Motivic Design and Structural Levels in the First Movement of Brahms's String Quartet in C Minor

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Motivic Design and Structural Levels in the First Movement of Brahms's String Quartet in C Minor

ALLEN FORTE

WITH the exception of a few recent studies, little analytical work of any depth has been published on the music of Brahms. Even Heinrich Schenker, whose admiration for the composer is well known, did not publish extensively on his music. It is not difficult to ascertain the reason for this: Brahms's music, even when ostensibly simple, is full of complications and projects unusual structures which have no counterparts in the music of the Classical masters generally regarded as his model repertory.

Although this study is founded upon Schenkerian principles, demonstrating a belief in the sanctity of the tonic triad and a reverence for the transcendental reality of the *Urlinie*, it often departs from Schenkerian paradigms in order to cope with the special features of Brahms's music. In particular, it emphasizes the primal importance of the motive—to be construed in a sense somewhat broader than traditionally conceived—as a determinant of musical gestures at levels beyond the scale of the foreground.

After a brief review of the form of the movement, with some attention to other features of interest, I will proceed to a discussion of motives in the foreground, beginning with a general statement concerning the concept of motive in Brahms's music, as exemplified in the subject work.

In its essential form this essay was delivered as a paper at the London Brahms Conference, Goldsmith's College of the University of London, July 10, 1983. It is part of a set of three studies of late-nineteenth-century works by the present author. The others are: "Motive and Rhythmic Contour in Brahms's Alto Rhapsody," *Journal of Music Theory*, XXVII/2 (Fall, 1983), and "Middleground Motives in the Adagietto of Mahler's Fifth Symphony," *19th Century Music* (forthcoming).

I shall then discuss instances of motivic penetration of the middleground, a strong feature of this work and probably a structural aspect of widespread significance in all music of the later nineteenth century.

I shall also touch upon certain traditional features of the music, for example, the use of imitation and double counterpoint as well as extensions of these as they relate to the motivic design. In this connection, I emphasize that certain pitches—both single pitches and dyads—as well as a particular triad (not the tonic triad) are of special importance and may be regarded as having a catalytic role.

Form and Some General Features

The overall formal plan of the movement is that of the Classical sonata—with, of course, many departures from any stereotype of that pattern. However, as can be seen in the Overview of Form, Brahms maintains in the reprise a precise correspondence of the parts of the exposition, with few exceptions—and those always in details.

The Overview of Form also reflects the complicated segmentation of the traditional parts of sonata form. The second subject area is especially elaborate, with at least five identifiable parts. Of these, the developmental episode, which begins in measure 45 of the exposition, is perhaps most unusual, since it apparently interrupts the established continuity of the music and has the effect of an interpolation. The structural meaning of this passage will be discussed in connection with Example 10, which presents the episode as it occurs in the reprise. (The reader may wish to keep the Overview of Form at hand as the discussion moves forward.)

A word about the unusual key relations is in order before I proceed to a consideration of motivic detail. In particular, the second subject is in E♭ minor, instead of the traditional key of the mediant, E♭ major. This unusual key provides a hint of the identity of the work to which Brahms refers elsewhere in the movement: the Piano Sonata in C minor, Opus 13 (*Pathétique*), by Beethoven.[1] The A major/A minor

[1] This key relation was pointed out by Roger Graybill in his dissertation, *Brahms's Three-Key Expositions* (Yale, 1983). The key of E♭ minor had a special significance for Brahms, as in the slow movement of the Horn Trio, a dirge for his mother. So did C minor, of course, because of its special role in music of the Classical period. However, it is the *Pathétique* Sonata and not other famous pieces in C minor—for example, Beethoven's Op. 18, No. 4—to which he refers in his C-minor String Quartet. The resemblance between the two works extends to other

OVERVIEW OF FORM

Exposition
- First Subject (c)
  - Part 1: mm. 1–8
  - Part 2: 9–22
  - Part 1 modified: 23–27
  - Transition: 27–34
- Second Subject (e♭)
  - Part 1: 35–40
  - Part 2, extension in double counterpoint in the 15th: 41–44
  - Part 3, developmental episode: 45–52
  - Part 4, resumption of V from m. 41: 53–66
  - Part 5, cadenza: mm. 67–70
- Closing Subject
  - Part 1: 71–75
  - Part 2: 75–82
- [Repetition of Exposition]

Development (a/A)
- Transition/Introduction: 80b–91
- Part 1, first subject: 92–95
- Part 2, second subject: 96–107
- Part 3, first and second subjects: 108–117
- Part 4: 118–129
- Transition: 129–132

Reprise
- First Subject (c)
  - Part 1: 133–150
  - Part 2: 151–163
  - Part 1 modified (f); 164–175 (cf. first subject of finale)
- Second Subject (c)
  - Part 1: 176–182
  - Part 2, extension in double counterpoint in the 15th: 182–185
  - Part 3, developmental episode: 186–193
  - Part 4, resumption of V from m. 182: 194–207
  - Part 5, cadenza: 208–211
- Closing Subject (c)
  - Part 1: 212–215
  - Part 2: 216–223
- Coda
  - Part 1: 224–232
  - Part 2: 232–239
  - Part 3: 240–260

cast of the development, as well as of the developmental episode mentioned earlier, also has a special meaning, to which I will return later.

Finally, I wish to draw attention to the existence of many short traditional canons as well as the extension of the canon idea to the sphere of rhythm. In both cases, the canons are intimately bound up with the motivic design which is the primary focus of this presentation.

Before considering the motivic constituents of the movement as they appear in the foreground level, I wish to set out four general analytical guidelines related to the notion of motive in Brahms's music:

1. The motive is primarily an intervallic event, distinct from any particular pitch manifestation.
2. The original pitch or pitch-class representation of a motive is of singular importance, however, and we call this referential function of a particular form *pitch-specific* which means that the motive designated consists of the same pitches as the original form of the motive; and the term *pitch-class specific* means that the motive is recurring, but at some level of octave transposition with respect to the original form.
3. The boundary interval of the motive is its most salient feature. The internal structure is variable or may even be absent in some representation of the motive. The boundary interval may undergo octave inversion, or—more appropriate to Brahms's usage—expansion by octave displacement, as major third and minor sixth.
4. A motive may be transformed without losing its basic identity. The transformations which Brahms uses are retrograde, inversion, and retrograde inversion. He also uses a transformation which I will call *minor to major* or *major to minor*, depending upon the circumstances.

In the examples that accompany this essay, Greek letters designate motives, while two symbols attached to the letters designate transformations: the prime superscript signifies that the motive is in its retrograde form, while the bar above the letter signifies inversion.

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features as well. The second theme of the Beethoven work also incorporates motive alpha (described below) and the second movements of both are in A♭, with motive beta bar prime prominently represented in the first theme of the *Pathétique*.

Thus, alpha bar prime is the retrograde of the inversion of alpha. No special symbol is used for the minor-to-major transformation.

It should be observed that the transformations will alter the internal intervallic organization of the motive, but—with the exception of the major-to-minor transform—preserve the boundary interval which is the distinguishing feature of the motive.

And it is essential to bear in mind that these atomic constituents, however commonplace they may seem out of their musical contexts, are not in the least trivial. Nor are they floating about in some random musical space, but are attached to other elements in the composition at a specific structural level or levels, so that each motivic particle, however minuscule, relates to the whole through the organizational hierarchy.

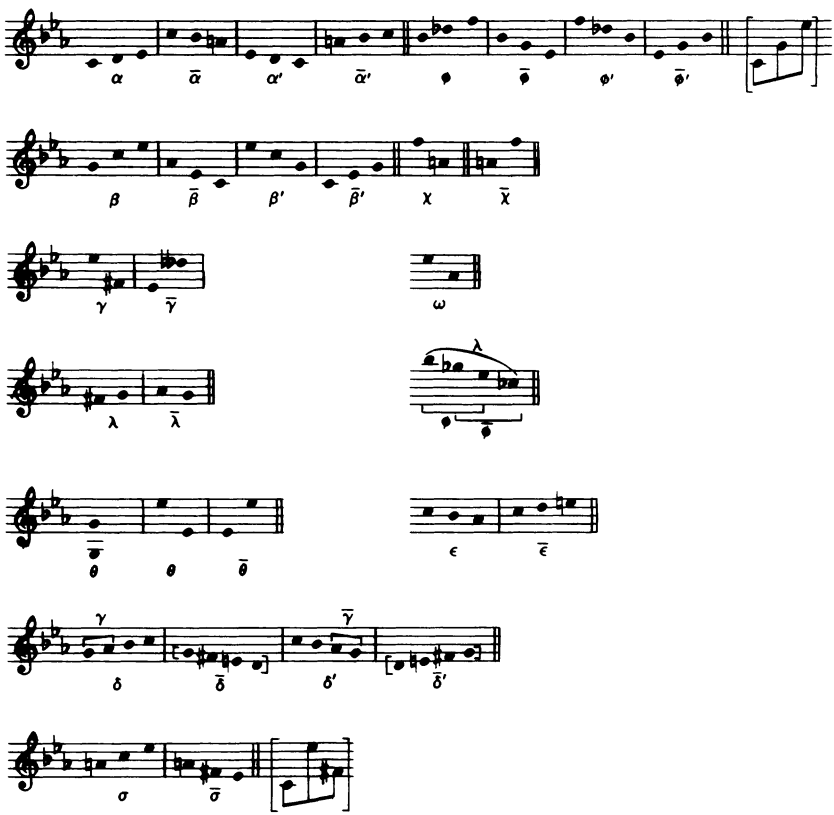
The Table of Motives offers a convenient summary of the main motives in the movement. We will consider these from top to bottom, beginning on the left side, then proceeding from top to bottom on the right side.

