HARMONY, VOICE LEADING, AND MOTIVE IN BEETHOVEN'S LAST QUARTET

by

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An Abstract of the Dissertation of

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Title: HARMONY, VOICE LEADING, AND MOTIVE IN BEETHOVEN'S LAST QUARTET

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Beethoven's last five string quartets have engaged the imagination and curiosity of performers, listeners, and critics at a level that has rarely been touched in the world of chamber music, or beyond. Throughout the late quartets' history, musicians have scrutinized the works in search of a logic that might demystify their stylistic and structural peculiarities. This present study continues this pursuit as it examines analytically (through Schenkerian techniques) the harmonic, contrapuntal, and motivic procedures in Beethoven's last complete composition, the String Quartet in F major, op. 135.

Most of the published analytical commentaries on the F major quartet approach the work more or less exclusively from a motivic standpoint. Arnold Schoenberg (1941), Rudolf Réti (1951), Deryck Cooke (1963), and Christopher Reynolds (1988) have all praised op. 135 for its highly unified motivic structure; what their studies

show—at least in a general sense—is that there is undoubtedly a motivic strategy that ties much of op. 135 together. But what are we to do when the details of one motivic reading opposes another? Or what if a particular reading contradicts the way we understand a passage aurally (which happens often when the proposed reading is incongruous with the music's harmonic-contrapuntal structure)? What criteria should we use to evaluate a motivic analysis? Clearly, we need a set of principles and standards that will help answer these questions and advance us beyond mere intuition.

The position taken in this study echoes John Rothgeb's argument that "proposed thematic relationships must bear scrutiny in the light of the Schenkerian theory of structural strata," and that incompatible readings should be "dismissed as spurious" (1983, 42). In the pages that follow, a Schenkerian approach is adopted to help assess existing motivic readings of op. 135 within the requisite contexts of harmony and voice leading. The method is also used to help generate a rational, hearable analysis that reveals motivic relationships that reside at deeper, hidden levels of structure.

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INTRODUCTION

Beethoven's late string quartets are so challenging technically, intellectually, and emotionally that they tend to leave listeners somewhat bewildered. What is astonishing is that, in many ways, this is as true now as it was in the composer's own time. Initial reviews of Beethoven's last five quartets show that while some critics celebrated their transcendental qualities, many others found the works eccentric and incomprehensible. And even those who did champion the late quartets struggled earnestly in their efforts to come to grips with them.[1] The most troublesome technical features of the quartets seemed to be their expanded dimensions, inventive formal schemes, polyphonic density, extreme contrasts (of all sorts), and their unusual chromaticism and harmonic progressions. Although we might wrestle less with their lengths and forms today, Beethoven's late quartets still confront us with their wild contrasts and striking tonal juxtapositions. Indeed, throughout the late quartets' history, musicians and writers have scrutinized the works in search of a logic that might explain their stylistic and structural peculiarities. This present study continues this pursuit as it examines analytically (through Schenkerian techniques) the idiosyncrasies of Beethoven's harmonic, contrapuntal, and motivic procedures in his last string quartet, op. 135 in F major (1826).

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[1]See Christina Bashford, "The Late Beethoven Quartets and the London Press, 1836–ca. 1850," *The Musical Quarterly* 84/1 (2000): 84–123.

Although a large body of literature on Beethoven's late quartets has developed over the years, surprisingly little of it is analytical in nature. In an exceptional study of the three late quartets Beethoven dedicated to Prince Galitzin (opp. 127, 132, and 130), Daniel Chua has noted that when it comes to the late quartets in general, "analysts have exhibited a strange reticence" due perhaps to "a sense of awe in the face of these difficult works, clothed by history in such an aura of spirituality that to analyse them would be almost sacrilegious."[2] I suspect that it is precisely the intense difficulty of Beethoven's last quartets that is, more than anything else, the source of modern analysts' avoidance of these works. Among the writings of those who have dared to tackle the late quartets, Chua observes a common deficiency: "the occasional annotations given by various commentators," he says, "although full of sporadic insights, are not designed to tackle a *whole* quartet."[3] Due to their wide scope, the many distinguished surveys of Beethoven's entire string quartet *oeuvre* are inevitably found wanting when it comes to sorting out all the intricate and wondrous details of a single quartet. Once again, the fact that there are so few comprehensive analytical investigations dedicated to just one or two quartets—especially the late ones—is surely a testament to the challenges of such an undertaking. This present study of op. 135 operates nevertheless under the conviction that a close reading of the entire quartet not only helps us appreciate the work's particular allure, but also helps us avoid stereotyping it.

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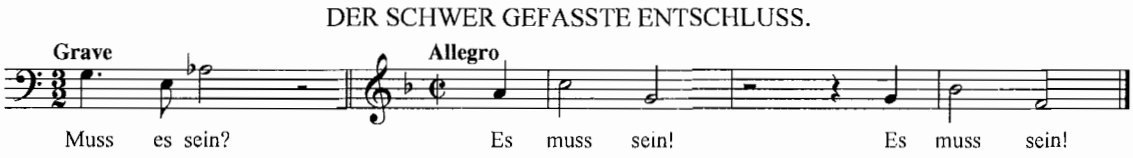
[2]Daniel K. L. Chua, *The "Galitzin" Quartets of Beethoven: Opp. 127, 132, 130* (Princeton, Princeton University Press, 1995), 5.

[3]Ibid.

Survey of the Literature

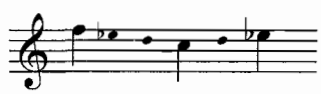
Out of the few analytical efforts aimed at finding coherence in Beethoven's F major quartet, op. 135, nearly all are directed at the composer's motivic technique. This is not surprising, given the curious motivic epigraph titled "Der schwer gefasste Entschluss" ("The Difficult Decision") that Beethoven attached to the quartet's final movement (see Example 1.1). In 1941, Arnold Schoenberg cited the finale of op. 135 in

Example 1.1. Op. 135, iv, Epigraph.



his essay "Composition with Twelve Tones" as an example of earlier music that utilizes a basic set of tones in "diverse mirror forms."[4] Schoenberg noticed that not only are Beethoven's "Muss es sein?" ("Must it be?") and "Es muss sein!" ("It must be!") motives related by inversion, but also that the second phrase of the Allegro theme (meas. 17 ff.) comes about from the retrograde inversion of the "Es muss sein!" motive being filled in with passing tones (see Example 1.2). Schoenberg does not explore Beethoven's motivic development any further in the movement, however, since his

Example 1.2. Retrograde Inversion of "Es muss sein!" with Passing Tones (unstemmed).

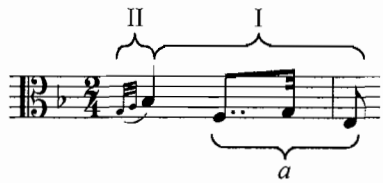


[4]Arnold Schoenberg, "Composition with Twelve Tones, I (1941)," in *Style and Idea: Selected Writings of Arnold Schoenberg*, trans. Leo Black, ed. Leonard Stein (New York: St. Martin's Press, 1975; reprint, Berkeley: University of California Press, 1984), 220 (page references are to reprint edition).

purpose for citing op. 135 is only to establish historical roots for his own methods of transforming a twelve-tone series.

The earliest attempt to understand Beethoven's entire F major quartet in terms of motivic development comes in Rudolf Réti's *The Thematic Process in Music* (1951). Here, Réti claims that the whole structure of op. 135 evolves from just one or two short motivic particles. He brings to mind Schoenberg's *Grundgestalt* when he refers to the first movement's opening gesture as "the basic motivic brick from which the quartet's architecture is developed."[5] Réti identifies two basic motives overlapped in this opening gesture; he further designates the last three notes of the main motive (labeled "I") as particle *"a"* since it occasionally appears on its own (see Example 1.3).

Example 1.3. Réti's Basic Motives Embedded in the Opening Gesture of Op. 135, i, mm. 1–2.[6]



As Réti works his way through the various themes of the quartet, he assures us that "once we pierce the surface, these shapes which seem to bear no resemblance to each other reveal themselves in substance as fully identical."[7] Réti's approach, however, has attracted serious criticism over the years. David Epstein characterizes Réti's analytic technique as "largely intuitive" with "an almost total absence of

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[5]Rudolf Réti, *The Thematic Process in Music* (New York: Macmillan, 1951), 209.

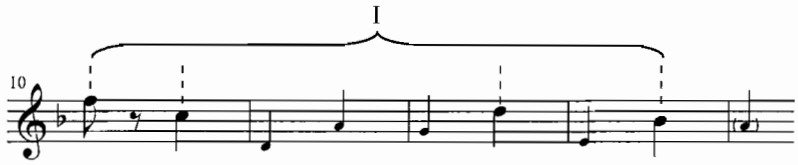
[6]See Réti, 211 (Ex. 331, mm. 1–2).

[7]Ibid., 210.

methodological proof."[8] Similar objections come from Walter Frisch, who considers most of the analyses contained in *Thematic Process* to be "disappointingly shallow."[9] Frisch believes that Réti, in an attempt to reduce all a work's themes down to a generating "motivic kernel," singles out pitches "with little regard for rhythmic or harmonic context; he simply relegates to small print any notes that do not fit the shape he is trying to construe."[10]

From a Schenkerian standpoint, it does appear at times that Réti's analyses highlight certain decorative pitches while suppressing the structural notes they embellish. Consider, for example, his reading of measures 10–14 of the F major quartet's first movement, reproduced in Example 1.4. Here, Réti finds his

Example 1.4. Réti's Motivic Reading of Op. 135, i, Quarter-note Theme, mm. 10–14.[11]



Motive I by separating the cadential note, F, from the previous phrase (mm. 5–10) and linking it to the C, D, and B♭ of the ensuing quarter-note theme. Although Beethoven's quarter-note subject may be somewhat ambiguous harmonically (due to its

[8]David Epstein, *Beyond Orpheus: Studies in Musical Structure* (Cambridge, MA: MIT Press, 1979), 10.

[9]Walter Frisch, *Brahms and the Principle of Developing Variation* (Berkeley and Los Angeles: University of California Press, 1984), 22.

[10]Ibid., 23.

[11]See Réti, 211 (Ex. 329). In this example, I restore the theme's concluding pitch (A), which Réti had removed.

unaccompanied presentation in octaves), its final note, the cadential A, clearly possesses greater tonal stability than the B♭ that precedes (and resolves to) it. Because of this, a Schenkerian reading of the theme would assign the final A to a higher structural rank than the B♭ that is prioritized Réti's analysis.[12] For some listeners, the underlying tonal hierarchy also makes it difficult to experience Réti's motivic pitches (F–C–D–B♭) on a level separate from the remaining pitches in the passage. Moreover, appending the concluding F from the previous phrase to the beginning of the new quarter-note theme is questionable, not only from a Schenkerian perspective, but also from a practical aural one because it proposes a grouping that is not easily grasped.[13] While it certainly appears that there is a motivic process involved in Beethoven's op. 135, Réti's approach focuses so narrowly on locating motivic relationships and intervallic parallels that it becomes blind to the work's harmonic-contrapuntal structure.

A decade later, Deryck Cooke extends Réti's argument when he proposes that all five of Beethoven's late quartets form "a self-contained unity, a single continuous act of creation, in which Beethoven persistently developed certain implications of two basic pitch-patterns."[14] While Cooke acknowledges that discovering these pitch-skeletons in the late quartets does not amount to a "genuine analysis" of the works, he argues that it

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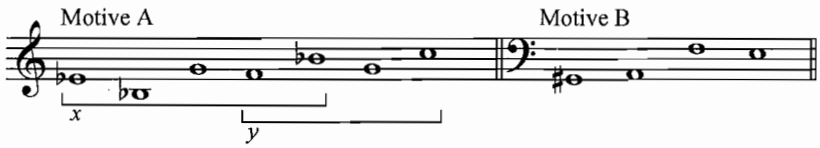
[12]For a Schenkerian reading of the first movement's quarter-note theme, see Appendix B, measures 10–14. See also the discussion pertaining to Examples 1.6 and 1.7 below.

[13]In Chapter III, I discuss Jonathan Kramer's interpretation of the cadential arrival on F in measure 10 as representing the "final" cadence of the movement in terms of its gestural strength. Kramer's analysis reflects the fact that it is very difficult, if not impossible, to perceive a thematic unit that groups the terminative F on the downbeat of measure 10 with any of the notes that follow.

[14]Deryck Cooke, "The Unity of Beethoven's Late Quartets," *The Music Review* 24 (1963): 32.

does provide a "schematic representation of . . . the thematic unity of the group."[15] The two pitch patterns he identifies are the "bright" major motto-theme (A) and "dark" minor motto-theme (B) summarized below in Example 1.5. Cooke also divides his lengthy Motive A into two overlapping segments *x* and *y*, of which *y* figures more prominently in the late quartets, and resembles op. 135's "Es muss sein!" theme (in retrograde).

Example 1.5. Cooke's Motivic Sources of the Late Quartets.



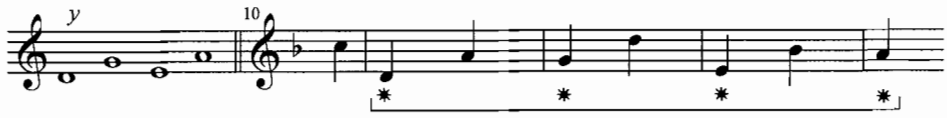
Example 1.6 compares Cooke's reading of op. 135's first-movement quarter-note theme with Réti's analysis of the same passage (cited earlier in Example 1.4). Remarkably, *none* of the pitches that correspond to Cooke's Motive *y* (D–G–E–A) are members of Réti's Motive I (F–C–D–B♭); the two readings are completely at odds. Although Cooke's motive is highlighted metrically and includes the goal tone, A, some aspects of his analysis also conflict with a Schenkerian view of the voice-leading structure. In Example 1.7, I offer a voice-leading sketch that proposes the subject's initial C and penultimate B♭ (two notes suppressed by Cooke) are members of a structural descending third-progression, C–B♭–A.[16] From this perspective, C, B♭, and A

[15]Ibid.

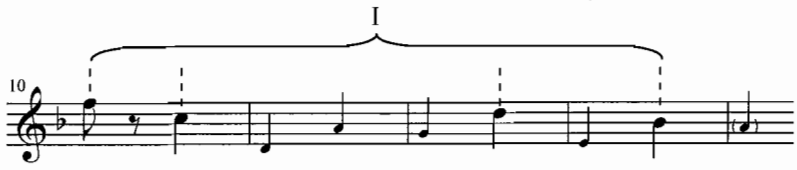
[16]See also the graph in Appendix B, mm. 10–14, and the accompanying discussion of this theme in Chapter III, pp. 67–69).

Example 1.6. Comparison of Cooke's and Réti's Motivic Readings of Op. 135, i, Quarter-note Theme.

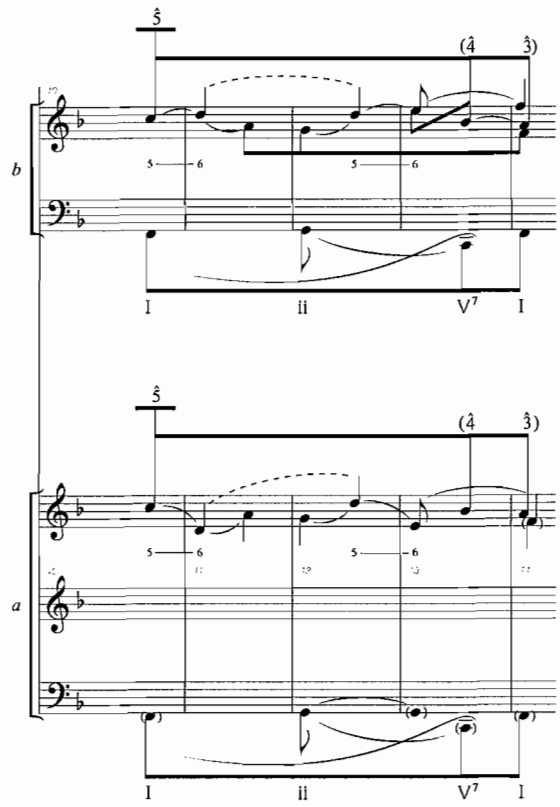
a. Cooke's Motivic Reading of Op. 135, i, mm. 10–14.[17]



b. Réti's Motivic Reading of Op. 135, i, mm. 10–14.



Example 1.7. A Schenkerian Reading of Op. 135, i, Quarter-note Theme, mm. 10–14.

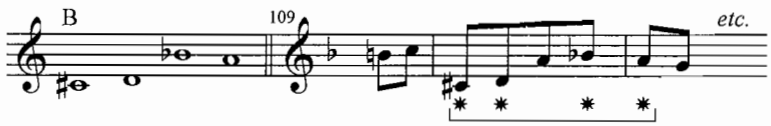


[17]See Cooke, 44 (Ex. 53a).

form the structural skeleton of the theme and may be recognized both conceptually and aurally as belonging to the same structural level.

From a Schenkerian standpoint, Cooke also contradicts his own analysis when he suggests later that the ornamented version of the quarter-note theme takes on the form of Motive B, and not *y* (see Example 1.8). While Cooke presents only half of the embellished subject here, it is enough for us see that Beethoven's original and decorated

Example 1.8. Cooke's Motivic Reading of Op. 135, i, Quarter-note Theme (embellished), mm. 109–111.[18]



settings of the theme are connected tonally, whereas Cooke's motivic analyses of these themes are not. The only corresponding pitch highlighted in both of Cooke's readings is D4 (compare Examples 1.6a & 1.8).[19] The G, which was motivically vital in his first reading, is now merely decorative. And from a Schenkerian stance, Cooke's asterisked C♯, B♭, and A given in Example 1.8 have purely ornamental roles in the tonal hierarchy of the passage.[20] Such details suggest that Cooke's motivic approach to op. 135 is no more driven by the quartet's tonal structure than Réti's.

The contradictory readings of Réti and Cooke raise some important questions: What are we to do when motivic analyses oppose each other? What criteria should we

[18]See Cooke, 44 (Ex. 53b).

[19]Presumably, had Cooke continued his motivic analysis to include the entire ornamented subject (i.e., through m. 113), E4 would be another pitch the two readings would have in common.

[20]See the voice-leading sketch in Appendix B, mm. 109–113, level *a*.

use to evaluate a motivic analysis? Can there be more than one acceptable reading? Clearly we need a set of principles and standards that will help us answer these questions and advance us beyond mere intuition (though intuition is not without its value). It is probably evident from my commentary on Cooke's and Réti's analyses above, that I subscribe to the view that a well-formed motivic analysis is one that is compatible with a Schenkerian understanding of the work's harmonic-contrapuntal structure. This echoes John Rothgeb's argument that "proposed thematic relationships must bear scrutiny in light of the Schenkerian theory of structural strata."[21] One advantage of the Schenkerian approach, Rothgeb explains, is that it is "founded on fixed and indisputable principles of relation," so that when we try to associate a given theme to an underlying motivic shape, the process is "informed by principles that are independent of any specific configuration one may believe 'ought' to be present."[22] In other words, the Schenkerian graph helps keep us honest because it assists us in interpreting diminutions consistently.

The second, perhaps more important, advantage of the Schenkerian method is that "it promotes the hearing and identification of relationships wherever and however they may be manifested."[23] Since it highlights only those motivic and thematic relationships that are audible or potentially hearable, a Schenkerian approach is the one

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[21]John Rothgeb, "Thematic Content: A Schenkerian View," in *Aspects of Schenkerian Theory*, ed. David Beach (New Haven and London: Yale University Press, 1983), 42.

[22]Ibid., 41.

[23]Ibid., 42.

that most strongly supports our intuition; it reflects more what the ear hears and what the mind understands than what the eye sees.

Before moving forward, however, it should be noted that the Schenkerian "test" for motivic associations might not be quite as perfect as Rothgeb and others have suggested. Richard Cohn has raised the issue of an apparent inconsistency between Schenkerian theory and practice when it comes to identifying motivic relations. According to Schenkerian doctrine, the "recognition of motivic relations results from analysis, but does not influence the analytical process."[24] This tenet, however, is frequently broken in actual analyses. Cohn offers several examples by very well respected Schenkerians (including Schenker himself) in which motivic considerations appear to influence structural decisions. Here, motivic relations become more than mere byproducts of the analytic process, as they "create their own independent source of unity, interacting with the Ursatz hierarchy yet maintaining ultimate autonomy with respect to it."[25]

Cohn's examples illustrate three basic situations. In the first type, the analyst is faced with two equally well-formed, equally plausible interpretations, but decides to give preference to the reading that demonstrates richer motivic connections. In the second situation, the analyst is still faced with two well-formed interpretations of a passage, however one interpretation is now more plausible (because it is simpler or otherwise more conventionally "Schenkerian"), while the other option is motivically

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[24]Richard Cohn, "The Autonomy of Motives in Schenkerian Accounts of Tonal Music," *Music Theory Spectrum* 14/2 (1992), 155.

[25]Ibid., 169.

richer. In this case, the analyst still opts for the motivically interesting interpretation, even though it is strictly less plausible. Finally, the third situation is just the same as the second, except that here the analyst tries to escape choosing between the competing interpretations by combining elements from both readings into one (ill-formed) Schenkerian graph.

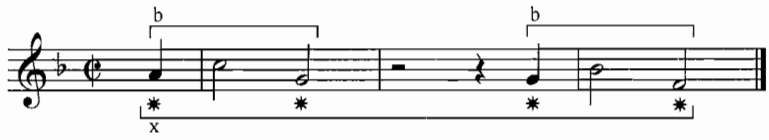
Obviously, situation #3 is problematic because the analyst produces a graph that contradicts itself. But either of its competing interpretations—be it the more conventional one or the motivically rich one—*could* be used as a basis for a motivic analysis, because, as Cohn acknowledges, each option is "well-formed." In other words, each reading is plausible, though one might be more plausible (i.e., more conventionally "Schenkerian") than the other. As far as this study is concerned, a real problem would arise only if an analyst's motivic interpretation of a passage were *implausible* from a Schenkerian perspective, and thus not compatible with the deeper harmonic-contrapuntal structure. As long as we can reasonably reconcile a proposed motivic analysis with a Schenkerian reading of the work, then we have to consider that motivic analysis to be at least viable.

In more recent years, Christopher Reynolds has taken a rather different motivic approach to Beethoven's last quartet. Unlike Réti and Cooke, he considers an intricate "complex" of motives at work in op. 135, and his article, "The Representational Impulse in Late Beethoven, II: String Quartet in F Major, Op. 135" (1988), likens the quartet's techniques of motivic transformation to those found in Beethoven's song cycle *An die ferne Geliebte,* composed ten years earlier. According to Reynolds, the quartet, like *An*

die ferne Geliebte, is a "Beethovenian *Kreis*: both cycle and circle," with one of its key unifying elements being that it "begins with a foretaste of its conclusion" as "motives presented at the outset of the first movement return transformed in the last."[26]

Reynolds, like his predecessors, identifies his main motives with the "Es muss sein!" theme of the quartet's finale. For him, though, the motto theme creates two equally important lines: "Motive b" is the familiar ascending third followed by a descending fourth, while "Motive x" is a stepwise descending third (marked with asterisks in Example 1.9). The unique feature of Reynolds's reading is that his Motive x is a *middleground* pattern that resides beneath the surface of the paired statements of

Example 1.9. Reynolds's "Es muss sein!" Motives in Op. 135.[27]



Motive b.[28] As for the quartet "beginning with a foretaste of its conclusion," Reynolds shows how transformations of Motives b and x first appear (along with another motive, "a") in the first movement's opening gesture (see Example 1.10a). Example 1.10 also illustrates just how differently Reynolds and Réti segment this opening gesture.[29]

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[26]Christopher Reynolds, "The Representational Impulse in Late Beethoven, II: String Quartet in F Major, Op. 135," *Acta Musicologica* 60/2 (1988): 180.

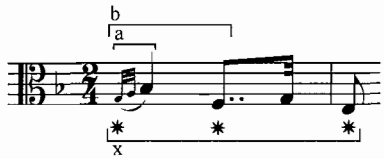
[27]See Reynolds, 180 (Ex. 1).

[28]My Schenkerian analysis of this movement (see Chapter II) will reveal that this middleground motive has even broader structural implications than Reynolds considers.

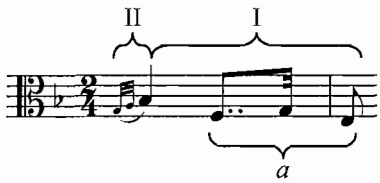
[29]Although Reynolds's Motive b is not one that Réti labels, Réti (p. 216) does acknowledge the pitch correspondence (G–B♭–F) between the quartet's opening gesture and the concluding three-note segment of the "Es muss sein!" motive.

Example 1.10. Comparison of Reynolds's and Réti's Motivic Readings of Op. 135, i, Opening Gesture.

a. Reynolds's Transformations of Motives b and x in Op. 135, i, mm. 1–2.[30]



b. Réti's Basic Motives Embedded in the Opening Gesture of Op. 135, i, mm. 1–2.



In contrast to Réti and Cooke, Reynolds expands his analytic view beyond a few primary motivic shapes to incorporate a network of supporting motives as well. This seems fitting if one is intent on providing a motivic account of the *entire* quartet. The potential difficulty, however, is that Reynolds's central supporting motives (named "y" and "z") are so fluid and abstract in nature, that many readers may become wary. For example, Reynolds defines his Motive y alternately as (1) an ascending perfect eleventh from C to F, or (2) as an ascending fifth from F to C over a dominant C pedal. Similarly, Reynolds's Motive z may be either (1) a descending perfect eleventh from F to C, or (2) a descending octave from F to F. These alternate definitions certainly do seem disparate, yet Reynolds maintains: "It would be wrong to insist on either one reading of these motives or the other, because Beethoven exploits them in all of their

[30]See Reynolds, 181 (Ex. 2a). It is worth noting that here, the descending third of Reynolds's Motive x prolongs the dominant harmony rather than the tonic (as shown in Example 1.9).

dimensions, from individual segments in the first movement to a full fledged reunion of x, y, and z in the finale."[31] Reynolds does acknowledge that, at times, the various transformations of y and z are "so different that there is little to compare," and that only by understanding x, y, and z as a motivic complex, and then relating the larger complexes to each other, do the similarities emerge.[32] It appears, then, that Reynolds justifies his abstract motives y and z, which some critics would view as mere byproducts of tonality, largely because those motives are involved in a kind of developmental musical process.

One of Reynolds's most significant contributions involves his interpretation of the "Muss es sein?" and "Es muss sein!" texts. Previously, authors have looked outside the music to the events of Beethoven's final year for clues as to what the unidentified "it" (*Es*) might symbolize. As Reynolds recounts, speculations have ranged from "the imminence of Beethoven's own death, to the unavoidability of relinquishing custody of his suicidal nephew, to the mundane need to pay subscription dues, based on the comical *'Es muss sein'* canon," which Beethoven composed earlier that year.[33] Reynolds, on the other hand, offers a new way to interpret the epigraph based on the music rather than the composer's biography. By reading "Es" literally as the German note name for E♭, Reynolds construes the epigraph as Beethoven's own acknowledgment of the compositional challenge he set for himself: the integration of E♭ into an F major work.

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[31]Reynolds, 183.

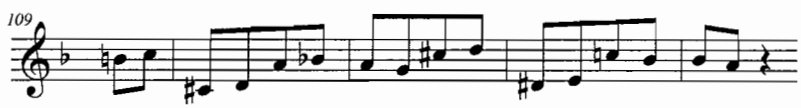
[32]Ibid., 185.

[33]Ibid., 189. I discuss Beethoven's joke canon in Chapter II (pp. 28–30).

The quartet, as a consequence, becomes a drama in which the status of E♭ undergoes a transformation from movement to movement. The note first appears in the *Allegretto* as an intrusion that disrupts both the rhythmic flow and the sense of tonic. By the end of the finale, however, Beethoven has integrated E♭ into the main motives to such an extent that Reynolds dubs the movement a "solution and synthesis."[34] Therefore in the finale Beethoven answers musically the question "Muss *es* sein?" For him, "*Es,*" or E♭, "muss sein!" Reynolds stresses, however, that his *musical* reading of the epigraph does not contradict biographical interpretations. Instead he proposes that Beethoven used the changing role of E♭ precisely to express his views of biographical events. This, Reynolds believes, is Beethoven's "representational impulse."

While Reynolds's approach is certainly more methodical than the analytical practices of Réti and Cooke, he also proposes motivic connections that seem to run contrary to the music's tonal hierarchy. Consider Reynolds's analysis of what appears to be an embellished version of the quarter-note subject in the quartet's first movement (see Example 1.11):[35]

Example 1.11. Op. 135, i, mm. 109–113.

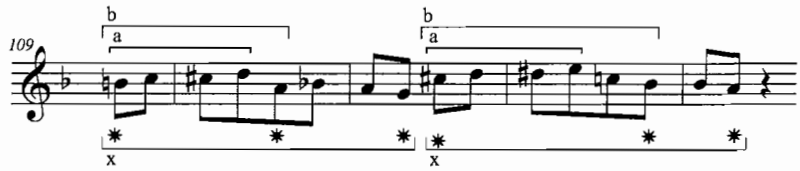


[34]Ibid., 193.

[35]Réti's and Cooke's analyses of the original quarter-note version of the theme are cited above in Examples 1.4 and 1.6. Cooke's analysis of the first half of this embellished version is given in Example 1.8.

By revoicing some of the octaves in this theme, Reynolds is able to locate his primary motives a, b, and x (see Example 1.12). A comparison of Reynolds's revoiced

Example 1.12. Reynolds's Revoicing of Op. 135, i, mm. 109–113.[36]



analysis to the original quarter-note version of the theme (given in Examples 1.6 and 1.7) reveals that some of the pitches used to bring about his motivic shapes have embellishing functions in terms of the harmony and voice leading. Specifically, the B♮ and C♯ that begin each of Reynolds's motivic statements are, from a Schenkerian standpoint, merely surface embellishments of the more tonally stable pitches (C and D) that they precede. As a consequence, both segments that Reynolds identifies as Motive x begin with pitches belonging to a lower structural rank than do the ensuing pitches of his proposed motive.

While the motivic approach to Beethoven's late quartets has gathered the most momentum over the years, Daniel Chua has offered these now familiar caveats about this analytic method:

> First, the motivic process must transcend a myopic, bar-to-bar continuity and rise to a higher order of unity which ranges from the balance of periodic structures to the overall tonal motion. . . .
>
> Secondly, with the late quartets, motifs must be considered not only in their harmonic and tonal context but also within a contrapuntal framework; for in

[36]See Reynolds, 181 (Ex. 2f). Except for being an octave higher, Reynolds's revoiced theme is identical to Beethoven's second violin part in measures 109–213.

> these late works there is an obsession with counterpoint in the structuring of the form.[37]

In short, Chua is saying that to speak of coherence in Beethoven's late quartets requires that we account not only for the motivic transformations, but also for the harmonic and contrapuntal settings within which the motives operate. While the proposal is not new, the way he puts it seems to suggest another layer to the argument, which is that a purely motivic analysis, even one we might find completely satisfying at all times, could never fully explain the unusual sound world Beethoven constructed in his last quartets. The striking sounds of Beethoven's late compositions arise predominantly from their intervallic content, which is expressed in chords, counterpoint, and melody—all dimensions that are addressed most clearly though Schenker's method.

Beethoven's extraordinary treatment of voice leading and dissonance in op. 135 has caused at least one writer to perceive whole-tone and quartal sonorities in the work. In his article, "Color and Dissonance in Late Beethoven: the Quartet Op. 135," Curt Cacioppo uses pitch-class set analytic techniques to bolster a claim that the trichord B♭, F, G (025) from the quartet's opening gesture serves as a "basic unit" that "repeats, varies and develops in several ways."[38] Upon examination, however, I find that Cacioppo's segmentation of the music does not correspond to aurally meaningful musical groups. Consider, for instance, his segmentation of the quartet's opening theme shown in Example 1.13:

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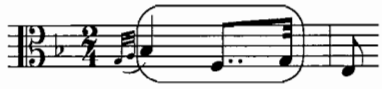
[37]Chua, *"Galitzin" Quartets*, 12–13.

[38]Curt Cacioppo, Color and Dissonance in Late Beethoven: The Quartet Op. 135," *Journal of Musicological Research* 6/3 (1986): 210.

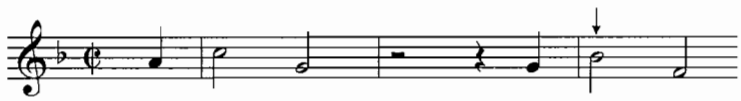
Example 1.13. Cacioppo's Segmentation of Op. 135, i, mm. 1–2.[39]



To select B♭, F, and G, and then ignore the final E seems to deny the natural grouping of the notes. Not only is the final E the tonal goal of the gesture, its downbeat position is also a metrical goal. To make an analogy, Cacioppo's omission of the final E is like taking Shakespeare's famous phrase and trimming it like so: "To be, or not to."

In general, Cacioppo's segmentation of op. 135 disagrees with a Schenkerian understanding of the quartet's tonal structure. For instance, he claims that the "Es muss sein!" motto theme of the finale "challenges traditional aesthetics of melodic writing" because of its "stubborn insistence upon the unresolved fourth scale degree, b♭" (see Example 1.14).[40] Cacioppo believes that by skipping from the B♭ down to F (instead of

Example 1.14. The "Unresolved" [?] Fourth Scale Degree of Beethoven's "Es muss sein!" Motive.



resolving it down stepwise to A), "Beethoven heretically mocks the responsibility toward stylistic resolution [according to the dictates of counterpoint], and proceeds to make a theme of the prank."[41] Moreover, Cacioppo views the motive's perfect fourth as

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[39]See Cacioppo, 210 (Fig. 2).

[40]Ibid., 227.

[41]Ibid., 228.

a motto that "epitomizes the quartal personality of the musical language of this piece."[42] It seems to me, however, that the B♭ and F in Beethoven's motive are not really connected melodically and that each note belongs to a separate strand of a compound melody (see Figure 1.1):

Figure 1.1. Two Distinct Voice-leading Strands within Beethoven's "Es muss sein!" Motive.

What is more, the B♭ does actually resolve to A in the quartet, though it is the A that is unfolded an octave lower in the viola.[43] Indeed throughout the work, the groundbreaking quartal and whole-tone sounds Cacioppo attributes to the F major quartet can be understood alternatively as moments of embellished tertian harmony if one invokes some standard Schenkerian concepts such as compound melody and register transfer.

Incredibly, it appears no writers other than Cacioppo have attempted to explain the harmonic structure of Beethoven's last string quartet. Although Schenker himself does provide a remote background sketch of the first 32 measures of op. 135's scherzo movement (to illustrate ♭VII as the beginning of a chromaticized dominant prolongational span[44]), a comprehensive analysis of the quartet's large-scale tonal structures has yet to be published. Again, this absence may have something to do with

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[42]Ibid.

[43]See my voice-leading analysis of the finale in Appendix A, measure 17.

[44]Schenker's analytical sketch appears in *Free Composition,* Figure 111, a1. Note that ♭VII in the F major Scherzo is E♭—"Es" in German—which ties the music to the epigraph of the finale.

the elusive quality of the late quartets in general. In his study of opp. 127, 132, and 130, Chua speaks of the quartets' ability to "disable" analysis, believing the music's contradictions and "heterogeneity of histories and emotions" forces analysis away from unity towards paradox, ambiguity, and disconnection. As a consequence, Chua argues, "the analytical inadequacies will give way to ambiguities and impasses; harmonic logic will fail to connect," and "Schenker graphs will 'warp' under the strain of demonstrating motivic structures."[45] In this study of op. 135, however, I have found Schenker's method effective in untangling the labyrinth of voices to reveal simpler middleground and background harmonic structures on both local and global levels. Though it is certainly not without its challenges, the F major quartet has not caused the voice-leading graphs herein to "warp" or present an otherwise distorted image of the Schenkerian *Ursatz.* Whether this is because op. 135 is somehow fundamentally different from the other late quartets, as some commentators have professed, remains to be seen.

From the beginning, there have been critics who perceived Beethoven's final string quartet as evoking an earlier tradition. In a commentary on the excessive contrasts in opp. 130 and 131, Beethoven's personal assistant and rather unreliable biographer, Anton Schindler, notes: "A sustained style can be found only in the four movements of the quartet in F major, Op. 135," whose premiere, Schindler adds, "was a success, since the work offered no stylistic, harmonic or technical peculiarities."[46] In

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[45]Chua, *"Galitzin" Quartets*, 9.

[46]Anton Schindler, *Beethoven as I Knew Him*, trans. Constance S. Jolly from the 3rd edition of *Biographie von Ludwig van Beethoven* of 1860, ed. Donald W. MacArdle (Chapel Hill: University of North Carolina Press, 1966), 308.

other words, the final quartet returned to a more comfortable, familiar style that was more in line with its original audience's understanding of the genre. A. B. Marx wrote in his review of the quartet that it "appears to us as melancholy memories of a more beautiful bygone time."[47] This sentiment is echoed nearly a century and a half later by Joseph Kerman, when he refers to the quartet as "nostalgic." Kerman calls the first movement of Beethoven's op. 135 "his most successful evocation of the style of Haydn and Mozart,"[48] and then goes further to say that the movement "at last matches and outmatches Haydn and Mozart on their own ground."[49] Martin Cooper refers similarly to the "neo-Haydn exterior" of the first and last movements, and calls attention to the new lighthearted tone of op. 135:

> Beethoven seems to have exorcised the angels and the demons, pity and terror, to have momentarily finished with supramundane contemplation and the Dionysian assertion of the significance of life's struggles and contradictions. He is now content to cultivative [*sic*] his garden, to smile and to remember, to mock a little perhaps at his own dramatization of cosmic problems and to exercise his incomparable gift for musical invention, the instinctive grasp and unfolding of a single melodic cell's potentialities.[50]

Notably, each of the foregoing statements that Beethoven's last quartet evokes an earlier style comes from a text that deals with the work on a less detailed, less technical level than do the analytical studies surveyed earlier. In making such statements, these

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[47]Adolf Bernhard Marx, review of a concert performance of the String Quartet in F Major, Op. 135, by Ludwig van Beethoven, In *Berliner allgemeine musikalische Zeitung* Jg. 6 (1829): 169–170. Quoted and translated in Kristin Marta Knittel, "From Chaos to History: The Reception of Beethoven's Late Quartets" (Ph.D. diss., Princeton University, 1992), 99–100.

[48]Joseph Kerman, *The Beethoven Quartets* (New York: Knopf, 1967), 354.

[49]Ibid., 358.

[50]Martin Cooper, *Beethoven: The Last Decade, 1817–1827* (London: Oxford University Press, 1970), 404.

authors, might have been responding to such overt characteristics as the F major quartet's more modest proportions, its more conventional treatment of form, its avoidance of abrupt remote tonal juxtapositions, and its lighter emotional character overall. Given these plainly audible differences with the preceding quartets, such conclusions about the F major only seem natural—that is, unless one delves beneath its surface. In response to the views expressed by Kerman, Ratner (who hears in op. 135 echoes of the eighteenth-century *galant*), and others, Lewis Lockwood raises the same argument: "The basis for this judgment lies essentially in externals. . . . these comments fail to look behind the mask of affability that the quartet wears on its surface, disclosing unmistakable features of [Beethoven's] late quartet style and much that moves in new directions within that style."[51]

In contrast, several more recent writers have attached a greater significance to Beethoven's last quartet. For Kathryn Bumpass, the style of op. 135 represents "less a retreat from the extraordinary features of the four preceding quartets than a synthesis of those features with Beethoven's early quartet style."[52] Specifically, this "synthesis" involves Beethoven reconciling the polyphonic density of his late style with the more homophonic and formally transparent Classical style. In this light, op. 135 represents a laudable achievement rather than a regressive disappointment. Daniel Chua too believes the F major quartet is more than just a nostalgic return to an earlier style. Such an

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[51]Lewis Lockwood, *Beethoven: The Music and the Life* (New York and London: W.W. Norton, 2003), 483.

[52]Laura Kathryn Bumpass, "Beethoven's Last Quartet" (Ph.D. diss., University of Illinois at Urbana-Champaign, 1982), 293.

"innocent return," he argues, is impossible after the radical disintegration brought about in the "Galitzin" Quartets (opp. 127, 130, and 131). "Instead, there is an air of indifference," Chua says, "as if the progress of the 'Galitzin' Quartets had simply reached a point of stasis, and all that is left is the history of that progress to play with."[53] In their own way, Chua and Bumpass are both suggesting that the style of op. 135, while different from the other late quartets, is a continuation of (or perhaps even an appropriate conclusion to) that remarkable artistic expression Beethoven began with the composition of op. 127.

Besides being read as a source of nostalgia, a stylistic reconciliation, and a historical commentary, Beethoven's last quartet receives yet another kind of interpretation from analysts like Réti, Cooke, Cacioppo, and Reynolds. As we have seen, these writers tend to view the quartet as a work of subtle genius. While Réti, Cooke, and Reynolds each claim to discover an astounding level of organic coherence in the quartet's intricate motivic relationships, Cacioppo regards the work as pioneering in its use of what he believes are quartal and whole-tone sonorities. It comes as no surprise, of course, that such analytical texts should find Beethoven's quartet praiseworthy, since analysts are not likely to invest themselves so deeply in works they consider to be less than masterful. More generally, what these analytical writings help convey, however, is how diverse the critical opinions of Beethoven's last quartet have truly been.

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[53]Chua, *"Galitzin" Quartets*, 4.

K.M. Knittel proposes in her dissertation, "From Chaos to History: The Reception of Beethoven's Late Quartets," that critical evaluations of op. 135 have tended to be driven by underlying assumptions about the traumatic events of the composer's final year. Biography, she believes, is invoked to "salvage Beethoven's reputation from the accusations of reversion or nostalgia in op. 135."[54] According to Knittel, critics inevitably portray the author of the F major quartet alternately in either a passive or active light:

> The passive interpretation uses biography to make an excuse for the quartet. Because of his illness, Beethoven simply either wanted to complete the quartet in the shortest time possible, or was unable to complete it in the way he would have liked. Therefore, Beethoven's good intentions were thwarted by forces he could not control.[55]

In the active plot, on the other hand, Beethoven overcomes his circumstances to produce in the twilight of his life, sublime music. This particular interpretation, Knittel explains, "hinges on Beethoven's conscious desire to compose a fitting end to his quartet cycle."[56] More than that, Beethoven, sensing the end was near, "wanted to create a final masterpiece as a farewell."[57]

Knittel's argument becomes somewhat controversial, however, when she reveals another essential aspect of her theory:

> Both the active and passive view of Beethoven's composition of the quartet op. 135 rely on Beethoven's intention to compose a set of quartets, and both views require the critic to place op. 135 into the context of the other four late

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[54]Kristin Marta Knittel, "From Chaos to History: The Reception of Beethoven's Late Quartets" (Ph.D. diss., Princeton University, 1992), 256.

[55]Ibid., 257.

[56]Ibid., 264.

[57]Ibid., 257.

> quartets. If the critic chooses to follow the active path, then he or she must show how the F major quartet does fit into the trajectory begun by the other four by unveiling [usually through analysis] its subtle genius. The followers of the passive path try to show how the quartet succeeds at least upon its own terms, but fails to live up to the standards set by the other four quartets.[58]

This line of reasoning certainly rings true for those "passive-view" critics who, in light of the other late quartets, cannot help feeling let down by op. 135. But Knittel assumes a lot when she suggests that "active-view" critics must necessarily be concerned with the quartet's perceived failure and are consequently obsessed with portraying it as a true *Schwanengesang* of the "cycle." She even goes so far as to say that op. 135 "never appears as an autonomous work, even in the most 'analytical' discussions,"[59] and that "It is not possible to view the quartet in itself as a 'success': that success must be measured on the terms of the other four late quartets."[60] I find such statements difficult to accept in light of the analytic writings discussed at the beginning of this literature survey, since only Cooke tries to demonstrate unity between op. 135 and the preceding four quartets. The rest of the analysts—Schoenberg, Réti, Cacioppo, and Reynolds—mention Beethoven's other late quartets only incidentally if at all. In spite of this fact, Knittel cites Reynolds as one of her "active view" critics concerned with showing how op. 135 fits into the trajectory established by the preceding quartets. She claims that Reynolds, in demonstrating the F major to be a "subtle masterpiece of motivic and cyclic unity," thereby "ignores the criticism of op. 135 as insufficient by creating a reading in which it

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[58]Ibid., 268–269.

[59]Ibid., 269.

[60]Ibid., 263–264.

is invaluable."[61] Knittel may be right in saying that Reynolds "ignores the criticism of op. 135," since he never mentions it at all, but it is a stretch to imply that his analysis—which certainly appears to praise the quartet as a success *on its own terms*—has instead a hidden agenda aimed at countering some perceived failure of op. 135. Knittel also reveals something about her own assumptions when she says Reynolds "*creates* a reading that does not allow for Beethoven to have lost control, or to compose unworthy pieces."[62] Her implication here is that Reynolds set out to concoct some kind of scheme that would save op. 135 by elevating it to the rank of the other four late quartets. But how can she be so sure what his (or anyone else's) motivation is? Perhaps Reynolds's favorable view of Beethoven's last quartet is driven instead by all the inventive and sophisticated relationships he discovered in his analytical exploration. Who is to say that saving the quartet from some critics' perceived failure has anything to do with it? Such a view would also seem to downplay the value of the interesting findings that have been made through analysis. I believe that Beethoven's last quartet holds many wonderfully nuanced details that have yet to be discovered, and therefore we should embrace the work's potential to being great on its own terms. This is the spirit that inspires and propels this present study.

[61]Ibid., 267–268.

[62]Ibid., 254–255; emphasis added.

CHAPTER II

A BASIC SET OF TONES IN "DIVERSE MIRROR FORMS": OPUS 135, FOURTH MOVEMENT

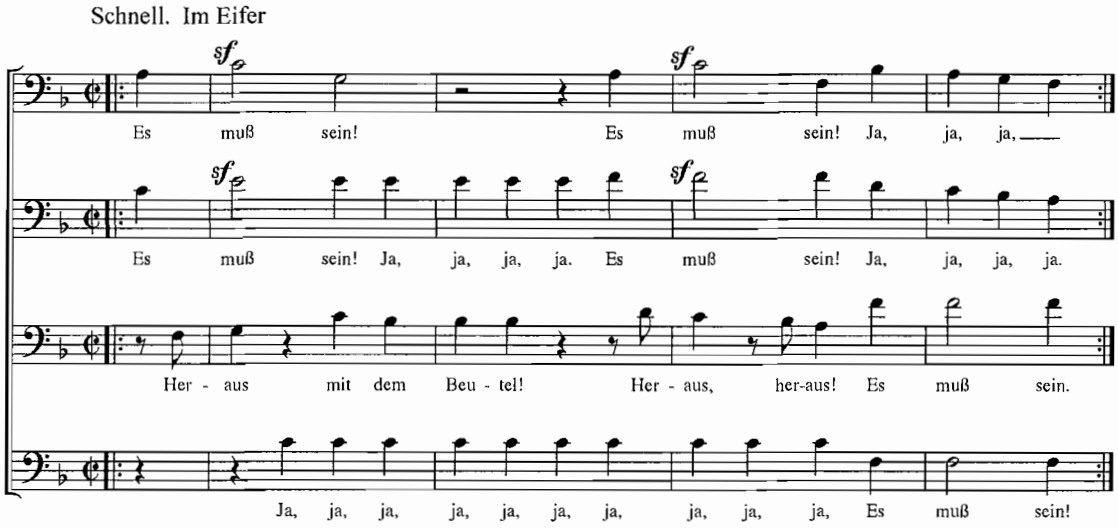
It is probably unrealistic to insist that all the themes in Beethoven's last quartet stem from just a few source motives, however there do appear to be some convincing motivic connections that span the entire work. Not surprisingly, motives based on the "Muss es sein?" and "Es muss sein!" pitch patterns inscribed at the head of the finale wind up having the greatest global significance. This naturally lends the finale a special function as it offers us a framework for interpreting certain key themes presented earlier in the quartet. For this reason, the final movement is an ideal place to begin exploring, because doing so will give us a sense of the various transformational and combinational possibilities inherent in Beethoven's main motives. Following Schoenberg's lead, we shall consider, among other things, how the "Muss es sein?" and "Es muss sein!" themes of the finale represent a basic set of tones that the composer arranges in "diverse mirror forms."[63]

Just prior to beginning work on the F major quartet in the summer of 1826, Beethoven is said to have dashed off the following joke-canon in response to an amusing

[63]Schoenberg, 220.

incident with one Ignaz Dembscher, a wealthy music patron and quartet lover who served as an official of the Austrian war department (see Example 2.1):[64]

Example 2.1. Beethoven's "Es muss sein!" Canon, WoO 196.[65]



Not only does the canon's opening motto (and text) find a new home in the op. 135 quartet finale, the very idea of canon becomes that movement's motivating force. The link between the joke-canon and the quartet finale is confirmed by entries in Beethoven's

[64]The story behind the joke-canon is detailed in Elliot Forbes, ed., *Thayer's Life of Beethoven* (Princeton: Princeton University Press, 1967): 976. "Dembscher had neglected to subscribe for Schuppanzigh's concert [premiere of Beethoven's op. 130] and had said that he would have it played at his house, since it was easy for him to get manuscripts from Beethoven for that purpose. He applied to Beethoven for the Quartet, but the latter refused to let him have it, and Holz, as he related to Beethoven, told Dembscher in the presence of other persons that Beethoven would not let him have any more music because he had not attended Schuppanzigh's concert. Dembscher stammered in confusion and begged Holz to find some means to restore him to Beethoven's good graces. Holz said that the first step should be to send Schuppanzigh 50 florins, the price of the subscription. Dembscher laughingly asked, "Must it be?" ("Muss es sein?") When Holz related the incident to Beethoven he too laughed and instantly wrote down the . . . canon."

[65]The transcription is by Ludwig Misch and it corrects several misread pitches of Beethoven's autograph that were made by earlier transcribers. See Ludwig Misch, "Noch ein verstümmelter Kanon von Beethoven," *Die Musikforschung* 8/3 (1955): 327; reprinted in Ludwig Misch, *Neue Beethoven-Studien und andere Themen* (Bonn: Beethovenhaus; Munich and Duisburg: G. Henle Verlag, 1967), 50. The transcription also appears in Donald W. MacArdle and Ludwig Misch, trans. and ed., *New Beethoven Letters* (Norman: University of Oklahoma Press, 1957), 512.

sketchbooks that suggest the composer had been working out his ideas for both pieces around the same time;[66] this evidence, as Lewis Lockwood has pointed out, casts suspicion on that part of the fabled story that portrays Beethoven swiftly jotting down the joke-canon one day in April.[67] Although concrete connections between the canon and the quartet finale appear to be limited to various reworkings of the motto theme, the *idea* of canon, along with related contrapuntal techniques, exerts a powerful influence on the quartet movement as a whole. As the sketches demonstrate, Beethoven was absorbed in trying out various contrapuntal combinations with his "Es muss sein!" theme, and at one point he even tags a set of musical entries as "canonnisch."[68]

Besides canon, another, equally essential, characteristic of the finale is the idea of contrasting opposites, which is encapsulated in the movement's epigraph (refer to Example 1.1 above). Daniel Chua elucidates this dialectic particularly well:

> What Beethoven emphasizes in the epigram is the oppositional structure of the conversation, by dissecting and labelling the elements as a table of contrasts before the movement begins: bass and treble clef, question and exclamation mark, triple and duple time, Grave and Allegro, up and down, single and double statements, 'atonal' and diatonic intervals, statement and sequence.[69]

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[66]Bumpass, "Beethoven's Last Quartet," 230–231. Upon scrutinizing the sketches, Bumpass also informs us, "it is not always possible to distinguish with certainty between the sketches for the canon and those for the finale" (203).

[67]See Lewis Lockwood, *Beethoven: The Music and the Life* (New York and London: W. W. Norton, 2003), 480.

[68]See Bumpass, "Beethoven's Last Quartet," 234. Here, the author presents a transcription of the sketch page in question (folio 2v of Manuscript 66, group 9, which is housed at the Bibliothèque Nationale in Paris). Curiously, this passage does not appear to be canonical at all, and so perhaps Beethoven intended the title "canonnisch" as a mental note rather than a description of his sketch. In addition, this particular passage does not make its way into the finished quartet, although similar sketches that work out contrapuntal settings of the "Es muss sein!" motto certainly do.

[69]Daniel K. L. Chua, *Absolute Music and the Construction of Meaning* (Cambridge and New York: Cambridge University Press, 1999), 282.

This polarity expressed by Beethoven's musical question ("Muss es sein?) and response ("Es muss sein!") is realized within the body of the quartet finale through the contrasting Grave and Allegro sections. The individual characters of the slow and fast sections appear to occupy such disparate emotional worlds, that, were it not for their motivic connections, it would be difficult to comprehend them belonging to the same movement. Perhaps Beethoven is making a joke here after all, and this is precisely it. As the Grave introduction sets the stage for the kind of profound artistic inquiry into man's Destiny that "surged from the very depths of the Beethovenian soul," as Rolland put it,[70] the Allegro simply shrugs off the weighty question and takes off cheerfully without a care in the world. Thus Beethoven plays a trick on us by escalating our expectations for a serious dramatic piece, only to catch us off guard with a whimsical about-face.

All of these characteristics of the finale—its polar contrasts, the influence of canon, and its various motivic transformations—must be taken into consideration if we have any hope of finding meaning and coherence in the movement. But we must also be careful not to pass over the work's small- and large-scale tonal framework. For one thing, the various levels of the finale's harmonic-contrapuntal organization, understood in the Schenkerian sense, provide the analyst with a vital quality-control system when it comes to identifying and interpreting Beethoven's complex motivic relationships. And if the movement does, in fact, compose out a genuine Schenkerian *Ursatz*, then that, in

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[70]Romain Rolland, *Beethoven: les Grandes Époques Créatrices*, vol. 5, *La Cathédrale Interrompue: Tome II. Les derniers Quatuors* (Paris: Éditions du Sablier, 1943), 299–300; quoted in Joseph Kerman, *The Beethoven Quartets* (New York: Knopf, 1967), 363.

itself, will contribute a fundamental level of coherence. With this in mind, let us now explore each of the major sections of this sonata-form movement.

The Introduction (mm. 1–12)

The finale's slow introduction (marked "*Grave ma non troppo tratto*") is obsessed with posing the question: "Muss es sein?" Beethoven begins the movement with the interrogative form of his motive sounded in octaves by the viola and cello. In presenting the "Muss es sein?" pattern unaccompanied in the first measure, he symbolizes the motto's question musically as he provokes the listener to *question* the very tonality of the movement. It is not until the middle of measure 2 that the introduction's F minor tonality comes into focus. As a general technique, Beethoven creates harmonic ambiguity in the quartet by delaying the resolution of one or more structural pitches. At the beginning of the Grave, for instance, the first two notes of the "Muss es sein?" motive unfold the interval of a third, G–E♮; although the upper voice (G) resolves directly to A♭ in measure 1, Beethoven puts off resolving the lower voice (E♮) until the viola bass note F arrives on the third beat of the following measure (m. 2). This delayed resolution in the bass is what causes the moment of tonal uncertainty at the movement's outset. The voice leading between these unfolding thirds (G–E♮ resolving to A♭–F) is illustrated more clearly at level *b* (mm. 1–2) of my voice-leading sketch of the finale (see Appendix A).

As soon as the first "Muss es sein?" statement is finished in measure 1, Beethoven injects the idea of canon into the movement by setting imitative scalar descents (C–B♭–A♭–G–F) in the first violin, viola, and the second violin at the distance of

one beat apart (see mm. 1–2). Just as F minor begins to emerge as tonic, however, the music takes a turn that once again tempts the listener to question the tonal center. In measures 3–4, Beethoven tonicizes B♭ minor by transposing the music of the first two bars up a fourth.[71] The fact that Beethoven introduces a new tonal area so early in the movement, and that he does it with the same material, is what leads us to question the governing centricity of F minor. Only in hindsight do we recognize B♭ as iv.

