MOTIVIC REPETITION IN BEETHOVEN'S PIANO SONATA OPUS 110

PART II: THE TRIO OF THE SECOND MOVEMENT AND THE ADAGIO-ARIOSO

by

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In the first part of my study of Beethoven's Piano Sonata Opus 110, published in the initial volume of this journal (1987), I stated that the entire sonata--with the exception of the Scherzo (March)--is derived from or in some way related to a single motivic idea, initially stated in the opening phrase of the first movement. To refresh your memory, I have reproduced my analysis of the opening theme in Figure 1, in which the two statements of the motive are indicated by brackets. In its original (and complete) form this *Ur*-motive consists of the pitch succession e^{b2} - f^{2} (neighbor note) - e^{b2} - d^{b2} - c^{2} ($\hat{3}$). However, as we might suspect, this idea undergoes various transformations as the movement unfolds. Of particular significance is the role register plays in this process. Statements near the surface are sometimes treated to registral disjunction, often resulting in the isolation of the neighbor-note figure ($\hat{5}$) - $\hat{6}$ - $\hat{5}$. On the other hand, elements of greatly expanded statements of the motive, like the one encompassing the first and second theme areas in the recapitulation, are frequently articulated by registral association, often in the extreme upper register. Very frequently the

motive appears without its initial element, that is, as the descending fourth f - e^{b} - d^{b} - c. And though many statements occur at the original pitch level, others--those in the second theme area of the exposition and in the development--are transposed. Despite all these changes--registral disjunction, fragmentation, expansion and transposition--the motive retains its identity and thus, I believe, gives to this movement and to the entire piece its unique character and coherence.

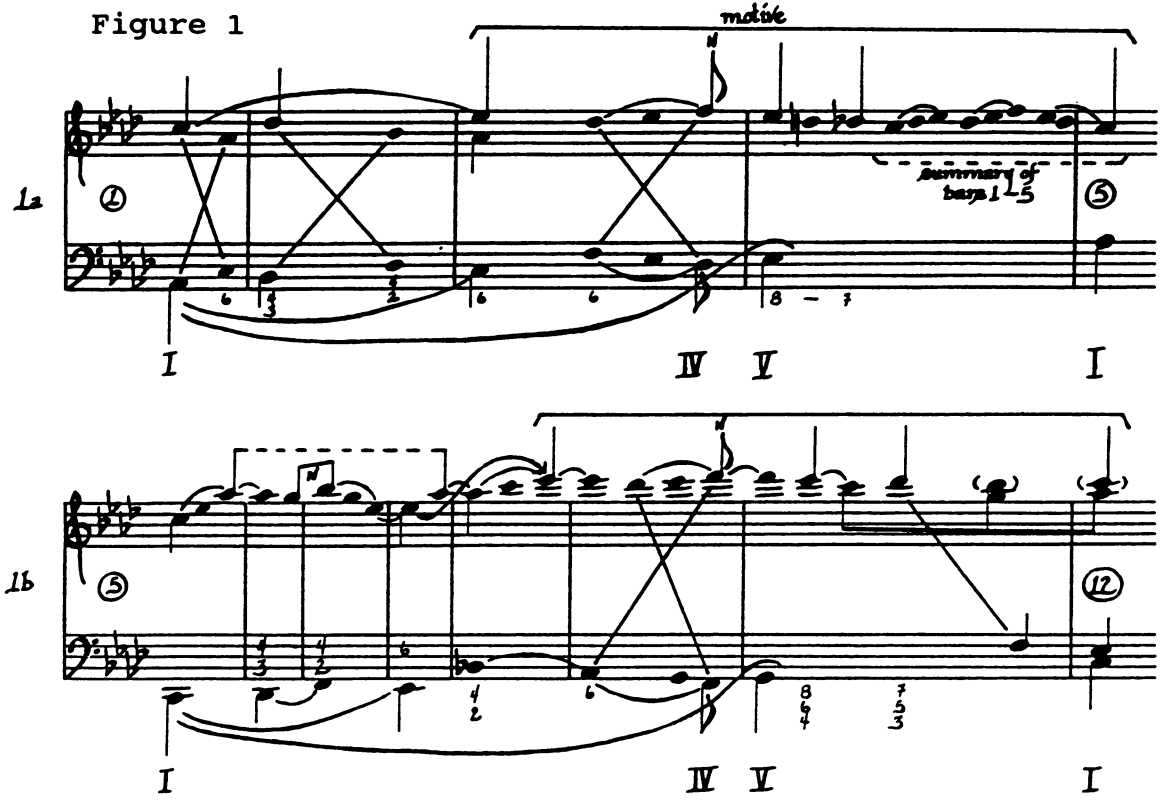
In the following pages I will show how the motive is utilized in two additional parts of Opus 110: the Trio of the second movement and the Adagio-Arioso, that is, the opening of the final movement. The fugue subject and thus the fugue itself are also derived from this idea, but because of the length and complexity of that structure, its analysis will have to wait for a later installment. Meanwhile I will begin with the introduction to the fugue, since its relationship to the original motive is relatively straight-forward.

