

The Elements of Stasis in Beethoven’s Opus 95, Movement II

Movement I of Beethoven’s String Quartet Opus 95 in F Minor is a fast ride through distantly-related key centers and features many surprise harmonic shifts. New material occurs so quickly that the listener’s comprehension of the material seems to be constantly lagging. The second movement of this piece contrasts this dynamic nature with a static, languorous quality, providing a necessary respite from the drama that movement I, III, and IV bring. This quality is created by its structural and harmonic stasis, achieved by a careful “disobedience” of the traditional roles of form, harmonic modulation, contrasting melodic and key-center considerations, and by its eerie major/minor tonality with a “hinge” on B^b as a common tone between harmonies. This article will examine this stasis and the methods Beethoven employs to create coherence within the context of this ambiguous aural environment.

I. Structural Coherence

For the purposes of this article, the form of this piece will be defined as having the following untraditional structure; (a segmentation into its possible interpretation as a more traditional sonata form is also shown):

<i>Measures:</i>	1-4	5-34	35-64	65-78	79-111	112-115	115-143	144-183	184-192
Section:	Intro¹	A¹	B¹	Intro²	B²	Intro³	A²	Coda	Intro⁴
<i>Remarks</i>	No harmonic support: seems to modulate to A	Uses elements of the modes of D major and D minor	Fugue in D maj/min: modulates unexpectedly to A ^b major	Bridge between B ¹ & B ² : sequence of tri-tones; lands on harmonically unsupported B ^b	Fugue in D maj/min: features a sequence of tri-tones and dominant and tonic pedals as closing	No harmonic support: almost exact repetition of Intro ¹	Almost exact repetition of A ¹ : no actual closure; interrupted by the coda	Combines A and B material: finally resolves B ^b as an A ^b and therefore part of D minor	Closing: closes B ^b with harmonic support; leads attacca to next movement
<i>Sonata sections:</i>	Exposition			Development		Recapitulation		Coda	

As a method to understanding this unusual structure, it will be useful to examine its adherence to and departure from the traditional sonata form. As a first illustration of the movement's break with tradition, let us look at the introduction material: a descending bass line in the cello at measures 1-4 which is then restated four times throughout the movement in various developmental manners (one is an almost exact repetition). A traditional sonata would not have an introduction section that is developed throughout the movement as an entity separate from the other sections of the work. Of its four occurrences, only two have harmonic support: the "bridge" section at 35-64, and the closing occurrence at measures 184-192. Both of these "hinge" on B^b, a critical pitch in the harmonic coherence of this movement (more on this in section III). In addition, the introduction's descending contour can be seen as similar to the descending quality of the fugal subject first heard at measure 35. However, other than this contour relation, the relation of two of its occurrences, and despite its treatment to a certain amount of development, the introduction material seems unrelated to the rest of the material of the piece. With a distinctive gestural quality, its only important structural purpose may be to interrupt the flow of more complex material, which helps to give the piece its languorous mood. The movement is "book-ended" by four occurrences of introduction material: it helps give structural distinction between the A and B sections of the piece. It also causes pause for momentary reflection between movements (fast music precedes and follows Movement II's introduction material in Movements I and III), as some respite from the fast pace is needed for a balance of "energies."

After the first introduction is an A section which elegantly draws upon elements from the D major and D minor modes. Next, at measure 35 comes a B fugal section,

surprisingly *also* in D major/minor, as if A and B are part of the same section. Both sections are slow, lyrically expressive, and they lack any hint of the first movement's rhythmic drive and dramatic audacity. With the sonata form in mind, these sections could be seen as the first and second themes of an exposition; however, they lack the traditional distinctions such as contrasts in key center and gestural quality. Also, if we are to consider this movement a sonata, then there must be a development and a recapitulation. If we interpret the introduction to be part of the first theme, the "bridge" section at 65 could be interpreted as a kind of development which continues to develop the fugal material at 79. However, as mentioned above, the introduction material is so distinctive that it feels unrelated to the B section's fugue, and it sounds more like an interruption between the movement's two fugal occurrences (B¹ and B²). In addition, a traditional development section would not typically ignore such a large section of the exposition's first theme. B² is greatly developed from B¹, giving the piece a developmental quality, but, as both the A and B sections are based on D major (and in fact all but one cadence in D major) there does not seem to be enough harmonic or developmental contrast in these sections to argue for the sonata form. A sonata recapitulation usually resolves contrasting key centers: as there are no contrasting key centers here, there is no need for a traditional recap. In fact, using the sonata model, the recap that would fall at A² is, in this movement, an almost exact repetition of, rather than any sort of resolution of, A¹, except for some register and orchestration differences (and the lack of closure). The function of this movement's coda is also, therefore, questionable, as a typical sonata-form coda would help to resolve "unfinished business." Movement II's coda does intermingle material from A and B (like the first two themes of a sonata form's exposition), but, as no significant key-center or gestural distinctions exist between A and B, the coda sounds


more like restatements or further developments of the A and B sections. A traditional sonata-form coda is not heard here: this coda serves only to resolve the “B^b factor” as an Augmented 6th of D harmony (more on this in section III), to close the registers, to give dramatic weight to the movement, and to give a final statement of the introduction as an aforementioned “book-end” before the fast pace of Movement III begins.

