BRAHMS' TECHNIQUE OF MOTIVE DEVELOPMENT
IN HIS SONATA IN D MINOR, OPUS 108
FOR PIANO AND VIOLIN

by

Richard S. Fischer

A Paper Submitted to the Faculty of the
SCHOOL OF MUSIC
In Partial Fulfillment of the Requirements
For the Degree of
DOCTOR OF MUSICAL ARTS
In the Graduate College
THE UNIVERSITY OF ARIZONA

1964
I hereby recommend that this dissertation prepared under my direction by Richard S. Fischer entitled Brahms' Technique of Motive Development in His Sonata in D Minor, opus 108 for Piano and Violin be accepted as fulfilling the dissertation requirement of the degree of A.Mus.D.

Dissertation Director

After inspection of the dissertation, the following members of the Final Examination Committee concur in its approval and recommend its acceptance:

*This approval and acceptance is contingent on the candidate's adequate performance and defense of this dissertation at the final oral examination. The inclusion of this sheet bound into the library copy of the dissertation is evidence of satisfactory performance at the final examination.
STATEMENT BY AUTHOR

This paper has been submitted in partial fulfillment of requirements for an advanced degree at The University of Arizona and is deposited in the University Library to be made available to borrowers under rules of the Library.

Brief quotations from this paper are allowable without special permission, provided that accurate acknowledgment of source is made. Requests for permission for extended quotation from or reproduction of this manuscript in whole or in part may be granted by the copyright holder.

SIGNED: Richard S. Fischer
ACKNOWLEDGMENT

The author wishes to express sincere gratitude to Professor James R. Anthony for his expert guidance in the preparation of this paper, and also to Professor Rodney Mercado for his valuable suggestions.

R. S. F.
ABSTRACT

The study entails a detailed analysis of Brahms' method of motive development in his Sonata for Piano and Violin in D minor, Opus 108. An introductory chapter opens with the observation that there is a need for a more thorough and intensive investigation of this composer's treatment and development of the motive within a large-scale composition than has heretofore been undertaken.

A declaration of purpose follows in which it is stated that the study will demonstrate:

1. How the essential thematic material within any movement of the Sonata is derived from the principal subject of the individual movement
2. How these derivations result from the imitation, variation, and/or transformation of motives which constitute the structure of that principal subject
3. How the entire thematic substance of all four movements is derived from the four opening measures of the Sonata through the utilization of the above developmental processes
4. How motive development is related to dynamics and harmony.

The introductory chapter also includes a definition
of terms, a discussion of research procedures, a resume of related research, and a brief coverage of the Sonata's background.

Chapters II-IV are devoted to a discussion of the first movement. In chapter II the architectonic form is analyzed from both a thematic and harmonic viewpoint. A structural analysis of the first four measures (called the "germ-theme") follows, in which six melodic motives, two rhythmic motives, and one dynamic feature, bearing developmental potential, are presented as the sources of thematic development throughout the entire Sonata. A harmonic analysis of the germ-theme is also discussed with reference to its future developmental influence. The rest of the exposition section is treated in chapter III while the development section, recapitulation, and coda are analyzed in chapter IV.

Two synthetic motives, resulting from the development of germ-theme motives, are established at the end of the exposition's first subject. These are subject to future development throughout the Sonata. Other unifying features, discovered within the first movement, include a trend in which a theme or section ends with its starting note, and a characteristic intervallic pattern in which the melodic direction of a pair of notes is immediately reversed by a succeeding pair (subsequently reduced to a three-note reversed interval pattern in the last two movements).
Chapter V treats the remaining movements in the order of their appearance within the Sonata. The architectonic form of each movement is considered in the same manner as in the first movement. The principal theme of each movement is analyzed in regard to its individual characteristics as well as with respect to the influence of the germ-theme motives upon its structure. Independent development of the individual movement's principal theme, and development of the germ-theme motives are then discussed as they appear during the course of the movement.

A harmonic development involving a conflict between the minor and major tonalities has been found to influence the key scheme of the Sonata's four movements. Its progress is traced periodically throughout the paper. The transforming effect of altered harmonization upon a theme is also discussed at the time of its occurrence.

Chapter VI presents the summary and conclusions drawn from the investigation. An appendix containing the thematic plan and key scheme of each movement is attached.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>INTRODUCTION</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>The Problem</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Definition of Terms</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Procedures</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Related Research</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>The Background of the Sonata</td>
<td>8</td>
</tr>
<tr>
<td>II.</td>
<td>THE ARCHITECTONIC FORM AND THE GERM-THEME MOTIVES IN THE ALLEGRO</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>The Architectonic Form</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>The Germ-Theme and its Motives</td>
<td>13</td>
</tr>
<tr>
<td>III.</td>
<td>THE EXPOSITION</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>First Subject</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Bridge Section</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Second Subject and Codetta</td>
<td>50</td>
</tr>
<tr>
<td>IV.</td>
<td>THE DEVELOPMENT SECTION, RECAPITULATION, AND CODA</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>The Development Section</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>The Recapitulation</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>The Coda</td>
<td>91</td>
</tr>
<tr>
<td>V.</td>
<td>THE INFLUENCE OF THE GERM-THEME MOTIVES UPON SUBSEQUENT PRINCIPAL THEMATIC MATERIAL</td>
<td>101</td>
</tr>
<tr>
<td></td>
<td>Adagio</td>
<td>101</td>
</tr>
<tr>
<td></td>
<td>Un Poco Presto e con Sentimento</td>
<td>114</td>
</tr>
<tr>
<td></td>
<td>Presto Agitato</td>
<td>125</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS -- Continued

VI. SUMMARY AND CONCLUSIONS ........................................ 147

The Prime Motives ....................................................... 147
Developmental Devices .................................................. 148
Thematic Derivation ...................................................... 148
Other Unifying Features .................................................. 150
The Influence of Dynamic Treatment Upon Motive Development .... 152
The Influence of Harmony Upon Motive Development ................ 152

APPENDIX ................................................................. 154

BIBLIOGRAPHY ............................................................ 176
CHAPTER I

INTRODUCTION

The Problem

The numerous writers on Brahms inevitably extoll his extraordinary mastery of musical form and structural detail. Occasionally musical illustrations are provided in which obvious structural affinities between several prominent themes are portrayed graphically. These isolated examples, though interesting in themselves, fail to reveal the vast network of motive imitations, variations, and transformations which enabled Brahms to generate an entire sonata or symphony from a single pregnant thematic idea.

