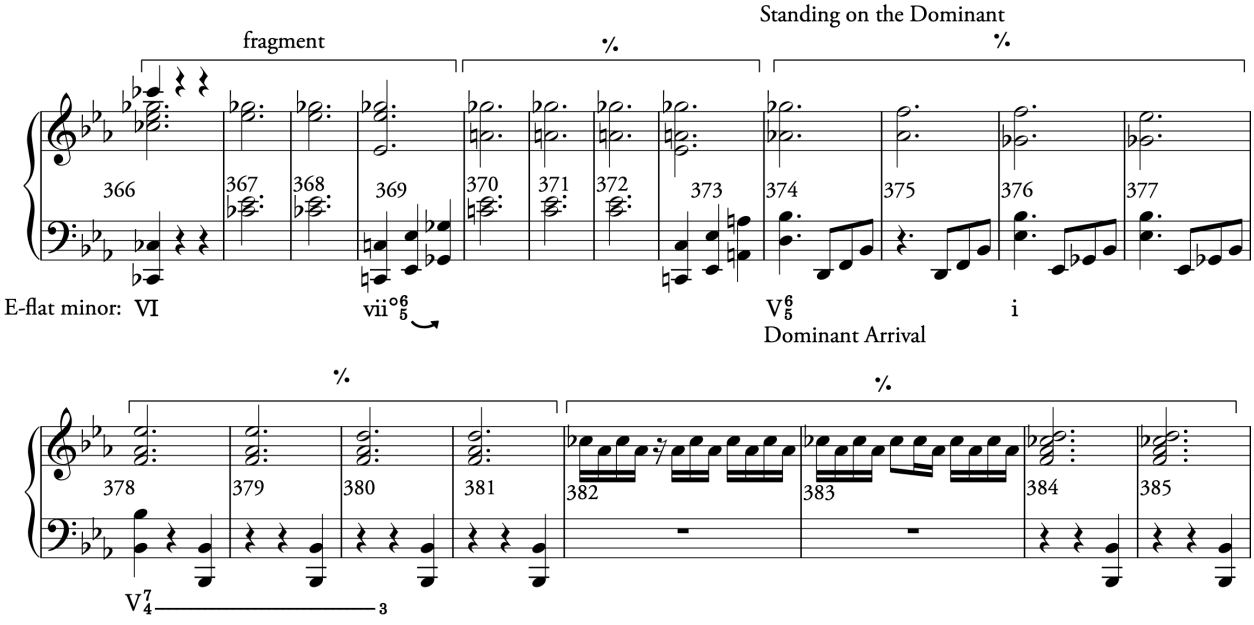
Example 170: Op. 55, I., mm. 131–135, Subordinate Theme 2, Part 2, Cadential



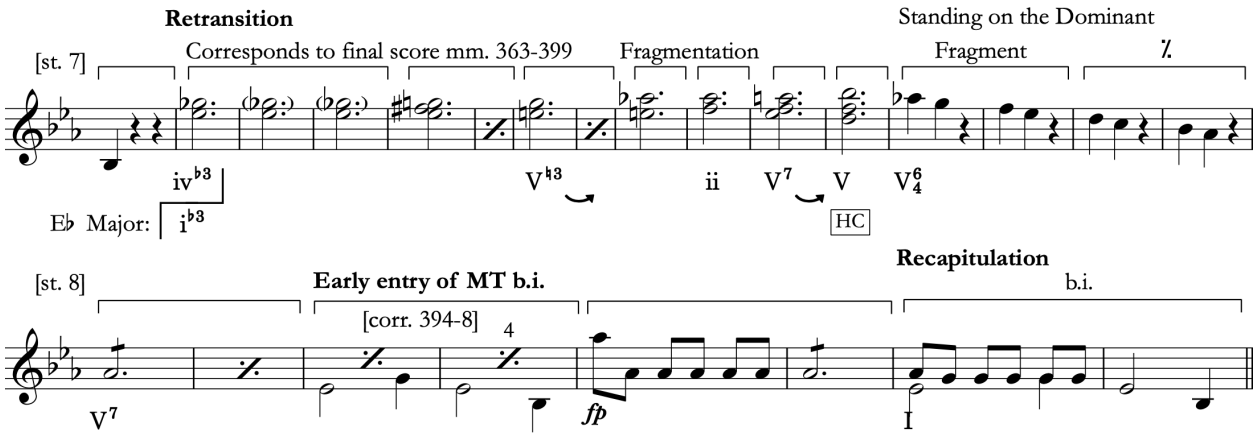
Example 171: Op. 55, I., mm. 322–336; Development Theme Material in E-flat minor and G-flat major



Example 172: Op. 55, I., mm. 366–385



Example 173: *ES* p. 4, st. 7–8

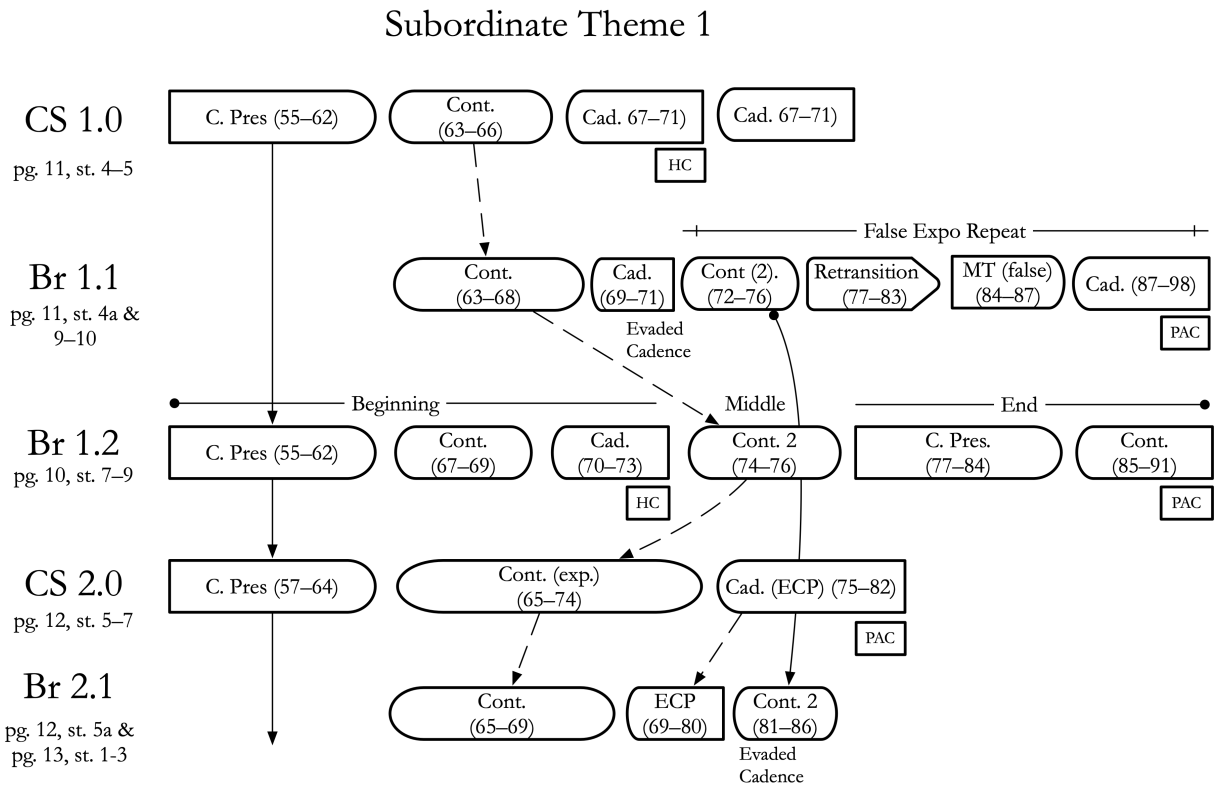


Given Beethoven's propensity for realizing chromatic embellishing tones in more substantial ways later in his pieces, it seems that G-flat played a significant role as both a disruptive and generative element in the first movement. Put succinctly, G-flat, frequently juxtaposed with G-natural, is present in important areas of the final exposition and the sketches. He tried to incorporate this chromatic contrast in multiple areas of the exposition throughout his compositional process, just as he worked to realize the tonal implications of the main theme's C-sharp.

6.4.3 Summary of Branch 2.1, Subordinate Theme 1

So far, Beethoven has written 5 different versions of the first subordinate theme. If we had looked solely at the first sketch (Vol. 2, p. 32, CS 1.0, mm. 55–71), we might have concluded that he completed its sentential design in his first attempt. But this interpretation would have been a vast oversimplification of his process. As Figure 48 shows, Beethoven's compositional approach to the first subordinate theme was far more complex than we might have expected. While the compound presentation remains invariant in each trunk and branch, the material thereafter changes considerably. He moves the continuation that corresponds with the final version to different parts of the theme in each of the sketches (trace the dashed, token-character transfer line). Similarly, he tries to re-integrate the second continuation that he drafted in the 1.1 branch into the new version sketched in CS 2.1 (trace the solid line, which goes under the functions in branch 1.2 and CS 2.0). Ultimately, he will settle on a version of the theme that is most like the one he wrote in CS 2.0. But this does not mean that the material he abandoned went to waste: we have already seen how he used some of the elements for the second subordinate theme. We will see additional evidence of this practice below.

Figure 48: Form Function Diagram Revision History of Subordinate Theme 1 from CS 1.0–2.1 (approximately scaled)

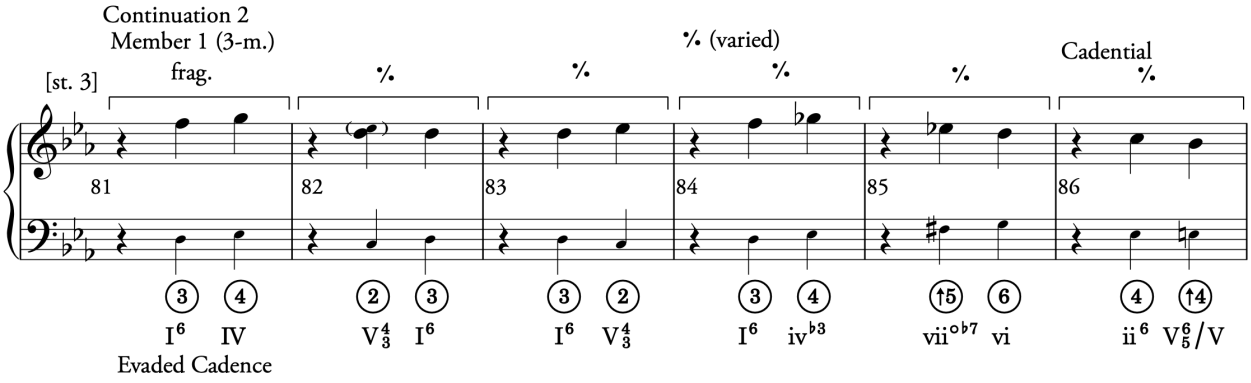


6.4.4 Analysis of the Subordinate Theme 2, Continuation

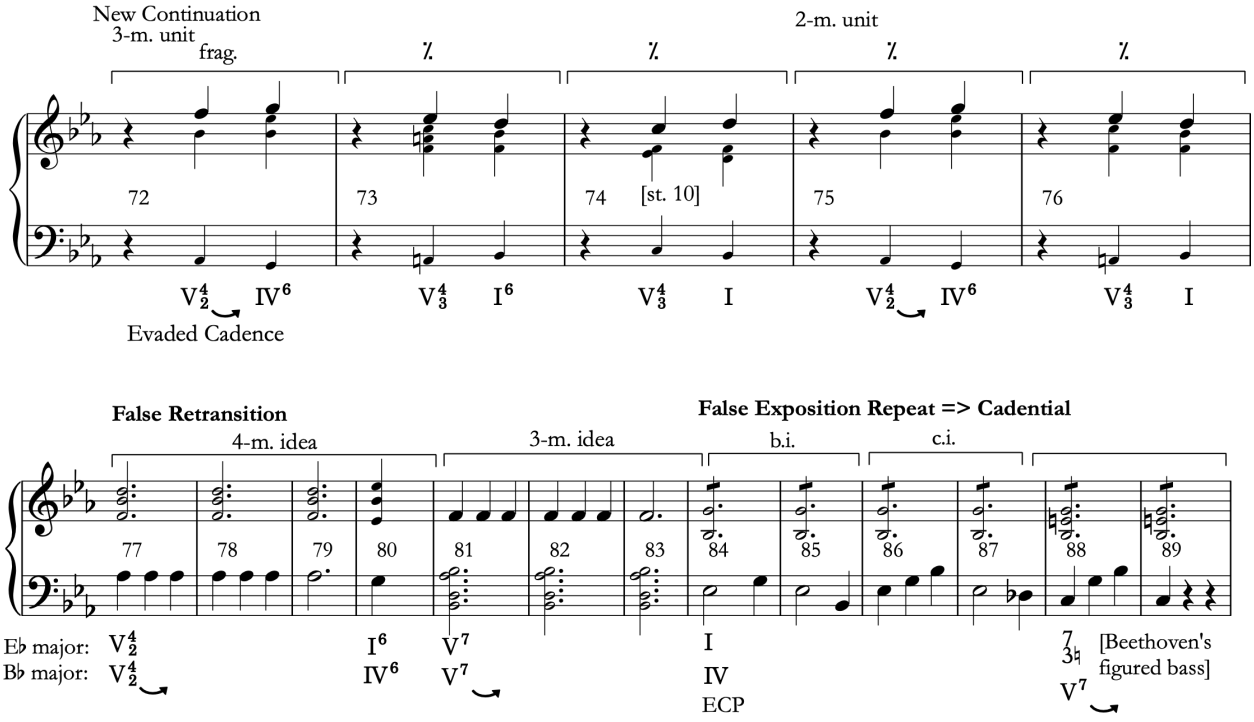
Let us now return to the fragments on page 13. It is difficult to state with certainty what Beethoven intended to compose after the continuation 2 that he wrote on staff 3 just discussed (i.e., Example 174, mm. 81–86). We might look to previous sketches for insight, but unfortunately these earlier sketches confound the problem. Recall that in the 1.1 branch written on page 12 (Example 175, mm. 72–89), he followed a similar design with a seeming exposition retransition that led to a (false) exposition repeat. His intentions with the 2.1 version on page 13 are more difficult to interpret, however, because what follows is fragmentary. He leaves a small gap on the staff (see Example 176) after the new quarter-note based continuation (shown in Example 174), then writes a running eighth-note fragment that expresses the home key (note that he does not change the A-flat to an A-natural; Example 177, mm. 87–89); I have deliberately altered the clef to a bass clef, which differs from Lockwood and Gosman's transcription. The music that is most similar to this fragment in the 2.0 trunk is the end of the transition, part 1 SotD (Example 178, CS 2.0, mm. 29–32). Given that the

earlier material had a different function and context, it is not clear where Beethoven planned to use the Example 177 fragment on p. 13.

Example 174: Branch 2.1, mm. 81–86; New Continuation following ST1 Continuation 2 (*ES* p. 13, st. 3) [reproduced example]

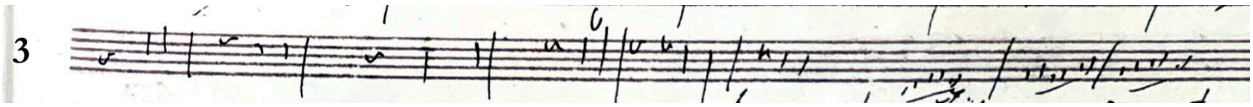


Example 175: Branch 1.1, mm. 72–89; Retransition (*ES* p. 11, st. 10)

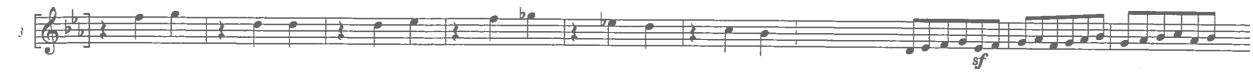


Example 176: *ES* p. 13, st. 3; Original (A, top) and transcription (b, bottom)

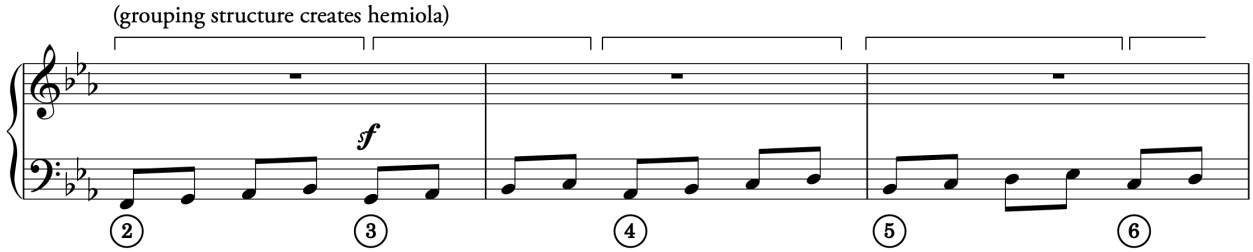
A. Original



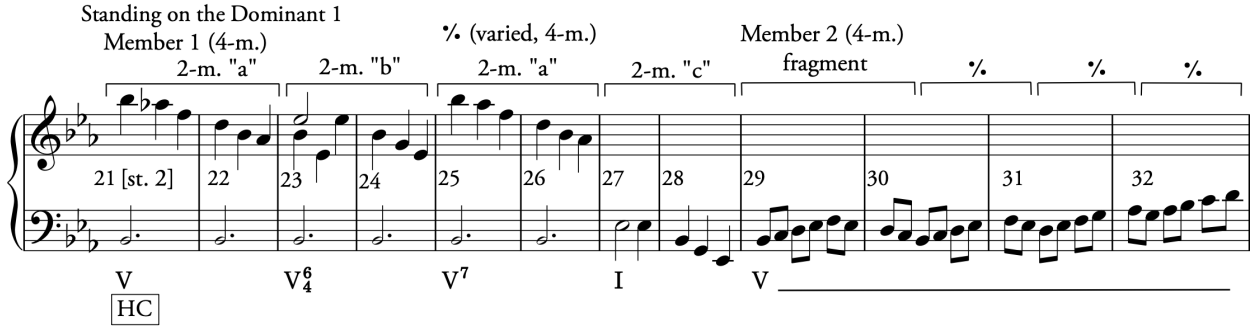
B. Lockwood' and Gosman's transcription



Example 177: CS 2.1 (*ES* p. 13, st. 3b) fragment

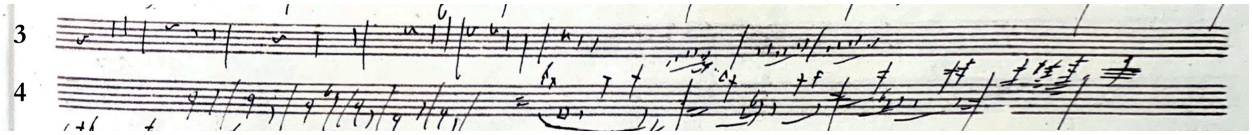


Example 178: CS 2.0, mm. 29–32; Transition, Part 1, Standing on the Dominant (*ES* p. 12, st. 2)

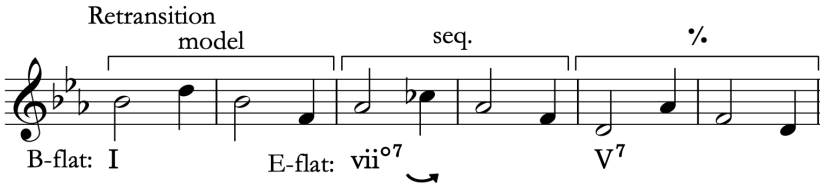


After the running eighth-notes fragment (i.e., Example 177), Beethoven leaves the remainder of the staff empty (see Sketchbook Excerpt 10, staff 3, right-hand side). He also leaves space at the beginning of the next staff (st. 4). It is likely, therefore, that we should read the music that follows the space on staff 4 (transcribed in Example 179) as separate from the running-eighth notes. Because this main theme material-based passage modulates from the subordinate key (B-flat) to the home key (E-flat), the fragment projects a retransition function—one that is different from the prior two versions sketched on page 12 (Example 180, mm. 131–138) and 10 (Example 181, branch 1.2, mm. 119–126). Consequently, it seems possible that he left space at the end of staff 3 and the beginning of staff 4 because he was planning to put additional material *after* the running eighth notes and *before* the retransition that ends the exposition. Page 13 seems to have served as a scratch pad, rather than as a place for a complete continuity sketch.

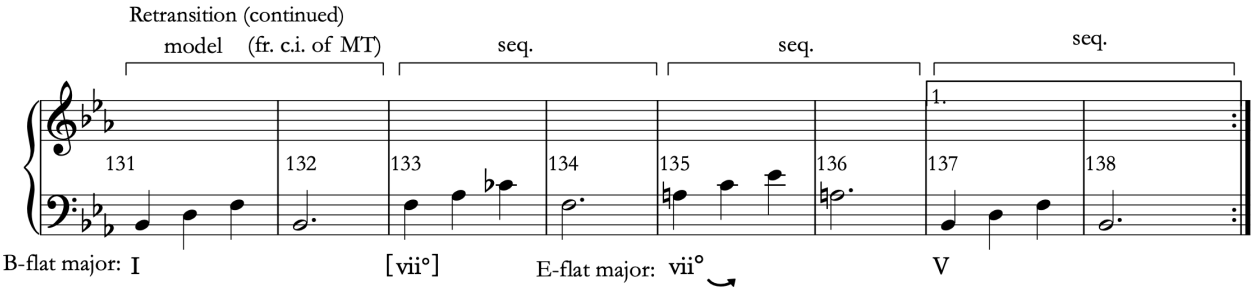
Sketchbook Excerpt 10: *ES* p. 13, st. 3–4 (Original)



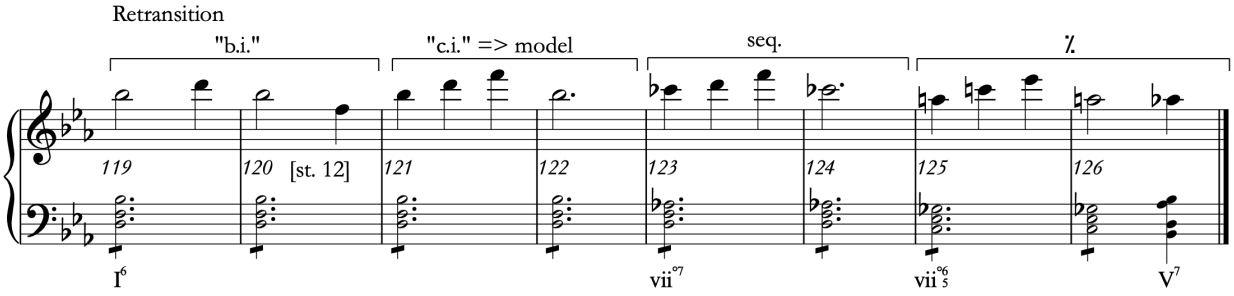
Example 179: *ES* p. 13, st. 4a; Likely Retransition



Example 180: CS 2.0, mm. 131–138; Retransition (*ES* p. 12, st. 12)



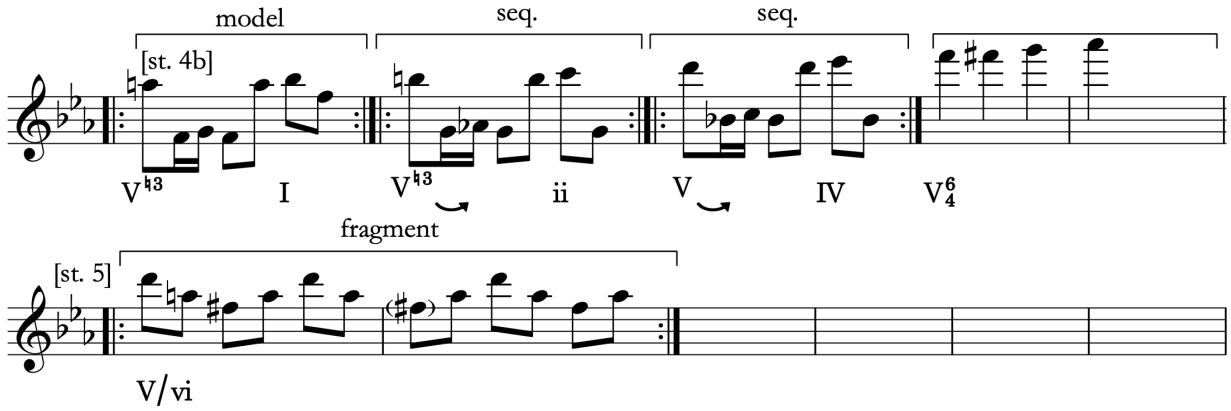
Example 181: Branch 1.2, mm. 119–126; Retransition (*ES* p. 10, st. 11–12)



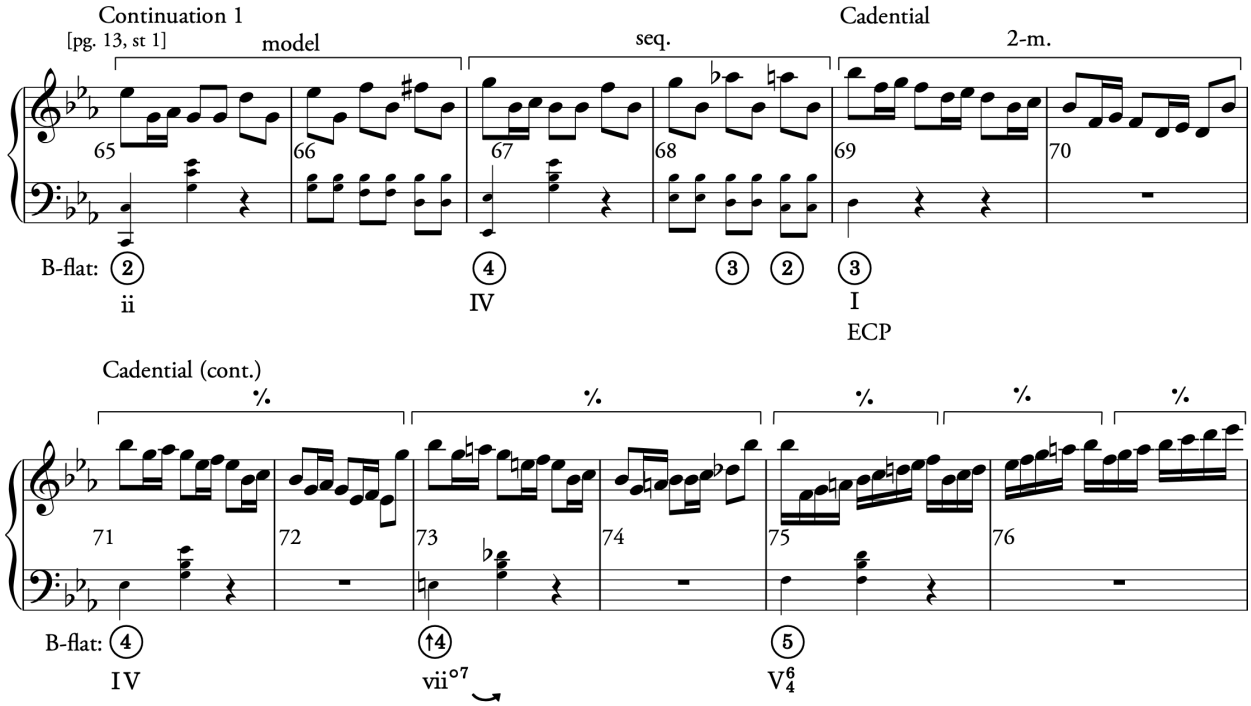
The music that Beethoven writes on the remainder of staff 4 and the beginning of staff 5 (box 3, transcribed in Example 182) also does not logically follow the running eighth-note fragment on staff 3 and therefore is unsuitable for filling the gap between the end of staff 3 and the beginning of staff 4. Beethoven likely intended the fragment on staves 4 and 5 (Example 182) to replace a portion of the 2.1, subordinate theme 1's continuation that he wrote on the same page at staves 1–2 (Example 183, CS 2.1, mm. 65–74). The new page 13 fragment is structured as a sequence, like the branch 2.1 subordinate theme 1 continuation, but it introduces a more dramatic ascent in the continuity-voice by embedding a chromatic ascent from A-5 to A-flat-6 in the top-most voice (only

E-natural is missing). Thus, given the similar revision of this continuation at the top of page 13 (i.e., Example 183), Beethoven seems to have wanted to make the chromatic ascent that he drafted on p. 20 of his sketchbook (i.e., 2.0, mm. 65–75) discussed above even more dramatic.

Example 182: *ES* p. 13, st. 4b–5

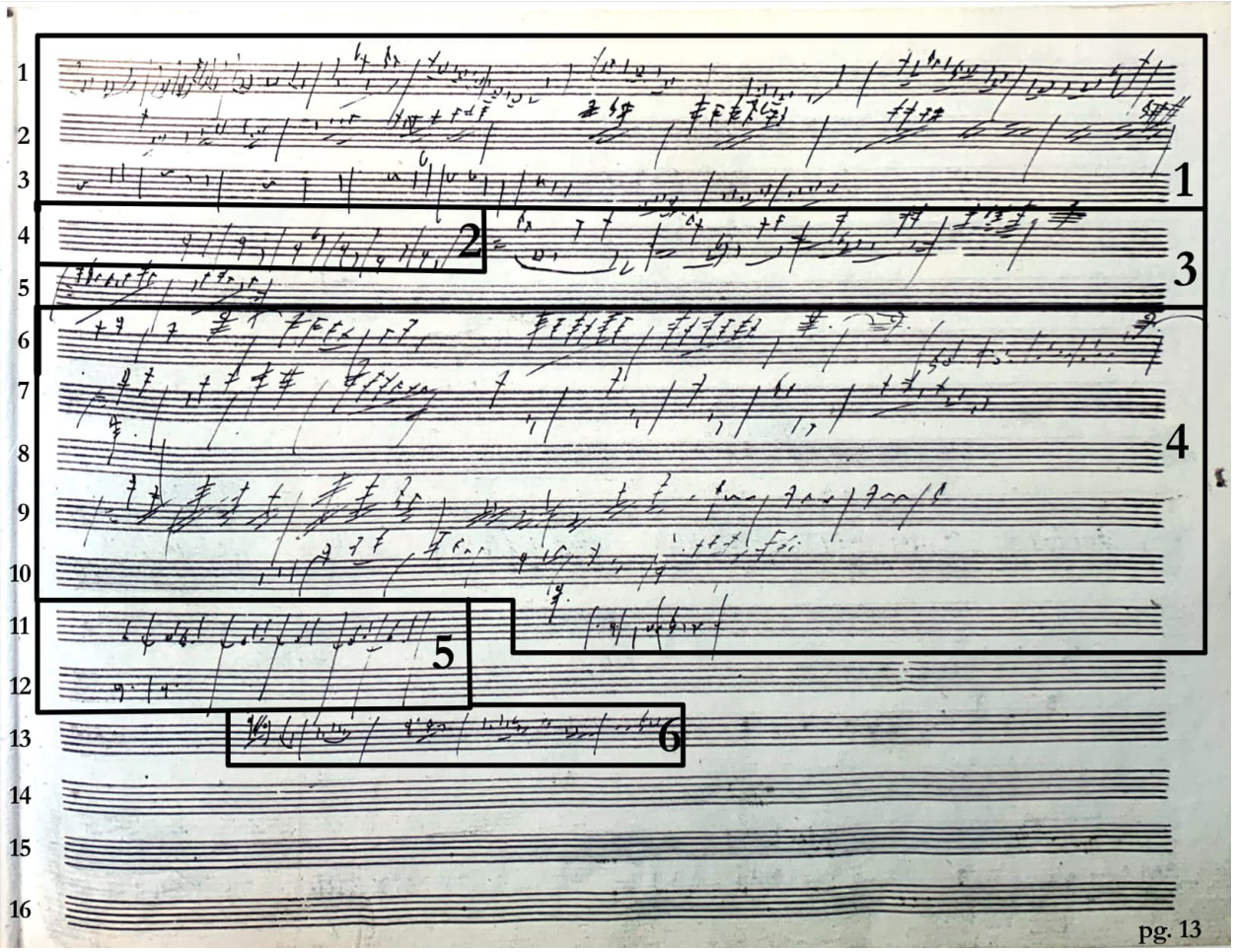


Example 183: CS 2.1, mm. 65–76; Subordinate Theme 1, Continuation & Cadential (*ES* p. 13, st. 1–2)



6.4.5 Sketches for a New Subordinate Theme on Page 13?

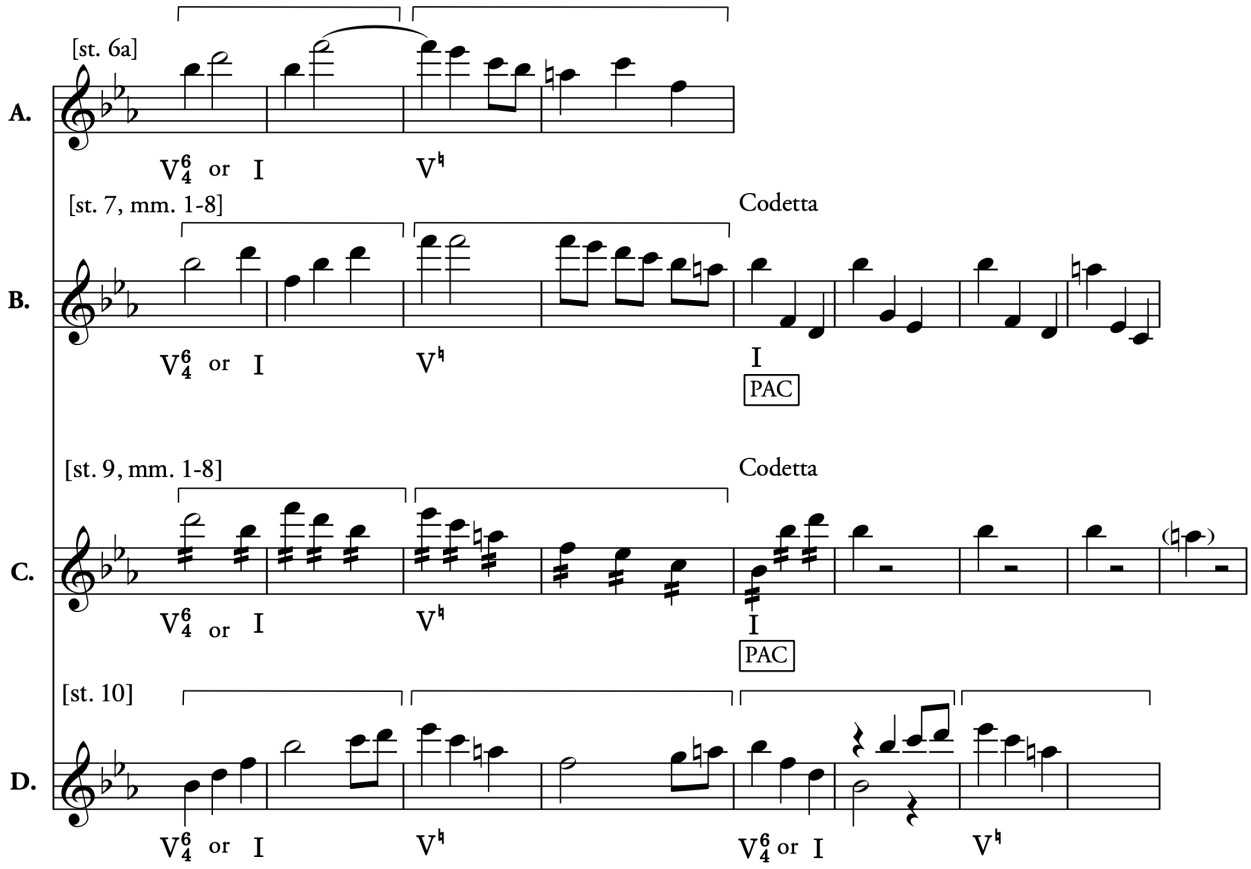
Sketchbook Excerpt 11: *ES* p. 13, Segmented into 6 parts



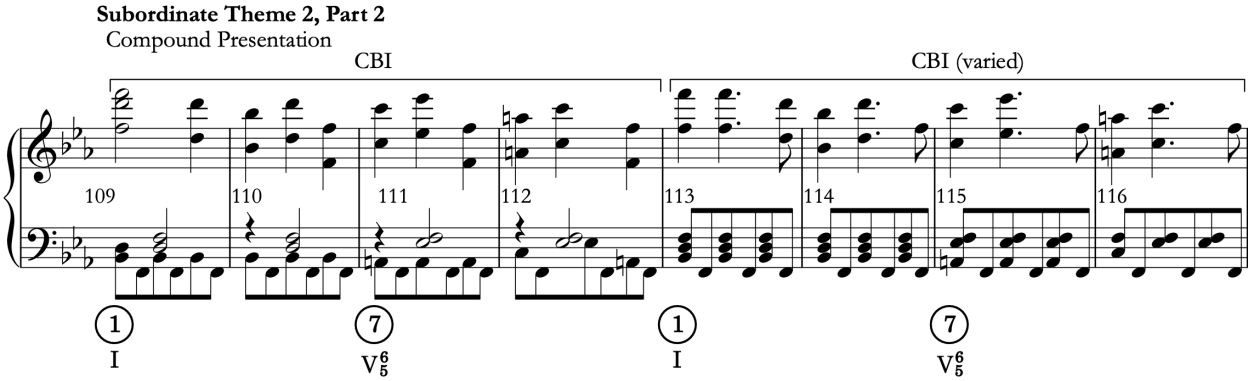
Let us turn now to the fragments that Beethoven wrote on staves 6–11 boxed as "4" in Sketchbook Excerpt 11 (box 3 was discussed above, see Example 182). Example 184 transcribes and analyzes four of the fragments sketched on staves 6 (A), 7 (B), 9 (C), and 10 (D). Lockwood and Gosman (2013a, 35–36) propose that the first four measures of A, B, and C, and the complete eight measures of D, are earlier versions of the "B♭ theme," that is, the final exposition's subordinate theme 2, part 2's compound presentation (compare the excerpts in Example 184 with the treble voice in Example 185). They acknowledge, however, that "it was on page 17 [of the sketchbook] that Beethoven first considered replacing the E♭ opening theme [i.e., the main theme material] with the B♭ theme [subordinate theme 2, part 2]." As he did not introduce the new compound presentation that starts the subordinate theme 2, part 2 until page 17, but these sketches were written on page 13, they

suggest that Beethoven may have returned to the empty staves on page 13—presumably sometime after page 17—to try out alternate forms of the subordinate theme 2, part 2 compound presentation. In what follows, I raise some doubts about this interpretation and offer a different reading of these fragments.

Example 184: *ES* p. 13, st. 6 (A), 7 (B), 9 (C), 10 (D)

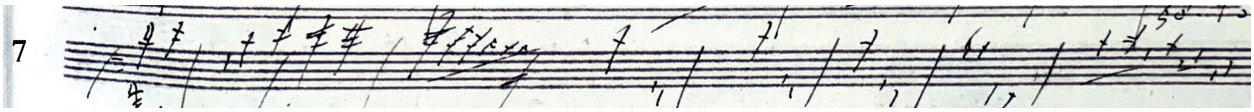


Example 185: Op. 55, I., mm. 109–116, Piano Reduction, Subordinate Theme 2, Part 2

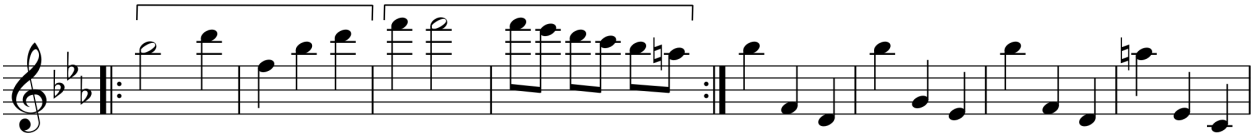


Several clues on page 13 suggest that the fragments shown in Example 184 were not initially planned as alternate versions of the subordinate theme 2, part 2 compound presentation (Example 185) but were instead intended as prolongations of the penultimate dominant for the final PAC. Consider first fragment B (Example 184) written on staff 7, mm. 1–8. An excerpt of this staff in Beethoven's handwriting is shown in Sketchbook Excerpt 12 and Lockwood and Gosman's transcription is reproduced in Example 186. It does appear, as Lockwood and Gosman suggest, that Beethoven wrote repeat signs around the first four measures. But while these repeat signs could suggest the makings of a larger compound presentation, the four measures that follow the repeat signs match verbatim the codetta material written at the end of CS 2.0 (compare with Example 187, mm. 127–130). Consequently, the repeated four measures on staff 7 suggest a prolongation of the cadential dominant, which resolves to the subordinate key tonic to bring the final PAC of the exposition. The four measure fragments do not therefore suggest a new initiating function for the subordinate theme 2, part 2.

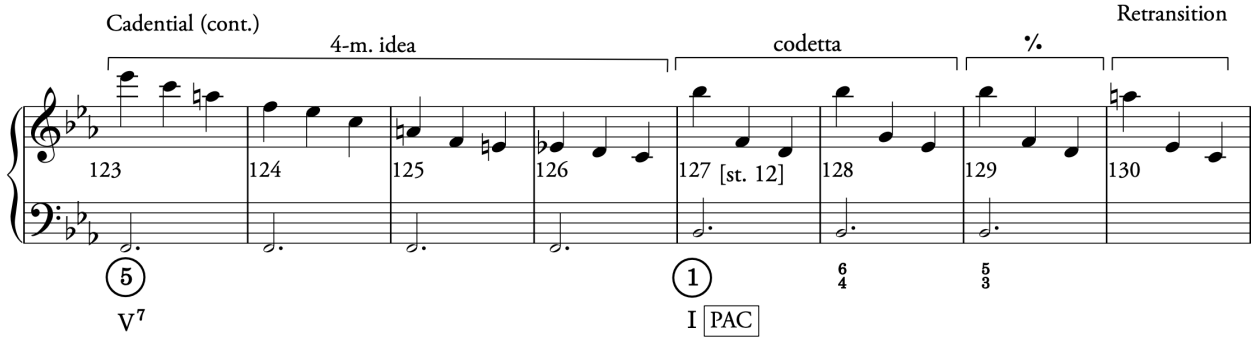
Sketchbook Excerpt 12: *ES* p. 13, st. 7



Example 186: *ES* p. 13, st. 7

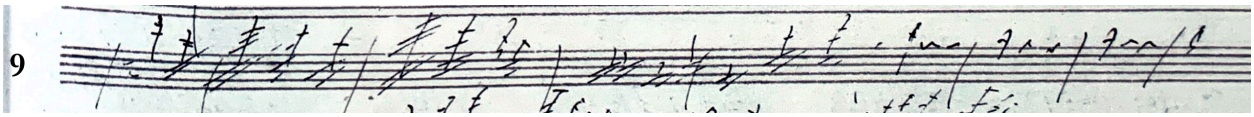


Example 187: CS 2.0, mm. 123–130; Cadential and Codetta

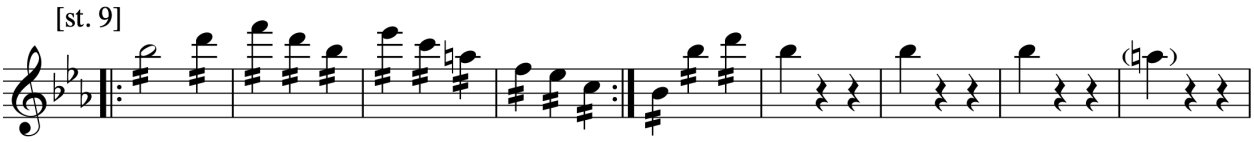


Consider now the C fragment written on staff 9 (see Sketchbook Excerpt 13 transcribed in Example 188).[186] Yet again, Beethoven follows the first four measures with material that emphasizes B-flat on the downbeats of the next three measures, followed by an A-natural on the last measure. This material also looks like codetta material and resembles the downbeats of mm. 127–130 in CS 2.0 (Example 187). Thus, given these similarities, it makes sense to interpret the first parts of the fragment as a prolongation of the cadential dominant once again (i.e., a cadential six-four resolving to a five-three).

Sketchbook Excerpt 13: *ES* p. 13, st. 9



Example 188: Lockwood's and Gosman's transcription of *ES* p. 13, st. 9, mm. 1–8



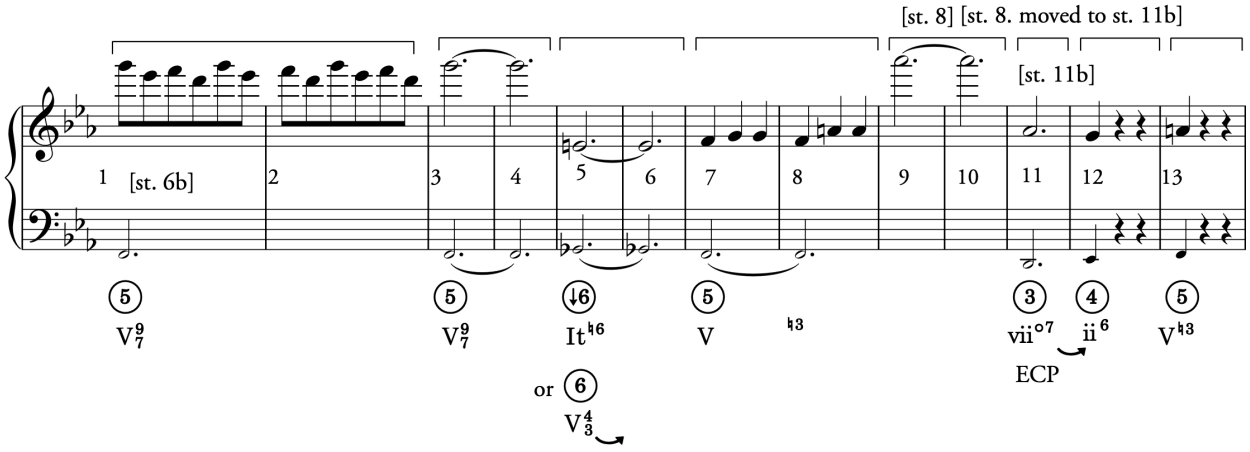
Finally, if fragments B and C (Example 184) are prolongations of the final cadential dominant, then it seems likely that fragments A and D were intended to serve a similar cadential function given their proximity to the codetta material. Thus, to summarize, the fragments shown in Example 184 appear to have been designed to precede the final PAC that closes the exposition, they were not initially intended as alternate versions of the subordinate theme 2, part 2 compound presentation. If this interpretation is correct, then it is unlikely that Beethoven returned to write on page 13 after he wrote material on page 17 to try alternate versions of the subordinate theme 2, part 2 compound presentation. This part of the subordinate theme group was not yet conceived. I suggest instead that he returned to this page at an earlier stage, perhaps after or while drafting CS 3.0 on pages 14–15, discussed in the next chapter. Before we move onto the CS 3 series, however, let us consider the remaining fragments written on page 13.

[186] It is not clear what Beethoven intended to write in the first measure on this staff. In my interpretation of this music, he writes a high D-6 a half-not, followed by a quarter-note B-flat-5 (see Example 184 C.). By contrast, Lockwood and Gosman suggest that Beethoven wrote a half-note B-flat-5 followed by a quarter-note D-6 (Example 188).

After the cadential fragment that Beethoven wrote on staff 6 (Example 184A), he left a gap on the staff, then wrote the fragment shown in Example 189. He seems to have written this material after he wrote the fragments shown in Example 184 because he had to write the material on multiple staves: at the end of staff 6, he continued the high A-flat-7 on staff 8, but then moved the note to staff 11b and wrote the final three measures of the fragment. It is not entirely clear where Beethoven planned to place this music. But given all the other cadential fragments identified above, it is likely that he planned for it to function as a dominant prolongation followed by the re-establishment of an ECP. The E-naturals in mm. 5–6 of the fragment suggest an applied pre-dominant harmony, perhaps an augmented sixth (with G-flat and thus ↓⑥) or an inverted dominant four-three (with G-natural as ⑥) that act as a neighbor to the underlying dominant.

In any event, the primary element that Beethoven seems to have been working on in the fragment (Example 189) concerns the registral placement of important pitches. In the highest register, mm. 1–4 bring a high G-6 that moves to A-flat6 in m. 9–10. At a lower register (in the treble voice), he stages an ascent from E-natural4 (mm. 5–6) to F4 and G4 (m. 7), A-natural4 (m. 8), and presumably B-flat4 in the measures that would follow the fragment. These strong registral contrasts would have been a dramatic way to lead to the final PAC of the exposition.

Example 189: *ES* p. 13, st. 6b, 8, and 11b (measure numbers do not correspond to CS 2.0)

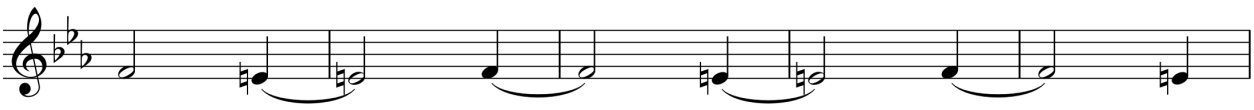


6.4.6 Remaining Page 13 Fragments

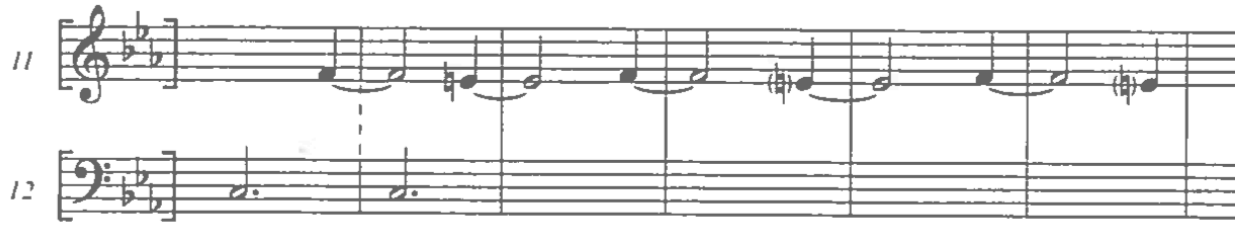
Two remaining fragments written on page 13 (boxes 5 and 6 in Sketchbook Excerpt 11) relate to CS 3.0 discussed in the next chapter. The first, written on staff 11 (transcribed in Example 190) suggests a pre-dominant prolongation of V/V (i.e., C major as V of V in B-flat). Lockwood and Gosman's transcription of staves 11 and 12 imply that staff 11 was coupled with staff 12 (Example 191, see the

dotted line marking the first measure), which has two dotted-half note C3's in the first two measures. But in the original sketch (Sketchbook Excerpt 14), Beethoven's bar lines start after the first two measures. Still, as Lockwood and Gosman suggest, it does seem that Beethoven intended for this fragment to articulate a root position applied dominant (i.e., C as V of V in B-flat major). It is not clear in this context how this material relates to the prior 2.0 sketch. We will see in the next chapter on the CS 3 series, however, how this passage functions within the exposition as part of a new cadential function to a greatly expanded, second subordinate theme.

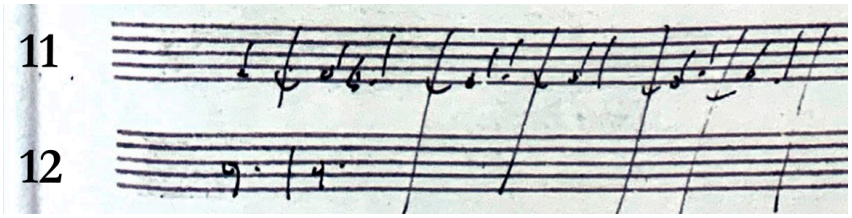
Example 190: *ES* p. 13, st. 11



Example 191: *ES* p. 13, st. 11 Lockwood and Gosman Transcription



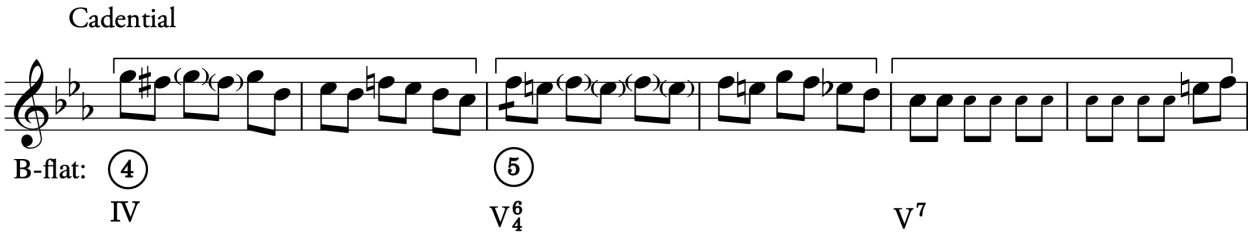
Sketchbook Excerpt 14: *ES* p. 13, st. 11 Original



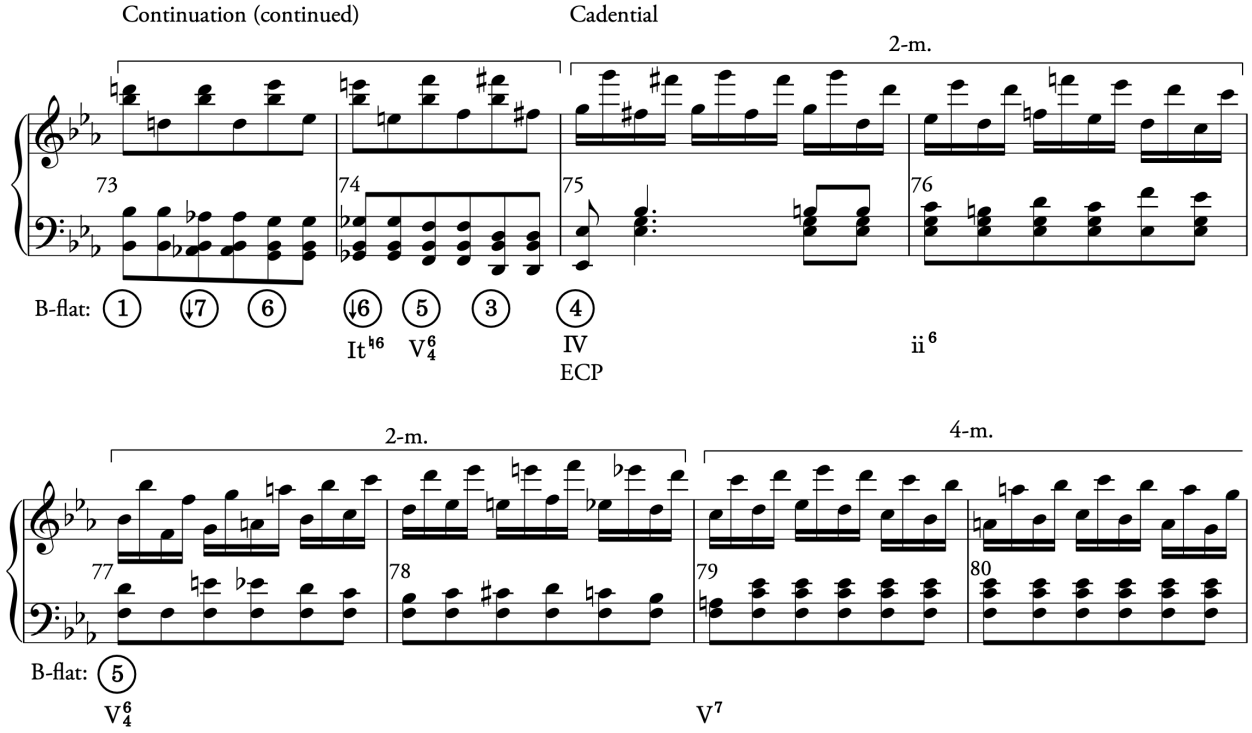
The last fragment written on staff 13 (Example 192, box 6 in Sketchbook Excerpt 11), was likely intended as additional material for the first subordinate theme's continuation (compare with Example 193, mm. 75–78). The first two measures of the fragment (Example 192) suggest a predominant harmony, likely the subdominant, and the remaining four measures suggest a penultimate cadential dominant (dominant six-four to seven-three). This fragment is still considerably shorter than the final version's corresponding passage and will undergo significant transformation in successive sketches. Note especially how the first two measures (Example 192) are sequenced in the next two measures. In the final version (Example 193, mm. 75–78), the ECP

unfolds with more dynamic movement and features less repetition at the two-measure level. Beethoven devotes several more sketches to refining this material that we will explore in the next chapters.

Example 192: *ES* p. 13, st. 13



Example 193: Op. 55, I, mm. 73–80; Subordinate Theme 1, Continuation and Cadential

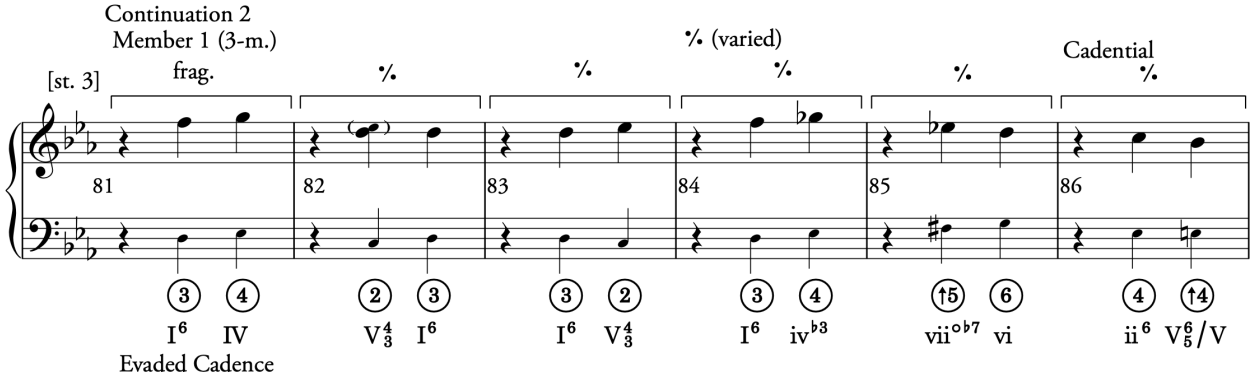


Let us conclude our analysis of the fragments on page 13. These parts revise a large portion of the first subordinate theme and the end of the exposition. Apart from some of the more surface-level changes to the first subordinate theme, the most notable revision is the reintegration of a second, quarter-note based continuation (Example 194) that he originally drafted in the 1.1 branch but abandoned in successive sketches. It is clear at this point that Beethoven had not forgotten about this material, but it is evident that he was not yet sure how he would use it.

Finally, recall that Beethoven sketched several cadential dominant prolongations that he seems to have intended to place before the final PAC. I suggested that, within the context of page

13, these fragments were not originally intended to be alternate versions of the second subordinate theme, part 2 compound presentation, but were instead intended as cadential material before the final PAC. This claim does not completely invalidate Lockwood and Gosman's interpretation—namely, that Beethoven was trying alternate forms of the subordinate theme 2, part 2 compound presentation[187]—because it is possible that these designs motivated aspects of that theme. It is true that the first parts of these fragments project a compound presentation grouping structure that, if harmonized with tonic and dominant harmonizes, could function as a new beginning to a theme part. Moreover, the final subordinate theme 2, part 2 fulfils a quasi-, large-scale cadential role to the entire subordinate theme group (see section 3.3 and 3.3.3) so this reading does not seem too far off in the end. But at this stage in his compositional process, Beethoven had not yet conceived of a plan to introduce a new compound presentation to start a new subordinate theme part 2, so it seems sensible to recognize the more pronounced cadential function of this material instead.

Example 194: Branch 2.1, mm. 81–86; New Continuation following ST1 Continuation 2 (*ES* p. 13, st. 3)



Now that we have a general overview of CS 2.0 and the fragments that Beethoven wrote on page 13, let us now move onto discuss the CS 3 series sketches. We will see how he substantially revises everything after the first subordinate theme. Broadly, he alters the way that he enlarges the subordinate theme by expanding its constituent functions rather than extending the theme group as he did in CS 2.0.

[187] Lockwood and Gosman do not use these form functional terms.

3 SERIES SKETCHES (PAGES 14–18)

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7.1 Introduction

In this chapter, I analyze the 3 series sketches that Beethoven drafted on pages 14–18 of the *Eroica* Sketchbook. Figure 49 diagrams this material as a trunk, 3 branches, and 3 twigs. The 3.0 trunk comprises the material on page 14, st. 1–10, and page 15, st. 1–8. Beethoven uses pages 16–18 to revise the end of the subordinate theme group and therein creates six revisions (refer to Figure 49): 3.1 (p. 15, st. 15 and p. 16, st. 2–7), 3.1.1 (p. 15, st. 15 & p. 16, st. 2–7), 3.2 (p. 17, st. 1–8), 3.2.1 (p. 16, st. 12 & 13, p. 18, st. 1–4), 3.2.2 (p. 18, st. 6–8), and 3.3 (p. 18, st. 10–14).

There are three central features that we will trace in the CS 3 series. These include how the subordinate theme group starts, the structure of second subordinate theme and how it is expanded, and how the new subordinate theme 2, part 2 arises. In general, it is in these sketches that the structure of the subordinate theme group begins to resemble the final version.
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Figure 49: 3 Series Sketches

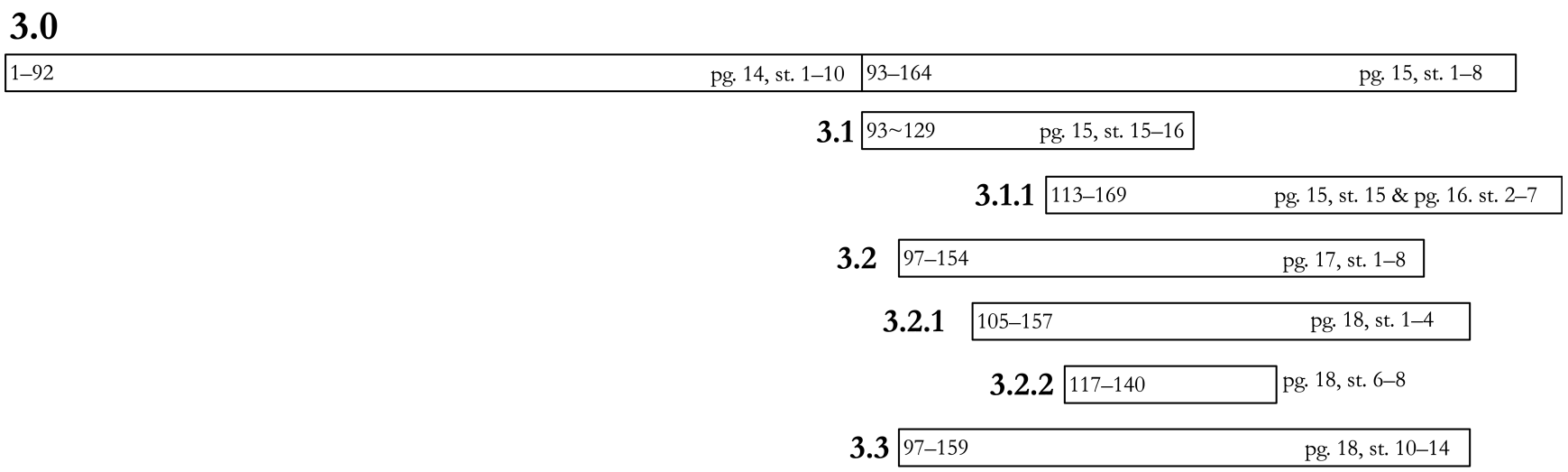


Figure 50: CS 3.0 Form Function Diagram

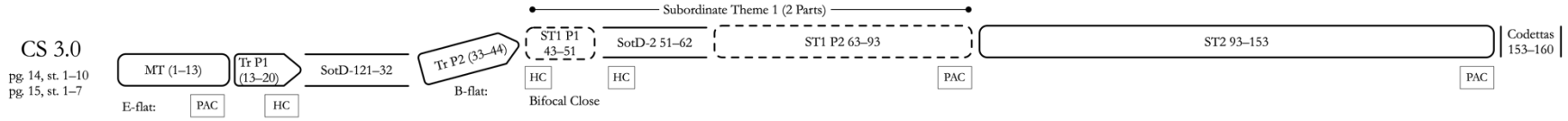
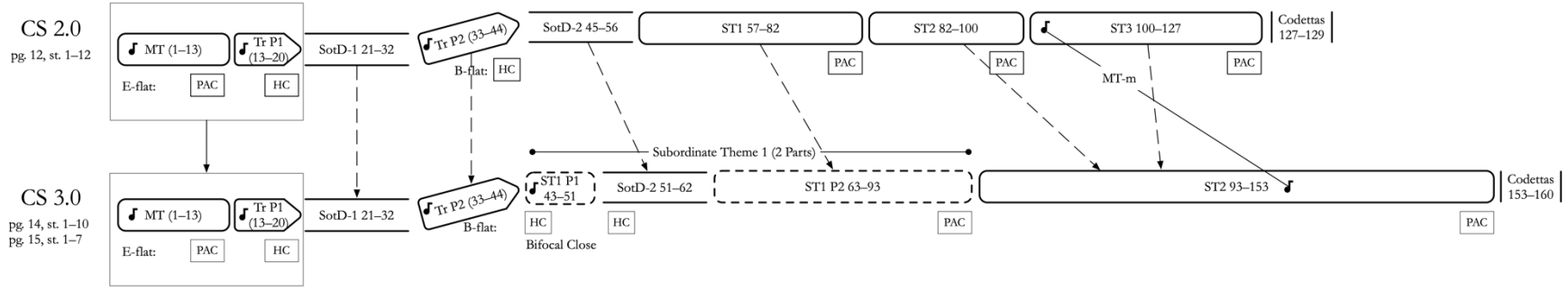


Figure 51: CS 2.0 to CS 3.0 Form Function Transfer Diagram



7.2 Main Theme, Transition, and the Beginning of the Subordinate Theme Group

Let us begin with the 3.0 trunk (i.e., CS 3.0, Vol. 2, pp. 58–63). Figure 50 diagrams the theme functions of this sketch. Broadly, the first four functions of this sketch (Vol. 2, p. 58, mm. 1–42) correspond with what he wrote in CS 2.0, which mostly matches the final. These functions are sketched on page 14 of the sketchbook: the main theme (mm. 1–13), transition, part 1 (mm. 13–21) with its SotD (mm. 21–32), and transition, part 2 (mm. 33–42; excluding the SotD). Everything that follows this material changes (see Figure 51). For now, let us focus on the what follows the second part of the two part transition (Vol. 2, p. 59, CS 3.0, mm. 43–50), as this material is suprisingly different than what he sketched in CS 2.0.

The material that appears in mm. 43–50 in CS 3.0 is a second revision. On staff 5 of page 14 (Sketchbook Excerpt 15), Beethoven writes two layers of music. The first layer (transcribed in Example 195), which he scratches out, includes the main theme material in the home key in the same register that it originally appeared in the main theme function. The second layer (transcribed in Example 196, mm. 43–46), which replaces the crossed-out layer with darker ink, introduces the main theme material in the subordinate key. Because both layers differ considerably from 2.0, let us examine both of their formal implications.

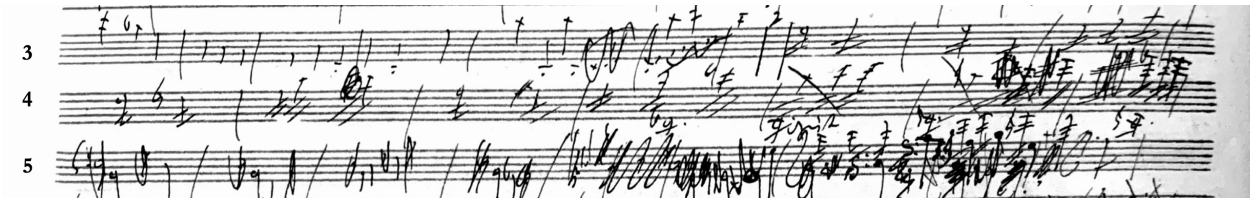
The crossed-out E-flat version of main theme material (Example 195) is extremely unusual, but it does not seem to be merely a slip of mind or a revision of the prior non-modulating transition, part 1. To bring back the main theme material in E-flat after the transition, part 2, Beethoven had to precede this material—that is, end the previous staff (st. 4)—with a dominant harmony in the home key. Although it is difficult to read staff 4 (see Sketchbook Excerpt 15, st. 4, right hand side), Example 197 shows one likely transcription. Here, in the fourth measure of the example, the upper-voice continues the triadic sequence and the bass voice completes the descent from D-flat-4 to B-flat-3 to set up the dominant harmony that would lead convincingly to the E-flat main theme material shown in Example 195.[188]

If Beethoven kept the first layer (i.e., Example 197 and Example 195), the E-flat main theme material would have signaled the beginning of an extremely unusual transition, part 3. This design would have caused the main theme material to appear four times in the home key: in the main theme (mm. 1–4), and three separate times in a very irregular, three-part transition (mm. 13–16, mm. 33–

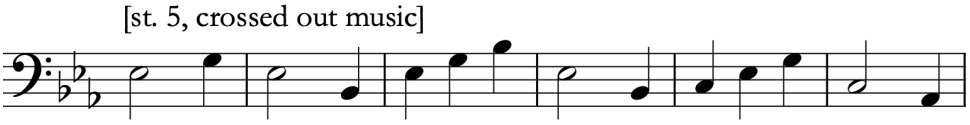
[188] Lockwood and Gosman transcribe only the revised version of this measure shown further below in Example 199; see (Beethoven, Lockwood, and Gosman 2013a, 14).

35, and would-be mm. 43–46). Moreover, each appearance of the main theme material would bring an initiating function.

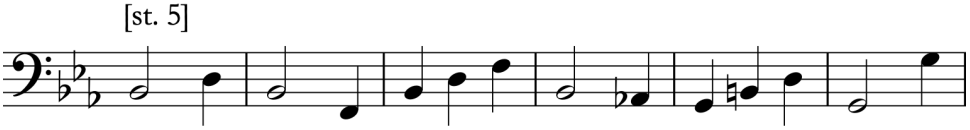
Sketchbook Excerpt 15: *ES* p. 14, st. 3–5



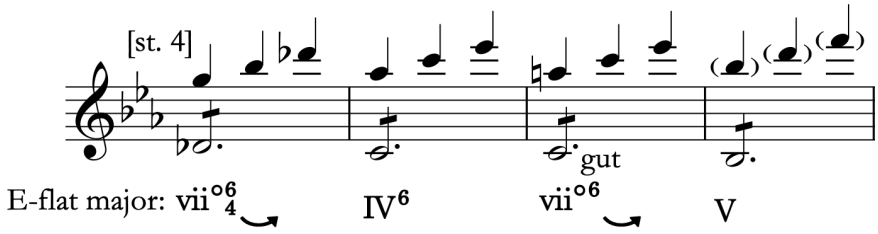
Example 195: *ES* p. 14, st. 5 (crossed out portion) transcribed; Main Theme Material in the Home Key (E-flat major)



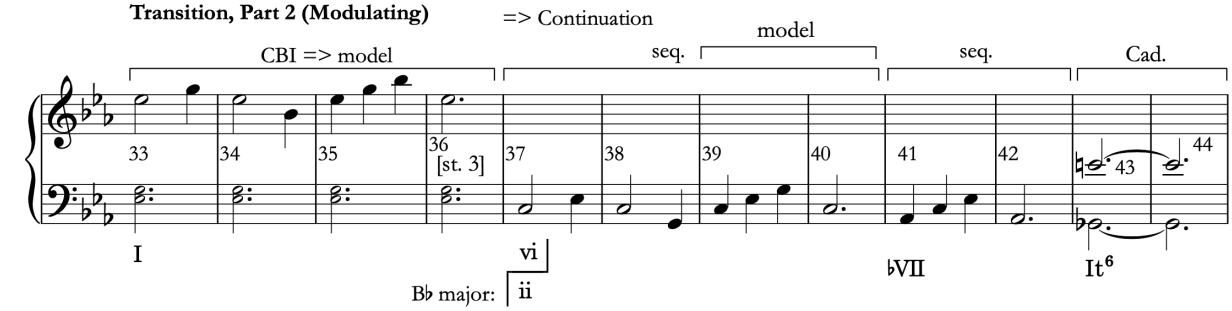
Example 196: *ES* pg 14, st. 5 transcribed; Main Theme Material in the Subordinate Key (B-flat major)



Example 197: *ES* p. 14, st. 4, mm. 4–7; Possible reading

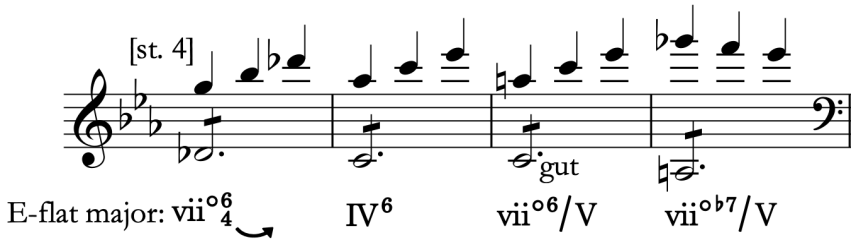


Example 198: CS 2.0, mm. 33–44, Transition, Part 2 (Modulating)

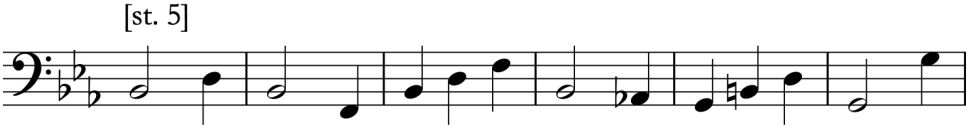


Not long after trying this unusual design, Beethoven crossed out the last two measures on staff 4 (i.e., Example 197) and all the E-flat main theme material on staff 5 (i.e., Example 195). He then changed the last measure of staff 4 to prolong the applied fully diminished seventh harmony (i.e., vii^{o7}/V; Example 199, compare with Example 197) and rewrote the main theme material on staff 5 in the subordinate key (i.e., B-flat major; Example 200). These revisions suggest, surprisingly, that the problem with this passage for Beethoven was not the redundancy of main theme material, but the key. Given what we know from the final version, it is striking that he did not simply eliminate this fourth statement of main theme material altogether. Apparently, he was not concerned about there being four consecutive statements of it, each expressing initiating functions; he was more apprehensive about the order of keys. It is even more astonishing that this four-fold entrance persists in his last exposition continuity sketch (CS 4.0 on p. 20), discussed in the next chapter, and it is not eliminated in any of the successive revision sketches thereafter. He must, therefore, have removed this fourth entry of main theme material during some intervening stage that is no longer extant.

Example 199: *ES* p. 14, st. 4, mm. 4–7 revised



Example 200: *ES* pg 14, st. 5 transcribed; Main Theme Material in the Subordinate Key (B-flat major)

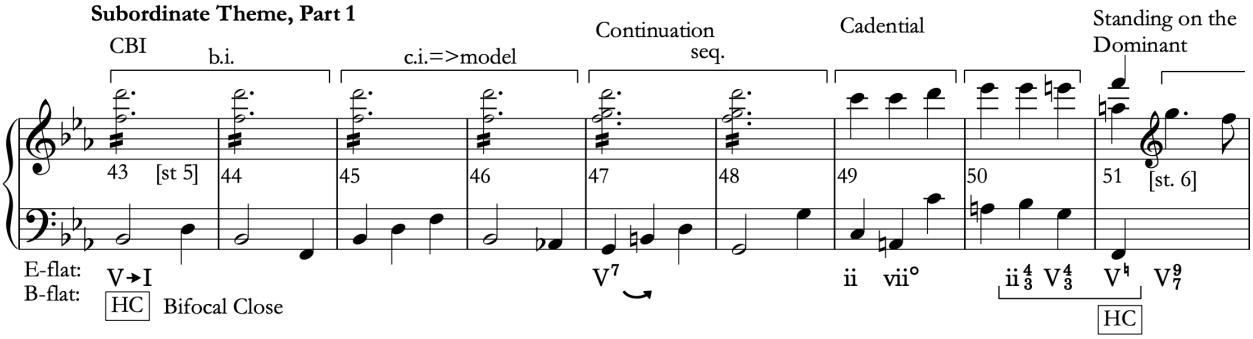


The intrinsic initiating function of the fourth, subordinate key (B-flat) entry of the main theme material (Vol. 2, p. 59, mm. 43–50, reproduced in Example 201) is similar to a passage Beethoven sketched earlier on page 11 in CS 1.0 (Example 202, mm. 31–36). Observe how both versions of this music begin with the main theme material in the subordinate key (B-flat major) and end with a corresponding, SK: HC.

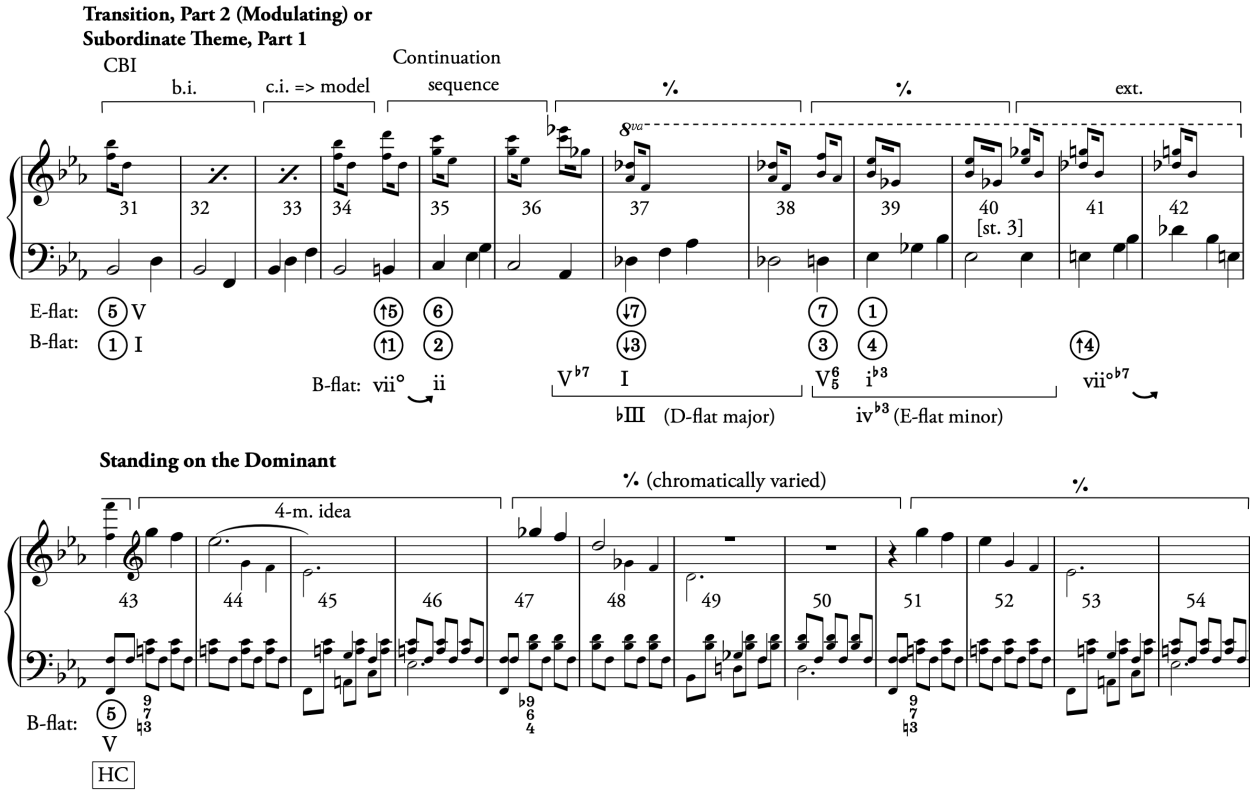
There are two main differences with the 3.0 version (Example 201), however. The first is the formal context. Earlier in CS 1.0, the B-flat main theme material (Example 202) projected the functions of either a modulating, transition, part 2, or a subordinate theme, part 1 depending on whether a bifocal close was interpreted at the start of the material. By contrast, the corresponding B-flat main theme material in CS 3.0 appears after two non-modulating transitions (mm. 13–42), so we are more likely to understand it as beginning the subordinate theme group. Thus, the overall form up to this point in CS 3.0 is a main theme followed by two, non-modulating transitions, the second leading to a new, main theme-based subordinate theme 1. In essence, the new design obscures—at least, rhetorically—the beginning of the subordinate theme group in a similar way as CS 1.0. Beethoven had not yet abandoned his initial design, even though he changed the second part of the transition in a later sketch.

The second difference with the 3.0 version is the omission of the ascending, chromatic sequence in the bass in the continuation (compare Example 201, CS 3.0, mm. 46–50 with Example 202, CS 1.0, mm. 35–41). In CS 1.0, Beethoven introduced the chromatic line to tonicize D-flat major and E-flat minor, likely to foreshadow these same keys at end of the subordinate theme group in the third part of the theme (see Section 4.3.3). In CS 3.0, he seems to have had a different plan because he removed the chromatic ascent and instead tonicized the supertonic (Example 201, m. 49) with an applied dominant (m. 47–48). This change allowed him to extend the passage to a more normative eight measure without introducing chromatic motion in the bass voice, but the prolonged supertonic is unusual. Finally, to conclude this theme part, mm. 49–50 bring a pre-dominant prolongation that sets up a SK: HC which arrives in m. 51 (the first HK: HC appeared in m. 43 as a bifocal close). Up to this point, the exposition is monothematic, that is, all the material that generates the initiating theme functions of the main theme and transition, besides the SotDs, use main theme material.

Example 201: CS 3.0, mm. 43–51; Subordinate Theme 1, Part 1 (*ES* p. 14, st. 5–6)



Example 202: CS 1.0, mm. 31–54; Transition, Part 2 (Modulating) or Subordinate Theme 1, Part 1 (*ES* p. 11, st. 2–3)

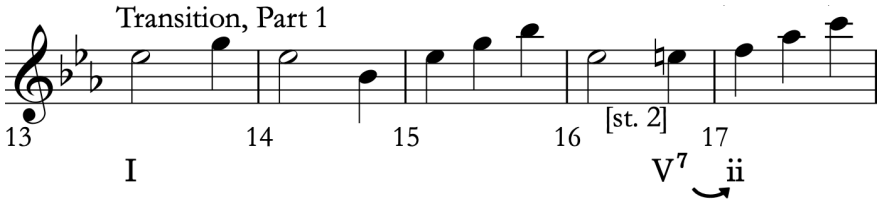


In addition to the unusual introduction of B-flat main theme material in CS 3.0, there are more unexpected elements in the transition. In the second, non-modulating transition (see Vol. 2, p. 58, CS 3.0, mm. 33–42) Beethoven also reintroduces the chromatic redundancy in the continuity voice that he removed in the previous 2.0 sketch (i.e., the move from E-flat, E-natural, and F in mm. 36–38; refer to Section 6.3.1). In a sense, then, he reverted the 3.0 transition back to the design he sketched in the 1.2 branch, because first and second parts of the transition's leading voice (the top-most voice) moves through E-natural (compare Example 203A and B respectively). It seems,

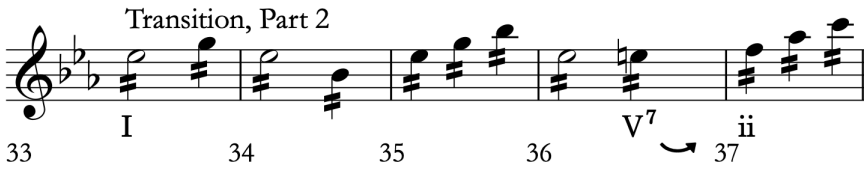
therefore, that Beethoven's desire to expand the sonata functions—except for the main theme—trumped other issues of functional, harmonic, and melodic redundancy. This hypothesis is supported by other features CS 3.0 that suggest that expansion was Beethoven's primary goal for this sketch.

Example 203: CS 3.0, Transition Part 1 and 2

A. mm. 13–17 (*ES* p. 14, st. 1–2)



B. mm. 33–37 (*ES*, p. 14, st. 3–4)



Let us turn now to what follows the fourth entry of main theme material beginning in CS 3.0 m. 51. At the end of the new subordinate theme 1, part 1 (m. 51), Beethoven prolongs the subordinate key dominant with the same SotD that he used in CS 2.0 to prolong the HC obtained in transition, part 2 (compare CS 3.0 in mm. 51–62 with the version in CS 2.0 in Example 204). Overall, then, his decision to have the main theme material appear a fourth time in the subordinate key caused the position of the second SotD (i.e., CS 3.0, 51–62) to shift to a later position (see Figure 52). Thus, if we interpreted the fourth statement of B-flat major main theme material (mm. 43–46) to start the subordinate theme group, then the SotD (mm. 51–62) that follows now resides in that group instead of the transition.

Example 204: CS 2.0, mm. 45–56; Transition, Part 2, Standing on the Dominant 2 (*ES* p. 12, st. 3–4)

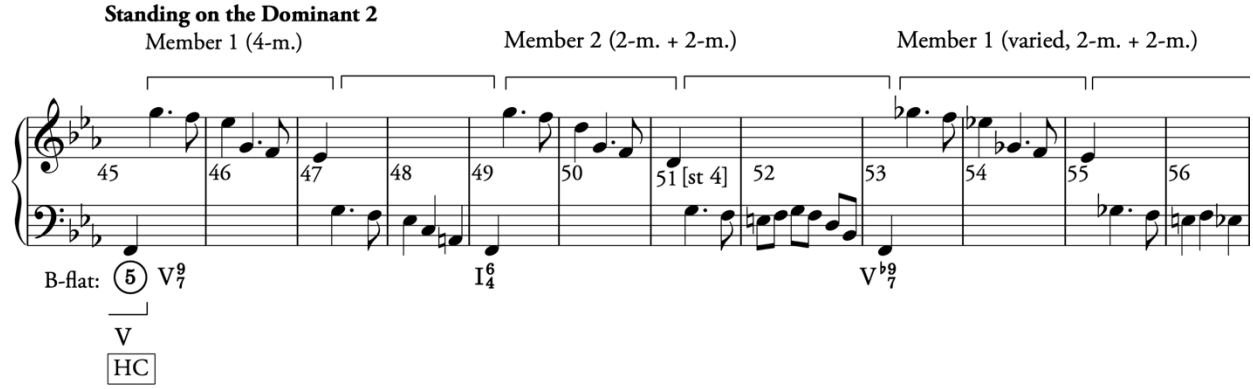
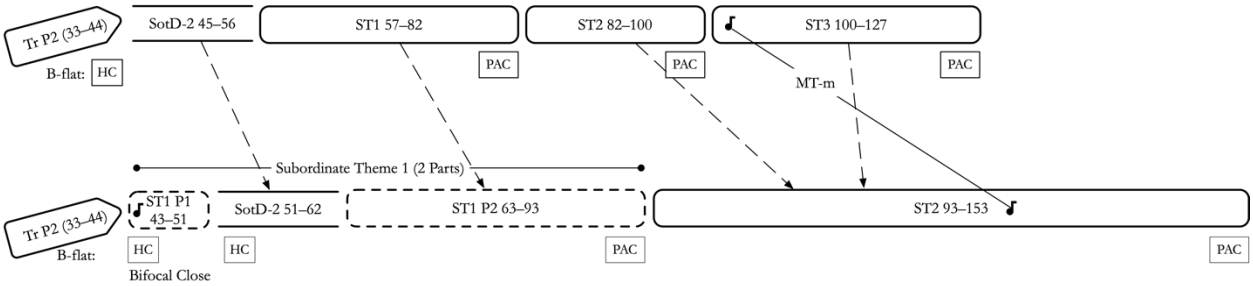


Figure 52: CS 2.0 (top) to CS 3.0 (bottom) Function Transfer, Transition, Part 2 and Subordinate Theme Group



After the, SK: SotD-2 (cf. mm. 63ff), Beethoven re-introduces the invariant, rising, scalar theme (which corresponds to the beginning of the first subordinate theme in the final version) that he sketched in all previous sketches. He writes the same compound presentation (mm. 63–70) as in CS 2.0 but revises and expands the continuation that follows (mm. 71–93). Consequently, mm. 43–93 in CS 3.0 are best interpreted as a two-part theme that is bisected with an internal SotD (mm. 51–62). This change causes the remaining subordinate themes in CS 3.0 to shift to the right in relation to how they were organized in CS 2.0 (refer to the transfer arrows in Figure 52). As the functions of the 3.0 second part of this first subordinate theme are equivalent to those of the corresponding music in the 2.0 sketch (i.e., mm. 63–93 in CS 3.0 include compound presentation followed by a continuation and ECP, just like it appears in CS 2.00), let us temporarily table a more detailed analysis of this music. For now, know that the subordinate theme 1, continuation phrase ends with a PAC in m. 93 that elides with the beginning of a greatly expanded subordinate theme 2, discussed next.

To summarize, Beethoven expands considerably the first subordinate theme by adding a new first part and enlarging the second part's continuation phrase. The first part (mm. 43–62) begins with main theme material in the subordinate key, and the second part (mm. 63–92) begins with

scalar compound presentation that has been invariant since the first sketch, which corresponds to first subordinate theme in the final piece. Given that analysts have debated where the subordinate theme starts in the final version, it seems likely that they would have had even greater trouble with the 3.0 design. As I suggested in Section 4.4, Beethoven seems to have wanted to blur the listener's perception of where the subordinate theme group started, perhaps to reserve some "rhetorical space" for the new lyrical theme that he had planned to introduce late in the development.

7.2.1 Subordinate Theme 2

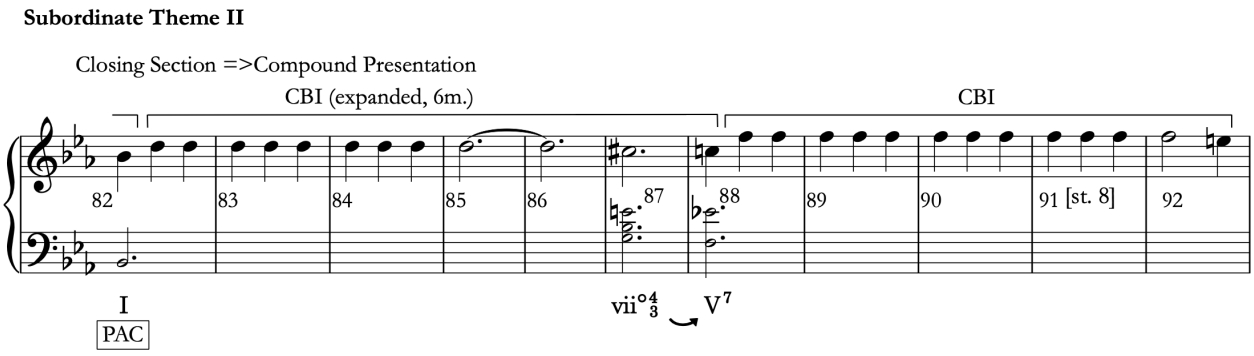
Now that we have an overview of the main theme, transition, and unusual beginning of the subordinate theme group, let us turn now to the more substantial changes that Beethoven makes to the second subordinate theme that follows (Vol. 2, pp. 60–62, mm. 93–153). Beethoven expands this theme to an extraordinary size in three ways. First, he enlarges the initiating function by repeating the compound presentation one octave higher (i.e., mm. 93–100 repeat in mm. 101–108). This repetition forms a "grand presentation," that is, a two-fold repeat of a compound presentation.

Second, he builds a continuation with the main theme material in E-flat major (m. 109–112), which sounds as the subdominant in the subordinate key. Compared to the CS 2.0 sketch, the main theme material now brings a new function, namely, a medial continuation, discussed below. Finally, he greatly expands the rest of the theme (mm. 115–153) with an internal HC and SotD, followed by a greatly expanded cadential function. As this music differs considerably from what he wrote in CS 2.0 and begins to establish the structure that will emerge in the 4 series sketches and the final version, let us examine the component parts of this subordinate theme 2 in greater detail.

As was mentioned above, the principal guiding goal in CS 3.0 seems to be expansion. This enlargement begins right-away with the subordinate theme 2's initiating function (mm. 93–108), which is doubled in size with repetition to form a grand presentation. In both compound presentations, a tonic-based CBI is sequentially repeated a whole-step higher (in mm. 97–100 and 105–108) on the supertonic. Note, however, that each CBI differs somewhat from the version sketched in CS 2.0: he removes the chromatic C-sharp in the top-most voice in the first CBI (compare CS 3.0, mm. 93–96 with Example 205, CS 2.0, mm. 82–87) and adds a G-flat in the top-voice of the sequential repetition (CS 3.0, m. 100). He also writes, for the first time, an alto voice in the first compound presentation (mm. 93–99) that replaces the chromatic descent through C-sharp that he sketched in the continuity-voice of CS 2.0 (compare with Example 205, CS 2.0, mm. 86–88).

As this alto voice avoids C-sharp/D-flat, perhaps he was aiming to preserve this pitch class for later in the form (e.g., the recapitulation).

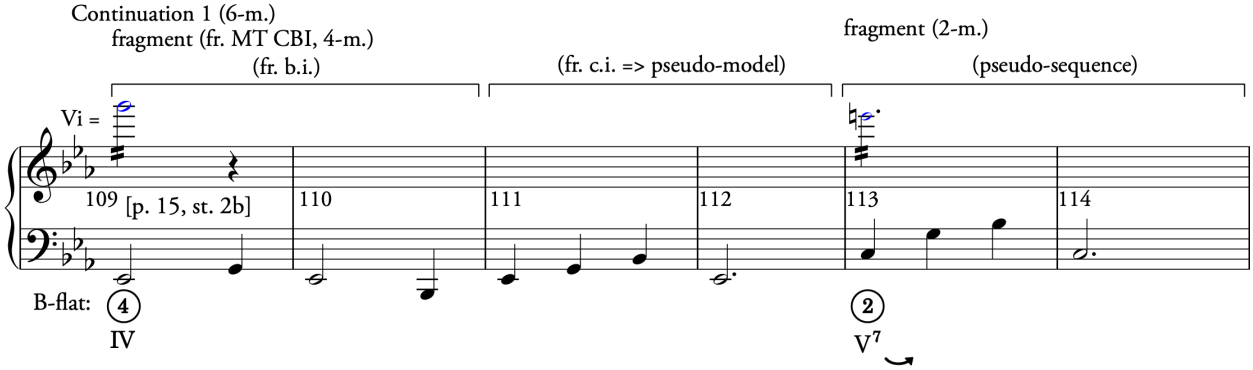
Example 205: CS 2.0, mm. 82–92; Subordinate Theme 2, Compound Presentation (*ES* p. 12, st. 7–8)



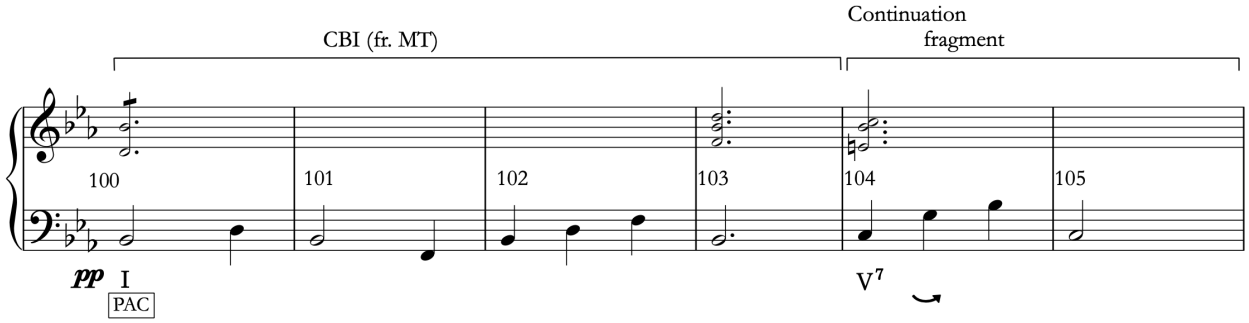
Overall, he greatly expands the initiating unit by extending its components with repetition. Although this design sets the stage for an enormous, second subordinate theme, the grand presentation is problematic because its harmonic syntax and repetitive material is overly static. We will see in subsequent revision sketches how he remedies this deficiency by expanding the theme in other ways.

After the grand presentation (mm. 109ff), we expect new continuational material to destabilize the tonic and bring momentum to the theme. Surprisingly, Beethoven uses the main theme CBI material to accomplish this task (mm. 109–114). Although the main theme material appears in E-flat major, we do not hear a return to that key here, because the prior grand presentation (mm. 93–108) firmly established the subordinate key. Consequently, the E-flat main theme material in mm. 109–112 sounds like a 4-m. fragment that brings subdominant harmony in the subordinate key. The main theme material therefore fulfils a medial continuation function, rather than an initiating CBI function as it has elsewhere. Finally, after the main theme material completes, Beethoven exits the 4-m. of subdominant by sequencing the contrasting idea material up a sixth (mm. 113–114) to create a V^7/V that suggests an imminent internal HC.

Example 206: CS 3.0, mm. 109–114; Continuation (*ES* p. 15, st. 2)



Example 207: CS 2.0, mm. 100-105; Subordinate Theme 2, Part 1 (*ES* p. 12, st. 8)



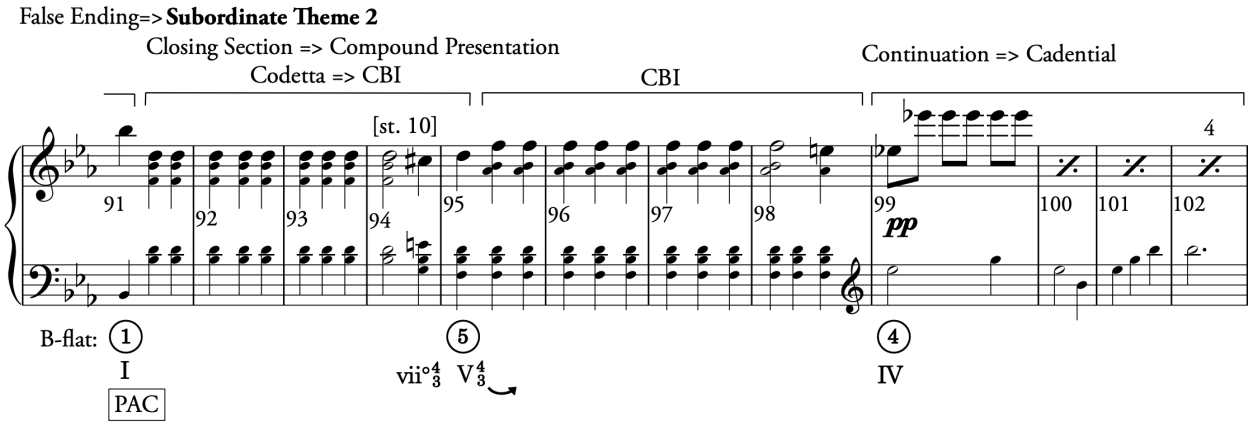
Before we discuss what follows this new main theme-based continuation, let us pause to examine how the main theme material relates to two corresponding passages in CS 2.0 and branch 1.2. The content of the subordinate theme 2's continuation in CS 3.0 (mm. 109–114, reproduced in Example 206) matches the corresponding music in CS 2.0's subordinate theme 3 (Example 207, mm. 100–105): both passages feature the 4-m. main theme material in a low register and a 2-m. pseudo-sequence of the contrasting idea that articulates an applied V^7/V in the subordinate key. The harmony and formal context for these passages differ, however: in CS 2.0 (Example 207), the B-flat main theme material coincided with an elided PAC in m. 100, which caused the main theme material to initiate a third subordinate theme. By contrast, as was discussed above, the main theme material in CS 3.0 (Example 206) arrives after a grand presentation in E-flat major and therefore projects subdominant harmony and thus a medial, continuation function. Therefore, although the material layout of the 3.0 and 2.0 versions corresponds, they articulate different formal functions, the initiating function of a third subordinate theme in CS 2.0 and continuation of a second subordinate theme in CS 3.0.

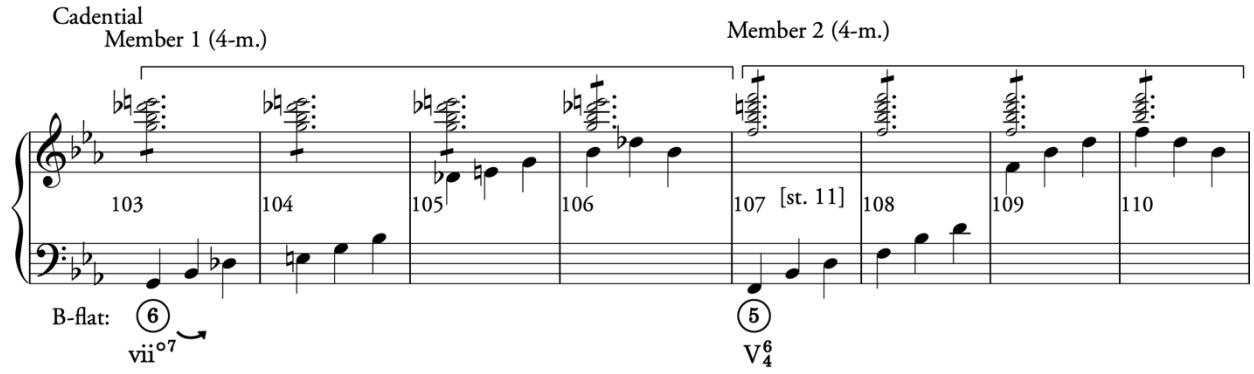
The continuation function in CS 3.0 (mm. 109–114) seems to have been influenced by what he wrote four pages prior in branch 1.2 (Example 208). Recall, that, in branch 1.2, he brought back

the main theme material in the subordinate theme 2 after a compound presentation in E-flat major (Example 208, 1.2, mm. 99–102). We recognized that the main theme material in mm. 99–102 outlined the subdominant harmony and thereby served a continuation becomes cadential function. This earlier version in branch 1.2 must have been inspired by the false exposition repeat that he crafted in the 1.1 branch (Example 209). In a similar way to how the main theme material reappears in the revised 1.2 branch (Example 208, 1.2, mm. 99–102), the main theme material in CS 3.0 (mm. 109–112) projects an even more clear continuation because of the new context that it emerges in: the prior grand presentation in CS 3.0 (mm. 93–108) firmly established the subordinate key, which allows us to hear the main theme material more readily as a fragment, and thus project a continuation function (from a repeated 8-m. unit to a 4-m. unit).

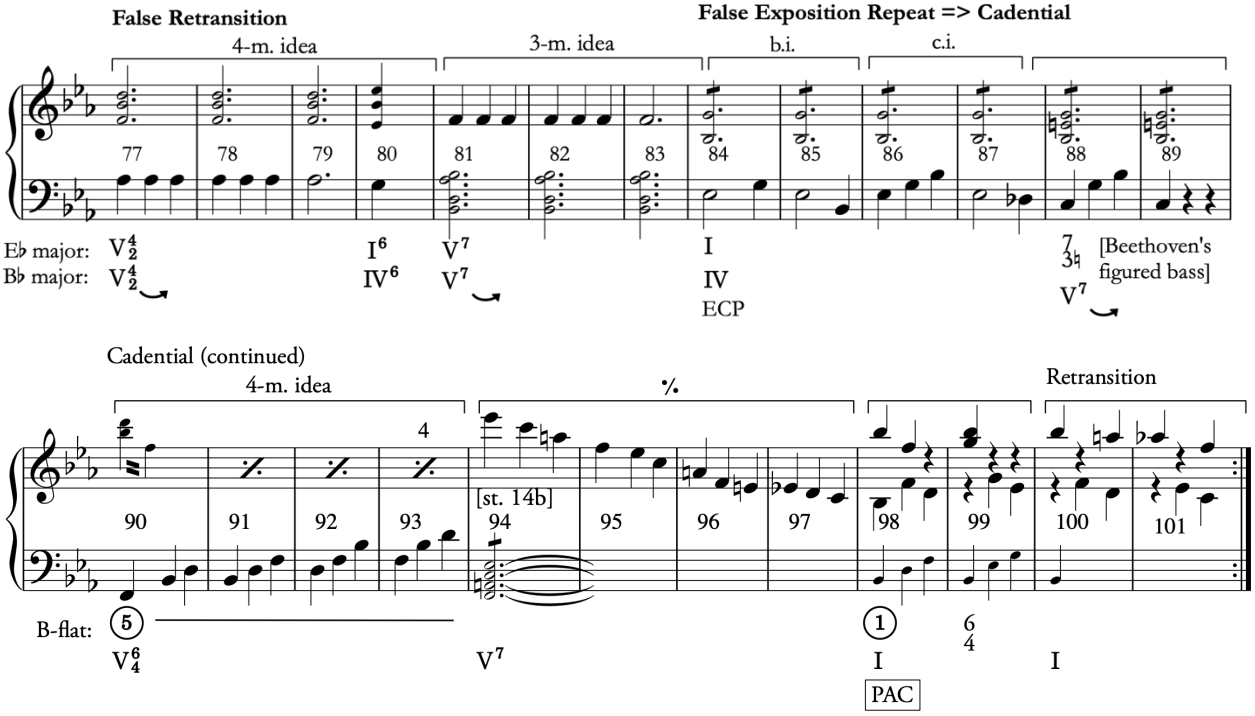
In total, Beethoven's main theme material-based continuation in CS 3.0 synthesizes elements from CS 2.0 and branch 1.2. Presumably, Beethoven wanted to bring back the main theme material in CS 3.0, but he sought for ways to reduce the functional redundancy that he introduced in the previous CS 2.0 sketch. By expanding two-fold the initiating function of the theme to a grand presentation, he solved some of the functional ambiguity that he introduced with the version he wrote in the 1.2 branch and set the stage for a greatly expanded second subordinate theme, but he sacrificed a more dynamic beginning of the theme.

Example 208: CS 1.2, mm. 91–110; Subordinate Theme 2, Compound Presentation and Continuation (*ES* p. 10, st. 9–11)





Example 209: Branch 1.1, mm. 77–101; False Retransition and Exposition Repeat (*ES* p. 11, st. 10 and 14)

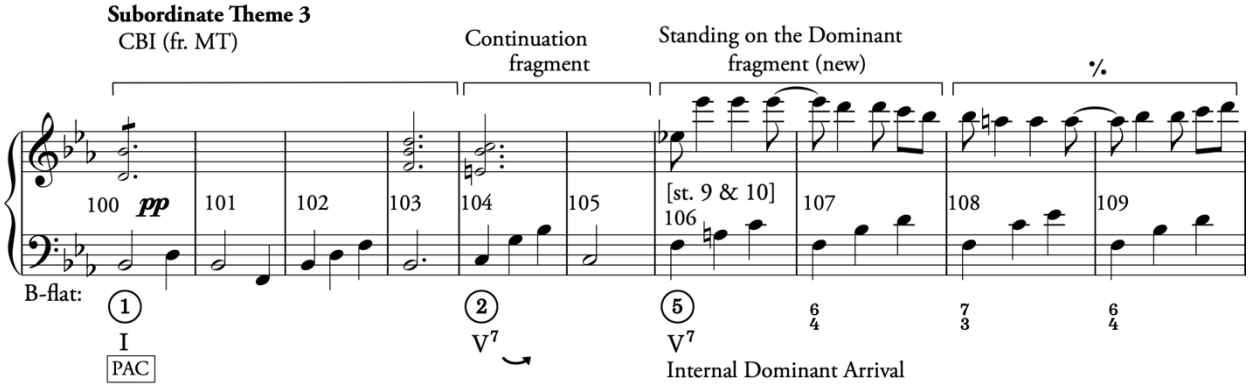


Let us turn now to the music in CS 3.0 that follows the continuation, beginning in m. 115 (Vol. 2, p. 61). Having so far heard a grand presentation and a smaller main theme material-based continuation (i.e., mm. 93–114), we would expect a large cadential function to follow. Before we examine what occurs, recall what happened in prior sketches. In the earlier 1.2 branch (Example 208, 1.2, mm. 99–110), Beethoven followed the continuational main theme material with ascending arpeggios beginning on ⑥ in the bass, which he harmonized as a fully-diminished seventh that resolved to the cadential dominant ⑤ in m. 107. In short, he followed the main theme material directly with cadential content. In branch 1.1 (see Example 209, mm. 88–90), he similarly followed

the main theme material (mm. 84–86) with cadential content: the applied V^7/V in branch 1.1 (mm. 88–89) resolved directly to the ultimate dominant (mm. 90–97), so we reinterpreted the main theme material to bring an ECP. Finally, in CS 2.0, (Example 210), he followed the main theme material with an internal SotD (mm. 106–109), which required him to re-establish the dominant as a penultimate harmony later in the theme.

In CS 3.0 (Vol 2, p. 61, cf. mm. 115ff), he sketches something that is similar to what he wrote in CS 2.0; that is, m. 115, brings a pre-mature dominant arrival and thus mm. 115–120 functions as an internal SotD. (Compare CS 3.0 in mm. 113–120 with the corresponding music in CS 2.0 in Example 210, mm. 104–109). He enlarges the CS 3.0 SotD by two measures. The main theme material in CS 3.0 brings a different function than it did in CS 2.0, however—continuation in the former, but CBI in the latter. Ultimately, then, Beethoven synthesizes designs that he wrote in branches 1.1, 1.2, and 2.0 to create a second subordinate theme that deploys a main theme material-based continuation and an internal 6-m. SotD. Once again, he uses manages to integrate main theme material into the end of the subordinate theme group, but this time it brings a medial function.

Example 210: CS 2.0, mm. 100–109; Subordinate Theme 3 (*ES* p. 12, 8–10)

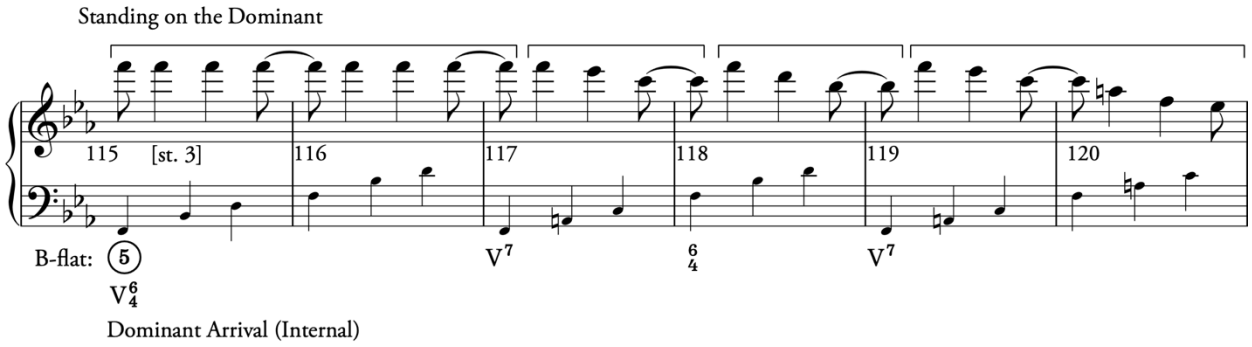


The 6-m. SotD of CS 3.0 (mm. 115–120) features a syncopated rhythm in the top voice that relates closely to the corresponding music in CS 2.0 (compare the music in CS 3.0, mm. 115–120 in Example 211 with CS 2.0 in Example 212). (Although Beethoven does not add a bass voice to the high, syncopated F-6's in the new sketch—3.0, mm. 115–120—it is likely that he intended a dominant prolongation like the previous version). As I suggested in the previous chapter, the opening rhetoric of this SotD gesture might have been one of the early progenitors of the subordinate theme 2, part 2 in the final version, which occupies the same register as the continuity

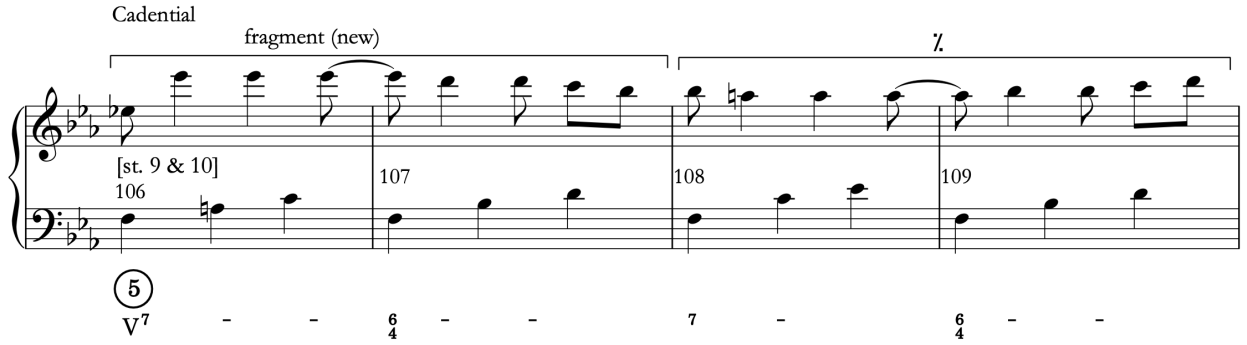
voice (e.g., compare Example 211 and Example 212 with Example 213). To be sure, the SotD material in CS 3.0 (mm. 115–120) does not project the formal characteristics of an initiating function to a theme. Rather, it is the underlying rhetoric, register, and re-energizing texture that seems to have been a catalyst for the character of the final subordinate theme 2, part 2. Perhaps the syncopated upper voice in the CS 3.0 SotD inspired the dotted quarter-note rhythm in the final version's varied repetition of the CBI (Example 213, mm. 113–116). Similarly, as I mentioned in the previous chapter, the final version's persistent oscillation to ⑤ in the bass of the subordinate theme 2, part 2 (Example 213, mm. 109–116) projects some of the characteristics of an SotD, because it could undermine the tonic ① that governs the passage.

In any event, although the function of the internal SotD in CS 3.0 (mm. 115–120) is different than the subordinate theme 2, part 2's compound presentation in the final version, we can find some illuminating parallels. Note, for instance, that, in the final piece, Beethoven built the internal SotD that bisects the second subordinate theme parts 1 and 2 with different material entirely (compare Example 211 and Example 212 with Example 214, mm. 99–108): the material of the internal SotD in the final version (Example 214, mm. 99–108) does not directly derive from the internal SotDs that he drafted in the subordinate theme groups of CS 2.0 and 3.0. These differences support the hypothesis advanced here, namely, that he re-envisioned the CS 3.0 SotD (and thus the equivalent material in CS 2.0) to become the final version's subordinate theme 2, part 2 compound presentation—not the internal SotD—then conceived new material to build a new internal SotD (i.e., Example 214, mm. 99–108) that divides the subordinate theme 2 into two parts. In other words, the new SotD that bisects the subordinate theme 2 into two parts does not seem to be derived from the internal SotDs that he sketched in CS 2.0 and 3.0.

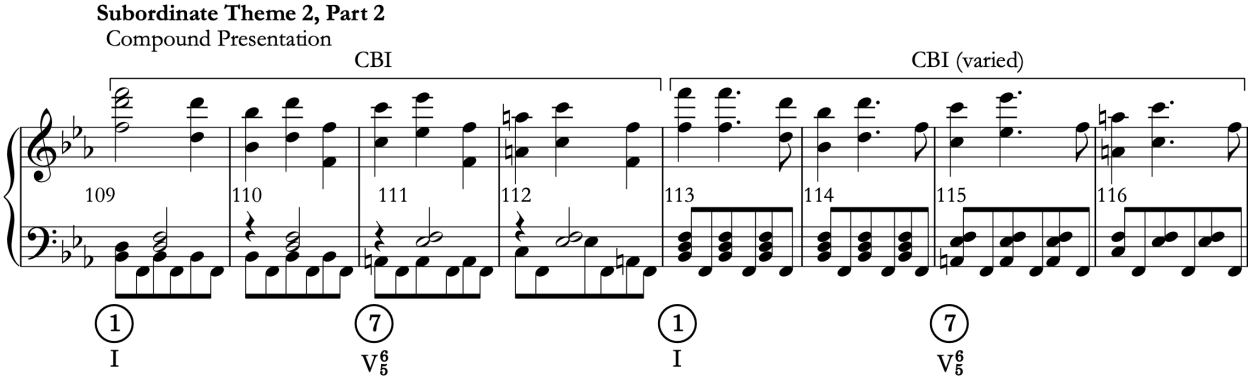
Example 211: CS 3.0, mm. 115–120; Internal SotD (*ES* p. 15, st. 3)



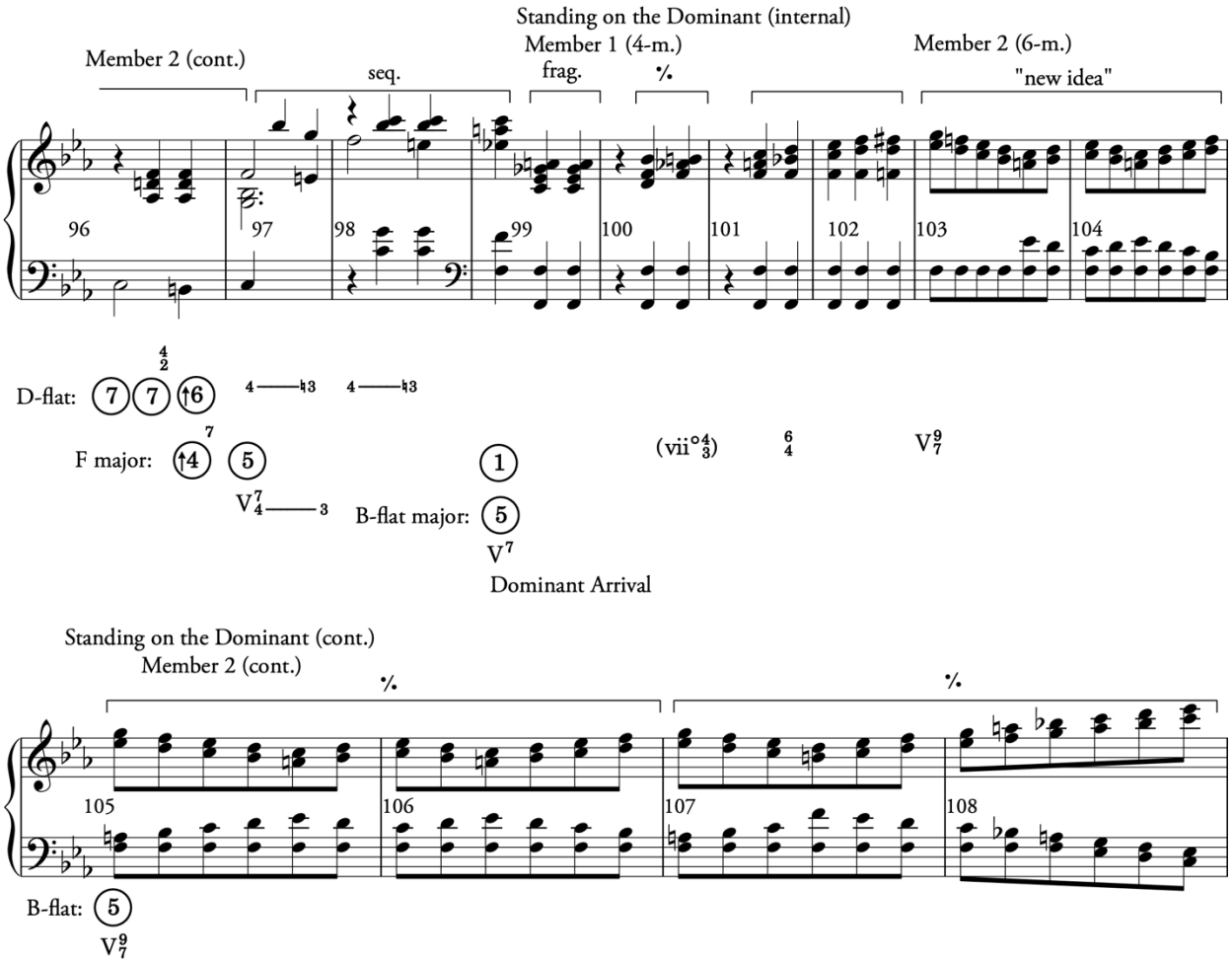
Example 212: CS 2.0, mm. 106–109; Subordinate Theme 3, Cadential (*ES* p. 12, st. 9 & 10)



Example 213: Op. 55, I., mm. 109–116, Subordinate Theme 2, Part 2



Example 214: Op. 55., I. mm. 96–108; Subordinate Theme 2, Part 1, Continuation and Standing on the Dominant

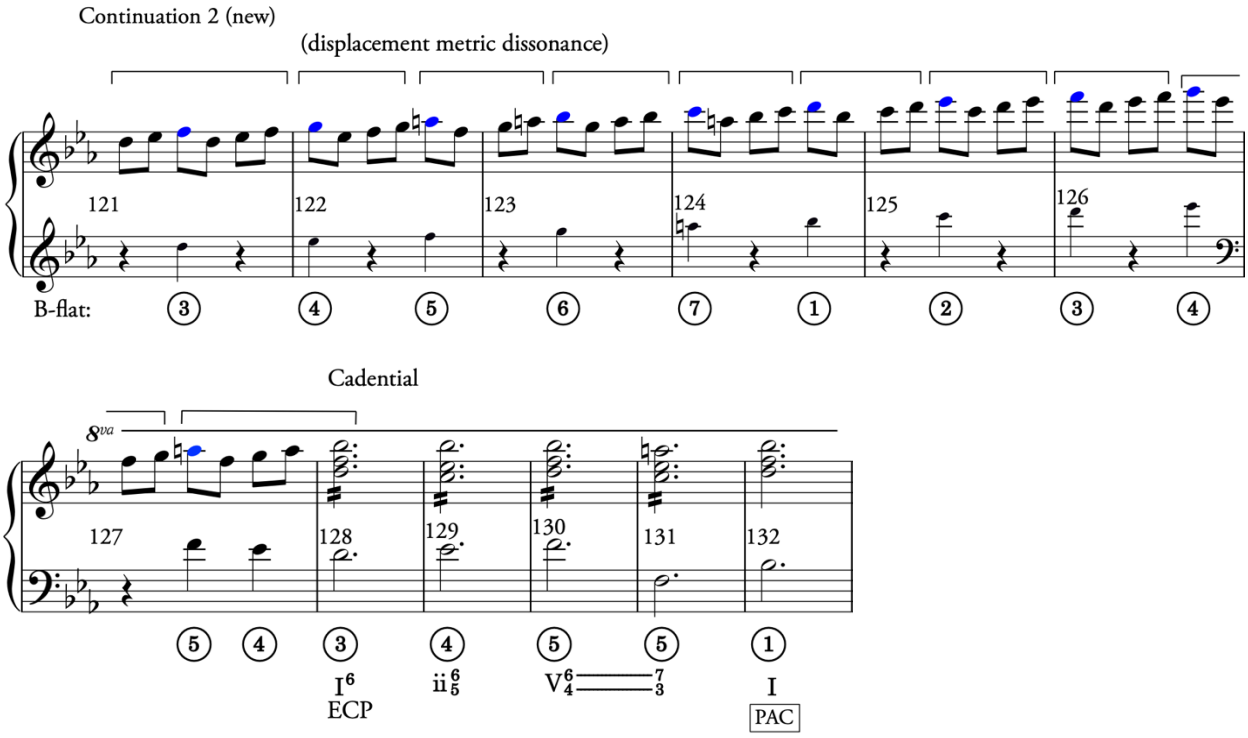


Let us turn now to the music after the internal SotD in CS 3.0 beginning in m. 121 (Vol. 2, p. 61). Having heard an internal dominant arrival and SotD, we would expect the theme to resume with a "new" continuation, or to begin a second part with a new initiating function (see Caplin 2013, 376–77). Beethoven uses the former approach: mm. 121–126 bring a new 6-m. continuation organized around a linear ascent from F-5 to a high G-6 (shown as blue notes in the eight-note passage work). As the suggested parallel tenths harmonization helps show, a displacement metric dissonance accumulates considerable anticipation for what comes next.

Beethoven could have ended the eighth note run as shown in the hypothetical version in Example 215. Here, the pattern would have reached a B-flat in m. 128, and thereafter he could have written a simple ECP (Example 215, mm. 128–131) and closed the theme with a PAC (in m. 132). In CS 3.0, however, he does something more surprising: he breaks the continuity voice pattern at the end of the run by repeating, in eighth notes, the penultimate G-6 (Vol 2., p. 61, CS 3.0, m. 126, beat

3). This deviation leads to an unexpected, high A-flat-6 in m. 127 that leaps down two octaves to A-flat-4 in the next measure (m. 128). It is difficult to know what harmony Beethoven planned for the A-flats in m. 127–128, or if he intended to harmonize these notes at all given the surprising rhetorical effect that this passage engenders. In my reconstruction of this music, I have left the A-flats without a bass note or implied harmony, although a B-natural, which would suggest a fully diminished seventh, could be one possible reconstruction. Whatever harmony he may have planned for these A-flats in mm. 127–128, Beethoven seems to have wanted to surprise the listener at this point by subverting the ending of the theme.

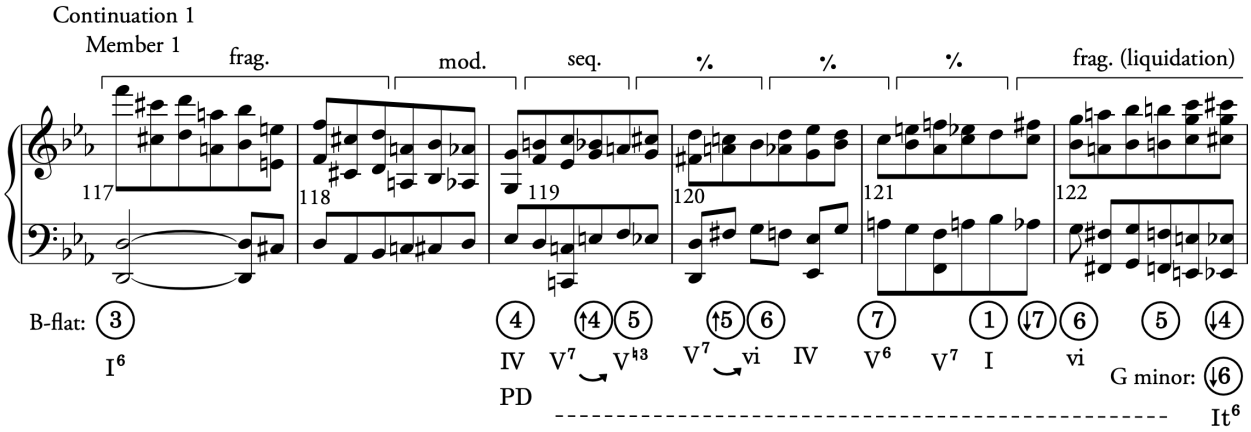
Example 215: Hypothetical CS 3.0, mm. 121–132; Subordinate Theme 2, new continuation and cadential



It is likely that Beethoven would have recognized the excessive nature of the overly mechanical and conventional passagework of the running eighth-note continuation that he drafted in CS 3.0 (mm. 121–126). At this stage, therefore, he seems to have been more concerned with drafting the general dimensions and formal structure of the exposition. The simple continuation in CS 3.0 serves as something like a placeholder that he will improve upon in successive drafts. We will see in the 3 series revision sketches and the 4 series sketches in the next chapter how he redesigns this conventional passagework to become more characteristic—the music that corresponds to the

sketch in the final piece (Example 216) is considerably more sophisticated harmonically and melodically than the mechanical sequence in CS 3.0 (mm. 121–126).

Example 216: Op. 55, I., mm. 117–122; ST2 P2 Continuation

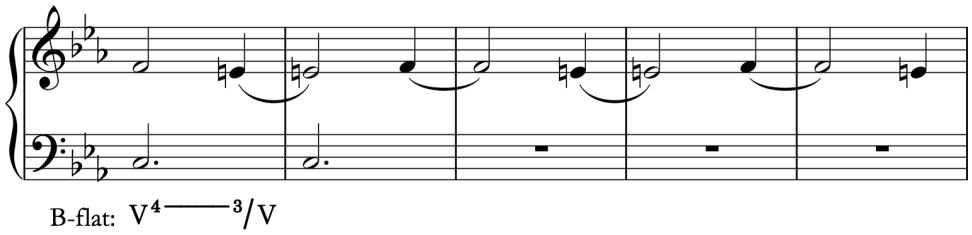


Let us turn now to the material that follows the mechanical sequence in CS 3.0, beginning in m. 128 (Vol. 2, p. 62). After the music leaps down two octaves to A-flat-4 (m. 128), Beethoven undermines the previous energy-gaining continuation 2 with music that projects a more recessive and slower character (mm. 129–136). The leading-voice moves to E-natural in m. 131, which resolves upwards to F in m. 132; this motion repeats twice more in mm. 133–134 and 135–137. This slow neighboring motion around E-natural, combined with the tied dotted half-notes notes that create a displacement hemiola, disorients our sense of the downbeat and throws us further into doubt about what will follow. In my reconstruction of this music, I add a C-3 to the bass voice of mm. 131–136, which suggests a V/V harmonization in the subordinate key and thus a pre-dominant prolongation.

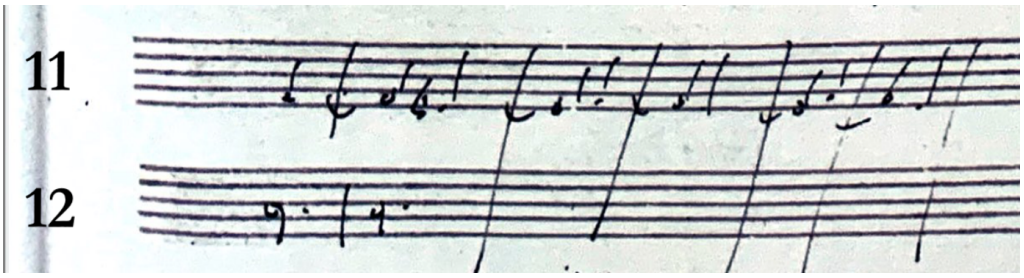
Although this sketch lacks information to fully confirm a V/V interpretation, this harmonization would be consistent with two similar versions of this passage that he wrote on pages 13 and 15 in the sketchbook. On the *recto* page 13, staves 11 and 12 (Example 217, a variant of CS 2.0 discussed in Section 6.4.6), for instance, Beethoven wrote two dotted-half-note C-3's in the bass voice of the corresponding passage that suggested a V/V harmony in the subordinate key. Although is not completely evident whether the two C-3's written on staff 12 were intended to be grouped with the material written on staff 11—recall how the extended bar lines appear *after* these notes in the sketchbook (Sketchbook Excerpt 16)—the implied C dominant seventh as V/V seems likely, and the bass-voice C's do not connect with anything else on the page. I therefore agree with

Lockwood's and Gosman's transcription of this earlier passage on page 13 (Example 218), which includes the C-3s in the grand staff. Finally, there is one more fragment that Beethoven wrote on p. 15, staff 15 (transcribed into a grand staff in Example 219) that matches mm. 131–136 in CS 3.0: in the latter fragment, he similarly harmonized the F to E-natural neighboring motion with a C-3 in the bass. In sum, then, evidence on pages 13 and elsewhere on 15 in the sketchbook supports reading mm. 129–136 in CS 3.0 (written on page 15) as a V/V predominant prolongation.

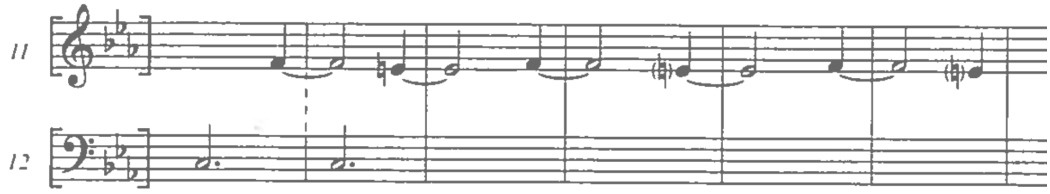
Example 217: *ES* p. 13, st. 11 & 12 Transcribed (CS 2 variant)



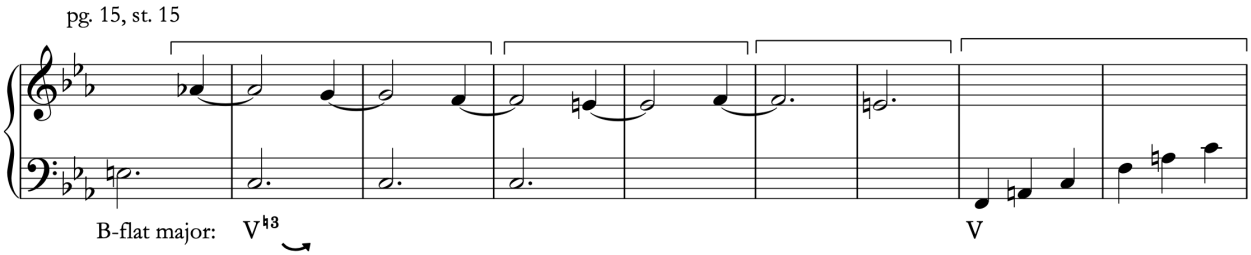
Sketchbook Excerpt 16: *ES* p. 13, st. 11 & 12 Original



Example 218: *ES* p. 13 st. 11–12, Lockwood and Gosman Transcription

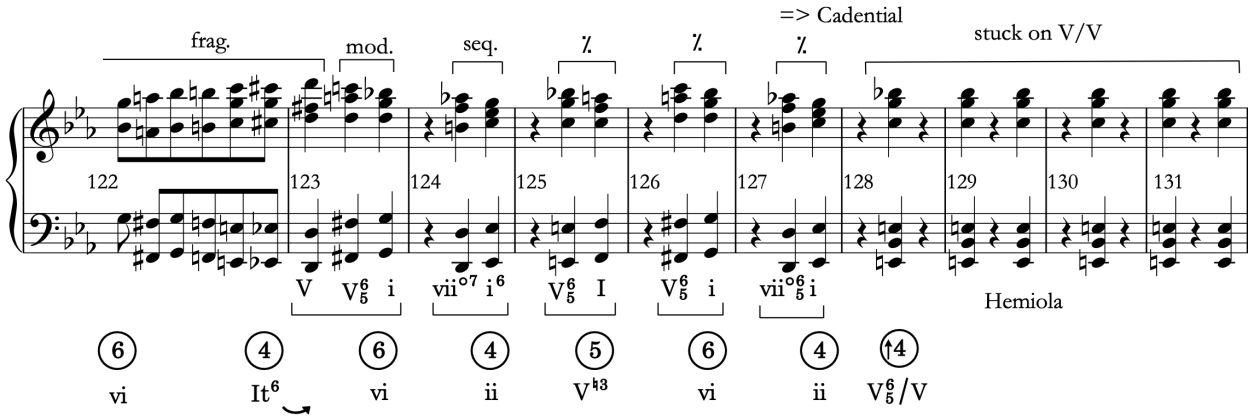


Example 219: *ES* p. 15, st. 15 fragment (CS 2 variant)



Although the specific character of the predominant V/V prolongation in mm. 129–136 cannot be found in the final version of the piece in the exposition, the general idea of being temporarily "stuck" on V/V in the subordinate key becomes a characteristic feature of the end of the exposition in the final subordinate theme 2, part 2 (Example 220, mm. 128–131). We will see in the 3 series revisions, discussed further below, how he recasts the descending dotted half-note passage (i.e., CS 3.0, mm. 131–136) into something that is more like the punctuated quarter-note, "stuck on V/V" in Op. 55 (Example 220, mm. 128–131), and we will discover how he experiments with this idea further in the 4 series sketches in the next chapter. It seems, therefore, that Beethoven arrived at the harmonic design—that is, an emphasis on V/V towards the end of the subordinate theme 2, part 2— before he settled on the content and character that would articulate that idea. In CS 3.0, the V/V prolongation (mm. 131–136) suggests a slower, languid character, whereas in the final (Example 220, mm. 128–131) the punctuated quarter-note harmonies create a more dramatic, arresting effect. Despite these differences, the V/V passage in CS 3.0 (mm. 131–136) is best read as a prolonged pre-dominant in a greatly expanded cadential function.

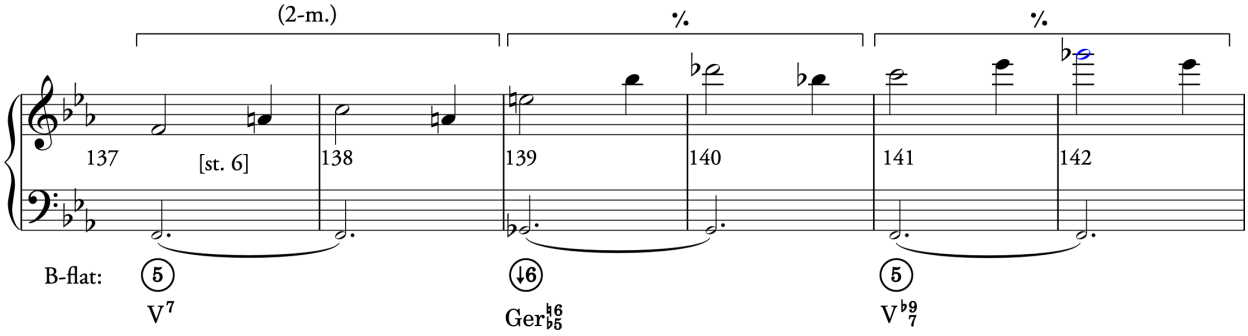
Example 220: Op. 55, I., mm. 122–131, Piano Reduction; Subordinate Theme 2, Part 2, Continuation and Cadential



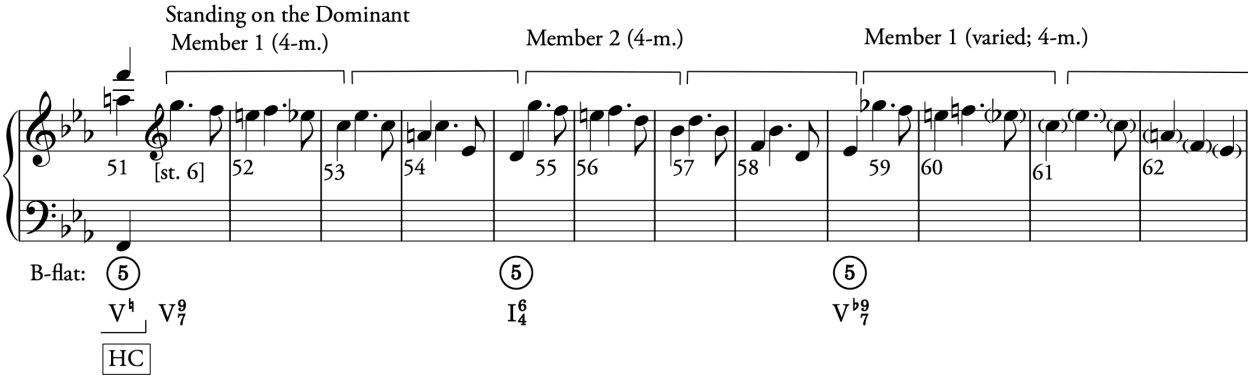
At the end of the pre-dominant V/V prolongation in CS 3.0 (m. 136ff), Beethoven resolves the applied dominant seventh to the penultimate, cadential dominant (m. 137). As we just heard a continuation (mm. 121–126) and prolonged, cadential pre-dominant (i.e., V/V in mm. 131–136), we expect this dominant to be equally, expanded, if not even more so. Beethoven achieves this expansion in two ways. First, he writes a 6-m. dominant prolongation (mm. 137–142) that segments into three 2-m. fragments. The first fragment (mm. 137–138) implies the dominant harmony, the second (mm. 139–140) reproduces the fragment a sixth higher and suggests a neighboring

augmented German-sixth harmony,[189] and the last 2-m. fragment (mm. 141–142), moves up a sixth once more, which outlines a likely $V^{\flat 9}$ harmony that is reminiscent of the same harmony in the earlier transition, part 2's SotD (compare Example 221, mm. 141–142 with Example 222, mm. 59–62). This first part of the dominant expansion (Example 221) uses material inspired from the main theme CBI.