I. THE ADAGIO AND ARIOSO[1]

The Adagio-Arioso is divided into two parts, an introductory phrase (bars 1-8), which has the character of a recitative, and the Arioso itself, which is a self-contained (e.g., harmonically closed) structure. Though in the larger context the Adagio and Arioso clearly function in a secondary capacity, namely as a bridge between the scherzo and the fugue, this section will be

[1]This portion of the study is a revision of a paper read at the Schenker Symposium, held at the Mannes College of Music, 15-17 March 1985. The paper was titled "Beethoven's Piano Sonata in A-Flat, Opus 110: The Concealed Motivic Structure of the Adagio and Arioso."

Figure 1



treated here as if it were an independent structure. I will begin with the Arioso, since it is somewhat easier to deal with than the introductory phrase.

The Arioso

The Arioso can be divided into four phrases in the key of the tonic minor (a^b). The first leads from the tonic harmony to the dominant (bars 9-12), though, as we shall see, the voice leading and more specifically the completion of an initial statement of the motive suggest continuation beyond the dominant to the tonic on the downbeat of bar 13. The second begins from that point and leads to a cadence on the mediant in the second half of bar 16. The third, beginning from that cadence, leads through the subdominant to the dominant in bar 20, and the final phrase, with the motive in an inner voice, begins on the tonic harmony in first inversion (bar 21). Considered at this level, the harmonic motion of the entire Arioso is thus i - III - (iv) - V - i, as is indicated below the second system of Figure 2, which provides an interpretation of the voice leading and harmony of both the Adagio and the Arioso.

As indicated by the square bracket above bars 9-13 (downbeat) in Figure 2, the Arioso begins with a complete statement of the motive at the original pitch level and supported by the same harmonic progression as at the opening of the sonata, except now in the minor mode.[2] The initial motion to the upper neighbor note

[2]It is perhaps worth noting here that Beethoven's initial attempt at the opening of the Arioso theme is found on p. 71 of the sketchbook Artaria 197 amongst fragments for the first movement and an initial version of the fugue subject (in inversion). (See Karl Michael Komma, *Die Klaviersonate As-Dur Opus 110 von Ludwig van*

(bar 10) is contained within the tonic harmony, but the second and structurally more important one (bar 11) is supported by the subdominant. This time the f^{b} is reached from above (*Übergreifentechnik*), but because of its rhythmic placement it is not heard as an important note. Furthermore, its continuation is weakly stated while the inner voice is metrically stressed. One might expect the line to stop at b^{b} over the dominant in bar 12 or perhaps to continue on to a^{b}, and it is only at the downbeat of bar 13, with the arrival of c^{b} instead of a^{b}, that the direction of the weakly stated upper line becomes apparent. Viewed from a different perspective, one might say that the appearance of the motive has been disguised by its rhythmic and metric realization.

The melody of the second phrase is composed of two separate lines: One is a decorated ascending octave leading from c^{b2} to c^{b3}; the other is an incomplete and transposed statement of the motive, with the final note (e^{b}) occurring only in the lower register. The parallel with the second part of the initial theme of the first movement--where the motive, except for the final note, is stated in the upper register--is striking. In this case, the result of the transferred resolution is the reinstatement of e^{b} in the original register, now supported by the mediant harmony. Thus, in the largest sense, what we have to this point is the prolongation of e^{b2} with a change of harmony from tonic to mediant.

As was previously mentioned, the third phrase progresses from the mediant through the subdominant to the dominant (bar