It is worth noting that the B♭ minor transposition is even less stable than the F minor beginning. This is because when the structural bass finally reaches B♭ on the third beat of measure 4 (violin II), the harmony mutates from minor to major and the cello slips in an A♭ as the lowest sounding voice.[72] The fact that Beethoven emphasizes B♭7/A♭ in measure 5 is significant. According to the conventions of functional tonal harmony, this chord (as V_2^4/VII) threatens to lead us even further from the tonic F minor to an E♭ chord. And considering what Christopher Reynolds has brought to light about E♭ representing the German "Es" in this movement, we can recognize Beethoven making yet another play on our expectations: as we hear V/VII, we might rightfully ask ourselves, "Muss *Es* (E♭) sein?" Beethoven answers negatively for now, however, and does not allow E♭ to materialize. Instead, he leads B♭7/A♭ to a diminished seventh,

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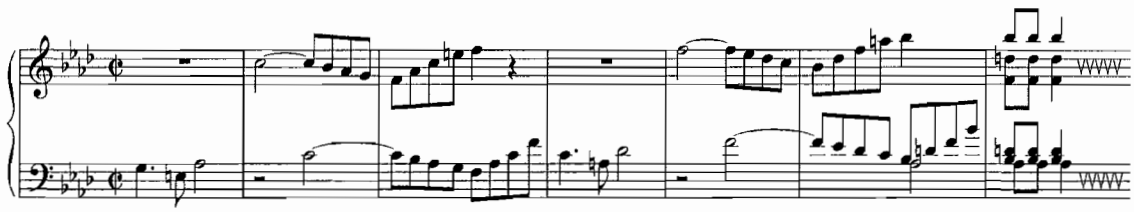
[71]Notice in the transposed version (mm. 3–4) that the voice order of the imitative entries changes to violin I, violin II, viola.

[72]This A♭ is probably best understood as a passing seventh that comes in one beat sooner than expected. B♭, then is the *structural* bass in measure 4 (see the voice-leading graph in Appendix A, mm. 4–5).

E°7/G, which functions as vii°$^{6}_{5}$ of F minor, making possible a smooth return to the tonic in measure 8.[73]

Beethoven's opening bars of the finale are not only tonally ambiguous, they are metrically ambiguous as well. The first four-and-a-half measures could just as well be perceived in duple meter instead of Beethoven's notated triple (see Example 2.2). A listener might be led to interpret the opening measures of the finale this way largely

Example 2.2. Duple Meter Reinterpretation of Op. 135, iv, mm. 1–5 (simplified).



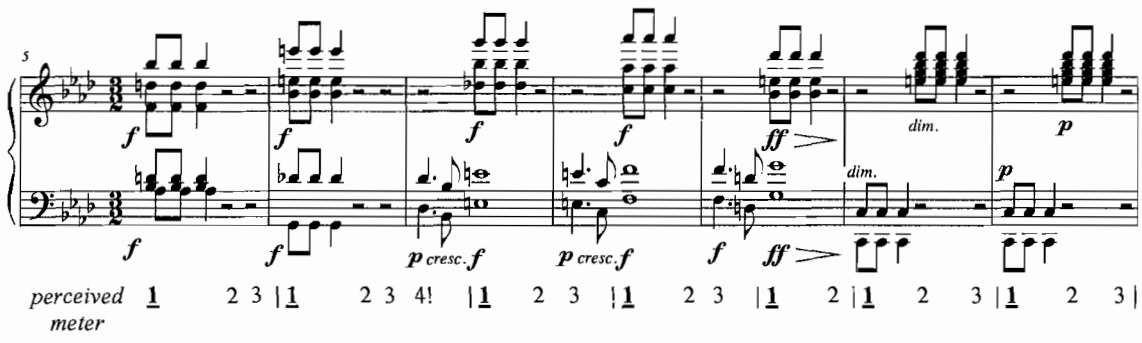
because of the first violin, whose entrance (shown in the top staff of Example 2.2) creates a distinct accent as it is the first and the highest statement of the imitative group.[74] Also, a duple interpretation of this passage is fitting because, just like the notated original, it positions Beethoven's repeating motives consistently within their respective measures. Of course, the duple pattern does not last long, and the metrical orientation of the accented repeating chords (♩♩) in measures 5–6 will surely cause sensitive listeners to shift their perceptions to triple meter. But this is the point. By changing the positions of his accents, Beethoven is now playing with our expectation for a consistent, stable meter.

[73]Coming from B♭7/A♭, the E°7/G would be a "common-tone" diminished seventh if the B♭ were maintained in the same octave between measures 5 and 6.

[74]Observe that for each group of imitative entries, the third imitative voice is omitted in Example 2.2 for the sake of clarity.

And he continues to do this through the remainder of the introduction. In measures 7–11, for instance, he maintains his accented ♫♩ chords in the upper voices, but he shifts their location so that the motive now begins on the second beat of each measure. In spite of the shift, there is something there that tempts us to continue hearing the accented-chord motive as a downbeat marker, so that the passage in question might be perceived as follows (see Example 2.3):[75]

Example 2.3. Shifted Metrical Accents in Op. 135, iv, mm. 5–11.



This is not to suggest that Example 2.3 illustrates the *preferred* way to hear the passage, particularly since it would require the perception of mixed meter, however it does represent one logical way to experience the piece. The key point is that Beethoven's metrical ambiguity plays an important role in conveying the emotions wrapped up in his question, "Muss es sein?"

From a Schenkerian viewpoint, we can see that the deeper voice leading of the Grave also symbolizes the motto's question (see Appendix A, mm. 1–12). The upper voice, which is embellished with some rather striking register transfers, traces a structural

[75]Notice in Example 2.3 that hearing the ♫♩ rhythmic motive as a downbeat marker would imply a meter change in measure 6 to the beginning of measure 7 and in measure 10 where the lower strings come in with the motive.

linear descent from the primary tone C ($\hat{5}$) down to the second scale degree G ($\hat{2}$). In typical fashion, the melodic interruption of the *Urlinie* here is supported harmonically by a half cadence, which, according to classical convention, generally has the function of a musical "question."[76] In order to heighten the suspense associated with his half cadence even more, Beethoven adds both a dissonant seventh (B♭) and ninth (D♭) to his dominant harmony (mm. 10–11). The introduction ends, however, with a quiet intensity as Beethoven brings the dynamic level down to pianissimo and reduces the texture to bare octaves. The effect is as if Beethoven were motioning for us to lean in closer so that he might finally whisper into our ears the secret answer to his most profound philosophical question.

The Exposition (mm. 13–80)

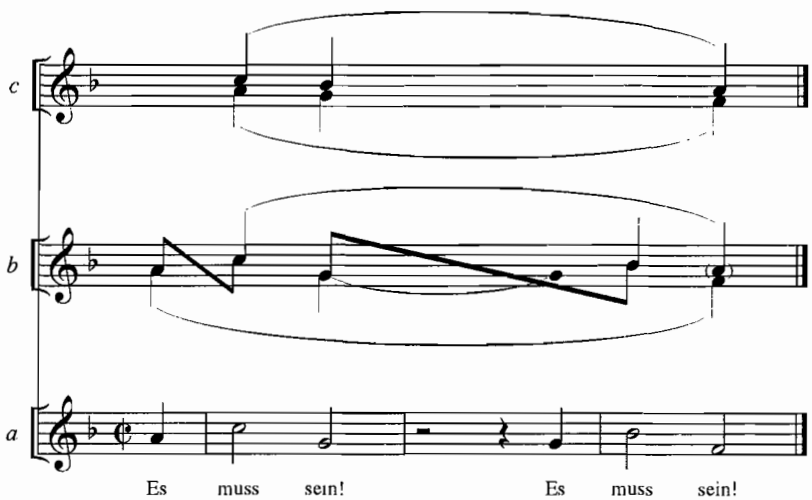
With the emotional heaviness of the Grave hanging almost palpably in the air, the vibrant whimsy of the Allegro proves to be a shock to the system. Beethoven begins straight away with his "Es muss sein!" answer motif being sounded in octaves by the two violins. In addition to bewildering us with the Allegro's extreme mood shift, the composer also confronts us with his unusual late-style counterpoint. For instance, the A♮ pick-up note of the "Es muss sein!" theme belongs harmonically with its upper third, C, which appears on the downbeat of measure 13.[77] Oddly, though, the A♮ is not consonant

[76]William Caplin reminds us that half cadences are typical at the ends of slow introductions in sonata form movements. He also insists that such introductions "almost always contain something of the uncertain and hesitant." See William E. Caplin, *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven* (Oxford and New York: Oxford University Press, 1998), 205.

[77]I illustrate the relationship between these two pitches by connecting them with Schenker's unfolding symbol, 𝄐 (see Appendix A, mm. 12–13, level *a*).

with the prolonged dominant harmony that supports measures 13–14. How are we to comprehend such a pitch that is so vital motivically, yet not supported by the harmony? At level *b* of my voice-leading sketch (Appendix A, m. 13), I interpret the A♮ as somewhat of a "free dissonance" (more specifically, an incomplete neighbor) that gets prolonged in the middleground chord progression. As discussed in the previous chapter, the double statement of Beethoven's "Es muss sein!" motive unfolds two voices of a compound melody in parallel thirds. Taken on its own, the motive's voice-leading structure represents a simple tonic prolongation in F major (see Example 2.4). The

Example 2.4. Voice-leading Structure of Beethoven's "Es muss sein!" Motive.



typical way to harmonize these thirds would be I—V^7—I, so it is quite unusual (and fascinating) that Beethoven would support the initial A–C third with V (C major). To be fair, though, the passage does not *sound* all that strange. Part of it is because of the quick tempo, but it is also because the accompanying bass line does not enter until after the

downbeat, so that by the time we actually realize the harmony in measure 13 is V, the "dissonant" pitch, A, has already resolved.

A similarly curious moment occurs when the B♭ of the motto arrives on the downbeat of measure 15—the very moment when the harmony changes to I (F major). Motivically, the B♭ is the upper voice of the unfolded third, G–B♭, yet it appears dissonant above F major. The pattern of unfolded thirds, however, allows us to make sense of Beethoven's bizarre dissonance as a displaced structural pitch, and so the middleground voice-leading analysis at level *b* of Appendix A (mm. 13–15) begins to reveal a consistent pattern of unstable pitches on downbeats.

One last comment about Beethoven's "middleground motive" of parallel thirds is that, throughout the quartet, the final note in the upper voice must often be implied in order to complete the voice-leading pattern (as in levels *b* and *c* of Example 2.4). The first time Beethoven presents the motive, however, the B♭ *does* actually resolve to A, although it is the lower-octave A played by the viola in measure 17.[78]

The second phrase of the Allegro is an example of a common theme-type in Beethoven's music that Schoenberg dubbed the "sentence": a two-bar *presentation* of a basic idea (mm. 17–18) is echoed by a sequential *repetition* of that idea (mm. 19–20), which is then followed by a four-bar *continuation* (mm. 21–24) that balances and concludes the phrase.[79] Observe also that the presentation segment here includes the

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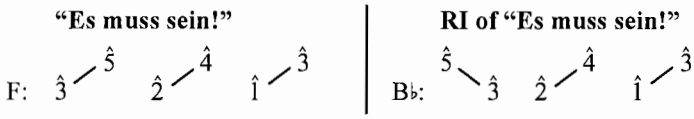
[78]Notice that at levels *b* and *c* of the voice-leading analysis, A is normalized to its more natural structural register (see Appendix A, mm. 15–17).

[79]The three parts of the sentence are typically in the proportional ratio 1:1:2. While Schoenberg did not explicitly give names to these parts, they have come to be known by the labels *presentation*, *repetition*, and *continuation*. See Arnold Schoenberg, *Fundamentals of Musical Composition* [written

motive that Schoenberg recognized as the retrograde inversion (RI) of "Es muss sein!" filled in with passing tones (see Example 1.2 above).[80] But whereas Schoenberg highlights the F, C, and E♭ of the motive, my reading of the segment emphasizes the unfolding thirds that match the original motto.[81] Figure 2.1 illustrates how the unfolding thirds of both motives compare abstractly using scale-degree numbers:[82]

Figure 2.1. Similar "Unfolded" Thirds in Beethoven's Motive Forms.



The similarities between the two motives at this middleground level are plain to see: the unfolded thirds involve the very same scale degrees within their respective keys, and the only difference has to do with the order of the scale degrees presented in the initial third. What this shows is that these "diverse mirror forms" of Beethoven's motive exhibit a high degree of middleground similarity.

1937–48] (New York: St, Martin's Press, 1967), chaps. 5 and 8. William Caplin offers a compatible yet slightly different explication of the sentence in *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven* (New York and Oxford: Oxford University Press, 1998), chaps. 1 & 3.

[80]Of course, many musicians will also recognize the likeness between this motive and Beethoven's inverted fugue subject from his Piano Sonata, op. 110 (see movement iii, mm. 136–138).

[81]See Appendix A, mm. 17–18, level *a*. Oddly enough, Schoenberg's reading of the RI motive, which connects F and C at the beginning (instead of unfolding the opening third, F–D), is more conventionally Schenkerian than mine, while my reading emphasizes the motivic sequence by graphing the presentation and repetition segments of the sentence the same way. Here, my reading would fall under Cohn's situation #2 discussed in Chapter I (pp. 11–12); see also Cohn, 157.

[82]The RI form of the motive tonicizes B♭, and therefore its scale-degree numbers are given in that key.

A Schenkerian reading of the first violin's motive beginning at measure 17 requires a similar interpretation as the one proposed for the motto statement back in measures 12–13, where $\hat{3}$ (A) is structural motivically, yet not supported by the harmony of the accompaniment. In measure 17, it is the violin's D that is not supported by the prolonged harmony (F major); while the unfolding pattern emphasizes D, the supporting harmony contradicts it. Just like before, we have here something of a "free dissonance" that gets prolonged in the middleground chord progression (see Appendix A, mm. 17–18, level *b*). The embellished RI version of "Es muss sein!" in measures 17–20 is also a double statement (i.e., the motive repeats sequentially). The second statement (mm. 19–20), which represents the repetition segment of the sentence form, suspends the same unfolded third (C–E♭) that was consonant in measure 18 as part of F7 (V^7/IV), but is now dissonant over the B♭ chord (IV). Again, the analytical sketch in Appendix A (level *b*) shows the harmonic displacement clearly, and it also ties the middleground pattern of three descending thirds (mm. 17–20) to the same pattern at the beginning of the *Allegro* (mm. 13–15).[83]

Despite the displacement of structural melodic pitches and the occasional prolonged dissonance, the underlying harmony of the *Allegro* has been, up to this point, fairly clear-cut. In measure 21, however, it becomes decidedly more ambiguous. Part of the ambiguity has to do with the eight-measure prolonged tonic pedal (F) in the cello (mm. 17–24) against which the subordinate chord changes in the upper voices sometimes

[83]Notice at level *b*, however, that the motivic thirds are shifted metrically: in measures 13–15 the middleground pattern is "***strong–weak, strong–weak***," while in mm. 17–20 it is "***weak–strong, weak–strong***."

clash. In measure 21, for instance, the viola plays a G–B♭ double stop, suggesting ii over the structural F pedal point that, for the moment, is not part of the local (i.e., subordinate) G minor harmony. At this local level, then, G is the functional bass note in the subordinate progression, even though it is not literally the lowest sounding pitch.[84] Naturally, it can be confusing when structural voices do not appear as the highest or lowest sounding part, however voice-leading context can usually help us determine an appropriate way to interpret a passage. Consider another instance, where the viola begins to double the first violin's melody a third higher on the last quarter note of measure 21. True, the viola is the highest sounding voice at the moment, however there is such continuity in the first violin's melodic line that its structural function cannot be overthrown. Furthermore, the viola can be seen as a canonic embellishment of the first violin part: in measures 21–22, the first violin plays D–C–B♭–A, and two quarter notes later the viola plays a decorated version of that stepwise line as D–C–D–C–B♭–A. The fact that the viola part is an imitation, then, gives us another reason not to consider it the structural upper voice.[85]

Further interpretive challenges arise in measure 22, where the cello's F pedal plus the downbeat A and C (played by the violin and viola) inevitably tempt us to read the local harmony as tonic (F major). But if we listen to the whole phrase carefully, a genuine return to the tonic does not seem to occur until the cadence in measure 24. So if there were a true tonic in measure 22, it would spoil the effect of the resolution and the

[84]For this reason, I have implied the local "functional" bass, G. in the bass register (notated in parentheses) in my analysis (see Appendix A, m. 21, level *a*).

[85]At level *b* of Appendix A (mm. 21–24) the viola part is given in smaller stemless note heads to indicate that it is an embellishing "covering" progression.

sense of arrival that comes at the cadence. Furthermore, to call the harmony in measure 22 a tonic would suggest the less formulaic chord progression ii—I—V, or, functionally speaking, *pre-dominant—tonic —dominant* (mm. 21–23). An alternative solution is given in Appendix A (mm. 22, levels *b* and *c*). Here, the A and C are considered accented passing tones in the subordinate progression (over the tonic pedal), which are themselves embellished by upper neighbors. This reading suggests that the local harmony in both measures 21 and 22 is G minor (ii), which prepares the cadence in a very conventional way. At the cadence, the dominant in measure 23 is embellished similarly with accented passing tones, F and A, played by the violin and viola; although, we might now label the sonority on the downbeat as a cadential six-four, the technique of embellishment is exactly the same as it was in the previous bar. If we now examine the implied functional bass line of Beethoven's sentence (m. 17–24), we can see that its structural middleground skeleton is F–B♭–G–C–F (see Appendix A, level *b*). Although this is admittedly a common bass-line pattern in tonal music, the first four notes (F–B♭–G–C) do correspond to the retrograde of "Es muss sein!" when their registers are normalized.[86] So at a deeper level, we can locate the retrograde inversion of the motto in the upper voice sounding against the retrograde of the motto. Considering the vital roles that canonic technique and motivic transformation play in this movement, perhaps such an interpretation is not altogether unfathomable.

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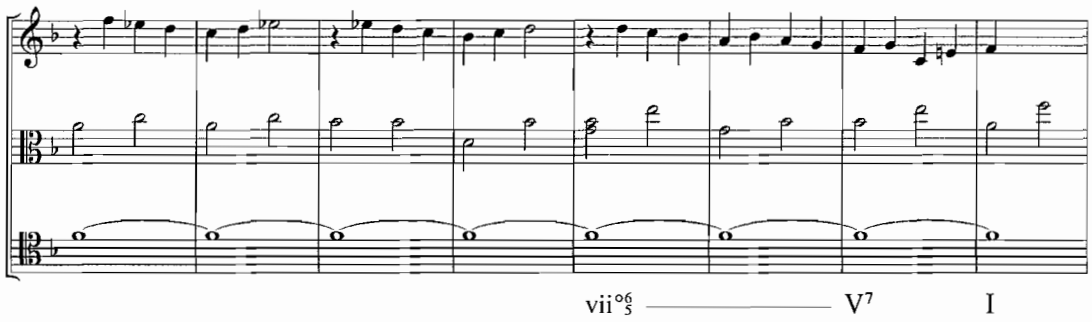
[86]The retrograde motive here is one note short of being complete, however. It is missing the final pitch A (i.e., F–B♭–G–C–**A**). Again, musicians will also likely recognize this motive as having the same shape as the famous fugue subject from Beethoven's Piano Sonata, op. 110 (see movement iii, mm. 26–28).

To be sure, a Schenkerian-style analysis goes a long way towards clarifying the harmony and voice leading of such a passage. With Beethoven, however, we can also sift through the composer's sketchbooks for clues. Example 2.5 is based on one of the sketches for the phrase we have just been considering. Notice particularly the last half of

Example 2.5. After Beethoven's Sketch for Op. 135, iv, mm. 17–24.[87]



the example. In the fifth measure, Beethoven's viola part (middle staff) includes G, B♭, and E♮. If we ignore the F pedal for the moment and include the D in the top staff, the sonority of the measure is E°7/G, or vii°6/5. And while the E♮ is not literally present in the next measure, we retain the pitch mentally so that the diminished chord continues to be prolonged. These fifth and sixth measures are where the greatest difference occurs between the sketch and the final product. Specifically, Beethoven chose not to use the E♮ in his finished quartet, so the harmony in measures 21–22 is more likely heard as G minor (ii). Based on the sketch evidence, of course, we could imply the E♮ in the quartet, but the fact that Beethoven deliberately omitted the leading tone seems significant. It

[87]This example is distilled from Kathryn Bumpass's transcription of Manuscript Artaria 216, p. 36, staves 1–9. See Bumpass, "Beethoven's Last Quartet," vol II (Transcriptions), 328. The manuscript is held at the Staatsbibliothek Preussicher Kulturbesitz in Berlin.

could be that he later changed his mind about the harmony, or that he really intended for it to be ambiguous.

In measure 25, we encounter the most overtly canonical passage in the movement: Beethoven repeats the material from his previous sentence, however the theme is now set imitatively in the two violins. As we can see, the second violin is the leader, while the first violin follows a measure later and an octave higher.[88] One result of the canonic setting is that the harmonic pacing must be adjusted to accommodate the trailing voice. Figure 2.2 compares the basic harmonies of the original phrase (mm. 17–24) and the canonic one (mm. 25–32). The first difference occurs in measure 27, where Beethoven must repeat V^7/IV (F7) in to order to support the unfolded third, C–E♭,

Figure 2.2. Comparison between Beethoven's Original Phrase and its Canonic Version.

meas.	*17*	*18*	*19*	*20*	*21*	*22*	*23*	*24*
R.N.	I	V^7/IV	IV	IV	ii	ii	$V\frac{6}{4}\text{—}\frac{5}{3}$	I
root	F	F	B♭	B♭	G	G	C	F

meas.	*25*	*26*	*27*	*28*	*29*	*30*	*31*	*32*
R.N.	I	V^7/IV	V^7/IV	IV	IV	ii	$V\frac{6}{4}\text{—}\frac{5}{3}$	I
root	F	F	F	B♭	B♭	G	C	F

played by trailing violin I. Remarkably, this adjusted harmonic progression is able to support both voices of the canon properly, however it does create an unusual effect against the "normal" pacing of the lead voice (violin II). While the second violin plays a conventional sentence consisting of a two-bar presentation (mm. 25–26), a two-bar repetition (mm. 27–28), and a four-bar continuation (mm. 29–32), the harmonic root

[88]In order to symbolize the following voice's lower structural rank, it is notated using smaller notes in Appendix A (see mm. 25–32, levels *b* and *c*).

motion projects a dissimilar grouping structure of 3+2+3 bars (i.e., three measures of F, two measures of B♭, and finally three cadential measures). And so we are faced with yet another passage in which contradictory information breeds ambiguity.

Before moving on, let us compare the analogous measures 22 and 30 to see if the latter might shed some light on the former. Recall that, upon first glance, the harmony in measure 22 appeared to be tonic (F major), yet other considerations, including Beethoven's own sketch materials, contradicted such a reading. As it turns out, the situation is somewhat clearer in measure 30. Specifically, the sustained G and B♭ whole notes in the viola no longer allow F major (I) to be a candidate, and (despite the F pedal in the bass) seem instead to suggest G minor (ii) as the local harmony. This lends further support to the interpretation that the chord in measures 21–22 is ii over a tonic pedal.[89]

In terms of formal design, the "main theme"[90] of the finale includes the *Allegro's* initial four-bar "Es muss sein!" statement plus the two sentences based on the retrograde inversion of the motto. As main themes go, this one is atypical in that it has a looser harmonic focus than one would expect. Two factors are chiefly responsible for obscuring the main theme's tonal structure: (1) the nearly ubiquitous appearance of an F pedal point, which blurs our sense of a local bass-line progression, and (2) the integration of a chromatic E♭ into the melody, which shifts the tonal emphasis momentarily to B♭

[89]Or possibly vii°§ (as in Beethoven's sketch), but certainly not tonic.

[90]In this study, I adopt the nomenclature of musical form used in Caplin's *Classical Form.*

(IV).[91] Of course, E♭'s prominence is not surprising if we accept that the pitch somehow represents the "Es" of the movement's epigraph, as Reynolds suggests.

Beethoven's transition (mm. 33–44) is notable for where it goes and how it gets there. The bulk of the transition does not "transition" at all, but instead prolongs the tonic harmony (F) as the outer voices move diatonically in contrary motion. Only at the last moment (m. 41) does Beethoven pull a maneuver that takes us to V of the new key, which happens to be a distant key at that. The subordinate key area that the transition prepares is A major, or III♯, and though it is far from being the customary dominant, the technique Beethoven uses to get there is so graceful that many listeners will never detect that the modulation is chromatic. In Schenkerian terms, Beethoven reestablishes the primary tone, C ($\hat{5}$), in measure 36 (see Appendix A). C remains conceptually active as the structural soprano (even though other notes intervene) until measure 41, at which time it ascends stepwise to D, creating a 5–6 motion above the bass, F. Through this 5–6 motion, Beethoven is able to transform the tonic triad (F) into a minor $\frac{6}{3}$ chord (Dm/F), which can then resolve to V of III♯ (E) in the manner of a Phrygian half cadence.[92]

Before the A-major subordinate theme takes shape, Beethoven gives it a short introduction (mm. 45–52) based on the same embellished RI of the "Es muss sein!" pattern that we heard in the main theme. The introduction here shares other

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[91]Recall that Beethoven emphasized the subdominant similarly at the very beginning of the *Grave* section (see mm. 3–5). The difference, however, is that tonal uncertainty is a common quality of slow introductions.

[92]In other words, I becomes vi^6, which is reinterpreted as iv^6 in A. Aldwell and Schachter discuss a similar modulation in the first movement of Beethoven's "Waldstein" Sonata (op. 53), except that there the composer transforms the original tonic into an augmented-sixth chord before leading to V of III♯. In the Waldstein, the motion above the tonic bass is 5–6–♯6. See Edward Aldwell and Carl Schachter, *Harmony & Voice Leading*, 3d ed. (Belmont, CA: Wadsworth Group/Thomson Learning, 2003), 605–606.

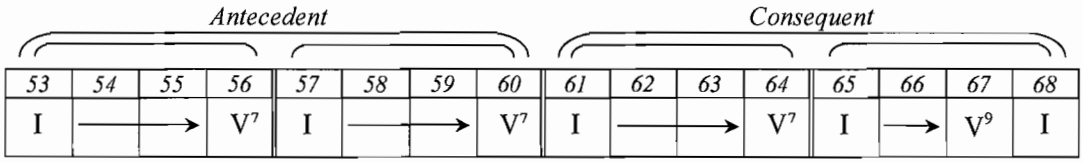
characteristics with the main theme as well: (1) it is a sentence, (2) there is a tonic pedal sustained in the cello, (3) the appearance of $\flat\hat{7}$ in the second measure creates a V^7/IV, and (4) the motive is presented in canonic imitation at the distance of one measure, although this time with the first violin leading while the second violin and viola follow together in sixths and thirds. Besides the imitation occurring at intervals other than the octave, the main difference is that the motive is sequenced upward instead of down by step.

When the subordinate theme does finally break through in the cello (m. 53), we notice at once that it could hardly be more different from its main theme counterpart. Whereas the main theme is harmonically complex and ambiguous and enriched with motivic transformations and imitative counterpoint, the subordinate theme is a simple pentatonic "folk tune" with an amusing calliope-style accompaniment on tonic and dominant. Such qualities reverse the conventional relationship between main theme and subordinate theme in a sonata-form movement, since generally it is the main theme that is the more "tightly knit" of the two.[93] Despite its simplicity, the A-major theme does exhibit some peculiar structural characteristics. For one thing, its melodic structure outlines a sequence of interruptions ($\hat{2}$ ‖) in the subordinate key (measures 56 & 64), yet the theme itself never resolves them. To put it another way, the subordinate theme never comes to rest on $\hat{1}$, which, for all the theme's harmonic stability, is a fascinating quirk. The theme does eventually receive some degree of harmonic closure with an obscured authentic cadence in measure 68 (over an E pedal); overall the theme's phrase structure,

[93]As Caplin observes, "Subordinate themes are usually constructed out of the intrathematic functions associated with tight-knit main themes, albeit in a significantly looser manner." See *Classical Form*, 97.

then, can be understood as a sixteen-measure double period (mm. 53–68), as illustrated in Figure 2.3.

Figure 2.3. Double-period Structure of Beethoven's Subordinate Theme, mm. 53–68.



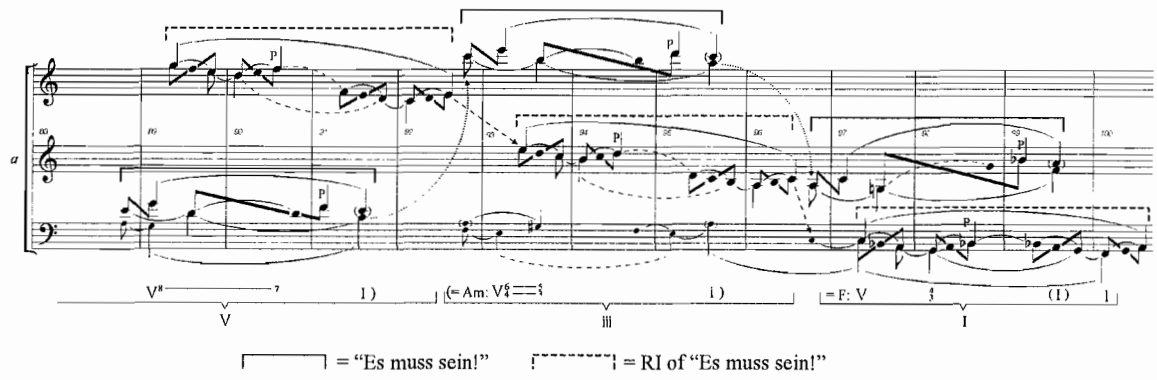
In the closing section of the exposition (mm. 69–80), Beethoven ultimately resolves the pent-up tension that has accumulated from the folk melody's non-resolution to $\hat{1}$. Here, the "Es muss sein!" motto reappears and finds itself being tossed between the inner and outer pairs of voices in imitation as the exposition comes to a fitting end. The bulk of the closing section (mm. 72–80), like the main theme, is a sentence form, and in terms of voice-leading structure, it effects closure by replicating the *Ursatz* in III♯ (A major; see Appendix A).

The Development Section (mm. 81–160)

Beethoven's fixation on the "Es muss sein!" motto intensifies in the development section. At the pick-up to measure 83 (second ending), all four instruments take hold of the theme and present it as a dramatic modulatory sequence in octaves. The underlying harmonic-contrapuntal structure of this remarkable passage is given in Appendix A (mm. 82–88). As we can see, the harmonic role of the sequence is to move away from the previous key, A major (III♯), by briefly tonicizing the dominant (C) through the progression vi—V^7—I in that key. What follows (mm. 88–100) is a contrapuntal tour de

force as Beethoven combines in double counterpoint his original "Es muss sein!" motto with the now familiar retrograde-inversion theme. The double (or "invertible") counterpoint can be seen at level *a* of the voice leading-sketch in Appendix A, however that analysis also includes other significant voices. Example 2.6 therefore offers a stripped-down version in which Beethoven's invertible counterpoint can be recognized more readily.[94] The combination of these two motives operates within the framework of a harmonic sequence that fleetingly tonicizes the following tonal areas: C major (V),

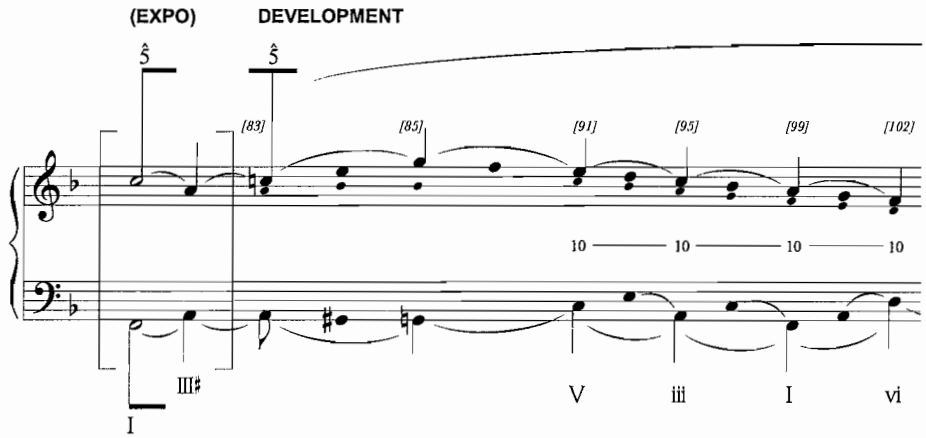
Example 2.6. "Stripped-down" Foreground Sketch of Op. 135, iv, mm. 88–100.



A minor (iii), F major (I), and D minor (vi). As we can see, this series falls into a pattern of descending thirds, which, in all likelihood, is a reflection (literally!) of the tonal relationship between the exposition's main and subordinate themes. Example 2.7 offers a high-middleground synopsis of the development up to this point (m. 102). Here, the pitch registers have been normalized to show more clearly the *linear intervallic pattern* that underlies Beethoven's sequence.

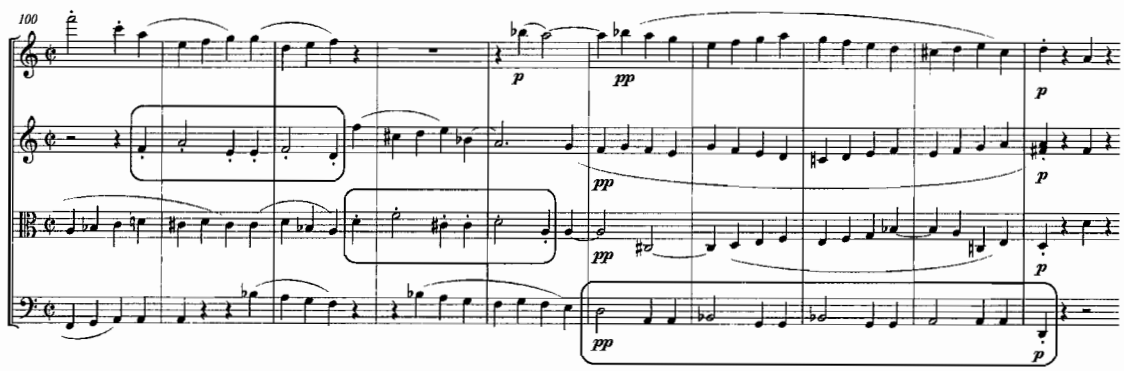
[94]Recall that "Es muss sein!" and its retrograde inversion have the same descending-third middleground skeleton (see Figure 2.1). Because of this, the RI motive plays an imitative role at the middleground level, and it is therefore symbolized with smaller notes in Appendix A (mm. 89–99).

Example 2.7. High-middleground Synopsis of Op, 135, iv, mm. 83–102.



While Beethoven's passage in double counterpoint is certainly complex, we as listeners are guided through the contrapuntal maze by an unbroken chain of "Es muss sein!" statements. Once the passage turns toward D minor (m. 101), however, the motive breaks down as its double statements become compressed and its melodic intervals begin to change. The circled segments in Example 2.8 below highlight the fragmented "Es muss sein!" motive, which is passed from the second violin to the viola and then finally to the cello, where its characteristic intervals are "liquidated" to the point of becoming a stock cadential bass line. As the voice-leading sketch in Appendix A illustrates, the

Example 2.8. Breaking Down of the "Es muss sein!" Motive in Op. 135, iv, mm. 100–109.



cadential bass line supports a descending fifth-progression in the structural soprano, which produces a replication of the *Ursatz* in D minor (vi) (see mm. 105–109).

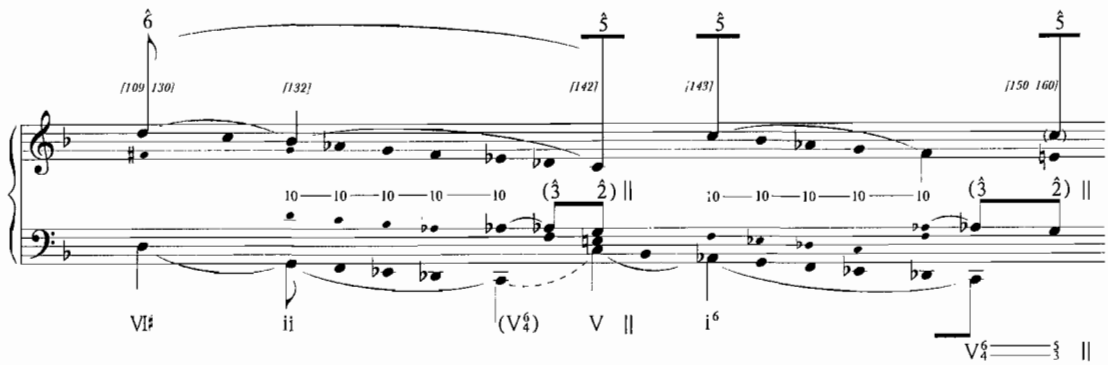
The cadential arrival in measure 109 also happens to be the starting point of a new phrase. Here, Beethoven elides the two phrases so that the D minor chord we expect at the cadence gets "covered" by the D major chord that begins a new statement of the subordinate theme.[95] As far as deep voice-leading structure goes, all of the development's music in the key of D helps support a prolonged neighbor note D ($\hat{6}$) in the upper voice (see Appendix A, mm. 109–124).

With the addition of C♮, the development's prolonged D major harmony (VI♯) transforms into V^7 of Gm (ii) in measures 124–132. Here, the RI of the "Es muss sein!" theme is stated prominently in the cello (mm. 125–128) and then is repeated in the first violin (mm. 129–132). Against the first violin's statement of the theme, the viola gets involved by playing the RI theme in contrary motion,[96] and then (beginning at the pick-up to measure 132), the second violin and cello each play the "tail" of the motive (i.e., C♮–B♭–A–G–A–B♭) in canonic imitation. The harmonic motion to G minor initiates the first of a series of passages that all lead to a half cadence on the structural dominant (C). A high-middleground synopsis of these passages is provided in Example 2.9. Here, as well as in Appendix A, we can see that the two phrases in question (mm. 132–142 and

[95]Not surprisingly, the theme is subjected to a few alterations here in the development. Most notable among them are (1) its harmonic framework is enriched with embellishing chords, (2) it is an eight-bar period (rather than a double period), but now with an eight-bar extension based on its consequent phrase, and (3) the extension features canonic imitation at the octave between the cello and first violin (one measure apart; see mm. 116–124),

[96]This, of course, is an embellished *retrograde* transformation of the original "Es muss sein!" motto.

Example 2.9. High-middleground Synopsis of Op, 135, iv, mm. 109–160 [End of Development].



mm. 143–150) are variations of each other. Consider that each of the phrases consists of three structural descending lines. When we compare them, we find that the bass voice of the first phrase (without the initial G) comes back as the middle voice of the second phrase. Similarly, the first phrase's top voice (without the initial B♭) comes back as the bass voice of the second phrase. Finally, the middle voice of the first phrase shows the same C–B♭–A♭ descent as the second phrase's top voice. Once again, we witness Beethoven demonstrating his prowess with invertible counterpoint. Another notable connection between these two phrases is that the cello's four-note motive in measures 134–138 returns in the first violin part in measures 143–146.[97] Finally, a more general characteristic of these two phrases worth paying attention to is that the presence of additional flats darkens the tonality toward F minor as the end of the development draws near. It becomes clear that Beethoven does this so that he can convincingly incorporate material from his Grave introduction into the next section, the recapitulation.

[97]The motive comes originally from the exposition's main theme (see m. 22). We can also see Beethoven experimenting with the motive in his sketches, where he tries it out contrapuntally against the "Es muss sein!" motto (see Manuscript 66, group 9, folios 2r and 2v).

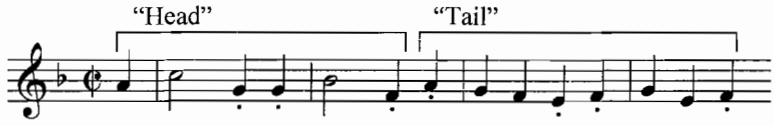
The Recapitulation (mm. 161–243)

Formal boundaries are obscured (with sustained pitches and a repetition of the dominant harmony) as Beethoven's retransition (mm. 155–160) flows seamlessly into the recapitulation of the "Muss es sein?" Grave theme. The return of the theme, with its new unrelenting tremolo accompaniment, appears less mysterious and more menacing than it did at the beginning of the movement. Other changes include the sustained V^9 resolving deceptively to VI (D♭) on the last quarter note of measure 169, which initiates another remarkable sequential passage (mm. 169–172). Here, Beethoven brings a chromaticized version of "Es muss sein!" into the world of the Grave as the violins play the motive in octaves against "Muss es sein?" (with expanded intervals) in the cello and viola. The puzzling surface-level chord progression (suggested at level *a* of Appendix A, mm. 170–172) is the result of an ascending linear intervallic pattern whose job it is to connect the initial D♭ chord with the concluding C9 (i.e., VI—V^9) (see Appendix A, levels *b* and *c*).

Perhaps the most significant revision in the recapitulated Grave lies in its deep voice-leading structure. No longer separated from the Allegro by a half cadence and melodic interruption on $\hat{2}$, the Grave's voice leading now connects to the succeeding Allegro. Again, Beethoven seems to be opting for a more seamless aesthetic between the formal sections here at the end of the finale. The fact that such an emotionally charged introduction now flows right into the bouncy Allegro seems to enhance the tongue-in-cheek quality of Beethoven's "serious" music; after all, how serious can he really be when he is willing to swap fervor for gaiety in the space of one measure?

For the return of the Allegro (m. 174), Beethoven redesigns his main theme. We can think of the new version dividing into two halves, with the first part, the "head," being a compressed double statement of the "Es muss sein!" motive, and the second part being a cadential "tail" (see Example 2.10). In terms of its voice-leading structure, the theme still consists of a series of unfolded thirds, but the upper voice of the compound melody contains a descending fifth progression (C–B♭–A–G–F) (see Appendix A, 174–177).

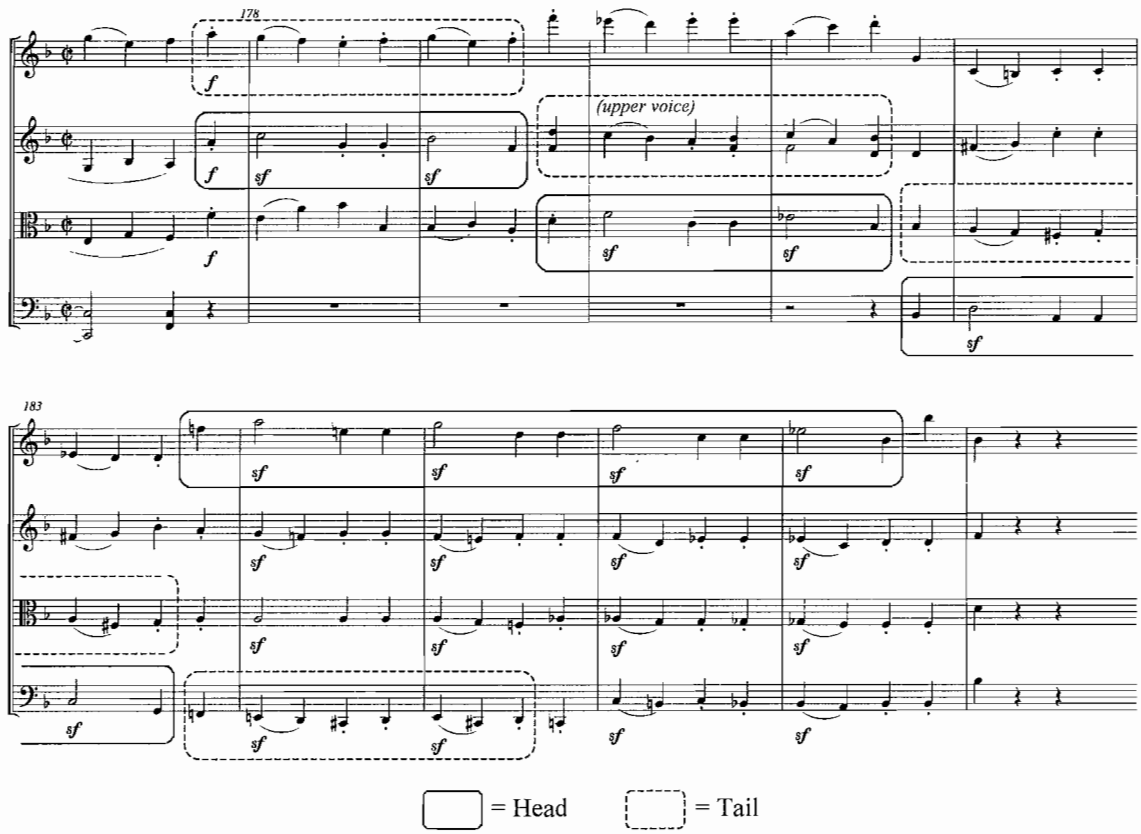
Example 2.10. Redesigned "Main Theme" of the Recapitulation.



Once the main theme has been heard in full, Beethoven splits it in half and sets the head motive against the tail contrapuntally. These vertical combinations are shown on the score in Example 2.11. Tonally speaking, the phrase in mm. 178–187 is rather unstable as the motives are transferred from key to key in a way that is more reminiscent of passages in the development section (cf. mm. 88–100 or mm. 100–109) than those in the exposition. One detail of the exposition's harmonic scheme that *is* reflected here, however, is the emphasis on IV (B♭). Given that Beethoven's transition is in that key (see mm. 188), the passage in Example 2.11 functions more like a transition *to the transition.*

Recall that the original transition was, for the most part, a progression that prolonged the tonic (F major). Only at the last moment, did Beethoven maneuver the

Example 2.11. Main Theme's "Head" and "Tail" Combined Contrapuntally in Op. 135, iv, mm. 178–187.



phrase to end with a half cadence on V of III♯. Since the transition here has essentially the same harmonic-contrapuntal structure as it did in the exposition, the B♭ beginning will naturally pave the way for *its* chromatic mediant, D major.[98] D major is indeed confirmed in measures 200–207, where Beethoven brings back the introduction to the subordinate theme in that key. And, as before, the music here contains canonic entries based on RI of "Es muss sein!" The symbolic importance of D major, which is the

[98] Beethoven once again uses the 5–6 technique to prepare the modulation. First, he changes the local tonic, B♭–D–**F**, to B♭–D–**G**. Then, he interprets that chord (Gm/B♭) as the first member of a Phrygian half cadence (i.e., iv^6) that resolves to A (V) in the key of D major.

chromatic submediant (VI♯) of the home key, is that it acts as a counterbalance against the prior motion to the chromatic mediant, A major (III♯) in the exposition.[99]

The tonal digression to D major does not last long, however, and before the subordinate theme itself has a chance to materialize, Beethoven launches into a brand new introduction to the subordinate theme, this time in the expected home key (F major) (mm. 208–216). Seeing this short introduction in the tonic major makes it easy to recognize the extensive similarities between this phrase and the exposition's main theme, particularly as it appears in measures 25–32. In both locations we find the following elements: (1) canonic imitation on the RI motive at the octave following at the distance of one measure, (2) a tonic pedal in the cello, and (3) an underlying harmonic progression that reads I—V^7/IV—IV—ii—{V^7 *or* V^{6}_{4}=$^{5}_{3}$}—I. The main difference, ignoring variations in register and scoring, has to do with each phrase's sentence structure. Although not without its peculiarities (see pp. 44–45 above), the sentence in measures 25–32 demonstrates the conventional eight-bar length. The sentence in measures 208–216, on the other hand, is extended to nine measures by an extra bar of V^7 at measure 215. Surely, the brief extension has to do with the different function that the phrase carries here. As a short introduction to the subordinate theme, the sentence must *connect* to the theme, and not be separate from it. Beethoven's way of forging this connection is to extend the penultimate harmony so the final chord of the introduction overlaps the beginning of the subordinate theme in measure 216.

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[99]Balancing the chromatic mediant in the exposition with the chromatic submediant in the recapitulation is certainly not an unprecedented practice. Beethoven does the very same thing in the first movement of the "Waldstein" Sonata (op. 53), where the exposition's modulation from C major (I) to E major (III♯) is answered in the recapitulation where the subordinate theme touches upon A major (VI♯) (see mm. 196–199).

The appearance of the subordinate theme in the home tonic, in addition to reconciling the tonal and thematic conflict generated in the exposition, also reestablishes the primary tone C ($\hat{5}$) in the structural upper voice (see m. 217). As others have commented, the music here represents the first truly stable, unhindered expression of F major in the entire movement.[100] Perhaps this might be why the consequent phrases of Beethoven's folk theme are supported only by a stationary tonic harmony (see mm. 220–223 and mm. 228–231).

Since the closing section (mm. 236–243) is more or less a straight transposition of the music that ended the exposition, it need not be discussed any further here. Instead, the voice-leading sketch in Appendix A should be sufficient to communicate how the various "Es muss sein!" iterations at the end of the movement fit within the harmonic-contrapuntal framework of the *Ursatz* to effect a structural close.

The Coda (mm. 244–277)

Given the extensive influence of the epigraph's question and answer on so many aspects of the finale, it seems only fitting that Beethoven's coda would raise one final musical question before the movement, and the work as a whole, comes to a close. In a very brief six-bar passage that Leonard Ratner calls "the most pathetic moment in the entire quartet,"[101] Beethoven dares to challenge the optimism and ambition conveyed so confidently by the preceding structural cadence. Specifically, he presents three echoed

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[100]See Bumpass, "Beethoven's Last Quartet," 276–277.

[101] Leonard G. Ratner, *The Beethoven String Quartets: Compositional Strategies and Rhetoric* (Stanford, Calif.: Stanford Bookstore, 1995), 306. And by "pathetic," Ratner means "poignant," *not* "pitiful."

"Es muss sein!" statements that are so unsure of themselves tonally and rhythmically that they begin to take on the essence of a question.

The analysis of measures 244–249 given in Appendix A helps clarify the underlying harmonies and voice leading in this passage, which is somewhat challenging due to the shifting of registers within each strand of the voice leading. Levels *b* and *c* of the voice-leading graph gradually normalize each voice's register until it becomes evident that there are three basic sonorities represented: A/C♯, D, and E♭ [*becoming* E♭m]. While the harmonic logic of the progression could be understood as, say, Gm: V^6 / V—V—VI—vi(♭), the context of Beethoven's quartet does not support such a reading. If, on the other hand, we consider the chords as representing *key areas*, then A makes sense as symbolizing the key of the subordinate theme (III♯) and D makes sense as the counterbalancing key area (VI♯) that Beethoven tonicizes in both the development and recapitulation. Finally, we are left to interpret the curious pair of E♭ chords, whose pitch name, as we are now well aware, corresponds to the German "Es" of the finale's epigraph. The fact that there are two "Es" chords (one major and one minor) in measure 248 may be intended to represent the dichotomy associated with Beethoven's question and its response.

The questioning nature of these first measures in the coda is also manifested structurally in the soprano voice, which goes "$\hat{3}$—$\hat{2}$—♭$\hat{2}$ ‖." Even though neither second scale degree is harmonized by the customary dominant, the fact that the line cuts off so abruptly certainly suggests a melodic interruption, which is often recognized as denoting a musical question (as is the case in most antecedent phrases, for example).

Ratner describes what happens next in the coda as follows: "Quickly, the poignant mood is shaken off with the most playful texture of in the movement, all voices pizzicato, as the violin carries the tune."[102] The "tune" to which Ratner is referring is the pentatonic subordinate theme, which can be heard in measures 250–265. In the final flourish of the quartet, however, Beethoven reaffirms the preeminence of his "Es muss sein!" motto, by fashioning a long motivic chain out of the theme and using it to retrace the *Urlinie* three times over at the end of the piece (mm. 266–277).

[102]Ibid.

CHAPTER III

BEGINNING "WITH A FORETASTE OF ITS CONCLUSION": OPUS 135, FIRST MOVEMENT

Now that we have experienced Beethoven's motto themes in their purest forms given in the finale (and have analyzed them within their appropriate harmonic-contrapuntal contexts in a Schenkerian sense), we can use this as a point of reference for assessing the thematic material that shapes the earlier movements. Both Réti and Reynolds have emphasized motivic associations between the quartet's first and last movements in particular. Réti, for instance, observes a long-range progression in which the "somber opening *motif*" of the first movement (mm. 1–2) is transfigured to become the "serene *theme* [i.e., "subordinate" theme] of the Finale."[103] For Reynolds, op. 135 represents a "Beethovenian *Kreis*" where "motives presented at the outset of the first movement return transformed in the last."[104] Let us consider, then, while also considering the movement's harmonic-contrapuntal background, the extent to which Beethoven's themes and motives cause the quartet to begin, as Reynolds says, "with a foretaste of its conclusion."[105]

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[103]Réti, 217. This development from embryonic *motif* to fully-fledged *theme*, however, breaks down once we consider each passage's harmonic-contrapuntal framework.

[104]Reynolds, 160. In Chapter I (pp. 13–14), I discuss how Reynolds identifies the quartet's opening gesture with the "Es muss sein!" theme of the finale.

[105]Ibid.

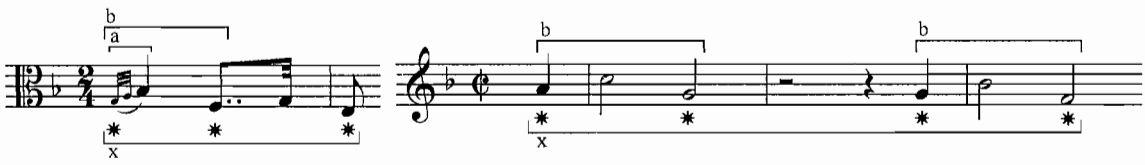
The Exposition (mm. 1–62)

Each of the theorists concerned principally with motivic transformation in op. 135—namely Réti, Cooke, and Reynolds—in one way or another to links the quartet's opening gesture to the finale's "Es muss sein!" motto. Réti and Cooke (following Réti's lead), however, operate outside the boundaries of a Schenkerian tonal framework. Consider Réti's illustration (see Example 3.1):

Example 3.1. Réti's Comparison of Op. 135's opening Gesture and the "Es muss sein!" Motto.[106]

Here, Réti takes a portion of the opening gesture (omitting the concluding G and E) and matches it to a portion of Beethoven's "Es muss sein!" motto (the second statement of the pair). The two extracts contain the same pitches (G, B♭, and F), to be sure, and there is something to be said for this, but surely we must also consider each musical idea in its entirety before we can rightfully declare a kinship between them. Fortunately, this is the approach Reynolds takes. Unlike Réti and Cooke, Reynolds compares the quartet's opening gesture and the "Es muss sein!" motto in full (see Example 3.2):

Example 3.2. Reynolds's Comparison of Op. 135's opening Gesture and the "Es muss sein!" Motto.[107]



[106]See Reti, 216 (Ex. 340).

[107]See Reynolds, 181 (Ex. 2a) and 180 (Ex. 1)

What connects the two musical ideas in this example now points to something deeper than the fact that they both have a G–B♭–F segment (which Reynolds does acknowledge and labels motive "b"). The more significant correspondence is that the opening gesture and the "Es muss sein!" double-statement each contain a stepwise descending third (labeled motive "x" and marked with asterisks) as an underlying *middleground* pattern going from beginning to end.[108]

Appendix B provides a voice-leading sketch of the first movement. In measures 1–2, at level *a*, notice the opening gesture's underlying stepwise third (G–F–E), which is marked with downward stems. Here, the middle note, F, acts as a passing tone between two members of the prolonged V^7 harmony (see level *b*). F's lower structural status gives us a reason to question Réti's analysis. As we saw in Example 3.1, Réti treats F as an endpoint, presumably because doing so will make the opening gesture resemble the second statement of "Es muss sein!" But in terms of the harmonic structure, F is a diminution that leads to the true endpoint, E, which Réti cuts. Réti's motivic connection, then, does not hold up according to the music's harmonic-contrapuntal hierarchy as defined by its voice-leading graph.

In measures 3–4, Beethoven presents a slightly fuller repetition of his opening gesture, and together the two statements (mm. 1–4) serve as a *thematic introduction* to the sonata movement's *main theme group.*[109] Though brief, the thematic introduction

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[108]The chief difference between the two segments, of course, is that the descending third in the opening gesture (i.e., $\hat{2}$–$\hat{1}$–$\hat{7}$) prolongs V, whereas the descending bass in "Es muss sein!" (i.e., $\hat{3}$–$\hat{2}$–$\hat{1}$) prolongs I.