Therefore, with its categorically atypical form, the question arises of how Beethoven is able to maintain structural coherence in this tender and lyrically expressive movement. The answer lies in its “musical language of stasis” and its resultant harmonic and structural subtlety: 1). All sections of the movement are centered around D major, meaning no resolution of key centers is possible. 2). No resolution is given between D major and G minor (more on this in section II), creating an eerie major/minor harmonic world throughout the movement. 3). The only substantial modulation is to a key center too distantly related and too briefly stated (A^b at measure 65) to be of any structural harmonic consequence. 4). Each section is a complete gesture which does not attempt to resolve its modal interchanges or “chromaticisms,” 5). The piece begins, ends, and has two other obvious restatements of the introduction material, creating distinct, structural “book-ends,” and 6). Each section is slow and languorous in mood and no reconciliation between “energies” (typically the first and second themes in a traditional sonata) is required: the movement is like one moment frozen in time. This is a much needed respite from the jolting and tormented world of the first movement and prepares the ear for the more fast-paced activity that the third will bring. In fact, lack of development or contrast is common in second movements of this era, and an attempt to interpret this movement as belonging to any traditional form is perhaps useful only as an exercise rather than as a method to understanding the brilliance of the composition.

II. Tonal Coherence

As mentioned above, all sections of this piece are centered around D major, with frequent shifts into the D minor mode (in fact the harmonic language of the entire movement is a D major/minor tonality; more on this below). Except for some passing tonicized harmonies, there is only one modulation in the piece: that of the B¹ section from D major to A^b major. While D major is clearly the home-key of the movement, there is considerable chromaticism and wandering harmonic motion throughout, and it features many elusive cadences (more on this below). However, despite this simultaneous harmonic stasis around D major and tonal ambiguity around other key centers, the piece maintains a kind of tonal coherence. Two major factors play a role in this coherence: its *tri-tone relationships*, and its consistent *major/minor shifts* and resultant delivery of major harmonies where minor ones are expected.

Tri-tone relationships: The use of motion through key centers related by the tri-tone is very common in this movement. There are three major occurrences: 1). the first fugue modulates from D major to A^b major, passing through D minor and G minor, 2). the bridge section is a sequence moving from A^b → C minor, then up a tri-tone for the second entrance: G^b minor → B^b minor, and then up another tri-tone for the third entrance: F^b minor → A^b minor (although this third entrance lands on the sonority of A⁶ of A^b minor which is then reinterpreted as a V⁷ of D major), and 3). The B² section uses a sequence of consecutive tri-tone-related keys: starting at measure 99, the viola plays C → F# (answered by the cello in 100), then at measure 101, D → G# (answered by the cello at 102), and then from G# back to a 1^{6/4} of D minor harmony (over a dominant pedal) at 104, completing a third tri-tone entrance. In addition, as the piece switches between the minor and major modes, tri-tone relationships will naturally abound: Bb is commonly


used as part of the $\text{II}^{6/5-07}$ chord of D (minor) creating a natural tri-tone between the E and the B^b  This tri-tone, of course, is not found in the major mode. The only major-mode tri-tone is between the 4th and 7th degrees of the major scale, which would traditionally be used in a dominant, rather than subdominant, function.

Cadences and Major/Minor Shifting: This piece uses elements of the D major and D minor modes, and, as there is really no reconciliation between the two, the listener is given no true harmonic resolution. The only possible harmonically traditional resolution between D major and G minor could be via a reconciliation between D major and D *minor* (illuminating the frequent use of the subdominant G minor as a subdominant of D minor) or between G minor and G *major* (reinterpreting G as a true subdominant of D major). In fact, no such reconciliation occurs, giving the piece a floating and elusive quality. The lack of possibility for harmonic development puts in doubt the interpretation of any traditional structural understanding of this piece, leaving the listener with a static or floating feeling at the end of the movement. Both the A and B material is centered around D major/minor: no other harmonies are substantially developed.