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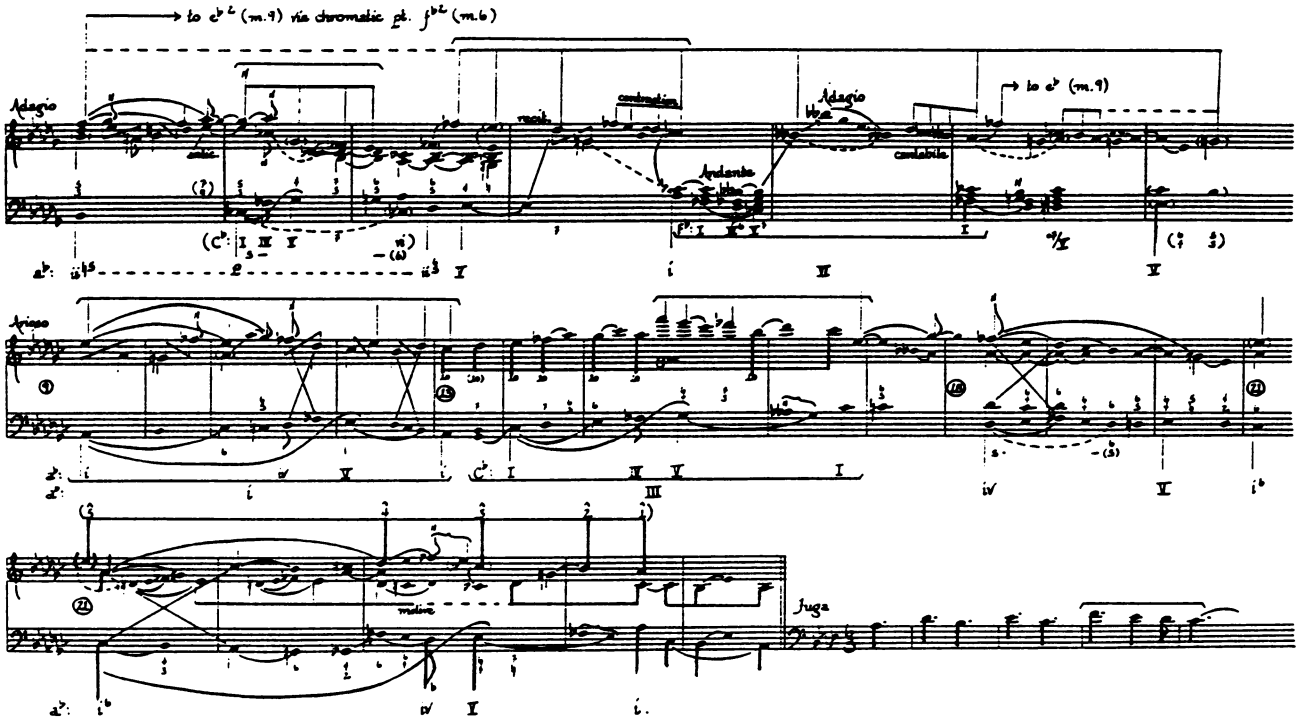
Beethoven, Beiheft zur Faksimile-Ausgabe [Stuttgart, 1967], p. 9.) Though not conclusive evidence for a motivic link between these passages, it does indicate that Beethoven was thinking ahead to the final movement while still working out passages from the first movement.

20). Once again the upper neighbor note f^{b} is reached from above as in bar 11, but here, despite the momentary displacement, the f^{b} and its supporting harmony are given far greater prominence. From this f^{b} the line moves down by step to the g of the inner voice, which is supported by the dominant harmony. This unfolding of an interval of a diminished seventh from f^{b2} to g-natural^{1}--from an outer to an inner voice--strongly suggests a resolution to e^{b2} over a^{b1}, as shown at the end of the second system of Figure 2. Instead the e^{b} is transferred to an inner voice at the beginning of the final phrase. This transfer, which is articulated by the repetition of the double neighbor-note figure in bars 21 and 22, is signaled in advance by the statement of the d-natural-e^{b} in the left-hand part of bar 20.

It is my contention that the e^{b}, once transferred to the inner voice, continues in that register throughout the final phrase. It moves through the d^{b}, supported first by subdominant and then dominant harmony in bars 23 and 24, before the resolution to c^{b} over the final tonic harmony. To be sure, this line is buried in an inner voice, covered by yet another reference to the f^{b}-e^{b} motive in the upper register (bar 23), which is answered immediately by the bass in the next bar. Despite this reference to the original register, one's attention is drawn back to this inner line when the c^{b}, the final note of the motive, is continued in open octaves through b^{b} to a^{b} in preparation for the fugue. Though the importance of this inner line is made clear by its continuation, one can hardly ignore the upper register or pass it off merely as "covering." Repeated hearings suggest to me that there is an implied descent in this register to the a^{b} at the cadence, as indicated in Figure 2. Nevertheless, I take this implied descent to closure on a^{b} as secondary in importance to the

Figure 2



completion of the motive in the inner voice and the subsequent preparation for the initial statement of the fugue subject in that register.

It is now possible for us to consider the overall structure of the Arioso. Recall that in the largest sense the first two phrases prolong e^{b2} over a change of harmony from tonic to mediant. What follows is a motion to the upper neighbor note f^{b}, supported by the subdominant harmony in bars 18-19, which in turn leads to the dividing dominant supporting the inner-voice g-natural in bar 20. As noted above, the return to e^{b} over a tonic harmony in six-three position occurs through registral transfer to an inner part, where the continuation to c^{b} and completion of the motive is accomplished. *Thus the entire Arioso can be understood as encompassing one greatly expanded statement of the motive*, within which there are embedded two shorter statements, the first at the original pitch level in bars 9-13 and the second transposed in phrase 2. This interpretation is graphically represented in Figure 3A, second system, or with less detail below at level B.