Motive alpha (1) is without question the most prominent motive in the movement. As every musician will recognize, it consists of the first three notes of the *Pathétique* Sonata, identical even with respect to register and with the further association through the dotted rhythm. Moreover, Beethoven accompanies his motive with its retrograde, a procedure upon which Brahms elaborates in the string quartet movement. The three transformations of alpha are given in the table, in somewhat arbitrary pitch forms, since they occur in many ways in the work: first, alpha bar, the contour inversion of alpha, then the reverse of alpha, alpha prime, and finally, the most complicated transformation of alpha, alpha bar prime.

While alpha is first presented as the first three notes in the melodic first subject (m. 1), beta, the triadic formation shown in the Table of Motives, is presented as the next three pitches. Beta bar then becomes a major triad, in the first inversion, while beta bar prime presents the ascending form of beta bar, a motive of singular significance to this music, especially in the pitch-class form shown in the table (A♭-major triad).

Motive gamma (2) is introduced as the descending skip of a diminished seventh in the subject at the beginning of measure 2. Gamma bar is shown in the table, but no further transforms, since obviously they would not be distinct from gamma and gamma bar with respect to

Table Of Motives



contour. Although gamma has the notational boundary interval of a diminished seventh in its initial manifestation, it also occurs frequently with the boundary interval of a major sixth.

Motive lambda (3) is, like the previous motives, a component of the melodic first subject. Its pitch-specific form f♯–g¹, has a special meaning throughout the work, as will be shown. Lambda bar, the inverse of lambda, is the final dyad of the first part of the first subject, the dramatic conclusion of the long opening phrase (m. 7).

In motive theta (4) we have a constituent which might not even be accorded motivic status in a more conventional reading. This is the octave motive which occupies an entire measure alone (m. 8), and, if only for that reason, deserves special attention. In measure 24, as first violin accompaniment to the subject in the cello, it assumes a prominent role in the foreground and has two shapes, designated theta and theta bar in the Table of Motives.

The next motive is delta (5), with the boundary interval of a perfect fourth. This motive first occurs in the middleground, beginning with g¹ in measure 2. Subsequently it becomes prominent in the foreground as well—the reverse of the usual chronology. Motive delta incorporates gamma as its first dyad, an observation that suggests further connections among the basic motives of the movement. Delta bar and delta bar prime are given in the table for the sake of theoretical fastidiousness, but they are not represented in any significant way in the music.

Motive sigma (6), the diminished triad is the secret emblem of the work, as will be explained at an appropriate time. The bracketed form of sigma reminds us that the diminished triad delimits the opening gesture of the first subject. Notice also that c¹–e♭² is nothing more nor less than an expansion of the boundary interval of alpha.

Motive phi (7), the minor triad, shown at the top of the right side of the Table of Motives, is also outlined by the opening of the first subject, as c¹–e♭²–g¹.

Motive chi, which first occurs as a melodic leap in the first subject, is included in the table, but is not an especially significant or prominent motive.

Motive omega (8), the descending fifth, is reserved for closure and also reflects the basic melodic background in the Schenkerian sense. That is, the background melodic space in the upper voice is defined by the fifth from the primary tone G to the tonic C.

While the motive (9), which first appears as the melodic figure in measure 39, might be regarded as a new structure in the music, it is viewed here as a composite of three previously stated motives. Its boundary interval, the major seventh, is a registral expansion of lambda, and the internal components are explained as interlocking forms of phi and phi bar.

And last is the motive epsilon and its inverse (10), with the boundary interval of a major third. So closely is this associated with motive alpha that one might almost regard them as equivalent. However, they have been given separate names here. At an appropriate time we will invoke the minor-to-major transformation to explain the relation between the two.

It is hoped that this somewhat detailed coverage of the basic motives will have served a useful purpose when we proceed to examine portions of the music at hand. As an adjunct to this survey of the pitch motives, the table headed Some Prominent Rhythmic Motives (see p. 479) affords a concise overview of seven patterns which are multiply represented in the composition.

Certainly the opening rhythmic figure, item 1, dotted quarter-eighth-quarter, is the rhythmic hallmark of the piece. The table shows a few of its associations with the pitch motives. Notice, in particular, that it articulates both alpha and (in m. 133) beta bar prime, the $A_{\flat}^{6}$ formation, shown at the end of the top line in the table.

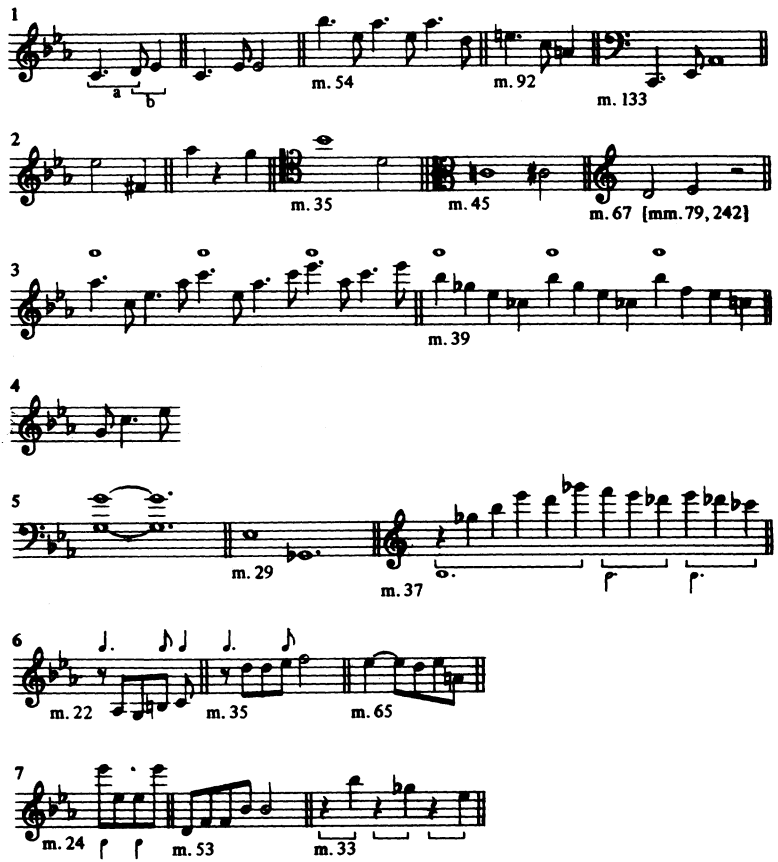
The rhythm originally associated with motive gamma, the descending diminished seventh, also relates gamma to its inverse, $a_{\flat}^{2}$–g^{2}, as shown in item 2 of the table. In doubled form as whole-half, it relates gamma to the registrally expanded form of the boundary interval of epsilon (m. 35) and to lambda (m. 45).

Item 3 consists of the three whole notes motive, a characteristic hemiola pattern which appears in several unexpected ways in the work. One of these is shown in the table, the melody at measure 39. As is evident, the whole-note components of the pattern result from compounding of the dotted quarter-eighth figure.

The symmetrical rhythm eighth-dotted quarter-eighth, item 4, distinguishes motive beta, and the same pattern is also an element of the whole-note pattern in item 3 where it is associated initially with beta bar. (The dotted rhythm of beta bar at the opening of the Romanze of this quartet is surely not happenstance.)

The whole-dotted whole originally associated with theta has other

Some Prominent Rhythmic Motives



connective functions, most notable of which are the setting of gamma in measure 29, about which more will be said when we come to Example 7, and the consequent phrase of Part 1 of the Second Subject (m. 37), as illustrated in connection with item 5. Here the dotted whole is detached from the complete figure and followed by its halved replicas, representative of a rhythmic generative process which seems to be common in Brahms's music.

Although a detailed study of rhythmic relations is not within the scope of this essay, it is perhaps not inappropriate to remark that the whole-dotted-whole motive is exactly proportional in duration to the eighth-dotted quarter-eighth motive in item 5: it is exactly four times as long; that is, the half note serves as multiplier.