There are, however, several passing harmonies which are momentarily tonicized. These harmonies are given coherence by their connection to Bb (more on this in section III), and the ear is continually prepared to hear minor harmonies but given major ones instead. This can be illustrated by examining several important cadences in the movement:

Measure:	34	64	76	112	143	188
Cadence to:	D major	A ^b major	D major	D major	(D major-interruption)	D major
Expected Harmony:	D minor	A^b minor	A^b minor/D minor	D minor	D minor	D minor
Notes:	With the frequent use of G minor and $\text{II}^{6/5-07}$ of D harmonies, we expect a minor tonic	C ^b 's in measures 60-62 and diminished dominants prepare A ^b minor	The tri-tone sequence of minor key centers should land on A ^b minor; instead lands on unsupported B ^b as A ⁶ of D (minor)	The long passage of $\text{II}^{6/5-07}$ material over the tonic pedal prepares D minor	Close of A ² section; but no real cadence here; more D major material interrupts	With the frequent use of G minor and $\text{II}^{6/5-07}$ of D harmonies, we expect a minor tonic

This continual arrival on major harmonies helps give the piece a coherent floating quality, with a possible interpretation of major harmony as representing “hope” in the context of Beethoven’s “tormented minor-key world” (elegantly portrayed by the first movement). In addition, all major cadences are in D major, except for the A^b major arrival at 65. However, while this wholly unusual A^b cadence is dramatically highlighted by its quiet arrival, it is, traditionally speaking, one of the weakest cadences of the movement. For the purposes of further discussion, it will be useful to examine the elements that create this weak A^b arrival:

1). *No closure in first violin/tonal ambiguity* – The melody in the first violin at measures 58-64, derived from the first part of the fugal subject, descends on the pitches D^b, C, C^b, B^b, F^b, E^b, D, D^b, and C: 

This leaves F natural (part of the A^b major tonality which is given at 59 and 65, and which also appears in the viola and second violin at 60 and 62, respectively) unheard, as well as A^b (the ensuing tonic pitch). It could be inferred that the F natural, as the 6th degree of the scale, is given as a flatted 6th instead, which implies A^b minor, and that the first violin’s absence of A^b is resolved by octave transference in the second violin and cello at measure 64. However, the tonal ambiguity here cannot be overlooked: using C^b’s, C naturals, F^b’s and F naturals, the passage has elements of the preparation of both A^b minor and A^b major, and the descending line of the first violin, relying heavily on unsettling chromatic motion, leaves certain pitches untouched, giving the cadence a weakened effect.

2). *Unusual bass line* - The bass line at measures 62-64 in the cello, on the pitches E^b, F^b, G, and A^b  leaves F *natural* unheard, which is part of the harmonic minor scale (or major mode) and traditionally used in any cadential

ascending bass line. This bass line ascent is highly unusual; especially considering the cello's lack of resolution within the register that it had occupied for the previous four measures.

3). *Un-cadential I^{6/4} of A^b major* - On the fourth eighth note of measure 59, a passing I^{6/4} in A^b major is heard, which would typically lead directly to a V chord and then a major mode cadence to I (or possibly a deceptive cadence). Instead, more E^b dominant material is heard, which prepares A^b *minor*.

4). *Weak-beat arrival* – the A^b cadence in measure 64 comes on the weak beat of 3, instead of arriving, in typical fashion, on the downbeat. This further weakens the arrival point.

This A^b major cadence, landing on a very distantly-related key center to the tonic of D major, is typical of the cadences in this movement, in that it prepares or uses elements of both major and minor tonalities. Another unusual cadence comes at the end of the bridge at measure 76-77. Here we see a sequence of minor keys related by the tritone, which should land on A^b minor for its third entrance. Instead, we are given a kind of Neapolitan harmony of B^{bb} (A major), which leads to, without harmonic support, a single B^b in the viola. This B^b is then reinterpreted as part of an Augmented 6th of D minor, but then leads to a restatement of the D major fugal subject. This D major is almost completely unprepared, as the V that appears in measure 76 (B^{bb} or A major as Neapolitan of A^b minor) is questionable, as is the B^b subdominant of A⁶.

As there is no real resolution between the major and minor modes of this movement, the aural “world” of the piece is defined by a kind of combined D major/minor tonality, and, by the end of the movement, our ear accepts this stasis. The *repetition* of major/minor gives coherence to the movement and obviates the need for

harmonic resolution. Were this a movement of contrasting major and minor key centers, such as the first movement's F minor and D^b major, an actual reconciliation would be needed in the form of recap and/or coda. No such reconciliation is needed here.

III. The importance of B^b

As it has been mentioned earlier, B^b is the one pitch that is common to all key centers and arrival points in this movement, except for the momentary A minor arrival at measures 88-90 (and excepting of course the home key center of D major). These key centers are: G minor (heard throughout the A & B sections and measure 53), D minor (50), C minor (57, 68), A^b major (65), G^b major (69), and B^b minor (72). Despite several brief modulations and rich chromaticism, however, most of the material of the movement is centered around the D major/minor tonality with B^b as the common pitch, and it uses G minor as a kind of “hinge” to connect the two. The subdominant to D major would normally be G major, but the D major gets frequent dominant treatment to infuse it with a subdominant quality to G minor. This tonic/subdominant duality is never truly resolved, however, and, as B^b is the most common and relevant “color” tone of this movement, there are several occurrences of B^b which give the piece an overall coherence (please see the appendix for all occurrences of B^b and their functions):

1). *Measure 19-20*: At measure 20, after all the references of B^b as part of the questionable subdominant harmony of G minor, we hear an actual subdominant of D major in the second two beats of measure 19: *E minor*. This is then contrasted and responded to in the first two beats of measure 20 with the E⁰⁷ harmony acting as a II^{6/5-07} of the D tonic. The wide leaps in the first violin in this passage highlight the B^b as a color tone (rather than a scale degree of another mode) and its sound begins to be

confirmed as part of a subdominant function of D major, rather than as part of G minor.