Before turning to the Adagio, I would like to comment on two matters. First I feel obliged to say something further about the division between the third and fourth phrases, which is partially obscured by the bass line. Furthermore, because of the registral connection between bars 18 and 23, one might be tempted to read a prolongation of the subdominant harmony across the phrase division. Despite this obvious reference and the continuous motion of the bass line, I am convinced one must understand bar 21 as a new beginning as well as a continuation. Thus the true prolongation at the largest level is of the tonic harmony, from bar 9 to the

beginning of phrase 4, as shown in Figure 3. Second I would like to note that statements of the motive are not just melodic, but involve repetition of a harmonic pattern as well. The upper neighbor note is always supported by the subdominant, and the return or simply the descent to $\hat{5}$ most often occurs with the dominant. Only in the greatly expanded version does the e^{b} coincide with a return to the tonic.

The Adagio

Upon first hearing, the status of the B^{b} minor triad which opens the Adagio is unclear. It might be a tonic, or, just as likely, it is heard as a momentarily stable subdominant in the key of the preceding movement. However, it soon becomes clear that it is instead to be heard in relation to the original key of A^{b}. In the immediate context this tonic is re-asserted by the progression leading to and the cadence in bar 4, an important dividing point within the Adagio. However, in the larger context, the true arrival at the tonic harmony comes only in bar 9, at the beginning of the Arioso. Thus, at this larger level, we understand the melodic f of bar 1 to lead eventually through the f^{b} of bar 6 (written as e-natural) to the e^{b} of bar 9, as shown at level B of Figure 3. The meaning of the B^{b} minor chord now becomes clear: It provides consonant support for the upper neighbor note f($\hat{6}$), which is subsequently altered to f^{b} in preparation for the change of mode.[3] In this sense we can

[3]The relationship between f and f^{b} is also exploited in the first movement. The two pitches occur in immediate juxtaposition in bars 77 ($e^{\#}$ - e-natural) and 114 (f-natural - f^{b}). And the chromatic passing tone f^{b}, written as e-natural, is prolonged in bars 70-77.

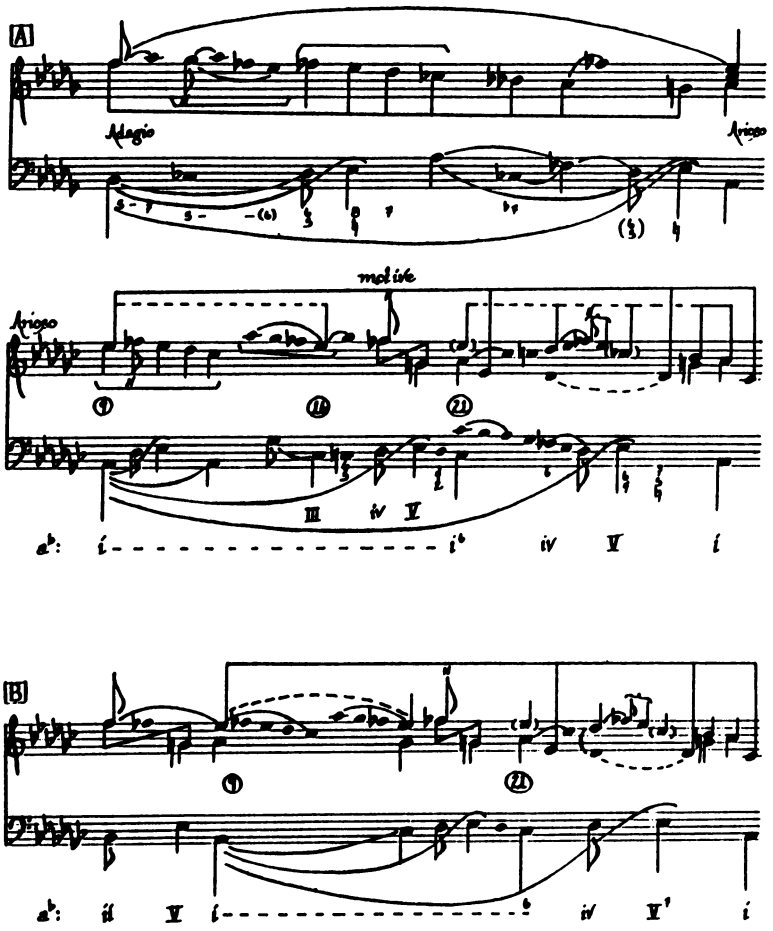
understand the Adagio as preparing the Arioso not only harmonically but motivically as well. That is, this large-scale motion f-e^{b} (bars 1-9) anticipates and prepares the subsequent statements of the motive in bars 9-13 and, at the highest level, in bars 9-24.[4]

As shown in Figure 3A, the melodic f of bar 1 is prolonged by a linear motion to the inner-voice tone g-natural, which is supported by the implied dominant in bar 7. (Here it must be noted that neither the dominant nor the g-natural are stated explicitly, but are clearly implied by the context.) This unfolding of the seventh f^{2} - g-natural^{1} is answered immediately by the fifth e^{b2} - a^{b1} in the first bar of the Arioso, which in turn is decorated by the unfolding g-natural^{1} - f^{b2} in the next bar. Thus the large-scale motion of the Adagio seems to be reflected immediately in the voice leading of the Arioso.