The figure eighth rest-four eighths displayed as item 6 clearly derives from the dotted quarter-eighth pattern of item 1, as indicated by the notation above the staff of item 6. This upbeat figure is then carried throughout the movement as the primary rhythmic contour of the first part of the second subject, beginning in measure 35, as shown. In the rhapsodic passage that begins at measure 65 the eighth rest is replaced by a tied eighth, yet the association remains unmistakable. Out of this grows the constant eighth pattern of the cadenza from measure 67, completing a chain of rhythmic development that began in the opening measure.

Finally, item 7 shows the four-eighth motive initially associated with motive theta in measure 24 and subsequently manifested by the arpeggiation of measure 53, a form of beta bar prime. This motive has many other associations throughout the movement, as does its offshoot, the quarter rest-quarter figure shown at the end of the example.

As a way of organizing the discussion of motivic design while keeping complexity reasonably under control, I will take up each motive in turn as it appears in various passages throughout the movement. The numbered examples that follow consist for the most part of fragments of the score that have been annotated analytically by the addition of stems, beams, brackets, and the Greek letter designations for motives which are by now familiar.

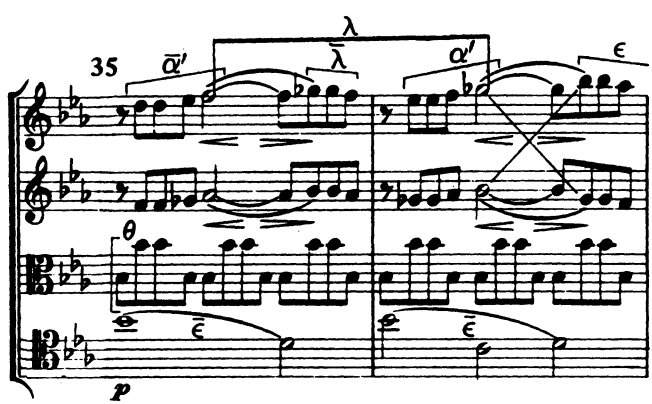
Motive alpha, originally the head motive of the first subject, proves to be the source of the head motive of the second, as alpha bar prime (Ex. 1). The melodic figure here consists of two parts, first alpha, then lambda bar, $g_{\flat}^{2}$–f^{2}, the latter a pitch-class specific form of lambda bar as it occurred in measure 9. Lambda is also present, as indicated by the

beamed half notes in Example 1, albeit not as a contiguously formed dyad. As if to conceal the foreground pattern here, Brahms introduces a voice exchange at the end of measure 36 (Ex. 1), as indicated by the crossed lines connecting first and second violin parts. As a result, the first two notes of the descending major third motive, epsilon, are brought into the upper voice and, indeed, complete epsilon by descending to $g_{\flat}^{2}$ in the next measure (see score). However, epsilon, in its inverse transform, epsilon bar, has already contributed to the counterpoint of the passage: the cello presents its boundary interval in the form of the minor sixth $b_{\flat}^{1}$–d, the second time including the passing tone c^{1}. The cello then continues in the next measure with a series of three gammas as descending major sixths (see Ex. 24, the corresponding passage in the reprise), an instance of the minor-to-major transformation, which thus links the two motives, epsilon and gamma.

In Example 1, we see that motive theta is also a participant in the second subject as the octave figure in the viola. This is effectively an inner-voice $B_{\flat}$ (dominant) pedal. In fact, the pivotal role of $B_{\flat}$ in the passage is underscored by the relation between epsilon bar and epsilon here: epsilon is an inversion of epsilon bar about $B_{\flat}$ as axis pitch class.

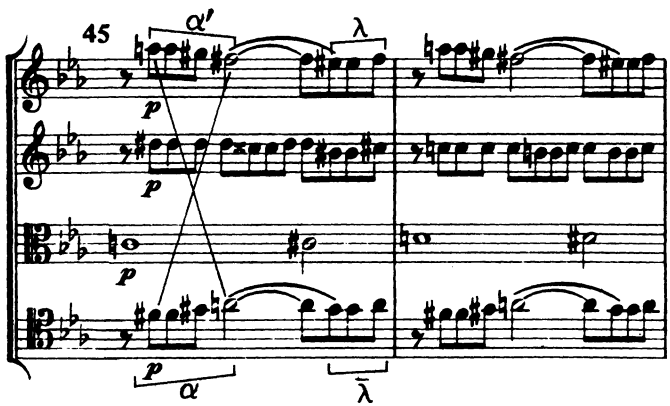
In Example 2, from the developmental episode (Overview of Form), alpha is set out against its reverse transform, alpha prime. While this may be regarded as a voice exchange, and, indeed, is so marked on the example, surely the interaction of the two forms of the motive is the most basic musical occurrence here. Associated with alpha prime in the first violin is lambda, pitch-class specific with

Ex. 1



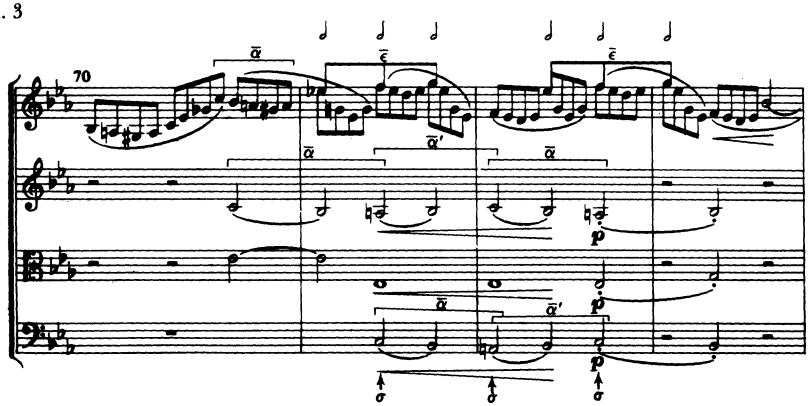
respect to measure 9, just as was lambda in Example 1. Lambda bar in the cello is also a significant pitch-class form of the motive, for it refers directly to the climactic motion in the upper voice of measure 129 (Ex. 21). It seems gratuitous to say that Brahms was always attentive to particular pitch classes, and I only do so to point up the importance of pitch class with respect to motive, the primary focus of this essay.

Ex. 2



Example 3 illustrates two general aspects of Brahms's music: (1) the development of associations between initially distinct motives; and (2) motivic counterpoint. Here epsilon bar in the first violin unfolds in quasi-imitation against alpha bar and alpha bar prime in the second violin and the cello. Only a slight reduction is required to reveal that the imitation is more than "quasi," for epsilon bar moves in a series of three halves just as do the interlocking forms of alpha bar and alpha bar prime. In this way the boundary intervals of the two motives are associated. In terms of motivic transformation, the major third becomes the minor third, and vice versa. What this means in terms of other portions of the movement will be discussed in connection with Example 19. Suffice it to observe here that the minor-major and major-minor transformations appear to be far from trivial manipulations in Brahms's music. Motivic counterpoint, the second feature illustrated in Example 3, is of the utmost significance, not only in Brahms's music, but also in much of later nineteenth-century music altogether: the components of contrapuntal passages are often motivic in nature and not arbitrary collections of notes.

Ex. 3

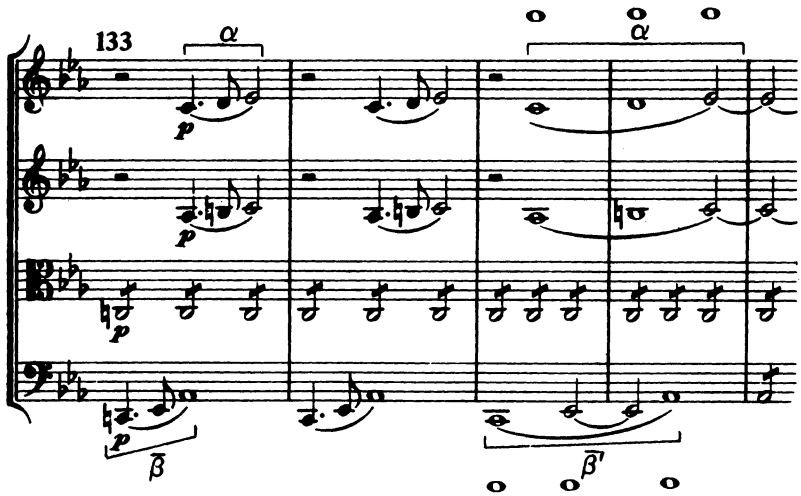


Example 4, from the beginning of the reprise, offers a particularly striking instance of motivic association. Whereas beta originally succeeded alpha in the first subject (m. 1), here, in its manifestation as beta bar prime, it precedes alpha. Again, the basis of association is rhythmic, specifically through the dotted quarter-eighth figure. The association continues into measures 137–38, where both motives receive the three whole notes pattern, again in rhythmic canon. A further association becomes evident when one considers the boundary intervals of beta and epsilon, minor sixth and major third, respectively. The boundary intervals of epsilon and alpha have already been linked, as shown in connection with Example 3; now beta is associated with alpha (and epsilon).