This investigator's research has failed to uncover a genuinely thorough motive analysis of any of the master's large-scale compositions; consequently, it is felt that a more thorough study of Brahms' treatment and development of the motive is needed in order to provide a deeper insight into the composer's great capacity for organic development within structural unity.

It is the purpose of this study to demonstrate:


2These terms are defined on pp. 3-4.
1. How the essential thematic material within any movement of Brahms' D minor Violin Sonata is derived from the principal subject of the individual movement

2. How these derivations result from the imitation, variation, and/or transformation of motives which constitute the structure of that principal subject

3. How the entire thematic substance of all four movements is derived from the four opening measures of the Sonata through the utilization of the above developmental processes

4. How motive development is related to dynamics and harmony.

It is hoped that this investigation will encourage more detailed analyses of Brahms' other compositions, and of the masterpieces of other great composers. The student of composition should find this study helpful, for Brahms' D minor Sonata provides a great lesson in the art of thematic expansion within formal limitations. Performers of the sonata may see its interpretative potential in a new light through an increased awareness of the underlying thematic relationships exposed in this analysis. The lover of music who becomes acquainted with the method of analysis employed in this study, may increase his appreciation of
the art of music through a deeper understanding of its creative processes.

Definition of Terms

For the purposes of this study, the terminology employed by Rudolph Reti has been adopted. He described "motive" and "theme" as follows:

We call motif any musical element, be it a melodic phrase or fragment or even only a rhythmical or dynamic feature which, by being constantly repeated and varied throughout a work or section, assumes a role in the compositional design somewhat similar to that of a motif in the fine arts.

A theme, then, could be defined as a fuller group or "period" which acquires a "motivic" function in a composition's course.3

The term, "imitation," denotes the repetition of a motivic shape by any voice in which the basic intervallic structure remains unchanged (with the exception of alteration by accidentals for harmonic reasons). Transposition as well as repetition involving such contrapuntal treatment as melodic inversion, retrogression, augmentation and diminution have been included in the category of imitation.

"Variation" and "transformation" are related terms, both involving the alteration of a motivic shape. The difference between the terms is a matter of degree; and therefore, is sometimes difficult to determine. In

variation, a motivic shape is subjected to alteration only to the extent that outer similarity is preserved thus constituting an external change of the motivic shape. Transformation seeks to conceal the outer identity while preserving a strong, deep-rooted internal relationship.\(^4\)

Three methods of transformation have been analyzed, and are defined as follows:

1. A transformation by "intervallic alteration" has taken place when one or more melodic intervals of a motivic shape have been expanded or contracted in such a way that the original motivic identity is preserved.

2. "Interversion" (a term invented by Reti) pertains to the alteration of a motivic or thematic shape resulting from the interchange of its notes.\(^5\) Although the principle of interversion is somewhat similar to melodic inversion and retrogression, its effect is generally potent enough to produce a transformation.

3. The term, "mutation," (although not employed by Reti) has been used by this investigator to denote the combining of several motives to form a new motivic or thematic shape which possesses further development potential.

\(^4\)Ibid., pp. 56-65.

\(^5\)Ibid., p. 72.
Procedures

The investigation commenced with a complete formal and harmonic analysis of the sonata. The principal subject of the first movement was then analyzed in order to determine and classify its characteristic intervallic and rhythmic structural elements (hereafter termed melodic and rhythmic motives). 6 Distinctive harmonic and dynamic features of this principal subject were also observed and recorded for reference in association with subsequent motive development. An investigation of the individual movements followed in which the progressive development of the motives from their principal subjects was traced and related to the formation of new thematic shapes within the movement. These new shapes in turn were structurally analyzed in the manner described above, with consideration for additional motive development. Finally, the last three movements were investigated in order to determine the relationship of their thematic content to motives and themes from preceding movements. 7

Chapters II-IV have been devoted to a discussion

---

6It has been necessary to separate the intervallic and rhythmic aspects of the motive since either element may contribute independently to the formation of a new thematic shape.

7The C. F. Peters edition of Brahms' violin sonatas, edited by Arthur Schnabel and Carl Flesch; and volume X of the composer's collected works, edited by Hans Gal have been consulted as the musical references for this study.
of the first movement. In Chapter II an analysis of its architectonic form and the motivic structure of its first four measures has been presented. The subsequent development of the motives which were extracted from these opening measures has been covered in the next two chapters each of which have been subdivided into three sections. The subheadings of Chapter III which deal with the exposition section are entitled First Subject, Bridge Section, and Second Subject and Coda; while the divisions of Chapter IV are labelled Development, Recapitulation, and Coda. In Chapter V the remaining movements have been taken up in the order of their appearance in the sonata, a subdivision being devoted to each movement. Although the architectonic form and the development of motives from the principal thematic material within the individual movements have been discussed to some extent, emphasis (as the chapter's title suggests) has been placed upon the continued development of the Allegro's prime motivic material throughout all movements. A final chapter summarizes the study and presents conclusions drawn from the findings of the investigation. An appendix contains tables illustrating the thematic plan and key scheme of each movement.

Related Research
Arnold Schoenberg\(^8\) has made a detailed analysis of

the intervallic structure of the principal subjects from the second movement of Brahms' String Quartet in A minor, Op. 51, No. 2 and his song, O Tod, O Tod, wie bitter bist du! Schoenberg's observations are extremely beneficial in providing a deeper insight into Brahms' method of melodic construction through a comprehension of the motival relationships which exist within the boundaries of a single theme.

Rudolph Reti's exceptional contribution to the study of thematic development includes a penetrating investigation of Brahms' Two Rhapsodies, Op. 97. His perceptive analysis of motive development within each rhapsody, and of the resulting thematic relationships between the two works, is closely related to the problem covered in this paper.9

The nearest approach to the present study is found in Daniel Gregory Mason's10 thirteen-page discussion of the D minor Sonata. He has pointed out some easily perceptible affinities between the important themes within each movement, sometimes even calling attention to a former bass line that has been transformed into a principal melody later in the movement. However, the structural relationship between themes from different movements has been completely overlooked as have the subtle motive

---

transfigurations which occur in bridges, inner parts, and in the continuation of the prime statement of a new thematic idea. Mason claimed that "all of the most essential material of the opening Allegro of the D minor Sonata (with the exception of the purely subordinate and lyrical second and conclusion themes) is contained within the first four measures of the main theme." Had he been aware of Schoenberg's analytical method, he might have traced the origin of all thematic material in the sonata (including the "second and conclusion themes") to these first four measures.