Let us now consider the voice leading of the Adagio in some detail, as is shown in the top system of Figure 2. Here one can see the true significance of the cadence in bar 4. It is not merely a dividing point within the larger unfolding, but it also articulates the end of dual statements of the motive initiated from the upper neighbor note. As shown by the bracket above, the primary statement begins with the f^{b2} in bar 3, which in the overall context of the phrase reaches back to the f-natural of bar 1. The shorter statement, an embedded contraction, appears as an embellishment of the dominant seventh leading to the final note of both statements of the motive.

[4]This situation is analagous to what occurs in bars 20-35 of the first movement, where a complete statement of the transposed motive is preceded by its upper neighbor note.

Figure 3



The connection between the $f^{\#}$ of bar 1 and the f^{b} of bar 3, which are supported by a prolonged supertonic harmony, is composed out in a very elaborate manner. The corresponding connection in the bass, the third b^{b} to d^{b}, is filled in by the passing tone c^{b}, which is prolonged by its own progression. This progression (I - IV - V - vi) supports a transposed statement of the motive, which is not immediately apparent because of the abrupt registral change in bar 2. This registral change accomplishes two things: It establishes a precedent for what is to follow; and more locally it isolates the g^{b2}, the upper neighbor note of f (bar 1) and eventually f^{b} (bar 3). The prolonged upper neighbor g^{b} is reached from above, a voice-leading technique employed twice in the Arioso to move to the upper neighbor of e^{b}.

The continuation of the descent from the c^{b} of bar 4 to the a^{b} ($g^{\#}$) of bar 6 involves several registral changes and an important shift of harmonic emphasis to the submediant (F^{b}), which, as in the first movement, is written as E-natural. The c^{b} first moves to the b^{bb} in the lower register at the end of bar 4. However, this pitch, harmonized as the seventh of the dominant of F^{b} (E-natural), is repeated several times with increasing and then decreasing intensity– a particularly intriguing feature of this passage--before its resolution in bar 6 to the a^{b} ($g^{\#}$) in the original register. The return to this register coincides with another surface statement of the motive (transposed), which is parallel to the contracted statement leading to the cadence in bar 4. The continuation of the a^{b} to g-natural is hinted at in bar 6, but because of the harmony it is heard instead as a lower neighbor. Thus, as was noted previously, the g-natural and its supporting dominant are never actually stated, but clearly implied by

the context. They are replaced in bars 7 and 8 by the descending arpeggiation of the tonic triad, which locally prepares the Arioso.

There are many interesting features of the Adagio and Arioso that I have not attempted to discuss in the preceding paragraphs, since it was my intent to focus solely on the voice leading and motivic organization. But before leaving this relatively brief section of Opus 110, I would like to raise two issues that are both intriguing and puzzling. First, why did Beethoven choose the upper register for the repeated a-naturals in bar 5? Though there may be some hidden deeper meaning, I suspect that the answer will not come as the result of analysis. Rather I would guess that the answer lies in something far less tangible, such as the greater *expressive* power of this over the lower register. And second, what can one make of Beethoven's key signature for the Arioso? In his critical edition of this work, Schenker suggests that Beethoven may have chosen a key signature with one flat less than normal so that accidentals in the score would be required, thereby conveying visually the continuation of the recitative character of the Adagio into the Arioso.[5] Certainly it is true that by using this key signature Beethoven had to lower the f consistently throughout, which does draw one's attention visually to that pitch. And, as we have seen, the relationship between f and $f^{\flat}$ (e-natural) has more than local significance in this work, which may also have affected Beethoven's decision to write a key signature of six rather than seven flats. We will, of course, never know what motivated Beethoven, but, like

[5]Heinrich Schenker, *Erläuterungsausgaben der letzten fünf Sonaten Beethovens*: Op. 110 (1914), p. 50.

Schenker, I would prefer to think that his action had some meaning, or at least was not fortuitous.

II. THE TRIO OF THE SECOND MOVEMENT

Depending upon one's perspective, the second movement may be described either in terms of contrasts or similarities in relation to the rest of the piece. Certainly in terms of character, the Scherzo and especially the Trio, with its almost frantic energy, are like nothing else in Opus 110. Yet there are certain connections--some rather obvious, but others obscured by the musical surface--that bind it closely to the first and third movements. I will begin with the obvious. First there is a direct pitch link between the first and second movements. The c^2 that closes the Allegro--which, by the way, coincides with a final statement in that movement of the motive--becomes the initial melodic pitch of the second movement; that is, $\hat{3}$ in A^b is taken over locally as $\hat{5}$ in F minor. Second, the coda to the second movement functions as a transition to the Adagio, creating a direct link between the Scherzo and the final movement. (As was noted in the first part of this study, this sonata is to be played continuously from beginning to end, the only pause--and a brief one at that, so as not to destroy the link--coming between the first and second movements.) If we now look more carefully at the Trio, we can see that it is derived from a single figure, f - c - e^b - d^b, stated initially at the beginning of the Trio (bar 41) and repeated later by itself in different registers (bars 92-95) before the repeat of the Scherzo. In fact, Beethoven's initial sketch of this section,[6]