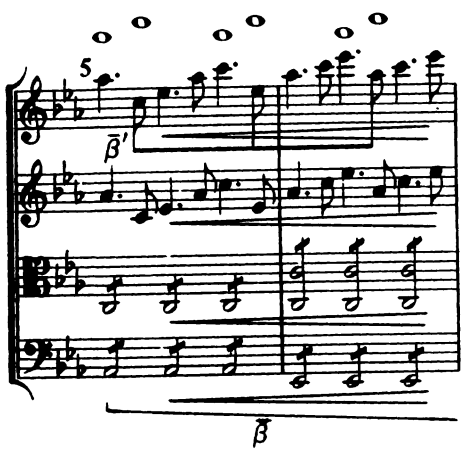
Perhaps the strongest initial presentation of motive beta occurs at the end of the first phrase of the first subject (Ex. 5). Here again is a rhythmic canon involving the succession of three whole notes. The upper component of the canon is an arpeggiation of an A♭ triad, while the lower component, beamed in Example 5, is beta bar prime, in exactly the pitch-class form in which it appears at the beginning of the reprise (Ex. 4). Moreover, this form of beta bar prime is pitch-class specific to the bass figure at the beginning of the Romanze of this quartet. Why Brahms chose to repeat beta bar prime there will be explained at the end of this essay.

Against beta bar prime in the upper part, beta bar unfolds in the bass, in dotted whole-note (i.e., full-measure) values. Here the motivic counterpoint involves a single motive, beta.

Ex. 4

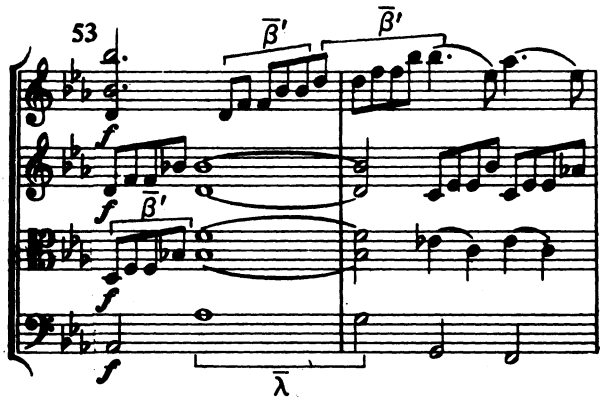


Ex. 5



Example 6 shows beta bar prime again, with its tail note in the first violin, $b\flat^2$, reinstating that important middleground pitch from the beginning of measure 53. (In the reprise $b\flat^2$ is replaced by g^2, the primary melodic tone of the movement.) Equally important at this point in the music is the bass motion $A\flat$–G, motive lambda in pitch-

Ex. 6



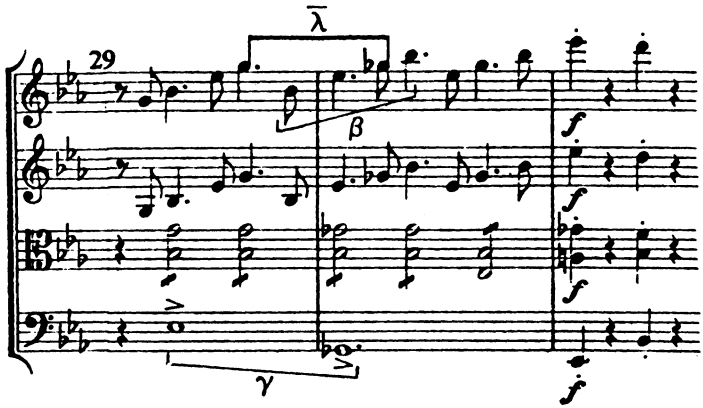
class specific form with respect to its climactic occurrence at the end of the first part of the first subject (Ex. 9).

The fact that I have given only examples of beta bar and not beta in the music does not imply that the former is of greater importance than the latter—since beta appears with every statement of the first subject—it is only intended to emphasize the notion that transformations of motives are as viable as original forms.

In general, gamma is reserved for special moments in the music, notably in the first subject, where it originally occurred. It is also strongly linked to two pitch-class representations: E♭–F♯ (G♭) and A♭–B. Example 7 shows what is perhaps its most striking appearance in the movement, in the cello, measures 29–30. It is at this point that the key of the second subject, E♭ minor, is prepared. Since gamma plays such a crucial role and, in particular, since F♯ of the original statement in measure 2 has now become G♭, it is not difficult to conclude that the original gamma foreshadowed, in a very specific way, the large-scale tonal reorientation effected when the E♭ minor of the second subject arrives. This general idea—which is, of course, Schenkerian in its theoretical origin—that foreground events can influence events of larger scale is amply demonstrated in other sections of the music, as will be shown.

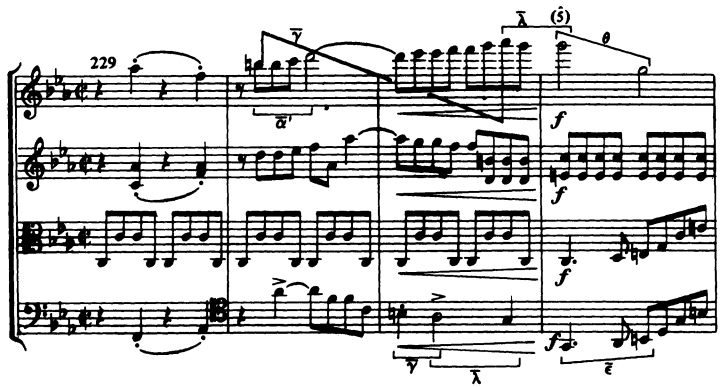
In Example 7 the close relation between gamma (in the cello) and lambda bar (in the first violin) is strongly suggested, but in Example 8, where gamma occurs in its A♭–B form, the relation is unequivocal, since the upward motion of gamma bar from b^2 to $a♭^3$ through

Ex. 7



successive forms of alpha culminates on lambda bar, here pitch specific with respect to its first occurrence (Ex. 9).

Ex. 8

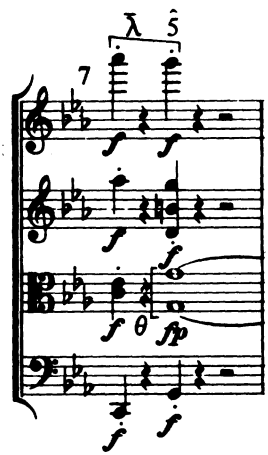


Instances of Motive Lambda

The role of lambda and lambda bar in the second subject has already been discussed in connection with Example 2. Its position at the end of the first phrase of the first subject was also mentioned, but Example 9 offers a closer look. Two additional factors are of importance. First, the register in which lambda occurs is significant throughout as the register of structural climax—in particular, mea-

sures 125–29 in the development section, where lambda and lambda bar combine on the pitches $g\sharp^3$–a^3 finally to define the apex pitch a^3, an event of very special significance in the music. In measure 7 (Ex. 9) lambda is the motive which introduces the *Kopfton* of the movement, g^3, and thus the motive is directly connected to the fundamental structure of the work. The second factor of importance in Example 9 is the relation between lambda and theta at this crucial moment: the onset of theta in the viola coincides exactly with the termination of lambda bar. Moreover, theta then initiates a large-scale linear progression (not shown in any of the examples) which incorporates the second part of the first subject, descending through delta prime, ultimately reaching c^1 in measure 23 (Ex. 23), just as the first subject returns in the bass.