[109]As Caplin explains, *thematic introductions* are generally short passages that prolong a single harmony (tonic or dominant) and create a sense of anticipation for the main theme's arrival. See *Classical*

establishes a very significant motive, and it also offers us a "foretaste" of things to come, namely, the expansive *Grave* introduction in the finale. Like the *Grave*, the first movement's thematic introduction presents its short motive in the same low register of the viola (supported by the cello), which is then commented upon by the upper strings. The little intro also implies that the first movement's tonality will be F *minor* on account of its D♭–C cello motive, which is the same motive that turns up so conspicuously when the *Grave* is recapitulated in the finale (see mm. 166–167).[110]

In short, the motive of the thematic introduction certainly appears to be connected to the motto themes of the finale, however, a notable difference is that it does not project a series of unfolded parallel thirds at the middleground level like its counterparts in the finale do. So, while the first movement's opening gesture does involve a descending third progression (G–F–E), it does not possess a similarly descending upper strand in its voice leading. Instead, its "upper voice" consists of the lone B♭ chordal seventh that is prolonged through the introduction and does not resolve until the main theme's tonic arrives in measures 5–6 (see the analysis in Appendix B). On a deeper middleground level, however, this resolution of the thematic introduction into the main theme's tonic does involve a pair of unfolding thirds (B♭–G resolving to F–A; see measures 1–6, levels

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Form, 15. Curiously, Jonathan Kramer and Kathryn Bumpass both refer to measures 1–4 as an "antecedent" phrase whose consequent follows in measures 5–10; see Jonathan D. Kramer, *The Time of Music: New Meanings, New Temporalities, New Listening Strategies* (New York: Schirmer, 1988), 125, and Bumpass, "Beethoven's Last Quartet," 77. These two authors clearly have a different conception of "phrase" from mine. Here, I adopt Rothstein's definition that a phrase in tonal music is "a directed motion in time from one tonal entity to another; these may be harmonies, melodic tones . . . or some combination of the two" (see Rothstein *Phrase Rhythm*, 5). By this definition, the dominant prolongation in measures 1–4 cannot be considered a phrase because there is no tonal motion.

[110]We find the D♭–C cello motive in the recapitulation of the first movement as well, where the motive is emphasized and expanded and with continuous triplets in measures 101–102.

b and *c*). Significantly, this scale-degree pattern ($\hat{4}$–$\hat{2}$ resolving to $\hat{1}$–3) anticipates the second half of the retrograde-inversion form of "Es muss sein!" that figures so prominently in the finale (see mm. 19–20 of the finale for its first appearance).

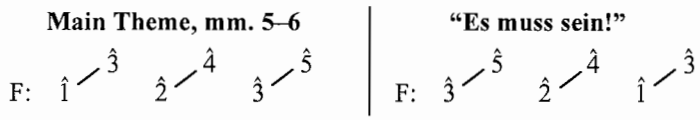
In measures 5–10, Beethoven introduces the decidedly easygoing first theme of his main theme group. As listeners will undoubtedly notice, the most immediately striking feature of the theme is the way its motivic segments are displaced among the registers of viola and the violins. Bumpass refers to this as a "mosaic technique" of presentation, which is notable because it introduces an "exaggerated discontinuity" into the "otherwise innocent" phrase; this discontinuity, she argues, is a sign of Beethoven's "preoccupation with extreme contrasts" in his late quartets.[111] If we agree with this assessment (which I do), then we can also argue that the theme's discontinuity foreshadows the extraordinary polar contrasts that characterize the finale's epigraph motives and their associated *Grave* and *Allegro* sections.

Thus far in this study, I have focused a great deal of attention on the fact that the double statement of Beethoven's "Es muss sein!" motive unfolds two voices of a compound melody in parallel thirds (which are illustrated in Example 2.4). Given the emerging pattern of motivic concordances in this quartet, it is not surprising then that Beethoven's main theme should similarly project a series of parallel thirds. If we examine the theme's beginning (mm. 5–6), we find that we do have a series of arpeggiated thirds, although here they are *ascending* rather than descending (see Appendix B, mm. 5–6, levels *a* and *b*). While the graph does not use the unfolding

[111]Bumpass, "Beethoven's Last Quartet," 77 & 91.

symbol to illustrate these ascending thirds (F–A, G–B♭, A–C), the voice-leading pattern is clear enough at level *b*. Figure 3.1 uses scale-degree numbers to symbolize this interval pattern and to show its close relation to the "Es muss sein!" model:

Figure 3.1. Relation between Op. 135, i, Main Theme (mm. 5–6) and "Es muss sein!"



Compared with "Es muss sein!" the first-movement theme preserves the order of the scale degrees within each individual third, but reverses the order among each set of thirds. So, while the scale-degree arrangement within each third prohibits the first-movement theme from corresponding to any of the standard motivic transformations at the surface level of the music, the theme is, in a more abstract sense, a "middleground retrograde" of Beethoven's motto.[112]

Besides its registral displacement, another peculiar aspect of Beethoven's main theme in measures 5–10 is that the accompanying bass line avoids sounding a downbeat tonic until the very end of the phrase (m. 10). The suppression of the supporting bass, as Jonathan Kramer explains, creates a certain degree of tension because "each time [the phrase] arrives on the tonic, some factor subverts the expected stability, so that it is only with the strong cadence in m. 10 that we feel full root-position accented tonic

[112]Incidentally, the reason I do not emphasize the upper thirds A and B♭ by stemming them in my voice-leading graph is because of their short durations and weak metrical positions (see Appendix B, m. 5, level *a* and *b*). Conversely, the theme's lower stepwise line (F–G–A) seems primary because of its durational and metrical emphasis, and also because it participates in a voice exchange with the bass in measures 5–6.

resolution."[113] Other bass notes, besides the tonic degree, appear to be missing in this passage as well. For instance, from the last eighth-note of measure 6 to the downbeat of measure 7, the viola line (F–E–D | C) is unaccompanied. We can infer, however, that the implied harmonic progression is IV—$I^{(6)}$, and when the same material repeats in measures 8–9, Beethoven confirms our intuition by supplying the "missing" B♭ bass note.[114]

In measure 8, Beethoven provides neither a bass note nor a melodic resolution to $\hat{1}$ (F) on the downbeat, but his purpose here is clear: he is evading the cadence so that he can repeat his cadential material and bring about a more decisive close (with the melody trebled in the viola and violins) in measures 8–10.[115] Kramer has made much of the fact that Beethoven's cadence in measure 10 feels too final to appear so early in the piece, and therefore it represents a conflict between "gestural time" and "absolute time."[116] In his view, the movement is concerned with unfolding a long-range developmental process of "progressively increasing regularity, continuity, and agreement between gesture and function."[117]

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[113]Kramer, *Time of Music*, 125.

[114]Never, though, does he give us the bass note that would follow B♭ (see mm. 7, 9, 106, 108, 190, and 192), but considering the rest of the surrounding bass line, it seems most appropriate to imply A as the bass (making the implied harmony I^6).

[115]Notice in Appendix B that this first phrase of the main theme group (mm. 5–10) contains within itself two nested replications of the *Ursatz*.

[116]See Jonathan D. Kramer "Multiple and Non-Linear Time in Beethoven's Opus 135," *Perspectives of New Music* 11/2 (1973): 122–145; and *The Time of Music* (New York: Schirmer, 1988), chapters 5–6; and "Postmodern Concepts of Musical Time," *Indiana Theory Review* 17/2 (1996): 21–61. See also Judy Lochhead, "The Temporal in Beethoven's Opus 135: When Are Ends Beginnings?" *In Theory Only* 4/7 (1979): 3–30.

[117]Kramer, *Time of Music*, 135.

I think most listeners would agree with Kramer that the movement is discontinuous at its beginning. The exposition, he notes, sounds rather like a succession of independent thematic blocks whose textures are remarkably diverse.[118] This is certainly the case when we hear the entrance of the new quarter-note theme in measure 10 after the (too) strong cadence. The distinctively disjunct theme is but a four-note motive played in octaves, which is then sequenced up by step (mm. 10–14). Joseph Kerman nicknames it the "*cantus-firmus* theme," but I prefer Bumpass's choice of "subject" since it gets treated fugally later on.[119] In its unaccompanied form, the subject might appear at first to be harmonically ambiguous, and its structure is certainly elusive.[120] But once we recognize its voice-leading pattern, the subject's underlying harmonies start to reveal themselves. Let us begin by taking a cue from Beethoven's preceding theme (mm. 5–10). The technique of registral displacement is, without a doubt, the special ingredient here. If we look at the quarter-note subject in this same light, it starts to make sense that its wide leaps are similarly the product of such displacement. The voice-leading sketch in Appendix B shows the subject with its register normalized (see mm. 10–14, level *b*). Level *c* of the sketch normalizes the *rhythmic* displacement of the theme, and we can now see in the upper staff a series of three descending parallel thirds (A–C; G–B♭; F–A) accompanied by a less structural covering progression (C–D–E–F) in the highest register. At this point it may be patently

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[118]Ibid., 124.

[119]Kerman, 355; Bumpass, "Beethoven's Last Quartet," 78.

[120]In Chapter I, I detail how Réti's, Cooke's, and Reynolds's analyses of the subject are each in conflict with the theme's harmonic-contrapuntal structure suggested by my Schenkerian graph (see pp. 5–9 and 16–17).

apparent that, covering progression aside, the descending thirds revealed at level *c* demonstrate the same voice-leading pattern that underlies the "Es muss sein!" double statement.[121] Figure 3.2 uses scale-degree numbers to compare the descending thirds of the quarter-note subject with those of the motto theme:

Figure 3.2. Descending Thirds of Op. 135, i, Quarter-note Subject (mm. 10–14) and "Es muss sein!"

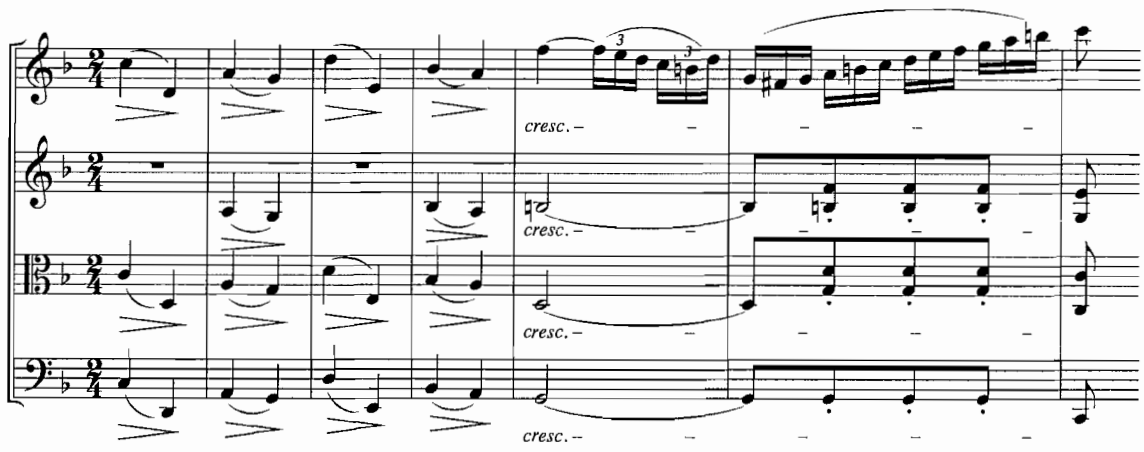
Once again, the particular ordering of the thirds within each pair does not allow us to name them with any of the standard motivic transformations of "Es muss sein!" at the surface level, however the subject is a more abstract transformation of the motto because it possesses the same middleground voice-leading structure.

Before moving on to the remainder of the exposition, there is one other aspect of the quarter-note subject worthy of our attention. As Kramer suggests, the theme's starkly contrasting texture is one of a few techniques that Beethoven uses to create discontinuity at the beginning of the movement. Just as disruptive, however, is the theme's temporal nature. Clearly the subject's unvarying rhythm is a significant change from what preceded it, but its metrical setting is also a source of interruption and confusion. Although the subject, as notated, begins on the weak beat, it has qualities that make it sound as if it begins on the downbeat. Specifically, the slurs and decrescendo markings for each quarter note pair emphasize the notated weak beats while they deemphasize the

[121]Notice too that the quarter-note subject is also built upon a sequential double statement. This detail corroborates its connection to the "Es muss sein!" motto.

notated strong beats. Moreover, the beginnings of the four-note sequential motive cause the greatest accents to fall on the notated weak beats of measures 10 and 12. Finally, any sensitive performing ensemble will surely take a little breathing space after the strong cadence in measure 10, which, combined with the aforementioned compositional elements, will undoubtedly support our experience of the new theme as starting on the downbeat. The consequence of our metrical reinterpretation is that we are likely to lose our metrical bearings when the music shifts back to the notated meter in measures 15–17. More specifically, our sense of the meter will be suspended briefly in measures 15–16 until Beethoven brings us out of the confusion with a clear downbeat arrival in measure 17. To contrast the metrical discontinuity of Beethoven's phrase, Example 3.3 offers a recomposed version of the subject with its metrical disturbances eliminated.[122]

Example 3.3. Recomposition of Op. 135, i, Quarter-note Subject.



The harmony in measure 17 is the dominant (C major), and its emphasis results from the tonicizing V^7/V (mm. 15–16) that approaches it with great momentum owing

[122]Besides shifting the subject so that it begins on the downbeat, Example 3.3 merely omits the D minor chord on beat 2 of Beethoven's measure 14.

to the repeated chords and the rising scale in the first violin. Indeed, measure 16 has the feeling of one large upbeat. At this point we might rightfully assume we have reached the subordinate key, but this proves to be false as the ensuing phrase makes its way back to the tonic (F) in measure 25.

In any event, the music in measures 17–25 is most unusual for this part of the sonata form. Although we are approaching the end of the first tonal area, the phrase has the volatile quality of a transition. It is harmonically unstable, motivically fragmented, and metrically ambiguous. The only relatively stable detail of the phrase is its imperfect authentic cadence that is elided with the beginning of the transition in measure 25. Ironically, the transition sounds like the more stable theme, and so it appears that Beethoven has reversed the aesthetic qualities of the foregoing passages. Even as the transition is destabilizing the home key, it sounds very thematic (see mm. 31–37). The most conventional way for a transition to finish is with a half-cadence in the subordinate key. The dominant at the end of Beethoven's transition, however, does not constitute an arrival because it resolves without interruption to the tonic of the first subordinate theme (see mm. 37–38). This, according to Caplin, is a rare feature.[123]

The first subordinate theme begins with a straightforward phrase composed of a pair of "rocket" motives outlining tonic and dominant (mm. 38–41). Like the main theme, however, Beethoven presents its constituent motives in different instruments. The first subordinate theme continues similarly in measure 42, with more tonic and dominant, before taking a chromatic "transition-like" turn in measures 44–45. Here, the

[123]See Caplin, 131.

phrase progresses into a sequence based on a "10—7" linear intervallic pattern (see Appendix B, mm. 44–45, especially level *b*). On the music's surface, the phrase appears to unravel before being supplanted by a second subordinate theme in measure 46. The deeper voice-leading levels, however, suggest that there is once again an elision between the phrases (see Appendix B, mm. 45–46).[124]

As Kramer observes, the movement seems to get progressively more regular and more continuous. A contributing factor to this perception is that the music associated with the subordinate key consistently falls into regular four-bar hypermeasures. Within this regular hypermetrical framework, however, there continues to be traces of irregularity due to the frequent elisions between phrases. One such moment occurs in measure 54, where the beginning of the closing section covers the cadence of the previous phrase.[125] After a four-bar hypermeasure, the newfound continuity is brought to a startling halt (at least in terms of tonality) by a deceptive cadence in measure 58 on V_3^4/ii. Immediately, the motivic idea from the exposition's main theme makes a return, presumably to bring the section to a close once and for all, but this turns out not to be the case. The final tonic (in the subordinate key) never materializes, and instead we are left suspended on the dominant in measure 62. That the exposition could be harmonically

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[124]I should point out that I use the term "elision" here in the sense that Lerdahl and Jackendoff propose. The concept differs from phrase "overlap" in that it always involves an event from one group being omitted and "covered" by an event from the adjoining group. See Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music* (Cambridge, Mass.: MIT Press, 1983), 58–59.

[125]Several prominent scholars today consider *closing sections* to be "post-cadential" material, that is, they come in *after* the structural cadence has occurred. While I generally agree with this view, this particular exposition is a special case in that it lacks a structural PAC altogether. Therefore, I feel justified in labelling this the "closing section" based on the more generic profile of the melodic "passagework" that takes place here.

open-ended is something that is practically unheard of, and it may just be the biggest surprise of all.

The Development Section (mm. 62–100)

At the beginning of the movement, Beethoven succeeded his good-natured main theme with a highly contrasting quarter-note subject. In the development, he reverses this relationship, and it is the subject that takes control first. Here, Beethoven combines his theme with the quartet's opening motive in a genuinely fugal style. Together, the contrapuntal ideas interact within a self-contained harmonic block (usually V^9—I), and thus can be easily transported to any tonal area; this attribute proves most handy at the beginning of a development section, where transient modulations are the norm.

The first set of entries (mm. 62–66) is in G major, which picks up where the exposition left off. This particular statement is slightly different from the ones yet to come because the introduction motive appears only over the end of the quarter-note subject, and not at the beginning as well. In this location, the short motive must be transposed so that it will end within the local tonic chord; in making the alteration, Beethoven causes the motive to resemble a version of "Es muss sein!" that leads into the final cadence of the quartet's last movement (see the first violin part, mm. 274–275).

In the remainder of the contrapuntal pairings, the structures of the subject and the introduction motive (or "countersubject," as it were) become thoroughly enmeshed at the beginning. To see how, examine the voice-leading sketch in Appendix B (mm. 66–70, level *a*). Here, the quarter-note subject is given in the upper staff, the countersubject is given in the middle staff, and an accompanying triplet arpeggio is shown in the bass

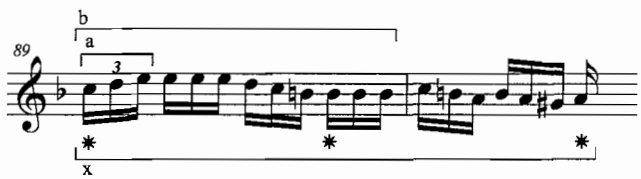
staff. Notice that the beamed structural upper voice ($\hat{5}$–$\hat{4}$–$\flat\hat{3}$) uses pitches from both the subject *and* the countersubject. The addition of the countersubject also requires the quarter-note subject to be interpreted differently than when it appeared alone. Recall that in its solo form, the subject's middleground voice-leading structure projected a series of descending parallel thirds ($\hat{5}$–$\hat{4}$–$\hat{3}$ over $\hat{3}$–$\hat{2}$–$\hat{1}$; see Figure 3.1). But since the countersubject clearly prolongs V^7, whenever the two ideas are combined, the quarter-note subject must also be interpreted as beginning on the dominant (and not the tonic). The harmonic reinterpretation of the subject can be accomplished simply by reading its third note as a passing tone (see Appendix B, m. 67, levels *a* and *b*). While reinterpreting the theme's harmonic structure might, at first, seem questionable to some, in this case, the arpeggiated triplets support the reinterpretation by spelling out the underlying harmonies. As the development moves forth, the various motives begin to swap registers so that we end up with the kind of invertible counterpoint that Beethoven also uses in the development section of the finale. And so we have yet another way in which the quartet begins with a "foretaste of its conclusion."

As the development passes through its various tonal regions, it is fascinating to see what happens with the structural upper voice. The fugal passage's arrival on A♭ (♭III) in measure 74 reestablishes the primary tone, C ($\hat{5}$), albeit with an alternative harmonization, and initiates the broad structural descent of the *Urlinie* down to $\hat{2}$, which is the typical maneuver of development sections. From this point forward, we can witness the composer selecting only those tonal areas that will be conducive to this structural descent. So when the fugue breaks off suddenly with a jolting chromatic

mediant motion from A♭ to F7 in measures 78–80, this prepares the way for a false recapitulation in B♭ major (IV), a tonal area that supports the descent in the *Urlinie* to B♭ ($\hat{4}$) (see Appendix B). After less than four measures, Beethoven aborts his false recapitulation in the subdominant only to launch another one, this time in the tonic (m. 84–86). In Kramer's view, this places "undue emphasis on the tonic in the 'wrong' place,"[126] but from a Schenkerian standpoint, the tonic does enable the *Urlinie* to descend another step to A ($\hat{3}$) (see Appendix B, m. 86). The remaining sequence of keys, A minor (89–90), D minor (91–92), G major (93–96), and C major (97–100) involves root motion by fifth and imitates the tonal progression "iii—vi—V/V—V." As far as their effect on the fundamental line is concerned, A minor and D minor continue to support $\hat{3}$ (A), while G major and C major permit the *Urlinie* to reach its temporary goal, $\hat{2}$ (G).

Reynolds cites the A minor section's upper voice (mm. 89–90) to show that it contains his trio of motives, a, b, and x (see Example 3.4). While the pitches that his

Example 3.4. Reynolds's Motives a, b, and x in Op, 135, i, mm. 89–90.[127]



motives highlight do fit within the harmonic-contrapuntal structure, other equally structural pitches are not accounted for. Consider the voice-leading graph of this passage

[126]Kramer, *Time of Music*, 133.

[127]See Reynolds, 181 (Ex. 2d). Here, Reynolds's motive "b" is C–E–B♮. Refer back to Examples 1.9 and 1.10 to see Reynolds's analyses of these motives in the "Es muss sein!" motto and in the first movement's opening gesture.

in Appendix B. Here, we can see that this melodic voice traces a descending fifth-progression in A minor (E–D–C–B–A) supported by a compound melodic voice a third lower. I propose that this sequence of unfolded parallel thirds also connects the theme with Beethoven's "Es muss sein!" motto. Even if Reynolds were to label the C, B, and A in measure 90 (i.e., the first, fourth, and seventh pitches) as a nested version of his motive x[128], he would still not account for the structural D in the middle of measure 89.

From the middle of the G major portion of the development (m. 95) through the end of the C major retransition (m. 101), we find a repeated motive whose unfolded thirds, as illustrated in Appendix B, clearly resemble the retrograde-inversion theme that, as we already know, will permeate the fourth movement (see m. 17 ff.). And thus Beethoven's development ends as it began, with an idea that predicts an essential ingredient of the finale.

The Recapitulation (mm. 101–163)

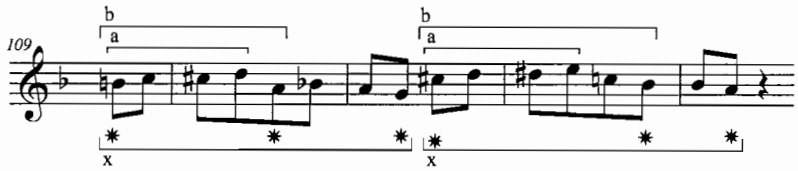
As Bumpass points out, Beethoven's recapitulation exhibits a formal regularity that exceeds what we might expect from one of his late sonata-form movements: "All the motivic cells are recapitulated, and in the order of their original appearances."[129] The first noticeable variation is that the fugal subject comes back embellished with chromatic neighbors (or *incomplete* neighbors in the Schenkerian sense; see Appendix B, mm.

[128]Reynolds could additionally label the first three pitches in measure 90 as his motive x. In Schenkerian terms, the first violin line exhibits *motivic nesting* (or "hidden repetition") at three different levels.

[129]Bumpass, "Beethoven's Last Quartet," 81.

109–113, level *a*). Let us return to Reynolds's analysis of this version of the subject.[130] Example 3.5 shows how Reynolds locates his primary motives by revoicing the registers of the subject. This is Reynolds's most non-Schenkerian reading. As I argued in

Example 3.5. Reynolds's Analysis after Revoicing Op. 135, i, mm. 109–113.[131]



Chapter I, the B♮ and C♯ that begin each motivic statement are merely surface diminutions (i.e., chromatic incomplete neighbors) that embellish the notes they precede. Each of Reynolds's motives (a, b, and x), however, relies on these "diminutions," and so his motivic reading is necessarily incongruous with a Schenkerian view of the tonal structure. A debatable point is when Reynolds insists the eighth-note version of the subject is the more basic form, and that the quarter-note version is "actually a simplification . . .made by eliminating every other note."[132] The proposition certainly seems unintuitive, however it appears Reynolds has no choice since he cannot get his motives directly from the quarter-note subject, and must therefore leave it unanalyzed. A Schenkerian approach, on the other hand, allows us to analyze both the initial quarter-

[130]I discussed it briefly in Chapter I, pp. 16–17.

[131]See Reynolds, 181 (Ex. 2f).

[132]Reynolds, 181.

note subject and its eighth-note variation in the very same way because the two themes share the same harmonic-contrapuntal skeleton.[133]

Another change in the recapitulation is that the eighth-note fugue subject in the tonic (mm. 109–113) is followed immediately by a new subdominant version of the theme (mm. 113–117); later, Beethoven employs the same tactic when the subordinate group is recapitulated in the tonic (see mm. 136–143). As we have seen, Beethoven also exercises this *tonic statement—subdominant repetition* scheme in a number of places in the finale. Most notably, he does it the two *Grave* sections (mm. 1–4 and mm. 161–164), but he also does it using a fragment of the main theme in measures 178–181. So, once again we witness just how closely the first and last movements of op. 135 are aligned.

The Coda (mm. 163–193)

As with the exposition, Beethoven decides to end his recapitulation without [!] an authentic cadence. It is left up to the coda, then, to close the movement's tonal structure. Because of this unorthodox design, the coda gets promoted from its usual post-cadential standing to highest structural status. The section begins fugally just like the development, but its contrapuntal texture soon dissolves into a prolonged "standing on the dominant" (mm. 172–177). The prolonged V^7 resolves in measure 178 into a repeat of the movement's closing material, and as the drive toward the final cadence intensifies, Beethoven is compelled once again to pull back on the reins. He effectively neutralizes the forward momentum of the phrase with a jolt of E♭ at the end of measure 181 (where the first violin's high C is supported by three E♭s played *forte* in the lower strings).

[133]Compare mm. 10–14 & 109–113 of Appendix B.

Given what we now know about the finale and its epigraph and the apparent attachment between the German "Es" and the pitch E♭, we can hardly dispute that the disruptive E♭s in measures 181–183 are directly linked to the finale's question "Muss es (E♭) sein?"

It should also be noted that the way Beethoven triples the E♭ in measure 181 is perhaps as mysterious as the appearance of the pitch itself. The basic harmony is eventually unfolded via a return of the quartet's opening gesture, and the appearance of F♯ and A in measure 182–183 make it clear that the initial sonority is F♯°7/E♭ (vii°$^{4}_{2}$/ii). A sequential repetition of the opening gesture (mm. 184–185), however, transforms it into F7/E♭ (V$^{4}_{2}$/IV), which prompts another false attempt at the main theme in the subdominant key, B♭ (mm. 186–187). At the pickup to measure 188, Beethoven corrects the false key and completes the movement (and the *Ursatz*) fittingly with the same "final" cadence associated with the main theme at measure 10.

CHAPTER IV

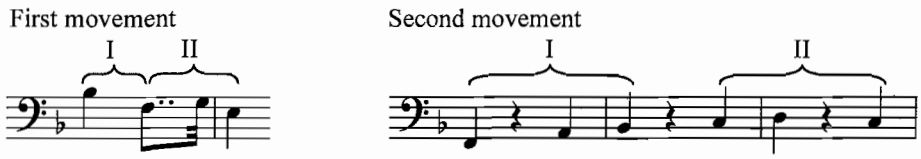
EXTRAMOTIVIC ASSOCIATIONS, INCLUDING A "FOREBODING INSTRUSION" OF E♭: OPUS 135, SECOND MOVEMENT

Structurally sustained motivic connections, like those between the outer movements of the F major quartet, are much harder to establish between the finale and the second movement, the scherzo and trio. Réti and Cooke, who are the most intent on discovering motivic associations throughout the quartet, have little to say when it comes to the second movement. Réti, for example, sums up the quartet's middle two movements in a single sentence accompanied by a musical example. He writes: "As for the next two movements, the Vivace and the Adagio, we need only point briefly to the way in which their opening shapes vary the original motif."[134] As we shall see, the motives in Réti's example (see Example 4.1), like before, disagree with a Schenkerian view of the music's harmonic-contrapuntal structure, and it also does not help that he spontaneously redefines his original motives "I" and "II" here.[135] The first things to notice is that the two illustrations of Motive II in Example 4.1 are incompatible; in the opening movement, the motive has the profile of an escape-tone figure (F–G–E), while in

[134]Réti, 214–215.

[135]Compare the "first movement" motives I and II in Example 4.1 with Réti's original motives I and II given in Example 1.3.

Example 4.1. Réti's Comparison between the Quartet's Opening Gesture and the Scherzo (bass).[136]



the second movement it is an upper neighbor (C–D–C). It is difficult to say what Réti views as the commonality here (except that the two have the same contour with one being an *incomplete* neighbor and the other being a *complete* neighbor); it is unfortunate that he does not offer an explanation. Frequently, Réti's rationale is to make motivic associations that are pitch-class specific, however that is not the case here.

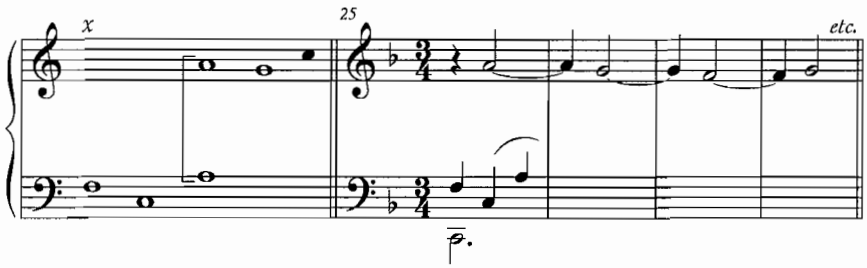
Pitch-class specificity does come into play when Réti labels his Motive I. Here, the motive in the first movement is a leap from B♭ down to F, and in the second movement, it is reversed and transformed into the ascending F–A–B♭. As the voice-leading analysis of the first-movement motive given in Appendix B (mm. 1–2) suggests, the F functions as a passing tone between a grace note G (which Réti no longer shows) and the E on the downbeat of measure 2. If we wish to consider the tonal hierarchy, we must ask ourselves how such an embellishing note could be considered so motivically vital. Is it not a contradiction of the voice leading to regard a passing tone as an endpoint? Réti's Motive I in the second excerpt of his example similarly conflicts with a Schenkerian reading of the passage. In the scherzo, the bass arpeggiates the lower third (F–A) of the tonic chord, and then continues up to the fifth (C) by *passing through* B♭ (see Appendix C, mm. 1–2, level *a*). By indicating the B♭ passing tone as another

[136]See Réti, 215 (Ex. 338).

motivic endpoint, Réti proposes the same kind of structurally conflicting interpretation he did for the F in the first movement. To summarize, then, Réti's B♭–F motive conflicts with the tonal structure in both movements since in the first case the F is passing, and in the second case the B♭ is passing.

Deryck Cooke claims that the scherzo is based on his "bright" major motto-theme, due in large part to the accompaniment figure in measure 25 (see Example 4.2).

Example 4.2. Cooke's Source for the Scherzo Theme of Op. 135, ii.[137]



While there are indeed pitch similarities between Cooke's motto and this particular pairing of theme and accompaniment, the resemblance comes across more as happenstance than by design. What about all the other statements of the scherzo "theme," where it does not appear with this particular arpeggiated accompaniment (F–C–A)? In these instances, a connection to the "bright" major-motto theme is nonexistent. I also question Cooke's analysis here because he extracts segments of different voice-leading strands (melody and accompaniment) and joins them together to

[137]See Cooke, 44 (Ex. 55).

construct something that will resemble his motto-theme.[138] As I have argued earlier, motivic associations that operate within the parameters of complete, meaningful musical units (viewed most intelligibly from the Schenkerian perspective) tend to be the most compelling.

Compared to Réti and Cooke, Christopher Reynolds gives far more consideration to the inner movements of op. 135, even though his primary concern is the connection between the quartet's first and last movements. In his view, the scherzo and the set of slow variations that come after it complement each other as "opposing sides of a single personality."[139] Considering the middle movements as a pair, Reynolds goes on to assert that "beneath the differences in temperament there is a tangible motivic bond between their opening phrases to match that between the outer movements."[140]

The "tangible motivic bond" of which Reynolds speaks, however, turns out to be quite abstract in nature. Specifically, Reynolds argues that the beginnings of the two inner movements exhibit a correspondence between their four instrumental parts—but with the outer voices (violin I and cello) switched. So, for instance, the bass line of the scherzo's first phrase (mm. 1–8) traces a path that goes up a major sixth (F↗D), down a major sixth (D↘F), and back up a major sixth (F↗D) just prior to the cadence. Reynolds believes that the theme of the Lento assai (third movement), played by the first violin, outlines a similar contour: after an initial descending motion, the melody ascends a major

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[138]While it is common in Schenkerian analyses for the voice leading to connect different registers (see, for example, my interpretation of the "Es muss sein!" motto in Appendix A, mm. 15–17, level *a*), this is different from Cooke's example, because he selects notes from two discrete voice-leading strands.

[139]Reynolds, 187.

[140]Ibid.

sixth (A♭↗F), descends a major sixth (F↘A♭), and finally ascends the same sixth (A♭↗F). But considering the phrase structure, does the Lento assai melody really descend a major sixth in measures 4–5? One could make a case that the F never gets down to A♭ since there is a melodic interruption on $\hat{2}$ (E♭) accompanied by a half cadence on the second beat of measure 4 (see Appendix C, mm. 4–5). From a Schenkerian standpoint, it appears there is no melodic motion from F down to A♭ in measures 4–5; instead, the melody of the theme starts anew in measure 5 (on D♭) and thus the melodic motion to A♭ is initiated not from a sixth above, but from a fourth.

Conversely, Reynolds believes that the scherzo's melody and the bass line at the beginning of the Lento assai are linked because they both move stepwise within the boundary of a third. But this connection seems loose at best, given that the scherzo melody (A–G–F–G–A, etc.) prolongs its third, F–A, with the aid of a passing tone G, while the Lento assai bass prolongs a single tonic pitch, D♭, through upper and lower neighboring motions (D♭–E♭–D♭–C–D♭). In other words, the third (C–E♭) in the Lento bass involves a pair of diminutions, whereas the scherzo's third is a structural representation of the tonic harmony. It appears, then, that the structural skeletons of the two musical segments are not the same thing at all, since each features a different voice-leading maneuver. Furthermore, if we consider the phrase structure at the beginning of the Lento assai, is it really appropriate to say the bass line goes "D♭–E♭–D♭–C–D♭"? Taking into account the melodic and harmonic interruption in measure 4 (as discussed

above), the bass line becomes "D♭–E♭–D♭–C‖ D♭–E♭–D♭–A♭‖," which also resists Reynolds's motivic reading.[141]

As far as the inner voices of each movement's first themes are concerned, the "tangible motivic bond" Reynolds proposes, amounts to a pedal tone in each of the violin II parts accompanied by a repeating neighbor-note figure in the viola (compare mvt. II: mm. 1–6 and mvt. III: mm. 3–6). If the outer voices are not related motivically, as my voice-leading analyses suggest, then the Reynolds's thematic connection between the second and third movements rests entirely upon their rather nondescript inner-voice parts, which is an argument I doubt many would support. From a Schenkerian view, Reynolds's thesis is hindered by motivic connections that run contrary to the music's harmonic-contrapuntal structure.

So the question remains: are there any motivic ties between the second movement of op. 135 and the other parts of the quartet—especially the motto themes of the finale—that are supported by the Schenkerian tonal hierarchy? I have to admit that I have not been able to locate any such motivic connections between Beethoven's scherzo and the other movements, but there are other types of connections that make the movement cohere with the rest of the quartet. Let us now consider those other connections in detail.

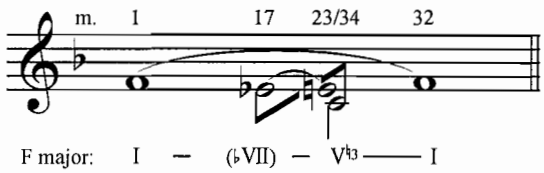
The Scherzo (mm. 1–66)

The most conspicuous association between the scherzo proper and the quartet's outer movements is the "foreboding intrusion" of E♭ (as Reynolds puts it) that is sounded

[141]See the voice-leading analysis in Appendix D, mm. 2–6, levels *a* and *b*.

for more than six measures in unisons and octaves by all four instruments (see mm. 16–22).[142] Oddly, Beethoven uses this repeated note to compose the bulk of the scherzo's B section. Schenker offers an interpretation of the peculiar passage in *Free Composition*, where he provides a remote background sketch of the first 32 measures of the movement showing how ♭VII (E♭) can function as the beginning of a chromaticized dominant prolongational span; Schenker's sketch is quoted in Example 4.3, below. In Appendix C, I offer a slight alternative to Schenker's reading by suggesting that E♭

Example 4.3. Schenker's Voice-leading Sketch of Op. 135, ii, mm. 1–32.[143]



starts off as a passing ♭7 in the bass, but eventually "resolves" as a chromatic lower neighbor to E♮, the inner-voice third of the approaching dominant harmony (see Appendix C, mm. 17–25, levels *a* and *b*). In a dramatic sense, the "intruding" note is yet another sensational E♭ moment in the quartet. It recalls the startling deceptive cadence that just occurred at the end of the previous movement (see mvt. I, mm. 181–183), and, of course, it is also provides another musical foreshadowing of the "Es" that is contemplated in the epigraph of the quartet's final movement.

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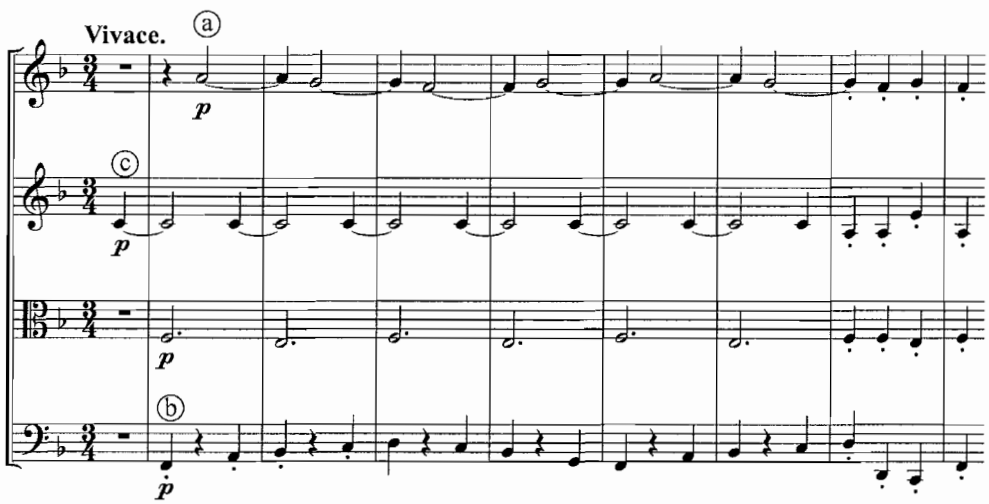
[142]Harald Krebs elucidates the "grouping dissonance" that arises from the rhythms in this passage. Here, Beethoven projects a pattern of two-beat metrical groups (defined by each articulation of E♭) that is superimposed over the notated triple meter. Krebs also astutely observes that the grouping dissonance "enhances the strangeness" of the foreign E♭. See Harald Krebs, "Metrical Dissonance and Metrical Revision in Beethoven's String Quartets," in *The String Quartets of Beethoven*, ed. William Kinderman (Urbana and Chicago: University of Illinois Press, 2006), 34–35.

[143]See Schenker, *Free Composition*, Fig, 111, a1.

Looking back to the A section of the scherzo, we see that it demonstrates a correlation to the first and last movements of the quartet as well. Each time A returns over the course of the scherzo proper, its principal voices appear in a new instrument and/or register. This once again confirms Beethoven's preoccupation with invertible counterpoint, which we have already observed as a characteristic feature of the quartet's outer movements.[144] The A section of the scherzo is an eight-bar phrase in F major. In its initial statement (mm. 1–8), the first violin and the cello present the two most distinctive contrapuntal voices. We might also, as Kerman suggests, include the second violin's pedal tone (C) in the network of invertible parts, making the counterpoint triple.[145] Example 4.4, below, presents the scherzo's A section with the invertible voices labeled "a," "b," and "c":

Example 4.4. Op. 135, ii, mm. 1–8.



[144]See movement I (mm. 66–78 and mm. 163–171) and movement IV (mm. 88–100 and mm. 132–150).

[145] Kerman, 359. I have no objection to including the pedal voice in the invertible counterpoint, since it does usually appear when A returns, however we must qualify this as a more trivial case of triple counterpoint.

In measures 9–16, we encounter a written-out repeat of the A section, but with the C pedal now appearing as the highest voice, while the second violin and cello play the other contrapuntal voices ("a" and "b") an octave higher than they did in the previous eight measures. The A section appears a total of four times in the scherzo proper, and the invertible arrangement of its contrapuntal voices for each appearance (using the voice-labels given in Example 4.4) is summarized below in Figure 4.1:

Figure 4.1. Invertible Counterpoint in Op. 135, ii, A sections of the Scherzo.

	A_1 *(mm. 1–8)*	**A_2** *(mm. 9–16)*	**A_3** *(mm. 25–32)*	**A_4** *(mm. 33–40)*
violin I	a	c	a	b
violin II	c	a		b
viola			b'	a
cello	b	b	c	a

The form of the scherzo is slightly irregular due to the addition of the A_4 repeat with its long extension (mm. 41–66) that carries the structural descent of the *Urlinie* from C ($\hat{5}$) down to F ($\hat{1}$) (see Appendix C). In spite of this unexpected expansion of the form, it still resembles a conventional sectional rounded binary, and can be diagrammed as follows: $\|: A_1 \; A_2$ *(written repeat)* $:\| : B \; A_3 \; A_4 +$ *extension* $:\|$.

No discussion of the scherzo theme would be complete without addressing its most potent feature, which, of course, is its rhythm. Harald Krebs categorizes the overlapping layers of syncopation at the beginning of the movement as "displacement dissonances." In measures 1–8, for example, the cello and viola have rhythmic patterns that correspond to the notated triple meter, while the two violins play triple-meter rhythms that are out of phase with the notated meter. Referring back to Example 4.4, we

can see that the first violin's three-beat note values are displaced so that each note's attack falls on beat two of the notated measure. Similarly, the second violin's three-beat note values are offset so that each attack falls on beat three of the notated measure. In a case such as this, where we have more than one distinct "antimetrical" layer sounding out of phase with the notated meter, Krebs calls it a "compound displacement dissonance," which is a type he identifies as being rather popular in Beethoven's string quartets.[146]

The Trio (mm. 67–200)

The large-scale tonal structure of Beethoven's inflated trio section of the movement is much less conventional than the framing statements of the scherzo. Here in the trio, Beethoven scraps the traditional two-reprise blueprint in favor of an unbroken dramatic profile that rises tonally from F major through G major, on the way to its harmonic goal, A major.[147] The trio, in itself, then, is not a closed harmonic structure, and therefore makes the return of the scherzo *da capo* a structural necessity. While other authors have noted that these three keys recall and expand the main pitches of Beethoven's scherzo theme (see violin I, mm. 1–8),[148] none (as far as I know) have viewed the trio's tonal progression from F (I) to A major (III♯) as a foreshadowing of the relationship between the main and subordinate keys in the finale's sonata form exposition. Of course, in the trio, Beethoven takes a much longer route to get from I to

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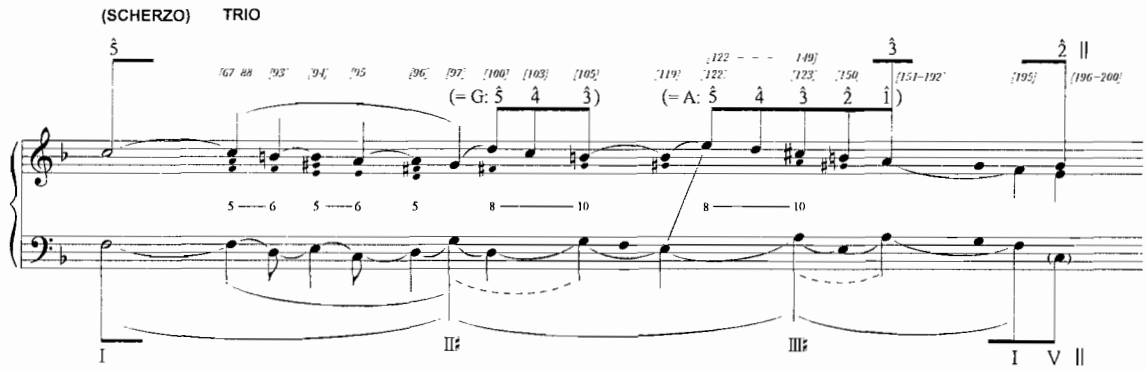
[146]Krebs, 34–35.

[147]Beethoven reinforces the continuous nature of the Trio by eliminating the repeat signs that would normally appear in the form.

[148]See Kerman, 361 and Ratner, 299. Kerman informally credits Roger Sessions with this discovery.

III♯, however his technique is no less elegant than the more direct approach he employs in the finale.[149] Example 4.5 provides a high-middleground synopsis of the trio, illustrating its tonal motion from F major to A major. As the example shows, the motion

Example 4.5. High-middleground Synopsis of Op. 135, ii, Trio, mm. 67–200.



to A major involves a two-step process. Beethoven's first step is to reach the key of G major (II♯), which he accomplishes by way of a modified "falling fifths" sequence (F–B°/D–E–Am/C– D–G) that features a 5–6 linear intervallic pattern in the outer voices at the beginning (see Example 4.5, mm. 67–97). Beethoven executes the second stage of the modulation—getting from the key of G to A—through a harmonic sequence as well (an 8–10 linear intervallic pattern), although here it operates on a more remote structural level since the harmonies involved in the sequence are separated by the prolongation of G in measures 105–118. Example 4.5 reduces this prolongation of G to a single "chord," and thereby reveals the harmonic sequence, which moves down by step: D(7)–G, E(7)–A (see mm. 100–105 and mm. 119–123).

[149]For my discussion of Beethoven's remarkably efficient transition from I to III♯ in the finale, see chapter II, pp. 46.

Another remarkable foreground event not shown in the voice-leading sketch of Example 4.5, is the obsessively reiterated five-note figure (F♯–E–F♯–G♯–A) that Beethoven repeats in the lower three strings a total of 48 consecutive times (m. 142 ff.). This peculiar feature was a source of great bewilderment for Beethoven's critics, and it led at least two, namely A. B. Marx and Alexander Oulibicheff, to invoke Beethoven's deafness to explain the quirky repetitious passage.[150] As the motive pedals on and on, the first violin cuts loose with a spirited "musette," as Ratner calls it, which highlights an occasional hemiola rhythm (mm. 143–144 &161–162) and dissonances caused by rhythmic displacement (see Appendix C, mm. 160 & 163–164, for example). Displacement dissonances such as the melodic D ($\hat{4}$) occurring over I, followed by C♯ ($\hat{3}$) occurring over V (mm. 163–164) are comparable to the intriguing dissonance Beethoven demonstrates in measure 15 of the finale, where the B♭ ($\hat{4}$) of the "Es muss sein!" motive is supported by the F major tonic harmony. In the end, however, I must agree with Knittel that the passage in the trio does not sound nearly as unsettling to our modern ears as it apparently did in Beethoven's day, but it is definitely unusual, all the same.

The voice-leading graphs in Example 4.5 and in Appendix C both show, on different levels, how Beethoven cleverly escapes A major to set up for the return of the F major scherzo. Kerman's description of the action at the foreground is the best:

> Beethoven whittles away at the turn-motif, accidental by accidental, until it no longer lives in A major but in F, and is shown to spell out the numb configuration A–G–F with which the *Scherzo* will begin its *da capo.*[151]

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[150]For translations of Marx's and Oulibicheff's reviews, see K. M. Knittel, "'Late', Last, and Least: On Being Beethoven's Quartet in F Major, Op. 135," *Music & Letters* 87/1 (2006): 17–18.

[151]Kerman, 361.

By gradually morphing the motive so that it uses G♮ (instead of G♯) and F♮ (instead of F♯) in measures 190–191, Beethoven is able to mitigate the sharpness of the common-tone modulation from A major to F major considerably. The common tone, A ($\hat{3}$), then descends to G ($\hat{2}$), ending the trio with melodic interruption supported by a half cadence (see mm. 192–200). The ensuing scherzo *da capo*, though it is renotated, appears exactly as it did at the beginning of the movement, with the exception that there is now a 7-bar tonic-chord coda based on the duple rhythm of the scherzo's B section added to the end (mm. 266–272).

In conclusion, while there may be no motivic relations between the second movement of op. 135 and the other movements in the quartet that are supported by the Schenkerian tonal hierarchy, there are a number of other kinds of associations that connect the scherzo movement to the rest of the quartet. The similarities range from pitch-specific correlations, like the modulation from F major to A major in the trio and the intrusion of E♭ ("Es") in the scherzo proper, to more general compositional techniques, such as the composer's emphasis on invertible counterpoint. All of these elements work to contribute both overt and subtle layers of coherence to Beethoven's last quartet.

CHAPTER V

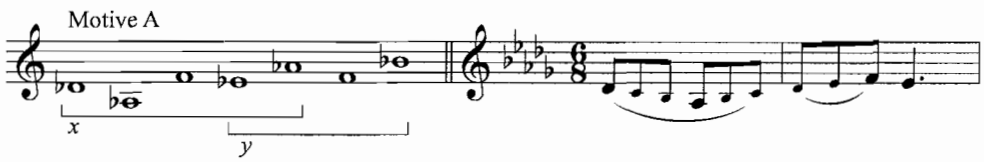
A MICROCOSM OF THE WHOLE:

OPUS 135, THIRD MOVEMENT

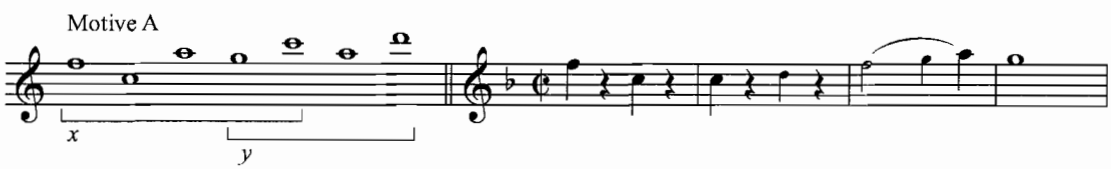
The third movement of Beethoven's F major quartet, marked "*Lento assai, cantante e tranquillo*," is an ultra-compact set of slow variations in D♭ major. Since the movement concentrates on developing a single theme, there will naturally be less material to consider when seeking motivic parallels with the quartet's other movements. As it turns out, the opening segment of the theme bears a striking resemblance to the first half of the finale's subordinate theme. It appears Cooke was the first to relate the two themes to each other motivically, although he did so indirectly by showing that each was based on the first four pitches of his "bright" major motto-theme (see Example 5.1).

Example 5.1. Cooke's Motivic Source for Two Thematic Segments in Op. 135.[152]

a. Lento assai Theme, Op. 135, iii



b. Subordinate Theme, Op. 135, iv



[152]See Cooke, 44–45.

Despite being in different keys, the two thematic segments clearly have matching structural skeletons. Specifically, each begins with a descent from $\hat{1}$ to $\hat{5}$, then ascends back up through $\hat{1}$ to the highpoint, $\hat{3}$, and finally ends with a melodic interruption on $\hat{2}$.[153] In addition, the two segments emphasize their corresponding structural scale degrees analogously within their respective meters. In light of these deeper structural similarities, Cooke's assertion that the thematic segments are related motivically is quite convincing. I should note that I use the term "thematic segment" here since each of the phrases Cooke cites is only the first part of a larger conventional theme type. In the finale, the full theme usually appears as a parallel period, while in the Lento assai it is a sentence (an important characteristic that I shall address shortly).

As I discussed in Chapter IV, Christopher Reynolds considers the second and third movements of op. 135 as a pair linked by a "tangible motivic bond" between the corresponding voices of their opening measures.[154] Upon probing the music's deeper tonal structure, however, we find that these proposed "motivic bonds" are either incompatible with the harmony, voice leading, and phrase design, or else they have such indistinct melodic and rhythmic profiles (as with a pedal tone, for example) that the connections seem incidental at best. The middle movements of the quartet, then, do not appear to have the same type of motivic cohesion that unifies the outer movements. That being said, the Lento assai does demonstrate a significant motivic association with the

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[153]Compare Cooke's examples with my voice-leading graphs of the Lento assai theme (see Appendix D, mm. 3–4) and the finale's subordinate theme recapitulated in the tonic (see Appendix A, mm. 216–219).

[154]See Chapter IV, pp. 82–84.

finale, although it is aligned with the finale's subordinate theme, rather than the motto themes that appear in the epigraph.[155] But perhaps more importantly, the Lento assai, like the preceding scherzo and trio, identifies considerably with the quartet's outer movements through an array of very convincing "extramotivic" relationships. Let us now consider, among other things, some of these relationships in detail.

The Theme (mm. 1–12)

Entries in one of Beethoven's sketchbooks suggests that the D♭ melody of the Lento assai was originally conceived as an ending to be attached to the finale of the preceding quartet in C♯ minor, op. 131.[156] In the book, Beethoven reveals his own thoughts on the emotional character of the theme, labeling it "sweet song of rest" (*Süsser Ruhegesang*) and "song of peace" (*Friedengesang*).[157] From a technical standpoint, the theme is a sentence.[158] Its presentation segment (mm. 3–4), which is the two-bar phrase quoted by Cooke, is repeated more or less exactly in measures 5–6; the ensuing "continuation" (mm. 7–10), begins sequentially with a passage based on the "falling

[155]Recall that the quartet's outer movements are unified principally through various transformations of the "Muss es sein?" or "Es muss sein!" mottos.

[156]See Robert Winter, "Plans for the Structure of the String Quartet in C Sharp Minor, Op. 131," in *Beethoven Studies 2*, ed. Alan Tyson (London: Oxford University Press 1977), 121–125. The sketches in question are from Beethoven's "Kullak" sketchbook (Autograph 24) held at the Staatsbibliothek Preussicher Kulturbesitz in Berlin.

[157]Of course, Beethoven's ultimate decision not to use the D♭ melody in the C♯ minor quartet has prompted some writers to wonder whether the whole F major quartet was written with the purpose of providing a home for the "sweet song of rest." See Bumpass, "Beethoven's Last Quartet," 224. Here, she defends the conservative aspects of op. 135 by reasoning "it is not inconsistent that a quartet born out of a 'sweet song of rest' should, in its overall stylistic profile and in many details, echo the sense of resolution of the Lento."

[158]Caplin also discusses the Lento assai theme as a sentence in *Classical Form*, 11–12.

fifths" progression. Through the sequence, the theme is fragmented before leading to an authentic cadence embellished with cadential six-four.[159]

While the theme is fundamentally an eight-measure unit (2+2+4 bars), it is extended on both ends. Before its beginning, Beethoven places an introduction to the theme in first two measures of the movement, which set the stage by literally introducing each instrument, one at a time, and each note of the D♭ tonic triad, one at a time. The order in which the tonic's pitches enter (F–A♭–D♭) is significant because the ordering delays the tonic note until last. That way, when it does come in, the tonic provides a delightful surprise. Since all the previous music was in F, the first notes of the Lento assai, F and A♭, inevitably bring to mind F minor. But as soon as the D♭ makes an appearance, we experience an instantaneous shift in our tonal perception as we reinterpret the F and A♭ in a whole new light as the third and fifth of the D♭ tonic chord. In a general sense, then, the thematic introduction here is quite like the Grave introduction in the finale since both introductions withhold their true tonics at the beginning.

As far as the theme itself is concerned, we might be tempted to think that the melodic shape of its first six pitches corresponds to the retrograde inversion of "Es muss sein!" filled in with passing tones. While their outward contours are similar, the Lento theme's melodic line does not stop on its sixth note (C), but instead continues upward (to

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[159]The sentence proportions of the theme are undeniable, however the organization of its cadences also suggests a contrasting period. This is because the theme's presentation and repetition segments are each phrases that end with a melodic interruption on $\hat{2}$ supported by a half cadence. Collectively, the presentation and repetition bring to mind an antecedent phrase (with the stronger root position V at the end of the repetition serving as the half cadence for the pair). The continuation, then, suggests a melodically contrasting consequent that ends conclusively with a perfect authentic cadence.