The Background of the Sonata

The Sonata in D minor, Op. 108 was Brahms' final contribution to the violin sonata literature. It was completed at Thun during the summer of 1888 and first performed by Brahms and Joachim on February 13, 1889, the year of its publication. Murdoch observed that "the third Sonata is conceived in a larger mould than its companions for not only is a fourth movement included, but the work is more symphonic and far more difficult, both technically and interpretatively." Despite its increased proportions this composition represents the ultimate in economy of

\[11\text{Ibid., p. 189.}\]

thematic material and imaginative organic development, for Brahms, now at the zenith of his creative power, was well equipped to demonstrate Schoenberg's statement that "the most important capacity of a composer is to cast a glance into the most remote future of his themes or motives." At the age of twenty-two, long before the composition of his Opus 108, Brahms indicated his conscious interest in organic construction by copying this maxim from Lessing into his quotation book:

> Without inner cohesion, without the most intimate connexion of each and every part, music is nothing but a sandheap, incapable of any lasting impression. Inner cohesion alone can make it the solid marble, on which the hand of the artist may immortalize itself. 

Because of his intensely self-critical nature, Brahms often lacked confidence in the artistic merit of his work. His uncertainty and modesty was reflected in a letter to Elizabeth von Herzogenberg in which he referred to his forthcoming manuscript of the D minor Sonata as follows: "I am tempted to send you another trifle in undress." Elizabeth's (and later Clara Schumann's) enthusiasm for the sonata was boundless. In a long letter of praise she wrote:

---


15Murdoch, op. cit., p. 151.
What delights me so in this sonata is its wonderful unity. The four movements are so unmistakably members of one family. One purpose dominates them; one color scheme embraces them all; yet their vitality finds expression in various ways.16

Many elaborate commendations have since been lavished upon the D minor Violin Sonata, but none speaks as eloquently as the music itself.

CHAPTER II

THE ARCHITECTONIC FORM AND THE GERM-THEME

MOTIVES IN THE ALLEGRO

A comprehensive understanding of Brahms' method of motive development within the first movement of his D minor Sonata is dependent upon three basic fields of inquiry. These are:

1. A study of the architectonic form with reference to thematic content and key scheme
2. An analysis of the germ-theme\(^1\) with respect to the development potential of its melodic motives, and characteristic dynamic and harmonic features
3. A study of the development of these motives and their characteristic dynamic and harmonic features throughout the entire movement.

The Architectonic Form

A sonata-allegro form of large proportions serves as the structural foundation for the opening movement.

\(^1\)Schauffler has coined the term, "germ-motive," in order to denote "a germinal phrase, cyclically used with more or less disguise, to interlock the parts of a sonata or symphony into a unified whole." (Op. cit., p. 301).

It is in this sense that the term, "germ-theme," is applied to the first four measures of the Allegro movement in the present study.
The rhythmic indication is alla breve; the tempo, allegro.

The divisions of the movement have been outlined in two tables (see appendix, pages 155-161). Table 1 presents the thematic plan of the movement with a musical illustration of the beginning of each essential melodic idea as it is related to the form. Table 2 outlines the movement's sequence of keys. The following explanation will serve to interpret the symbols used in these tables.

The investigator prefers to consider the principal or first subject of the sonata as a theme-complex containing more than one thematic idea; consequently, its divisions have been labelled A<sup>1</sup> and A<sup>2</sup> respectively. In similar manner three thematic ideas have been indicated in the bridge section as Br<sup>1</sup>, Br<sup>2</sup>, and Br<sup>3</sup>. Although the second thematic idea of the second subject bears strong resemblance to Br<sup>3</sup>, it has been labelled B<sup>2</sup> in order to retain its proper identification as an interlude between the two main statements of the second subject, B<sup>1</sup>. The beginning of the recapitulation's bridge has been considerably extended through the addition of a new motive; hence this portion has been labelled Br<sup>4</sup>. The codetta in the recapitulation is transformed into a bridge section through the application of chromatic modulation, and by the addition of the new motive which produced Br<sup>4</sup>. However, since the content consists of previous thematic material, no new musical illustration has been provided.
For this same reason the development, recapitulation (except the above-mentioned Br^{4}), and the coda sections have merely been listed according to measure number without additional musical illustration. Numbers in parentheses refer to inclusive measure numbers unless otherwise indicated. When individual letters have been used to represent keys (as in Table 2), the capital letters indicate major keys while the small letters refer to minor.

The Germ-Theme and its Motives

The germ-theme has been analyzed with respect to the four elements which constitute its construction. They are listed as follows: (1) intervallic structure, (2) rhythmic structure, (3) dynamic structure, and (4) harmonic structure.

The intervallic analysis has revealed a motive-type divested of rhythmic, harmonic, and dynamic properties; the "melodic motive." The rhythmic analysis in like manner has exposed the "rhythmic motive." Dynamic and harmonic elements, although not usually regarded independently as motives, play an important role in the

---

2For the sake of brevity during the ensuing discussion, the melodic motive has been identified as "motive," while rhythmic motives have retained their descriptive adjective; hence, "Motive 1" refers to the earliest identifiable melodic motive whereas "Rhythmic Motive 1" indicates the earliest rhythmic motive. It will become evident that the two do not always coincide.
evolutional development of melodic and rhythmic motives.
It is most important to keep in mind that in the actual
course of development, the elements of these four classi-
fications may appear independently or may be combined in
various ways.

The germ-theme involves two melodic lines of
almost equal importance: the violin melody and the bass
melody. Their characteristic melodic structures are
outlined in example 1.

Example 1. Characteristic Intervallic
Structures in the Germ-Theme

The most prominent and most influential of the
melodic motives (hereafter referred to as Motive 1) is
represented by the rising interval of a perfect fourth

\[ \text{Mason emphasized the thematic significance of the}
\text{bass line as follows: "as we are dealing with so strongly}
\text{contrapuntal a mind, we shall expect the bass to prove}
\text{little less important than the treble" (op. cit., p. 189).} \]
with which the violin melody opens (example 2). Its immense procreative power is promptly demonstrated, for all but one of the five remaining melodic motives represents a development of this perfect fourth.

Example 2. Motive 1

The second motive (Motive 2) of the violin melody (example 3a) is a transformed melodic inversion of the opening motive: that is, a filled-in, descending perfect fourth. Although the external appearance of this motive is simple, its internal structure (as will be illustrated presently) is extremely complex due to the fact that the outlines of the four remaining melodic motives (Motives 3-6) are contained therein. Since all four motives appear in the bass line in advance of their representation in the violin melody, Motive 2 may be considered as the apex of a highly compressed and intricate development section which is enclosed within the first two measures of the sonata. As a matter of fact, not only are the four internal motivic outlines of Motive 2 anticipated, but its entire external shape is presaged in the bass melody as illustrated in example 3b.
Motive 3 is represented by the four-note, descending scale which opens the bass melody (example 4a). Again the ascending perfect fourth of Motive 1 has been inverted and transformed. The image of Motive 3 is visibly and audibly perceptible within Motive 2 (example 4b). A symbolic relationship to Motive 1 is also suggested by the transposition to the fourth above.