Example 221: CS 3.0, mm. 137–142; ST2 P2, Cadential, Part 2 (*ES* p. 15, st. 6)



Example 222: CS 3.0, mm. 51–62 (*ES* p. 14, st. 6)



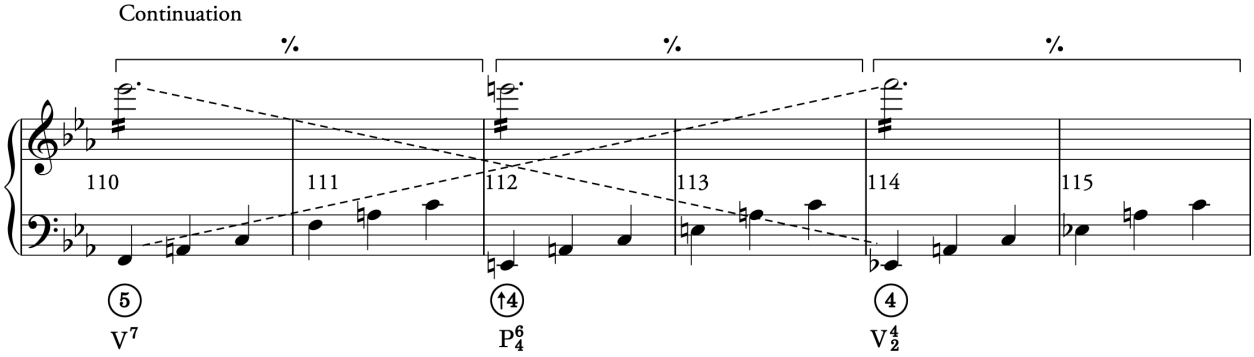
The second way that Beethoven expands the dominant (mm. 143–152) is through a deceptive resolution to the submediant. Following the 6-m. dominant expansion (mm. 142ff), Beethoven delays the PAC further with another 6-m. phrase that re-energizes the cadential function. In the same way as the prior 6-m. dominant prolongation (mm. 137–142) the second 6-m. phrase (mm. 143–148) groups into 2-m. units organized with a bass motion that moves from ↑⑤ (F-sharp in m. 143) to ⑥ (G-natural in m. 145) and ↓⑥ (G-flat in m. 147) before returning to the cadential ⑤ (F in m. 149). In the upper voice, I have added a contrapuntal line that moves from E-flat (m.

[189] A G-natural, which would imply a fully diminished seventh harmony, would also be plausible and stylistic. I have chosen a G-flat instead because it corresponds to other sketch material.

143) to D (m. 145), and E-natural (m. 147) that draws inspiration from a similar passage that Beethoven wrote in CS 2.0 (compare CS 3.0, mm. 143–148 with Example 223, CS 2.0, mm. 110–115, top voice).

Notably in this second part of the dominant prolongation (CS 3.0, mm. 143–148), Beethoven makes explicit the relationship between G-flat and F-sharp that was expressed throughout the CS 3.0 sketch: as G-flat (↓⑥, mm. 147–148), the bass serves as a chromatic upper-neighbor to ⑤ harmonized as an augmented sixth harmony; as F-sharp (↑⑤, mm. 143–144), the bass functions as a chromatic note that must resolve up to the submediant ⑥ (i.e., G minor). Thus, whereas the G-flat in the prior 6-m. dominant prolongation (mm. 137–142) expanded the dominant, the F-sharp expands the penultimate dominant (mm. 145–146) with a deceptive resolution to the submediant; that is, G-flat brings us back to B-flat, whereas F-sharp leads us to G minor.

Example 223: CS 2.0, mm. 110–115 (*ES* p. 12, st. 9 & 10)

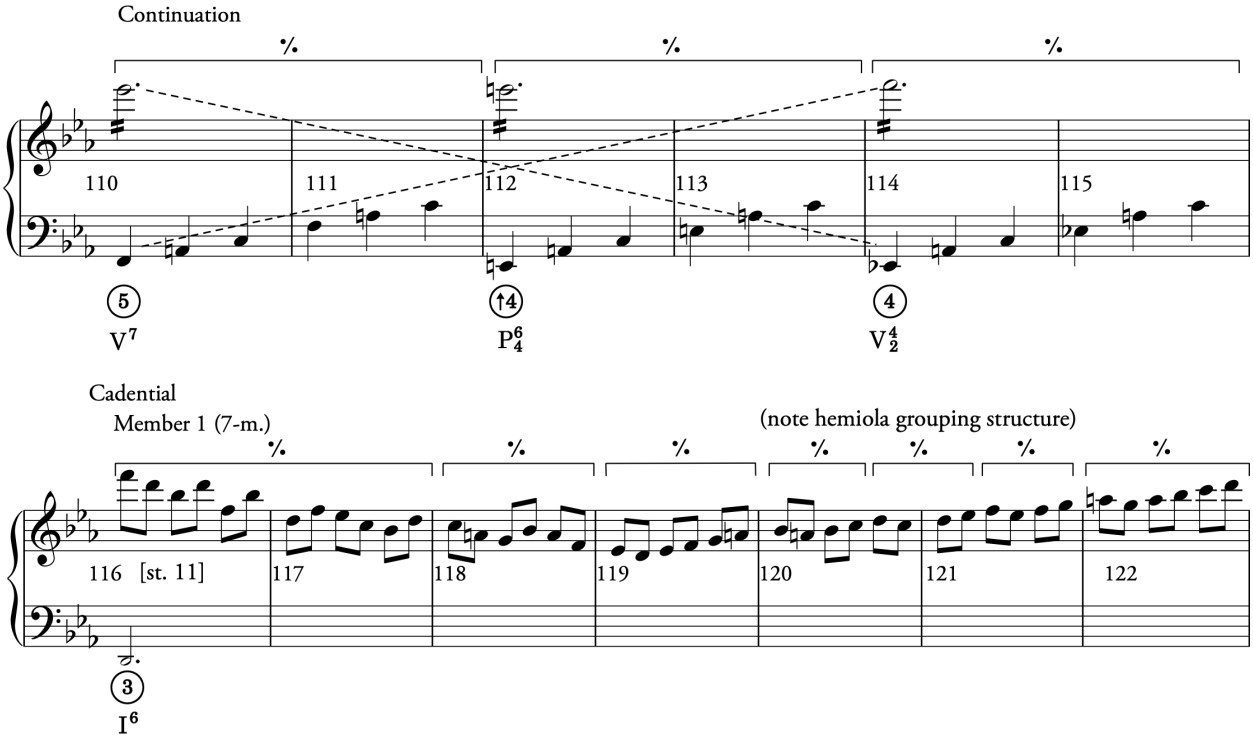


To return to the cadential dominant after the deceptive, submediant resolution, Beethoven employs ↓⑥ (G-flat) in mm. 147–148, harmonized as an augmented German sixth that resolves to the cadential ⑤ in m. 149. Finally, after 4-m. of dominant harmony (mm. 149–152), the long-awaited PAC arrives in m. 153 and an 8-m. closing section follows (mm. 143–160). A brief 4-m. retransition (mm. 161–164) then leads the listener back to the exposition repeat.

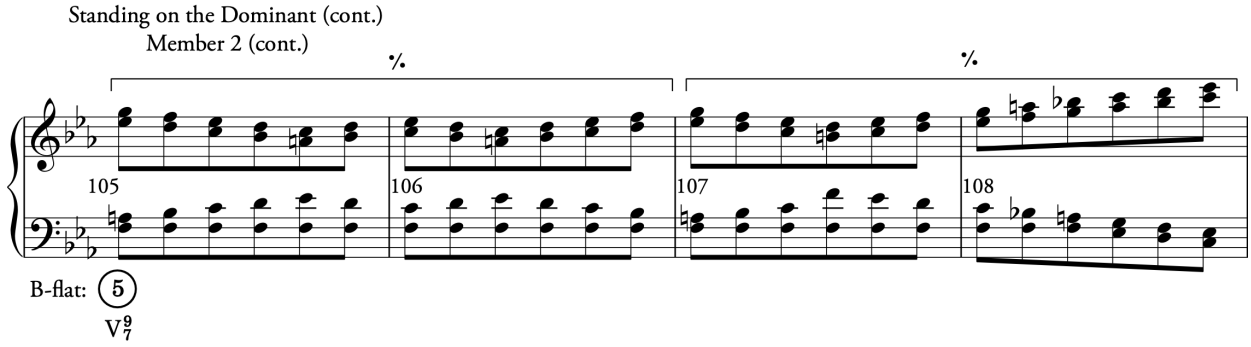
Before we conclude our discussion of CS 3.0, let us return to some of the material earlier in the subordinate theme 2 to see how it relates to previous sketches. Beethoven rearranges the order of some of the materials. First, the continuation 2 material after the internal SotD (m. 121–126) is likely inspired by a passage Beethoven wrote in CS 2.0 but the material now appears in a different order in CS 3.0. Recall that in CS 2.0 (Example 224, mm. 116–122), he placed the running eighth-note passage after the ascending, quarter-note arpeggios (mm. 110–115). But in the new 3.0 sketch,

he positions the eighth note passage (CS 3.0, mm. 121–126) considerably before the ascending, quarter-note arpeggios (mm. 143–148). Thus, the similar grouping structure of the eighth note passage in CS 3.0 and CS 2.0 suggests that this material was something of an invariant element for Beethoven at this stage, but he was not yet sure what function it should carry or where it would be placed. In CS 2.0 (Example 224, mm. 116–122), the eighth-note material starts the cadential progression because it begins on ③ and it was preceded by a continuation (Example 224, mm. 110–115). By contrast, in CS 3.0 (mm. 121–126) we have the impression that the similar eighth-note material functions as a new continuation 2. In the end (see the incipit in Example 225), Beethoven will refashion this eighth note passagework to serve as the material for the internal SotD in the subordinate theme 2 in the final version. He thus keeps the material but changes its function.

Example 224: CS 2.0, mm. 100–122; Subordinate Theme 3 (*ES* p. 12, st. 10–11)



Example 225: Op. 55, I., mm. 105–108; Internal Standing on the Dominant in ST2

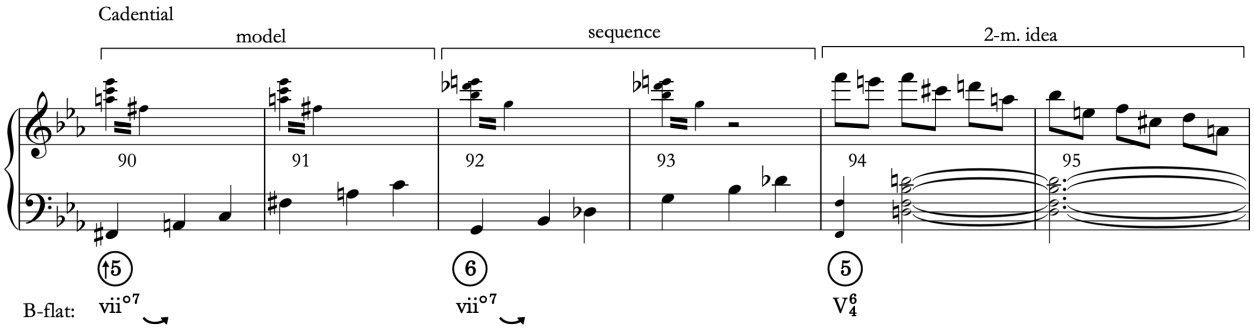


The ascending, quarter-note arpeggios (CS 3.0, mm. 143–148) also appear to be a persistent compositional idea that he altered in successive sketches to achieve different formal functions. Example 226 shows the four different iterations this material that he wrote in CS 1.0 (A), 1.2 (B), 2.0 (C), and 3.0 (D). Each version, except for the version written in CS 1.2 (B),[190] can be identified by, 2-m. units of an ascending, quarter-note arpeggios in the bass register. Functionally, the version written in in CS 2.0 (C) stands out: in contrast to the others, which move the bass-melody towards the dominant ⑤, the version in CS 2.0 (C) moves away from ⑤ with a chromatic descent (eventually to ③). By contrast, the version in CS 3.0 (D) marks a return to the previous function that Beethoven crafted in the 1.2 branch (B) and CS 1.0 (A), namely, the bass-melody prolongs the cadential dominant with neighboring motion (i.e., ↑⑤–⑥–↓⑥–⑤ in mm. 143–149). But while the function of CS 3.0 (D) returns to dominant prolonging design, its material is more like the version sketched in CS 2.0 (C). Note how both the 6-m. 3.0 (D) and 2.0 (C) versions segment into three 2-m. groups that articulate three different harmonies, whereas the versions in CS 1.0 (A) and 1.2 (B) segment into two groups that express two harmonies. Once again, Beethoven uses elements of the material that he sketched CS 2.0 but refashions it to express the function he initially developed in the first sketch (CS 1.0). Said another way, he synthesizes the functions and content from prior sketches. Beethoven's compositional process thus accords well with the fundamental axiom of the theory of formal functions: it was necessary for us to recognize the independence of content from formal function to understand these changes.

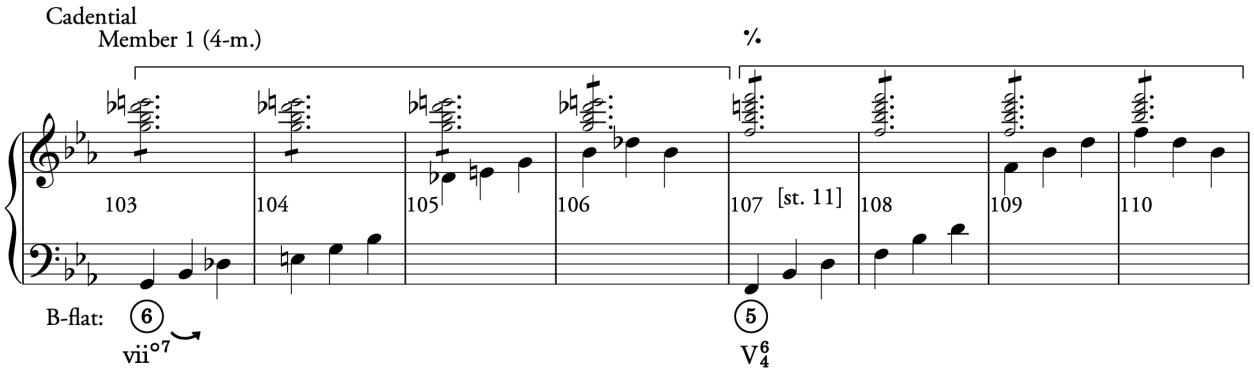
[190] We recognize that the version in CS 1.2 (B) is similar but differs by expansion: each 2-m. unit is expanded to 4-m. by continuing the arpeggio into a higher voice.

Example 226: Ascending Quarter Note Arpeggios

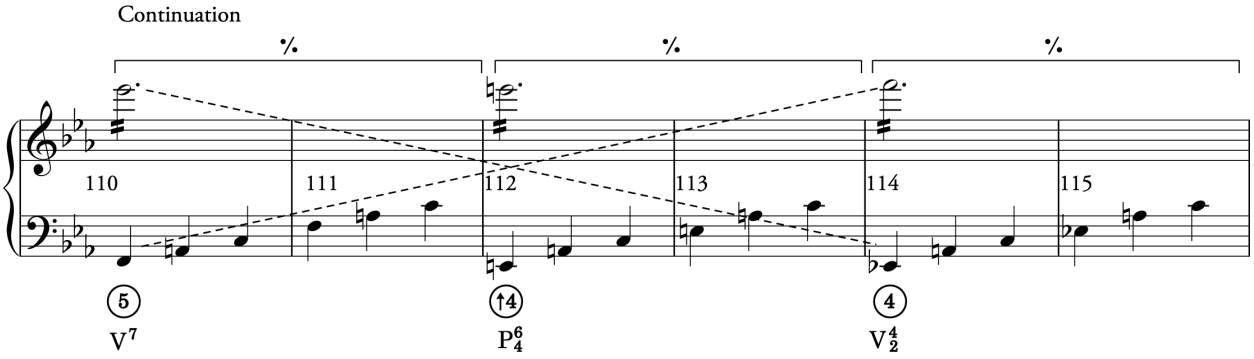
A. CS 1.0, mm. 90–95 (*ES* p. 11, st. 6)



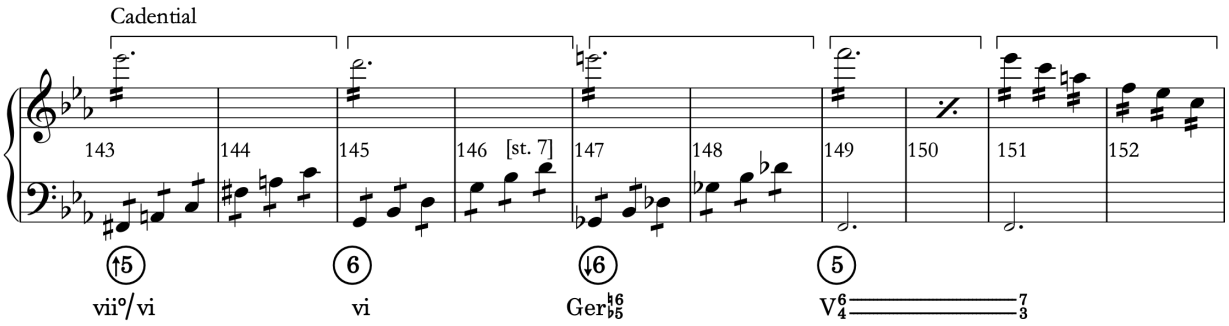
B. CS 1.2, mm. 103–110 (*ES* p. 10, st. 10–11)



C. CS 2.0, mm. 110–115 (*ES* p. 12, st. 9 & 10)

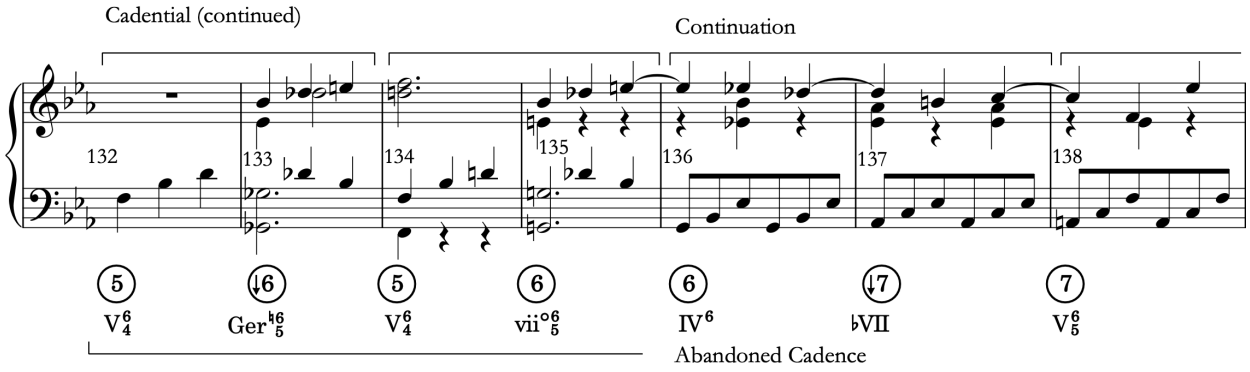


D. CS 3.0, mm. 143–152 (*ES* p. 15, st. 6–7)



In the final piece (Example 227, mm. 132–135), Beethoven uses the quarter-note arpeggios to prolong the dominant, but he compresses their expression considerably. Mm. 132–134 prolongs the cadential bass-melody ⑤ with an intervening neighboring ↓⑥. When the bass melody reaches ⑥ in m. 135 (vii$^{o6/5}$), we expect the bass to return to ⑤ in the measure thereafter to maintain the cadential dominant. Instead, the bass moves deceptively to ⑥ (mm. 134–136). This cadential abandonment occurs in a 5-m. span versus the 14-m. unit in CS 3.0 (Vol. 2, p. 62, mm. 137–150). Ultimately, this compression arose because Beethoven developed more dynamic ways to expand the subordinate theme 2. We will study these changes later in this chapter and the next.

Example 227: Op. 55, I. mm. mm. 132–138, Piano Reduction

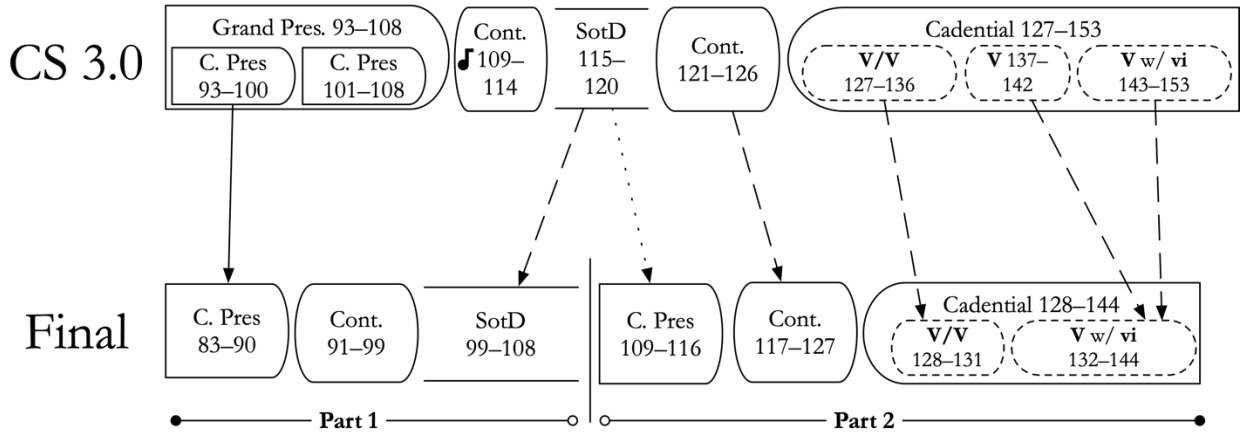


On the surface, the enlarged subordinate theme 2 in CS 3.0 (mm. 93–153) seems to be considerably different from the final version. But as I have hinted in the analysis above, there are numerous structural similarities. Figure 53 shows how the phrase structures in CS 3.0 correspond with the final corresponding theme. In the sketch, we get the impression that Beethoven sought to expand the subordinate theme 2 as a *one-part* theme as much as possible, even if this introduced redundancy and conventional passagework. He began by doubling the size of its initiating function

by repeating the entire compound presentation (i.e., mm. 93–108) to form a grand presentation. To expand the medial function, he split the continuation (mm. 109–126) into two units by bisecting it with an internal dominant arrival and SotD (mm. 115–126). Finally, he enlarged the cadential function (mm. 127–153) in three ways. First, he expanded the pre-dominant part of the ECP by getting "stuck" on V/V. Second, he enlarged the dominant with neighboring motion in the bass melody (i.e., ⑤–↓⑥-⑤). And third, he avoided a cadence by moving the bass-melody deceptively from ⑤ through ↑⑤ to ⑥ to tonicize the submediant (m. 145–146, G minor) before returning to the cadential ⑤ through ↓⑥ (mm. 147–149). These final cadential expansions allowed him to emphasize the chromatic pitch classes that we have been tracing through previous sketches, D-flat, E-natural, and G-flat/F-sharp.

Apart from the first, main theme material-based continuation (Vol. 2, p. 61, mm. 109–114), which cannot be found in the final version, the general structure of the 3.0 subordinate theme 2 sets the stage for the final design. Consider again Figure 53. In CS 3.0, the subordinate theme 2 is expressed as a single theme with greatly expanded beginning, middle (bisected with an internal SotD), and ending functions. In successive sketches, he fine-tunes the expansion of the theme by splitting it into two parts. By changing the theme in this way, he solved several related problems. First, the greatly enlarged theme in CS 3.0 had too many harmonically static passages including an internal SotD (mm. 115–120), the languid "stuck on V/V" passage (mm. 128–136), and the lengthy dominant prolongation in the cadential function (mm. 137–153). Similarly, the grand presentation (mm. 93–108) was wanting because the CBIs were themselves comprised of unwavering, repeating quarter notes. In his 3 series revisions, he eliminates this stasis by introducing new characteristic continuational material (i.e., mm. 91–99 of the final), and by further dividing the theme's larger functions into smaller, co-dependent theme parts.

Figure 53: CS 3.0 Subordinate Theme 2 to Final Subordinate Theme 2



7.3 Summary of CS 3.0

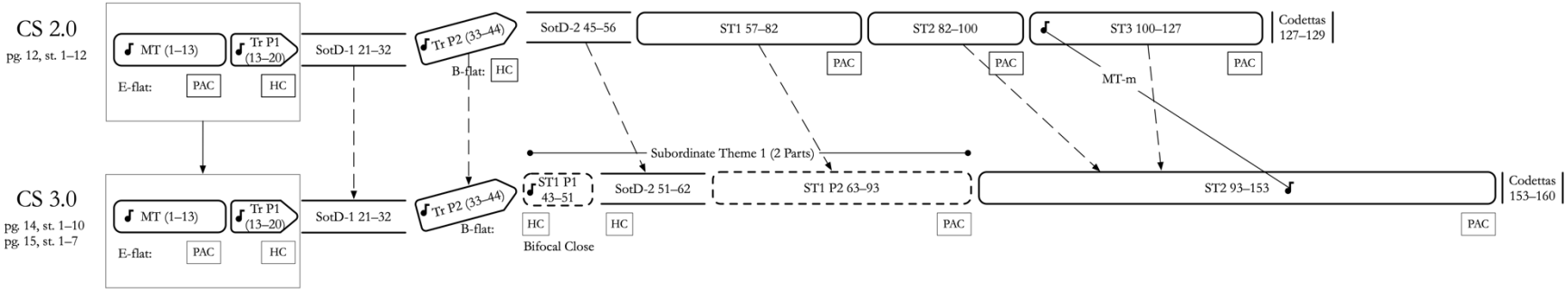
To summarize, Beethoven changes CS 3.0 in two substantial ways compared to the prior 2.0 version: first, he re-introduces the main theme material (CS 3.0, mm. 43–46) in the subordinate key after the two-part transition to begin the subordinate theme group; second, he greatly expands the subordinate theme 2 (mm. 93–153) by merging the second and third subordinate themes that he wrote in CS 2.0 into a single theme (see again the function transfer diagram shown in Figure 54; ST2 and ST3 in CS 2.0 become ST2 in CS 3.0). Overall, CS 3.0 exemplifies an effort to expand rather than extend; that is, instead of partitioning the subordinate theme group into three independent themes, he tried to unite them into two greatly expanded themes.

Although most of the material that he wrote in CS 2.0 returns in CS 3.0, he leaves out the new, quarter-note continuation that re-appeared in the CS 2.1 sketch (Example 228, mm 81–86). Beethoven did not abandon this material completely, however, as it returns in his first revision, CS 3.1, discussed in the next section. As this material appears in revision branches but not the trunks, he seems to have had some trouble figuring out how he would use this material in the exposition as was noted in the previous chapter.

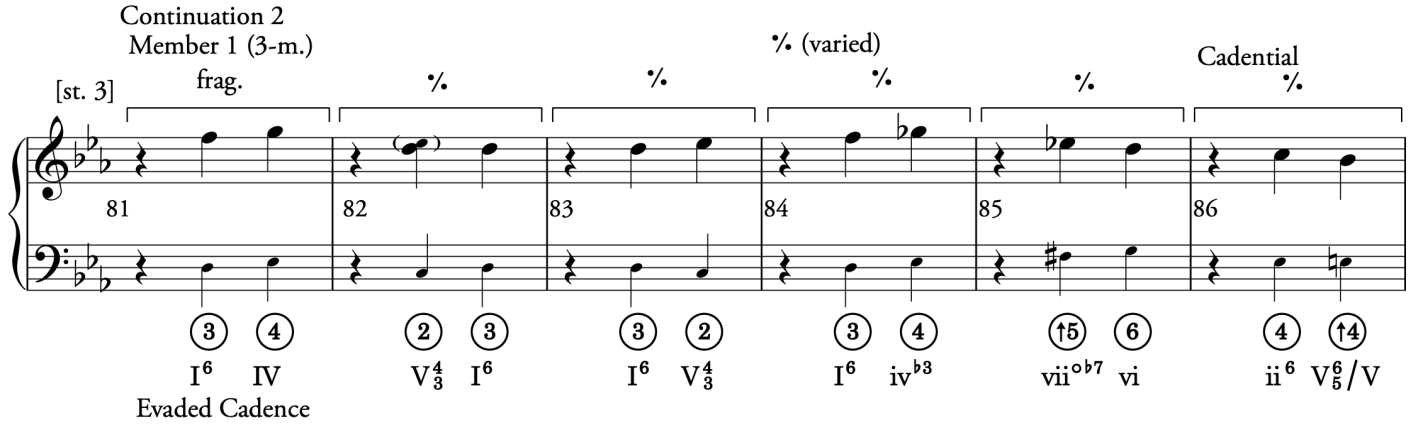
Beethoven's expansion plan introduced some problems, however, including excessive conventional passagework and lengthy static harmonies. In what remains of this chapter, we will discover how Beethoven solved some of these problems in the 3 series revision branches by compressing elements that he previously expanded (e.g., the internal SotD in mm. 115–120 and the prolonged, pre-dominant V/V in mm. 127–136) and by devising new dynamic and characteristic

material to replace the enormous ending function that he drafted in CS 3.0 with a new second part to the second subordinate theme.

Figure 54: CS 2.0 to CS 3.0 function transfer diagram



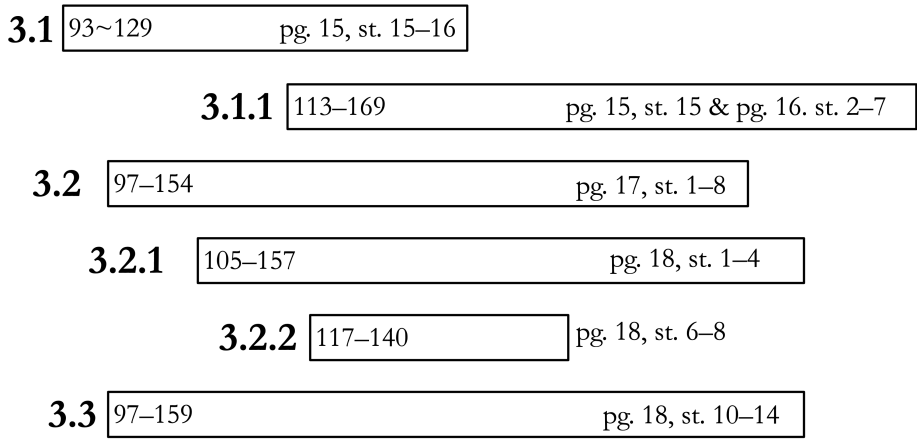
Example 228: CS 2.1, mm. 81–86; New Continuation (*ES* p. 13, st. 3)



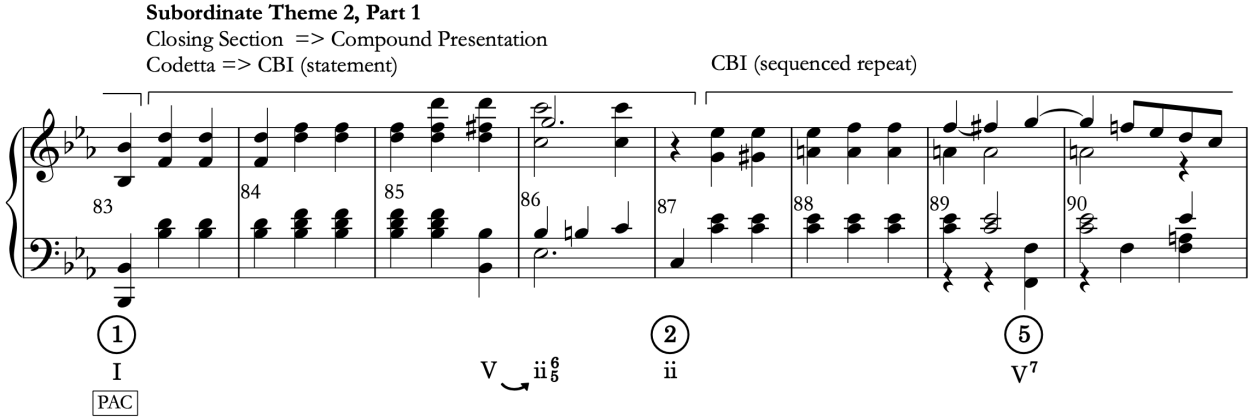
7.4 CS 3 Revisions and Fragments

Now that we have analyzed the CS 3.0 trunk, let us turn now to the six revisions (Figure 55). Beethoven devotes the remaining space on pages 15–18 of the sketchbook to revising the end of the subordinate theme group, beginning with the repeating quarter-notes that correspond with the subordinate theme 2, part 1 in the final version (an incipit of the initiating function of this theme in the final piece is shown in Example 229). The 3 series revision sketches change dramatically the structure of the subordinate theme group and bring the exposition closer to the final version. In what follows, I analyze each of the revisions and highlight the most significant changes to this part of the form.

Figure 55: 3 Series Revision Sketches



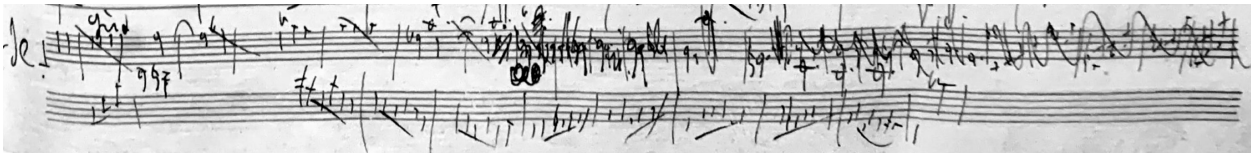
Example 229: Op. 55, I., mm. 83–90



7.4.1 Branch 3.1

Let us turn now to branch 3.1 in Volume 2 (p. 64). This sketch comprises the material written on p. 15, st. 15–16 in the *Eroica* sketchbook. At the very bottom of page 15 on staff 15 (Sketchbook Excerpt 17), Beethoven wrote "=de", then sketched music that could replace part of the subordinate theme 2, part 2 in the 3.0 sketch on the rest of staff 15 and 16. The "=de" written on staff 15 links to the "Vi=" that Beethoven wrote on the prior *verso* p. 14, st. 15—transcribed as mm. 91–92 in the 3.1 branch. In other words, mm. 91–92 in the reconstruction were written on the previous page 14, but everything that follows (mm. 93–128) was written on page 15, st. 15–16.

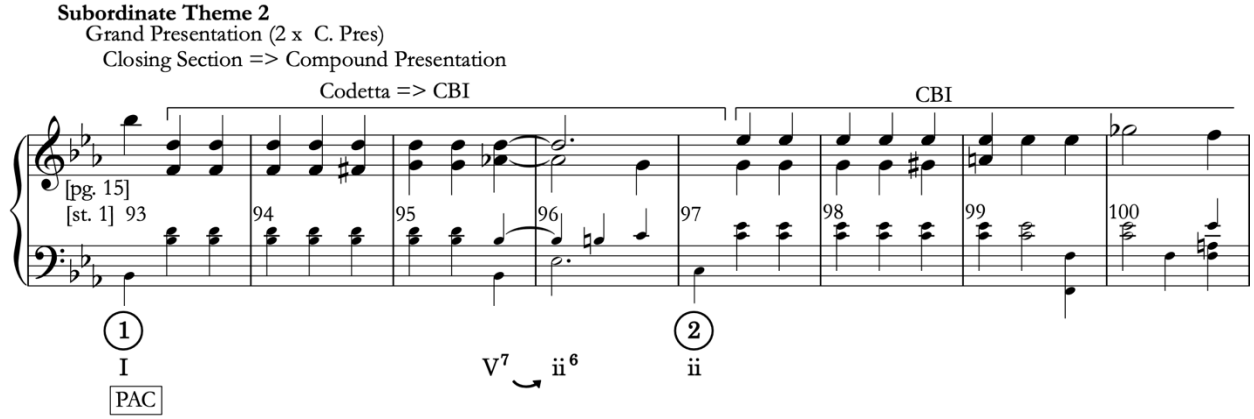
Sketchbook Excerpt 17: *ES* p. 15, st. 15–16



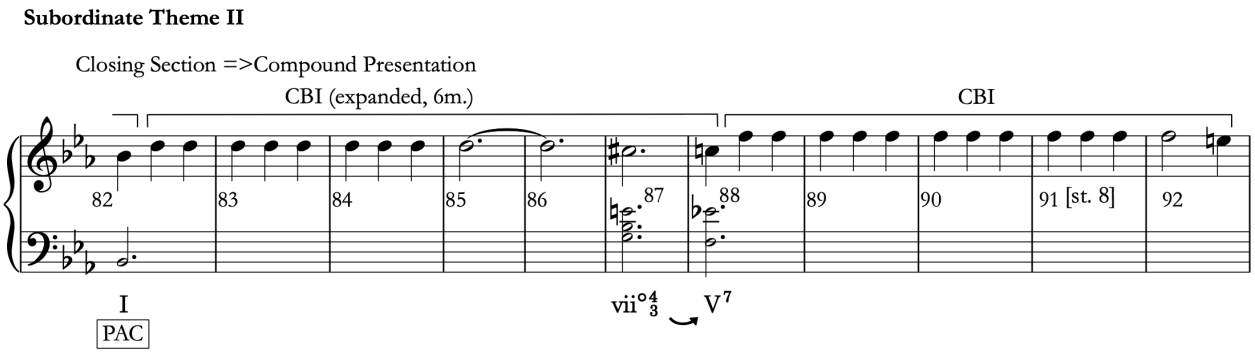
In the 3.1 revision, Beethoven tightens the second subordinate theme in three ways. First, he eliminates the repetition of the compound presentation, which returns the initiating function to its smaller, 8-m. size. Second, he removes the continuational main theme material and the internal SotD. And third, he repurposes the ascending arpeggios. Let us examine these three changes in greater detail, beginning with the initiating function (3.1, mm. 93–100).

The first four measures of the 3.1 revision (mm. 93–96) bring essentially the same version of the CBI that he previously drafted in CS 3.0 (Example 230, mm. 93–96), with some minor differences (note the G-flat in m. 96). The next four measures (3.1, mm. 97–101) differ more substantially. Here, Beethoven sequences the CBI up a minor third to the flat mediant (♭III = D-flat major) instead of the supertonic (ii = C minor) that he used in the previous sketch (compare mm. 97–100 with Example 230, mm. 97–100). He seems to have sought to reintroduce the D-flat in a more prominent way as a tonal part of the initiating function instead of realizing D-flat with a melodic embellishment (see, for instance, the C-sharp that he tried earlier in CS 2.0, Example 231, m. 86–88).

Example 230: CS 3.0, mm. 93–100; ST2 Compound Presentation (*ES* p. 15, st. 1)

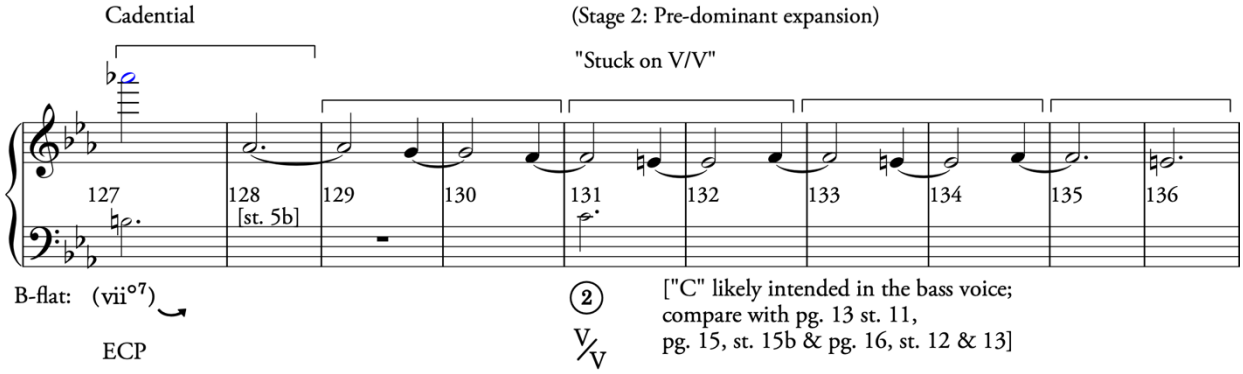


Example 231: CS 2.0, mm. 82–92; ST Compound Presentation (*ES* p. 12, st. 7–8)



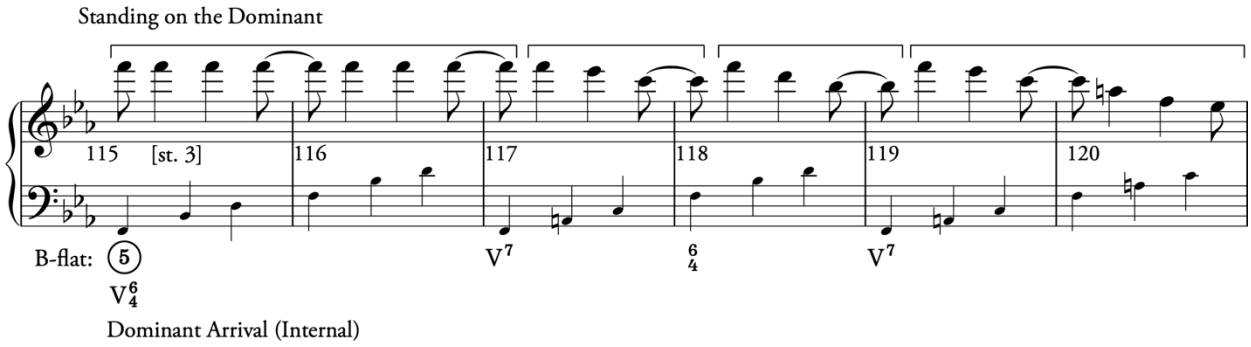
The second major compression involves the first continuation of the subordinate theme 2 (3.1, beginning in m. 101). Here, Beethoven removes the main theme material and instead repeats the A-flat quarter notes down an octave (mm. 101–102). This voice then moves chromatically upwards through A-natural (m. 103) to B-flat (m. 104). The faster harmonic rhythm of this music projects a continuation function, rather than a third repetition of the CBI as it did in CS 3.0. Thereafter, mm. 106–107 (3.1) bring a 2-m. fragment that establishes V/V in the subordinate key, just as it appeared in the 3.0 design (compare 3.1, mm. 101–113 with Example 232). In total, Beethoven reconfigures one of the CBI repetitions in CS 3.0 to form the beginning of a continuation in branch 3.1. Despite this change, however, the continuation still leads to the 6-m., "stuck on V/V" prolongation thereafter (3.1, mm. 108–113).

Example 232: CS 3.0, mm. 127–136; Cadential, Stage 2 ("stuck on V/V") (*ES* p. 15, st. 5)

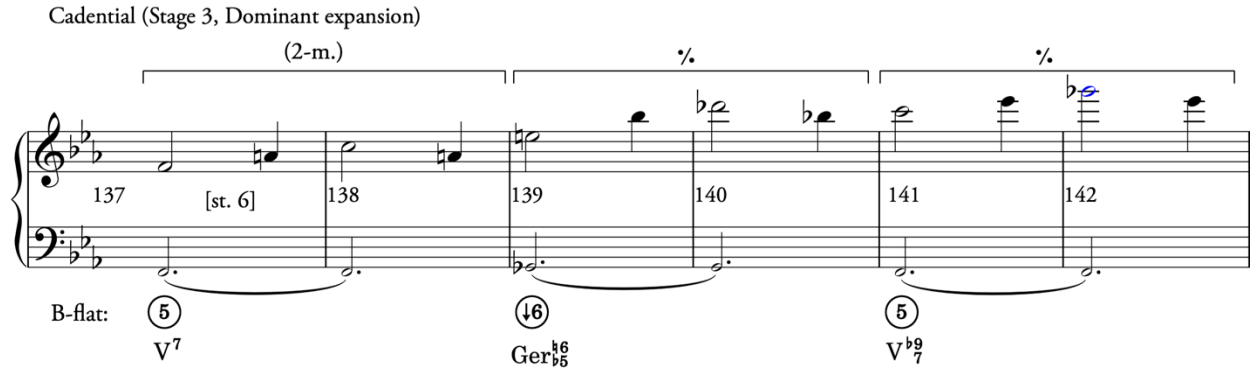


The third and final way that Beethoven tightens the theme in branch 3.1 is by compressing the cadential function (beginning m. 108). After the pre-dominant, V/V prolongation (mm. 108–113), he eliminates the internal SotD that he wrote in CS 3.0 (Example 233) and the later dominant prolongation with the neighboring augmented sixth over ↓⑥ (Example 234). These eliminations cause the V/V prolongation (3.1, mm. 108–113) to move directly to the quarter-note arpeggios (mm. 114–119). As we saw above, these ascending, quarter-note arpeggios have had several different functions in the sketches so far discussed. This time, the arpeggios move away from the dominant ⑤ rather than prolong it (i.e., ⑤–↑④–④); he thus reverts the function of these arpeggios (mm. 114–119) to be more like what he wrote in CS 2.0 (Example 235, mm. 110–115) instead of CS 3.0 (Example 236, mm. 143–148).

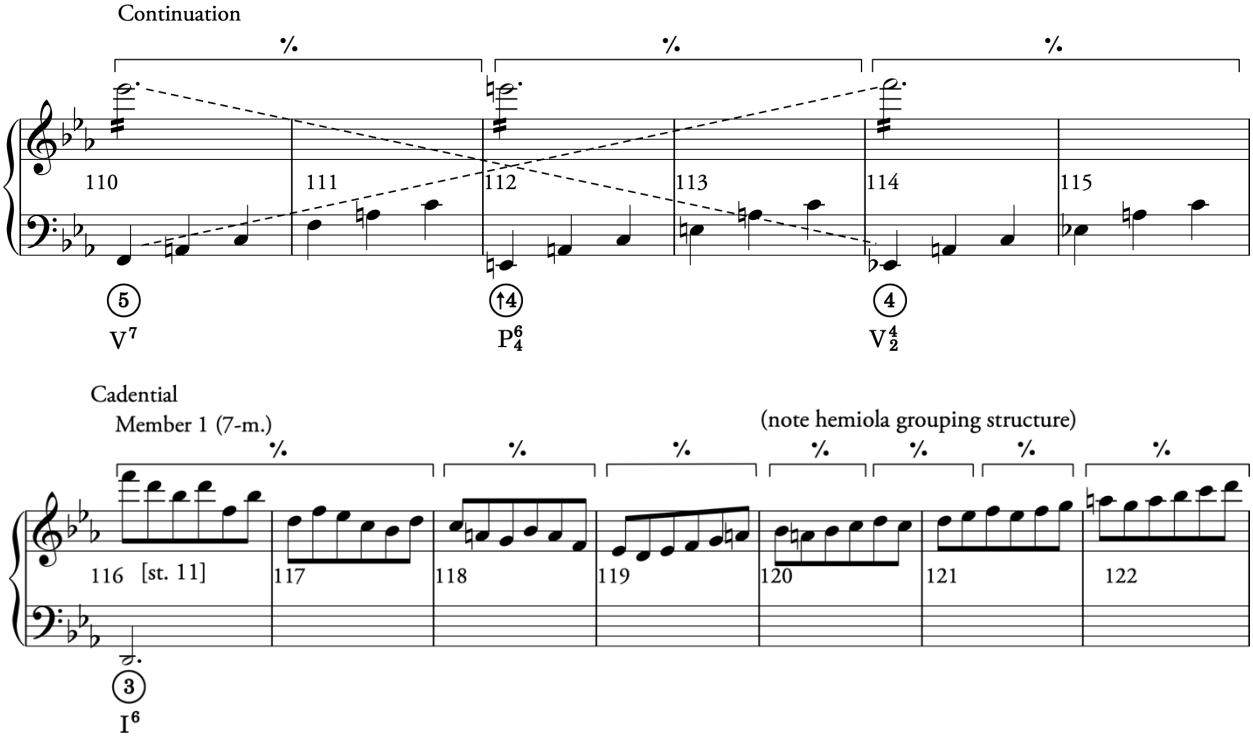
Example 233: CS 3.0, mm. 115–120 (*ES* p. 15, st. 3)



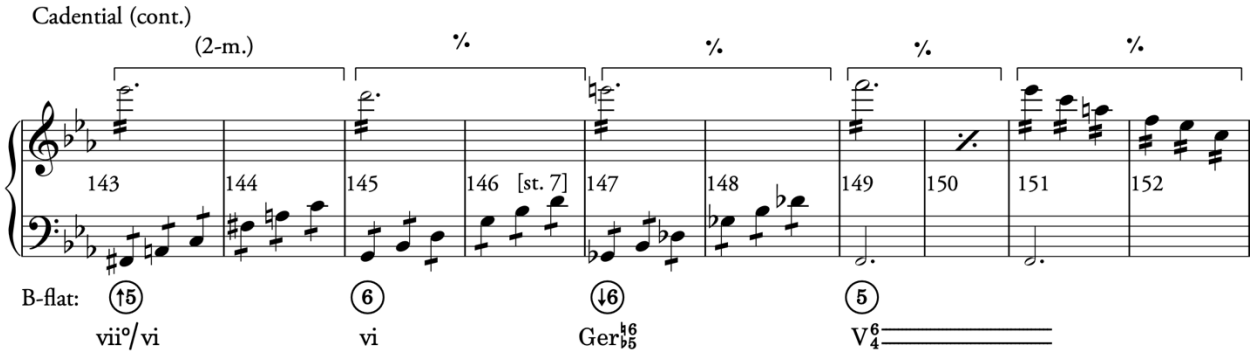
Example 234: CS 3.0, mm. 137–142 ; Cadential, Stage 3 (*ES* p. 15, st. 6)



Example 235: CS 2.0, mm. 110–122; Continuation and Cadential (*ES* p. 12, st. 9 & 10, 11)

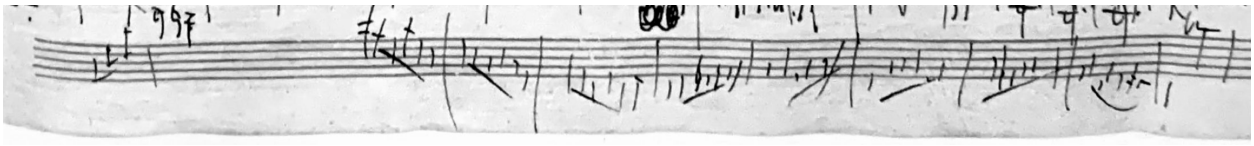


Example 236: CS 3.0, mm. 143–152; Subordinate Theme 2, Cadential (*ES* p. 15 st. 6–7)

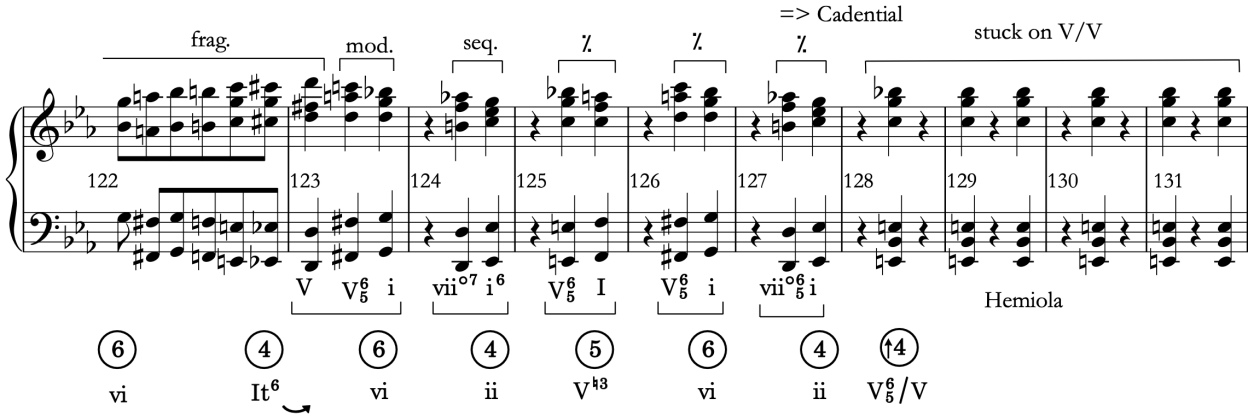


Towards the end of branch 3.1, it is not completely clear what Beethoven planned to write after the chromatic descent (end of m. 119), because he leaves a considerable space on the staff thereafter (see Sketchbook Excerpt 18). He may have considered placing additional material in this space. Nevertheless, the material that appears after the gap, the descending eighth-note passagework could syntactically follow the quarter-note arpeggios (see Sketchbook Excerpt 18, transcribed as mm. 120–128 in 3.1). If this passage (mm. 120–128) was intended to directly follow the previous ascending quarter-note arpeggios, it would prolong a tonic I^6 harmony over ③ and thus begin an ECP just like the corresponding material he wrote in CS 2.0 (compare 3.1, mm. 114–128 with Example 235, m. 116ff.). It seems plausible, therefore, that the space he left on staff 16 (Sketchbook Excerpt 18) was inconsequential, and the eighth note passage work thereafter (3.1, mm. 120–127) was intended to follow the quarter-note arpeggios (3.1, mm. 114–119). Finally, at the very end of eighth-note passage (m. 128), he writes three quarter-notes that correspond with the beginning of the subordinate theme 2, part 2 continuation in the final version (compare 3.1, m. 128 with Example 237, m. 123). This measure of three quarter-notes suggests that he would re-introduce the continuation that he first drafted in branch 1.1 (refer to Vol. 2, p. 41, mm. 72–76).

Sketchbook Excerpt 18: *ES* p. 15, st. 16



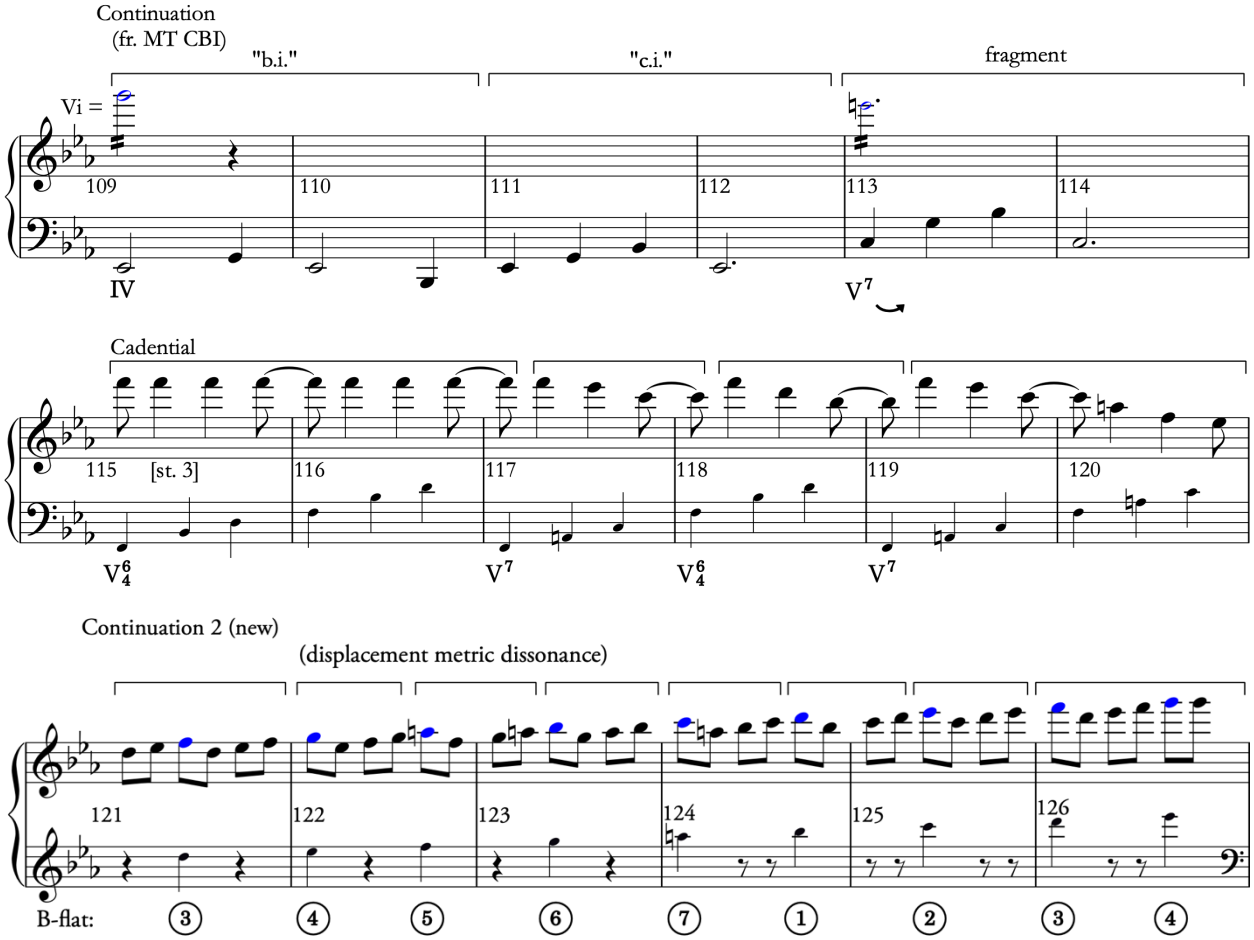
Example 237: Op. 55, I., mm. 122–131, Subordinate Theme 2, Part 2, Continuation to Cadential



To summarize, in his first 3.1 revision, Beethoven greatly compresses the music that corresponds to the subordinate theme, part 1 in the final by eliminating four elements from the CS 3.0 sketch: the main theme material (Example 238, 3.0 mm. 109–112) in the continuation, the

syncopated internal SotD (mm. 115–120), the rising eighth-note continuation (mm. 121–126), and the passage that re-established dominant harmony with a neighboring G-flat as ↓⑥ (mm. 137–142). By removing these segments, Beethoven returned the second subordinate theme in branch 3.1 to something more like what he wrote in CS 2.0. Figure 56 shows the rather complex relationship of how the phrase functions transfer between CS 2.0, 3.0, and 3.1. This transfer diagram suggests that Beethoven was still experimenting with multiple different designs for the subordinate theme group. Generally, he seems to have had two, primary separate designs (CS2/CS3.1 and CS3) that he was juggling. The revision sketches show how he worked to integrate and combine these seemingly different designs in various ways.

Example 238: CS 3.0, mm. 115–120 (*ES* p. 15, st. 2–4, and 6)



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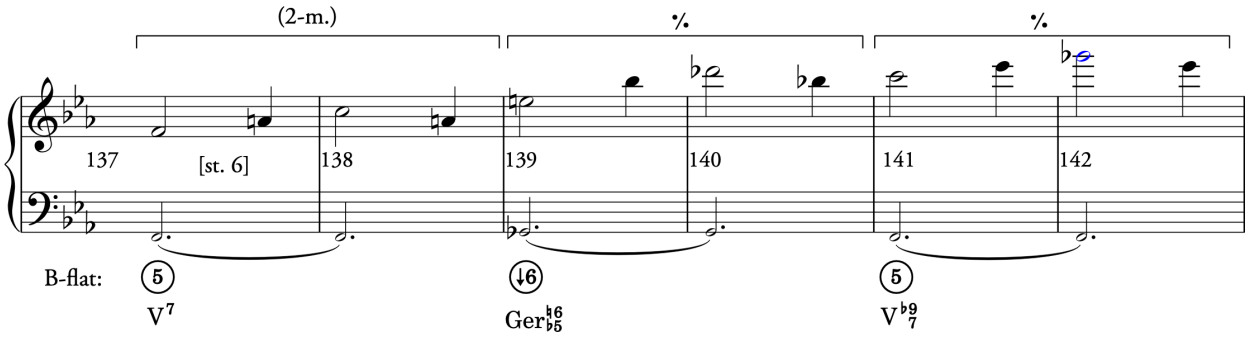
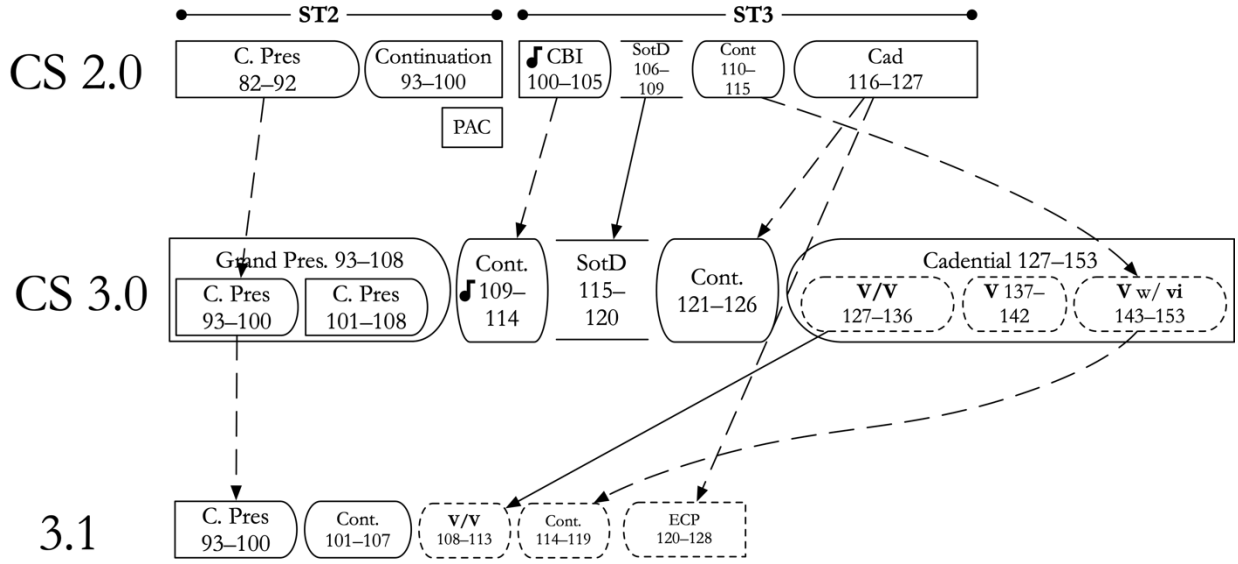


Figure 56: Subordinate Theme Group Transfer Diagram from CS 2.0 (Top) to CS 3.0 (Middle) to branch 3.1 (Bottom)



7.4.2 Twig 3.1.1

Let us turn now to a revision of the 3.1 branch, the 3.1.1 twig (Vol. 2, p. 65–66). At some point, Beethoven marked what Lockwood and Gosman interpreted as "V.S." for "Volti Subito" (i.e., "turn the page immediately") on the right-hand side of st. 15 (see Example 239). Although it is difficult to know exactly what Beethoven intended with this marking, perhaps he used it in a similar way to how he used "Vi=de." That is, maybe he wanted to alert himself that, after m. 113 in 3.1 the sketch, he should turn the page and the sketch would continue (in 3.1.1). Indeed, on the next *verso* page 16, we find material on staves 2–7 that could replace the right-hand portion of staff 15, that is, everything that follows the end of the V/V prolongation beginning in m. 113 (see in Vol. 2, sketch 3.1.1). Because this interpretation can be corroborated with a later revision (3.2) discussed in the next section, we will assume that Beethoven's "V.S." marking on staff 15 (Example 239) was intended to

indicate that branch 3.1 should connect to the 3.1.1 twig. Thus, we can envisage a merged sketch that combines mm. 91–113 of 3.1 with the new material in 3.1.1, mm. 113–169 (see Figure 57).

Example 239: *ES* p. 15, st. 15, right-hand side, [V]olti [S]ubito

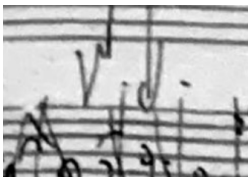


Figure 57: Merged 3.1.1

	pg. 15, st. 15–16			
3.1	93~129	113–170	**3.1.1**	pg. 15, st. 15 & pg. 16. st. 2–7

The new material written on page 16 on st. 2–3 (Vol. 2, p. 65, sketch 3.1.1) begins with a series of applied dominants (mm. 113–118) that ultimately lead to the main theme material (mm. 119–122), which expresses E-flat major as the subdominant of the subordinate key. In greater detail, the passage starts (mm. 113–114) by continuing the V/V harmony with a 2-m. model whose content is based on the main theme material contrasting idea. The next four measures (mm. 115–118) bring two ascending-fourth sequences of that model with implied dominants. Finally, the sequence ends in m. 119 and Beethoven reintroduces the main theme material (mm. 120–123) with a *pianissimo* dynamic marking in the original register that it appeared in the main theme function at the beginning of the exposition.

In this intriguing revision, the succession of applied dominants in mm. 113–118 seems to "undo" the harmonic progress that the subordinate theme has made up to this point. Instead of moving towards a cadence in the subordinate key, the ascending fourth sequence (mm. 113–119) returns us back—at least, temporarily—to the home key, E-flat major. At this point, we do not recognize a true modulation into the home key, however, because there has been no cadential progression or cadence to confirm this change. Consequently, the main theme material in mm. 120–123 expresses a strongly tonicized subdominant harmony that continues the underlying sequential progression and thus the continuation function. It is as if the main theme material emerges as an echo or shadow of its former self within the context of the subordinate theme 2's continuation. Beethoven's *pianissimo* markings further amplify this effect.

The analysis of the main theme material in 3.1.1 (mm. 119–122) presented here corresponds in some ways with Nottebohm's interpretation of this passage. He explains (underlined words indicate changes to Katz's English translation):

> In ihr erscheint das Hauptthema, gangartig eingeflochten (in Es-dur) und umgeben von Versetzungen seines dritten und vierten Taktes. Es wird wie eine Vision vorübergeführt. Diese Überleitung vom zweiten Seitensatz zum Schlusssatz hat etwas Verschwommenes an sich. Man muss der Skizze die Kraft beimessen, es einleuchtend zu machen, dass eine so ganghafte Überleitung, dass ein fortwährendes Aneinanderreihen von Gängen, die aus verschiedenen Motiven und Figuren gebildet sind, nicht geeignet sei, die ebenfalls gangartig eingerichtete Schlusspartie mit ihren kräftigen Motiven, mit ihrem Schwung und ihrer Fülle in ein gehöriges Litch zu stellen, dass ein günstiges Verhältniss zwischen den inhaltlich so verschiedenen und reichen Partien nur gewonnen werden konnte, wenn zwischen beide eine Scheidewand aufgestellt wird.[191]

> We find the principal subject [main theme material], woven in as a passage [*gangartig*] figure (in E-flat major) and flanked by transpositions of its third and fourth bars [i.e., the main theme material contrasting idea]. It passes us by like a vision; there is something nebulous about this transition from <u>the second subordinate theme</u> to the end-section. The sketch was obviously capable of demonstrating clearly that such a transition—a continual succession of passages formed from different motives and figures—was not sufficient to display in suitable light of the end-section, similarly constructed in a succession of passages, with all its powerful motives and its buoyancy and vigor; a proper relation between the two sections, so rich and so different in content, could be established only by placing a separating element between them.[192]

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[191] (Nottebohm 1880, 21)

[192] This translation is based on Jonathan Katz's version; (Nottebohm 1979, 65). For clarity and ease of comparison I have modified Katz's translation of "vom zweiten Seitensatz" to "from the second subordinate theme."

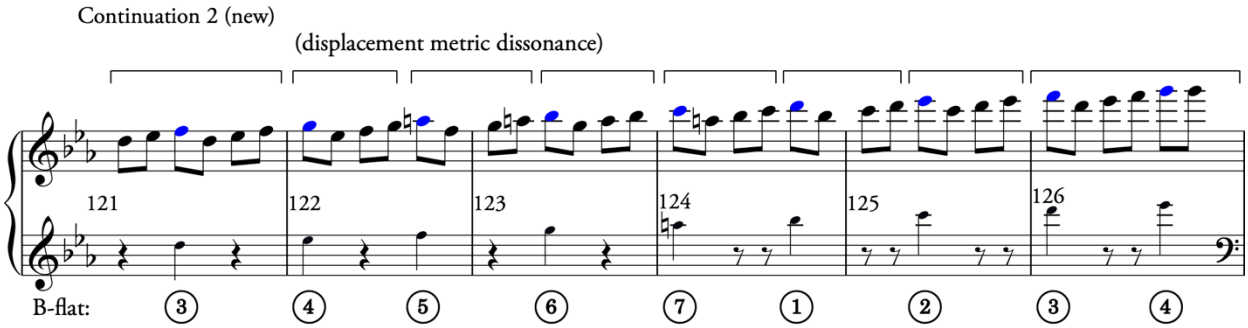
Here, Nottebohm interprets the main theme material in 3.1.1 (mm. 119–122) as "*gangartig*," that is, it functions to separate the beginning of the second subordinate theme from the "ending section." In a footnote to his translation, Jonathan Katz explains that "The German 'ganghaft' and 'gangartig'," are used liberally by Nottebohm and refer to a "'transitional' passage—'*Gang*'—always leading on to something else, as opposed to a self-contained musical phrase" (Nottebohm 1979, 63). The notion of a *Gang* owes to A.B. Marx's formulation in his *Die Lehre von der musikalischen Komposition praktisch-theoretisch* (1837). Thus, in context, Nottebohm's explanation of the main theme material as a transitional device (Katz's "passage figure") seems to correspond well with the notion of a medial, continuation function. Presumably, the "ending" section that Nottebohm mentions includes mm. 123–158 in the 3.1.1 sketch. Let us examine this material now (Vol. 2, pp. 65–66).

In 3.1.1, mm. 123–124, Beethoven sequences the contrasting idea material down a major sixth to articulate a G-flat major triad. In context, this harmony could suggest either a flat-submediant (♭VI), or a German augmented sixth harmony (with an E-natural in the upper voice). In my reconstruction, I have interpreted the harmony as a German augmented-sixth, but the alternative interpretation would be equally viable. Thereafter (mm. 125–126), the flat-submediant moves to the cadential six-four, then another implied German, augmented-sixth harmony follows in mm. 127–128.

The music that follows in mm. 129–132 is difficult to interpret. It would be appropriate for the bass-melody ↓⑥ expressed by the augmented German six-five in the prior measures (mm. 127–128) to resolve down to ⑤ in m. 129 as shown in my realization. In the four measures that follow (mm. 129–132), the continuity voice emphasizes the subordinate key tonic pitch classes (F, D, and B-flat) with a series of lower chromatic neighbors (i.e., E-natural, C-sharp, and A-natural). If this music was intended to sound over ⑤ in the bass, then mm. 129–132 would suggest a prolongation of a cadential six-four dominant harmony. What happens thereafter (beginning in m. 133) seems to unravel this idea, however. Instead of resolving the cadential six-four in m. 133, Beethoven begins a new scalar ascent in the continuity voice (see the blue notes in mm. 133–137) that reminds us of a similar design he wrote in CS 3.0 (compare 3.1.1, mm. 133–137 with the corresponding music in CS 3.0 shown in Example 240). In the earlier 3.0 sketch, we read this material as a second continuation in the subordinate theme 2. Thus, if we assume that the corresponding passage in the new sketch (3.1.1, mm. 133–137) fulfils a similar, medial role, then we must recognize that the cadential

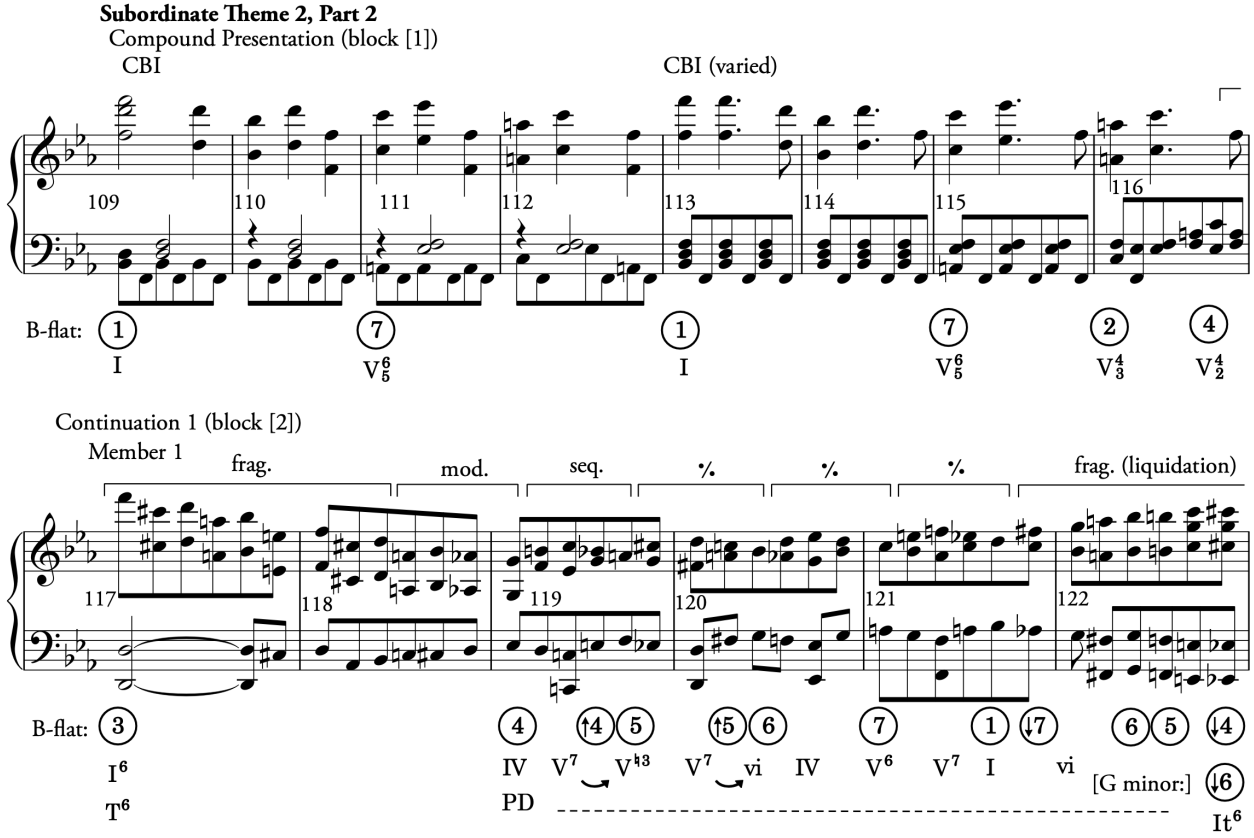
dominant six-four that was established in mm. 129–132 was abandoned. It is not clear when this may have occurred, however.

Example 240: CS 3.0, mm. 121–126; Continuation 2 (*ES* p. 15, st. 4)



In the final piece (see Example 241, mm. 117–121), the music that likely corresponds to mm. 129–132 in 3.1.1 expresses a different function, namely, a continuation that starts at m. 117 on tonic harmony over ③ (i.e., I^6). In reference to the final version, might Beethoven have intended to start m. 129 in 3.1.1 with a tonic harmony instead of a dominant? In both the sketch and the final versions, the top-most voice (the continuity voice) suggests tonic harmony. The discrepancy depends on what he intended for the bass voice. Ultimately, the 3.1.1 sketch does not provide enough information to settle the harmony. And given that the G-flat ↓⑥ in mm. 127–128 (3.1.1) and the measures thereafter (3.1.1, mm. 129–132) seem to fulfill a different harmonic role, I suggest that that this material articulates a cadential-becomes-continuation function over an implied ⑤ in the sketch. We will see in successive sketches how Beethoven eliminates these functional ambiguities by moving the neighboring G-flats to the end of the subordinate theme group, and by introducing a new initiating function that partitions the subordinate theme 2 into two parts, discussed further below.

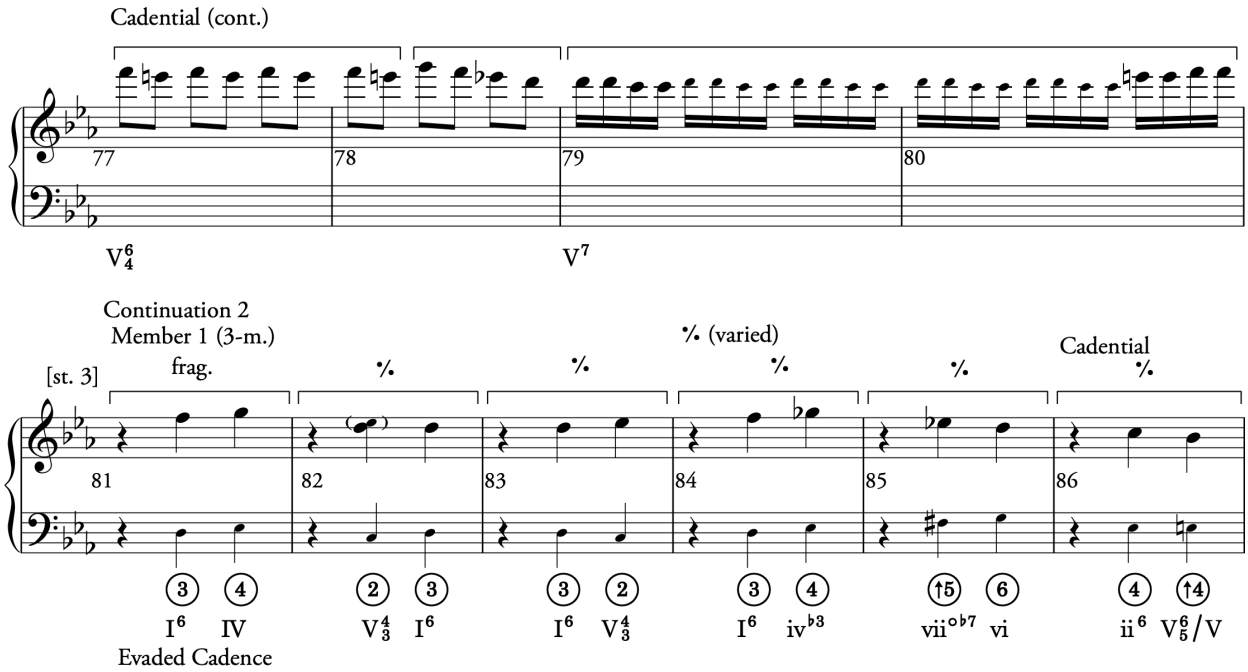
Example 241: Op. 55, I., mm. 109–121; Subordinate Theme 2 Part 2



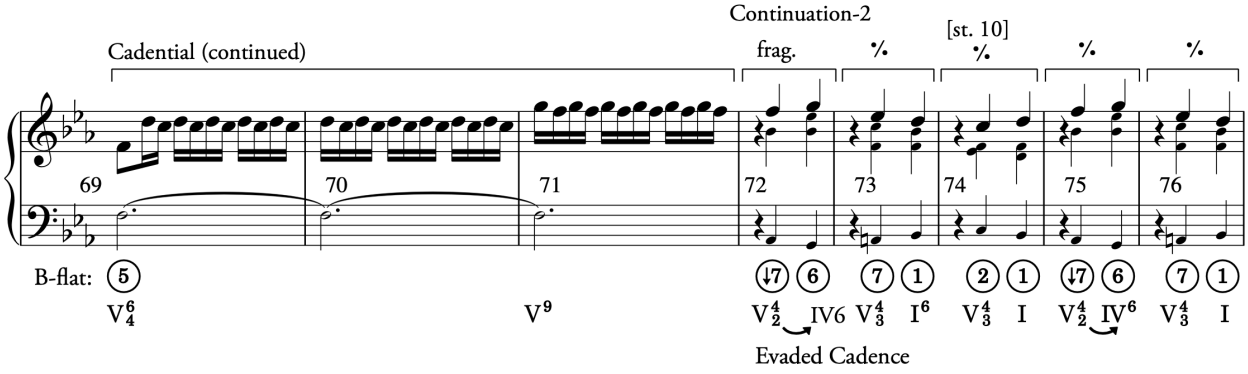
Let us return to the 3.1.1 revision, beginning in m. 138. At the end of the scalar ascent (m. 137), a second, 12-m. continuation follows (mm. 138–149). The first 8-m. of this continuation (mm. 138–145) is built with a 4-m. member (mm. 138–141) that is repeated (mm. 142–145), followed by another 4-m. member (mm. 146–149) that suggests a sequence. As there is very little information in the sketch to fully inform the harmony he intended, I have added one possible contrapuntal bassline. The repeated notes in m. 140–141 and 144–145 are especially difficult to interpret, but perhaps he intended to suggest a $V^{6/5}$ harmony in the vein of the "stuck on $V^{6/5}/V$" passage that follows (i.e., mm. 150–153). In the last four measures of the continuation (mm. 146–149), the bass could bring an ascending, sequential, stepwise line that moves from ⑥ to ④: ⑥ as G in m. 146), ⑦ as A-natural in m. 147, beat two, ① as B-flat in m. 147, beat three, ② as C in m. 148, ③ as D in m. 149, beat 1, up to ④ as E-flat in m. 149, beat two. This ④ (E-flat) would then lead to the likely ↑④ (E-natural) in m. 150, functioning as a chromatic pre-dominant to the penultimate, cadential dominant over ⑤ (m. 154).

In essence, Beethoven re-introduces in twig 3.1.1 the quarter-note-based continuation (i.e., mm. 138–149) that he wrote in the 2.1 branch on page 13 (Example 242, branch 2.1, mm. 81–86). Recall that this continuation originated in the 1.1 branch (Example 243, mm. 72–76), but was abandoned in several sketches thereafter. In previous revision sketches, this continuation material evaded a cadence (Example 242, branch 2.1, mm. 79–80 and Example 243, branch 1.1, mm. 72–76). The formal situation in 3.1.1 (mm. 138–149) is less clear given the harmonic ambiguity of the preceding measures (mm. 129–137) discussed above, but we can see parallels in 3.1.1 with his original concept drafted in branch 1.1. Ultimately, the new continuation in 3.1.1 (mm. 138–149) dissipates the energy so far accumulated and delays the arrival of the exposition ending PAC. Once again, Beethoven returns to material that he drafted in earlier sketches (in branches 1.1 and 2.1) but left out of the previous sketch (CS 3.0) to create a new ending to the second subordinate theme.

Example 242: Branch 2.1, mm. 80–75 (*ES* p. 13, st. 2–3)



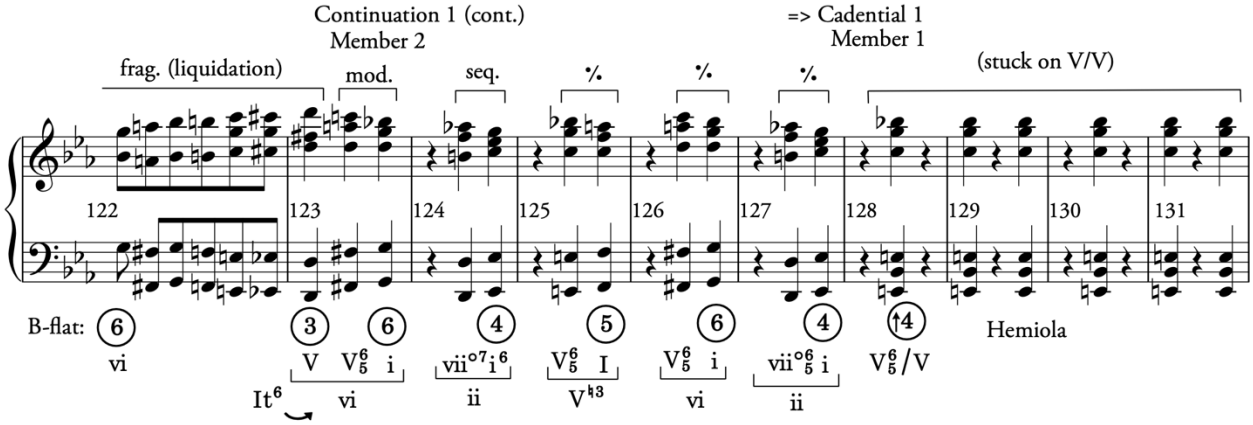
Example 243: Branch 1.1, mm. 69–76; Subordinate Theme Cadential and New Continuation before False Recap (*ES* p. 11, st. 9–10)



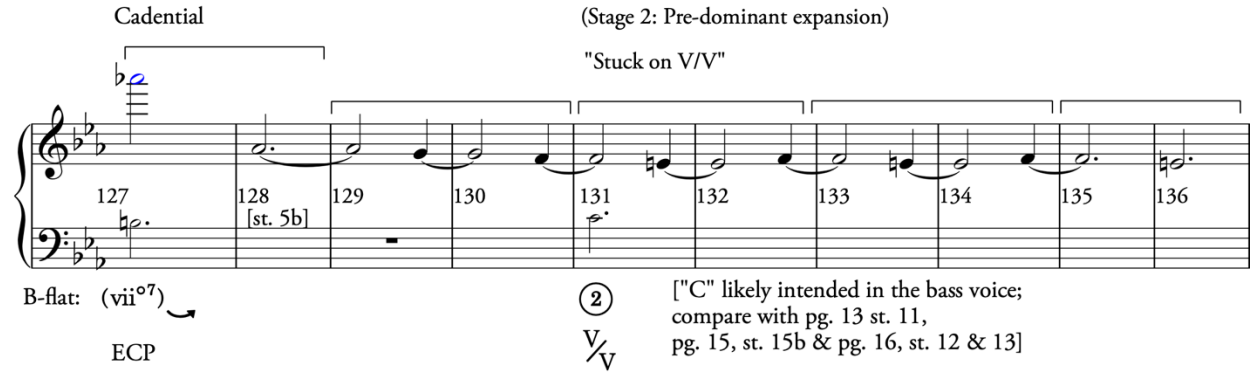
Returning to twig 3.1.1 (Vol. 2, p. 66, cf. mm. 150ff), we see that after the new continuation 2, the music gets stuck on the implied ↑④ (mm. 150–153) with the characteristic grouping structure hemiola that strongly suggests a $V^{6/5}$/V harmony. The character of this passage (mm. 150–153) anticipates, for the first time, the beginning of the subordinate theme 2, part 2, cadential 1 function in the final exposition (compare 3.1.1, mm. 150–153 with Example 244, mm. 128–131). It seems plausible that the "stuck on V/V" passage in 3.1.1 (i.e., mm. 150–153) was intended to replace the more languid and static descending version of the "V/V" that was in CS 3.0 (compare 3.1.1, mm. 150–153 with Example 245, mm. 131–136). Perhaps Beethoven revised the character of the V/V material because it was incommensurate with the surrounding material in CS 3.0. The slower character and static harmony in that earlier sketch caused the end of the subordinate theme group to stall out, rather than build further anticipation for a cadence.

Both versions (3.0 and 3.1.1) of the V/V prolongation bring rhythmic disruptions: the new "stuck on V/V" in 3.1.1 (mm. 150–153) introduces a hemiola and the corresponding passage in CS 3.0 (Example 245, mm. 131–136) a syncopation. Overall, the 3.1.1 version (mm. 150–153) is more dynamic and arresting in its character. It seems, therefore, that Beethoven wanted to disturb the meter and have a V/V prolongation, but he was dissatisfied with the version he sketched in CS 3.0. The overall formal situation is now different in 3.1.1, however, so we cannot know for certain if the earlier V/V passage in CS 3.0 was the progenitor of the "stuck on V/V" passage in branch 3.1.1. Nevertheless, this newly crafted V/V passage (3.1.1, mm. 150–153) now matches a corresponding segment in the final version.

Example 244: Op. 55, I., mm. 122–131; ST2 P2, Continuation 1 and Cadential 1



Example 245: CS 3.0, mm. 127–136 (*ES* p. 15, st. 4–5)



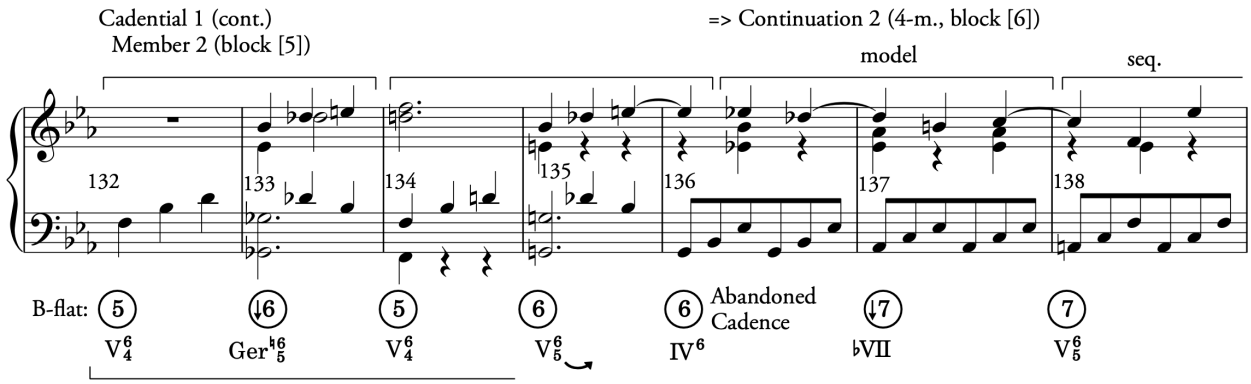
At the end of the CS 3.1.1 "stuck on V/V" passage (m. 153ff), Beethoven resolves the applied $V^{6/5}$ to the subordinate key cadential dominant ⑤ (i.e., F major; mm. 154–157) and a PAC follows in m. 158 that closes the exposition. An 8-m. closing section follows with two, 4-m. codettas (mm. 169–166), and a retransition (mm. 167–170) modulates back to the home key for the exposition repeat.

Overall, 3.1.1 brings several new elements to the second subordinate theme that correspond more closely with the final version. These include the cadential => continuation material in mm. 129–132, which will eventually become the part 2 continuation 1 in the final (Example 241, mm. 117–121), the new continuation 2 (3.1.1, mm. 138–149) that corresponds with a more compressed version in the final (Example 244, 123–127), and the "stuck on V/V" (3.1.1, mm. 150-153) that starts the cadential progression (Example 244, 123–127).

Some significant differences in the 3.1.1 branch still distinguish it from the final exposition, however. For one, the contrasting-idea-based, sequential continuation (3.1.1, mm. 113–118) is

nowhere to be found in the final, nor is the main theme material that follows (mm. 119–122). Additionally, as was mentioned above, the dominant prolongation with the neighboring flat-submediant and German augmented sixth (3.1.1, mm. 123–128) anticipates a similar passage in the final (Example 246, mm. 132–135) but the dominant prolongation appears in an entirely different formal position in the 3.1.1 sketch and is considerably larger. Finally, branch 3.1.1 does not include the internal, 6-m. SotD that partitioned the large subordinate theme 2 in CS 3.0 (mm. 115–120). Broadly, then, Beethoven tightens the structure of the second subordinate theme in 3.1.1 compared to the 3.0 version, but he expands it compared to the prior 3.1 version by reintroducing continuation material (mm. 138–149) that he previously omitted. Up to this point, the theme unfolds as a single part—he has not yet partitioned the theme into two co-dependent theme parts like he does in the final version.

Example 246: Op. 55, I., mm. 132–138



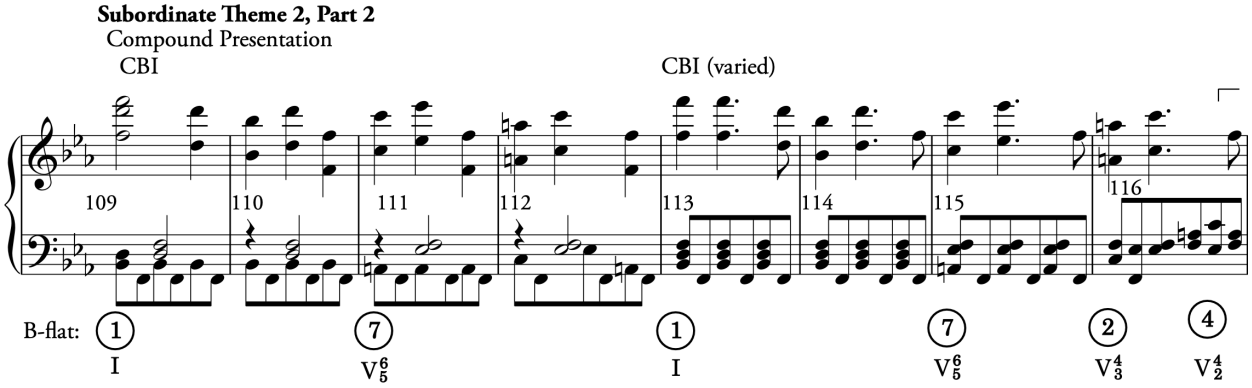
7.5 The Emergence of the Subordinate Theme 2, Part 2 Compound Presentation

Up to this point, a major part of the subordinate theme group has yet to emerge: the subordinate theme 2, part 2's compound presentation (Example 247). In what follows, we will explore how this phrase function arises. In essence, the second part emerges in three stages: 1) Beethoven removes the main theme material that he tried to bring back in so many sketches, 2) he rewrites the theme's continuation, and 3) he composes a new initiating function to begin part 2. Lockwood and Gosman characterize this process broadly as Beethoven replacing the main theme material with the new compound presentation.[193] Although there is some truth to this interpretation, the process is more

[193] There refer to the "B-flat theme," not the compound presentation.

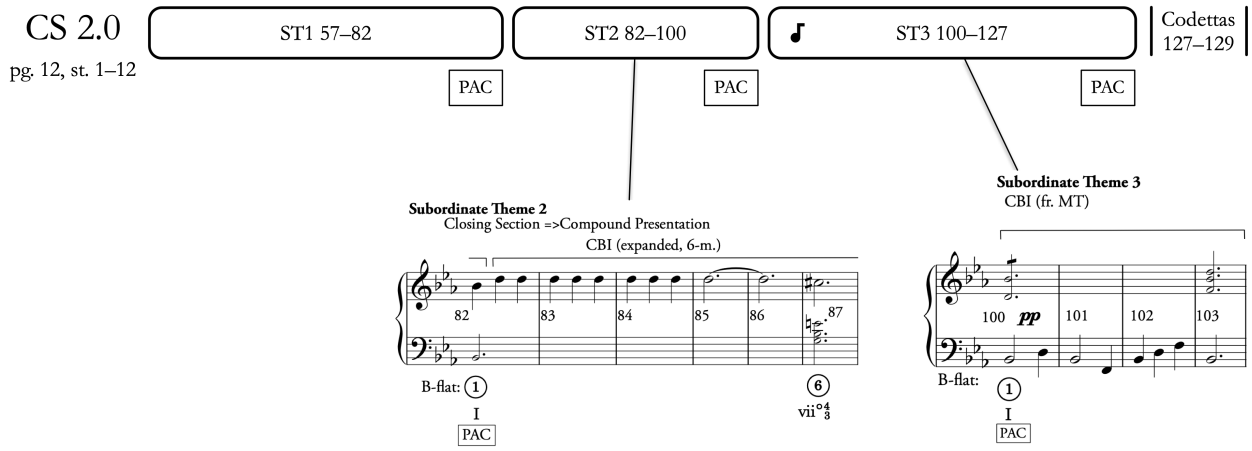
complicated because the main theme material did not bring an initiating function in the prior sketches—it brought a medial function (as Nottebohm also suggested). Thus, from a form-functional perspective, the overall process is somewhat different from what Lockwood and Gosman propose.

Example 247: Op. 55, I., mm. 109–116; Subordinate Theme 2, Part 2



Before we examine how the new part 2 compound presentation emerges, let me summarize the role that the main theme material has played in the subordinate theme group up to this point. Recall that in CS 2.0, Beethoven experimented with partitioning the music that corresponds with the final version's subordinate theme 2 into two separate themes: the first (ST2) began with the repeating quarter-note gesture, and the second (ST3) began with the main theme material in the subordinate key. See Figure 58. The main theme material functioned as the initiating component to a new, third subordinate theme in this prior sketch.

Figure 58: CS 2.0 Subordinate Theme Group Phrase Diagram with Incipits



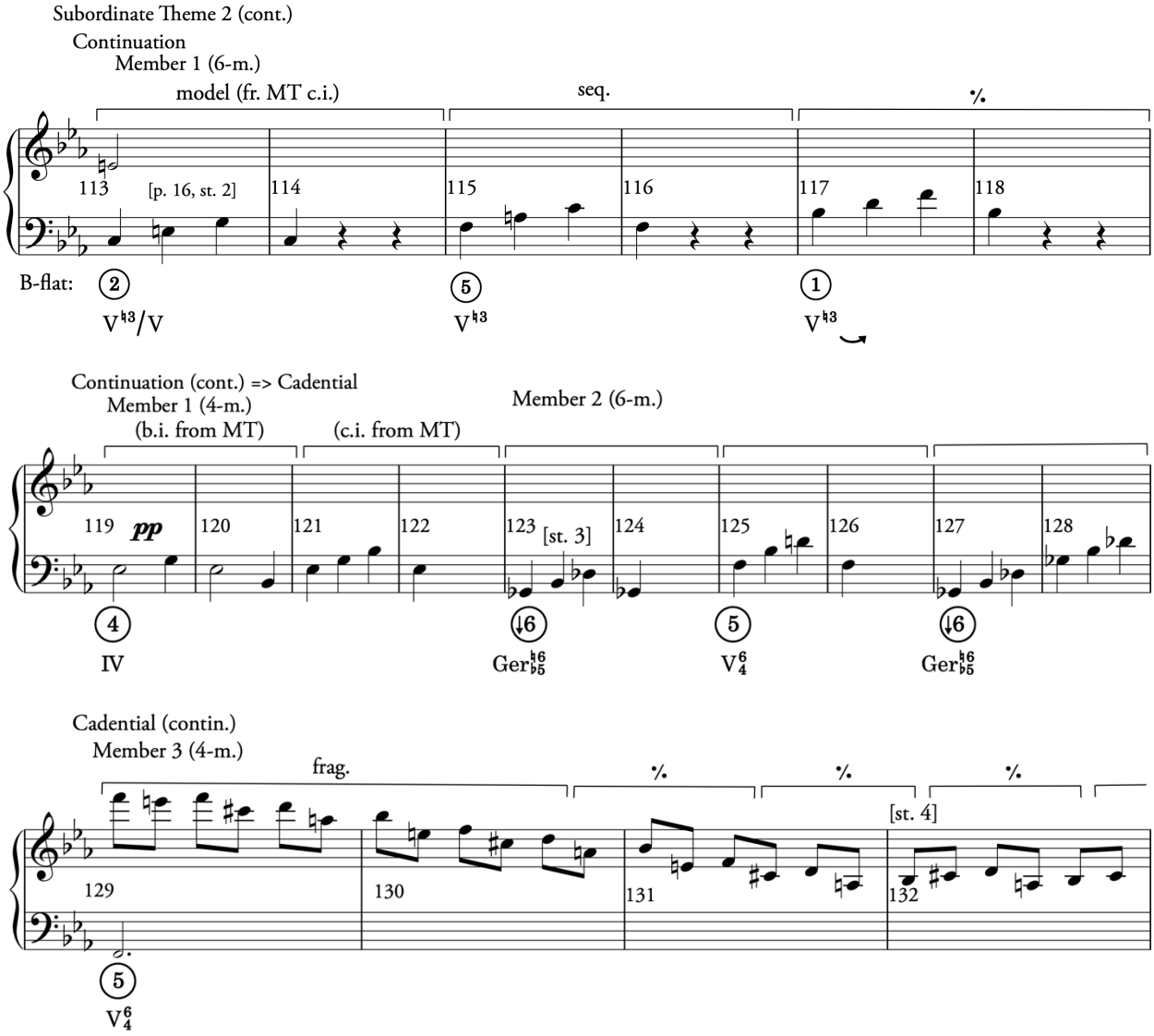
In his subsequent CS 3.0 sketch, he kept the main theme material, but integrated it into the second subordinate theme (ST2) as a continuation after a greatly expanded grand presentation. He therefore reverted the function of the main theme material to be continuational, more like the previous CS 1.2 sketch. Consequently, the subordinate theme group in CS 3.0 comprised only two subordinate themes instead of three.

In his first major revision of the subordinate theme group in branch 3.1.1, Beethoven foregrounded the main theme material somewhat by proceeding it with a sequence built with applied dominants that brought the main theme material in E-flat major (as subdominant in the subordinate key). But given the prior sequencing, it still brought a medial function, not the start of a new theme part. Thus, in the most recent sketches up to this point, the main theme material expresses a continuation, not a CBI. With these designs in mind, let us consider the role of main theme material in the new revisions.

7.5.1 Branch 3.2 (p. 17, st. 1–8)

Let us turn now to branch 3.2 (Vol. 2, pp. 67–68), the sketch that Beethoven wrote on page 17 of the sketchbook. In this sketch, the first two staves (corresponds with mm. 97–98) bring the continuation of the subordinate theme 2, beginning with the repeated quarter-notes on A-flat. Fortunately, Beethoven wrote the bassline to this music, which clarifies its function: the music moves from a ♭VII in B-flat (mm. 97–98) to tonicize F major as V/V in the subordinate key (mm. 99–101). Thereafter, a descending fragment in the top voice (mm. 102–104) leads to C major as an applied V/V in an ascending fourth sequence that matches what he wrote in 3.1.1 (compare mm. 105–114 to Example 248, mm. 113–122). In contrast to the previous 3.1.1 branch (Example 248, mm. 119–122), however, Beethoven does not write the main theme material at the end of the sequence in 3.2 (mm. 111–114), he merely implies it by writing a repeating high E-flat-6 in the continuity voice. In the next revision twig (i.e., 3.2.1) Beethoven will remove the main theme material altogether, so the explicit lack of this material in this 3.2 branch suggests that he was beginning to think about removing it. The sketch does not suggest, however, that he had yet come to the solution of bisecting the theme by devising a new initiating function to begin a second theme part. This idea will arrive later.

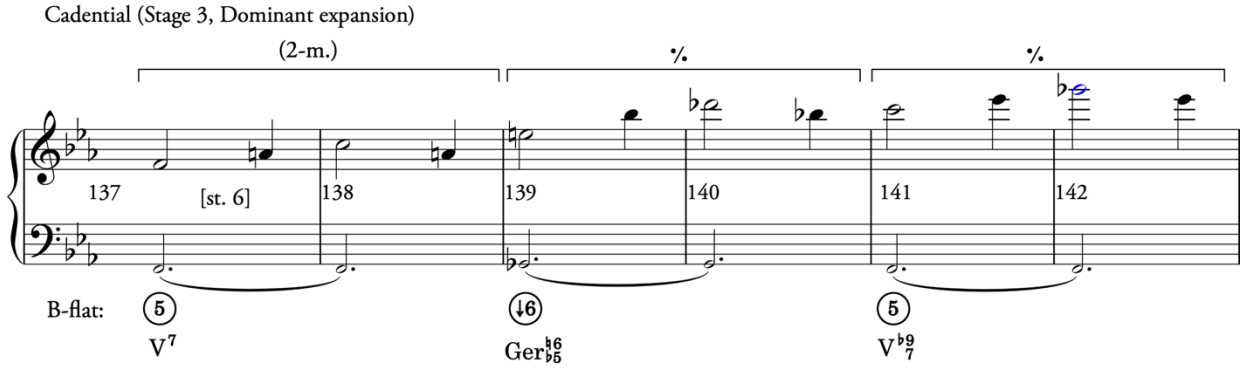
Example 248: Branch 3.1.1, mm. 114–132 (*ES* p. 16, st. 2–3)



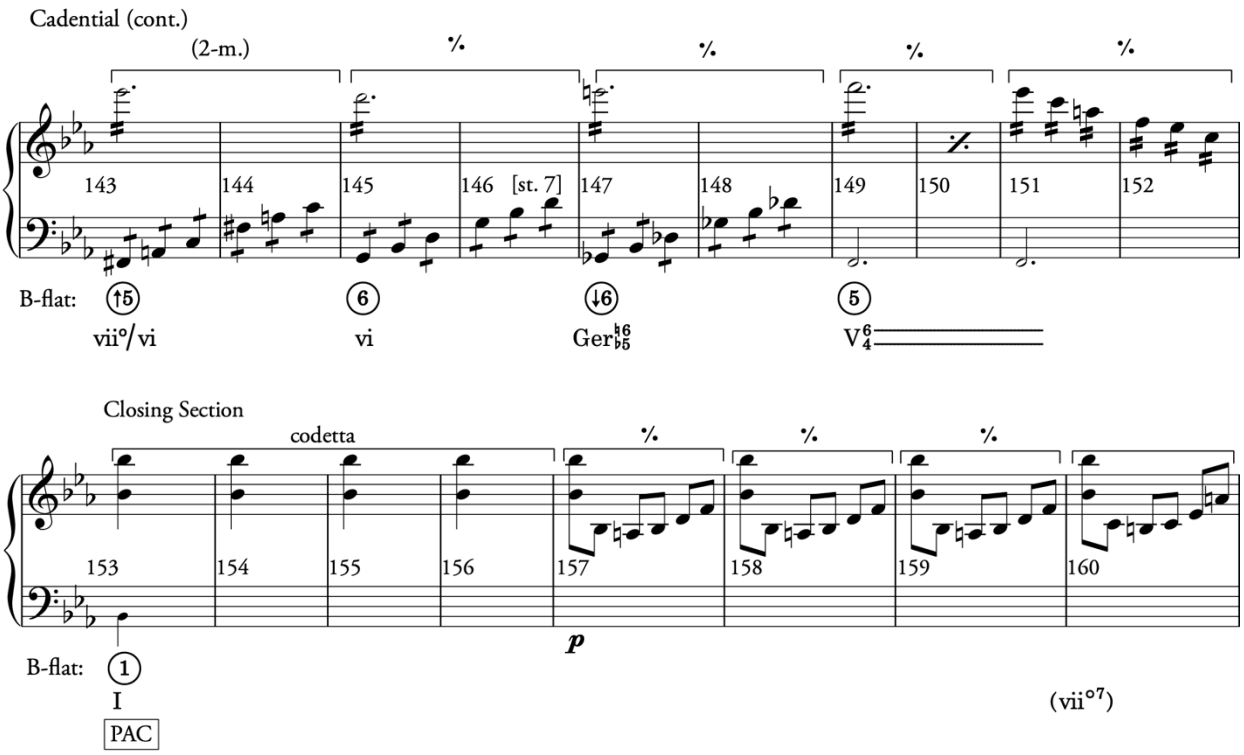
After the implied main theme material (Vol. 2, p. 67, branch 3.2, cf. mm. 114ff), the dominant prolongation that follows in mm. 115–119 appears to have been inspired by what Beethoven wrote on the previous page in branch 3.1.1 (compare 3.2, mm. 115–119 with Example 248, mm. 123–128). As before, he neighbors the cadential dominant ⑤ with ↓⑥ in the bass voice, likely harmonized as a German augmented sixth. The main difference in the new 3.2 sketch is the faster harmonic rhythm. In the prior 3.1.1 twig, the harmonies switch every two measures, whereas in the 3.2 branch they change every measure. This latter design corresponds more to the final version.

Having finally established the cadential six-four dominant in mm. 118–119 (branch 3.2), Beethoven could have resolved it to the cadential five-three, and closed the exposition with a PAC shortly thereafter in a similar fashion to how he ended CS 3.0 (compare the 3.0 version in Example 249 with Vol. 2, p. 67, branch 3.2, mm. 115–120).[194] Instead, he delays the cadence in the 3.2 branch by following the dominant prolongation (cf., branch 3.2, mm. 120ff) with the same eighth-note material that he wrote in the 3.1.1 sketch (compare the continuity voice in the treble voice of branch 3.2, mm. 120–123 with Example 248, mm. 129–132). In the previous 3.1.1 branch (Example 248, mm. 129–132), I suggested that this material prolonged a cadential dominant because the bass G-flat on the downbeat of m. 127 (3.1.1) suggested that an F would follow in m. 129. In 3.2, the situation is different because the last harmony in the dominant prolongation is a cadential six-four (3.2, mm. 118–119) and not an augmented German sixth. Consequently, two harmonizations are possible for the music that follows: 1) Beethoven could have abandoned the cadential six-four and started the continuation with ③ in the bass in m. 120 (as a first inversion tonic); or 2) it is equally plausible that he could have continued the cadential six-four. Either way, the dominant is abandoned shortly thereafter (somewhere around m. 123) and we get the impression that the cadential function has turned into a new continuation (mm. 120–127).

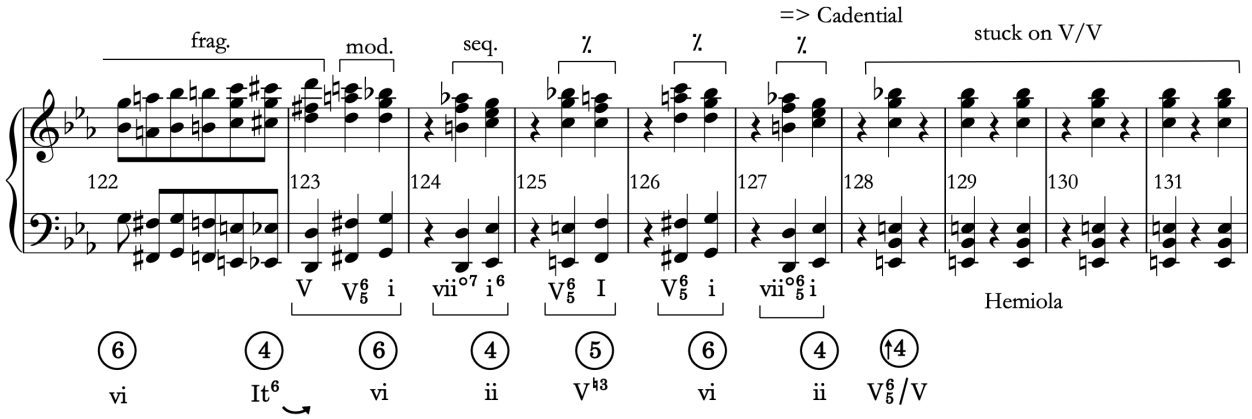
Example 249: CS 3.0 mm. 138–160, ST2 Cadential (*ES* p. 15, st. 6–7)



[194] In CS 3.0, he follows the cadential dominant with deceptive movement in the bass-melody cadential stream (from ⑤ to ⑥), then re-establishes the cadential ⑤.



Example 250: Op. 55, I., mm. 122–131, mm. 151-154

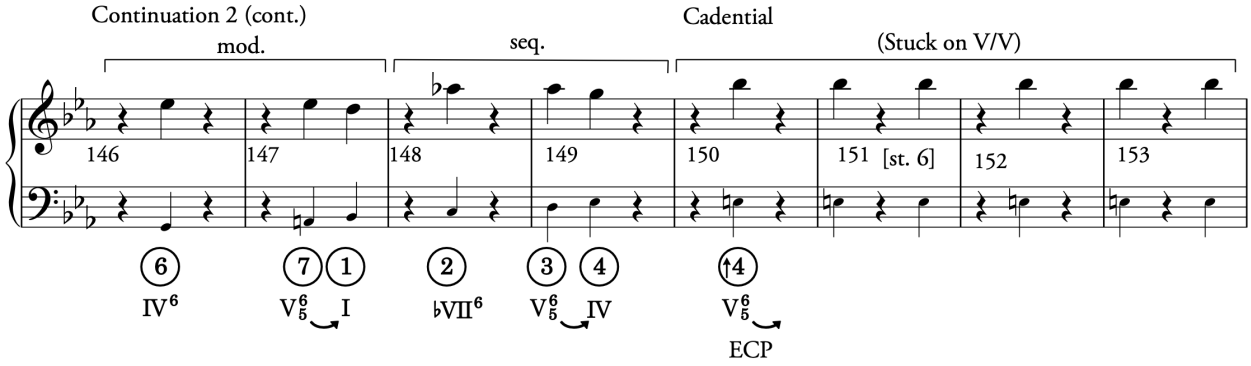


Given that Beethoven did not write a bass-voice for mm. 120–124 (3.2), it is not entirely clear what function he had planned for this passage. He must have recognized, however, the disjunction between the cadential rhetoric and the subsequent new continuation that was emerging. It is becoming more evident, therefore, that some new intervening function will need to be placed between the cadential dominant material (mm. 115–119) and what follows (mm. 120–124) because the logical succession of formal functions is strained.

At the end of the new continuation, beginning in m. 128 (branch 3.2, Vol. 2, p. 68), Beethoven re-writes the sequential, continuation 2 (labeled "Member 2, block [3]") that matches a

corresponding passage in the final version (compare 3.2, mm. 128–132 with Example 250, mm. 123–127). He then follows this continuation with the "stuck on V/V" passage (3.2, mm. 133–134, labeled "Member 1, block [4]") with explicit 6/5 figures between the E-natural in the alto and the B-flat in the soprano. Compared to the previous version of this music, he shortens the "stuck on V/V" prolongation to two measures, then follows it with four measures of cadential six-four harmony (compare 3.2, mm. 133–138 with Example 251). In addition, he eliminates the grouping structure hemiola that the previous 3.1.1 version expressed and replaces it with steady emphasis on beat two of each measure. Ultimately, Beethoven takes several steps closer towards the final piece in branch 3.2, but at the same time revises some elements in ways that make them more distant. This compositional approach suggests that he did not always know what the best version would be.

Example 251: CS 3.1.1, mm. 146–153, Subordinate Theme 2, Continuation (*ES* p. 16, st. 5–6)



After the arresting chordal stabs in mm. 133–138 (3.2, labeled "block [4]"), Beethoven resolves the dominant six-four (mm. 135–138) to the dominant five-three (m. 139) with a leaping motion in the continuity voice (m. 139–142) and writes a PAC in m. 143. Two 4-m. codettas follow (mm. 143–150), and a 4-m. retransition (mm. 151–154) prepares the exposition repeat.

To summarize, the overall phrase structure of the 3.2 revision written on page 17 matches closely what Beethoven wrote on pages 15 and 16 (3.1.1). The primary differences between these sketches include some changes to the figuration and internal phrase structures, a general compression of functions, and less explicit emphasis of the main theme material. At this point, the subordinate theme 2 is expanded primarily by enlarging its constituent continuation and cadential functions. As has been in the other 3 series sketches so far, the expansion of the subordinate theme group in 3.2 results from extensive cadential deviations. These deviations were becoming excessive,

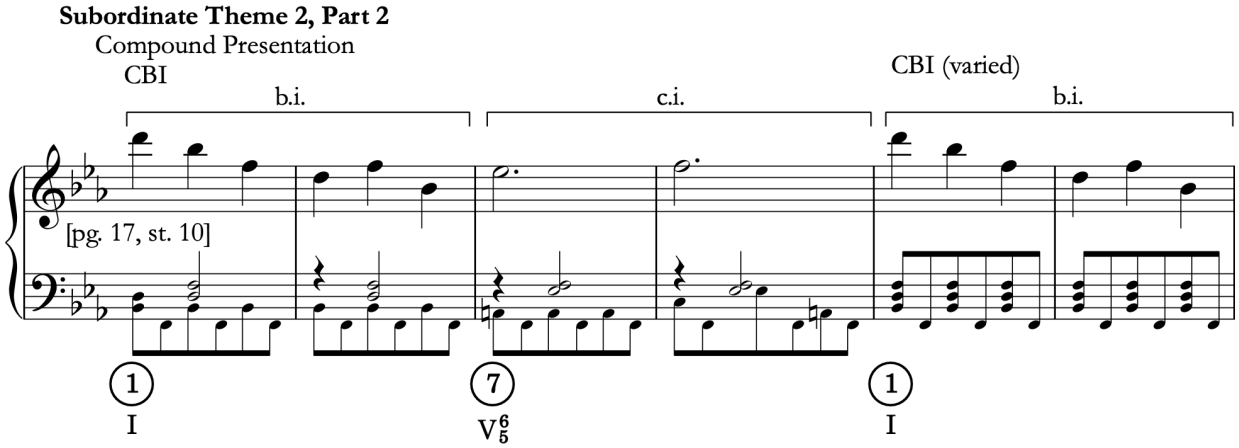
however, so the stage was set for a new compound presentation to establish a second part of the second subordinate theme.

7.5.2 Page 17 Fragments

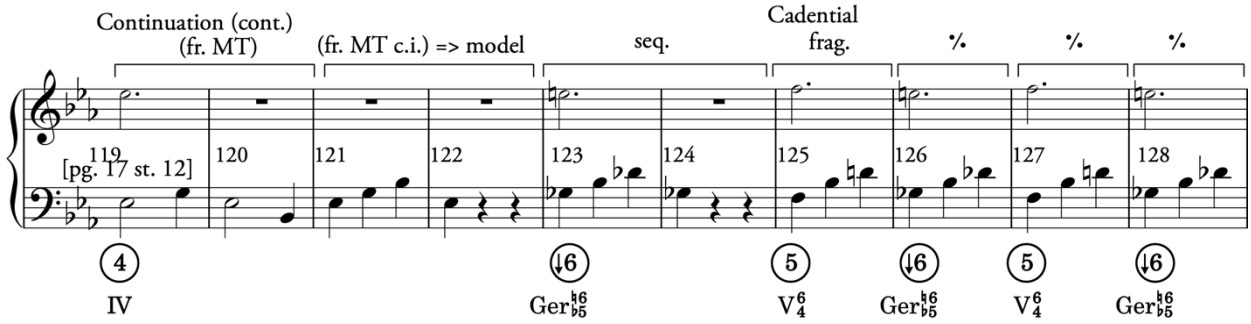
Before we move on to examine twig 3.2.1, the sketch that introduces the new, subordinate theme 2, part 2 compound presentation for the first time, let us consider the remaining material that Beethoven wrote on page 17 of the sketchbook. Most notable is the 6-m. fragment (Example 252, written on st. 10) that corresponds with the first 6-m. of the new, part 2 compound presentation, and the 10-m. fragment (Example 253, written on st. 12) that contain the main theme CBI material.

Lockwood and Gosman (2013a, 35) suggest that Beethoven laid out these passages (Example 252 and Example 253), one over the other (see Sketchbook Excerpt 19), because he was considering replacing the E-flat "theme" (i.e., the main theme material in Example 253) with the B-flat "theme" (i.e., the ST2 P2 compound presentation in Example 252). The main theme material sketched on st. 12, (Example 253, mm. 119–122), however, does not function as a self-contained theme, but rather modifies part of the continuation that Beethoven sketched on page 16 in branch 3.1.1 (Example 254, mm. 120–129). In this page 17 revision (Example 253), he merely tightened the cadential part of the phrase (mm. 126–129) by shortening the augmented-German sixth and dominant six-four harmonies to one measure fragments instead of two (compare Example 253 with the 3.1.1 version in Example 254, mm. 126–129). Thus, because the main theme material sketched on staff 12 (Example 253, mm. 119–122) projects part of the continuation function leading to a cadential dominant—at least, in reference to the prior 3.1.1 sketch (Example 254, mm. 119–122)—it is not clear that Beethoven was considering to replace the medial, main theme material with the new subordinate theme 2, part 2 compound presentation (Example 252) because these functions are not analogous. From a form-functional perspective, therefore, is not evident why he wrote these two passages over one another on staves 10 and 12. If we temper Lockwood and Gosman's suggestion, perhaps Beethoven sought to compare the *material* of the main theme with the new subordinate theme 2, part 2 CBI, but not the function. At this stage, he seems to have realized that he did not want to use the main theme material to build an initiating function, as he tried that solution in prior sketches but subsequently abandoned that design (e.g., in CS 2.0, Vol. 2, p. 53, mm. 100–103).

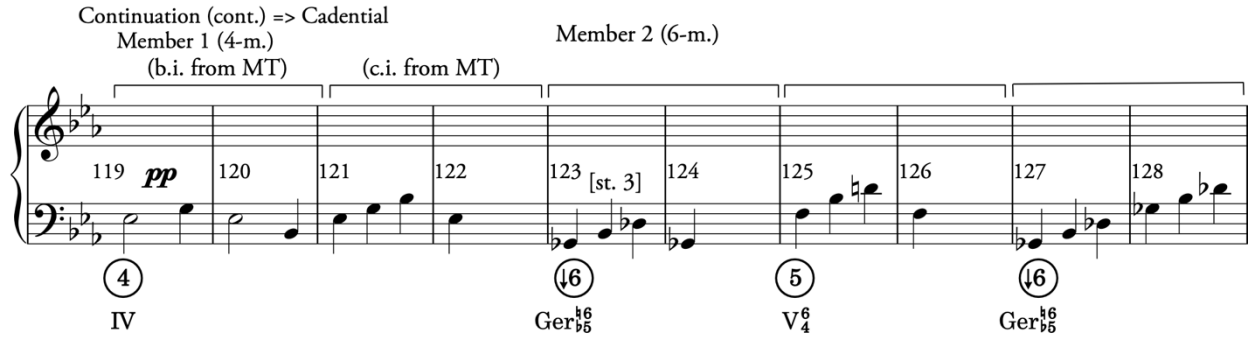
Example 252: *ES* p. 17, st. 10, mm. 1–6 Transcribed and Analyzed



Example 253: *ES* p. 17, st. 12; Transcribed and Analyzed (replaces CS 3.1.1, mm. 119–128)



Example 254: CS 3.1.1, mm. 120–129; Subordinate Theme 2, Continuation (*ES* p. 16, st. 2–3)



Sketchbook Excerpt 19: *ES* p. 17, st. 10–12

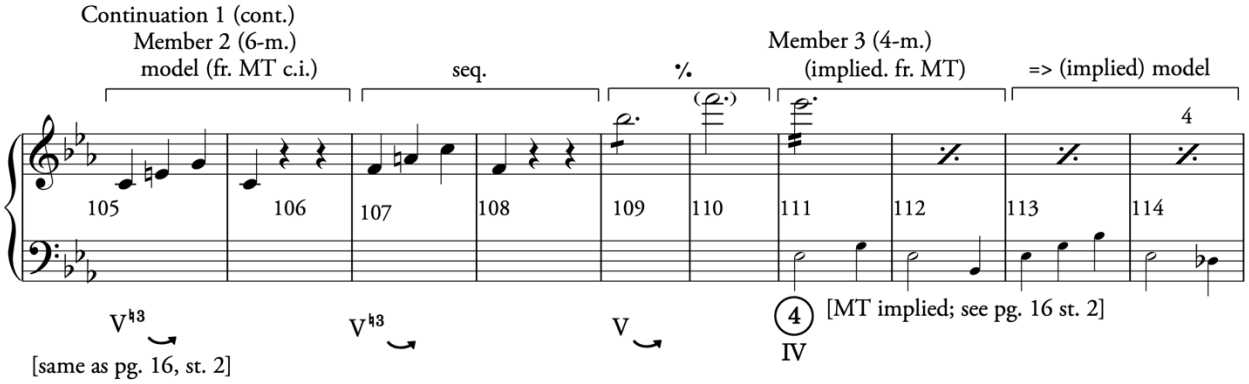


7.5.3 Twigs 3.2.1, 3.2.2, and Branch 3.3

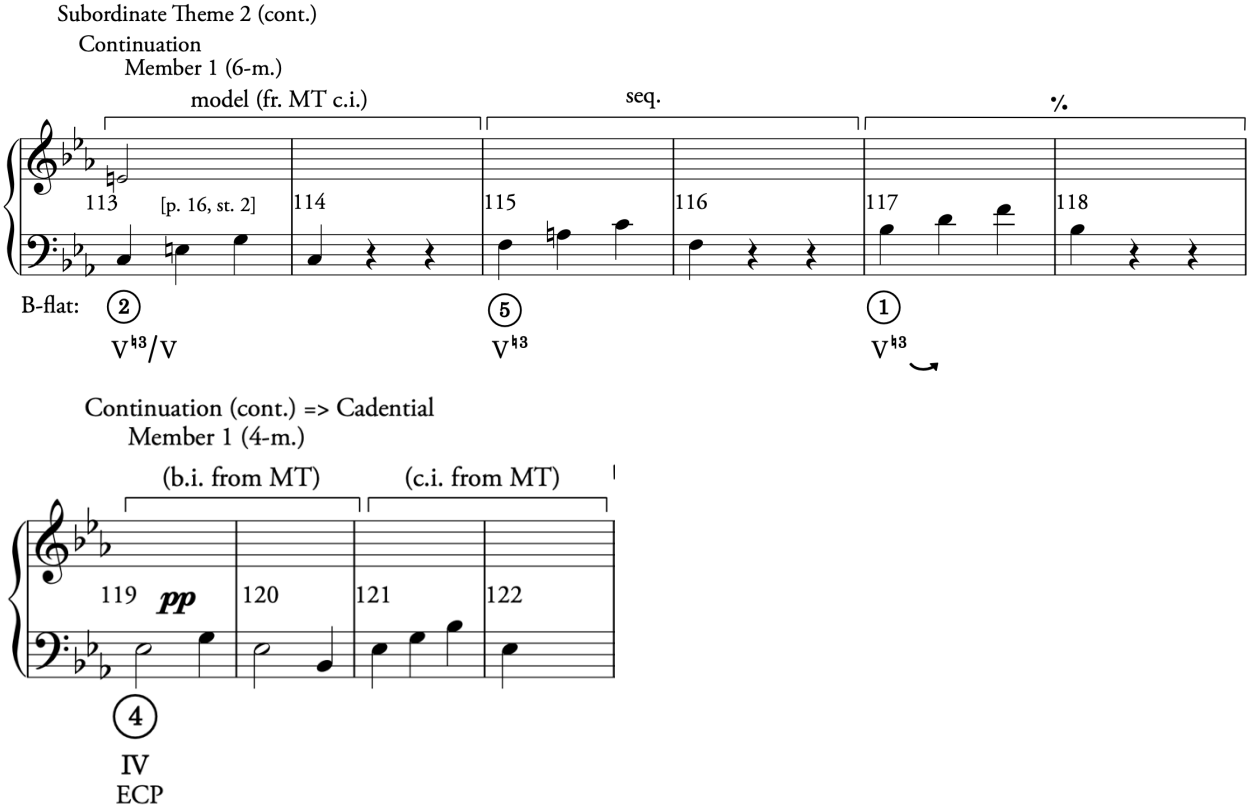
Now that we have examined the fragments that Beethoven wrote on page 17 of the sketchbook, let us turn to page 18. I partition this page into two twigs, 3.2.1 (st. 1–4), 3.2.2 (st. 6–8) and one branch 3.3 (st. 10–14). It is on this page that Beethoven eliminates the continuational main theme material from the subordinate theme group and introduces the new compound presentation that starts the second part of the subordinate theme 2. In what follows, I discuss this process in greater detail by detailing the form of twig 3.2.1 and highlighting some of the more minor differences in twig 3.2.2 and branch 3.3.

The 3.2.1 twig (Vol. 2, p. 69–70) begins with a reformulated version of the subordinate theme 2's first continuation (mm. 105–110) that is strongly inspired by the previous two versions (compare with Example 255, mm. 105–110 and Example 256, mm. 113–118). Namely, the continuation is built with the contrasting idea of the main theme material. In contrast to the previous two versions, however, he does not sequence the initial C major harmony in 3.2.1 (mm. 105–106, implying V/V) 2-m. fragment up a fourth (mm. 107–108). Instead, he keeps the initial C originally established on the downbeat of m. 105 and changes what follows to imply a $\flat$VII^{6} harmony (mm. 107–108). Thereafter, he lowers the initial C to a C-flat (m. 109) and implies a V$^{4/2}$/$\flat$VI harmony, that is, a D-flat dominant seventh harmony. He thus reformulates the continuation to move in a different harmonic direction: we no longer have the impression that we are moving by fifths towards the home key tonic (E-flat major) like we did in the prior sketches. Rather, we have the sensation that we are circling back to the subordinate key tonic (B-flat major) to correct the prior harmonic overshoot.

Example 255: CS 3.2, mm. 105–114; Subordinate Theme 2, Continuation (*ES* p. 17, st. 1)



Example 256: CS 3.1.1, mm. 113–122; Subordinate Theme 2, Continuation and Cadential (*ES* p. 16, st. 2)

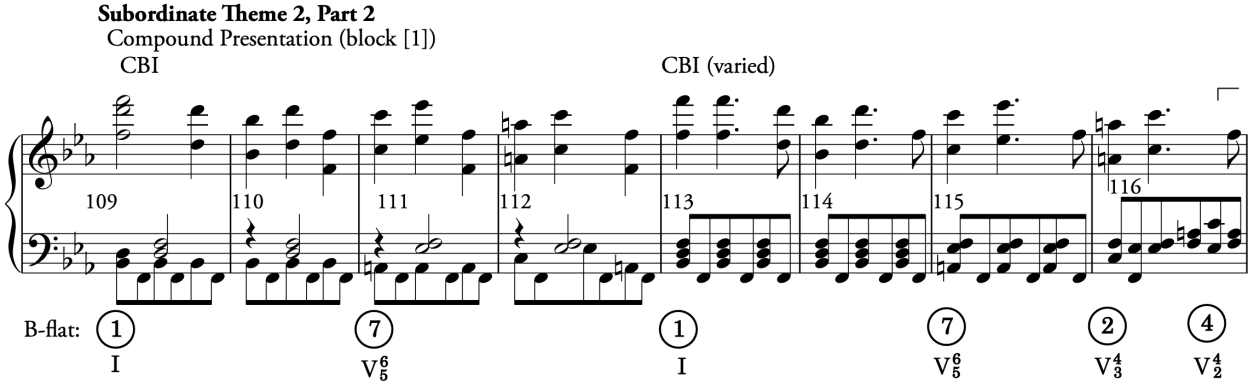


In the measures that follow the altered 6-m. continuation (Vol. 2, p. 69, twig 3.2.1, mm. 111–116), Beethoven writes a new 6-m. model-sequence built with alternating 5/3 and 6/3 figures that imbeds a chromatic ascent from ^↓3 (D-flat5) to ^5 (F5) on the downbeat of each 1-m. fragment

(highlighted in blue notes).[195] When the sequence reaches the subordinate-key dominant (F dominant seventh in m. 115), the sequence breaks, and the implied dominant harmony continues for one more measure (m. 116). Having re-obtained the subordinate key dominant, the stage is now set for a tonic harmony, and thus a new initiating function.

In mm. 117–124, Beethoven introduces a new compound presentation that initiates a part 2 of the subordinate theme 2 for the first time. The grouping structure and harmonic layout of this new compound presentation matches the corresponding passage in the final version (compare mm. 117–124 with Example 257), but the figuration differs considerably. Perhaps the most notable differences in the 3.2.1 version are the A-naturals that arrive on the downbeats of m. 119 and the varied repeat in m. 123. These prominent A-naturals in the soprano voice suggest a root position dominant harmonization rather than the inverted dominant ($V^{6/5}$, i.e., ⑦ in the bass) that is expressed in the final exposition (compare mm. 119–120 and 123–124 with Example 257, mm. 111-112 and mm. 115–116). In short, the general harmonic layout of the new compound presentation is established in 3.2.1 but the specifics differ.

Example 257: Op. 55, I., Piano Reduction, mm. 109–116; Subordinate Theme 2, Part 2



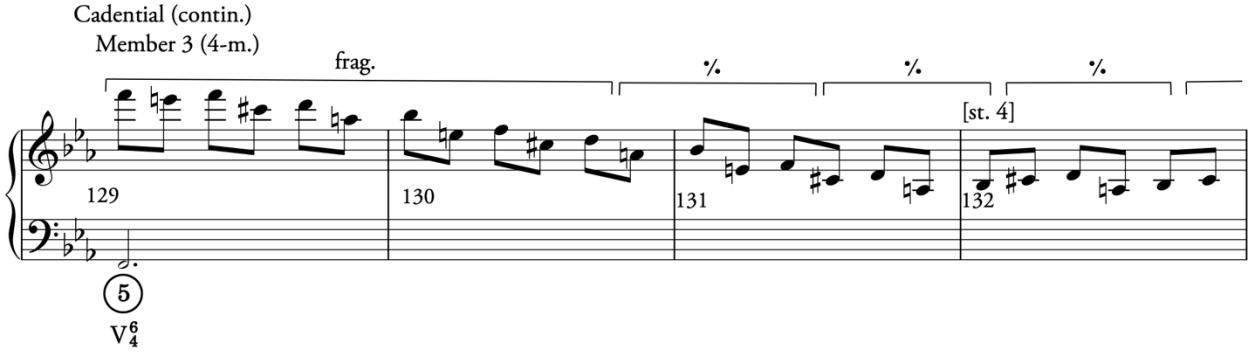
After the compound presentation (3.2.1, mm. 125–128), Beethoven writes a new eighth-note passage that brings a new continuation. This material is somewhat unexpected in reference to the final version, as we would have predicted him to use the material that he drafted in the earlier 3.1.1

[195] It is unclear how the harmony in m. 111 relates to the harmony in m. 109–110, given that this former harmony appears to be a D-flat dominant seventh, whereas the harmony in m. 11 expresses a D-flat triad. Unfortunately, mm. 109–110 are difficult to read in the sketch, so it is challenging to know what Beethoven intended for these measures.

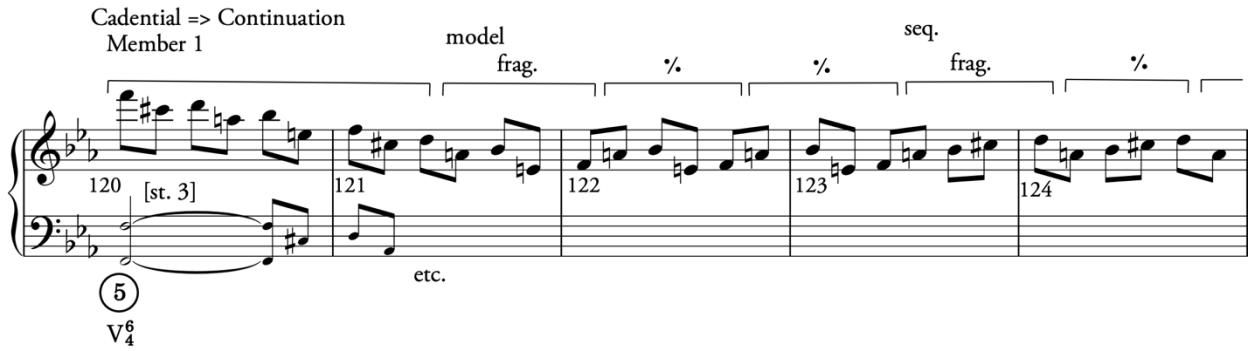
(Example 258) and 3.2 sketches (Example 259) branches discussed above, because the corresponding passages in those revisions more closely matched the material in the final version (Example 260). Perhaps he did not return to his previous material in the 3.2.1 branch (mm. 125–128) because he conceptualized his earlier designs as dominant prolongations and he now needed a passage that expressed tonic harmony. Presumably, then, he knew he wanted a continuation after the compound presentation built with an eighth notes texture, but he did not yet realize that he could use the material that he drafted earlier because it fulfilled a different function.

In the new 3.2.1 continuation (Vol. 2, p. 69, mm. 125–129), the continuity voice begins with a B-flat5 (m. 125). Although it is difficult to know exactly what he intended to harmonize this note with, one plausible solution would be ③ in the bass as I^6. In the end, Beethoven eventually recognized in the next sketch (3.2.2, Example 261, mm. 127–132), that he could use the material he previously devised in branches 3.1.1 and 3.2 to fulfil a continuation function after the subordinate part 2 compound presentation. The 3.2.2 design corresponds closely with the final version (compare Example 261 with Example 260; note, however, that Beethoven did not yet explicitly write in the suggested bass voice).

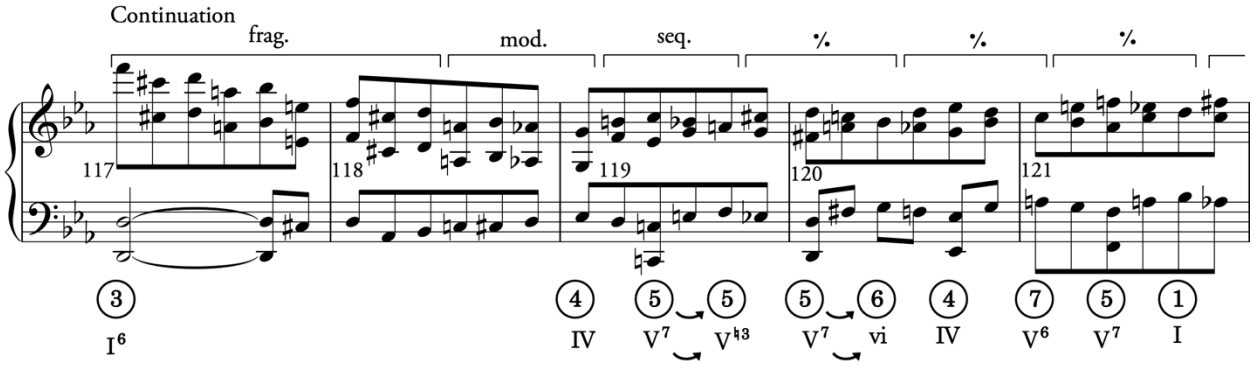
Example 258: 3.1.1, mm. 129–132 (*ES* p. 16, st. 3–4)



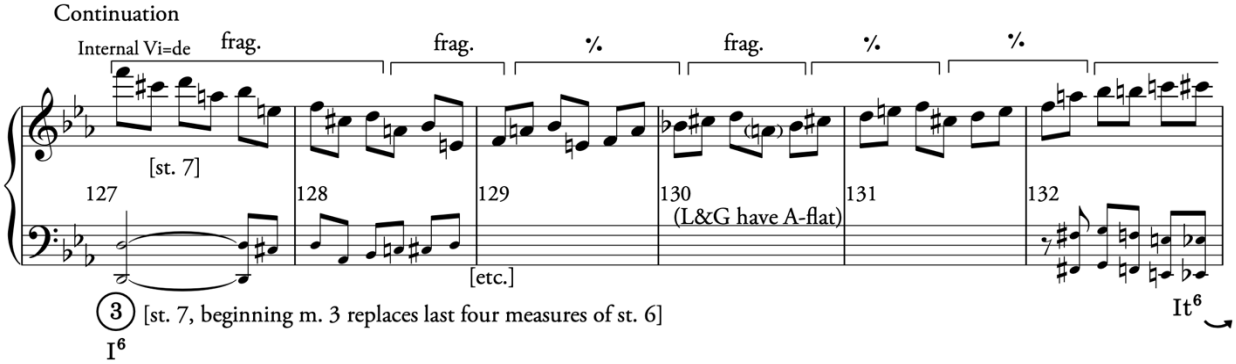
Example 259: 3.2, mm. 120–124 (*ES* p. 17, st. 3)



Example 260: Op. 55, I., mm. 117–121



Example 261: 3.2.2, mm. 127–132 (*ES* p. 18, st. 7)



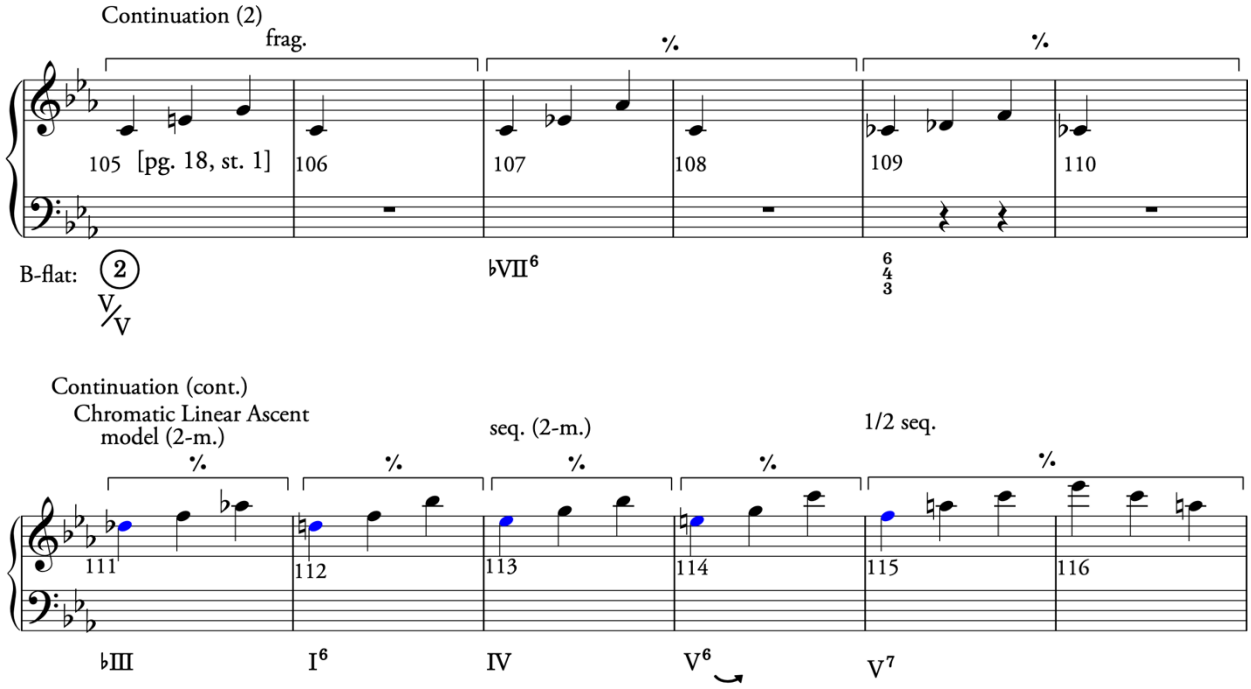
By the end of the 3.2.1 twig, the general structure of the subordinate theme group—except for the unusual main theme material that starts the group (drafted in CS 3.0, mm. 43ff.)—begins to resemble the final version. There is still some work to be done, however. The internal dominant arrival and SotD that separates part 1 of the subordinate theme 2 from part 2 is missing, as are the cadential deviations that expand part 2. Beethoven does not sketch any of these elements on page 18—we will find most of these changes in the CS 4 series, discussed in the next chapter. Before we move on to those sketches, however, let us consider a few more differences between the three revisions written on page 18 (i.e., 3.2.1, 3.2.2, and 3.3).