[6]Artaria 197, p. 75. See Komma, *Beiheft*, p. 12.

reproduced here as Figure 4, clearly reveals this plan, since all that is written out are the opening and closing bars, which were eventually shortened to four from the six indicated. If we now consider this repeated figure in relation to the opening of the Scherzo, it becomes clear that the underlying idea is nothing other than the motive that occurs repeatedly throughout this piece: f - e^{b} - d^{b} - c. This interpretation is hardly forced; in fact, the meaning of the repeated figure of the Trio becomes immediately apparent when the initial pitch of the Scherzo (c^{2}) is sounded. What is not at all apparent is that this statement of the motive--which occurs at the original pitch level but is harmonized differently than before--is elaborated by two transposed statements of the same idea. For this we will have to take a close look at the phrase structure and voice leading.

Figure 5 is organized to show the division of the Trio into six phrases, all but the fourth and sixth of which are eight bars in length. There might at first be some question about where the phrases actually begin and end, but it soon becomes apparent that the downbeats (that is, the initial bars) coincide with the lowest sounding pitches in the left-hand part, which, in all but the final phrase, are given dynamic stress. By contrast, it is to the final bar of each phrase that one's attention is drawn by the dramatic and dynamically articulated leap of two octaves (one octave in the final phrase) in the right-hand part, which results in the anticipation by a quarter note of the initial melodic note of each successive phrase. This rhythmic conflict between the parts adds considerable interest to the passage, and as a result the monotony that might otherwise have resulted is avoided. But, at the same time, this conflict makes this passage all the more difficult to play musically and convincingly.

Perhaps the best way to stave off potential difficulties is to keep the underlying metric structure as defined by the left-hand part clearly in mind.

Though the surface characteristics of the Trio give the impression of considerable complexity, the underlying voice leading is very simple. For example, as shown in Figure 5, the initial phrase consists of a prolongation of $\hat{3}$ and the tonic harmony (in the local key of D^{b} major) by means of a neighboring six-five chord. However, the compositional realization of this simple pattern is rather elaborate, occurring over a range of two octaves; the original melodic register is reinstated by the dramatic leap in the final bar of the phrase. First $\hat{3}$ is prolonged by the octave progression f^{3} - f^{2} over a tonic harmony. The pattern of the right-hand part and the repetition of the initial melodic figure in the third bar, shown by the downward-stemmed and beamed notes, divide these four bars into two plus two. The dominant six-five harmony is then extended for three bars, and the resolution of the neighbor note g^{b2} occurs only in the lower octave (to f^{1}) with the return of the tonic harmony in the final bar of the phrase. The first half of the second phrase is exactly the same as the first four bars of the initial phrase. The change comes in the second four-bar group, where the tonic harmony in first inversion is transformed into a dominant six-five chord of the subdominant, to which it resolves in the final bar of the group. As indicated in Figure 5, the implied resolution of the f^{2} of bar 53 is to g^{b2} in bar 56. Meanwhile the f^{2} has progressed by step to the inner-voice tone c^{b2}, which resolves finally to b^{b1} in bar 56. The subsequent two-octave leap establishes b^{b3} as a covering tone above the implied g^{b2} and thus prepares the third phrase, which is