F), making it different from the RI motive once we consider it as a whole. A more significant difference between the two segments, however, is that they have fundamentally different middleground structures. The RI motive in the finale has a structural skeleton that unfolds a series of descending parallel thirds as two distinct voices of a compound melody. In contrast, the Lento assai segment just prolongs $\hat{1}$ (D♭) through a motion to and from $\hat{5}$ (compare Appendix A, mm. 17–20 with Appendix D, mm. 3–4).

The first real similarity between the Lento assai and the quartet's finale can be found in the theme's continuation segment. As I mentioned, the theme's continuation (mm. 7–10) is based on a "falling fifths" sequence. The basic sonorities in the continuation (ignoring specific chordal inversions) are listed in Figure 5.1. Notice especially the progression in measures 7–8: F7–B♭m–B♭–E♭m. This progression

Figure 5.1. "Falling Fifths" in the "Continuation" Segment of Op. 135, iii, Theme, mm. 7–10.

7	*8*	*9*	*10*
F7 B♭m	B♭ E♭m	A♭ D♭	V^{8-7}_{6-5} I

foreshadows the opening progression (in the key of F minor) at the beginning of the finale: Fm–F–B♭m–B♭7–E°7/G (see mm. 1–5). As I noted in Chapter II (p. 33), the fact that Beethoven emphasizes B♭7 (V^7/VII) so early in the finale is worth noting, because in doing so, he threatens to lead us tonally astray to E♭ before the tonic itself is firmly established. In dramatic fashion, then, Beethoven compels us to ask ourselves, "Muss *Es* (E♭) sein?" Of course, Beethoven does not actually deliver E♭ in the finale, since such a

tonal departure would be premature in the opening bars of the movement. But when the progression appears within the tonal landscape of the D♭ Lento assai, Beethoven does not hesitate to resolve the B♭ chord to E♭m, because in this key, "*Es* (E♭) muss natürlich sein!"

Another feature of the Lento theme that connects it to the other movements of the quartet comes in its little two-bar extension (mm. 11–12). Here, Beethoven underscores the theme's structural cadence at measure 10 by restating the cadential measure two additional times. Notice, however, that Beethoven does not simply repeat the cadential measure. Instead, he composes a variation of it in which he transfers its $\hat{3}$–$\hat{2}$–$\hat{1}$ melodic descent to different registers in such a way that suggests canonic imitation. When we consider that Beethoven's finale was inspired by a canon (i.e., the "Es muss sein!" joke canon), the reference seems quite clear.

In the coming variations, Beethoven tends to follow his original theme fairly closely in terms of tonal structure and phrase design. Each variation, as we shall see, consists of an eight-measure sentence followed by a two-bar cadential extension. In this way, the movement is completely symmetrical around the second variation, which is highlighted further by its contrasting C♯ minor tonality and also by its homophonic texture. Beethoven's sketches show that he originally planned the Lento assai as a ternary form, so it follows that he would arrange his theme and variations to group musically as follows:

A	**B**	**A'**
Theme &Variation I	Variation II (*minore*)	Variations III & IV

Beethoven even adds a two-bar coda at the end of the movement as a counterweight to the similarly sized thematic introduction.

Variation I (mm. 13–22)

That Beethoven would conceive of the theme and the first variation as a pair is evidenced by the two-note "plagal" link that seems to cause a phrase overlap on the downbeat of measure 13.[160] The overlap so effectively minimizes the variation's feeling of commencement, that we are almost unsure it has begun.

Of all the variations, this is the least sentence-like. Strictly speaking, it is not a sentence in the classic sense because its third and fourth measures (mm. 15–16) do not repeat the opening melodic idea.[161] Still, the variation's proportional dimensions give it a clear sentential character. And furthermore, its "continuation" segment (mm. 17–20), although embellished heavily with chords having applied (or "secondary") functions, is still based on the "falling fifths" sequence we observed in the original theme. Figure 5.2 clarifies the *underlying* sequential progression by providing the basic sonorities (the newly added secondary-functioning chords appear in brackets "[ ]").

Figure 5.2. "Falling Fifths" in the "Continuation" Segment of Op. 135, iii, Variation I , mm. 17–20.

17	*18*	*19*	*20*
[C7] F B♭	[It.$^{+6}$] B♭ E♭m	[E♭7] A♭7 D♭	"I_4^6" V_2^4 I^6

[160]Notice that Beethoven uses the same link to connect variations III & IV, and also to prolong the tonic in the coda.

[161]The bass line in measures 15–16, however, is an embellished repetition of the bass in measures 13–14 (see the voice-leading graph in Appendix D, mm. 13–16).

At the end of the first variation's "sentence," we find the recurring two-bar cadential extension. This time, Beethoven hints at the kind of invertible counterpoint that is a principal feature of all the other movements in the quartet. Figure 5.3 illustrates how the cadential parts are repositioned among the instrumental voices in measures 20–22. Notice in measure 22 how the viola in changes $\hat{3}$ (F) into $\flat\hat{3}$ (F♭); this mutation of the third scale degree prepares the minor mode tonality of the second variation.

Figure 5.3. Invertible Counterpoint in Op. 135, iii, Variation I, mm. 20–22.[162]

	20	*21*	*22*
violin I	$\hat{5}$ —— $\hat{1}$	$\hat{3}$—$\hat{2}$—$\hat{1}$	$\hat{5}$ —— $\hat{1}$
violin II	$\hat{3}$—$\hat{2}$—$\hat{1}$	$\hat{1}$—$\hat{7}$—$\hat{5}$/($\hat{1}$)	$\hat{5}$ —— $\hat{1}$
viola	$\hat{1}$—$\hat{7}$—$\hat{5}$/($\hat{1}$)	$\hat{5}$ —— $\hat{1}$	$\hat{1}$/($\hat{5}$)—$\hat{4}$—$\hat{3}$→$\flat\hat{3}$
cello	$\hat{5}$—$\hat{4}$—$\hat{3}$	$\hat{5}$—$\hat{4}$—$\hat{3}$	$\hat{3}$—$\hat{2}$—$\hat{1}$

Variation II (mm. 23–32)

The C♯ minor variation serves as a contrasting middle section within the movement. Besides being in a different mode, the variation also introduces a contrast in its textural and rhythmic style. Whereas the preceding D♭ music was very lyrical with its sweeping legato melodies, variation II begins more like a funeral march with punctuated chords played in dotted rhythm. In terms of its phrase structure, variation II can also be understood as a sentence, although its focus on elements other than melody can make identifying the sentence more challenging. The presentation segment (mm. 23–24) moves harmonically from tonic to dominant in C♯ minor, while the repetition (mm.

[162]Parenthesized scale degree numbers in Figure 5.3 represent implied structural notes at moments when the voice leading appears to skip to or from a less structural "inner voice."

25–26) repeats the same motion, but in the relative major (E). Melodically, the repetition is not as literal as it is in most sentence forms, however the bass lines of the presentation and repetition do have essentially the same structure (although not the same surface contour).

It is in the continuation segment (mm. 27–30) that the variation demonstrates a noticeable characteristic of the quartet's first and last movements. Specifically, Beethoven obscures the voice leading through an extraordinary amount of registral displacement. In my voice-leading sketch of the movement (Appendix D), I attempt to untangle the labyrinth of displaced voices in order to reveal the simpler underlying structure. Level *a* of the graph uses solid and dashed arrows to indicate registral shifts in a particular voice-leading path; the solid arrows show displaced stepwise motion, while the dashed arrows indicate common tones that have switched registers. Level *b* of the graph then presents a hypothetical reconstruction of the voice leading with the registers for each voice-leading strand normalized.[163] Accordingly, we can conceptualize Beethoven's ultra-complex voice leading, represented at level *a* of the graph, as developing from the simpler model progression shown at levels *b* and *c*.

As we have already seen, Beethoven employs register displacement in the finale (see especially mm. 88–100 of the development section), however the technique plays an even more fundamental role in the first movement. Even in the main theme of the first movement, Beethoven displaces motivic segments among the registers of the viola and violins (see mm. 5–10). He then follows this theme with a quarter-note "subject" (mm.

[163]I arrive at this particular arrangement of the voices at level *b* of Appendix D (mm. 27–30) by looking ahead to the structural cadential six-four in measure 30 and then tracing the voice leading backwards to the beginning of measure 27.

10–14), which is constructed fundamentally of displaced stepwise motion. Generally speaking, the technique of register transfer reflects Beethoven's attraction to extreme contrasts, and more specifically he employs it in the first movement as a way to experiment with the effects of discontinuity.

Variation III (mm. 33–42)

The third variation of the Lento assai returns to D♭ major, and it features the return of the movement's "sweet song of rest," which appears in the cello. The most remarkable feature, and the one that is most suggestive of the quartet's finale, is that Beethoven sets the theme canonically with the first violin following at the distance of one measure. Compare this with what happens in measures 25–32 of the finale: there, Beethoven sets the retrograde-inversion theme, which is itself a sentence, in canonic imitation at the distance of one measure. In both the finale and in variation III, the canon has an unusual effect on the phrase structure because it obscures the characteristic segments (presentation, repetition, and continuation) of the sentence.

Variation IV (mm 43–52)

The exquisite final variation in the Lento assai completes the arch form of the movement by recalling several structural aspects of variation I. After referencing the central techniques of the quartet's other movements, it seems only fitting that the Lento assai would, in the end, come to reference itself. Here, the presentation and repetition segments of the sentence form are once again explicitly clear, and Beethoven also brings back the cello's bass line (D♭–E♭–D♭–C) originally from measures 3–4. Meanwhile, the

melody, which is adorned with appoggiaturas, has a basic structure (D♭–C–D♭–E♭) that is the inversion of the bass line.[164] In his final variation, Beethoven is focused less on making allusions to other movements, and instead appears to be consumed with creating what is arguably the most breathtakingly beautiful moment in the entire quartet. At the end of the continuation (m. 50), Beethoven avoids the expected perfect authentic cadence (by going to I^6), which allows him to take another approach to the cadence in measures 51–52 with the first violin soaring to a climactic high B♭ before the structural final cadence. Beethoven extends the final tonic with a two-bar coda that features the same "plagal" neighbor-note embellishments that appear between the major-mode variations. The coda provides a counterbalance to the thematic introduction, and its embellished arpeggio in the last bar, D♭–A♭–F, provides a fitting end as it rounds out the movement with the retrograde of its first three notes. And so it is that Beethoven makes one final allusion to the contrapuntal transformations that we will find so prominently in the quartet's finale.

[164]This double-neighbor-note motive (i.e., $\hat{1}$—$\hat{7}$—$\hat{1}$—$\hat{2}$) also appears in the top voice of the C♯ minor variation (mm. 23–24).

CHAPTER VI

SUMMARY AND CONCLUSIONS

This study examines the harmonic, contrapuntal, and motivic procedures in Beethoven's last complete composition, his string quartet in F major, op. 135. Specifically, the inquiry here searches for a compositional logic that might help elucidate the work's intricacies and idiosyncrasies, which are reflective of the composer's late style in general. Throughout the final quartet's history, critical evaluations of the work have been remarkably diverse, owing to the myriad approaches and levels of detail that the various critics have applied. In general, the earliest commentators on Beethoven's last five quartets struggled to make sense of the works on a technical level, and many turned instead to dealing with them on a highly subjective emotional and spiritual level. Modern authors writing about Beethoven's entire string quartet output have—perhaps out of necessity—also bypassed the analytical microscope, and have seemingly based their assessments on the more immediate features of the late quartets. Consequently, both of these traditions have led some to regard Beethoven's final quartet, op. 135, as "regressive" or, more favorably, "nostalgic."

With the advancement of motivic analytical techniques in the mid-twentieth century, a few writers began to discuss sophisticated and subtle relationships among the themes of Beethoven's last quartet. As we have seen, Arnold Schoenberg (1941), Rudolph Réti (1951), Deryck Cooke (1963), and Christopher Reynolds (1988) have all

praised op. 135 for its unified motivic structure. But while there is undoubtedly a motivic process at work in op. 135, these analysts (with the exception of Schoenberg) have been so focused on locating their basic motivic shapes at every turn that they sometimes produce a reading that is inconsistent with the tonal hierarchy of the music as viewed from a Schenkerian perspective. Réti and Cooke, for example, often locate their underlying motives by singling out certain decorative pitches in the music while at the same time suppressing the structural notes they embellish. Even a modern scholar like Reynolds occasionally proposes motivic connections that run contrary to the music's harmonic-contrapuntal structure. At other times, Reynolds's motives are either so loosely defined or indistinct in form that the motivic relationships he suggests are hardly distinguishable.

What we need is some type of quality control system that can help us assess a motivic reading within the context of the music's harmonic and voice-leading structures. Such a control system, as this study contends, is already available in Schenker's method. Of course, the reliability of any particular Schenkerian reading will naturally depend on the insight, skill, and inventiveness of the analyst, but the fact that Schenker's techniques are now so widely studied will enable many readers to judge the appropriateness of specific voice-leading analyses on an individual basis.

An additional virtue of the Schenkerian graph is that it can do more than just evaluate existing motivic analyses. The analyses contained in this study demonstrate how the voice-leading graph can actually help generate a well-founded motivic analysis, particularly by revealing motivic relationships that reside at deeper levels of structure,

which would likely go unnoticed if we were to limit our investigation to the music's surface. Most notably in op. 135, the three unfolded thirds of the finale's "Es muss sein!" motto ($\hat{3}$–$\hat{5}$, $\hat{2}$–$\hat{4}$, $\hat{1}$–$\hat{3}$), can be linked to a network of related themes in the quartet that demonstrate the same middleground voice leading, yet do not necessarily represent one of the traditionally recognized transformations (like inversion or retrograde). But while a motivic analysis supported by the tonal structure can certainly reveal a certain level of coherence in the last quartet, it cannot fully explain the unusual sound world Beethoven created in his late works. The striking sounds of Beethoven's late compositions arise principally from a given work's intervallic content, which is expressed through chords, counterpoint, and melody, all things that are best addressed through the Schenkerian method. So while most analysts have searched for coherence in the motivic processes of op. 135, we can also recognize a fundamental level of coherence in each movement's composing-out of the Schenkerian *Ursatz*.

This study begins its investigation of op. 135 with the quartet's finale, which Beethoven singles out by prefacing it with a surprising motivic epigraph. While it is unclear what the epigraph's cryptic title "Der schwer gefasste Entschluss" ("The Difficult Decision") might signify for Beethoven, Christopher Reynolds appears to have decoded the meaning (at least on a musical level) that lies behind its "Muss es sein?" question and "Es muss sein!" response. By reading "Es" literally as the German note name for E♭, Reynolds imagines the quartet as a drama in which the note E♭ is transformed from being a disruptive intrusion in the first movement to becoming an integral part of the main motives of the finale. To be sure, Reynolds's interpretation

helps us justify several unexpected E♭ moments throughout the quartet. And thus it appears that Beethoven's epigraph is the key to understanding certain events that occur in the quartet. Not surprisingly, motives based on the "Muss es sein?" and "Es muss sein!" pitch patterns—presented in their purest forms in the epigraph—wind up having the greatest global significance. Transformations of the motto themes appear throughout the quartet's outer movements, and thereby promote an extraordinary kinship between the work's beginning and end.

The motivic alliance between the quartet's outer movements is certainly remarkable in itself, however extramotivic techniques at work in op. 135 also help bring all the movements of the quartet together into a powerfully unified artistic expression. In the finale, for instance, Beethoven also demonstrates an interest in older contrapuntal techniques such as canon and invertible counterpoint. At times, he even integrates his fondness for motivic transformations and counterpoint by setting his retrograde-inversionally related main themes against each other in invertible counterpoint (see especially the development section). Invertible counterpoint also figures prominently in the quartet's first movement. As in the finale, it occurs here most impressively at the beginning of the development section, where Beethoven combines two of the most prominent themes of the exposition in a series of modulating statements in a genuinely fugal style that carries each theme from voice to voice. In the second movement, too, invertible counterpoint plays a pronounced role, as each repetition of the scherzo's A section reintroduces three recurring contrapuntal voices (one being a pedal) in a variety of registers and instrumental parts. Lastly, in the D♭ theme and variations of movement

III, Beethoven manages to incorporate a brief suggestion of invertible counterpoint during a series of cadential repetitions at the end of variation I. The movement connects to the quartet's finale even more explicitly in its third variation, where Beethoven sets the Lento theme against itself in canon.

Besides canonic imitation and invertible counterpoint, another equally distinguishing characteristic that runs through the F major quartet has to do with techniques that promote contrast and discontinuity. In the finale, there is a strong polarity suggested by Beethoven's musical question ("Muss es sein?") and response ("Es muss sein!") that the composer then realizes in the ensuing movement through its contrasting Grave and Allegro sections. Most noticeably, the contrasting elements in the finale include tempo, meter, mode, dynamics, articulation, and overall emotional character.

Beethoven also achieves discontinuity in the finale through the technique of register displacement, though this technique is even more characteristic of the quartet's opening movement. In the first movement, short segments of the main theme in measures 5–10 are divided so distinctly among different registers and/or instruments that Bumpass refers to the melodic texture as a "mosaic." Of course, we can compare this with several developmental passages in the finale where the voice leading is also displaced registrally.[165] Beethoven uses the technique in the third variation of the Lento assai movement, as well. In measures 27–30 of that movement, we find an entanglement of displaced voices that rivals the complexity of any other passage in the quartet.

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[165]See, for example, movement IV, mm. 89–100, mm. 170–173, and mm. 244–249.

Another discontinuous element common to both outer movements worth mentioning involves the composer's play with metrical ambiguity. This type of discontinuity can be felt most perceptibly in the Grave introduction of the finale (mm. 5–11),[166] and in the quarter-note subject of the first movement (mm. 10–17).[167]

A final compositional element that unifies all four movements of Beethoven's F major quartet is, as Reynolds has suggested, the conspicuous role that E♭ plays in the entire work. In movements I and II, E♭ is an intruder that disrupts the musical flow. At the end of the first movement, for example, a deceptive cadence using E♭ trebled in the lower voices provides quite a shock to the system as it effectively derails the music's momentum. Similarly, the B section of the scherzo proper in movement II, consists of nothing more than a rowdy E♭ that is syncopated on unisons and octaves for more than six measures by each instrument (see mm. 16–22). In stark contrast, E♭ is completely at home as $\hat{2}$ in the D♭ Lento assai. In this movement, we are made to experience E♭ in a completely different light, as it is emphasized in the recurring melodic interruptions built into the structure of the theme and variations. Now, E♭ is no longer a disruptive agent, but rather an essential participant in the movement's deep melodic structure. Finally, when the finale comes, Beethoven attempts to reconcile the role of E♭ in the quartet's main key, F major. Reynolds's commentary on the matter brings to mind Schoenberg's *musical idea*. Owing to the fact that Beethoven has at last successfully managed to integrate E♭ into his main thematic material (see, for example, the retrograde-inversion

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[166]See the discussion in Chapter II, pp. 34–35.

[167]See the discussion in Chapter III, pp. 68–70.

theme, mm. 17–24), Reynolds asserts: "The finale arrives as both a solution and a synthesis."[168]

* * * * * *

The String Quartet in F major, op. 135, embodies a number of compositional traits routinely associated with Beethoven's late style: canon, invertible counterpoint, discontinuous structures, and the incorporation of intricate motivic associations both within and across movements. Add to that, the finale's musical/philosophical epigraph and the dramatic role that the note E♭ plays over the course of the work, and it becomes increasingly hard to imagine the last quartet as "nostalgic," or worse, "regressive." Since its debut, however, there have been critics who have identified the quartet as evoking an earlier tradition. To them, the final quartet falls short of the expectations established by the composer's preceding "late" quartets (opp. 127, 132, 130, and 131). In making their judgments, however, it appears that these authors may have relied more upon intuition and their general impressions of the quartet's most immediately perceptible features (such as its more conventional treatment of form, its tendency to avoid remote tonal juxtapositions, and its lighter emotional character overall) than any comprehensive analytical investigation. In this study of op. 135, on the other hand, I have followed the principle that a close reading of the entire quartet is necessary to avoid stereotyping it. In my analyses of complete movements of Beethoven's op. 135, I have found the quartet to be both deceptively simple as well as maze-like and bewildering. In either case, a careful

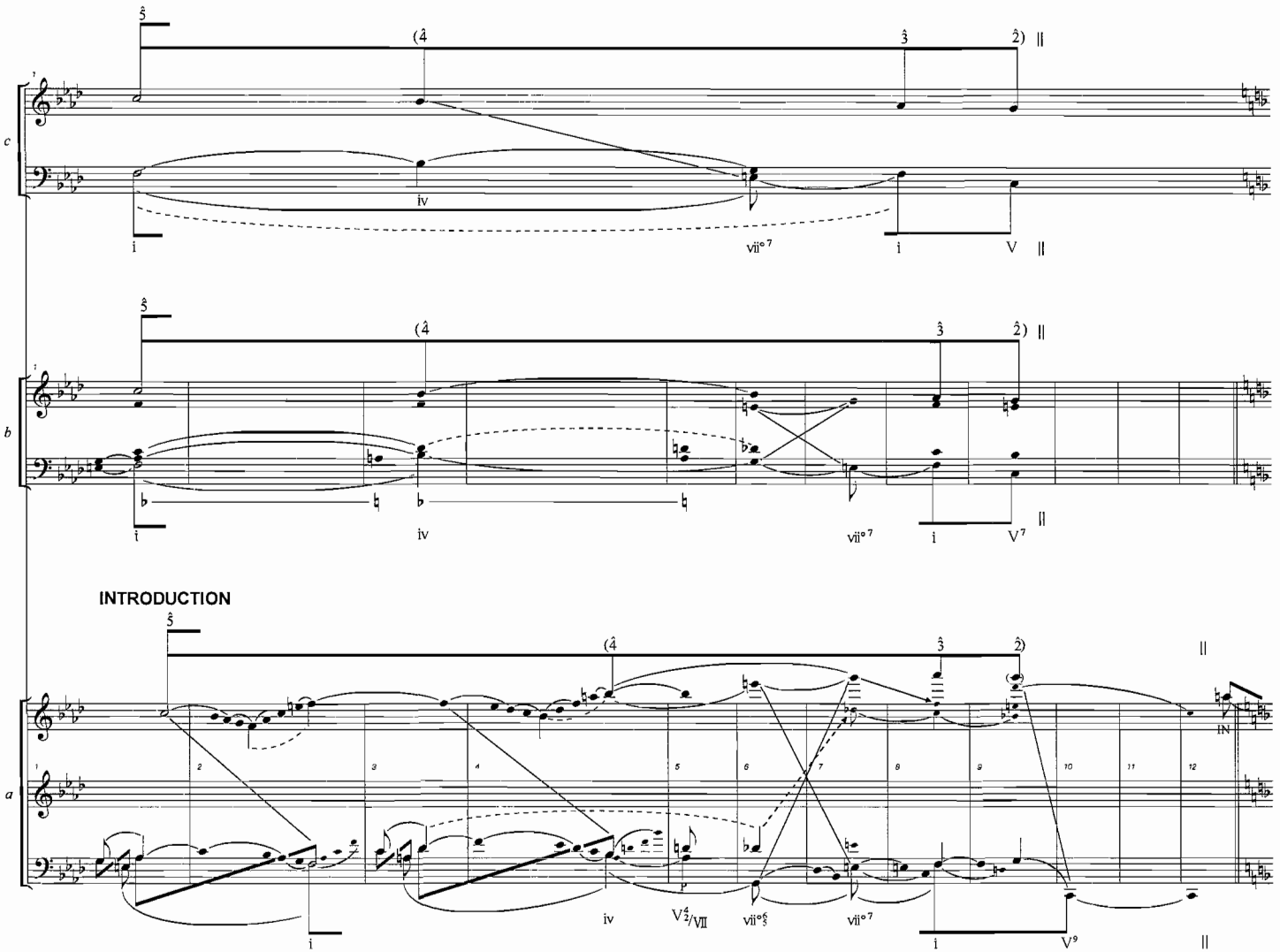
[168]Reynolds, 193.

and through analysis that considers not only the work's motivic relationships, but also the broader harmonic and contrapuntal contexts within which the motives operate, offers a more robust, yet nuanced method for getting closer to the quartet—a method that has been ignored for far too long.

APPENDIX A

VOICE-LEADING SKETCH, OP. 135, IV

Appendix A. Voice-Leading Sketch, Op. 135, iv



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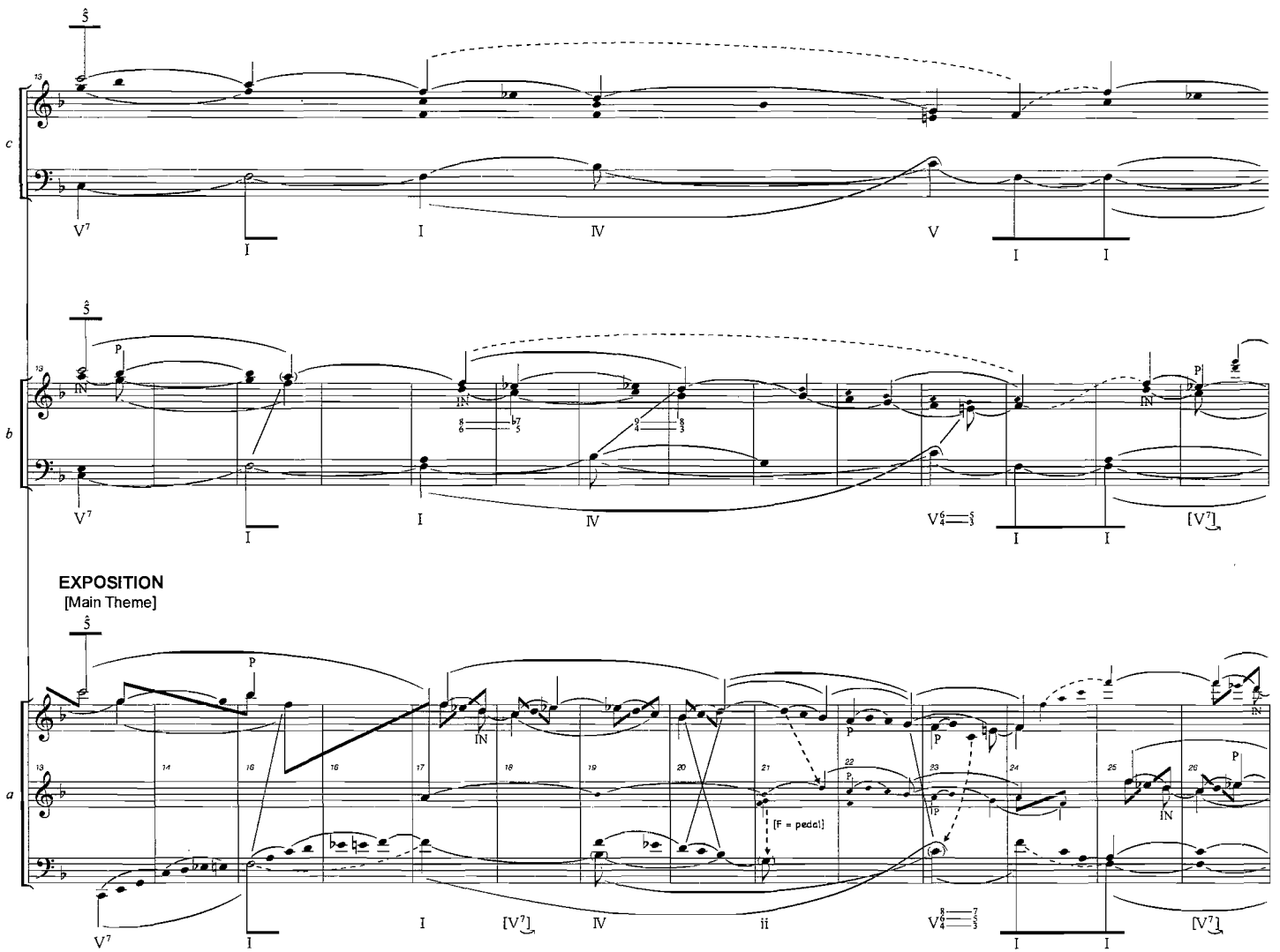

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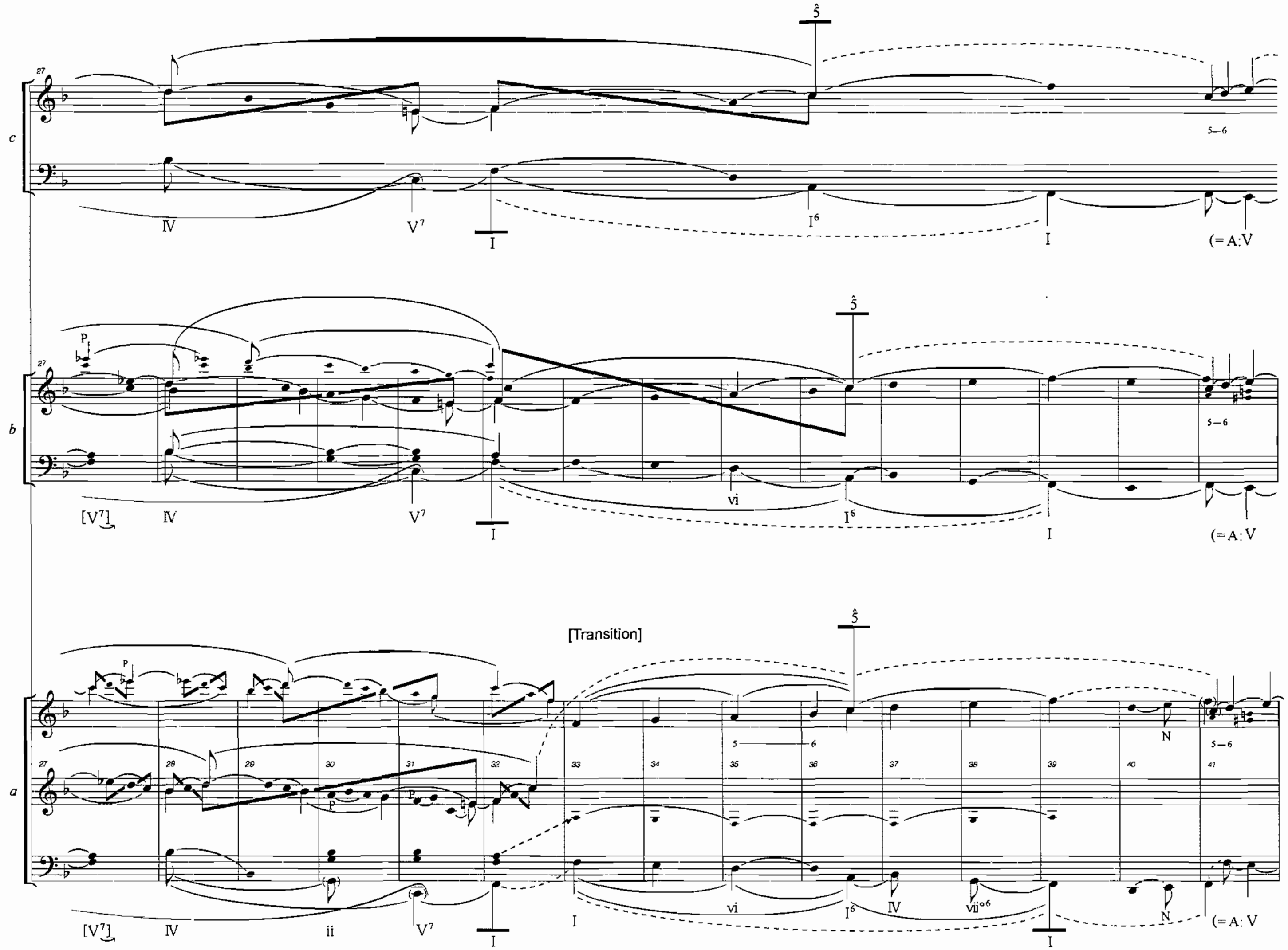

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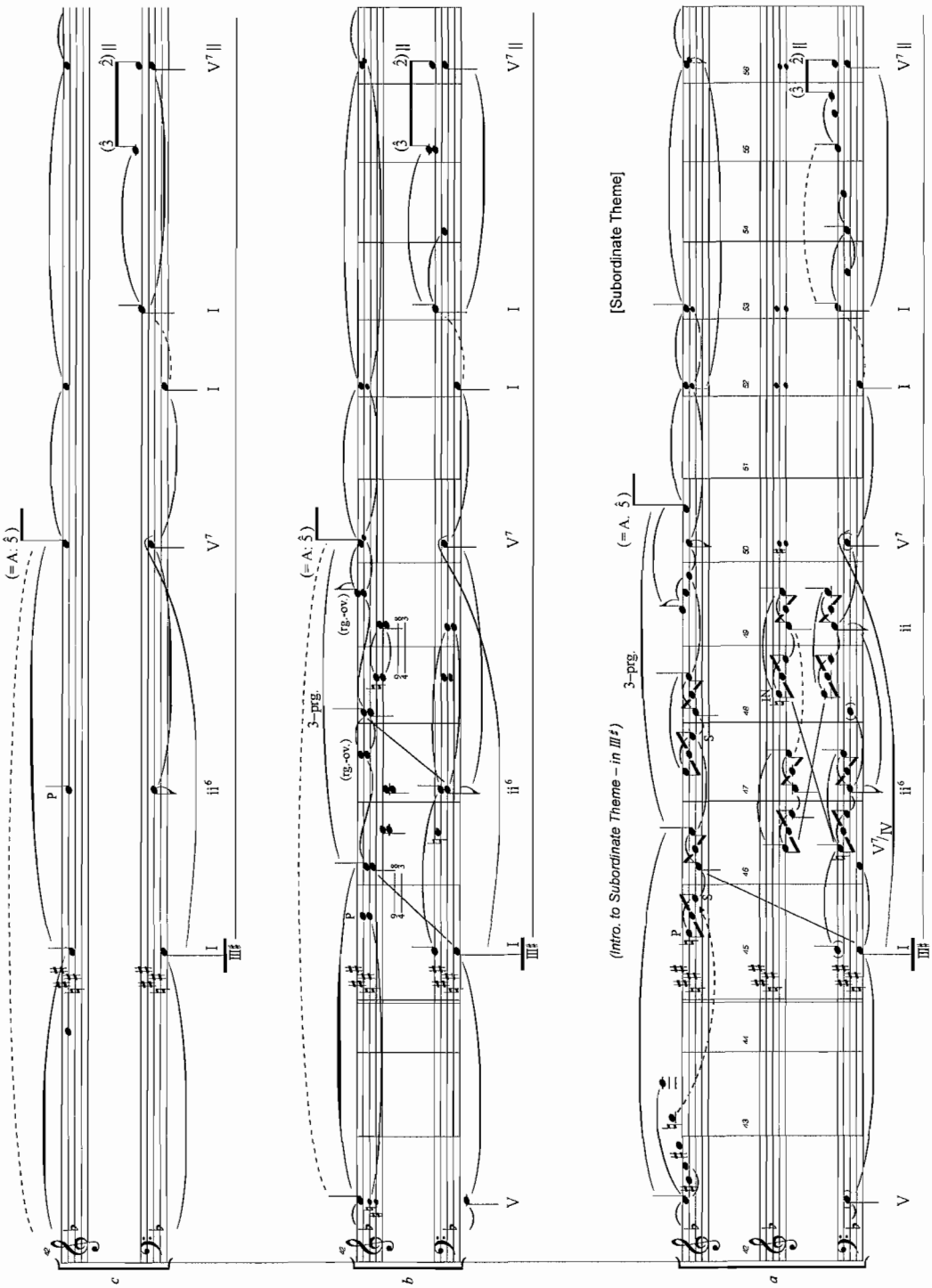

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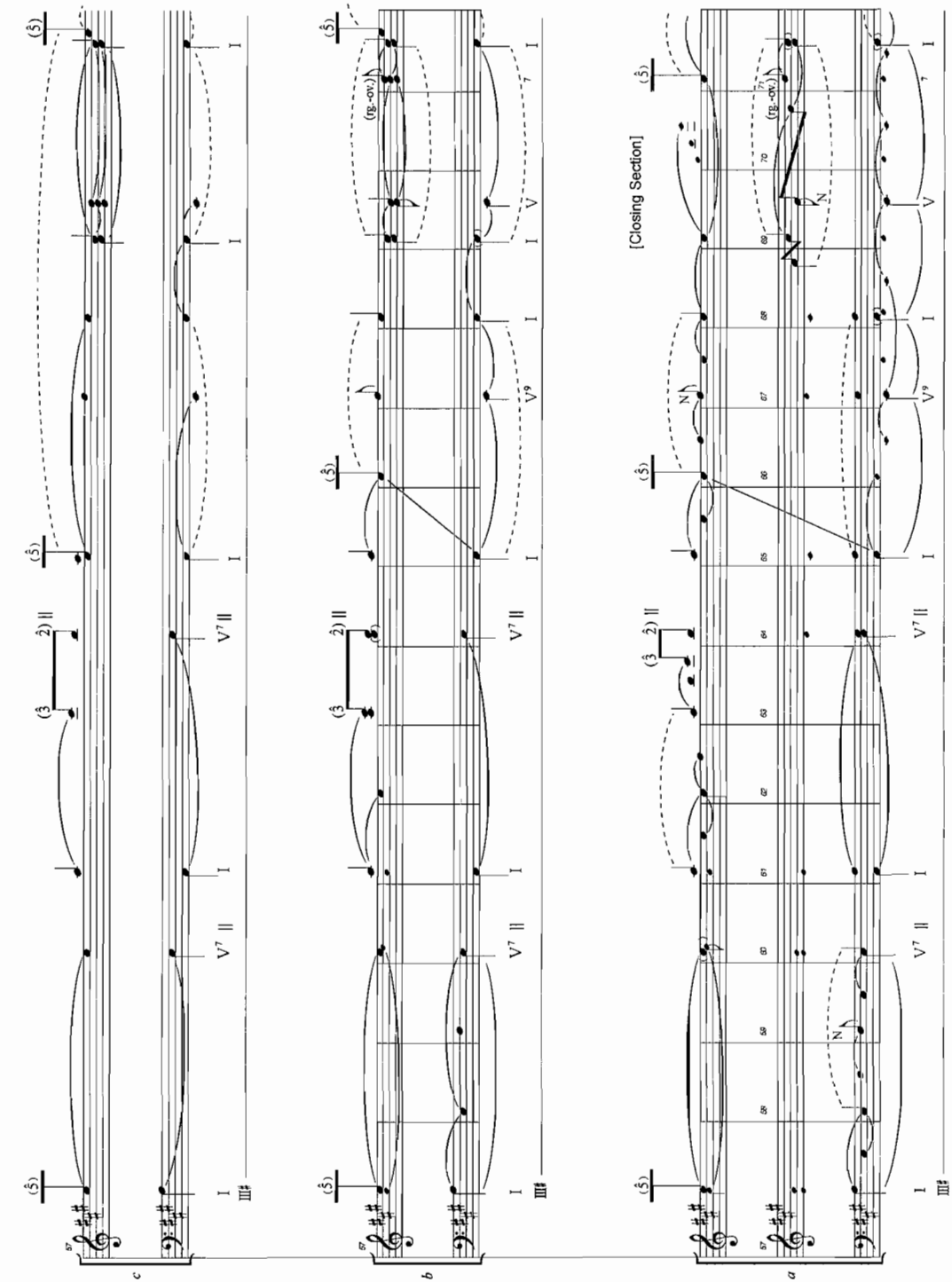

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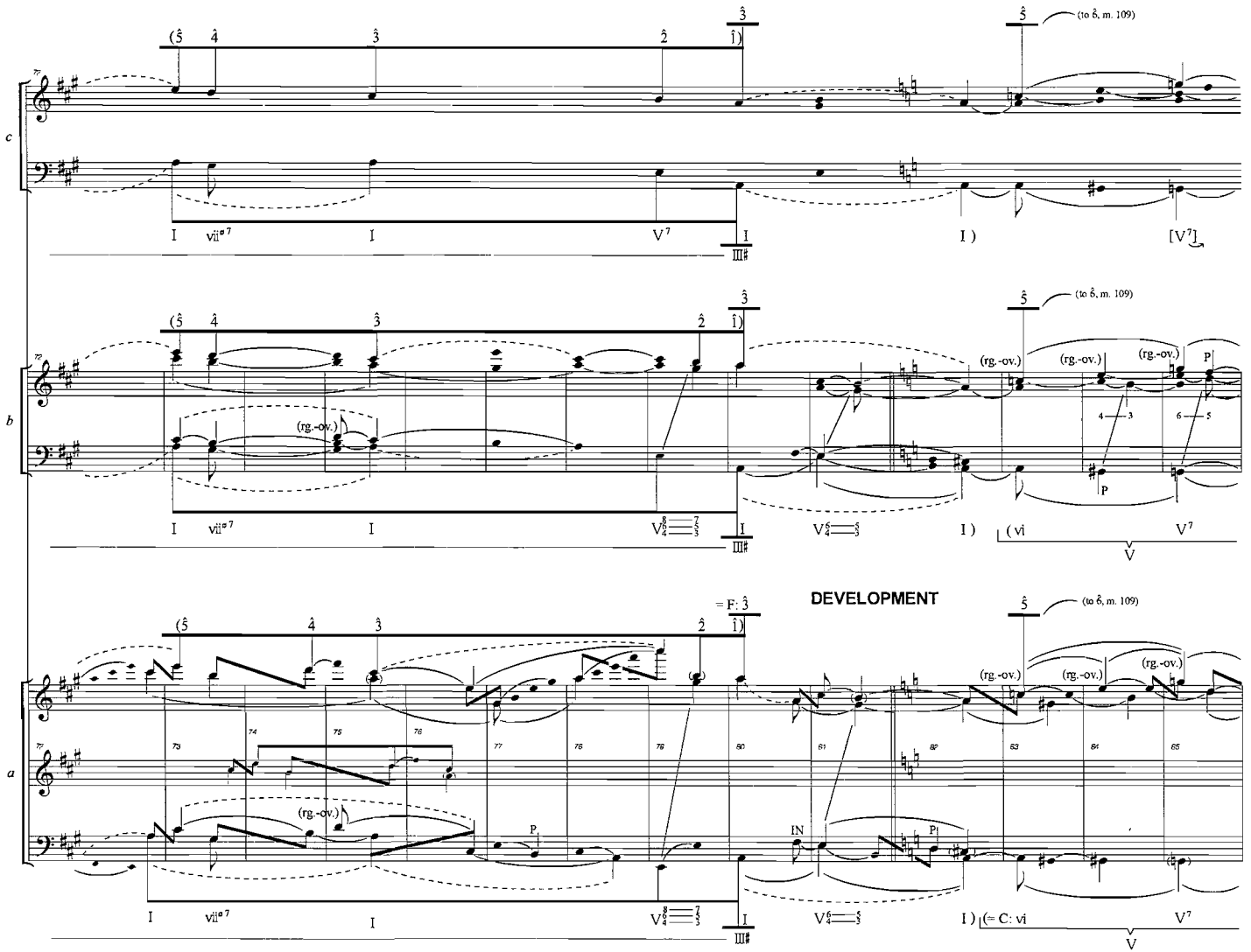

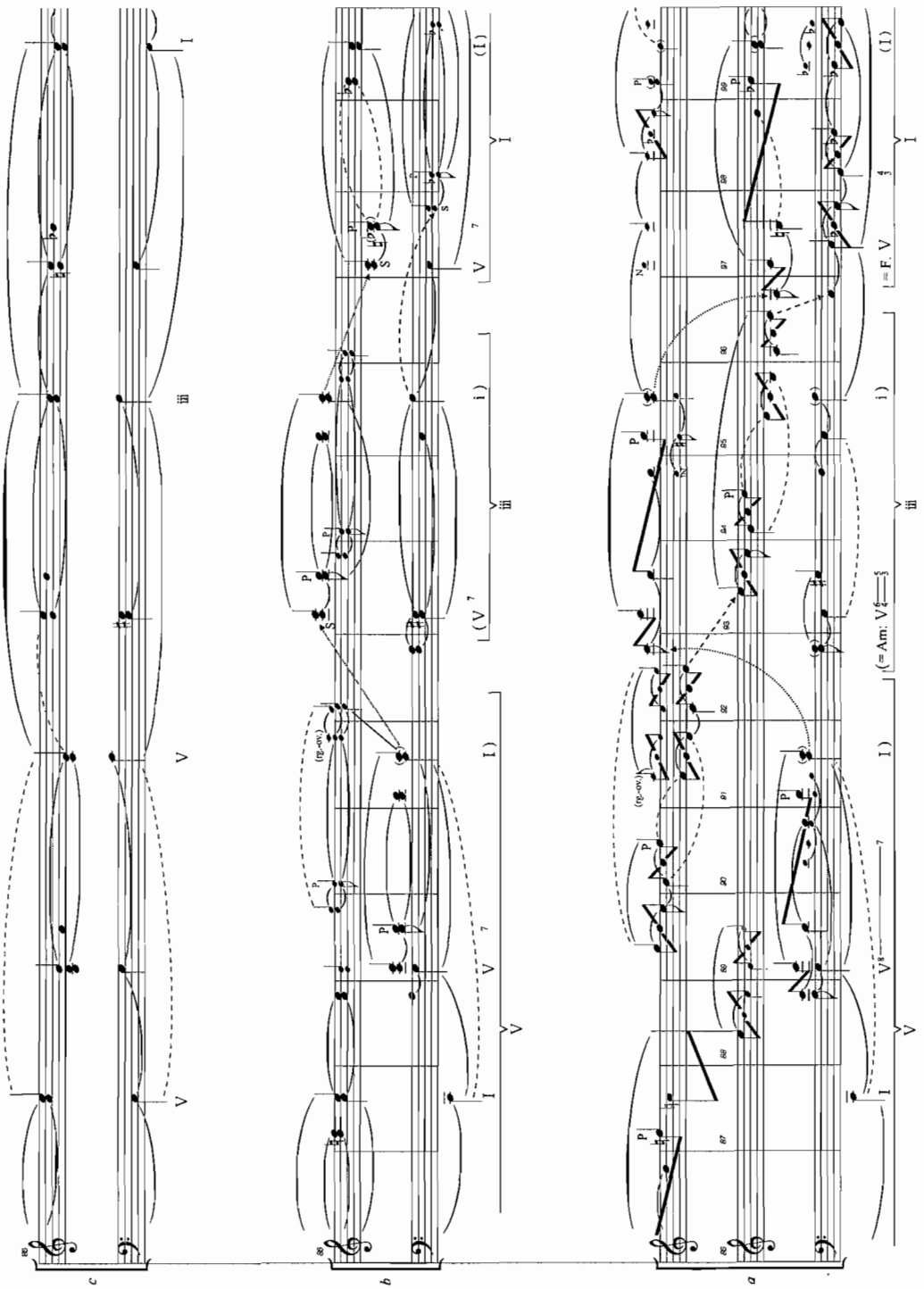

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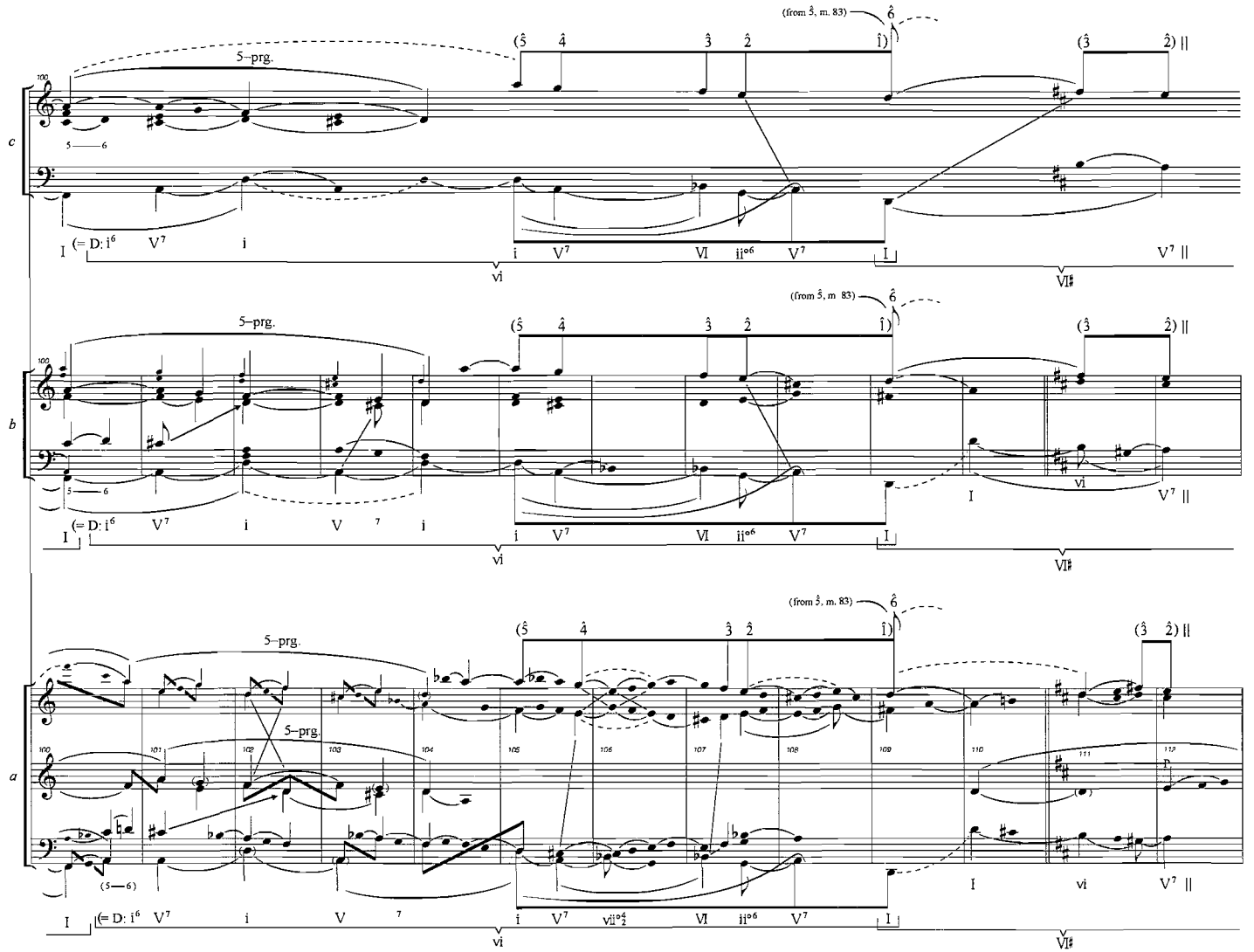

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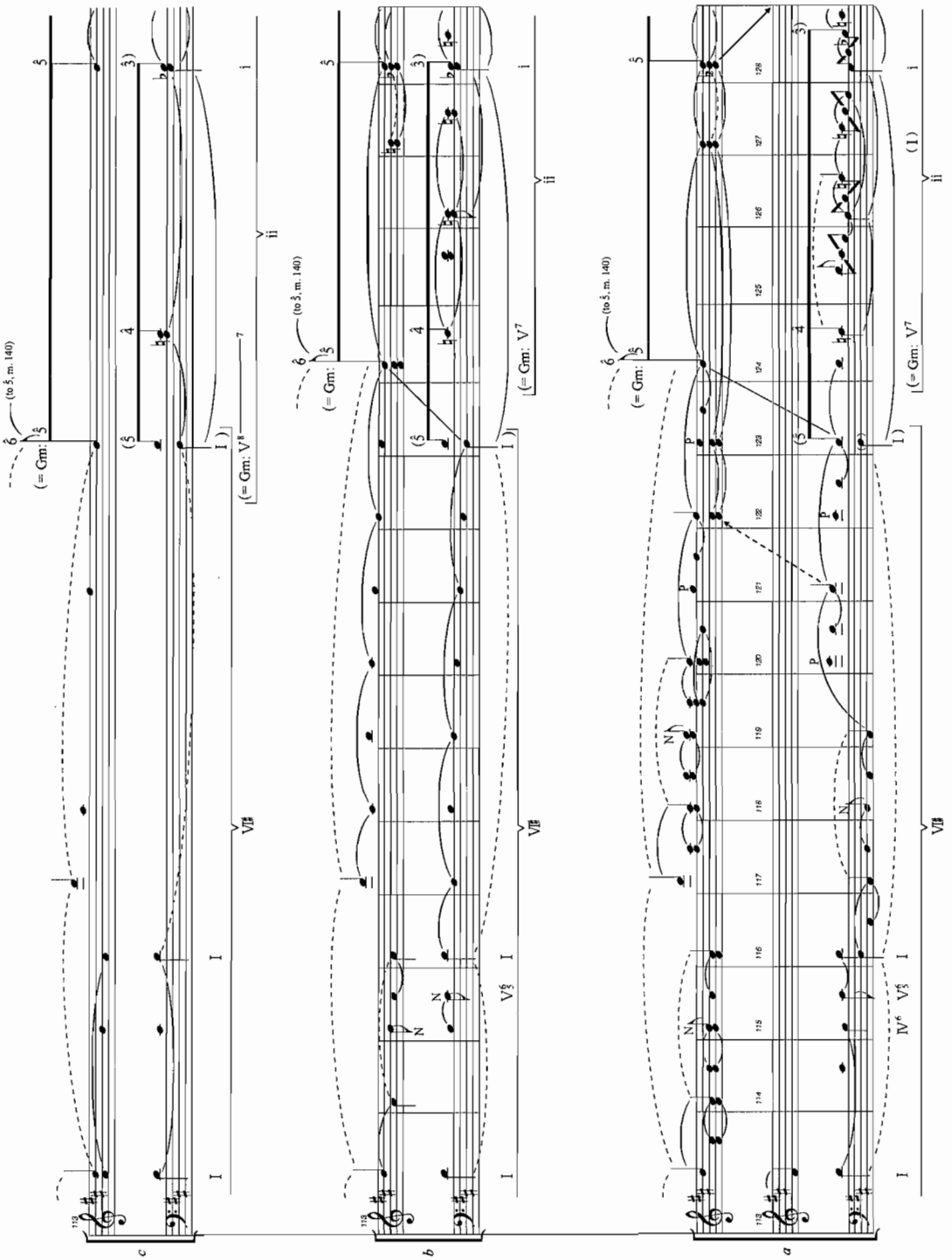

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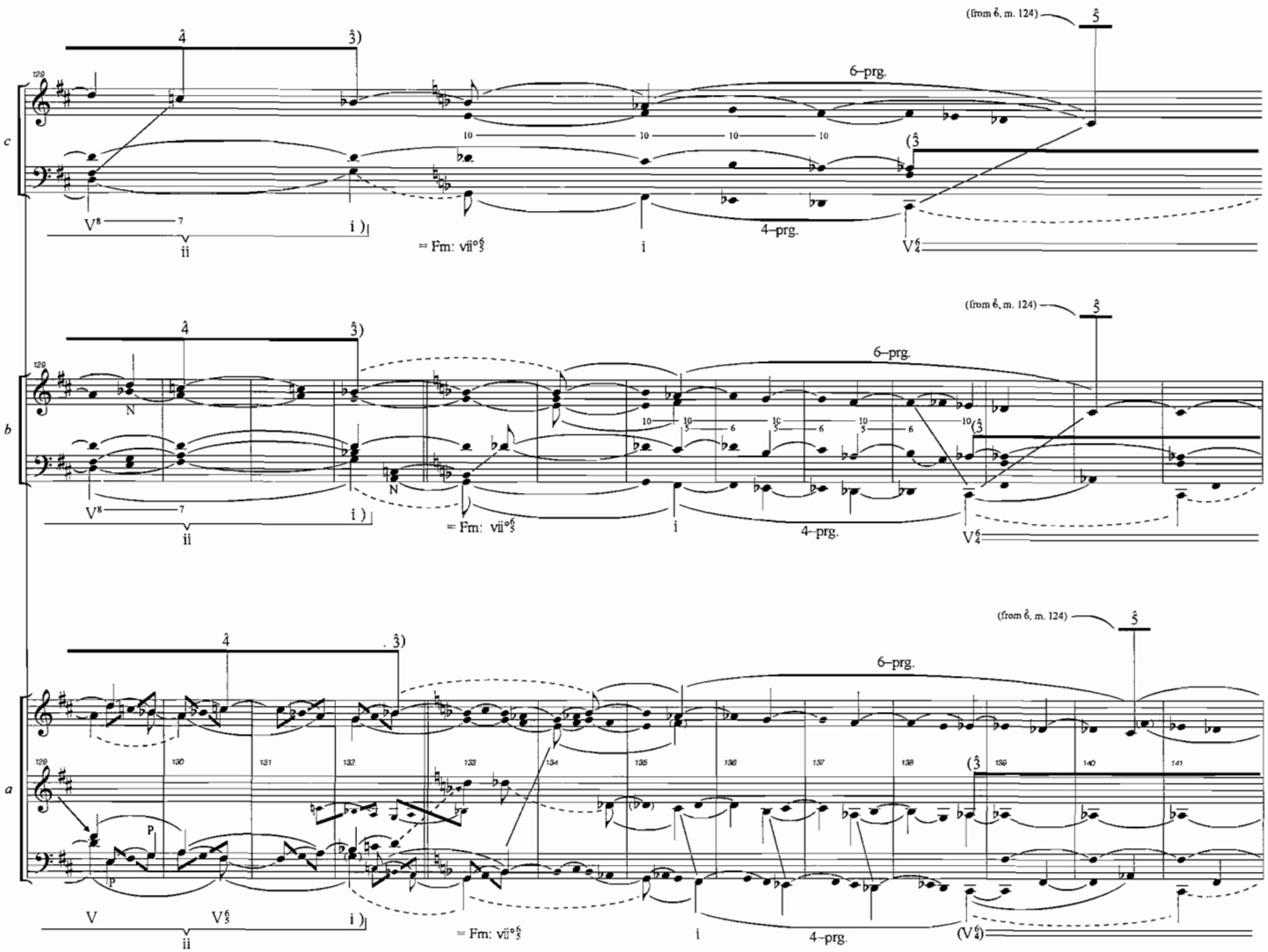