These revision sketches suggest that Beethoven was very unsure how he would transition from the end of the subordinate theme 2, part 1 to the beginning of part 2. All the sketches on page 18 attempt to use the main theme contrasting idea material to achieve this link (Example 262). Structurally, Beethoven's instinct in these sketches seems to be to write a fully chromatic ascending line that traverses from C up to B-flat that uses part of the contrasting idea to achieve this ascent. It is remarkable how many times he tries this idea before he eventually abandons using the contrasting idea altogether (compare the blue notes in Example 262A, B, and C). In the final version (Example

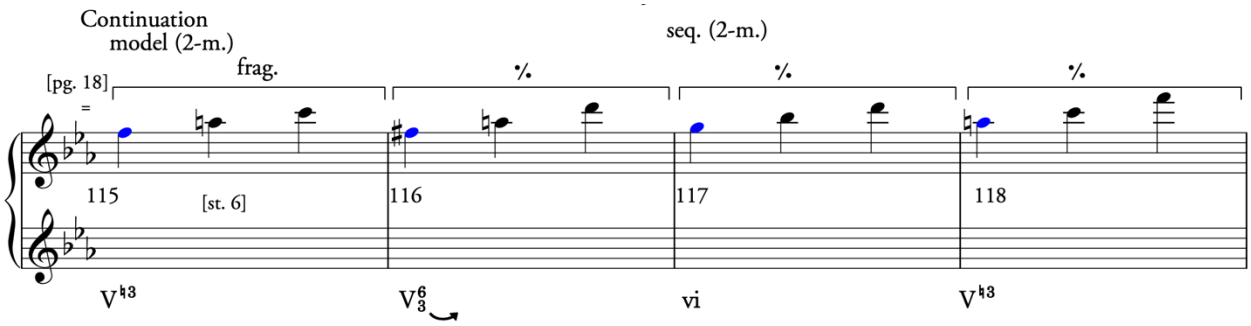
263, mm. 99–102), he keeps the structural ascending chromatic line in the top-most voice, but it is expressed in a greatly compressed form over a dominant harmony that articulates the internal SotD. The guiding compositional principle, therefore, seems to have been a desire to write an ascending chromatic line.

Example 262: Links from the end of subordinate theme 2, part 1 to part 2

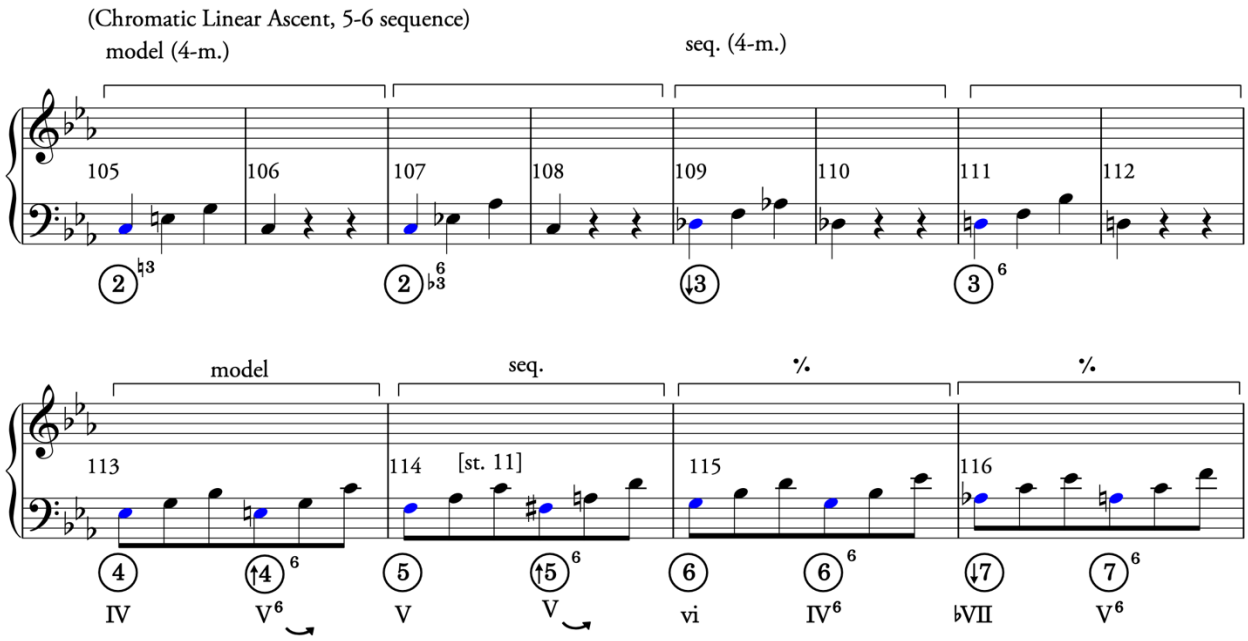
A. 3.2.1 (*ES* p. 18, st. 1)



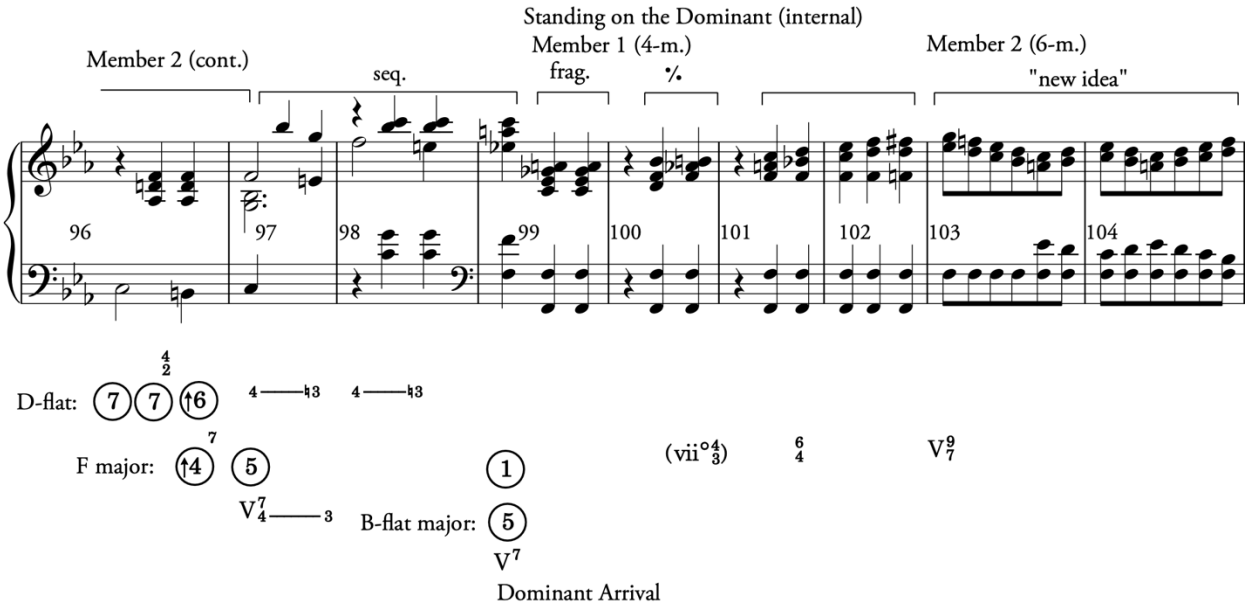
B. 3.2.2 (*ES* p. 18, st. 6)



C. 3.3 (*ES* p. 18, st. 10–11)



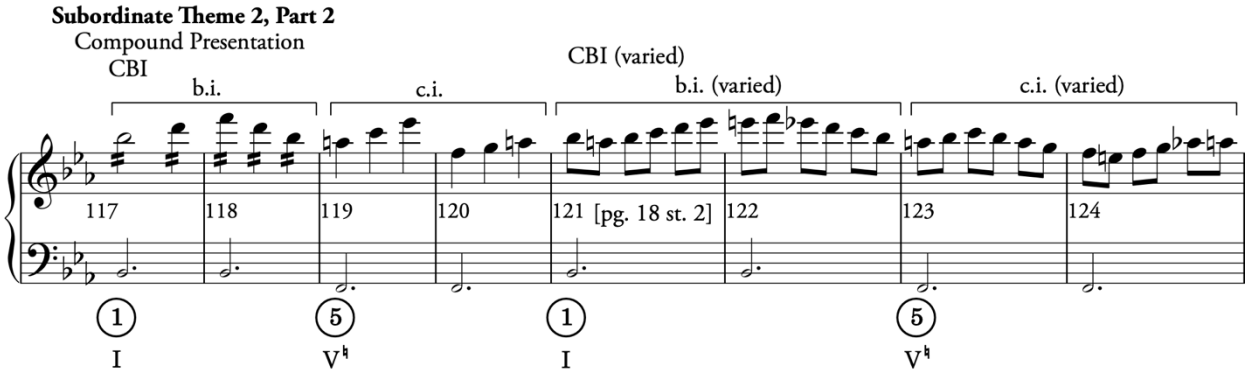
Example 263: Op. 55, I., mm. 96–104; Subordinate Theme 2, Part 2 Continuation and Standing on the Dominant (internal)



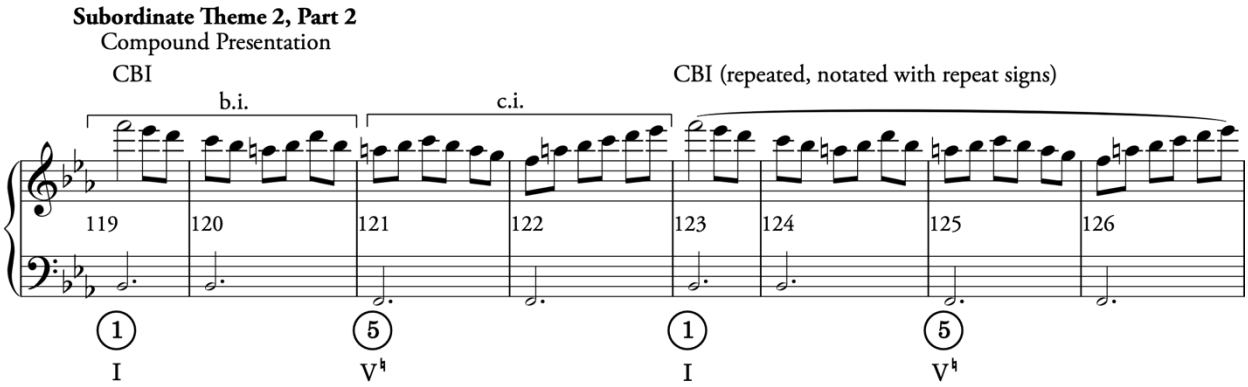
Apart from the contrasting idea-based continuation material that he used to link the end of the subordinate theme 2, part 1 with part 2 highlighted above (Example 262), the phrase functions of the rest of the sketch do not change significantly in the page 18 revisions. The content is still not yet finalized. Consider, for instance, the three different versions of the subordinate theme 2, part 2 compound presentation shown in Example 264. Each of these compound presentations articulate

the same basic harmonic and grouping structure, but their figuration differs considerably. The third version (C) begins to resemble the final version, especially because he adds a bass voice, but the design is more mechanical. Instead of a slightly varied contrasting idea, which would have built a CBI, he simply writes a statement-response of the basic idea (i.e., a dominant harmony version of the b.i.) to build a presentation (compare Example 264C with Example 265). We will see additional variants of this function in the 4 series in the next chapter: in general, he arrived at the functional structure of the subordinate theme 2, part 2 compound presentation but did not finalize its internal structure and content. Variants like these suggest that Beethoven composed with larger-scale formal functions in mind, then worked to realize those functions in the best way possible with the appropriate content for the context.

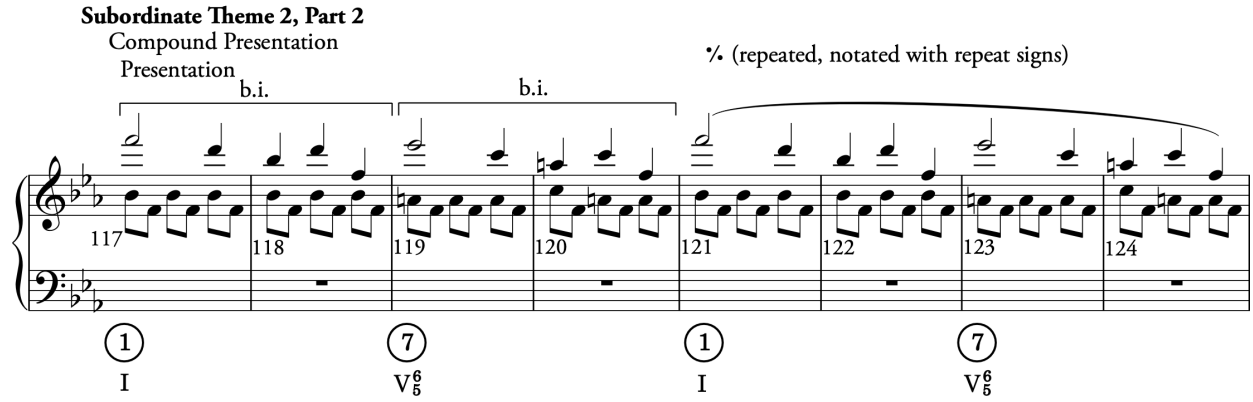
Example 264: Subordinate Theme 2 Part 2, Compound Presentation Versions (*ES* p. 18)
A. 3.2.1 (p. 18, st. 1–2)



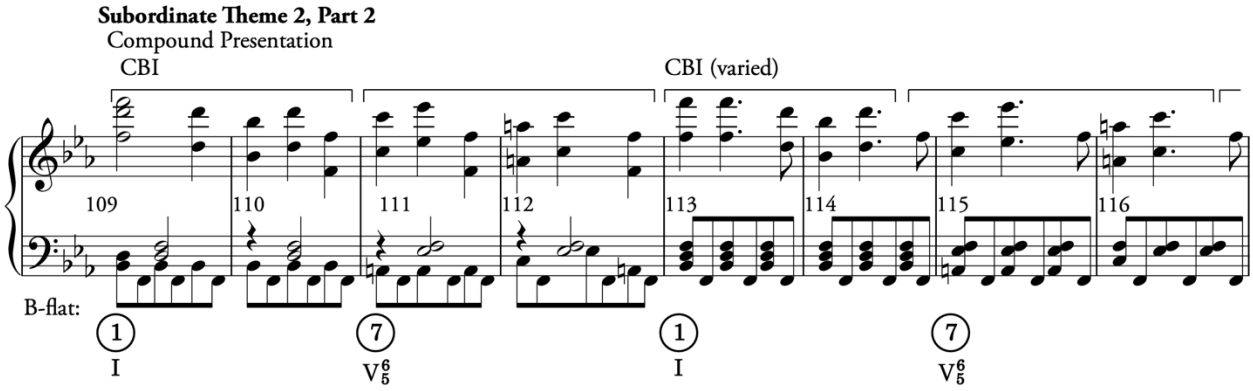
B. 3.2.2 (p. 18, st. 6)



C. 3.3 (p. 18, st. 11)



Example 265: Op. 55, I., mm. 109–116, Subordinate Theme 2 Part 2, Compound Presentation



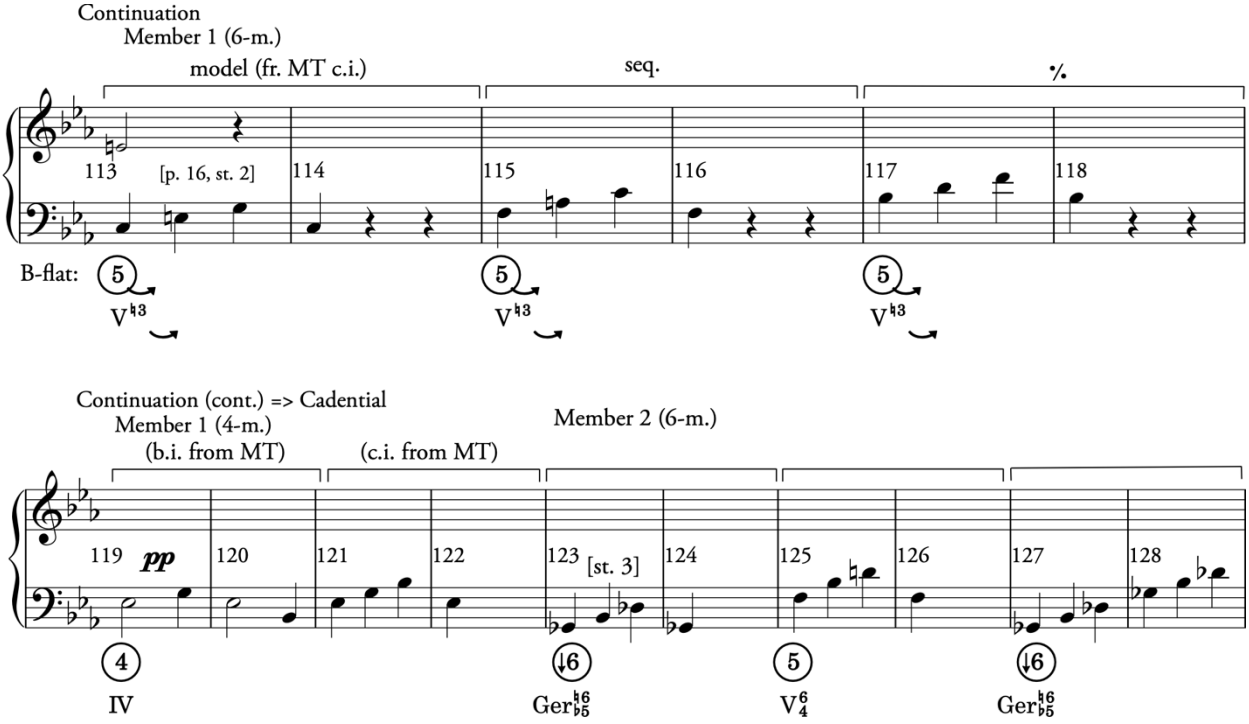
7.5.4 The Motivating Factors for the New, Part 2 Compound Presentation

Now that we have examined the phrase structure of the final revision written on page 18, let us return to Lockwood's and Gosman's characterization of how the new subordinate theme 2 part 2 arose in twig 3.2.1. On the one hand, as they suggest, Beethoven does remove the main theme material from the end of the second subordinate theme and he simultaneously introduces a new, compound presentation to start part 2 (3.2.1).[196] On the other hand, this interpretation is an oversimplification, because the two passages are not functionally equivalent. The main theme material that Beethoven wrote on the previous page 16, st. 2 (Example 266, mm. 119–122) is not a self-standing theme, nor is it an initiating function; rather, this material begins an ECP and follows a continuation. Thus, although Gosman and Lockwood's interpretation of Beethoven's compositional process is accurate from a material perspective, the way this plays out from a functional perspective is more involved.

[196] See (Beethoven, Lockwood, and Gosman 2013a, 35).

Beethoven's decision to write a new compound presentation to start a second part of the subordinate theme 2 and his choice to remove the main theme material could be motivated by several different factors. The main theme material, functioning as part of the continuation in subordinate theme 2, part 1, slowed down the harmonic rhythm to a single harmony for a 4-m. group. This harmonic deceleration group was not a problem when the prior initiating function of the subordinate theme 2 was an enormous grand presentation, as it was in the original 3.0 version. But now that Beethoven had compressed the initiating material to be a compound presentation (thus 8-m. instead of 16-m.) and shortened the continuation, the vestigial, main theme-based CBI material was no longer suitable because it stalled the harmonic rhythm of the continuation by not introducing fragmentation as we would expect from a continuation. Consequently, Beethoven had to devise a new way to expand the second subordinate theme.

Example 266: Main Theme material in in 3.1.1 (*ES* p. 16, st. 2)

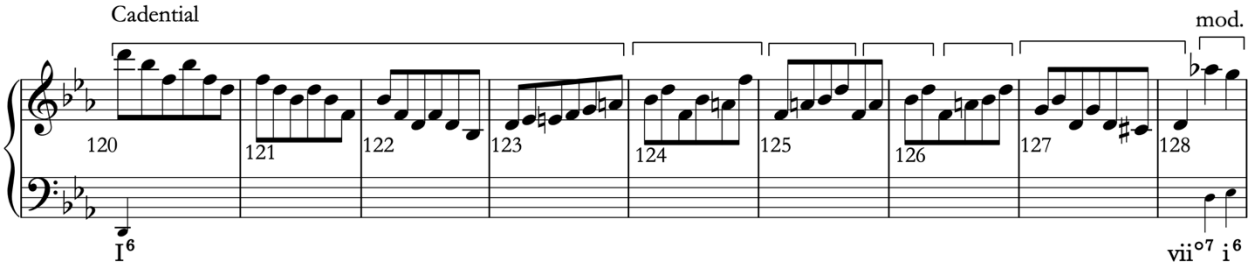


Functionally, and at the largest scale, the new, subordinate theme 2, part 2 compound presentation seems to have emerged from a desire to write a more emphatic initiating function to what was becoming a large-scale, hyper-ending function for the entire subordinate theme group. Consider Example 267, which shows the starting cadential material in branches 3.1 (A), 3.1.1 (B), and 3.2 (C). In each of these sketches, the cadential function begins with energy gaining eighth notes

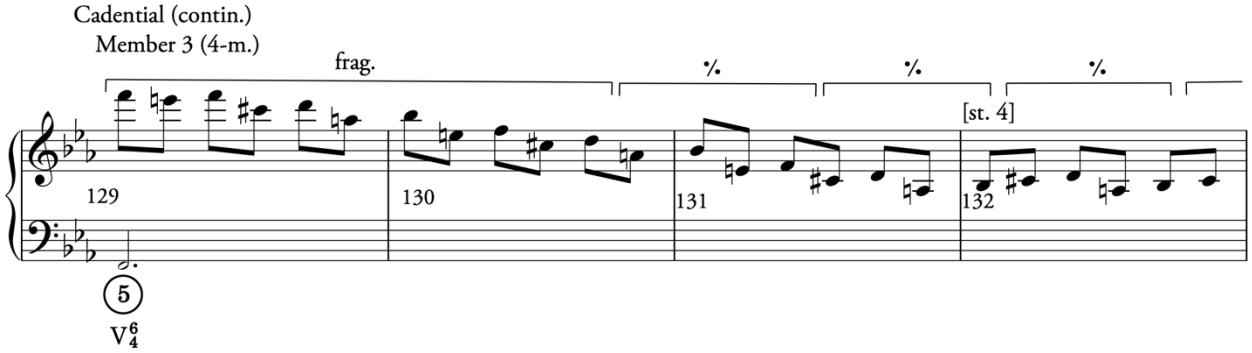
that follow a general descending trajectory. But in the next 3.2.1 twig (Example 268)—the sketch that includes the new part 2 compound presentation—Beethoven alters this eighth-note material considerably to ascend rather than descend. The new, 3.2.1 continuation prolongs what is presumably an inverted tonic (③ in the bass) but does not include the extensive sequential motion that he eventually uses in the final. His initial impulse, therefore, seems to have been to temper the size and scope of the eighth note continuation, perhaps to account for the new energy gaining compound presentation that he devised to precede it.

Example 267: Cadential functions sketched on page 17 (3.1, 3.1.1, and 3.2)

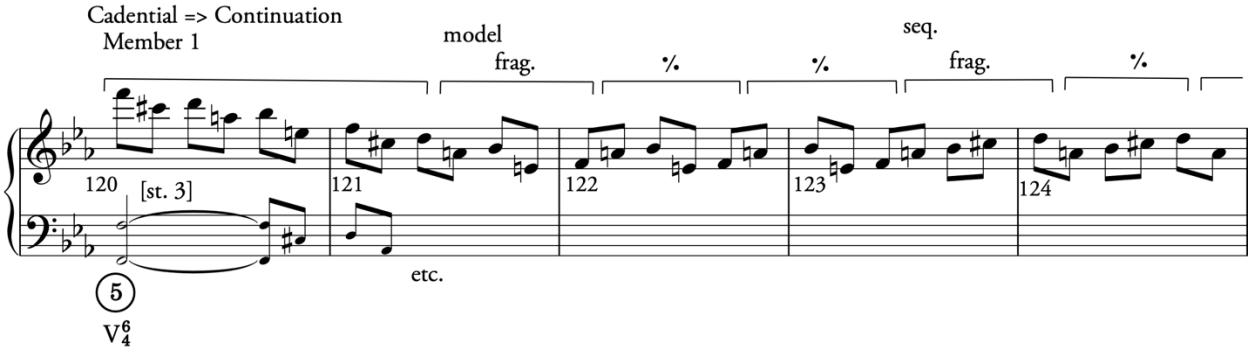
A. 3.1 (*ES* p. 17, st. 16)



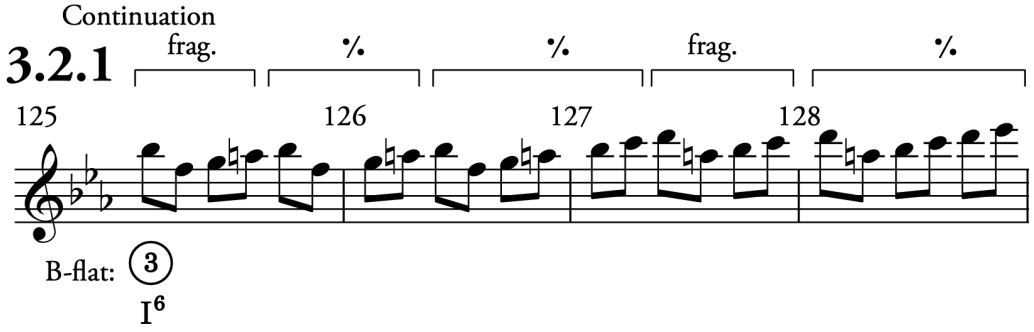
B. 3.1.1 (*ES* p. 17, st. 3–4)



C. 3.2 (*ES* p. 17, st. 3)

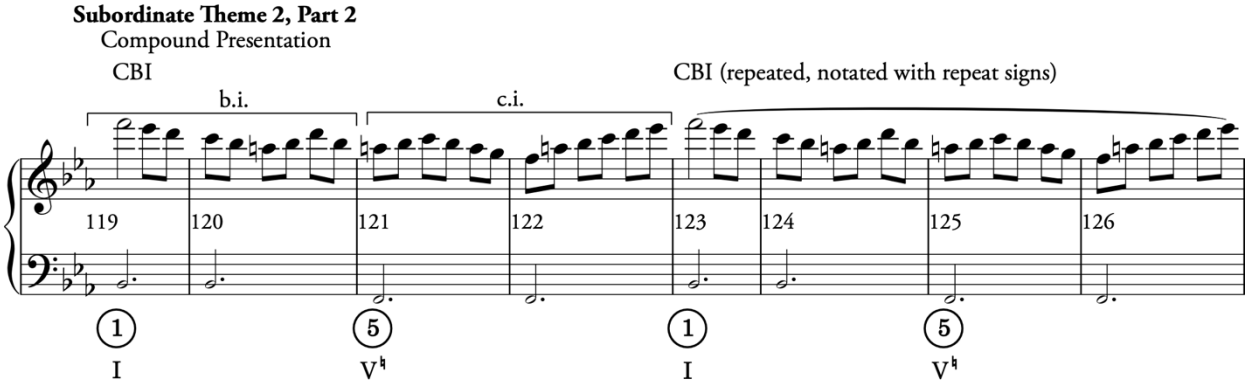


Example 268: 3.2.1, mm. 125–128; Continuation (*ES* p. 18, st. 2)



It is noteworthy that he tried one version of the compound presentation that was written completely with running eighth notes (i.e., 3.2.2 in Example 269). This content is most distant from the final, but most similar to the running eighth notes that previously brought a cadential function (i.e., in 3.1, 3.1.1, and 3.2 in Example 267). Thus, it is almost as though he considered repurposing the previous cadential material to be a new initiating function. In the 3.3 sketch thereafter (refer to Example 264C), he seems to have transferred the eighth-note energy that was in the continuation to the accompanying voice of the compound presentation. This change may have allowed him to re-introduce the previous quarter-note design in the top-most voice. Given that Beethoven did not normally write in the accompaniment texture alongside his continuity voice, this interpretation is plausible. In other words, Beethoven was balancing two compositional ideas, introducing new material to form a compound presentation on the one hand, and developing a new large-scale cadential function on the other.

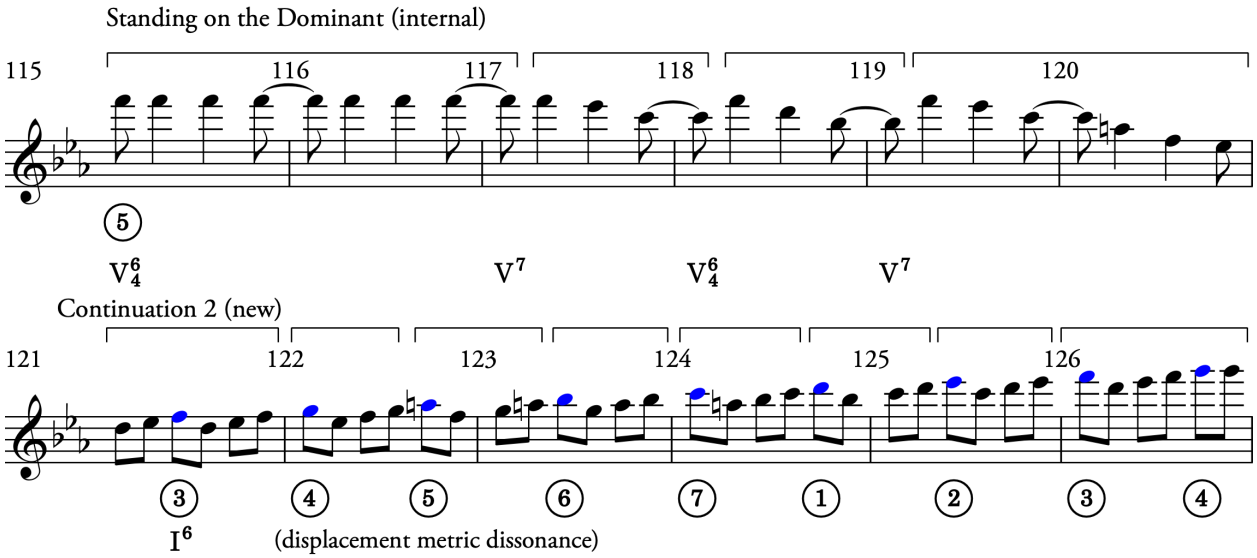
Example 269: 3.2.2 (*ES* p. 18, st. 6)



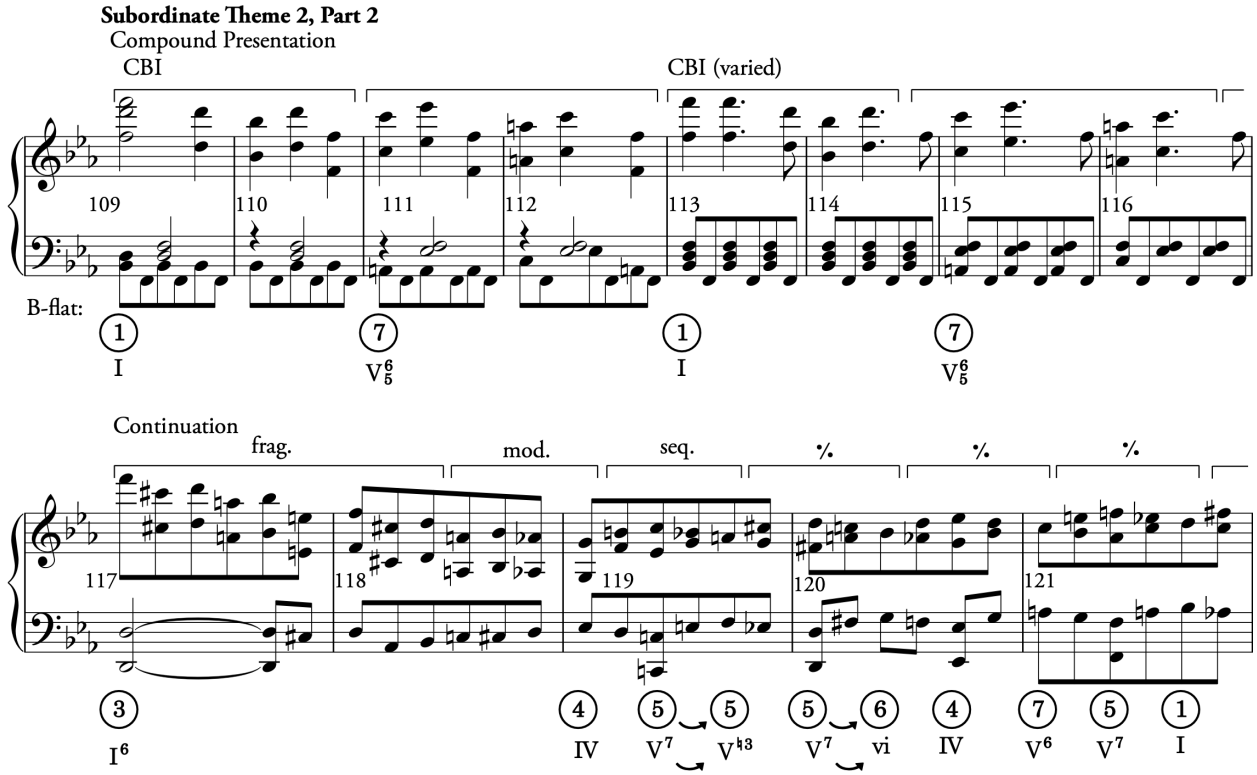
The new, part 2, compound presentation, at least, from a rhetorical perspective, may have also been inspired by the internal SotD that he devised in CS 3.0 to expand the subordinate theme 2 (see Example 270, 115–120; for context, see Vol. 2, p. 61). The general, soaring character of that earlier SotD followed by the running eighth note continuation thereafter (mm. 121–126) matches the general rhetoric of the part 2 compound presentation and continuation in the final version (compare Example 270 with the treble staff in Example 271). We might, therefore view the persistent oscillation in the bass to ⑤ in the part 2 compound presentation in the final version (Example 271, mm. 109–116; sketched first in 3.3, Vol. 2, p. 72, mm. 117–124) as a type of vestigial artifact of the original 3.0 internal SotD (Example 270). This interpretation is supported by the nature of the subordinate theme 2 in branch 3.3: the two parts are not separated by an internal SotD.

It is not until CS 4.0 that he drafts a new internal SotD that separates more the two parts of the subordinate theme 2. Note, however, that this new SotD brings an entirely different character than the one he wrote in a corresponding context in CS 3.0: compare the 3.0 SotD in Example 270 with the new design in CS 4.0, Example 272. The two SotDs are completely different but arise internal to the subordinate theme 2. I suggest, therefore, that the new, part 2 compound presentation and continuation took the place of the earlier 3.0 internal SotD and the continuation that followed; in other words, mm. 117–128 in branch 3.2.1 replaced the material shown in Example 270. See Figure 59. If this logic is correct, then it would explain why he felt the need to write a new internal SotD to separate parts 1 and 2 in the CS 4 series. Put simply, the new compound presentation that starts part 2 may have originated as an internal SotD; this lineage could explain the unusual strong oscillation to ⑤ in the bass voice.

Example 270: CS 3.0, mm. 115–126; Internal SotD and Continuation 2 (*ES* p. 15, st. 3)



Example 271: Op. 55, I., mm. 109–121; ST2 P2 Compound Presentation and Continuation



Example 272: CS 4.0, mm. 107–116; Internal SotD between ST2 P1 and ST2 P2 (*ES* p. 20, st. 14 and p. 21, st. 21)

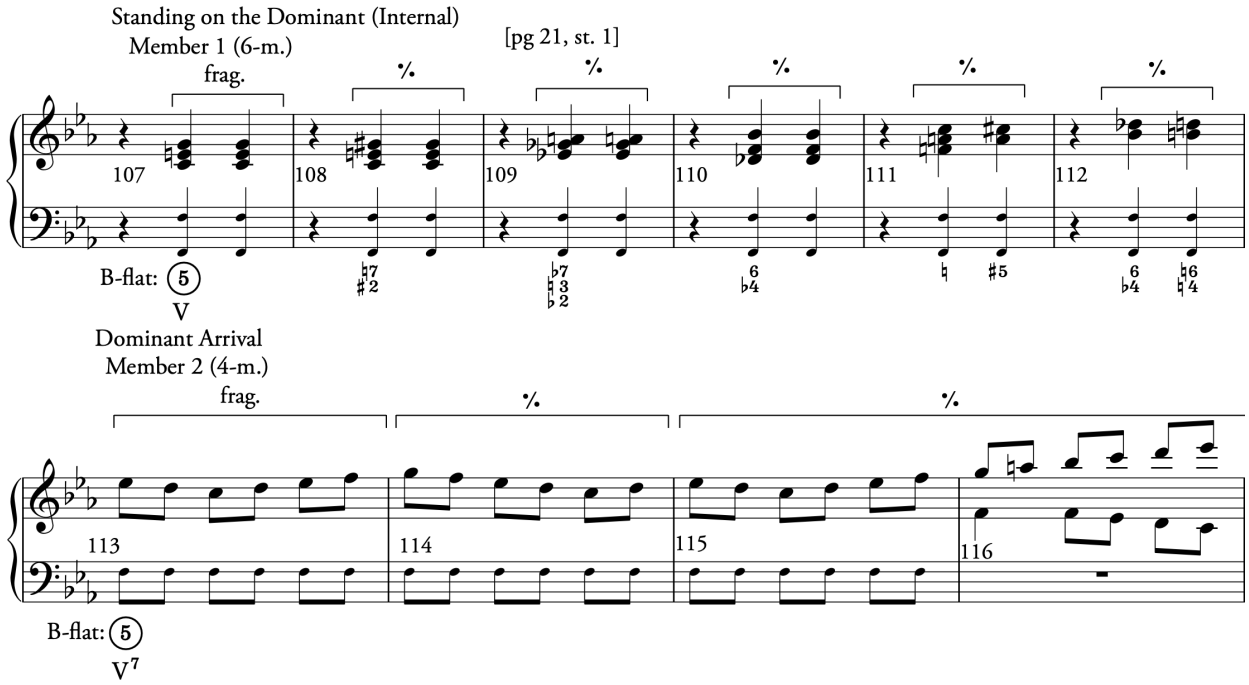
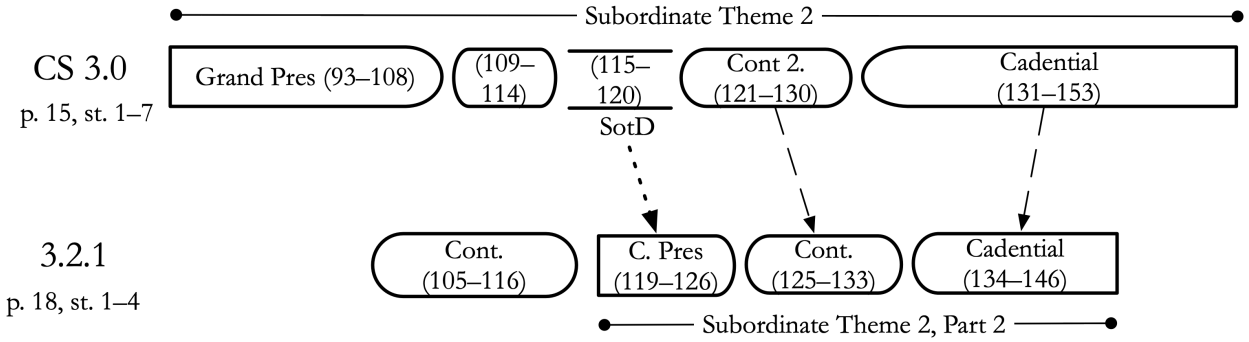


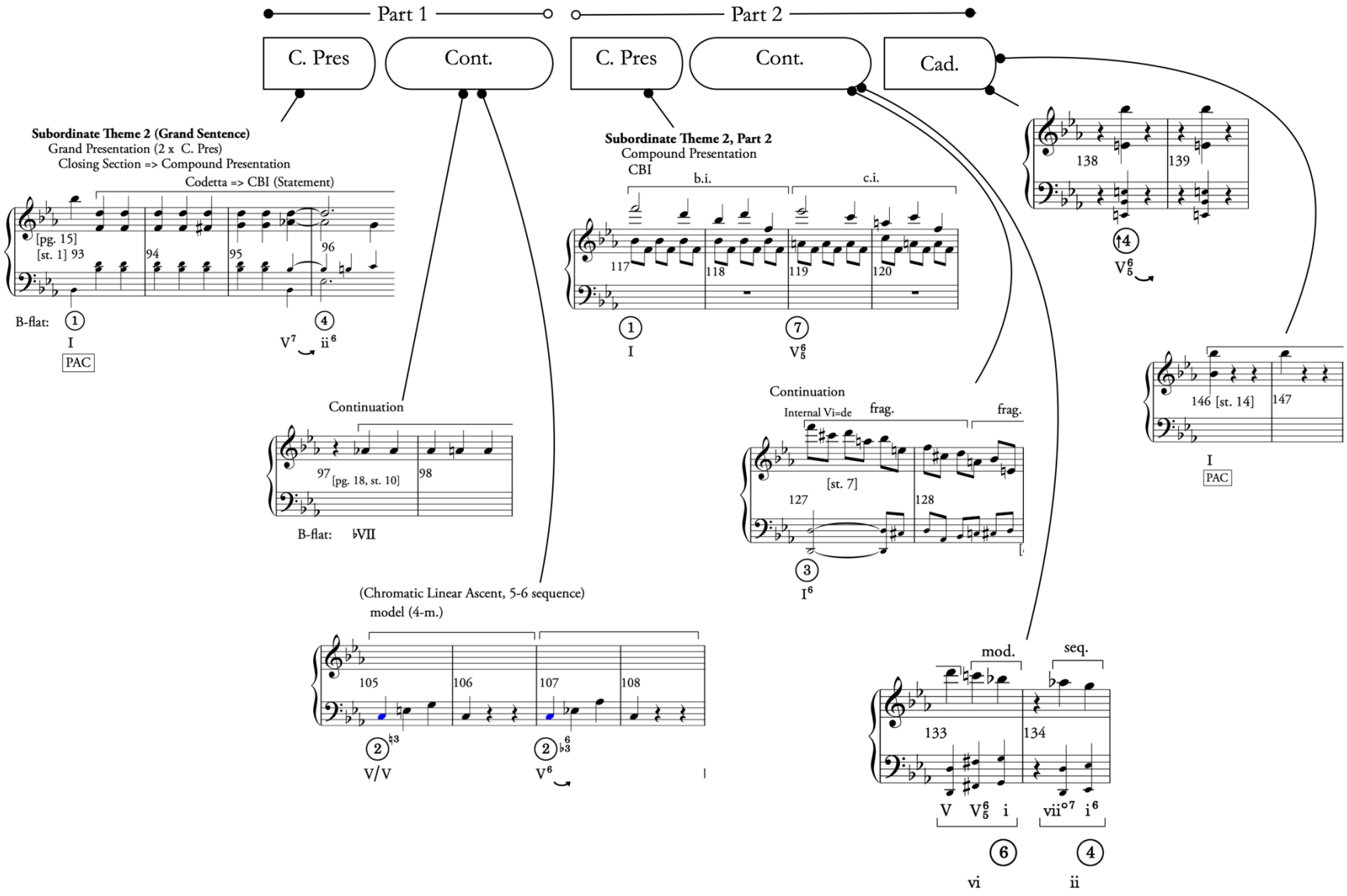
Figure 59: Function-transfer diagram: CS 3.0 to branch 3.2.1



In the end, the new created subordinate theme 2, part 2 crafted in branch 3.3 fulfils a kind of large-scale, hyper-ending function to the entire subordinate theme group. Of course, this music expresses a complete theme part with its initiating, continuation, and massive cadential functions, but the sketches strongly suggest that the new initiating function emerged to express more emphatically the beginning of a large-scale ending (at the thematic level) to what had developed into an enormous second subordinate theme. Ultimately, the factors that motivated Beethoven to excise the main theme material from the end of the subordinate theme group and introduce a new compound presentation were more complicated than a desire to simply replace main theme material.

Beethoven did not introduce the new, part 2 compound presentation until it was absolutely necessary. He tried other ways to expand the subordinate theme 2 before he settled on this two-part design.

Figure 60: Subordinate Theme 2 phrase structure at the end of page 18



Let us now conclude our discussion of the 3 series sketches. Figure 60 provides an overview of the phrase structure of the subordinate theme 2 at the end of the 3 series sketches; the diagram links the phrase function shapes to incipits from the 3.3 reconstruction. At this point, the general structure of the subordinate theme 2 begins to match the final: it is now two parts. But there are still more changes ahead. In the next chapter, we will discover how Beethoven alters the continuation of part 1, introduces a new internal SotD that divides further the two parts of the subordinate theme 2, and revises considerably everything that follows the part 2's first continuation.

In general, the 3 series sketches show Beethoven working on ways to enlarge the form of the exposition by expanding it. He began by reintroducing the main theme material in B-flat major, which blurred the boundaries between the end of the transition and the beginning of the subordinate theme group. Thereafter, he expanded the second part of the subordinate theme 1 (which corresponds to the final first subordinate theme) by enlarging the continuation function and by writing a substantial ECP with an extensive dominant prolongation. Finally, he worked to greatly expand the second subordinate theme in multiple ways. Eventually, he arrived at a two-part structure by introducing a new compound presentation to initiate the second part. In the next chapter, we will see how he improves the overall design of the second subordinate theme by integrating, developing, and tightening its constituent phrase functions.

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8.1 Introduction

In this chapter, I analyze the CS 4 series sketches that Beethoven wrote on pages 20–27 of the *Eroica* sketchbook. As shown in Figure 61, these sketches can be parsed into a CS 4.0 trunk and two larger branches 4.1 and 4.2. The 4.0 trunk has two twigs 4.0.1 and 4.0.2, as does the first 4.1 branch, 4.1.1 and 4.1.2, and the second 4.2 branch, 4.2.1 and 4.2.2. In general, Beethoven moves closer to the final version in these sketches, but the last sketch still differs in some respects with the final Op. 55. Consequently, he must have modified the exposition at some later time not shown in the sketchbook, perhaps even in the autograph.[197]

[197] On Beethoven's tendency to make changes in the autograph, see (Lockwood 1970b).
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Figure 61: 4 Series Sketches

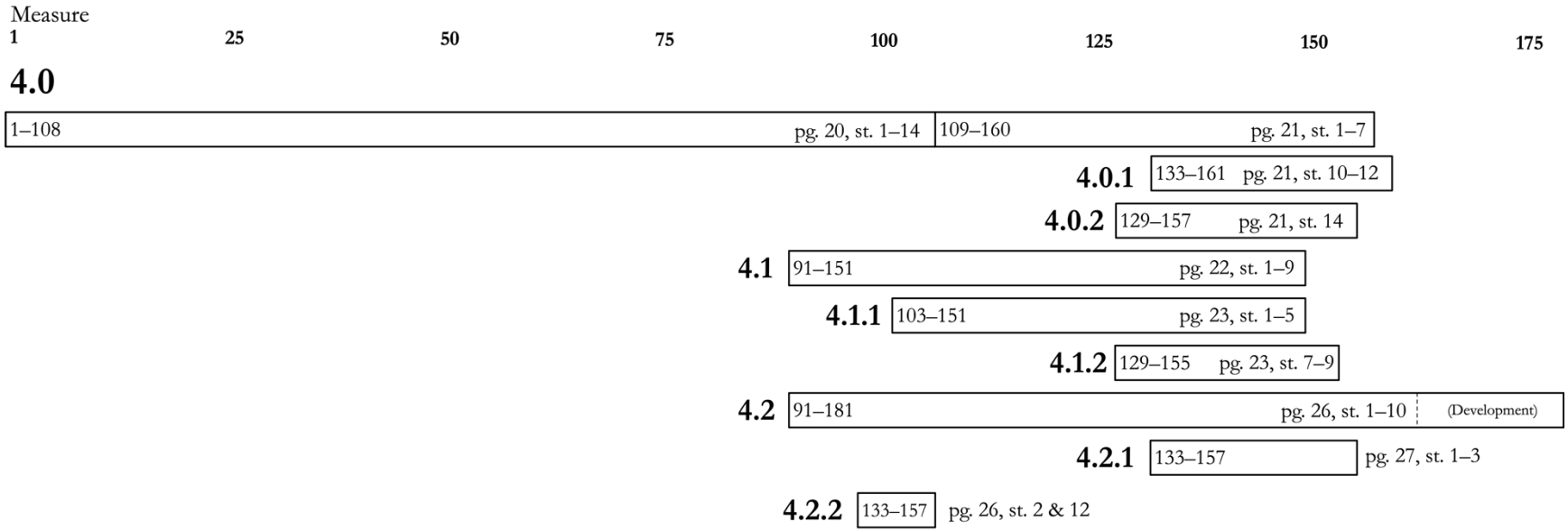
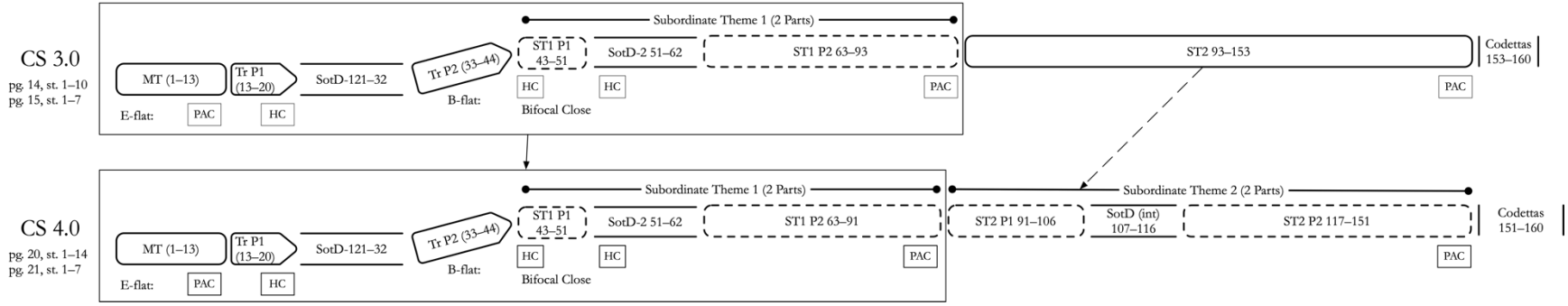


Figure 62: CS 3.0 to CS 4.0 Form Function Transfer Diagram



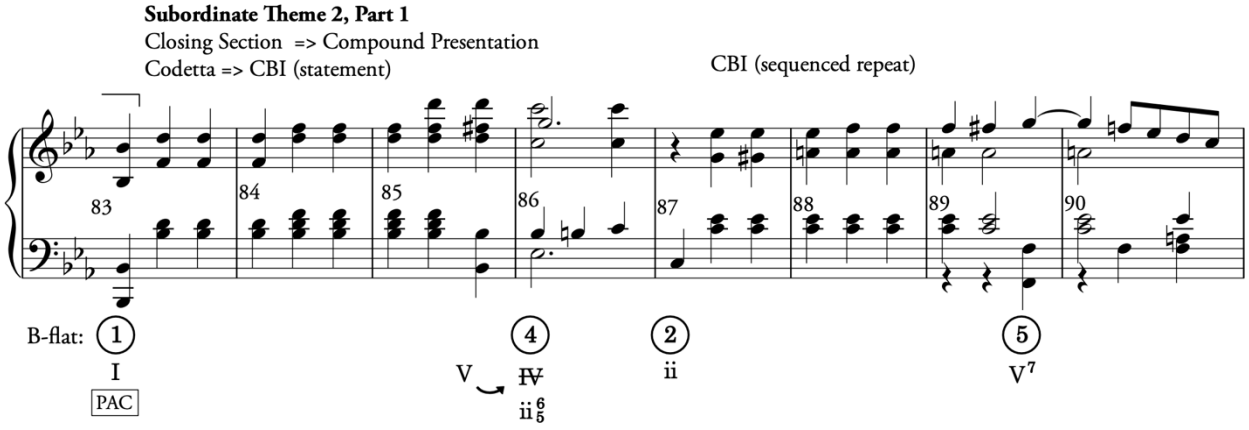
The 4 series sketches are the last exposition drafts that Beethoven wrote in the *Eroica* sketchbook. After writing a complete trunk (refer to Figure 61), he works primarily on the material that follows m. 91, that is, the second subordinate theme (ST2). Surprisingly, he keeps the unusual fourth entry of main theme material that started the subordinate theme group (4.0, mm. 43–50), which does not persist into the final piece. The first CS 4.0 trunk therefore brings a form that is similar CS 3.0, but with a substantially reworked subordinate theme 2 (Figure 62). As the 4 series main theme, transition, and subordinate theme 1 match the corresponding functions in the 3 series, we will focus on how Beethoven develops the second subordinate theme.

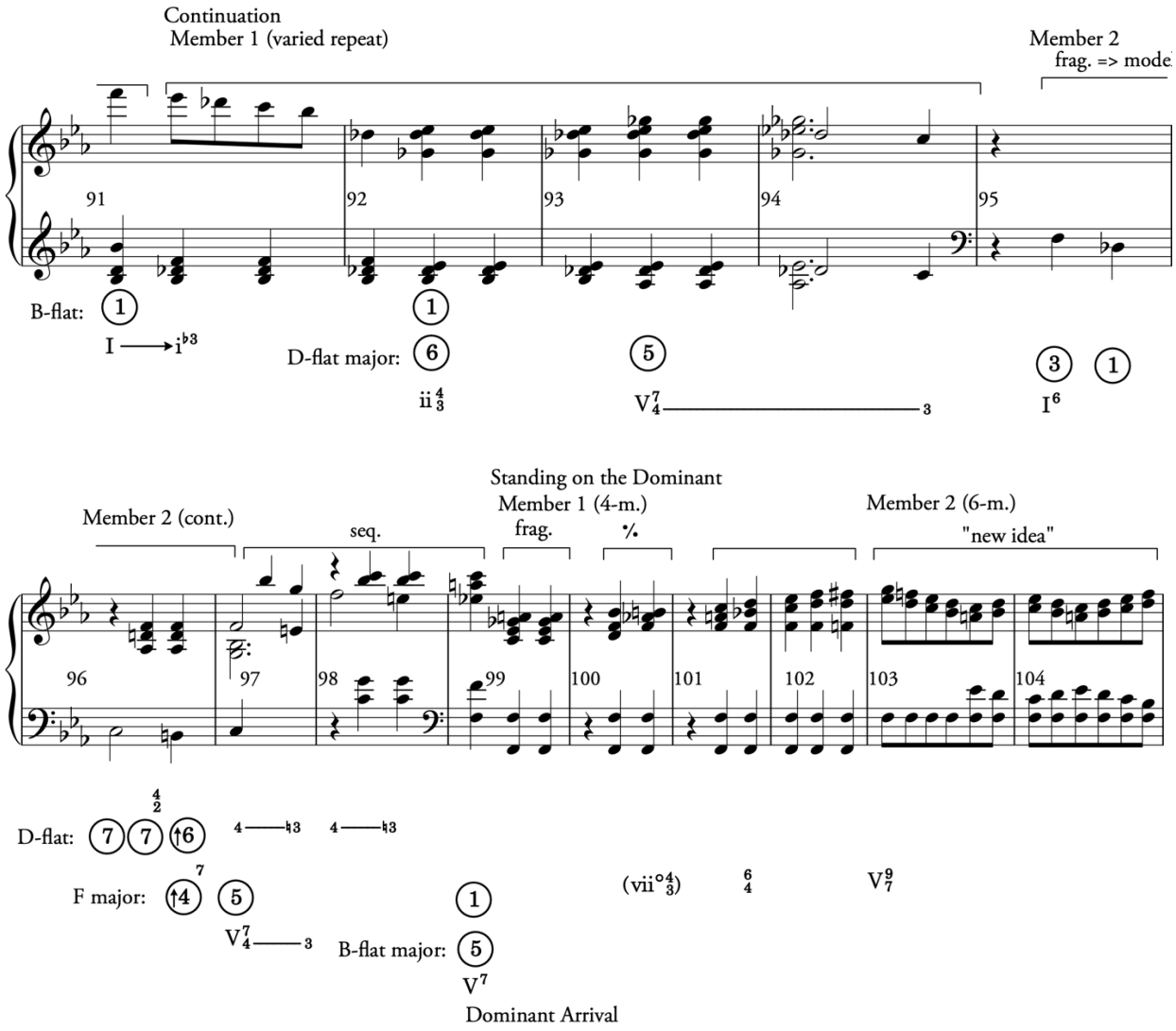
8.2 Subordinate Theme 2, Part 1 Compound Presentation

At the end of the 3 series sketches, Beethoven had not solidified the overall tonal and formal design of the subordinate theme 2, part 1. In the 4 series sketches, this theme part gradually begins to resemble more closely Op. 55 (shown in Example 273). The main variable element in this part of the form was the continuation and how it would connect to a newly devised internal SotD thereafter (Example 273, mm. 91–104).

Before we examine the evolving continuation, let us consider first the compound presentation of the subordinate theme 2, part 1 (i.e., the music that corresponds to the final version in Example 273, mm. 83–90). Example 274 provides the three versions of this function sketched in CS 4.0 (A), branch 4.1 (B), and branch 4.2 (C). Broadly, all three, 8-m. compound presentations bring a 4-m. CBI statement of tonic harmony that is sequenced on the supertonic in the next four measures, but there are some notable differences.

Example 273: Op. 55, I., mm. 83–90; Subordinate Theme 2, Part 1, Compound Presentation





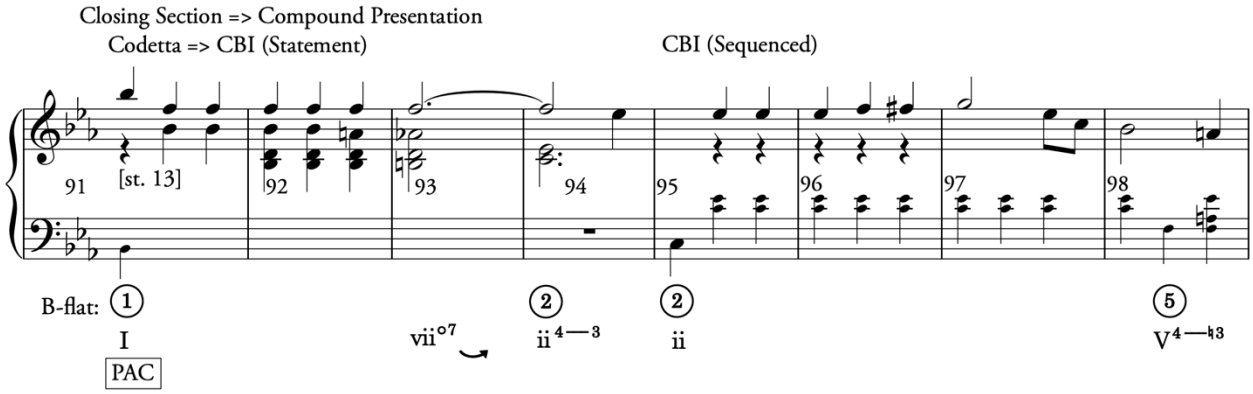
In the final Op. 55 (Example 273, mm. 83–90), the music arrives on the supertonic on the last measure of the first CBI (m. 86) and the CBI also begins on the supertonic (m. 87). We sense a subtle change in harmonic rhythm when the CBI repeats (from m. 86 to 87), however, because Beethoven implies a tonicization of the subdominant at the end of the first CBI (m. 85, beat 3 to 86, beat 1). In the first 4.0 sketch (Example 274A), he had not yet developed this subtle tonicization; instead, he introduces the root position supertonic (m. 94) by tonicizing it with a root position vii^{o7} in the previous measure (m. 93). In the final design, the root position supertonic that starts the CBI (Example 273, m. 87) sounds fresher because we previously anticipated the subdominant in the prior measure (in m. 86).

In the next sketch (4.1, Example 274B.), he writes an inner-voice line, F, F-sharp in m. 93, and the suspension D to C in the continuity voice. As these inner voices in 4.1 (B.) begin to match

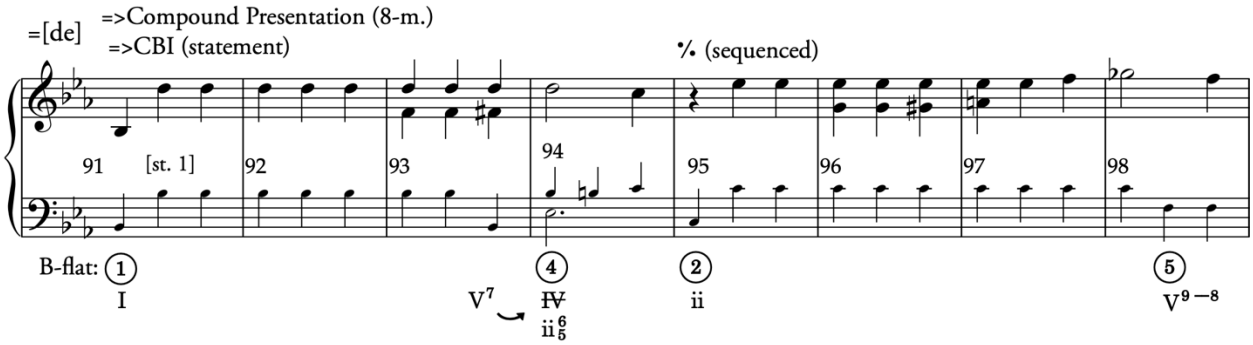
the final version, perhaps he started to think about the tonicization of the subdominant at this point. (Recall that Beethoven did not write the bass notes in Example 274C). In any case, he will make some further refinements to this part of the theme in a later stage not shown in the sketchbook.

Example 274: 4 Series: Subordinate Theme 2, Part 1, Compound Presentation Variants

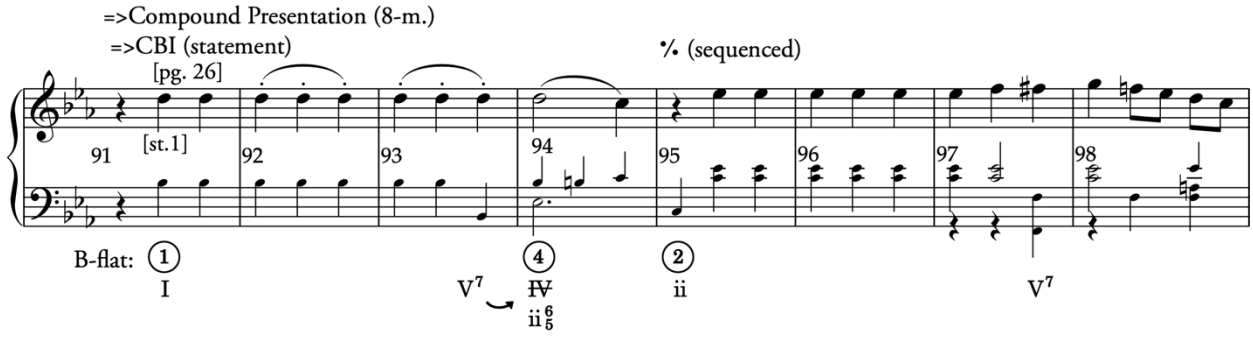
A. CS 4.0, mm. 91–98; ST2 P1, Compound Presentation (*ES* p. 20, st. 13)



B. Branch 4.1, mm. 91–98; ST2 P1, Compound Presentation (*ES* p. 22, st. 1)



C. Branch 4.2, mm. 91–98; ST2 P1, Compound Presentation (*ES* p. 26, st. 1)

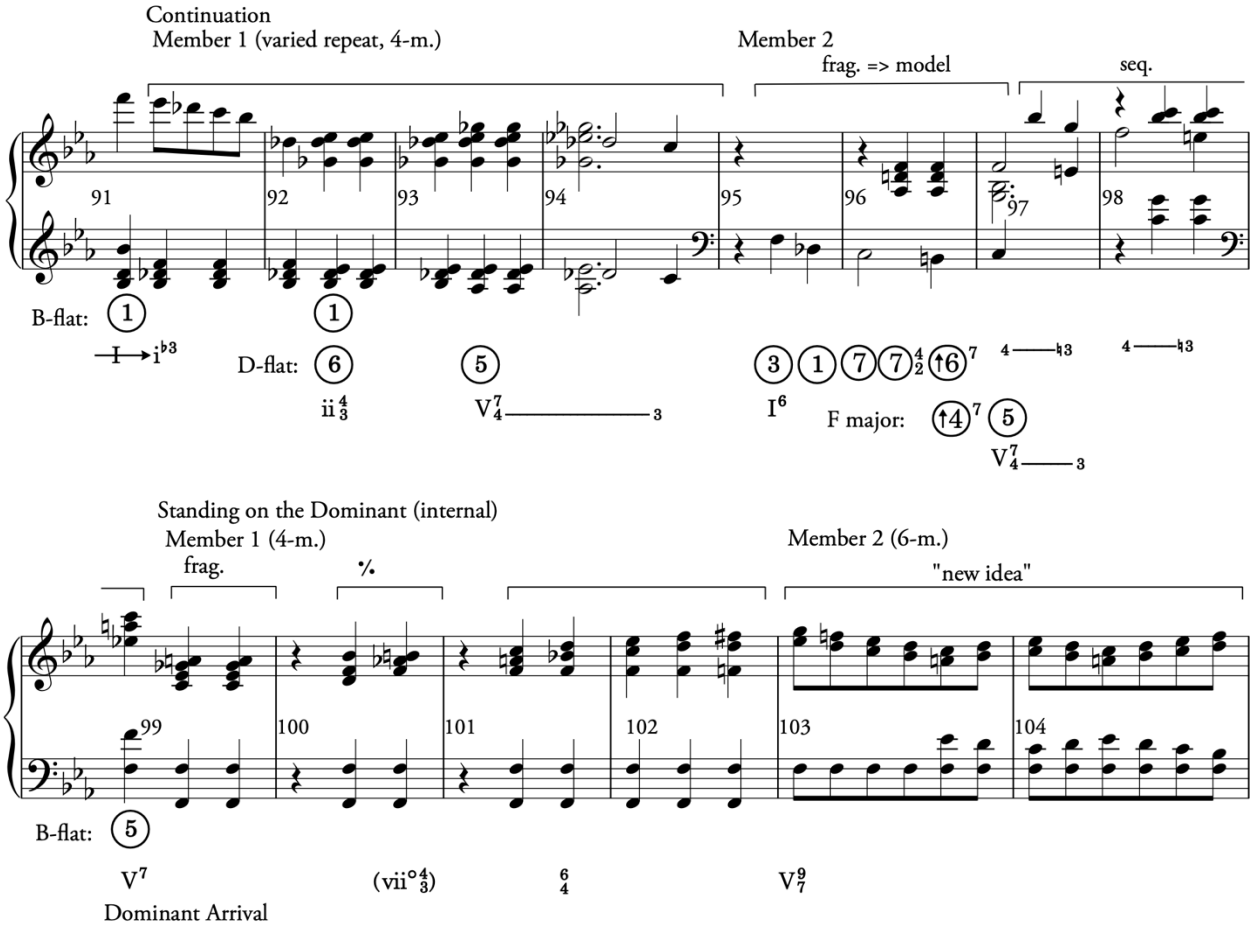


8.3 Subordinate Theme 2, Part 1 Continuation

Let us turn now to the music that corresponds to the subordinate theme 2, part 1 continuation that follows the compound presentation (Example 275, final, mm. 91–98). Recall that, in the final

version, the continuation comprises two 4-m. members, the first is a varied repeat of the CBI, while the second brings a new 2-m. model followed by a 2-m. sequence of that model. Notably, the continuation tonicizes the keys of D-flat major (mm. 92–95) and F major, through its dominant (mm. 97–99). When the expected F major arrives on the downbeat of m. 99, the E-natural obtained in the third beat of m. 98 in the upper-voice moves to an E-flat and the harmony becomes a dominant seventh in the subordinate key. Thereafter, Beethoven writes an internal SotD that liquidates the material from part 1 and prepares the listener for a part 2 (see the beginning 6-m. of this idea in mm. 99–104). (For a more thorough analysis of this music, refer to Section 3.3.2). With this final structure in mind, let us turn now to the sketches of this music.

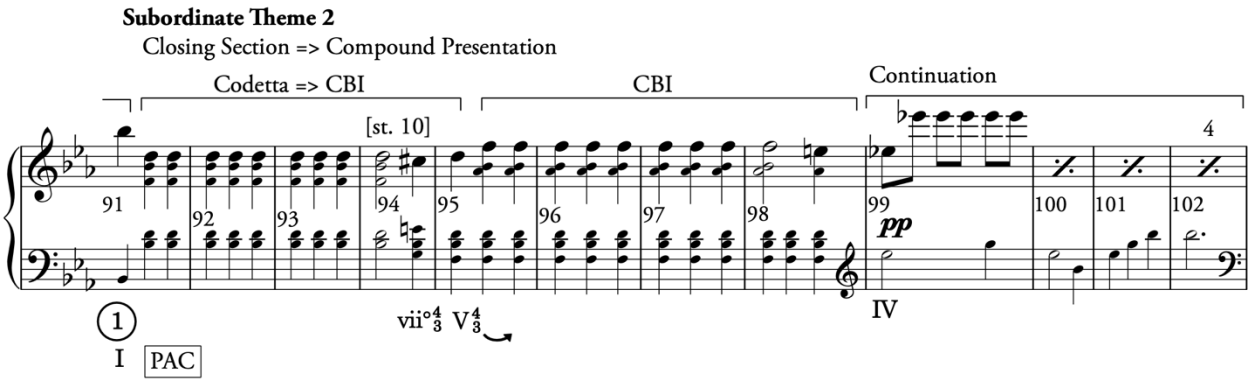
Example 275: Op. 55, I., mm. 91–99, Subordinate Theme 2, Part 1, Continuation



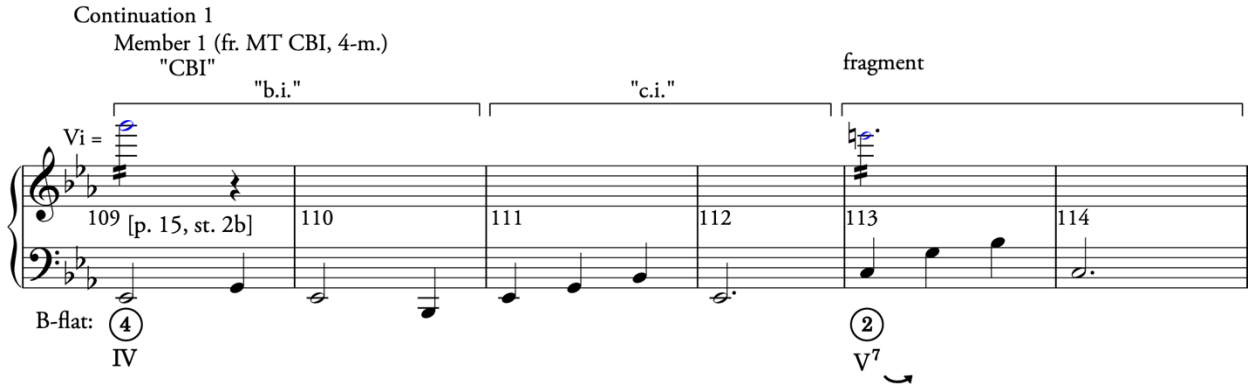
We have seen the music that corresponds to this continuation change dramatically throughout Beethoven's sketches. We witnessed, for instance, an attempt to fashion a continuation

out of main theme material in branch 1.2 (Example 276A, mm. 99–102) and trunk CS 3.0 (B, mm. 109–112). These main theme-based continuations appear to have been motivated by the design of branch 1.1 (C), where the music brought a (false) retransition and exposition repeat. In another attempt in CS 2.0 (D), he crafted a completely different design, namely, a chromatic descending line that suggested a model and sequence. When it came time to write the 4 series sketches, Beethoven abandoned all these previous designs and decided to build a continuation out of the material from the compound presentation instead of main theme material.[198] In addition, he solidified his plan to tonicize D-flat major and F major in this part of the form.

Example 276: Early sketches corresponding to final Subordinate Theme 2, Part 1 continuation
A. Branch 1.2, mm. 91–109 (*ES* p. 10, st. 9–10)

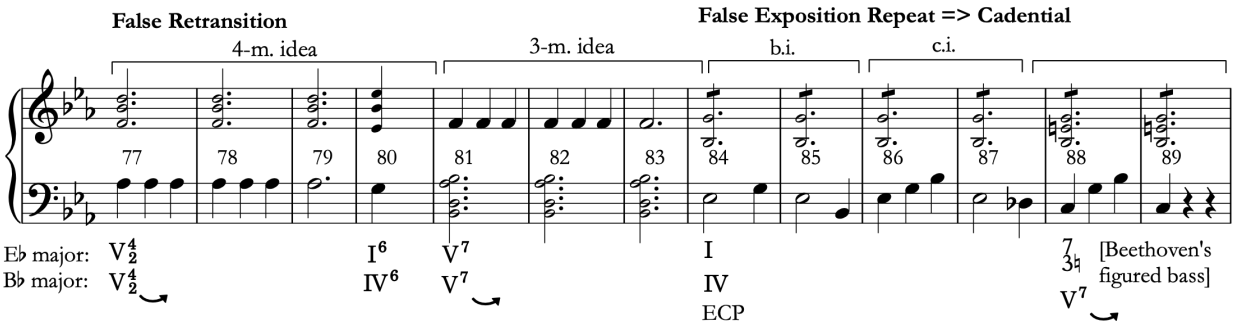


B. CS 3.0, mm. 109–114 (*ES* p. 15, st. 2b)

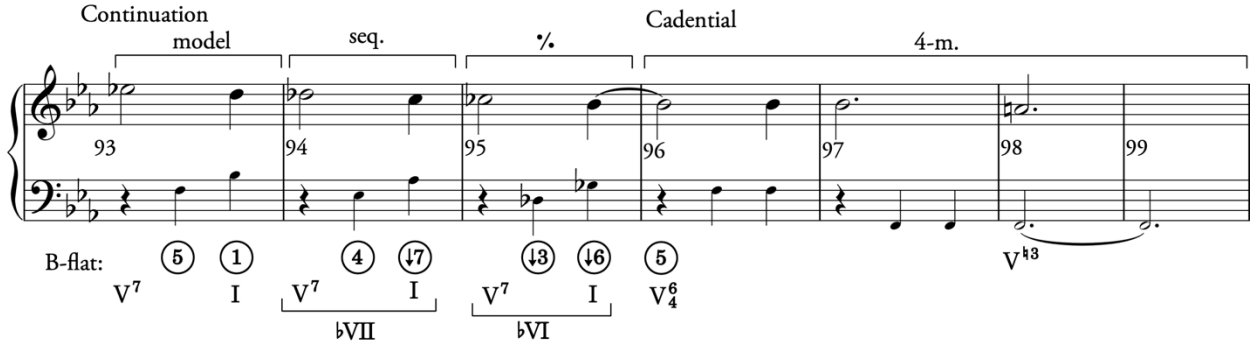


[198] We saw a similar trend with the subordinate theme 1 continuation in branch 1.2 (see section 5.3.1.2). In that sketch, Beethoven built the continuation by fragmenting material from the initiating compound presentation's CBI. He abandoned this idea in the sketch, however.

C. CS 1.1, mm. 77–89 (*ES* p. 11, st. 10)



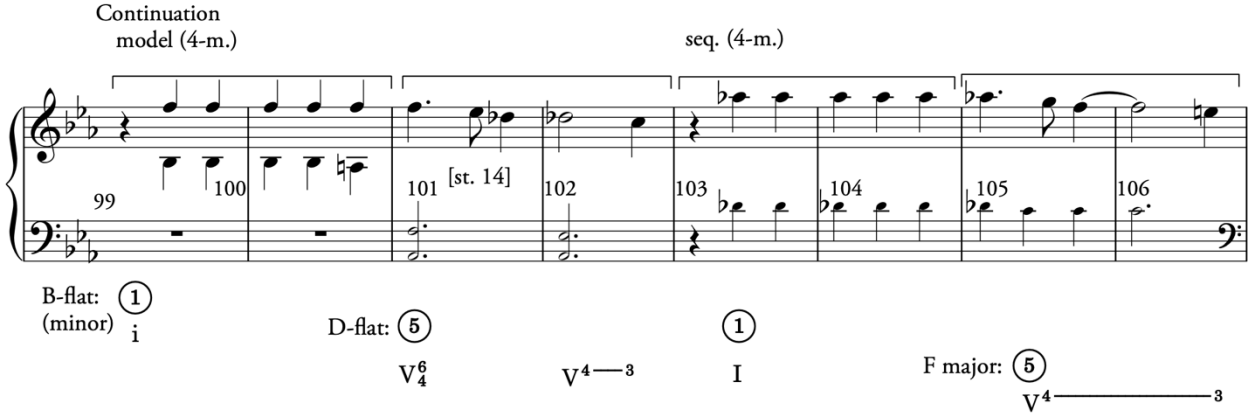
D. CS 2.0, mm. 93–100; Corr. to final's Subordinate Theme 2, Part 1 Continuation (*ES* p. 12, st. 7–8)



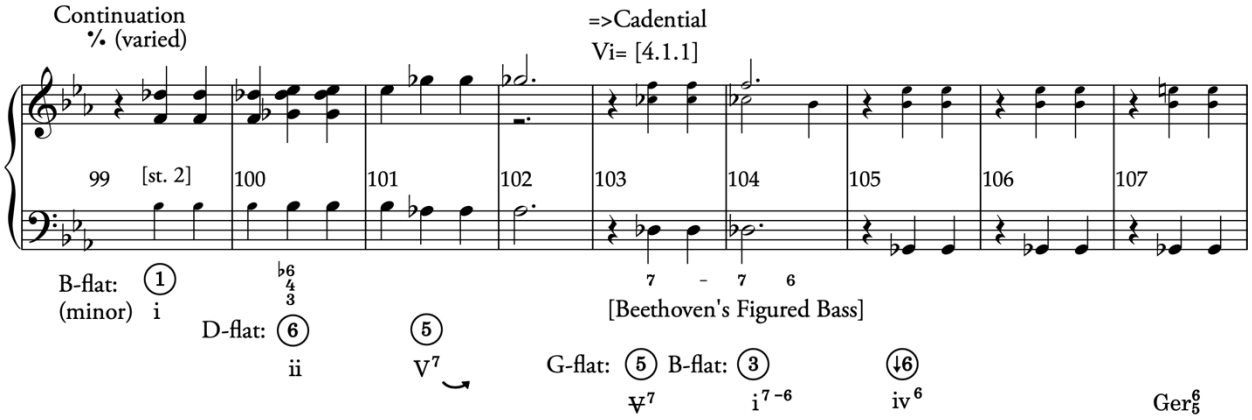
In what follows, I explain the evolution of Beethoven's sketches of the subordinate theme 2, part 1 continuation in three stages. In the first, I analyze the continuation sketches he wrote on pages 20 (Example 277A), 22 (B), and 23 (C) of the sketchbook. After he wrote these revisions, Beethoven left page 24 blank, then copied passages from C.P.E. Bach's *Zwei Litaneyen*on page 25. In the second stage, therefore, I account for this copied music by analyzing Bach's examples to better understand why Beethoven may have copied them into his sketchbook. Finally, in stage three, I analyze the last continuation revisions that he wrote on pages 26 and 27 and compare their changes with the findings from stage two. I propose that Beethoven copied Bach's examples to assist him with the modulation scheme in the continuation, which tonicizes D-flat major and F major (refer to Example 275 mm. 91–98).

Example 277: 4 Series: Subordinate Theme 2, Part 1, Continuation Variants, Stage 1

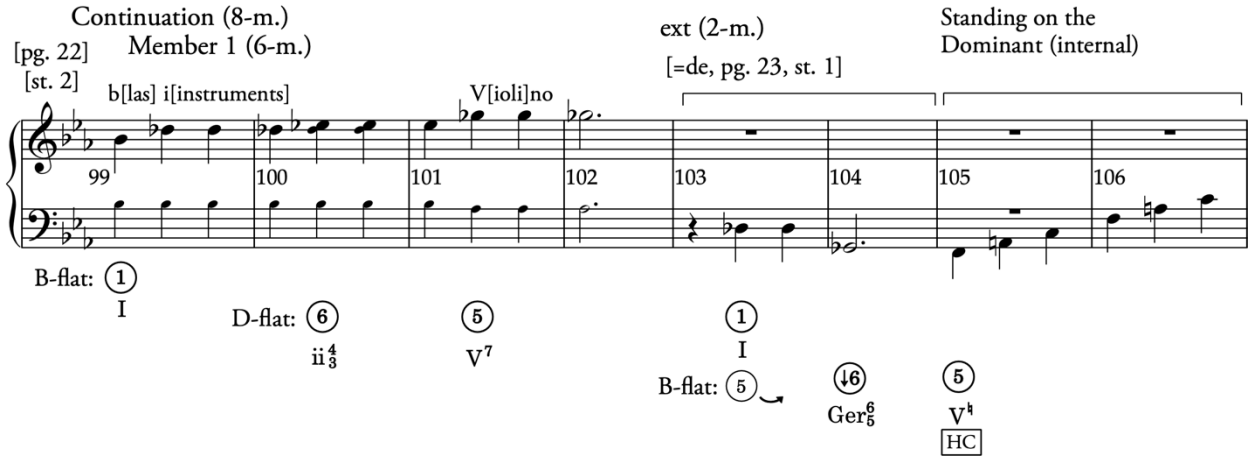
A. CS 4.0, mm. 99–106; ST2 P1 Continuation; (*ES* p. 20, st. 13b–14)



B. Branch 4.1, mm. 99–107; ST2 P1, Continuation; (*ES* p. 22, st. 2)



C. 4.1.1, mm. 103–112; ST2 P1, Continuation and Standing on the Dominant (internal); (*ES*, p. 22, 2 merged with p. 23, st. 1)



8.3.1 Stage 1: ST2 P1 Continuations Written Before C.P.E. Bach's *Zwei Litaneyen* Examples

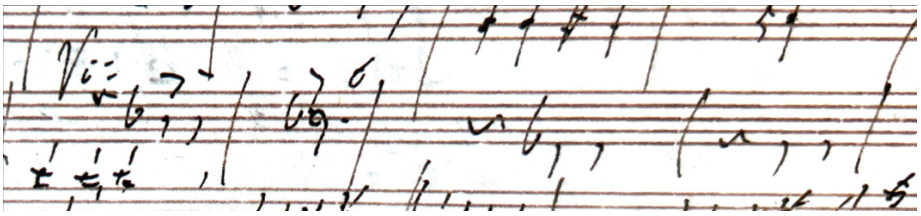
In the CS 4 series, subordinate theme 2, part 1 continuation sketches, the general harmonic structure of the continuation (the tonicizations of D-flat major and F major) is present, but its expression varies. In CS 4.0 (Example 277A), Beethoven constructs the continuation as a 4-m. model followed by a 4-m. sequence. It is likely that he intended the model to start with B-flat minor harmony (mm. 99–100), like the final version, because the line descends through a D-flat later (mm. 101–102), which implies a dominant of D-flat major. The sequence (mm. 103–106) then begins with a D-flat major tonic, and a similar descending line in mm. 105–106 suggests the dominant of F major as V of B-flat. Overall, then, the 4.0 continuation (Example 277A) expresses B-flat minor, D-flat major, and F major (through its dominant) with a straightforward 4-m. model-sequence. Beethoven was evidentially not satisfied with this simple way to tonicize these keys, because he tried several different approaches on the pages that followed. He was likely dissatisfied with the model-sequence design because it introduced a weakness in the grouping structure of the theme. With the simple 4-m. model sequence, the entire theme was organized as four, 4-m. units. In the final Op. 55, he introduces fragmentation after the third 4-m., which causes the continuation to accelerate and be more dynamic.

We have seen in previous chapters that G-flat played an important role in Beethoven's compositional process for the exposition. It is perhaps not too surprising, then, that he tried to integrate this pitch class into the continuation in a more prominent way in the next branch 4.1 (Example 277B, mm. 100ff). Here, the G-flat enters in the alto voice in mm. 100 (beat 2), then the soprano voice, in mm. 101–102 in the same way that it appears in the final version (compare the sketch in Example 277B, mm. 99–102 with the final in Example 275, mm. 91–94). Beethoven goes a step further than what he will eventually write in Op. 55, however: beginning in m. 103 (Example 277B), three D-flat-3's appear in the bass (mm. 103–104) with the figure 7–7–6 (see an excerpt of this music in Beethoven's handwriting in Sketchbook Excerpt 20). It is not clear whether he intended for the seventh to be a major or minor. If it was major, it would serve as a suspension that is prepared by the implied C established in the previous measure. If it was minor (C-flat), it would suggest a V^7 of G-flat major before it moved to "6" (i.e., B-flat). Based on subsequent sketches analyzed further below, I have chosen to realize the 7 as a minor seventh to suggest a potential tonicization of G-flat major shown by the crossed out V^7 in the analysis of m. 103 (Example 277B). The roman numeral is crossed out to suggest that, at first, the listener would interpret the harmony

as a V^7 in G-flat major, but when the seventh descends to 6, the harmony is reinterpreted as a tonic harmony in B-flat major over ③ (D).

What follows in mm. 104–107 (Example 277B) is not entirely clear from a harmonic perspective, because the G-flat in the bass could be harmonized as a G-flat major triad, or as an E-flat minor triad in first inversion. I have chosen to harmonize the triad as a first inversion E-flat minor triad, which suggests an inverted, minor subdominant harmony due to what Beethoven writes in later sketches and the final version. Finally, I harmonize the last two G-flats (m. 107, beats 2 and 3) as a German augmented sixth to prepare the subordinate key dominant that arrives in the measure thereafter (4.1, m. 108, not shown in the example). In the end, it is challenging to know what harmonies Beethoven intended for this revised, 4.1 continuation, but it is evident that he wanted to emphasize the pitch classes D-flat and G-flat, and it is apparent that he intended to tonicize D-flat major and move to the subordinate key dominant (F major) at the end of the continuation. These tonal moves remain consistent, but the path to their realization changes.

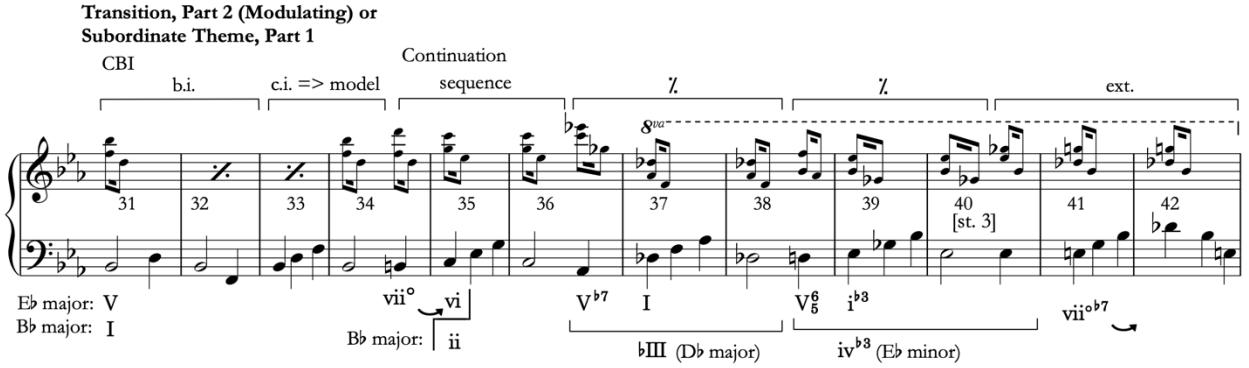
Sketchbook Excerpt 20: *ES* p. 22, st. 2 (middle staff)



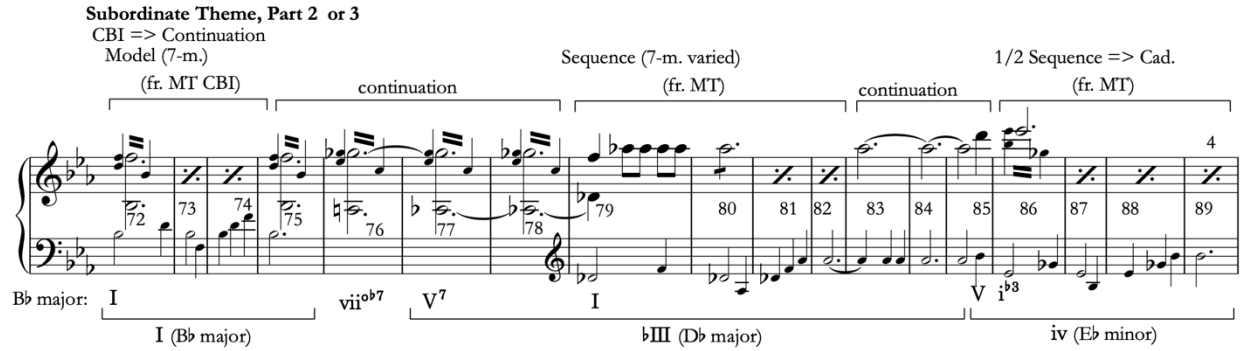
Beethoven's desire to emphasize D-flat in the subordinate theme group can be traced to the very first expositional sketch (CS 1.0), where it was tonicized first within the subordinate theme, part 1 (or transition, part 2, depending on the interpretation; Example 278A, mm. 37–38) and the part 3 (or part 2, B, mm. 79–85). These designs seem to have been born of a plan to realize additional relationships with the initial disruptive C-sharp in the main theme (discussed in section **3.1**). We saw that the main theme's C-sharp brought both a motivic embellishment to the main theme content and a disruption to the underlying E-flat major home key. It seems that he wanted to realize the same harmonic disruption in a different way in the subordinate theme group by expressing the enharmonic relationship with D-flat.

Example 278: B-flat and D-flat in CS 1.0

A. Transition or Subordinate Theme, Part 1, mm. 31–42; (*ES* p. 11, st. 2–3)



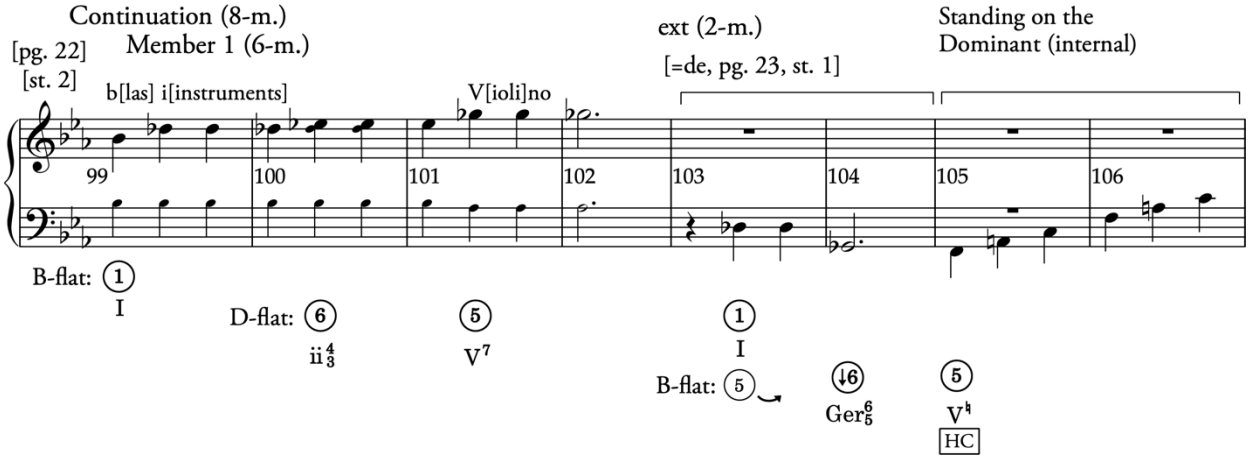
B. Subordinate Theme, Part 2 or 3, mm. 72–89 (*ES* p. 11, st. 5–6)



Before we move on to stage two to analyze the excerpts Beethoven copied from C.P.E. Bach's *Zwei Litaneyen* and the subsequent part 1 continuation revisions, consider the last revision that Beethoven wrote on page 23 (Example 279). This example merges features from the continuation written on page 22, st. 2 (mm. 99–102) with the implied "=de" revision written on the top of page 23, st. 1 (beginning in m. 103). In this revised 4.1.1 continuation, Beethoven cuts three measures out of the prior 4.1 version and thus shortens it to 4-m. (mm. 99–102), followed by a 2-m. extension (mm. 103–104). This extension appears to imply a root position D-flat tonic (m. 103) that resolves the prior implied, applied dominant-seventh in m. 101–102. As before, is not entirely clear what harmony Beethoven planned for the subsequent G-flat in the bass thereafter (m. 104), but an augmented German sixth would have been one possibility, since it could then lead convincingly to the subsequent HK: HC and SotD (beginning in m. 105). Thus, the latter part of the continuation (i.e., the material after m. 102 in Example 279), while it tonicizes the same keys as the final Op. 55 (D-flat major and F major as dominant to B-flat in m. 105–106), still differs from it. At this stage,

the tonal structure was invariant, but its realization was not yet fixed. Beethoven was evidently dissatisfied with the way he was tonicizing these keys.

Example 279: 4.1.1, mm. 103–112; ST2 P1, Continuation and Standing on the Dominant (internal) (*ES*, p. 22, 2 merged with p. 23, st. 1)



8.3.2 Stage 2: C.P.E. Bach's Zwei Litaneyen and Beethoven's ST2 P1 Continuation Sketches

Let us now analyze the excerpts Beethoven copied from C.P.E. Bach's *Zwei Litaneyen*. Among all exposition sketches contained in pages 10–27 of the *Eroica* sketchbook, pages 24 and 25 are anomalous because 24 is blank and page 25 (Sketchbook Excerpt 21) contains three figured bass patterns. Gustav Nottebohm identified these patterns as excerpts copied from Bach's *Zwei Litaneyen aus dem Schlewswig-Holsteinischen Gesangbuche*, W. 204 (1776).[199] Nottebohm did not explain why Beethoven may have copied these patterns in relation to the *Eroica* sketches, and instead viewed them as brief disturbances.[200]

To date, the relationship between Bach's excerpts and the *Eroica* sketches has remained unexplored. In the analytical text accompanying their critical transcription of the *Eroica* Sketchbook, Lockwood and Gosman included a brief essay by Matthew Crown that summarized the questions about the role of these excerpts. Crown summarized what was known of the copied passages:

[199] See (Beethoven, Lockwood, and Gosman 2013a, 49)

[200] Nottebohm summarized the material in the sketchbook from pages 25–64 that featured material from different pieces and summarized that, "Evidently Beethoven did not allow much else to disturb his work on the *Sinfonia Eroica*" (Nottebohm 1979, 99).

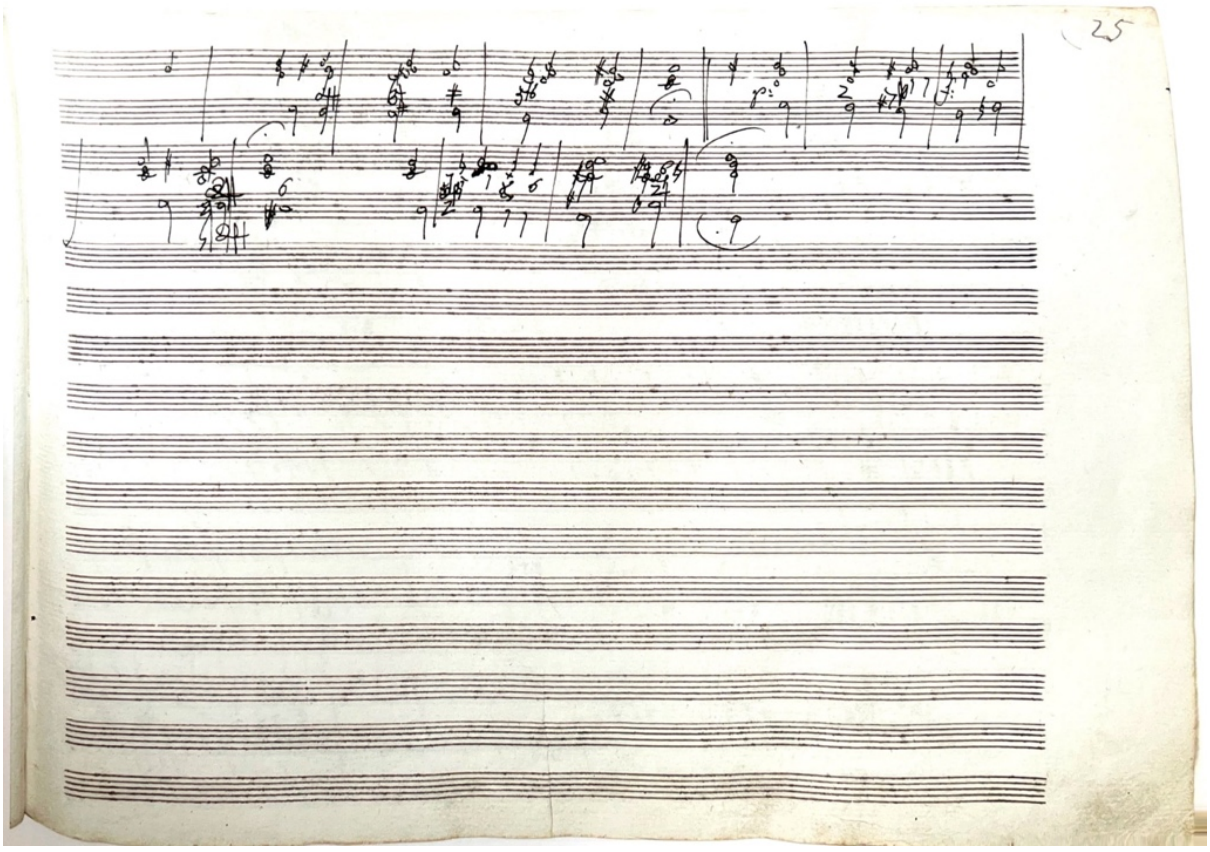
> The question remains whether this was of specific interest to Beethoven for composing, whether it served as material for teaching (as recommended by Bach and Reichardt), or perhaps whether the resulting sequence of text from the particular passages excised by Beethoven ("Help us, Lord, Lord our God; Protect us, Lord, Lord, our God; From disturbance and discord") was related to his mental and physical struggles at the time (Beethoven, Lockwood, and Gosman 2013a, 50).

In short, scholars did not know why Beethoven may have copied these excerpts.

I propose that Beethoven copied and studied the excerpts from Bach's *Zwei Litaneyen* to help him achieve the novel tonicizations of D-flat major and F major in the continuation of the subordinate theme 2, part 1. Consequently, I suggest that he copied these passages not for the text or teaching but as compact modulation pattern references for himself.[201] Notably, Lockwood and Gosman hold that page 25 in the *Eroica* sketchbook has a visible page fold;[202] perhaps he folded the page to refer to it while he wrote the final part 1 continuation sketch on page 26, discussed below.[203] In what follows, we will analyze the three patterns that Beethoven copied to test this hypothesis.

[201] C.P.E. Bach's *Zwei Litanyen* is known for its novel harmonizations and modulations; see (Kramer 1985, 577). It is unlikely that the text in the examples influenced Beethoven's decision to copy them out.
[202] It is difficult to see this fold in the excerpt shown here, however. One can perhaps see a trace of this fold at the bottom of the page.
[203] On the page folds, see (Beethoven, Lockwood, and Gosman 2013a, 14)

Sketchbook Excerpt 21: *ES*, p. 25



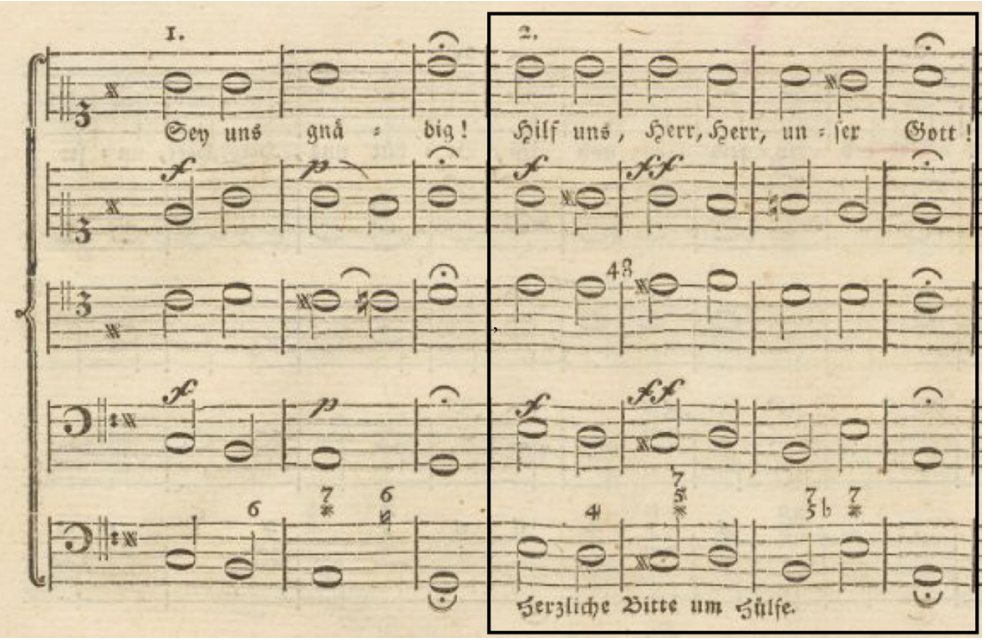
The first excerpt that Beethoven copied comes from the ninth petition, shown boxed in Example 280 (it starts at "2., Hilf uns").[204] Example 281 provides an analysis and transcription of Beethoven's copied version, which he wrote in keyboard style (note that Beethoven did not copy the text in the soprano voice or the text below the basso continuo).[205] This passage modulates from E minor to A minor, but it accomplishes this key change in an unusual way. Note how the bass steps down from E (m. 45) to D (m. 45.2) and C-sharp (m. 46), then turns back up to D (m. 46). At first glance, this turning figure in the bass bears similarities to the main theme's similar pattern from E-flat to C-sharp and back (Example 282). Bach's pattern is different, however, because it begins in E minor instead of E-flat major, and the ↓⑦ (D) is harmonized with a "4/2" figure instead of a

[204] Identified in (Beethoven, Lockwood, and Gosman 2013b, 195).

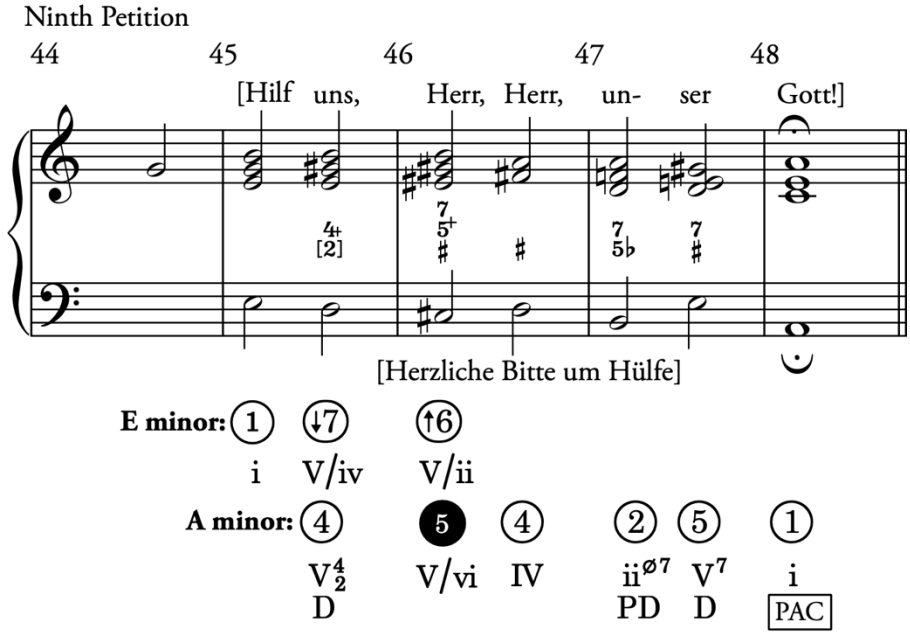
[205] For the differences between Beethoven's copies and the original piece, see (Beethoven, Lockwood, and Gosman 2013a, 50)

"6/4." Nevertheless, perhaps Beethoven was attracted to this pattern due to the similarities the basso continuo shared with his main theme.

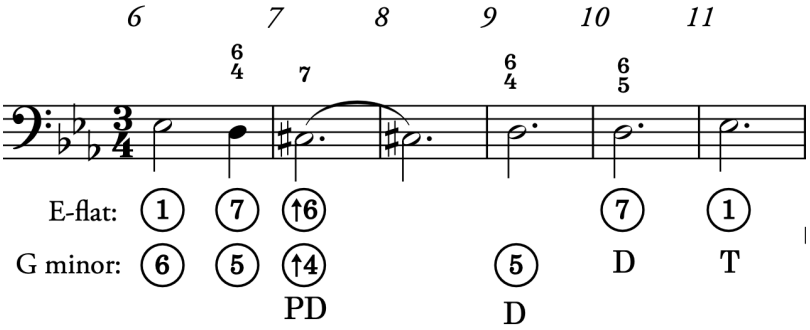
Example 280: C.P.E. Bach, *Zwei Litaneyen*, Ninth petition, mm. 44–50; (Bach 1786, 3)



Example 281: *ES* p. 25, st. 1a–2a; C.P.E. Bach's *Zwei Litaneyen aus dem Schlewswig-Holsteinischen Gesangbuche*, W. 204 (1776) from the ninth petition; identified in (Beethoven, Lockwood, and Gosman 2013b, 195). Beethoven did not write the measure numbers or text. Analysis below the staff is editorial.

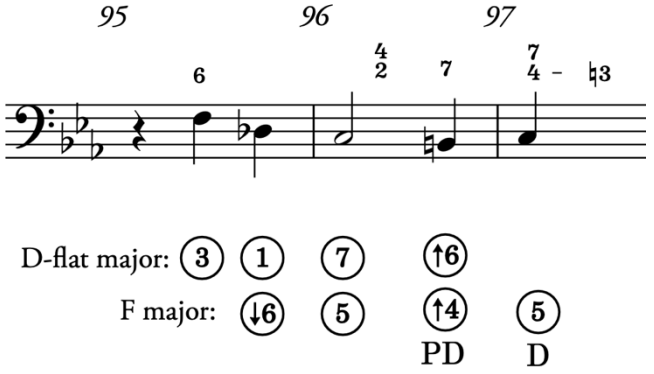


Example 282: Op. 55, I., mm. 6–11 Bass-Melody

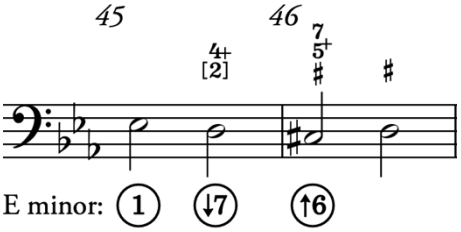


The beginning of Bach's ninth petition (Example 281) also bears some similarities to the subordinate theme 2, part 1 continuation's bass-melody (compare the final version in Example 283, mm. 95–97 with Bach's ninth petition in Example 284). In both instances, ⑦ (C in Example 283, m. 96, second beat) or ↓⑦ (as "D" in Example 284, m. 45) is figured with "4/2." This figure causes the bass to become a dissonance that requires resolution by stepping down. When the bass resolves to the step below in Op. 55 (Example 283, m. 96, beat 3), the resolution is harmonized with a "7" (in Bach's excerpt, Example 284, m. 46, beat 1, it is harmonized as a dominant seventh, but in Beethoven's it forms a fully diminished seventh). Finally, the bass steps back to the note that was previously figured as a "4/2" (to C in Beethoven's excerpt and D in Bach's). After this, the two passages diverge because Beethoven harmonizes the C (m. 97) with "7/4–3" whereas Bach harmonizes the D (m. 46, beat 3) with a "♯" implying a D major harmony. Given that Beethoven copied this passage in-between exposition sketches that feature extensive work on the continuation, it seems likely that he studied this excerpt to improve his tonicization scheme.

Example 283: Op. 55, I., mm. 95–97, ST2 P1, Continuation, Member 2

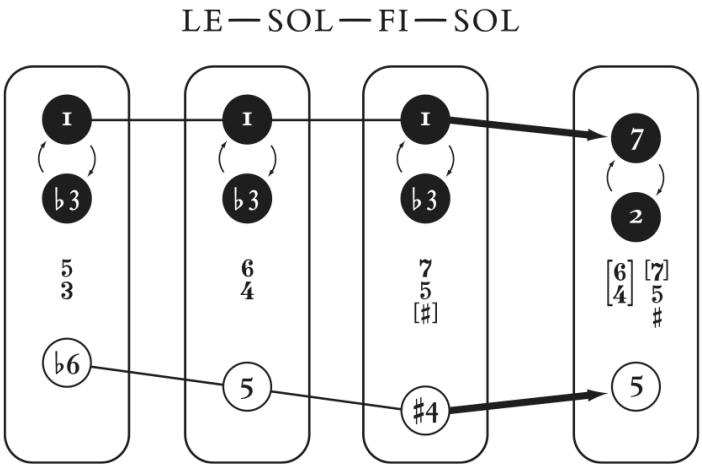


Example 284: C.P.E. Bach's *Zwei Litaneyen* excerpt, ninth petition



Bach's modulation pattern in his ninth petition is different than Byros's "le-sol-fi-sol" schema (Figure 63) because Bach's pattern uses ↓⑦ instead of ⑦, the pattern figures this bass-scale degree with "4/2" rather than "6/4," and the following C-sharp (↑④) is harmonized as a dominant seventh harmony rather than a fully-diminished seventh (as it is in the schemata). Thus, we should understand Bach's pattern as separate from the *le-sol-fi-sol* schemata, and therefore the main theme chromatic move.

Figure 63: "*Le-sol-fi-sol*" schema-topic; (Byros 2020, 116, Ex. 6.4)



For the modern reader, Bach's *Zwei Litaneyen* might seem like an unusual source of inspiration for Beethoven. On the contrary, Bach intended for the harmonies and thoroughbass patterns that he developed in this piece to be studied independently of the work's performance. In his preface (written in 1785 in Hamburg), he remarked that he hoped that "through this work one

will be sufficiently convinced of the richness and effect of harmony."[206] In his concluding remarks, he similarly emphasized his intentions for his chorale harmonizations: "I wish that my work may be agreeable and partly useful to lovers of harmony. This shall be the best reward for the trouble I have expended."[207] Apparently, his wishes were fulfilled, because Beethoven seems to have studied the work while he was composing the *Eroica*.

In an article, "The New Modulation of the 1770s: C.P.E. Bach in Theory, Criticism, and Practice," Richard Kramer (1985) highlighted that Bach sought to explain some of the new modulations he had developed in a revised version of his *Versuch über die wahre Art das clavier zu spielen*, Part 2, which was later published in Leipzig by Engelhardt Schwickert in 1797 (nine years after C.P.E. Bach's death). Shortly before his passing, Bach submitted an additional paragraph emendation on modulation that he intended to be placed directly after his discussion of fully diminished seventh chords. This paragraph, which has been slighted in scholarship (see Kramer 1985, 551), includes several modulations to distantly related keys.[208]

The most notable modulation in Bach's emendation for our purposes is a modulation by a third. Bach emphasized, for instance, that one can modulate from C to E major because "E is the dominant of A, and that A minor is very closely related to C major."[209] Beethoven may have encountered this revised chapter around the time he was composing the *Eroica*, or he may have discovered these possibilities while analyzing Bach's keyboard Rondos and *Zwey Litaneyen*. The new modulations to a key a third away manifest in several of Beethoven's works composed around this time, such as his Piano Sonata, Op. 31 No. 1, i. (the subordinate theme appears in the mediant), in multiple places in the *Eroica* symphony, and his Piano Sonata Op. 54, i. "Waldstein" (the subordinate theme appears in the mediant). Consequently, perhaps we could interpret Beethoven's large-scale key choices as reimaginations of Bach's smaller-scale novel thoroughbass tonicizations and

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[206] "Ich hoffe, daß man durch diese Arbeit von dem Reichthum und von der Würkung der Harmonie sattsam überzeugt senn werde, ohngeacht ich gewiß weiß, bey weitem noch lange nicht alles erschöpft zu haben. Meine Bässe zu eben diesen Litaneyen im holsteinischen Choralbuche sind merklich von diesen Bässen unterschieden. Je mehr man in der hamonie suchet, desto mehr findet man; nur habe ich diesmahl mein Suchen nicht übertreiben, und immer alles verändern wollen. Ich würde dadurch zu widrig und zuletzt undeutlich geworden senn Auf Bunden gehören Pflaster" (Bach 1786).

[207] "Endlich wünsche ich, daß meine Arbeit den liebhabern der harmonie angenehm und zum Theil nutzbar senn möge. Diese sey die beste Belohnung für die Mühe, die ich angewandt habe" (Bach 1786).

[208] For the translated text of C.P.E. Bach's modulation emendation, see (Kramer 1985, 552).

[209] Translated in (Kramer 1985, 552). Surprisingly, this passage is omitted William Mitchell's (1948) English translation and Heinrich Schenker's discussion as Kramer observed; (Kramer 1985, 554 & fn. 3).

modulations. In a sense, then, some of Beethoven's "innovations" from his so-called "heroic period" seem to be more the result of him turning back to repurpose and realize ideas that Bach developed about ten years after Beethoven was born (ca. 1778–1780).[210] Ultimately, the influence of Bach's ideas on Beethoven's compositions is currently underdeveloped. As several of Beethoven's letters suggest that he actively studied Bach's pieces throughout his career, perhaps future research will discover further relationships.[211]

We should understand Bach's new modulations within a larger context that unites key relationships with musical form. In his analysis of C.P.E. Bach's Keyboard Trio in G major (1775), W. 90, no. 2 (Helm 523), for example, Johann Nikolaus Forkel, writing in 1778, explained that remote modulations should not be employed solely for their daring effects:

> It is not enough to make a bold move. One must know how to do it with assurance and, in addition, how to retreat from it (*wieder zurückzuziehen*) in an acceptable manner. . . . One must feel confidently in control and be master of all possible means, in order to extricate oneself (*herauszuwickeln*) in the best way from a labyrinth into which one has gotten entangled due to boldness; and the listener must not be led to know the difficulties that it has cost to come out of it.[212]

In other words, if a composer writes a modulation (or tonicization) to a distant key, they should be able to return out of it convincingly. Kramer (1985, 573–74) explained that Forkel noticed that some of the distant modulations (tonicizations) in Bach's Rondos in his *für Kenner und Liebhaber* collection caused tonal disruptions early in the pieces that were reconciled in various ways towards their end. That is, Forkel observed that modulation (or tonicization) to remote keys could function both a

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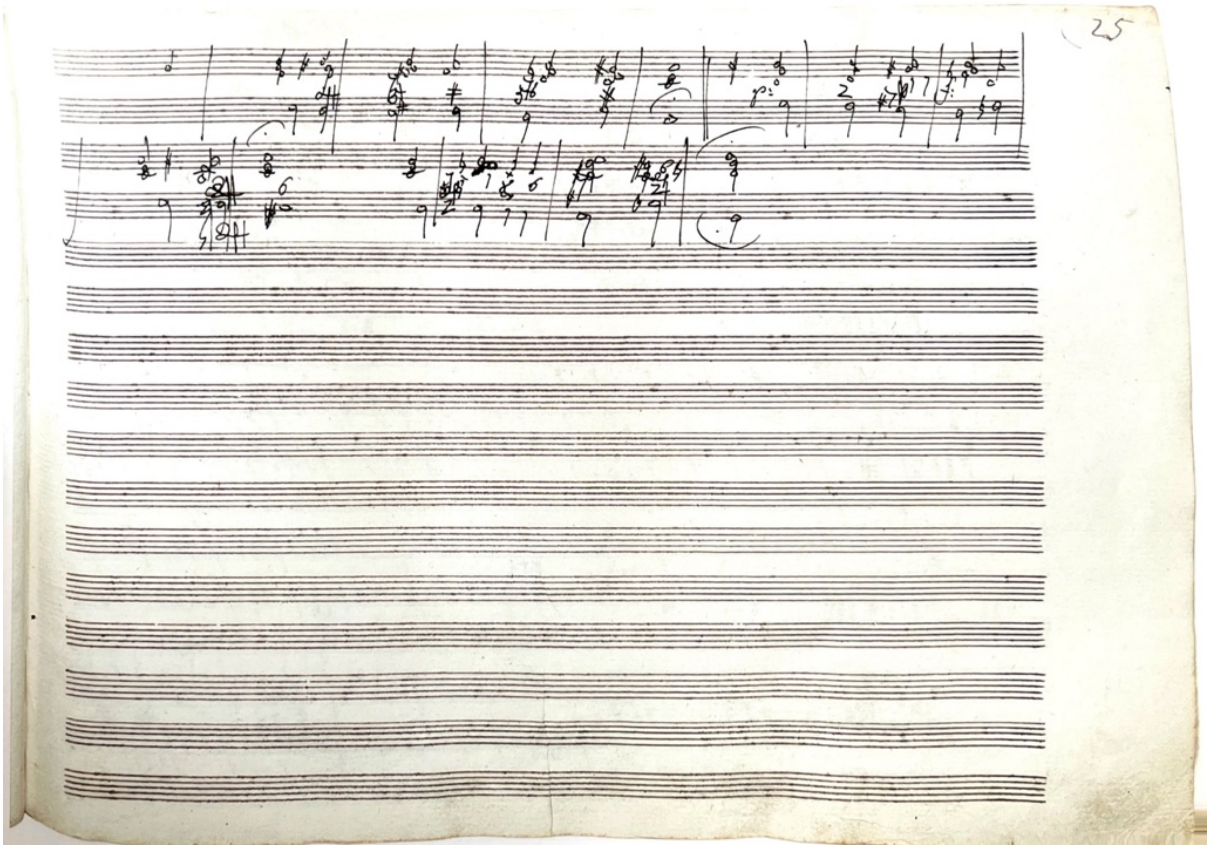
[210] On the dating of C.P.E. Bach's emendations, see (Kramer 1985, 577).

[211] In a letter addressed to Breitkopf & Härtel in 1809, Beethoven requested scores by C.P.E. Bach. He noted that "I have only a few samples of Emanuel Bach's compositions for the clavier; and yet some of them should certainly be in the possession of every true artist, not only for the sake of real enjoyment but also for the purpose of study" (A-220). In another letter to the same publisher in 1810, Beethoven requested again "all the works of Carl Philip Emanuel Bach, all of which, of course, have been published by you" (A-281). Apparently, the firm did not fulfil Beethoven's wishes, because he wrote to them again in 1812 requesting them once again: "I fancy you could make me a present of C. P. Emanuel Bach's works, for surely they are rotting with you" (A 345). Beethoven's last letter suggests that Bach's were becoming less popular at the time, but Beethoven still found them valuable for study.

[212] Translated and cited in (Kramer 1985, 573).

disruptive and generative element for a piece. Forkel's view characterizes well what we find in Beethoven's works and is particularly relevant for study of the *Eroica* and its sketches. Before we leave Bach's *Litanyen*, let us briefly examine the rest of the fragments that Beethoven copied from this work.

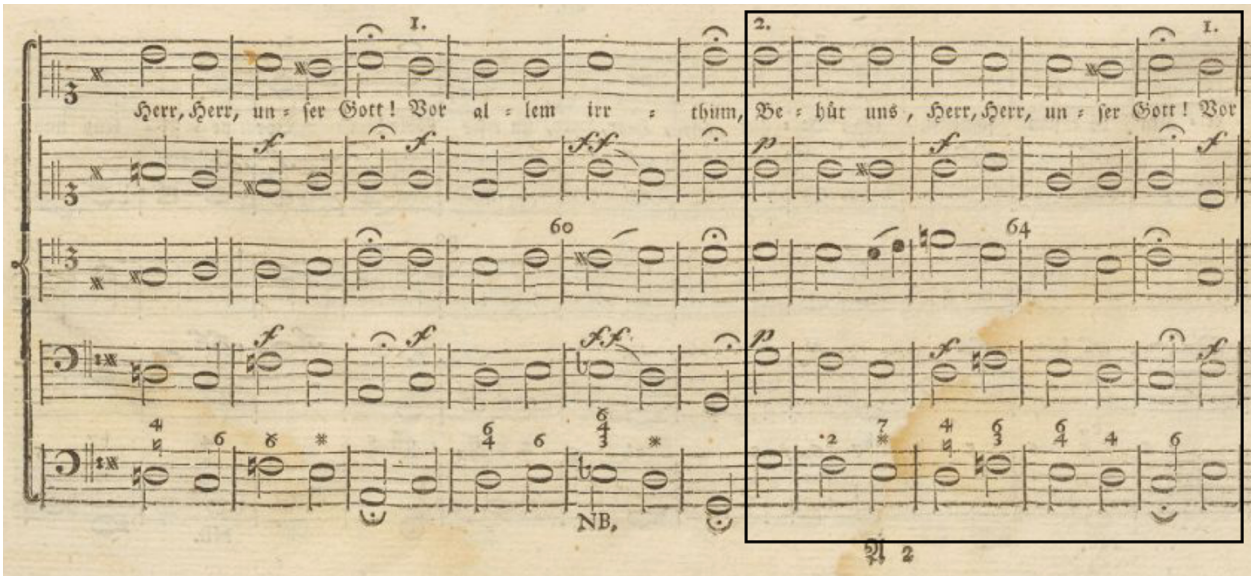
Sketchbook Excerpt 22: *ES*, p. 25 (repeated example)



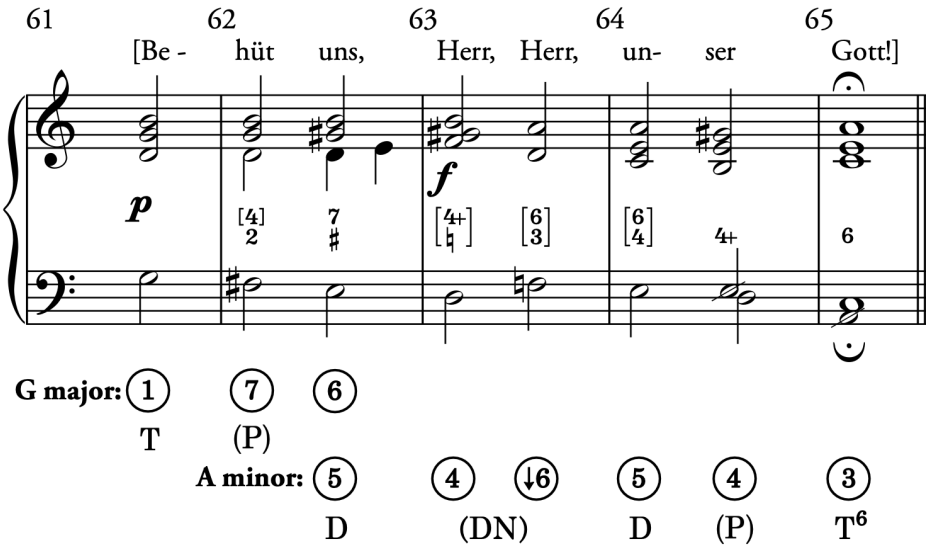
The second excerpt that Beethoven writes (Sketchbook Excerpt 22, staves 1b and 2b) is from the eleventh petition, mm. 61–65; Example 285 shows an excerpt from Bach's work and Example 286 transcribes and analyzes the thoroughbass framework. Broadly, Bach's passage provides a method for modulating up a whole step (from G major to A minor) that additionally prolongs the new key's dominant before closing with a cadence. In greater detail (see Example 286), the bass moves out of G major in m. 62 through ⑦$^{4/2}$. As a passing (transitus) chord, the bass must now resolve down by a half-step like it did in the previous examples. Once Bach reaches ⑤, he could have simply ended with a simple authentic cadence in A minor (Example 287). Instead, he

prolongs the dominant function with a series of intervening harmonies. First, he employs a double neighbor motion in m. 63 (i.e., ⑤-[④-⑥]-⑤). Thereafter, m. 64 brings back ⑤ and a cadential six-four. At this point, Beethoven initially miscopied C.P.E. Bach's excerpt because he left the E in the bass on the second half of m. 64 and resolved it to a root position A minor tonic in m. 65 (that is, he wrote a PAC). At some later point, as evidenced by his revision, he realized that C.P.E. Bach did not conclude on the tonic and instead abandoned the root position dominant in m. 64 in favor of moving through ④$^{4/2}$ to a first inversion tonic ③ in m. 65.

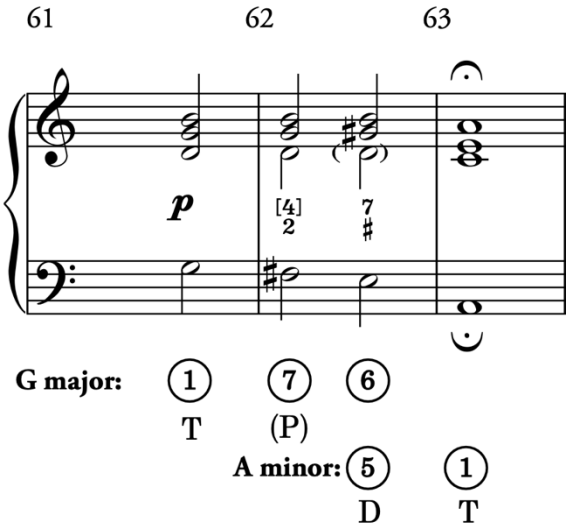
Example 285: C.P.E. Bach, *Zwei Litaneyen*, Eleventh petition, mm. 61–65; (Bach 1786, 3)



Example 286: Transcribed and Analyzed from Beethoven (*ES* p. 25, st. 1b & 2b); from C.P.E. Bach, *Zwei Litaneyen*, Eleventh petition, mm. 61–65; (Bach 1786, 3)



Example 287: Hypothetical ending to C.P.E. Bach's eleventh petition

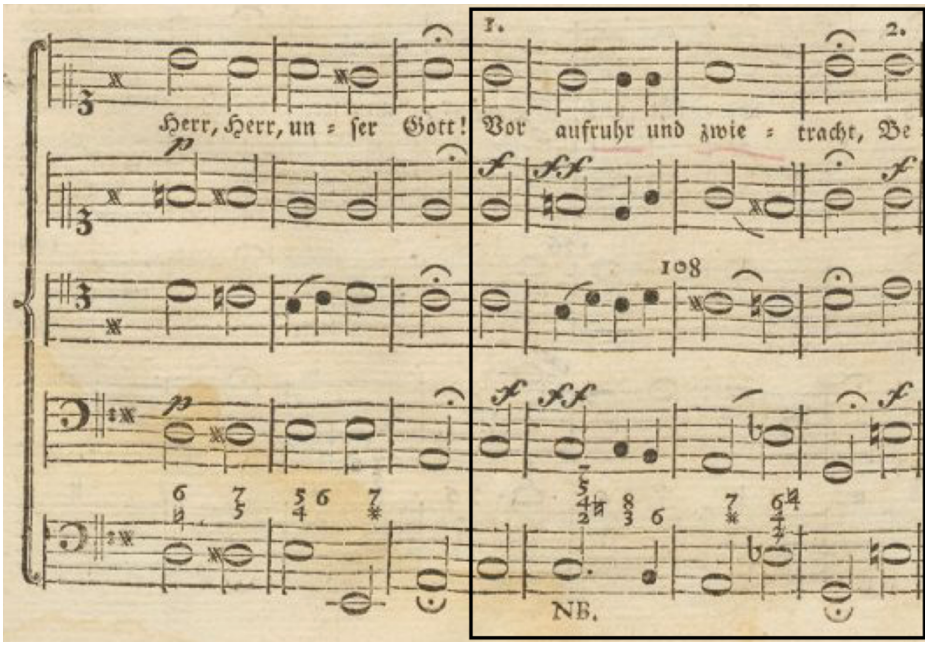


The final excerpt that Beethoven copied from Bach's *Zwei Litaneyen* is shown in Example 288 and transcribed and analyzed in Example 289. In this passage, the music modulates up a fifth from C major to G major. The most notable element of this example is the "7/4/2" harmony over ① on the downbeat of m. 107, the "7/#" over ⑥ in m. 108, and the surprising leap from E-flat to G in the bass melody at the end of the phrase. C.P.E. Bach wrote "NB" under the first harmony to indicate his "concern for the words."[213] Perhaps Beethoven copied this example to study the

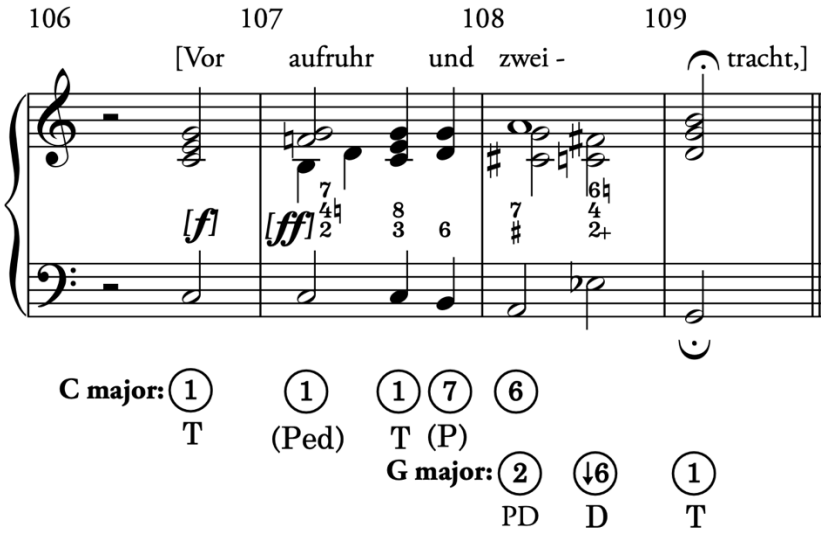
[213] (Beethoven, Lockwood, and Gosman 2013a, 49).

chromatic voice-leading in the upper voices, which feature prominently in the subordinate theme 2, part 1.

Example 288: C.P.E. Bach, *Zwei Litaneyen*, Seventeenth petition, mm. 106–109; (Bach 1786, 3)



Example 289: Transcribed and Analyzed from Beethoven (*ES* p. 25, st. 3b & 4b); from C.P.E. Bach, *Zwei Litaneyen*, Seventeenth petition, mm. 107–110; (Bach 1786, 3)

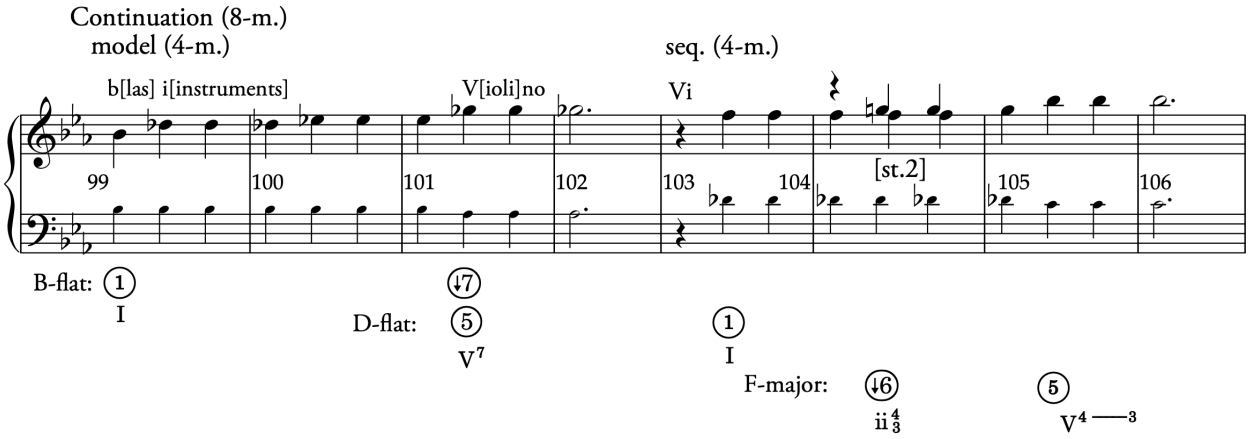


8.3.3 Stage 3: ST2 P2 Continuations Written After C.P.E. Bach's *Zwei Litaneyen* Examples

Now that we have studied the excerpts that Beethoven copied from Bach's *Zwei Litaney*, let us return to the sketches that he wrote on the page immediately thereafter (p. 26), beginning with branch 4.2

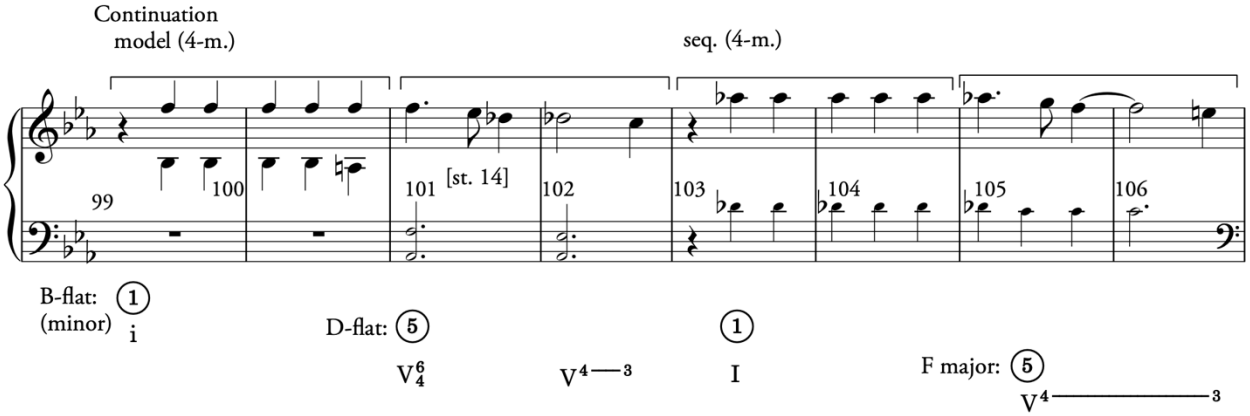
(Vol. 2, p. 87, m. 91ff). At the top of the page on the first staff, Beethoven sketched the compound presentation (Vol. 2, p. 87, 4.2, mm. 91–98), then the first four measures of the continuation (mm. 99–102). He then wrote the first measure of member 2 and moved to the second staff to complete the continuation in the third measure (mm. 104–106). The complete, combined continuation is shown in Example 290. In branch 4.2, the continuation expresses a similar model sequence structure to the CS 4.0 version (compare Example 290, with Example 291A), but the content is more similar to the first 4-m. sketched in the 4.1 branch (Example 291B, mm. 99–102). Once again, Beethoven merges elements from two prior versions (4.0 and 4.1) to create the new expression. Still, this new sketch differs from the final.