Motive 4 (example 5a) represents still another modification of the inverted version of Motive 1. The descending fourth is now filled in by two descending and overlapping thirds. Thus it should be noted that Motive 3 achieves its individuality from the descending scale pattern whereas Motive 4 is the representative of the falling third. Motive 4 is also represented in the framework of the violin's Motive 2 as illustrated in
Example 5b.  

The three notes of Motive 5 resemble a neighboring-tone figure. They appear three times within the four measures of the germ-theme. The earliest formation results from the combination of the last two notes of Motive 3 and the first note of Motive 4 in the first two measures of the bass line (example 6a). The second image of Motive 5, appearing within the framework of Motive 2, is easier to detect, as its three rapidly-moving eighth notes stand out in relief against the surrounding notes of greater time value (example 6b). The third, and most prominent, representation of Motive 5 (example 6c) takes place in the violin melody of measures 3 and 4 where it is associated with an important rhythmic motive (to be discussed shortly).

Aside from its own developmental purpose, Motive 5 symbolizes a distinctive characteristic of many themes in

---

4 The altered appearance of Motives 3 and 4 within the shape of Motive 2 illustrates the type of motive development defined as variation.
the Allegro movement; the departure from, and return to a fixed note. The earliest example of this feature is apparent in the initial violin theme whose terminal notes are A naturals on the same pitch level (follow the brackets outlining the interval of a fourth in the treble of example 1, page 14).

Example 6. Motive 5

As was observed in the discussion of Motives 3 and 4 (page 16), the influence of Motive 1 is evident in the two interlocking fourths which form the skeletal structure of the germ-theme bass (example 7a). Although this group of four notes attains eventual development in the second and fourth movements, its present importance is attributable to the fact that it is the generating source of Motive 6 (example 7b) whose intervallic pattern of a fourth followed by a third is more continuously developed throughout the sonata.\(^5\)

\(^5\)It might be argued that Motive 6 could just as
Motive 6 bears kinship to Motives 3, 4, and 5 by virtue of the fact that its image is clearly outlined in the violin's Motive 2 when extended to include measures 3-5 (example 7c).


well have been based on the descending notes, A-F-C in which case the intervals of the fourth and third would appear in reversed order. In either case, the future development of Motive 6 could be justifiably analyzed through the proper application of the terms, "retrogression" and "inversion." The selection of E instead of F as the central note of Motive 6 is not arbitrary, however, but is determined by several factors. First, the note, E, precedes the F in the skeletal outline of the germ-theme bass. Second, the F in the skeletal outline is anticipated by an earlier F which appears as the third note of the germ-theme bass melody, whereas the E in the skeletal outline is unprecedented. Finally, the fourth between A and E as an untransposed melodic inversion of Motive 1 is more closely related to the prime interval of the germ-theme than the fourth between F and C which represents a transposed melodic inversion of Motive 1. The construction of Motive 6, therefore, may also be explained as a mutation resulting from the combination of Motive 3 (example 4a, page 16) and Motive 4, the motive of the falling third (example 5a, page 17). In this sense it already represents an outgrowth of the motive development process, and from that viewpoint, Motive 6 may also be considered as another transformed version of Motive 1, (the perfect fourth) now extended to the interval of a sixth.
The six melodic motives have been stripped of their rhythmic identification and transposed to the same pitch range in example 8, below. This simplified illustration of their contours will provide a useful reference in the forthcoming study of the development of these motives.

Example 8. The Six Melodic Motive Contours

Two rhythmic motives are present in the germ-theme which have sufficient distinctive properties to permit their utilization as developmental agents. Unlike the melodic motives which could all be traced to measures 1-2, the rhythmic motives are the products of the second, third, and fourth measures. Rhythmic Motive 1 (example 9a) is the complement of Melodic Motive 2. Rhythmic Motive 2 (example 9b) is combined with the third exposition of Melodic Motive 5.

The only dynamic characteristic in the germ theme that has development potential is the swell which appears with the violin's eighth note in measures 3-4. (See example 1, p. 14.)
The germ-theme which is repeated frequently throughout the first movement, is continually developed without any appreciable melodic alteration due to the fact that its harmonic setting is constantly transformed. The initial harmonization is illustrated in example 10. Two important developmental features are contained within this harmonization. First, the sonata's leading motivic force - the perfect fourth - which has been so persistently represented by the melodic motives of the germ theme, receives additional correlation and amplification in the initial harmonic progression whose dominant-tonic root movement implies its outline. Second, the early (almost premature) modulation to F major in measure 2 is a prophecy of conflict between the minor and the major tonalities. The note, F itself, will be found to play an important part in this struggle.
Example 10. Harmonic Analysis of the Germ-Theme*

*Roman numerals refer to chord functions. A sharp or flat in combination with an Arabic numeral indicates the chromatic alteration of a scale-degree in the prevailing key. Thus $V$ in C minor implies an alteration of $\#7$ of B flat (the seventh tone of the pure C minor scale) to B natural. Since the seventh scale-degree functions as the third of the dominant triad, the resulting harmony is major (G-B-D).
CHAPTER III

THE EXPOSITION

First Subject

The analysis of the first four measures has demonstrated how Brahms developed his prime motives even while they were in the process of being created. The subsequent development of these motives will now be discussed.

The remainder of theme A1 (measures 5-8) consists of a repetition of the germ-theme varied slightly by the semitone reduction of its opening interval from the original perfect fourth to a major third. Hence a development of Motive 1 has transpired in which a transformation has been involved. The transformed Motive 1 (represented by the notes F and A in measures 5-6) is still identifiable through its continued association with the former rhythmic and melodic patterns of the original germ-theme. Another identifying feature is extant in the preservation of the common intervallic relationship between the melodic movement of the violin's Motive 1 and the harmonic tones of Motive 3 represented in the first measure of the bass. In the original germ-theme, both represent the interval of a fourth; whereas in the transformed repetition, the accelerated harmonic rhythm has enabled the essential tones
of the bass line to complement the major third of the altered Motive 1. (Compare the outer brackets in example 10 to those in example 11). Similarly, the complimentary intervallic relationship between the original Motive 1 and its initial harmonic root movement (previously discussed on page 21) has been preserved in measures 5-6. Thus, despite a transformed motive and an altered harmonization, unity has been maintained.