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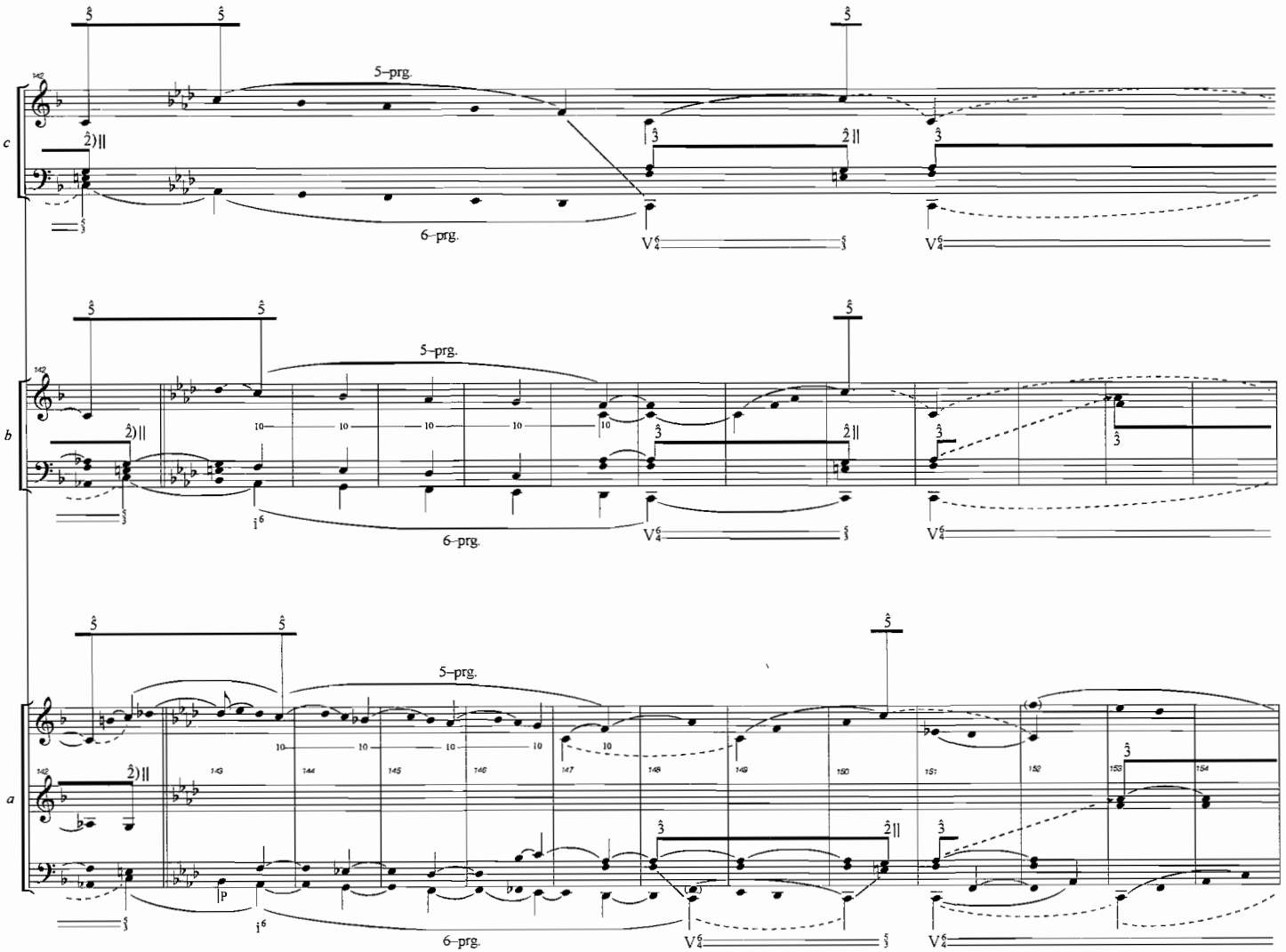

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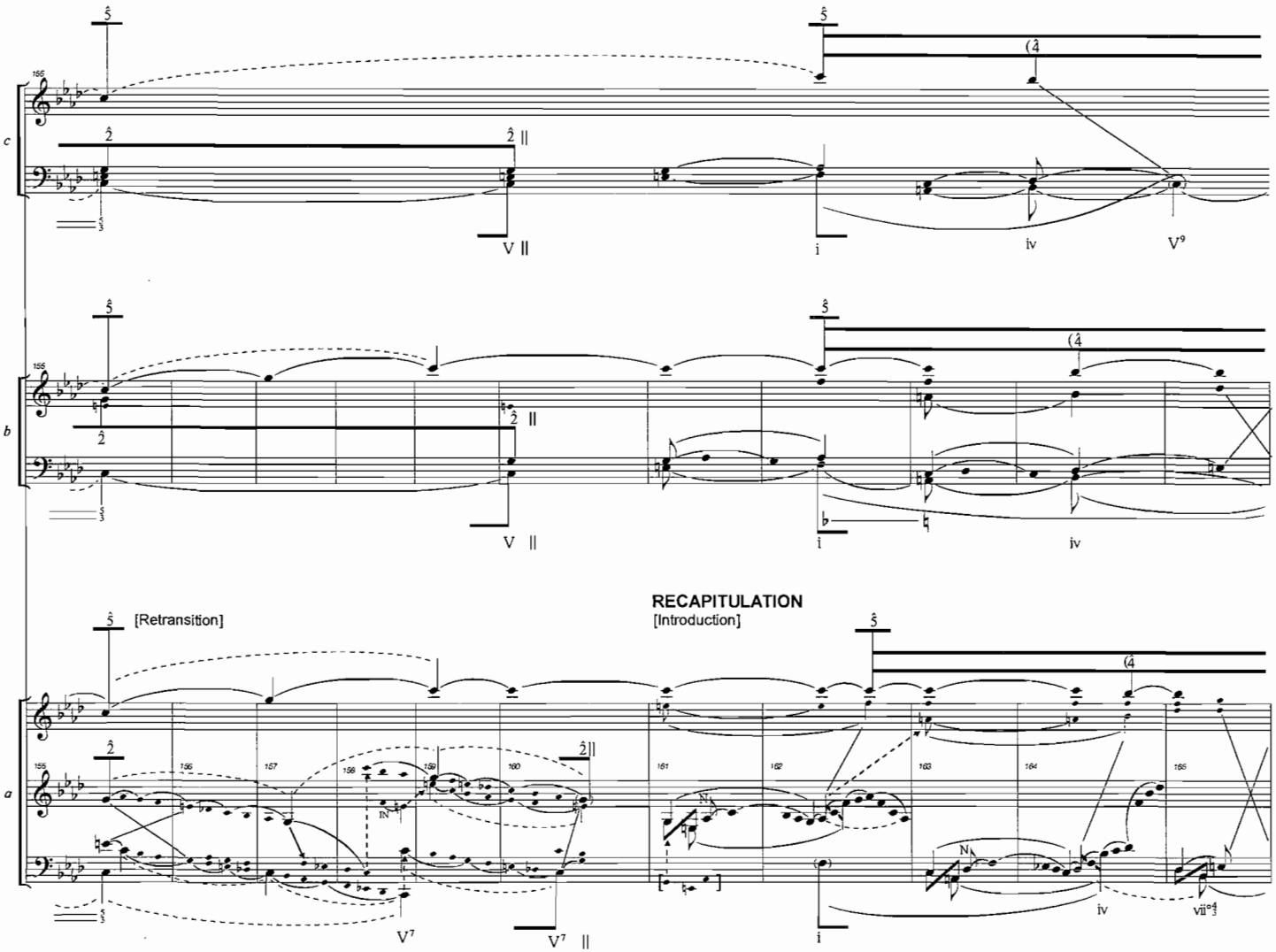

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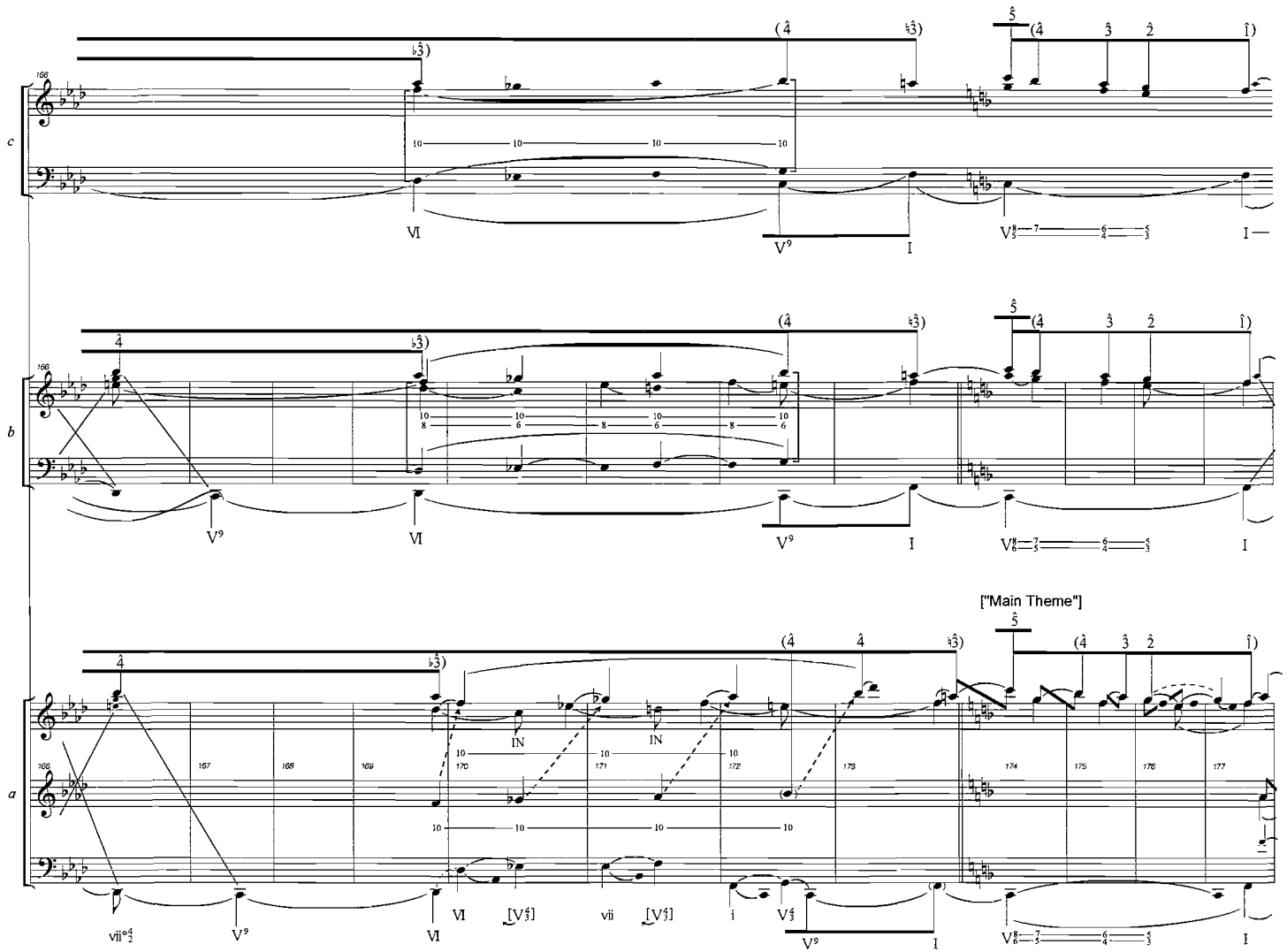

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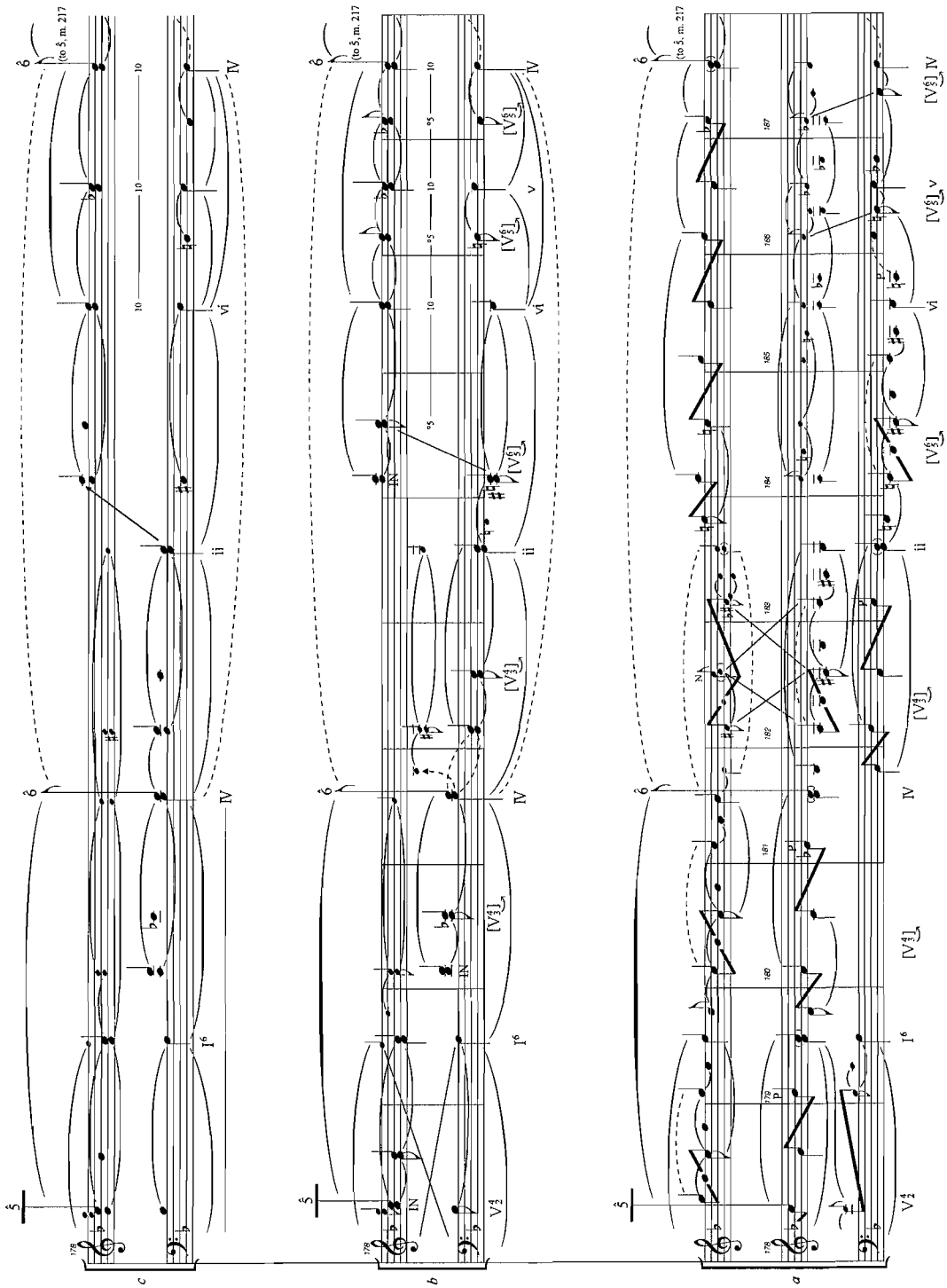

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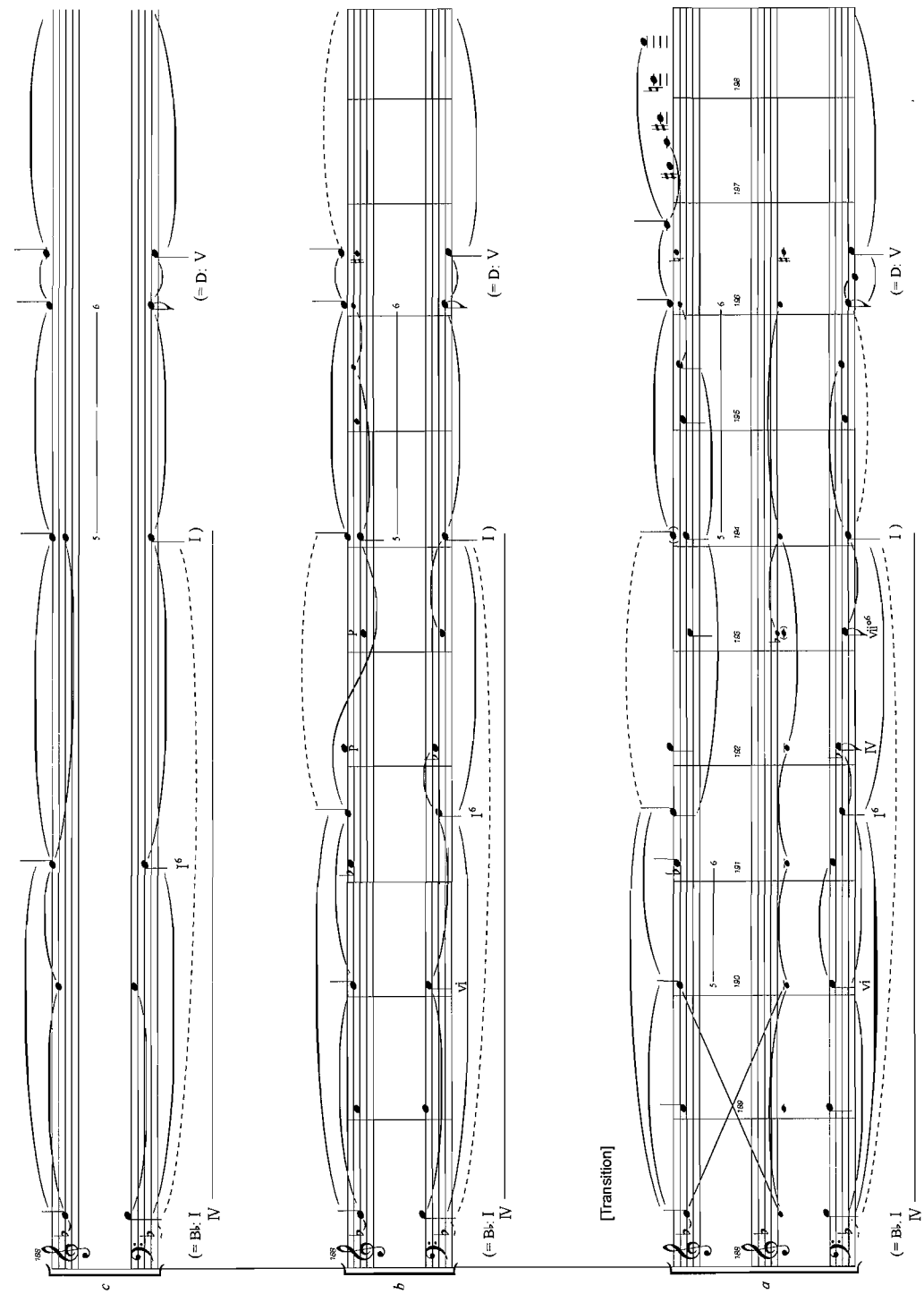

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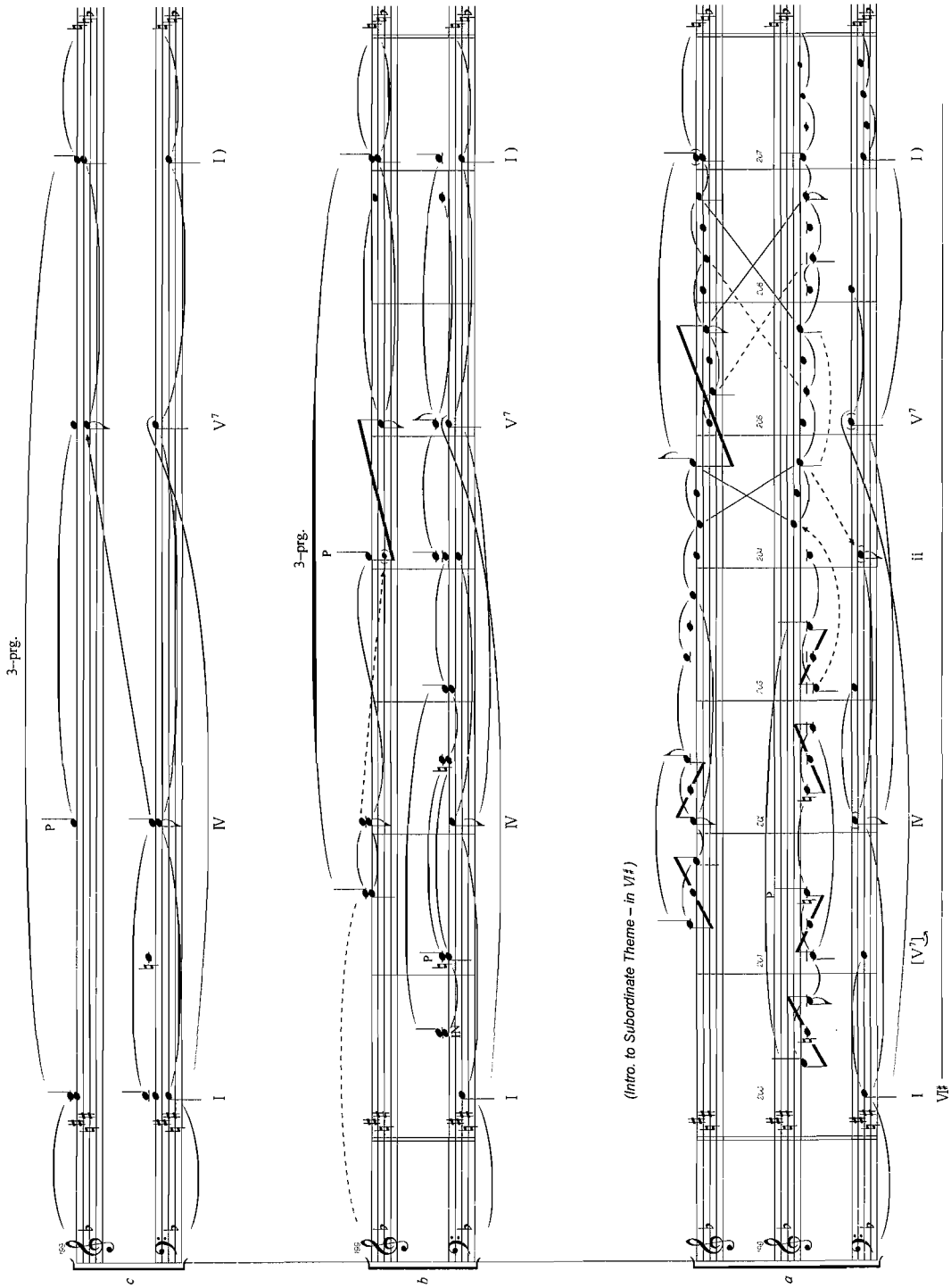

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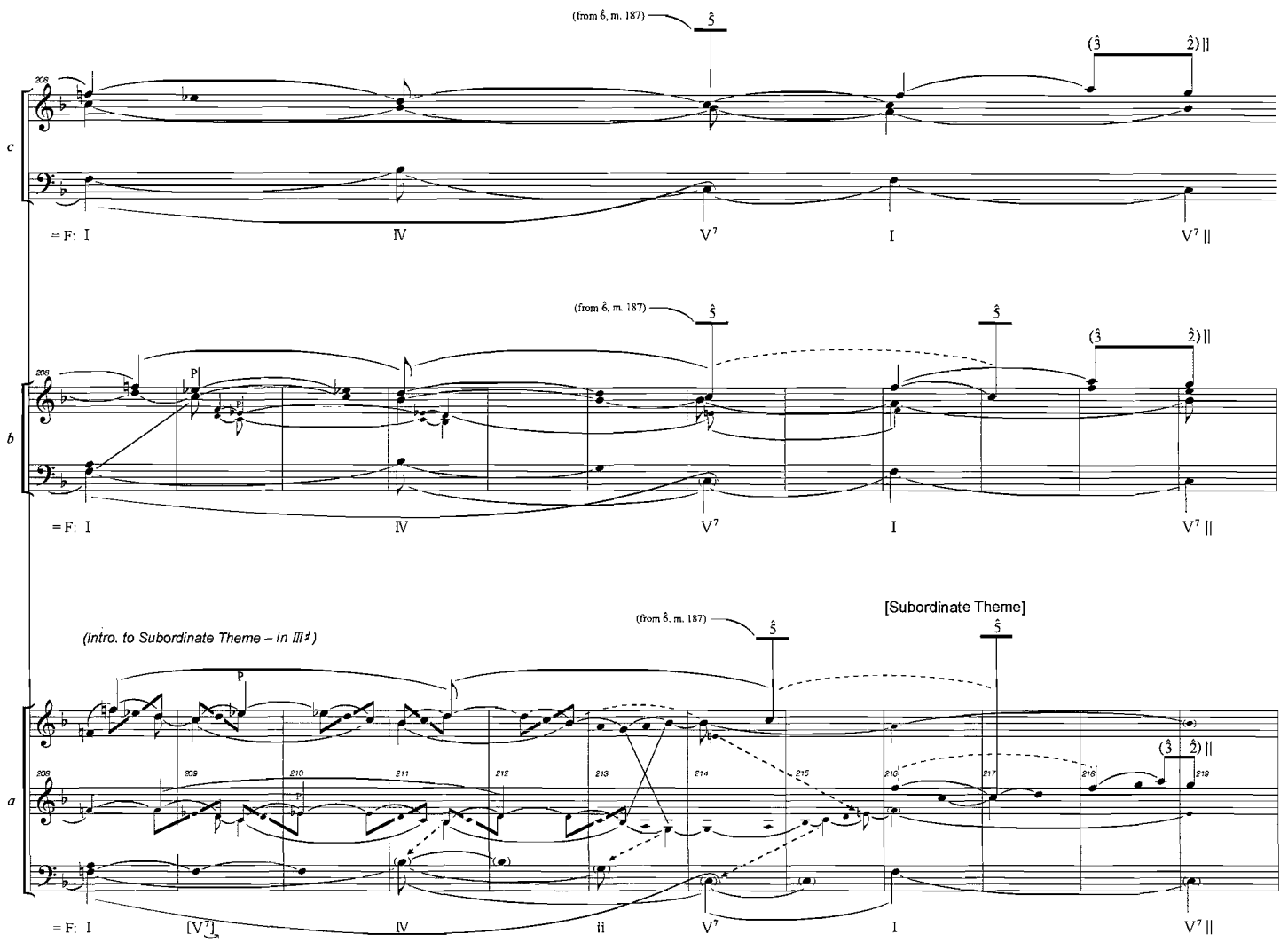

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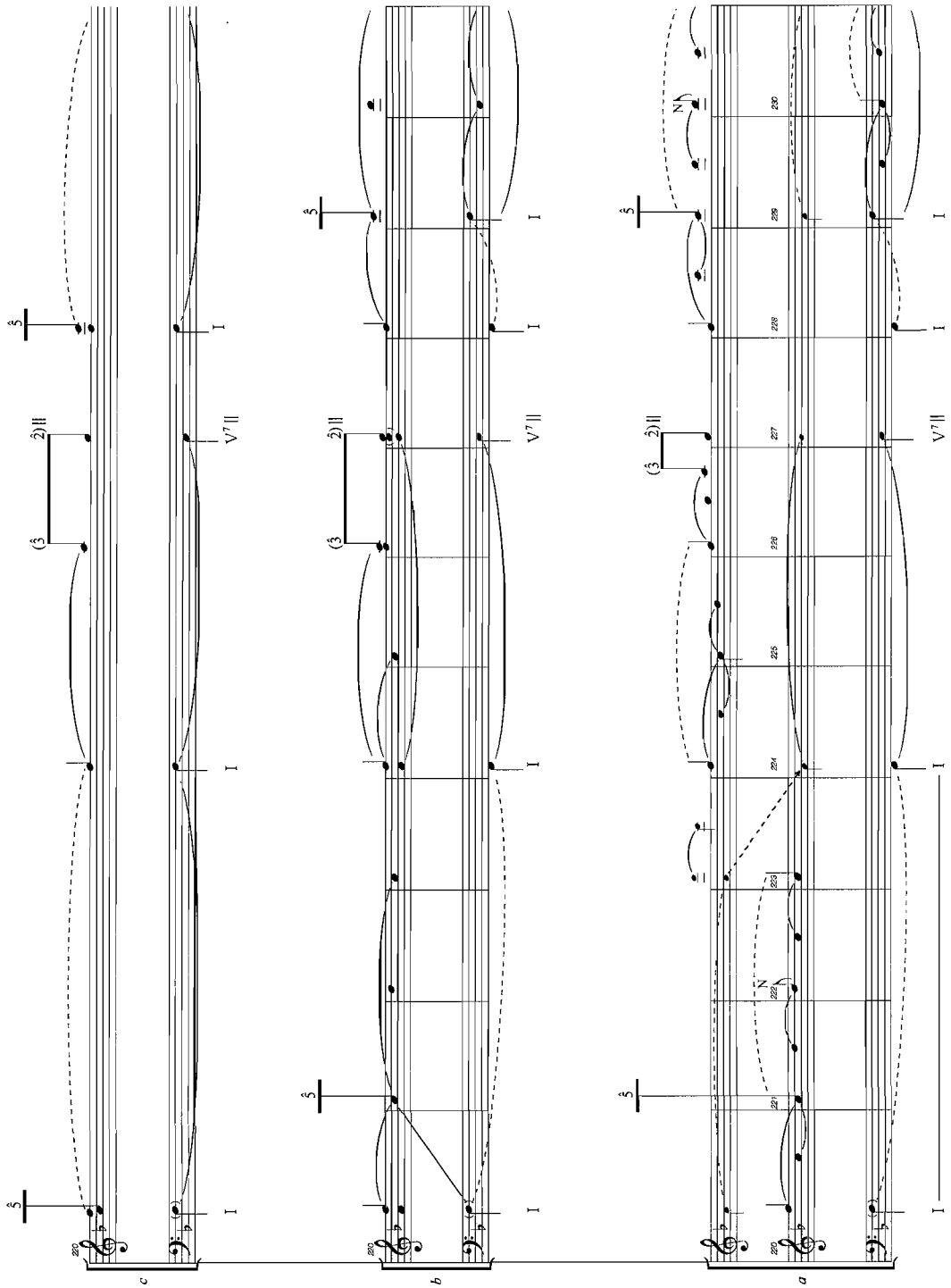

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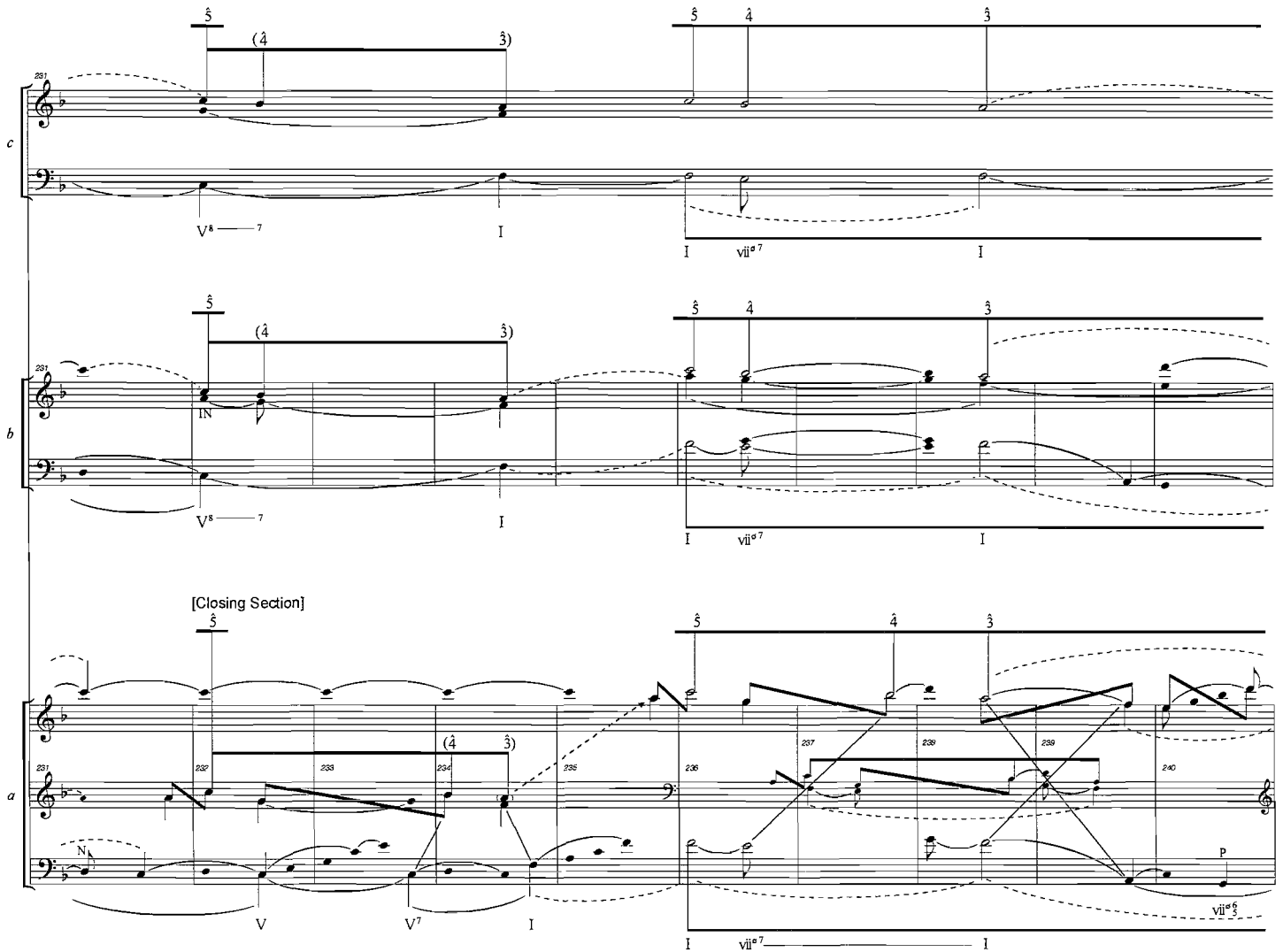

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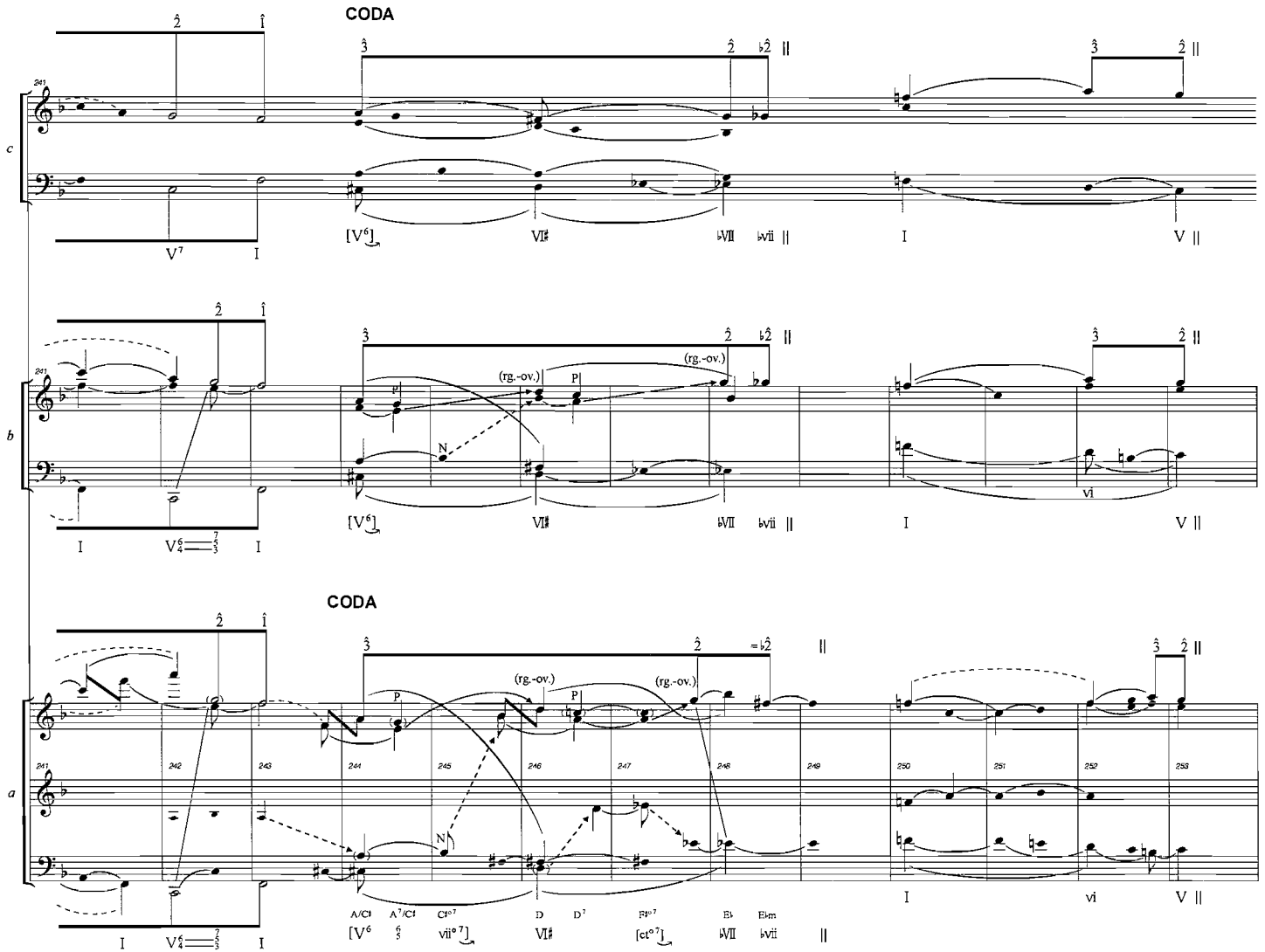

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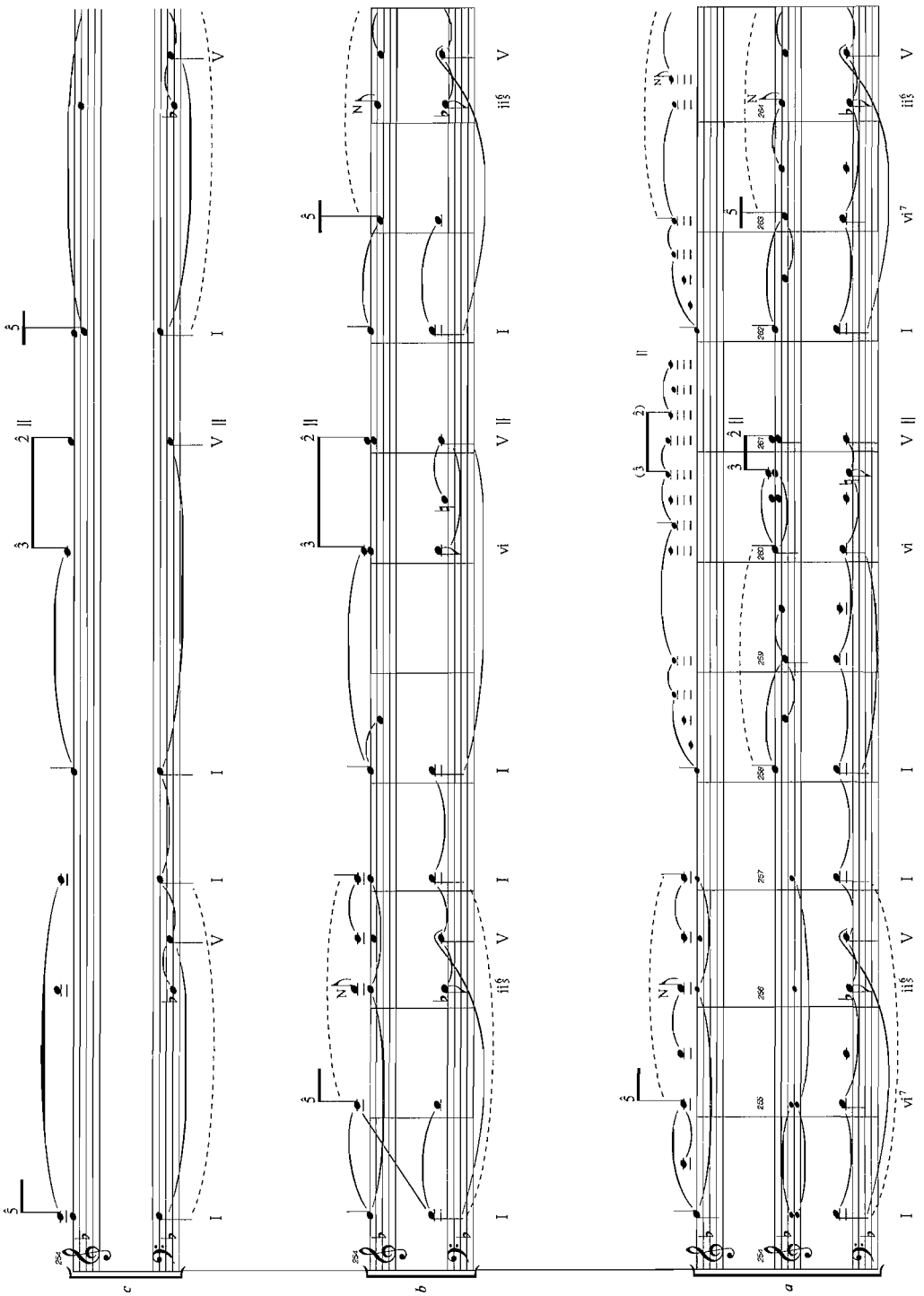

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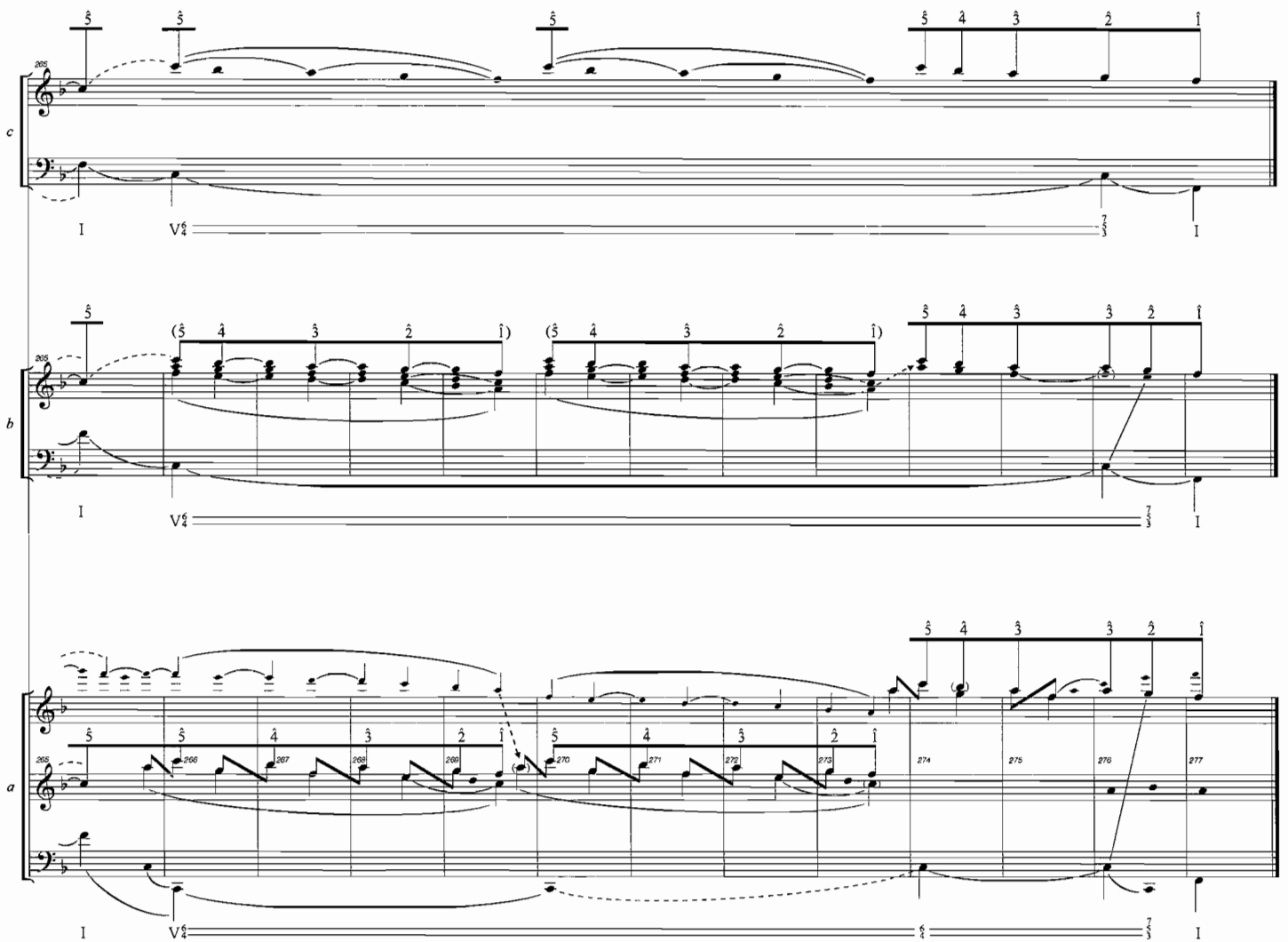
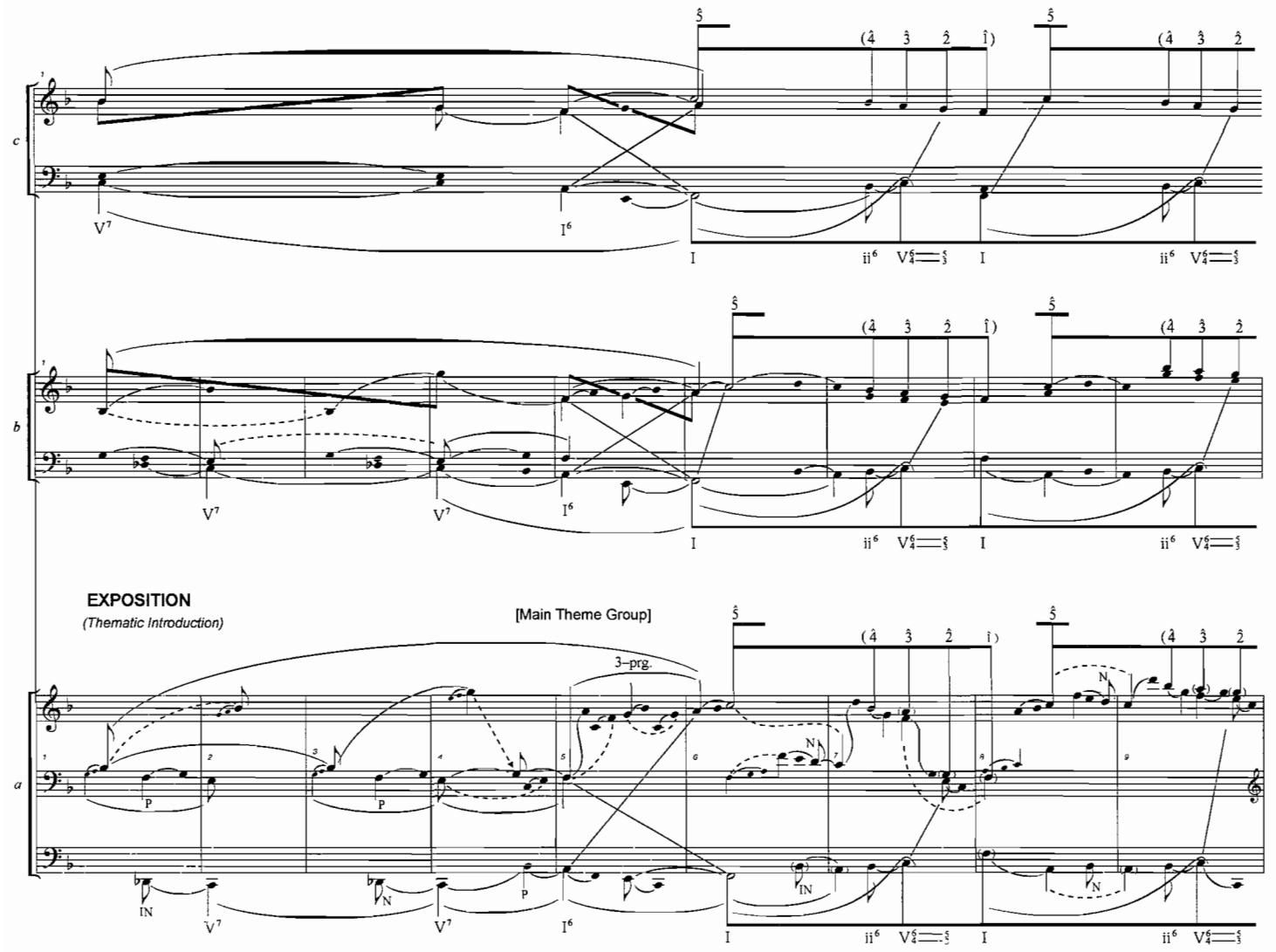


APPENDIX B

VOICE-LEADING SKETCH, OP. 135, I

Appendix B. Voice-Leading Sketch, Op. 135, i



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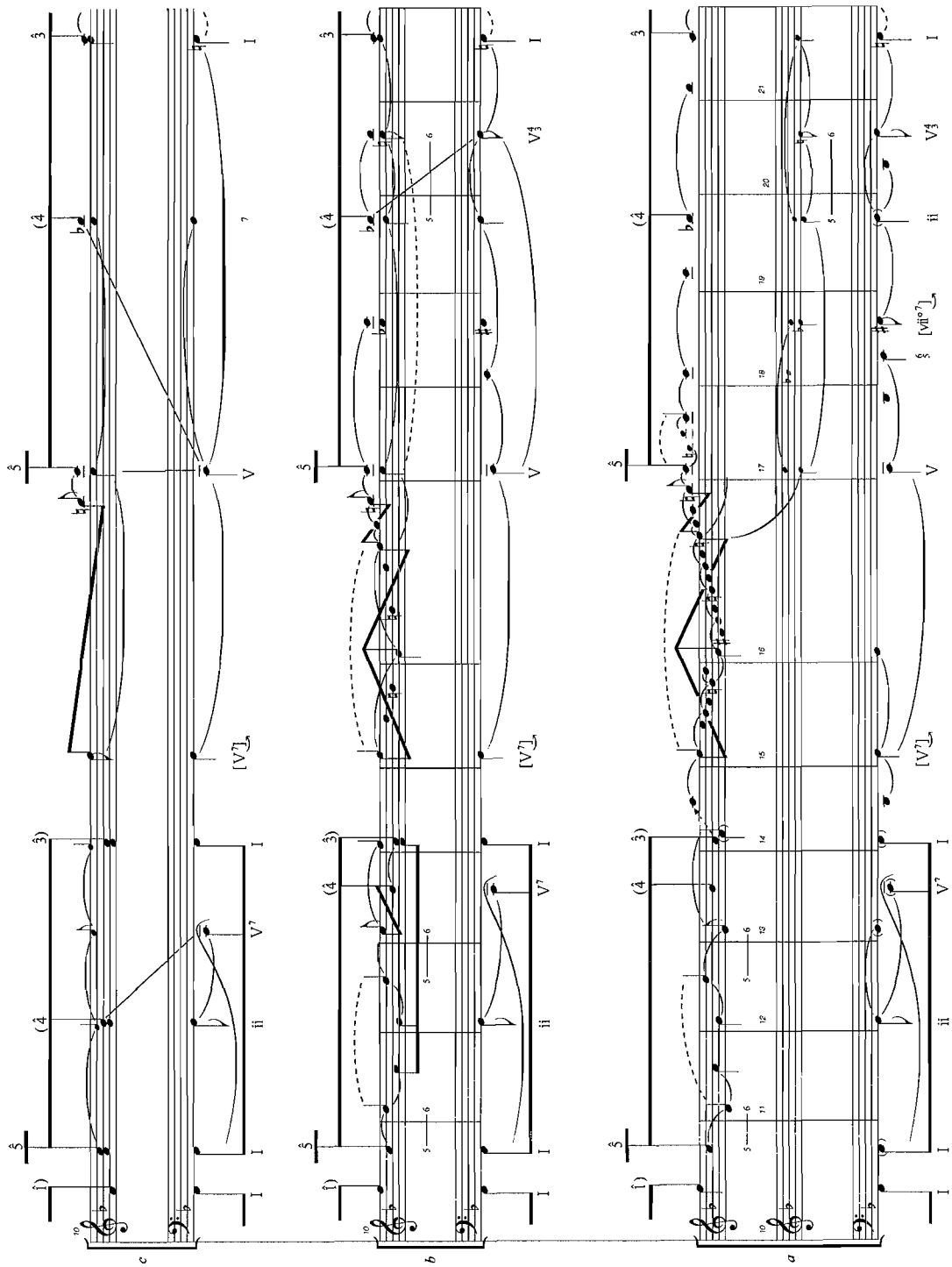