2). *Measure 33:* At measure 33 is the final of three cadences heard in this first A section. All of them include the B^b as part of a II^{6/5-07} harmony, but none of them resolves in their register (or at all), until measure 33, which features an A → B^b → A motion in the viola. This has the effect of momentarily “closing” the B^b and giving it a kind of resolution as a color tone. The soft dynamic level of this cadence, as well as the approach to, and departure from, B^b by step-wise motion, help to confirm B^b as a color tone rather than as part of any other chord.

3). *Measure 77:* Arguably the most unusual event of all of Opus 95, this B^b in the viola comes out of the harmonic “ether,” without harmonic support, to act as an Augmented 6th harmony to D major. The bridge section that it follows, however, with its sequence of key centers related by the tri-tone, is like a descent into complete harmonic obfuscation, and it lands on this single, seemingly unrelated, pitch. This event sparks interesting philosophical or poetic interpretations of the whole movement: perhaps it is an “expose” for the possible uses or developments of B^b, and this moment is the nearly silent climax. It can also be seen, harmonically and gesturally speaking, as something like a “near death experience:” the “life” of the music is pulled back by the return to the familiar D major harmony, although this return is eerie at best and barely unprepared by anything related to D major.

4). *Measure 108-111:* Several B^b occurrences here help to outline the diminished dominant passage over the tonic pedal. This diminished dominant harmony, however, prepares D minor, and the cadence (an untraditional one, heard over a tonic pedal) is on D *major* at measure 112. While hearing a major harmony when a minor one is expected is nothing new to this piece, this cadence is important in that it can be seen as the gestural

or energetic climax to the whole movement. B^b is no longer part of G minor (although this relationship will return in A^2), but is heavily portrayed as part of a subdominant of D: $\text{II}^{6/5-07}$, following a long passage of dominant and tonic pedal tones which starts at measure 104. The B^b 's in this section are important because this is the "last chance" for a developmental resolution between D major and D *minor* (as everything else that follows is recapitulation and coda), but, in fact, none occurs. The listener is planted squarely back into the introduction material and then into the same D major/minor tonality of the first A section. B^b 's relationship to D major will no further be developed than it has until this point, other than as part of the coda's Augmented 6th harmony.

5). *Measures 173 & 177:* The B^b 's in the cello on the 4th eighth-notes of measures 173 and 177 give an obvious Augmented 6th harmony of D major, having the effect of helping to close the B^b to receiving further development. This is true closing material and the B^b is used in a pedestrian manner, rather than as the unusual chord tone of most of this movement.

6). *Measure 187:* As part of the final cadence of the movement, this B^b in the cello is harmonized with all instruments as part of the $\text{II}^{6/5-07}$ of D major harmony. It has just followed an accented and sole B^b in the cello in measure 185, but, in 187, all instruments hold their place except for the cello, which moves step-wise to A for a V^7 of D major chord. It has also followed the two B^b 's mentioned in measures 173 and 177, which occur in the same register. At this final closing, the listener understands that experimentation with the B^b is done: B^b has been registrally and harmonically closed.

B^b is constantly used for contrast in this movement, and it helps give it its unusual color and aural "world" of major/minor harmony. An analysis of every event of B^b , such as the one in the appendix, touches on nearly all harmonies of this movement, and

provides for an interesting understanding of the tonal coherence that Beethoven is able to achieve using untraditional techniques.

IV. Connections to Other Movements

Much of the material introduced in the first movement is reused and recycled in the other movements. Some of this material includes: The surprise half-step harmonic shifts that come at measures 6, 38, and 49 in movement I are revisited in movement III's measure 40 with the motion up to G^b major from F minor. Movement III also uses a sort of gesture on octave C's as a response to F minor material at measure 28, mimicking movement I's similar gesture at measure 3. III's elision between periods at 39 recalls the elisions in I's 17 and 81. III's shift to D major, a distantly-related key center to its tonic of F minor, recalls II's D major (an unusual key itself to follow I's F minor tonic). III also uses D^b extensively as an Augmented 6th chord to its F minor tonic: this recalls the F-D^b relationship in I. Movement IV's harmonic jump to unison (and octave) D^b's at measure 21 recalls I's surprise runs landing on unison (and octave) D's at 38 and 49. Movement IV uses a texture at 32-40 which seems to be derived from I's measures 72-74. In addition, movement IV features an unusual cadence at measure 43-44 which has no dominant: this feels like one of the interruptions that have been so common throughout this piece.