Example 11. Harmonic Analysis of the Transformed Motive 1

Brahms has also proceeded to transform Motive 1, during the course of the first eight measures, by expanding it to the interval of a fifth. Observation of the bass melody in measures 3-4 (example 12a) reveals that Motive 1 has finally been repeated without being disguised through the intervention of transforming notes. The first two quarters in the bass of measures 3-4 form an inverted
imitation of Motive 1, while the last two quarters of measure 3 represent its transposed imitation. The corresponding bass line in measures 7-8 (example 12b) evolves an intervallic (not a melodic) inversion of the Motive 1 patterns in measures 3-4; hence the shape of Motive 1 has been transformed through the expansion of its perfect fourth to a perfect fifth.

Although the bass line in measures 7-8 could have repeated the identical pattern of measures 3-4, it appears as though Brahms felt that it was time to begin, slowly and discreetly to liberate the vast expansion potential of his germ-theme, gradually letting the awareness of this potential creep into his listener's mind. Since the wide intervals in measures 3-4 and 7-8 have caused the bass to relinquish some of its former melodic characteristics and to assume the idiosyncrasies generally associated with a "typical" homophonic bass, the listener's attention is drawn more sharply toward the melodic line of the violin. As a result, this intervallic expansion of Motive 1 in the bass is veiled from the listener's consciousness.

Example 12. Inversion and Expansion of Motive 1
Now that the germ-theme has been presented twice in the first eight measures, theme A² (measures 9-21) brings the expansion principle into the open. Intervallic expansion is the most obvious manifestation of this principle. The bass widens its leaps to exceed an octave in measures 9, 13, and 14. The violin complies in the same measures by converting its original fourth to a diminished seventh, which is even further expanded to a major seventh in measure 14. Phrase extension and the upward expansion of pitch range are both clearly visible here.

Example 13. Expansion and Contraction in the Phrases of Theme A²

Brahms, however, has maintained an equilibrium in theme A² by counterbalancing his intervallic expansions
in phrases 1 and 3 with intervallic contractions in the alternate phrases, 2 and 4. Here a succession of three descending semitones makes its first appearance (measures 12-13). The bass of phrases 2 and 4 also contributes to the counteraction of intervallic expansion, for it abandons its restless undulation, coming to rest on a single tone in phrase 2 and later descending slowly to the fourth below in the extension of phrase 4.

Motive development is now also brought to the foreground in theme A². The violin's opening melody (phrase 1) is based on the two prime rhythmic motives. Rhythmic Motive 1 can be easily recognized in measures 9, 13, and 14; for although it is combined with new notes, its essential rhythmic pattern remains unchanged. On the other hand, the varied form of Rhythmic Motive 2, which makes its appearance in measures 10 and 15, requires explanation. A comparison of the original Rhythmic Motive 2 with its successor (example 14) reveals that the former has been subjected to a quasi diminution. While the second and fourth notes of both versions have retained identical time value, the first and third notes of the new version are considerably shortened. The insertion of the eighth rests adds yet another alteration; however, the relative rhythmic lineament is still strong enough to identify this new motive as a transformation of Rhythmic Motive 2.
Example 14. Transformation of Rhythmic Motive 1

Melodic Motive 2 receives its first transformation at the beginning of theme $A^2$ (example 15b). Not only is the interval which is formed by its terminal notes, inverted; but the perfect fourth, originally formed by these notes (example 15a, bracket $z$), is now converted to a diminished fourth (example 15b, bracket $x$). The strongest identifying feature is the rhythmic pattern, which has remained unchanged. Bracket $y$ in example 15b reveals that the interior notes, which had originally formed Melodic Motive 5, are now transformed so that with the final note of the new version, they produce a transposed and rhythmically diminished imitation of Motive 3. Melodic Motive 6 is also outlined in the opening of theme $A^2$ if the second and third notes of measure 10 are added (example 16). This repetition must be classified as a moderate variation of the original Motive 6, especially if the series of notes in which it is now outlined is compared to the melodic pattern from which it was originally extracted.
If the violin melody in measure 10 (including its resolution note in measure 11) is stripped of its rhythm, a transposed imitation of Melodic Motive 2 is clearly recognizable (example 17). By combining the transposed repetition of Melodic Motive 2 with the varied repetition of Rhythmic Motive 2 (a new association for these motives), Brahms has preserved the intense motivic concentration which was manifest in the opening germ-theme.¹

¹Another similarity between phrase 1 of theme A²
Example 17. Transposed Imitation of Motive 2

Further evidence of such concentration in measure 10 is provided by the bass line. Its four notes can be traced, through the mediation of the bass melody in measures 5-6 (first half), to the first measure and a half of the germ-theme. A comparison of the bass of measure 10 (example 18a) with that of measures 5 and 6 (example 18b) establishes a close melodic affinity at identical pitch range. Since the six notes of example 18b are merely a transposed repetition of the first six notes of the germ theme (example 18c), the relationship between the basses of measure 10 and the germ-theme is obvious. The descending fourth in the first two bass notes of measure 10 may also be analyzed as a retrogression of Melodic Motive 1, the original pitch being preserved. The third and fourth bass notes of measure 10 might be considered as a

and the germ-theme is evidenced in the fact that both melodic contours rise immediately to their highest note and return slowly to the starting note.
transposed imitation of the first half of Melodic Motive 4.

Example 18. Transformation of the Germ-Theme Bass

Measure 15 combines its varied repetition of Rhythmic Motive 1 with a transposed imitation of Melodic Motive 4 (example 19). Although it is necessary to shift the violin melody slightly, in order to illustrate the outline of Motive 4, this illustration should not be adjudged as artificial. The imitation of Motive 4 in the bass of measure 15 bears a closer rhythmic resemblance to its procreator, and for this reason should be considered the leading influence here. The violin melody, therefore is an imitation of its bass.

A more subtle manifestation of motive concentration is present in measures 9, 13, and 14 where the bass melody presents an inverted variation of Melodic Motive 5 (example 20a). Transposition of the first bass note to a
higher octave facilitates visualization of the relationship, but no such transposition is necessary for auditory recognition. This three-note motive variation in the bass gains greater significance when one realizes that it is actually the underlying, or internal preparation for the external exposition of the inverted and augmented imitation of Motive 5 which appears in the violin melody of measures 11-12 and 16-17 (examples 20b and 20c).

Example 19. Transposed Imitations of Motive 4

Example 20. Motive 5 Varied and Imitated

The relation of dynamics to development is demonstrated here, for a comparison of the Motive 5 in measures 3-4 (example 21a) to these inverted evolutions (examples
2b and c) reveals that all have preserved the characteristic dynamic swell.