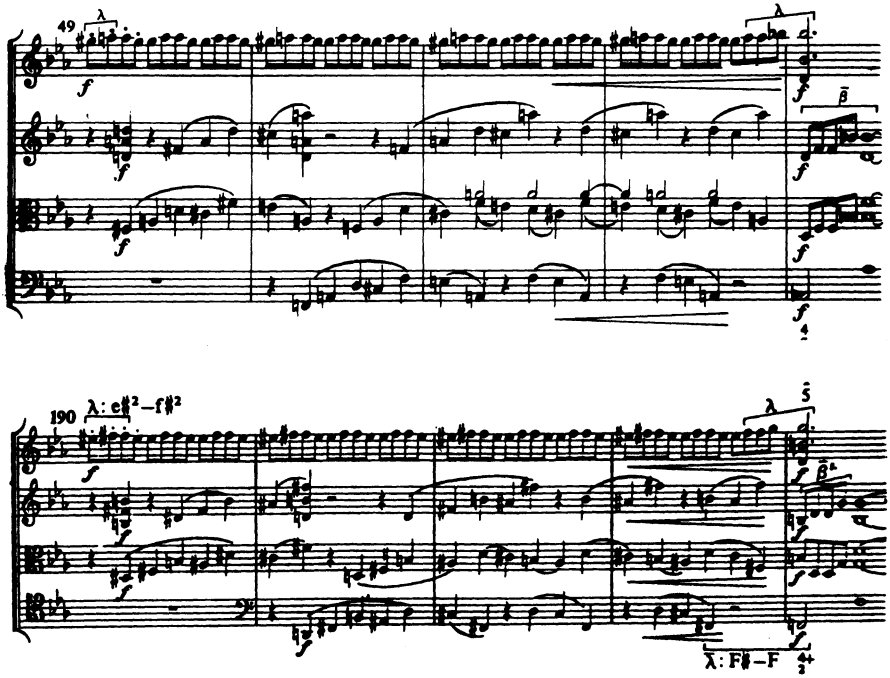
Ex. 9



Example 10 shows a five-measure segment of the exposition which connects the developmental episode with the return of the dominant of E♭ minor in measure 53. Here lambda is the key motive in the upper voice, in two forms: $g\sharp^2$–a^2 and then a^2–$b\flat^2$ (m. 53). The corresponding five-measure segment in the reprise is also shown in Example 10, aligned with its counterpart in the exposition. Now lambda is first $e\sharp^2$–$f\sharp^2$, then $f\sharp^2$–g^2. In this latter, culminative position it is once again directly attached to the *Kopfton* of the movement. Moreover, its inverse, F♯–F, forms the bass progression which leads to the $\frac{4}{2}$ that supports the *Kopfton* g^2, a telling instance of motivic counterpoint

involving a single motive. And again Brahms enhances the return to the dominant by reintroducing motive beta bar prime in measures 53 and 194, as indicated in the example.

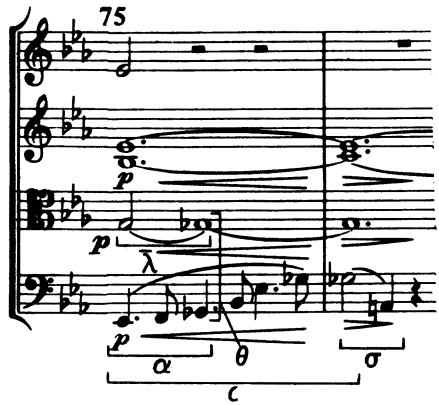
Ex. 10



As a final instance of motive lambda, Example 11 shows the return of the first subject, now in E♭ minor, at the beginning of the last part of the closing section of the exposition. Here lambda bar is in counterpoint with alpha and the two motives join on the octave G♭, to form theta. This beautiful confluence of motives dramatizes the motivic origin of the E♭ minor key, which was mentioned earlier. It also heightens the central role of alpha. What was apparent in the first subject in its C-minor form is even more strongly presented here, namely, motive alpha in expanded form as it moves from the low E♭ to g♭ at the top of the ascending motion (m. 76). At that point another

motive comes into play, sigma. Again, I postpone discussion of that motive until an appropriate moment.

Ex. 11



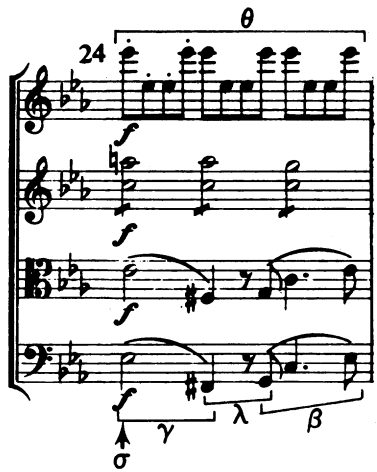
In Example 12 we see motive theta in the first violin, theta and theta bar to be precise. It enters exactly within sigma, the vertical designated by the up arrow on the example, and remains fixed while gamma, lambda, and beta enter below as part of the first subject in the bass. Not shown in Example 12 is the structure of larger scale that theta builds, beginning from measure 24, that is, a descending linear progression that spans a fourth: a large-scale replica of delta prime.

Theta in the viola part of Example 13 is reversed with respect to its appearance in Example 12: the upward contour precedes the downward. Brahms distinguishes between the two patterns throughout, with the upward-downward pattern always signaling the approach of the second subject, as here in Part 2 of the development.

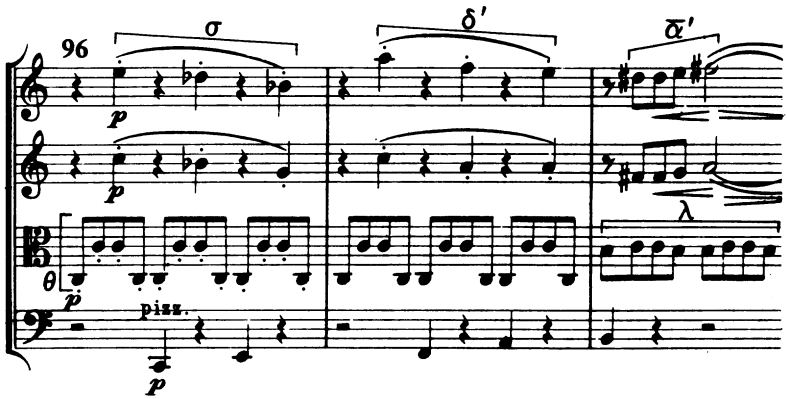
In measure 143 of the reprise, shown in Example 14, theta reappears in its basic guise as a simultaneously stated octave. Here, however, the reprise differs from the exposition: the line that departs from g^1 in the viola continues downward until it reaches g in measure 151. At that point the second part of the first subject commences, and motive lambda enters in the inner voice. Thus, motive theta has been prolonged by the octave line, "composed out," in Schenkerian terms. Also of interest is the fact that motive theta is succeeded by lambda in the inner parts, an event which occurs elsewhere (e.g., in Ex. 13) and which suggests a kind of motivic progression.

In measure 176, the beginning of the second subject in the reprise

Ex. 12



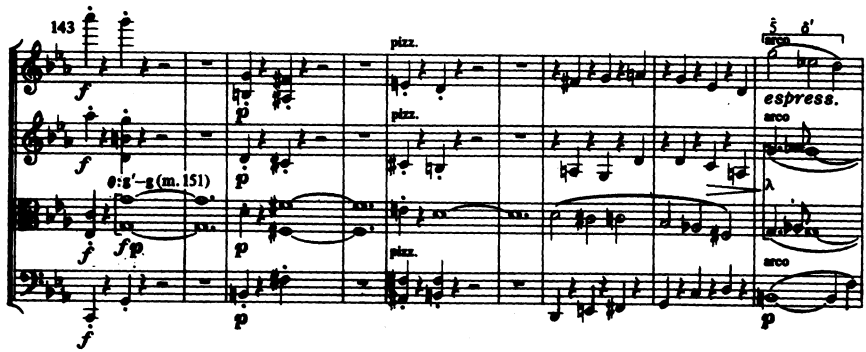
Ex. 13



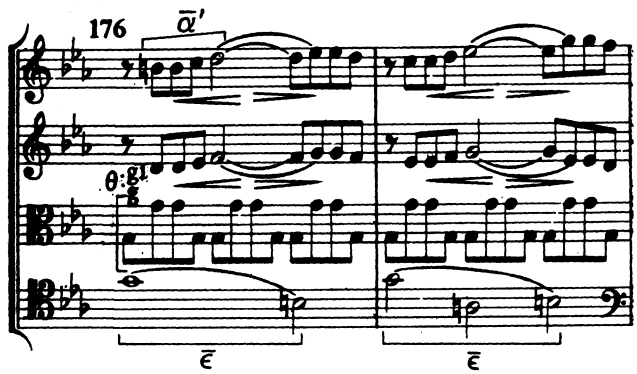
(Ex. 15), theta comprises g and g^1, thus pitch specific with respect to its first appearance in measure 8. This is also exactly the octave that was composed out in measures 143–51 (Ex. 14).

At the beginning of the coda (Ex. 16) theta has completed its many peregrinations and ended up in the lowest octave of the quartet, the cello's great C to c. Above this ostinato figure is a motivic panoply of some complexity. The new figure in the viola, measures 226–27, comprises beta prime (a rather rare occurrence of that form of beta), followed by gamma bar and lambda bar. In this configuration, Brahms places accents on $a\flat^1$ and $a\flat$, highlighting that pitch within

Ex. 14



Ex. 15

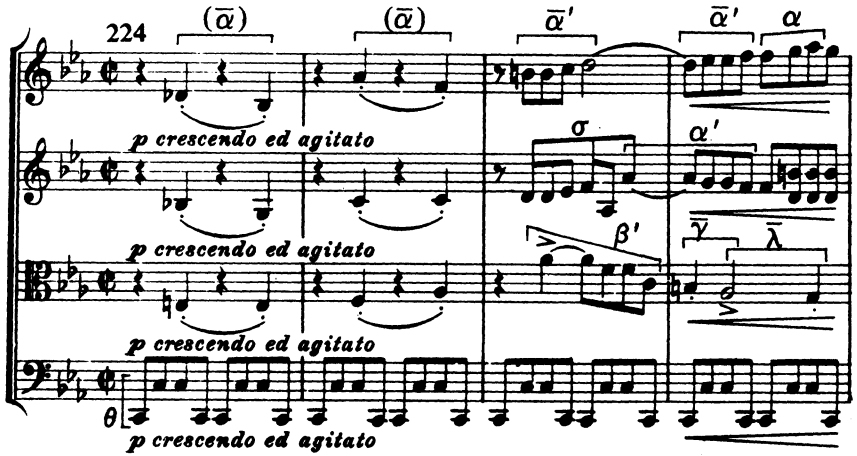


beta prime and lambda bar, a clear reference to the important thematic function of that pitch class at the end of the first subject in the exposition (Ex. 9) and elsewhere throughout the movement (Exx. 4, 5, 8).