Movement II uses very little of this material and seems to be created from a different musical syntax. One similarity however, is that movement II and III feature movement through several seemingly unrelated key centers. Movement III modulates from C minor → F minor (recalling II's D major/G minor subdominant ambiguity), G^b major → D major (recalling II's unusual D major → A^b major modulation), and C minor

→ C major (recalling movement I's reconciliation between F minor and F major, and II's major/minor duality). Movement IV also seems to refer to I and II's major/minor duality with 2 codas: one in F minor and the second in F major.

One of the most important differences between movements is II's formal distinction: it is somewhat "sonata-like," but cannot really fit into the sonata "mold" because of its lack of characteristic qualities. Movement's I, III, and IV, however, fit nicely (with certain innovations, of course) into the forms of sonata, menuet & trio, and rondo forms, respectively. These three movements seem to use these forms to their advantage: movement II is so highly unusual that perhaps discussions of its form are meaningful only as an exercise.

Discussion of the form of movement II can, however, illuminate its most important connection to the rest of the piece: its *dramatic* function. It has the effect of slowing the break-neck pace that movement I previously set. Movement II is like a moment frozen in time: this quality is created through its harmonic and structural stasis, as has been shown above. This is a great contrast to the temporal regularity and "justness" of the other three movements: each of them "move" the listener somewhere by developing the material they introduce (a menuet & trio form does not typically feature extensive development, nor does movement's III's menuet & trio, but with its contrasting key centers and developing trio sections, it has substantially more motion than movement II). Movement II, in its languid and ephemeral manner, is like a momentary lapse of consciousness to the whole movement, and its "book-ended" nature, as mentioned above, is like a model for the segmented quality of the whole piece: fast and developmental vs. slow and timeless. Movement IV refers to this timeless mood with its introduction at measures 1-8 before the mad rush to the finish of the piece.

Without the pause that movement II and the introduction of IV bring, all the fast music of the entire work might lose its panache.

Appendix: Occurrences and Functions of B^b's in Beethoven Op. 95, Movement II			
Mm./8th-note/Instr.	Harmony*	Approach	Notes/Function**
<i>*Please note that in the effort of illustrating the modal ambiguity of this movement, harmonies are shown in terms of their traditional function: i.e., a II 6/5⁰⁷ usually supports a minor I, but in this movement it often leads to a major I. Therefore, the implied resultant harmony is listed, not the actual one, and, thus, major-minor shifts will seem abundant.</i>			
<i>**In the Notes/Function section, the actual resultant harmonies are shown</i>			
<u>A¹ Section</u>			
7, 2, Vn II	G min - IV of D min?	leap	Helps create passing G minor harmony within the context of D major A section
7, 1, Va	G min - IV of D min?	step	Helps create passing G minor harmony within the context of D major A section
8, 1, Vn I	G min & II6/5 ⁰⁷ of D min	step	In lead melody in Vn I: highlights B ^b as the pivot note between D major & G minor
8, 1 Vn II	G min - IV of D min?	leap	Helps create passing G minor harmony within the context of D major A section
13, 1, Va	V7 ^{b9} of D min	step	In lead melody in Va: B ^b now helps to reinterpret previous G minor as subdominant of D major
14, 1, Va	I6/4 in D maj	step	In lead melody in Va: B ^b now helps to reinterpret previous G minor as subdominant of D major
17, 1, Vn I	V6/4 of D maj	step	In lead melody of Vn I: responding to Va melody in 13; further develops G minor's subdominant relationship to D major
17, 3, Vn II	V7 ^{b9} of D min	leap	Helps outline A7 ^{b9} harmony
20, 1, Vn I	II6/5 ⁰⁷ of D min	leap	In lead melody of Vn I: wide leap approach greatly highlights the B ^b and the shifting between major mode II of m. 19 and the minor mode II of 20
20, 2, Vn II	II6/5 ⁰⁷ of D min	leap	Helps to highlight the B ^b and the shifting between major mode II of m. 19 and the minor mode II of 20
24, 1, Vn I	II6/5 ⁰⁷ of D min	step	Cadential gesture recalls B ^b 's importance in previous section, but also responds to m. 23's minor mode D7 ^{b9} dom cadential gesture, further confirming the ambiguous relationship between D major and G minor
28, 1, Vn I	II6/5 ⁰⁷ of D min	step	Cadential gesture recalls B ^b 's importance in previous section, but also responds to m. 27's minor mode D7 ^{b9} dom cadential gesture, further confirming the ambiguous relationship between D major and G minor
33, 3, Va	II6/5 ⁰⁷ of D min	step	Cadential gesture recalls B ^b 's importance in previous section and further confirms mode shifting
<u>B¹ Section</u>			
36, 2, Va	V7 ^{b9} of G min	step	In fugal subject: helps to outline V7 ^{b9} harmony of G minor; no harmonic support highlights modal ambiguity
37, 1, 3, 4, Va	G min	step	In fugal subject: helps to outline G minor harmony in D major context; no harmonic support highlights modal ambiguity
42, 1, Vn II	N6 of A min	leap	In second entrance of fugal subject: leap highlights B ^b and helps to outline N6 of A minor, further developing modal