Example 290: 4.2, mm. 99–106; ST2 P1, Continuation (*ES* p. 26, st. 1–2)

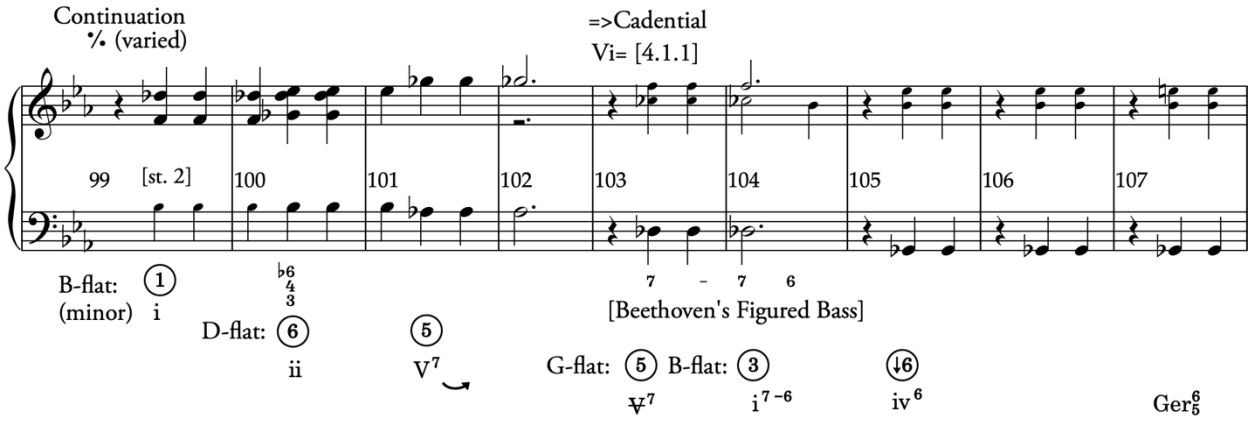


Example 291: ST2 P1 Continuations 4.0 and 4.1

A. CS 4.0, mm. 99–106; ST2 P1 Continuation (*ES* p. 20, st. 13b–14)



B. Branch 4.1, mm. 99–107; ST2 P1, Continuation (*ES* p. 22, st. 2)

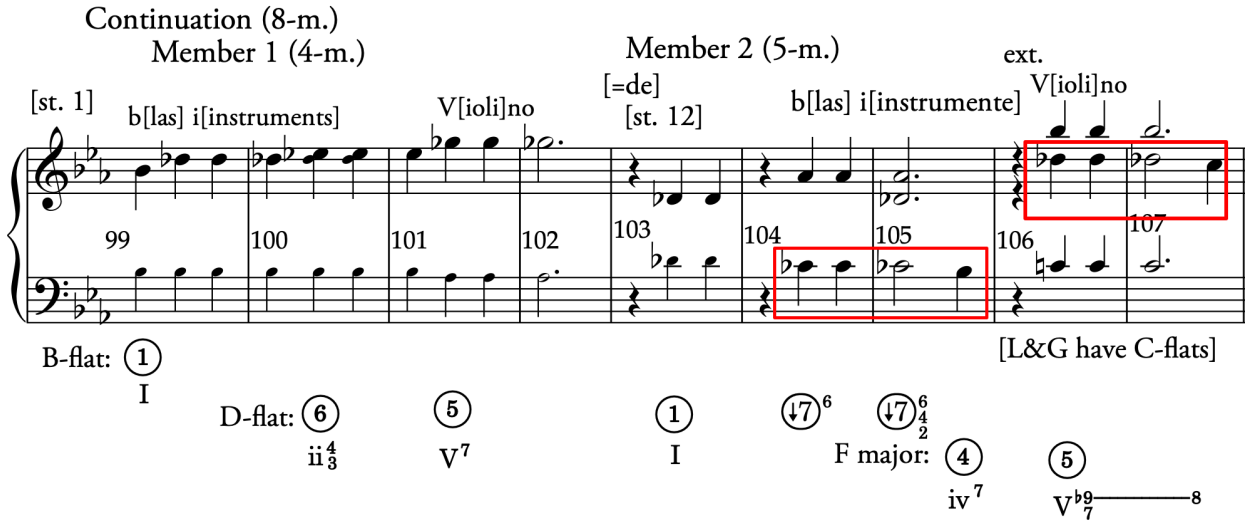


Sometime after finishing the rest of the exposition (branch 4.2), Beethoven crossed out the last measure of staff 1, corresponding with the beginning of the continuation, and all but the last two measures of staff 2 (i.e., he crossed out 4.2, mm. 103–112). He then wrote "Vi" to link to the replacement that he wrote on staff 12 (see Sketchbook Excerpt 23). Example 292 reconstructs this revised (merged) 4.2.2 continuation. In comparison to the previous 4.2 version (shown in Example 290), Beethoven eliminates the 4-m. sequence (Example 292, mm. 103–107) and instead writes new material (compare the 4.2 version in Example 290A, mm. 103–106 with the 4.2.2 revision in Example 292, mm. 103–107). For the first time, he introduces a chromatic descending motion in the bass voice that moves from C-flat (Example 292, m. 104) to B-flat (m. 105). This chromatic descent, boxed in red (mm. 104–105), is then repeated on D-flat in the alto voice (from D-flat to C in mm. 106–107). The harmony above the C-flat in m. 105 (consisting of the notes D-flat and A-flat) suggests a "6/4/2" figure. In the context of D-flat major, this C-flat would be interpreted ↓(7)$^{6/4/2}$. As we saw in stage two, above, this harmony is found in the first Bach *Zwei Litaneyen* excerpt (see Example 293, m. 46, beat 1). Given that the sketch written on the staff 12 of page 26 differs considerably from all the prior continuations written before page 25, it seems probable that the Bach's examples influenced Beethoven's revision.

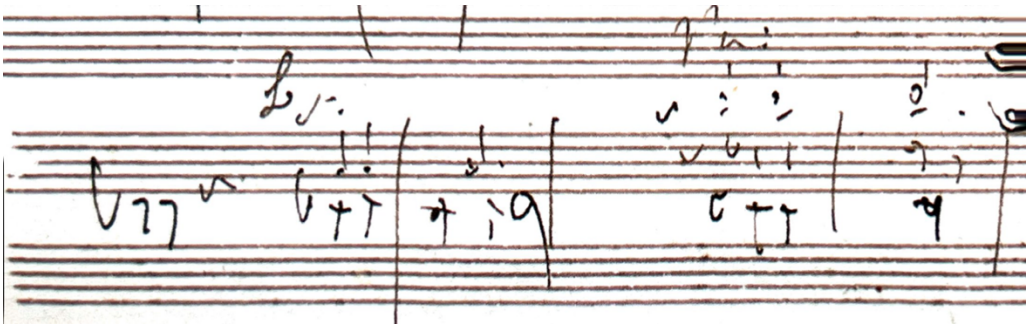
This last sketch of the continuation (4.2.2, Example 292) differs from the final version (Example 294) in two ways. First, the descending chromatic movement in the sketch starts on C-flat, whereas in the final it starts on C. Second, the sequencing of this pattern starts on D-flat instead of F. Despite these differences, the general structure of the continuation and the nature of the sketch's last four measures are reminiscent of the final version. As we have seen for other parts of the

exposition, Beethoven must have made the final changes to this music at some later stage not recorded in the sketchbook.

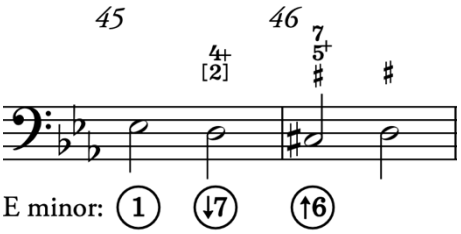
Example 292: 4.2.2, mm. 99–107; ST2 P1, Continuation (*ES* p. 26, st. 1 and 12)



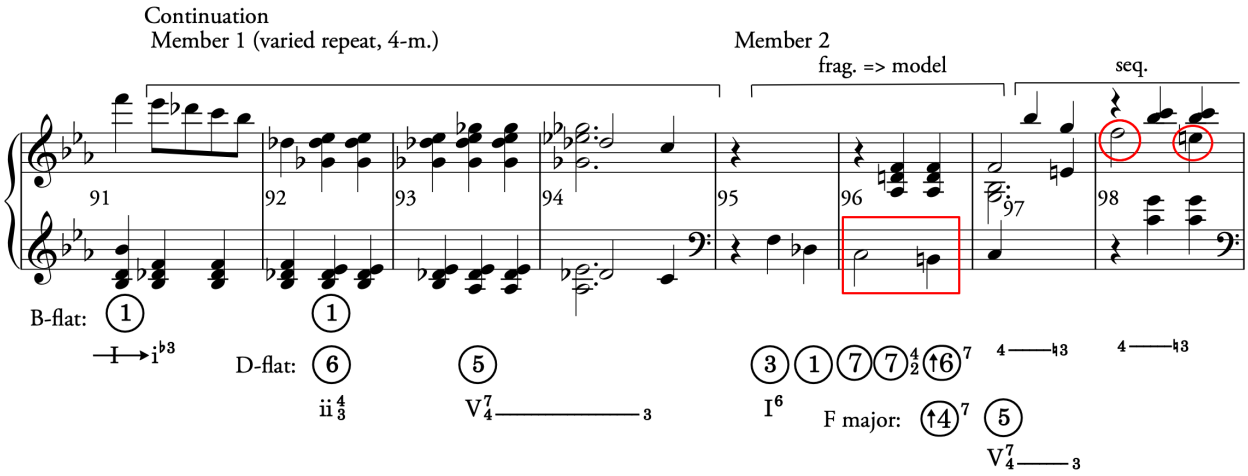
Sketchbook Excerpt 23: *ES* p. 26, st. 12 (middle staff)



Example 293: C.P.E. Bach's *Zwei Litaneyen* excerpt [Reproduced figure]



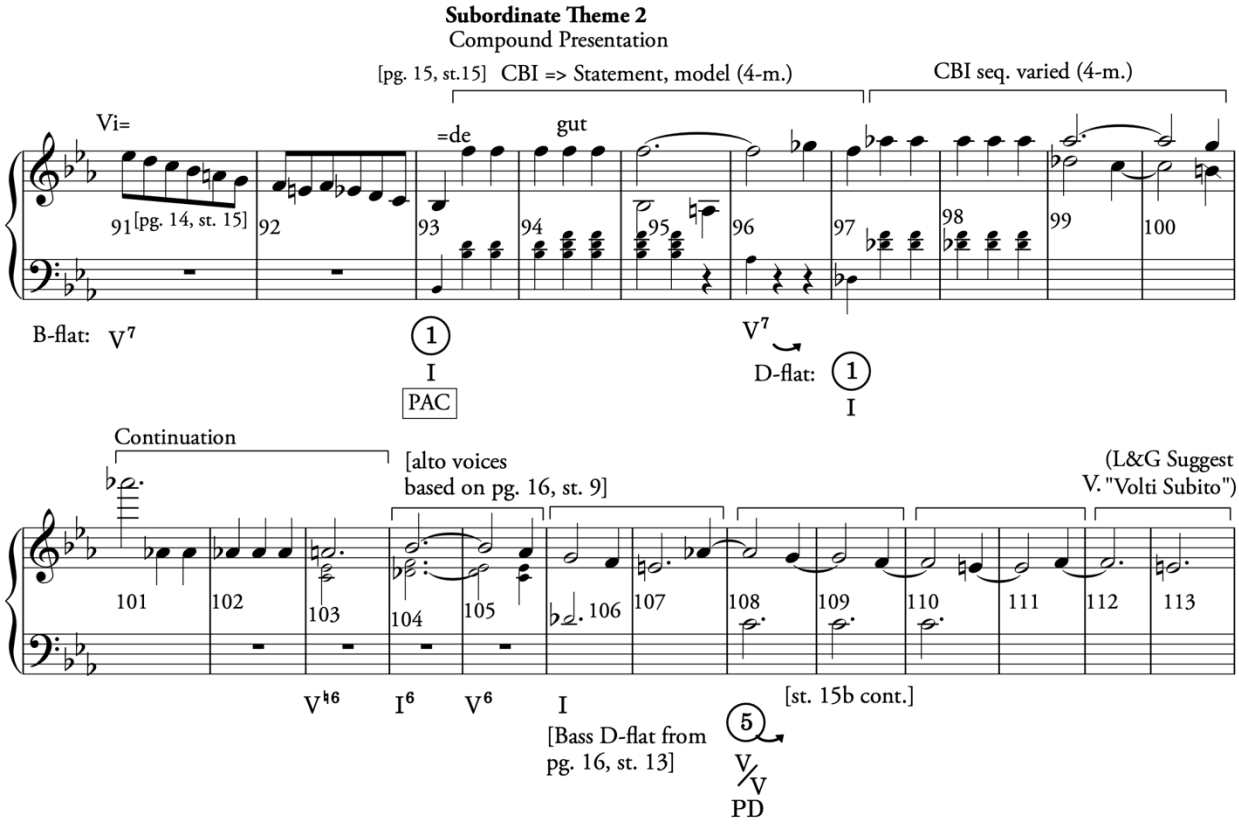
Example 294: Op. 55, I., mm. 91–98; ST2 P1 Continuation



Let us now conclude our study of the subordinate theme, part 1 sketches. In general, it took Beethoven multiple revisions to build the final part 1 continuation. He seems to have decided sometime around branch 3.1 (Example 295), written on page 15, that this part of the form would bring a tonicization of D-flat major (mm. 97–98), then move to tonicize F major through its dominant (mm. 108–113), which would then lead back to the subordinate key tonic (B-flat major, m. 114, not shown). In his first attempt (3.1), the D-flat appeared in the compound presentation as a varied repeat of the CBI. Notable too is the descending chromatic line D-flat, C, B (mm. 99–100), but the upper voices do not suggest the same thoroughbass patterns or harmonies as the final.

The principal difficulty Beethoven faced with the continuation was to devise a solution that moved—almost effortlessly, as Forkel suggested—from B-flat into D-flat major, then back. This goal seems to have been the primary focus of the 4 series sketches. In the end, he achieved a compact solution that also brought motivic parallelisms with the main theme's chromatic descent to C-sharp. The listener would not be aware of the difficulties that he went through to finalize these tonicizations. Beethoven thus fulfilled Forkel's words of wisdom: he figured out how to make a bold move into D-flat major, then retreat from it and return to B-flat in an elegant and seemingly simple way. The last 4-m. unit of the last continuation (Example 292, mm. 104–107) that he wrote on page 26 differed substantially from prior versions he wrote on pages 20–23. This difference seems to have arisen from his study of exemplars from Bach's *Zwei Litaneyen*.

Example 295: Branch 3.1, mm. 91–113, corr. Subordinate Theme 2, Part 1 (*ES* p. 14, st. 15 and p. 15, st. 15)



8.4 Subordinate Theme 2, Part 2

Now that we have analyzed the development of the subordinate theme 2, part 1 let us turn now to the final part of the exposition, the second part of the subordinate theme 2. Compared to the previous theme-part, Beethoven sketched considerably more variants of this material. To discuss these variants with greater precision and to simplify what follows, I develop a model for referencing this material that extends the phrase-function diagrams developed at the beginning of this study. I discuss how each element of the second theme part develops in successive sketches, then interpret why Beethoven made the changes that he did.

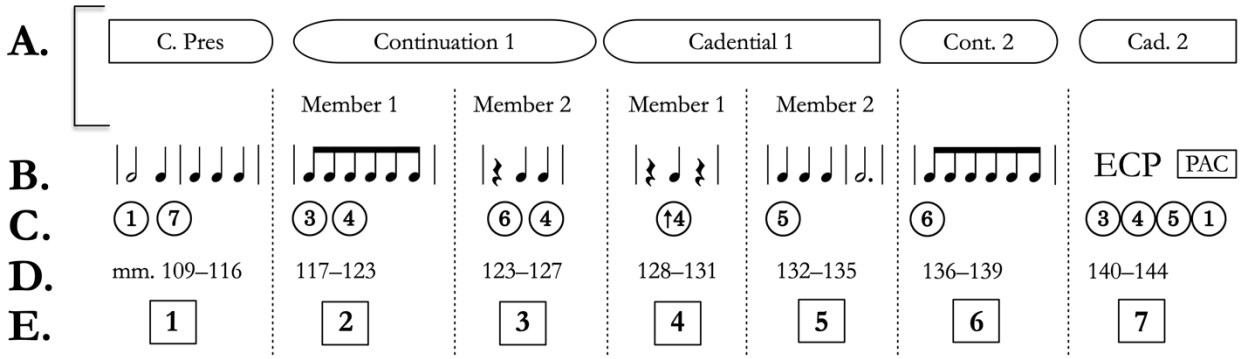
To make it easier to compare the different versions of the subordinate theme 2, part 2 with one another, it is helpful to develop a robust system for referencing its constituent elements. Consider the diagram of the final version in Figure 64. The top row (A) diagrams the phrase function shapes of this theme part. After the compound presentation, two continuations and two cadential functions follow; these functions arose due to the abandoned cadence (in m. 136). In total, then, the final subordinate theme 2, part 2 is built with five phrase functions: a compound

presentation, continuation-1, cadential-1, continuation-2, and cadential-2. We can parse continuation-1 and cadential-1 further into two members, and thus represent the theme with a total of seven building "blocks." To help recall the material in these blocks, brief rhythmic incipits have been placed under the phrase function shapes (row B). Each rhythmic incipit maps to a phrase function, or, if indicated, one of its members. As the function of these incipits changes somewhat in the various sketches, the structural bass-melody scale-degrees are provided under each incipit (C) along with the measure numbers that the incipit represents (D). Finally, because Beethoven alters the contextual position of the blocks in his sketches, it will be useful to reference them in terms of their final order. To facilitate this task, each block is assigned to a number 1–7 (E) that references the final version. In this text, specific blocks will be referenced by "block" followed by the number in brackets, e.g., block [3] represents the material that corresponds to mm. 128–131 in the final piece, that is, the continuation-1, member 2.

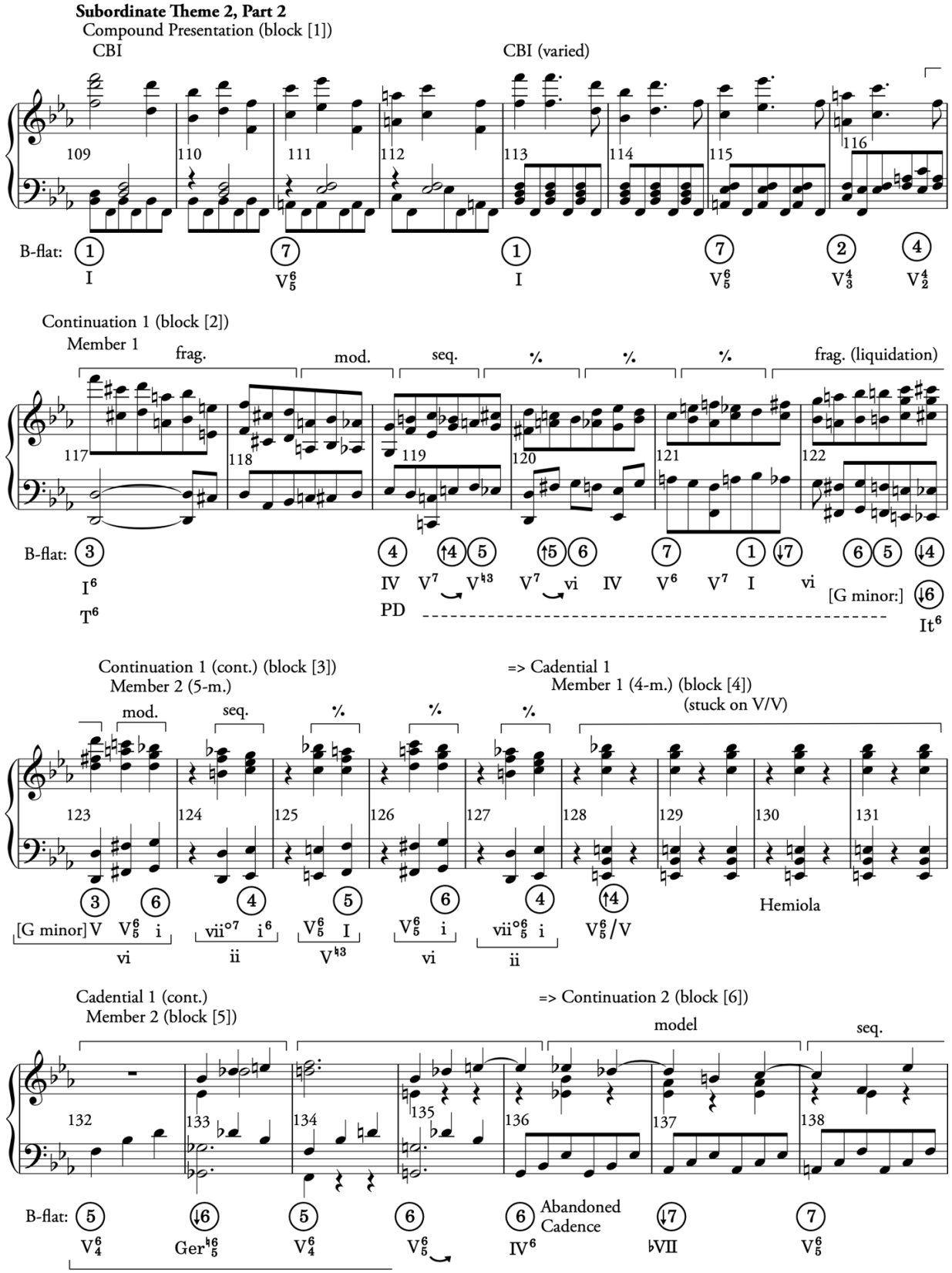
Figure 64 represents the music shown in Example 296 in a compact form. For instance, block [2], the continuation-1, member 1 incipit in Figure 64, row B, represents the music in Example 296, mm. 117–123. The block [2] rhythmic incipit shows six eighth notes, which correspond with the content of each measure in the music the block represents. Structurally (see Figure 64, row C), block [2] expresses bass-melody ③ (m. 117–118) in the prolongational stream, which then then moves to ④ (m. 119), which is suggestive of the cadential stream. This ④ is then prolonged with a sequence (mm. 119–122) until the applied Italian sixth appears at the end of m. 122. The reader is encouraged to compare the phrase functions (row A) and structural bass-melody scale-degrees ((row C) extracted in Figure 64 with the bass-melody durational reduction of the final subordinate theme 2, part 2 in Example 297 (to view this example in context, see the complete reduction in Vol. 2, p. 28).[214]

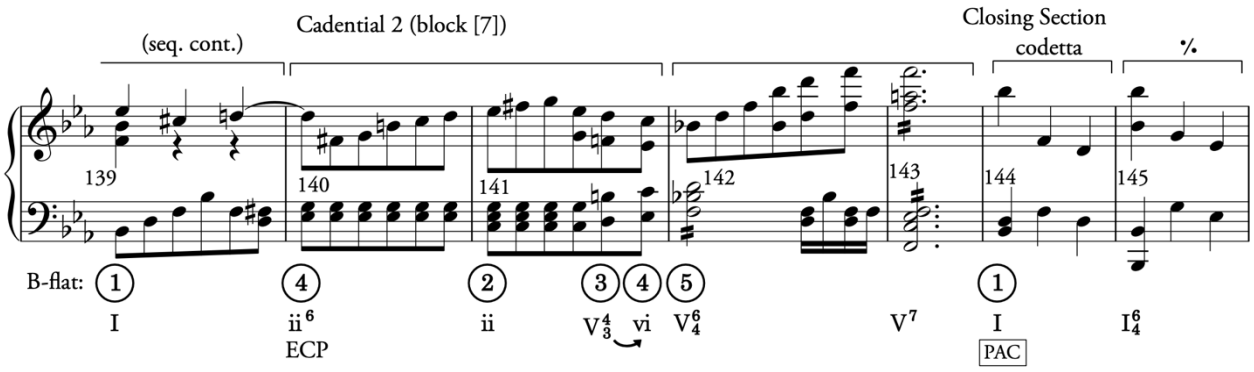
[214] As mentioned in Chapter 3, the durational reduction is approximate in mm. 117–122. A one-to-one mapping of mm. 117–22 would cause the durational reduction to look significantly more complicated than is necessary.

Figure 64: Final ST2 P2 Phrase Function Incipits (represents mm. 109–144)

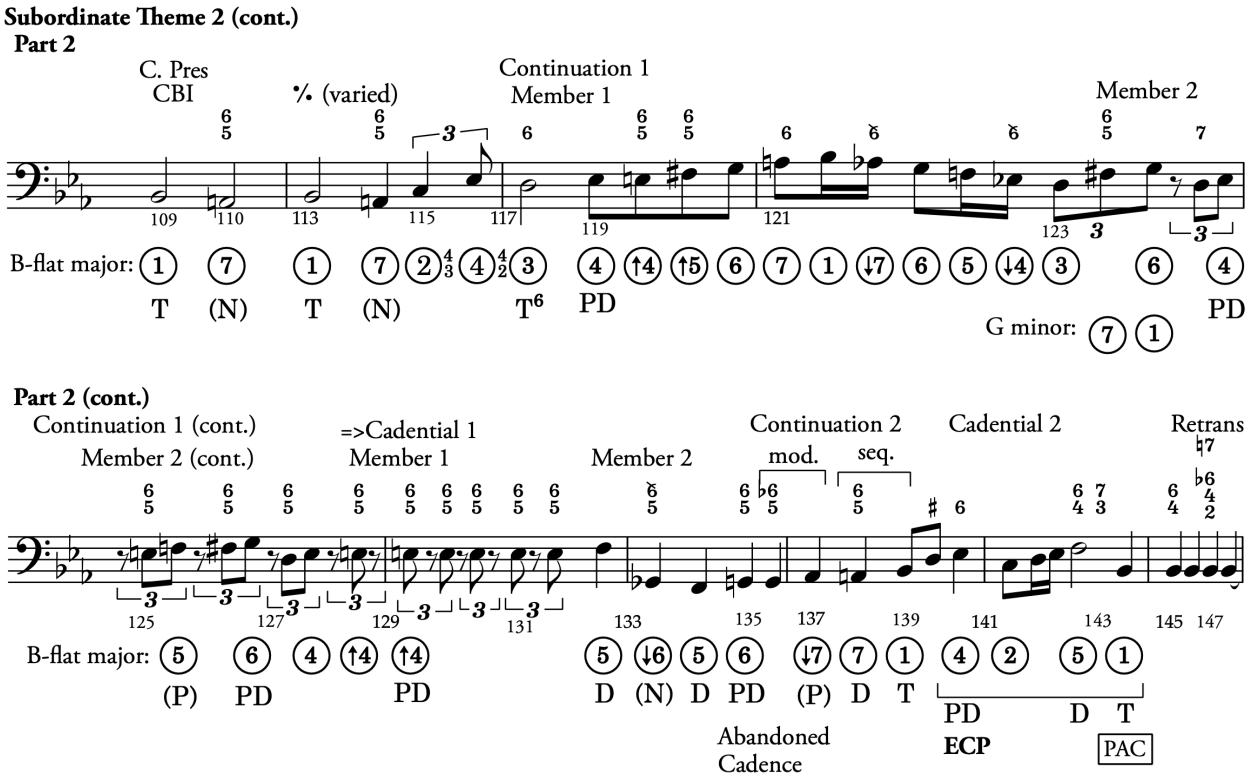


Example 296: Op. 55, I., mm. 109–145; Subordinate Theme 2, Part 2





Example 297: Subordinate Theme 2, Part 2 Bass-Melody Approximate Durational Reduction, mm. 109–148



Now that we have a way to reference each of the seven main building blocks of the subordinate theme 2, part 2, let us trace how these develop in the 4 series sketches. The sketches suggest that Beethoven had several musical ideas that he planned to integrate into this part of the form when he started his 4 series sketches, but he wasn't yet sure how large those blocks would be, or in what order he would deploy them. He even considered removing some of the blocks, but eventually re-integrated them. The abandoned cadence in the final Op. 55, and thus blocks [6] and [7], do not arise in any of the sketches in the sketchbook—this final touch must have been

introduced at a later stage. In what follows therefore, we will trace how each of the first five blocks develop and function, beginning with the compound presentation.

8.4.1 Subordinate Theme 2, Part 2: Compound Presentation and Continuation 1

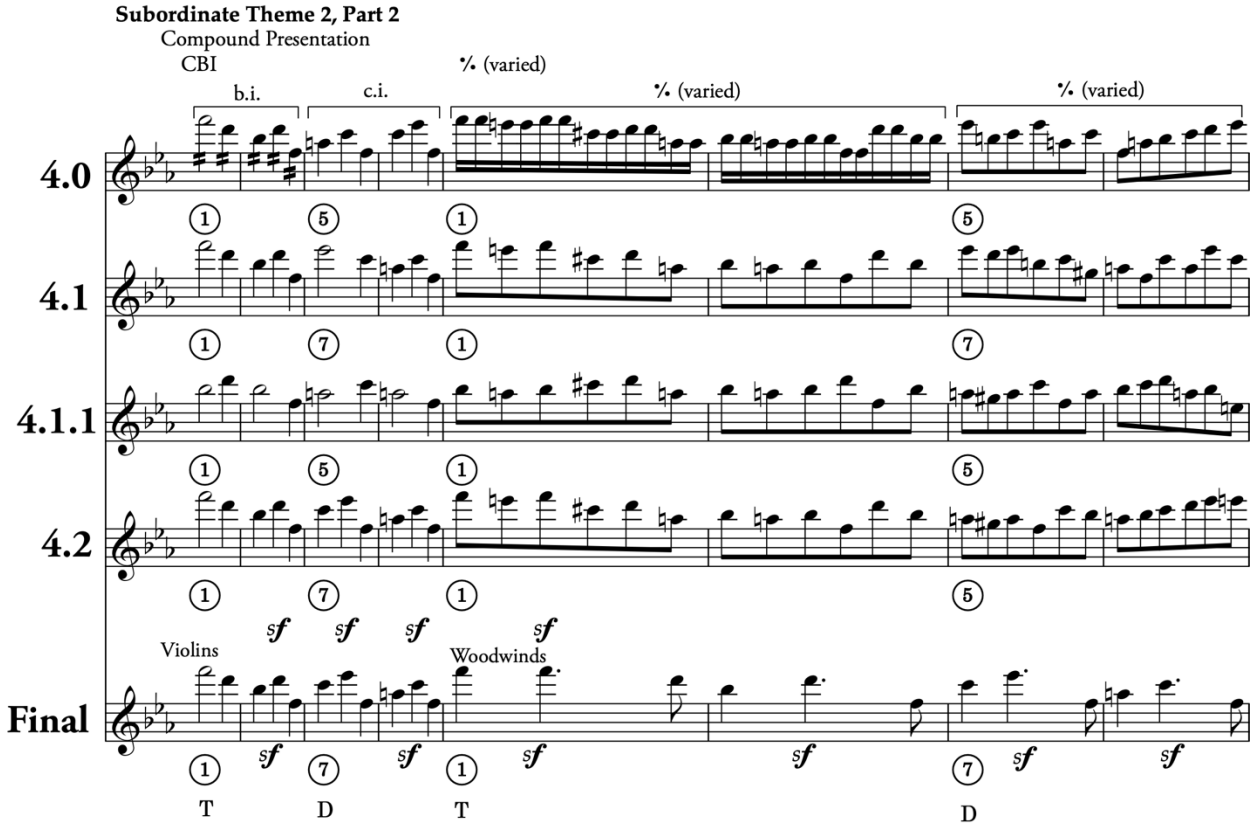
Let us turn first to the compound presentation (block [1]). Example 298 overlays the four different versions of this music that he sketched on pages 21 (4.0), 22 (4.1), 23 (4.1.1), and 26 (4.2). To begin, consider how the 4.0 compound presentation in Example 298 differs from the version he sketched in 3.3 (Example 299). In the 4.0 version (Example 298), the rhythmic design of the first four measures more closely matches the corresponding music in the final, but the pitch contour differs (compare the rhythmic incipits in Example 300). In the 4.0 sketch (Example 298), Beethoven writes a 4-m. idea rather than a two-fold repetition of a 2-m. basic idea, which he wrote in branch 3.3 (i.e., a presentation). We could say, then, that he expands the 4.0 idea function to 4-m. instead of extending a 2-m. basic idea by repeating it as he did in the 3.0 version. Finally, consider how the second 2-m. unit of the 4.0 CBI begins with an A-natural. This pitch suggests that the underlying harmony would be a root position dominant rather than a first inversion, because a first inversion harmony would have doubled the leading tone in the continuity voice. This implied root position dominant differs from the final version.

In the next 4.1 version (Example 298, second system), the first four measures of the function expresses once more a presentation instead of a CBI (i.e., a repetition of a b.i.). Although this change takes this music a step "backwards" compared to the final, the second unit can now be more readily harmonized with a first inversion dominant ($V^{6/5}$). In a sense, then, Beethoven advances towards the final expression with the underlying harmonization, but retreats from the final version's grouping structure and figuration. Beethoven vacillates between these two ideas in the next sketches.

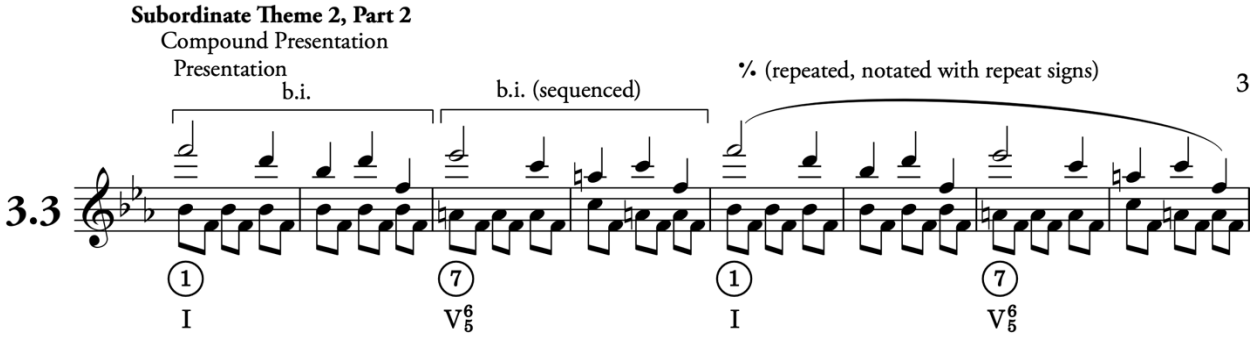
In the 4.1.1 sketch (Example 298, system 3), Beethoven returns yet again to the previous harmonic design implying a root position harmonization for the repetition of the basic idea, but now the basic idea is based on the main theme material, which repeats as a response to create a presentation. This main theme-based presentation does not make it into the final, but it does appear in a similar way—albeit, not as a statement-response—at the beginning of the coda (compare Example 298, 4.1.1, mm. 1–4 with Example 301). This 4.1.1 sketch, more than any of the other variants, strongly suggests that he attempted to make the part 2 out of main theme material. Given the prominent main theme material that he wrote in earlier sketches discussed in previous chapters,

this design should not be too much of a surprise at this point. Still, we must recognize that he tried this main theme-based design long after he decided to build a new compound presentation. In other words, the main theme material did not regain an initiating function in the new compound presentation until branch 4.1.1. Finally, in the last, 4.2 version written on p. 26 (Example 298), the first four measures are expanded (like the CBI in 4.0), and the second two measure unit begins with a C-6. The first four measures of this last design match the final version.

Example 298: 4 Series: ST2 P2 Compound Presentation (block [1])

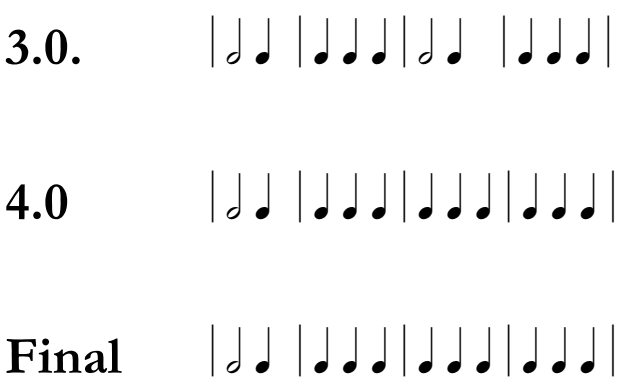


Example 299: Branch 3.3, ST2 P2, Compound Presentation (block [1]) (*ES* p. 18, st. 11)

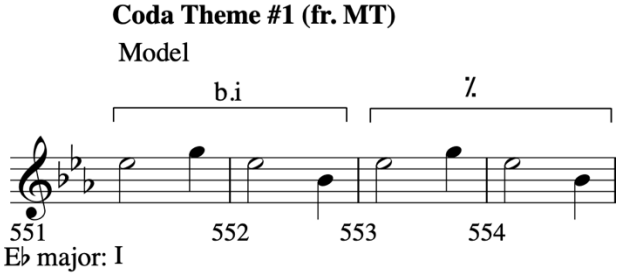


In all his 4 series sketches for the compound presentation (refer to Example 298 for most of them), Beethoven wrote a varied repeat of the initial 4-m. idea by increasing the surface rhythm with note repetitions and neighboring embellishments. He did not use this strategy in the final version. Instead, he varied the repetition with syncopation (Example 302, mm. 113–116). He may have chosen this alternative strategy to mark more clearly the beginning of the following continuation, which begins with eighth notes. This contrast creates a more distinctive separation from the opening compound presentation and the medial continuation that follows.

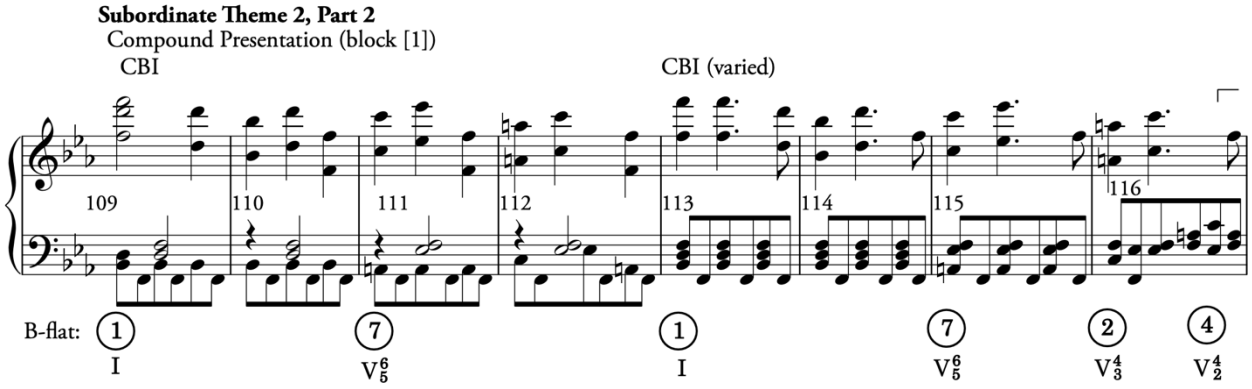
Example 300: ST2 P2 Compound Presentation Rhythmic Profiles (3.0, 4.0, final)



Example 301: Op. 55, I., mm. 551–554; Coda beginning



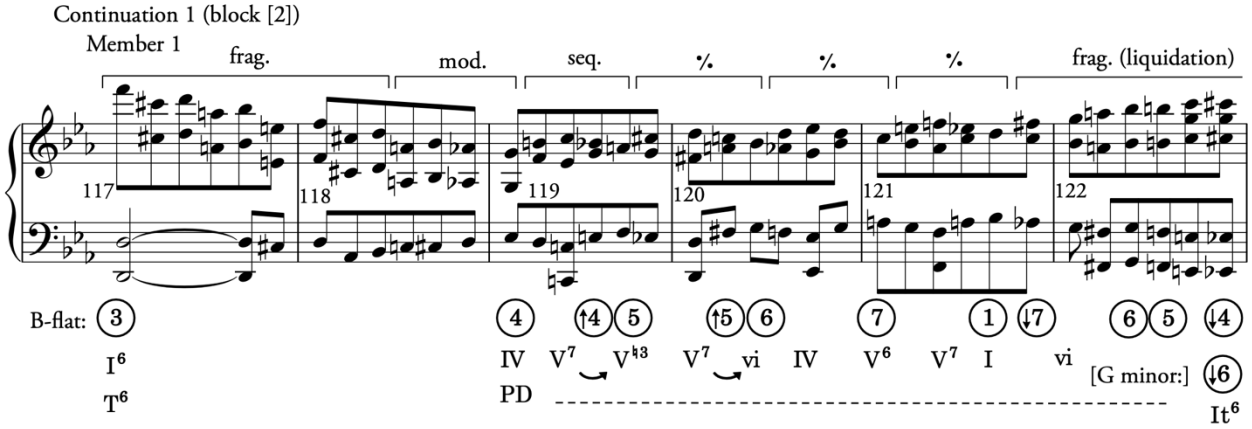
Example 302: Op. 55, I., mm. 109–116; Subordinate Theme 2 Part 2 (block [1])



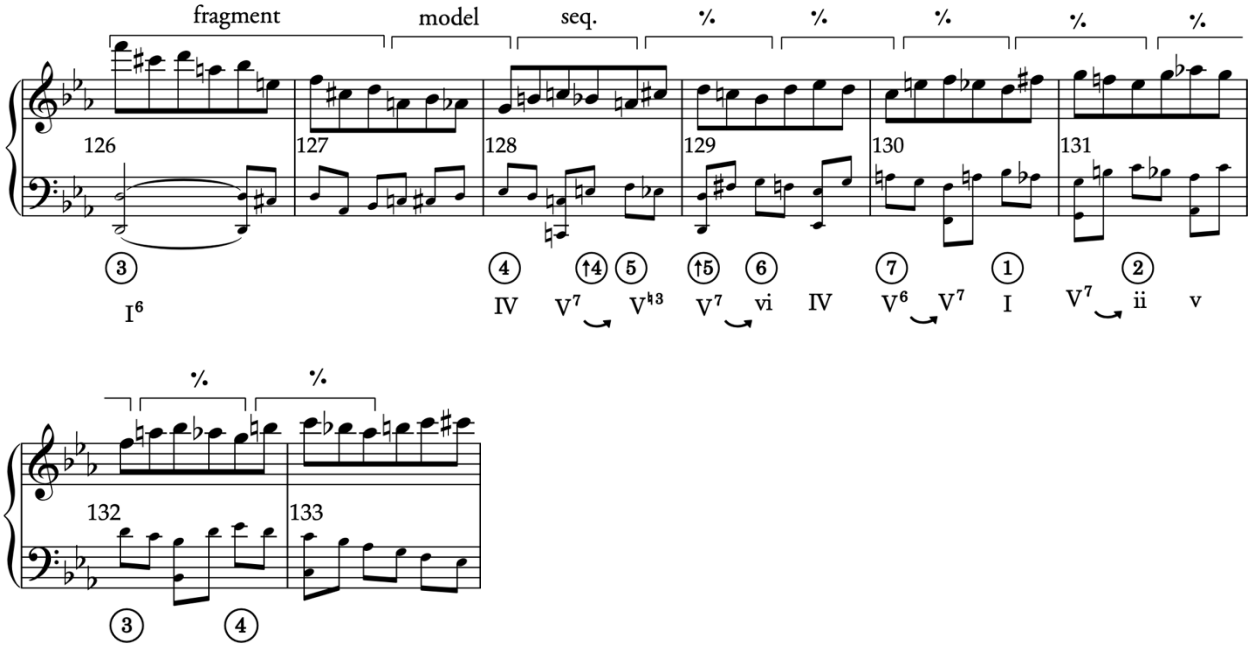
8.4.2 Subordinate Theme 2, Part 2: Continuation-1

Let us turn now to the evolution of continuation-1 that follows the compound presentation, i.e., block [2] (Example 303 provides the final version). At this point in Beethoven's process, this function was essentially fixed and close to becoming its final version. The main difference in these sketches is the excessive and mechanical use of sequences. In the 4.1 version, for instance (Example 304), the model is sequenced a total of nine times, which is five more than the final (compare with Example 303). Beethoven seems to have recognized that this mechanical repetition went too far, because he alters the sequence by splitting it into two parts in the next 4.1.1 revision (Example 305). Here, the first sequence ends in m. 125, and then another model-sequence appears in mm. 126–128. In addition, he reduces the initial tonic prolongation, which causes the first sequence to start earlier.

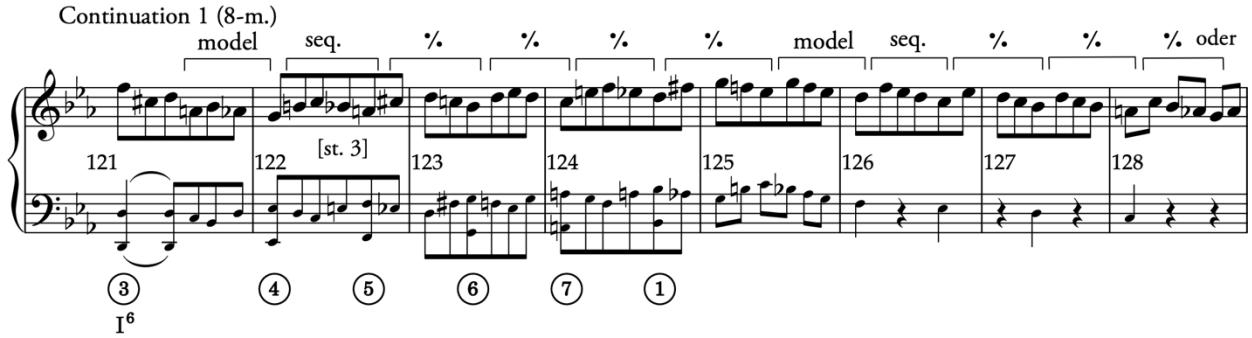
Example 303: Op. 55, I., mm. 117–122; ST2 P2 Continuation 1 (block [2])



Example 304: 4.1, mm. 126–133; ST2 P2 Continuation 1 (block [2]) (*ES*, p. 22, st. 5–6)

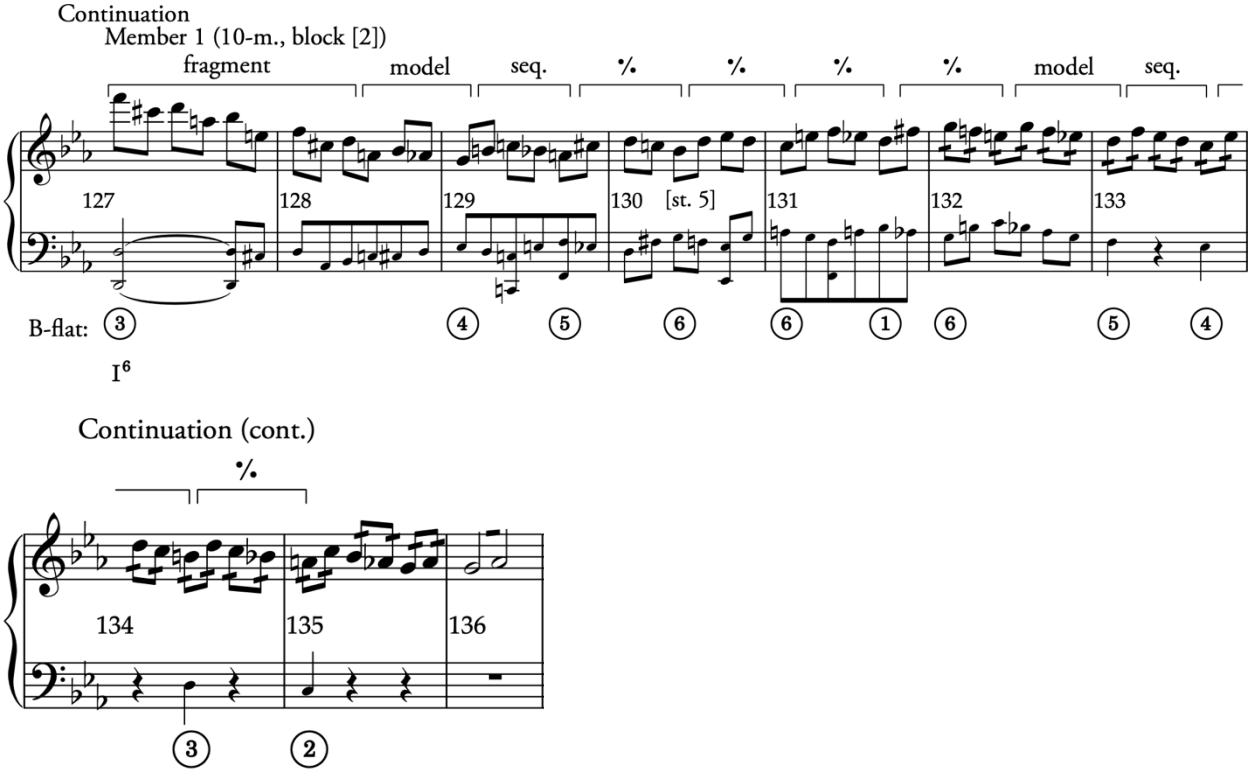


Example 305: 4.1.1, mm. 121–128; ST2 P2 Continuation 1 (block [2]) (*ES* p. 23, st. 2-3)



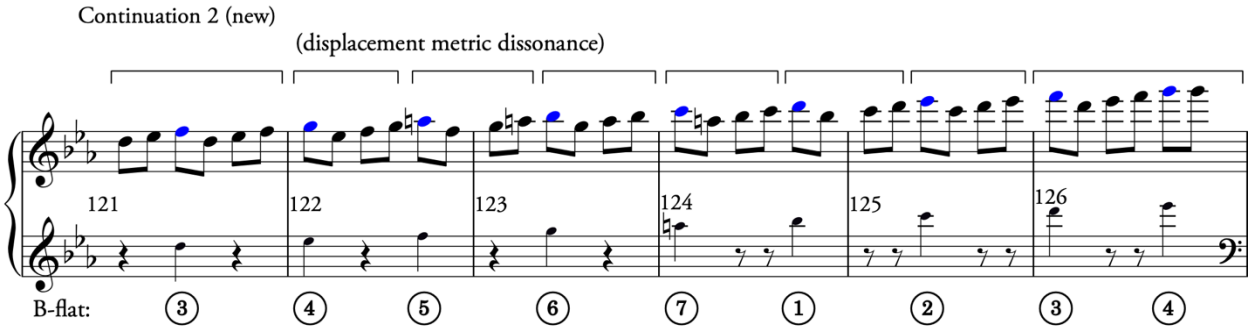
Finally, in his last revision in the sketchbook (4.2; Example 306), he combines elements of the two previous versions. Like the 4.1 version (Example 304, mm. 126–127), he begins the continuation with a longer fragment that implies a prolonged, tonic harmony in first inversion (Example 306, mm. 127–128), then (beginning in m. 129), he uses the two-sequence strategy that he developed in 4.1.1 (the second sequence begins in m. 132). In the final Op. 55, Beethoven eliminates the second sequence (mm. 132–136) and writes a more tight-knit continuation with a shorter sequence that ended with a tonicization of G minor in its place (compare Example 306 with the Op. 55, I. version in Example 303).

Example 306: 4.2, mm. 127–136; ST2 P2 Continuation 1 (block [2]) (*ES* p. 26, st. 4–5)

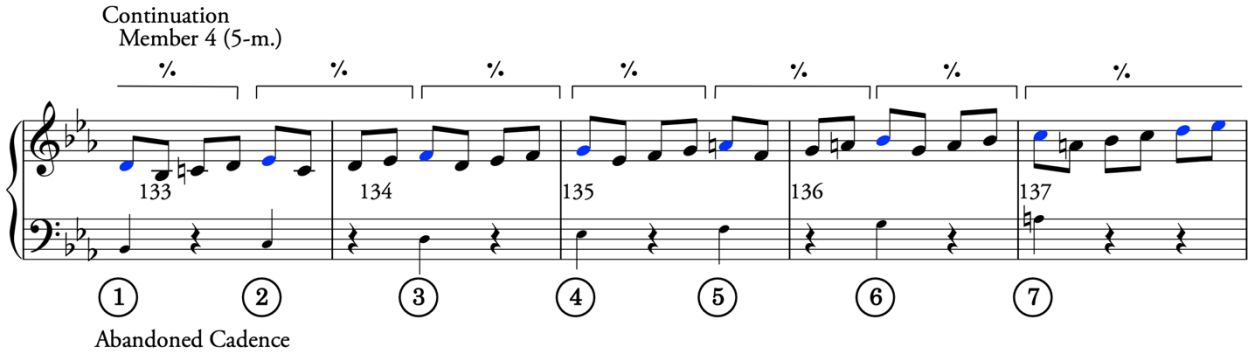


In general, Beethoven refined the first continuation, member 1 (block [2]) by devising a way to reduce the number of sequences and control the accelerating harmonic rhythm. In the prior CS 3 sketches, he tried a different continuation (see the version in CS 3.0 in Example 307 and the same part of the form in branch 3.1.1 in Example 308), but these also relied upon excessive and mechanical, sequential repetitions. He eventually devised a new and more complex sequence in the CS 4 series sketches (Example 304, Example 305, and Example 306), but they still contained too many repetitions. Notably, the final Op. 55, I., block [2] (Example 303) contains more two repetitions than is typical in Beethoven's music (four sequences instead of two), but the complexity and intricacy of the model allows it to withstand what would have otherwise been an excessive number of repetitions.

Example 307: CS 3.0, mm. 121–126, corresponds to Op. 55 Subordinate Theme 2, Part 2 Continuation 1 (block [2]) (*ES* p. 15, st. 4)



Example 308: 3.1.1, mm. 133–137; corresponds to Op. 55, I., Subordinate Theme 2, Part 2 continuation 1 (block [2]) (*ES* p. 16, st. 4)



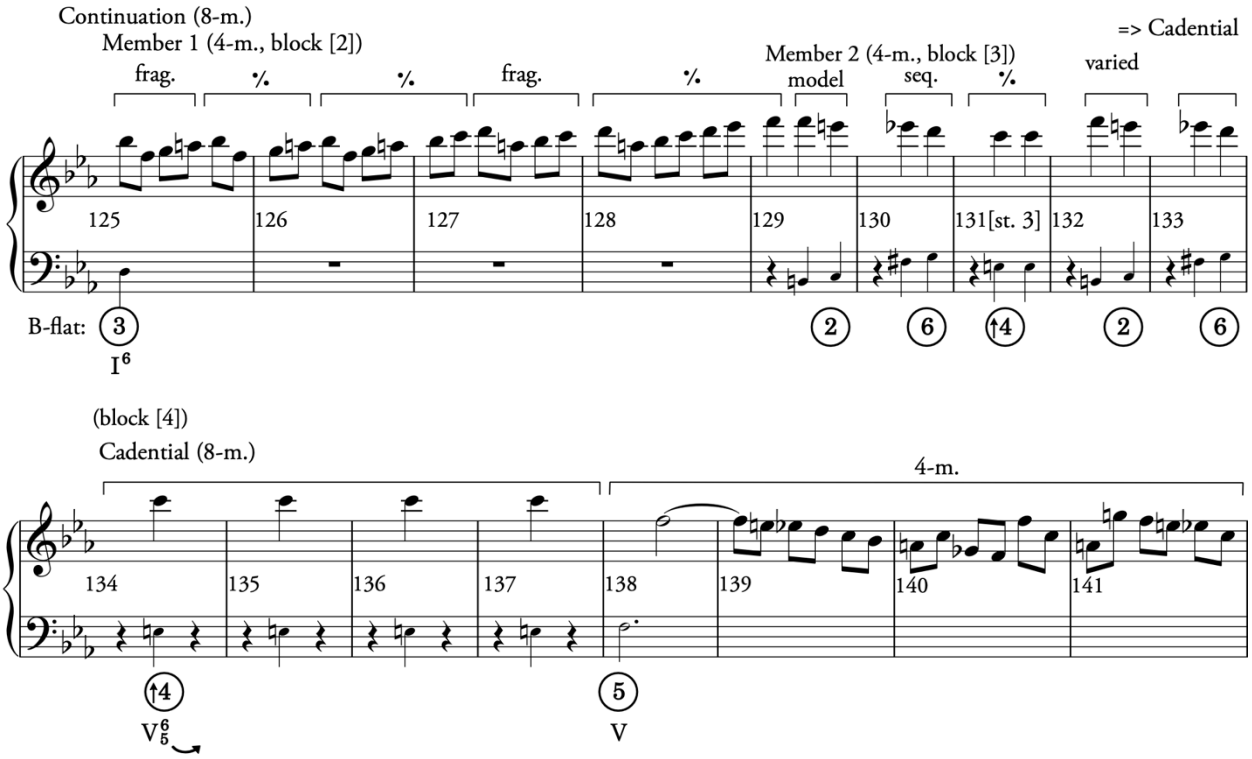
8.4.3 Subordinate Theme 2, Part 2: After Continuation-1

The music that followed the compound presentation and continuation-1, member 1 (i.e., blocks [3]–[7]; see Vol. 2, pp. 7–8, mm. 123–144) took several sketches to form. As we saw in the previous chapter in the 3.2.1 branch—the branch that introduces the new subordinate theme 2, part 2 compound presentation—Beethoven's first impulse was to continue the continuation-1 with member 2 (i.e., block [3], Example 309, mm. 129–133), then proceed to the "stuck on V/V" cadential-1, member 1 (block [4], mm. 134–137), and follow that with a 4-m. penultimate-dominant prolongation (mm. 138–141) and a PAC (m. 142, not shown). Figure 65 summarizes the form of this 3.2.1 design.[215] At this stage, the order of the first four blocks matches the final (compare Figure 65 with Figure 66), but blocks [5], [6], and [7] had not yet been conceived; indeed, blocks [6] and [7] do not appear in any of the sketches. Consequently, the passage that expressed the chromatic pitch

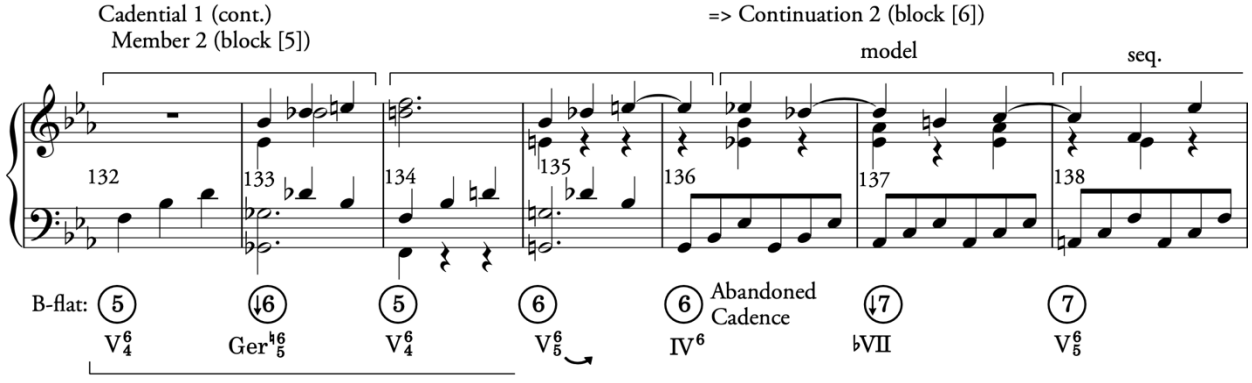
[215] Figure 65 is placed after Example 310 to allow the figure to appear next to Figure 66 and Figure 67 to facilitate comparisons.

classes D-flat, C-sharp, and F-sharp in the soprano voice (Example 310, mm. 136–141) must have appeared at a very late stage in Beethoven's compositional process.

Example 309: 3.2.1, mm. 125–141; ST2 P2 Continuation & Cadential (block [2], [3], and [4]) (*ES* p. 18, st. 2–3)



Example 310: Op. 55, I., mm. 132–145; ST2 P2 Cadential 1 (block [5], Continuation 2 (block [6]), Cadential 2 (block [7]), Closing Section



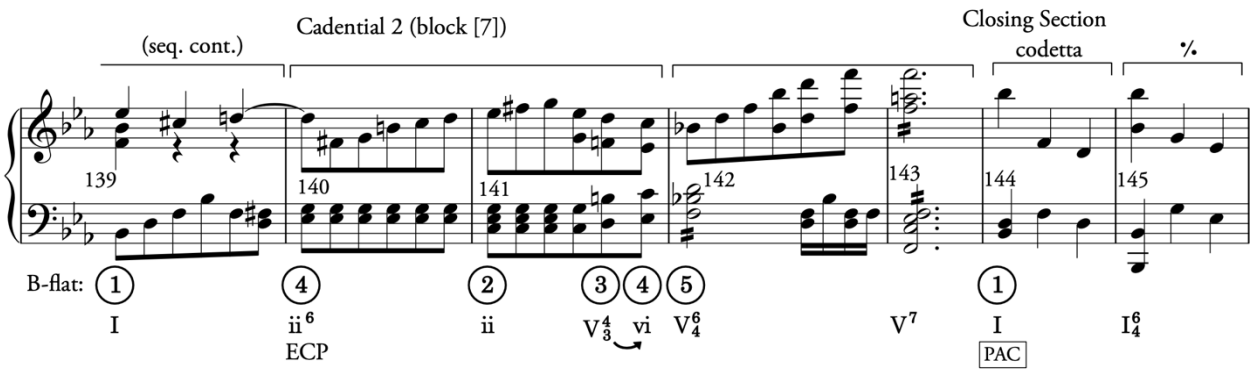


Figure 65: Incipit Diagram of 3.2.1, ST2 P2, mm. 117–142

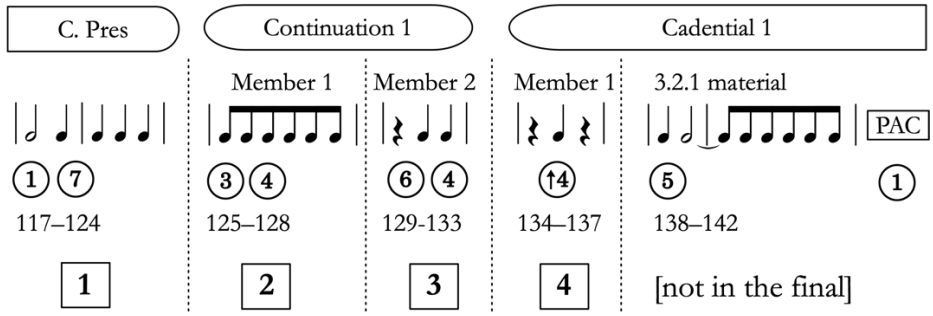


Figure 66: Incipit Diagram of Op. 55, ST2 P2, mm. 109–144

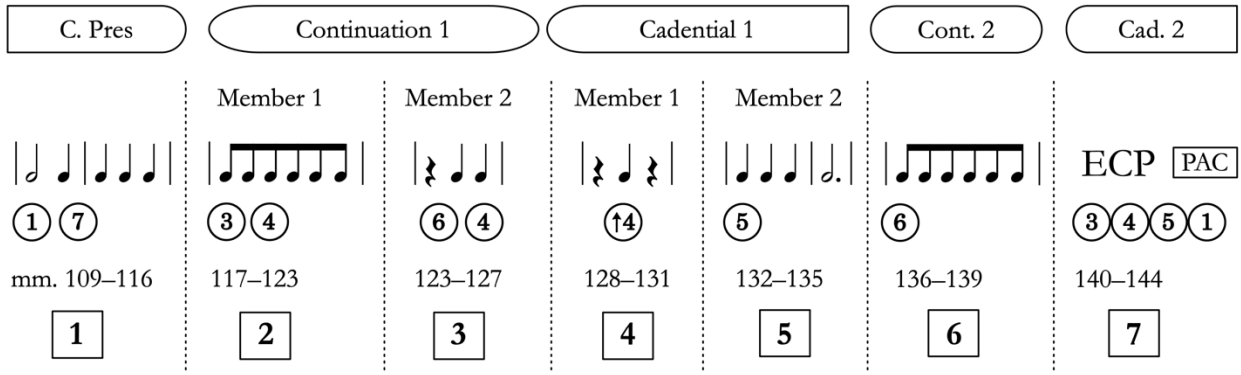
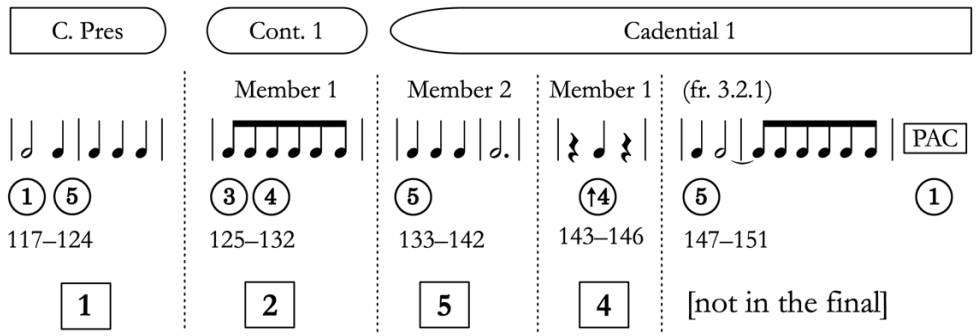


Figure 67: Incipit diagram of 4.0, ST2 P2, mm. 117–151



In CS 4.0 (Figure 67, corresponds to Vol. 2, pp. 78–79, mm. 117–151), Beethoven did not follow this layout (compare Figure 67 with the 3.2.1 version in Figure 65). Instead, he shortened the 4.0 continuation by omitting block [3] (i.e., the continuation-1, member 2; the music represented by Figure 68A) and lengthened the cadential function by adding new material that corresponds with part of the final cadential-1, member 2 (block [5]) (i.e., Example 311, mm. 132–135, represented by the rhythmic incipit in Figure 68B). He thus omitted block [3] in the 4.0 subordinate theme 2, part 2 and put block [5] in its place (refer to Figure 67). Recall that the block [5] material was not newly devised: in the prior 3.1.1 twig (Example 312), this block (mm. 123–128) appeared in a different position in the subordinate theme 2, part 1 after the continuational main theme material (mm. 119–122). In that earlier 3.1.1 twig, the music equivalent to block [5] functioned to prolong the cadential dominant of the first part of subordinate theme 2. Overall, then, he moved block [5] out of the first part and into the second beginning in CS 4.0 (Figure 67). Beethoven was not one to waste material: we have now seen several instances where he reappropriated material that did not fit earlier in the subordinate theme group to a later position.

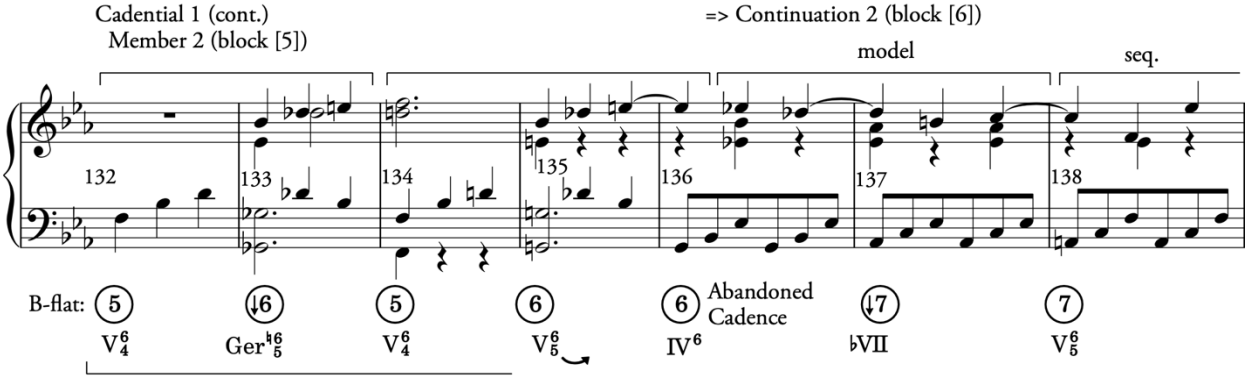
Figure 68: ST2 P2 Rhythmic Incipits (corr. Final)
A. Block [3]: Continuation-1, Member 2, Rhythmic Incipit (represents final, mm. 123–127)



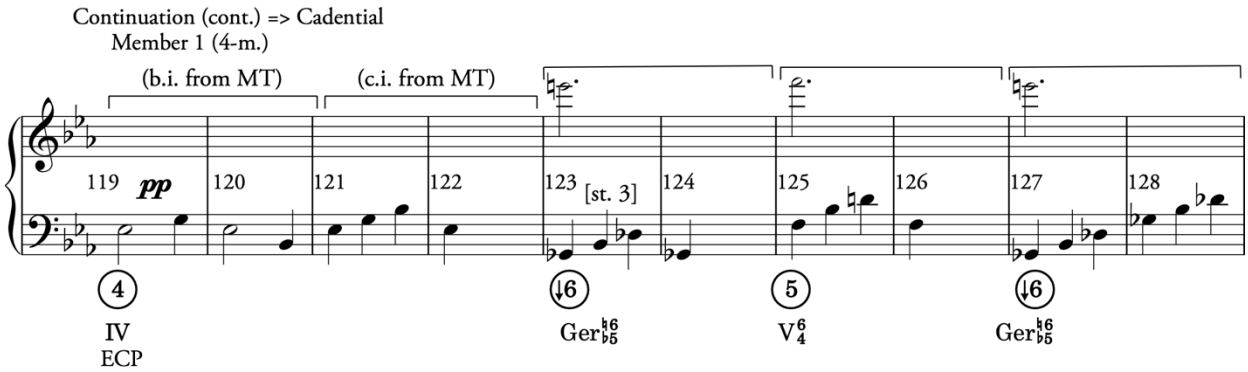
B. Block [5]: Cadential-1, Member 2, Rhythmic Incipit (represents final, mm. 132–135)



Example 311: Op. 55, I., mm. 132–138 (blocks [5] and [6])



Example 312: 3.1.1, mm. 119–128 (block [5] in mm. 123–128); (*ES* p. 16, st. 2–3)



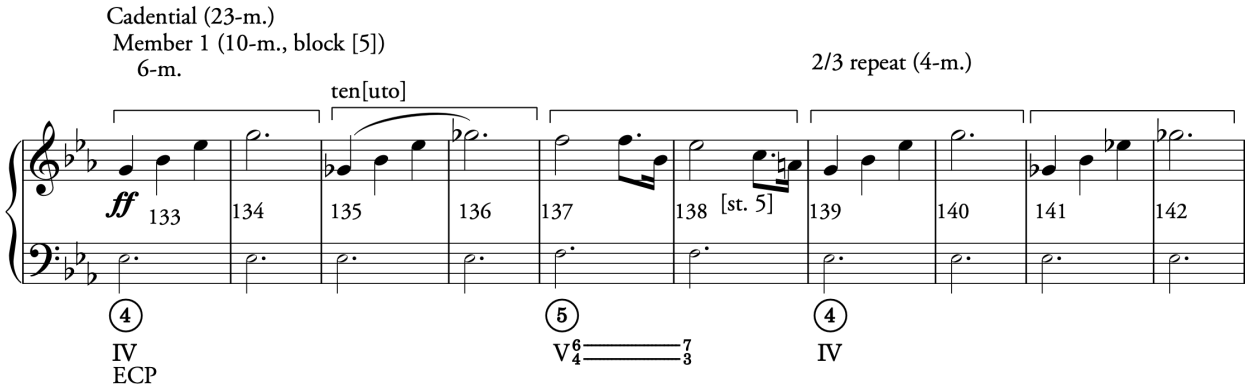
Tracing the development of block [5] offers considerable insight into Beethoven's compositional process (i.e., the music that corresponds to Example 311, mm. 132–135). It is surprising that this simple 4-m. dominant prolongation in the final took so many different forms in the sketch. In CS 4.0 and branch 4.0.1 (see Example 313A, and B, respectively), he kept the 2-m. harmonic rhythm that he developed earlier in the 3.1.1 branch (refer to Example 312, mm. 123–128), but expanded the block to 10-m. in both revisions by changing the function of the block from a penultimate dominant prolongation (in 3.1.1) to an ECP with a prolonged penultimate dominant with an evaded cadence (in 4.0 and 4.0.1). In the 4.0 trunk (Example 313A), note how the bass moves from an implied ④ to ⑤ (mm. 133–137), then moves out of the cadential dominant back to the predominant ④ (mm. 139–142). This ④ then likely moves to the pre-dominant, ↑④-based block [4] (not shown) follows.

In 4.0.1 (Example 313B), the ECP starts explicitly on ④ (mm. 133–134), which then moves to↓⑥ (mm. 135–136) and finally the cadential dominant ⑤ (mm. 137–138). Thereafter, he temporarily evades the cadential ⑤ through ↓⑥ (mm. 139–140) and ⑥ (mm. 141–142), but the ⑥ in (mm. 141–142) moves back to cadential ⑤ in the measures that follow (see 4.0.1 in Vol. 2, p.

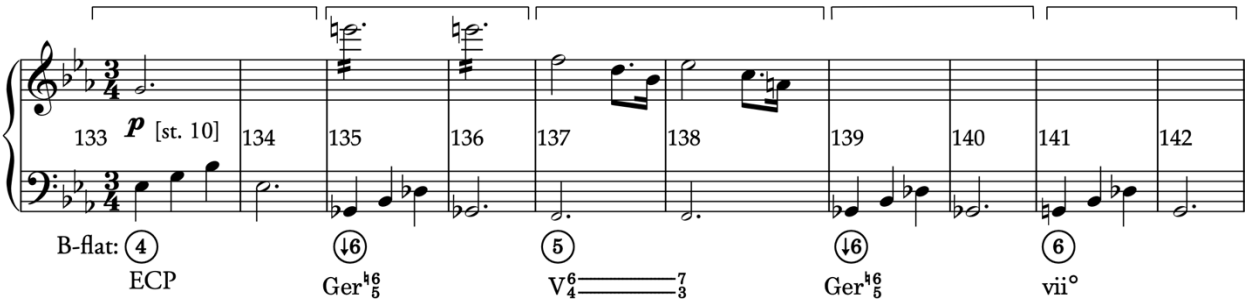
80, mm. 141–143). At this point, we can begin to see similarities with the final version (Example 311, mm. 134–136); the deceptive motion from ⑤ to ↓⑥ and ⑥ in the 4.01 version (Example 313B., 137–142) is similar to the deceptive motion in the final (i.e., Example 311, mm. 134–136, ⑤–⑥). In the sketches, however, there is no abandoned cadence, because after moving to ⑥ (not shown, see branches 4.0 and 4.0.1 in Vol. 2, pp. 78 & 80 respectively), the cadential dominant (⑤) returns. Consequently, Beethoven had not yet devised the abandoned cadence and the chromatic play that characterizes the final, Op. 55 mm. 136–138 (Example 311). The abandoned cadence in Op. 55, I., were an outgrowth of the extended neighboring motion ⑤–↓⑥–⑥–⑤ that Beethoven developed first in the 4.0.1 branch (Example 313B.).

Example 313: Block [5] Variants

A. 4.0, mm. 133–142, (block [5]); (*ES* p. 21 4–5)



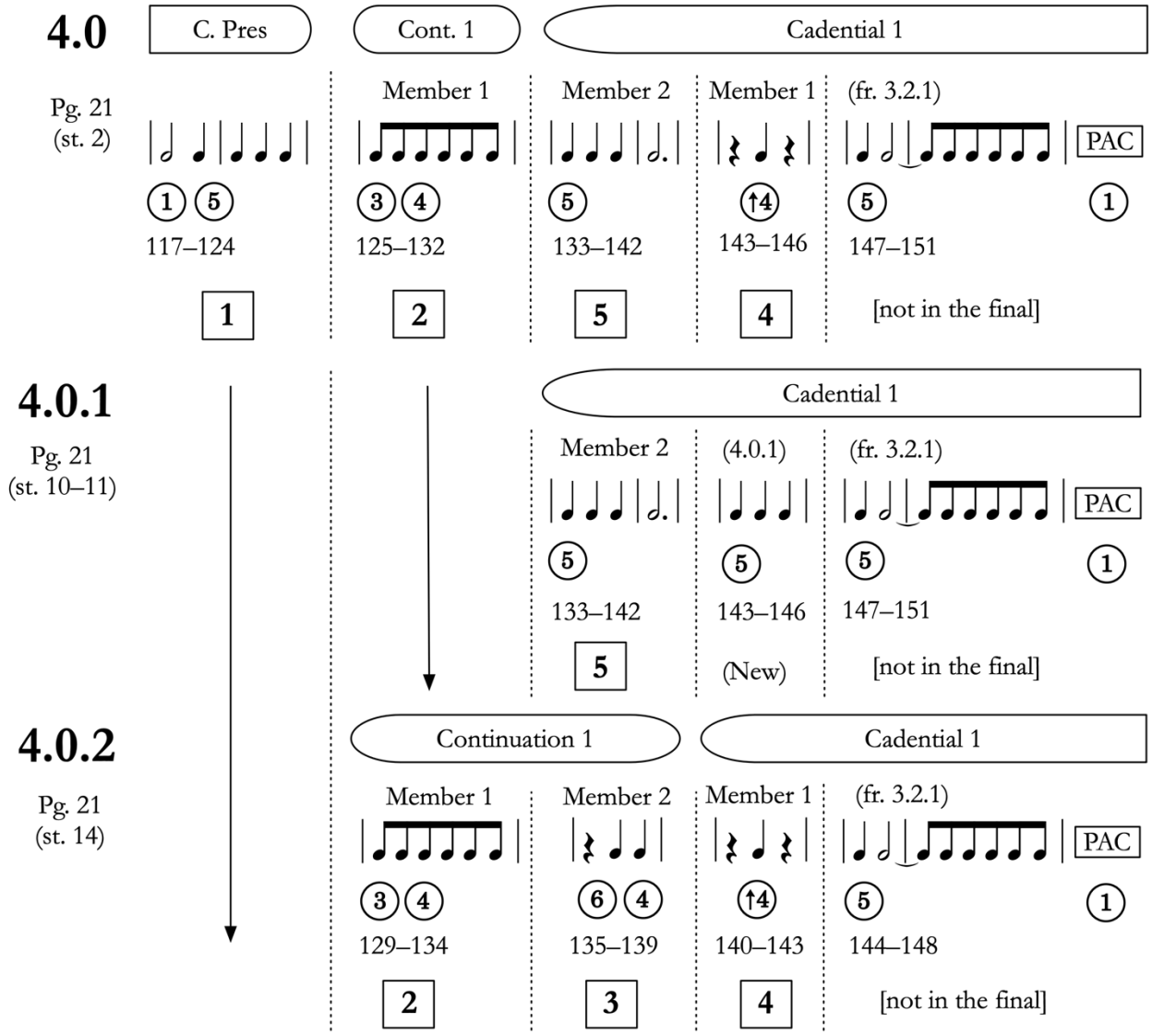
B. 4.0.1, mm. 133–142, Cadential (block [5]); (*ES* p. 21, st. 10)



Let us now track the formal position of block [5] in 4.0, 4.0.1, and 4.0.2 (Figure 69). In CS 4.0, Beethoven placed block [5] before block [4]. In the next 4.0.1 revision branch (Vol. 2, p. 80, mm. 143–146), he eliminated block [4] and moved directly to a new prolongation of the dominant (reproduced in Example 314, mm. 143–146). Notably, the dominant prolongation is realized with a

hemiola pattern that references the same hemiola as block [4] (compare with the rhythm in Example 315).

Figure 69: 4.0, 4.0.1, and 4.0.2 ST2 P2 (page 21 sketches) Incipit Diagrams



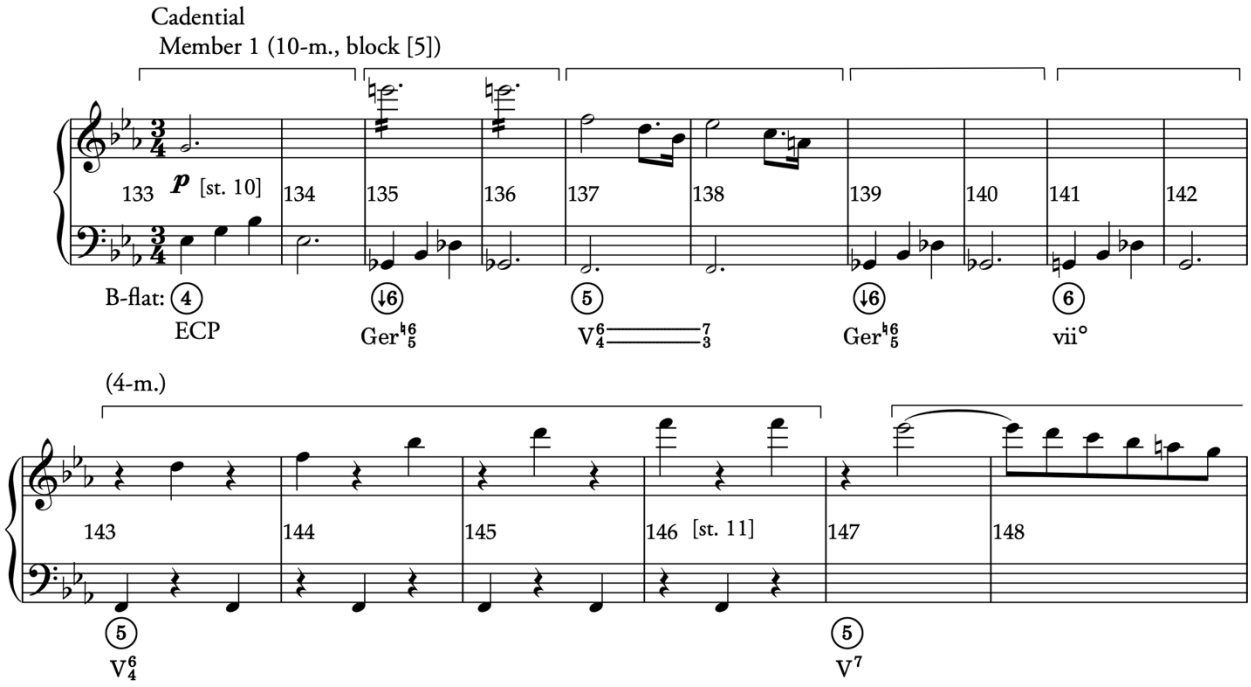
In the next 4.0.2 branch (see Figure 69; represents Vol. 2, p. 81), he reintegrated block [3] (the cont-1, member 2, mm. 135–139) and block [4] (mm. 140–143) but eliminated block [5]. These changes suggest that it was not clear to Beethoven how block [5] would fit in to the subordinate theme 2, part 2, and whether he could include it alongside the other material he had previously devised. The issue, it seems, was that block [5] had become too large. Both versions of this block in

CS 4.0 and branch 4.0.1 (see Example 313) are 10-m. long. Moreover, they both introduce an ECP with a lengthy dominant prolongation.

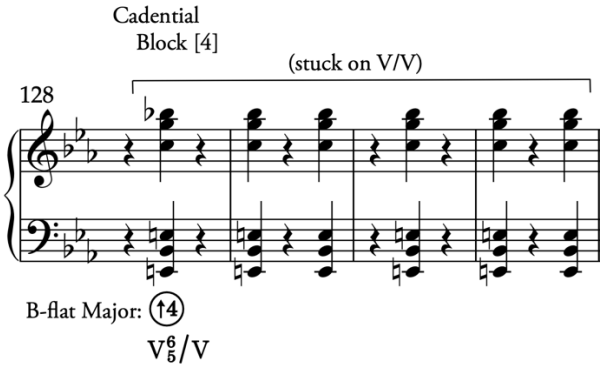
At this stage, the function of block [5] conflicted with the function of some of the other material he devised, especially block [4], the "stuck on V/V" passage that expanded the beginning of the cadential bass stream by prolonging the PD ↑④ (see the final incipit of this music in Example 315). This logic would explain why he omitted block [4] in 4.0.1 (see Figure 69), but when he reinserted it in 4.0.2, he omitted block [5]. A rhythmic issue also seems to be behind these changes: the hemiola of block [4] is better motivated when it is preceded by the rhythm of block [3], which places quarter-note rests on the downbeats of each measure—see the rhythmic incipits in Figure 69 of blocks [3] and [4]. When this order occurs, it is as though the arresting rhythmic quarter-notes of block [4] further develops the rhythmic ideas established in block [3].

Beethoven likely felt the need to juggle blocks [4] and [5] because they were competing to fulfil similar functions, namely, the expansion of the ECP's pre-dominant. The sketches show that he sought to expand the cadential function of the subordinate theme 2, part 2, but he had not decided if he would achieve that goal by introducing new material (i.e., block [4]), or by using a more limited set of materials, for example, by solely expanding block [5] (as in twig 4.0.1; see Figure 69).

Example 314: Branch 4.0.1, mm. 133–148 corresponding to block [5] and cadential dominant; (*ES* p. 21, st. 10–11)



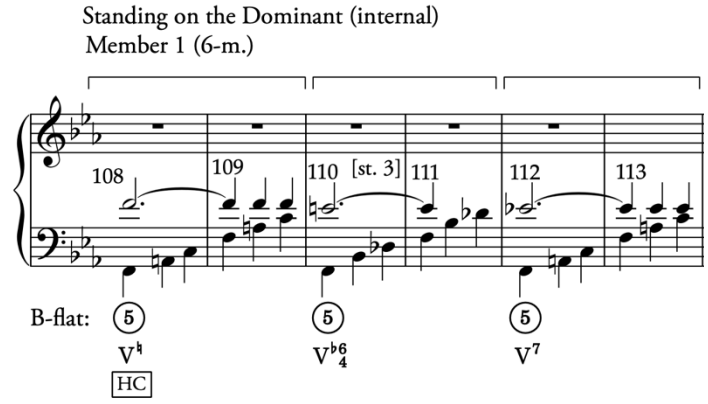
Example 315: Block [4] Incipit; Op. 55, I., mm. 128–131; ST2 P2, Cadential 1, Member 1



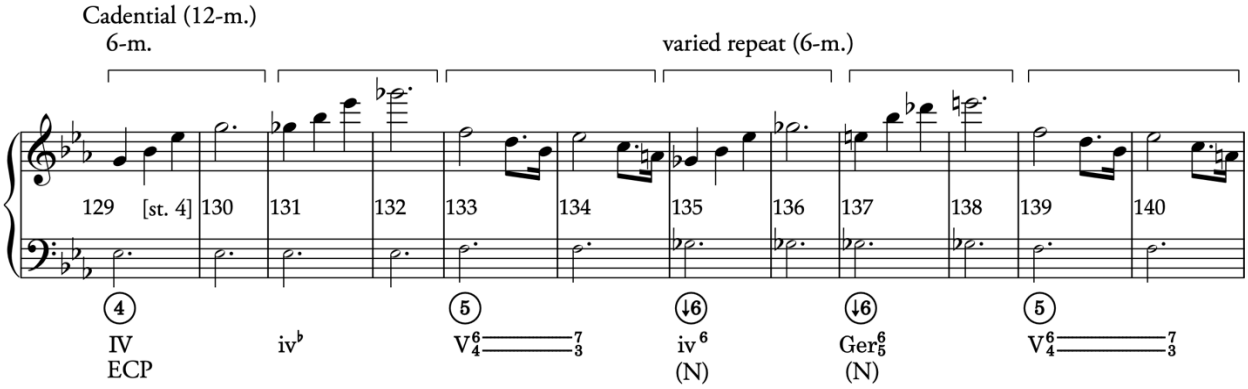
Let us turn now to the 4.1 branch and its twigs (Example 316). In the 4.1 version (A), he tried omitting the block [5] from the part 2 theme altogether (see Figure 70, 4.1), presumably to give more space for blocks [3] and [4]. It seems, however, that he moved block [5]—or at least, devised new music inspired by it (note the D-flat in Example 316A, mm. 110–111)—to the internal SotD that bisects parts 1 and 2. (Note that we do not find any material like the 4.1, mm. 108–113 in the final corresponding SotD). This design was short lived, however, as he reintegrated block [5] back into the subordinate theme 2, part 2 in the next 4.1.1 branch (Example 316B, mm. 129–140) and expanded it even further to twelve measures. As the size of block [5] had become even larger, he presumably removed both blocks [3] and [4] to accommodate it (Figure 70, 4.1.1).

Example 316: Block [5] variants in the 4.1.- Branches

A. 4.1, mm. 108–113; Standing on the Dominant, internal (block [5]) (*ES* p. 22, st. 2-3)



B. 4.1.1, mm. 129–140; Cadential (block [5]) (*ES* p. 23, st. 4)



C. 4.1.2, mm. 138–145; Cadential, Member 2 (block [5]) (*ES* p. 23, st. 7–8)

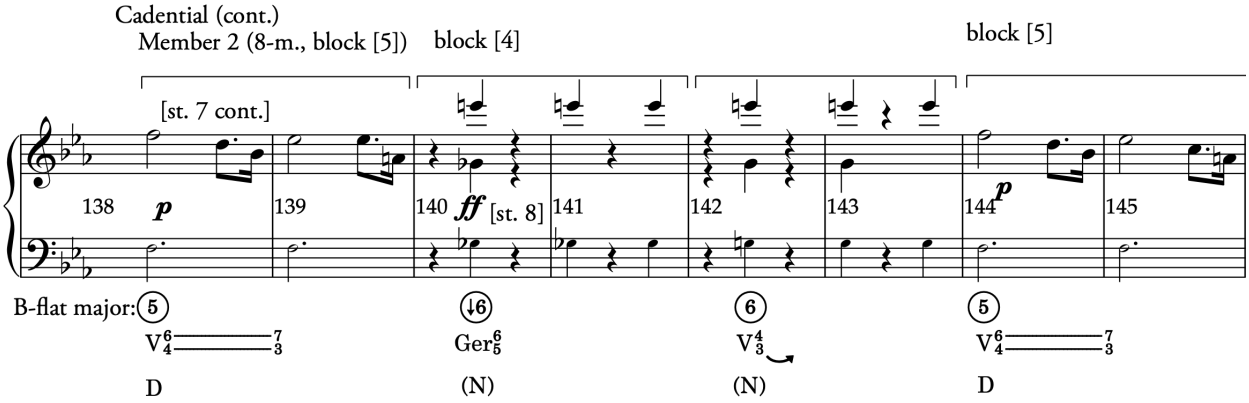
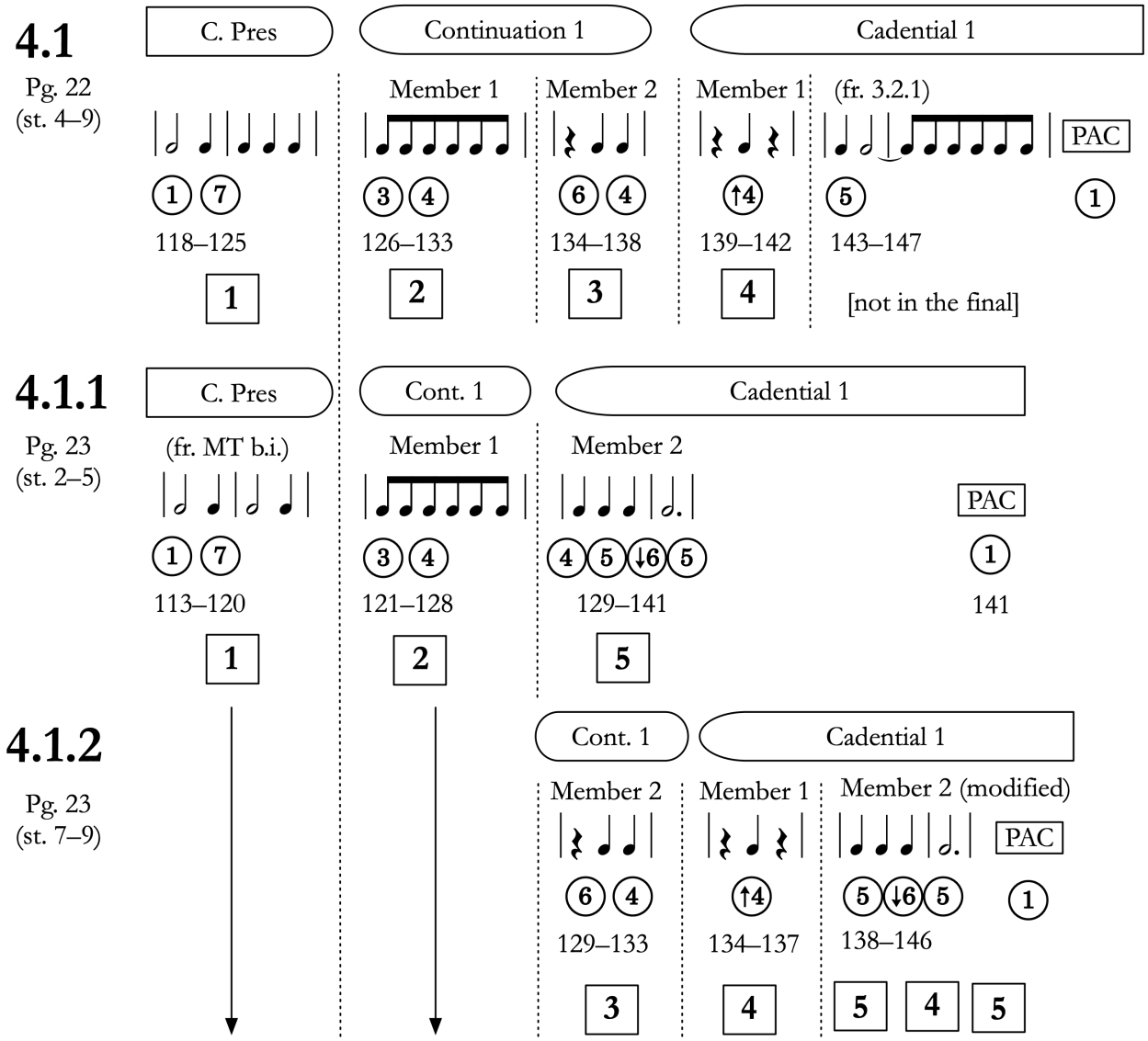


Figure 70: 4.1 to 4.1.1 to 4.1.2 ST2 P2 (page 22 and 23 sketches) Incipit Diagrams



The compositional logic in the 4.1 branches and twigs (see Figure 70) seems to have been focused around expanding block [5] to create a more unified cadential function with less variance in content. In the 4.1.1 version (Example 316B, mm. 129–140; corr. Vol. 2, p. 84), block [5] brings an ECP with a prolonged penultimate cadential dominant. The dominant ⑤ (mm. 133–134) is approached from ④ (mm. 129–132) and then neighbored with ↓⑥–⑥ (mm. 135–138), which moves back to ⑤ (mm. 139–140). Presumably, therefore, he removed blocks [3] and [4] from the 4.1.1 part 2 (Figure 70, 4.1.1) because their predominant expansion had become redundant in relation to the expanded block [5], which now included a greater emphasis on predominant

harmonies (i.e., the major and minor subdominant in Example 316B, mm. 129–132, the neighboring minor subdominant in mm. 135–136, and the implied augmented German sixth in mm. 137–139).

In the next 4.1.2 revision branch (Example 316C, mm. 138–145; corr. Vol. 2, p. 86), Beethoven revised block [5] once again. In contrast to the previous 4.1.1 version (B), which brought an expanded pre-dominant, the new 4.1.2 version (C) articulates exclusively a dominant prolongation. That is, instead of starting on a pre-dominant ④, the block starts and ends with an implied ⑤ (mm. 138–139 and 144–145) expressed with the half-note, dotted-eighth, sixteenth-note gestures. The middle four-measures of this 4.1.2 block (C, mm. 140–143) now imply ↓⑥ in the bass (mm. 140–141) with a high E-natural that suggests augmented, pre-dominant chord, followed by ⑥ in the bass (mm. 142–143), which expresses an applied $V^{4/3}$/V.

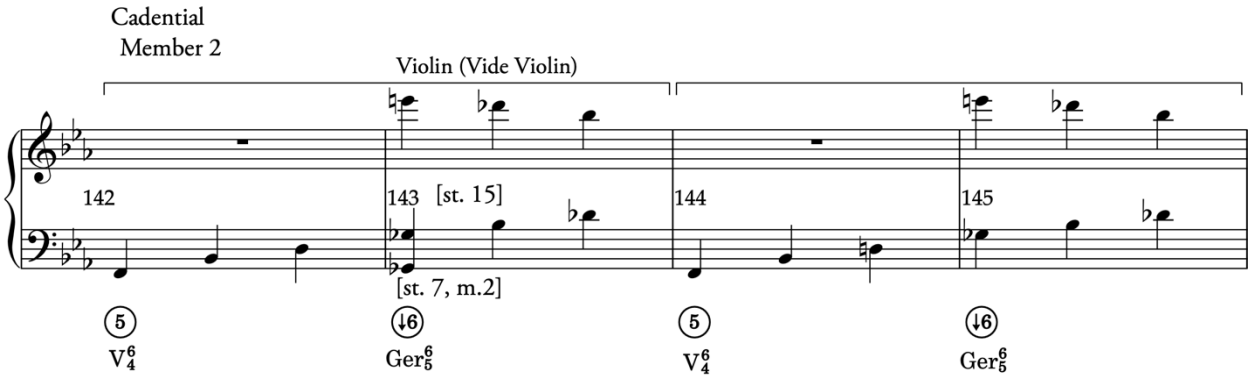
The principal goal in the 4.1.2 variant seems to have been to redesign block [5] to accommodate better the re-insertion of blocks [3] and [4] into the theme (compare Figure 70, 4.1.1 and 4.1.2). Notice too how the middle part of block [5] in 4.1.2 (Example 316C., 140–143; corr. Vol. 2, p. 86) articulates a "stuck on an Augmented sixth and minor subdominant" in a similar way to block [4]'s "stuck on V/V" hemiola. He thus seems to have tried to make block [5] fit better with the prior block [4] by having it echo block [4], but with new harmonies. Once again, blocks [4] and [5] seem to influence one another. The hemiola figure (Example 316C, mm. 140–143) of the echoed block [4] is not as well motivated, however, because it does not follow block [3]; it now follows block [5]. Ultimately (see Figure 70, 4.1.2), the overall block layout that he sketched in branch 4.1.2 begins to match the final version, but Beethoven did not yet know it would be the final. Block [5] will change in the next sketches, and the additional block [4] inspired material in the cadential-1, member 2 will be removed.

Let us now consider the corresponding music in the final two revisions, branch 4.2 (Example 317A, mm. 142–145; see Vol. 2, pp. 88–89) and twig 4.2.1 (B, mm. 133–142; see Vol. 2, p. 90) written on pages 26 and 27 of the sketchbook respectively. It is in these variants that Beethoven tries compressing block [5] (Example 317A) into four measures, which matches more closely the final version (compare A with Example 318, mm. 132–135). Still missing at this stage, however, is the abandoned cadence (Example 318, mm. 136ff). Instead, in the measures that follow block [5] (4.2 in Example 317A), he moves directly to the cadential dominant six-four (mm. 146–149, see 4.2 in Vol. 2, p. 88), which resolves to the cadential dominant (mm. 150–154, not shown in text) and a PAC ends the exposition (m. 154, not shown in text). The 4-m. design of block [5] in 4.2 (Example

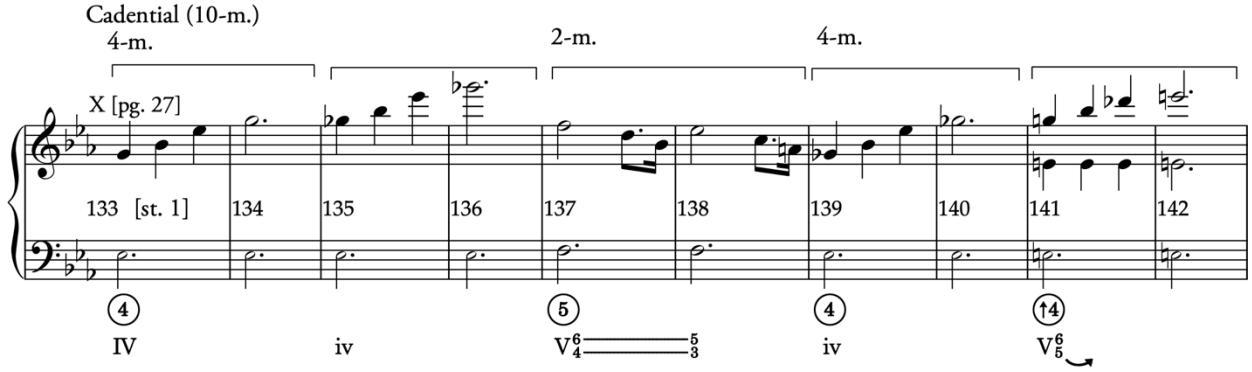
317A) is the shortest so far developed, but Beethoven was not yet fully convinced by this compressed design, as evidenced by the expanded version in the next 4.2.1 twig (B.)

Example 317: 4.2.– Branches; Corr. Cadential-1, Member 2 Variants

A. 4.2, mm. 142–145 (p. 26, st. 15 & 7)



B. 4.2.1, mm. 133–142 (block [5]) (*ES* p. 27, st. 1)



Example 318: Op. 55, I., mm. 132–138

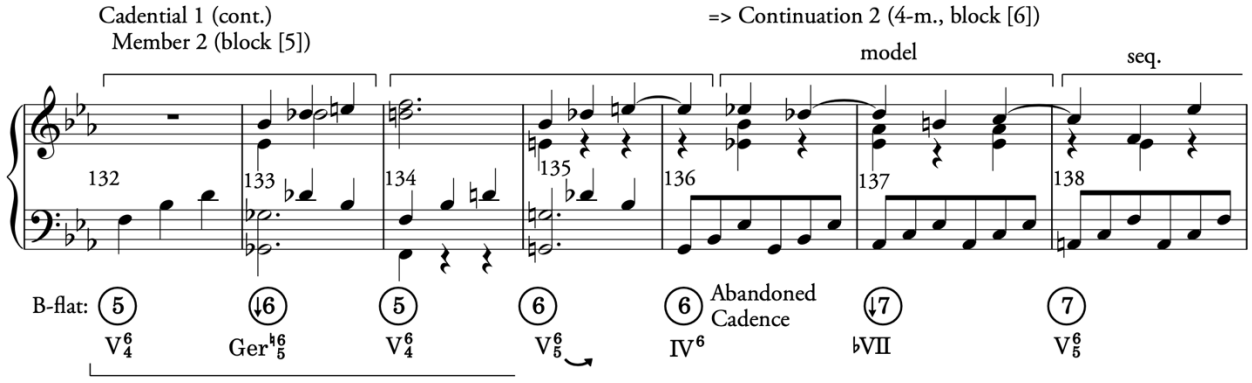
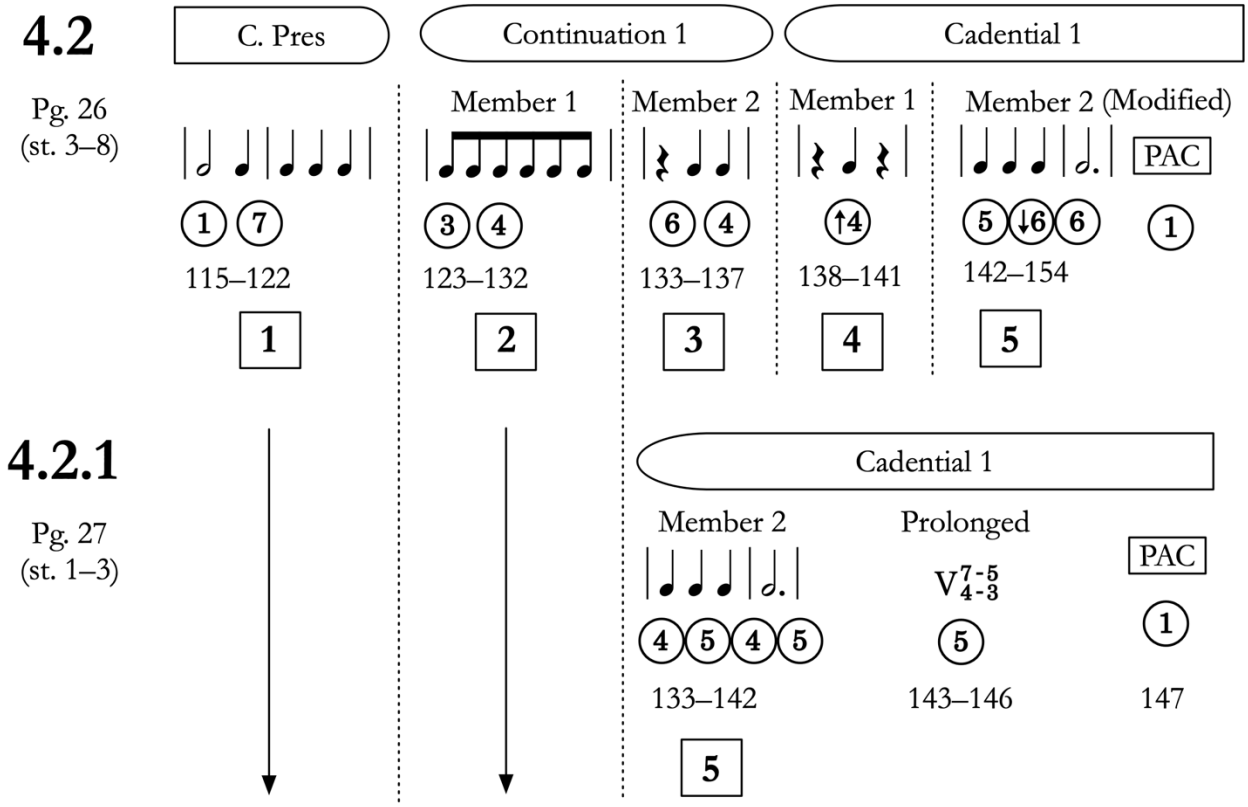


Figure 71: 4.2 to 4.2.1 ST2 P2 Incipit Diagram

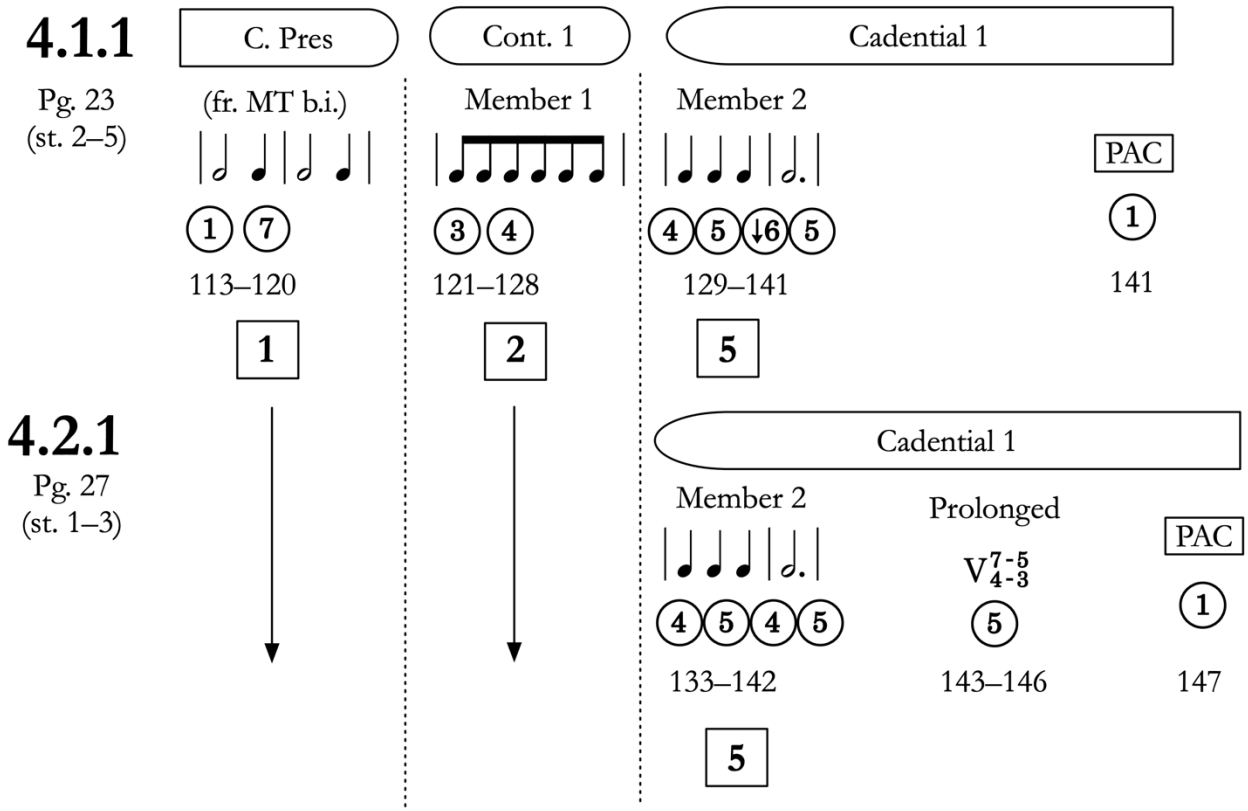


Although the 4.2 version of block [5] (Example 317A) was the closest design to the final version, he considered a different variant in his last 4.2.1 revision (B). In this final revision of block [5] (B), he re-expanded the block to ten measures, thus returning its design to the previous 4.0 version (compare Example 317B with Vol. 2, p. 78, mm. 133–142). In addition, he repositioned block [5] in 4.2.1 to follow the first continuation (see Figure 71) and cut blocks [3] and [4]. This final sketch of the subordinate theme 2, part 2—one he did not end up using in the final—returned the overall form of this theme part to be akin to the version he sketched in 4.1.1 (see Figure 72).

At some later stage, not shown in the *Eroica* sketchbook, Beethoven relinquished the more homogenous versions sketched in 4.1.1 and 4.2.1 (built exclusively with blocks [1], [2] and [5]; Figure 72) in favor of the version sketched in 4.2 that used all five blocks (Figure 71, top). Notably, however, he omitted the half-note, dotted eighth, and sixteenth figure that was present in all the previously sketched block [5]'s (e.g., see Example 317B., 137–138). This martial-like figure appeared prominently throughout the 4 series sketches but was removed entirely from the final piece thereafter.

In a final stage, not present in the sketchbook, he abandoned the penultimate dominant (Example 319, m. 136) to emphasize the motivic relationship between D-flat and C-sharp and the chromatic F-sharp one final time in the upper voice (mm. 136–139). This change required him to write a new (relatively) brief ECP to re-stablish the cadential stream in the final piece.

Figure 72: 4.1.1 to 4.2.1 ST2 P2 Incipit Diagram

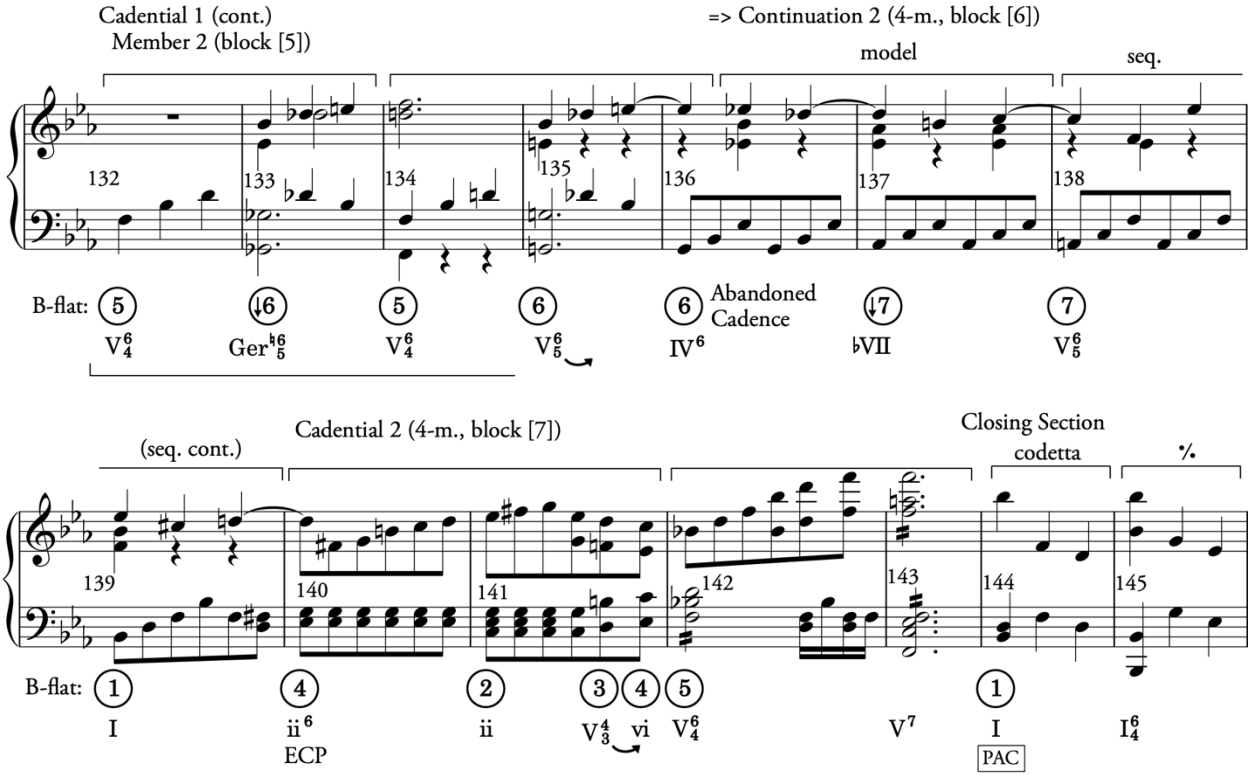


Barry Cooper noticed that the rather simple dominant prolongation that follows the cadential six-four to the PAC in the 4.2 branch (Example 320, mm. 146–158) lasts twelve measures, the same length as the passage in the final version that begins with the first cadential six-four at m. 132 (compare with Example 319).[216] As Caplin (1991, 43) explains, Beethoven had arrived at the overall size of the passage, but he was likely dissatisfied with the rather mechanical prolongation of the dominant. Beethoven improved this passage in the final (Example 319) by temporarily abandoning the dominant in m. 136 to resume it once more in m. 140. This solution introduced blocks [6] and [7], the motivic emphasis on the chromatic pitch classes D-flat (Example 319, mm.

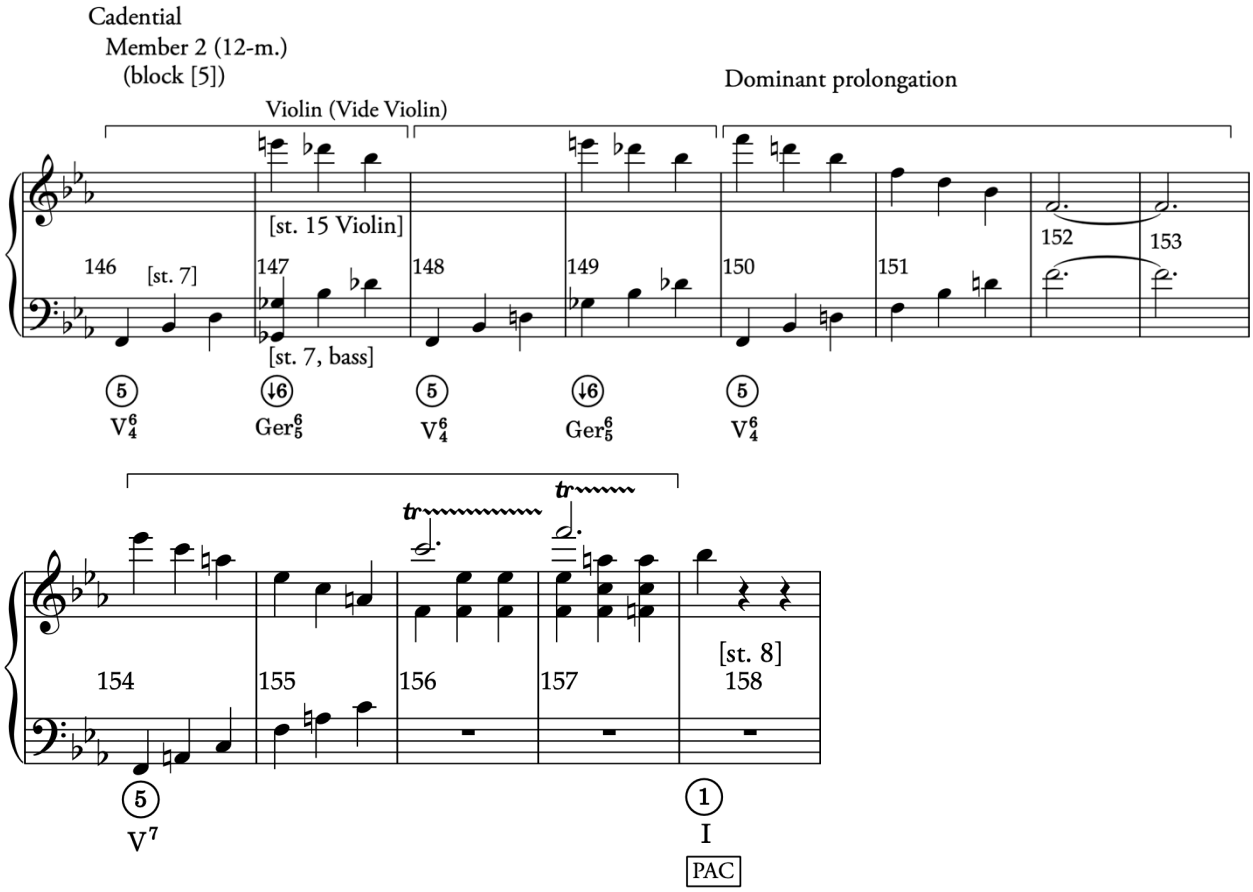
[216] See (Caplin 1991, 43), noted on pg. 54, fn. 12.

135–136), C-sharp (m. 139), F-sharp (m. 140), and the ascent in the bass from G (m. 135–136) to A-flat (m. 137), A-natural (m. 138), and B-flat (m. 139). As we have seen throughout this study, these pitch classes played important roles in the exposition, and will reappear in prominent places in the development and recapitulation. Overall, Beethoven reconfigured the conventional dominant prolongation that he drafted in branch 4.2 to summarize some of the highly characteristic pitch classes of the piece. It is unfortunate that no written record of these final changes persists; one wonders whether he devised this wonderful pitch class summary in the autograph, which is unfortunately no longer extant.

Example 319: Op. 55, I., mm. 132–145; Cad-1, Member 2, Cont-2, Cad-2, PAC



Example 320: Branch 4.2, mm. 146–158; Block [5] and final penultimate, cadential dominant prolongation



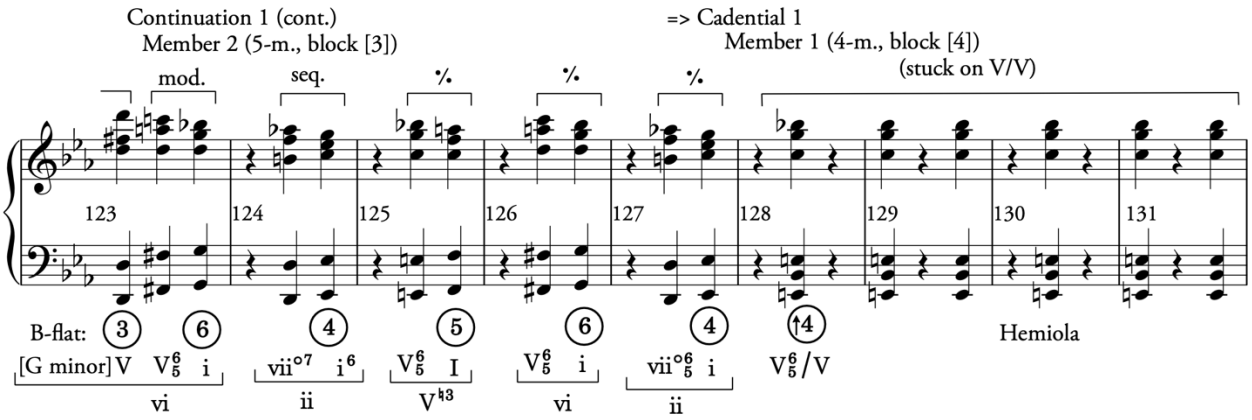
As we near the end of our study of the subordinate theme 2, part 2, let me highlight how blocks [3] and [4] came to be. Consider first block [3] (the rhythmic incipit in Example 321A), which represents the continuation-1, member 2 in the final (B, mm. 123–128). Recall that we saw this block first in the 1.1 branch (Example 322, mm. 72–76). In that earlier sketch, the corresponding material functioned as a new, second continuation that evaded the subordinate theme 1's cadence that was promised with the prior trill over dominant harmony (mm. 69–71). In the sketches that follow, we find the music that corresponds to this block moving in and out of the exposition sketches; it is absent in branch 1.2, trunks 2.0, 3.0, and 4.0, and branches 4.1.1 and 4.2.1. It is especially surprising that Beethoven did not include this material in any of the four trunks, given that it found a place in the final piece. We should be careful, therefore, to ascribe special significance to the trunks. With some exceptions, many of Beethoven's biggest changes arose in the branches and twigs.

Example 321: Block [3]

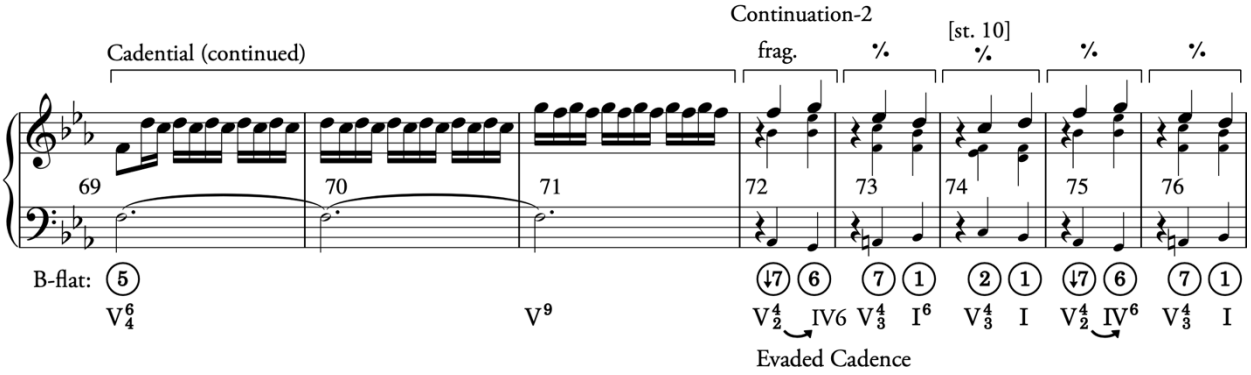
A. Rhythmic incipit (represents B., mm. 123–127)



B. Op. 55, I., mm. 123–127



Example 322: Branch 1.1, mm. 69–76, Cadential and Continuation-2 (*ES* p. 11, st. 9–10)

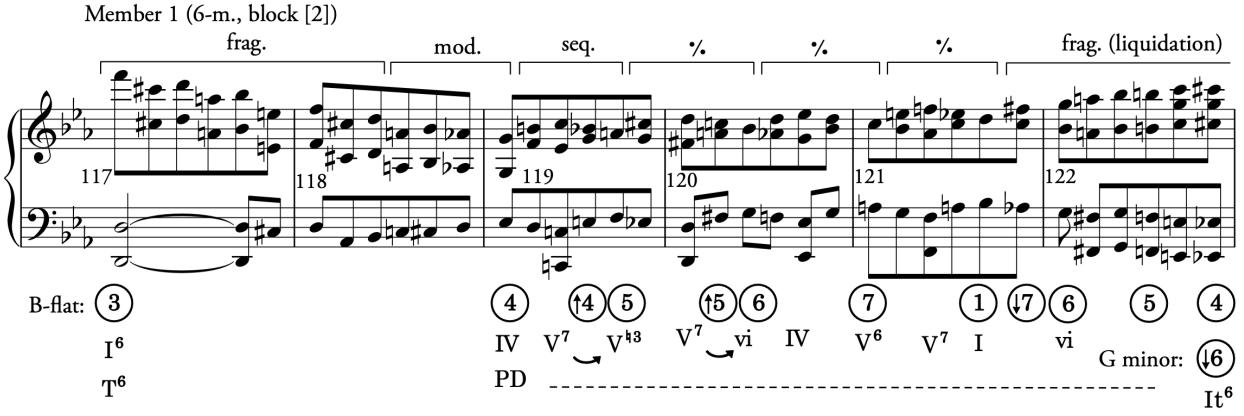


Throughout the exposition sketches, block [3] (see the final Op. 55 version in Example 321B, mm. 123–127) always appeared in a revision branch. In the 1.1 and 2.1 branch, the music corresponding to block [3] was positioned at the end of the music that corresponds to the final subordinate theme 1. In these sketches, the corresponding block [3] material functioned either as a second continuation after an evaded cadence (in branch 1.1) or a first continuation (in branch 2.1) in the first subordinate theme. Not until branch 3.1.1 did he relocate this block to serve as the continuation of the new subordinate theme 2, part 2. In the sketches that follow branch 3.1.1, we find block [3] in the same position, but it is omitted in CS 4.0, previously mentioned, and branches 4.1.1 and 4.2.1. The reason for its absence in these last two sketches seems to be related to

Beethoven's desire to enlarge the cadential block [5] function instead of the prior continuation, as was discussed above.

Given the extensive sequencing expressed in the block [2] continuation (the final version is shown in Example 323), one would anticipate the subsequent block [3] to bring a cadential function. What occurs turns out to be more complex and interesting. In his analysis of block [3] in the final Op. 55, I., exposition (Example 321B, mm. 123–127), Caplin explains that the passage expresses qualities of both a continuation, due to the ascending-step sequence, and a cadential function, due to the deceptive cadential progressions. Thus, even though Beethoven fixed the general character of this music in an early stage (branch 1.1, see Example 322, mm. 72–76), namely, emphasis on beats two and three of the measure with quarter-note harmonies, he clearly had difficulty negotiating between these two functional expressions, continuation and cadential. He vacillated for some time on whether he should expand the continuation, and thus include block [3], or the enlarge the cadential function, by expanding block [5]. In the end, he managed to expand both the continuation and cadential functions by fashioning block [3] to exhibit characteristics of both functions as Caplin suggests.

Example 323: Block [2] in Op. 55, I, mm. 117–122



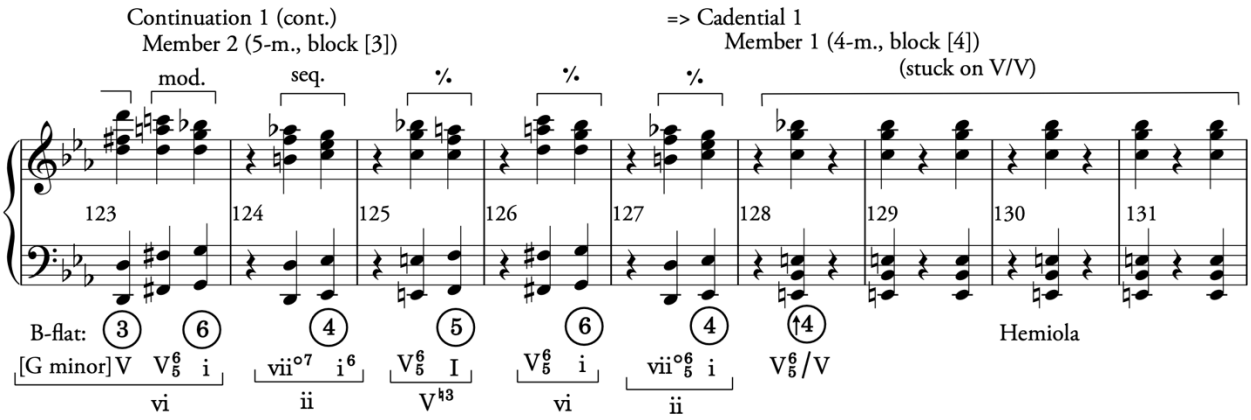
Let us turn now to block [4]—the arresting "Stuck on $V^{6/5}/V$" material (the rhythmic incipit in Example 324A represents the final music shown B, mm. 128–131). Block [4] was a late addition to the exposition. As we saw in the previous chapter, we begin to see hints of this V/V idea in CS 3.0 towards the end of the large second subordinate theme (Example 325, mm. 131–136), written on page 15 of the sketchbook, but with an entirely different and more languid character. But notably, this earlier version brought a metric displacement dissonance. The rhythmic disruption therefore seems to have been an invariant idea, but its expression would change.

Example 324: Block [4]

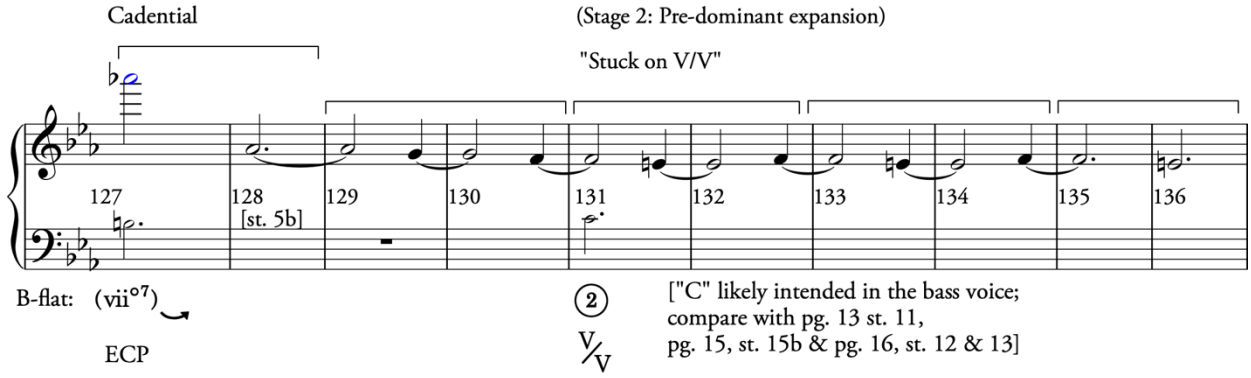
A. Rhythmic incipit (represents B., mm. 128–131)



B. Op. 55, I., mm. 123–127



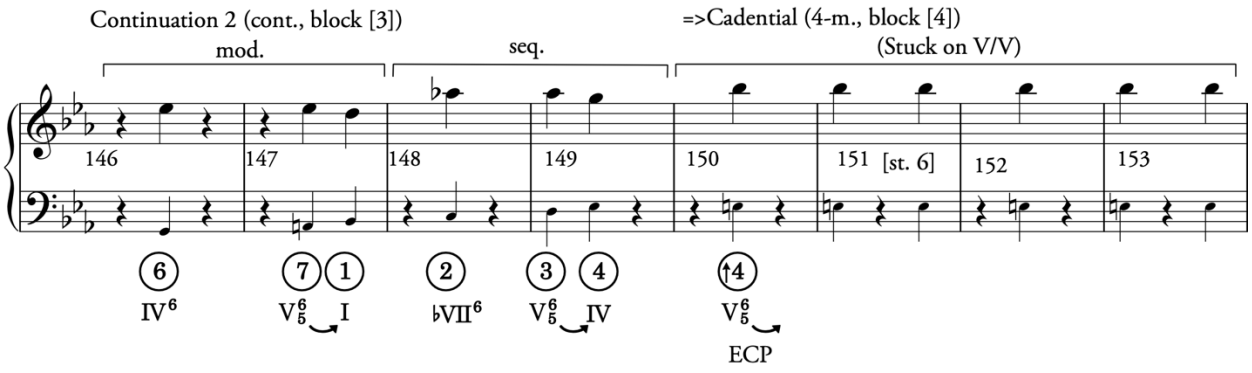
Example 325: CS 3.0, mm. 127–136 (*ES* p. 15, st. 5)



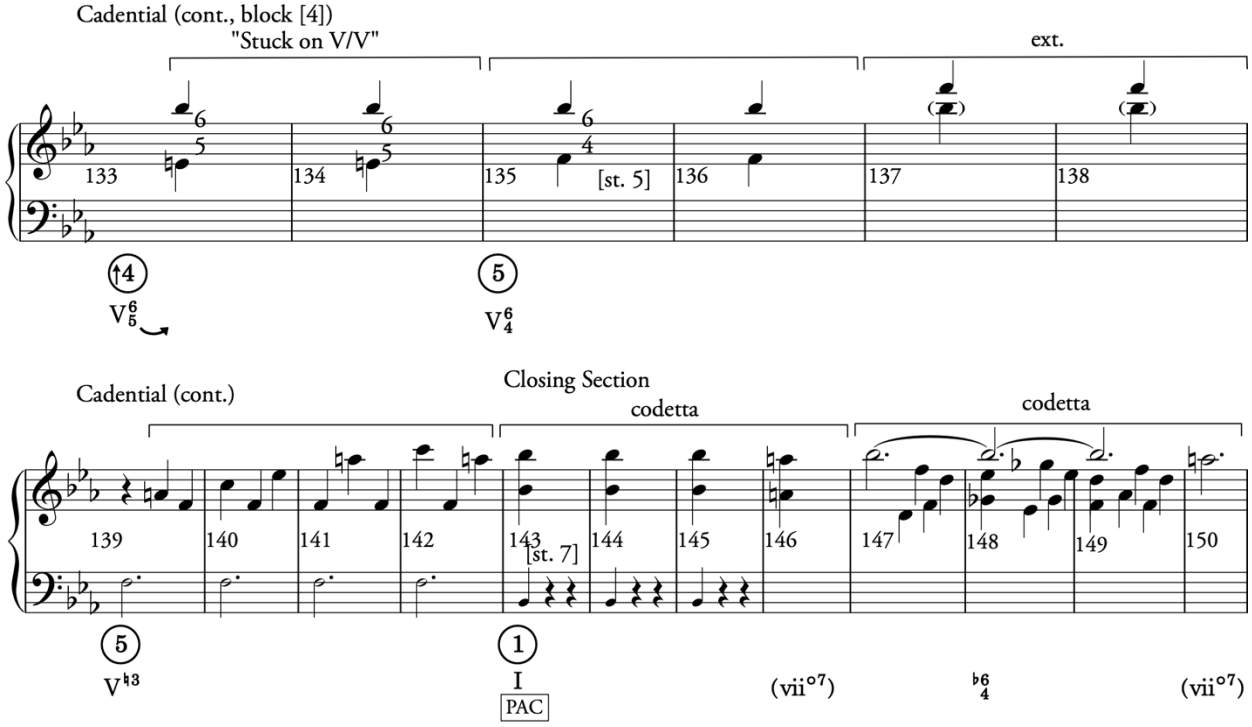
Beethoven did not change the character of the "Stuck on V/V" block [5] to its more arresting and punctuated, grouping structure hemiola until branch 3.1.1 (Example 326, mm. 150–153), written on page 16. But despite arriving at the final design in that branch, he was not immediately sure how long the passage should be. He must have initially thought that the harmony stayed on V/V for too long, because in the next 3.2 branch (Example 327, mm. 133–135), he changed the last 2-m. of the 4-m. unit to project a cadential dominant six-four harmony instead of a V/V. He also extended the dominant six-four two additional measures (mm. 137–138), then resolved the six-four to five-three (mm. 139–142) and closed with a PAC (m. 143). At a later stage,

he must have then realized that this reduced version was too tame because he returned to his initial 4-m. of V/V design that he sketched in branch 3.2.1 for the final Op. 55 exposition.

Example 326: Branch 3.1.1, mm. 146–153 (block [3] and [4]); (*ES* p. 16, st. 5–6)



Example 327: Branch 3.2, mm. 133–150; Cadential, "stuck on V/V" (block [4]); (*ES* p. 17, st. 4–5)



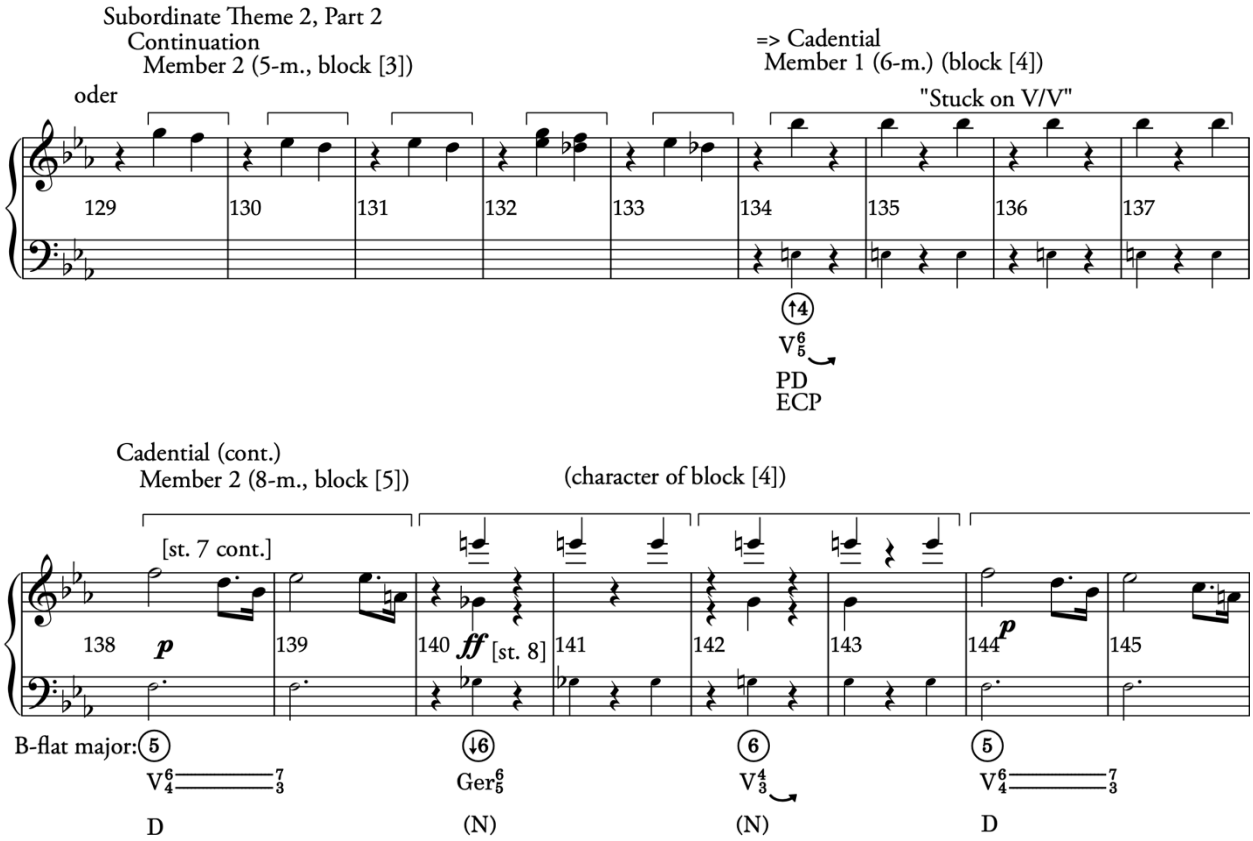
Beethoven's experiments with block [4] (the "stuck on V/V" passage) were not yet complete. His mature concept, sketched first in branch 3.1.1 (Example 326, mm. 150–153) persisted in CS 4.0 and most of the revision branches, but he omitted this block entirely in branch 4.1.1, as discussed above in reference to block [5]. He then experimented with doubling the effect immediately thereafter in branch 4.1.2 (Example 328, also discussed above). The "oder" ("or") written atop m. 129 (Example 328) was intended to replace the material written after the "oder" at

the end of the continuation-1 in the prior 4.1.1 (i.e., Example 329, m. 128 and following). That is, the material in branch 4.1.2 (all of Example 328) replaced the greatly enlarged block [5] material in the 4.1.1 sketch (Example 329, mm. 129–140). Overall, this change emphasized further the rhetoric of the standing on V/V block [4].