As mentioned earlier, delta is a motive that originates in the middleground of the first subject. Indeed, its main occurrences are in the middleground, often in the reverse transform, delta prime. These will be displayed later on as part of the analysis of middleground representations of motives.

Example 17 shows delta in its major foreground appearance as the melody of the second part of the first subject in the exposition. The boundary interval of a perfect fourth is preserved, but the internal structure, as given in the Table of Motives, is altered. Specifically, a passing tone is omitted, which reveals the second dyad to be lambda bar, as indicated in the example: $a\flat^1$–g, a pitch-class specific form with

Ex.16



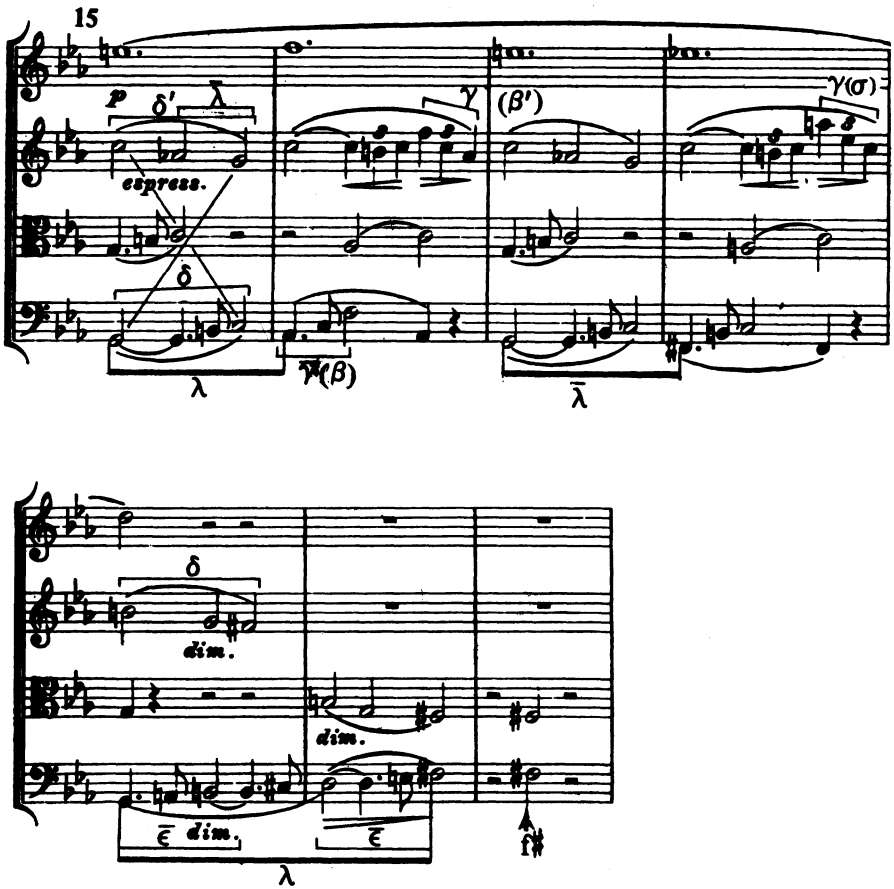
respect to lambda bar in measure 7 (Ex. 9). Moreover, delta prime in this setting is pitch specific with respect to its middleground progenitor in measures 2–5, the boundary interval of which is formed by g^1 and c^2.

Other motivic features of the second part of the first subject are shown in Example 17. In particular I draw attention to the arpeggiations in the second violin, measures 16 and 18. In both cases the interval of the major sixth expresses gamma, while the arpeggiation suggests beta and sigma, as indicated by the Greek letters in parentheses. In measures 19–21 lambda is set out in expanded form in the bass, incorporating epsilon bar. In counterpoint to this is delta, now with boundary pitches b^1–$f\sharp^1$. The pitch-class F♯ is of singular importance to the movement, as suggested earlier, since it foreshadows the E♭ minor tonality of the second subject in the exposition. Here it appears just before the return of the first subject in the bass (m. 23).

Motive epsilon is the first motion in the bass, from c to A♭ (Ex. 18). In this capacity it carries the progression from tonic to submediant, the A♭ harmony which is to assume so many important functions in the music.

Perhaps the most remarkable event involving epsilon is the metamorphosis which it undergoes at the beginning of the closing subject in the reprise (Ex. 19). There, counterpointed by alpha bar and alpha bar prime, it appears, prolonged, in its inverse form in the first violin.

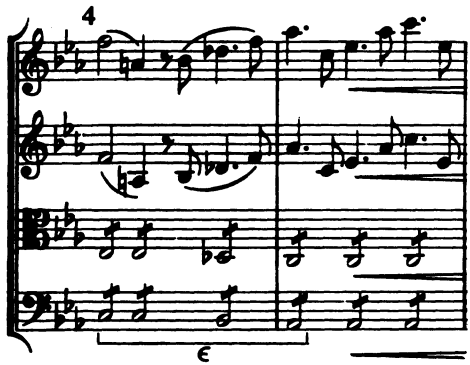
Ex. 17



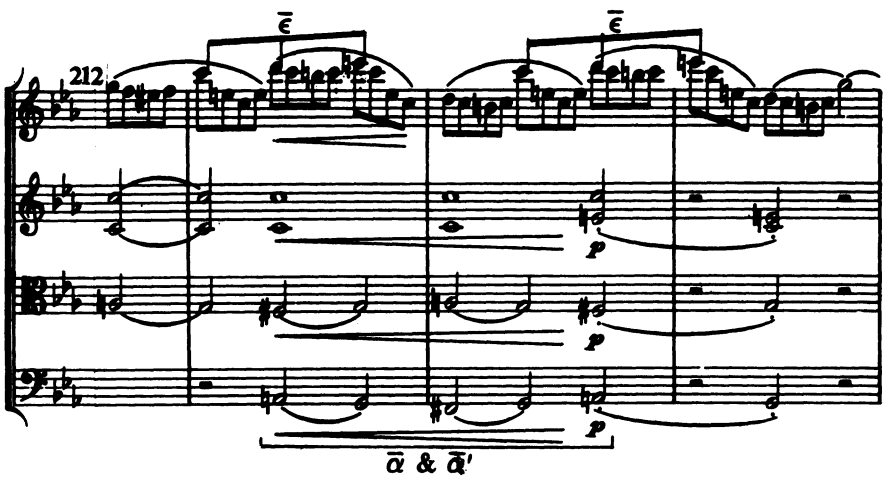
The change is unmistakable: c^3–d^3–e^3 is exactly analogous to alpha's C–D–E♭. That is, epsilon has become the minor-to-major transformation of motive alpha, and the presence of alpha as counterpoint in this passage only enhances the relation between the two motives, both now represented by their inverse forms.

The significance of motive sigma will be revealed during the forthcoming discussion. However, a particularly beautiful example in the foreground cannot be overlooked, namely measures 107 and 109 in the development (Ex. 20). There sigma is attached to the motive of the second subject—in this instance expressed as alpha, since the motives of the first and second subjects are completely interchangeable

Ex. 18



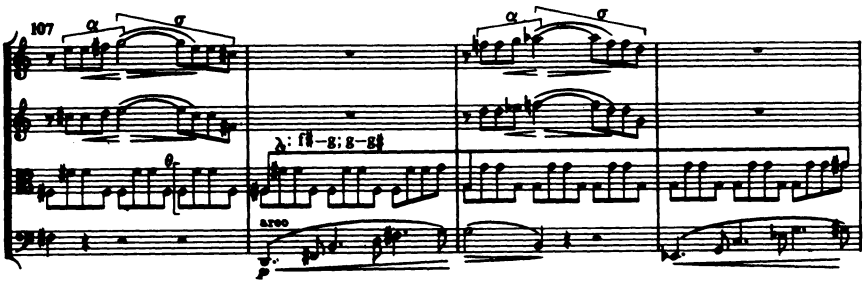
Ex. 19



in the development. Sigma thus replaces lambda bar as the consequent motive of the second subject (Ex. 1). Motive lambda, however, unfolds in the same context, as indicated in Example 20. Motive theta is carried by the viola here, but theta is in the service of lambda: f♯–g and g–g♯, a chromatic motion that finally culminates on a^3, the climax of the development in measure 129. It is important to recognize that the chromatic motion is motivic, not arbitrary chromatic motion.