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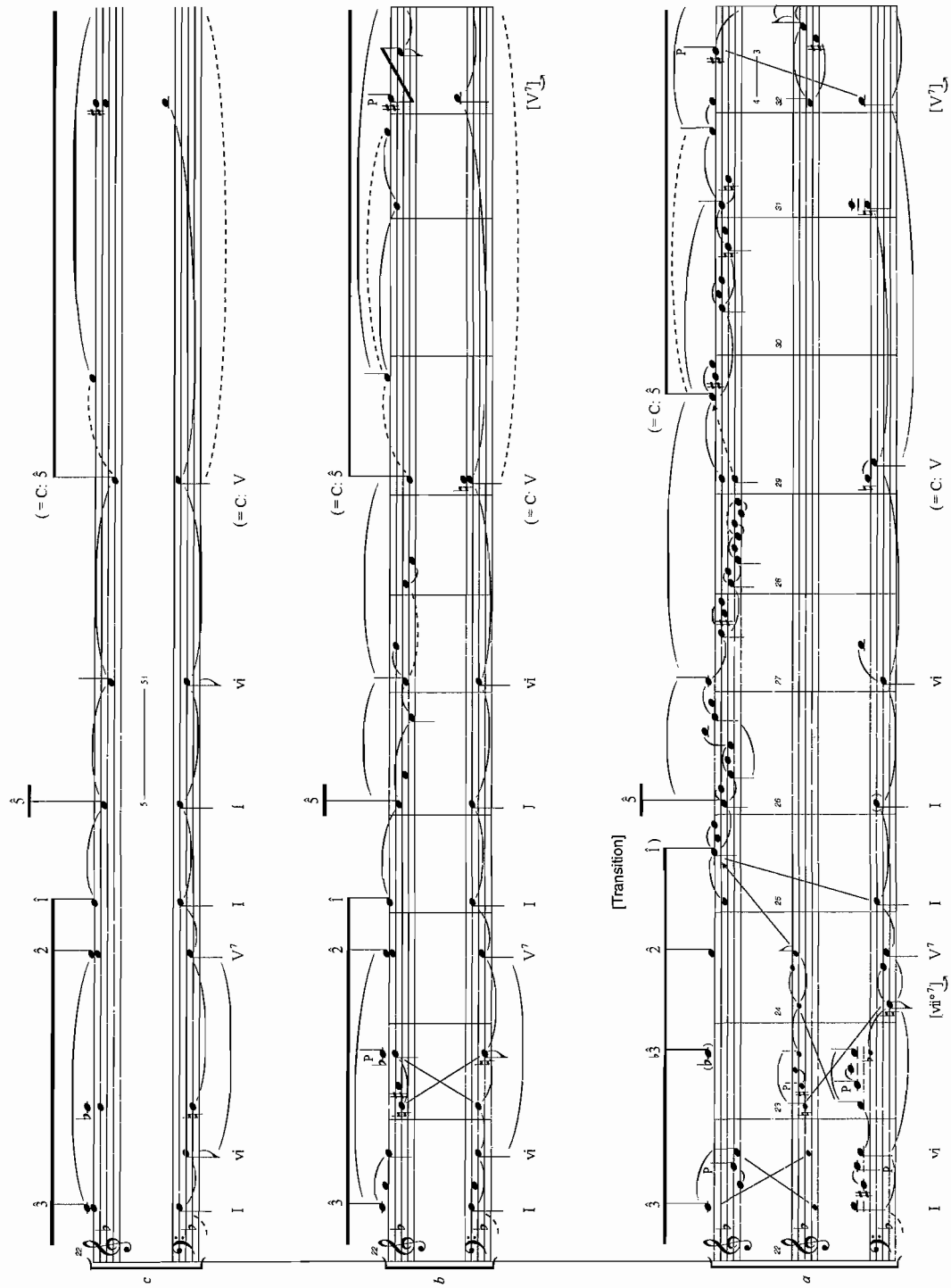

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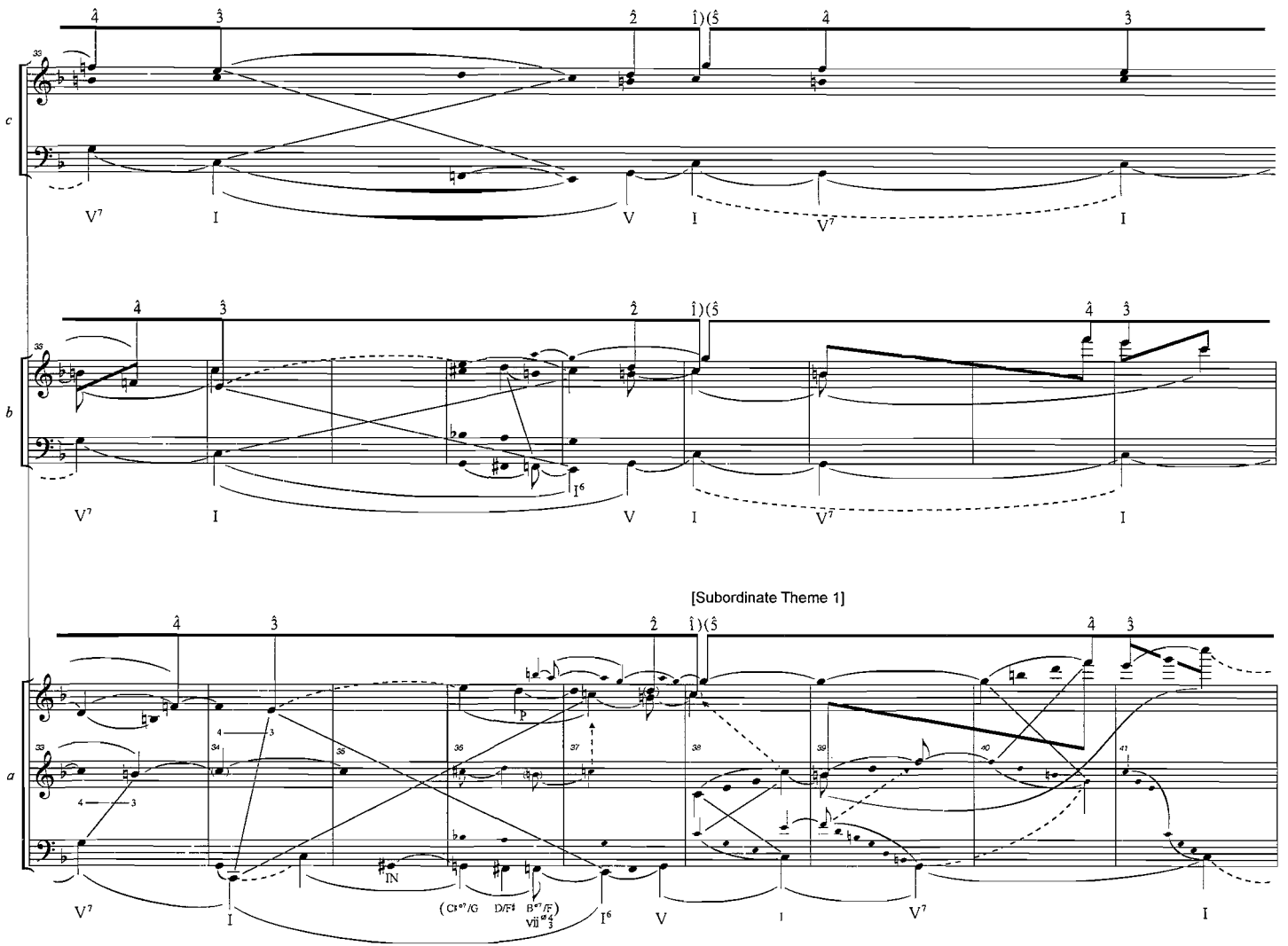

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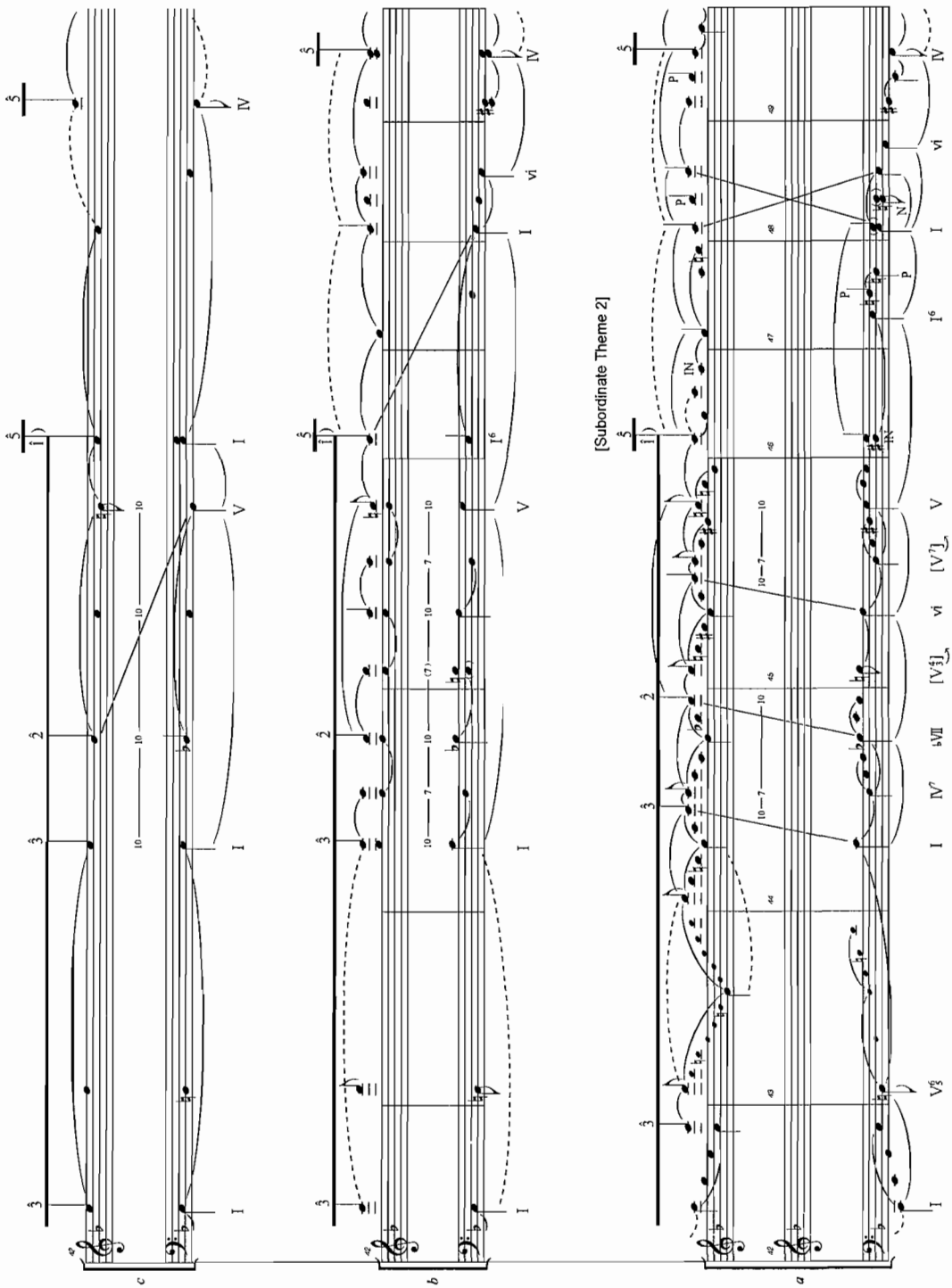

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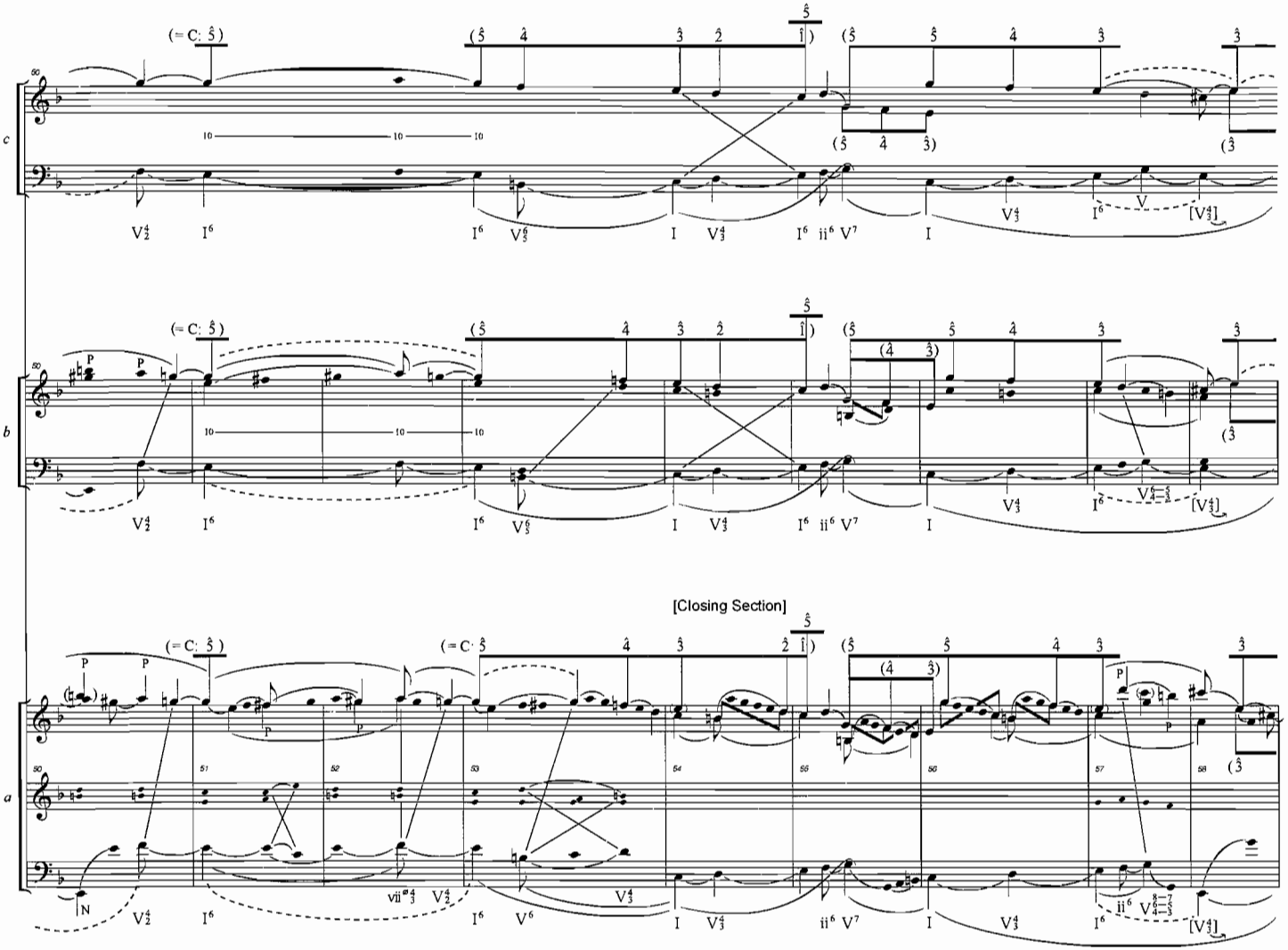

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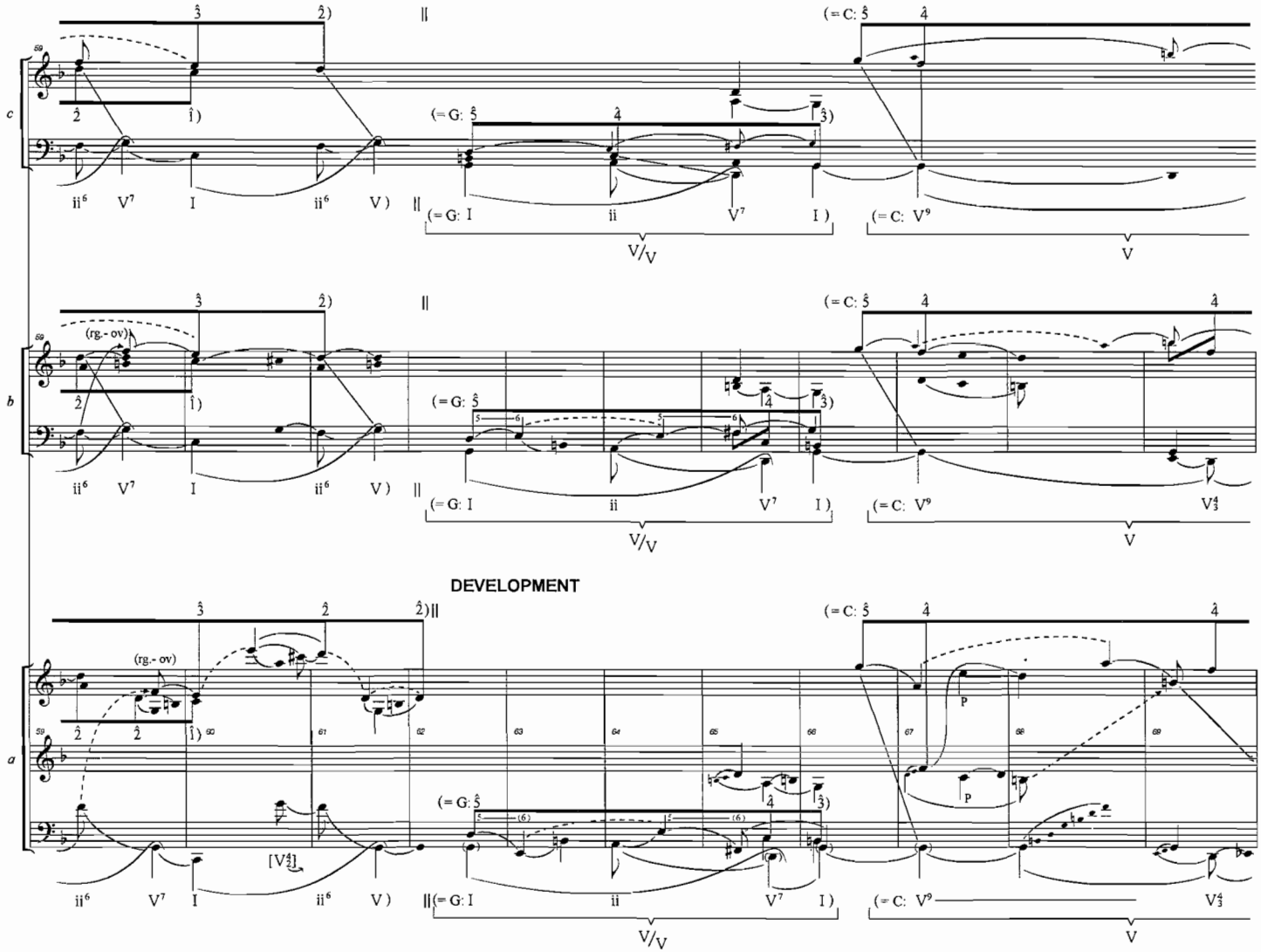

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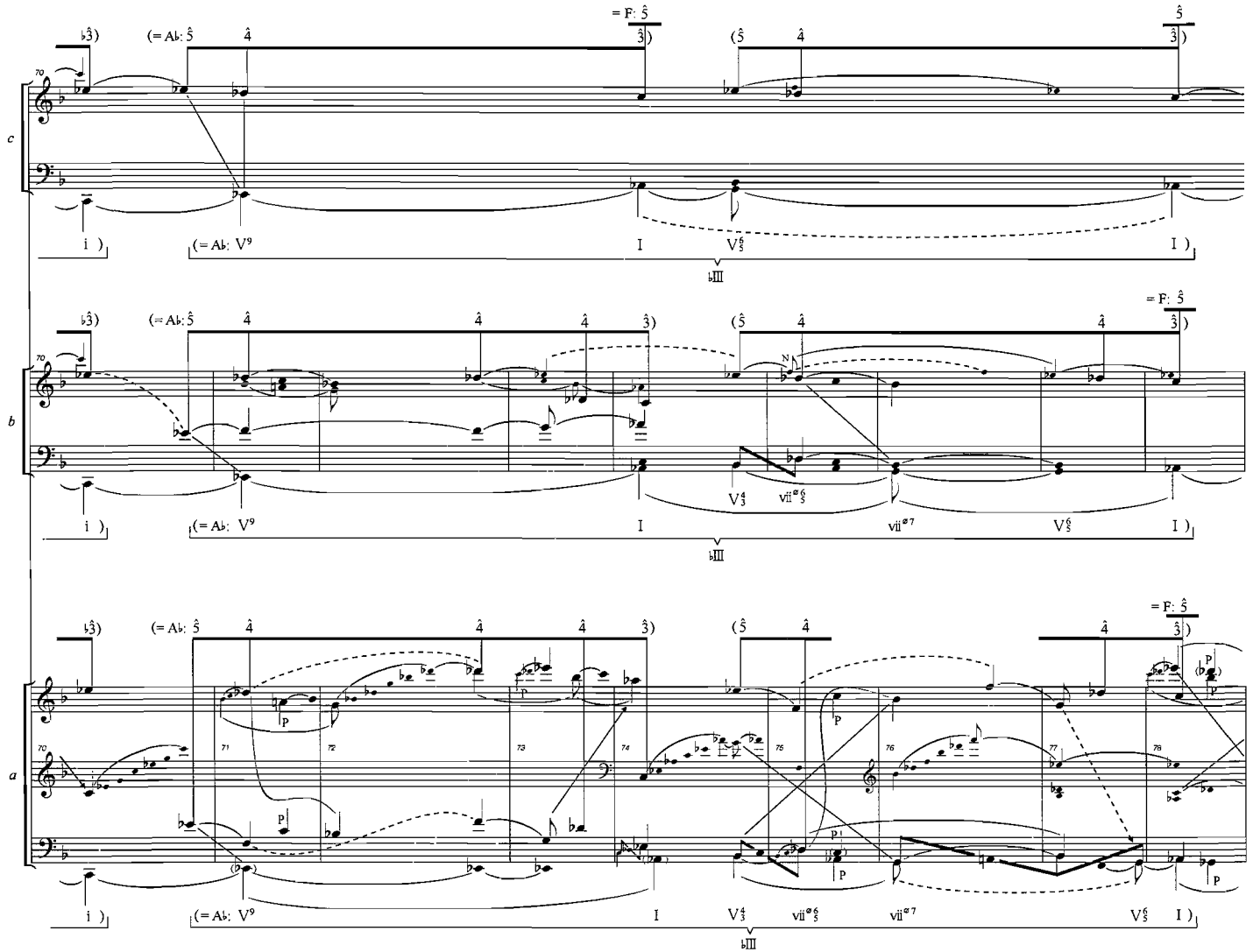

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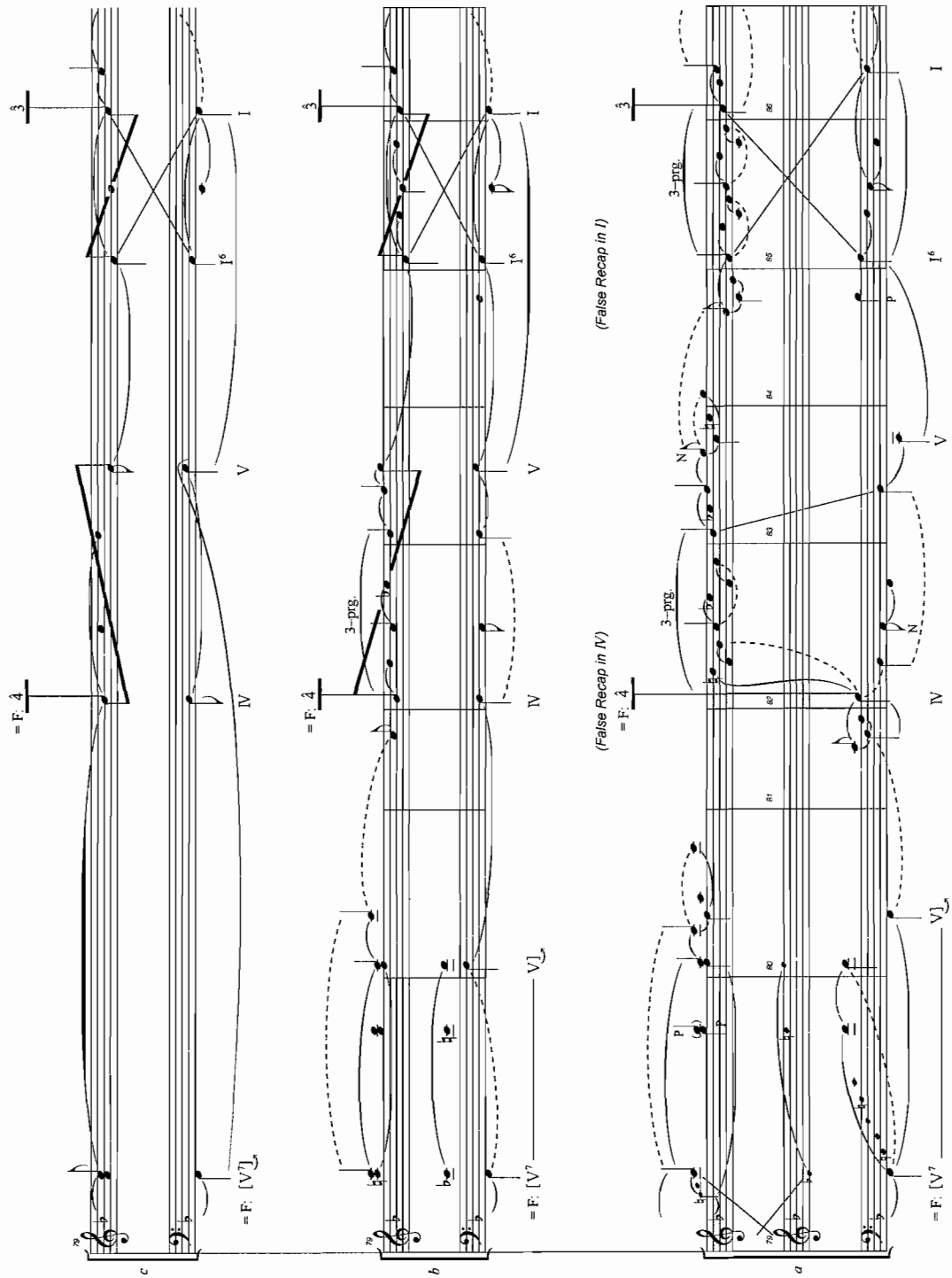

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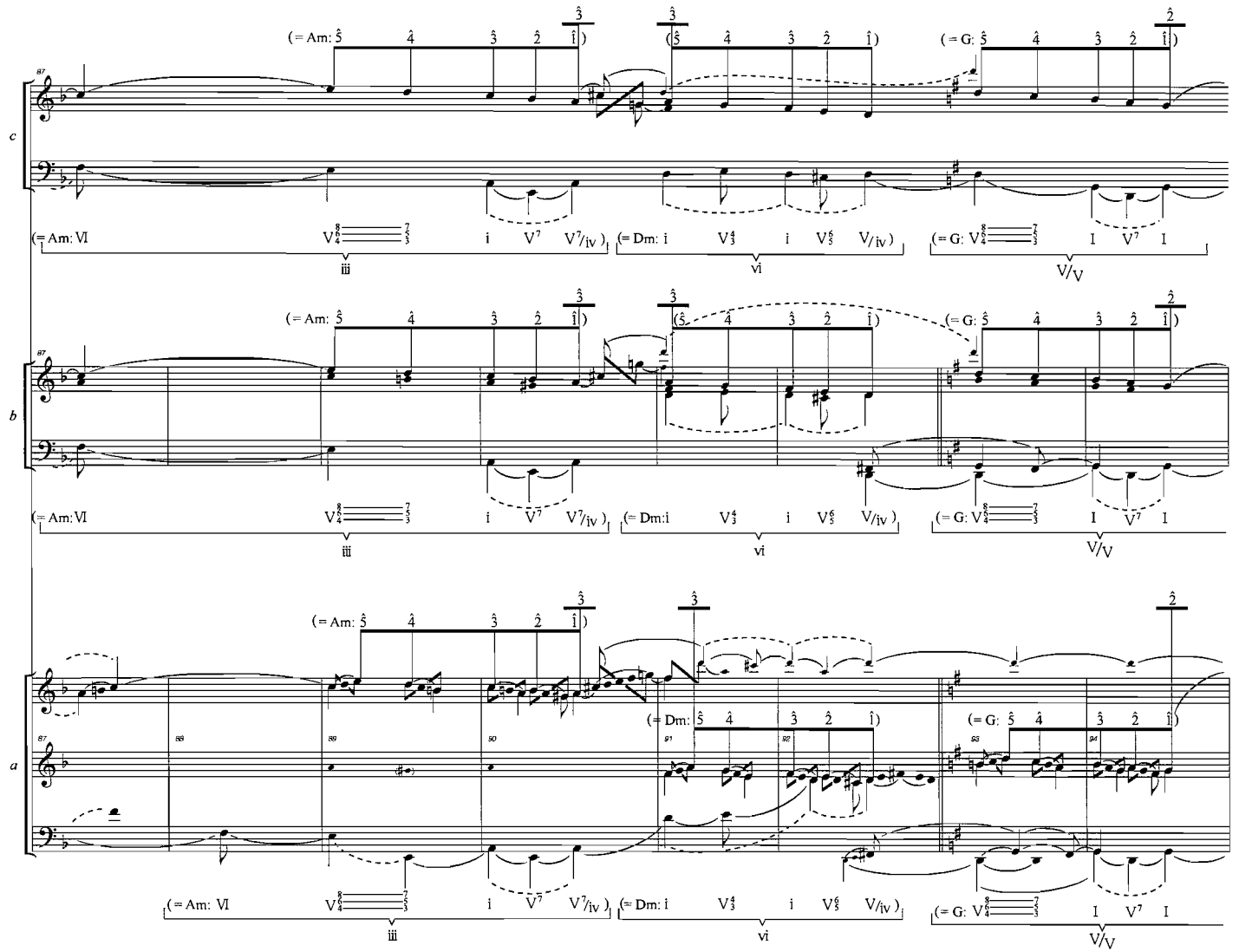
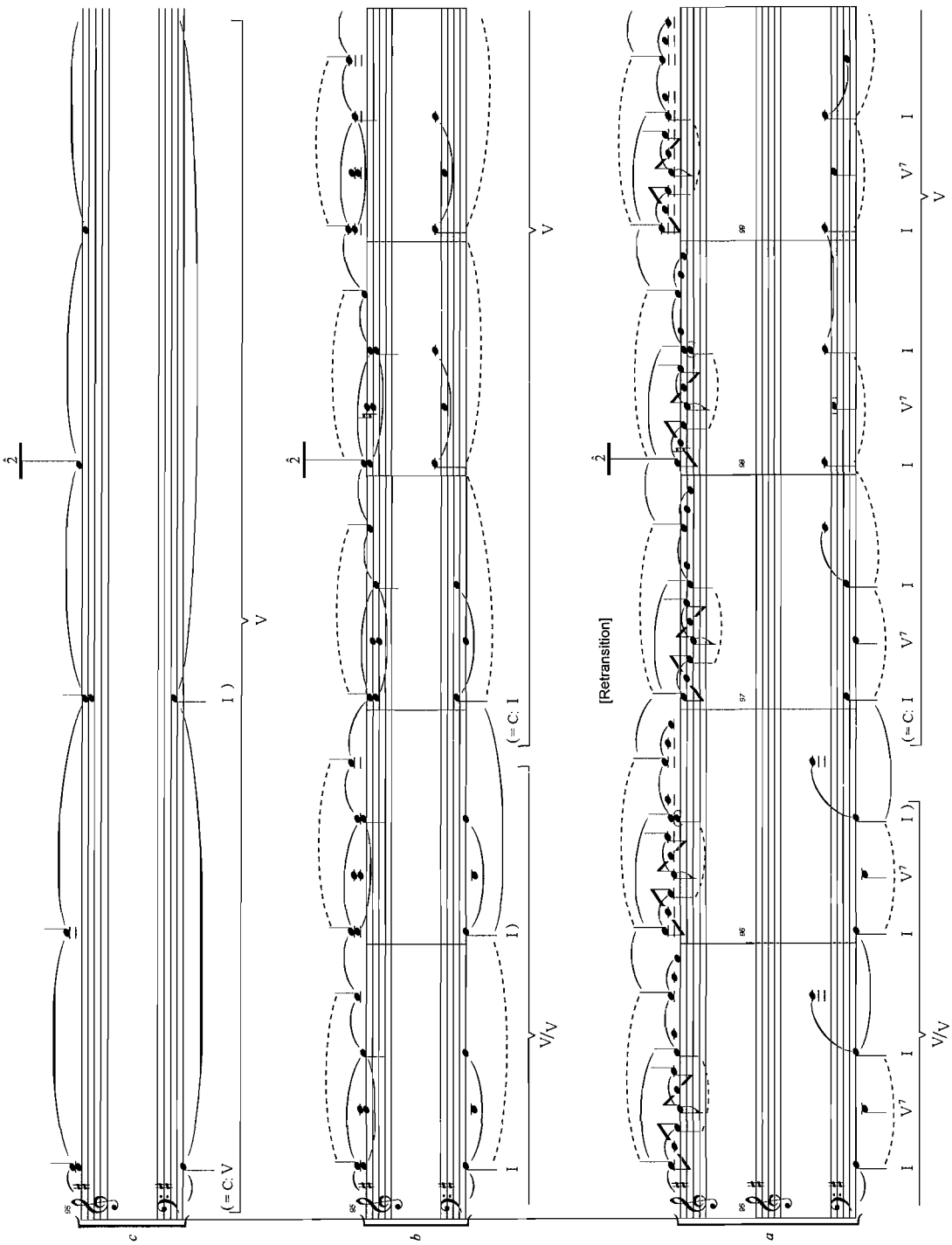


(Appendix B. Op. 135, i, continued)



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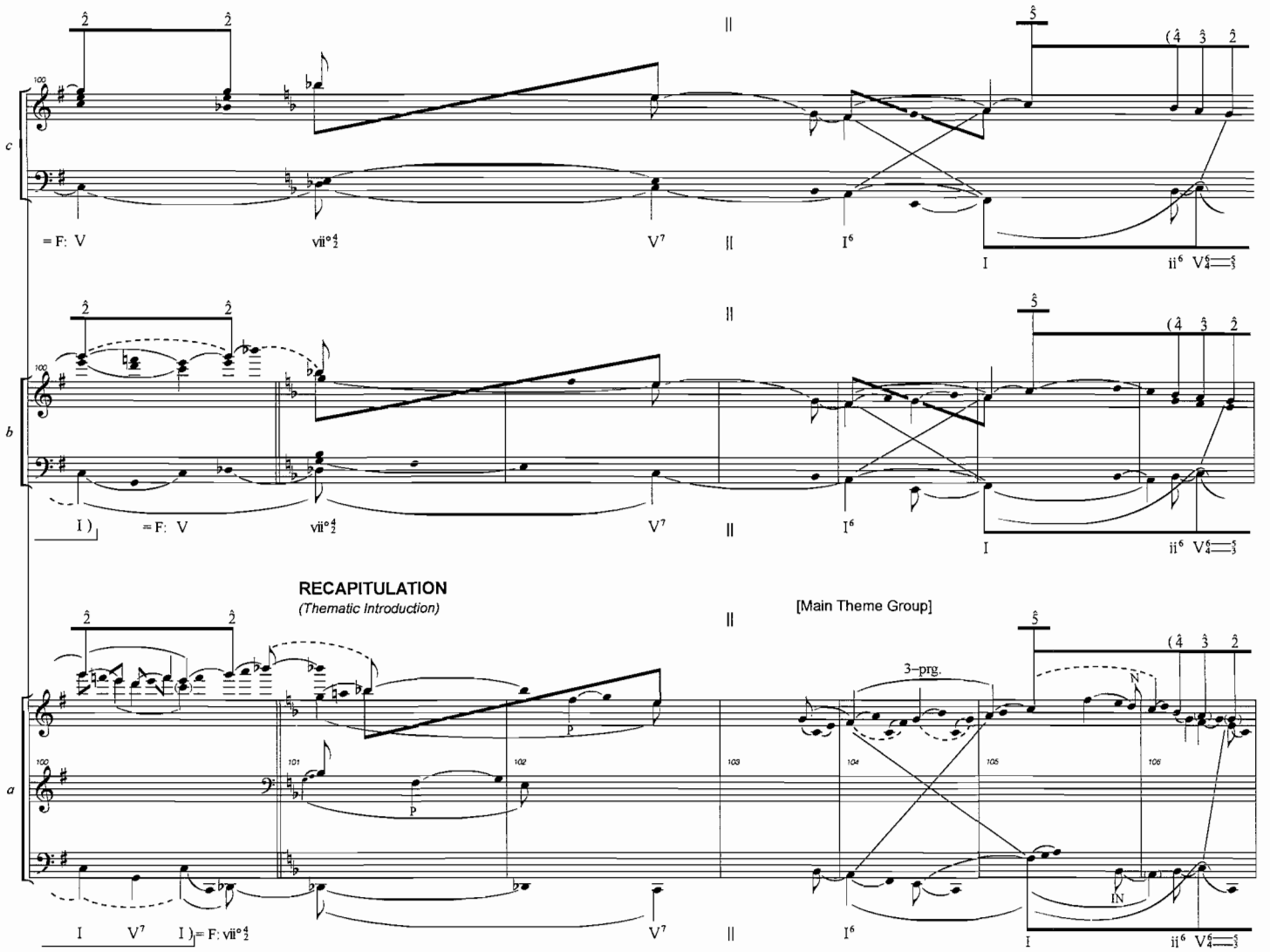

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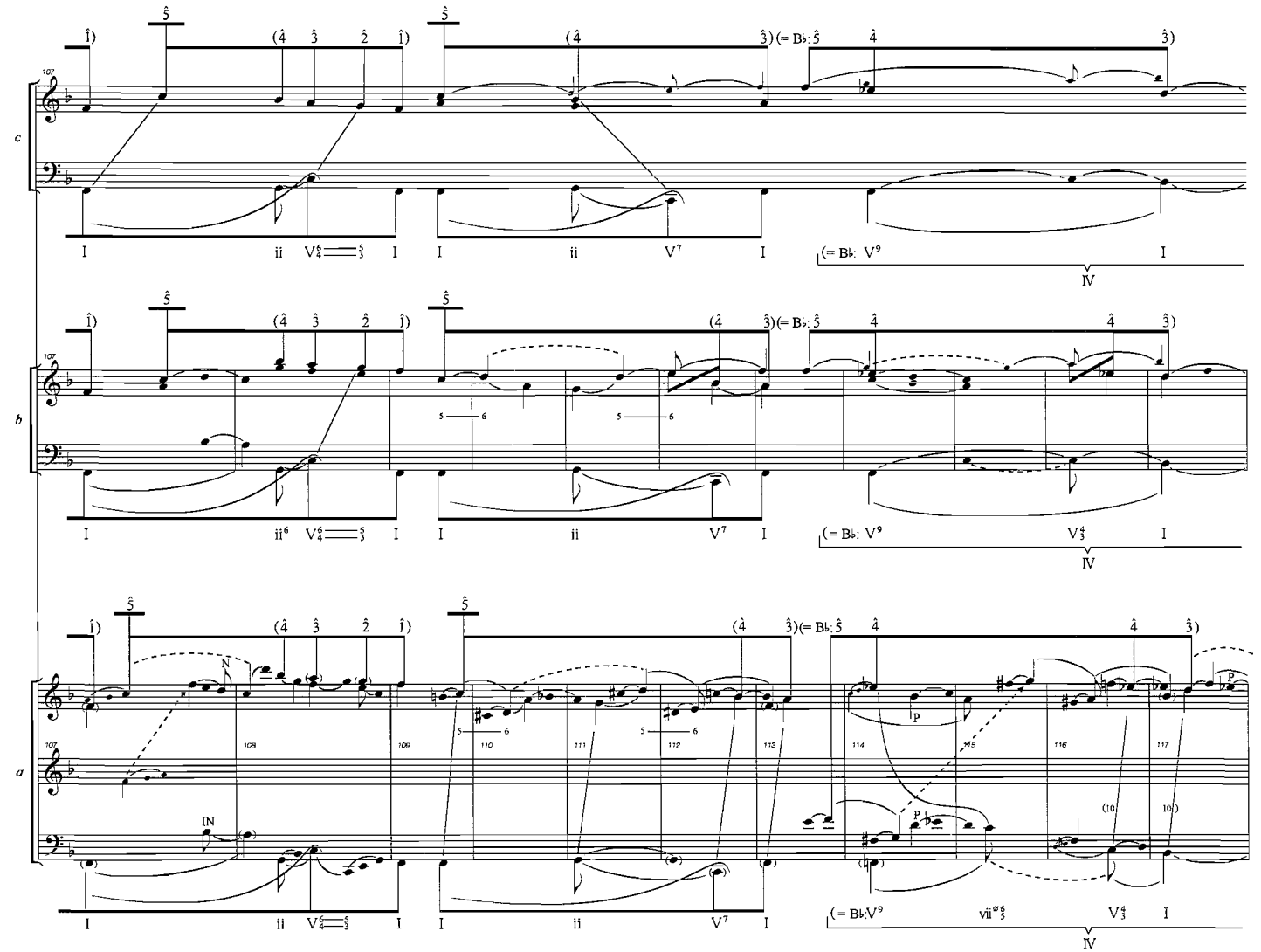

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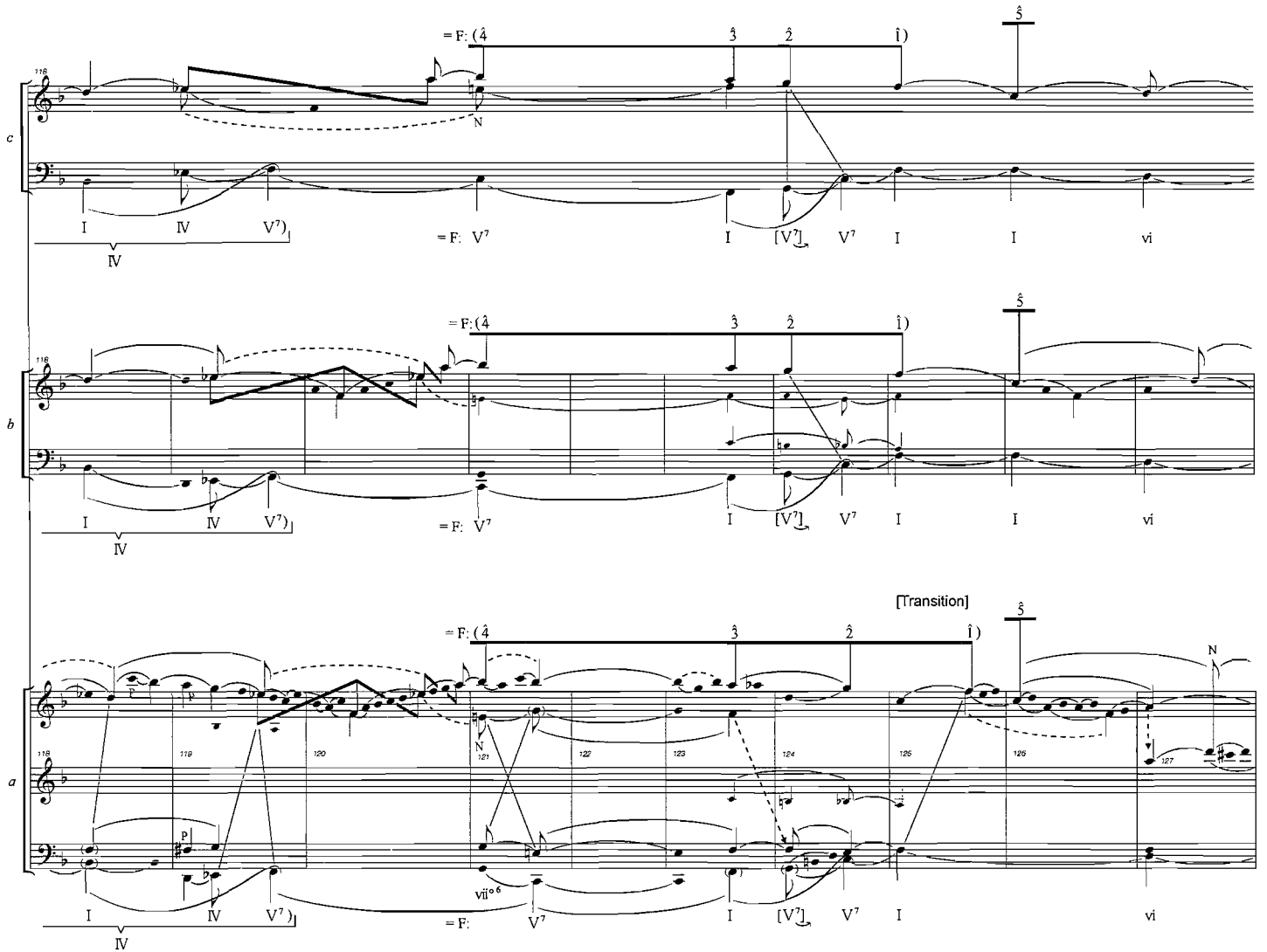

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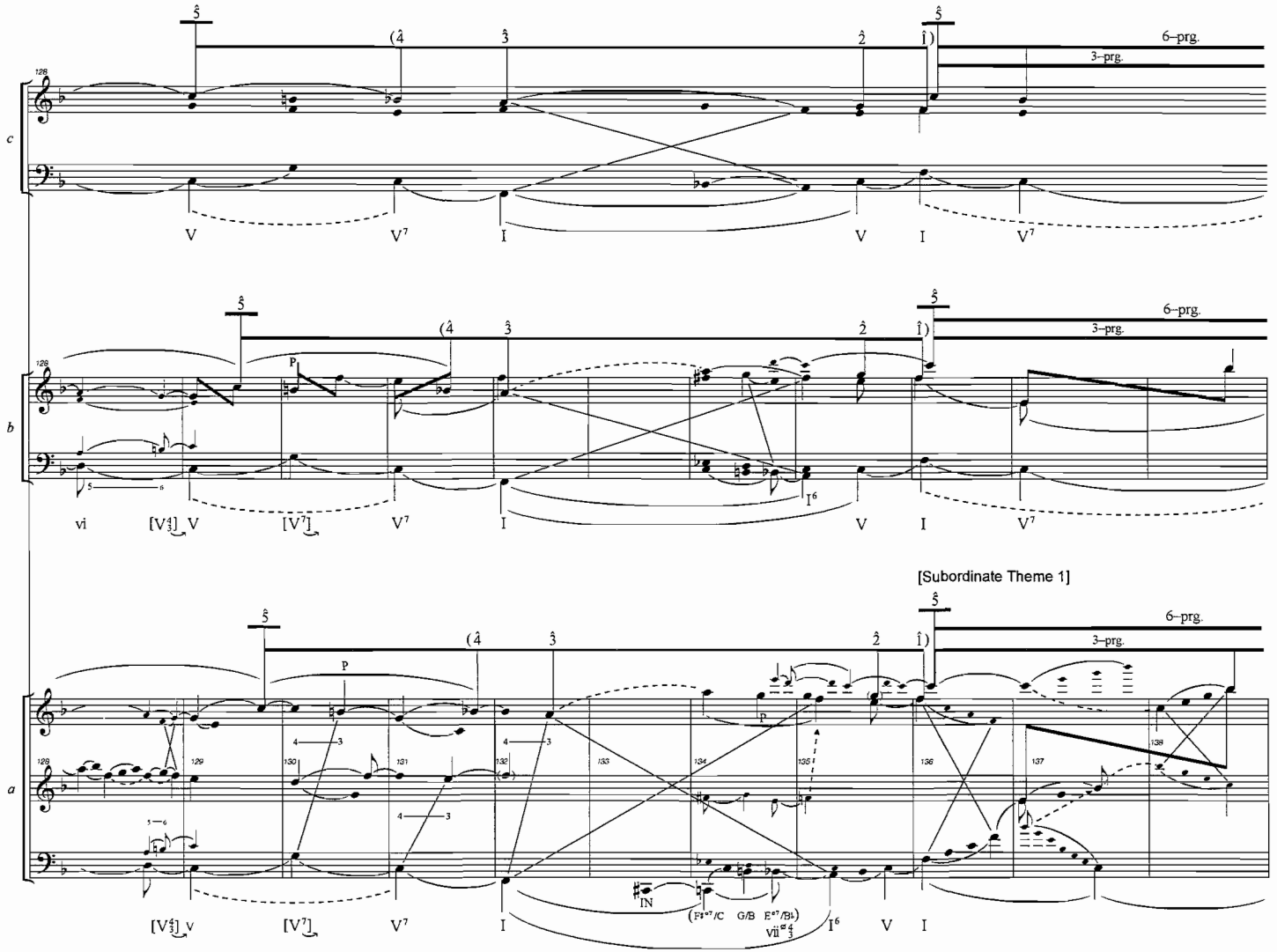

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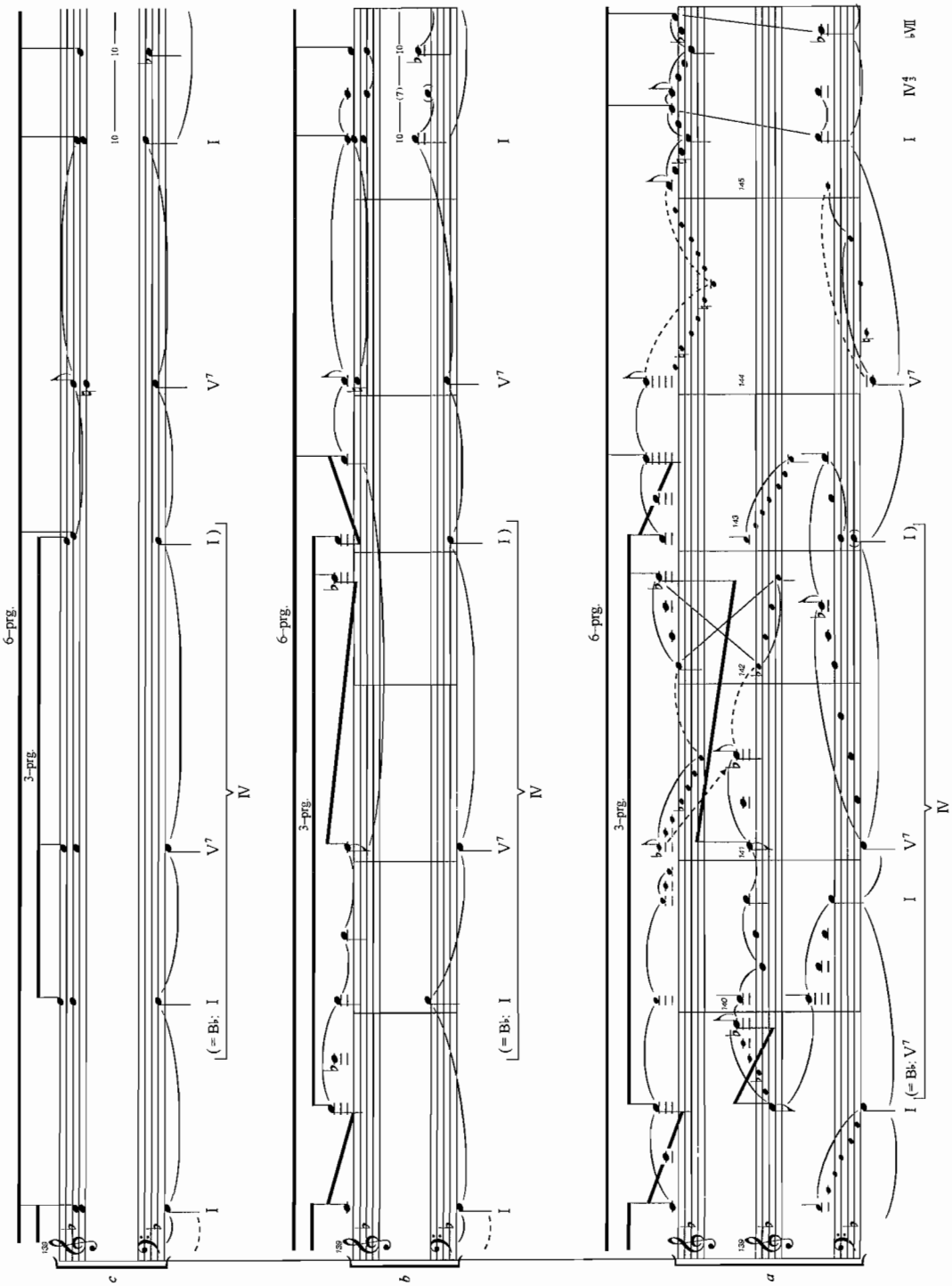
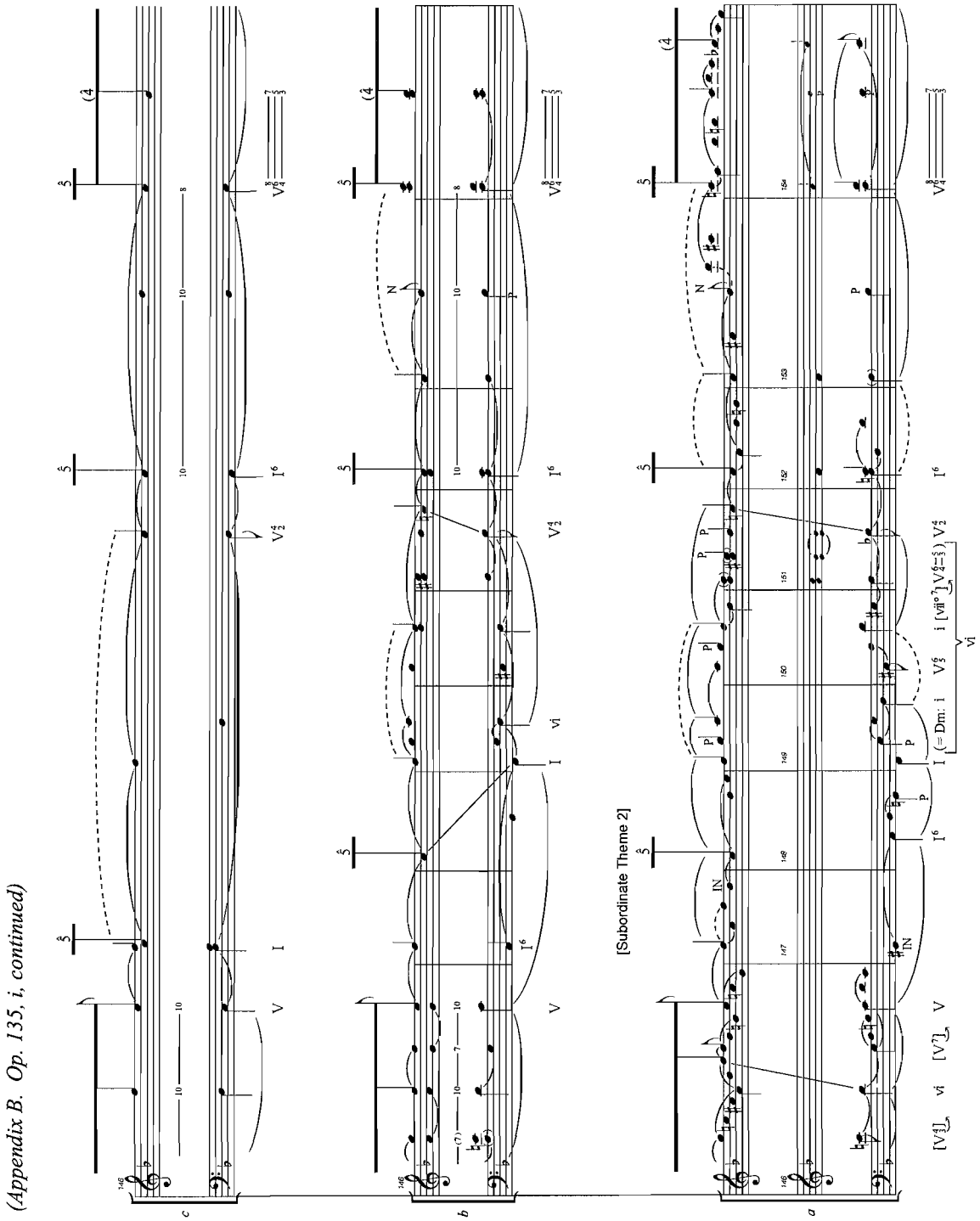


(Appendix B. Op. 135, i, continued)