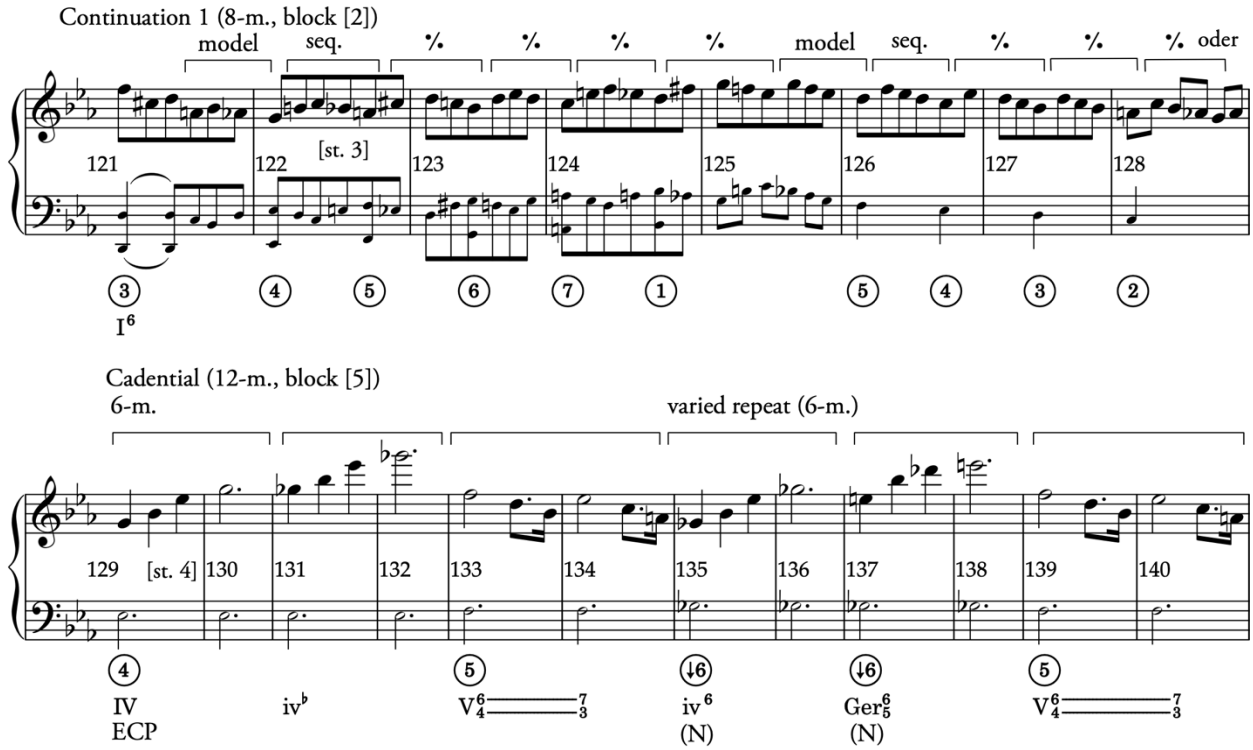
In the 4.1.2 revision (Example 328), he followed block [3] (i.e., 129–133) with block [4] (mm. 134–137), then wrote a new block [5] that integrated aspects of block [4]. At some later point, Beethoven eventually eliminated the block [4] influenced music in block [5] (i.e., Example 328, mm. 140–143) in the next 4.2 sketch (Example 330, mm. 146–149). In short, he experimented with compressing block [4], removing it, and emphasizing it more by repeating it within block [5].

It does not seem that Beethoven had "trouble" with block [4], per se, but rather that he was willing to experiment with different manifestations of the idea. As we have seen often in this study, he frequently returned to his initial impulse at the end of his experiments, but he was willing to try out considerably different versions before deciding that the first was the best suited for the piece. These different versions varied depending on the surround context, how other parts developed, and which materials assumed priority. Of course, it is challenging to know exactly which passages he was prioritizing at what time and why, but it is evident that the form and inclusion or exclusion of the blocks were dependent on one another. Beethoven worked to balance the amount of new material he introduced, sought to avoid functional redundancy, and deliberated on how to combine the material into a cohesive structure.

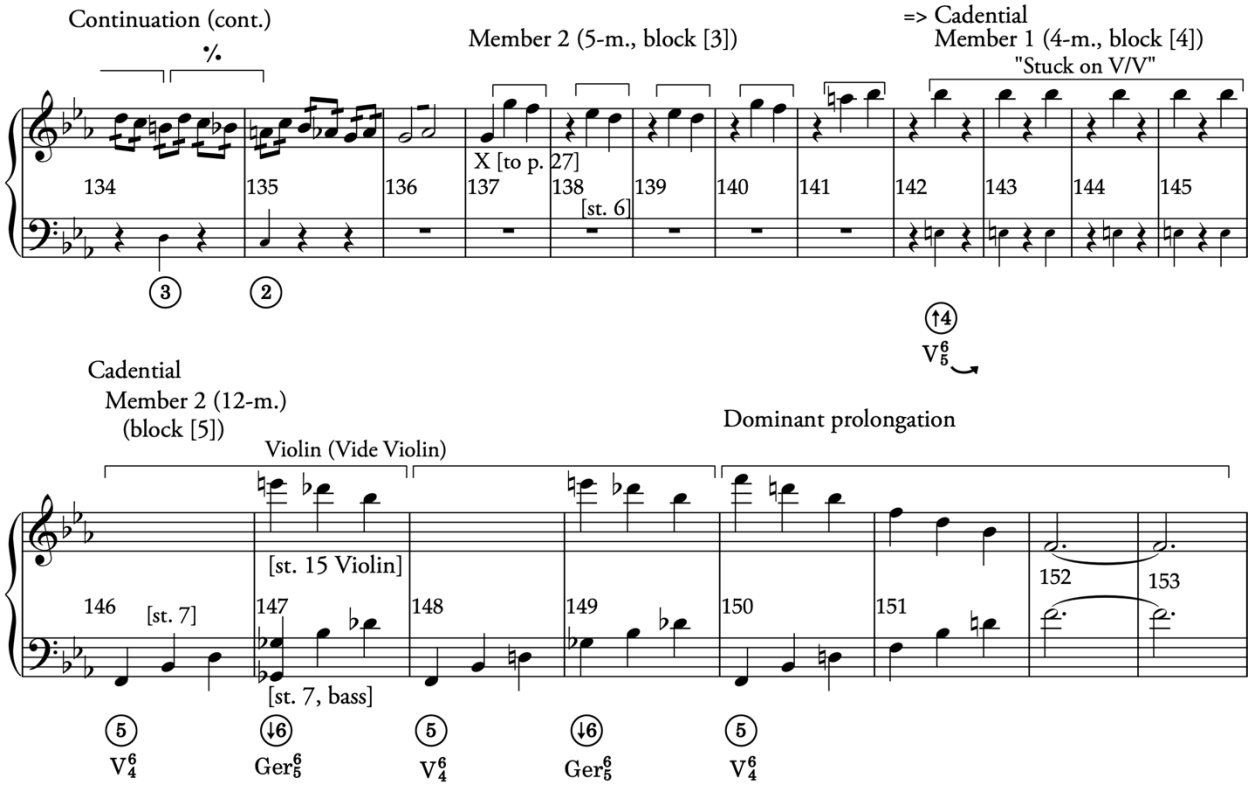
Example 328: 4.1.2, mm. 129–145 ST2 P2 Continuation and Cadential; (*ES* p. 23, st. 7–8)



Example 329: 4.1.1, mm. 121–140; ST2 P2, Continuation and Cadential; (*ES*, p. 23, st. 2–4)



Example 330: 4.2, mm. 134–153; ST2 P2, Continuation, Cadential; (*ES* p. 26, st. 5–7 & st. 15)



8.4.4 Summary of Beethoven's Process to the Subordinate Theme 2, Part 2

Now that we have explored the development of the first five blocks that made up subordinate theme 2, part 2, let me summarize Beethoven's compositional process for this theme-part more generally. In the 4 series sketches, the functions of the first two blocks [1] and [2]—corresponding to the compound presentation and continuation, member 1—were invariant. We saw that Beethoven experimented with some different material in these blocks, for instance, the main theme b.i. material for the compound presentation in branch 4.1.1, but the general structure of these two blocks persisted into Op. 55. After these blocks, however, the music varied.

In general, we see two main trends for the material that followed blocks [1] and [2] (i.e., the compound presentation and continuation-1). First, he experimented with the order and size of the blocks [3], [4], and [5]. When he introduced some content (e.g., block [3] in 4.0.2) he removed other parts (e.g., block [5]). In other instances, he experimented with the size of the blocks and thus their constituent phrase functions. Some of these experiments required him to reformulate parts of the material to achieve different formal functions—we saw, for instance, how block [5] changed from a simple dominant prolongation to a complete expanded cadential progression. These changes sometimes had effects on other blocks.

The second trend we saw was presumably driven by a desire to build a more homogenous ending to the subordinate theme 2, part 2, that is, a cadential function that introduced less new material. We witnessed, for instance, that he removed blocks [3] and [4] in favor of expanding block [5] in branches 4.1.1 and 4.2.1 (refer to Figure 72). Overall, this trend was more short-lived and less pronounced than the first—he seems to have favored the designs that brought all five blocks and thus more new characteristic material. Still, the omission of blocks [3] and [4] in two revisions suggest that he was not completely certain about the amount of new content that he wanted to introduce at the end of the subordinate theme group. Presumably he had to write and experience the alternatives—a part 2 with less new content—before he was completely convinced that all the material was a fruitful addition. He also had to try to interweave the blocks, presumably to make the separate material cohere better as a whole. In the end, the inclusion of all five blocks, plus the revision of the final dominant prolongation to become blocks [6] and [7] expanded the subordinate theme 2, part 2 to its final size. Ultimately, this theme part doubled in size in the 4 series sketches compared to the 3 series version.

8.5 Conclusion

Let us now conclude our study of the 4 series sketches. In these final drafts, Beethoven works considerably on the subordinate theme group, especially the subordinate theme 2. The primary new content in these sketches is the subordinate theme 2, part 1's continuation, which seems to have been influenced by Beethoven's study of C.P.E. Bach's *Zwei Litaneyen*, and the subordinate theme 2, part 2 block [5], the dominant prolongation before the last abandoned cadence. Throughout, we observed the composer's concern for balancing the amount of new content he introduces. We also witnessed the many different approaches that he experimented with to make these ideas cohere with one another.

As we have seen consistently throughout all the exposition sketches, Beethoven was willing to experiment with alternatives to almost all his designs. Frequently, he sketched an idea, then a variant of that same idea, and in a third sketch integrated the best ideas from the first and second. Throughout, he seems to have worked to set up competing variants, then he crafted the final version by combining each of the variant's strengths.

SUMMARY OF THE *EROICA* EXPOSITION SKETCHES AND BEETHOVEN'S COMPOSITIONAL PROCESS

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Now that all of Beethoven's exposition sketches have been reconstructed, analyzed, and interpreted, let me summarize aspects of his overarching compositional process for this part of the sonata form. In what follows, I provide a synopsis of how the exposition developed, discuss the motivating factors that may have influenced these designs, then conclude with a discussion of the relationship between the theory of formal functions and Beethoven's sketches more generally.

9.1 Summary of the Exposition Sketches

It is evident that Beethoven did not follow some simple underlying method to write the exposition, nor was there a single guiding principle that influenced all his decisions. In addition, his process was not linear. At times, he wrote something close to the final version, but then tried many alternatives before returning to his initial designs. Some of these alternatives influenced later designs, and others were abandoned. We must also remember that the sketches only show discrete instances of a more continuous compositional process. Nevertheless, to simplify the situation somewhat, I parse Beethoven's compositional process into four stages that roughly correspond to the 4 "series" of
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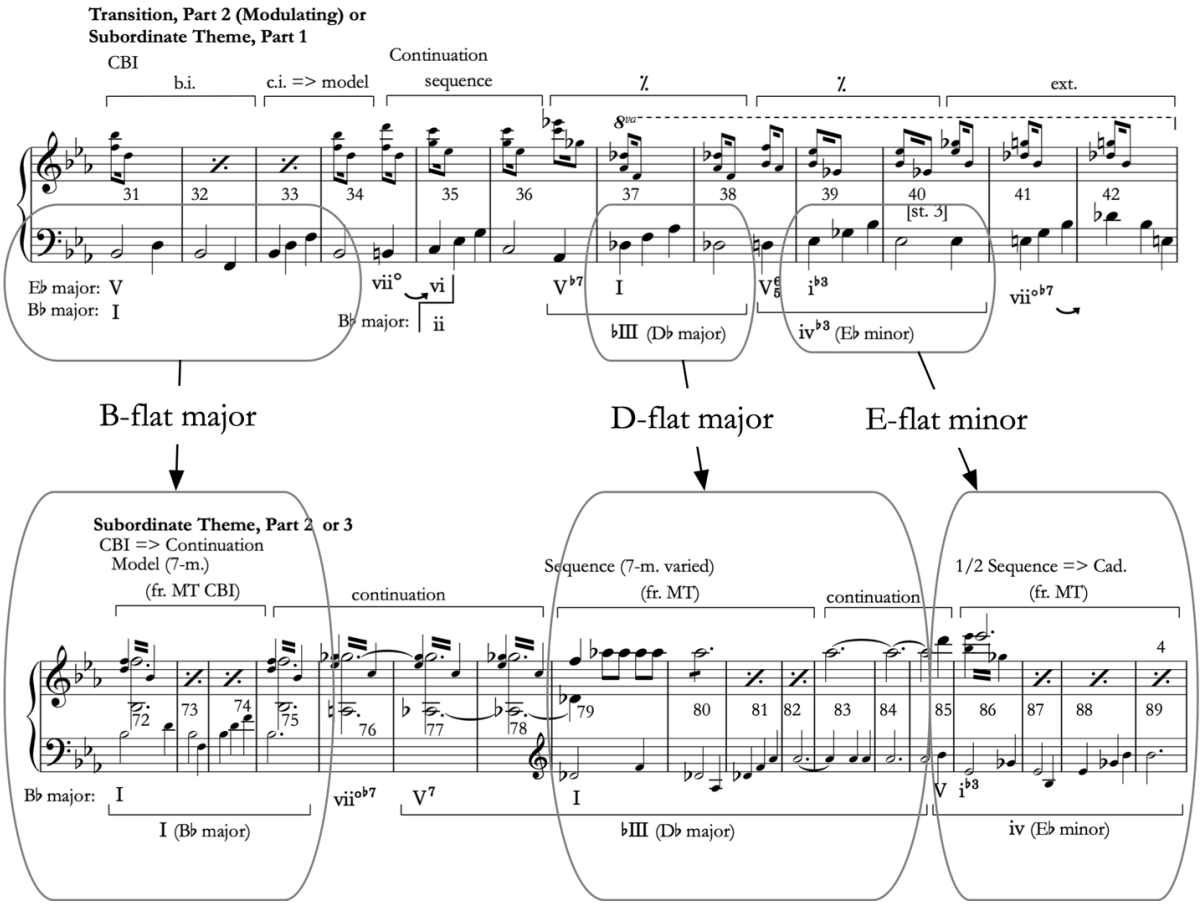
sketches discussed in the previous chapters. As the first stage (i.e., CS 1.0 and branches 1.1 and 1.2) is foundational for everything that follows, it is given more space.

9.1.1 Stage 1: A Mozart Model, A False Exposition Repeat, and the False End with Reboot

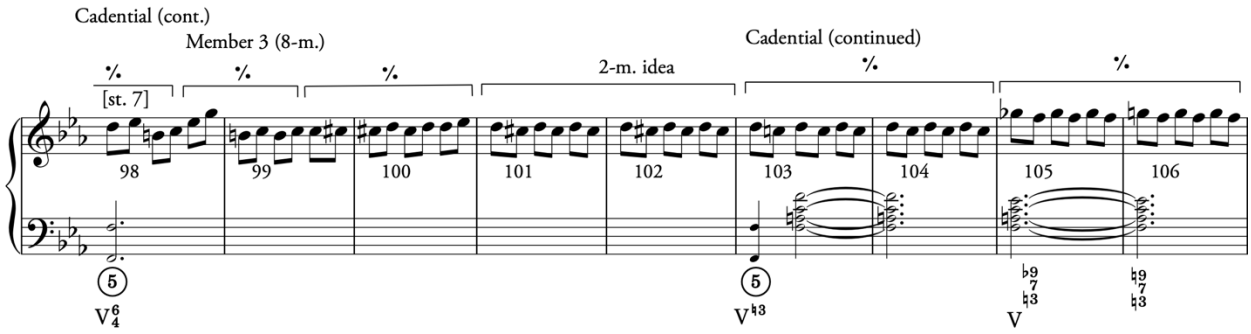
In stage 1 (the CS 1 series), Beethoven established two distinct versions of the exposition, CS 1.0, and branch 1.1. These two sketches, while distant from the final version, influence greatly its structure. The first sketch (CS 1.0) builds a large exposition that realizes several tonal goals. As I hypothesized in Section 4.3.4, Beethoven may have studied the first movement to Mozart's solo exposition to his last Piano Concerto in B-flat major, K. 595 as a formal model for his exposition. Mozart's exposition features a very unusual pattern of three subsequent HCs after the main theme PAC, which is also found in Beethoven's CS 1.0 exposition. As this design is extremely rare in the classical style, it is possible that Mozart's exposition influenced Beethoven's first exposition sketch.

Example 331: CS 1.0, relationship between Tr P2/ST P1 (mm. 31–42) and ST P2/P3 (mm. 72–89)



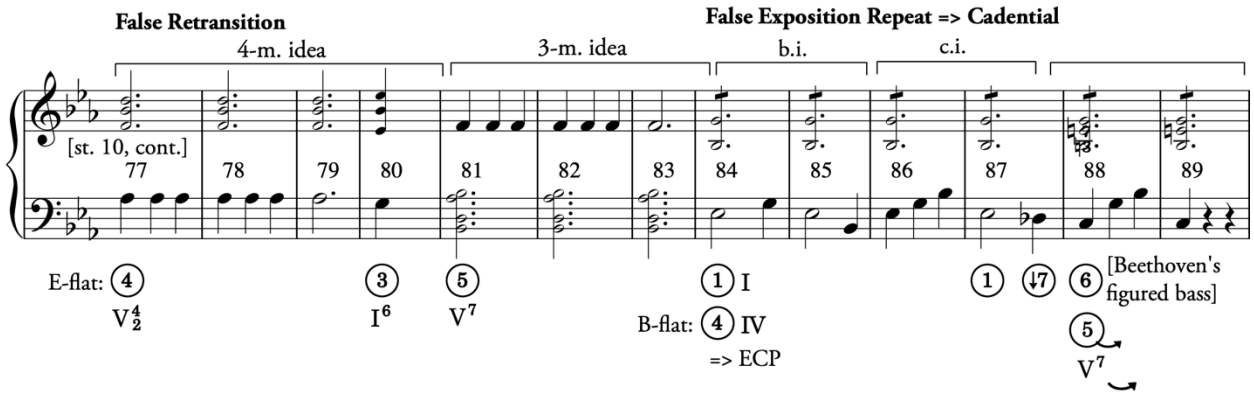
The most distinctive features of CS 1.0 include the blurred juncture between the transition and the subordinate theme group and the prominent tonicizations of D-flat major and E-flat minor in two different areas; see Example 331, mm. 31–42 and 72–89. Analysis also revealed three chromatic pitch classes of particular importance: E-natural, C-sharp/D-flat, and G-flat/F-sharp. These chromatic pitches appear multiple times in different parts of the exposition sketch, including the final cadential trill (Example 332). Ultimately, these pitch classes coincide with important tonal relationships and play out in multiple ways in all the exposition sketches and the final movement. They seem to have been a generative element for the piece.

Example 332: CS 1.0, mm. 98–106 (*ES* p. 11, st. 7)



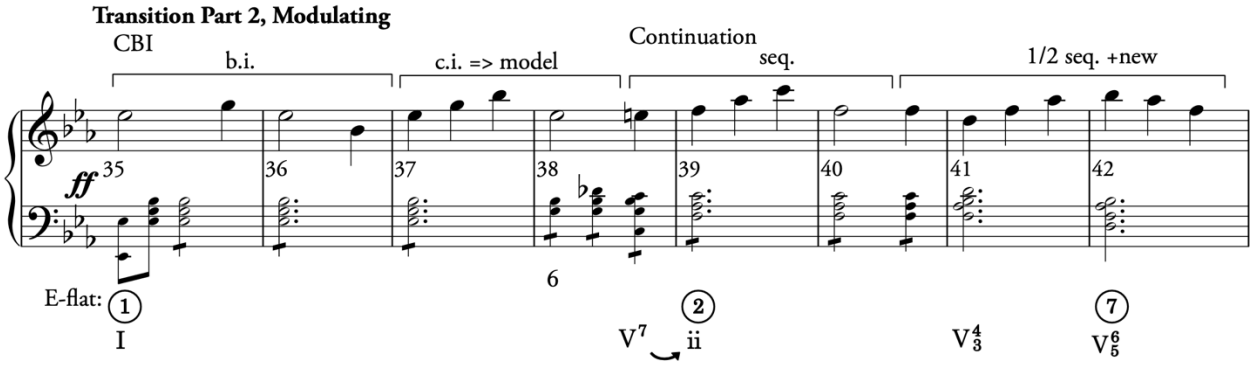
After composing the first sketch (CS 1.0), Beethoven wrote a variant of the subordinate theme group (i.e., branch 1.1, Example 333) that realized the enharmonic relationship between C-sharp and D-flat in a different way. Rather than tonicize D-flat as he had done in the first sketch (refer to Example 331), he built a new end of the subordinate theme group that brought a false exposition repeat. Notably, the repeat is revealed to be false when the listener would have expected the main theme to move through D to C-sharp (m. 87): instead, a D-flat arrives and it moves down to C-natural. At this point, a listener would become aware that they are not hearing the main theme but are rather experiencing the main theme *material* in the subordinate theme group. This clever ploy causes the enharmonic D-flat to serve as a reorienting formal device in the subordinate theme, which contrasts with the role it had in the main theme as a disorienting element. Overall, Beethoven seems to have wanted to balance the function of the initial C-sharp with an alternative way to express the pitch class as D-flat towards the end of the exposition.

Example 333: Branch 1.1, mm. 77–89 (*ES* p. 11, st. 10)

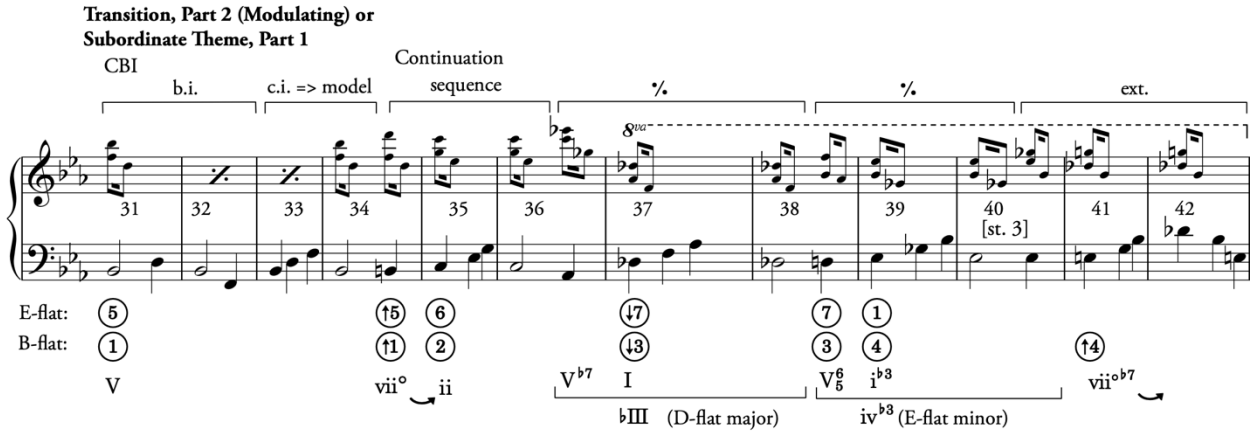


The first two sketches (CS 1.0 and branch 1.1), while related, are considerably different from one another. Beethoven seems to have wanted to merge these structures in the 1.2 branch. To accomplish this combination, he made three primary changes to the exposition. First, he redesigned the juncture between the transition and the subordinate theme group. By introducing the third entry of main theme material in the home key tonic (Example 334, mm. 35–38) rather than the subordinate key tonic (Example 335, mm. 31–34), Beethoven allowed a listener to hear a less ambiguous, two-part transition and thus a more pronounced start of the subordinate theme group that followed. This design would persist into the final piece, but not without some detours in later sketches discussed below. In general, the sketches suggest that Beethoven still wanted to obscure the juncture between the end of the home key and the beginning of the subordinate key.

Example 334: Branch 1.2, mm. 35–42 (*ES* p. 10, st. 5)

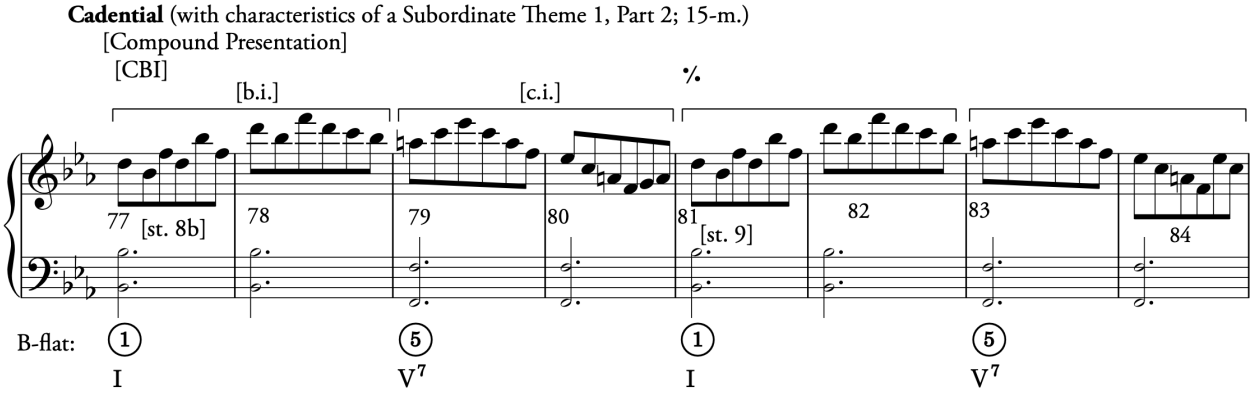


Example 335: CS 1.0, mm. 31–42 (*ES* p. 11, st. 2-3)



The second significant change that he made to branch 1.2 involved the first subordinate theme. As he devised a new way to realize the enharmonic relationship between C-sharp and D-flat in branch 1.1 (the false exposition repeat), the tonicizations of D-flat major and E-flat minor, which previously appeared prominently in CS 1.0 (see Example 331) were no longer necessary in branch 1.2. Consequently, he eliminated this material in the new 1.2 subordinate theme group and enlarged the subordinate theme 1 in other ways, namely, by writing a new continuation, pausing the theme with an internal HC (a vestige of the CS 1.0 design), and then resuming the theme with a second brief, 3-m. continuation and a large 14-m. cadential function (the first 8-m. of this function is shown in Example 336). A listener, having heard a large first subordinate theme and a distinctive and expanded cadential function, would likely be more convinced that the exposition had come to its end.

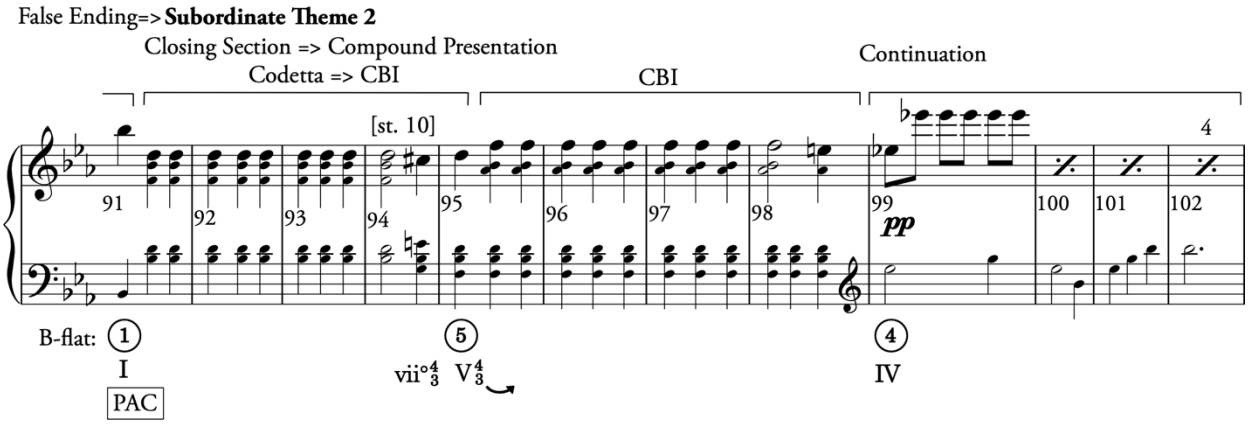
Example 336: Branch 1.2, mm. 77–84 (*ES* p. 10, st. 8–9)



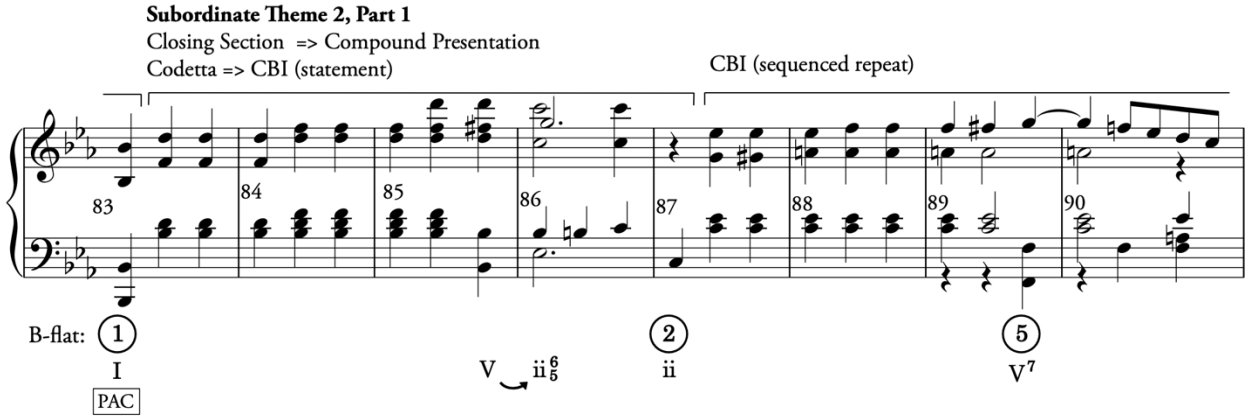
After the strong PAC cadence that closed the subordinate theme 1 in branch 1.2, Beethoven reconfigured the repeating, quarter notes that he used previously to build the false retransition in branch 1.1 (Example 337, mm. 91–98). The false-exposition idea, while clever, posed a problem when the exposition actually repeated—as was then the norm—because it would have caused the real main theme to be redundant. To solve this issue, Beethoven repurposed the repeating quarter notes to express the subordinate key tonic. Given the new 1.2 prior expanded subordinate theme 1 and emphatic cadence that closed it, the listener would now likely interpret this repeated quarter-note material as a closing section that worked to dissipate the energy accumulated by the previous subordinate theme 1, not a retransition. But when the repeating pattern continued a third higher (mm. 95–98), they would retrospectively hear the material as a new compound presentation to a new subordinate theme 2. Subsequently, this change altered the function of the implied main theme material that followed the repeating quarter notes (mm. 99–102). The main theme material, now firmly within the subordinate key, expresses subdominant harmony, and thus a medial, continuation function. This new revision eliminated some of the *functional* redundancy that the false-exposition repeat brought if the exposition (actually) repeated because the main theme material no longer appeared as an initiating function in the subordinate theme group.

Ultimately, the repeating quarter-note material devised first in branch 1.1 (Example 333, mm. 77–83) as a retransition and reconfigured to express subordinate key tonic harmony in 1.2 (Example 337, mm. 91–98) is the progenitor of the subordinate theme 2, part 1 in the final Op. 55, I. (Example 338, mm. 83–90). Beethoven therefore preserved in Op. 55, I., an aspect of exposition repeat that he designed in branch 1.1, namely, the impression that the exposition was ending before it really was. In other words, he reconfigured the false retransition to be a false closing section: the false exposition repeat became a "false ending." Following this device, he "rebooted" the exposition with new energetic material (i.e., the subordinate theme 2, part 2, Example 339), which enabled another drive towards a final and even more emphatic PAC. This design allowed Beethoven to significantly expand the exposition without resorting to a more recessive, lyrical, and characteristic subordinate theme, which he presumably sought to reserve for the development.

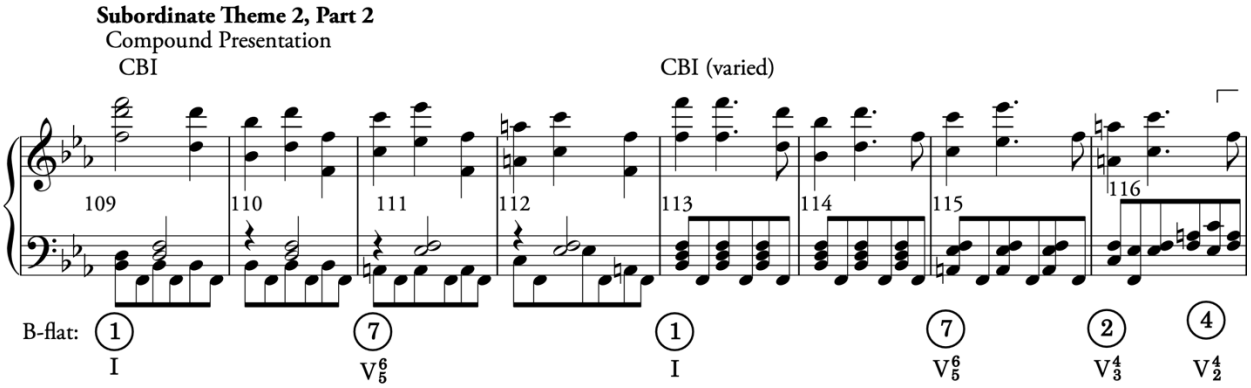
Example 337: Branch 1.2, mm. 91–102 (*ES* p. 10, st. 9–10)



Example 338: Op. 55, I., 83–90



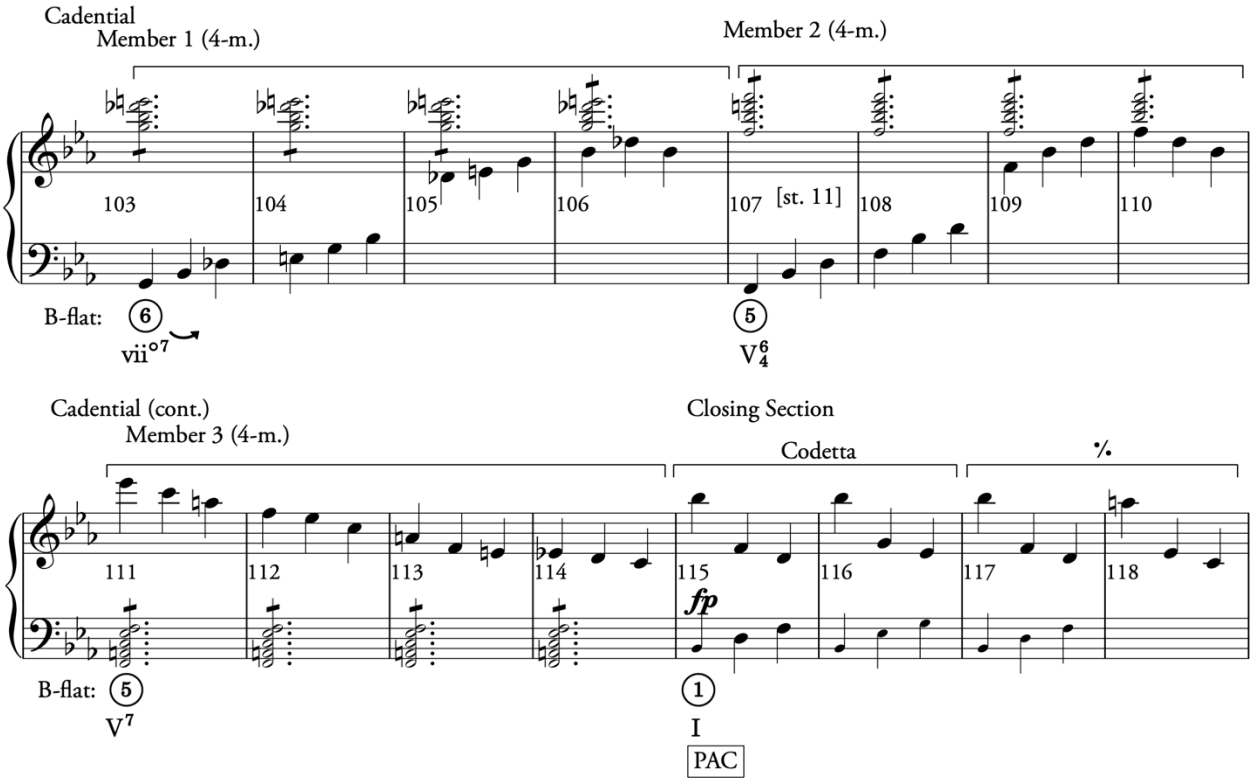
Example 339: Op. 55, I., mm. 109–116; Subordinate Theme, Part 2, Compound Presentation



Although the specifics of the branch 1.2 (Example 337) false-ending followed by a reboot will change in successive sketches, the overall effect persists into the final Op. 55 as a characteristic feature of the subordinate theme 2 (mm. 83–151). In the 1.2 branch, however, the "rebooting"

process is rather tame. Once the listener recognizes that a new, second subordinate theme is unfolding (Example 337) and the exposition has not ended, the music moves quickly to a cadential function (Example 340) that is built with four measures of predominant harmony and eight measures of a penultimate dominant prolongation. The reboot, therefore, does not bring a sense of something new or grand, but rather conventional cadential material. In the next sketches, Beethoven will add more excitement to the reboot by introducing new characteristic music that expands this part of the form considerably.

Example 340: CS 1.2, mm. 103–18 (*ES* p. 10, st. 10–11)

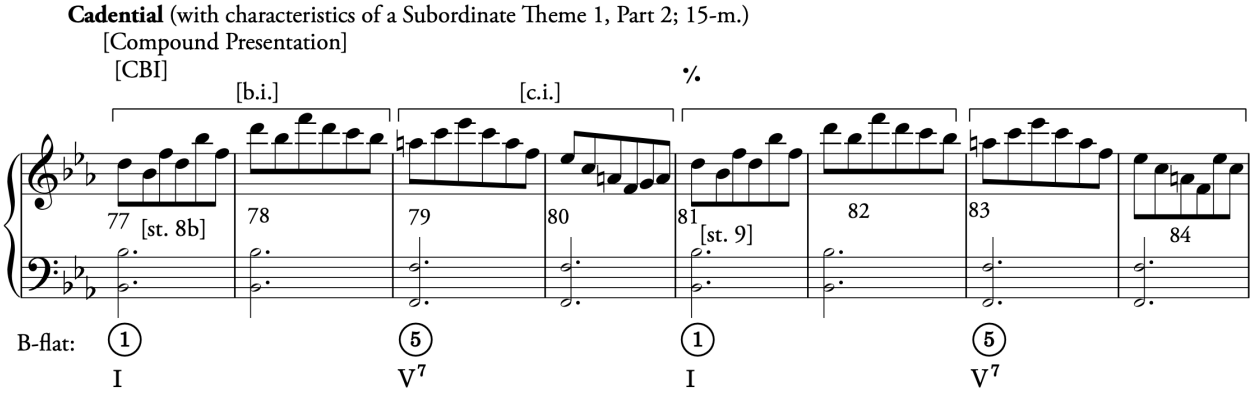


In the end, the large cadential function (see the incipit in Example 336) that Beethoven introduced into the first subordinate theme in branch 1.2 did not persist in subsequent sketches. But he did not forget about this idea: he eventually crafted something like it to be the final subordinate theme 2, part 2 compound presentation (Example 342) as Lockwood and Gosman suggested.[217] The factors that motivated these changes were considerably more complex than a simple repositioning of this material, however. But more generally, it does seem that the greatly expanded 1.2 branch

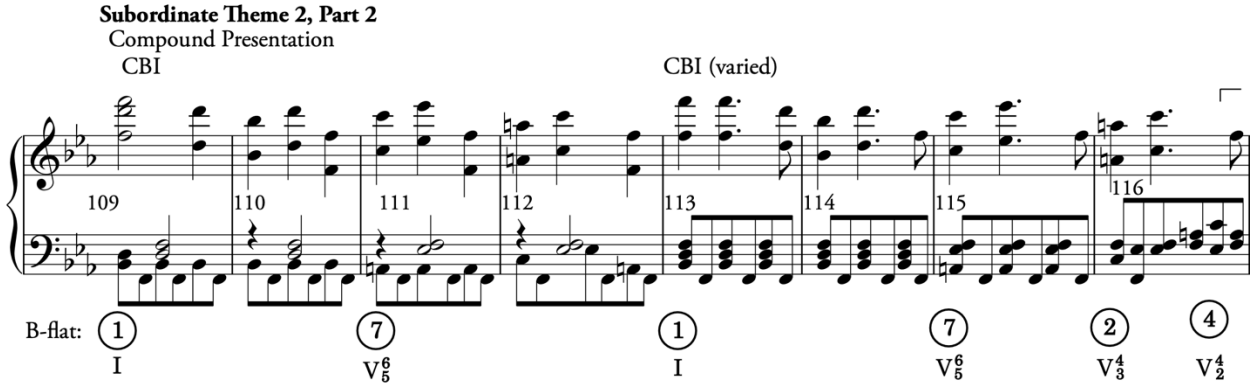
[217] Lockwood and Gosman do not refer to the process using form-functional terminology, however; see (Beethoven, Lockwood, and Gosman 2013a, 35, fn. 26).

subordinate theme 1 cadential material was one of several progenitors for the sentential structure of the new subordinate theme 2, part 2 compound presentation; the other motivating factor was an internal SotD that he drafted first in CS 2.0, discussed further below.

Example 341: Branch 1.2, mm. 77–84 (*ES* p. 10, st. 8–9)



Example 342: Op. 55, I., mm. 109–116; Subordinate Theme, Part 2, Compound Presentation

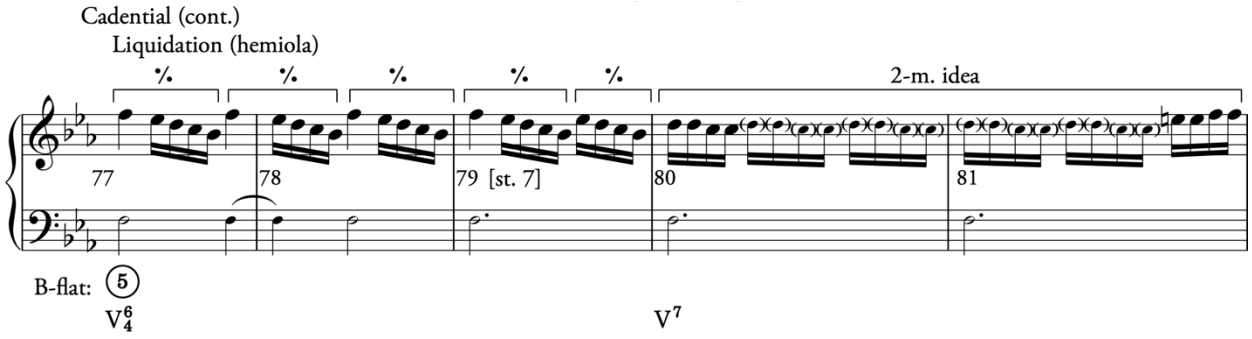


To summarize the first stage, Beethoven began by crafting two distinctive versions of the exposition that realized the enharmonic relationship between C-sharp and D-flat in different ways. Both versions expanded the exposition considerably, blurred the juncture between the end of the home key and the start of the subordinate key, and avoided a new, lyrical subordinate theme. Finally, he merged these two designs in the final 1.2 branch and ended up with an exposition that brought a distinctive false-ending and reboot, which are two characteristics that persist into the final piece.

9.1.2 Stage 2: Amplifying the Exposition Reboot with Extension

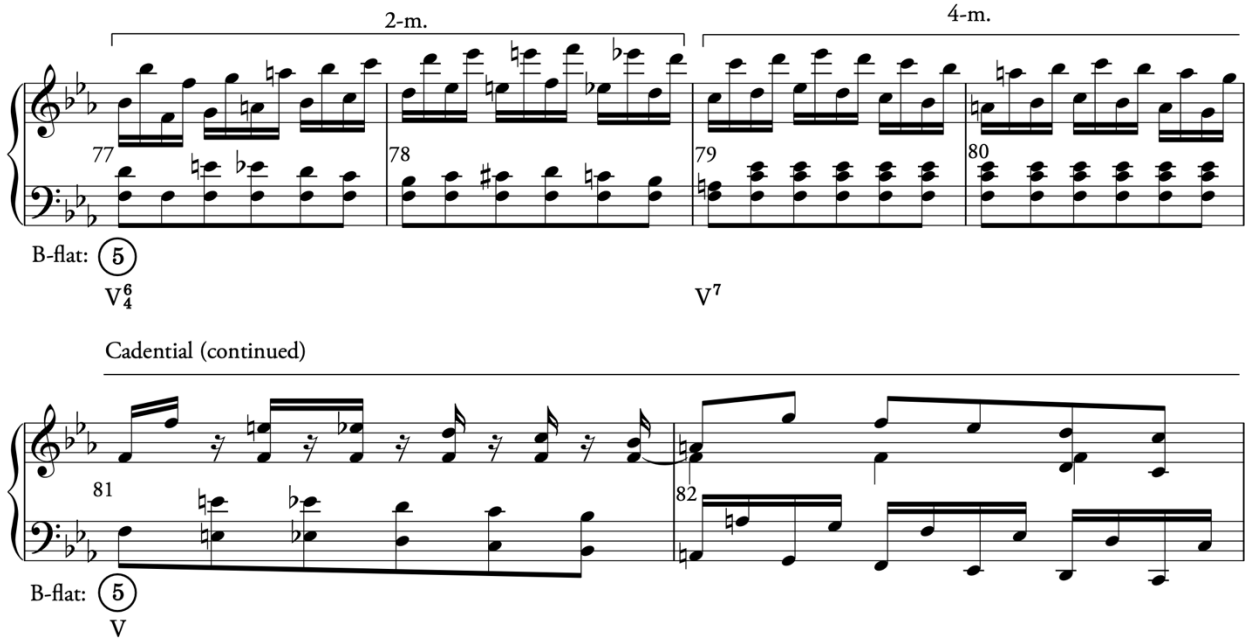
In stage two (the CS 2 series), Beethoven worked to amplify the "reboot" part of the exposition by redesigning the subordinate theme group. First, he reconfigured the first subordinate theme to articulate one large theme without an internal HC. To achieve this design, he greatly expanded its continuation and the cadential functions. At this point, he seems to have decided the dimensions he wanted for the first subordinate theme—the theme in the CS 2.0 is 26-m. (mm. 57–81), just as it is in the final piece[218]—but he wasn't yet sure what material he would use to achieve this size. The cadential function (Example 343), for instance, is constructed with conventional passagework and a rather trite 5-m. penultimate dominant prolongation with a cadential trill. In later sketches, he changed this conventional cadential material to be more chromatic, dynamic, and characteristic (Example 344).

Example 343: CS 2.0, mm. 77–81 (*ES* p. 12, st. 6–7)



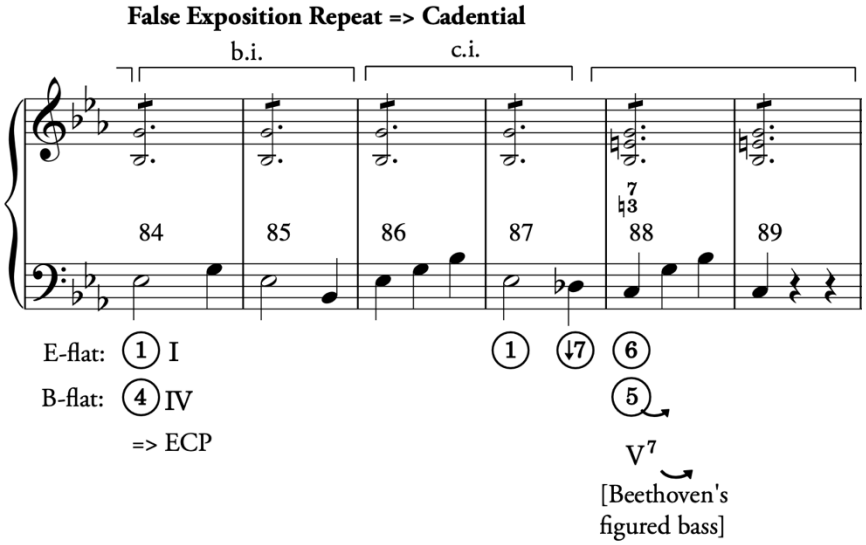
[218] Alfred Lorenz seems to have been the first to notice the similarity in their size; see (Lorenz 1924, 414–15).

Example 344: Op. 55, I., mm. 77–82

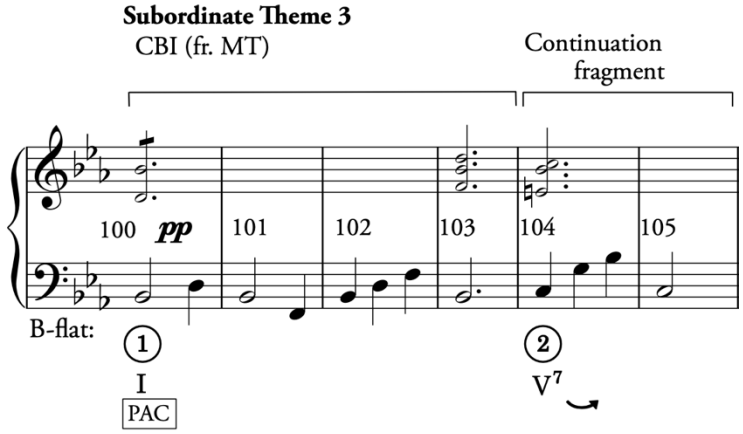


After the first subordinate theme, the sketches suggest that Beethoven was still not sure how to stage the exposition "reboot." His inclination in CS 2.0 was to restart the exposition with the main theme material, much like he did with the false exposition repeat in branch 1.1. But instead of appearing in the home key tonic (Example 345), as it did in branch 1.1, the main theme material in CS 2.0 expresses the subordinate key tonic (Example 346) and thus functions as a third subordinate theme instead of a false main theme repeat. Put simply, when a listener heard the main theme material reappear at the end of the subordinate theme group in CS 2.0 (Example 346), they would not imagine that they are at the beginning of the exposition. Rather, they would hear the main theme material as the element that rebooted the subordinate theme group after a seeming closing section.

Example 345: Branch 1.1, mm. 84–89 (*ES* p. 11, st. 10)



Example 346: CS 2.0, mm. 100–105 (*ES* p. 12, st. 8)



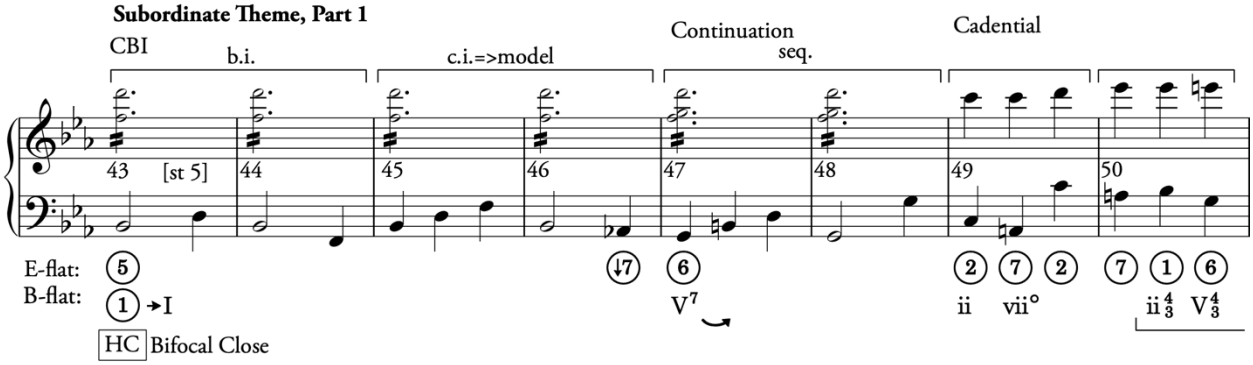
At this stage, the material that corresponds to the subordinate theme 2 in the final version is set as two independent subordinate themes, rather than one large theme that is divided into two parts. The subordinate theme group is therefore *extended* in this 2.0 sketch, whereas it is more *expanded* in the final piece. Expansion will become Beethoven's focus in the next sketches.

9.1.3 Stage 3: Expanding the Exposition

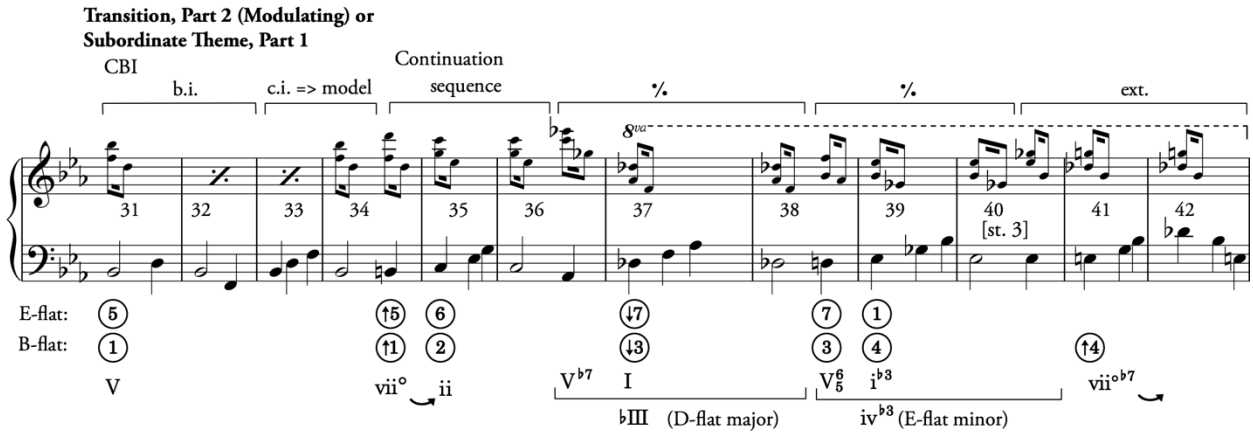
In stage three (the CS 3 series), Beethoven worked to expand the exposition instead of extend it. He altered the exposition in three ways to achieve this goal. First, he blurred once more the juncture between the transition and the subordinate theme group by re-introducing main theme material, though in the subordinate key (i.e., B-flat major, Example 347). This design caused the main theme material to appear four times in succession at the beginning of the exposition. Thus, while we may

have thought that he arrived in branch 1.2 at the final design of main theme and transition, he experimented in CS 3.0 (and CS 4.0) with a plan that was more similar to what he originally sketched in branch 1.0, namely, introducing main theme material in the subordinate key before the subordinate theme group. It does not seem, therefore, that the B-flat entry of main theme material was a simple blunder as Tovey and others have suggested.

Example 347: CS 3.0, mm. 43–50 (*ES* p. 14, st. 5)



Example 348: CS 1.0, mm. 31–42 (*ES* p. 11, st. 2–3)



Ultimately, Beethoven abandoned the idea of introducing the main theme material in the subordinate key after the two-part transition in the final exposition, but it persisted into the final sketch (CS 4.0), discussed in the next section. Given the regular reappearance of this design in CS 1.0, CS 3.0, and CS 4.0, then, it does not appear as a mere slip of the mind. It seems sensible, therefore, to interpret what Beethoven's goals with this design could have been.

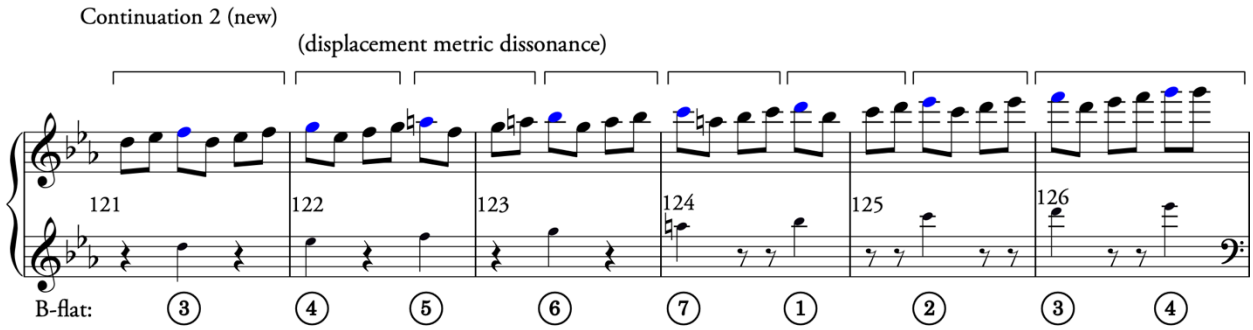
In every instance, the B-flat main theme material obscures the juncture between the end of the transition and the beginning of the subordinate theme group and thus the end of the home key

and the beginning of the subordinate key. The overall effect is one in which the import of the subordinate key is weakened by the main theme material. This strategy seems to be closely related to another goal, namely, to avoid introducing a lyrical subordinate theme. The sketches support the hypothesis that he was deliberately trying to obscure the beginning of the subordinate theme group. We will return to this idea again below (in section 9.2).

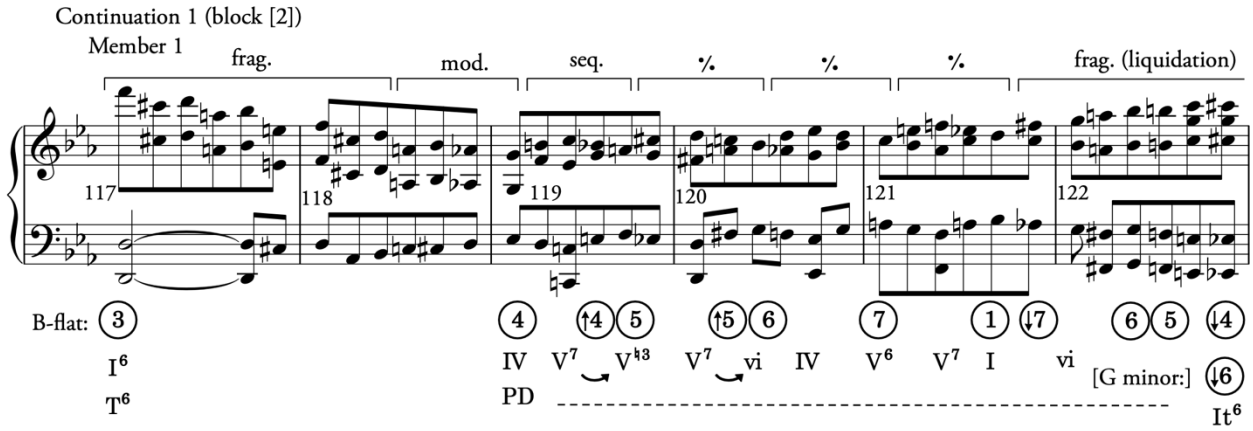
The second way that Beethoven expands the exposition is by enlarging the "reboot" portion of the subordinate theme group by building a massive second subordinate theme. To achieve this expansion, he doubled the size of the initiating compound presentation (thus forming a grand presentation), bisected the theme with an internal HC and SotD, then wrote a large cadential function that brought extensive prolongations of the pre-dominant and penultimate dominant harmonies. This design, while it expanded the second subordinate theme considerably, introduced some new problems: redundant material, overly mechanical repetitions, and excessively static harmonic prolongations. Consider, for instance, the conventional and excessive ascending sequence that served as a subordinate theme 2 continuation (Example 349A), the drawn out prolongation of V/V that followed (Example 350A), and the 6-m. of dominant prolongation (Example 351A). We could interpret these elements as something like musical placeholders—Beethoven allowed the excessive repetitions because he wanted to frame the overall size quickly. At a later stage, Beethoven replaced these rather static parts (A in each example) with more dynamic and characteristic material (B in each example).

Example 349: Music corresponding to the ST2 P2 Continuation and Cadential Functions

A. CS 3.0, mm. 121–126 (*ES* p. 15, st. 4)

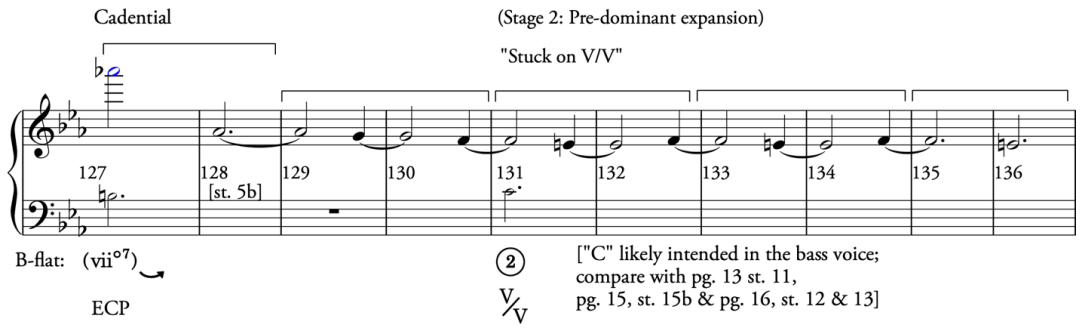


B. Op. 55, I., mm. 117–122

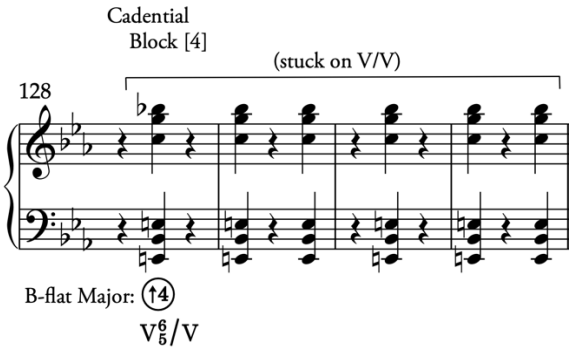


Example 350: Prolongation of V/V in ST2

A. CS 3.0, mm. 127–136 (*ES* p. 15, st. 5b)

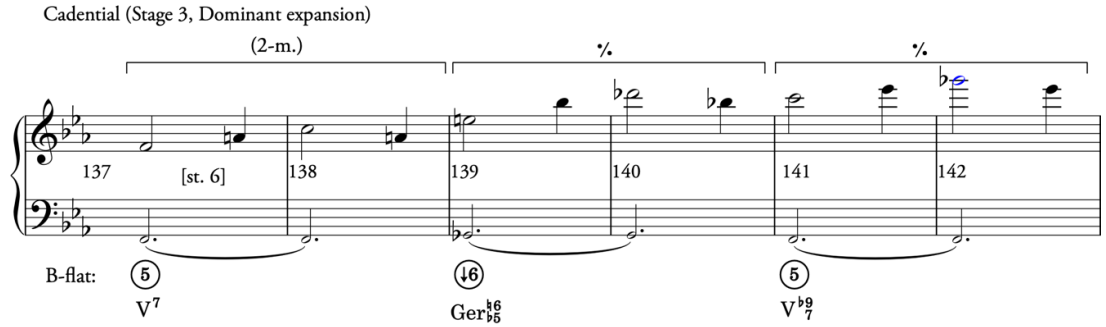


B. Op. 55, I., mm. 128–131

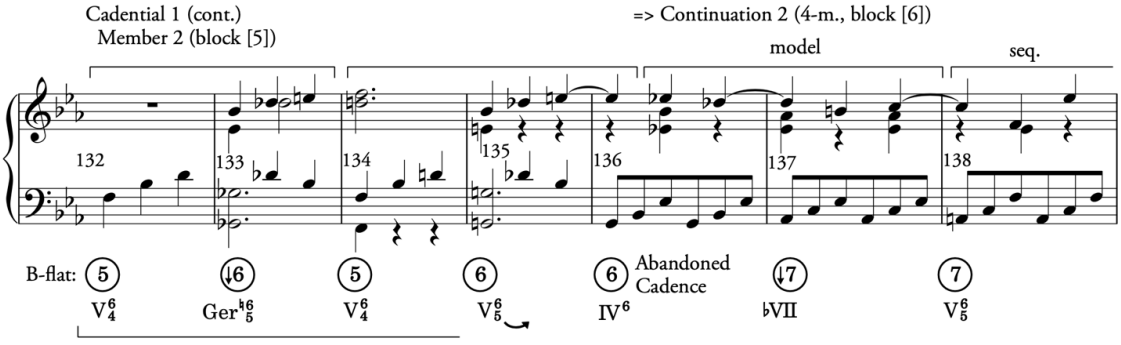


Example 351: Prolongation of V in ST2

A. CS 3.0, mm. 137–142 (*ES* p. 15, st. 6)



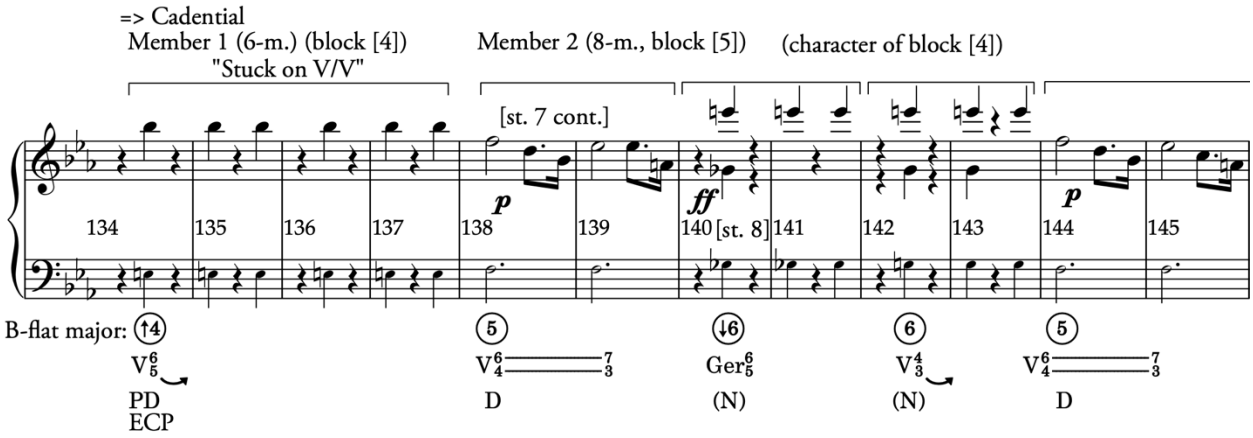
B. Op. 55, I., mm. 132–138



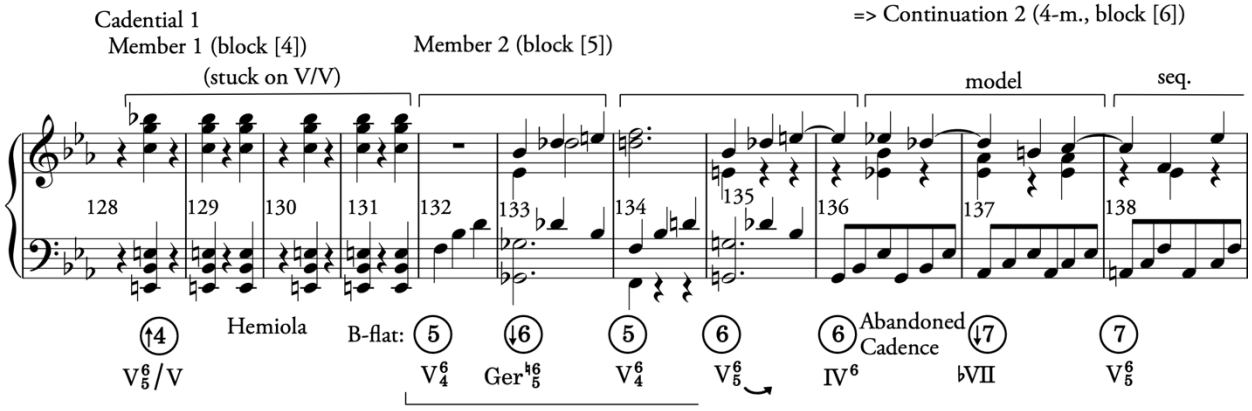
9.1.4 Stage 4: Refining the "Reboot"

In the fourth and last stage (the CS 4 series), Beethoven worked extensively on refining the subordinate theme group by replacing the static, overly mechanical, and redundant material mentioned above. The CS 4 series sketches focus primarily on the subordinate theme 2, part 1 continuation, and most of the subordinate theme 2, part 2. For the first part, I suggested that Beethoven studied examples in C.P.E. Bach's *Zwei Litaneyen* to help him achieve a rapid tonicization of D-flat major before returning to B-flat major. Regarding the second part, I showed that he vacillated between introducing a series of different materials (blocks) or crafting a more thematically homogenous ending. In one sketch (branch 4.1.2, Example 352) he tried to unify some of the material by repeating and inserting its rhythmic design among other. material (compare mm. 134–137 with mm. 140–143). The final version (Example 353, mm. 128–138) lacks this feature. In the end, he decided to follow his original inclination and keep the design that that introduced the greatest variety of material (see Section 8.4.3).

Example 352: Branch 4.1.2, mm. 134–145 (*ES* p. 23, st. 7–8)

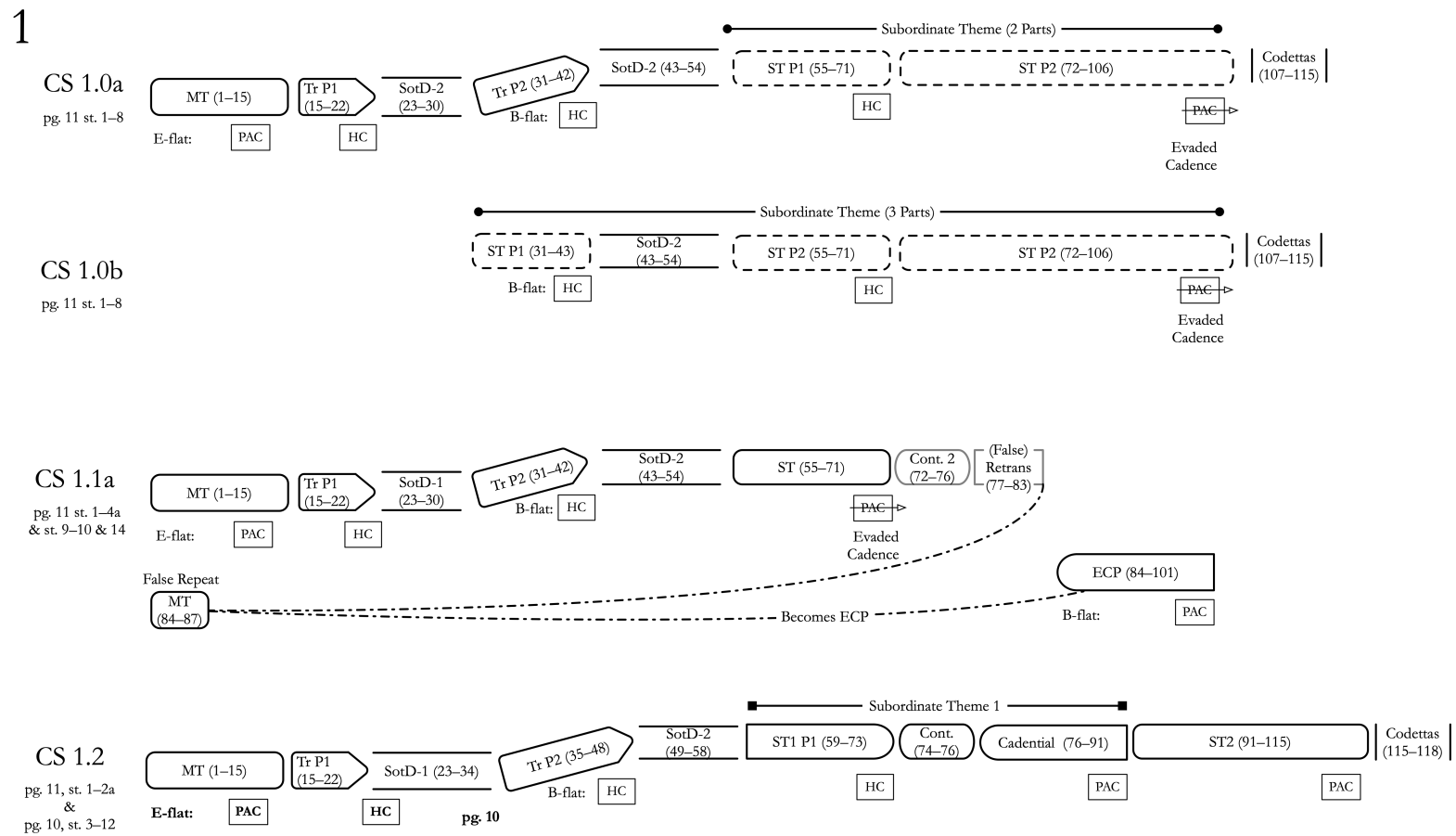


Example 353: Op. 55, I., mm. 128–138; ST2 P2, Cadential 1 and Continuation 2



Beethoven expanded the exposition to its largest size in the final 4 series sketch. In some later stage, not shown in the sketchbook, he refined the exposition further by eliminating some of the redundancies that persisted, especially the fourth entry of main theme material in the subordinate theme at the end of the two-part transition. He must have removed this element at a later stage, now lost to us. For reference, Figure 73 provides the diagrams of all the CS 1 series sketches, the trunks for CS 2.0, 3.0, and 4.0, and the final exposition. The reader is encouraged to compare these formal diagrams with the schematic layout of all the trunks, branches, and twigs shown in Figure 74. Note especially how the subordinate theme changes in successive sketches. We observe a process that moves from expansion to extension and back.

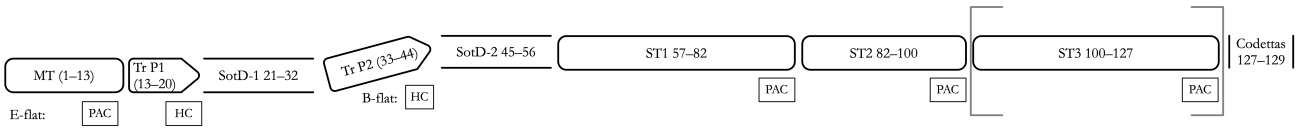
Figure 73: Form Diagrams



2

CS 2.0

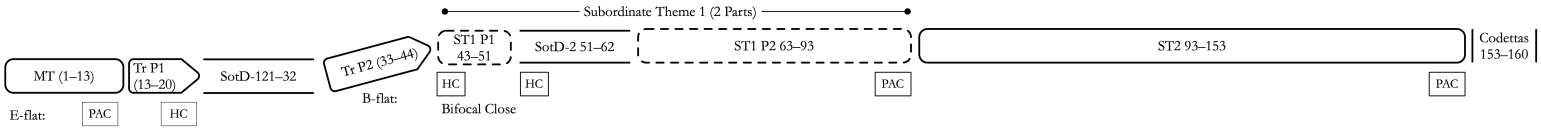
pg. 12, st. 1–12



3

CS 3.0

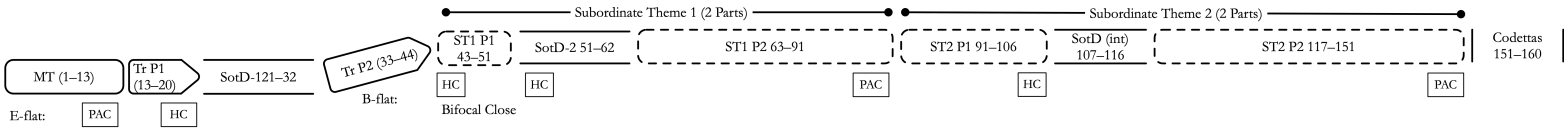
pg. 14, st. 1–10
pg. 15, st. 1–7



4

CS 4.0

pg. 20, st. 1–14
pg. 21, st. 1–7



Final

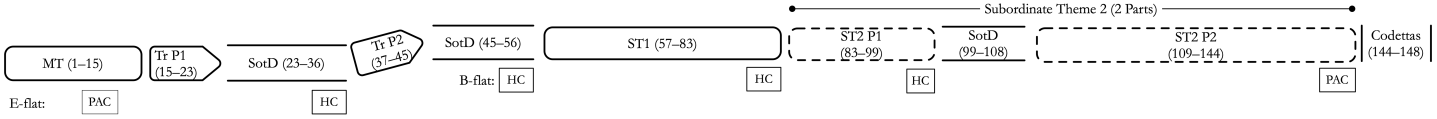
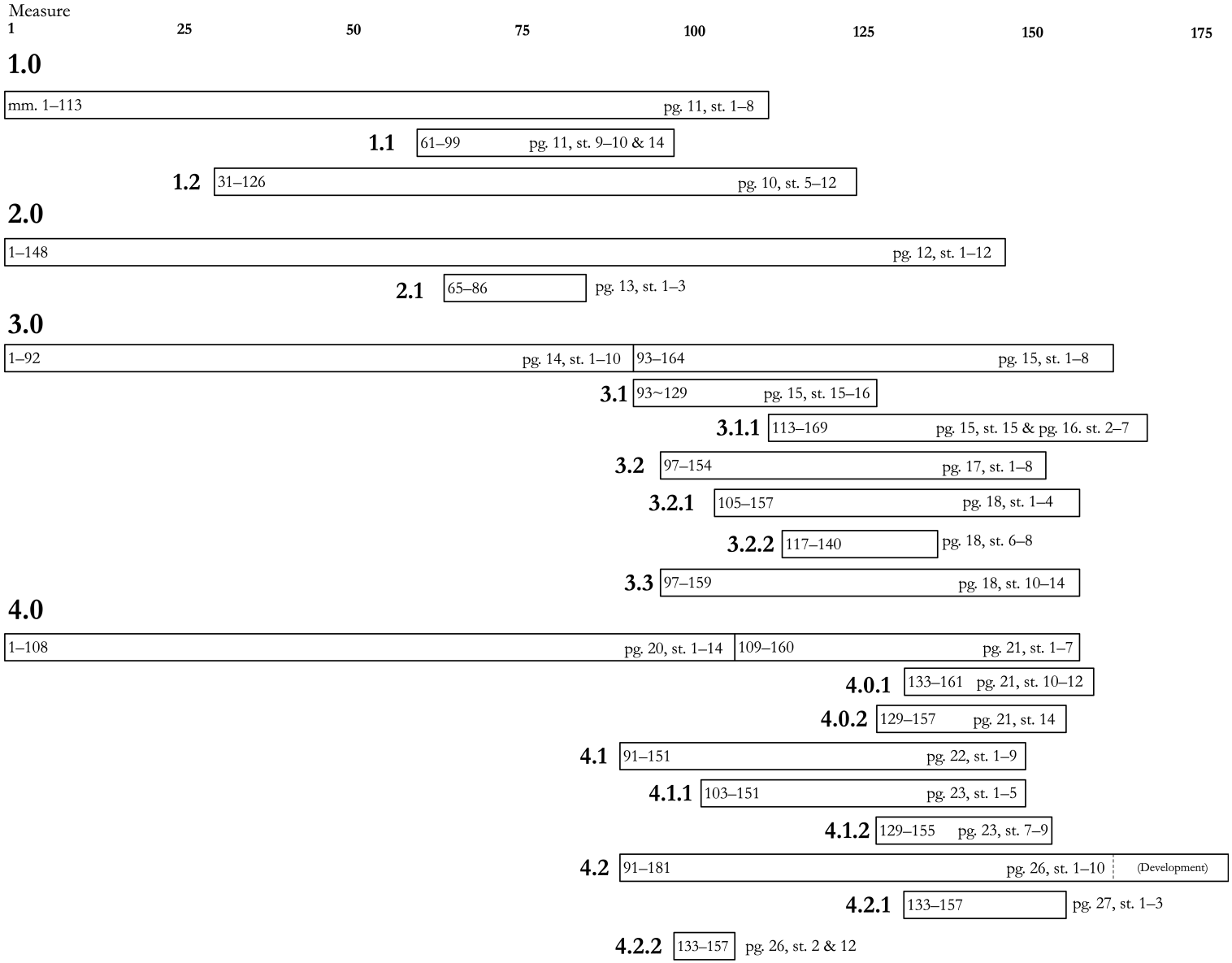


Figure 74: Exposition Sketches



9.2 Factors that Motivated Beethoven's Exposition Designs

Now that we have an interpretation of Beethoven's overall compositional process for the *Eroica* exposition, we should consider the motivating factors for these designs. Why did he create a false exposition repeat, and why would he have reconfigured this ploy to become a false ending followed by an exposition reboot? In Section 4.4, I hypothesized that Beethoven sought to expand the exposition while downplaying the typical rhetoric of a lyrical subordinate theme to motivate the new lyrical theme he had planned for the development.

It is evident that Beethoven wanted the first movement to be considerably larger than anything he had previously written, and it also seems clear that he wanted to avoid writing a lyrical theme in the exposition. These two compositional goals introduced a compositional problem, however: he had to figure out a way to relax the sustained overall musical energy in the exposition without a lyrical subordinate theme. His solution seems to have been to create the effect that the exposition was ending, before rebooting it with new energetic material. This strategy proved effective because it did not introduce new characteristic lyrical material, and it still allowed him to double the size of the exposition without overly taxing the listener with continuously vigorous material.

Once he had devised the general false-ending and reboot idea, he experimented with several different ways to stage the reboot. Throughout most of the sketches, (i.e., stages one, two, and the first part of three), he tried to reboot the exposition with the main theme material. This compositional impulse seems like a logical solution, but there was a fundamental problem with reintroducing the main theme material late in the subordinate theme group after a seeming exposition end: if the exposition was to be repeated, as was then standard practice, then a listener would have heard a false exposition repeat or ending followed immediately by the actual exposition repeat. This design would have introduced considerable redundancy if the reboot contained main theme material.

One wonders if Beethoven considered to not repeat the exposition at an early stage. Some evidence suggests that he was uncertain about whether the exposition would be repeated after he finished the piece. In a letter to Breitkopf and Härtel sent on February 12th, 1805, about two years after Beethoven completed the *Eroica*, his brother Karl told the publisher to add a repeat sign for the exposition. Karl explained the rationale: "My brother at first thought, before he had heard the symphony, that it would be too long if the first part of the first movement were repeated, but after

several performances, it turned out that it would be disadvantageous if the first part were not repeated."[219] Perhaps Beethoven's indecision in the latest stages of the work is reflective of his early sketches. Maybe the choice to repeat or not repeat the exposition influenced his compositional approach to the subordinate theme group.

The sketches show that he experimented with using the main theme material to express different functions in the subordinate key, but each of these solutions introduced other issues, so he abandoned the idea and realized the "reboot" in a different way, namely, by introducing a new compound presentation to start a second part to the subordinate theme 2. This solution solved the redundancy issues, brought a more distinctive ending to the exposition, and subverted introducing a new lyrical theme.

9.3 Beethoven's Sketches and Theory of Formal Functions

Now that we have explored the evolution of the exposition more broadly and discussed some of the motivating factors that resulted in these designs, let us consider the relationship between the sketches and the theory of formal functions more generally. One of the central goals of this study was to test the utility of the theory of formal functions for the analysis of Beethoven's sketches. Before this work, it was not clear what value the theory could bring to the study of his sketches. And given the distorted view of Beethoven's sketches as emblematic of failed or problematic experiments, one might have imagined that the theory would not apply to the sketches in the same way as the final piece. It is hoped that this study has dispelled this assumption; although there are some challenging passages to interpret, the theory proves to be viable for analyzing Beethoven's sketches. In what remains, I highlight a few insights that were developed in the prior analytical chapters that relied upon one of the central axioms of the theory: the notion that a formal function is distinct from formal content.[220]

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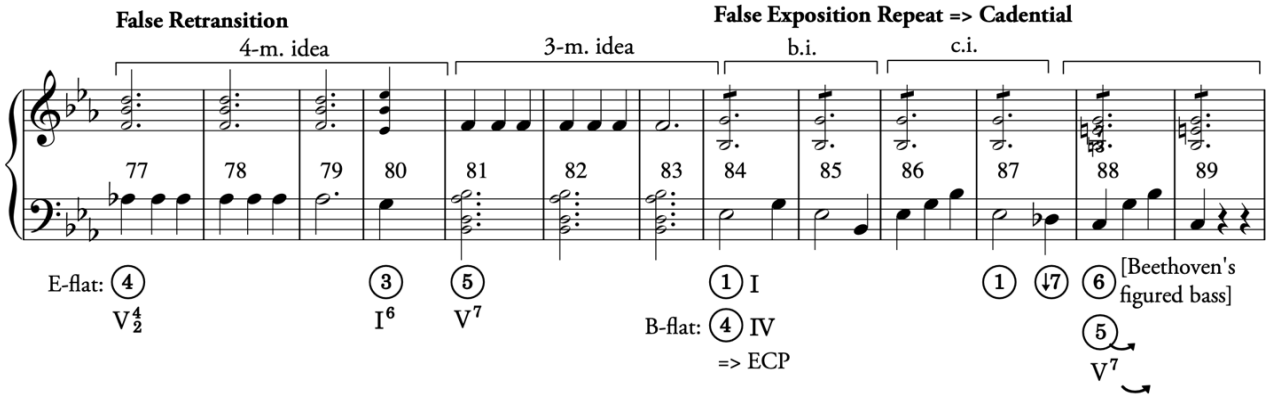
[219] "Mein Bruder glaubte anfangs, ehe er <sie> die Simpfonie noch gehört hatte, sie würde zu lang seyn wenn der erste Theil des ersten Stücks wiederholt würde, aber nach öfterer Aufführung derselben fand es sich, daß es sogar nachtheilig sey, wenn der erste Theil nicht wiederholt würde." Letter to Breitkopf & Härtel in Leipzig, Vienna, February 12, 1805; https://brieftext.beethoven.de/henle/letters/b0212.phtml. See also (Sipe 1998, 27).

[220] On this topic, see (Caplin 1998, 4).

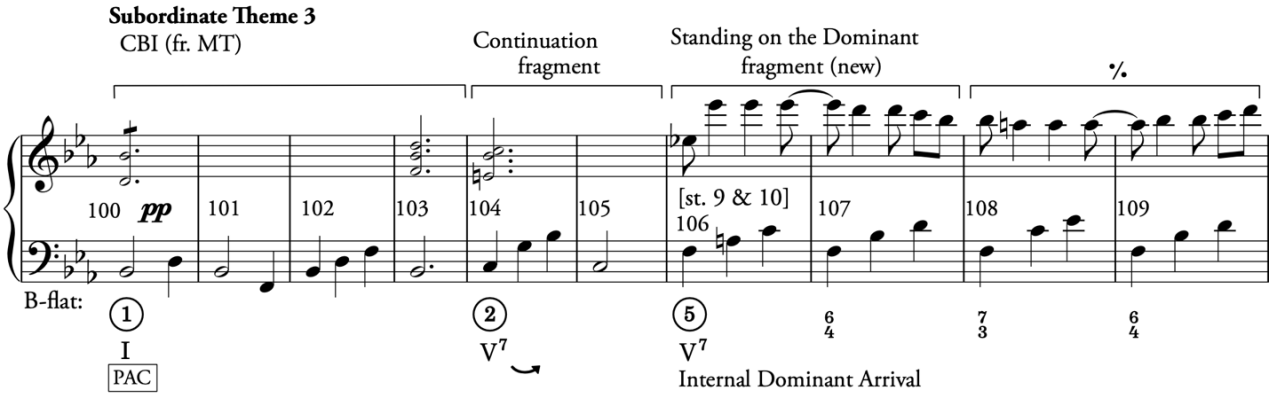
9.3.1 Persistent Material and Variable Functions

We witnessed several instances where Beethoven reformulated or recontextualized material that he drafted in one sketch to achieve a different function in another. The clearest example of this situation involves the main theme material in the subordinate theme group: he used this material to create a false exposition initiating unit (Example 354, 1.1, mm. 84–87), an initiating, third subordinate theme (Example 355, CS 2.0, mm. 100–103), a medial continuation (Example 356, CS 3.0, mm. 109–112), and the beginning of an ECP (Example 357, 3.1.1, mm. 119–122). In the subordinate theme group, the main theme material was, at least for many of the sketches, a persistent element, but its function varied. In the end, Beethoven could not find a suitable way to express a function with the main theme material content in the subordinate theme group, so he abandoned this material in this part of the form.

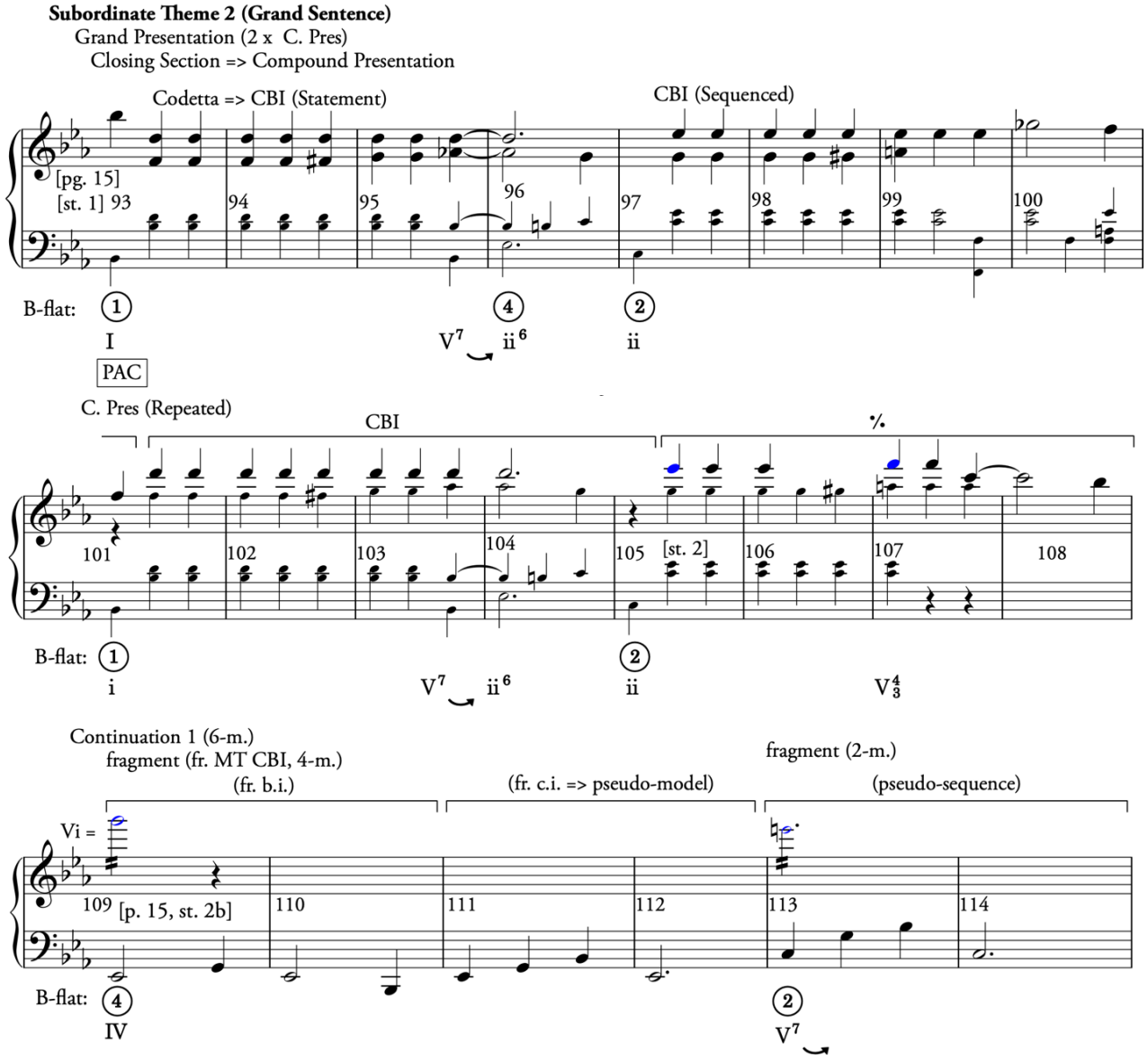
Example 354: Branch 1.1, MT material for a false exposition repeat (*ES* p. 11, st. 10)



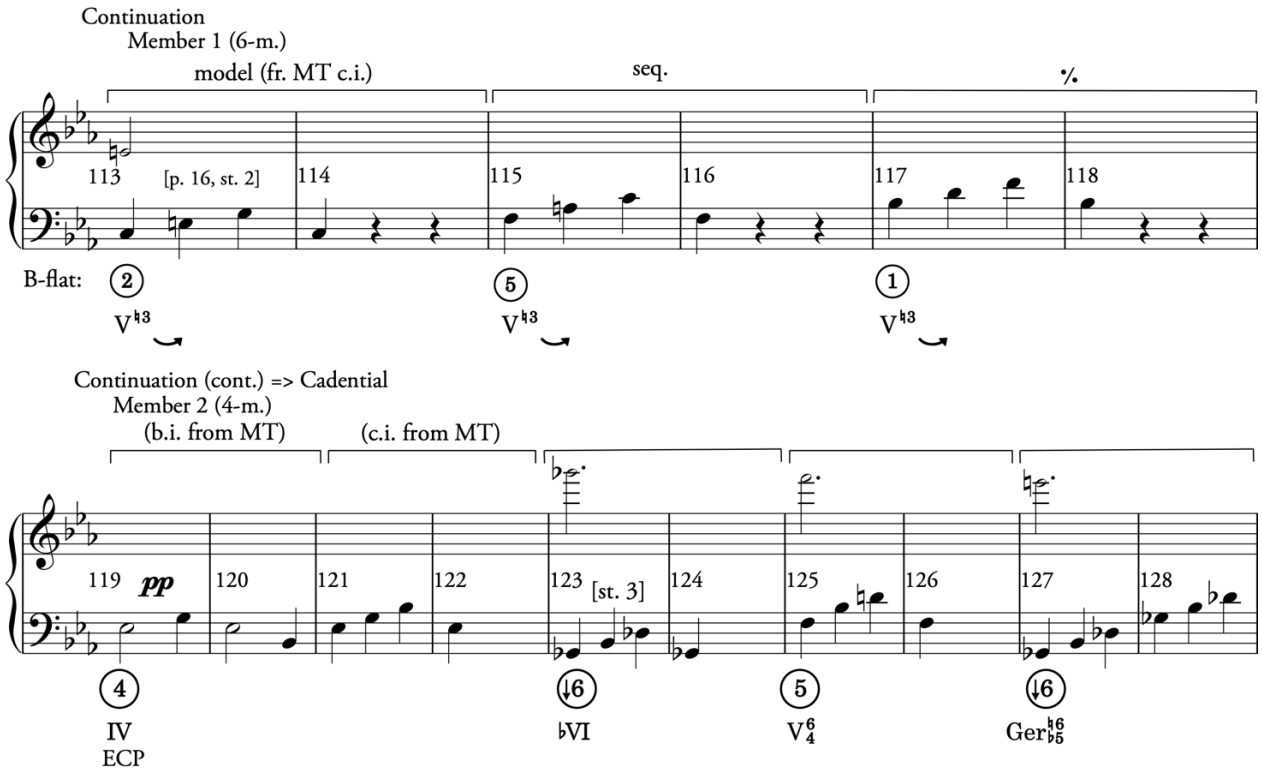
Example 355: CS 2.0, mm. 100–109; MT material brings initiating function in subordinate key (*ES* p. 12, st. 8–10)



Example 356: CS 3.0, mm. 93–114 (*ES* p. 15, st. 1–2)



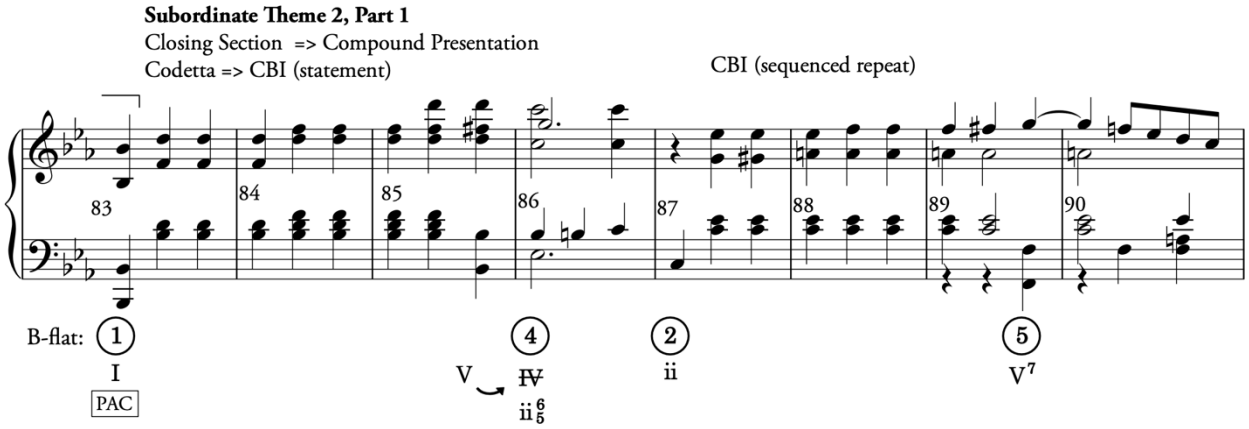
Example 357: Branch 3.1.1, mm. 113–128 (*ES* p. 16, st. 2–3); MT material bringing cadential function (mm. 119–122)



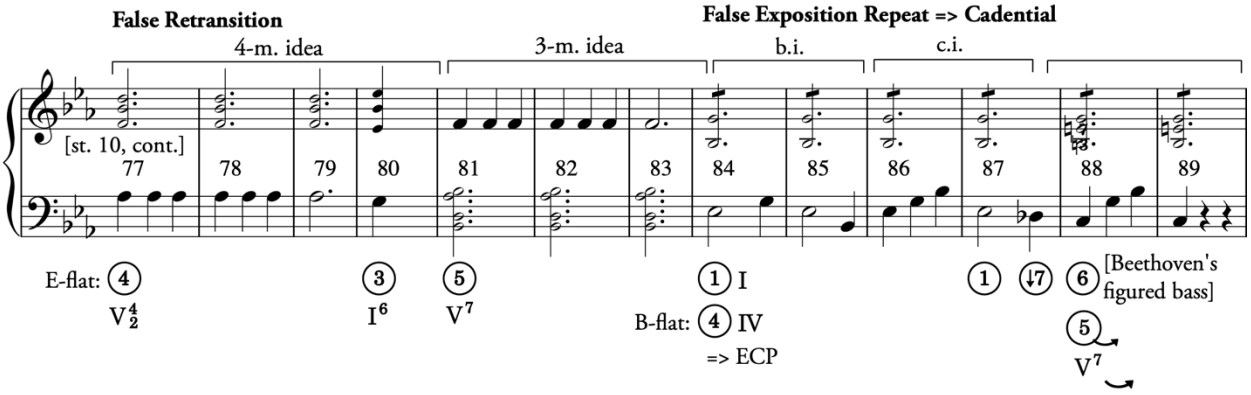
For another instance of Beethoven using similar material to build different functions, consider the repeating quarter-notes that characterize the final subordinate theme 2, part 1's compound presentation (Example 358). As was discussed in the summary above, this material first originated in branch 1.1 (Example 359). Originally, it expressed dominant harmony in the home key and thus brought characteristics of a retransition. In the next branch 1.2 (Example 360), Beethoven changed the repeating notes to express tonic harmony in the subordinate key. By changing the implied harmony, the material expressed a new function, namely, a closing section that, when repeated, brought the initiating function of a new subordinate theme 2. Once he decided to use the repeating quarter note material as a reinterpreted compound presentation, and thus the start of a second subordinate theme, Beethoven experimented with several different ways to realize the CBI repeat. In branch 1.2 (Example 360, mm. 95–98) the varied repeat suggested an applied dominant of the subdominant. In CS 2.0 (Example 361, mm. 88–92), he repeated the CBI as a response. In CS 3.0 (Example 362), the CBI repeat expressed supertonic harmony. He even experimented with using the CBI repeat to express D-flat harmony (♭III) in the 3.1 branch (Example 363, mm. 97–100). Ultimately, he selected one of his earlier designs, that is, the version that brought supertonic

harmony (compare the final Example 358, mm. 87–90 with the CS 3.0 version in Example 362). In every instance, the general shape of the repeating quarter-note material was fixed, but its functional expression varied because he changed the implied harmony. In short, the music that brought a retransition in an early sketch developed into a new subordinate theme, part 1 in a later draft.

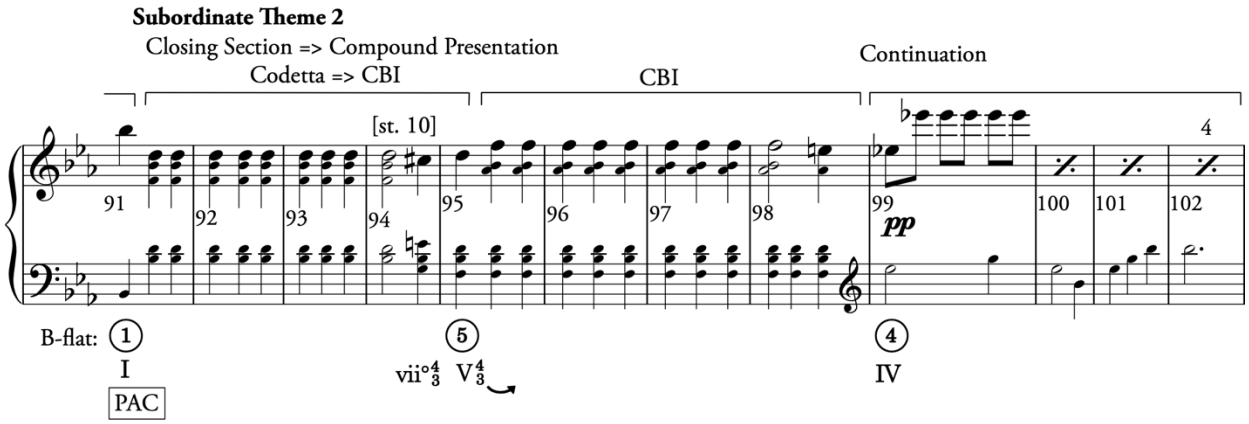
Example 358: Op. 55, I., mm. 83–90



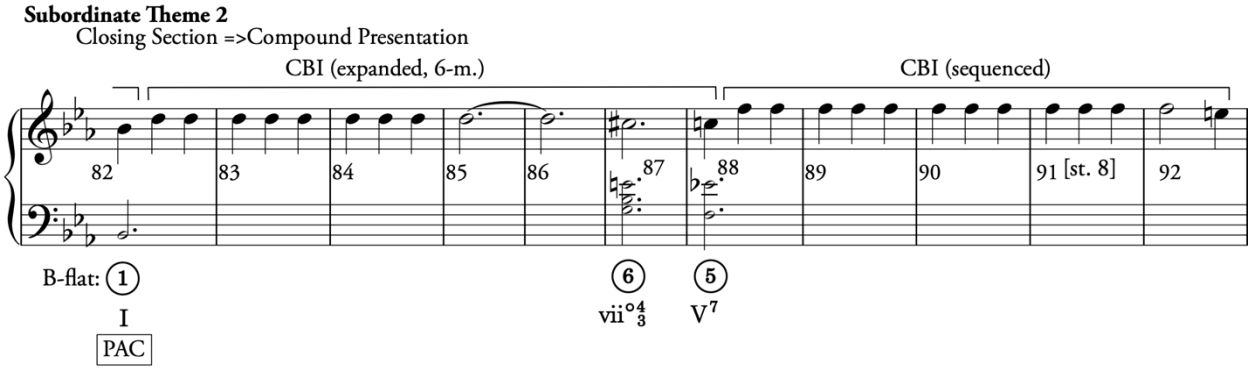
Example 359: Branch 1.1, mm. 77–89 (*ES* p. 11, st. 10)



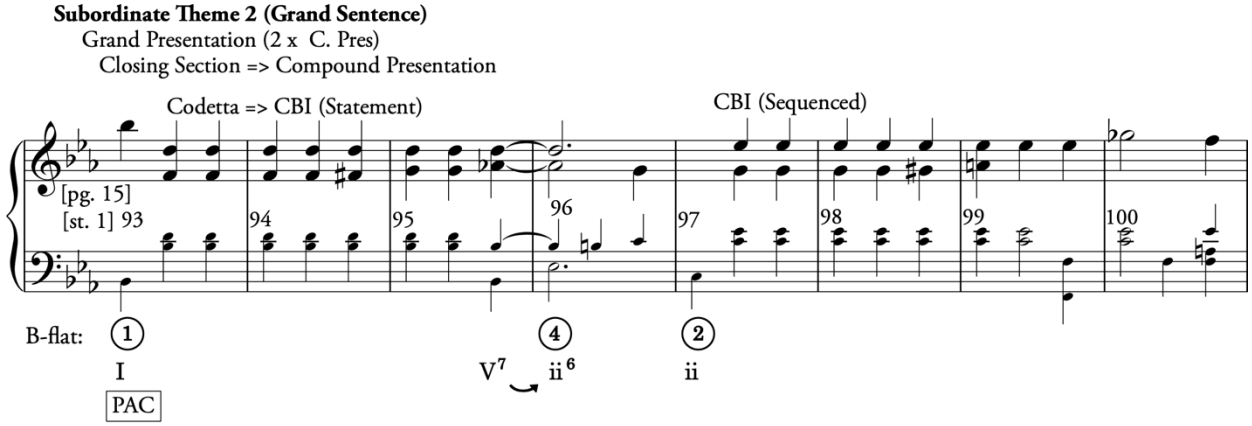
Example 360: Branch 1.2, mm. 91–102 (*ES* pg. 10, st. 9–10)



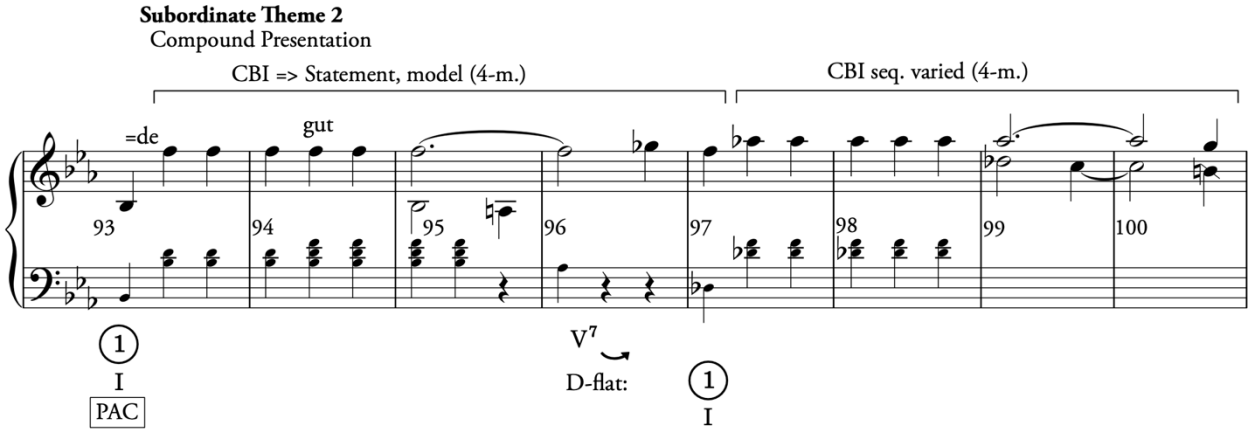
Example 361: CS 2.0, mm. 82–92 (*ES* p. 12, st. 7–8)



Example 362: CS 3.0, mm. 93–100 (*ES* pg. 15, st. 1)



Example 363: Branch 3.1, mm. 93–100 (*ES* p. 15, st. 15)

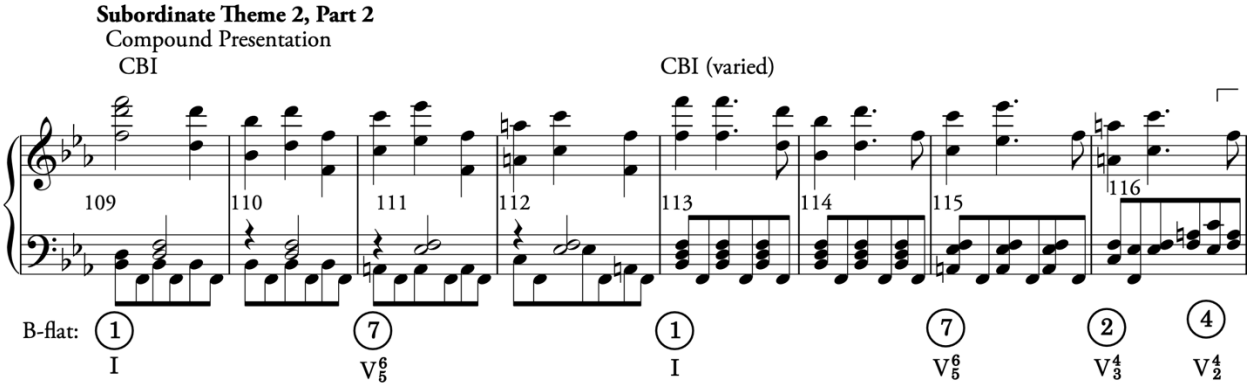


9.3.2 Persistent Functions and Variable Material

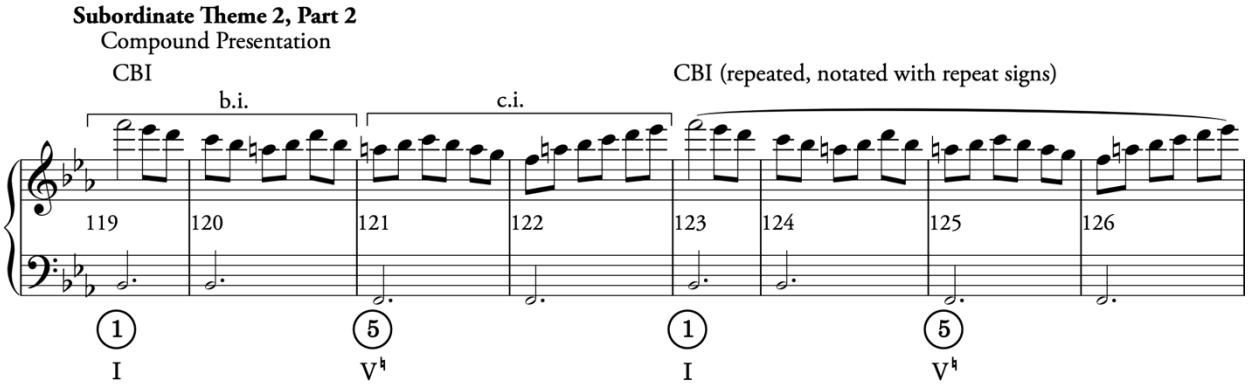
Now that we have considered how Beethoven used persistent material to build different functions, let us consider some instances where a function persisted but its material content varied. Consider the subordinate theme 2, part 2 compound presentation (the final version is shown in Example 364). Once Beethoven decided that he would use a new compound presentation, he experimented with

several different ways to generate this function. Although the general character of this function was similar in each sketch, he tried a version built with running eighth notes (3.2.2, Example 365), and several others (Example 298) that varied the triadic CBI gesture, including a version built with main theme material (4.1.1). It is clear, therefore, that the function, a compound presentation, was fixed, but the material that would generate that function could change.

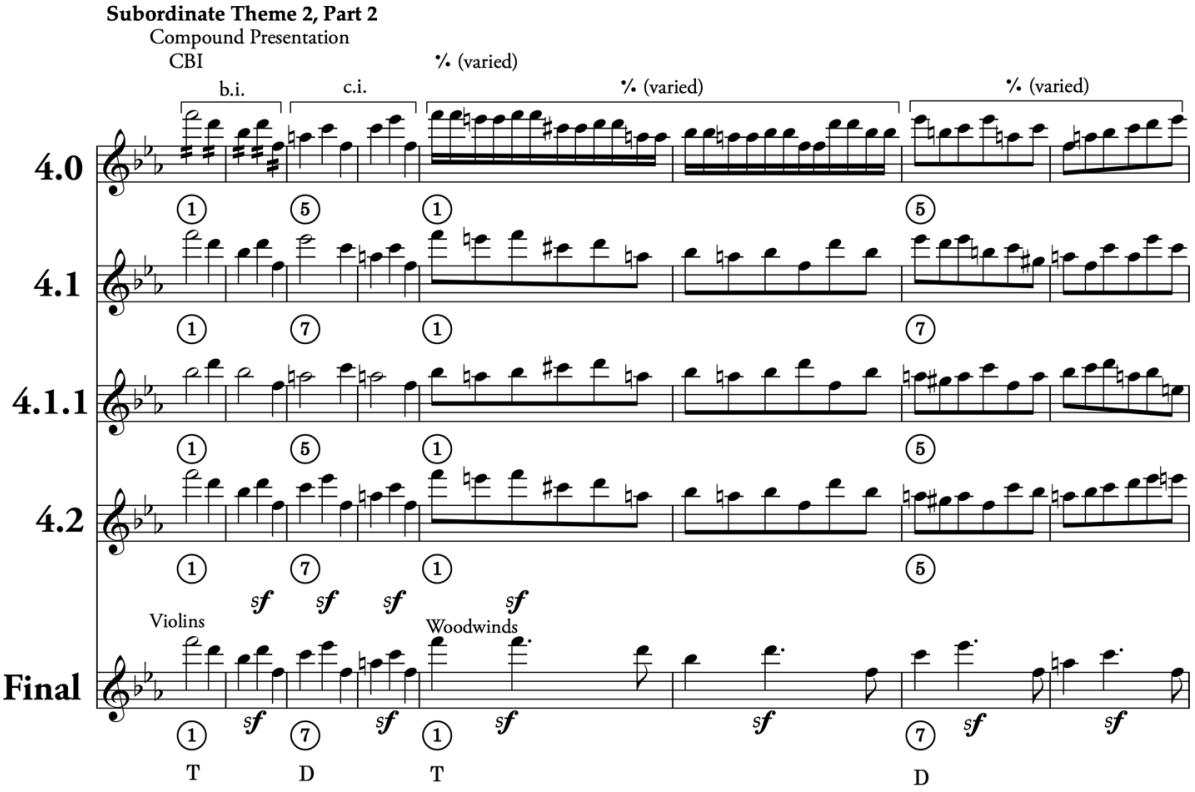
Example 364: Op. 55, I., mm. 109–116; Subordinate Theme, Part 2, Compound Presentation



Example 365: 3.2.2 (*ES* pg. 18, st. 6)

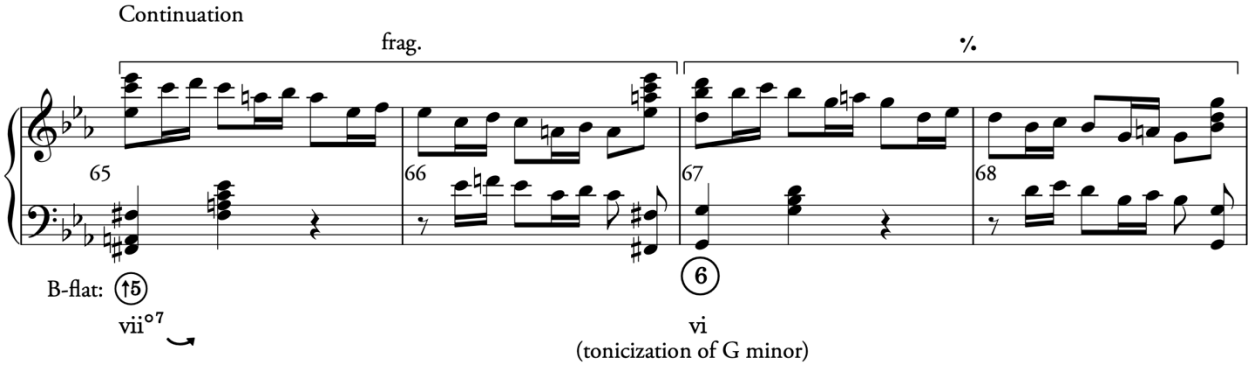


Example 366: 4 Series: ST2 P2 Compound Presentation

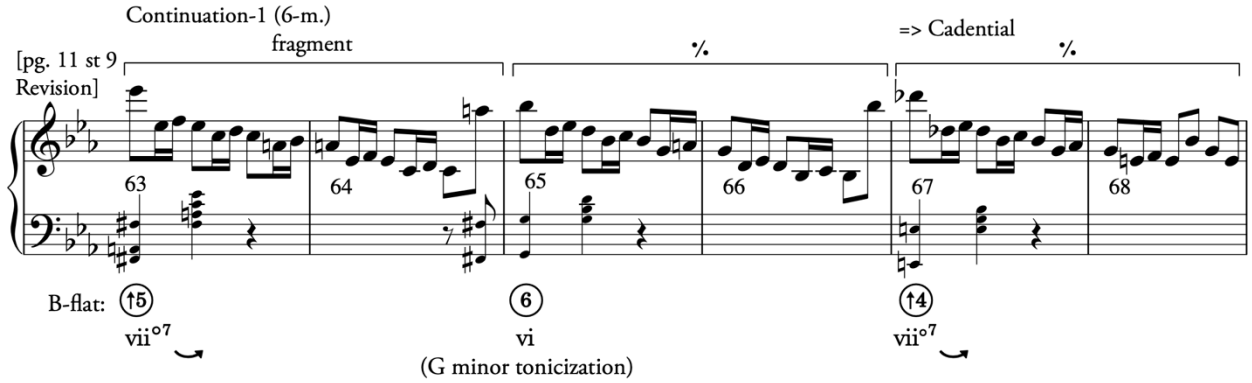


For another instance of Beethoven fixing a function but varying the material, consider how the subordinate theme 1 continuation developed in the sketches (an incipit of the final version of this material is shown in Example 367). Although he sketched material that corresponds with the final version very early in branch 1.1 (Example 368), he experimented with several alternatives including one that used compound presentation material (branch 1.2, Example 369). He also tried starting the continuation with different harmonies—e.g., the dominant in CS 2.0, (Example 370, mm. 65–66)—before he eventually returned to his first design (i.e., branch 1.1, shown in Example 369). In every instance, he knew that he wanted to follow the subordinate theme 1 compound presentation with a continuation (and not a cadential function), but he was willing to experiment with different ways to express that function. These alternatives included different material and harmonies.

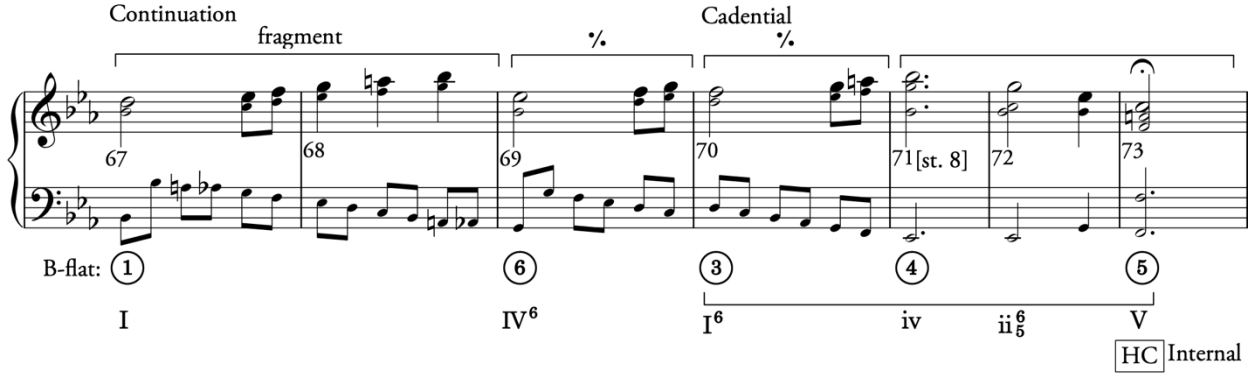
Example 367: Op. 55, I., mm. 65–68; Subordinate Theme 1, Continuation



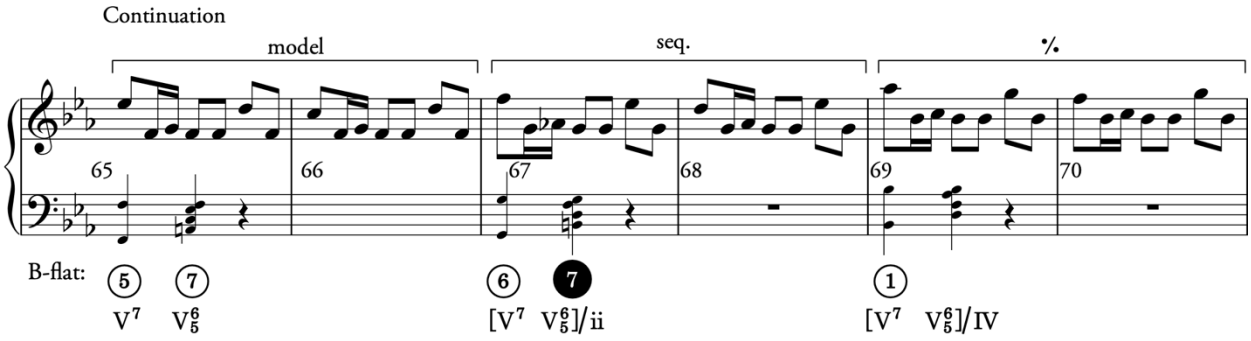
Example 368: Branch 1.1, mm. 63–68; corr. final ST1, Continuation (*ES* p. 11, st. 9)



Example 369: Branch 1.2, mm. 67–73; corr. final ST1, Continuation (*ES* p. 10, 7–8)



Example 370: CS 2.0, mm. 65–70; corr. final ST1, Continuation (*ES* p. 12, st. 5)

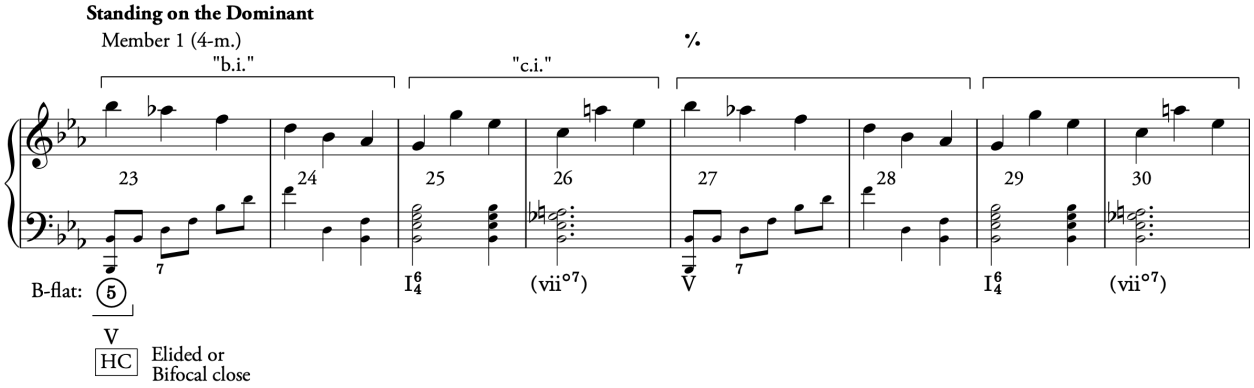


9.3.3 Final Observations

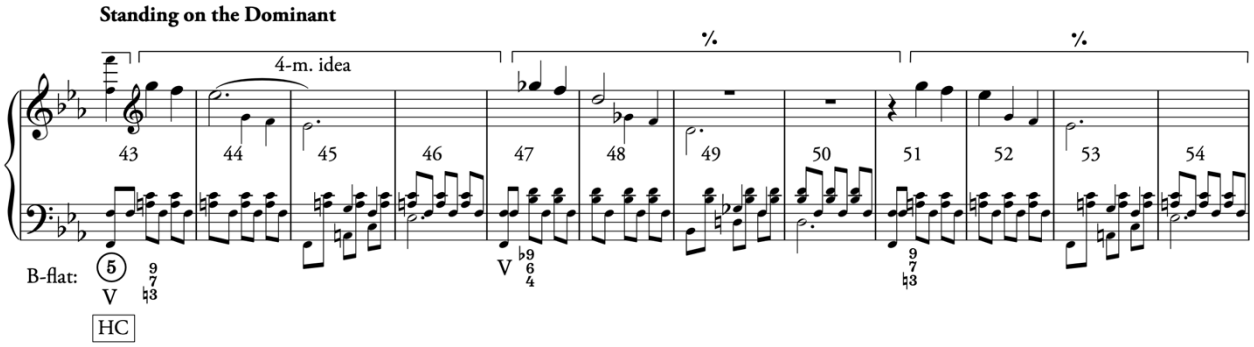
In general, the sketches suggest that Beethoven composed roughly in terms of units that correspond to phrase functions. In the earliest stages, these functions were nominally 4-m. units and many of the larger initial phrase-functions were formed with repetition. Example 371 shows some especially clear instances of these designs; in each, note how a 4-m. unit is repeated to create a larger phrase function. The sparsely notated SotD (Example 371B) is especially notable because it suggests that he sometimes framed larger structures before animating them with more dynamic material. The 1.0 SotD is the only instance of an outlined function, however. In most cases, he defined the phrase structure with material. This material may have had various flaws—excessive repetition or harmonic stasis (see Example 349 above)—but it was vital for shaping the overall form of the work.

Example 371: Larger Phrase Functions Formed by Repetition of 4-m. Units

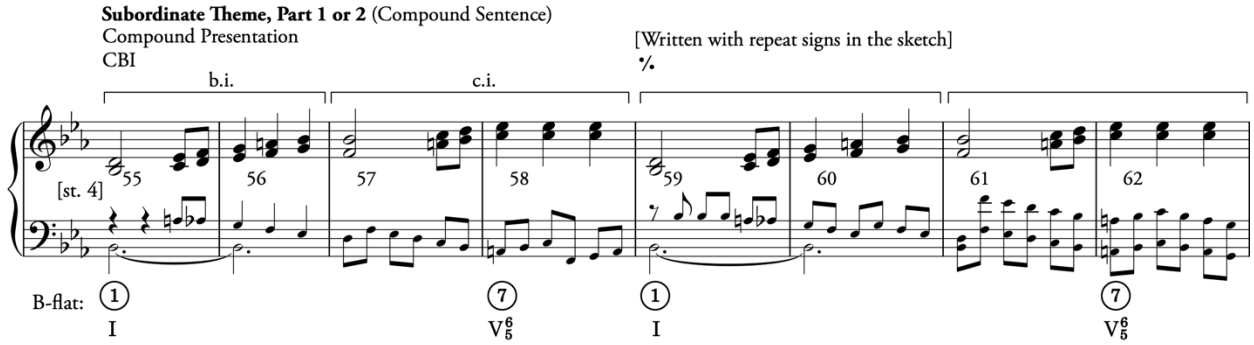
A. CS 1.0, mm. 23–30 (*ES* p. 11, st. 2)



B. CS 1.0, mm. 43–54 (*ES* p. 11, st. 3)



C. CS 1.0, mm. 55–62 (*ES* p. 11, st. 4)



Caplin's theory of formal functions offers a viable and productive way to study Beethoven's sketches. To use the theory, however, one must be willing to interpret Beethoven's compositional intentions by realizing the implied basslines, harmonies, and so forth. We can frequently perform this task with a high degree of objective accuracy, because the process is made easier when there are many variants and a final piece to compare with. Some areas in the sketches are more difficult to interpret, however. In some branches, it was not entirely clear what Beethoven was intending; perhaps even he himself may not have known. But in general, these difficult areas are less prominent

than one might expect. In most instances, it was possible to interpret the harmonies and thus formal functions that Beethoven intended with his continuity voice. This analysis proved highly valuable, because it allowed us to closely compare sketches and interpret Beethoven's compositional process.

9.4 Conclusion and Directions for Future Research

We have now reached the end of this study. We have learned that Beethoven's *Eroica* exposition sketches do not merely show a continuous or teleological process of refinement. Rather they depict a form that takes shape after many detours, variants, and combinations thereof. In the earliest stages of drafting the exposition, Beethoven's primary goal seems to have been to lay out the large-scale form of the piece by realizing several pre-compositional plans. These plans likely included certain material that he had improvised upon, tonal relationships, and broader rhetorical ideas such as the goal to expand the exposition without introducing a characteristic, lyrical theme.

In general, we do not get the sense from the sketches that Beethoven tinkered excessively on passages, improving them step by step. Rather, his method is better characterized as one that involves composing multiple variants of a passage, selecting his favorite solutions, and combining the best features from multiple versions. His process is more like a Darwinian survival of the fittest—pitting multiple variants against each other—rather than gradual linear evolution. This method of composing seems to be inspired by a compositional practice that Beethoven likely learned in Bonn: multiple bass chorale settings.[221] Just as Beethoven would have learned how to compose multiple bass lines to a given chorale,[222] he seems to have composed multiple realizations of a compositional idea, then selected his favorite realization and synthesized their best features to make a new design. This design might then have undergone further changes and experiments: we saw, for instance, that he did not always choose the final version that he sketched.

This study focused exclusively on the *Eroica* exposition sketches because of their historical value, scholarly interest, and abundance. Beethoven's numerous exposition sketches allowed extensive and rich comparisons. Future research may shed light on whether the processes and interpretations developed in this study apply more generally to his compositional process throughout his life. As more of Beethoven's sketches have become available through high quality

[221] On multiple bass chorale settings in Bach's thoroughbass pedagogy, see (Remeš 2019a; 2020, 175–98).
[222] For Beethoven's study of multiple bass chorales, see (Kramer 1975, 76–86). Beethoven likely studied Kirnberger's multiple bass chorale settings written in his *Die Kunst des reinen Satzes*. Kirnberger's multiple bass setting can be found in (Kirnberger 1968, 3-40 Pt. II, Erste Abtheilung).

transcriptions, future analysis will surely bring new insights. Studying Beethoven's sketches will not only teach us about how he created the pieces the sketches document, but his compositional style more generally.

If we are interested in understanding how composers create the works that inspire us, then our primary purpose should be to figure out *why* the composer wrote what they did. Description is the first part of this process, but ultimately, we want more. We want our interpretations to be explanatory. Functional analysis, particularly form-functional analysis—provides a strong framework for achieving these aims because it allows us to establish the presence of a musical feature or relationship by appeal to its creator's intended function. It is argued here that the theory of formal functions offers a viable approach for probing Beethoven's compositional intentions through the analysis of his sketches. In short, sketch study offers a valuable approach for interpreting how composers compose.

The act of composing is an intersubjective practice, not a projection of an individual's private and unavailable subjectivity. Artworks are necessarily directed at others—they require a real creator and a real interpreter. To leave either of these out, to reduce a work to an autonomous score, is to dehumanize music. The natural sciences may hold a privileged position in the academy, but by excising a composer's intentions to examine their work as autonomous organisms, we abandon the human that characterizes the humanities. Once we accept that we wish to understand what Beethoven was intending in his sketches, we can begin to better interpret his compositional process for the piece.

Beethoven sketch studies may have had their heyday in the late twentieth century. But it is hoped that with new theories, questions, and transcriptions, new work will begin again. The study of these sketches is of value not only for biography, as Johnson or Nottebohm would have it, but for what it tells us about a composer's compositional process and even the final work. A phrase-structural analysis of the first two first-movement exposition continuity-sketches to the *Eroica* symphony reveals a myriad of interesting musical structures that improve greatly how we understand the compositional genesis of the *Eroica* and Beethoven's compositional process more broadly. Future studies will surely teach us more about the composer, his methods, and the classical style. With new transcriptions, questions, and theories, the stage is set for a renaissance of Beethoven sketch studies.

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ANALYZING BEETHOVEN'S EROICA SKETCHES:

A Form-Functional Perspective on the First-Movement Exposition

VOLUME 2: RECONSTRUCTED AND ANALYZED SCORES

By

Thomas William Posen

Advised by

Prof. William E. Caplin

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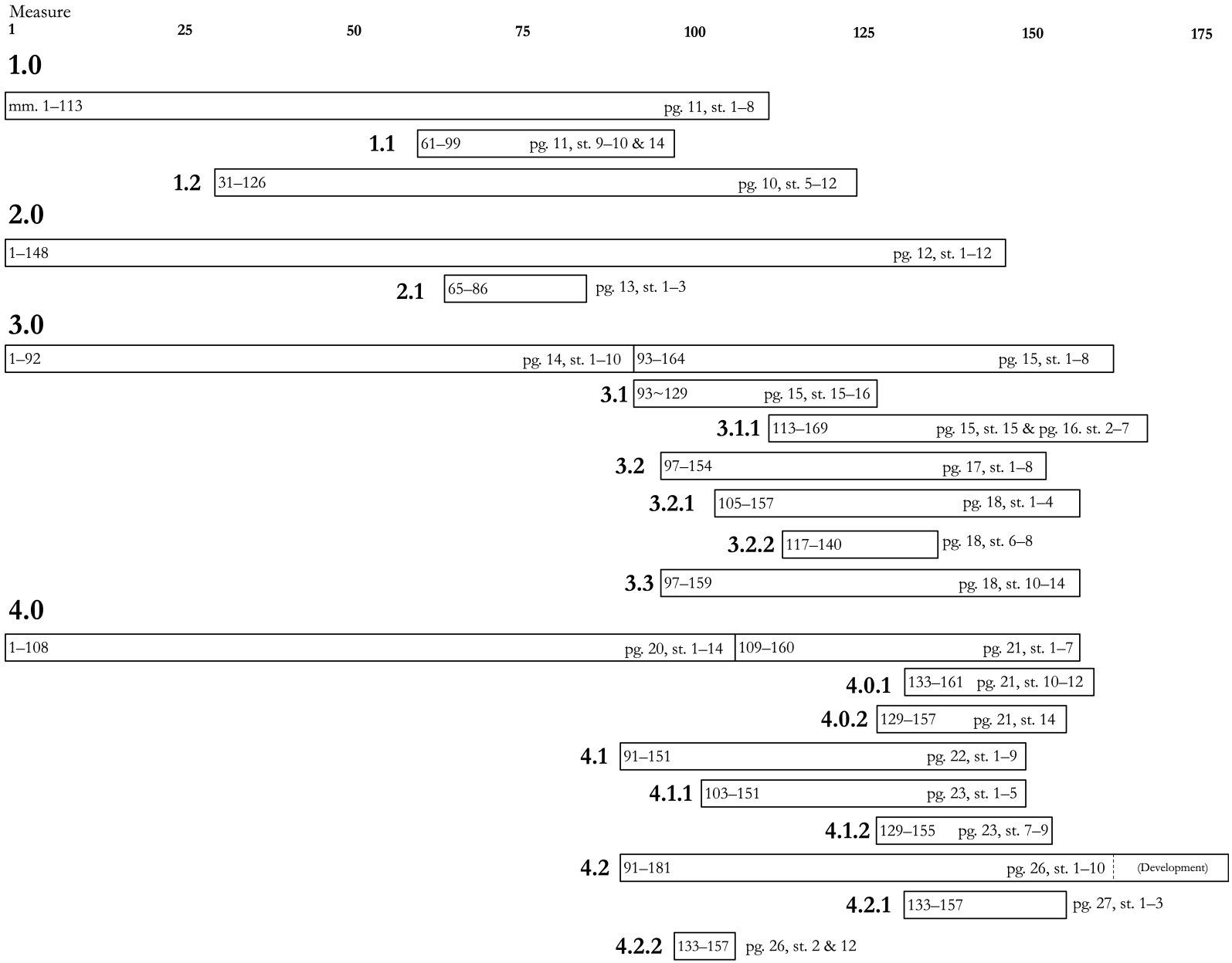
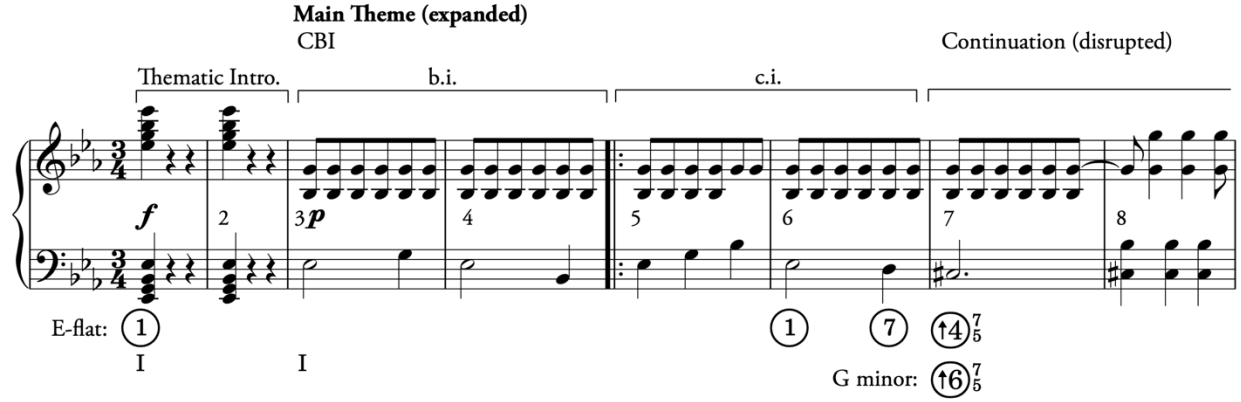
Exposition Sketches Diagram

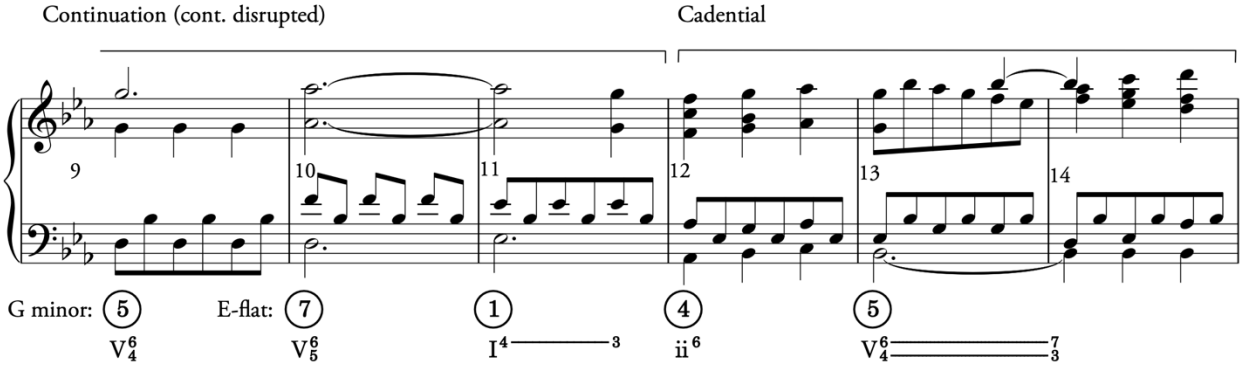


Piano Reduction

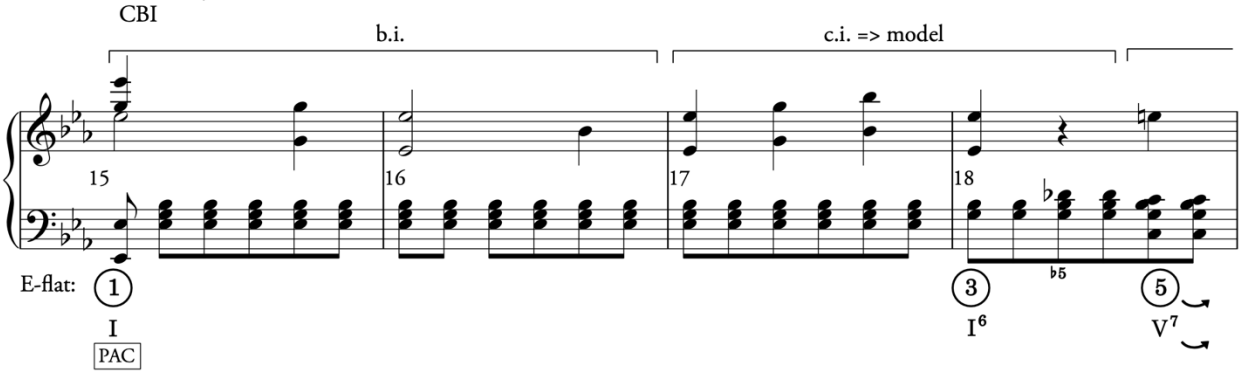
Op. 55, I., Exposition

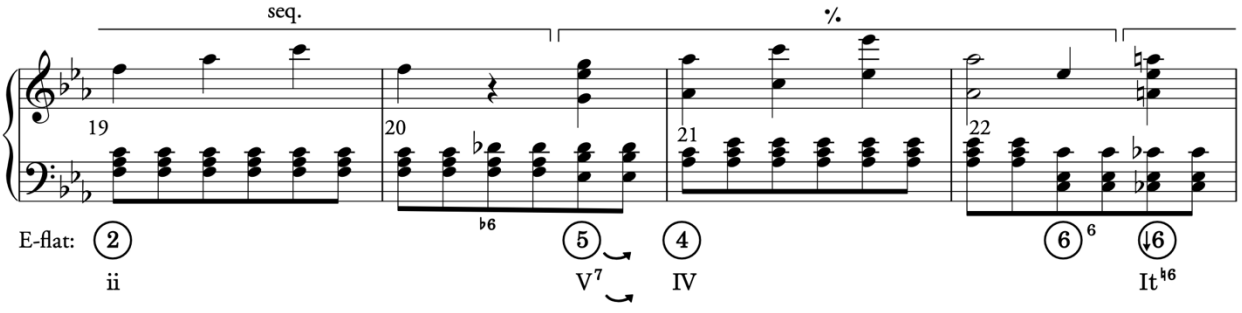
Main Theme (expanded)



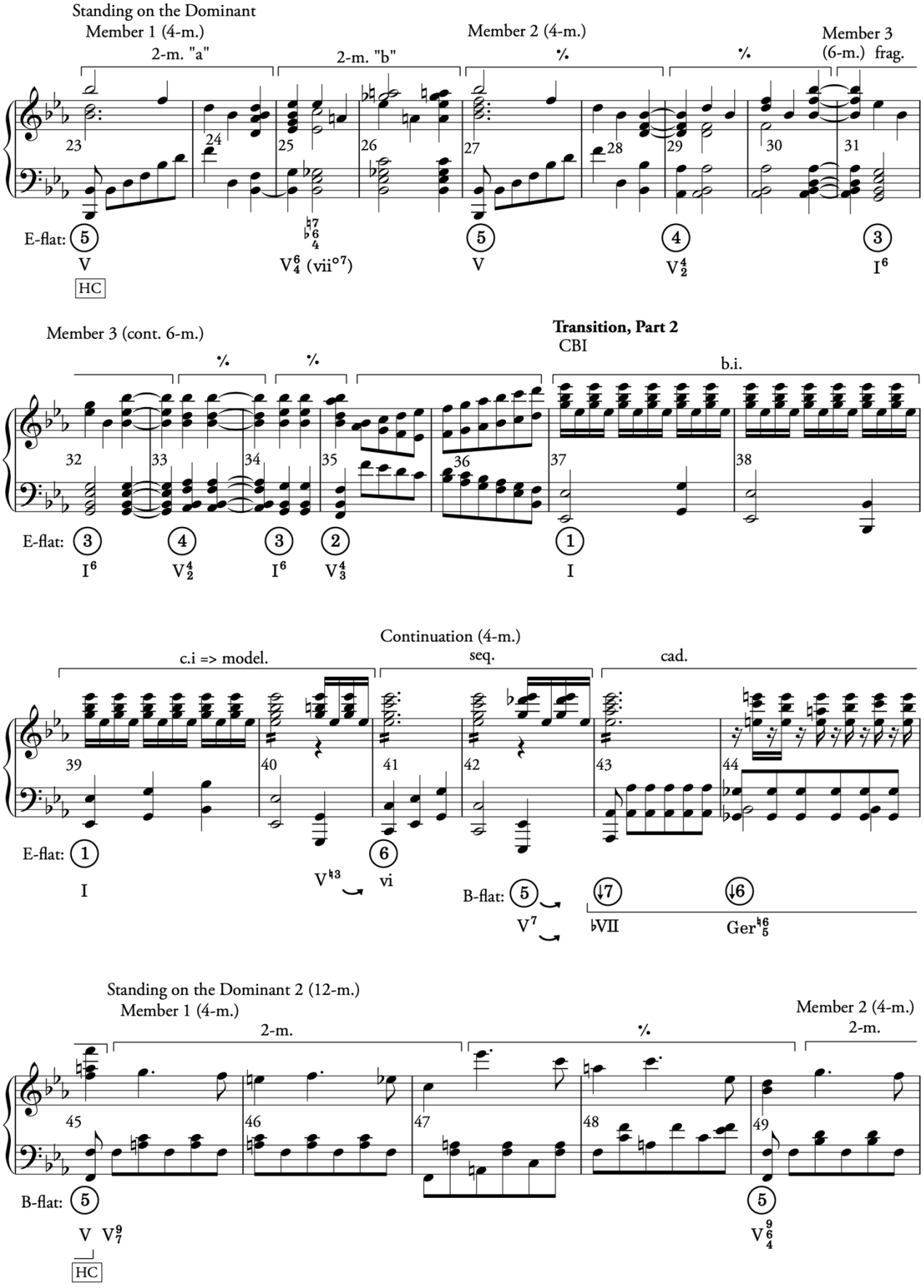


Transition, Part 1





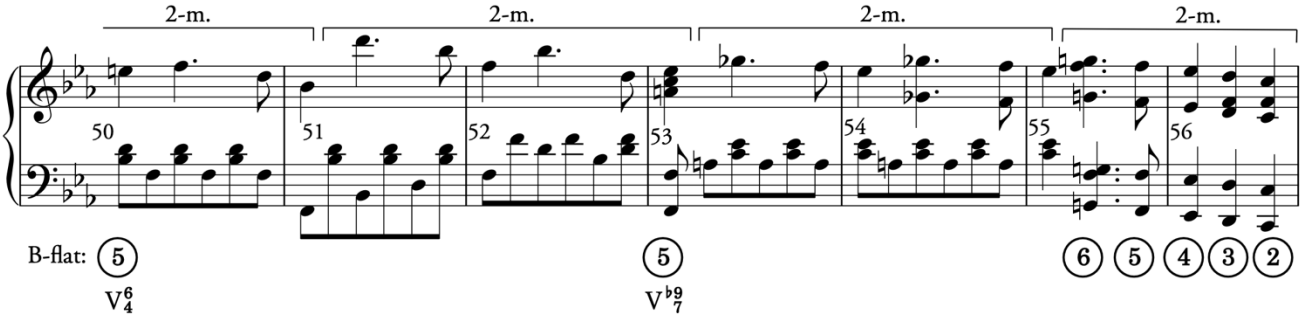
Piano Reduction (cont.)