Example 21. Development of Dynamics

One more internal motive development must be discussed before attention is directed to the closing measures of theme A². If the first notes in the melodic line of measures 13, 14, and 15 are grouped together, two ascending fourths of contrasting dimensions are formed (example 22.) The first interval represents the contraction of the perfect fourth; the second, its expansion. Thus Brahms has doubly transformed his Melodic Motive 1, at the same time preserving balance through the juxtaposition of extremes as witnessed earlier in the alternating phrases of theme A².²

²Two previous transformations of Motive 1 involving
Example 22. Double Transformation of Motive 1

The extension of phrase 4 (measures 18-21) is yet another model of motive concentration. Its first five melodic notes form a perfect augmentation of Rhythmic Motive 1 (example 23). The tendency of this rhythmic augmentation to counterbalance the former diminution of Rhythmic Motive 2 is reminiscent of the equilibrium characteristics of phrases 1-4. By removing the notes which are enclosed by braces in example 23, the original notes of Melodic Motive 3 are now disclosed (example 23, bracket a). A twofold development has transpired. First, Motive 3 has been expanded through the insertion of a new melodic idea; and second, Motive 3 has been elevated from its inferior position in measure 1 to a superior melodic post at the end of theme A\(^2\). Brahms has once again unfolded his motivic material with great subtlety. He has, however, confirmed the varied appearance of Motive 3 by its contraction and expansion have been discussed on pages 23-25. It should be noticed that the contraction in this case also preceded the expansion (compare the interval represented by the melodic line in example 11, p. 24 to the intervals outlined in example 12b, p. 25).
outlining its original shape in the bass (example 23, bracket b).

Example 23. Transformations in the Extension of Phrase 4 in Theme A²

A transposed variation of Motive 6 is an internal development in the motive complex of this closing section. Its form is unveiled by linking the highest note in measure 19 to the first notes of measures 20-21 (example 24).

Example 24. Transposed Variation of Motive 6

The three quarter notes in measure 19 which contributed to the transformation of Motive 3, will be found to have an important motivic role in the future. It is timely, therefore, to discuss some aspects of this new
motive's origin. Previous examination of the transformations of Motive 1 has disclosed two instances in which a dualistic development occurs. In both cases a contraction of Motive 1's characteristic perfect fourth was succeeded by its expansion. Furthermore, the two transformations followed one another more closely upon their second occurrence. The two intervals of the new Motive 1-tr represent the culmination of a trend which Brahms seems to have established in the two earlier double transformations. The transformed intervals have now attained their closest proximity, for the contraction of the fourth (represented by the rising minor third, a\textsuperscript{2}-c\textsuperscript{3}) is followed without delay by its expansion (expressed in the descending diminished fifth, c\textsuperscript{3}-f\#\textsuperscript{2}). The principle of inversion which was associated with the expanded transformation of Motive 1 in measures 7-8, is also manifest in the present expansion. From these observations it can be concluded that Motive 1-tr is a counterbalanced double transformation of Motive 1, or in other words, a synthetic product resulting from the combination of two previous transformations of Motive 1.

As a part of the closing section of Theme A\textsuperscript{2},

\footnotesize
\begin{itemize}
  \item[3] For future identification the group of notes appearing within braces in example 22 will be labelled "Motive 1-tr."
  \item[4] Compare the discussion on pp. 23-25 to that on p. 33.
\end{itemize}
Motive 1-tr may also be considered as a synthesis of the previous expanding and contracting forces which were observed in phrases 1-4 of Theme A². The rising minor third followed by the descending diminished fifth represents a compromise between the chromatic seconds and static basses of phrases 2 and 4, and the leaping sevenths and undulating basses of phrases 1 and 3. Thus the new motive acts as a balancing agent, expanding the semitone to a minor third, and reducing the seventh to a diminished fifth.

The synthetic formation of Motive 1-tr has introduced F sharp for its first appearance in the sonata. Although its tenure is quickly terminated for the present by F natural in measure 20, this note is worthy of mention here, for it will gain great importance as the composition proceeds.

The brief return of the germ theme (measures 21-24) brings the principal subject to a close. Even here the expansion principle advances. Since Motive 3 has just been exposed in the melodic line of the preceding measures, its immediate restoration as the bass melody of the germ-theme would seem redundant as well as retrogressive. Therefore, Brahms has combined Melodic Motives 3 and 4 to form a new bass melody (example 25a). A corresponding bond between the new bass line and Motive 3 is found in the characteristic successive descent of four notes. This relationship
may be further verified through a comparison of the harmonic progression in measures 21-22 with that in measures 5-6 where a transposed, but otherwise literal, imitation of motive 3 is outlined (compare the bass lines of examples 25a and b). The relationship of the new bass melody to Motive 4 is manifest in the descending succession of thirds which has been previously acknowledged (page 16) as an outstanding feature of Motive 4. The common goal of both Motives 3 and 4 to reach a note which lies a fourth below the starting note, is also shared by the present bass melody as outlined by bracket \( x \) in example 25a.

Since the descending series of thirds will play a decisive role in future thematic development, a new melodic motive must now be classified. It is based on the first four bass notes of example 25a which have evolved as the result of a mutation between Melodic Motives 3 and 4; hence the new motive will be labelled "Motive 3mu4" (see example 25c).

The violin melody of measures 22-24 demonstrates very little in the way of development since the original notation of the germ-theme has been essentially preserved. The true development is manifest in its harmonic treatment which has converted it from an opening theme to a closing theme. The earliest harmonic evolution of the germ-theme was achieved in measures 5-6 through the employment of new
harmonic material (necessitated by the transposition and transformation of the germ-theme), and the moderate acceleration of the harmonic rhythm.\(^5\) The third appearance of the germ-theme in measures 22-24 constitutes still another synthesis, for it restores the original notation and combines it with the basic harmonic progression of the early transformed version (compare the two bass lines in example 25). Despite the conclusive nature of measures 22-24, progressive development is harmonically generated in three ways. First, the tonic harmony, which accompanied the opening note of the germ-theme in measure 5, now enters a half measure too soon, causing the germ-theme to commence with the submediant harmony (compare example 25b to 25a). Second, a new key, A minor, has been established which, in association with the original D minor, symbolizes the perfect fourth of Motive 1. Third, the minor tonality which was challenged as early as measure 2,\(^6\) is now even more strongly disputed; for the minor tonic, instead of being temporarily displaced by a brief modulation to the relative major is directly transformed into major through the elevation of its third at the cadence (measure 24).