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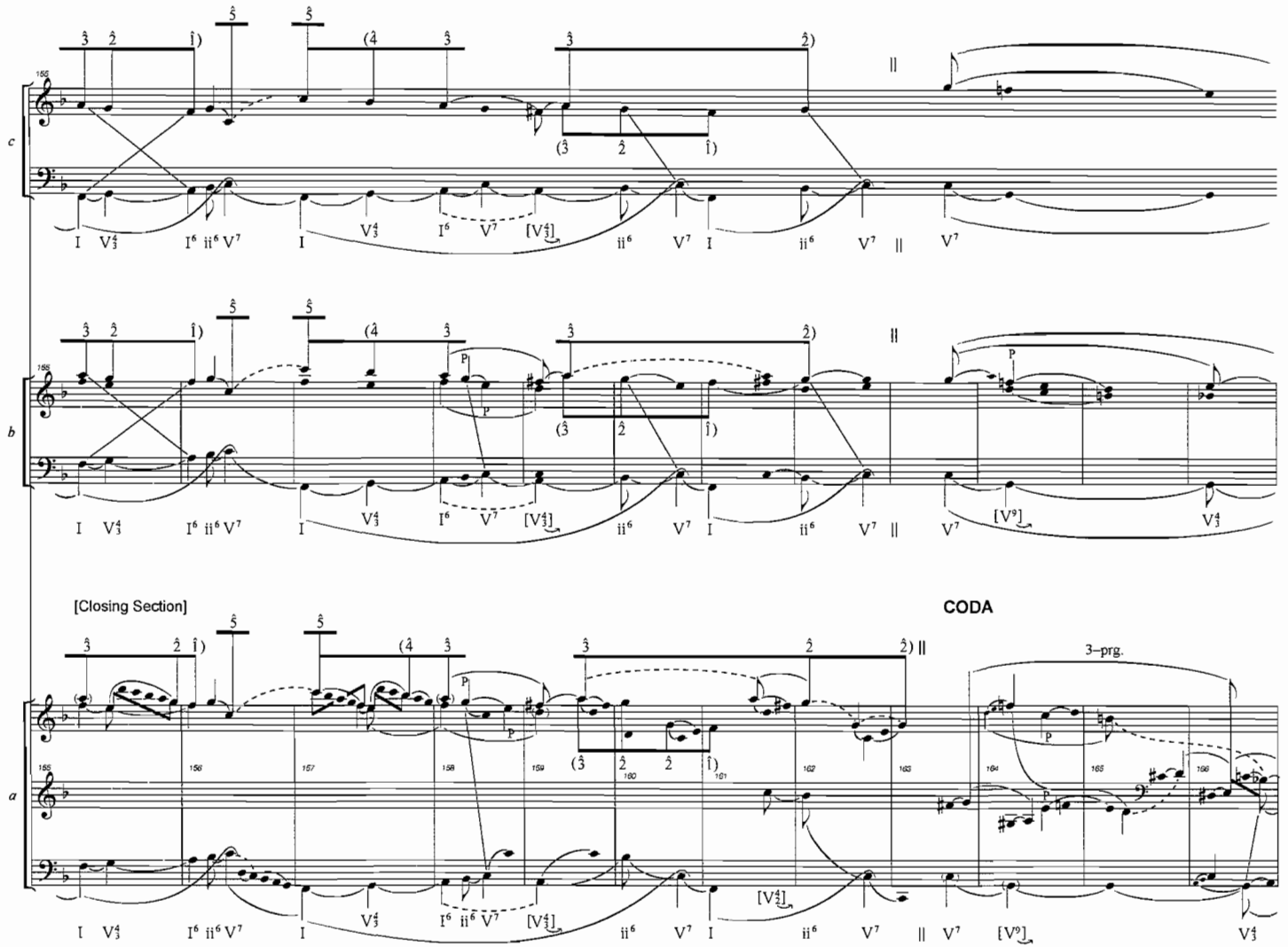
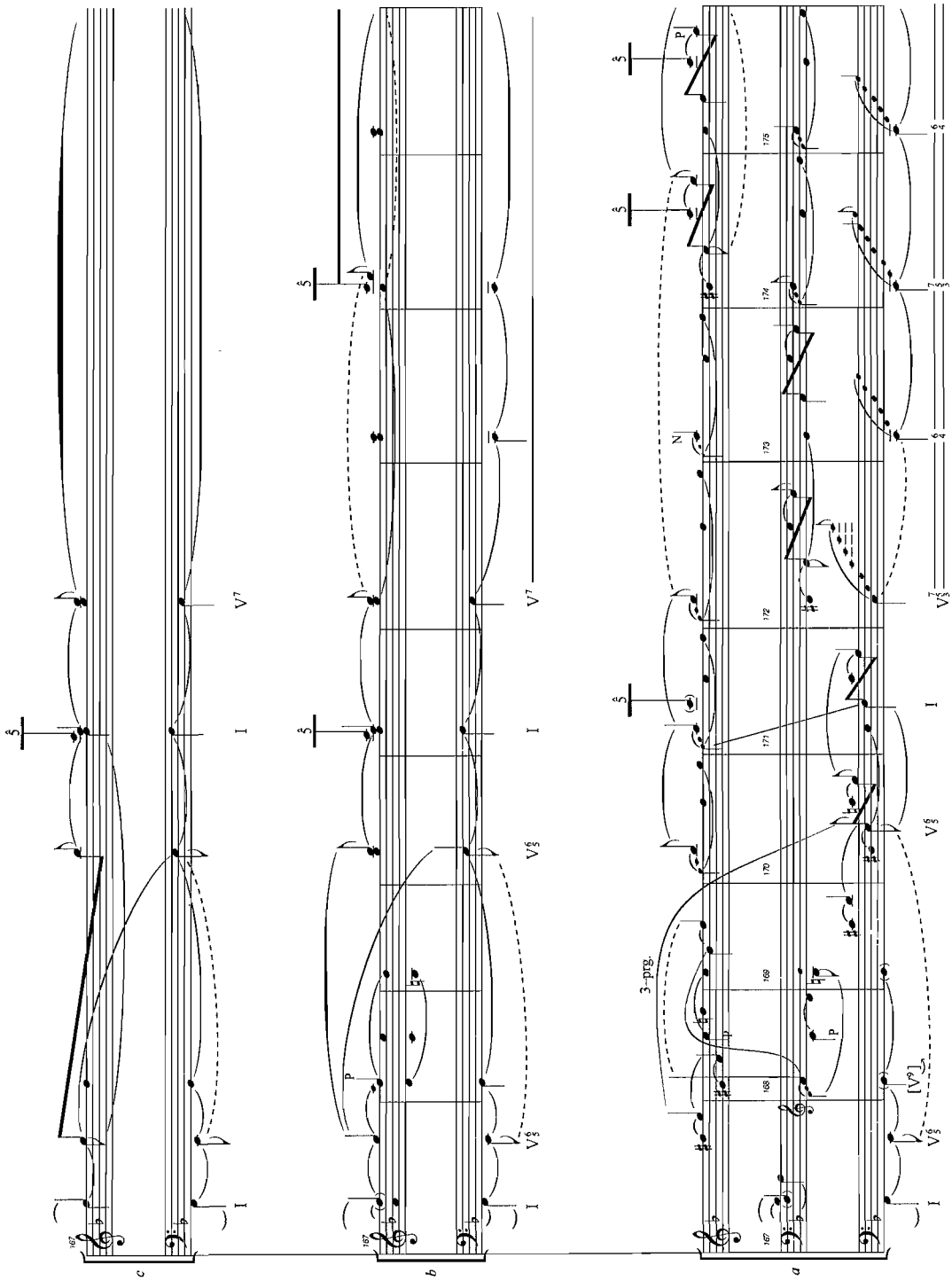


(Appendix B. Op. 135, i, continued)



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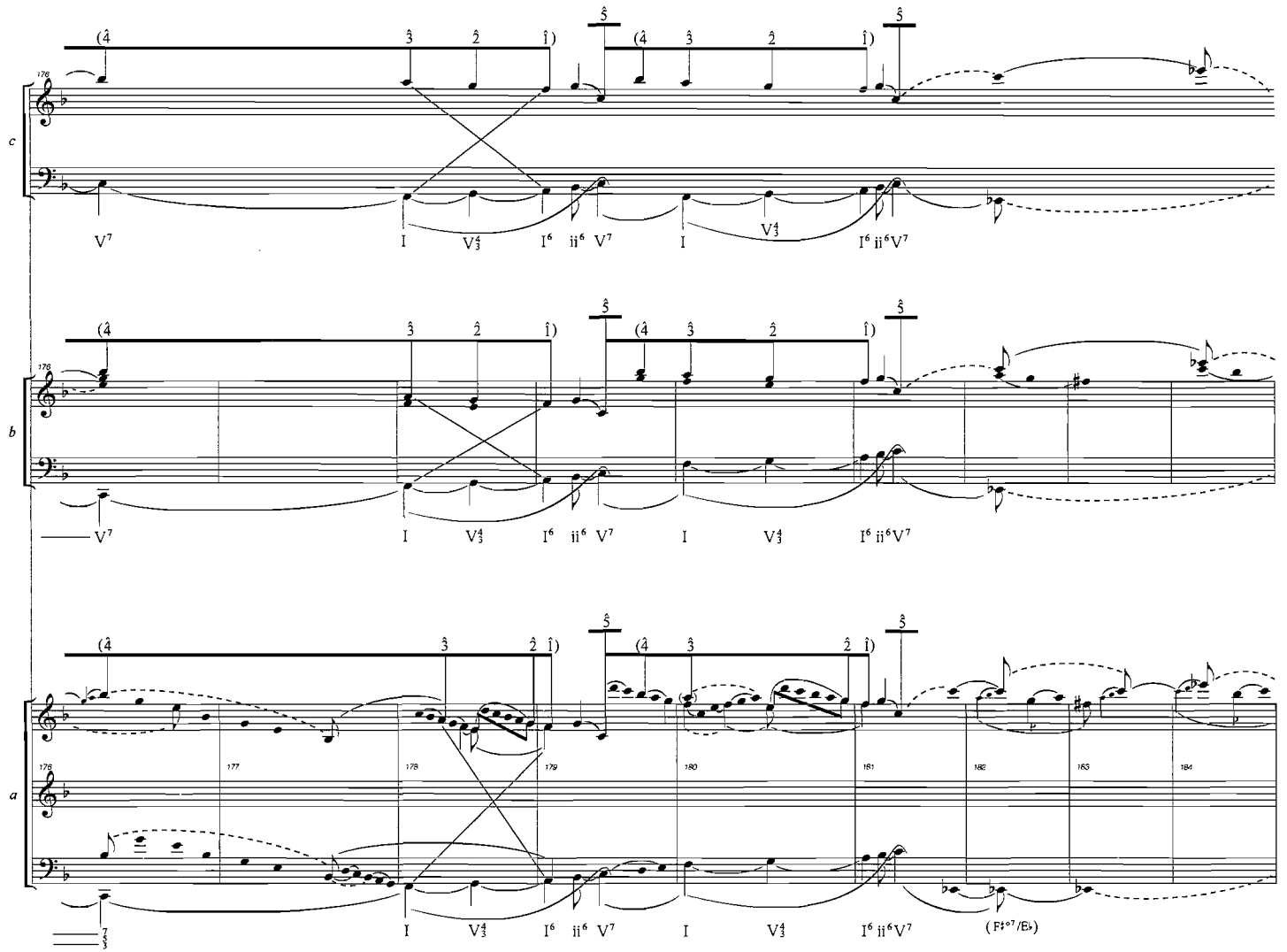

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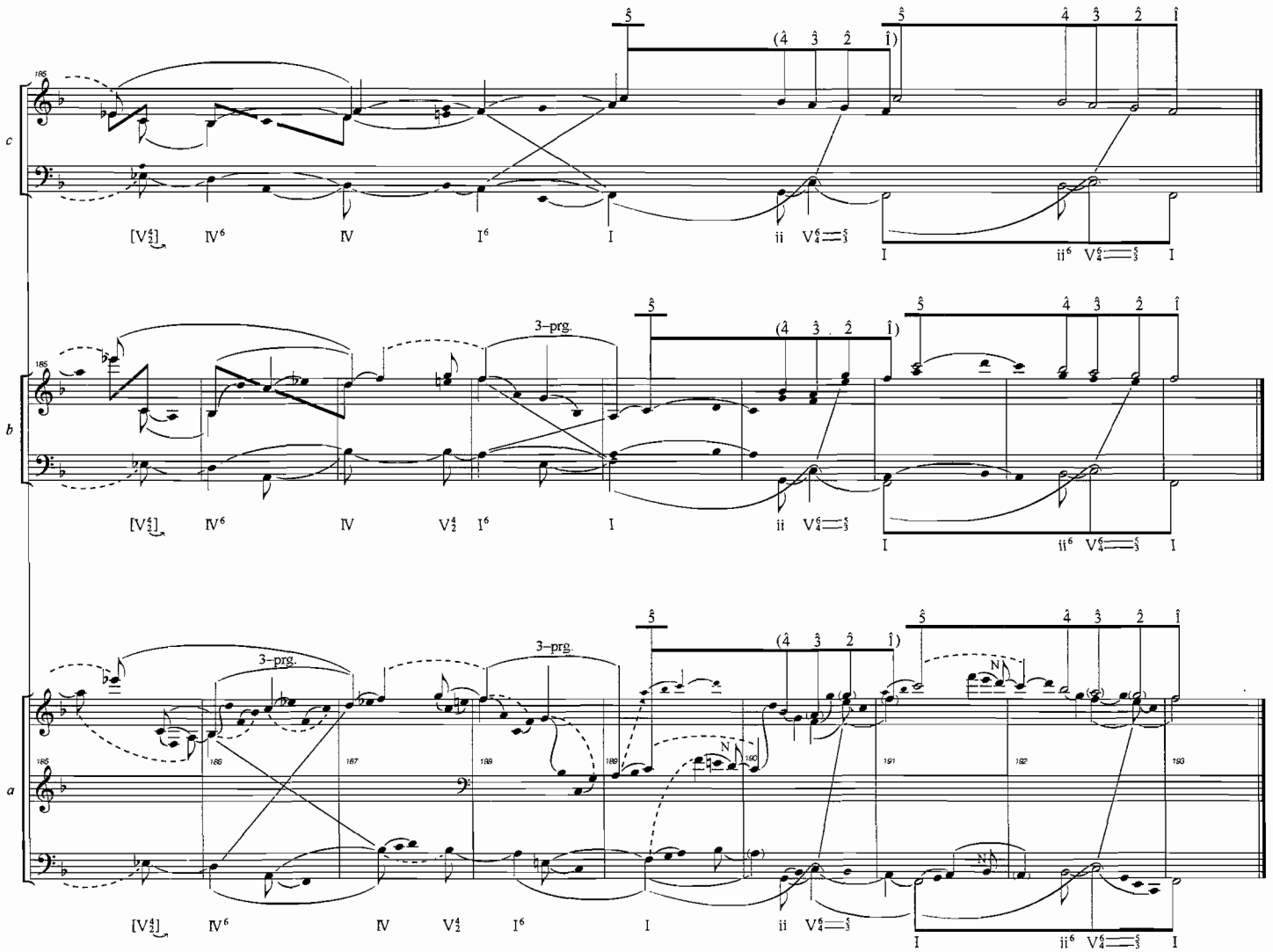
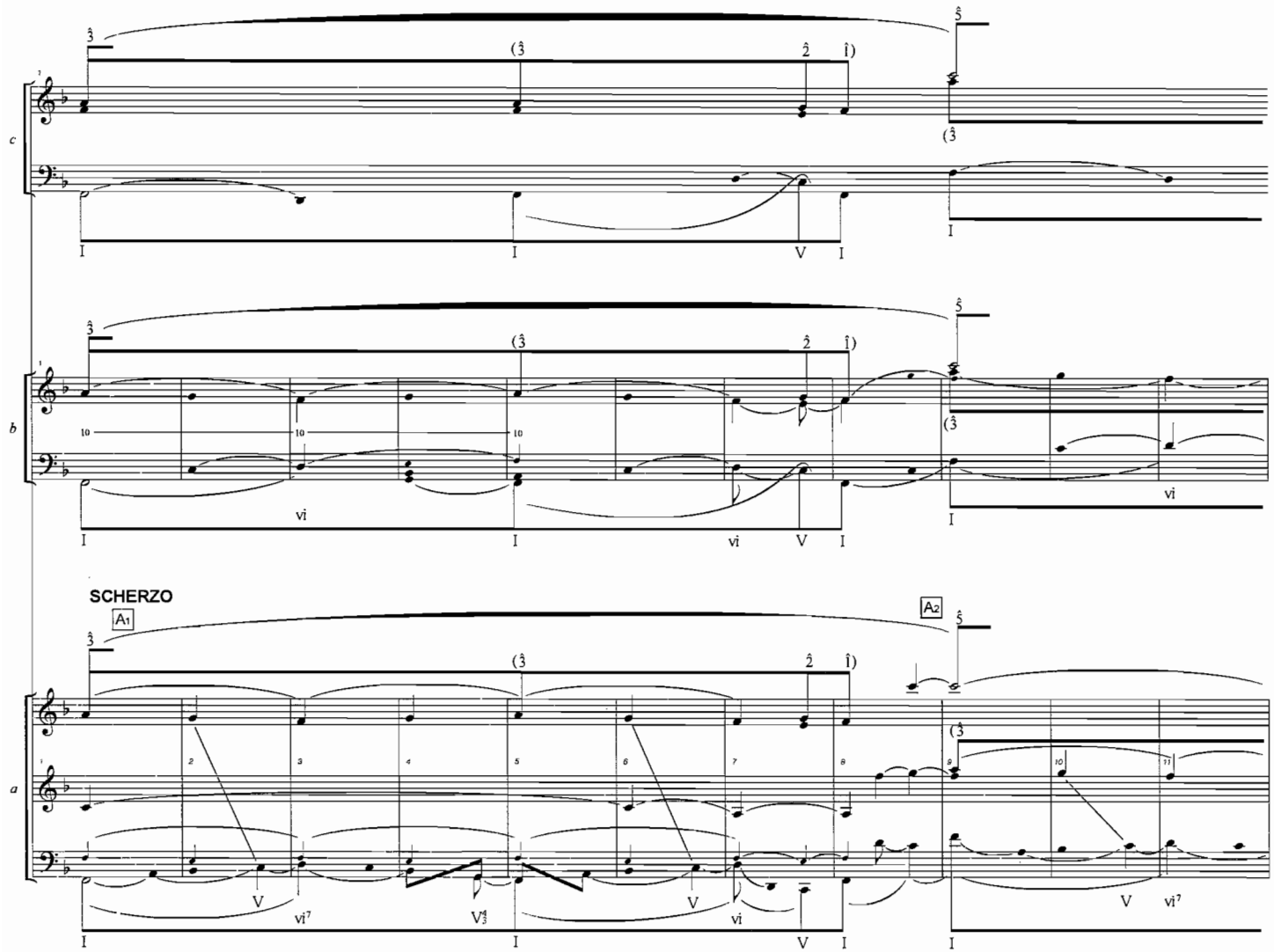


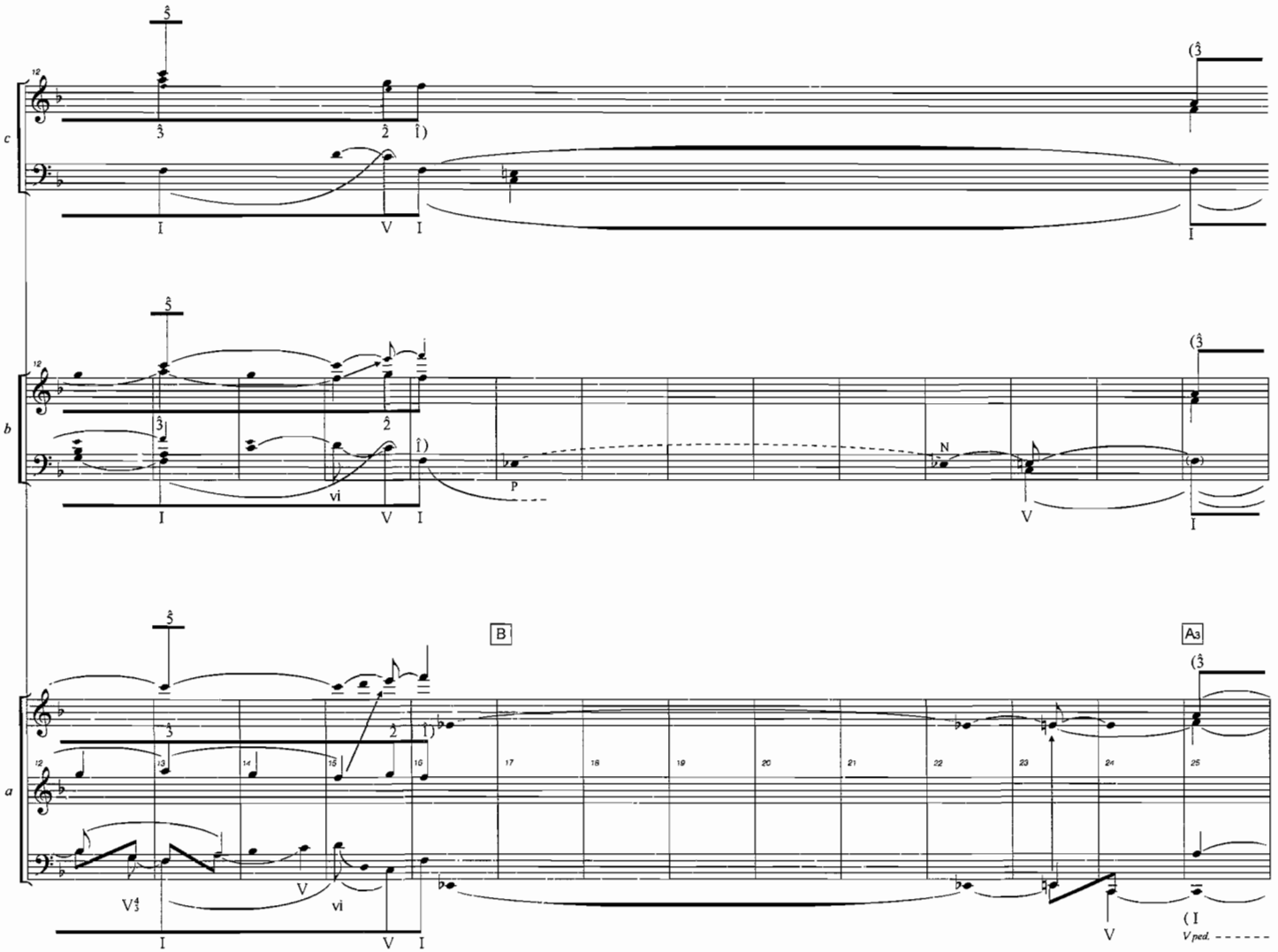
APPENDIX C

VOICE-LEADING SKETCH, OP. 135, II

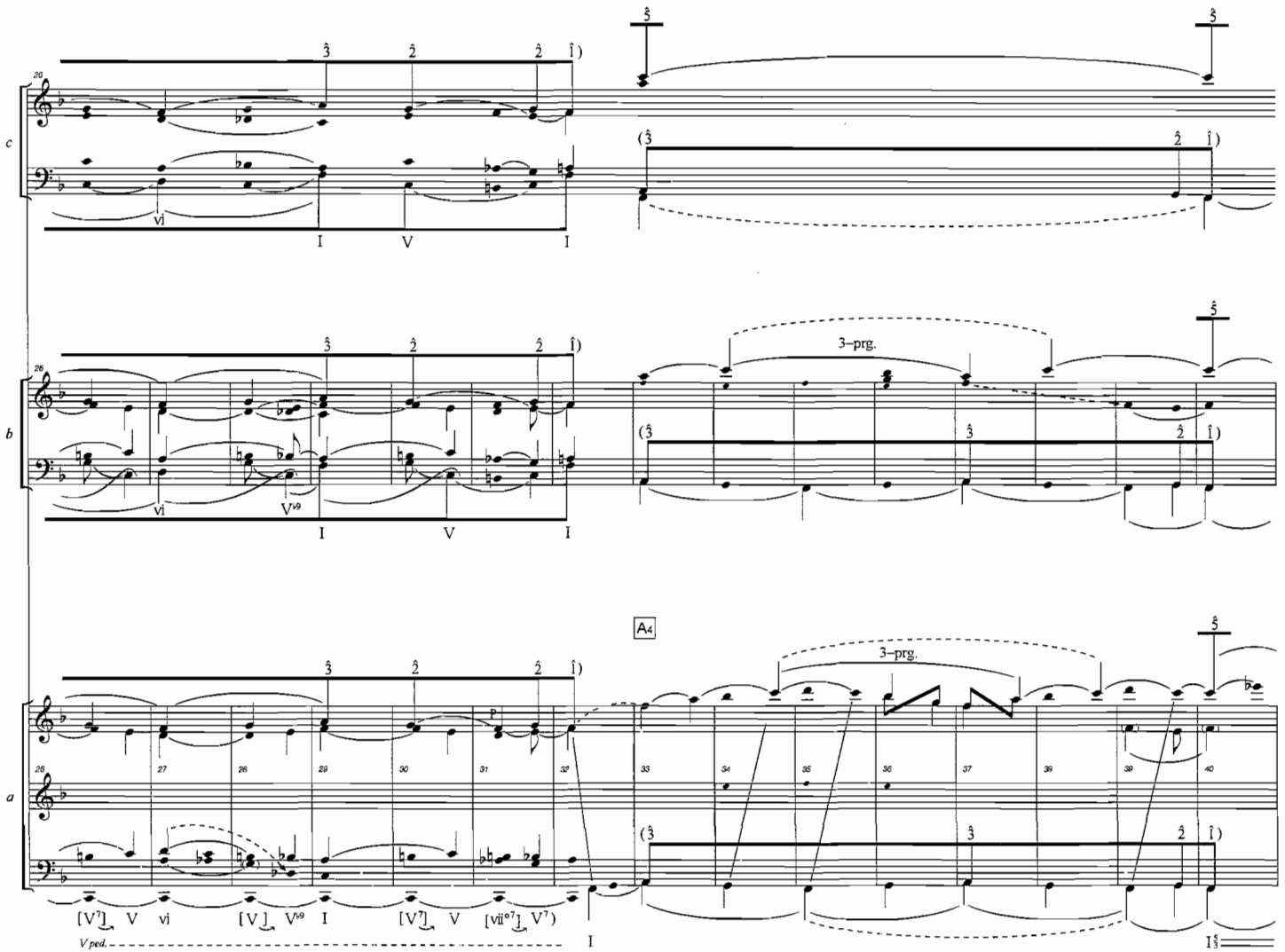
Appendix C. Voice-Leading Sketch, Op. 135, ii



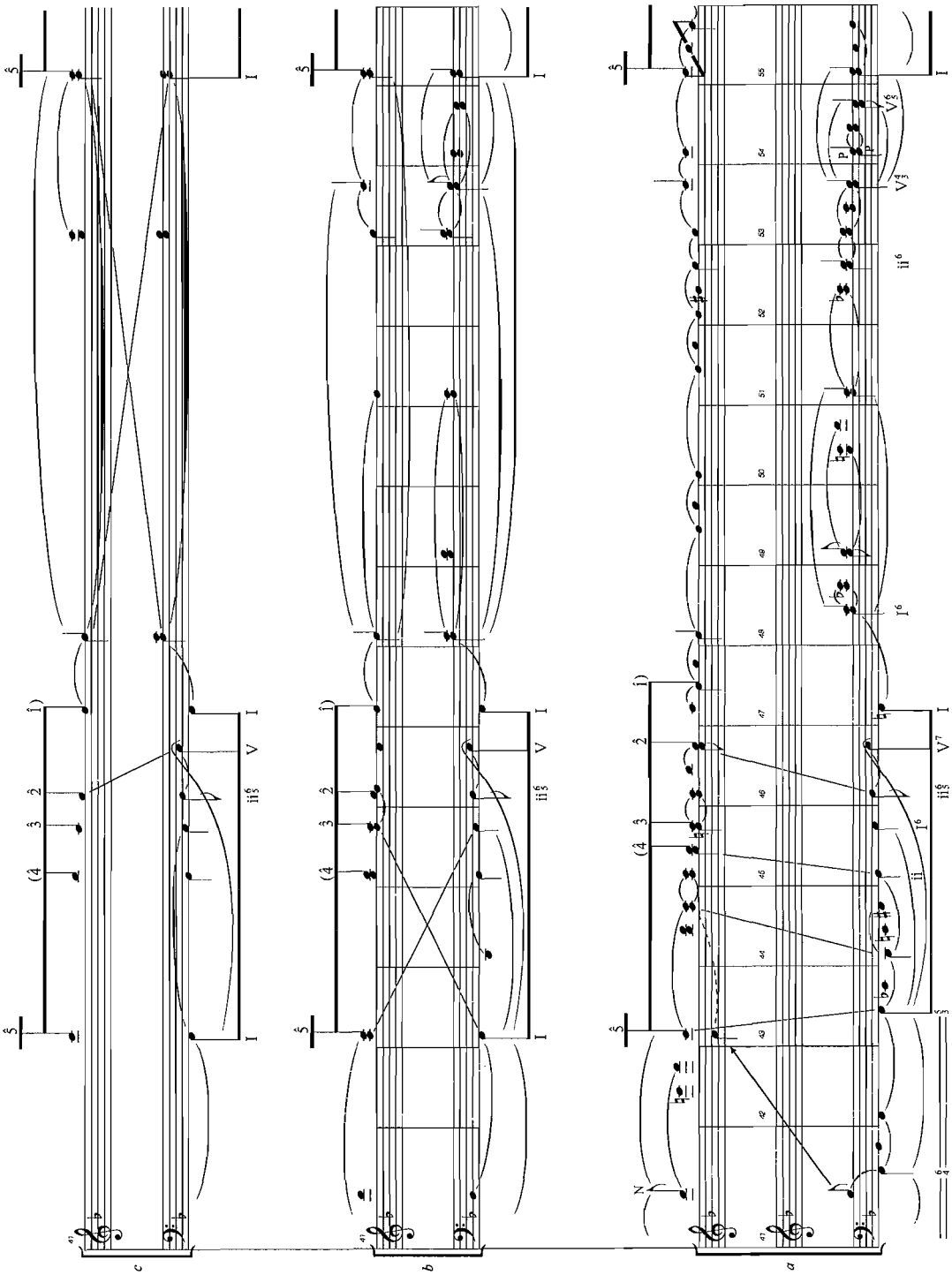
(Appendix C. Op. 135, ii, continued)



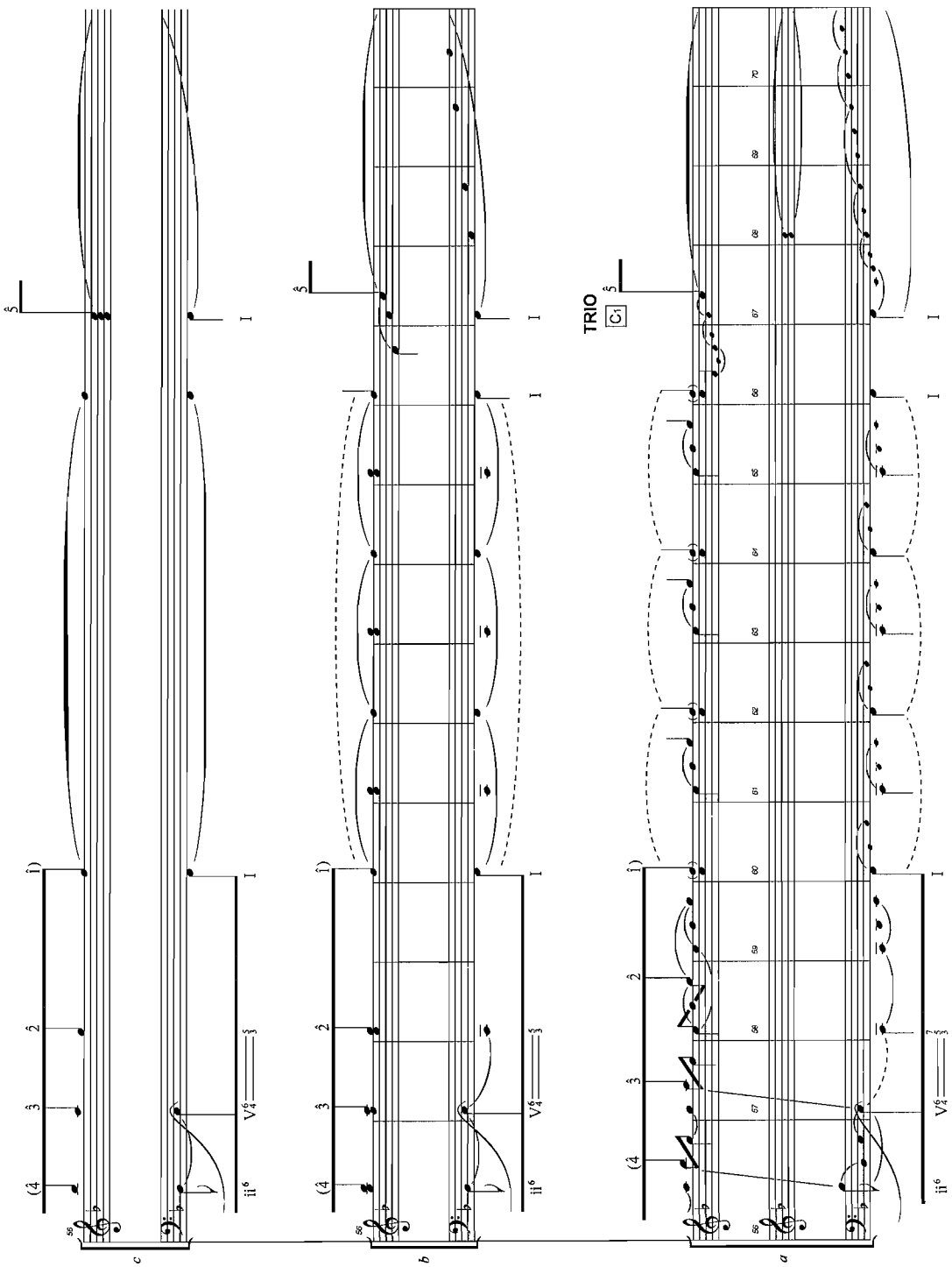
(Appendix C. Op. 135, ii, continued)



(Appendix C. Op. 135, ii, continued)



(Appendix C. Op. 135, ii, continued)



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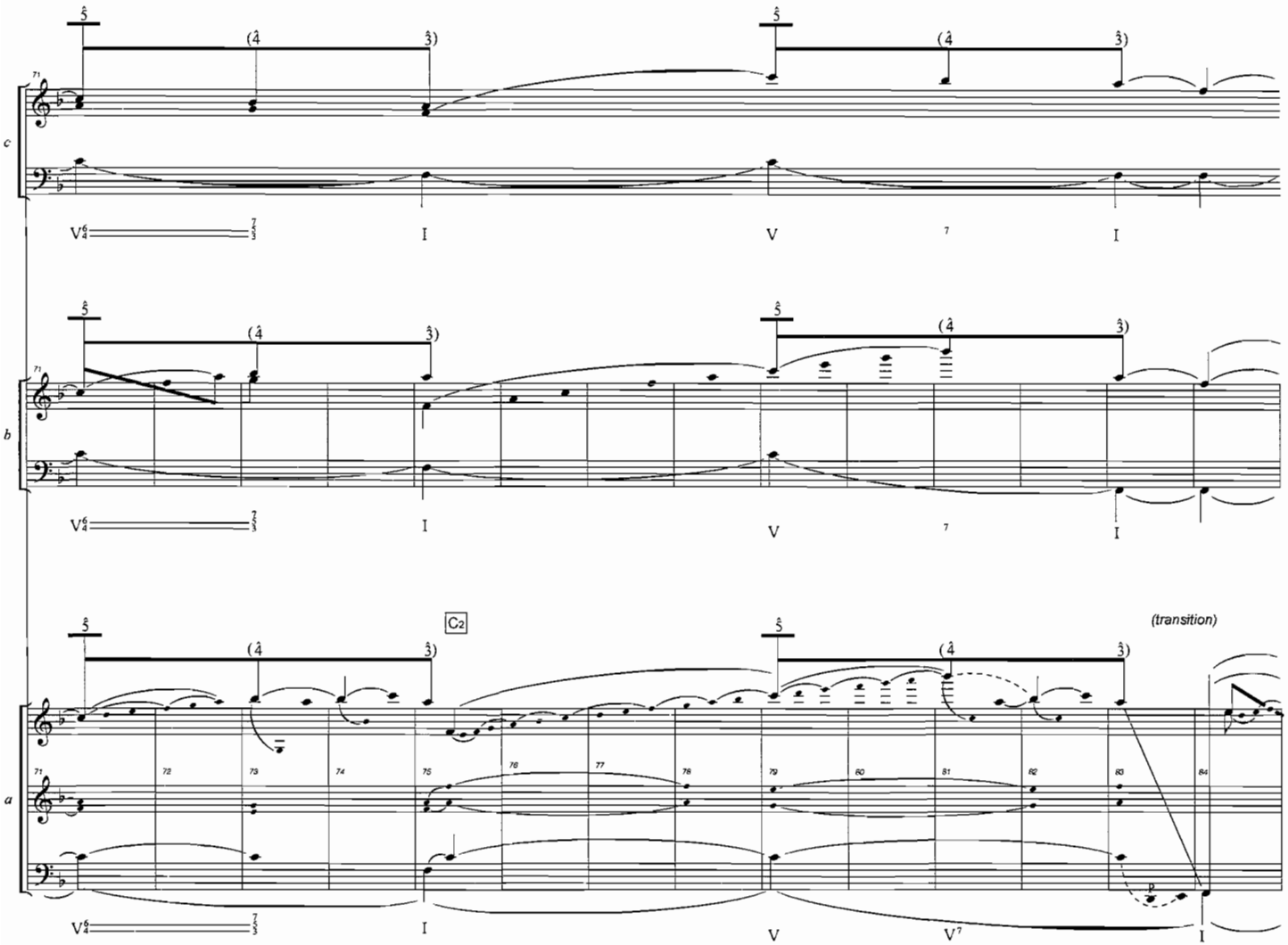

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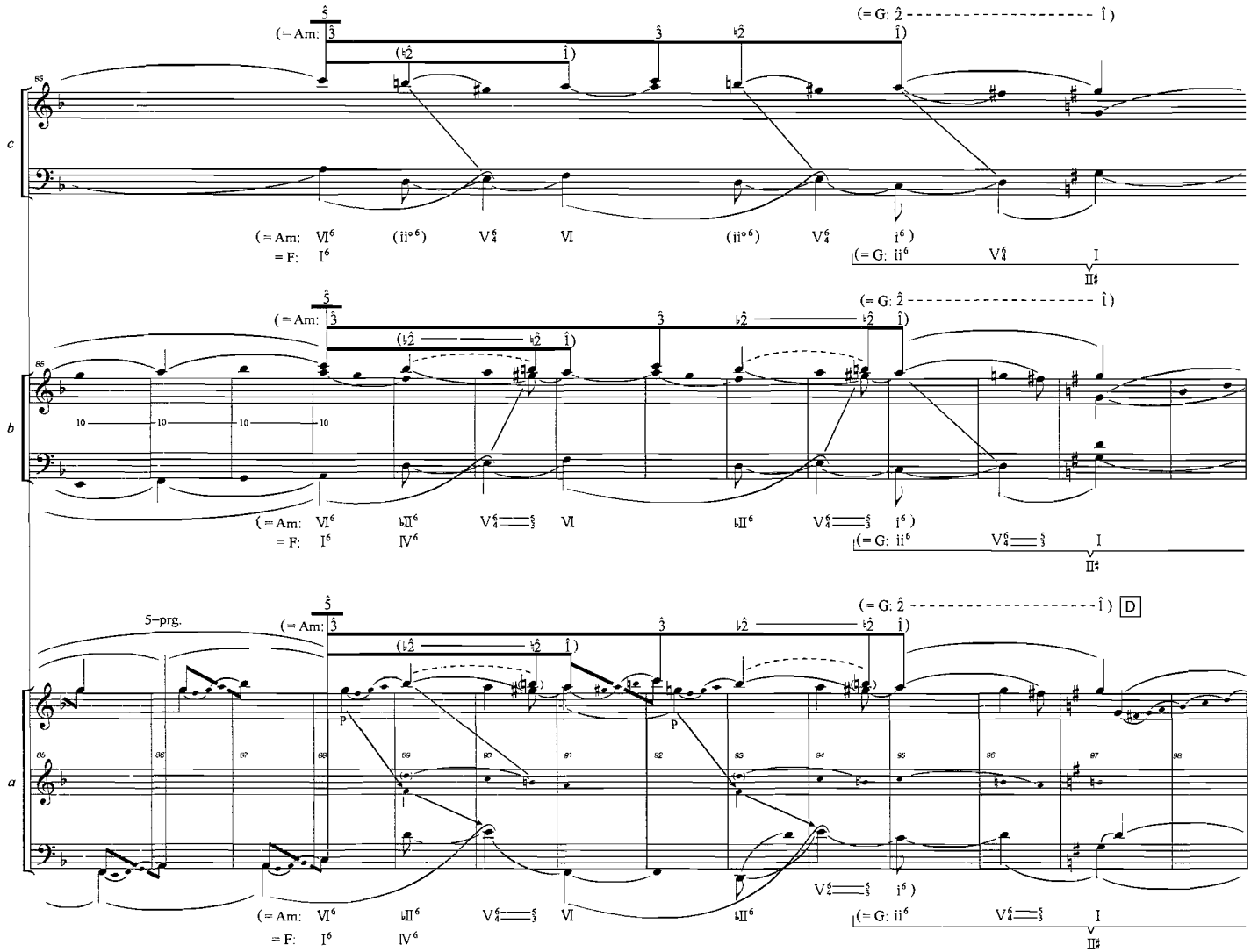
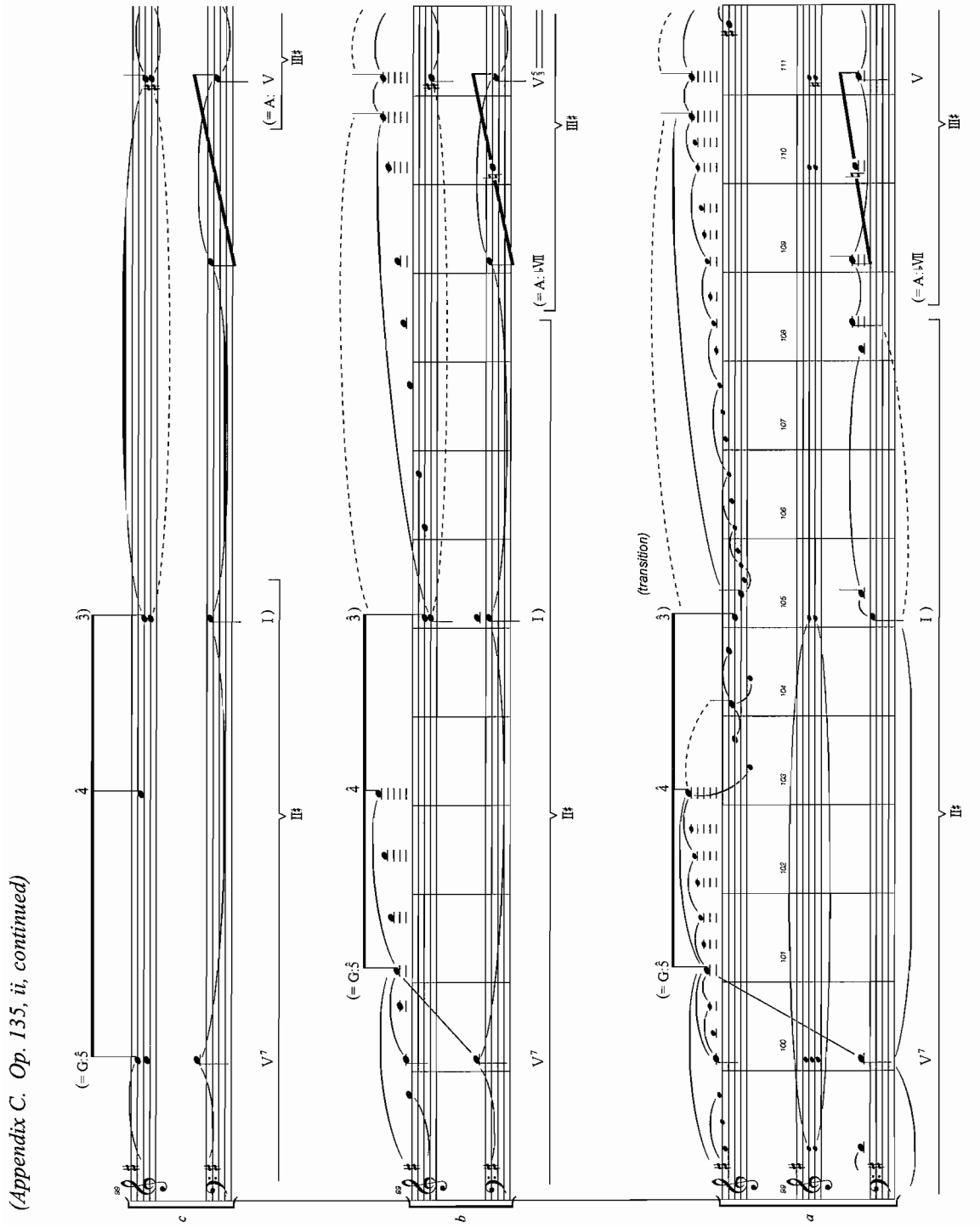


(Appendix C. Op. 135, ii, continued)



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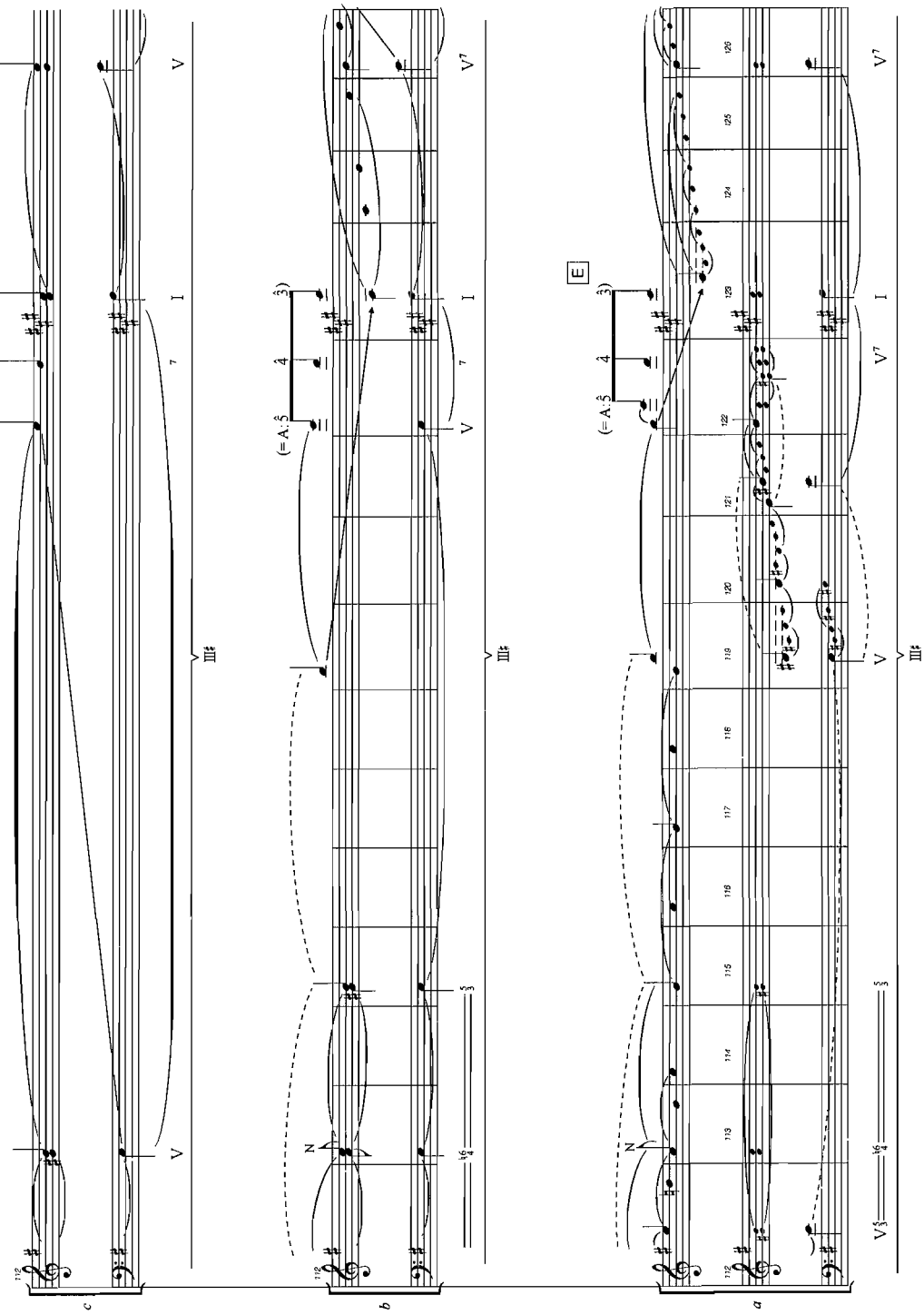
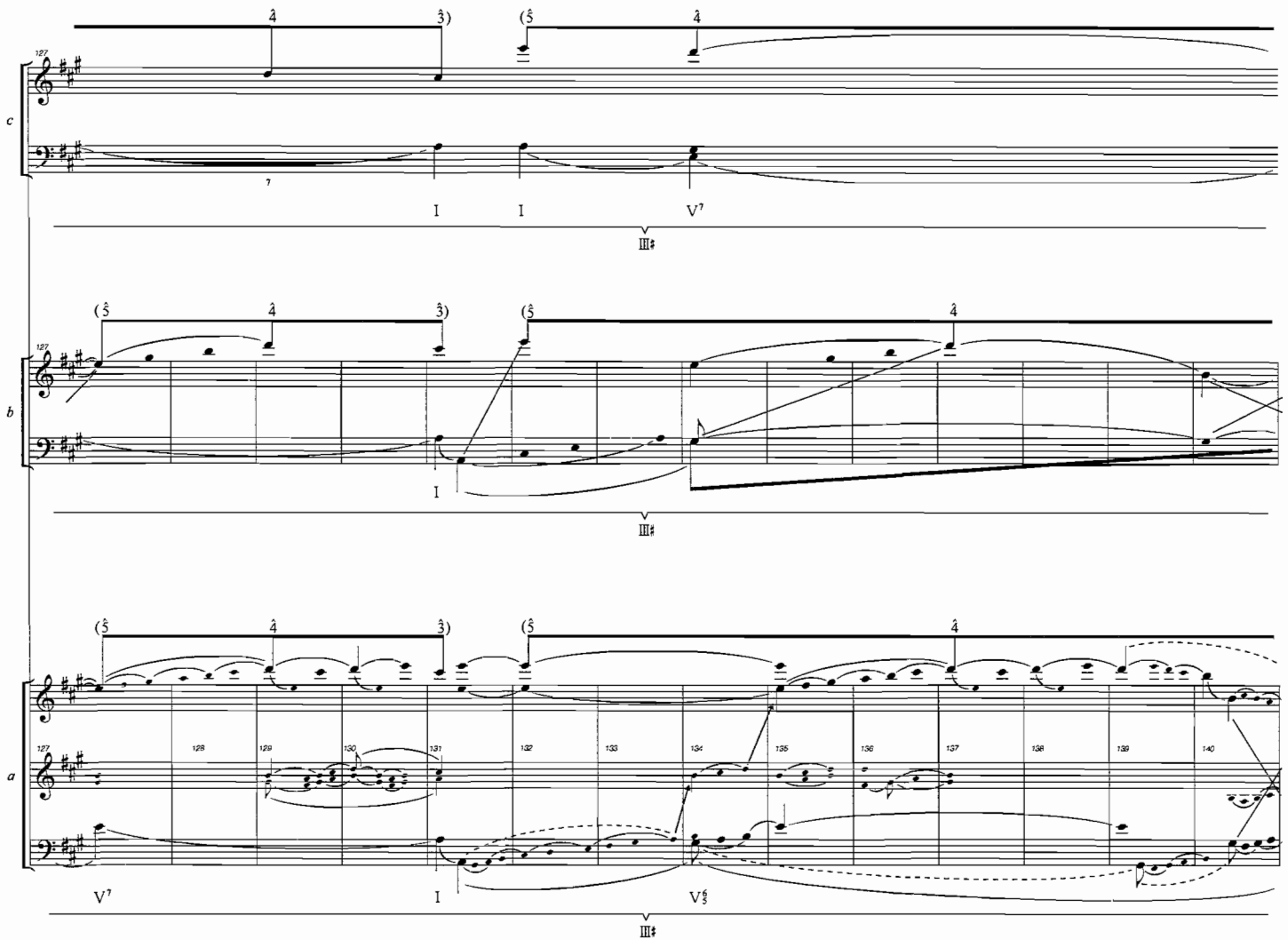
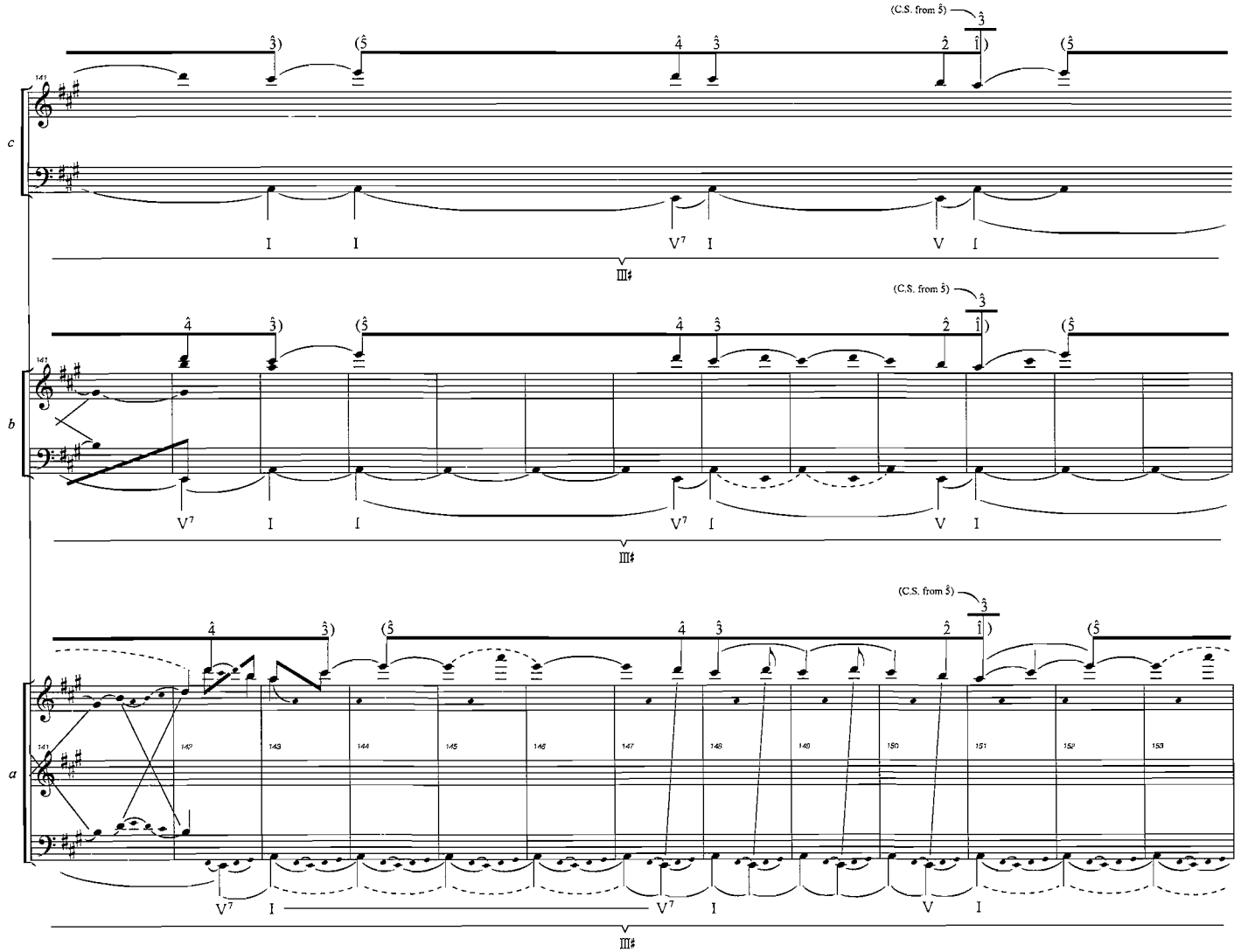