Standing on the Dominant 2 (continued)

Member 2 (continued)

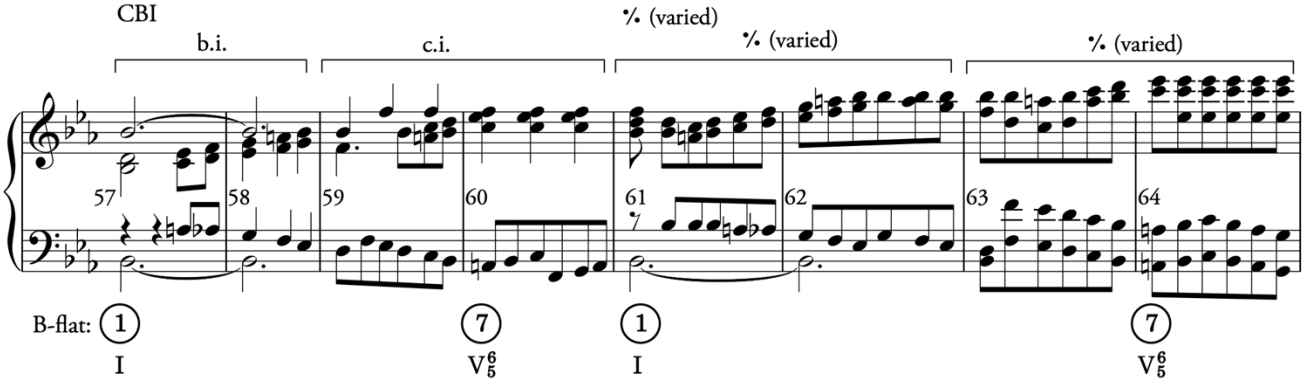
Member 1 (varied; 2-m + 2-m.)



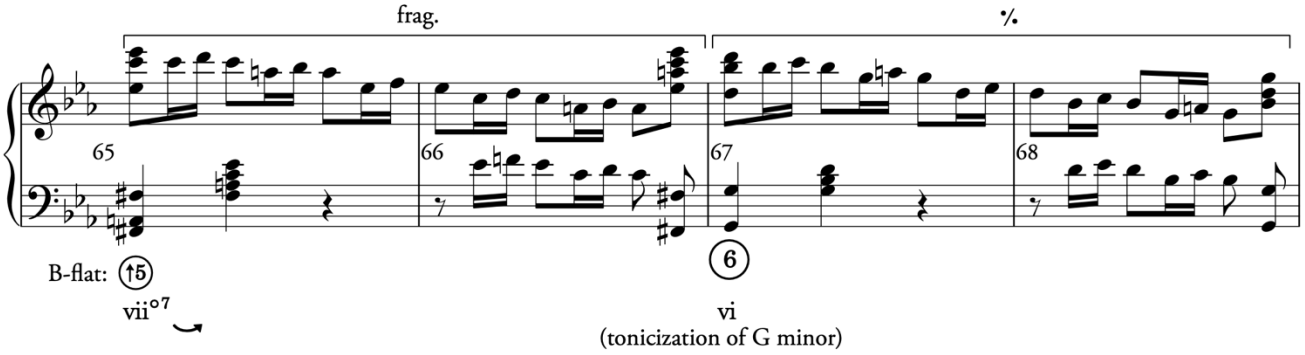
Subordinate Theme 1 (24-m.)

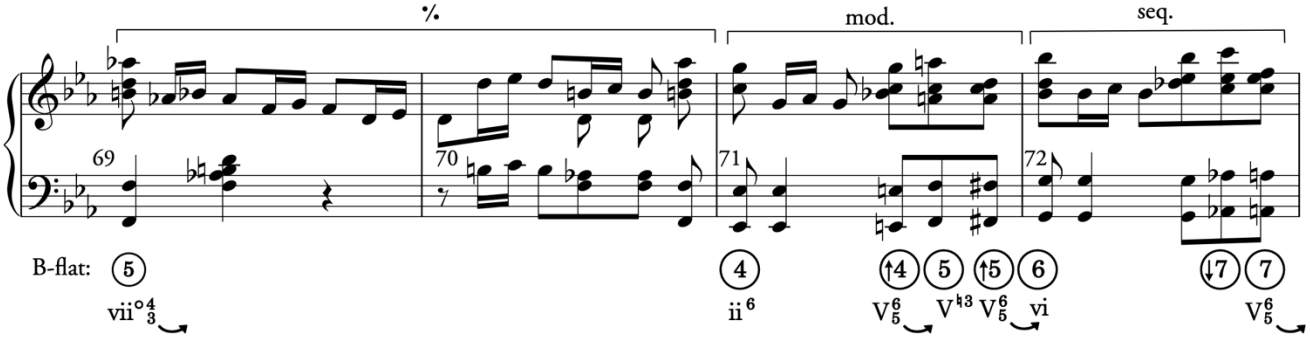
Compound Presentation (8-m.)

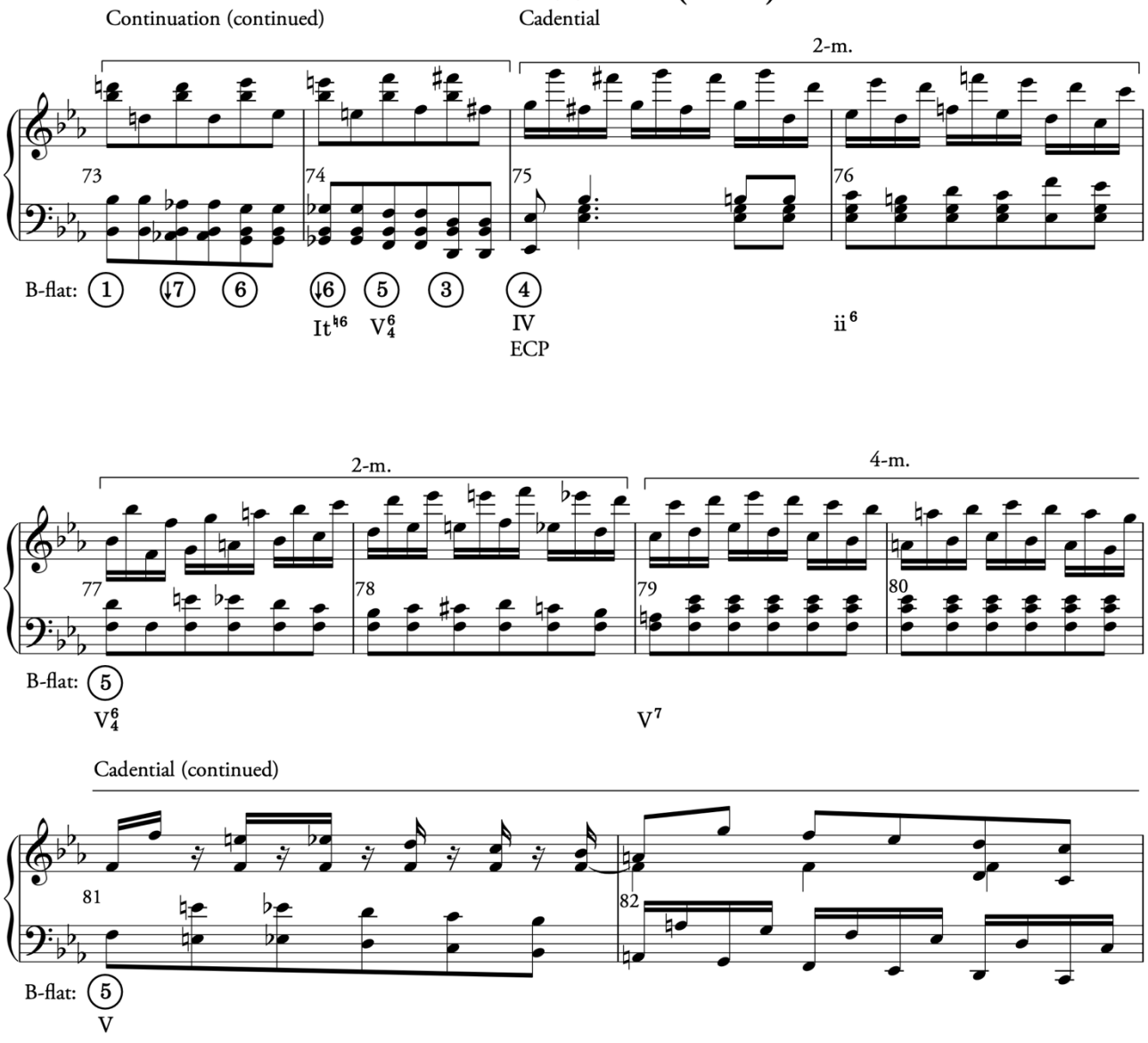
CBI

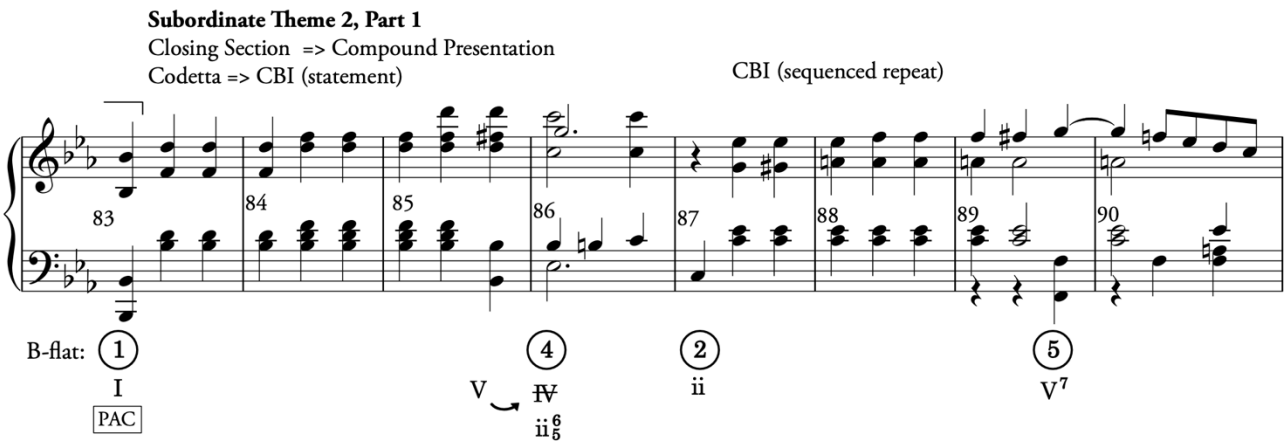


Continuation (18-m.)

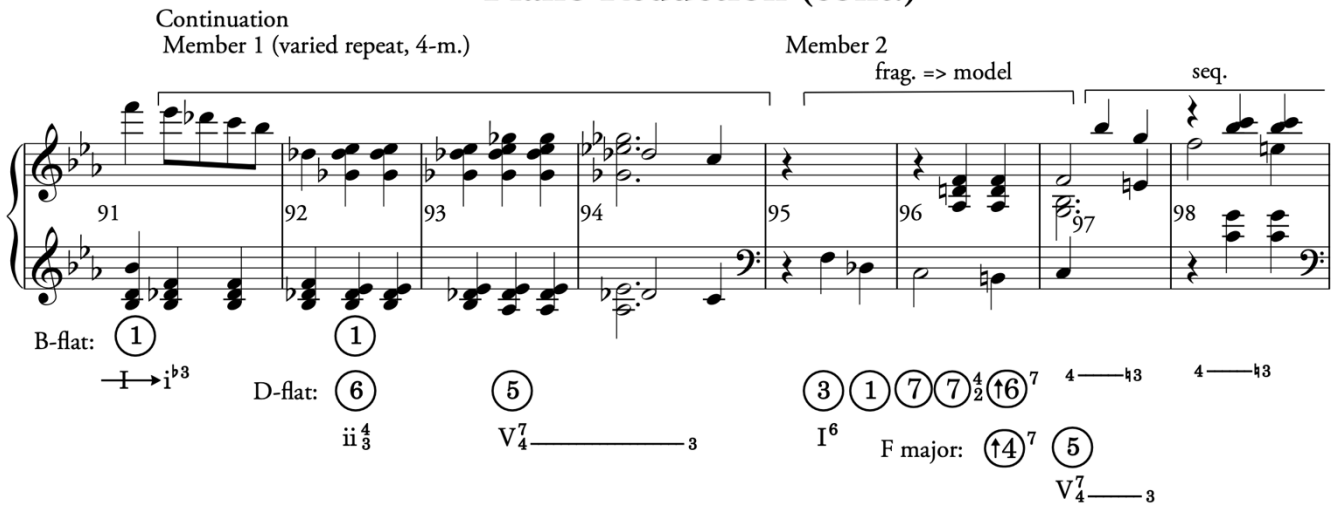


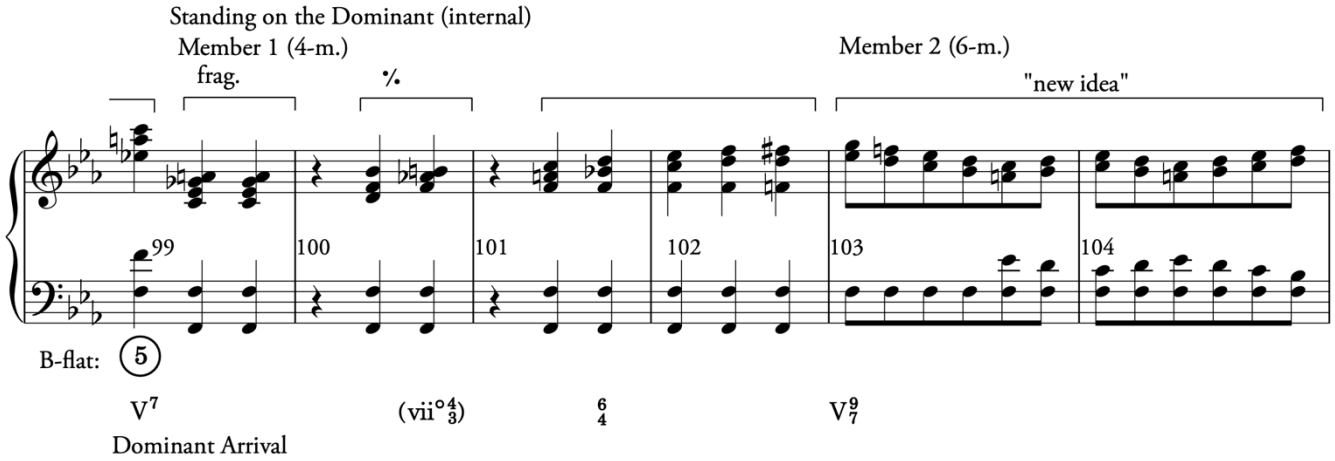


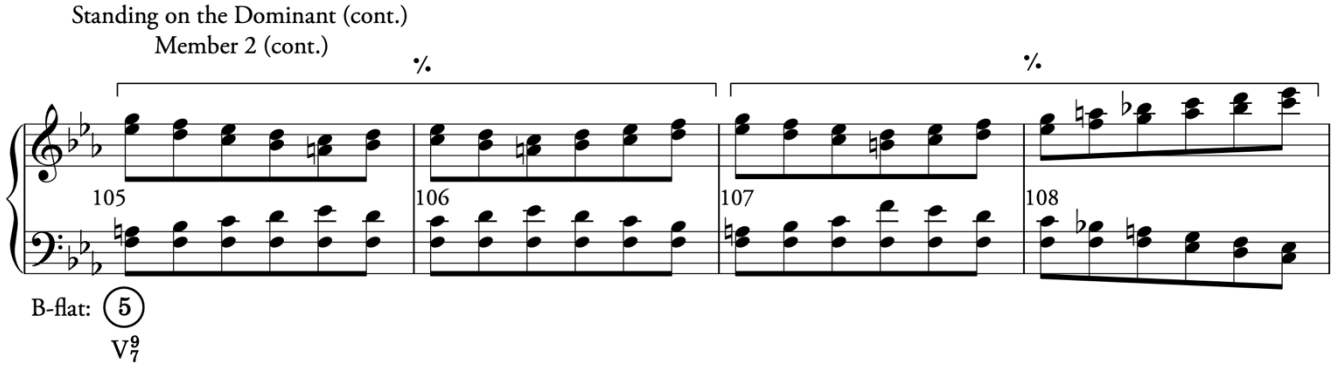

4
Continuation (continued)
Cadential
2-m.
73
74
75
76
B-flat: 1 ↓7 6 ↓6 5 3 4
It⁴⁶ V⁶₄
IV
ECP
ii⁶
2-m.
4-m.
77
78
79
80
B-flat: 5
V⁶₄
V⁷
Cadential (continued)
81
82
B-flat: 5
V


Subordinate Theme 2, Part 1
Closing Section => Compound Presentation
Codetta => CBI (statement)
CBI (sequenced repeat)
83
84
85
86
87
88
89
90
B-flat: 1 4 2 5
I
PAC
V
IV
ii⁶₅
ii
V⁷

Piano Reduction (cont.)



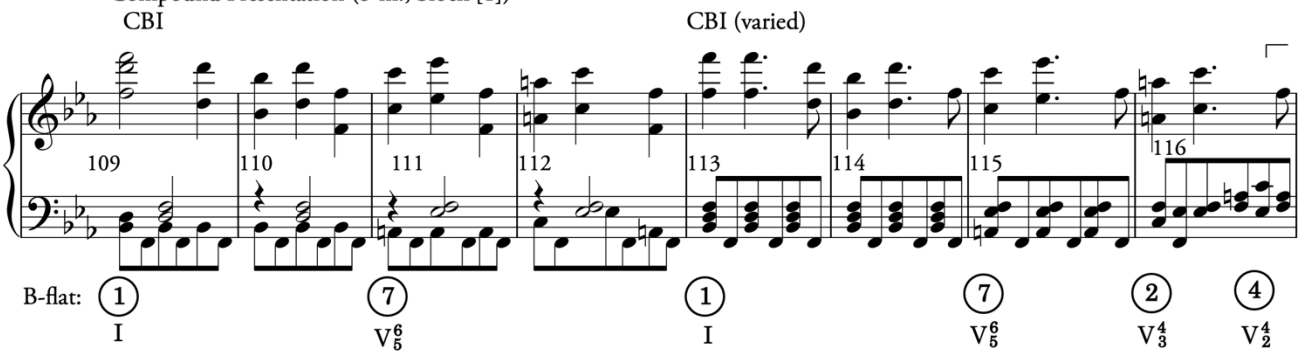




Piano Reduction (cont.)

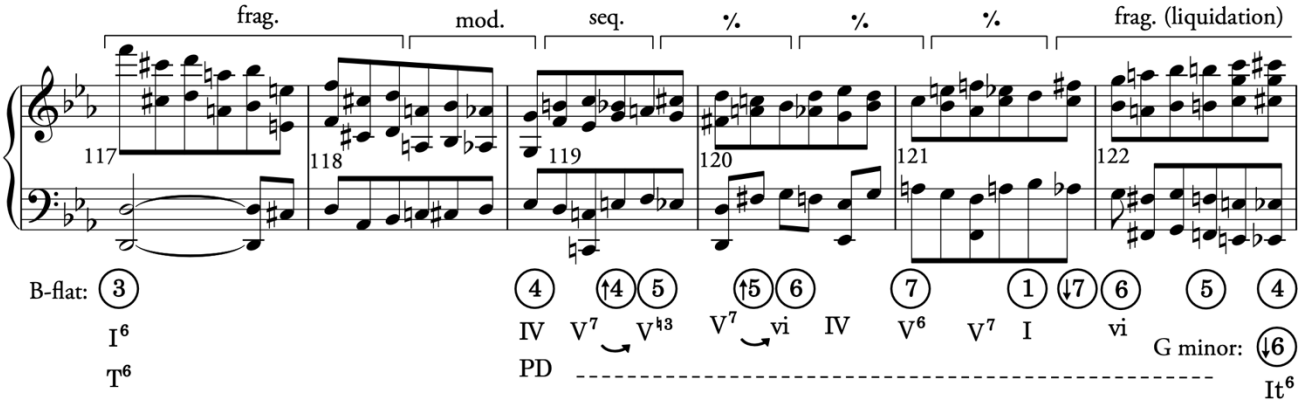
Subordinate Theme 2, Part 2

Compound Presentation (8-m., block [1])



Continuation 1

Member 1 (6-m., block [2])



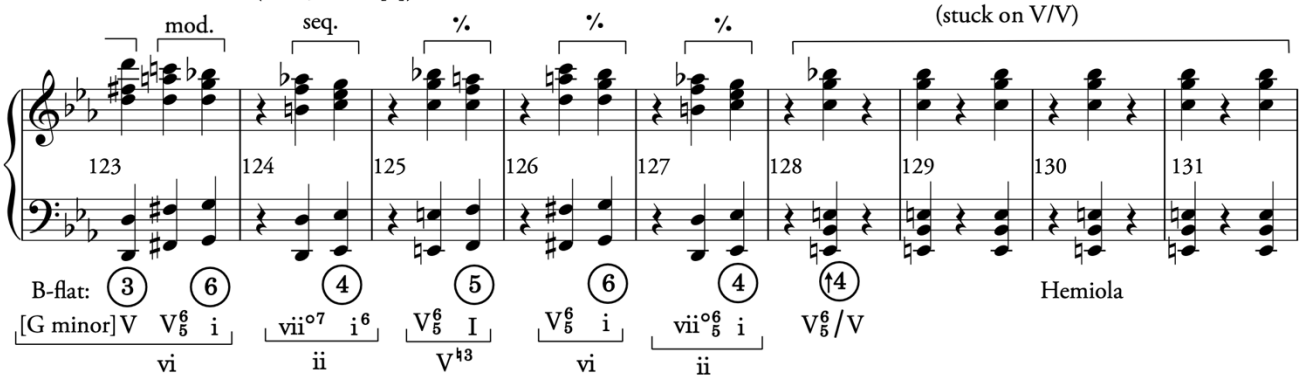
Continuation 1 (cont.)

Member 2 (5-m., block [3])

=> Cadential 1

Member 1 (4-m., block [4])

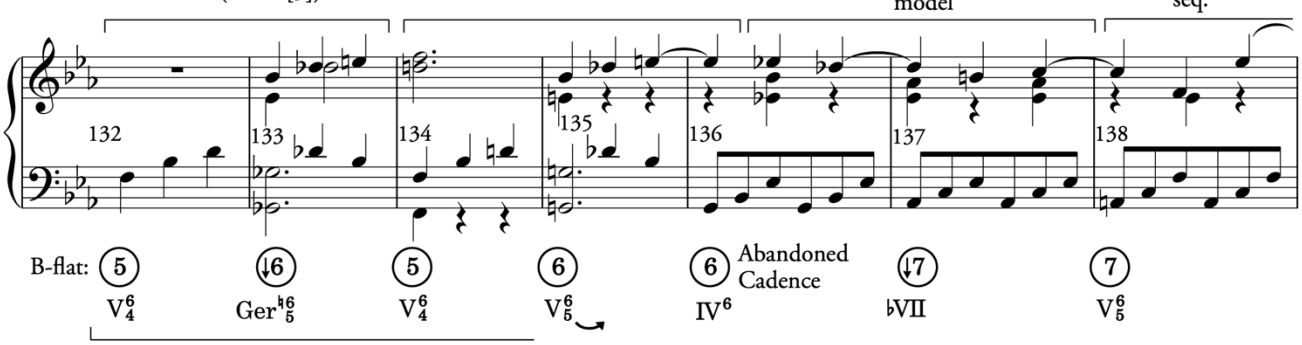
(stuck on V/V)



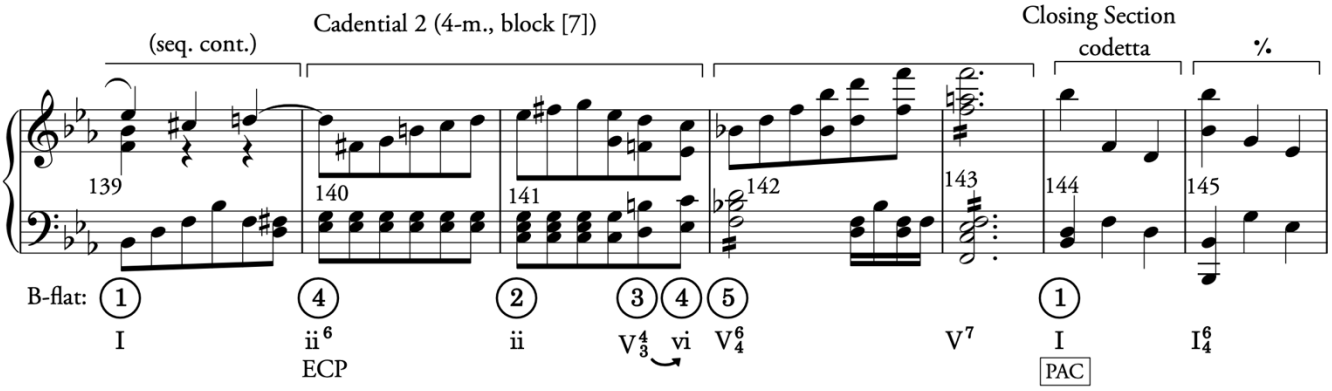
Cadential 1 (cont.)

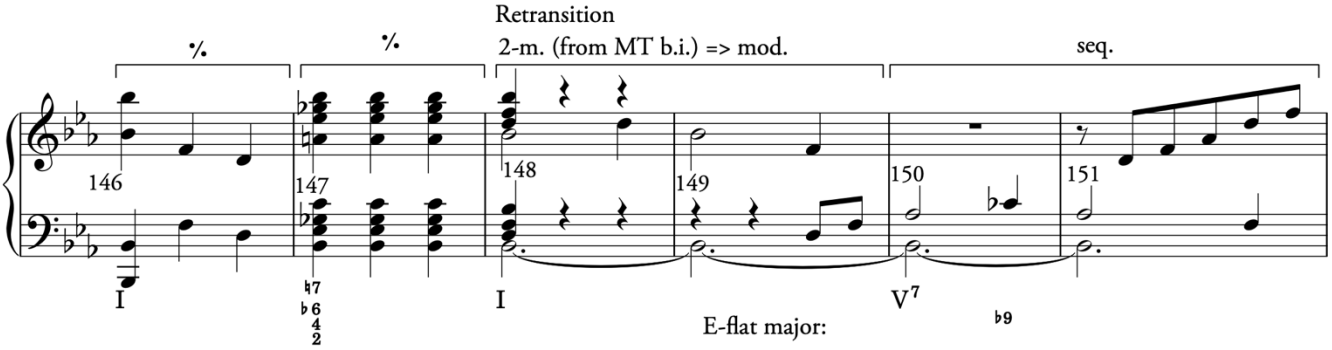
Member 2 (block [5])

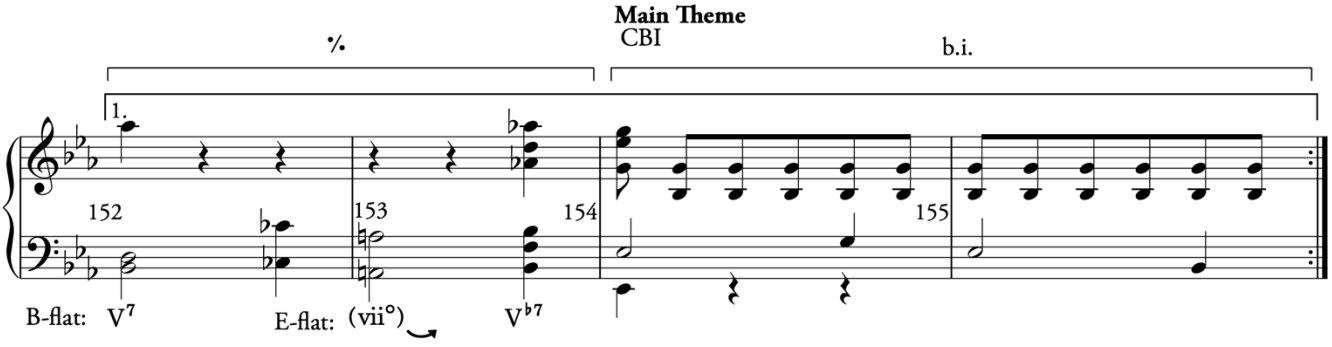
=> Continuation 2 (4-m., block [6])



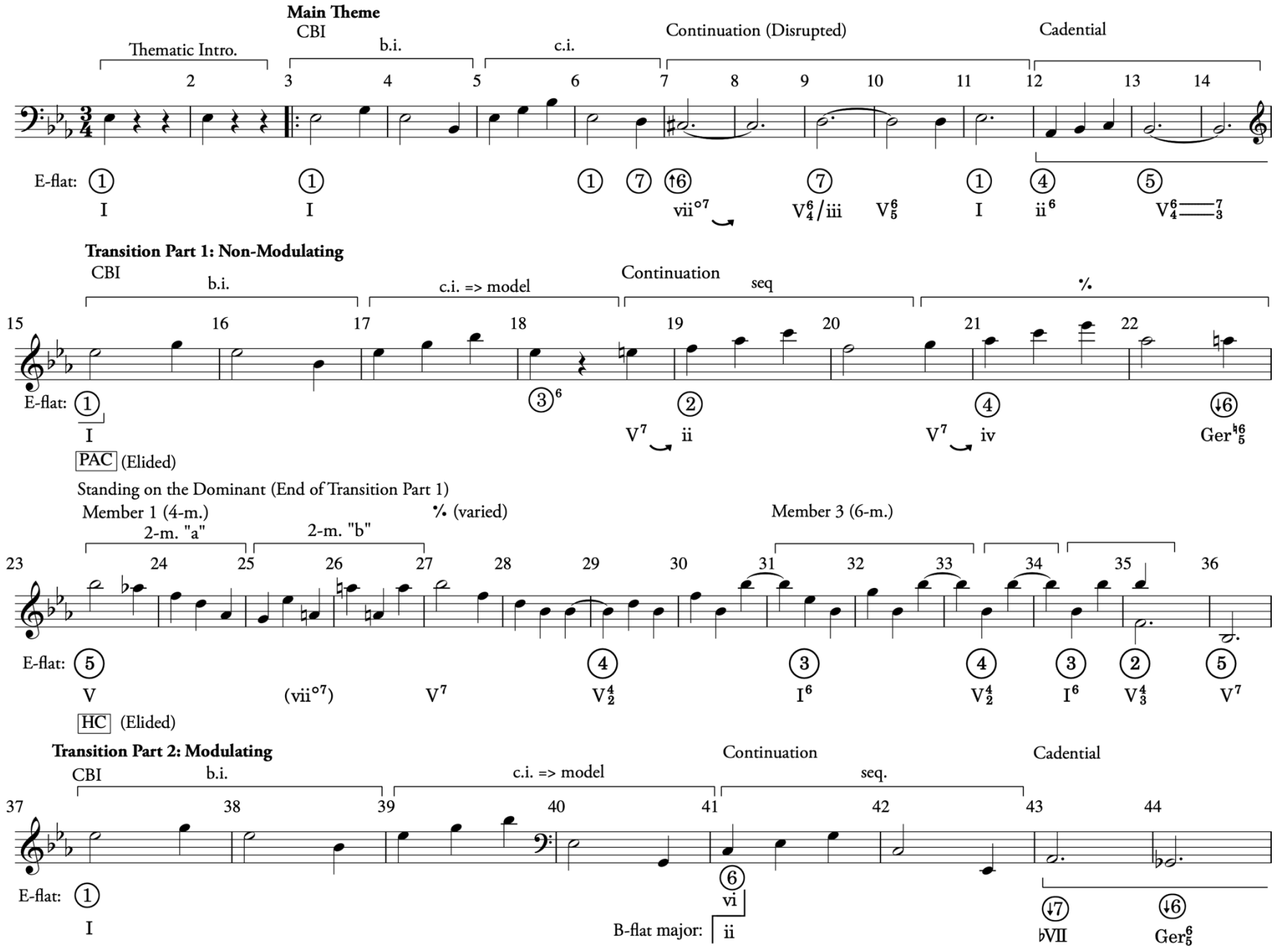
Piano Reduction (cont.)

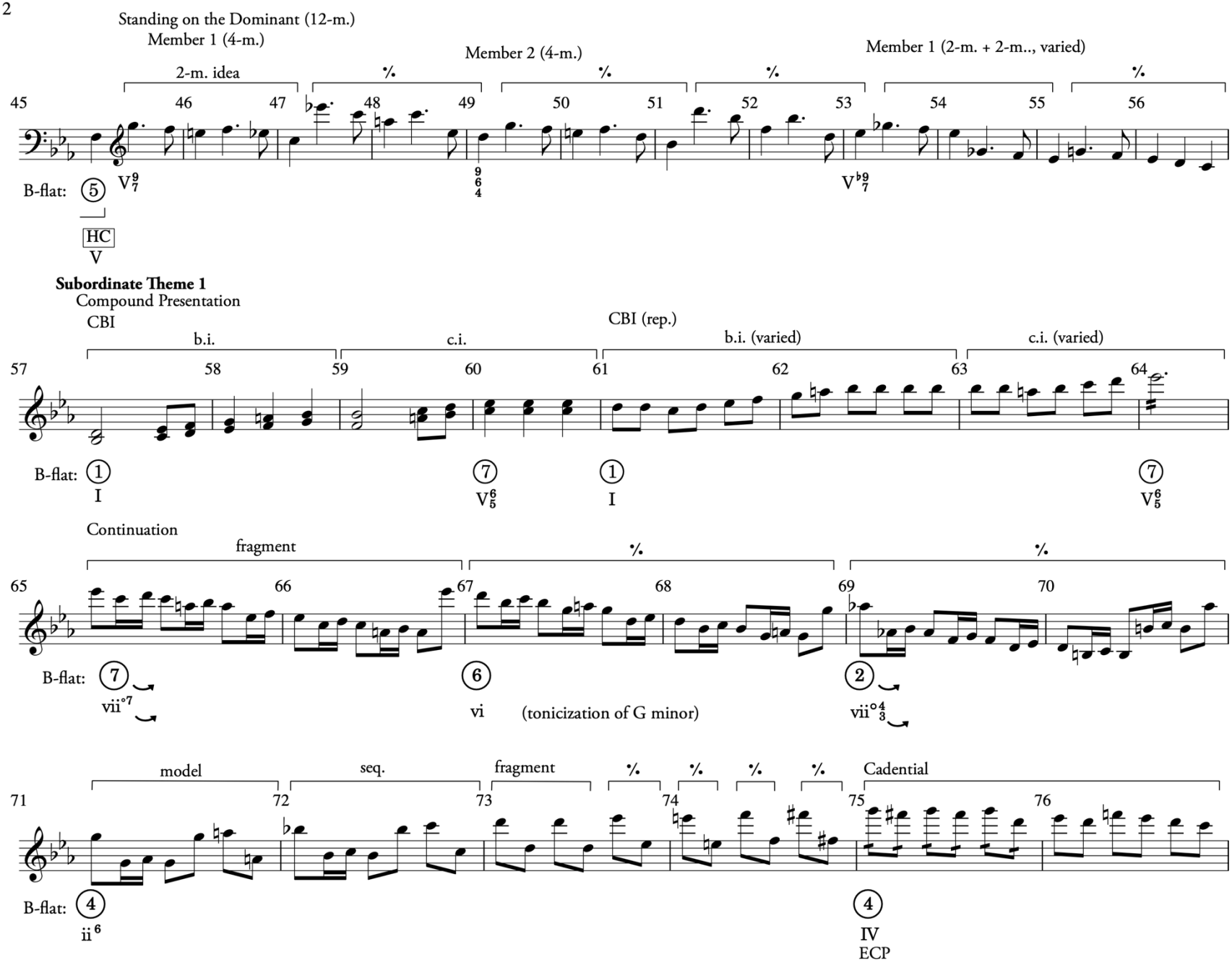


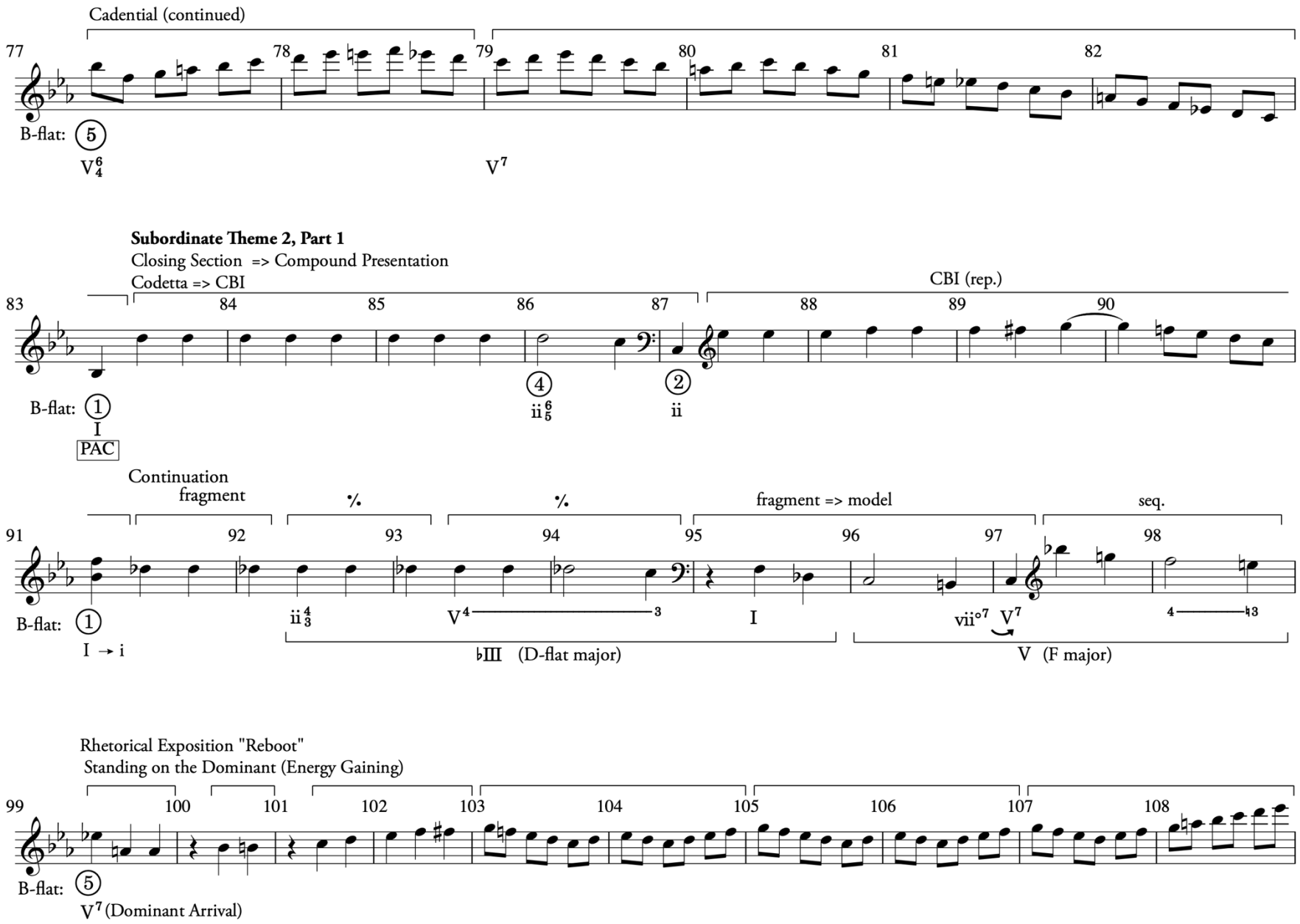




Cue Staff Reduction

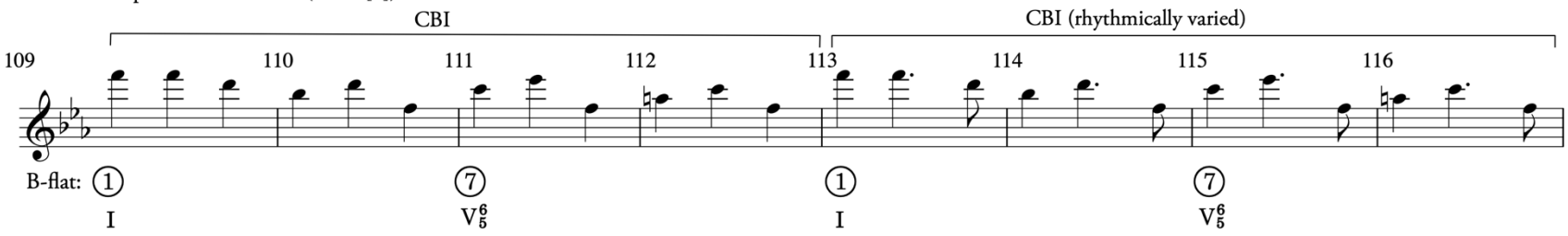



Standing on the Dominant (12-m.)
Member 1 (4-m.)
2-m. idea
Member 2 (4-m.)
Member 1 (2-m. + 2-m.., varied)
45 46 47 48 49 50 51 52 53 54 55 56
B-flat: 5
V
HC
V
Subordinate Theme 1
Compound Presentation
CBI
b.i.
c.i.
CBI (rep.)
b.i. (varied)
c.i. (varied)
57 58 59 60 61 62 63 64
B-flat: 1 7 1 7
I I
Continuation
fragment
65 66 67 68 69 70
B-flat: 7 6 2
vii°7 vi (tonicization of G minor) vii°4 3
model
seq.
fragment
Cadential
71 72 73 74 75 76
B-flat: 4 4
ii6 IV
ECP


Cadential (continued)
77
78
79
80
81
82
B-flat: 5
V 6 4
V7
Subordinate Theme 2, Part 1
Closing Section => Compound Presentation
Codetta => CBI
CBI (rep.)
83
84
85
86
87
88
89
90
B-flat: 1
I
PAC
4
ii 6 5
2
ii
Continuation
fragment
fragment => model
seq.
91
92
93
94
95
96
97
98
B-flat: 1
I → i
ii 4 3
V4 3
I
vii°7 V7
4 3
♭III (D-flat major)
V (F major)
Rhetorical Exposition "Reboot"
Standing on the Dominant (Energy Gaining)
99
100
101
102
103
104
105
106
107
108
B-flat: 5
V7 (Dominant Arrival)

Subordinate Theme 2, Part 2

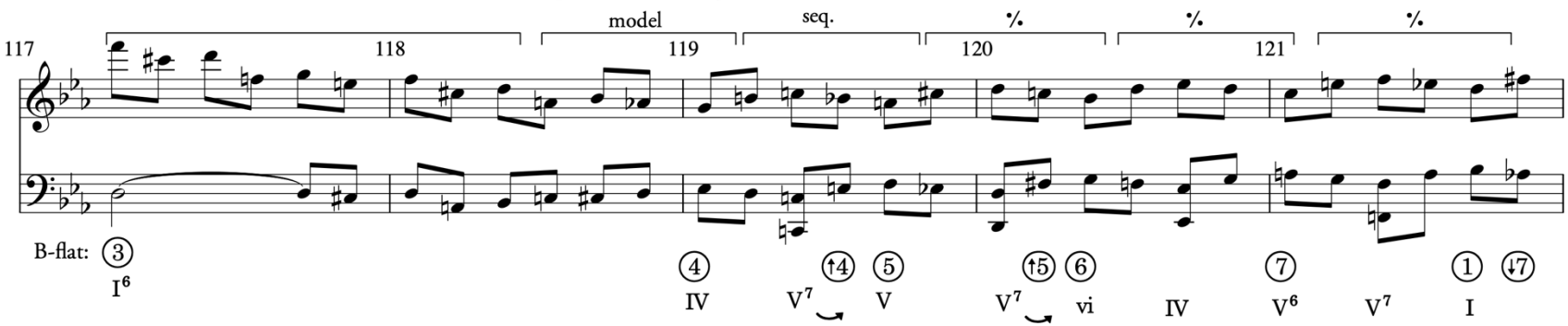
Compound Presentation (block [1])



Continuation

Member 1 (6-m., block [2])

Sequence 1 (ascending second)

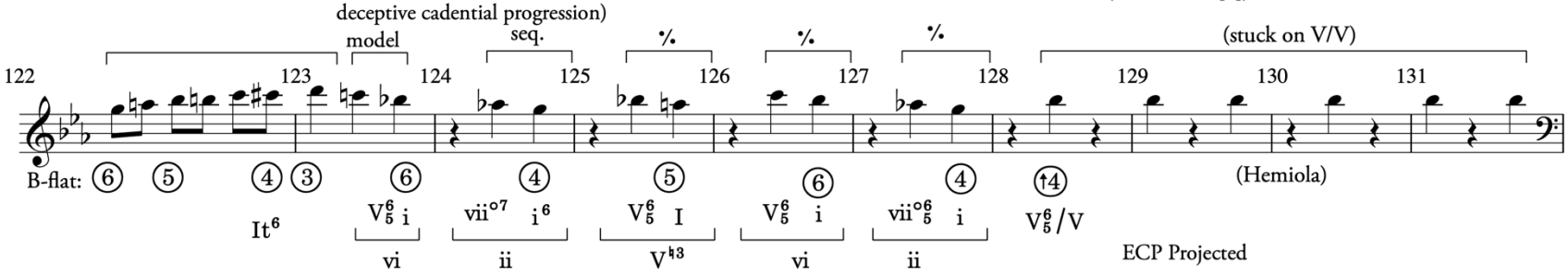


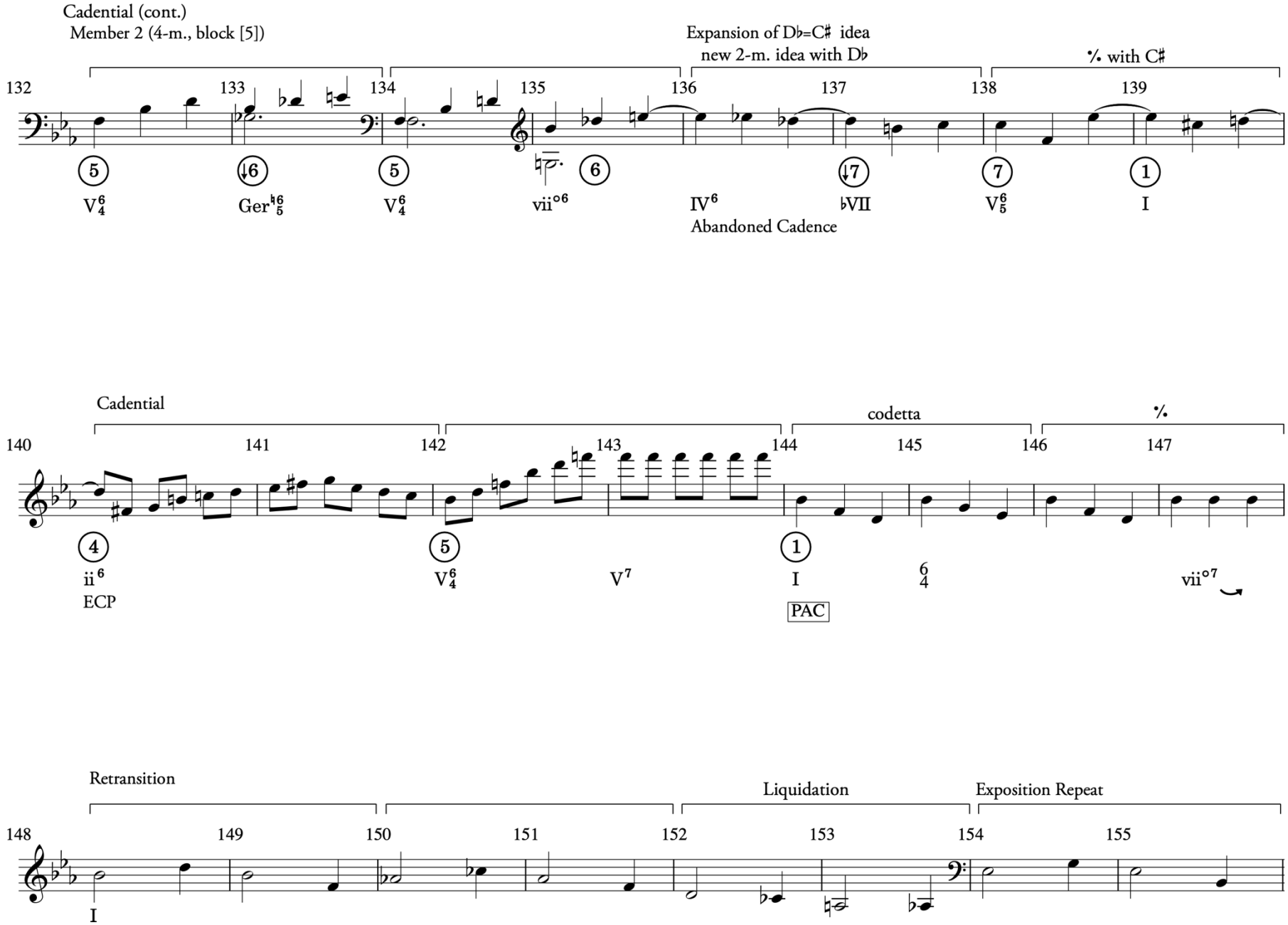
Member 2 (5-m., block [3])

Sequence 2 (chromatic expansion of deceptive cadential progression)

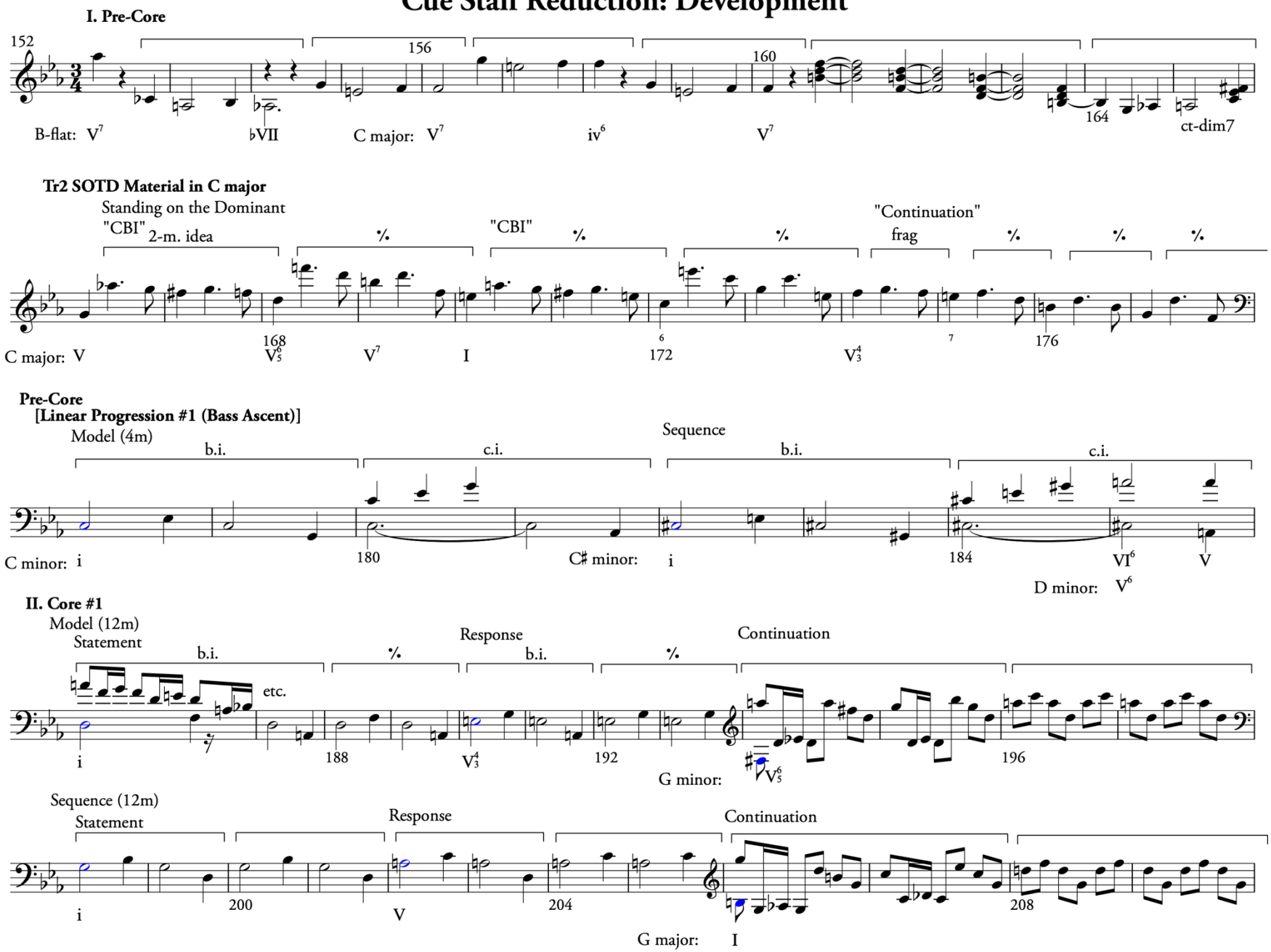
=> Cadential

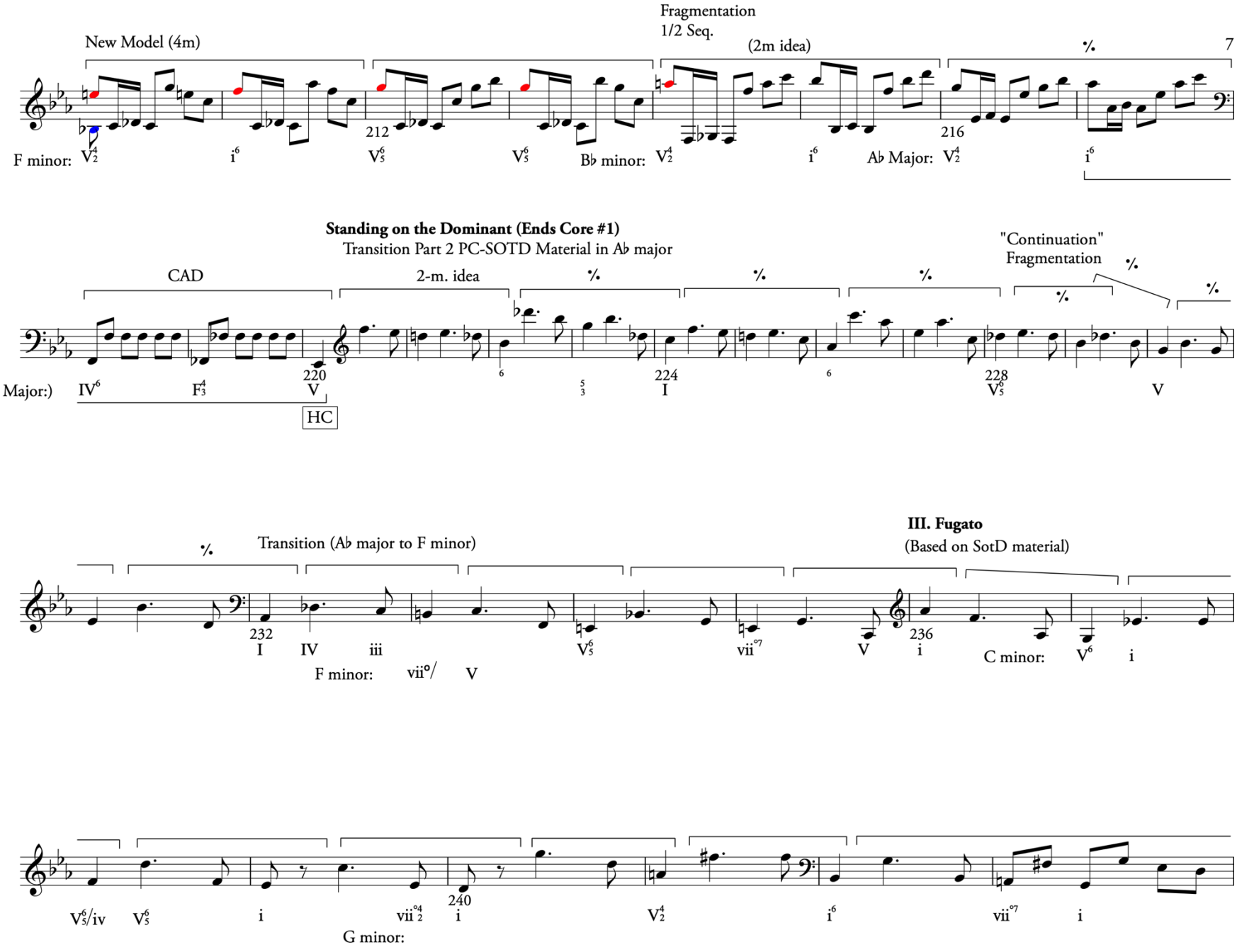
Member 1 (4-m., block [4])




Cadential (cont.)
Member 2 (4-m., block [5])
Expansion of D♭=C♯ idea
new 2-m. idea with D♭
% with C♯
132
133
134
135
136
137
138
139
5
6
5
6
7
7
1
V 6 4
Ger♮ 6 5
V 6 4
vii°6
IV6
♭VII
V 6 5
I
Abandoned Cadence
Cadential
codetta
%
140
141
142
143
144
145
146
147
4
5
1
ii 6
ECP
V 6 4
V7
I
6 4
vii°7
PAC
Retransition
Liquidation
Exposition Repeat
148
149
150
151
152
153
154
155
I

Cue Staff Reduction: Development



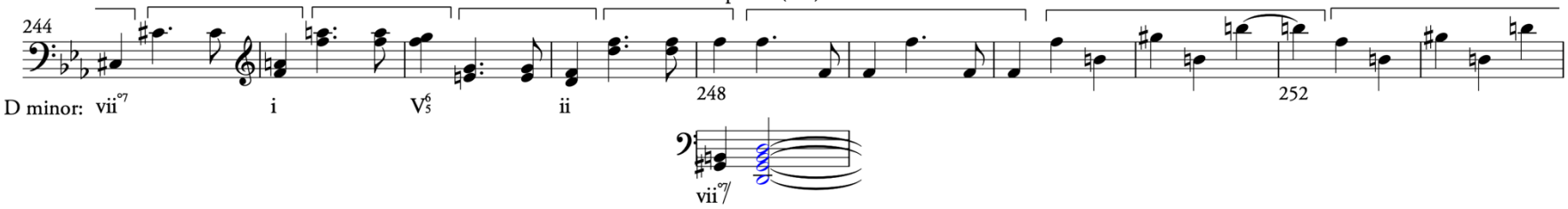

New Model (4m)
Fragmentation
1/2 Seq.
(2m idea)
7
212
216
F minor: V4/2 i6 V6/5 V6/5 B♭ minor: V4/2 i6 A♭ Major: V4/2 i6
Standing on the Dominant (Ends Core #1)
Transition Part 2 PC-SOTD Material in A♭ major
"Continuation"
Fragmentation
CAD
2-m. idea
220
224
228
(A♭ Major:) IV6 F4/3 V HC I V6/5 V
Transition (A♭ major to F minor)
III. Fugato
(Based on SotD material)
232
236
I IV iii V6/5 vii°7 V i C minor: V6 i
F minor: vii°/ V
240
V6/5/iv V6/5 i vii°4/2 i V4/2 i6 vii°7 i
G minor:

IV. Core #2

Linear Progression #2 (Bass Descent from D to A)

Model (12m)

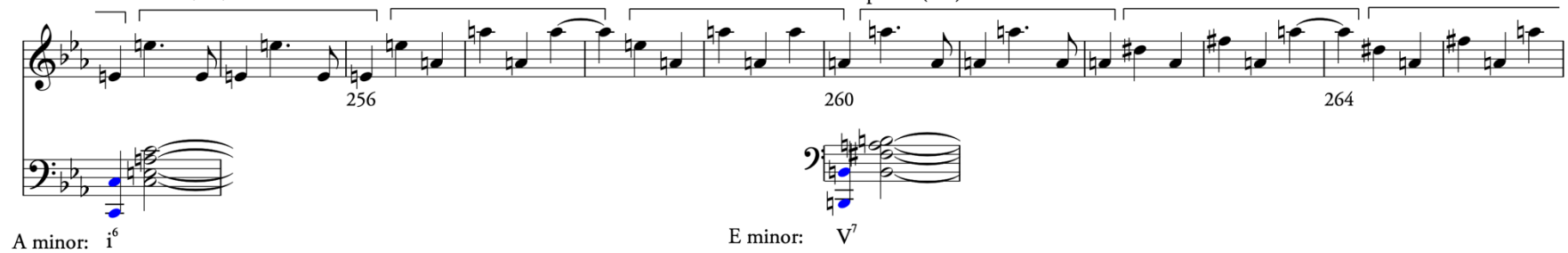
Response (6m)



Sequence (12m) (Altered)

Statement (6m)

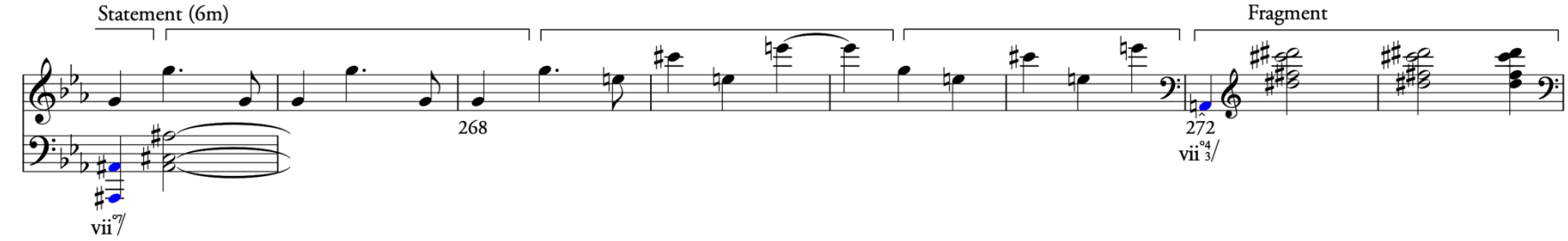
Response (6m)



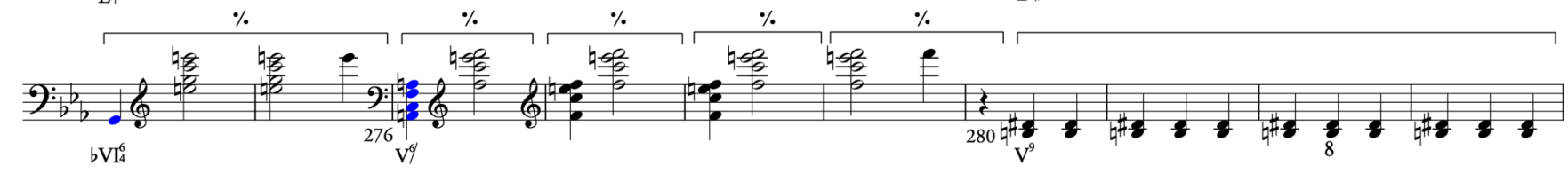
Response (2m)

Fragment

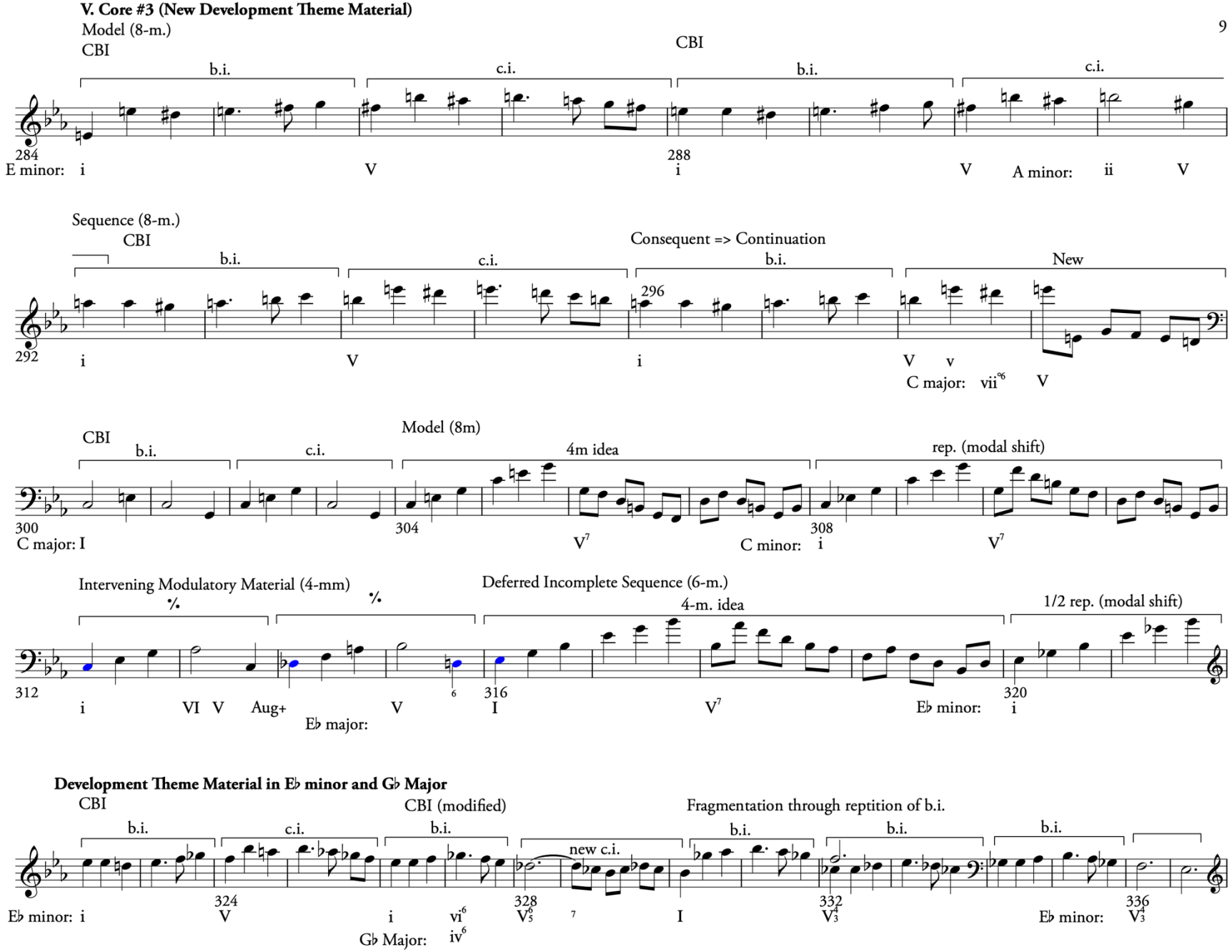
Statement (6m)



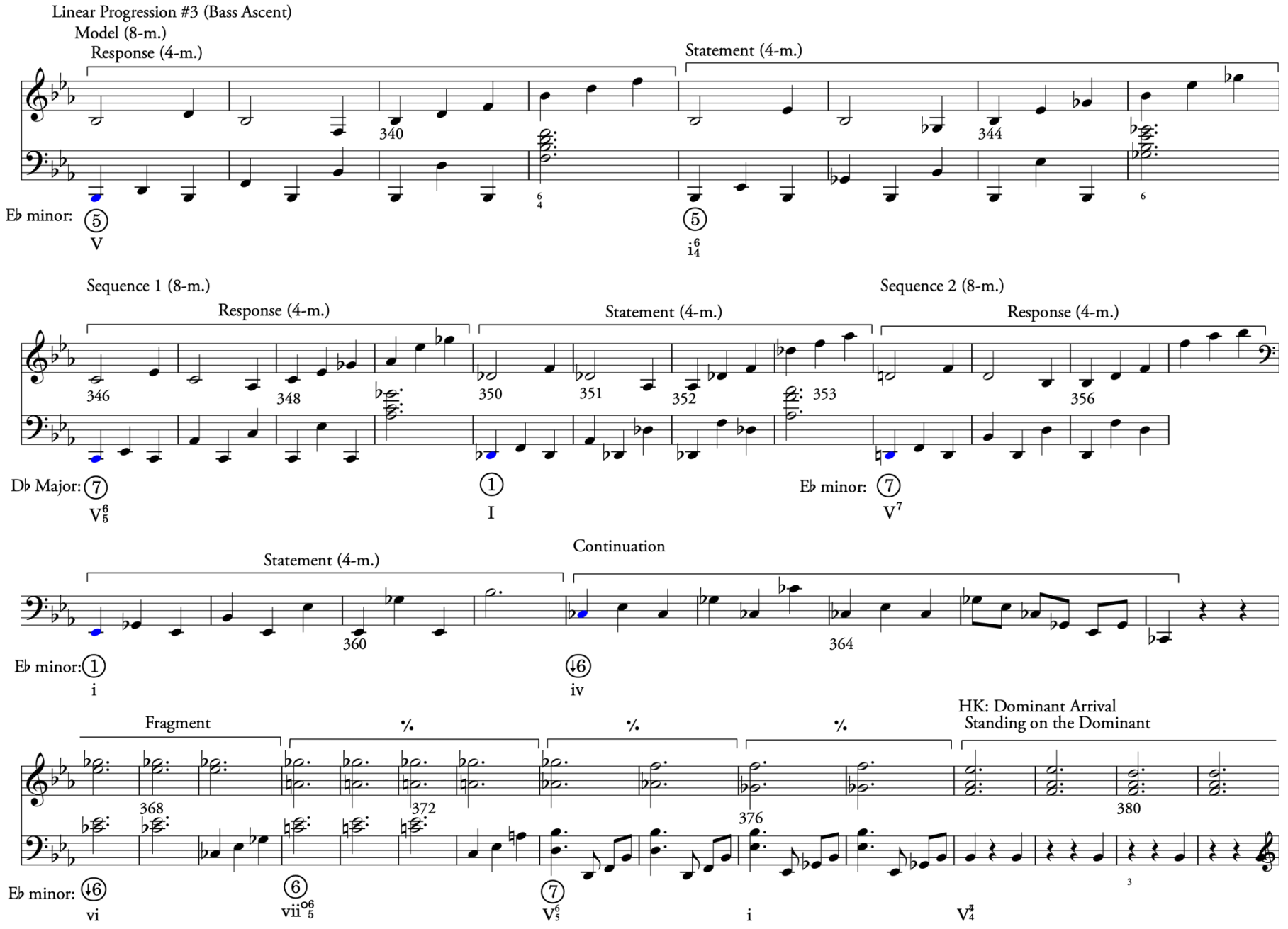
Dominant Arrival (Ends Core #2)

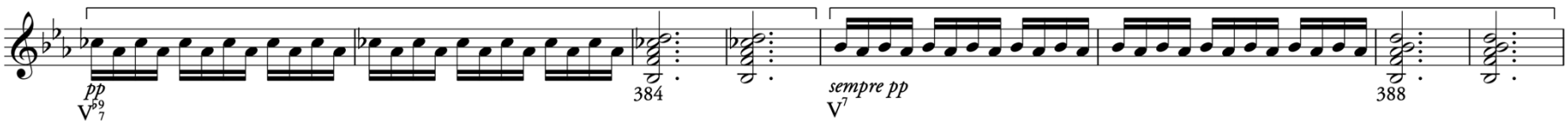


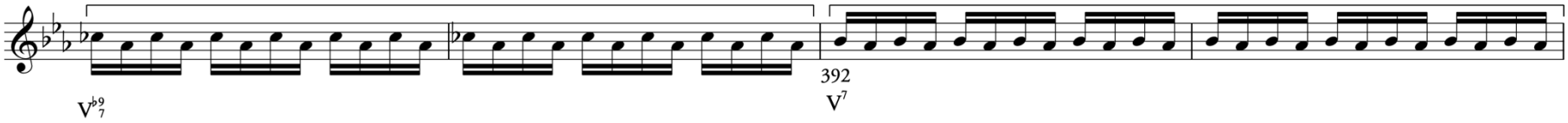
V. Core #3 (New Development Theme Material)



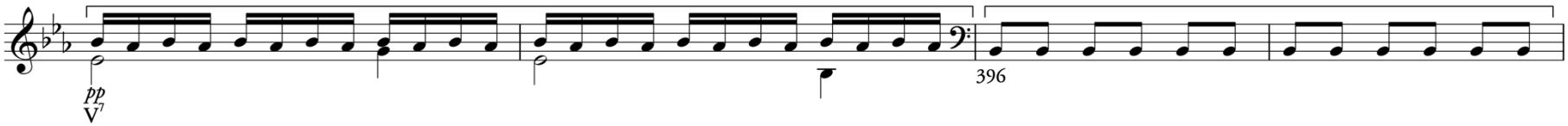
10 **VI. Core #4 (Stepwise Bass Ascent from B♭ to E♭)**



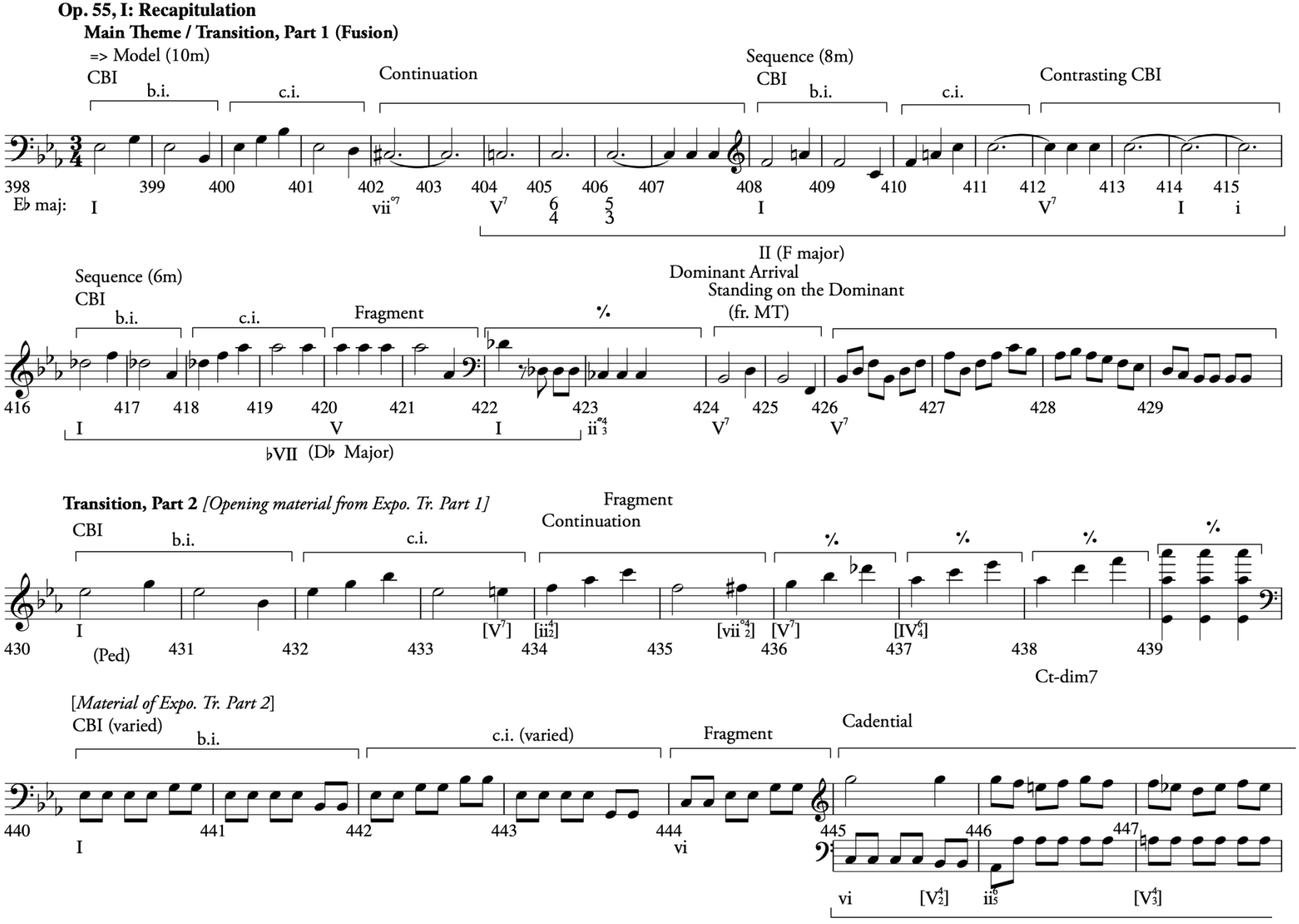


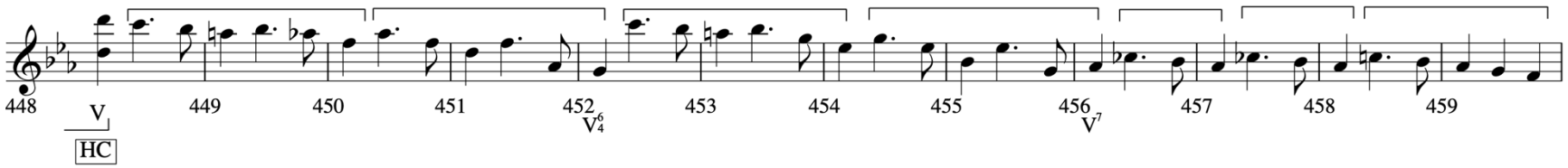


[Early Tonic MT Material over Dominant Harmony]



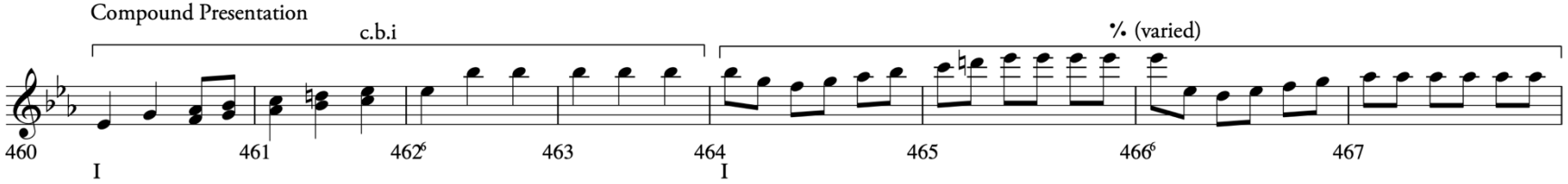
Cue Staff Reduction: Recapitulation





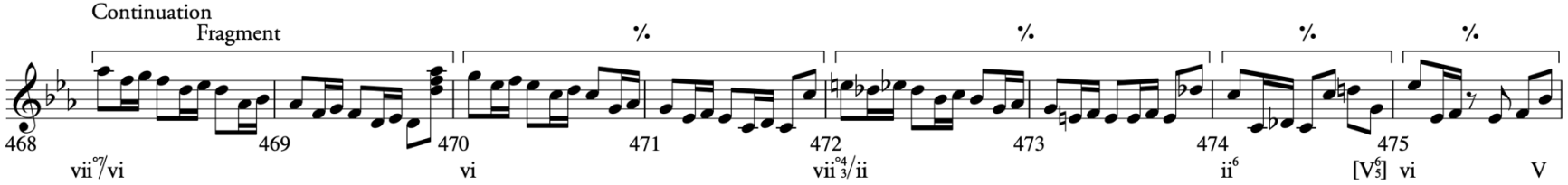
Subordinate Theme 1

Compound Presentation

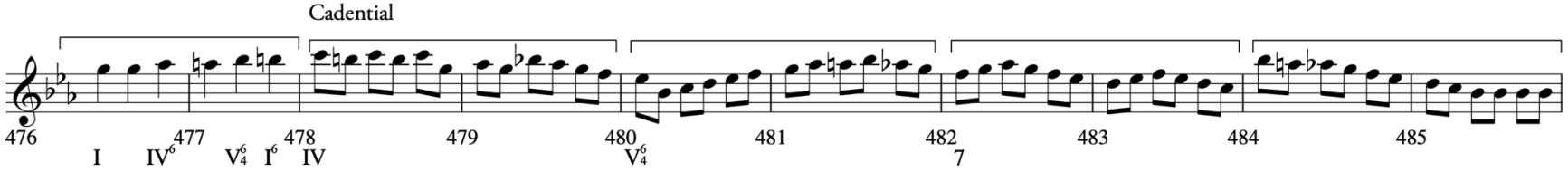


Continuation

Fragment

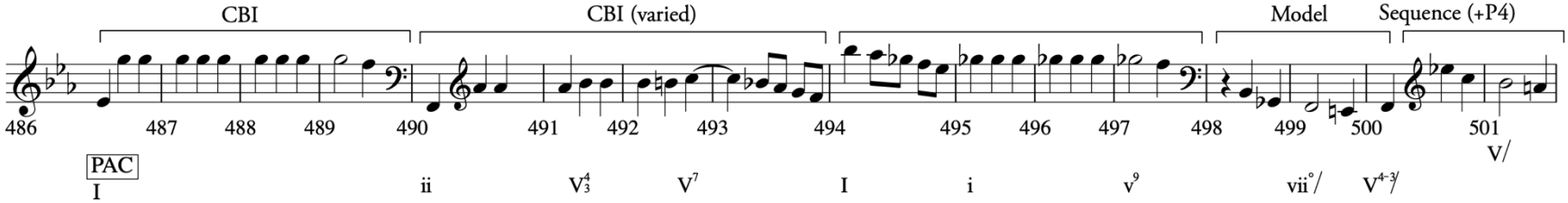


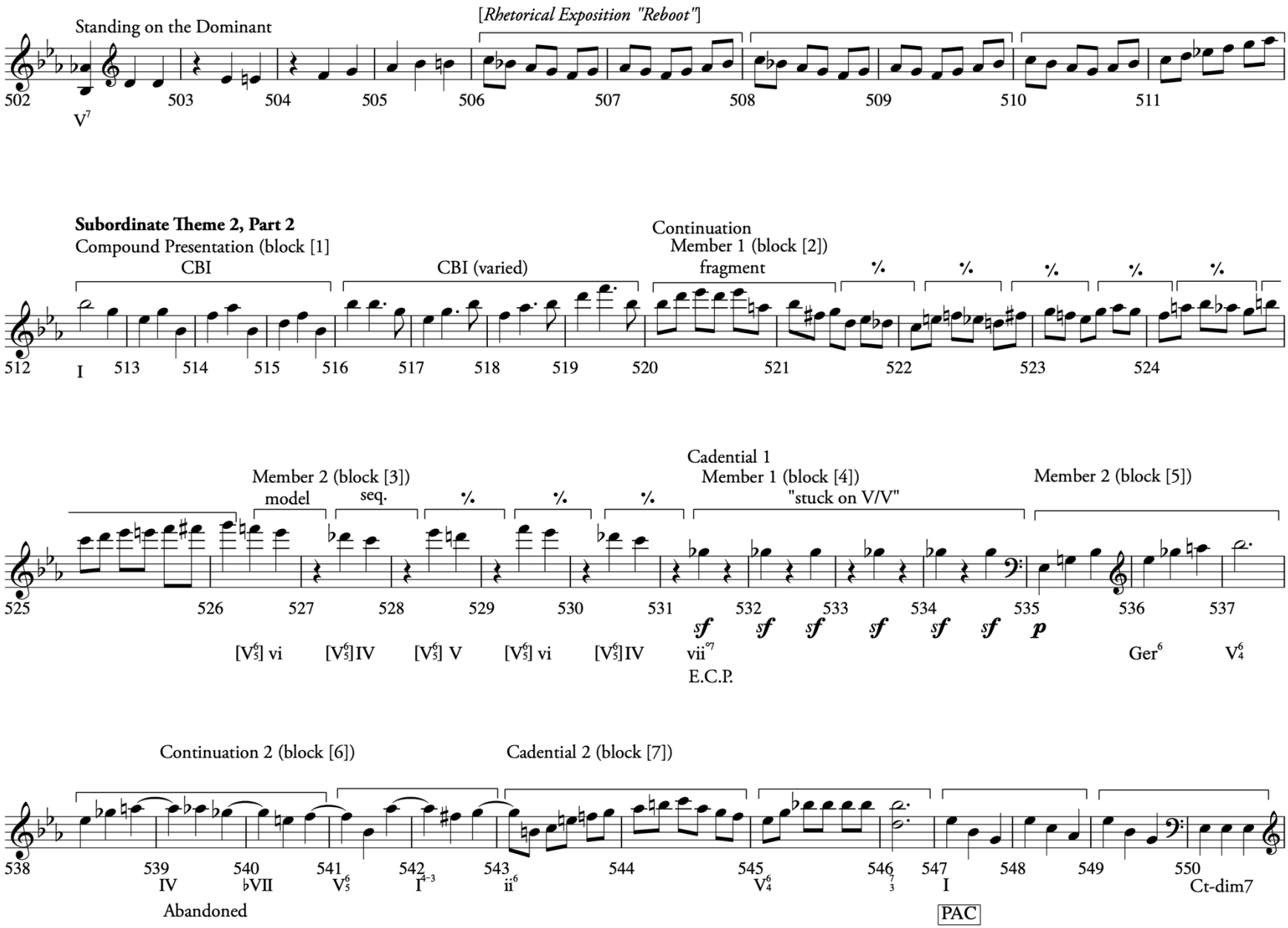
Cadential



Subordinate Theme 2, Part 1

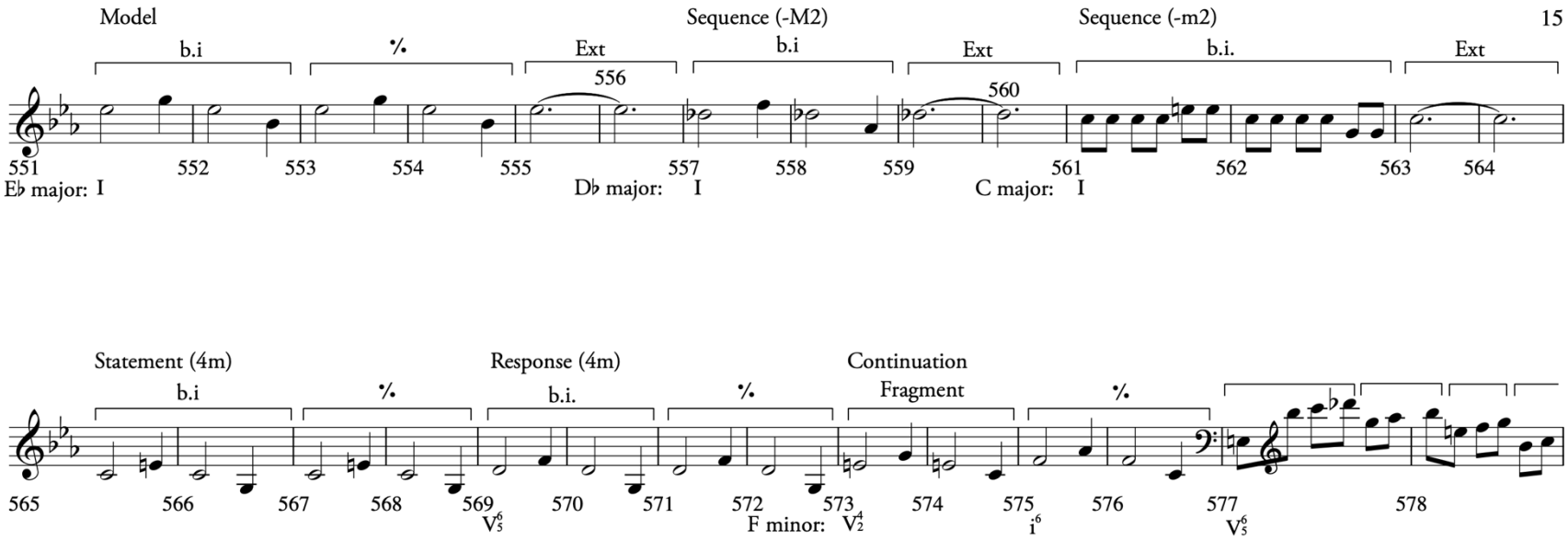
Compound Presentation



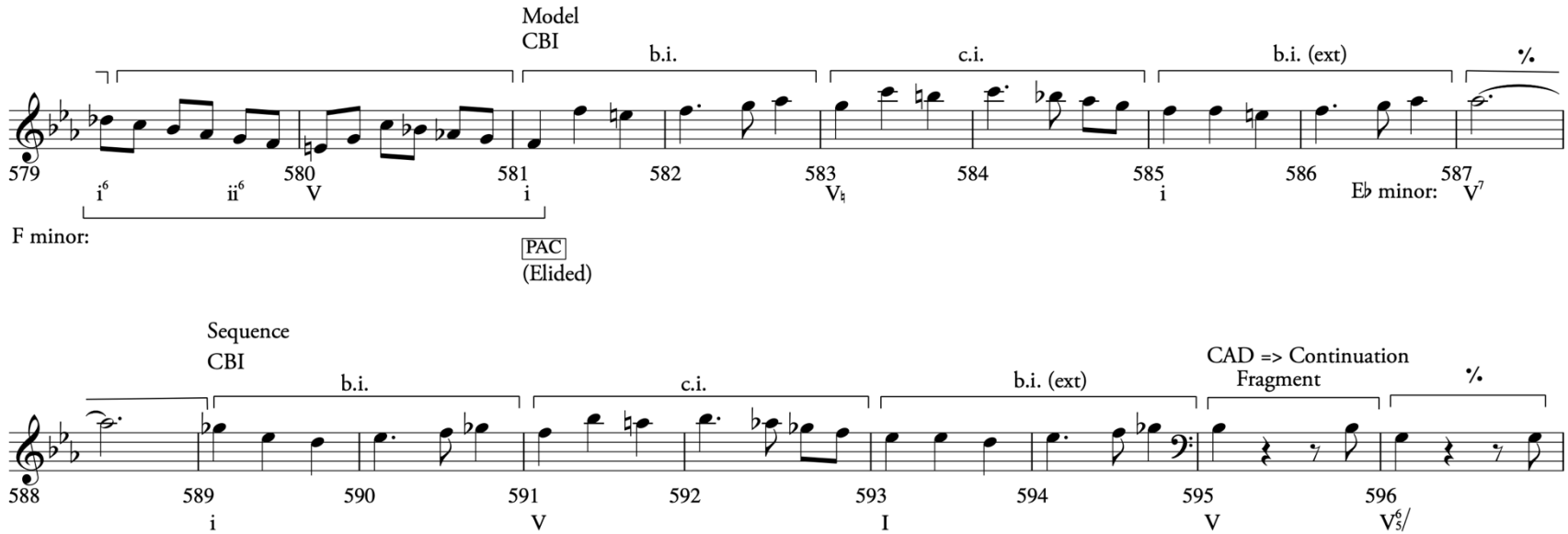

Standing on the Dominant
[Rhetorical Exposition "Reboot"]
502 503 504 505 506 507 508 509 510 511
V7
Subordinate Theme 2, Part 2
Compound Presentation (block [1]
CBI
CBI (varied)
Continuation
Member 1 (block [2])
fragment
512 513 514 515 516 517 518 519 520 521 522 523 524
I
Cadential 1
Member 1 (block [4])
"stuck on V/V"
Member 2 (block [3])
model
seq.
Member 2 (block [5])
525 526 527 528 529 530 531 532 533 534 535 536 537
sf sf sf sf sf sf p
[V65] vi [V65]IV [V65] V [V65] vi [V65]IV vii°7 Ger6 V64
E.C.P.
Continuation 2 (block [6])
Cadential 2 (block [7])
538 539 540 541 542 543 544 545 546 547 548 549 550
IV ♭VII V65 I4–3 ii6 V64 7/3 I Ct-dim7
Abandoned
PAC

Coda

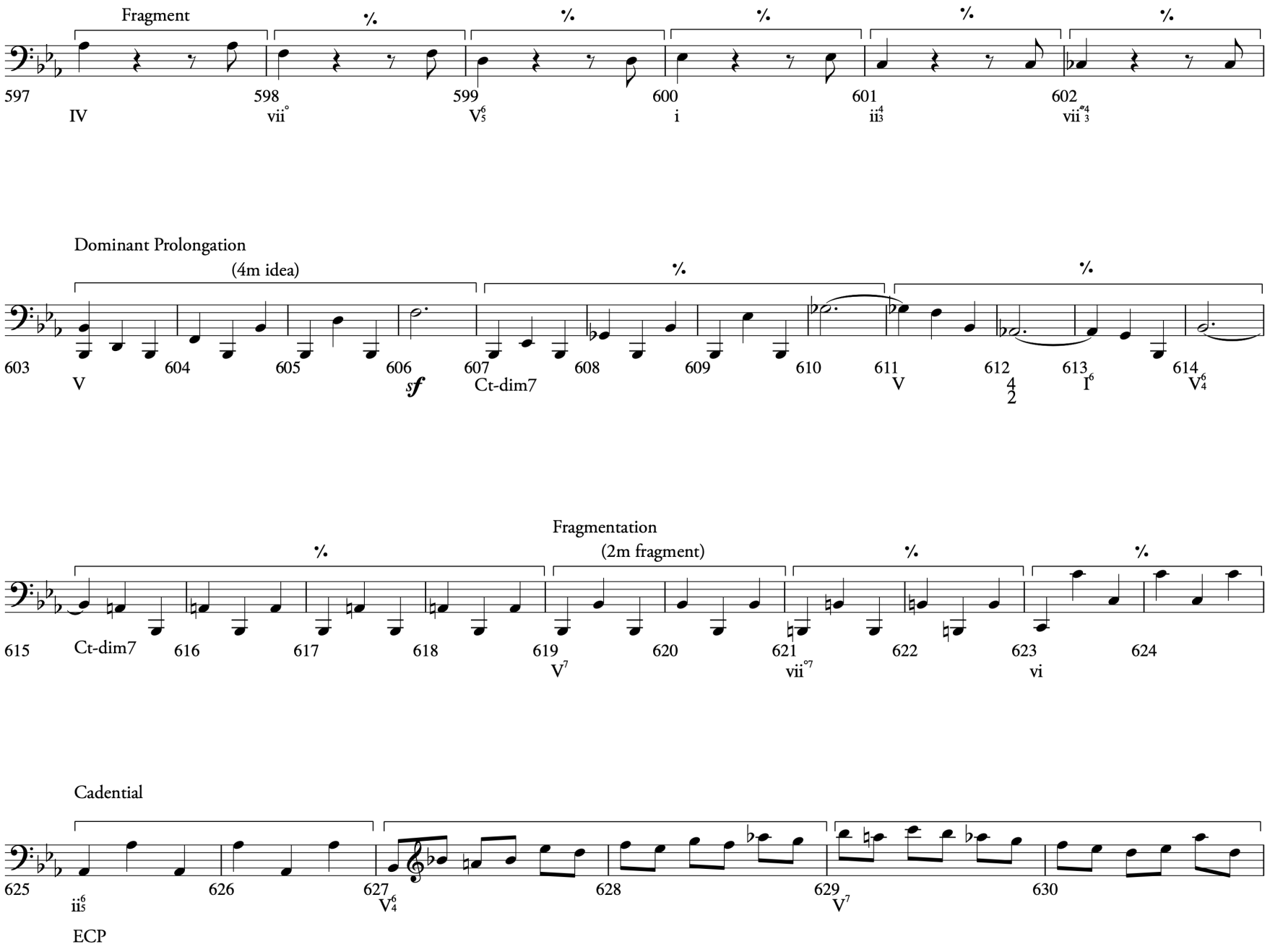
Coda Theme #1 (fr. MT)



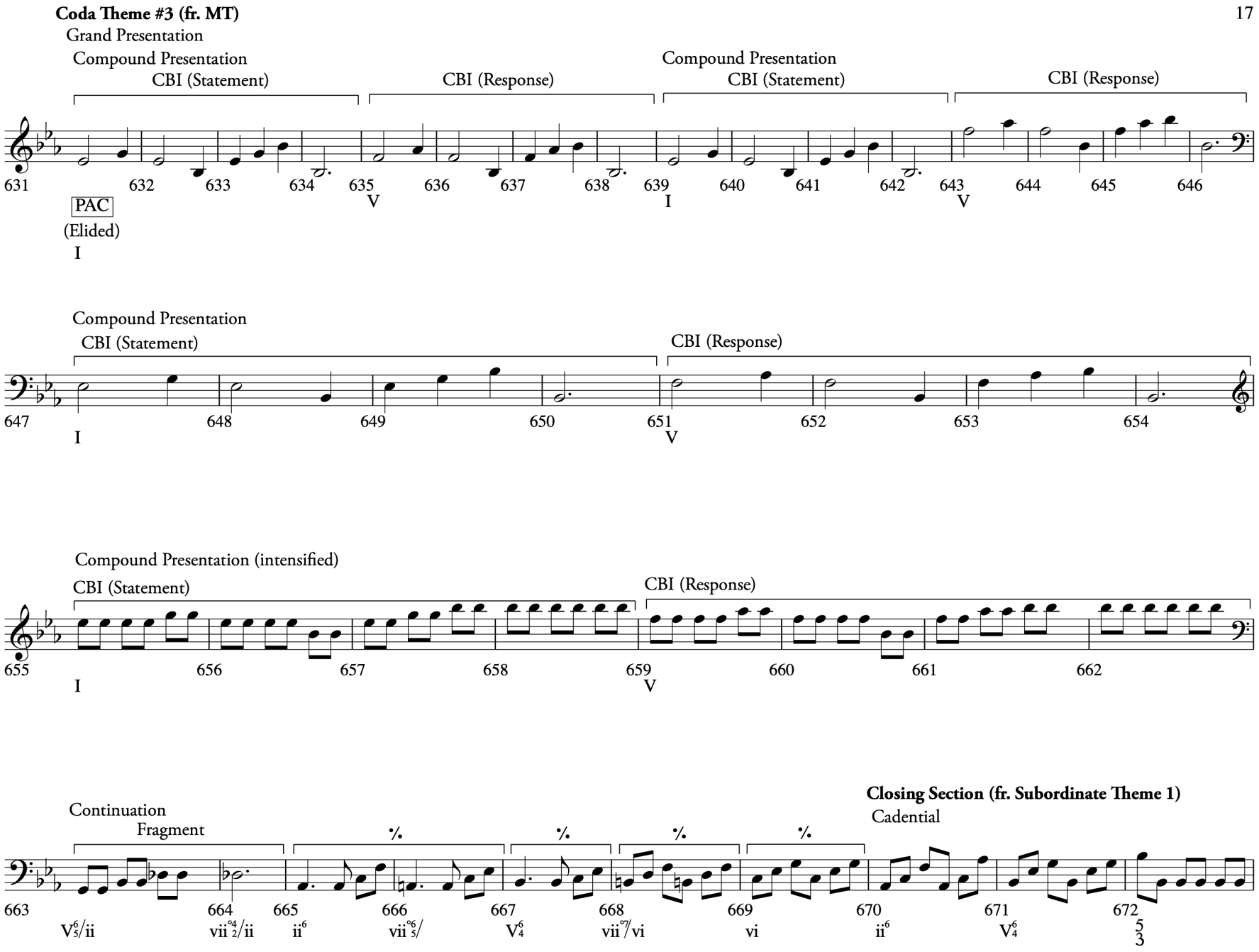
Coda Theme # 2 (fr. New Development Theme Material)

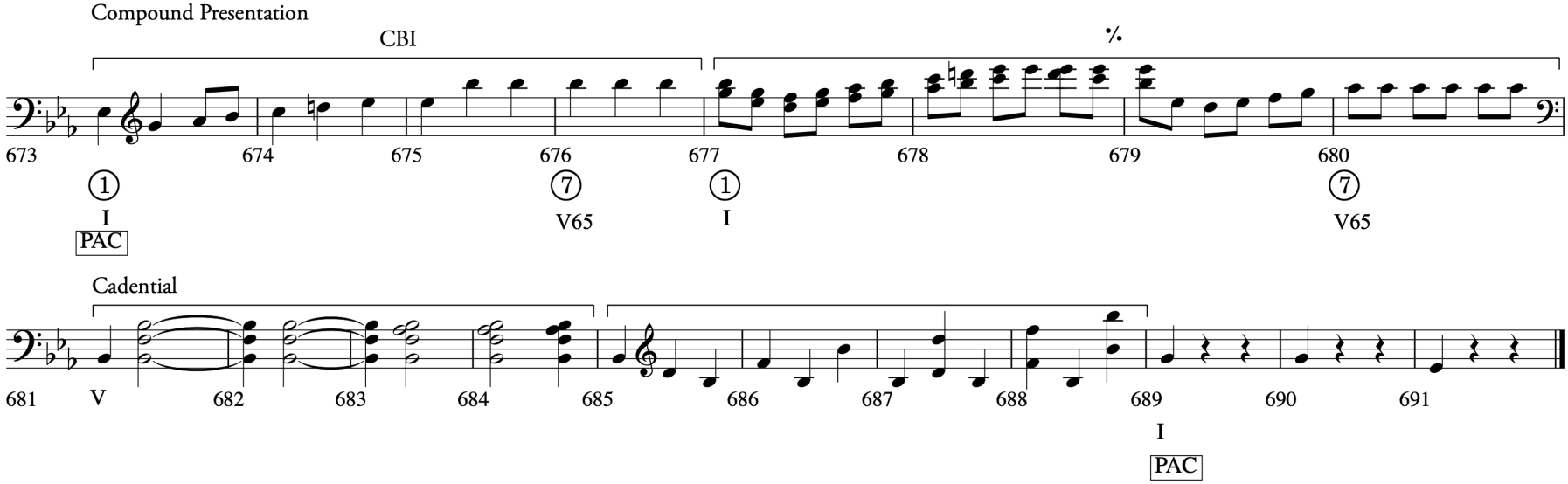


16

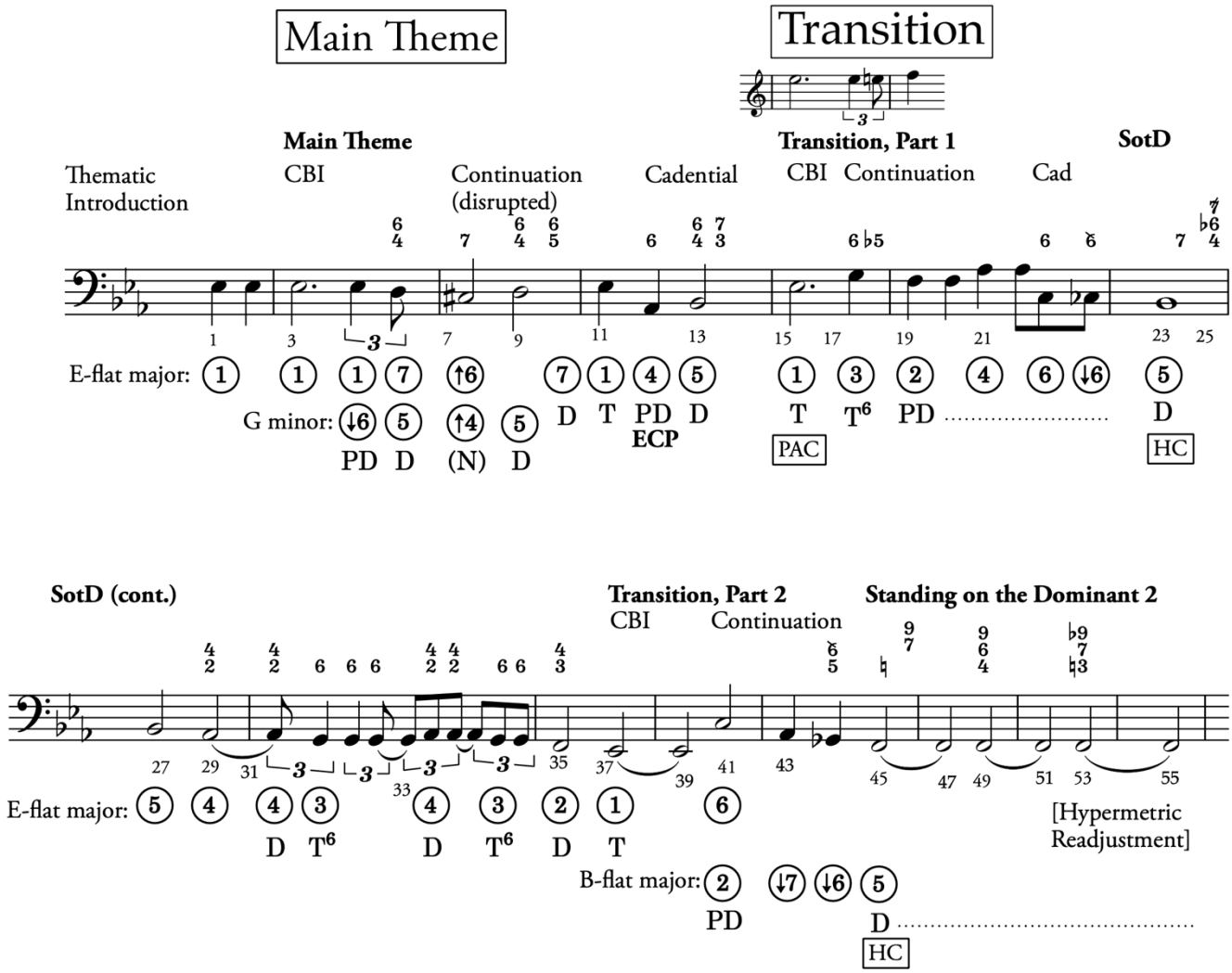

Fragment
597
IV
598
vii°
599
V6/5
600
i
601
ii4/3
602
vii°4/3
Dominant Prolongation
(4m idea)
603
V
604
605
606
sf
607
Ct-dim7
608
609
610
611
V
612
4/2
613
I6
614
V6/4
Fragmentation
(2m fragment)
615
Ct-dim7
616
617
618
619
V7
620
621
vii°7
622
623
vi
624
Cadential
625
ii6/5
626
627
V6/4
628
629
V7
630
ECP

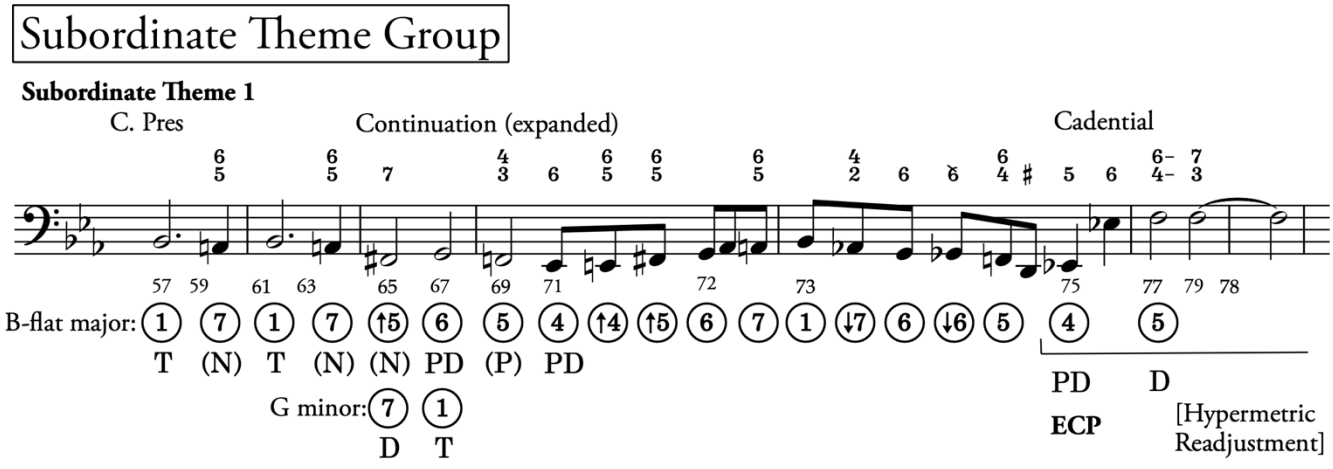
Coda Theme #3 (fr. MT)




Compound Presentation
CBI
%
673
674
675
676
677
678
679
680
1
I
PAC
7
V65
1
I
7
V65
Cadential
681
V
682
683
684
685
686
687
688
689
690
691
I
PAC

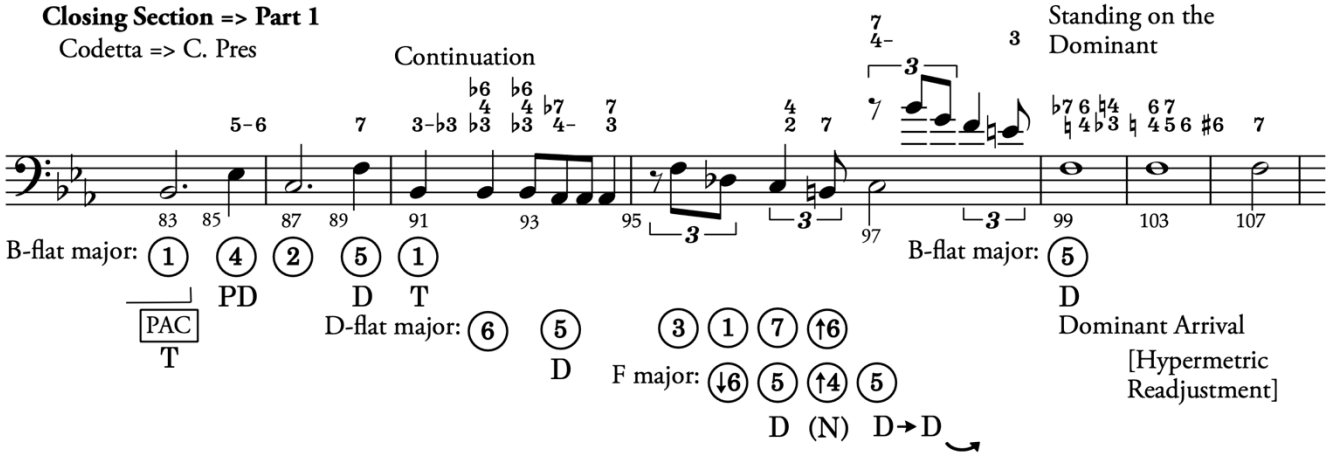
Bass-Melody Durational Reduction





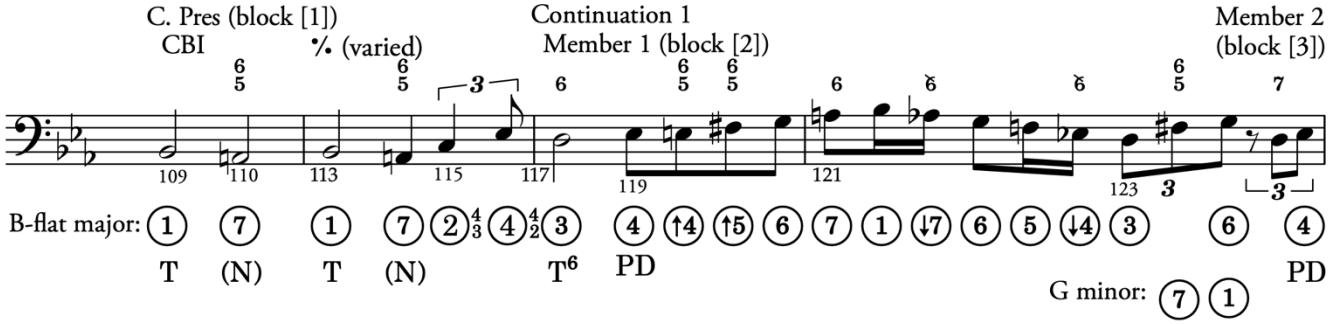
Subordinate Theme 2

Closing Section => Part 1

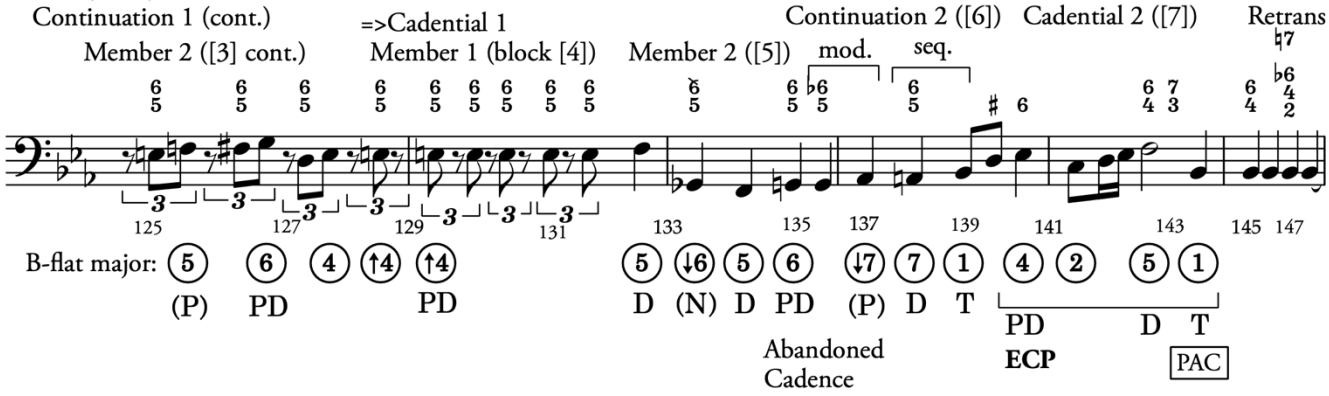


Subordinate Theme 2 (cont.)

Part 2



Part 2 (cont.)

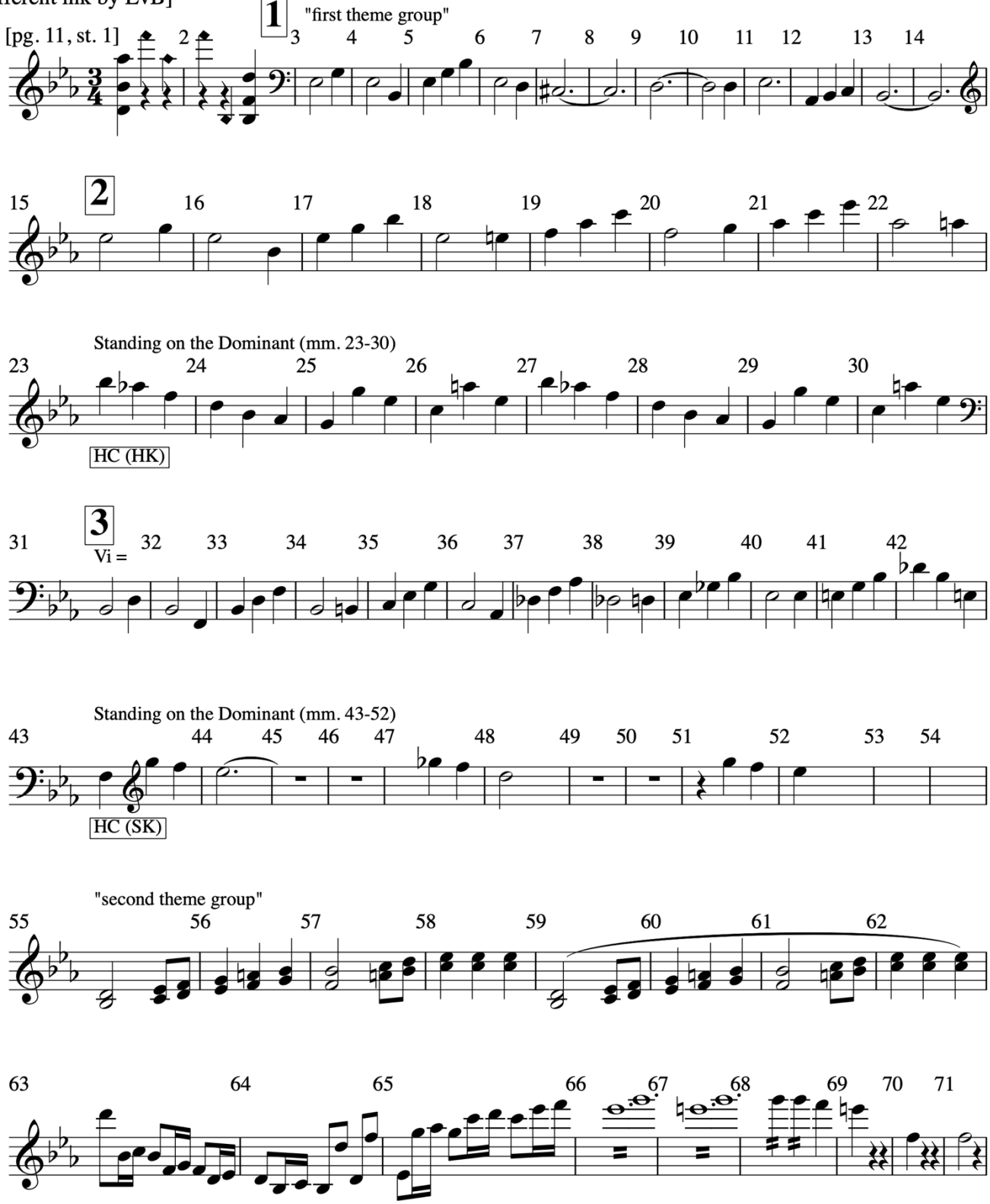


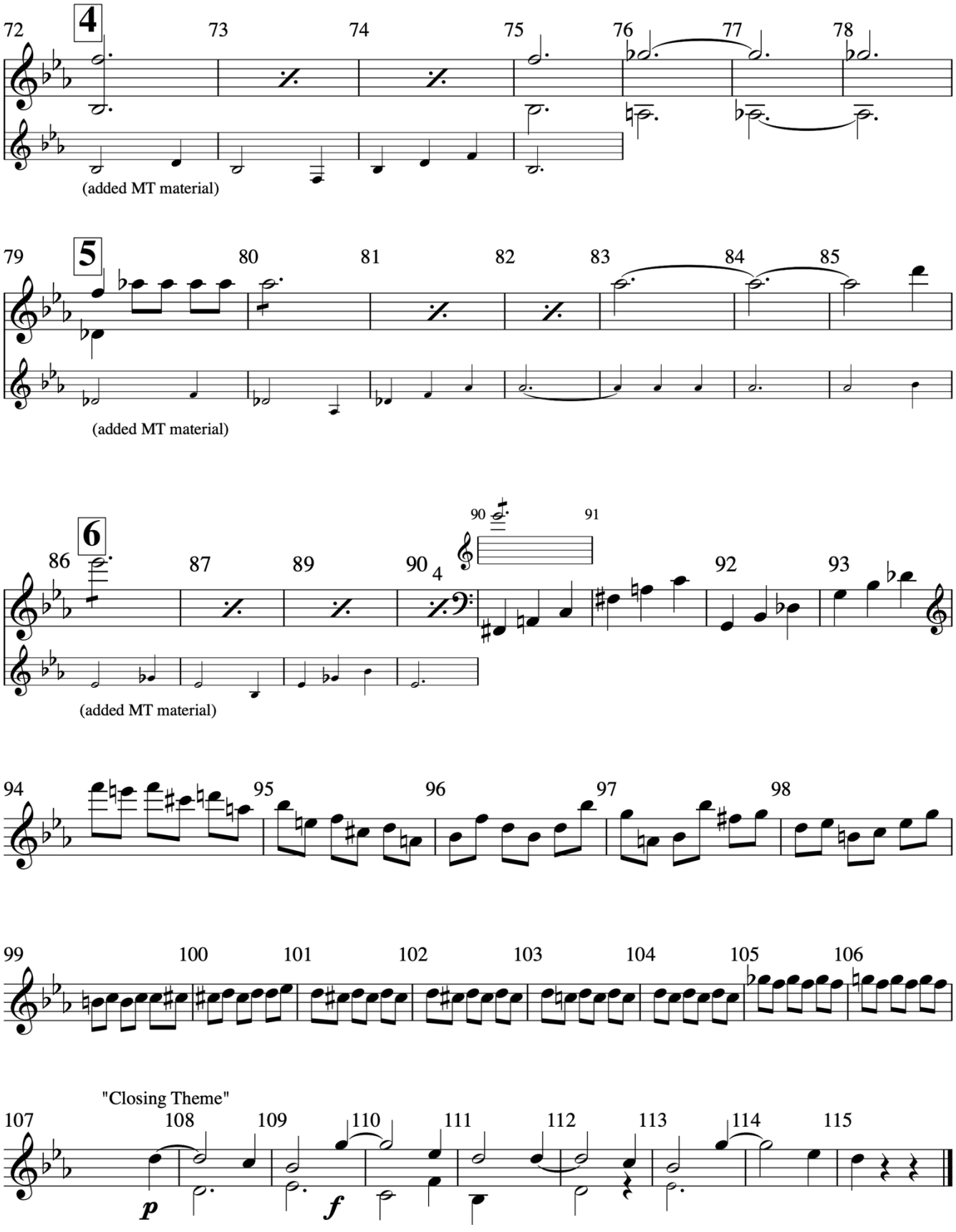
Ludwig van Beethoven

Transcription 1.0

[diamond noteheads in mm. 1-2 represent notes added faintly in different ink by LvB]

pg. 11, st. 1-8 from Gosman and Lockwood (2013)

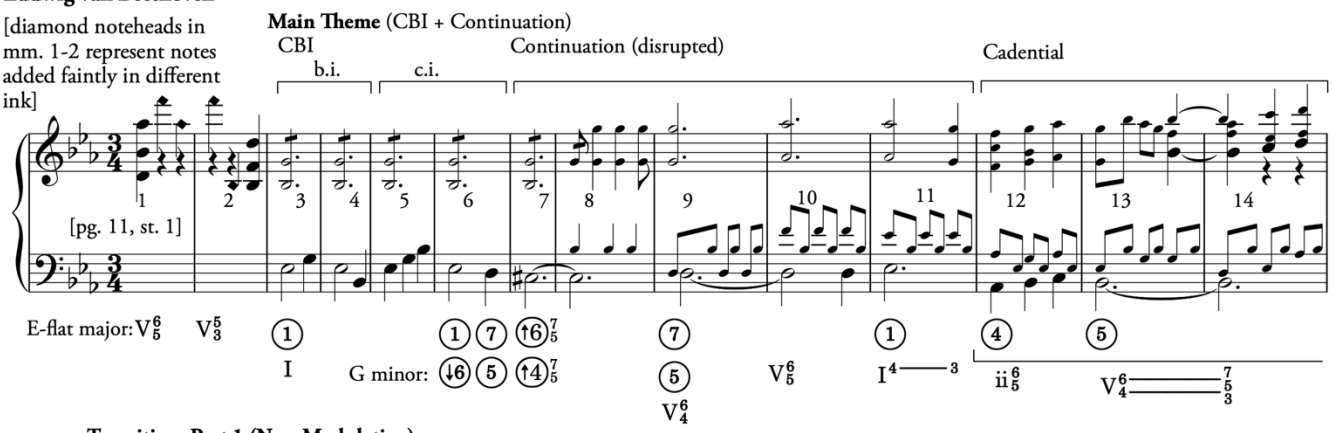



4
(added MT material)
5
(added MT material)
6
(added MT material)
"Closing Theme"
p
f

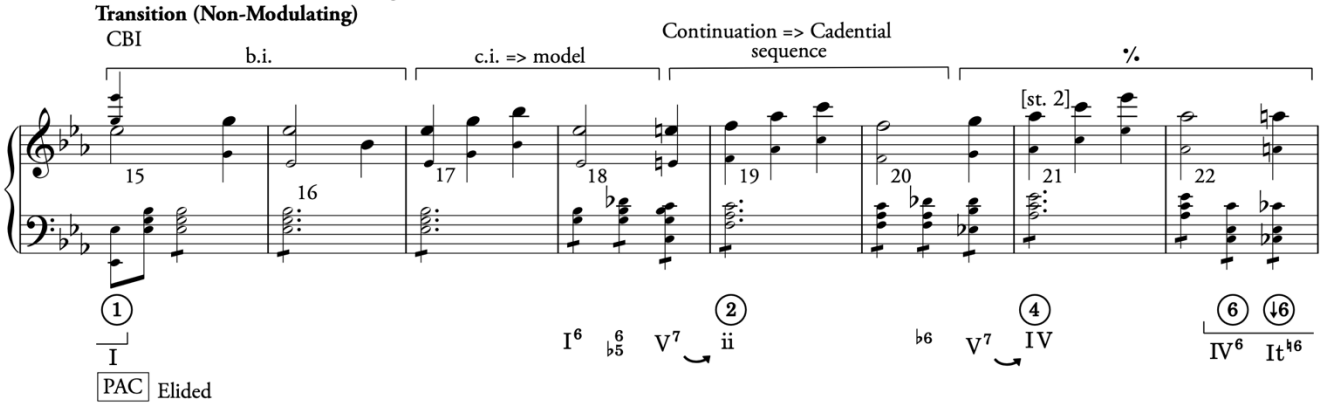
CS 1.0

Ludwig van Beethoven

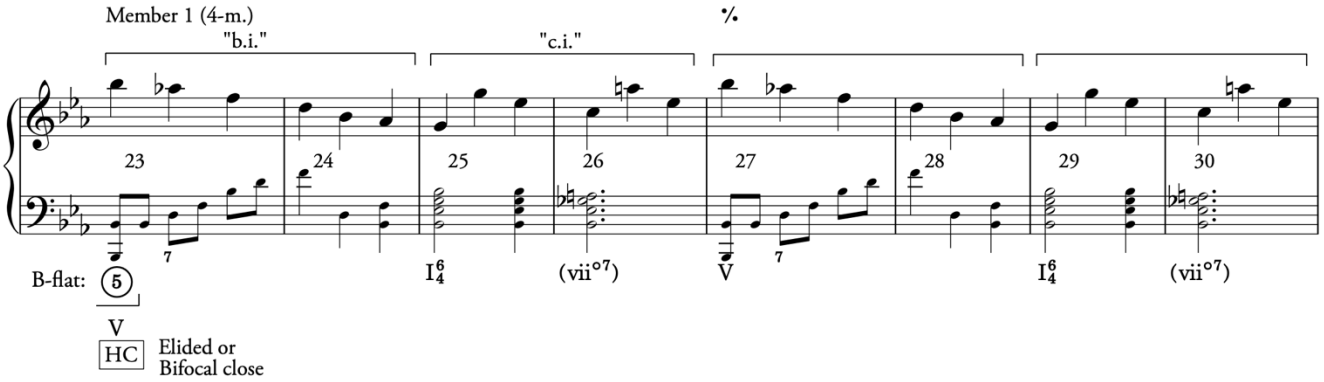
[diamond noteheads in mm. 1-2 represent notes added faintly in different ink]



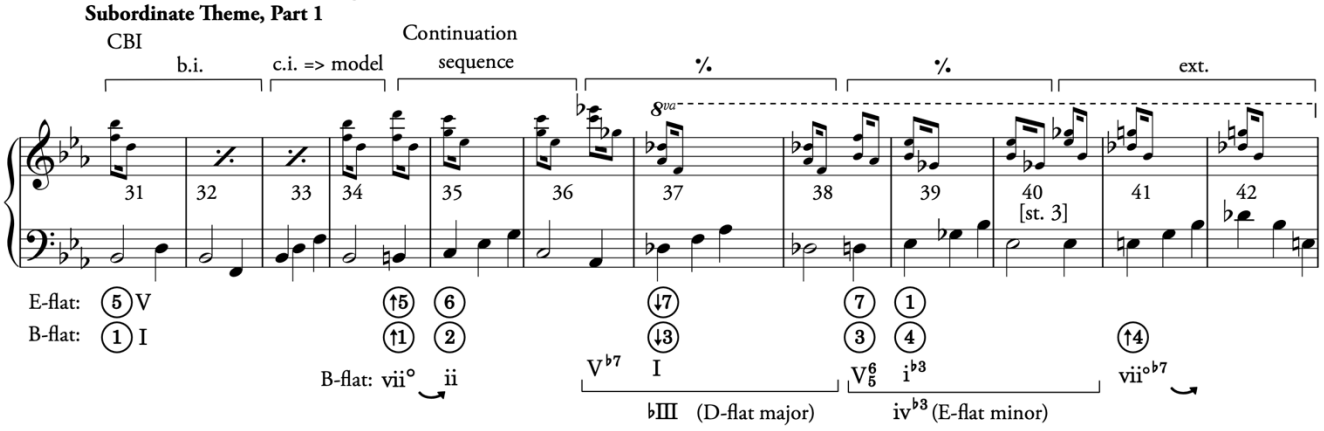
Transition, Part 1 (Non-Modulating) or Transition (Non-Modulating)



Standing on the Dominant



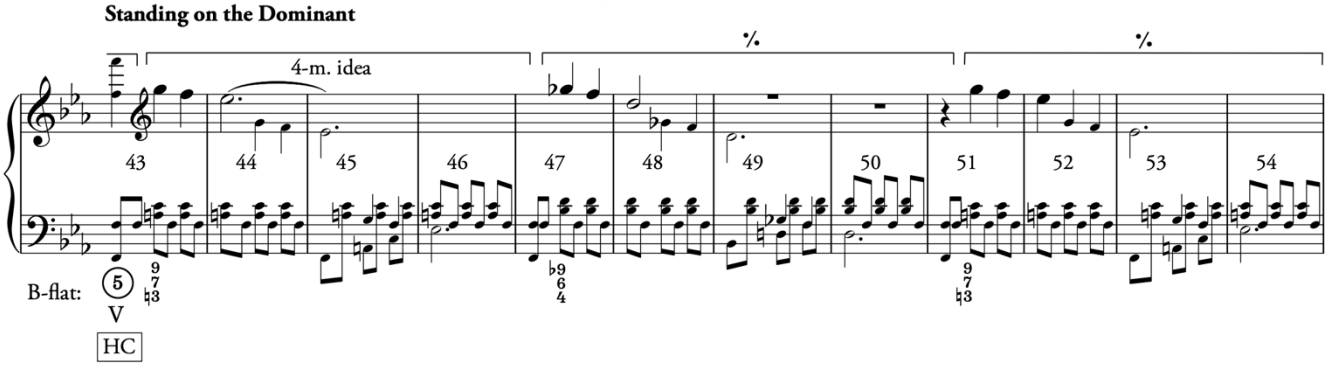
Transition, Part 2 (Modulating) or Subordinate Theme, Part 1



CS 1.0

page 11, st. 1-8

Standing on the Dominant

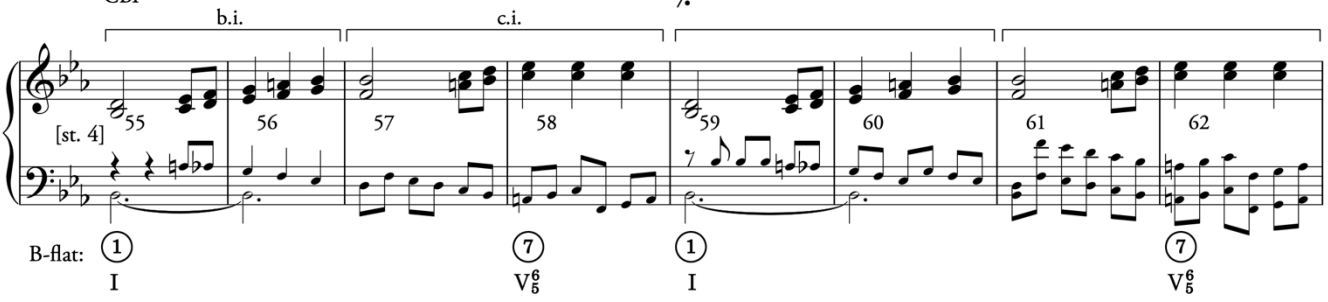


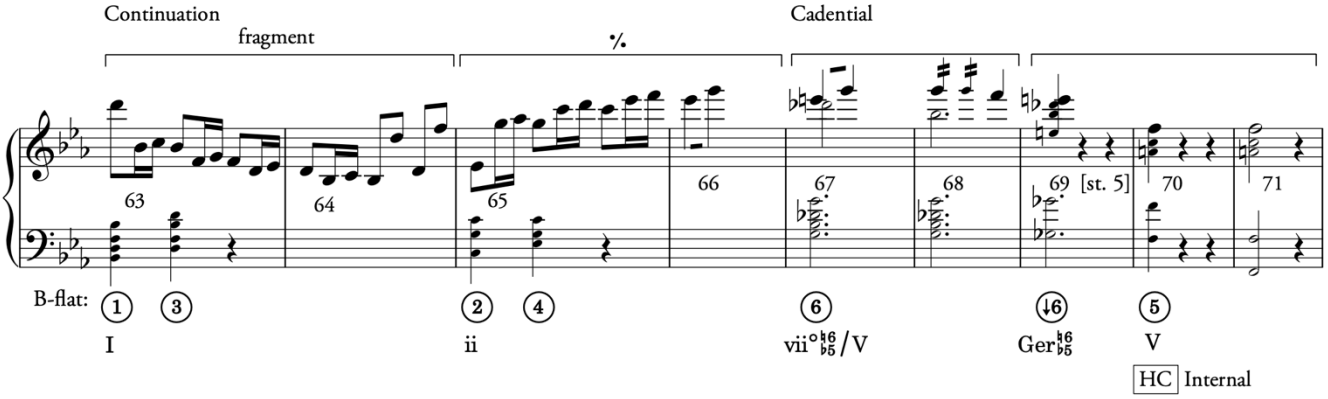
Subordinate Theme, Part 1 or 2 (Compound Sentence)

Compound Presentation

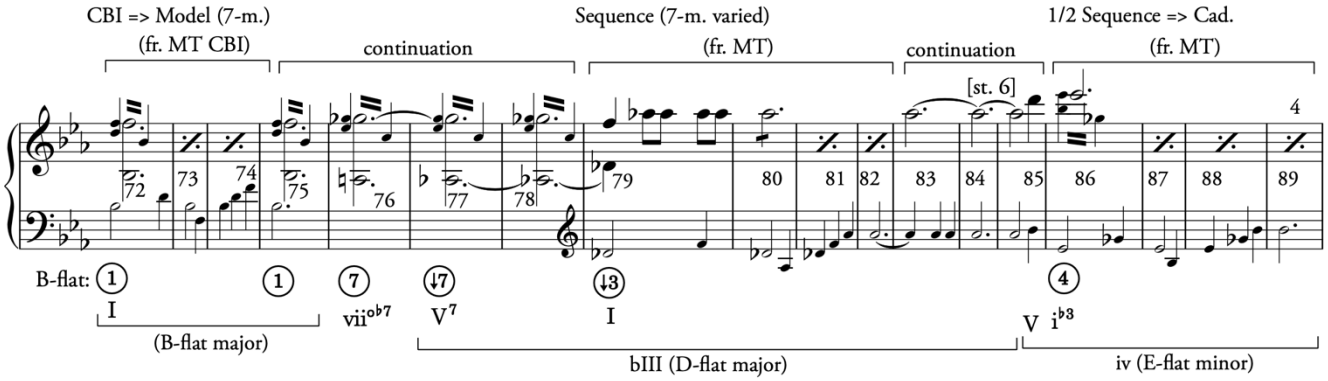
CBI

[Written with repeat signs in the sketch]



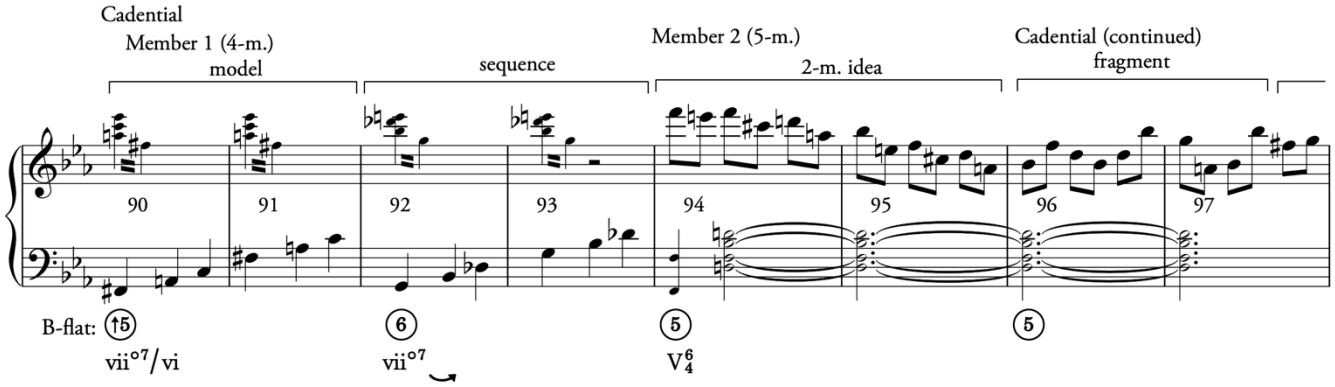


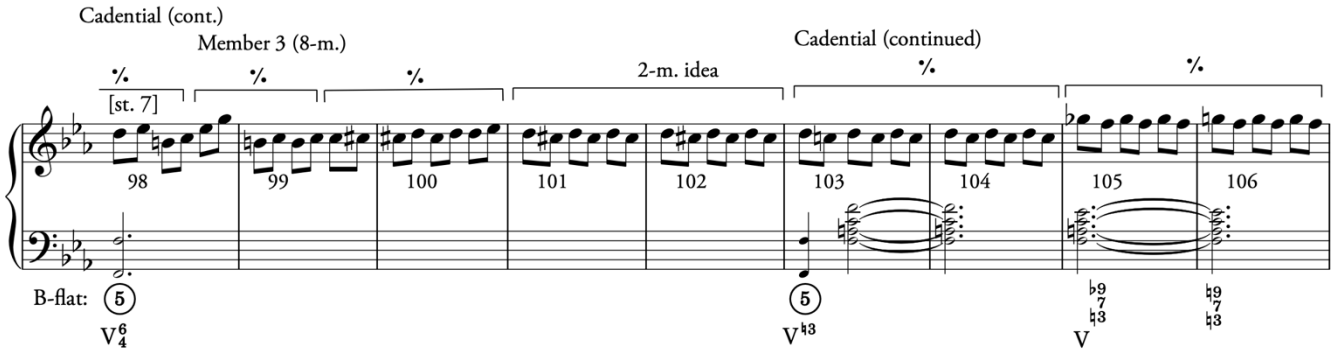
Subordinate Theme, Part 2 or 3 => Continuation

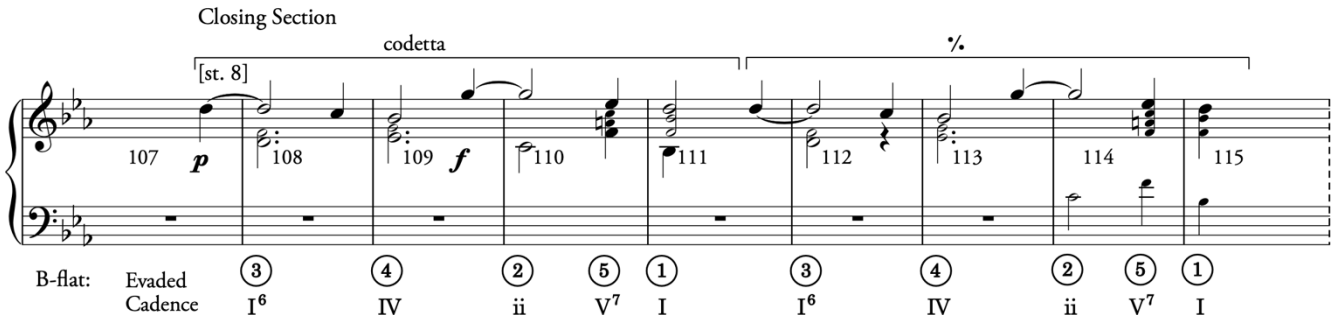


CS 1.0

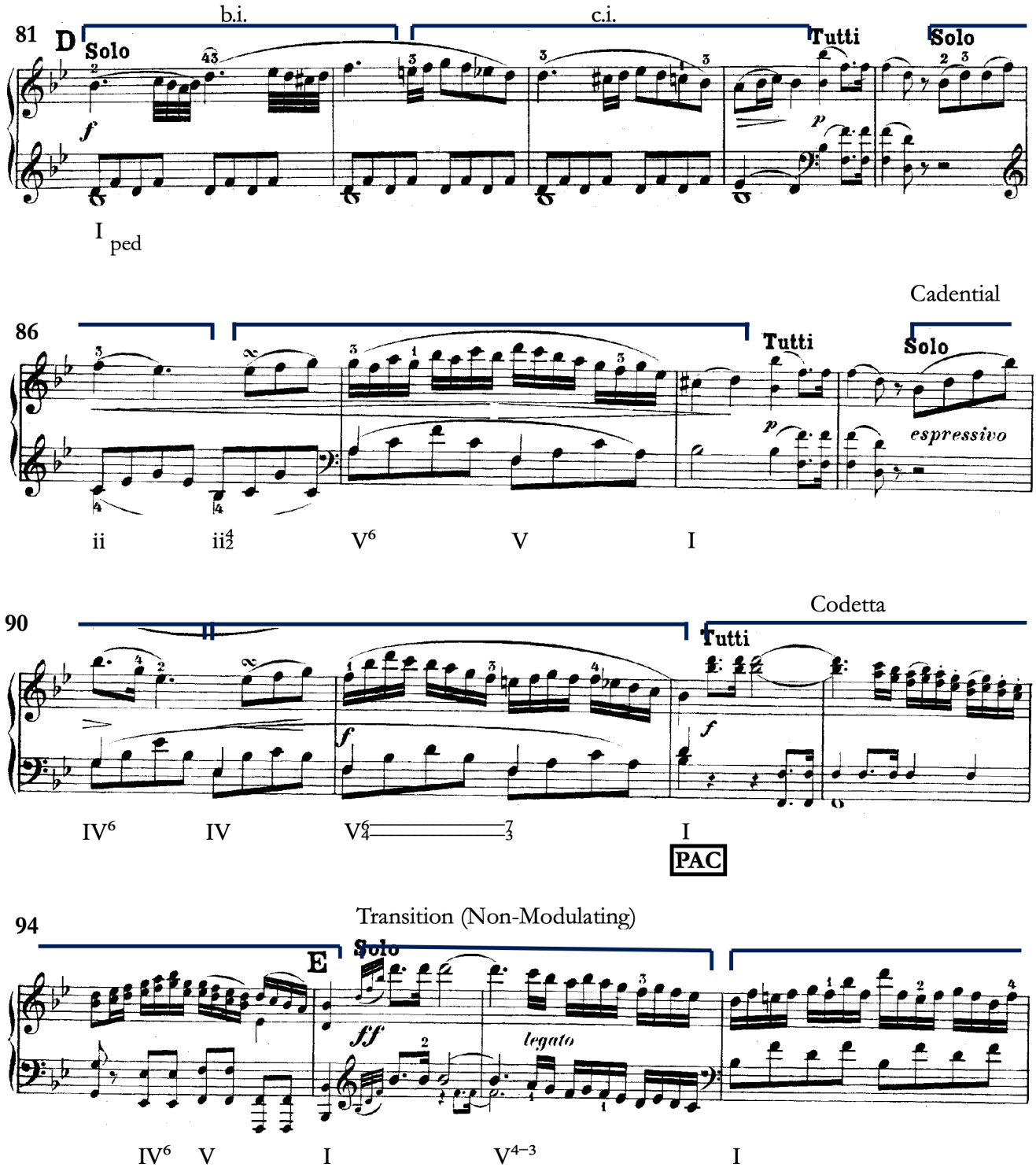
page 11, st. 1-8



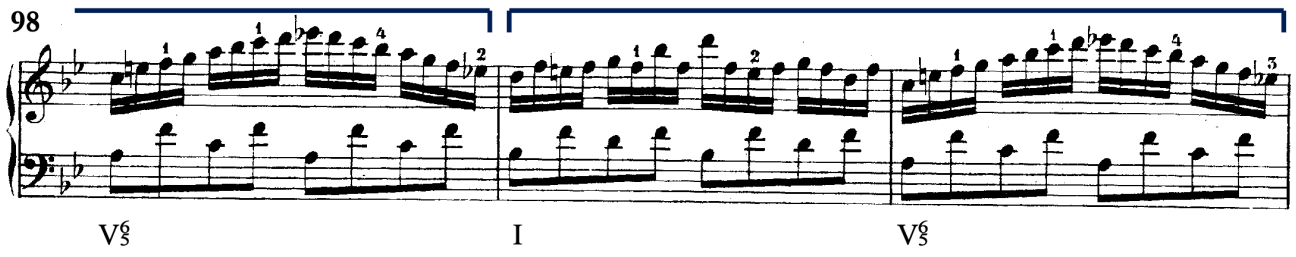


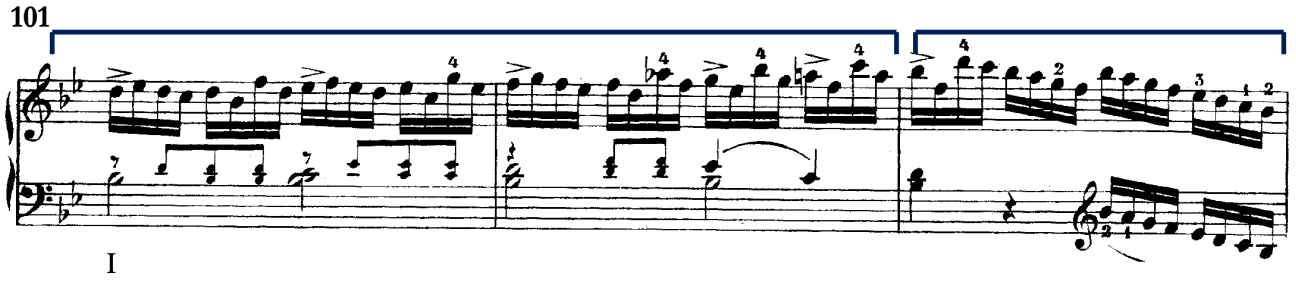


Mozart, Piano Concerto in B-flat, K. 595
(Solo Exposition, mm. 81–182)



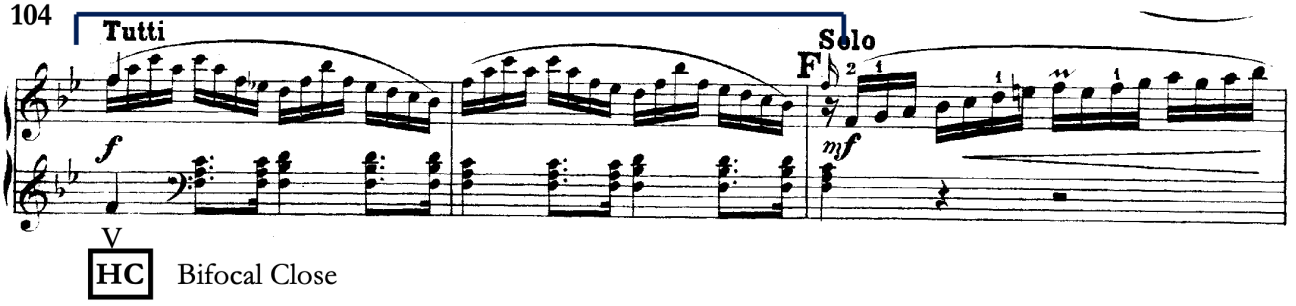
[Transition (Non-Modulating), cont.]