Figure 4

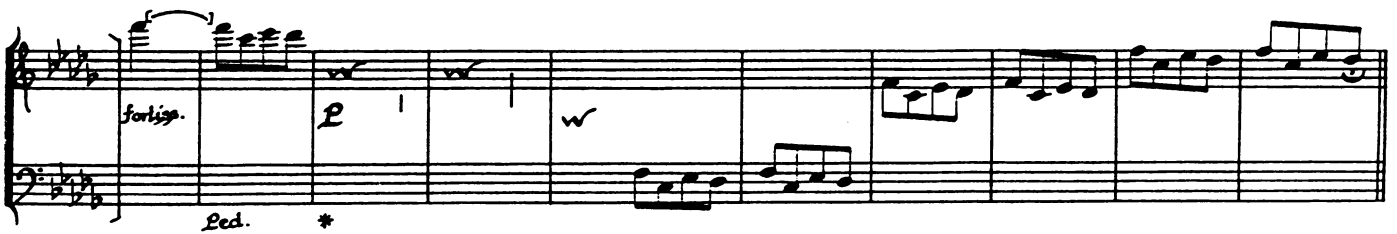
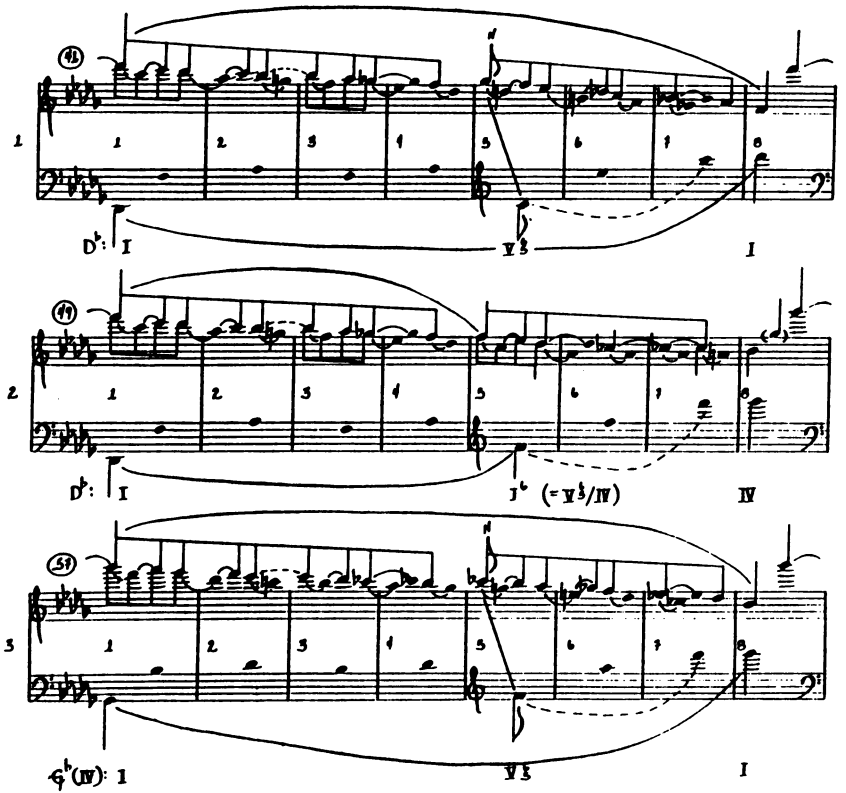
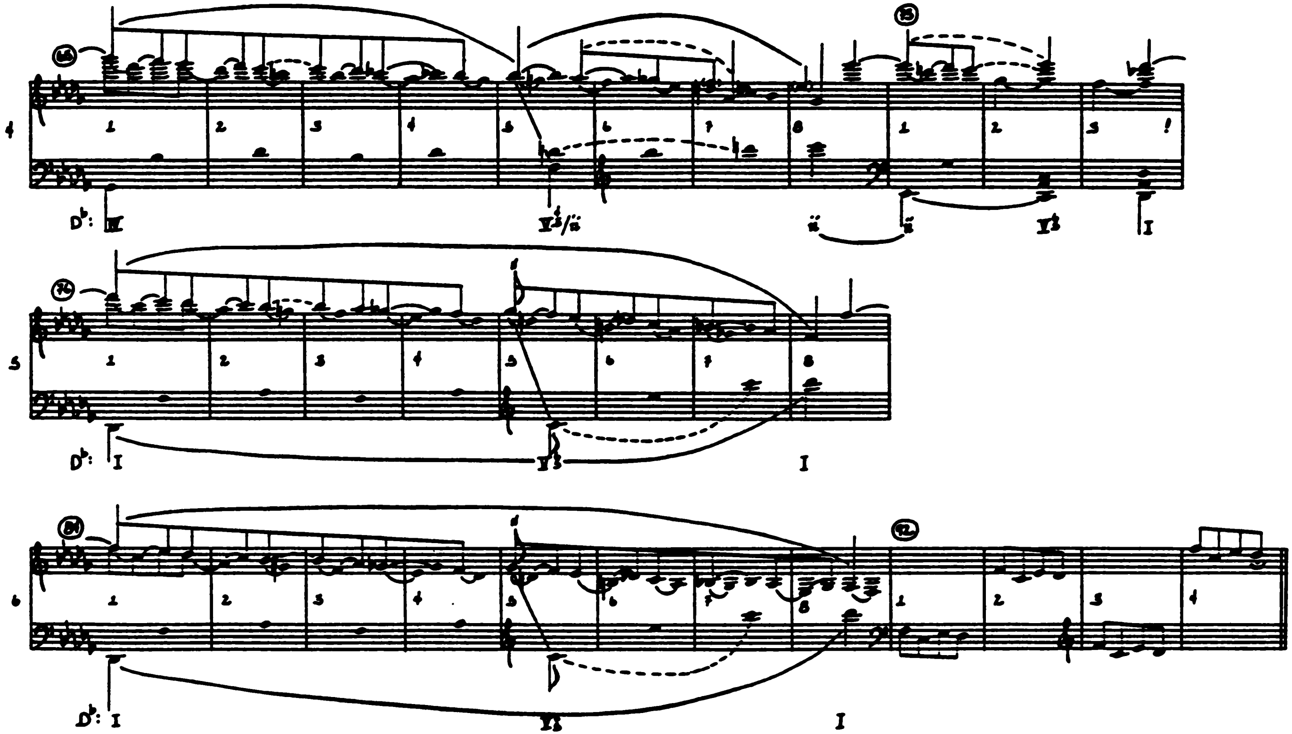