			ambiguity
43, 1, Vn II	II6/5 ⁰⁷ of D min	leap	In second entrance of fugal subject: brings back B ^b as part of II6/5 ⁰⁷ subdominant of D major, further developing modal ambiguity
45, 2, Vc	V7 ^{b9} of G min	step	In third entrance of fugal subject: recalls Va's first entrance outlining V7 ^{b9} harmony of G minor
46, 3, Va	G min	leap	In counter line of fugue: helps to outline G minor harmony in D major context
46, 1, 3, 4, Vc	G min	step	In third entrance of fugal subject: helps to outline G minor harmony in D major context
47, 3, 4, Vn II	II6/5 ⁰⁷ of D min & V7 of III of D min (F maj)	step	In counter line of fugue: helps to briefly modulate to F major by reinterpreting B ^b as part of V7 harmony
47, 1, Va	N6 of D min	tied	In counter line of fugue: tied over from previous measure, it helps to outline N ⁶ harmony of D minor in a D major context
49, 1, Va	II6/5 of F maj	leap	In counter line of fugue: functioning as part of a II6/5, it implies recent V7 of F major harmony (but leads to the familiar V6/5 of D major harmony)
50 2, Vn II	A6 of D min	step	Helps outline B ^b A6 harmony of D major
51, 1, Vn I	A6 of D min	leap	In fourth entrance of fugal subject: helps to outline A6 harmony of D major, contrasting the N6 of V function of the previous entrances' flatted 6th's
53, 1, Va	G min	step	Helps outline the passing G minor harmony
53, 1, Vc	G min	step	Helps outline the passing G minor harmony
56, 2, Vn I	B ^b dom (VII of C min)	step	In counter line of fugue: using a familiar three-note gesture, helps to outline a passing B ^b 4/2 chord
58, 2, Vn I	V4/2 (of Ab min)	leap	Helps outline an E ^b dominant passage leading to the distantly related key center of A ^b major
58, 1, Vn II	V4/2 (of Ab min)	leap	Helps outline an E ^b dominant passage leading to the distantly related key center of A ^b major
59, 2, Va	V7 ^{b9} (of Ab min)	leap	Helps outline an E ^b dominant passage leading to the distantly related key center of A ^b major
59, 1, 3, Vc	V7 ^{b9} and V7 (of Ab min)	step	Helps outline an E ^b dominant passage leading to the distantly related key center of A ^b major
60, 4, Vn I	V7 (of Ab min)	step	In lead melody of Vn I to conclude the first fugue: helps outline an E ^b dominant passage leading to the distantly related key center of Ab major
61, 2, Vn I	V7 ^{b9} (of Ab min)	step	Helps outline an E ^b dominant passage leading to the distantly related key center of A ^b major
61, 3, Va	V7 ^{b9} (of Ab min)	step	Helps outline an E ^b dominant passage leading to the distantly related key center of A ^b major
62, 2, Va	Cadential I6/4 (of E ^b maj)	step	A momentary cadential passage tonicizing E ^b major, as if at the end of an E ^b minor passage
63, 1, 3, Vn II	V 6/5 (of A ^b min)	leap	Helps to outline the E ^b dominant harmony in an unexpected and tonally ambiguous A ^b major cadence
64, 1, 3, Vn II	V 6/5 (of A ^b min)	step	Helps to outline the E ^b dominant harmony in an unexpected and tonally ambiguous A ^b major cadence
<u>Bridge Section</u>			
71, 3, Vc	V7 ^{b9} 4-3 suspension (of B ^b min)	step	In the harmonically floating and tonally elusive sequence of the bridge section: creates the passing B ^b minor harmony
72, 3, Vc	B ^b min	step	In the harmonically floating and tonally elusive sequence of the bridge section: creates the passing B ^b minor harmony
75, 1, Vc	A6 of D min	step	As the bridge section sequence completes it's third entry, the Vc's B ^b is reinterpreted to create the unexpected A6 of D minor harmony, although it leads back to the B ¹ section's D major