Standing on the Dominant

Lead-in



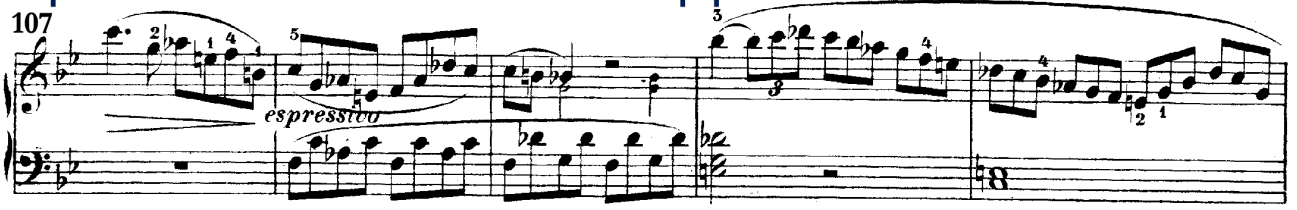
HC Bifocal Close

Subordinate Theme, Part 1 (CBI + Cont)

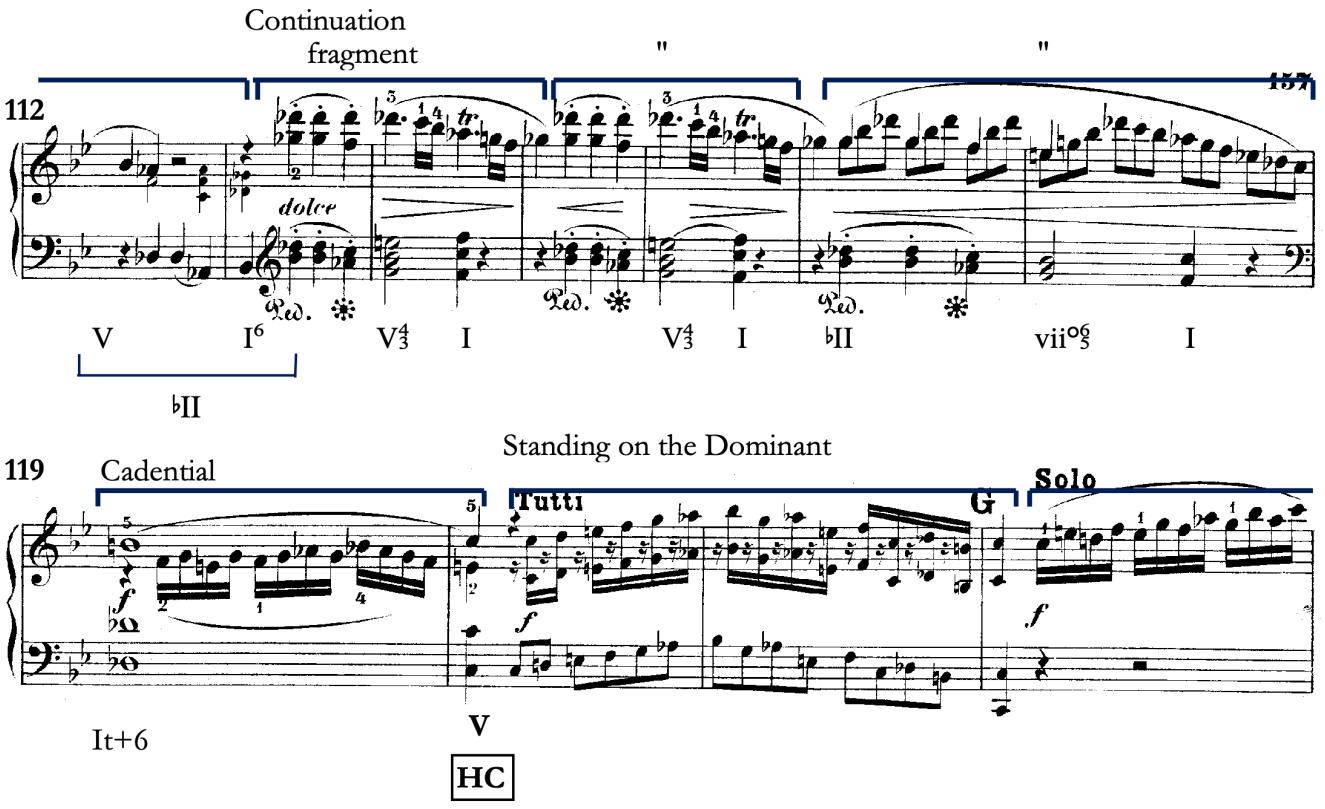
CBI (expanded)

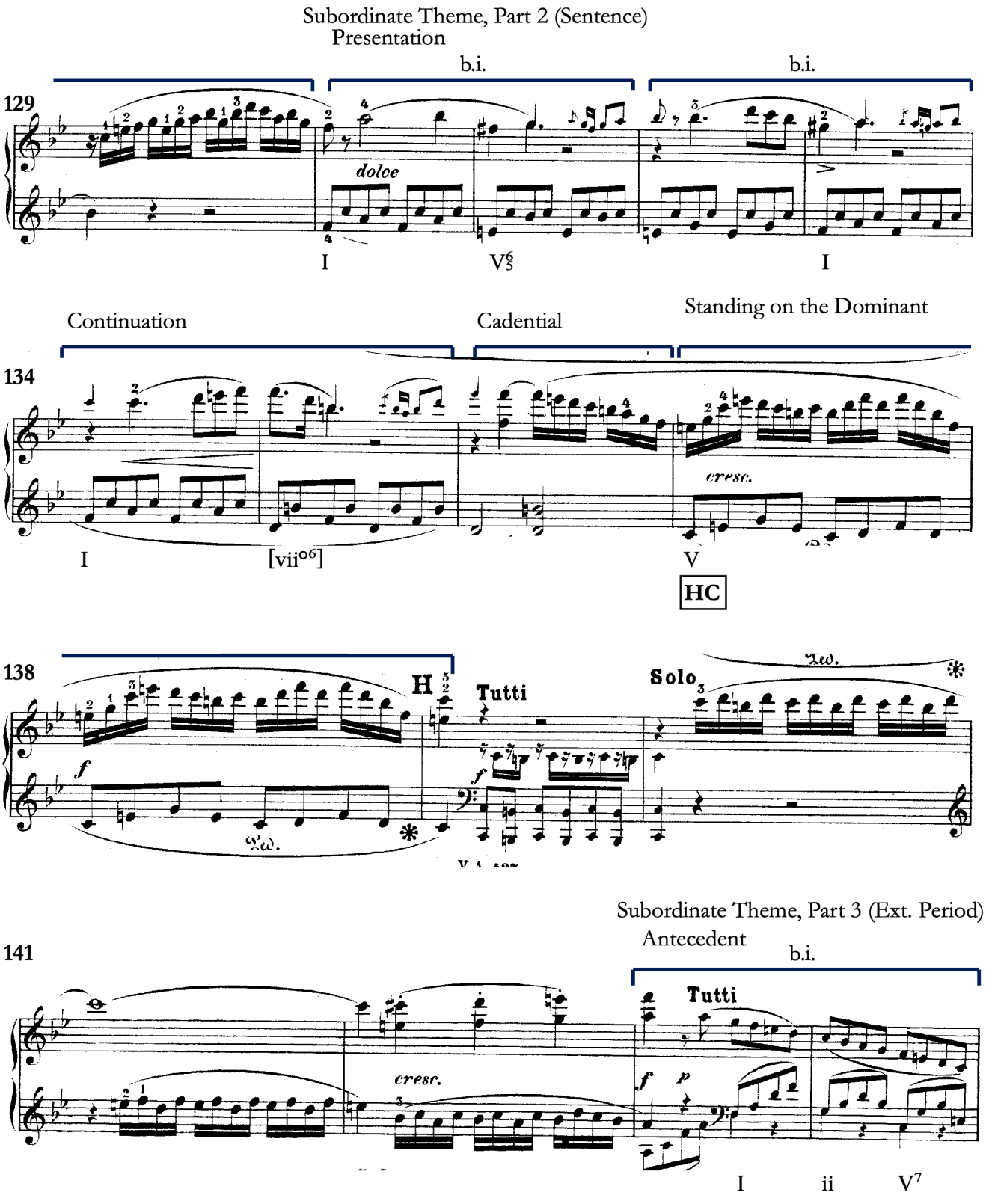
b.i. (expanded)

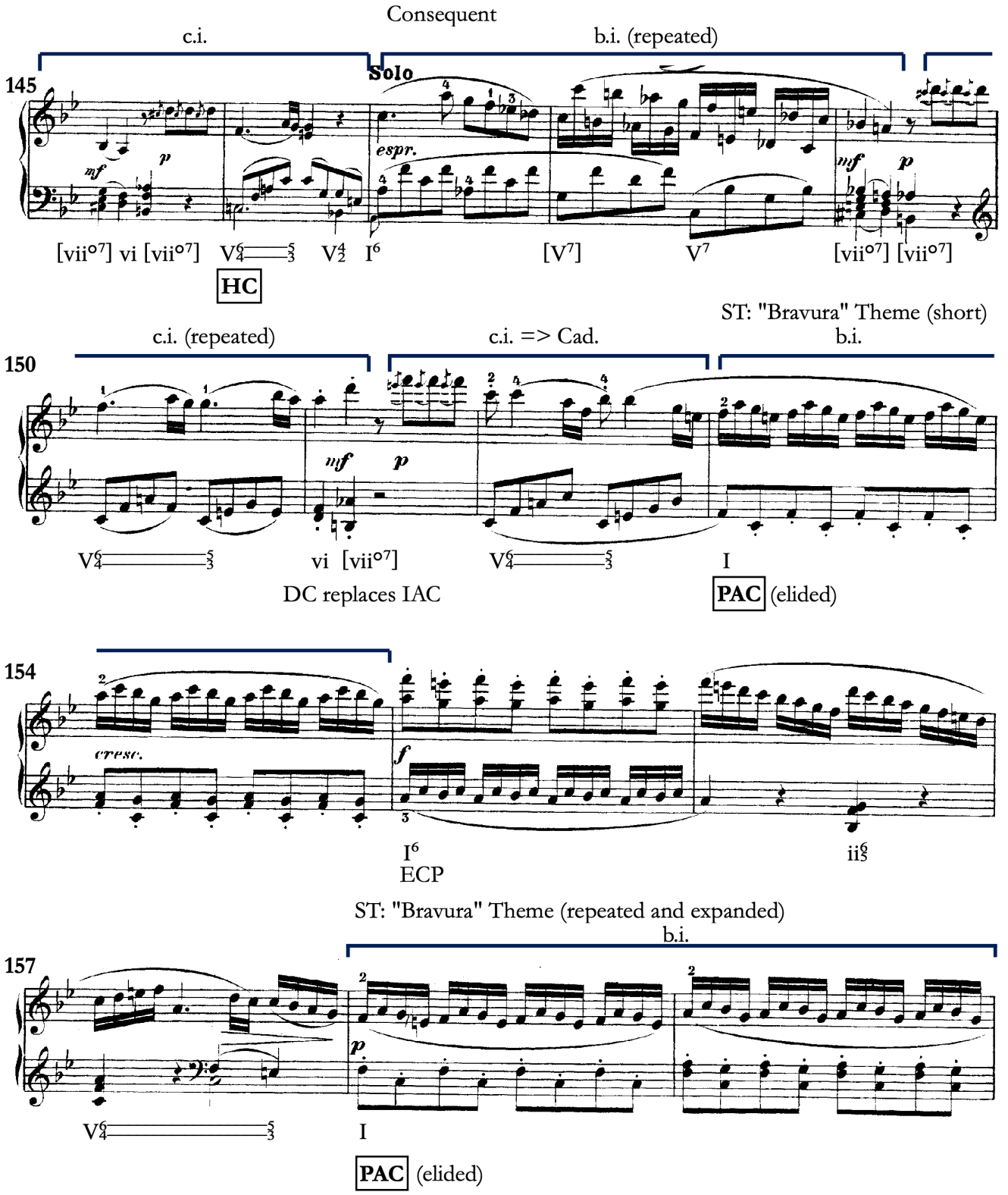
c.i. (expanded)

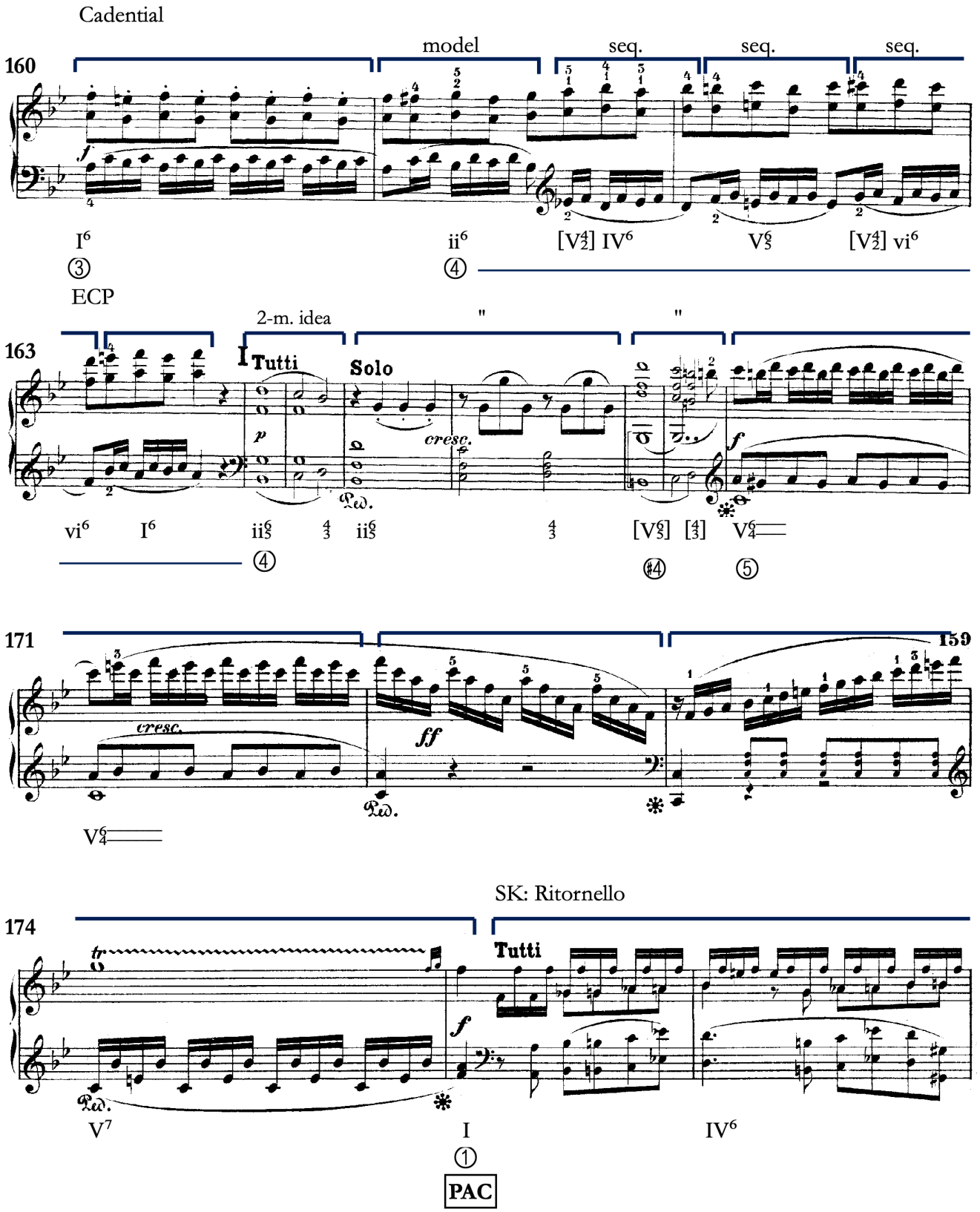


F minor: i ii° vii°7 V♮3

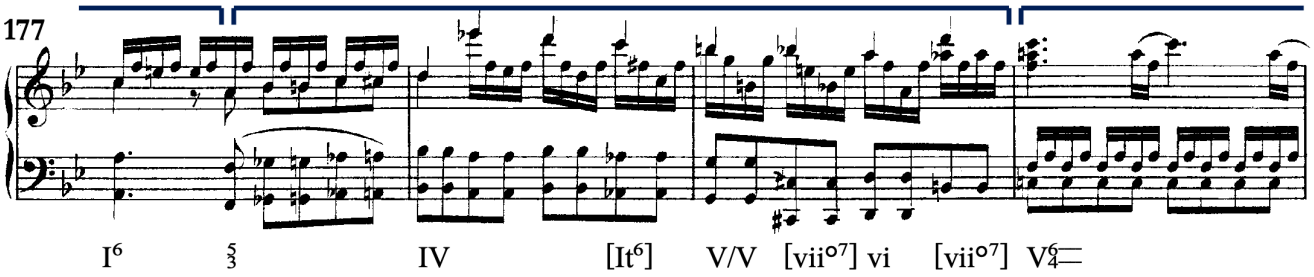

Continuation
fragment
"
"
112
157
dolce
V
I6
V43
I
V43
I
♭II
vii°65
I
♭II
Standing on the Dominant
119
Cadential
Tutti
G
Solo
It+6
V
HC
123
126


Subordinate Theme, Part 2 (Sentence)
Presentation
b.i.
b.i.
129
dolce
I
V§
I
Continuation
Cadential
Standing on the Dominant
134
cresc.
I
[vii°6]
V
HC
138
H
Tutti
Solo
f
f
Subordinate Theme, Part 3 (Ext. Period)
Antecedent
141
b.i.
Tutti
cresc.
f
p
I
ii
V7

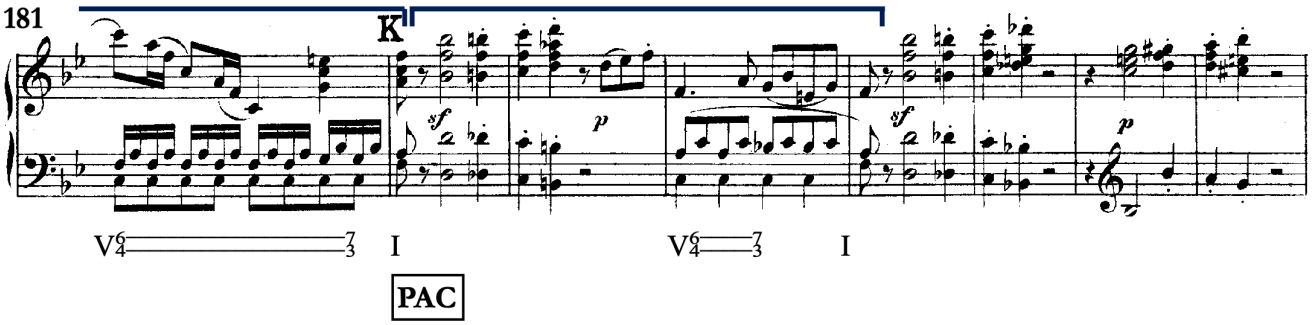

Consequent
c.i.
b.i. (repeated)
145
Solo
espr.
mf
p
mf
p
[vii°7] vi [vii°7] V6/4–5/3 V4/2 I6 [V7] V7 [vii°7] [vii°7]
HC
ST: "Bravura" Theme (short)
c.i. (repeated)
c.i. => Cad.
b.i.
150
mf
p
V6/4–5/3 vi [vii°7] V6/4–5/3 I
DC replaces IAC
PAC (elided)
154
cresc.
f
I6
ECP
ii6/5
ST: "Bravura" Theme (repeated and expanded)
b.i.
157
p
V6/4–5/3 I
PAC (elided)


Cadential
160
model
seq.
seq.
seq.
I⁶
ii⁶
[V4/2] IV⁶
V6/5
[V4/2] vi⁶
③
④
ECP
2-m. idea
"
"
163
I Tutti
Solo
cresc.
vi⁶
I⁶
ii6/5
4/3
ii6/5
4/3
[V6/5]
[4/3]
V6/4
④
♯4
⑤
171
159
cresc.
ff
V6/4
SK: Ritornello
174
Tutti
V⁷
I
IV⁶
①
PAC

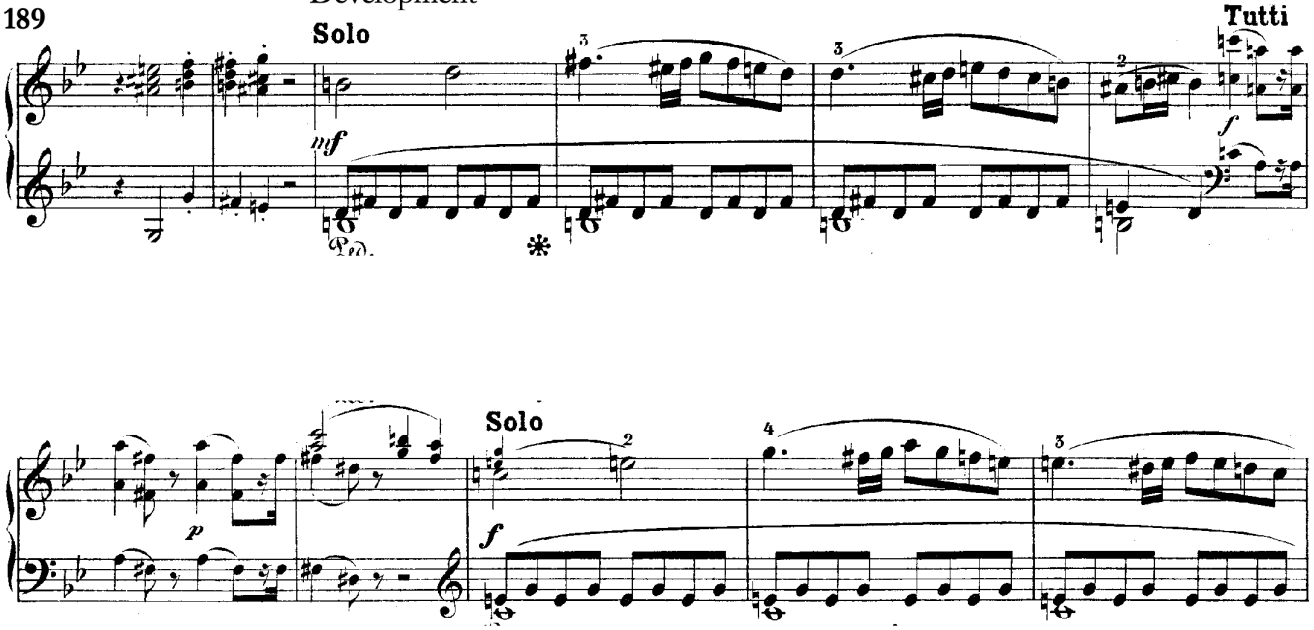
SK: Ritornello (continued)



Codetta

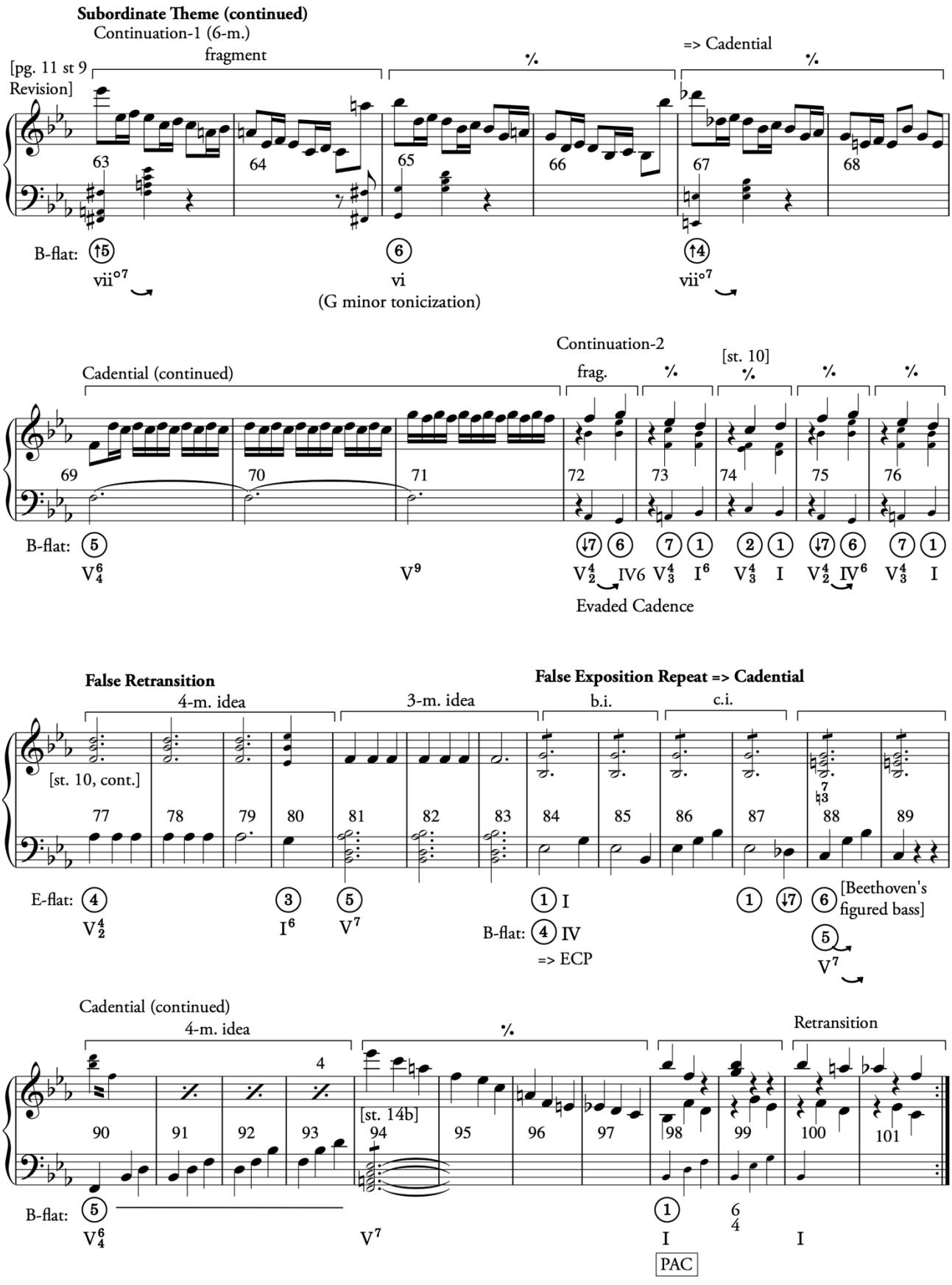


Development



Branch 1.1

pg. 11, staves 9-10 & 14b



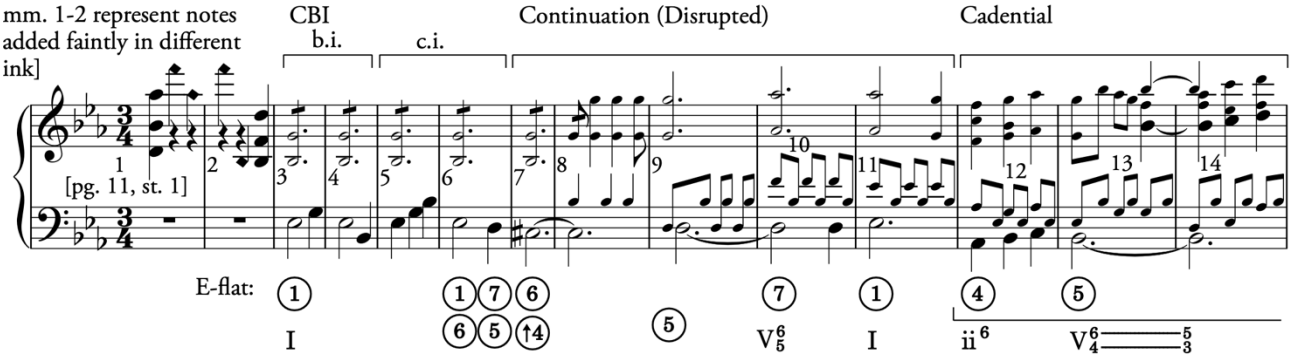
CS 1.2

(pg. 11 and 10)

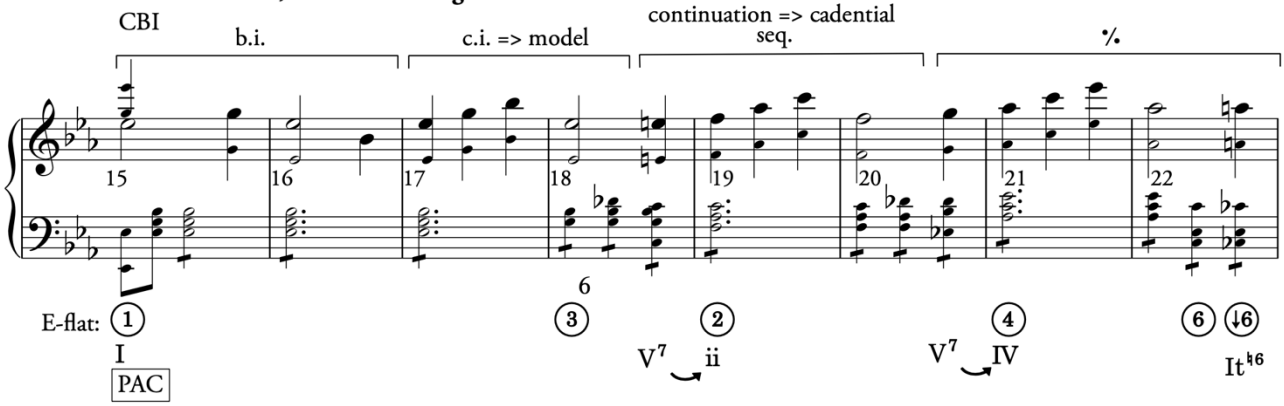
Ludwig van Beethoven

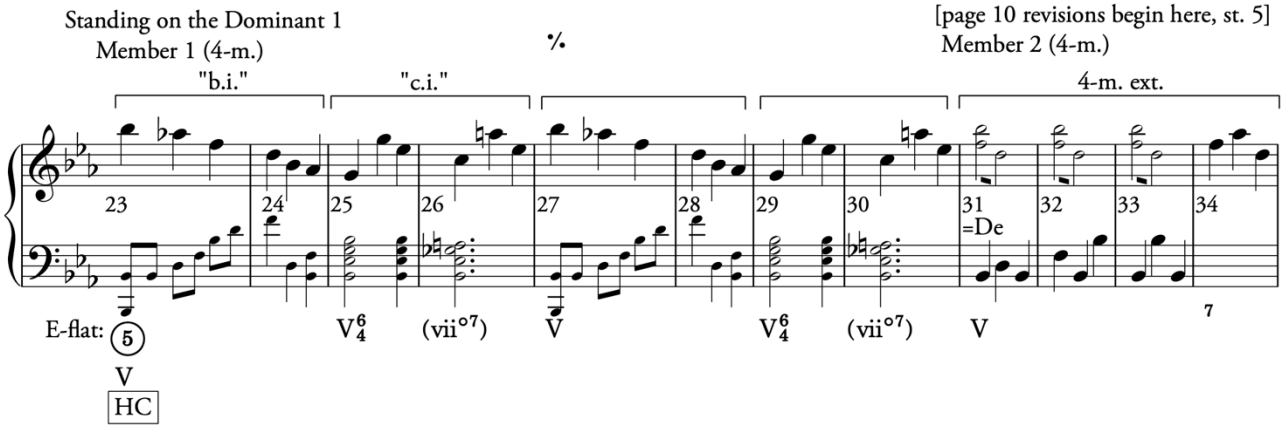
[diamond noteheads in mm. 1-2 represent notes added faintly in different ink]

Main Theme

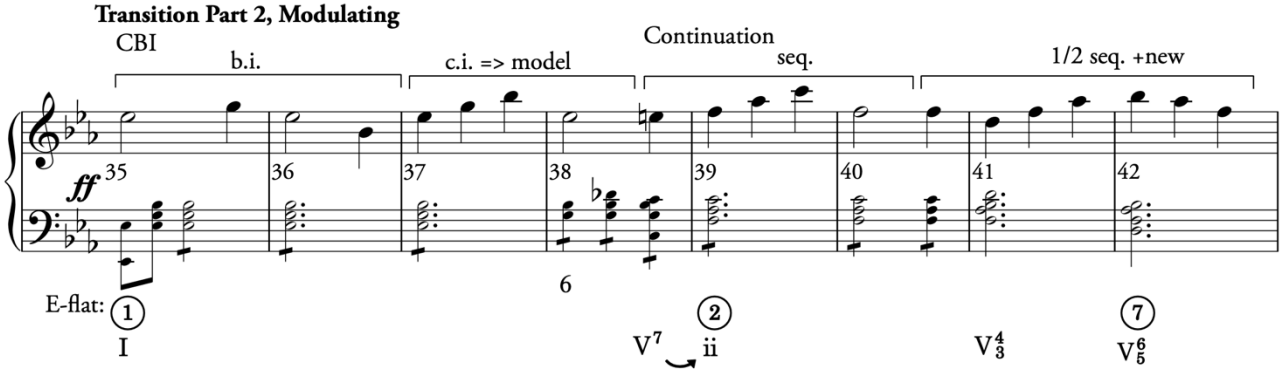


Transition Part 1, Non-Modulating

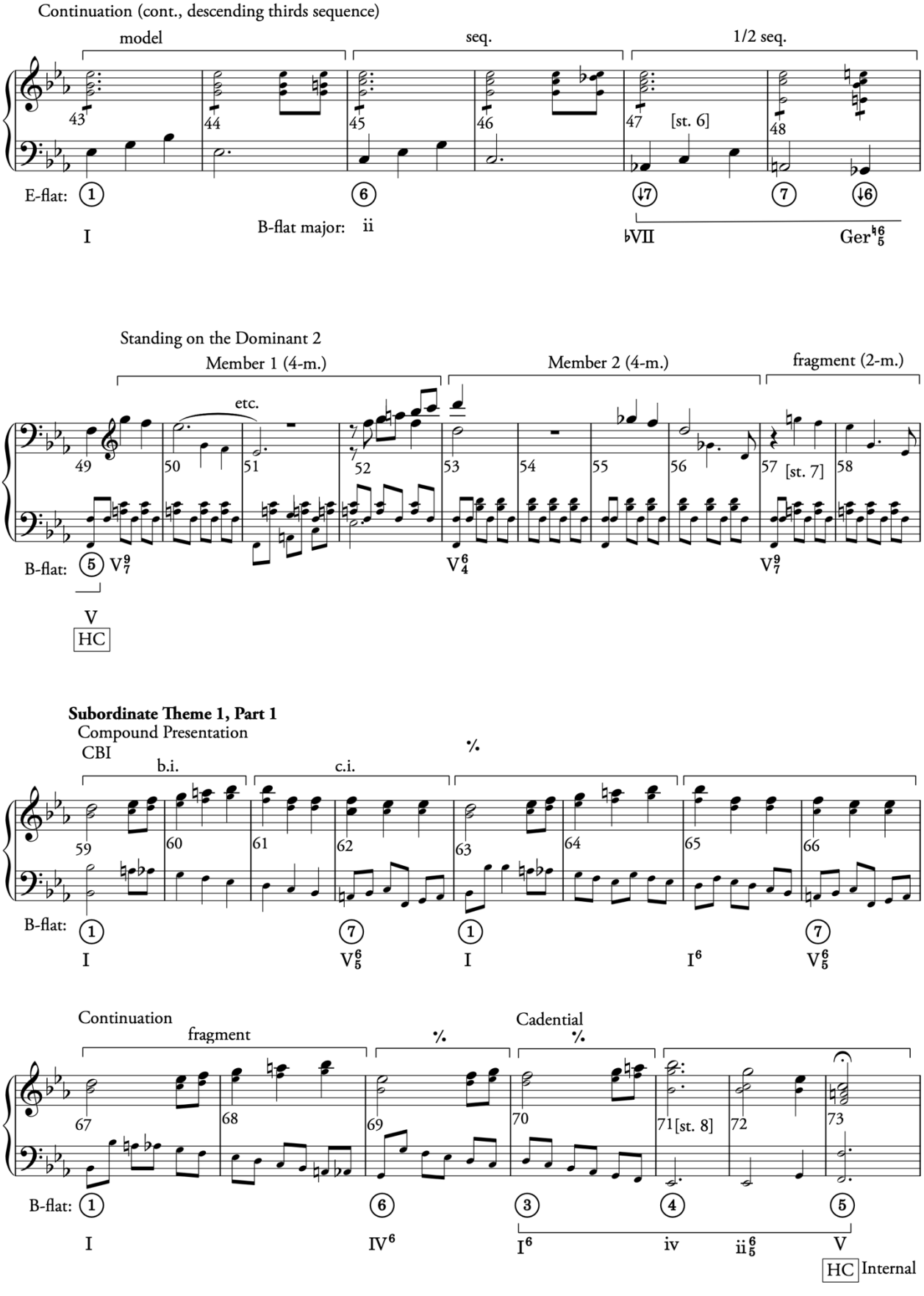




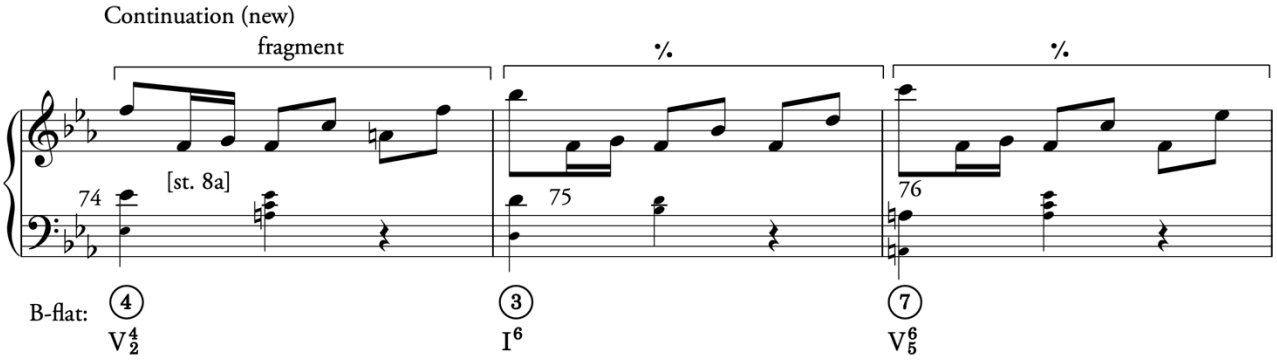
Transition Part 2, Modulating



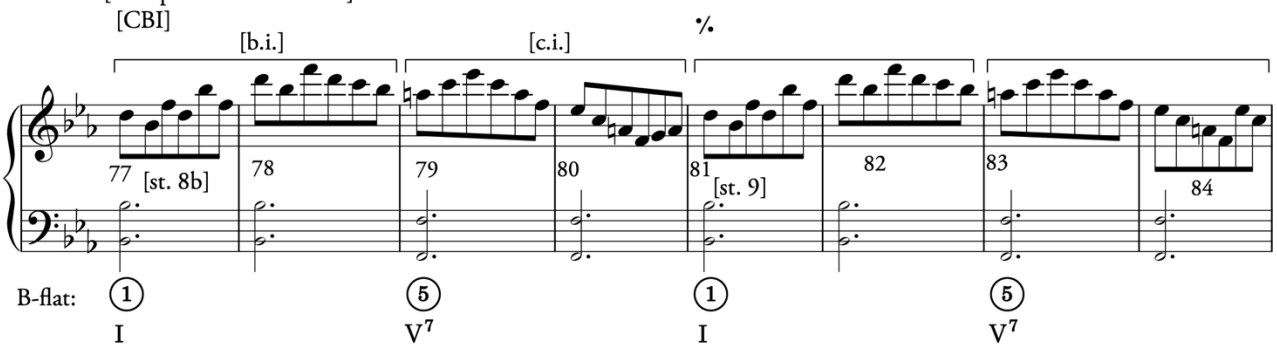
CS 1.2 (cont.)

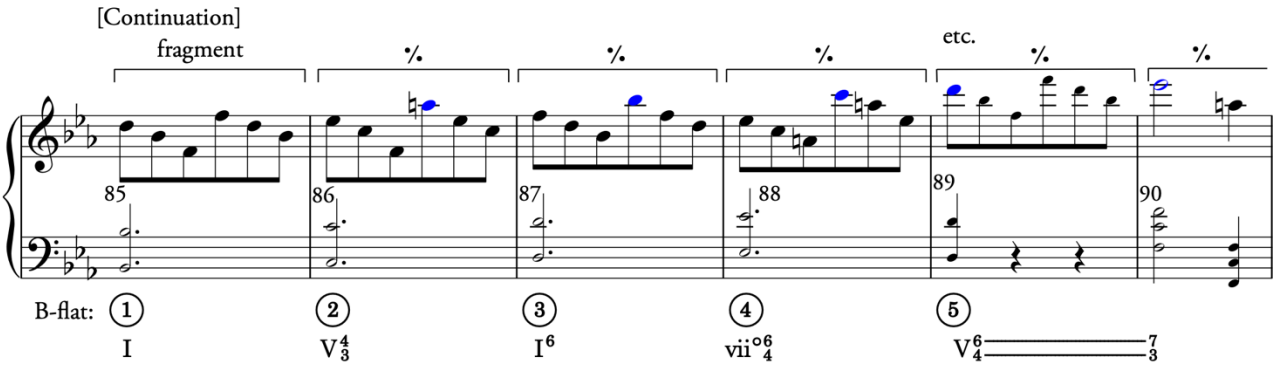

Continuation (cont., descending thirds sequence)
model
seq.
1/2 seq.
43
44
45
46
47
[st. 6]
48
E-flat: 1 6 ↓7 7 ↓6
I
B-flat major: ii
♭VII
Ger 4 6 5
Standing on the Dominant 2
Member 1 (4-m.)
Member 2 (4-m.)
fragment (2-m.)
etc.
49
50
51
52
53
54
55
56
57
[st. 7]
58
B-flat: 5 V 9 7
V 6 4
V 9 7
V
HC
Subordinate Theme 1, Part 1
Compound Presentation
CBI
b.i.
c.i.
59
60
61
62
63
64
65
66
B-flat: 1 7 1
I
V 6 5
I
I 6
V 6 5
Continuation
fragment
Cadential
67
68
69
70
71
[st. 8]
72
73
B-flat: 1 6 3 4 5
I
IV 6
I 6
iv
ii 6 5
V
HC Internal

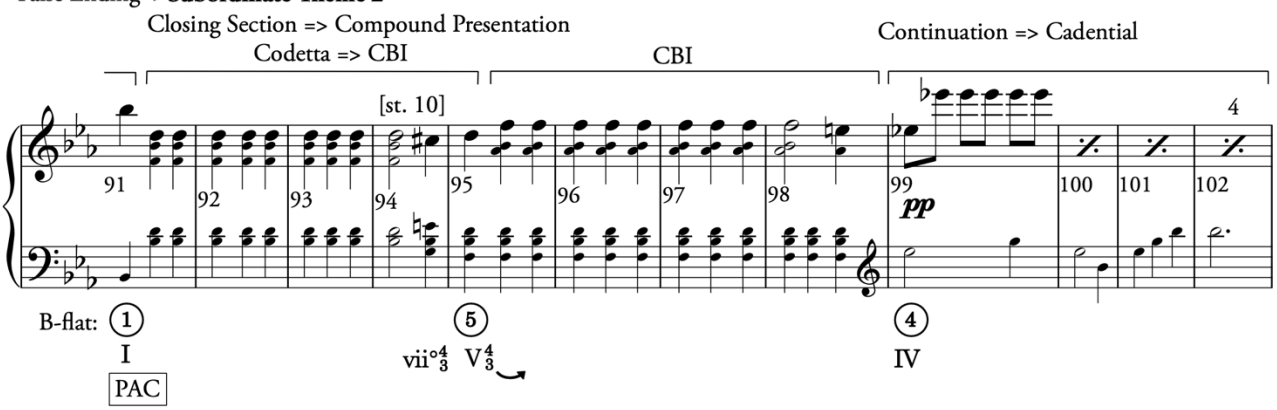
CS 1.2 (cont.)



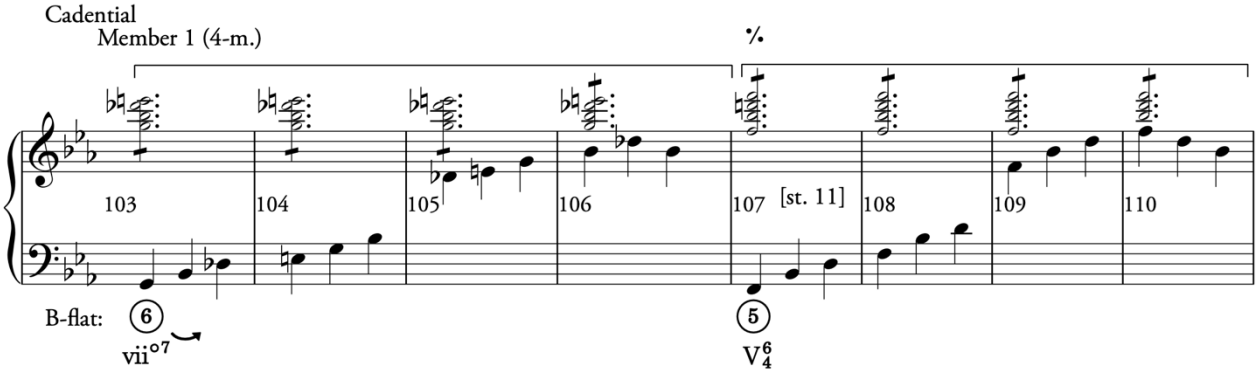
Cadential (with characteristics of a Subordinate Theme 1, Part 2; 15-m.)

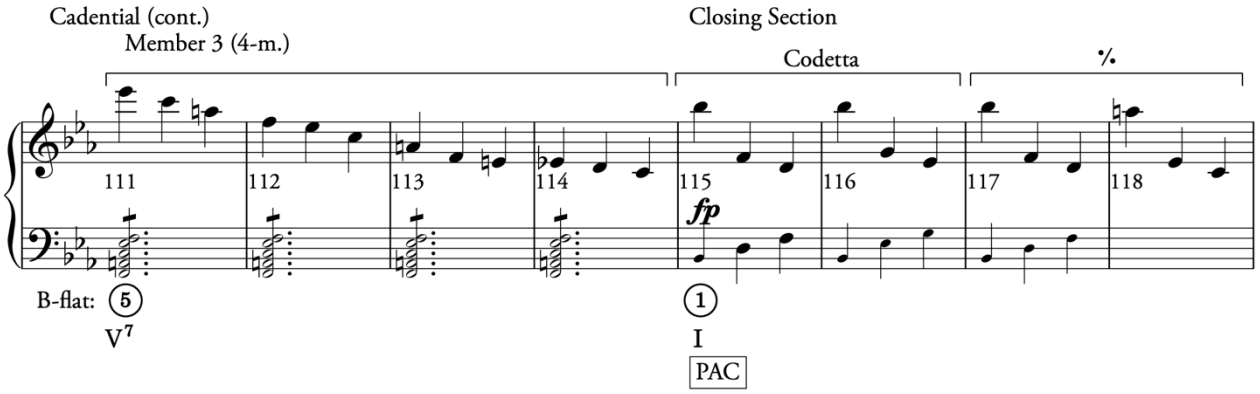


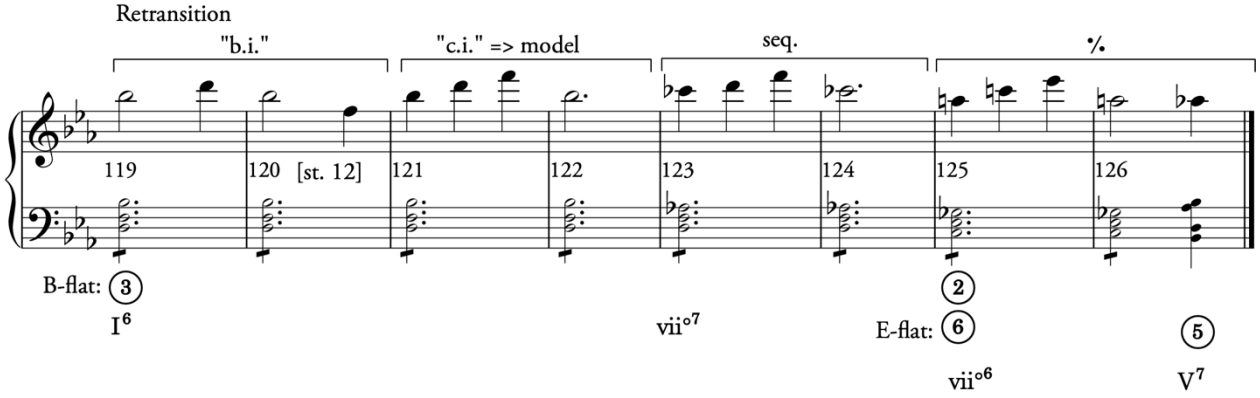




CS 1.2 (cont.)

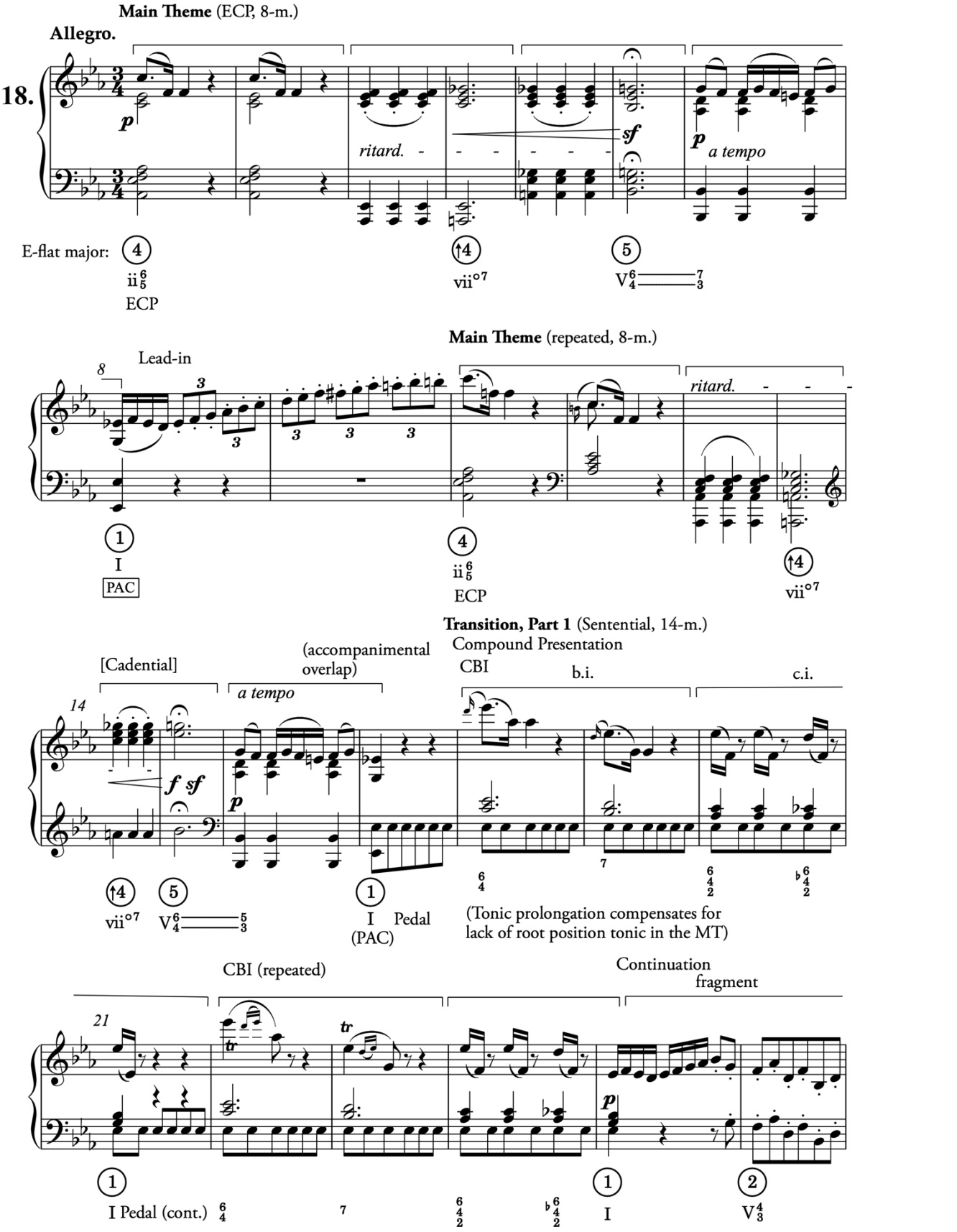

Cadential
Member 1 (4-m.)
103
104
105
106
107
[st. 11]
108
109
110
B-flat:
6
vii°7
5
V6/4


Cadential (cont.)
Member 3 (4-m.)
Closing Section
Codetta
111
112
113
114
115
116
117
118
fp
B-flat:
5
V7
1
I
PAC

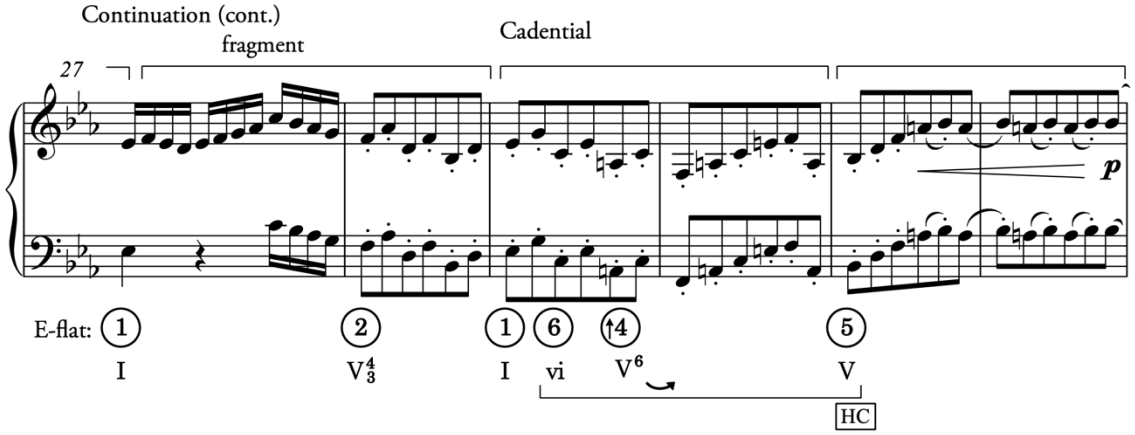

Retransition
"b.i."
"c.i." => model
seq.
119
120
[st. 12]
121
122
123
124
125
126
B-flat:
3
I6
vii°7
2
E-flat:
6
vii°6
5
V7

Sonate Op. 31, No. 3

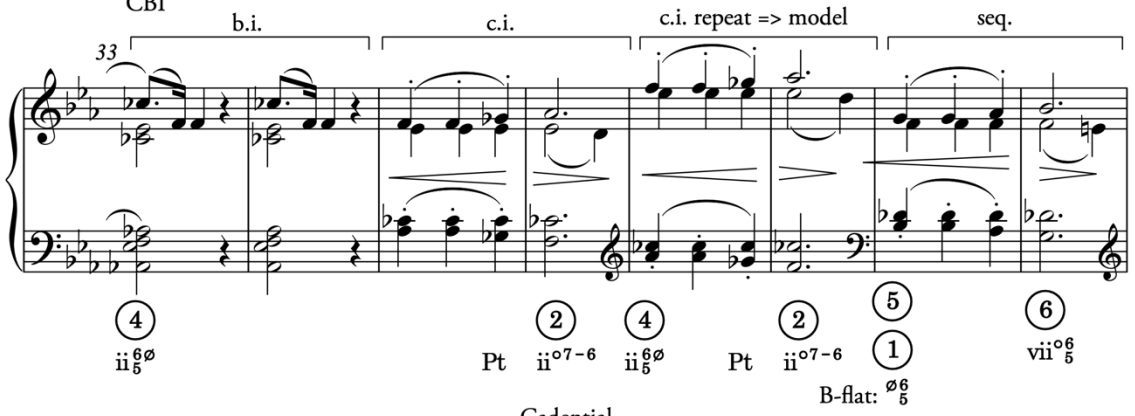
Ludwig van Beethoven
Analysis by Thomas W. Posen

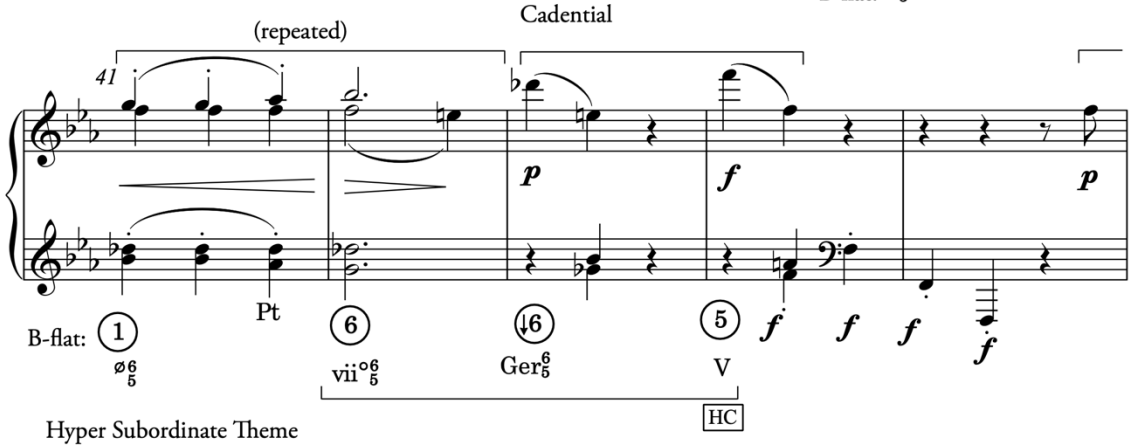


Transition, Part 1 (cont.)
Continuation (cont.)

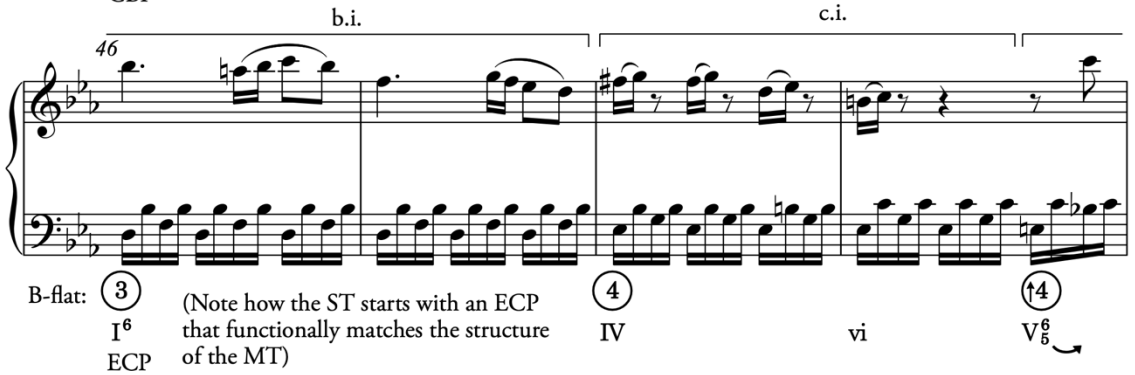


Transition, Part 2 (Hybrid; 12-m.)
CBI

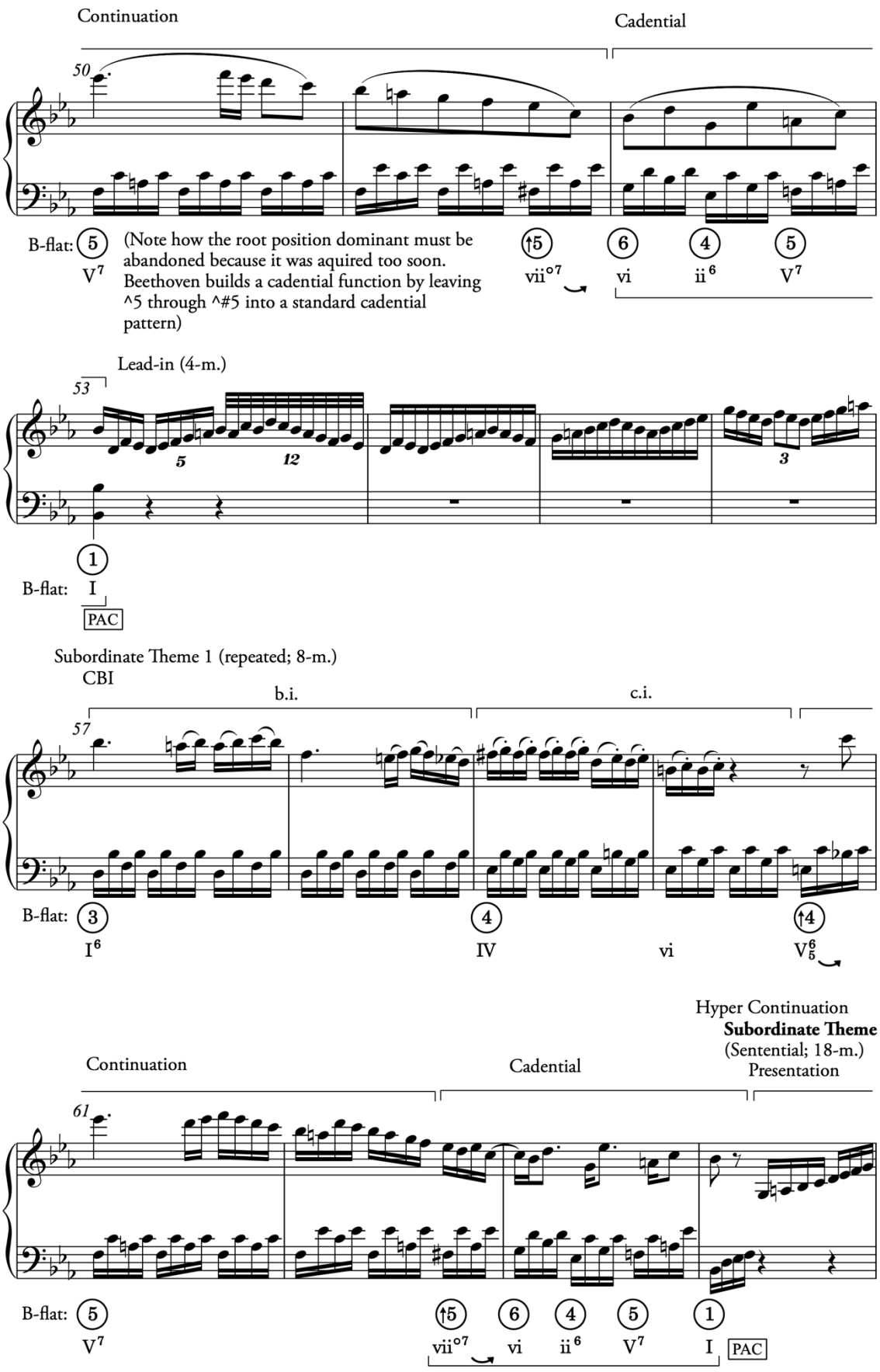




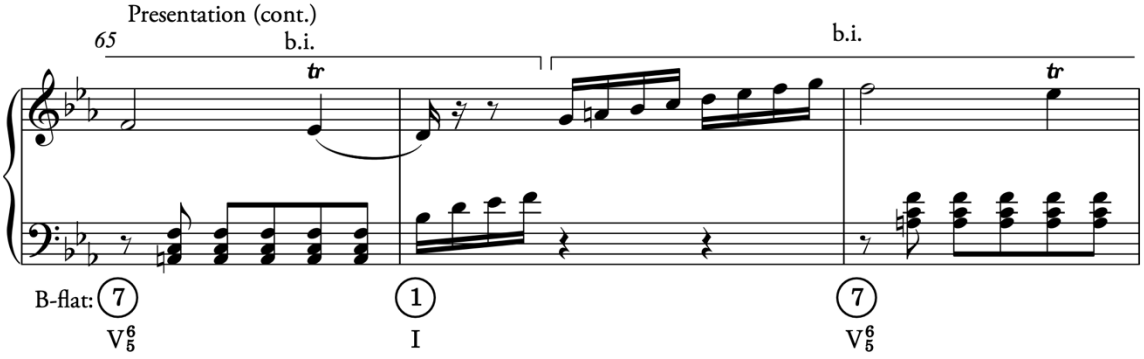
Hyper Subordinate Theme
Hyper Presentation (19-m.)
Subordinate Theme 1 (Hybrid, 8-m.)
CBI

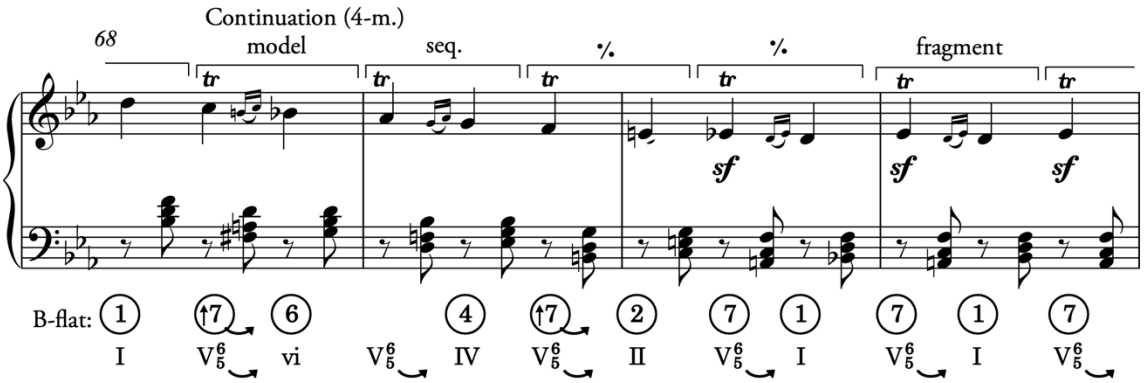


(Note how the ST starts with an ECP that functionally matches the structure of the MT)

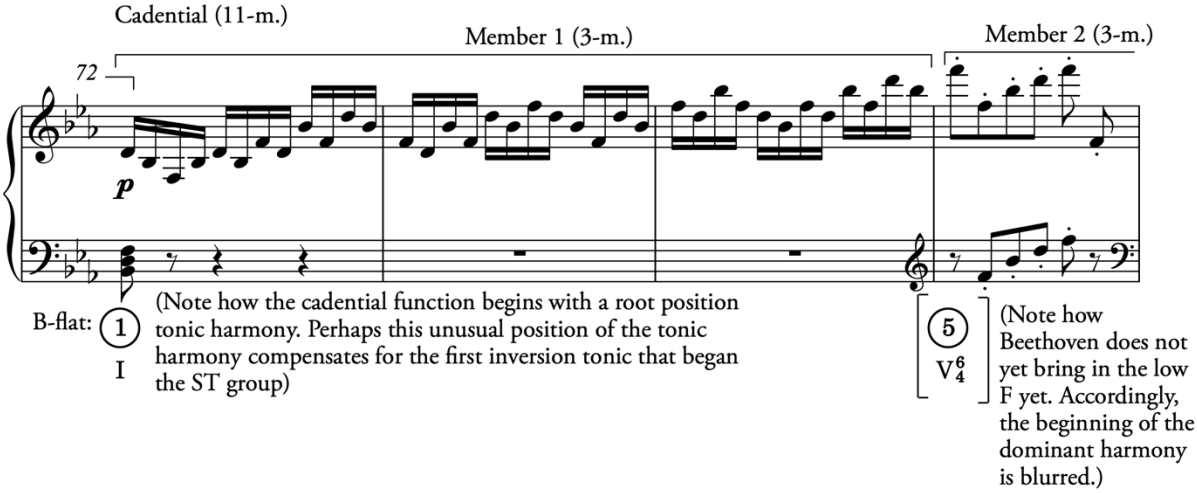

Continuation
Cadential
50
B-flat: 5 V7
(Note how the root position dominant must be abandoned because it was aquired too soon. Beethoven builds a cadential function by leaving ^5 through ^#5 into a standard cadential pattern)
↑5 vii°7
6 vi
4 ii6
5 V7
Lead-in (4-m.)
53
5
12
3
1
B-flat: I
PAC
Subordinate Theme 1 (repeated; 8-m.)
CBI
b.i.
c.i.
57
B-flat: 3 I6
4 IV
vi
↑4 V65
Hyper Continuation
Subordinate Theme 2
(Sentential; 18-m.)
Presentation
Continuation
Cadential
61
B-flat: 5 V7
↑5 vii°7
6 vi
4 ii6
5 V7
1 I
PAC

Hyper Continuation (cont.)
Subordinate Theme 2 (cont.)
Presentation (cont.)

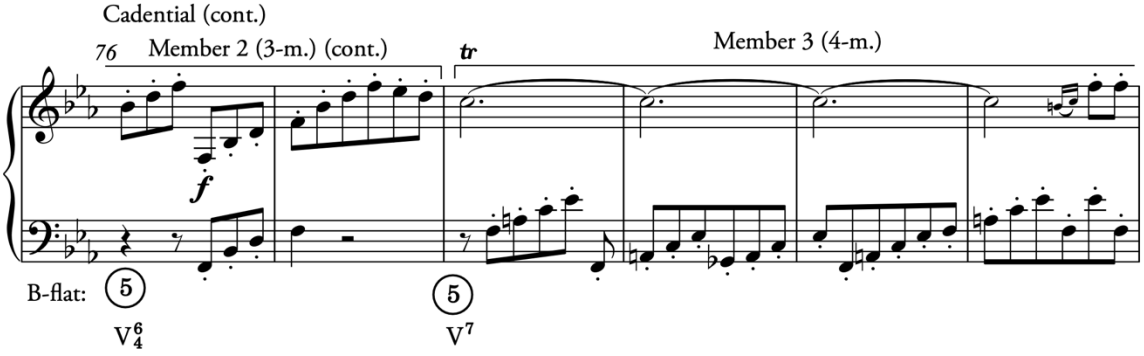




Hyper Cadential (11-m.)
Cadential (11-m.)

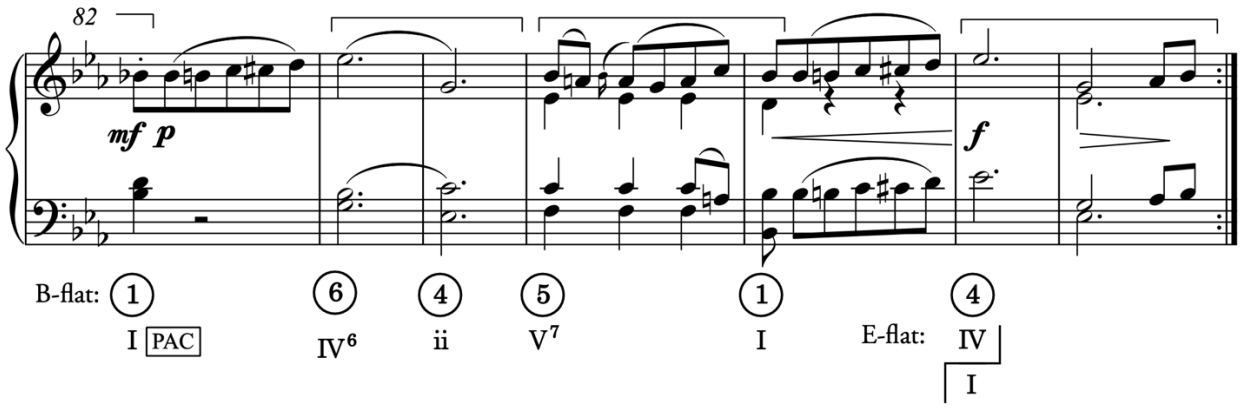


Cadential (cont.)



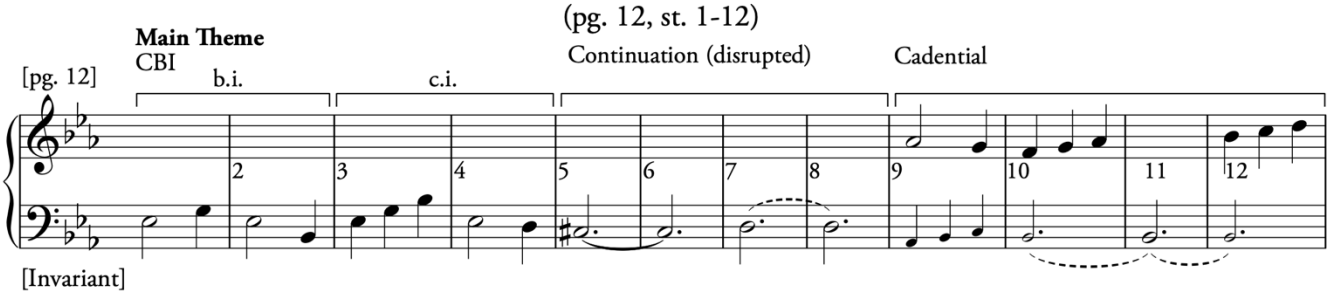
Closing Section

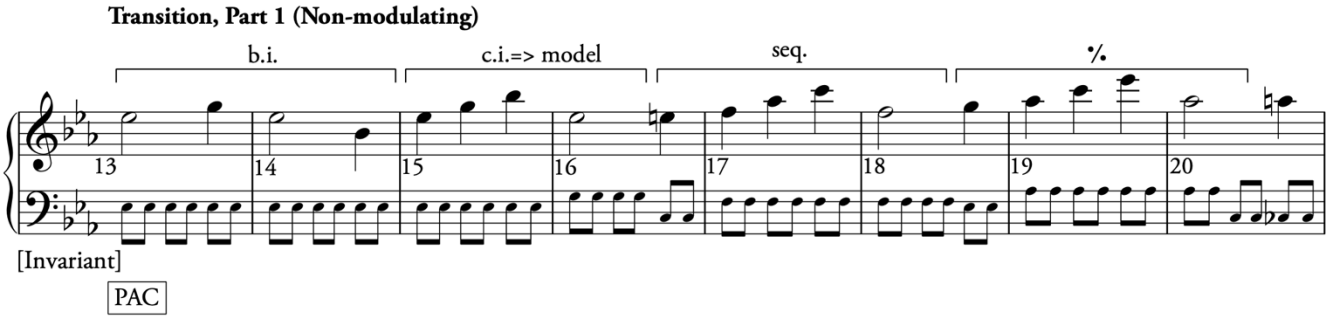
Codetta

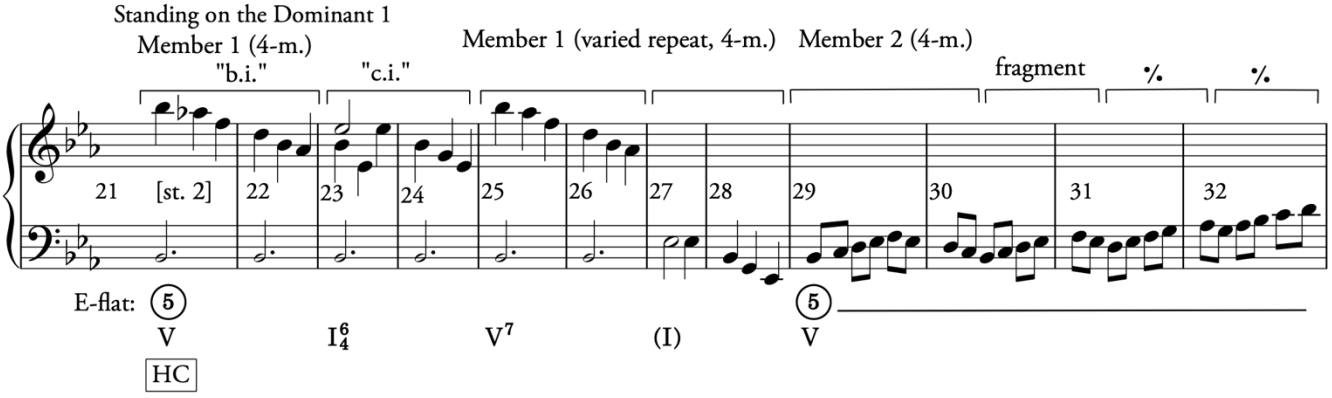


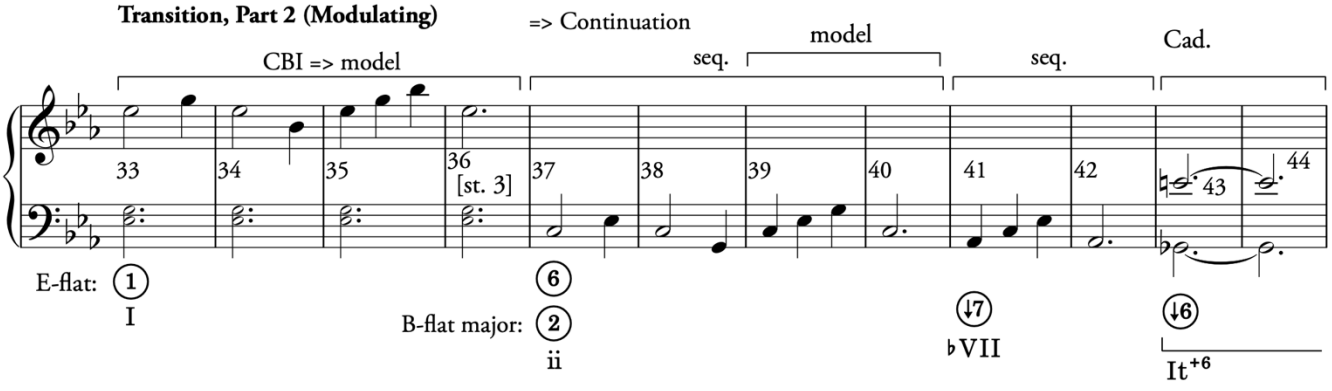
CS 2.0

(pg. 12, st. 1-12)



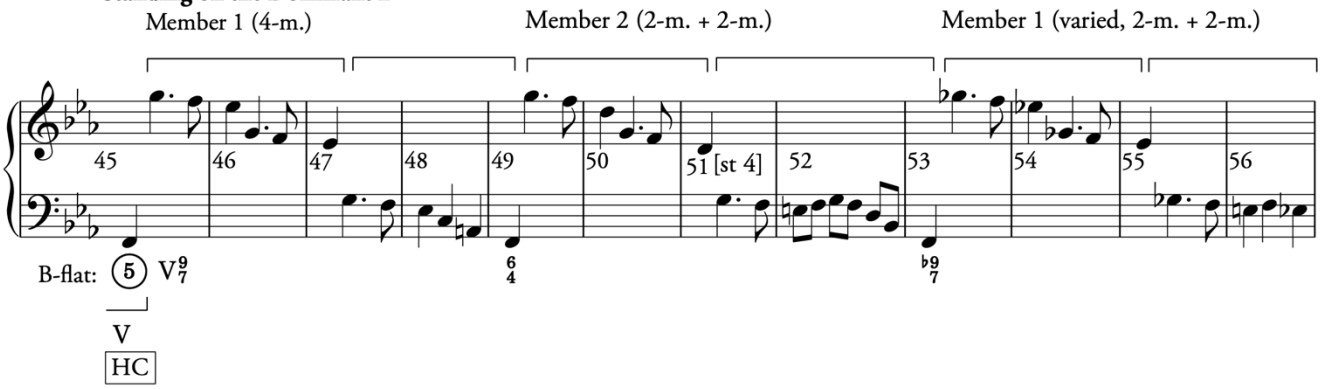




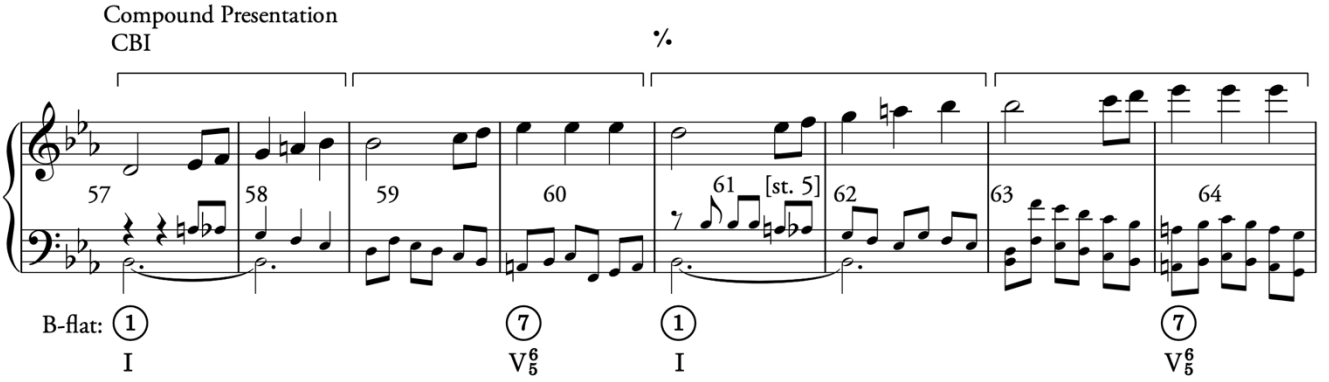


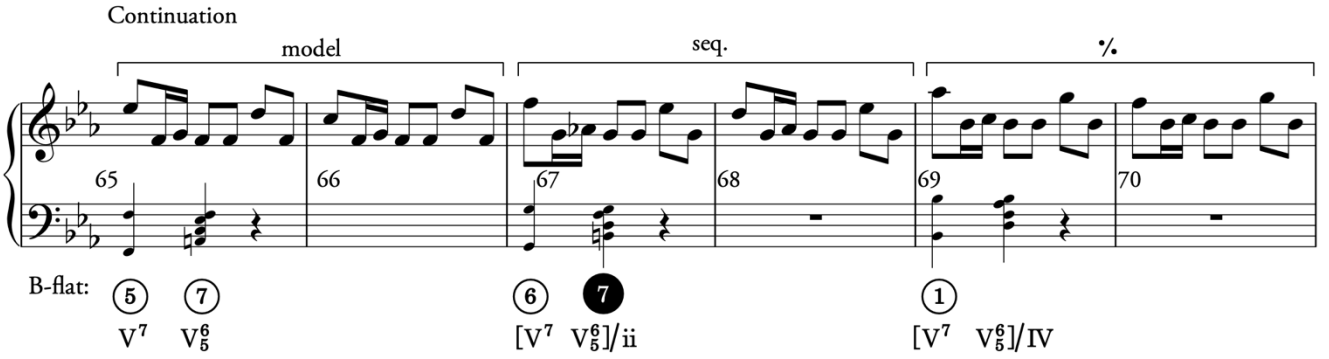
CS 2.0 (Cont.)

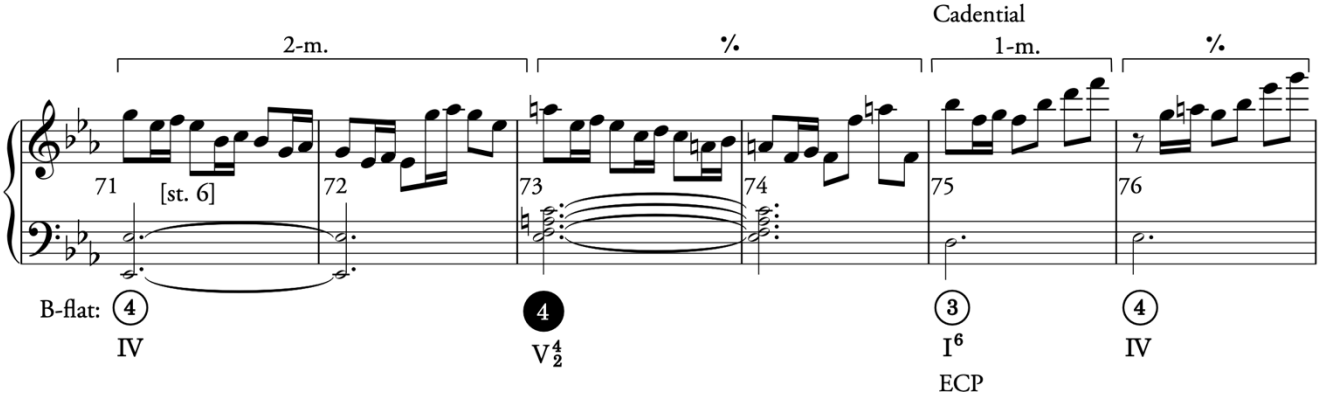
Standing on the Dominant 2



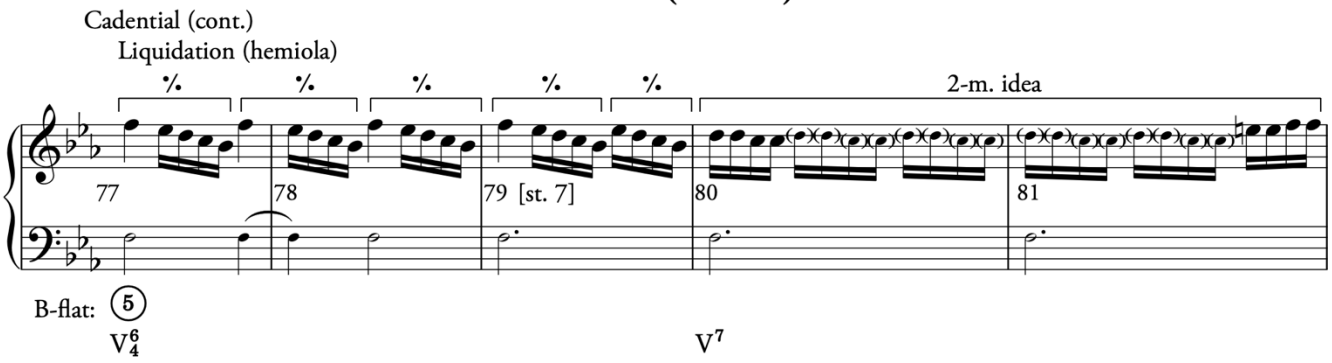
Subordinate Theme 1



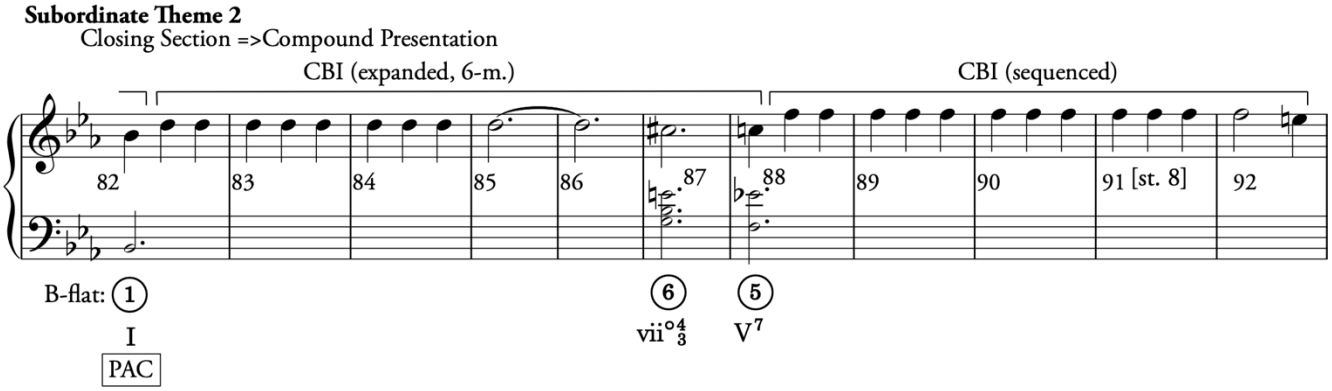


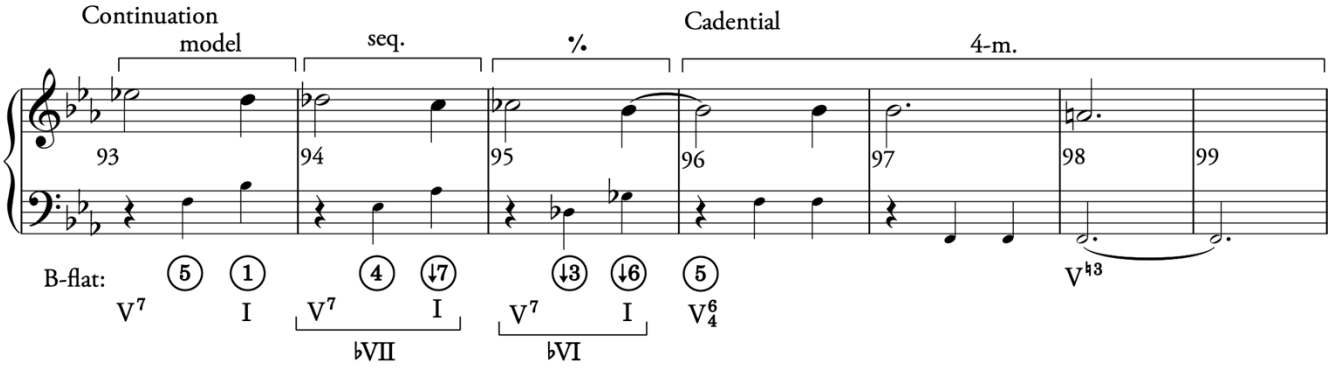


CS 2.0 (Cont.)

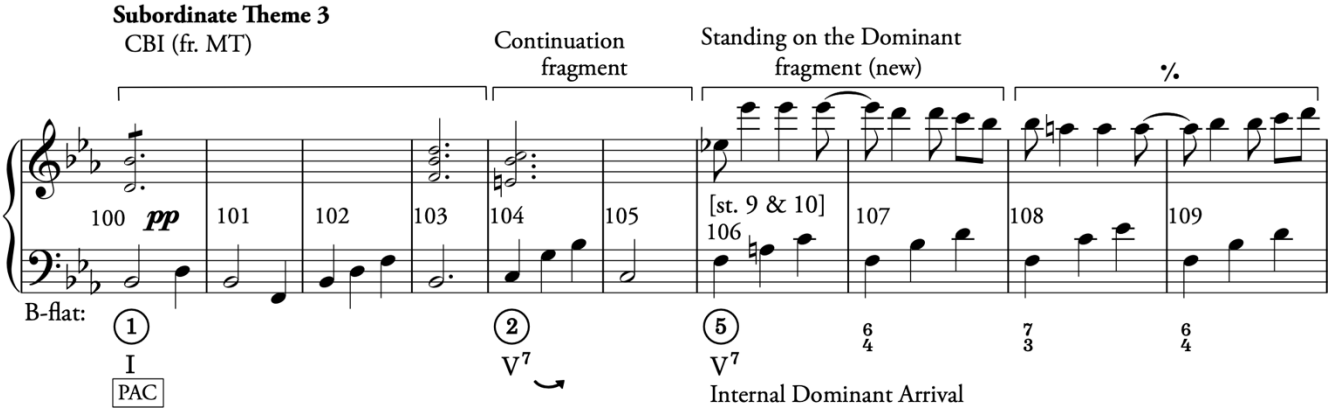


Subordinate Theme 2

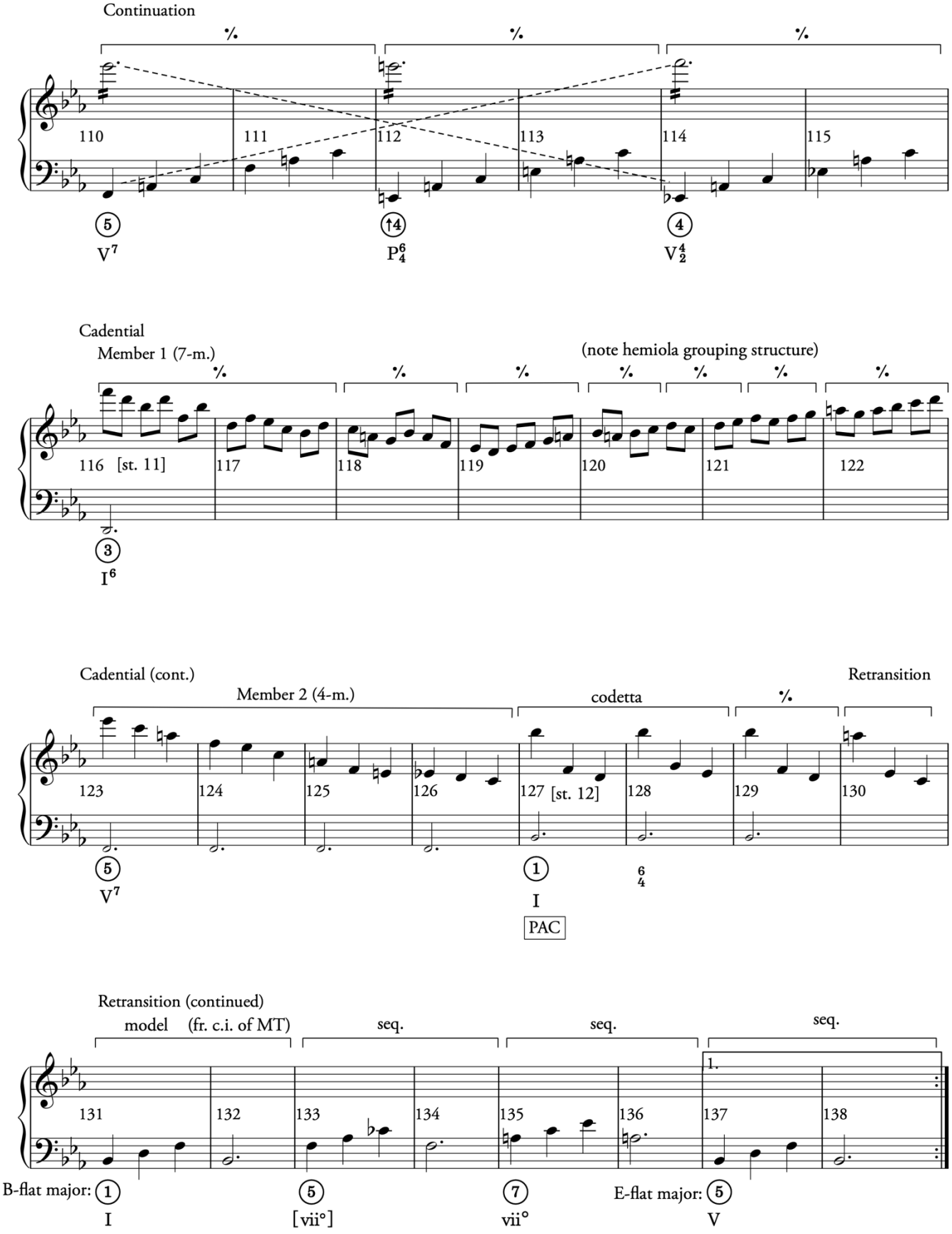




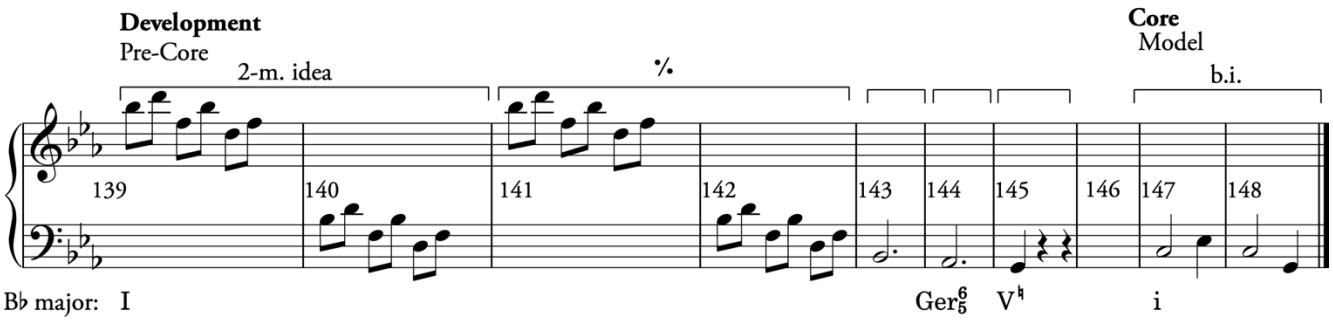
Subordinate Theme 3



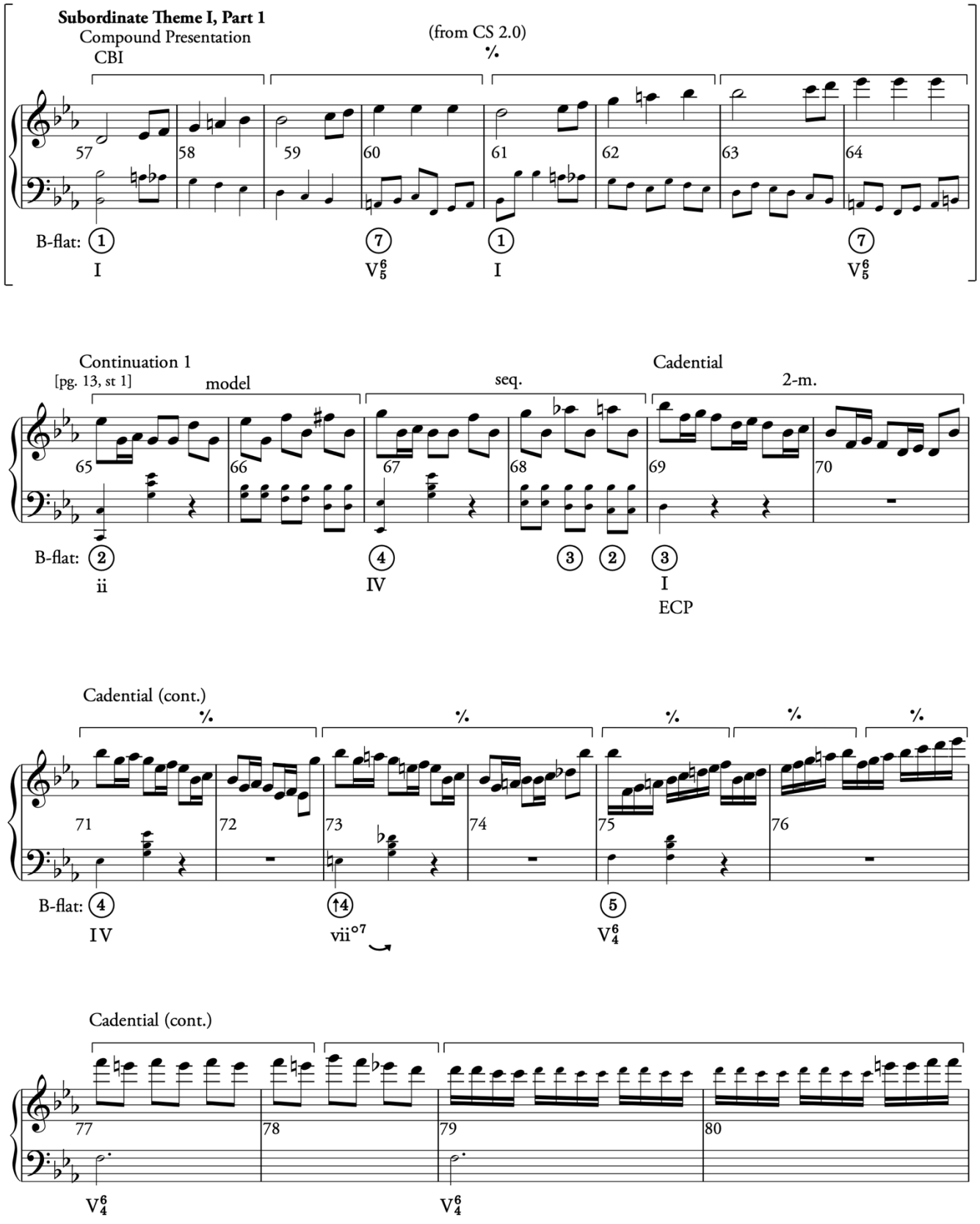
CS 2.0 (Cont.)

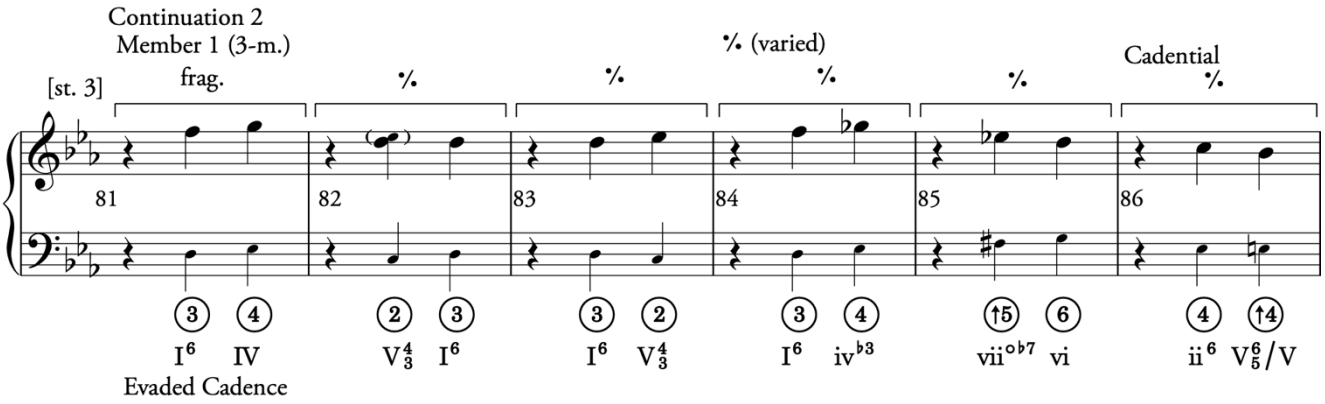

Continuation
110
111
112
113
114
115
V7
P64
V42
Cadential
Member 1 (7-m.)
(note hemiola grouping structure)
116 [st. 11]
117
118
119
120
121
122
I6
Cadential (cont.)
Member 2 (4-m.)
codetta
Retransition
123
124
125
126
127 [st. 12]
128
129
130
V7
I
PAC
Retransition (continued)
model (fr. c.i. of MT)
seq.
seq.
seq.
1.
131
132
133
134
135
136
137
138
B-flat major:
I
[vii°]
vii°
E-flat major:
V

CS 2.0 (Cont.)


Development
Pre-Core
2-m. idea
%
Core
Model
b.i.
139
140
141
142
143
144
145
146
147
148
B♭ major: I
Ger$^{6}_{5}$
V$^{\natural}$
i

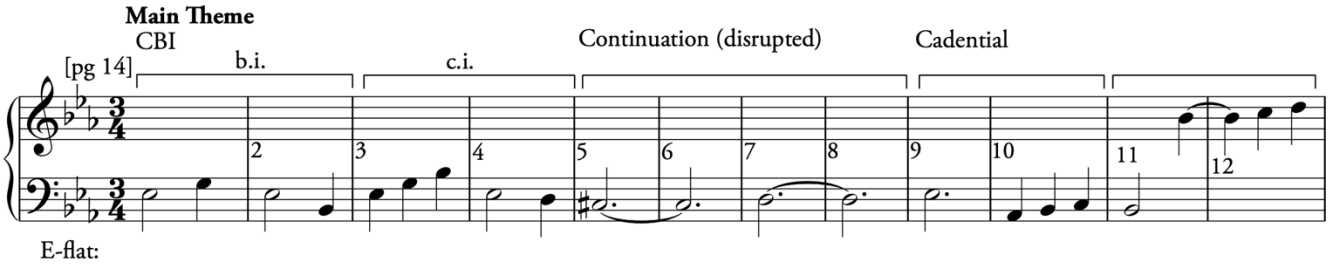
CS 2.1

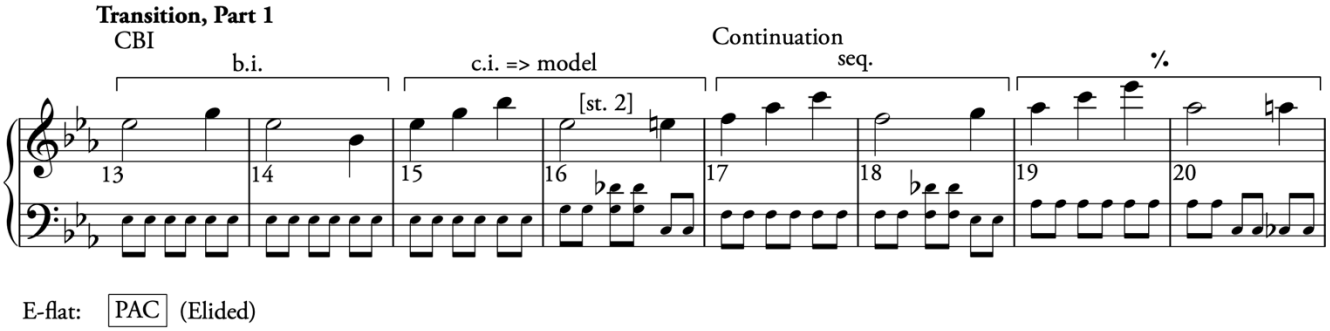

Subordinate Theme I, Part 1
Compound Presentation
CBI
(from CS 2.0)
%
57
58
59
60
61
62
63
64
B-flat: 1 7 1 7
I V6 5 I V6 5
Continuation 1
[pg. 13, st 1]
model
seq.
Cadential
2-m.
65
66
67
68
69
70
B-flat: 2 4 3 2 3
ii IV I
ECP
Cadential (cont.)
%
71
72
73
74
75
76
B-flat: 4 ↑4 5
IV vii°7 V6 4
Cadential (cont.)
77
78
79
80
V6 4 V6 4

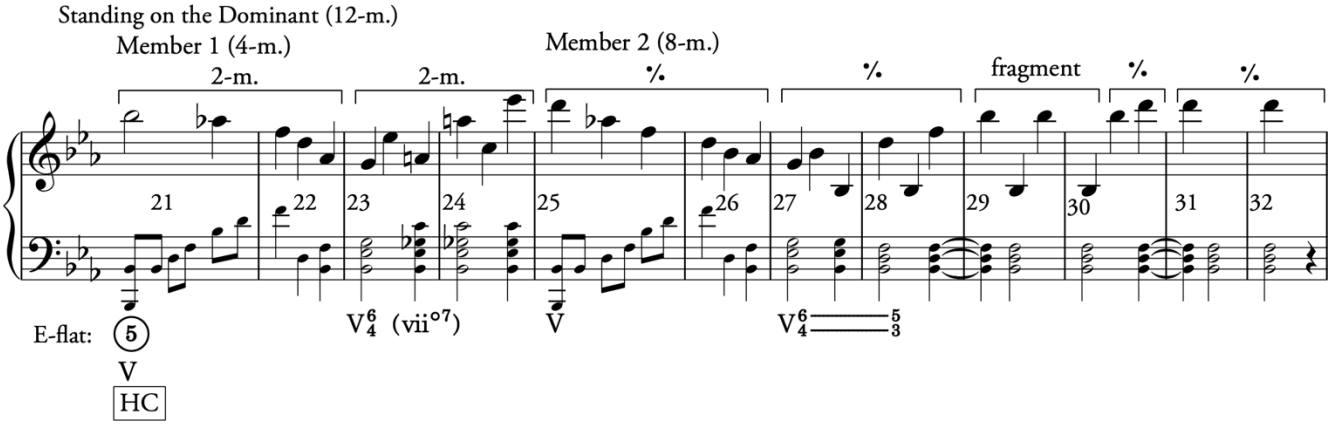

Continuation 2
Member 1 (3-m.)
[st. 3]
frag.
% (varied)
Cadential
%
81
82
83
84
85
86
3 4
2 3
3 2
3 4
↑5 6
4 ↑4
I6 IV
V43 I6
I6 V43
I6 iv♭3
vii°♭7 vi
ii6 V65/V
Evaded Cadence

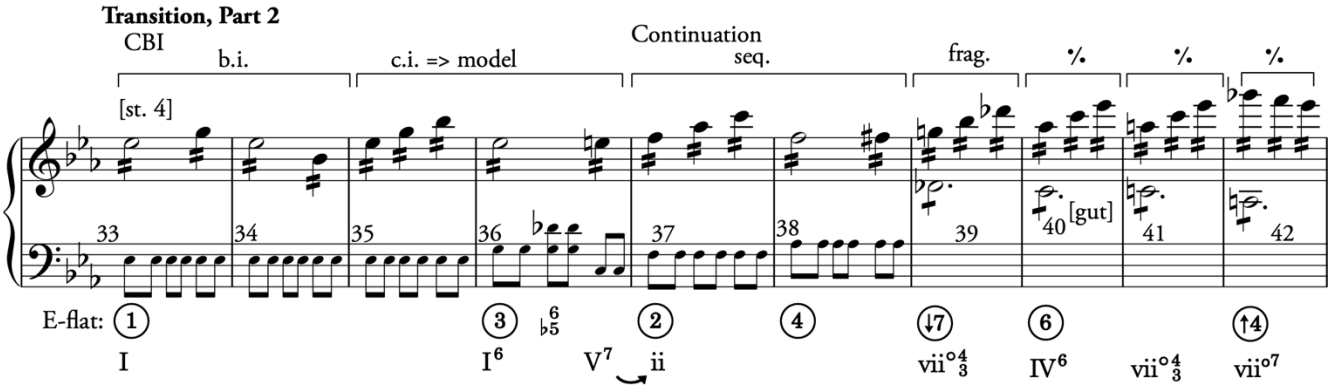
CS 3.0

pg. 14, st. 1-10 & pg. 15, st. 1-8

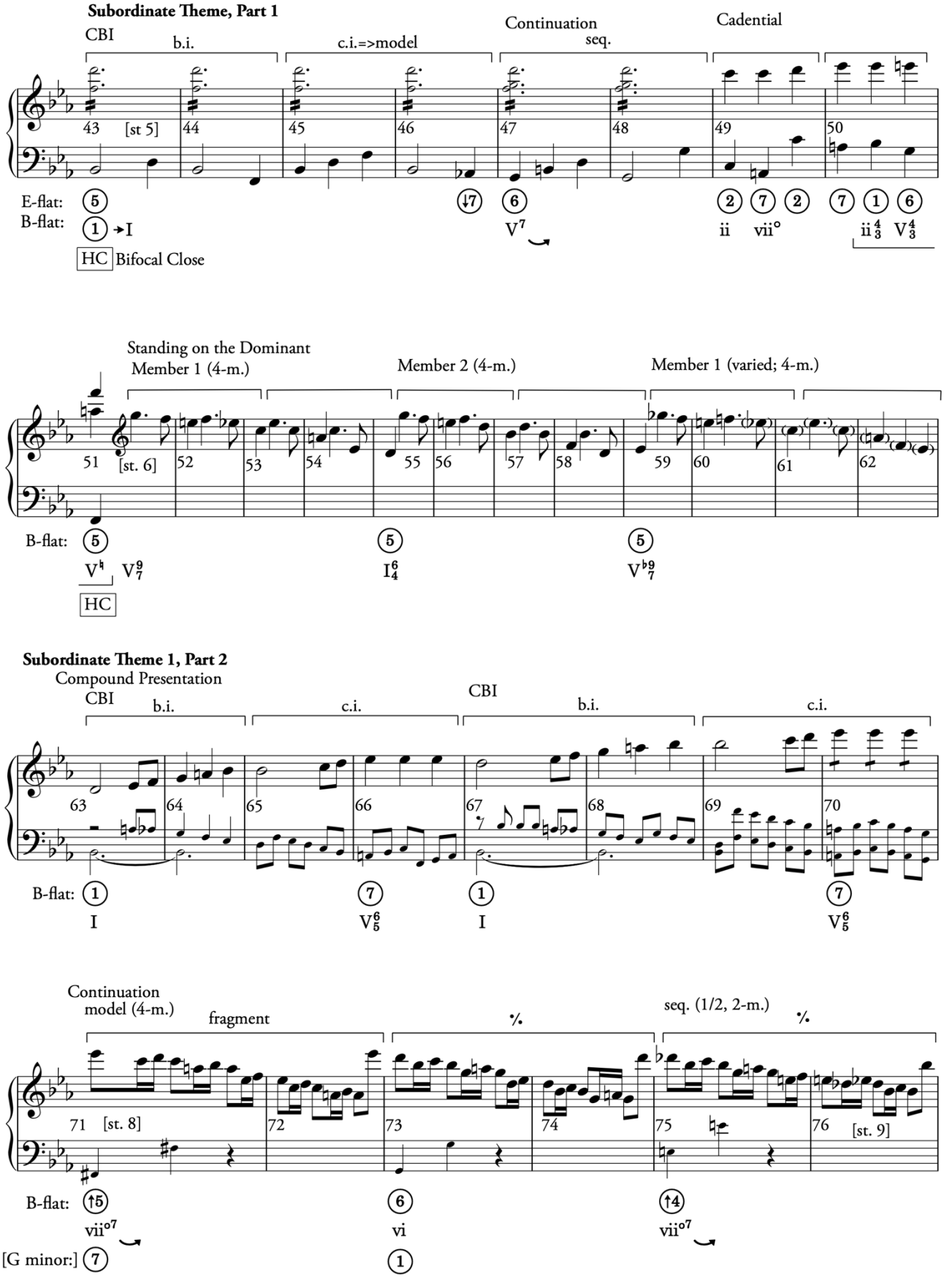






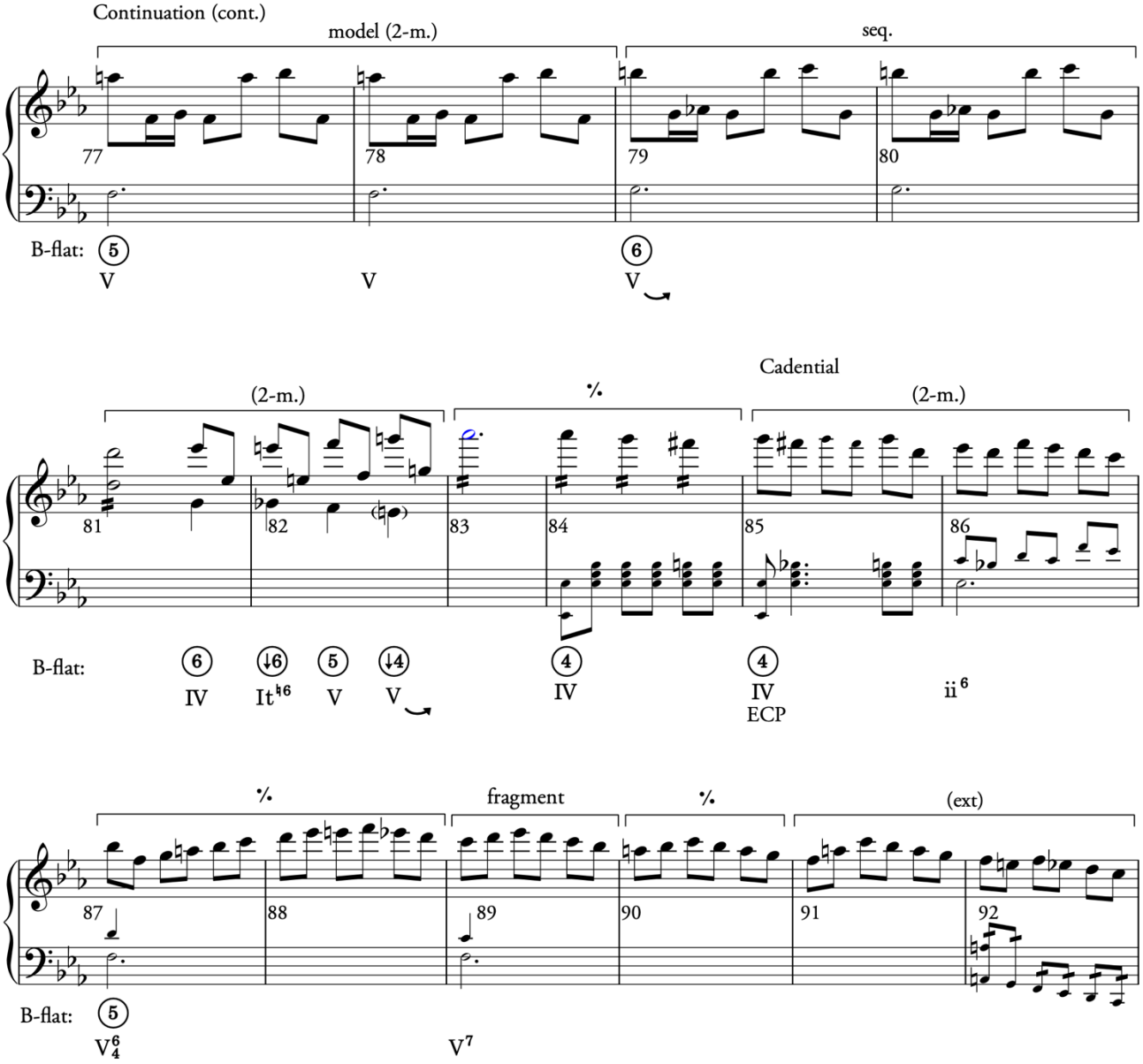


CS 3.0 (Cont.)

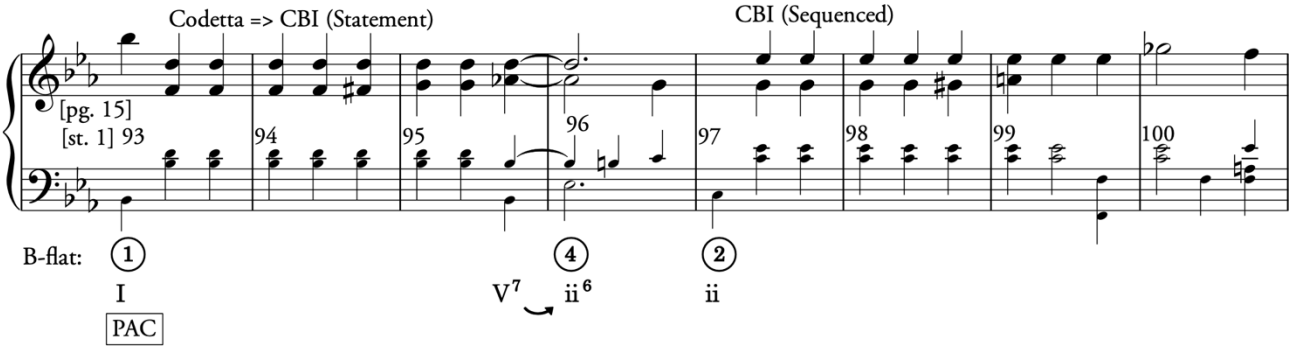

Subordinate Theme, Part 1
CBI
b.i.
c.i.=>model
Continuation
seq.
Cadential
43 [st 5] 44 45 46 47 48 49 50
E-flat: 5 ↓7 6 2 7 2 7 1 6
B-flat: 1 →I V7 ii vii° ii 4 3 V 4 3
HC Bifocal Close
Standing on the Dominant
Member 1 (4-m.)
Member 2 (4-m.)
Member 1 (varied; 4-m.)
51 [st. 6] 52 53 54 55 56 57 58 59 60 61 62
B-flat: 5 5 5
V♮ V9 7 I6 4 V♭9 7
HC
Subordinate Theme 1, Part 2
Compound Presentation
CBI
b.i.
c.i.
CBI
b.i.
c.i.
63 64 65 66 67 68 69 70
B-flat: 1 7 1 7
I V6 5 I V6 5
Continuation
model (4-m.)
fragment
%
seq. (1/2, 2-m.)
%
71 [st. 8] 72 73 74 75 76 [st. 9]
B-flat: ↑5 6 ↑4
vii°7 vi vii°7
[G minor:] 7 1

CS 3.0 (Cont.)

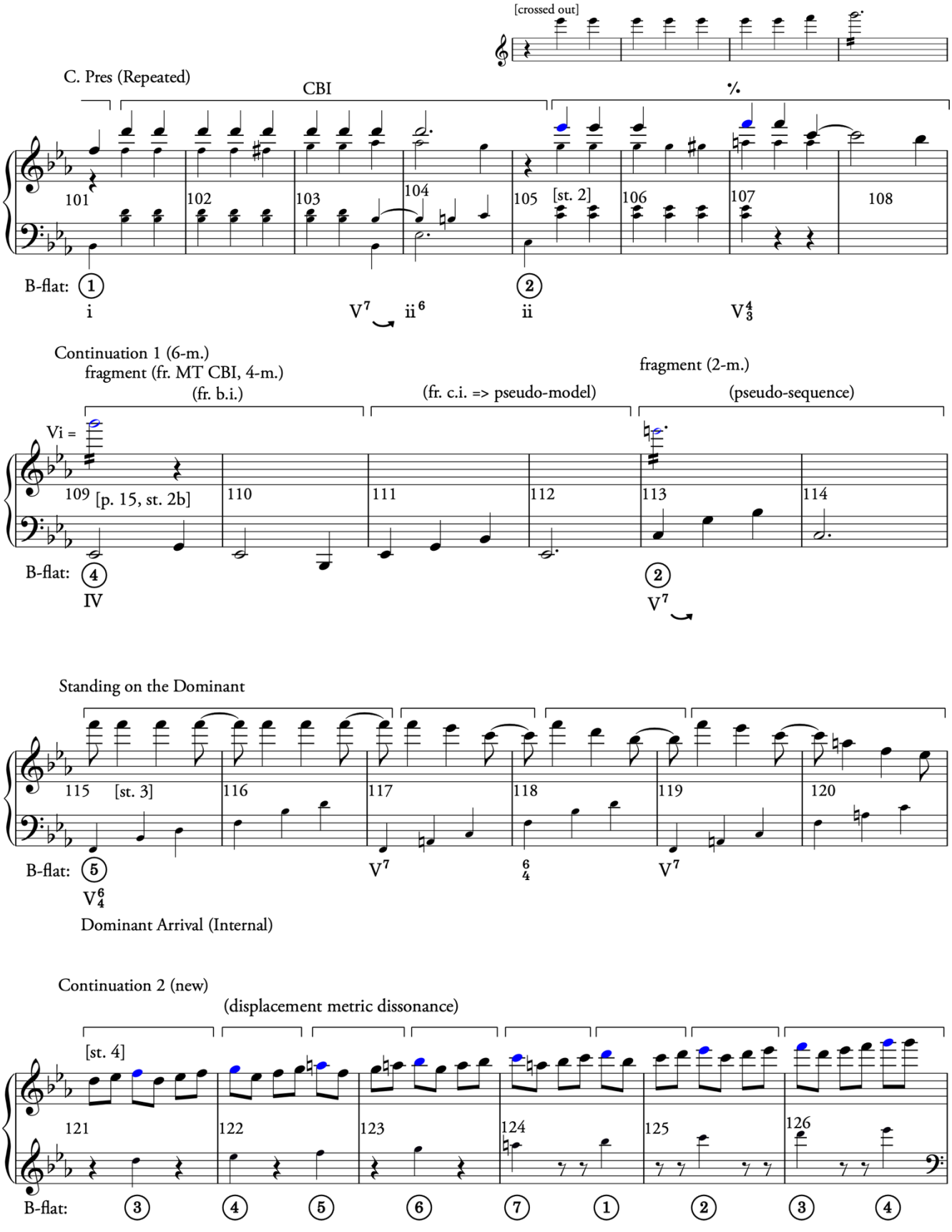
Subordinate Theme 1, Part 2 (cont.)
Continuation (cont.)