---

\(^5\)See the discussion on pp. 23-24.

\(^6\)The early modulation to F major was discussed on p. 21.
Example 25. The Transformation of the Germ-Theme's Bass Line and the Evolution of Motive 3mu4

Bridge Section

The bridge section which ingeniously links the past to the future, functions in a dual capacity as both transition and development. Theme Br-1 is clearly a contrapuntal development of the germ-theme whose original four measures have been expanded to nine and a half, extending from the second half of measure 24 through measure 33. The opening Motive 1, whose first note has been enlarged through repetition, is stated first in the piano. The violin answers three measures later as the piano unfolds a counterpoint.
based on transposed imitations of Motive 2. Measures 30-33 are devoted to a contrapuntal treatment of Motive 5 (example 26) which for two measures retains its original pitch and contour in the violin part, and is simultaneously mirrored by its inversion in the bass. Rhythmic Motive 2 is still combined with the violin's Motive 5, but its opening note has also been altered through repetition in similar manner to the first note of Motive 1 in measures 24-25. Measures 32-33 are merely a transposed imitation of measures 30-31.

Amidst this development of old material a progressive element, the earliest imitation of the new Motive 3mu4, appears surreptitiously in the treble of the piano in measure 29. Its four descending thirds in quarter notes produce a rhythmic diminution of the original motive. In keeping with previous double transformation
tendencies, this diminished version of motive 3mu4 is immediately counteracted by an expanded and inverted transformation in measures 30-34. The inverted image is exposed by connecting the essential bass notes of these measures as illustrated in example 27a. The validity of this transformation is substantiated by a more transparent recurrence in the following measures 35-36 (example 27b), and a simultaneous (and almost parallel) expanded development of the same motive in the violin part (example 27c).

The Br² section of the bridge assumes the responsibility of developing the content of Theme A². Its opening series of descending wide intervals represents still another synthesis of the contrasting elements of Theme A². The descending major sixths are nothing more than inverted and enharmonically spelled imitations of the ascending diminished sevenths of measures 9 and 13. The descending minor seventh, f² to g¹, in measures 34-35 is an inverted modification of the ascending major seventh in measure 14. If the upper notes of these intervals are connected, a descending scale line is exposed (example 28). Since its first and last notes encompass the interval of an augmented fourth, one may reasonably conclude that Motive 3 has been subjected to a transformation through the process of expansion. The antithetical chromaticism which appeared in phrases 2 and 4 of Theme A² (see example
Example 27. Multiple Development of Motive 3mu4
13, page 26) is also visible in the present descending scale line; thus the basic content of Theme $A^2$'s eleven measures has been compressed into the first two measures of $Br^2$.

Example 28. Motive 3
Transformed by Expansion

Measures 36-37 of the $Br^2$ section (example 29) present the synthesis of disjunction and chromatic conjunction in a more comprehensible outline, since the two contrasting elements are now alternated. A highly concentrated development of the expansion of Motive 1 is illustrated by the brackets in example 29. These interlocking diminished fifths and augmented fourths form a transition between the first appearance of the new Motive $1-tr$ in measure 19 and its future development to thematic proportions in measures 40-47.

Example 29. Concentrated Development of Motive 1
The right hand of the piano in Br2 deserves special recognition for its unifying qualities. Its figurations maintain a tie with the Br1 section of the bridge by employing the same repeated-note pattern which was responsible for the alteration of Melodic motive 1 and Rhythmic Motive 1 in that section. In addition, the descending leaps of these figurations are linked to the characteristic melodic outline of Br2, even preserving this outline after the violin has taken up a new pattern in measure 36.

While sections Br1 and Br2 are closely related to themes of the past, Br3 (measures 40-47) points toward the future by employing previous motives in a new thematic context which serves as an introduction to the second subject. Motive 1-tr has now been transposed and enharmonically notated so that its former diminished fifth appears as an augmented fourth (example 30, bracket x). The enharmonic change-over which was forecast by the interlocking diminished fifths and augmented fourths in measures 36-37 (example 29), has symbolically restored the image of the fourth. Complete restoration of this interval without expansion is visible between the first notes of measures 41-42 (example 30, bracket y). If the two quarter notes in measure 42 are interchanged, and inverted and expanded outline of Motive 3 can also be traced in measures 41-42 (example 30b). This is the earliest appearance of a
transformation by interversion\textsuperscript{7} in the sonata. In addition, the transformed version of Rhythmic Motive 2 which first appeared in measure 10 (see example 14, page 28), is also discernable under bracket \textit{y} of example 30a. The new Br\textsuperscript{3} theme, therefore, combines the following motives: (1) Motive 1-tr (transposed and enharmonically notated), (2) Motive 3 (transformed through inversion, expansion, and interversion), and (3) Rhythmic Motive 2 (transformed as before). Precedent has also been preserved in the cyclic treatment of the first and last notes of this new theme.

Example 30. Motive 1-tr and Transformation of Motive 3

The piano's chromatically varied repetition of the Br\textsuperscript{3} theme is introduced by elision on the second quarter of measure 42. The expansion of the perfect fourth is once again represented by the diminished fifth, ascending from

\textsuperscript{7}See definition on p. 4
B natural in measure 43 to F natural in measure 44 (example 31b, bracket \( \text{x} \)), and then descending slowly through a complete chromatic scale back to B natural in measure 46. In this descending chromatic scale (example 31b, bracket \( \text{x} \)), Motive 3 has experienced a transformation similar to that in measures 34-36. Where formerly the chromatic extension was partial, it is now complete. Although the descending chromatic scale has been presently relegated to the background because of the violin's entrance in measure 44, it is an important development in the sonata as will be revealed in the future.

Example 31. Development of Motives 3 and 1-tr

The violin re-enters by the same elision that previously introduced the piano variation. Its melody

\( \text{See pp. } 42-44. \)
represents a strong tendency to return to the perfect fourth characteristic of the germ-theme. Even the interval formed between the violin's opening Bb and the preceding F in the piano expresses this relationship (see dotted line n in example 31b). The first seven notes are externally based on conjunctly joined repetitions of Motive 1-tr which has been transformed by having its former diminished fifth (or augmented fourth) reduced to a perfect fourth (example 31a). In probing more deeply, two outlines of Motive 3 can be detected by linking the alternate notes of the descending broken-third pattern. Here the scale line formed by the lower notes (example 31, bracket y) represents still another return to the perfect fourth, while the upper line (example 31, bracket x) adheres to the expanded fourth. These broken thirds also represent a development of the melodic pattern in measures 34-36. The rhythmic articulation is identical, and the prevalence of descending sixths conveys the impression of intervallic inversion.