77, 1, Va	A6 of D min &	leap	This Bb has been prepared by the recent A6 of D harmony, however with no harmonic support and following an actual V of D, it sounds eerily unrelated to adjacent harmonies and creates the least tonally satisfying cadence in the entire movement.
78, 1, Va	II6/5 ⁰⁷ of D min	tied	Tied from previous measure, forms the beginning of the B ² section fugue
<u>B² Section</u>			
80, 2, Va	V7 ^{b9} of G min	step	In fugal subject: helps to outline V7 ^{b9} harmony of G minor in a D major context
81, 2, Vn I	G min	leap	In fugal subject: helps to outline G minor harmony in D major context
81, 1, 3, 4, Va	G min	step	In fugal subject: helps to outline G minor harmony in D major context
83, 4, Va	II6/5 ⁰⁷ of D min	leap	In fugal counter line: helps to outline the II6/5 ⁰⁷ of D major harmony
84, 1, Vn II	II6/5 ⁰⁷ of D min	leap	In fugal counter line: helps to outline the II6/5 ⁰⁷ of D major harmony
90, 3, Vn II	V7 ^{b9} of D min	leap	In fugal counter line: helps to outline the V7 ^{b9} of D major harmony
91, 2, 3, Vn II	II6/5 ⁰⁷ of D min	leap	In fugal counter line: helps to outline the II6/5 ⁰⁷ of D major harmony
93, 2, 4, Vn I	II6/5 ⁰⁷ of D min	leap	In fugal counter line: helps to outline the II6/5 ⁰⁷ of D major harmony
95, 2, Vc	V7 ^{b9} of G min	step	In head section of fugal subject: helps to outline the V7 ^{b9} of G minor harmony
97, 4, Vn I	Anticipation of V7 (of F)	leap	In a closing sequence, using material derived from the counter line of B ² 's fugue: helps to anticipate the next measure's C dominant harmony
98, 3, Vn I	V7 (of F)	leap	In a closing sequence, using material derived from the subject of B ² 's fugue: helps create the V7 of F harmony
98, 1, 2, Vn II	V7 (of F)	leap	In a closing sequence, using material derived from the counter line of B ² 's fugue: helps create the V7 of F harmony
99, 3, Vn II	V7 (of F)	leap	In a closing sequence, using material derived from the counter line of B ² 's fugue: helps create the V7 of F harmony
105, 3, Va	V7 ^{b9} of D min	leap	In a closing section over a dominant pedal: helps to create the V7 ^{b9} of D major harmony
106, 1, Va	V7 ^{b9} of D min	leap	In a closing section over a dominant pedal: helps to create the V7 ^{b9} of D major harmony
107, 4, Vn I	V7 ^{b9} of D min	leap	In a closing section over a tonic pedal: helps to create the V7 ^{b9} of D major harmony
107, 3, Vn II	V7 ^{b9} of D min	leap	In a closing section over a tonic pedal: helps to create the V7 ^{b9} of D major harmony
108, 1, 2, Vn II	II6/5 ⁰⁷ of D min	leap	In a closing section over a tonic pedal: helps to create the V7 ^{b9} of D major harmony
108, 4, Va	II6/5 ⁰⁷ of D min	leap	In a closing section over a tonic pedal: helps to create the V7 ^{b9} of D major harmony
109, 1, 4, Vn I	II6/5 ⁰⁷ of D min	leap	In a closing section over a tonic pedal: helps to create the V7 ^{b9} of D major harmony
109, 2, 4, Vn II	II6/5 ⁰⁷ of D min	leap	In a closing section over a tonic pedal: helps to create the V7 ^{b9} of D major harmony
110, 4, Vn I	II6/5 ⁰⁷ of D min	leap	In a tonally ambiguous cadential section over a tonic pedal: helps to create the V7 ^{b9} of D major harmony
110, 4, Vn II	II6/5 ⁰⁷ of D min	leap	In a tonally ambiguous cadential section over a tonic pedal: helps to create the V7 ^{b9} of D major harmony
111, 4, Vn II	II6/5 ⁰⁷ of D min	leap	In a tonally ambiguous cadential section over a tonic pedal: helps to create the V7 ^{b9} of D major harmony