Perhaps the most remarkable aspect of the motivic design of this music is the occurrence of several motives as middleground (pro-

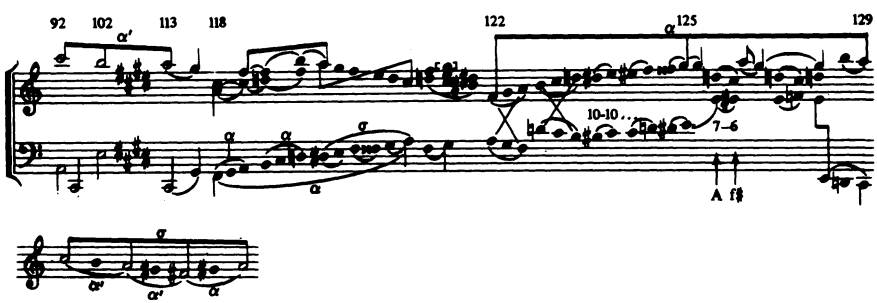
Ex. 20



longed) structures. Of these, alpha is the most interesting and immediately apparent. The interval of alpha, specifically the minor third from c^3 to a^2 (alpha bar or alpha prime), dominates the music from measure 84 to measure 92, after the beginning of the development. Alpha prime is also lucidly presented in the upper voice of measures 151-57, part 2 of the first subject in the reprise.

Example 21 shows two long-range forms of alpha, first in the bass beginning in measure 118 and then in the upper voice beginning in measure 122. The double counterpoint in the octave which relates these two passages thus assumes a special motivic significance, as do voice exchanges, and is not merely an academic contrapuntal device. I would like to remark here that its F♯ minor cast, within the framework of A major, was foreshadowed by the developmental episode that began in the reprise at measure 45.

Ex. 21



The first alpha in Example 21, in the bass, unfolds in a perfectly straightforward way, traversing the tenth from F♯ to a, exactly the way in which alpha occurs in expanded form in the first subject. However,

it is prolonged by stepwise detail, two forms of alpha in the small followed by more than a hint of sigma.

The second alpha in Example 21 is presented in a far more elaborate fashion. The counterpoint is modified, so that the lower voice now exchanges with the upper, just as it did in the developmental episode at measure 45. More important, the upper voice now arrives on the middleground passing note $g\sharp^2$ in measure 125 and this is sustained while the harmonies below it change its meaning from scale degree 7 in A to scale degree 2 in F♯ minor until E is taken up by the bass just before measure 129 and descends through D to C♯, at which point the upper voice completes alpha, arriving on the climactic note A in the final music of the development.

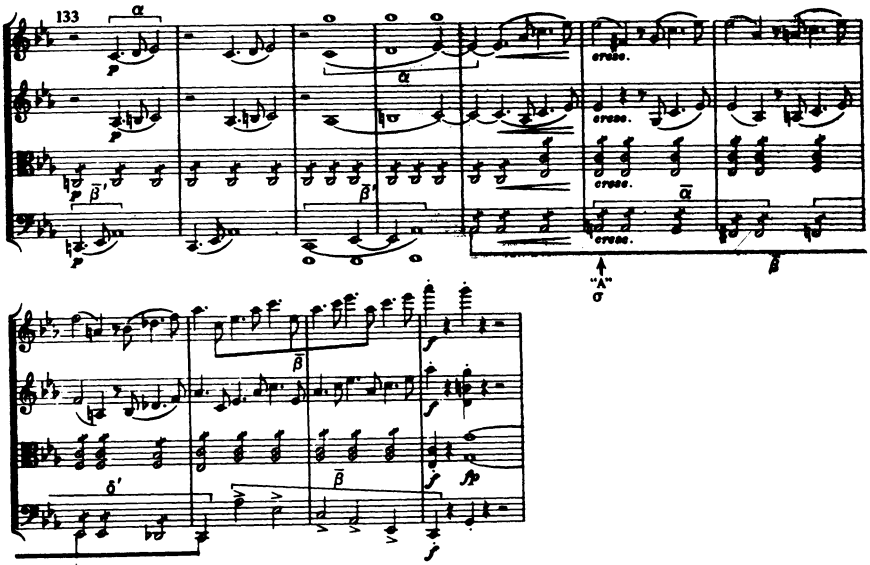
The small illustration below Example 21 is a schematic to show how concatenation of forms of alpha during the development sets out a concealed form of motive sigma, a motivic relationship which is exemplified elsewhere in the movement and which has a special significance, as suggested earlier.

Motive beta is prominent in the foreground of the reprise (Ex. 22). It also occurs in prolonged form as beta bar in the bass, extending from measure 137 to measure 141, when the entire motive is repeated in contracted form from a♭ down to great C, a motion which is temporally coextensive with beta in the first violin's self-contained canon. Not only does beta occur in this intensive way in the passage, but also its relation to delta is made manifest. As shown by the bracket beginning on the last bass note of measure 139 (Ex. 22) beta bar in this composed-out form incorporates beta prime as its last four notes: F–E♭–D♭–C.

In measure 138 of Example 22, the up arrow below the lowest staff points to A in the cello, while sigma designates the vertical at that point. By moving the bass from A♭ to A before the descent to great C to complete beta bar, Brahms does more than introduce sigma, A–C–E♭, in the vertical dimension: he shows the close relation between beta bar and sigma; they differ by only one note, A or A♭.

Motive lambda and its inverse lambda bar are, of course, ubiquitous. There are no instances of extensively prolonged forms—for example, as sevenths or ninths, although Example 17 shows one of many instances of lambda in the deeper foreground (the cello). However, there are telling instances of half-step voice-leading which surely refer to this motive in a nontrivial way. For example, in measures

Ex. 22



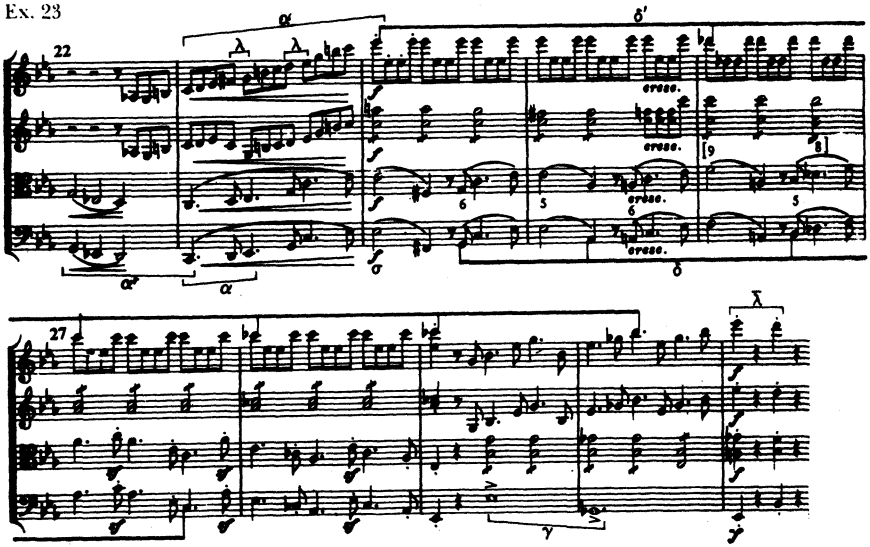
112–17 of the development section, the dyad A–G♯ foreshadows lambda bar in the upper voice as it leads to the climax of the development beginning in measure 125 (Ex. 21).

Theta has already been shown as it is composed out through an octave descent (Ex. 14). In measures 178–85 another octave descent occurs, this time in the upper voice. However, its structural integrity is broken by background functions—in particular, by the occurrence in the middle of the line of the primary melodic tone g^2, as shown in Example 24.

Motive delta comprises perhaps the most important middleground motion in the work and occurs many times, sometimes without the internal structure of the motive as shown in the Table of Motives. The beamed stems in the first violin part in Example 23 mark the progress of delta prime as it descends from $e\flat^3$ in measure 24 to its completion on $b\flat^2$ in measure 30. Here the terminal note of the progression is the head note of the second subject, and, in the corresponding passage in the reprise, it is the primary melodic tone, G.