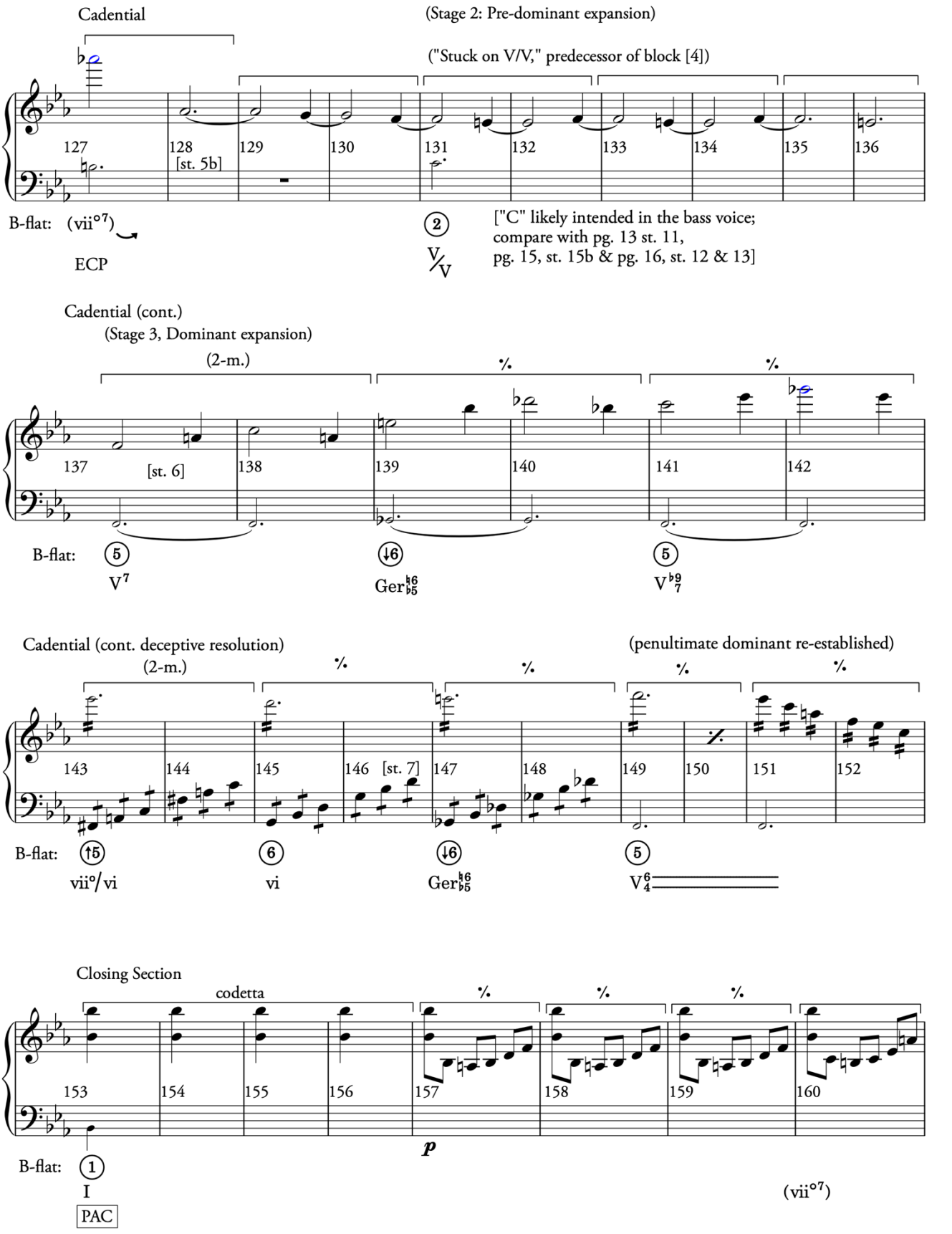
Subordinate Theme 2 (Grand Sentence)
Grand Presentation (2 x C. Pres)
Closing Section => Compound Presentation



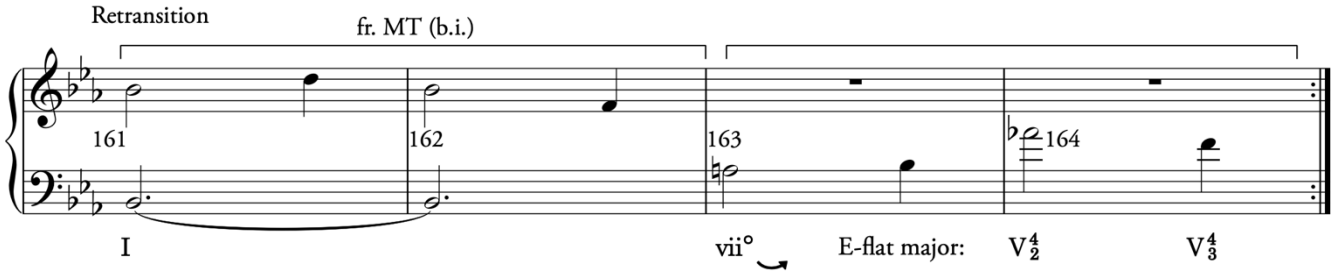
CS 3.0 (Cont.)


[crossed out]
C. Pres (Repeated)
CBI
%
101
102
103
104
105
[st. 2]
106
107
108
B-flat:
1
2
i
V7
ii6
ii
V43
Continuation 1 (6-m.)
fragment (fr. MT CBI, 4-m.)
(fr. b.i.)
(fr. c.i. => pseudo-model)
fragment (2-m.)
(pseudo-sequence)
Vi =
109
[p. 15, st. 2b]
110
111
112
113
114
B-flat:
4
2
IV
V7
Standing on the Dominant
115
[st. 3]
116
117
118
119
120
B-flat:
5
V64
V7
64
V7
Dominant Arrival (Internal)
Continuation 2 (new)
(displacement metric dissonance)
[st. 4]
121
122
123
124
125
126
B-flat:
3
4
5
6
7
1
2
3
4

CS 3.0 (Cont.)


Cadential
(Stage 2: Pre-dominant expansion)
("Stuck on V/V," predecessor of block [4])
127
128
[st. 5b]
129
130
131
132
133
134
135
136
B-flat: (vii°7)
ECP
2
V/V
["C" likely intended in the bass voice;
compare with pg. 13 st. 11,
pg. 15, st. 15b & pg. 16, st. 12 & 13]
Cadential (cont.)
(Stage 3, Dominant expansion)
(2-m.)
137
[st. 6]
138
139
140
141
142
B-flat:
5
V7
6
Ger♮6 ♭5
5
V♭9 7
Cadential (cont. deceptive resolution)
(2-m.)
(penultimate dominant re-established)
143
144
145
146
[st. 7]
147
148
149
150
151
152
B-flat:
5
vii°/vi
6
vi
6
Ger♮6 ♭5
5
V6 4
Closing Section
codetta
153
154
155
156
157
158
159
160
p
B-flat:
1
I
PAC
(vii°7)

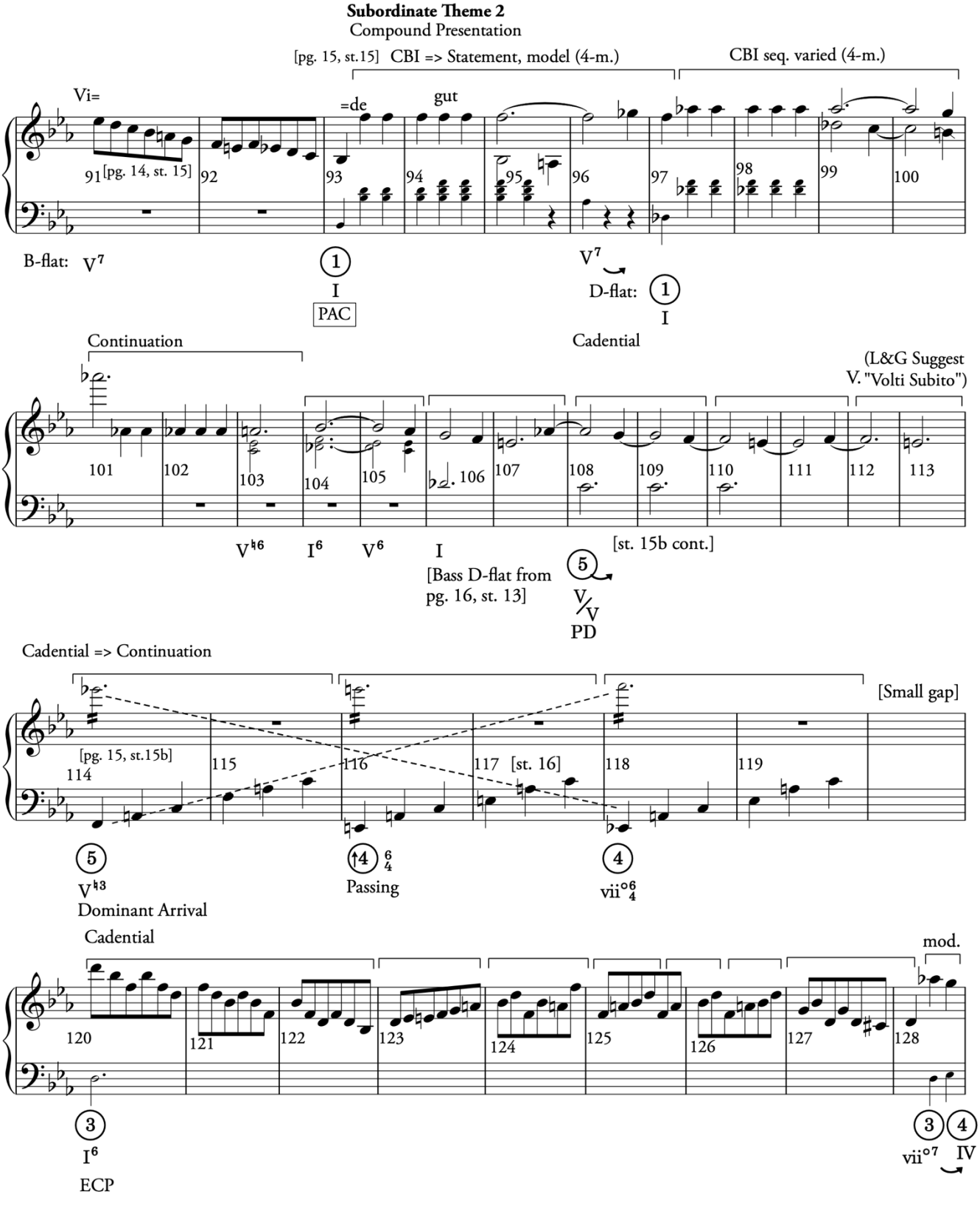
CS 3.0 (Cont.)


Retransition
fr. MT (b.i.)
161
162
163
164
I
vii°
E-flat major:
V4 2
V4 3

CS 3 Series Branches

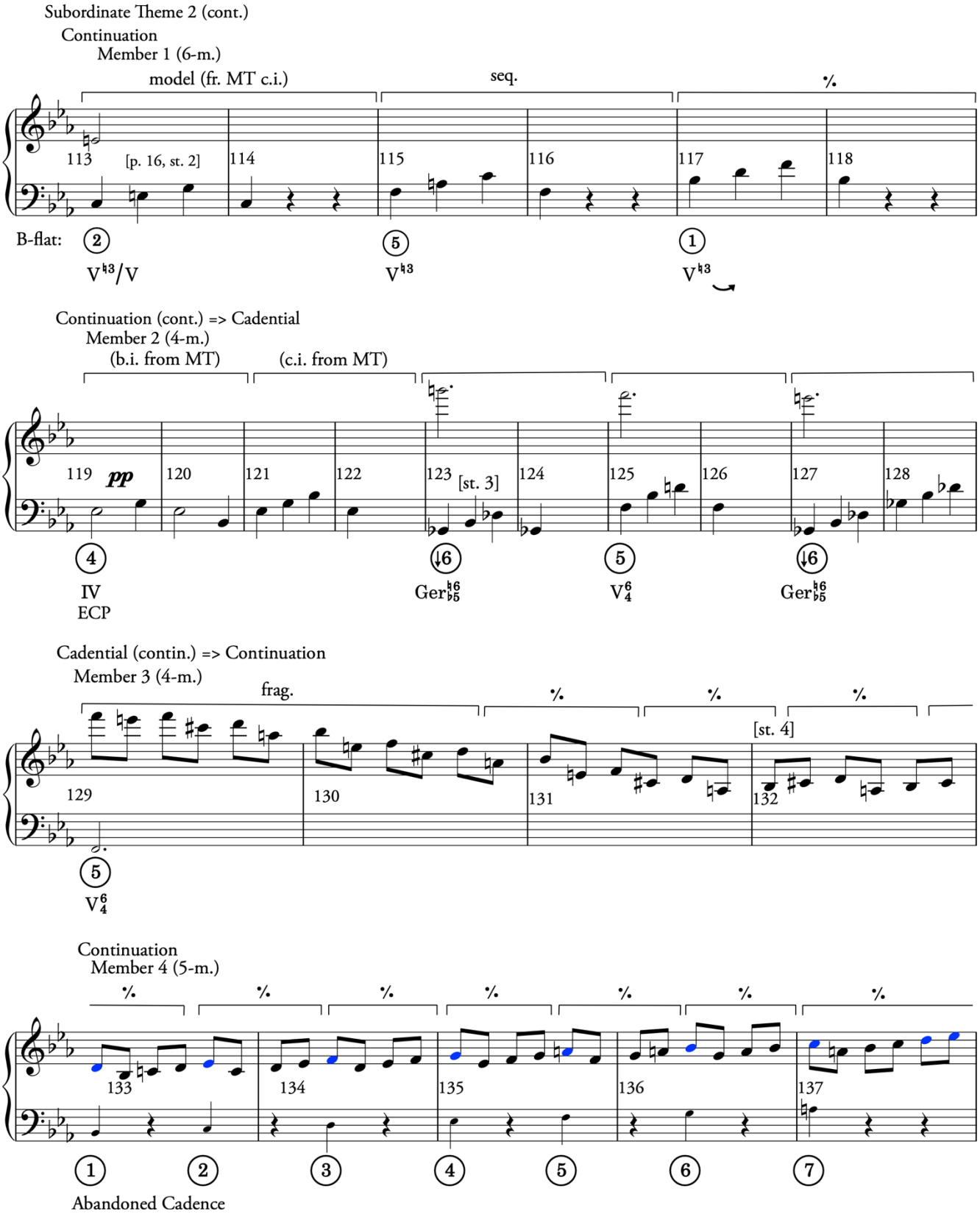
3.1

pg. 15, st. 15-16
mm. 93-129

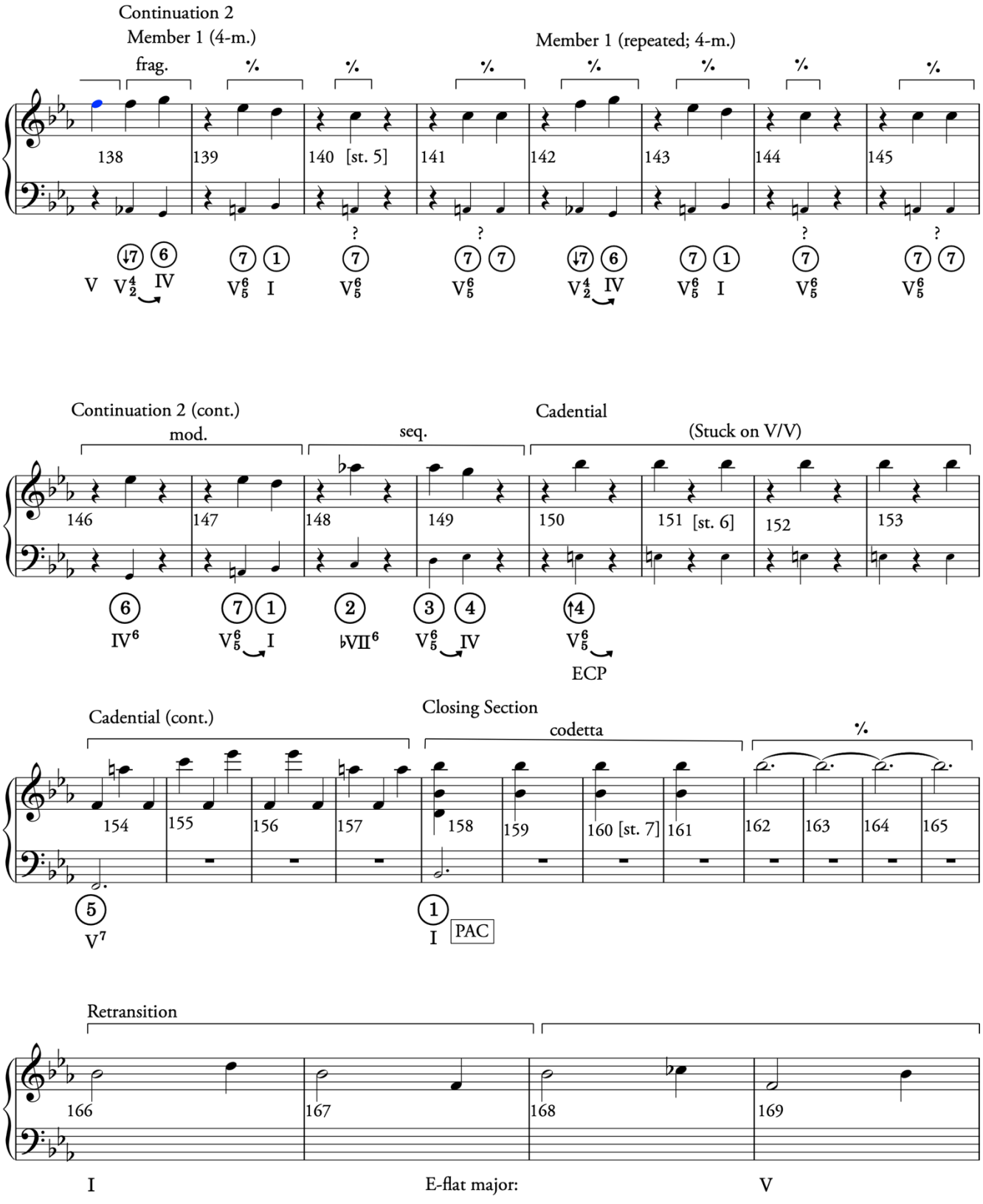


3.1.1

pg. 16, st. 2-7
mm. 113-117

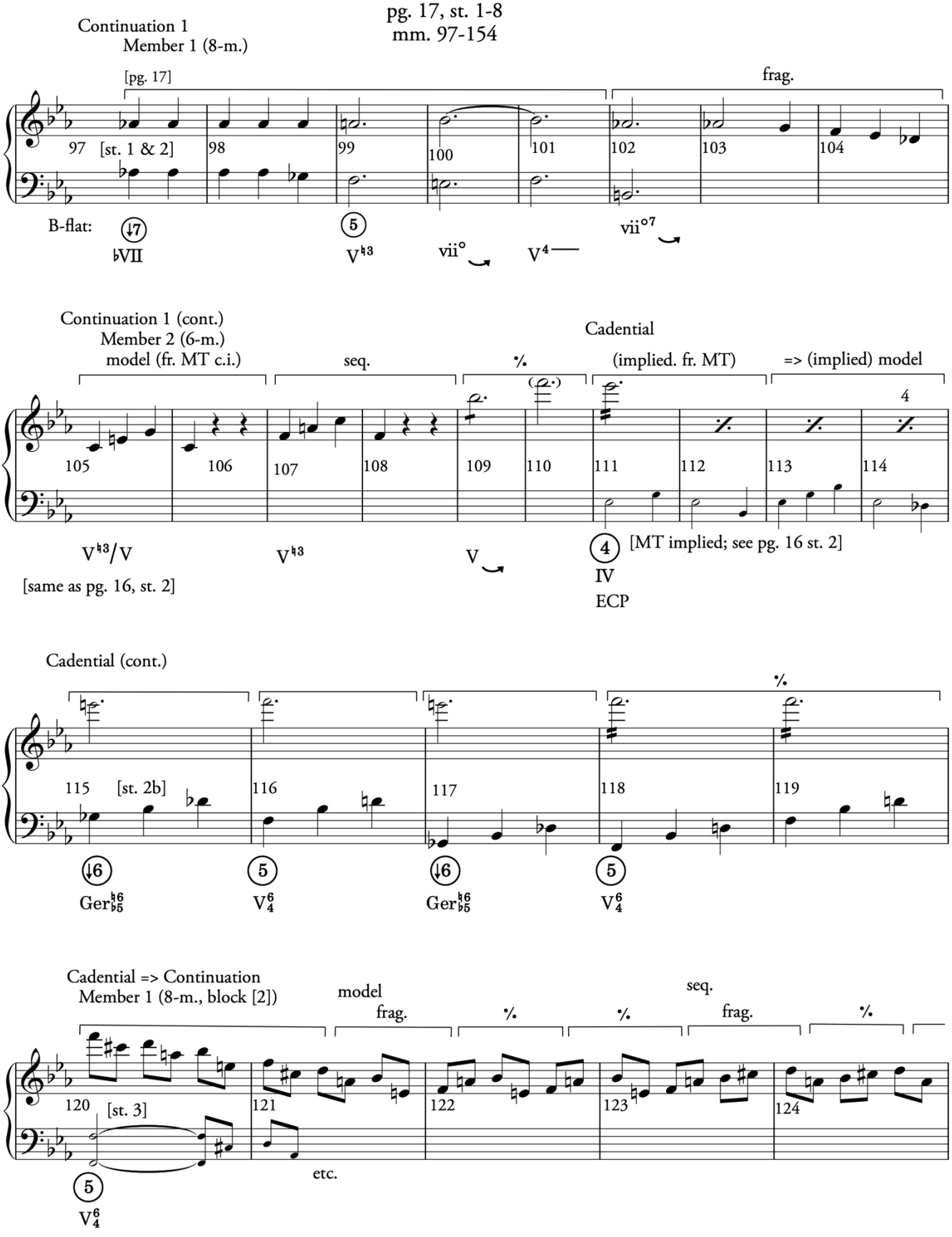


3.1.1 (cont.)

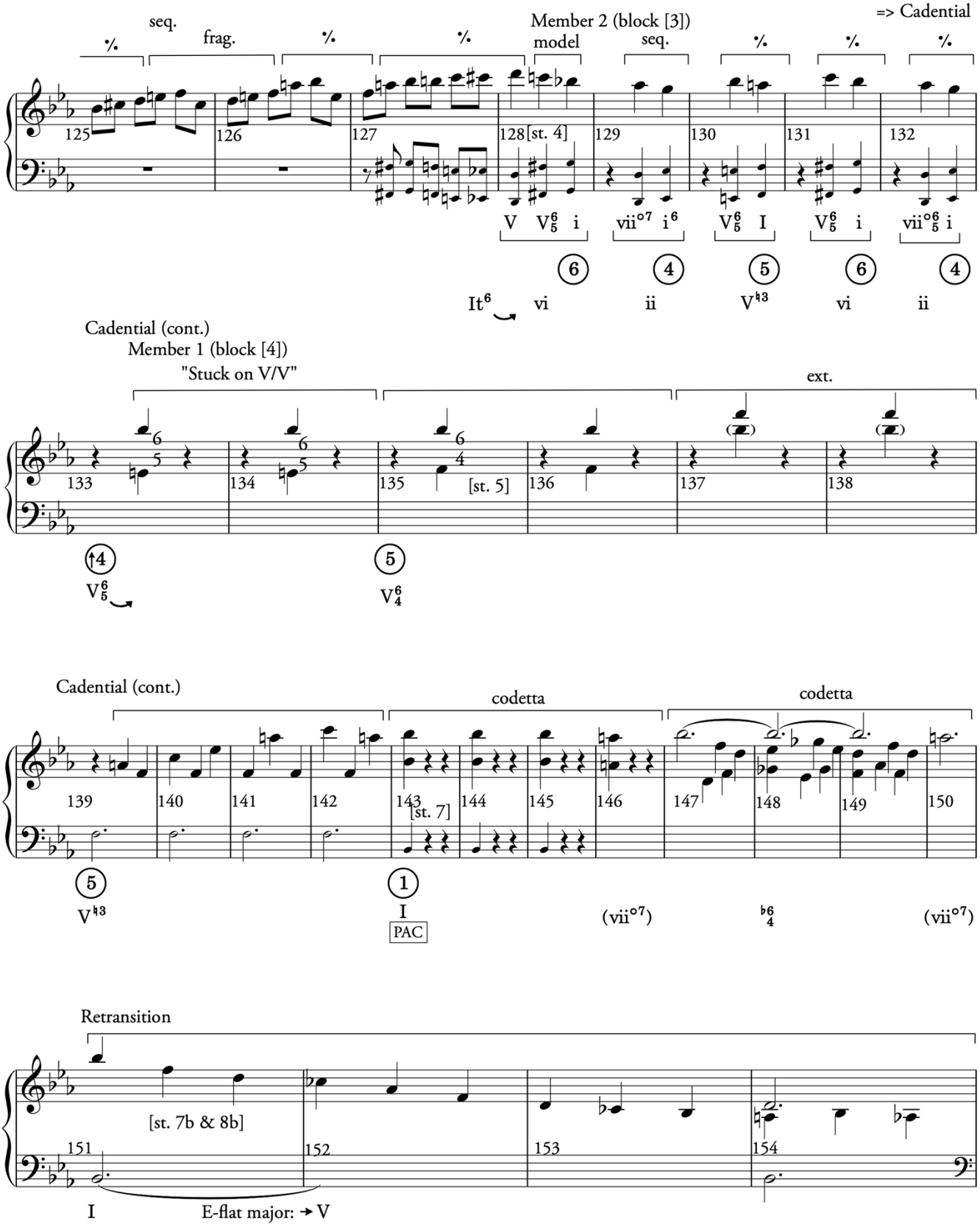

Continuation 2
Member 1 (4-m.)
frag.
Member 1 (repeated; 4-m.)
138
139
140 [st. 5]
141
142
143
144
145
V
V4/2 IV
V6/5 I
V6/5
V6/5
V4/2 IV
V6/5 I
V6/5
V6/5
Continuation 2 (cont.)
mod.
seq.
Cadential
(Stuck on V/V)
146
147
148
149
150
151 [st. 6]
152
153
IV6
V6/5 I
♭VII6
V6/5 IV
V6/5
ECP
Cadential (cont.)
Closing Section
codetta
154
155
156
157
158
159
160 [st. 7]
161
162
163
164
165
V7
I
PAC
Retransition
166
167
168
169
I
E-flat major:
V

3.2

pg. 17, st. 1-8
mm. 97-154

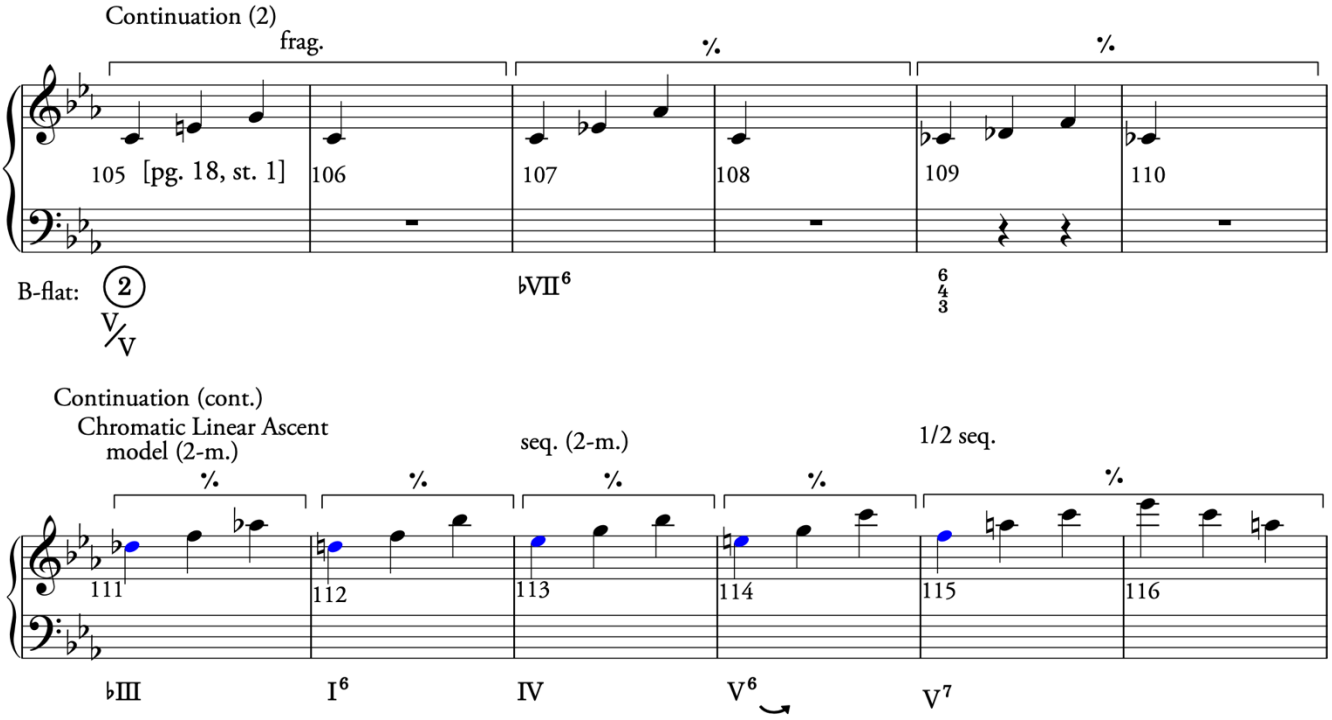


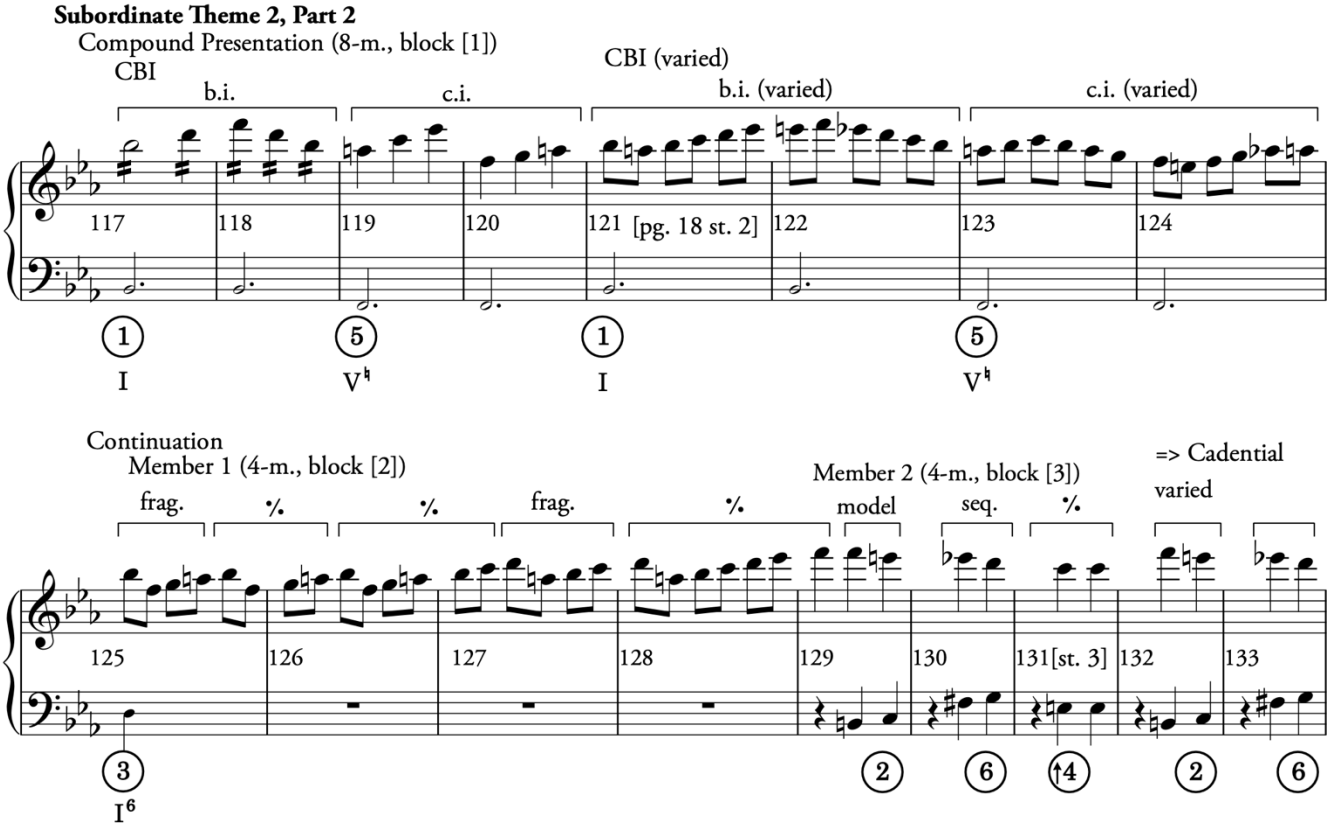
3.2 (cont.)


seq.
frag.
Member 2 (block [3])
model
seq.
=> Cadential
125
126
127
128 [st. 4]
129
130
131
132
V V$^6_5$ i
vii^{o7} i^6
V$^6_5$ I
V$^6_5$ i
vii$^{o6}_5$ i
6
4
5
6
4
It^6
vi
ii
V$^{\natural 3}$
vi
ii
Cadential (cont.)
Member 1 (block [4])
"Stuck on V/V"
ext.
133
134
135
[st. 5]
136
137
138
↑4
5
V$^6_5$
V$^6_4$
Cadential (cont.)
codetta
codetta
139
140
141
142
143
[st. 7]
144
145
146
147
148
149
150
5
1
V$^{\natural 3}$
I
PAC
(vii^{o7})
$^{\flat 6}_4$
(vii^{o7})
Retransition
[st. 7b & 8b]
151
152
153
154
I
E-flat major: → V

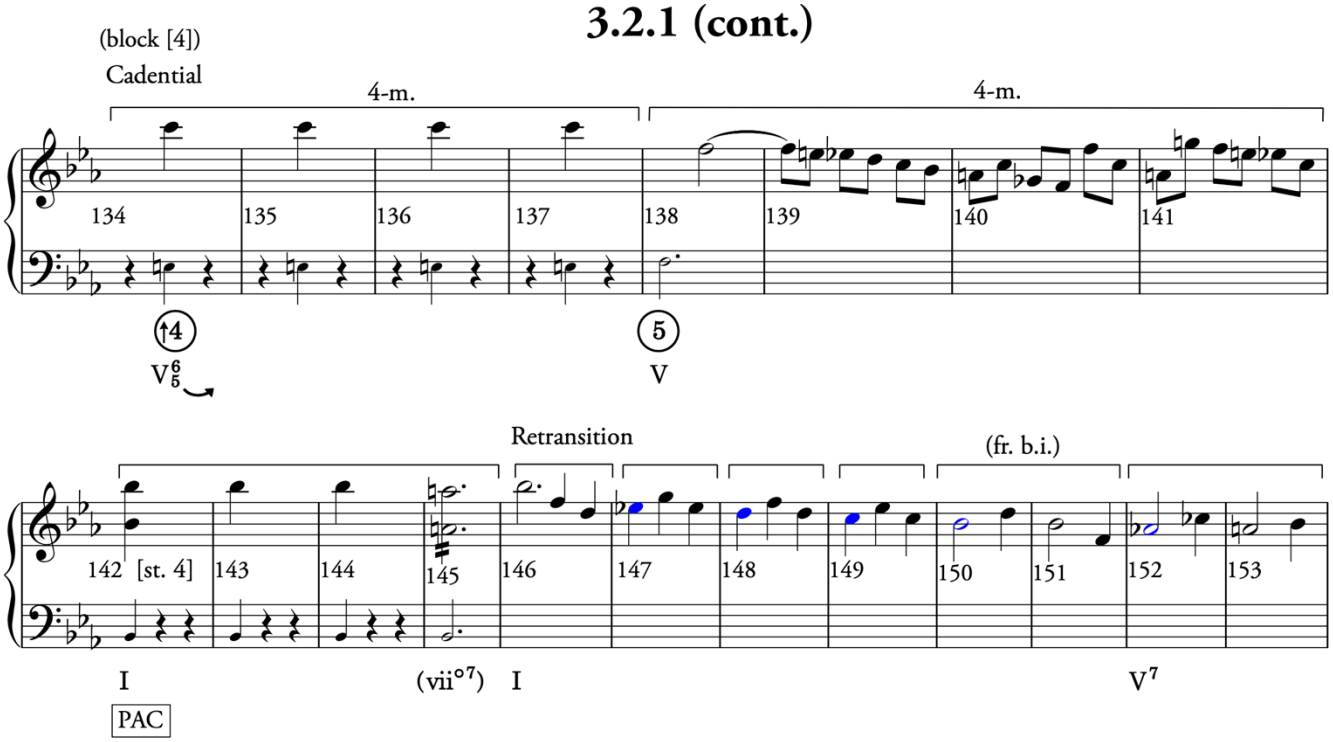
3.2.1

pg. 18, st. 1-4
mm. 105-153



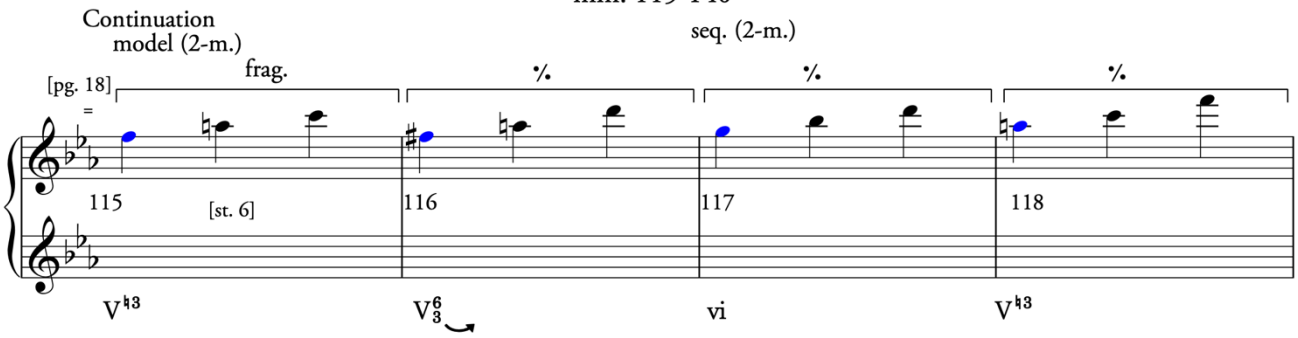


3.2.1 (cont.)


(block [4])
Cadential
4-m.
4-m.
134
135
136
137
138
139
140
141
4
5
V⁶₅
V
Retransition
(fr. b.i.)
142 [st. 4]
143
144
145
146
147
148
149
150
151
152
153
I
(vii°⁷)
I
V⁷
PAC

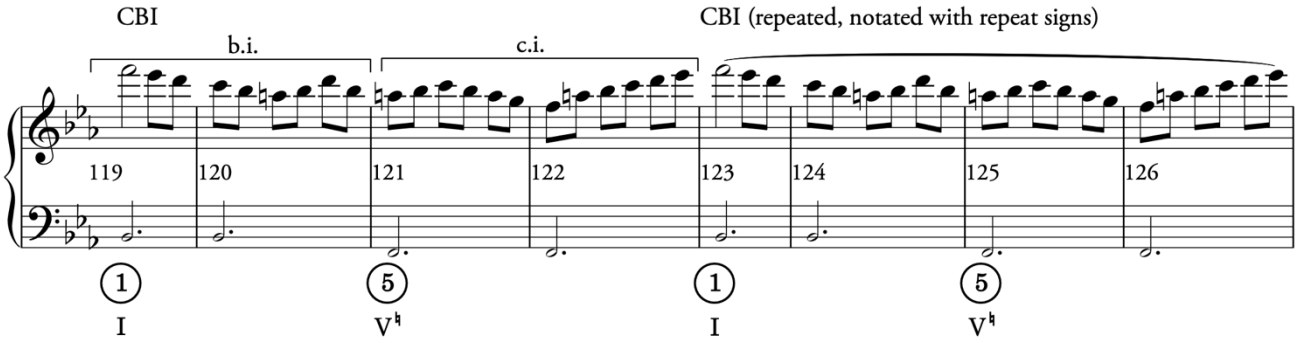
3.2.2

pg. 18, st. 6-8
mm. 115-140



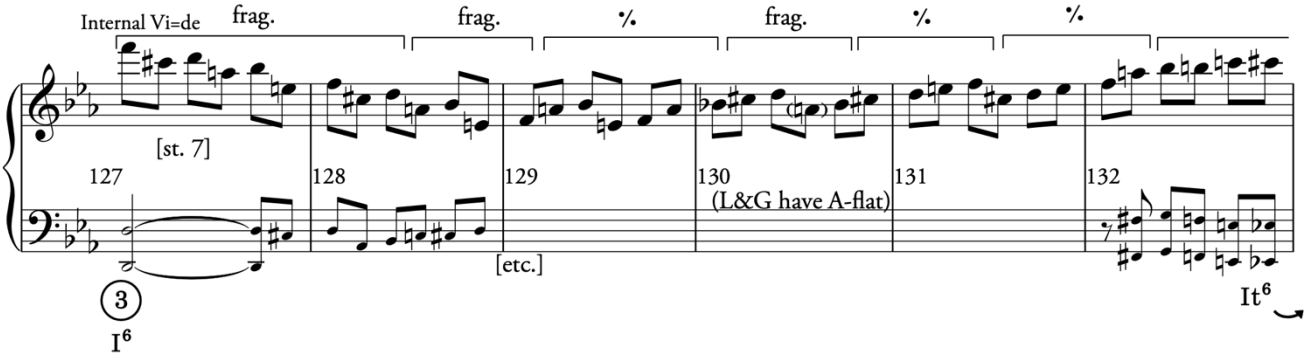
Subordinate Theme 2, Part 2

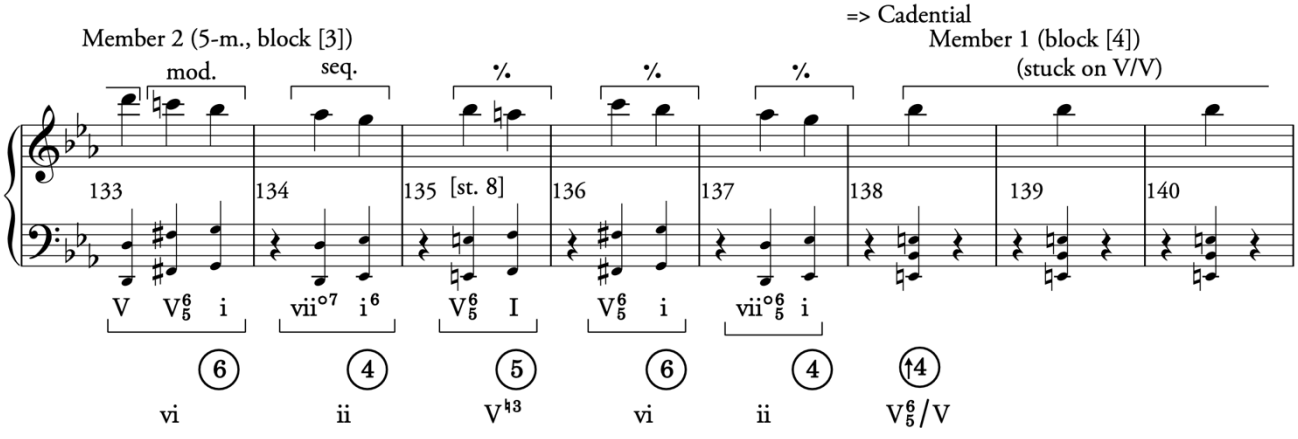
Compound Presentation (8-m., block [1])



Continuation

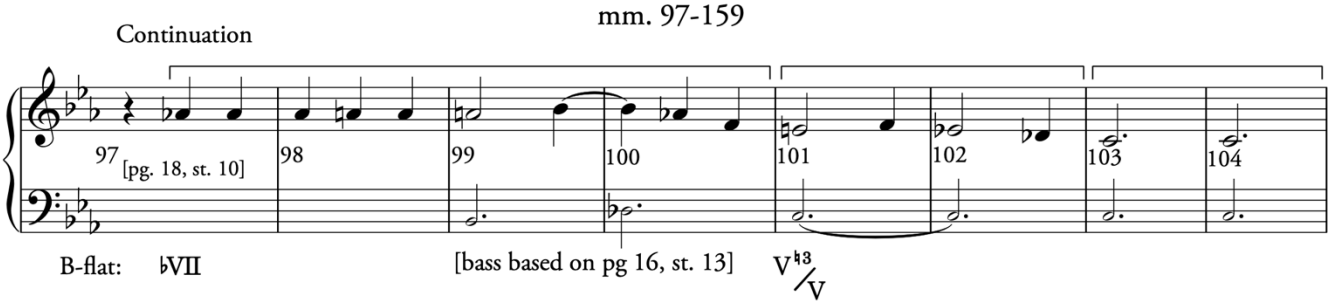
Member 1 (6-m., block [2])

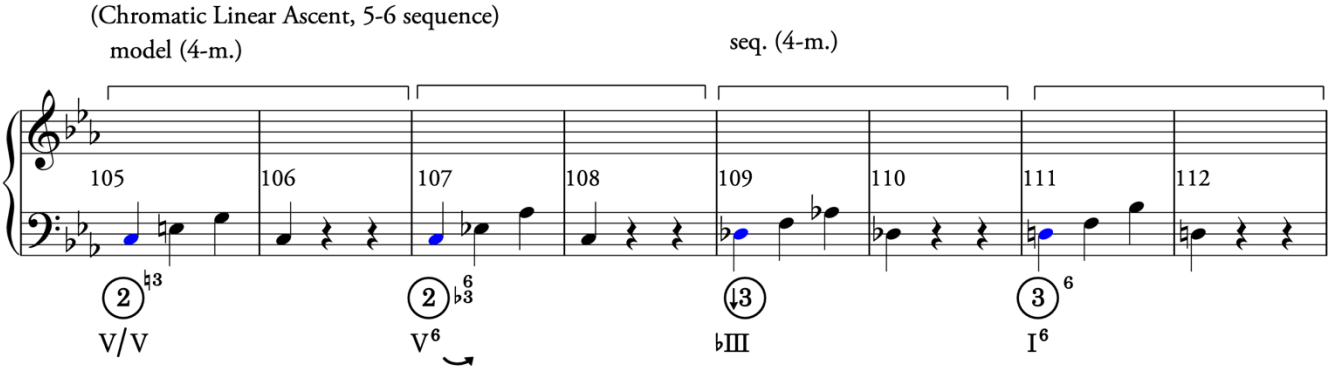


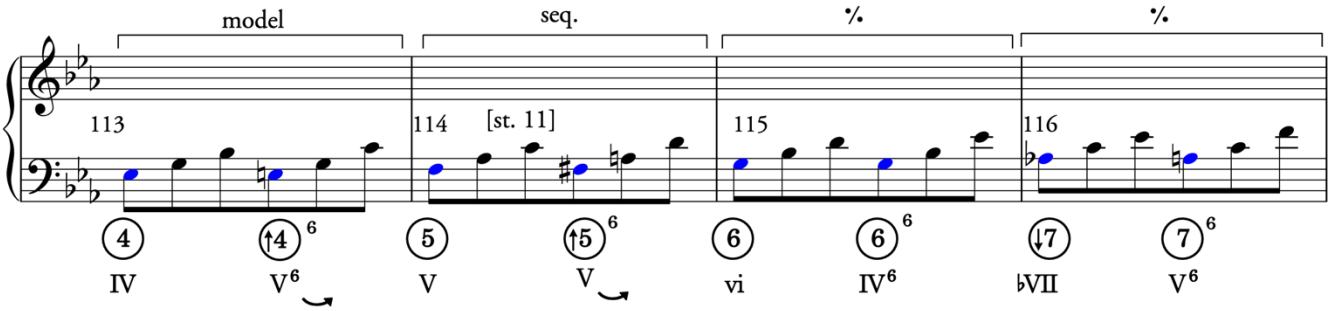


3.3

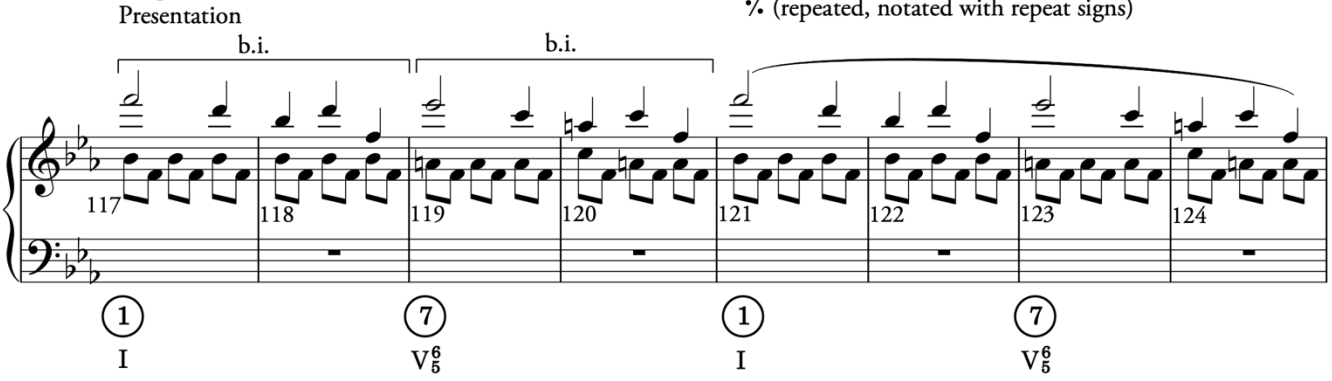
pg. 18, st. 10-14
mm. 97-159



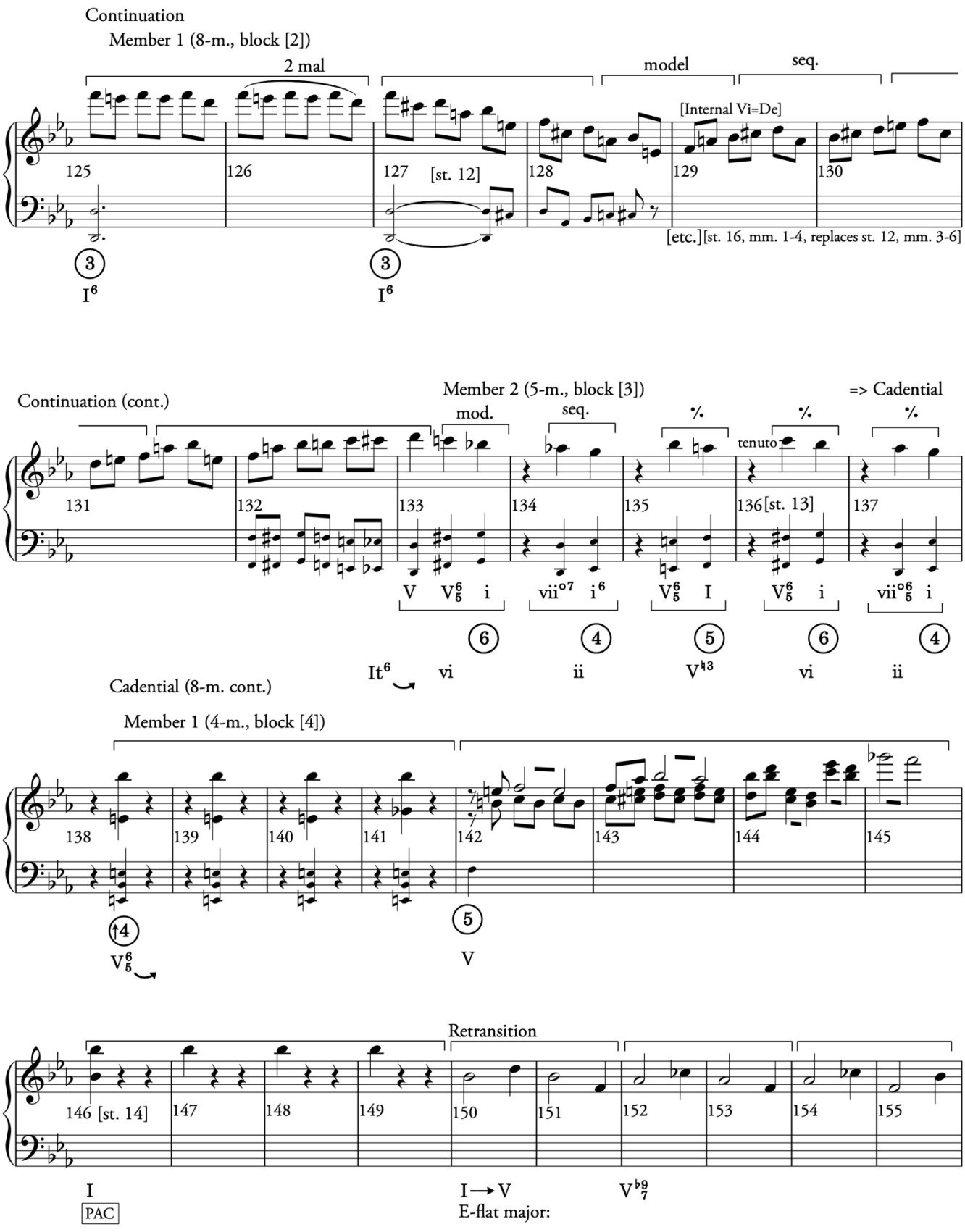




Subordinate Theme 2, Part 2
Compound Presentation (block [1])
Presentation

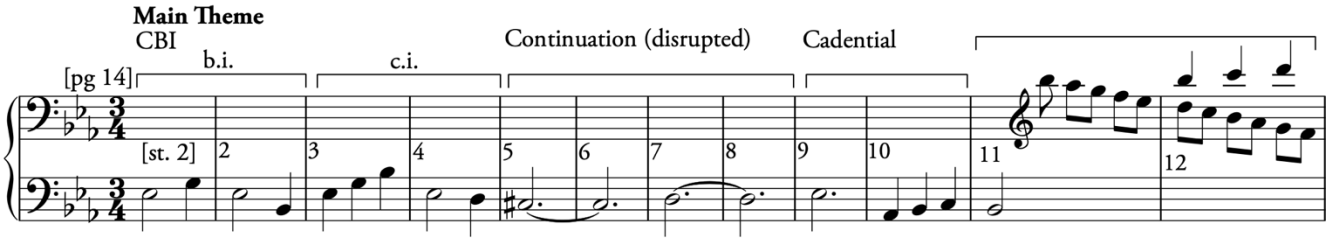


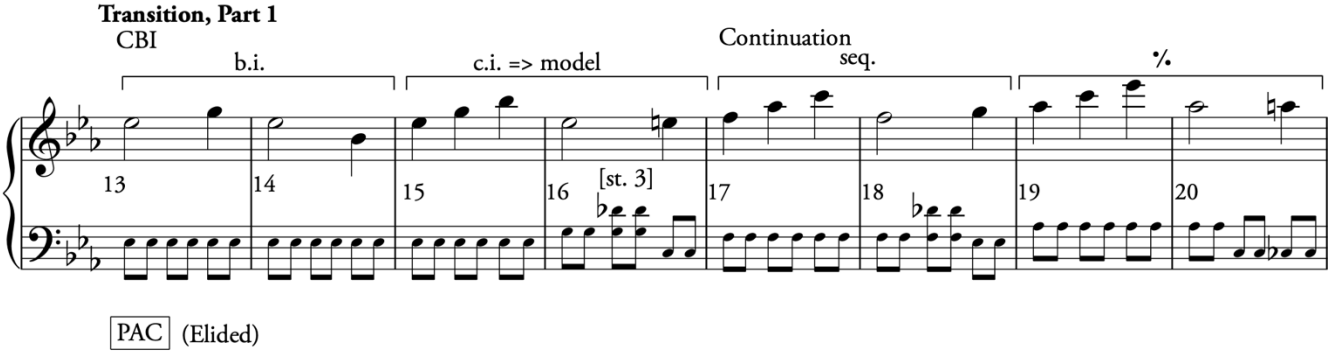
3.3 (cont.)

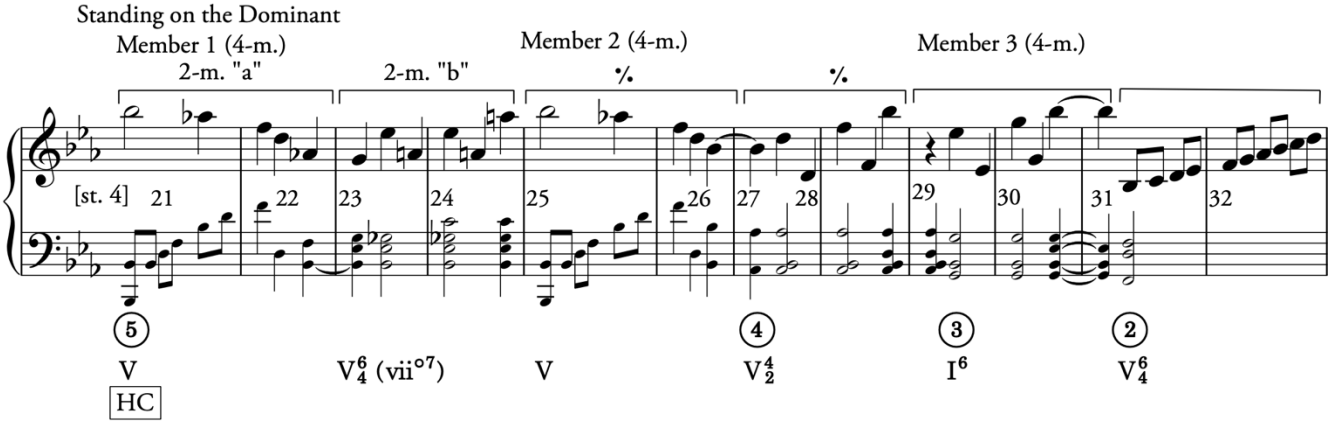

Continuation
Member 1 (8-m., block [2])
2 mal
model
seq.
[Internal Vi=De]
125
126
127
[st. 12]
128
129
130
[etc.][st. 16, mm. 1-4, replaces st. 12, mm. 3-6]
3
3
I6
I6
Continuation (cont.)
Member 2 (5-m., block [3])
=> Cadential
mod.
seq.
tenuto
131
132
133
134
135
136[st. 13]
137
V V65 i
vii°7 i6
V65 I
V65 i
vii°65 i
6
4
5
6
4
It6
vi
ii
V♮3
vi
ii
Cadential (8-m. cont.)
Member 1 (4-m., block [4])
138
139
140
141
142
143
144
145
4
5
V65
V
Retransition
146 [st. 14]
147
148
149
150
151
152
153
154
155
I
PAC
I→V
E-flat major:
V♭9/7

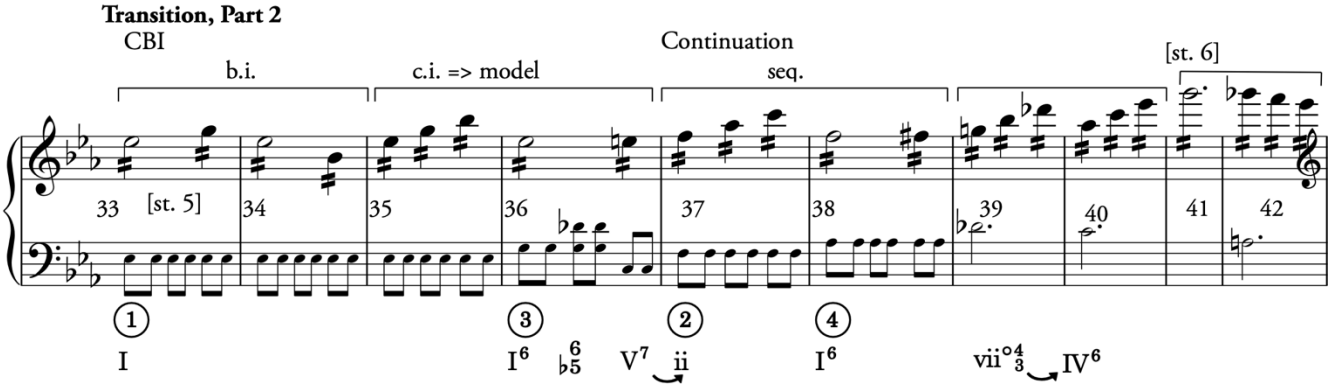
CS 4.0

pg. 20, st. 1-14 & pg. 21 st. 1-7

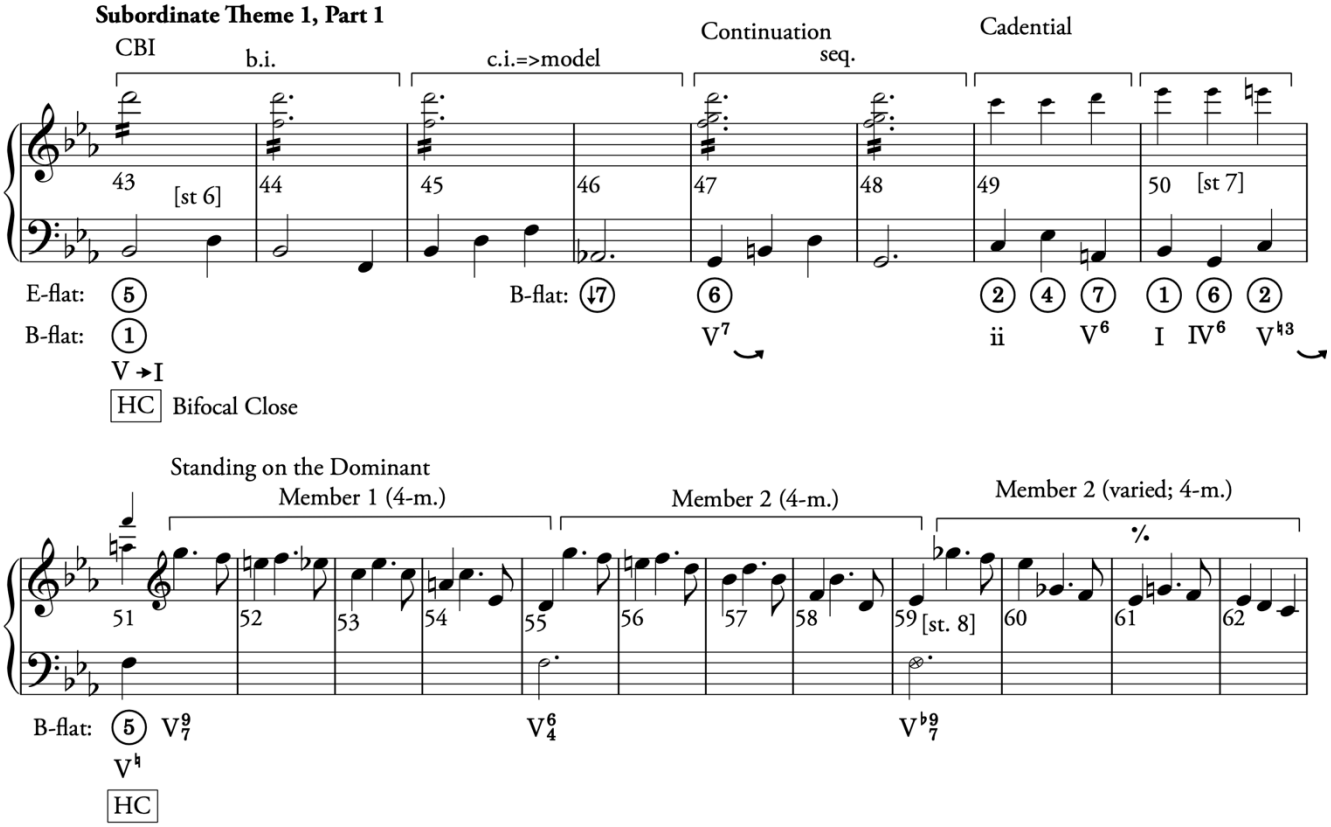


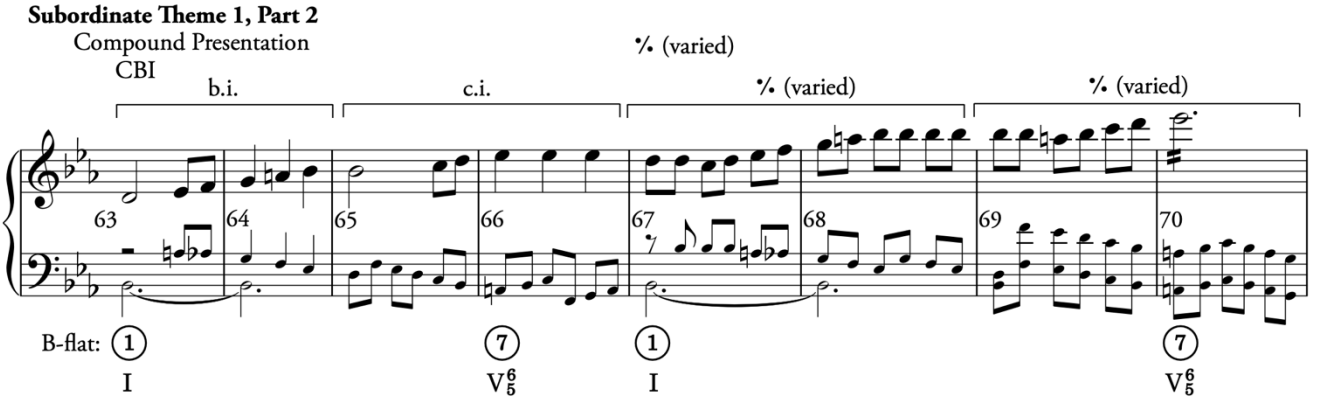


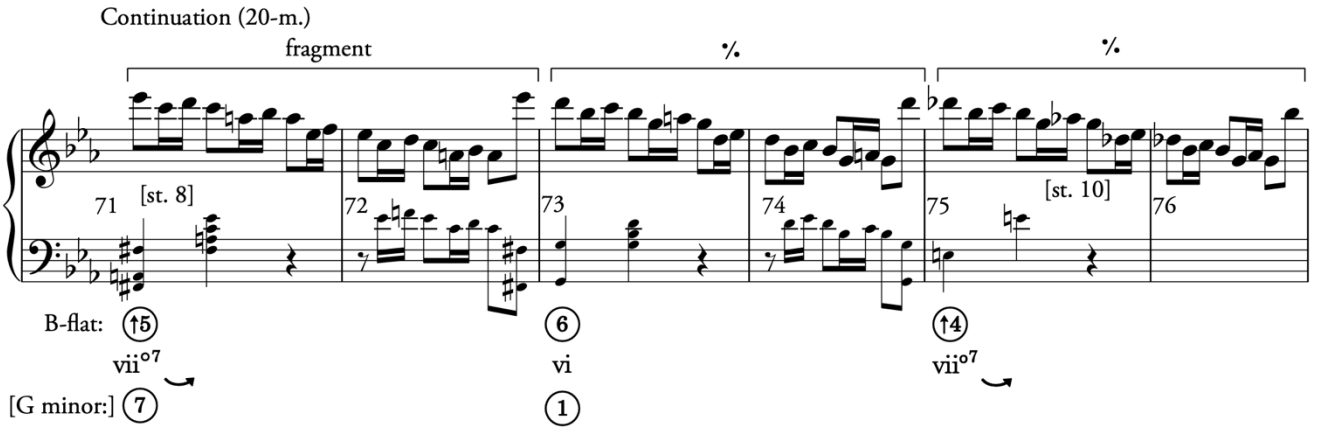




CS 4.0 (cont.)

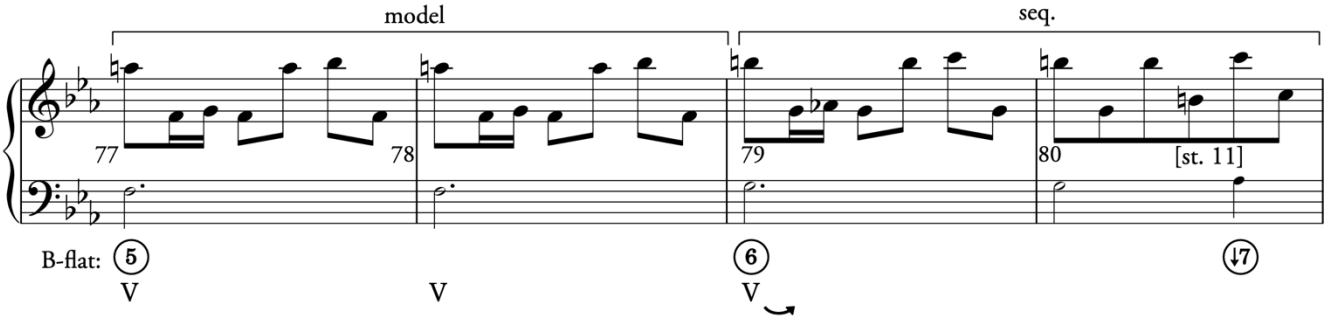

Subordinate Theme 1, Part 1
CBI
b.i.
c.i.=>model
Continuation
seq.
Cadential
43
[st 6]
44
45
46
47
48
49
50
[st 7]
E-flat: 5
B-flat: 1
V→I
HC Bifocal Close
B-flat: ♭7
6
V7
2 4 7
ii V6
1 6 2
I IV6 V♮3
Standing on the Dominant
Member 1 (4-m.)
Member 2 (4-m.)
Member 2 (varied; 4-m.)
51
52
53
54
55
56
57
58
59
[st. 8]
60
61
62
B-flat: 5 V9/7
V♮
HC
V6/4
V♭9/7

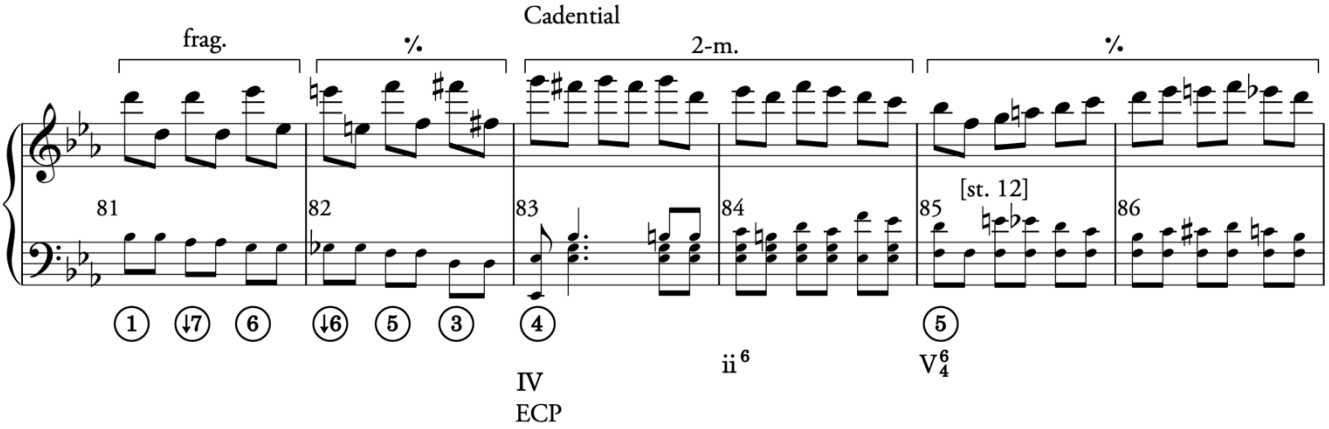

Subordinate Theme 1, Part 2
Compound Presentation
CBI
b.i.
c.i.
𝄋 (varied)
𝄋 (varied)
𝄋 (varied)
63
64
65
66
67
68
69
70
B-flat: 1
I
7
V6/5
1
I
7
V6/5

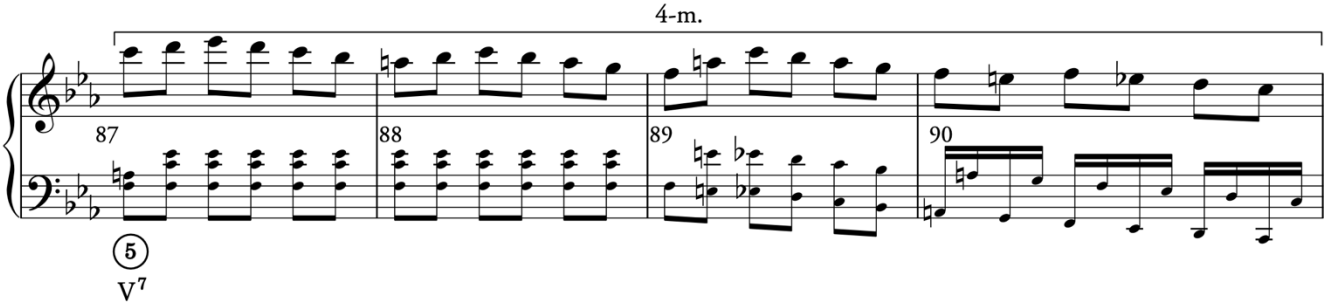

Continuation (20-m.)
fragment
𝄋
𝄋
71
[st. 8]
72
73
74
75
[st. 10]
76
B-flat: ♯5
vii°7
[G minor:] 7
6
vi
1
♮4
vii°7

CS 4.0 (cont.)

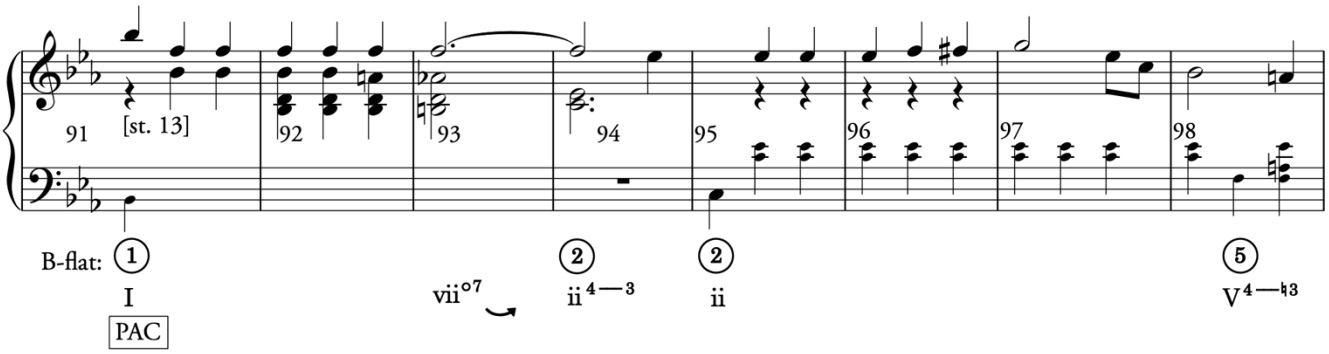
Subordinate Theme 1, Part 2 (cont.)
Continuation (cont.)



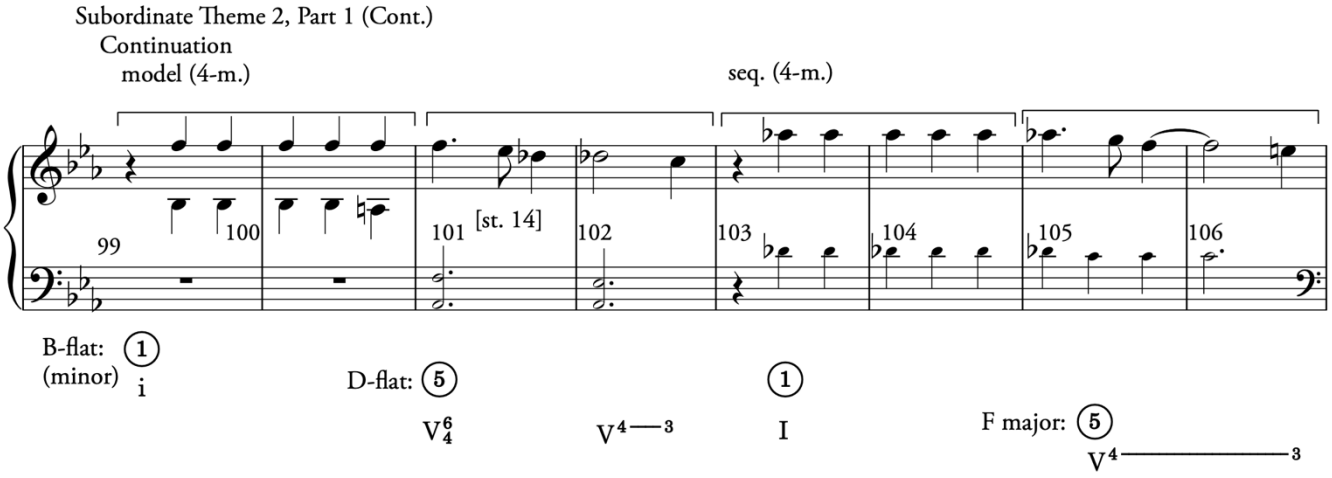


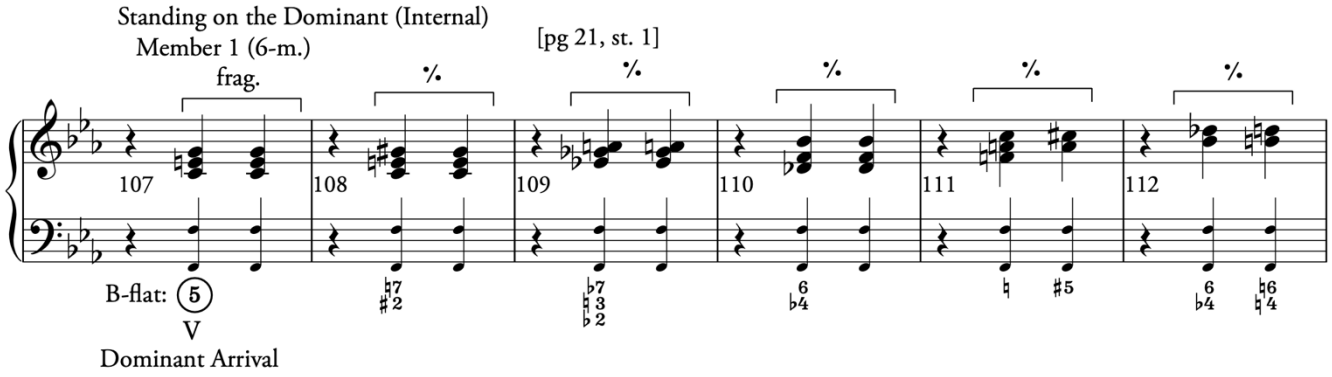


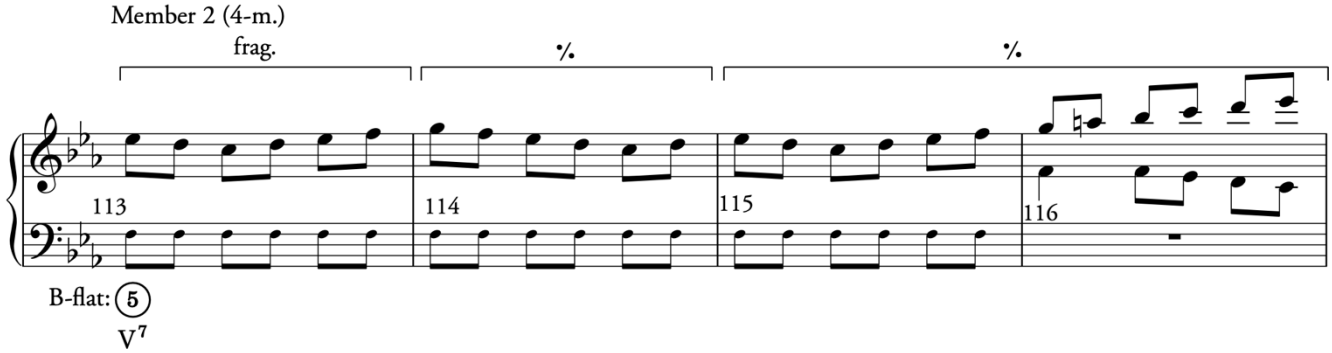
Subordinate Theme 2, Part 1
Closing Section => Compound Presentation
Codetta => CBI (Statement)
CBI (Sequenced)



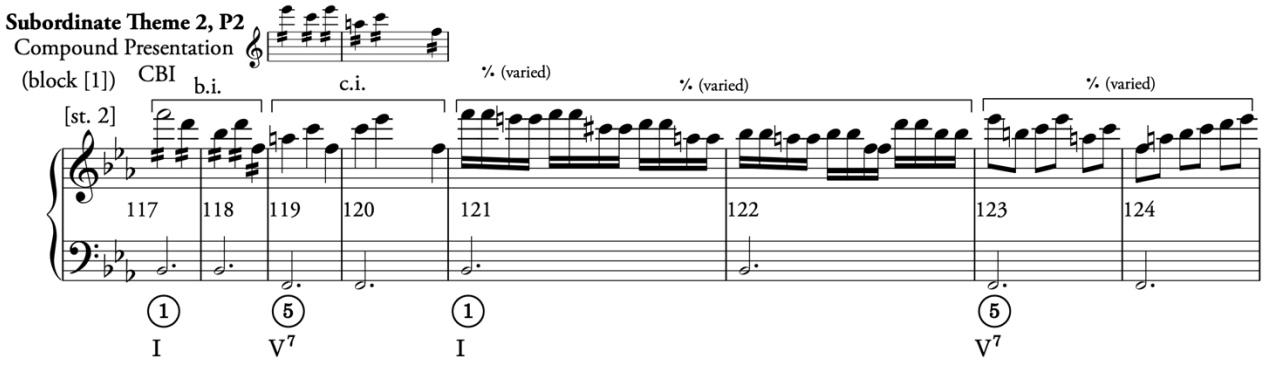
CS 4.0 (cont.)

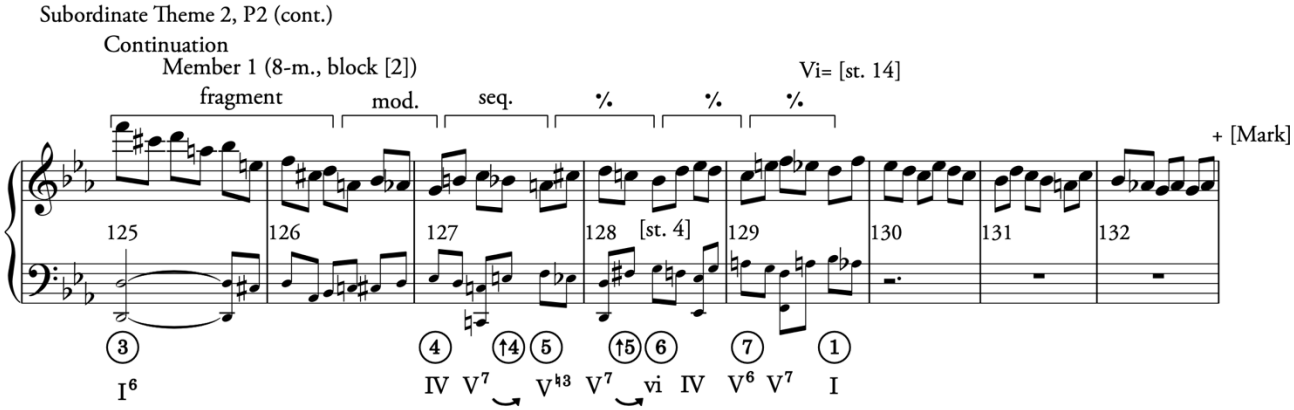

Subordinate Theme 2, Part 1 (Cont.)
Continuation
model (4-m.)
seq. (4-m.)
99
100
101
[st. 14]
102
103
104
105
106
B-flat: 1
(minor) i
D-flat: 5
V 6 4
V 4—3
1
I
F major: 5
V 4——3

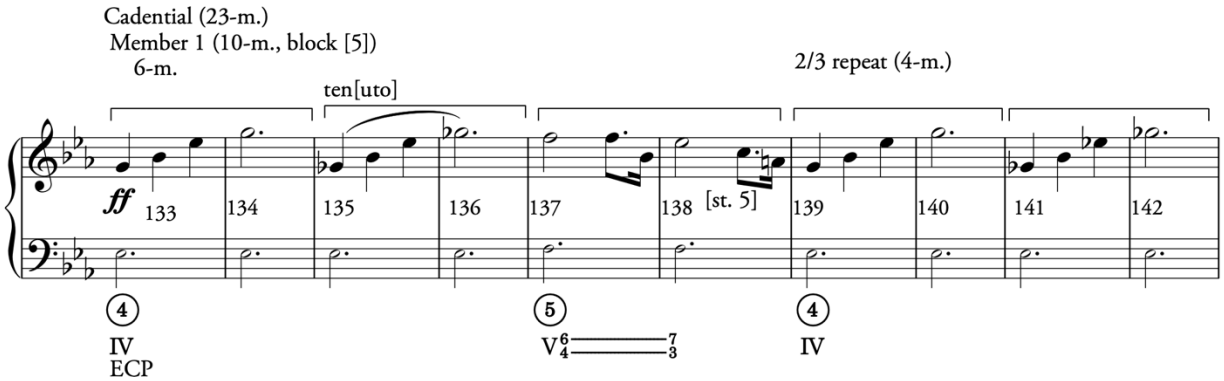

Standing on the Dominant (Internal)
Member 1 (6-m.)
frag.
[pg 21, st. 1]
107
108
109
110
111
112
B-flat: 5
V
Dominant Arrival


Member 2 (4-m.)
frag.
113
114
115
116
B-flat: 5
V 7

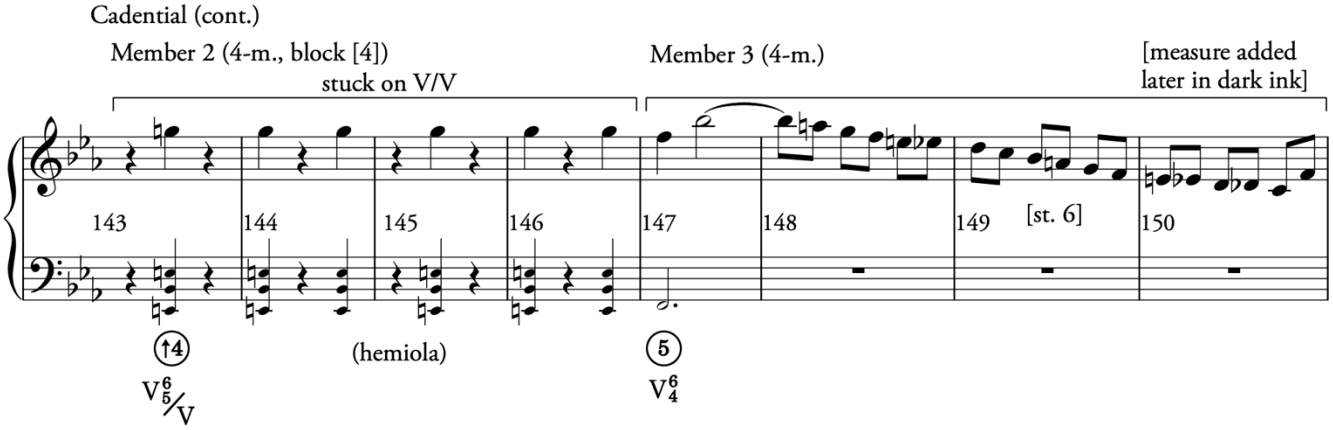
CS 4.0 (cont.)

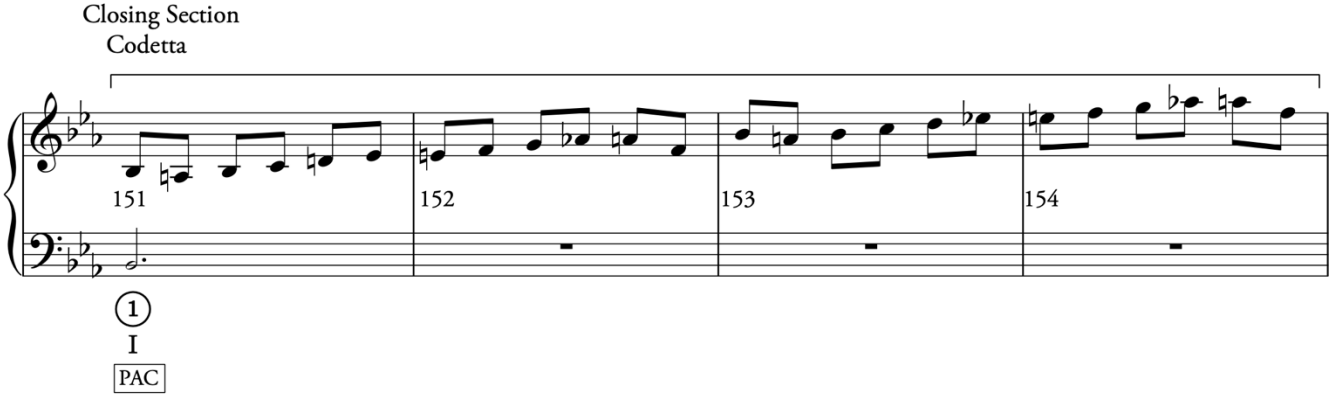

Subordinate Theme 2, P2
Compound Presentation
(block [1])
CBI
b.i.
c.i.
[st. 2]
% (varied)
% (varied)
% (varied)
117
118
119
120
121
122
123
124
I
V7
I
V7

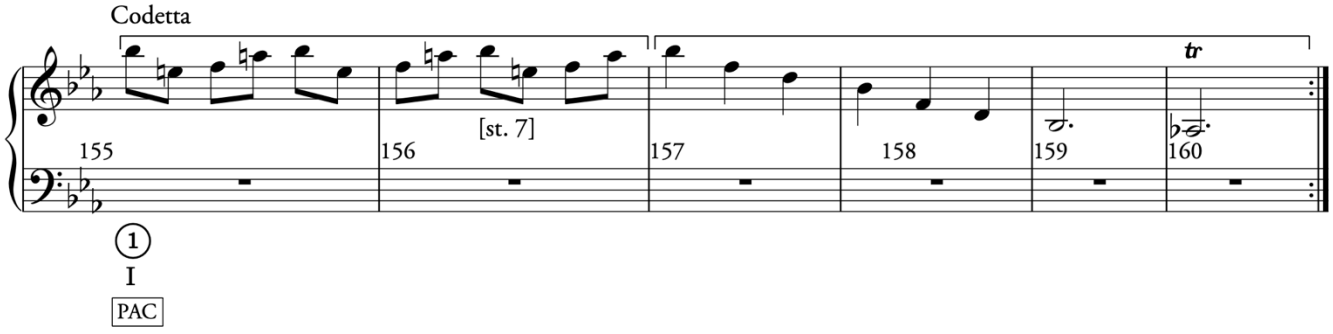

Subordinate Theme 2, P2 (cont.)
Continuation
Member 1 (8-m., block [2])
fragment
mod.
seq.
%
%
%
Vi= [st. 14]
+ [Mark]
125
126
127
128
[st. 4]
129
130
131
132
I6
IV
V7
V43
V7
vi
IV
V6
V7
I


Cadential (23-m.)
Member 1 (10-m., block [5])
6-m.
ten[uto]
2/3 repeat (4-m.)
ff
133
134
135
136
137
138
[st. 5]
139
140
141
142
IV
ECP
V6/4 7/3
IV

CS 4.0 (cont.)


Cadential (cont.)
Member 2 (4-m., block [4])
stuck on V/V
Member 3 (4-m.)
[measure added later in dark ink]
143
144
145
146
147
148
149
[st. 6]
150
(hemiola)
V6/5/V
V6/4

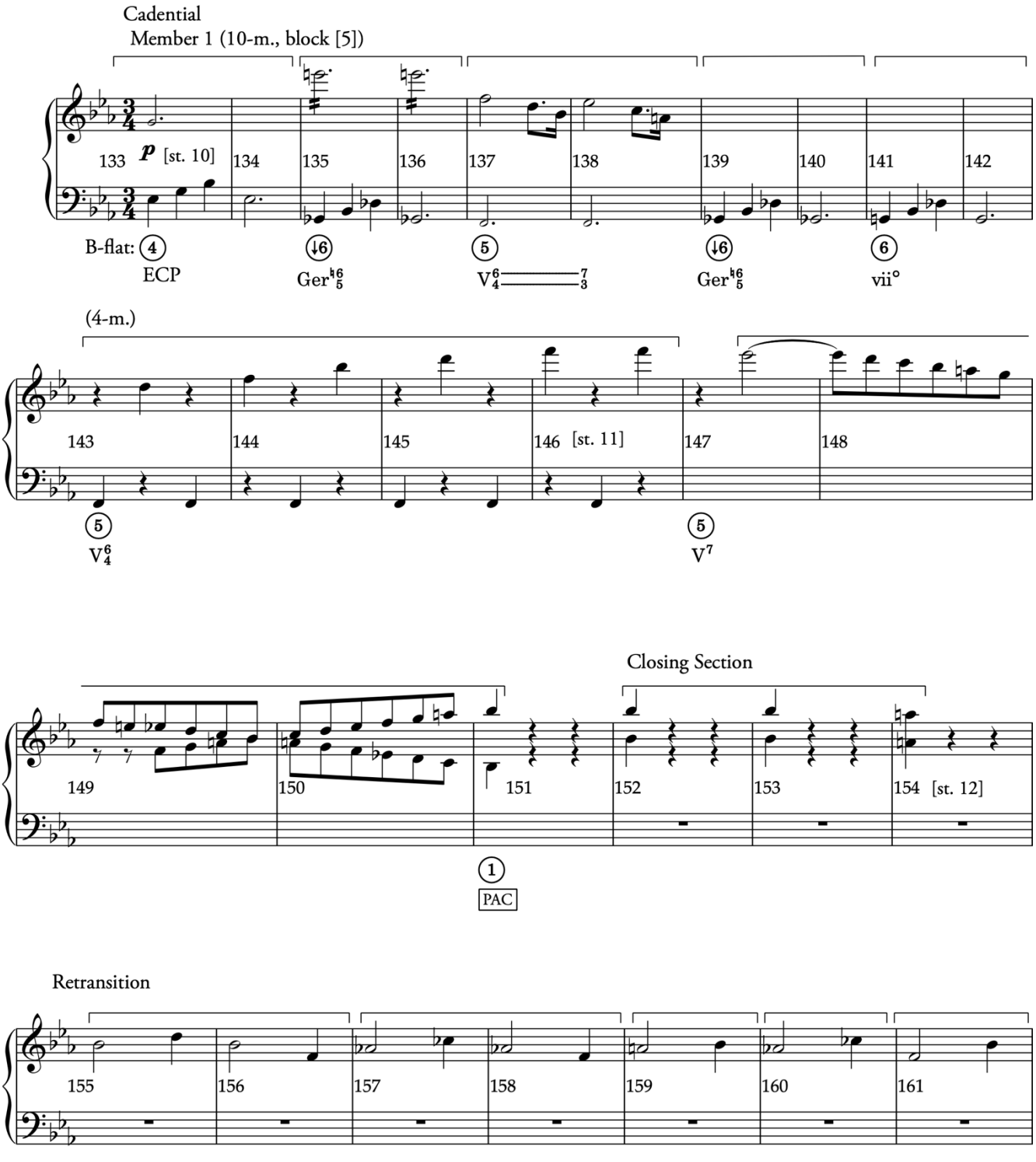

Closing Section
Codetta
151
152
153
154
I
PAC


Codetta
tr
155
156
[st. 7]
157
158
159
160
I
PAC

CS 4 Series Branches

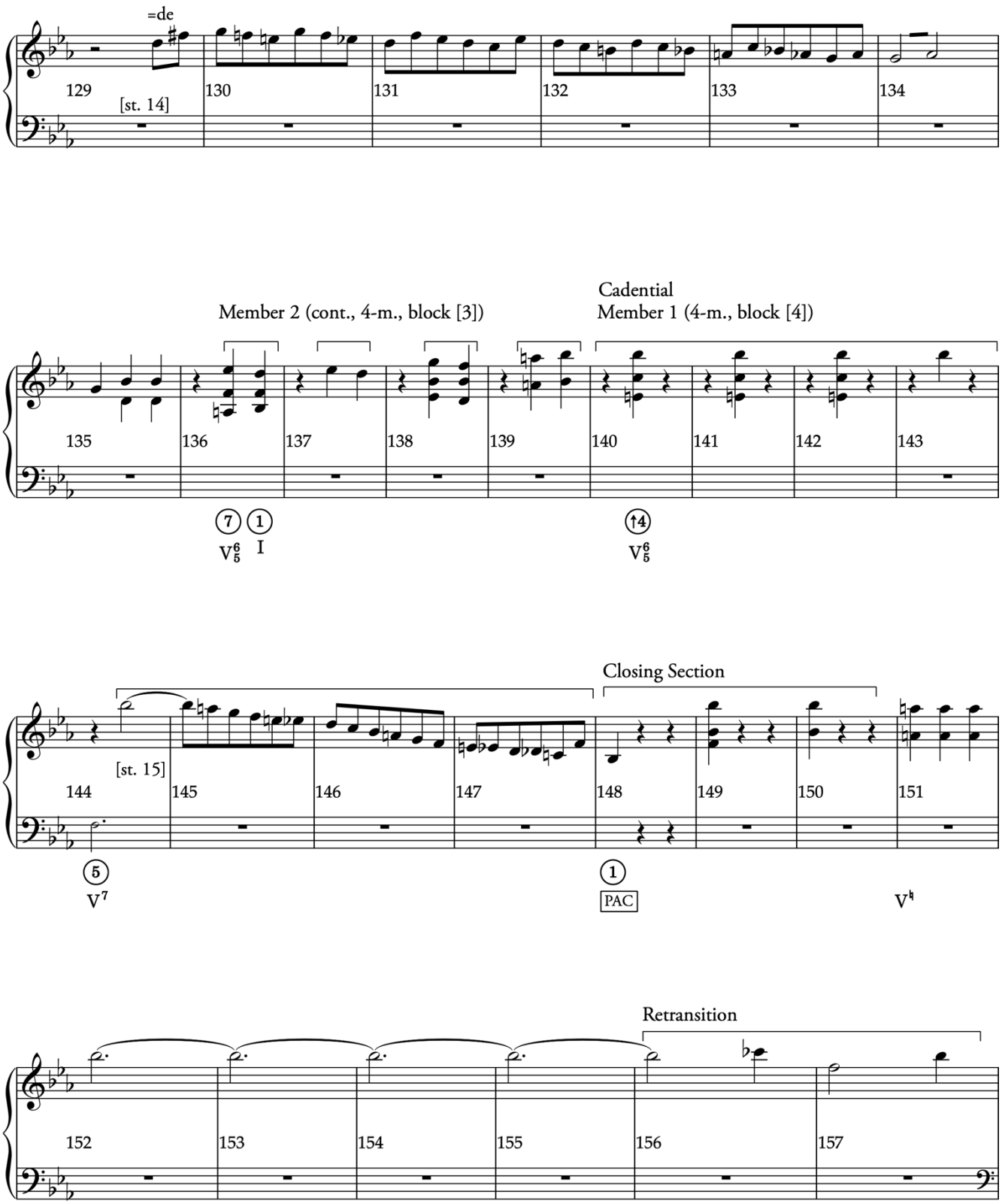
4.0.1

pg. 21, st. 10-12a



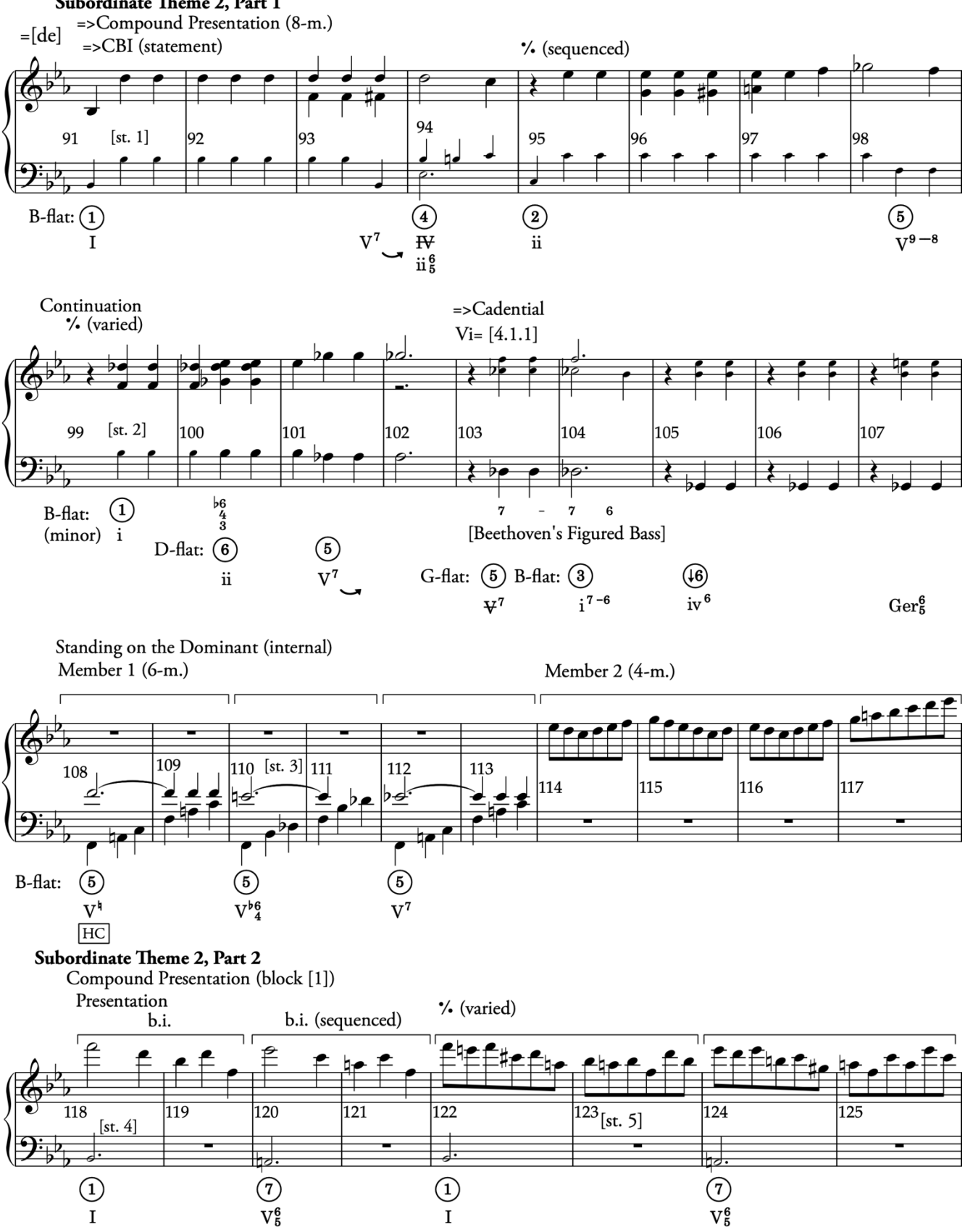
4.0.2

pg. 21, st. 14



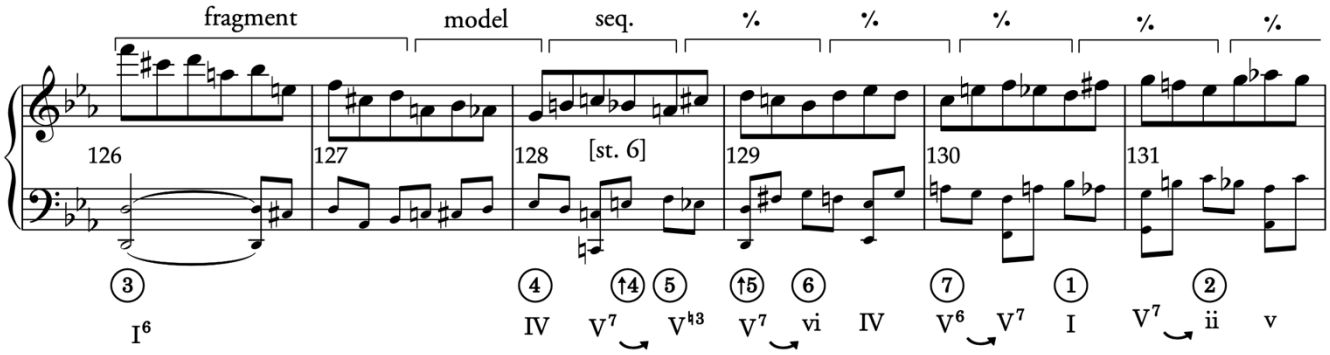
4.1

pg. 22, st. 1-9

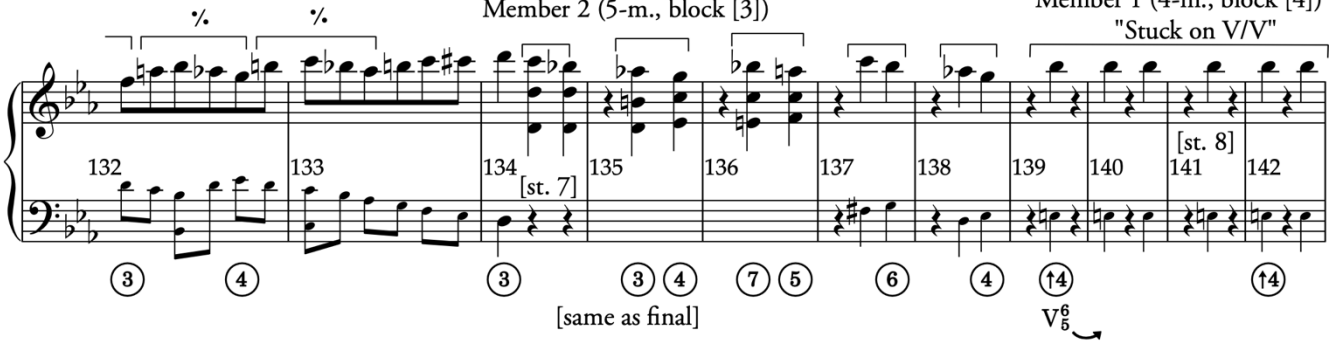

Subordinate Theme 2, Part 1
=>Compound Presentation (8-m.)
=[de]
=>CBI (statement)
% (sequenced)
91 [st. 1]
92
93
94
95
96
97
98
B-flat: 1 I
4 V7 IV ii 6 5
2 ii
5 V9 −8
Continuation
% (varied)
=>Cadential
Vi= [4.1.1]
99 [st. 2]
100
101
102
103
104
105
106
107
B-flat: 1 (minor) i
6 4 3 D-flat: 6 ii
5 V7
7 – 7 6
[Beethoven's Figured Bass]
G-flat: 5 V7
B-flat: 3 i7 −6
6 iv6
Ger6 5
Standing on the Dominant (internal)
Member 1 (6-m.)
Member 2 (4-m.)
108
109
110 [st. 3]
111
112
113
114
115
116
117
B-flat: 5 V♮ HC
5 V6 4
5 V7
Subordinate Theme 2, Part 2
Compound Presentation (block [1])
Presentation
b.i.
b.i. (sequenced)
% (varied)
118 [st. 4]
119
120
121
122
123 [st. 5]
124
125
1 I
7 V6 5
1 I
7 V6 5

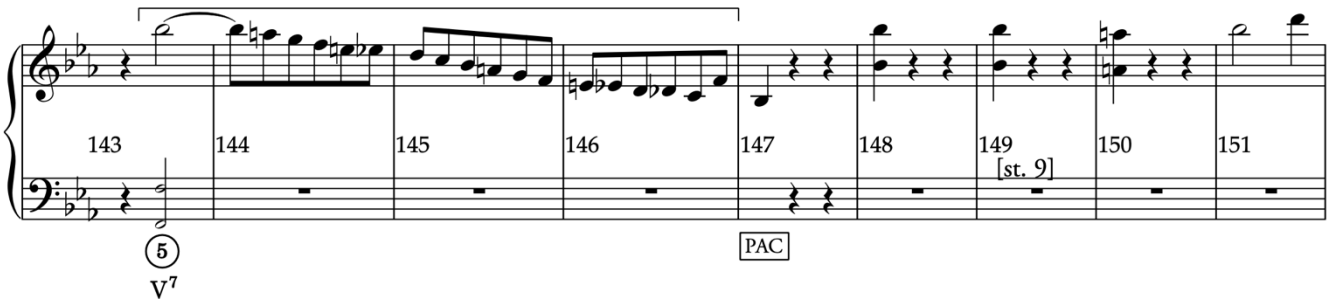
4.1 (cont.)

Subordinate Theme 2, Part 2 (cont.)
Continuation (13-m.)
Member 1 (8-m., block [2])



Continuation (cont.)



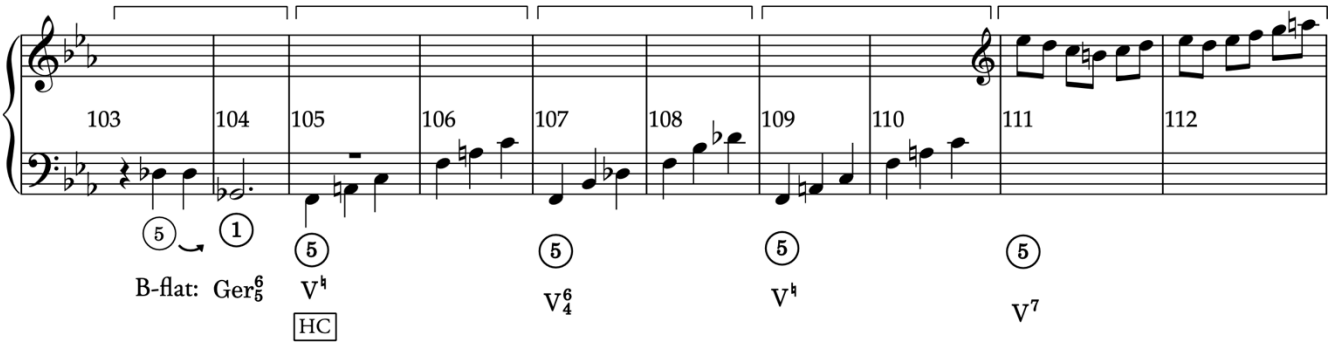


4.1.1

pg. 23, st. 1-5

Subordinate Theme 2, Part 1
(characteristics of block [5])

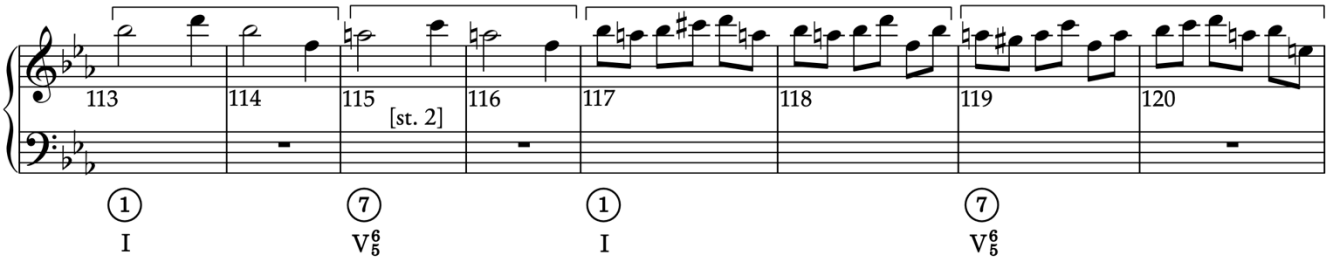
Continuation Standing on the Dominant (internal)



Subordinate Theme 2, Part 2

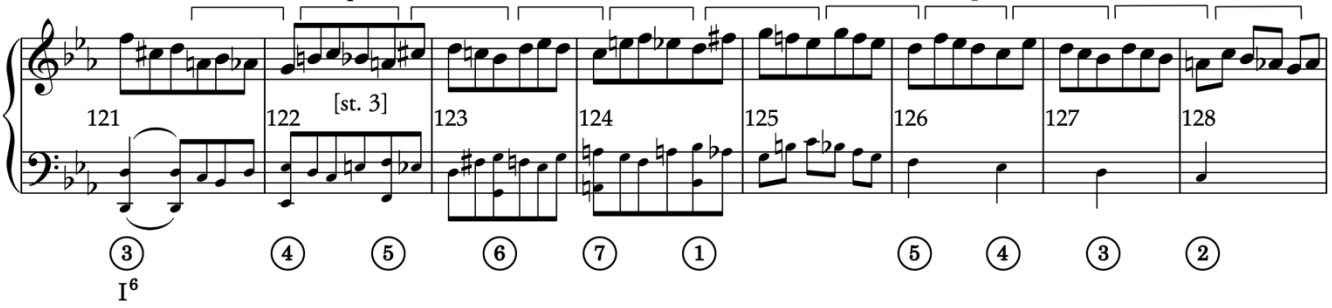
Compound Presentation (8-m., block [1])

CBI ⁒ (varied)



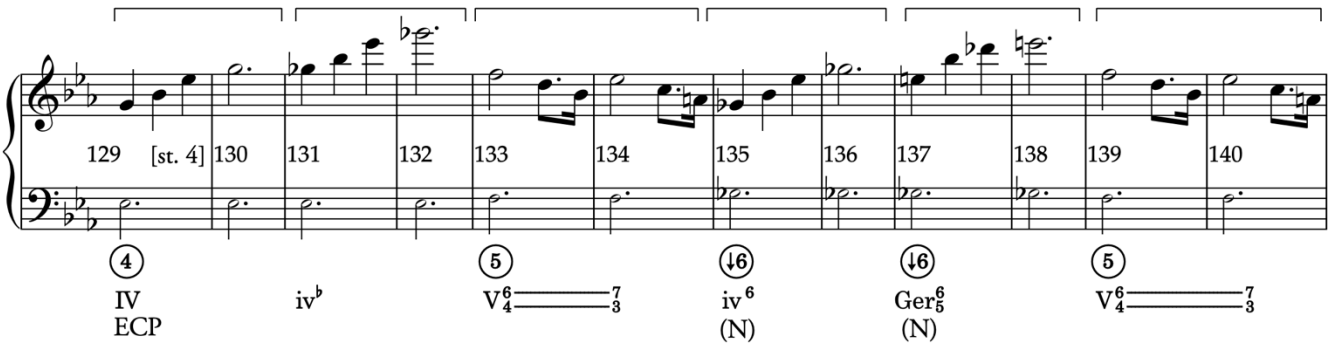
Continuation 1 (8-m., block [2])

model seq. ⁒ ⁒ ⁒ ⁒ model seq. ⁒ ⁒ ⁒ oder



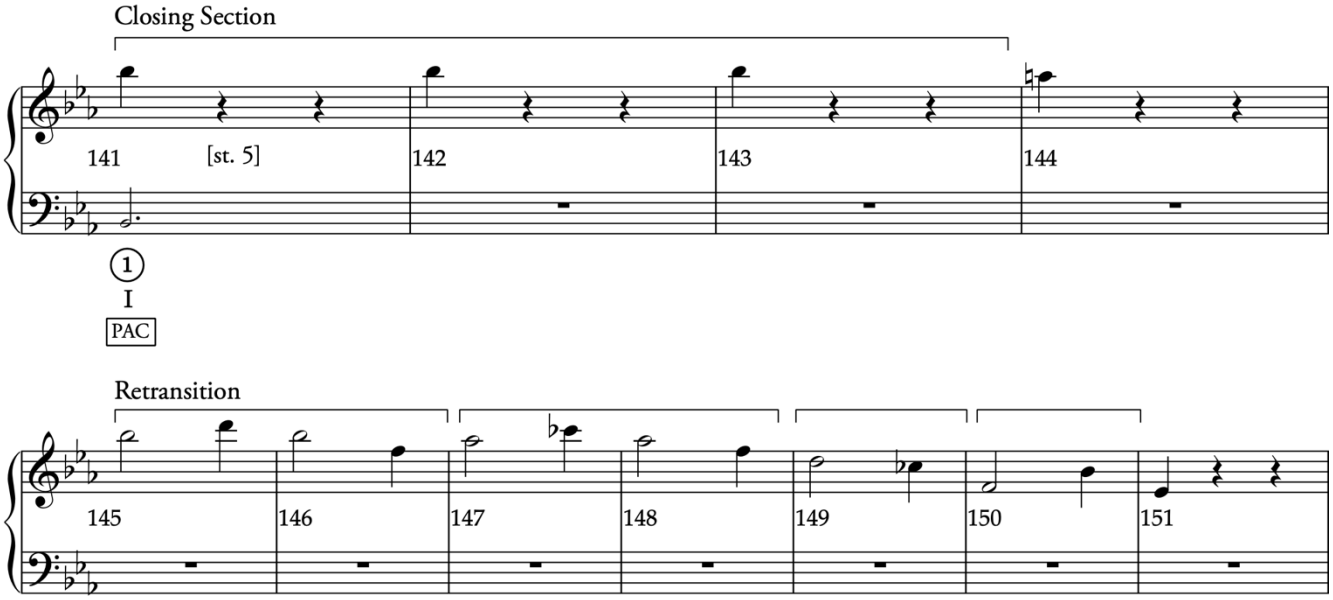
Cadential (12-m., block [5])

6-m. varied repeat (6-m.)



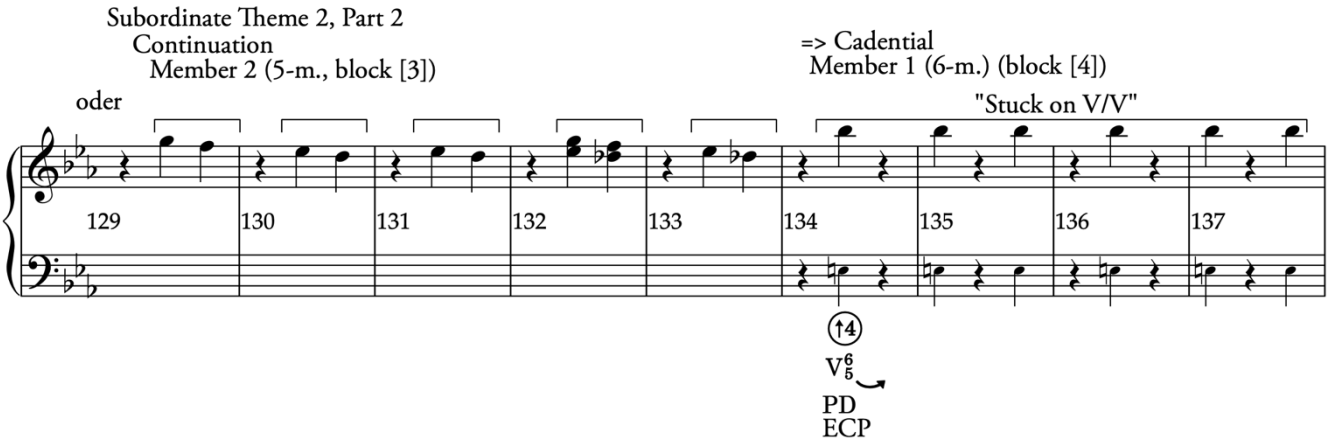
4.1.1 (cont.)

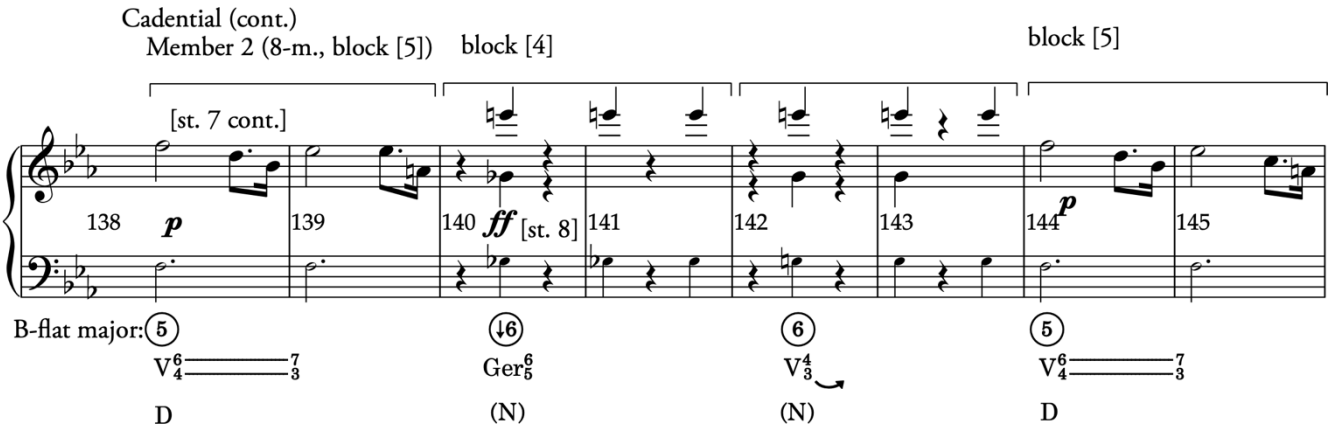
pg. 23, st. 1-5

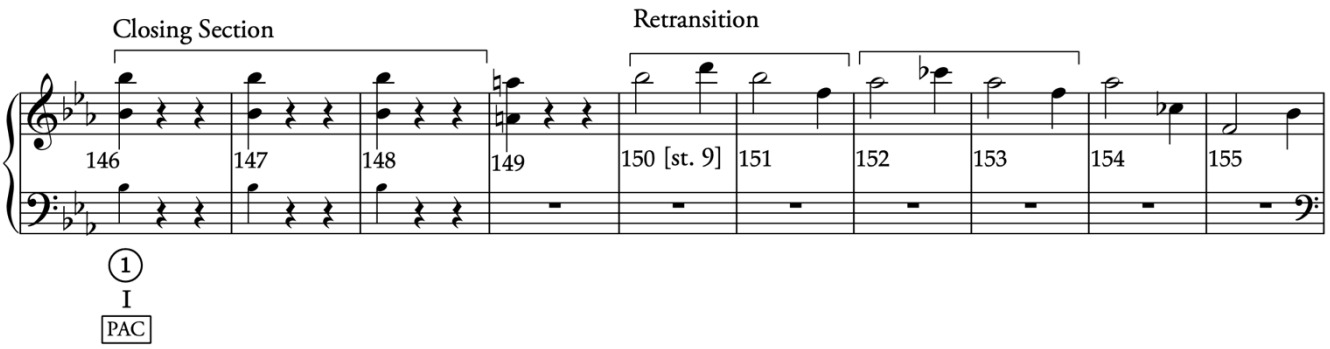


4.1.2

pg. 23 , st. 7-9







4.2

pg. 26, st. 1-10

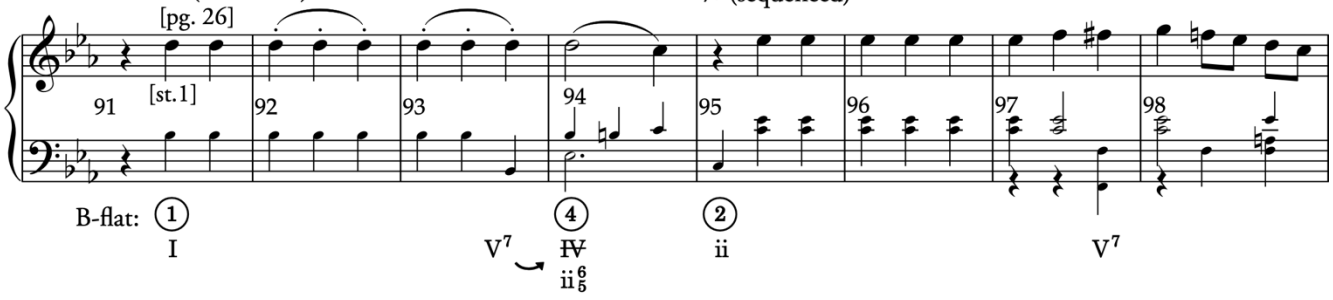
Subordinate Theme 2, Part 1

=>Compound Presentation (8-m.)

=>CBI (statement)

[pg. 26]

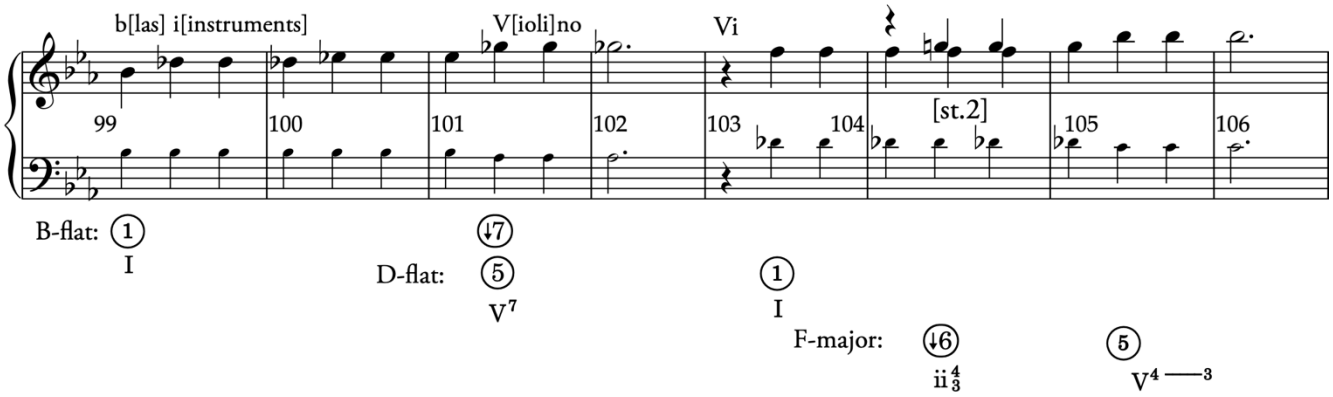
% (sequenced)



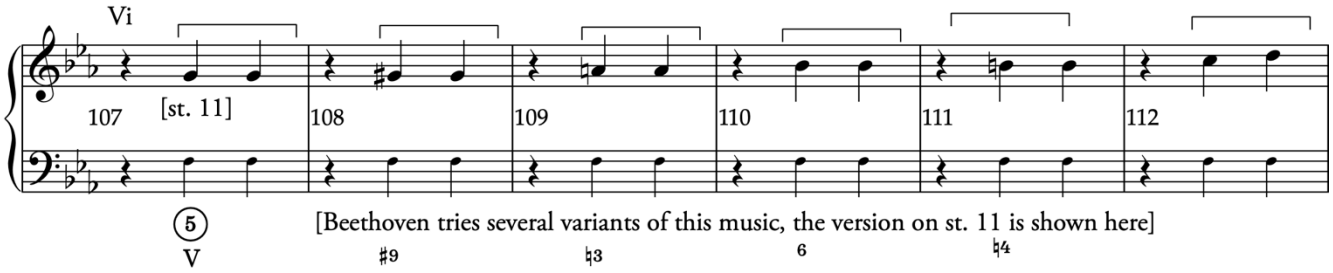
Continuation (8-m.)

model (4-m.)

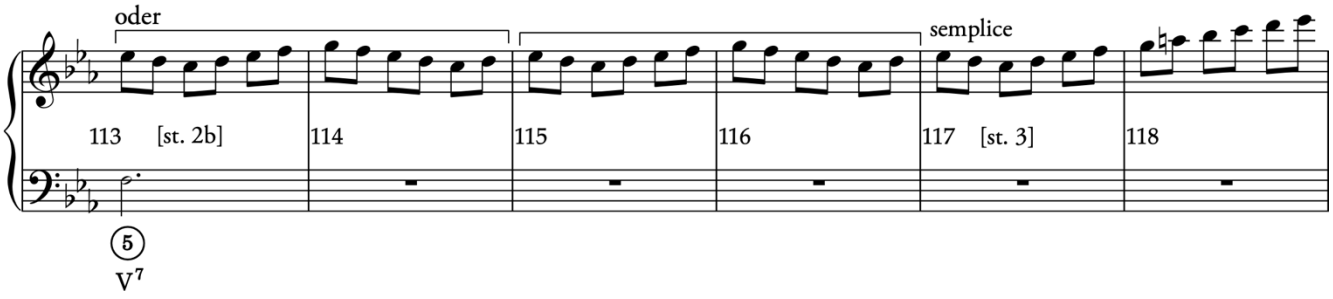
seq. (4-m.)

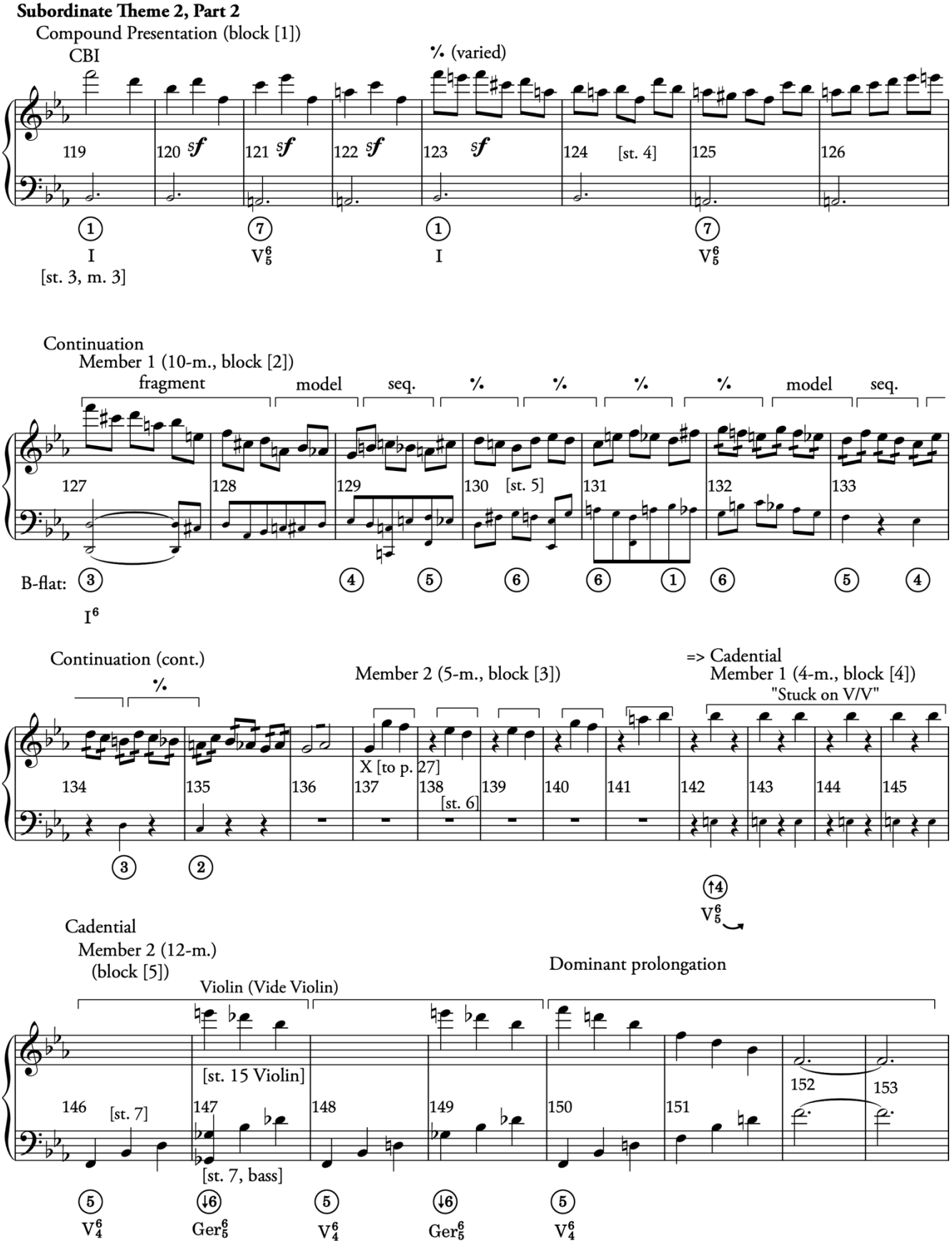


Standing on the Dominant (internal, 12-m.)



[Beethoven tries several variants of this music, the version on st. 11 is shown here]

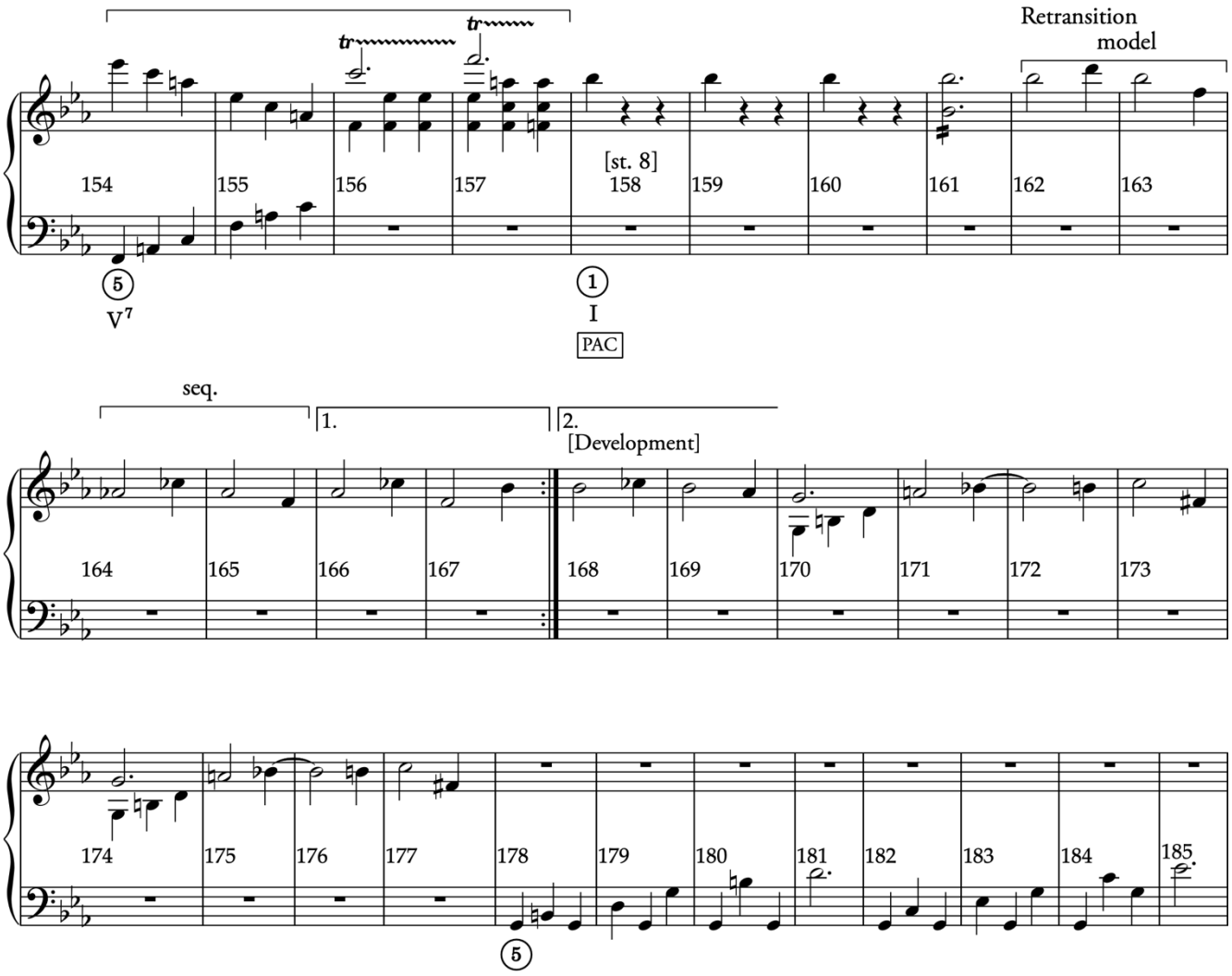



Subordinate Theme 2, Part 2
Compound Presentation (block [1])
CBI
𝄋 (varied)
119
120 sf
121 sf
122 sf
123 sf
124
[st. 4]
125
126
I
V6 5
I
V6 5
[st. 3, m. 3]
Continuation
Member 1 (10-m., block [2])
fragment
model
seq.
𝄋
𝄋
𝄋
𝄋
model
seq.
127
128
129
130
[st. 5]
131
132
133
B-flat:
I6
Continuation (cont.)
𝄋
Member 2 (5-m., block [3])
=> Cadential
Member 1 (4-m., block [4])
"Stuck on V/V"
134
135
136
137
X [to p. 27]
138
[st. 6]
139
140
141
142
143
144
145
V6 5
Cadential
Member 2 (12-m.)
(block [5])
Violin (Vide Violin)
Dominant prolongation
146
[st. 7]
147
[st. 15 Violin]
[st. 7, bass]
148
149
150
151
152
153
V6 4
Ger6 5
V6 4
Ger6 5
V6 4

4.2 (cont.)

10

Codettas

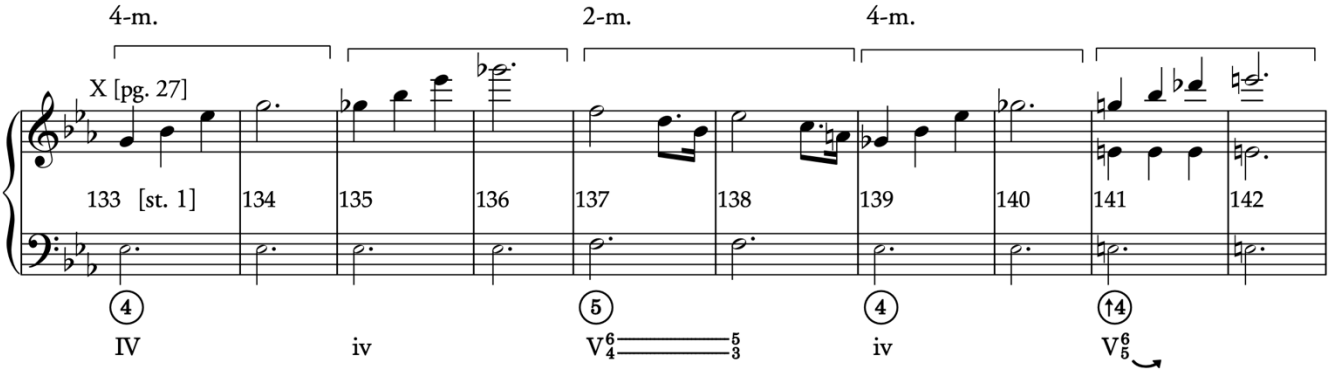


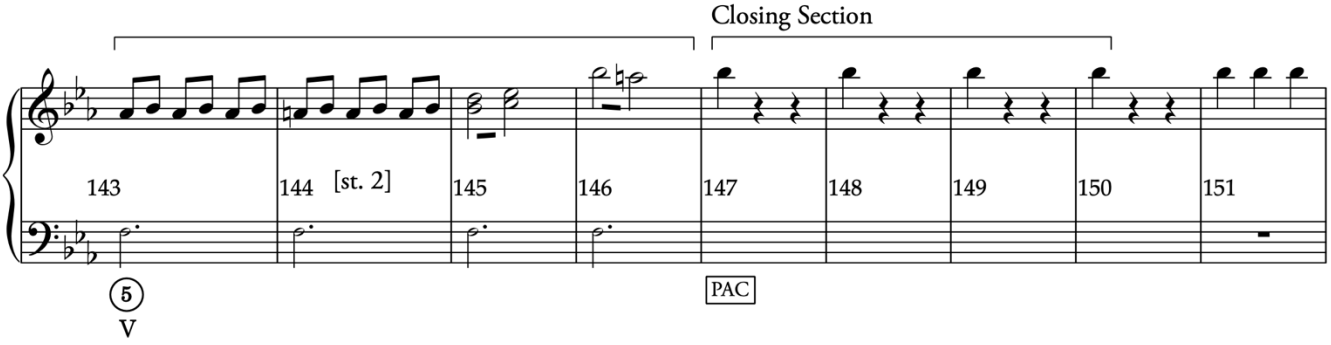
4.2.1

pg. 27, st. 1-3

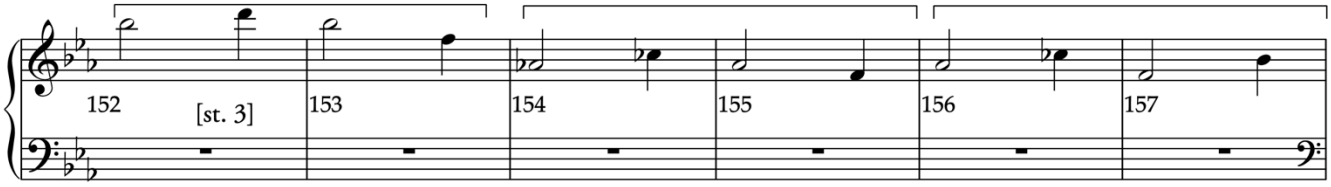
Subordinate Theme 2, Part 2 (Cont.)

Cadential (10-m., block [5])





Retransition



4.2.2

pg. 26 st. 2 & 12