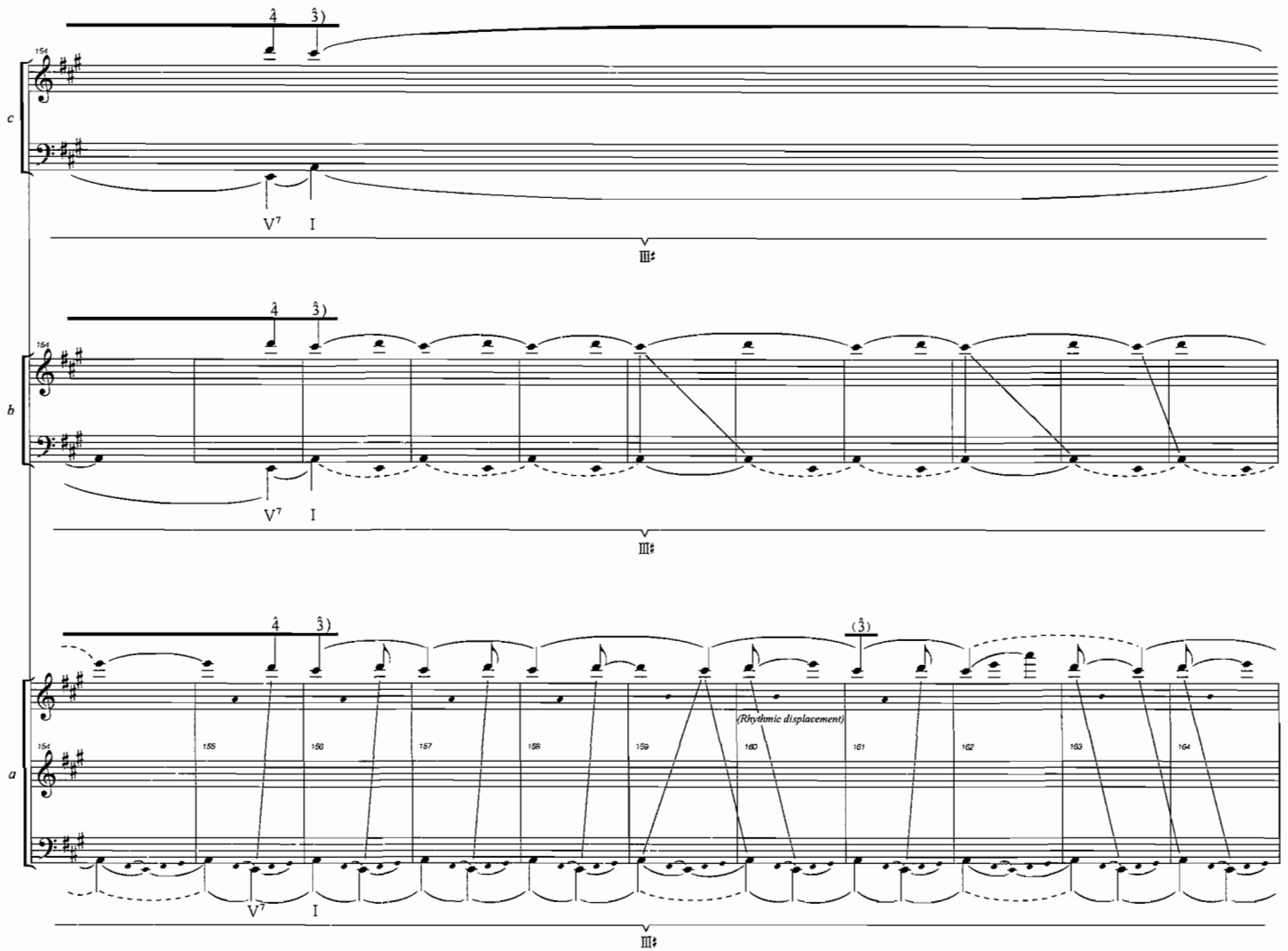
(Appendix C. Op. 135, ii, continued)



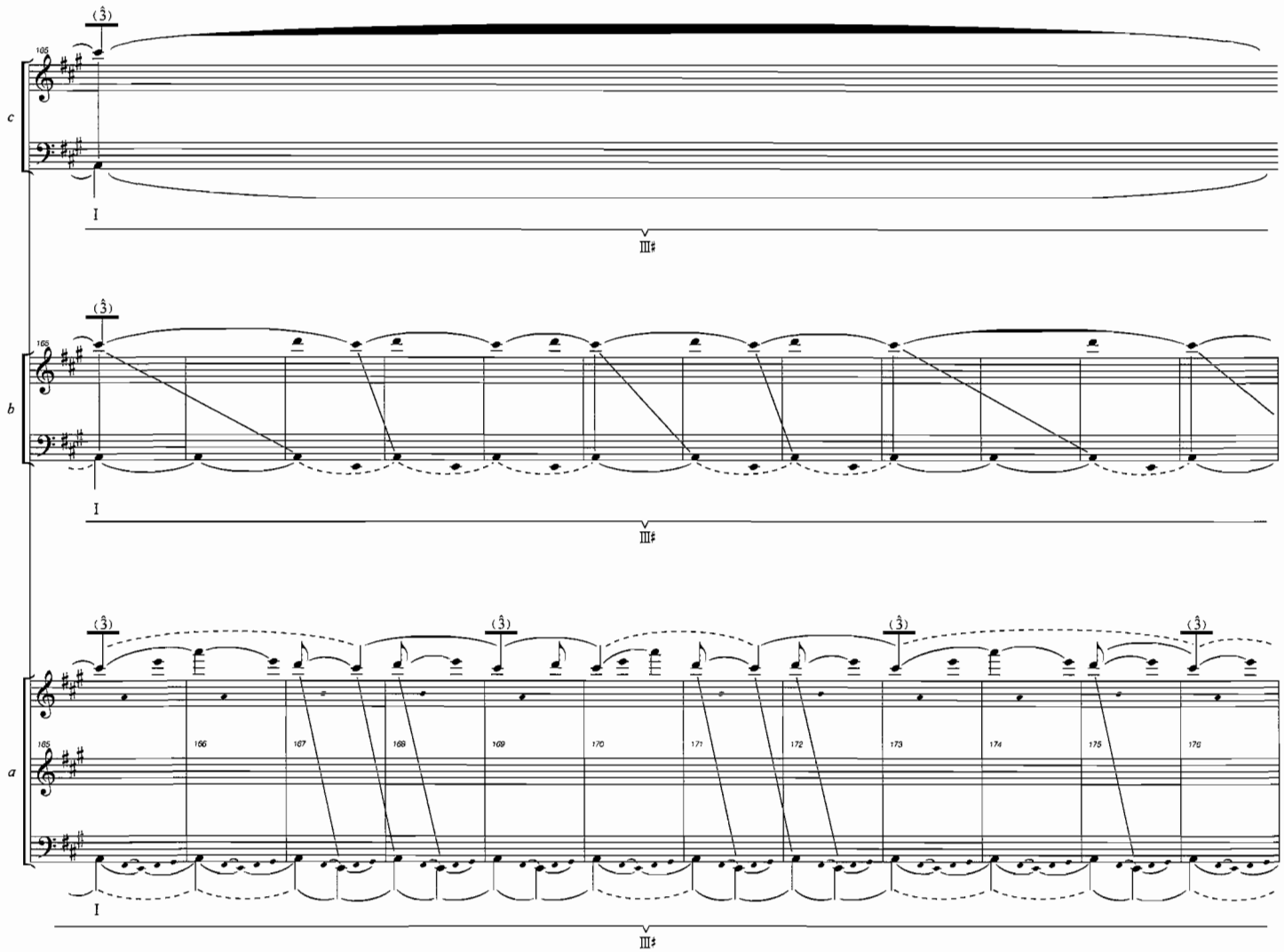
(Appendix C. Op. 135, ii, continued)



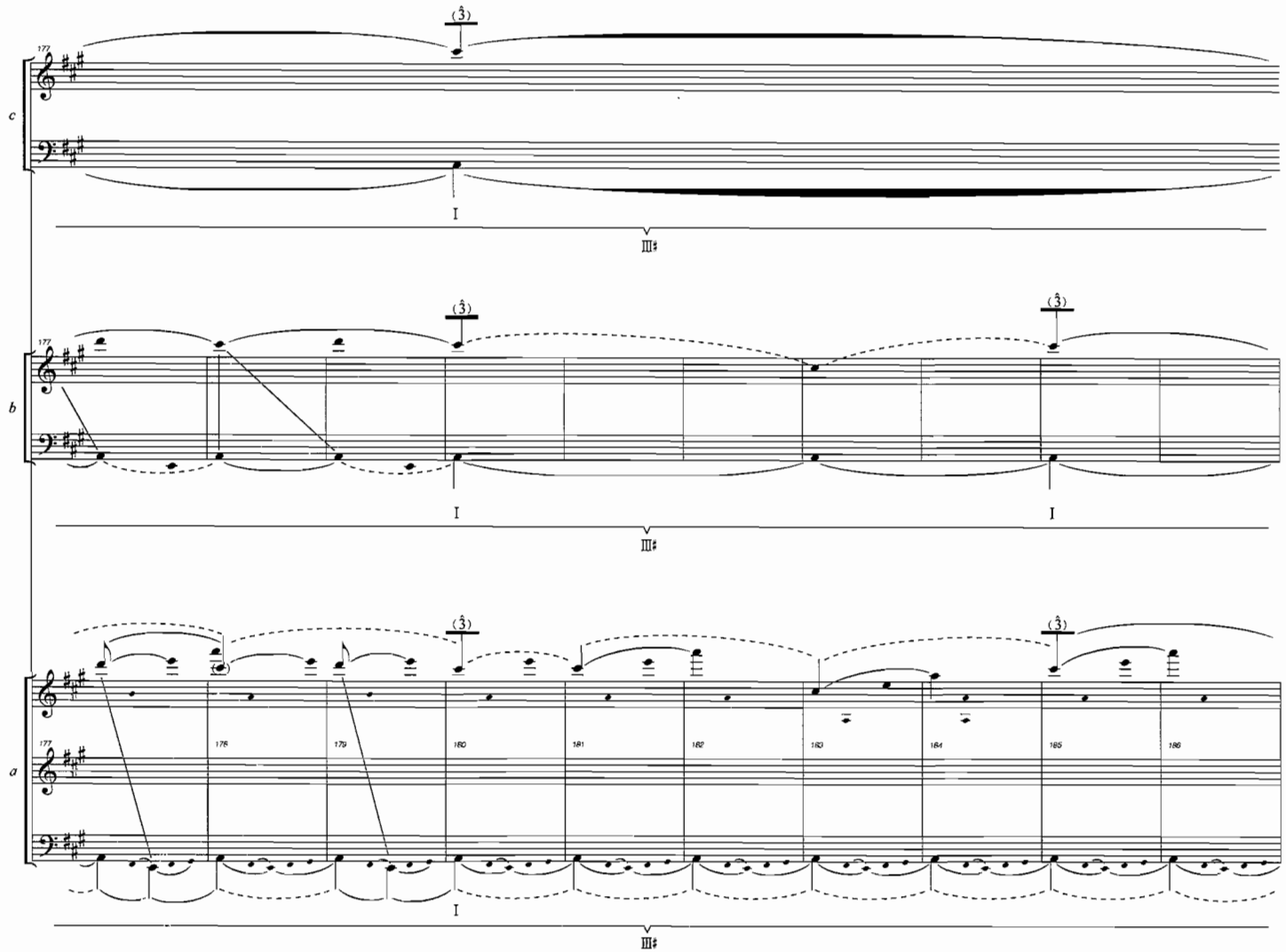
(Appendix C. Op. 135, ii, continued)



(Appendix C. Op. 135, ii, continued)



(Appendix C. Op. 135, ii, continued)



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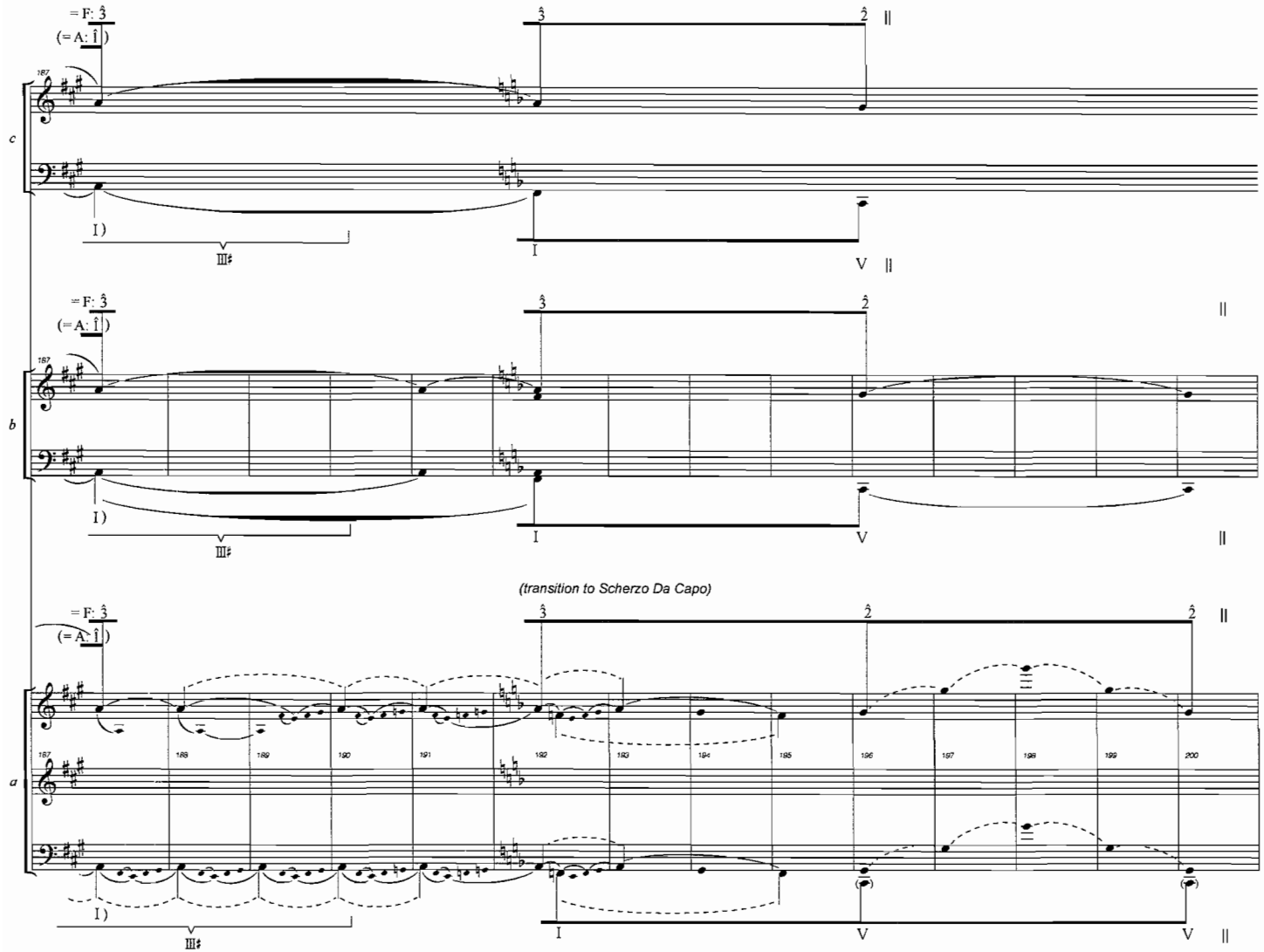
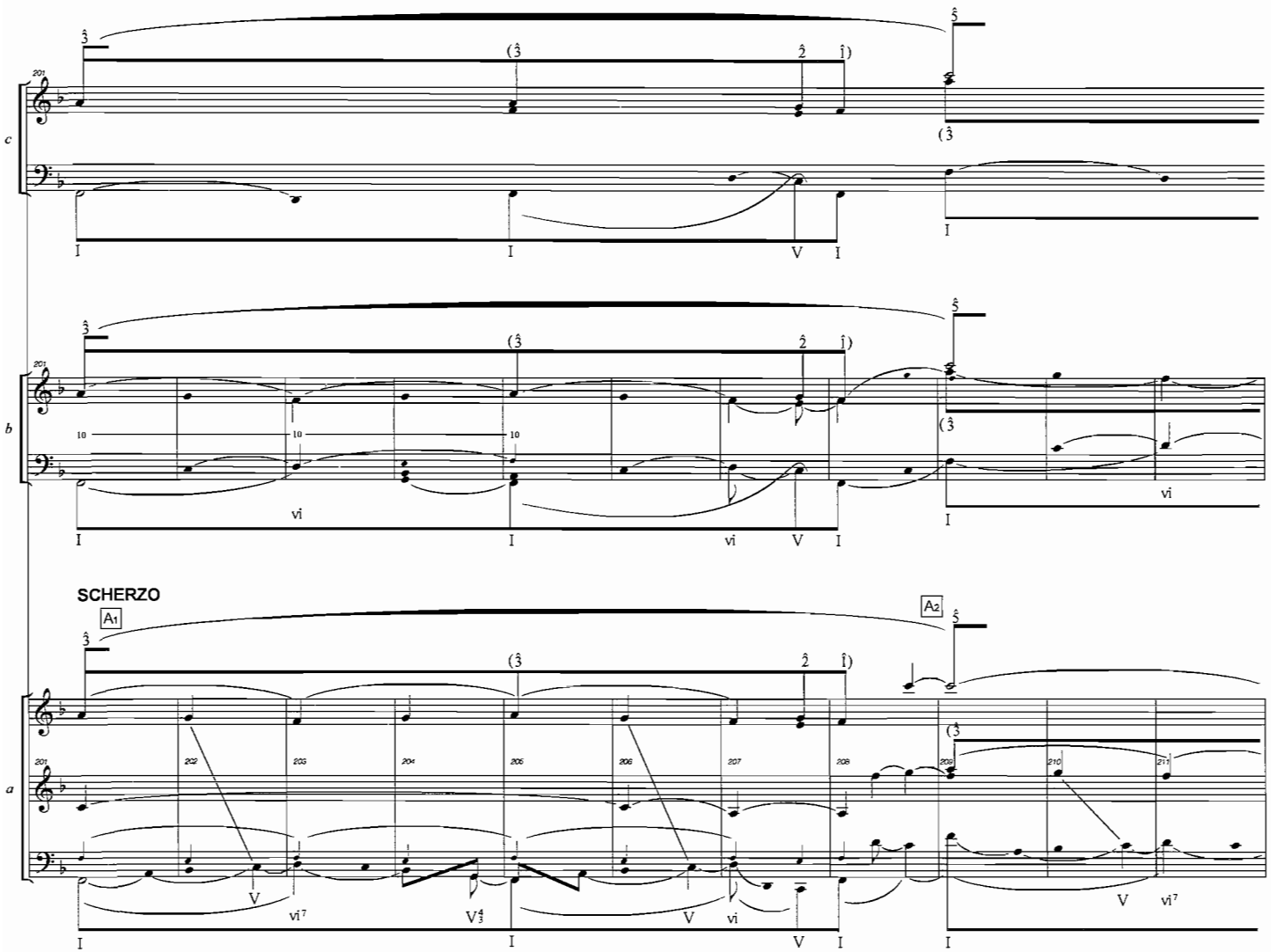
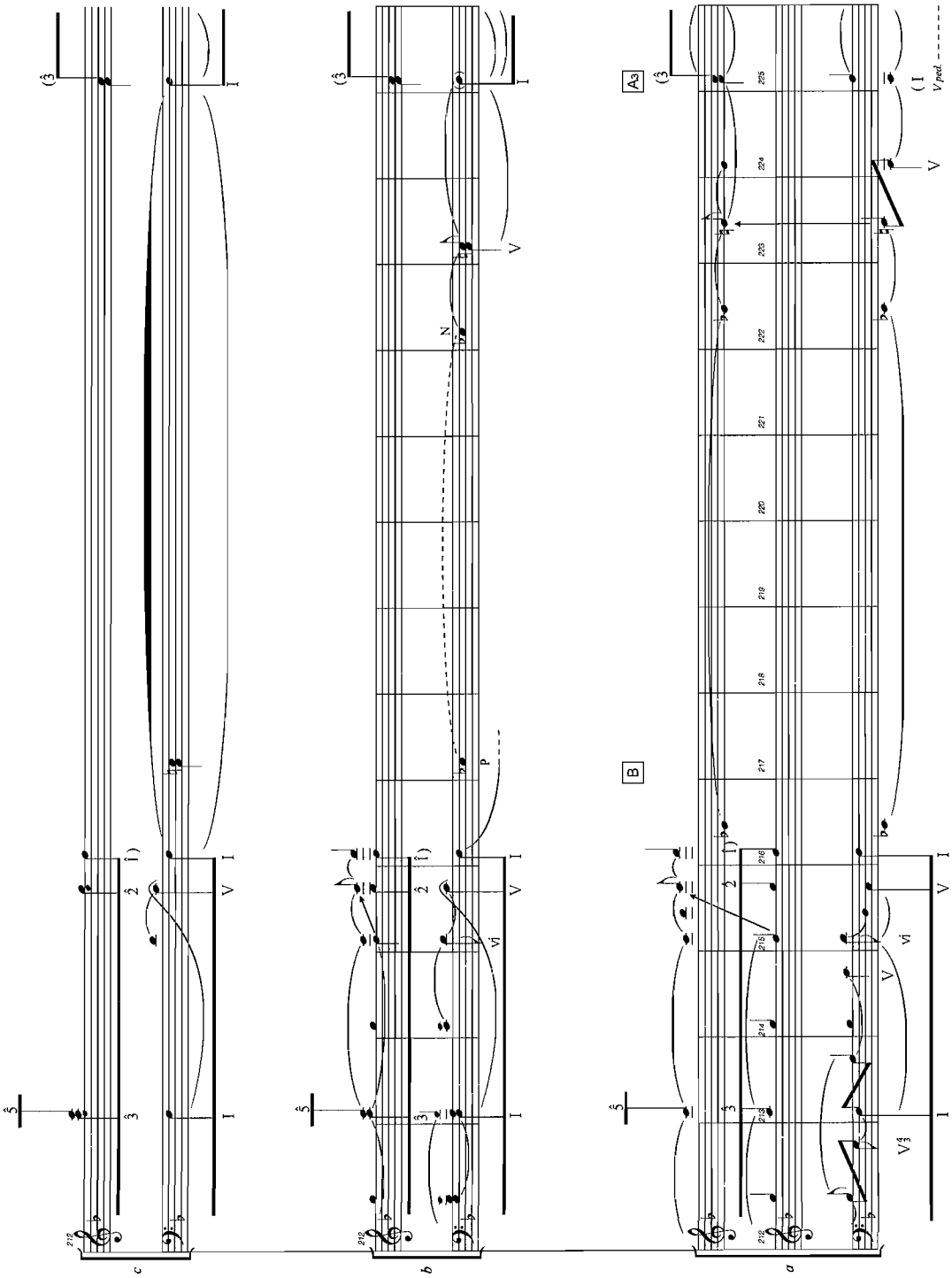


(Appendix C. Op. 135, ii, continued)



(Appendix C. Op. 135, ii, continued)



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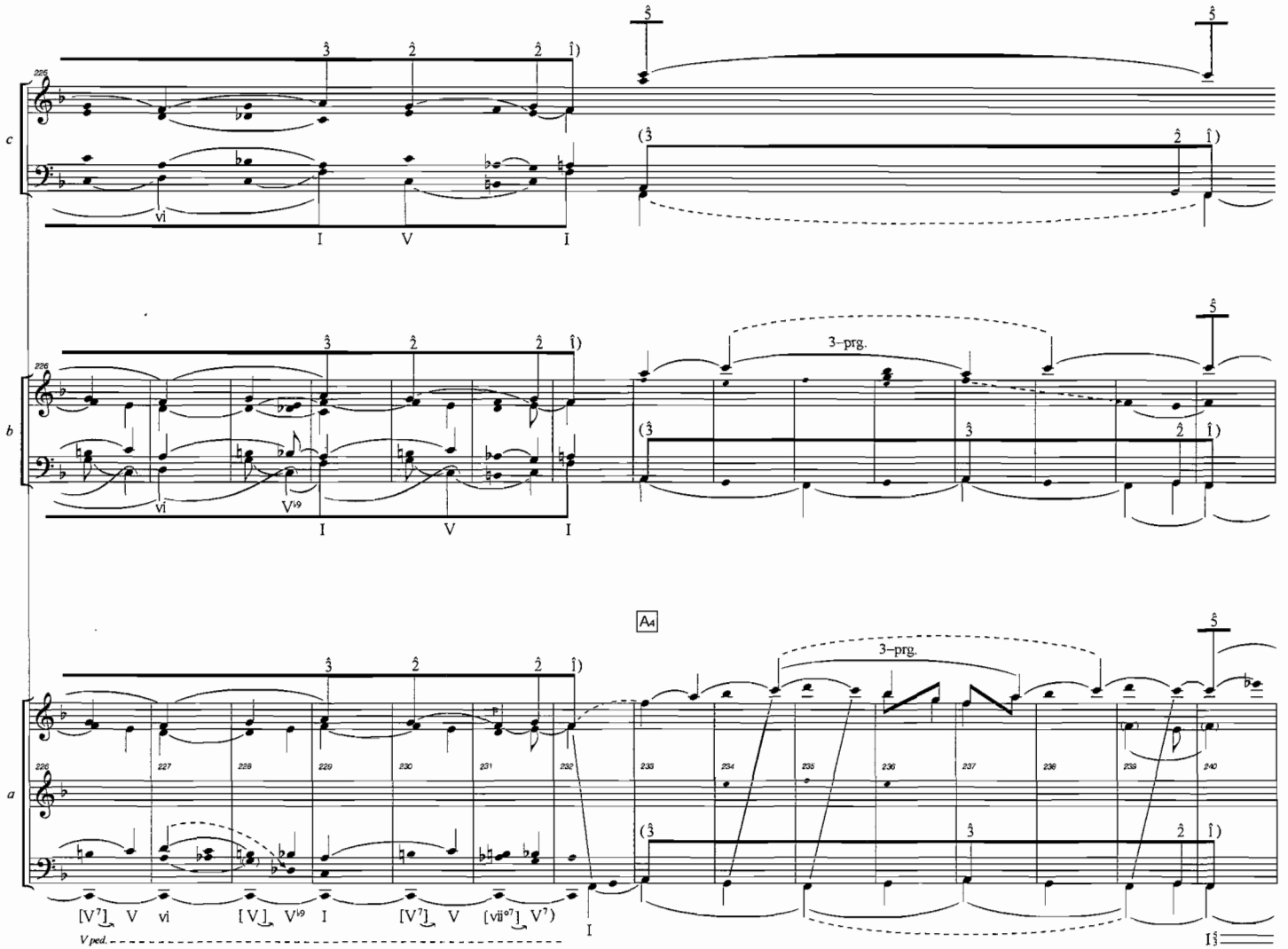

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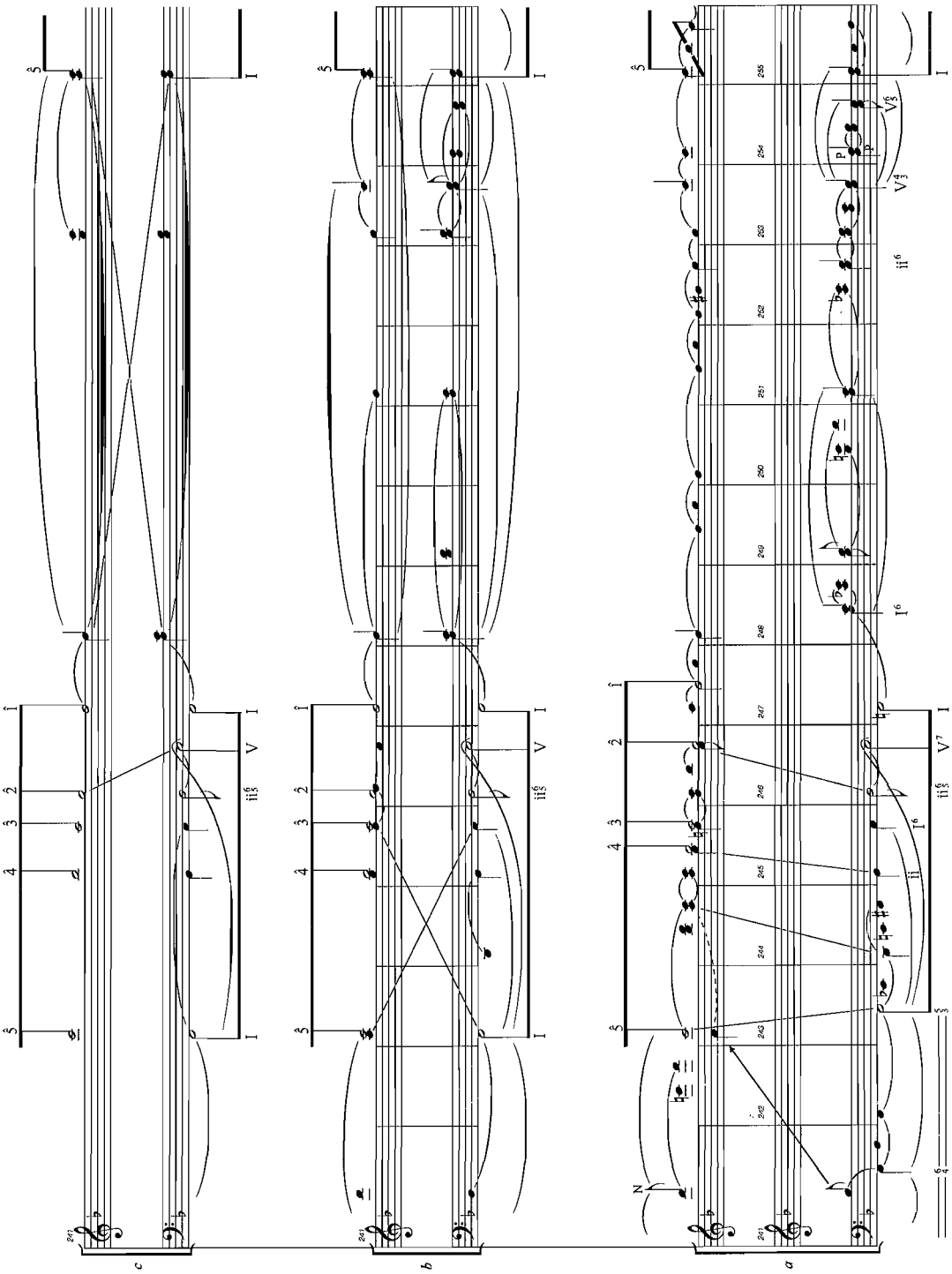

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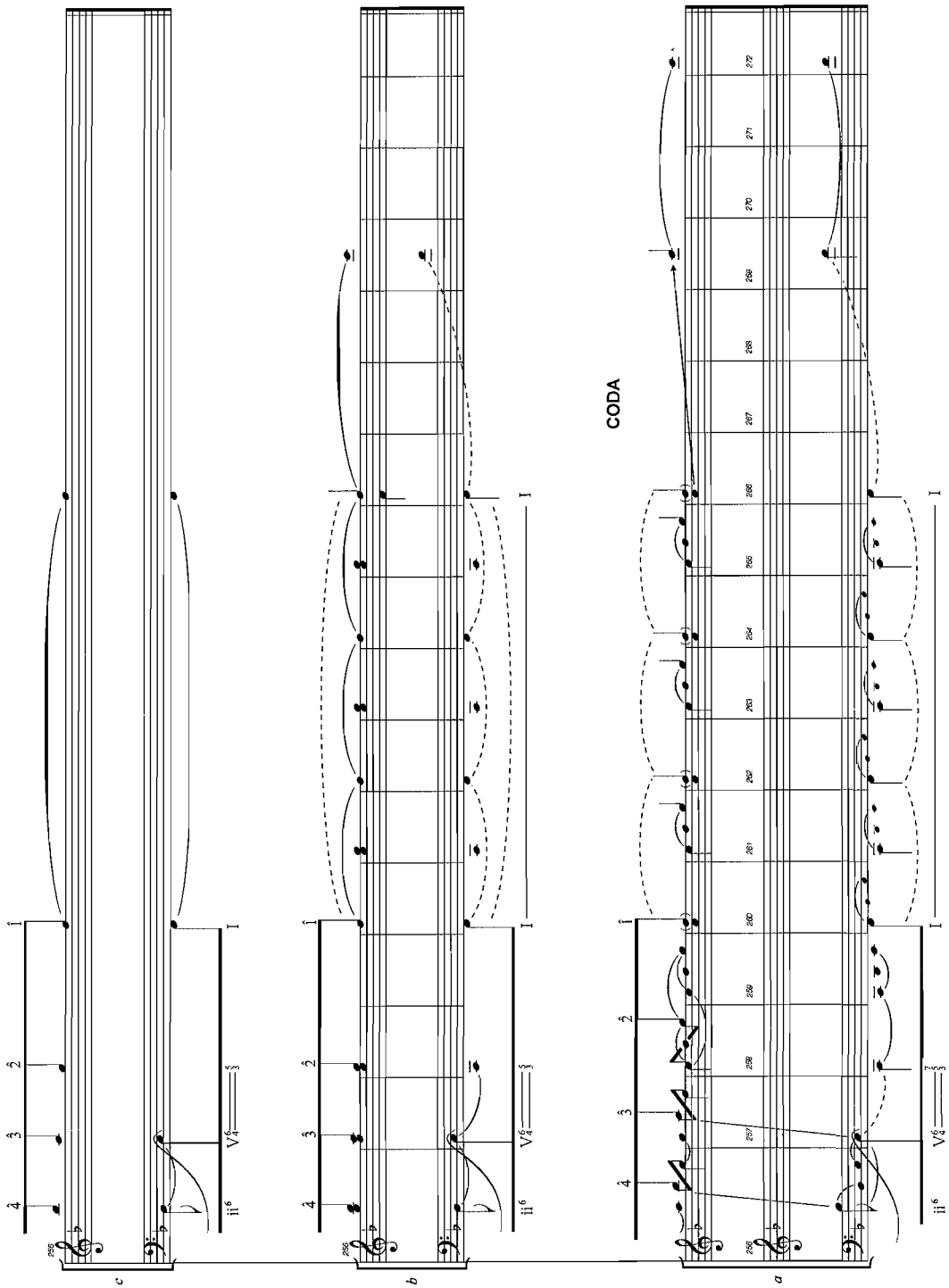
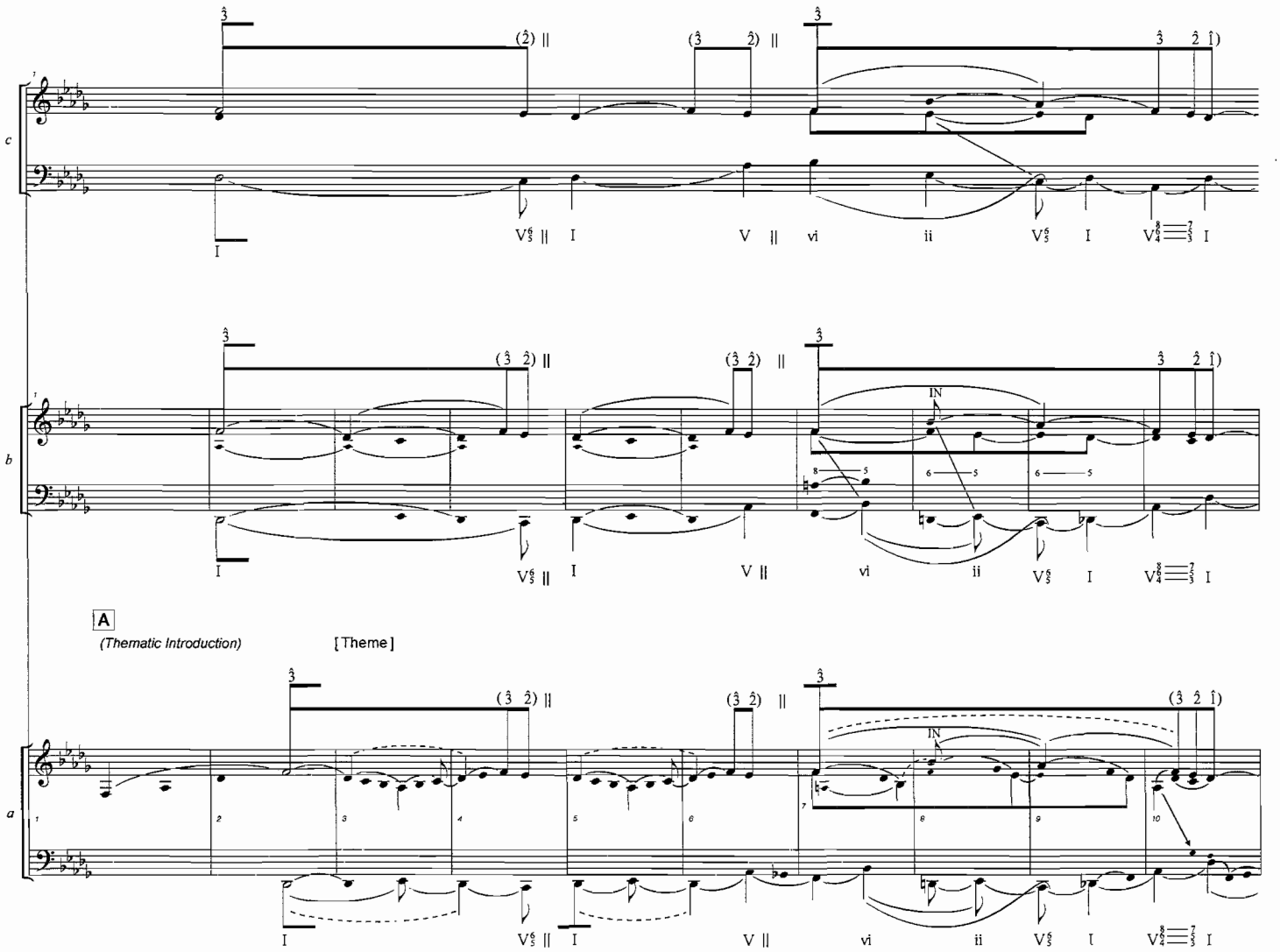


APPENDIX D

VOICE-LEADING SKETCH, OP. 135, III

Appendix D. Voice-Leading Sketch, Op. 135, iii



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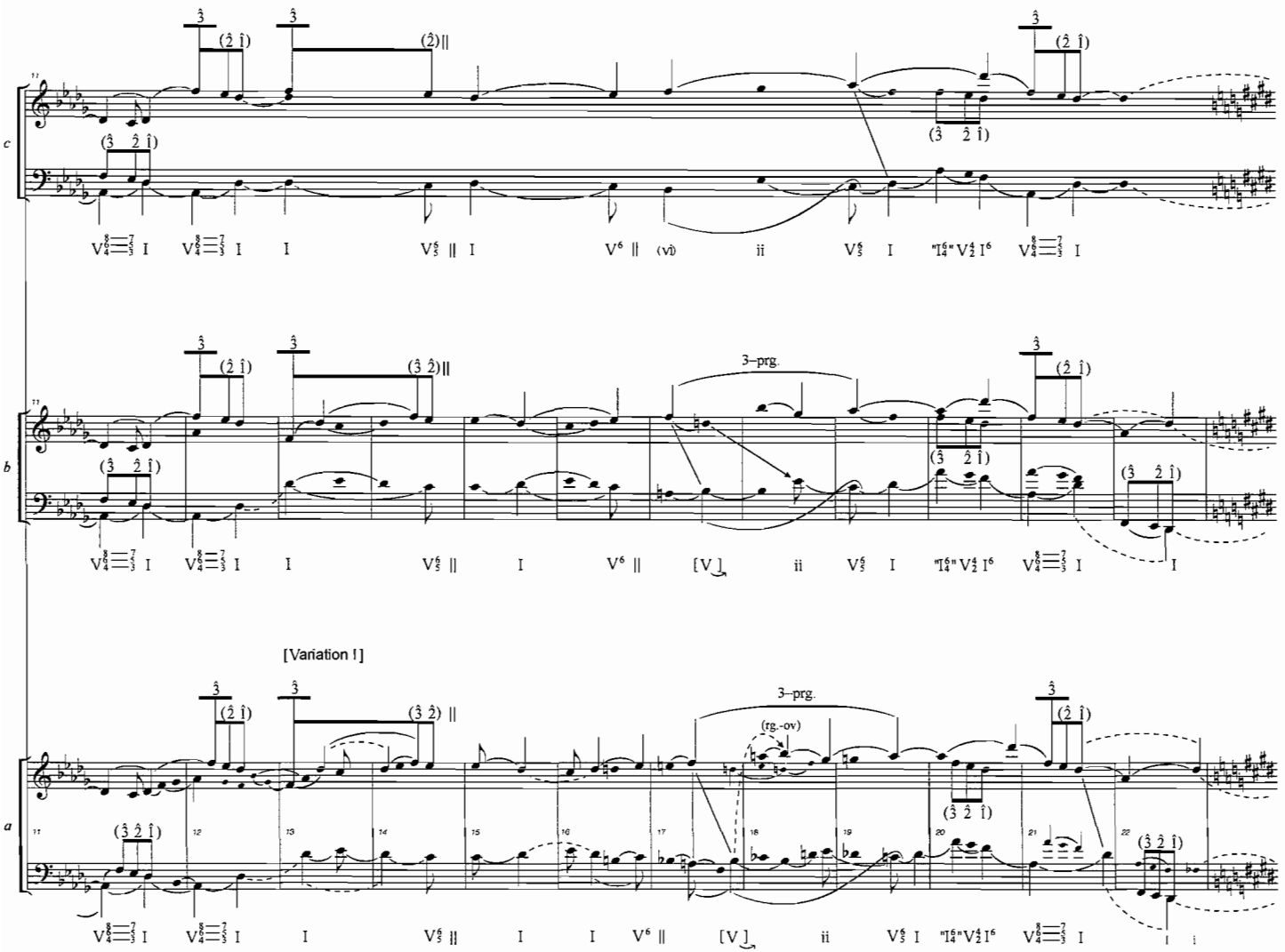
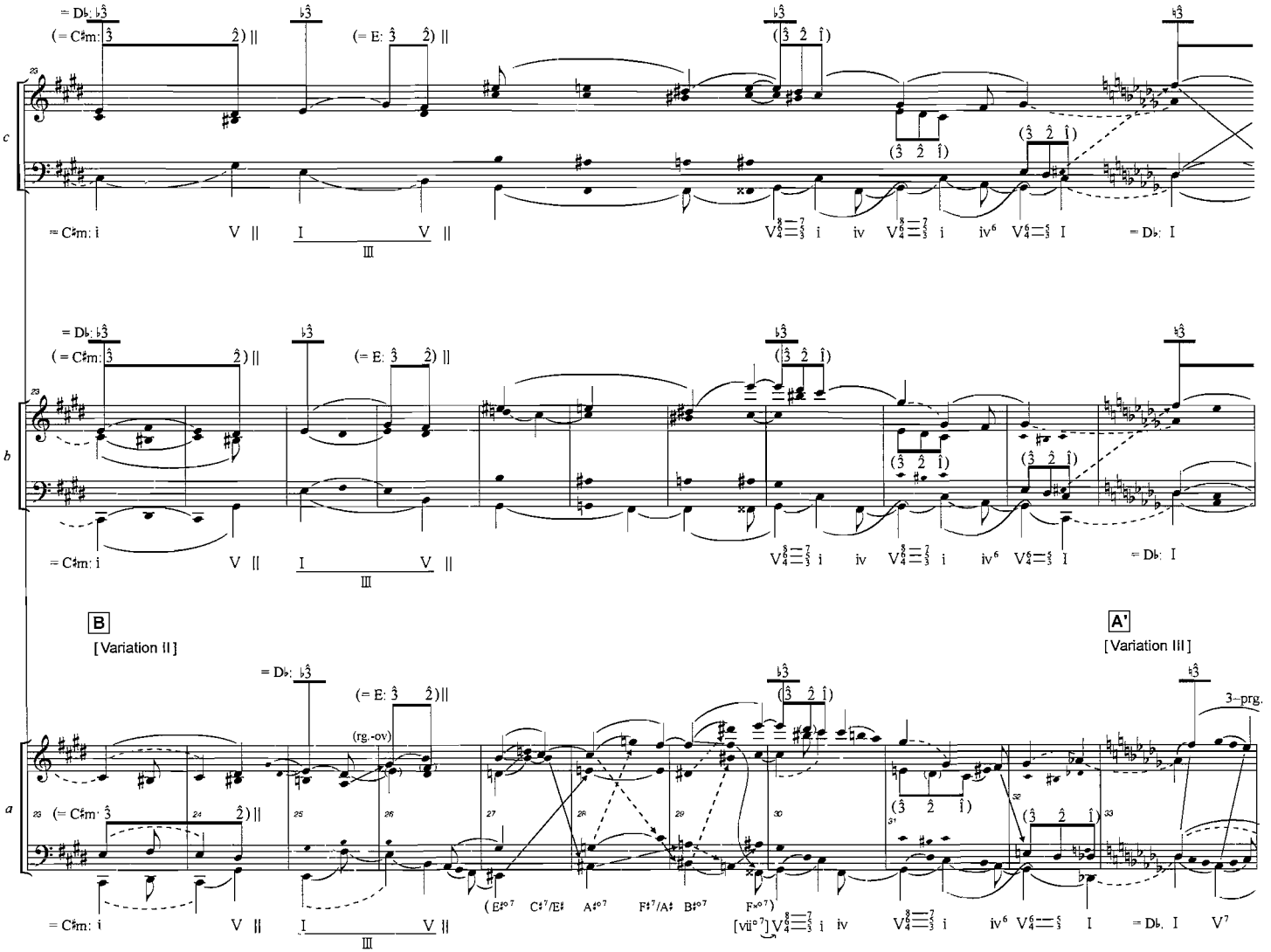
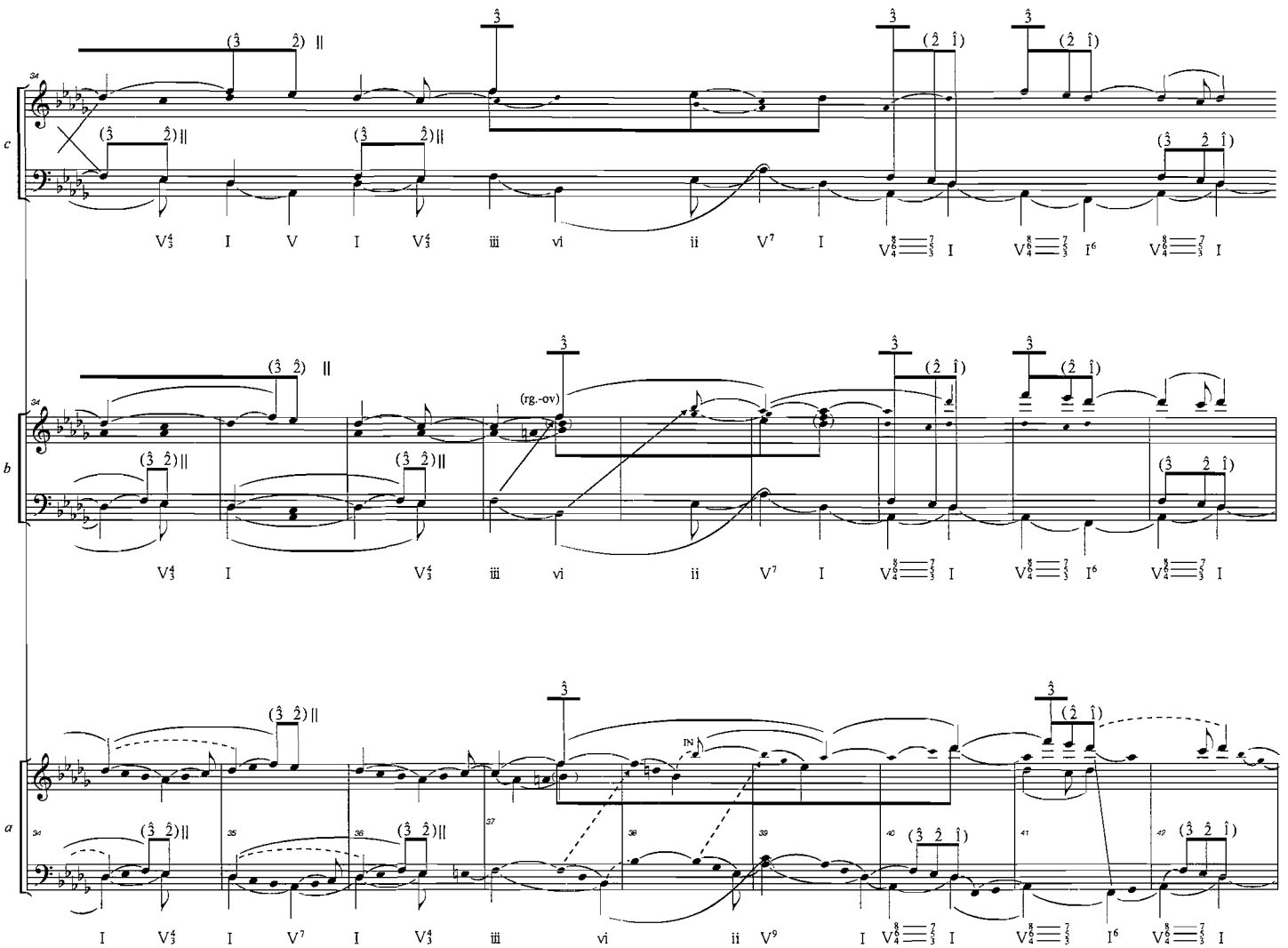


(Appendix D. Op. 135, iii, continued)



(Appendix D. Op. 135, iii, continued)



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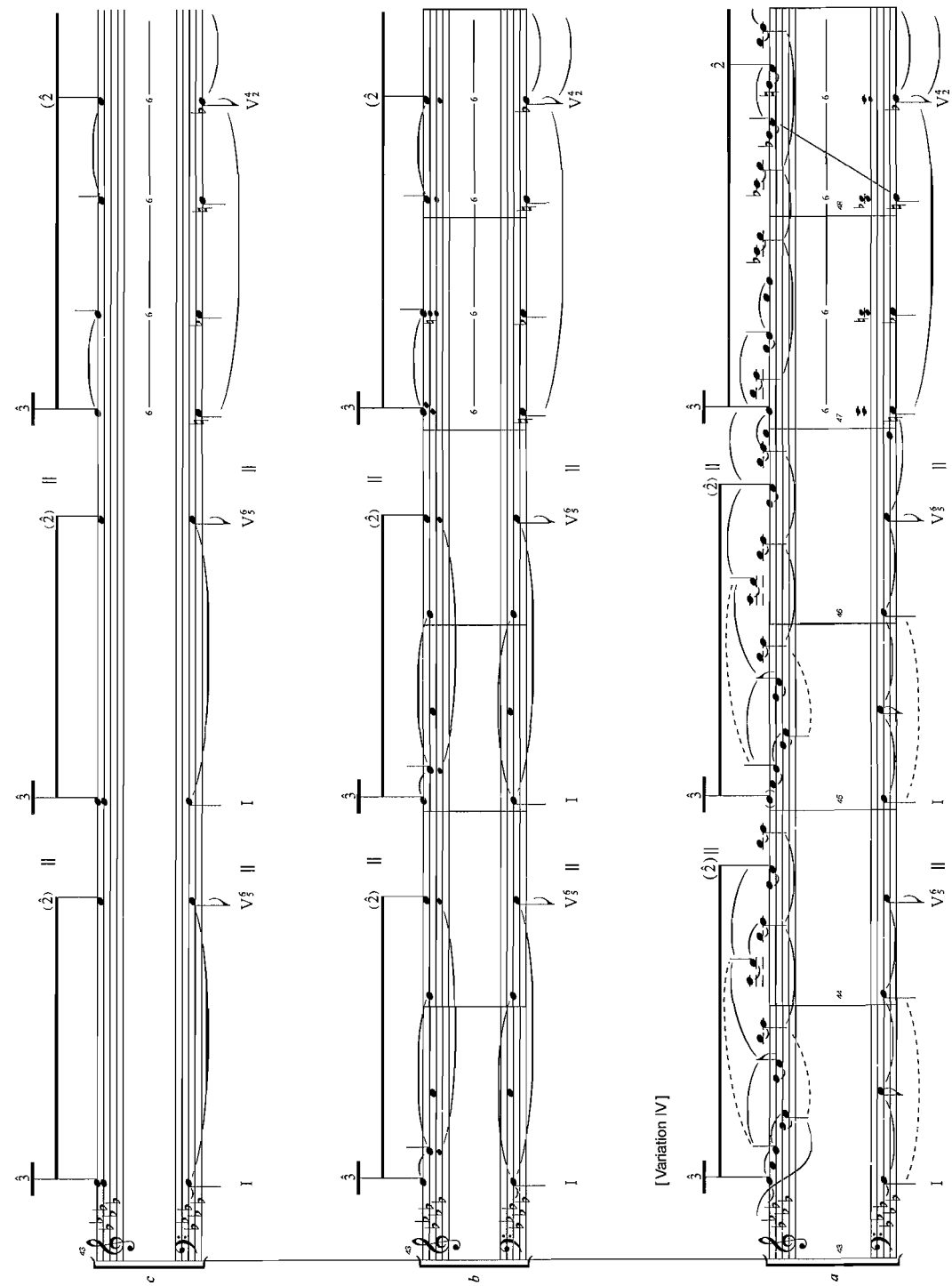

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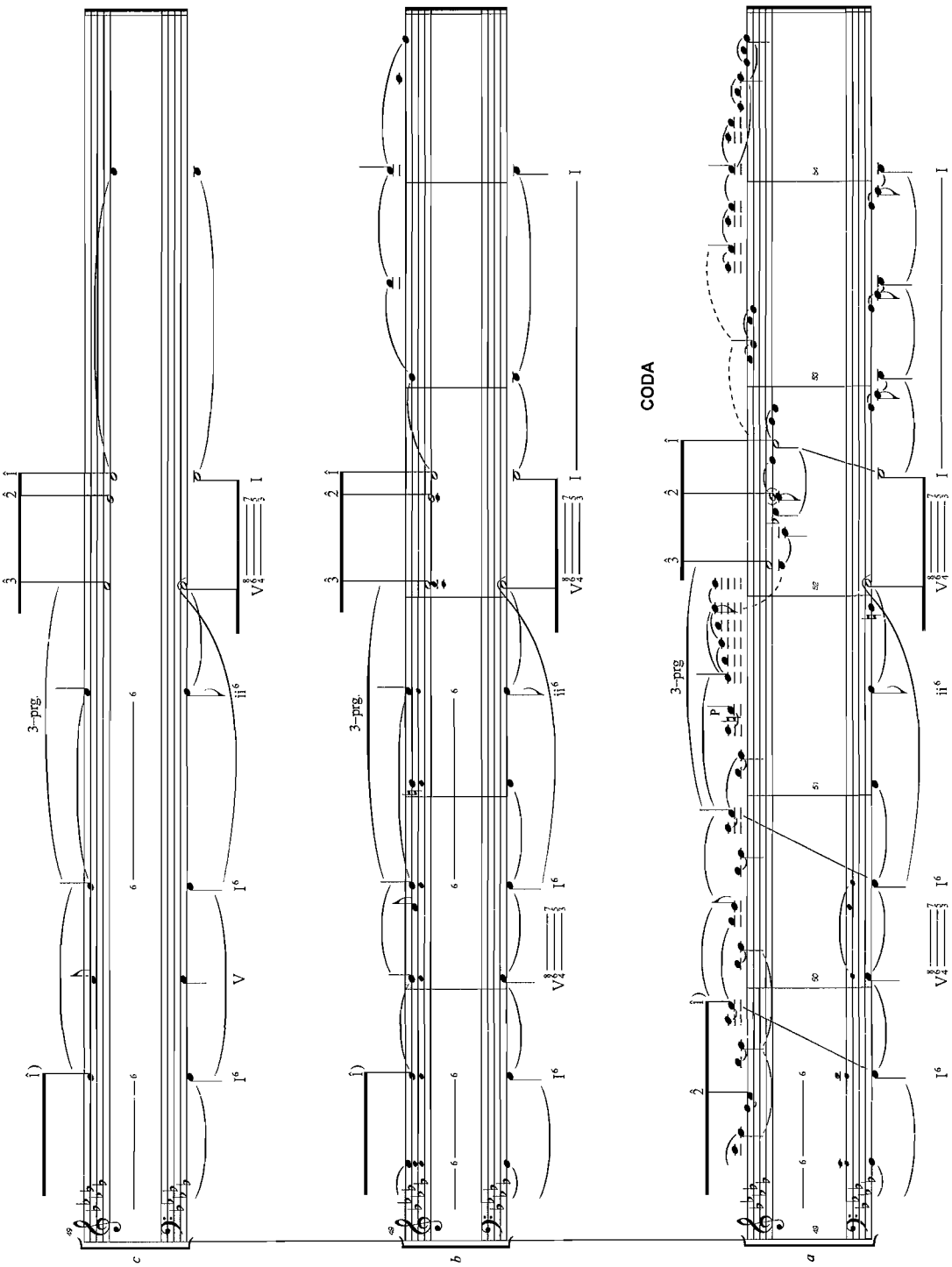

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