<u>A² Section</u>			
118, 2, Vn II	G min - IV of D min?	leap	Helps create passing G minor harmony within the context of D major A ² section
118, 1, 3, Va	G min - IV of D min?	leap	Helps create passing G minor harmony within the context of D major A ² section
119, 1, Vn I	II6/5 ⁰⁷ of D min	leap	In lead melody in Vn I: highlights B ^b as the pivot note between D major & G minor
119, 1, Vn II	II6/5 ⁰⁷ of D min	step	Helps create passing G minor harmony within the context of D major A ² section
124, 1, Va	V7 ^{b9} of D min	step	In lead melody of Vc: B ^b now helps to reinterpret previous G minor as subdominant of D major
125, 1, Vc	V7 ^{b9} of D min	step	In lead melody of Vc: B ^b now helps to reinterpret previous G minor as subdominant of D major
128, 1, Vn I	V7 ^{b9} of D min	step	In lead melody of Vn I: responding to Vc melody in 125; further develops G minor's subdominant relationship to D major
131, 1, Vn I	V7 ^{b9} of D min	step	Helps create V7 ^{b9} of D major and B ^b further reinterprets G minor as subdominant of D major
131, 2, Vn II	V7 ^{b9} of D min	step	Helps create V7 ^{b9} of D major and B ^b further reinterprets G minor as subdominant of D major
135, 1, Vn I	V7 ^{b9} of D min	step	Cadential gesture recalls B ^b 's importance in previous section, but also responds to m. 134's minor mode D7 ^{b9} dom cadential gesture, further confirming the ambiguous relationship between D major and G minor
139, 1, Vn I	V7 ^{b9} of D min	step	Cadential gesture recalls B ^b 's importance in previous section, but also responds to m. 138's minor mode D7 ^{b9} dom cadential gesture, further confirming the ambiguous relationship between D major and G minor
<u>Coda</u>			
145, 2, Va	V7 ^{b9} of G min	step	In material derived from the fugal subject now in a stretto: helps to outline V7 ^{b9} harmony of G minor
146, 1, 3, Va	G min	step	In material derived from the fugal subject now in a stretto: helps to outline the G minor harmony
147, 2, Vn II	V7 ^{b9} of G min	step	In material derived from the fugal subject now in a stretto: helps to outline V7 ^{b9} harmony of G minor
148, 2, Vn I	V7 ^{b9} of D min	step	In material derived from the fugal subject now in a stretto: helps to outline V7 ^{b9} harmony of D major
148, 2, Va	V7 ^{b9} of D min	step	In material derived from the fugal subject now in a stretto: helps to outline V7 ^{b9} harmony of D major
149, 1, Vn I	V7 of III of D min (F maj)	step	In a small closing section to the stretto: helps create the passing V7 of F major harmony
150, 1, Vn I	V7 of III of D min (F maj)	step	In a small closing section to the stretto: helps create the passing V7 of F major harmony
151, 1, Vn I	V7 ^{b9} of D min	step	In a small closing section to the stretto: helps create the passing V7 ^{b9} of D major harmony
152, 1, 3, Vn I	V7 ^{b9} of D min	step	In a small closing section to the stretto: helps create the passing V7 ^{b9} of D major harmony
153, 1, 3, Vn I	V7 ^{b9} of D min	step	In a small restatement of the A material: lead melody in Vn I helps create the V7 ^{b9} of D major harmony
154, 1, Vn I	D maj	step	In a small restatement of the A material: lead melody in Vn I recalls B ^b 's predominance as a non-chord tone
157, 1, Va	V7 ^{b9} of D min	step	In a small restatement of the A material: lead melody in Va I helps create the V7 ^{b9} of D major harmony
158, 1, Va	D maj	step	In a small restatement of the A material: lead melody in Va recalls B ^b 's predominance as a non-chord tone

161, 1, Va & Vc (doubling at the octave)	V7 ^{b9} of D min	step	In a small restatement of the A material: lead melody in doubling at the octave Va & Vc helps create the V7 ^{b9} of D major harmony
162, 1, Va & Vc (doubling at the octave)	D maj	step	In a small restatement of the A material: lead melody in doubling at the octave Va & Vc recalls B ^b 's predominance as a non-chord tone
164, 3, Vc II	V7 ^{b9} of D min	step	In coda section: helps to create the V7 ^{b9} of D major harmony
164, 3, Va & Vc (doubling at the octave)	V7 ^{b9} of D min	leap	In coda section: doubling at the octave Va & Vc help to create the V7 ^{b9} of D major harmony
167, 3, 4, Vn II	V7 ^{b9} of D min	leap	In coda section: helps to create the V7 ^{b9} of D major harmony
173, 4, Vc	A6 of D min	step	First substantial A6 chord of D major in the piece: using the B ^b in the bass voice (Vc), it helps to reinterpret the B ^b as subdominant of D
177, 4, Vc	A6 of D min	step	In bass voice (vs.): helps to further confirm B ^b 's meaning as part of an A6 chord of D
182, 1, Vn II	V7 ^{b9} of D min	step	In the final closing section of the movement, using material derived from the A section: helps to create the V7 ^{b9} of D major harmony
182, 3, Va	V7 ^{b9} of D min	leap	In the final closing section of the movement, using material derived from the A section: helps to create the V7 ^{b9} of D major harmony
183, 1, Vc	V7 ^{b9} of D min	leap	In the final closing section of the movement, using material derived from the A section: helps to create the V7 ^{b9} of D major harmony
185, 1, Vc	II6/5 ⁰⁷ of D min	leap	In the final closing section of the movement, using material derived from the introduction: helps to create the II6/5 ⁰⁷ of D major harmony and "hangs" on the B ^b , underscoring it's harmonic importance in the movement
185, 1, Vc	II6/5 ⁰⁷ of D min	leap	In the final closing section of the movement, using material derived from the introduction: helps to create the II6/5 ⁰⁷ of D major harmony and "hangs" on the B ^b , underscoring it's harmonic importance in the movement. This is also the only time that the resolution of the B ^b in the context of D has obvious harmonic support.