Motive delta, pitch-class specific with respect to its initial occurrence, also unfolds in the bass of Example 23, beginning on G in

Ex. 23

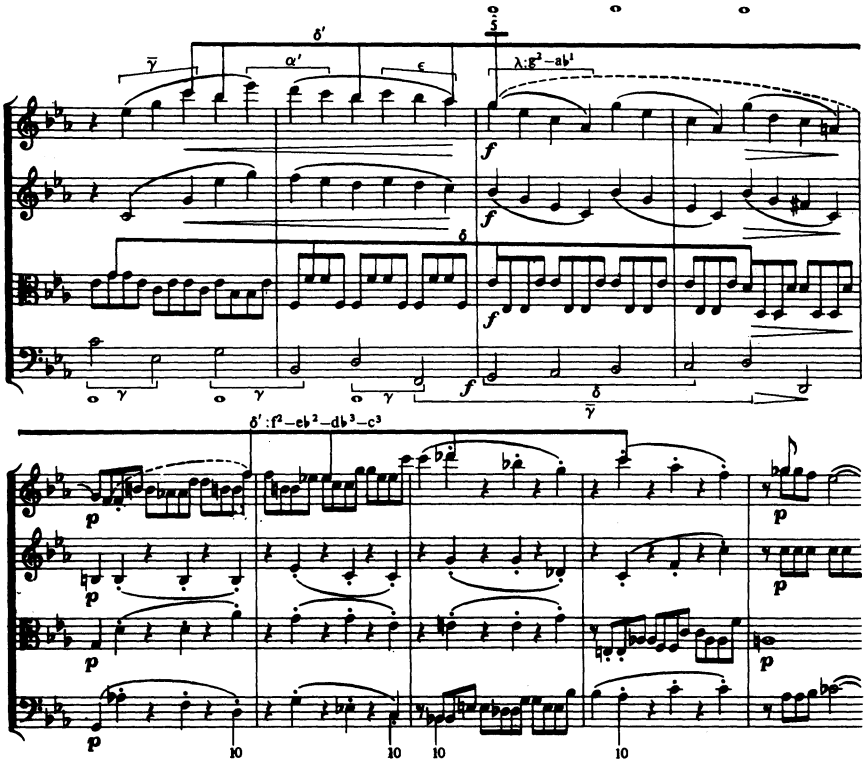


measure 24 and ascending to C in measure 27, the latter pitch a participant in motive beta bar prime.

Example 24 shows how delta prime organizes the foreground of the consequent phrase of the second subject in the reprise, which incorporates alpha prime and epsilon. Perhaps even more interesting is the motivic relation between gamma and delta which this passage reveals. Beginning in the bass of measure 178 three sequential statements of gamma, associated with the three whole notes rhythmic motive, are followed by a stepwise form of gamma bar, from F to D (Ex. 24). Within this latter motion occurs delta, pitch-class specific with respect to its initial form.

Example 25 presents two successive unfoldings of the almost-delta motive, that is, forms of delta which in internal organization do not correspond to the original statement of the motive. Both are marked "4-prg." in Schenkerian fashion in the example. The second delta, beginning in measure 198, is embedded in a linear intervallic pattern of the 10–7 variety, and the music becomes very exuberant by virtue of the pitch-rhythmic canon involving the three whole notes pattern. The passage ends with the melodic dyad C–D, which, as indicated, is the first dyad of alpha. There follows a section of considerable com-

Ex. 24

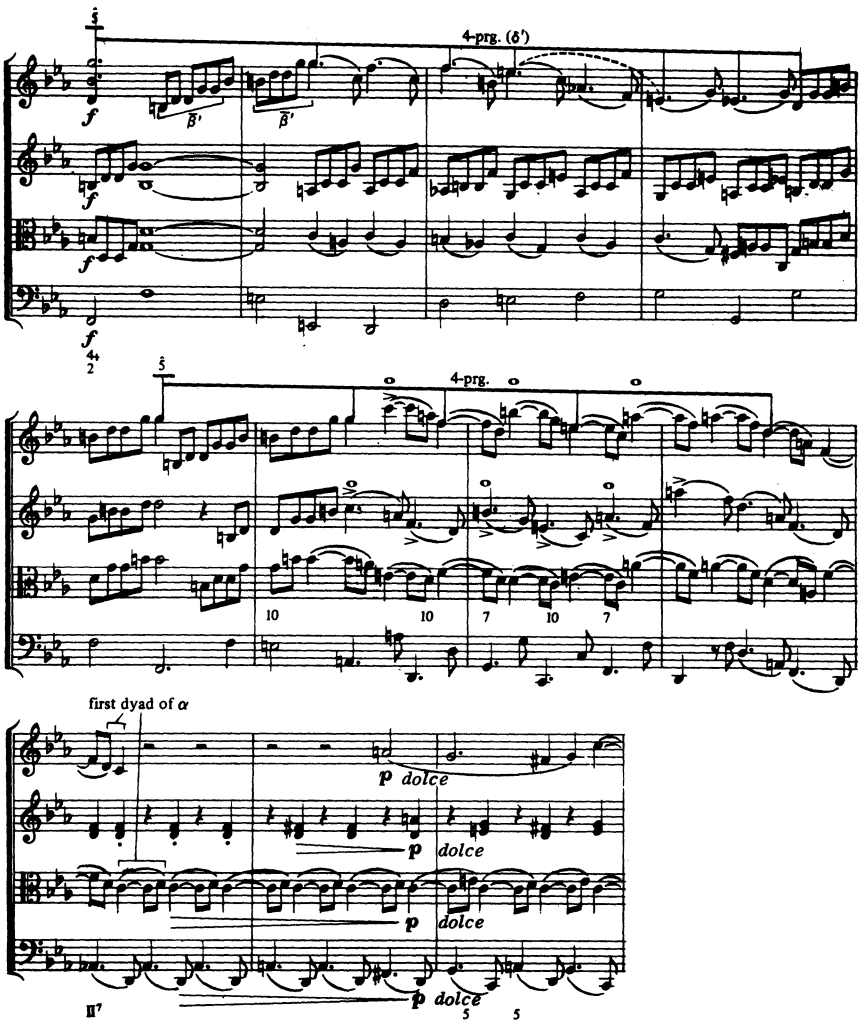


plexity, the motivic constituents of which will be very evident to the reader who has followed the analytical argument this far.

Finally, the appropriate moment to elucidate motive sigma has arrived. Sigma, the musical emblem of the first movement of the first string quartet, which Brahms certainly regarded as a signal achievement, is, in its primal form, composed of the pitches A–C–E♭—that is, C and A as in Clara, and Es as in Schumann.

This symbolic structure is expressed in many nontrivial ways in the music, perhaps most strikingly in the key relations C minor, as first subject, E♭ minor as second subject, and A major/minor as the main tonality of the development. The A-minor tonality is also interjected with great urgency and with a corresponding break in the continuity

Ex. 25



of the music to form the developmental episode to which I have referred several times.

Foreground examples of sigma can be found everywhere in the movement, although not all have motivic significance. Those labeled in the examples previously discussed will serve to illustrate the point,

and I refer the reader to Examples 3, 11, 12, 13, 20, 21, and 23 for further consideration of musical factors attending the appearance of this emblem.

Not only sigma as an entity but also its pitch-class components have striking roles in the music.[2] The highest note before the reprise, for instance, is b^3 in measure 129, which leads to the climactic a^3, the goal of the middleground progression shown in Example 21. Moreover, the sigma structure explains, in a motivic way, certain of the otherwise enigmatic tonalities. In particular, the strong references to F♯ minor at several points—notably in the passage shown in Example 21—with corresponding melodic motions involving F♯ and A appear to reflect the extension of the C–E♭–A structure to include F♯, forming the diminished seventh chord with its four forms of sigma.

Corresponding to the pitch motive sigma, in the programmatic sense, is the rhythmic motive composed of three whole notes. This motive is associated with beta bar prime, initially in measures 5–6 and most importantly in the reprise at measures 137–38 (Exx. 4, 22). Now, beta bar prime is almost like sigma, as noted earlier. This is why Brahms brings back the programmatic beta bar prime at the beginning of the reprise: it refers to sigma. Similarly, this is why beta bar prime occurs at the beginning of the second movement. The Romanze, however Brahms may have interpreted this programmatic title, begins with a concealed reference to Clara.

This essay has attempted to show that motivic design and structural levels are intimately related in the music of Brahms. In particular, a motive is not restricted to a foreground role, but may extend into the middleground level of a composition.

Motives have multiple meanings and associations, depending upon context. When they interact, motives may exhibit resemblances to other motives. As a particularly striking case, one motive may contain another.

Pitch and pitch class are of special importance to the study of motivic design. In the work which is the subject of this analysis specific pitch classes and dyads serve throughout to initiate motions,

[2] There are, of course, other references to letter names associated with friends of Brahms which appear in his music. In the first movement of the G-major Sextet, Op. 36, mm. 162–68, occurs the sequence A–G–A–H–E, a reference to Agathe von Siebold. And at the beginning of the A-minor String Quartet, Op. 51, No. 2, the first subject presents A–F–A–E, a reference to Joachim's motto, "frei aber einsam."

to terminate them, and to refer to musical events already completed or forthcoming. Although this feature is by no means restricted to the music of Brahms, the elegance and subtlety with which Brahms negotiates motivic relations leave him without peer.