Figure 5


41
1
1 2 3 4 5 6 7 8
D♭: I
V 5 3
I
49
2
1 2 3 4 5 6 7 8
D♭: I
I♭ (= V 5 3/IV)
IV
59
3
1 2 3 4 5 6 7 8
G♭(IV): 1
V 5 3
I



an exact repetition of the first phrase a fourth higher. In these bars, b^{b3} and its supporting harmony, the subdominant, are prolonged by their own neighboring six-five chord.

As revealed on pages 20 and 24 of the Autograph (Artaria 196),[7] it was the fourth phrase of the Trio--which begins as a repetition of the third--that caused Beethoven some difficulty. Considering what does and does not follow, one might surmise that these difficulties arose from the following two decisions: 1) to move to and cadence on the supertonic (e^b) in bar 72 (rather than follow the established tonal pattern, which would have led to c^b major); and 2) to move directly back to the tonic through a connecting dominant (rather than repeat the entire eight-bar phrase yet again at this pitch level). Regarding the first, it appears to have been only a matter of finding a suitable solution to the second half of the phrase (bars 69-72), where the motion to the supertonic takes place. But Beethoven's solution to the second decision is far from routine, for the resulting three-bar group momentarily destroys the established metric pattern.[8] The first bar (bar 73) begins as if a normal eight-bar phrase were to follow. But the pattern is broken immediately in the next bar, and when the rhythmic figure of bar 74 is repeated in bar 75, the result is a shift of hypermetric downbeat by one bar. That is, I think we initially hear bar 73 as metrically accented, but the pattern of bars 74-75 establishes a new order. It is only with the repetition of the opening phrase in bars 76-83 (the fifth phrase) and its repetition an octave lower in bars 84-91 (the sixth phrase) that the

[7] See Komma, *Beiheft*, pp. 32-33.

[8] There are two other places in the second movement where a three-bar group momentarily disrupts the established duple pattern. The first is in the final phrase of the Scherzo (bars 33-35), and the second occurs in the coda (bars 152-154).

original metric pattern with its above-mentioned conflict between the parts is firmly re-established. As was noted above, Beethoven originally conceived of the extension of the final phrase--which consists of repetitions of the figure f - c - e^b - d^b--as six bars in length. It was eventually shortened to four bars,[9] which is more in keeping with the established duple order of 2, 4 and 8.

A registral simplification of the voice leading of the Trio is provided in the upper part of Figure 6. Here the function of the motion to the supertonic in bar 72 becomes clearer: it extends the subdominant and avoids local closure in that area before the introduction of the connecting dominant six-five chord (bar 74). As shown by the bracket, the melodic contents of bars 57-72, the passage controlled by the prolonged subdominant harmony, constitute a transposed statement of the motive: b^b - c^b (N) - b^b - a^b - g^b. What is different from before is its harmonization. As shown in the lower part of Figure 6, this statement of the motive prolongs g^b, the upper neighbor note of f, the third of the tonic harmony in the local key of D^b (=VI in f minor). If we now consider the overall voice leading of the Trio, we can see that the melodic contents represent yet another statement of the motive: f - g^b (N) - f - e^b- d^b. The e^b and d^b are not given direct harmonic support, but rather are stated as part of the repeated melodic figure from which the Trio grows. Finally, if we consider this motion in relation to the Scherzo, we can see that the controlling idea is an even more encompassing statement of the motive at the original pitch level: f - e^b - d^b - c. As was noted above in conjunction with

[9] See Komma, *Beiheft*, p. 34.

Figure 4, this level of connection seems to be supported by Beethoven's initial sketch of the Trio.

Much of what I have just said about the Trio and many things I have not mentioned are contained in two sources by Schenker: the *Erläuterungsausgabe* of 1914 and the essay, "Noch einmal zu Beethovens op.110," from *Das Meisterwerk in der Musik* I (1925). Anyone interested in Opus 110 should read these works carefully. The difference between what Schenker and I have written is primarily a matter of perspective: I have focused on one issue, motive, while Schenker's interests were far more encompassing. It has not been my intent to present a comprehensive analysis of this part of Opus 110, but to demonstrate that it, like much of the piece, can be understood as motivically related to the opening of the Sonata. This underlying compositional link to the first and third movements gives added meaning, perhaps even justification, to a passage that, like many others in the late works of Beethoven, is not easy to understand on its own.

Figure 6