The former controversy between minor and major has ripened into a battle in the bridge section, with F as the principal figure. The major tonic chord which ended the previous A minor section on the first beat of measure 24, is immediately converted into a major mediant in F major. D minor struggles to regain its rightful place, beginning with a common-chord modulation in measure 27, but is constantly harrassed by the note, F sharp. In a sense,
the sharpening of the third in the minor tonic chord of measure 24 could be considered a harmonic motive which is now being developed in measures 27-28.

The germ-theme is now exposed to two additional harmonic developments. It receives its first complete harmonizations in F major (measures 24-27 [first half]) and in D minor (measures 27 [second half]-30).

An enharmonic change on the second half of measure 31 introduces a transitory modulation to F minor. Here the note, F, seemingly endeavors to maintain its identity with the minor tonality by becoming the root of the tonic minor chord, itself. The minor tonality is finally overthrown at the beginning of Br² (measure 34) where the relative A flat major forms a transitory link to C major (introduced enharmonically on the fourth quarter of measure 37). The C major tonic is immediately converted to a dominant seventh chord which is essentially sustained from measure 41 to 47, thus firmly establishing the harmonic frame for the second subject, F major. Although the note, F, has resisted sharpening, it has been unable to retain its former relationship with the minor tonality. A harmonic development has taken place.

Harmonic development may also be directly associated with motive development. The sequence of keys in measures 27-40 appears as follows: d-F-A flat-C. If
these are considered as ascending notes, the inverted image of motive 3mu4 is formed. The two inversions of this same motive which were observed in the bass and violin lines of measures 30-36 (see example 27, page 43) have therefore been confirmed harmonically.

Second Subject and Codetta

The second subject (measures 48-74) constitutes three sections in which a new theme \(B^1\) and its repetition are separated by an interlude \(B^2\) which is a varied repetition of the "introduitory" \(B\bar{r}^3\) theme. In keeping with precedent, \(B^1\) represents a highly concentrated motivic development, and continues to exhibit the expansive qualities that have been so much in evidence.

Its external motivic structure (example 32) is based on the inversion of Motive 5 (complete with characteristic dynamics,\(^9\) and a slightly altered outline of Rhythmic Motive 2), and the inversion of Motive 3.

\[\text{Example 32. Thematic Evolution of Motives 5 and 3}\]

\(^9\)Even the swell has been restored in the violin's repetition of \(B^1\).
The chromatic nature of the opening motive may be traced back to measures 11-12, and 16-17 of Theme A\textsuperscript{2} (see examples 20b and c, page 32) in which intervallic contraction played such an important counteracting role against expansion. In the present context, however, intervallic expansion is not presented in sharp contrast to contraction, but unfolds very gradually. With each sequential expression of the inverted Motive 5, the intervals widen until the renewal of Motive 1-tr in the Br\textsuperscript{2} interlude emerges as an outgrowth of the inverted Motive 5 (example 33).

Example 33. Evolution of Motive 1-tr from Progressive Expansion of Inverted Motive 5

Three motivic shapes closely resembling their predecessors in the germ-theme are developed within the first three measures of the second subject. An augmentation of Rhythmic Motive 1 is outlined in the right hand of the piano (beginning on the second half of measure 48), a simultaneous imitation of Melodic Motives 1 and 2 (minus the last note) appears as an internal manifestation of the bass line, and a transposed image of Motive 5 (without inversion) is formed by the first three notes in measure 49.
(example 34). Several interchanges have taken place. The rhythmic motives now appear in reversed order and the bass and treble have exchanged melodic motives (bearing in mind the inverted Motive 3 in the right hand of the piano as illustrated in example 32, bracket a on page 50).

Example 34. Internal Development of Germ-Theme Motives

The interval of the third has gradually increased in importance. From its modest beginning in the bass line of the germ-theme (Motive 4) it has advanced to the stage of active participation in the development of two new motives (1-tr and 3mu4). As a result, much of the bridge section's melodic line has been characterized by this interval or its inversion, the sixth. The third, therefore, has gained equal footing with the formerly unrivalled fourth. Its position in the second subject is evidenced in many ways. By connecting the first notes of measures 48 and 50,
the third is manifest in the sequential repetition of the opening motive, much in the same manner as the pattern of rising thirds established by the sequences of measures 30-36 (see example 27, page 43).

The filled-in third is outlined simultaneously by the outer parts in contrary motion as shown below.

Example 35. The Filled-in Third in the Outer Parts

The participation of the third in the expansion of the second subject's inverted Motive 5 can be observed in sections c and d of example 33 on page 51.

The minor third seems to influence the segmentation of the descending chromatic scale (example 36) which has now achieved an important melodic status in measures 53-56. The previous continuous growth of the chromatic scale might have been expanded to encompass the interval of a minor sixth had it not been interrupted mid-way by a major second. Each of its two segments, consequently, is circumscribed by the minor third.
Motive 6, which has received little attention thus far, is exposed to considerable development in the second subject. Its retrograde outline is formed by the melodic notes of longest duration in measures 48-53 (example 37a), and may also be detected by joining the last three melodic quarter notes of measure 51 to the dotted quarter of measure 52 (example 37b). The original (but transposed) shape of Motive 6 is exposed by connecting the F natural which is tied over from measure 52 to 53, to the first notes of measures 54 and 56 (example 37c). In defense against the possible argument that this outline has been arbitrarily chosen, the importance of these three notes requires explanation. The F natural can be recognized in example 37a to represent the highest stable note in the threefold sequential pattern of Theme B¹, the C natural in measure 54 initiates the beginning of a new melodic pattern which is contrasted to that of the previous measure, and the A natural in measure 56 is the cadence final.

Motive 6 is also expressed in the inner voices in various ways as illustrated below.
Example 37. Variants of Motive 6 in the Melodic Line of B^1

Example 38. Motive 6 Patterns in the Inner Parts of B^1

Aside from its motivic relationship to the germ-theme, B^1 has inherited the germ-theme's contour characteristics, for both themes form an arch, supported at each end by a common tone (compare the outlines of the brackets in a and c of example 37, page 55).

The interlude, B^2, has been described as a natural outgrowth of the preceding theme due to the comparatively expanded contour of its leading motive. Another factor also
points toward this evolutionary principle. Aside from its transposition, the melodic line of theme B² differs from the melodic line of theme Br³ (measures 40-42) only in one other respect: dynamic treatment. Its three opening notes have preserved the dynamic swell of the inverted Motive 5 which dominated Theme B¹, thus strengthening the bond between these two sections.

In keeping with the kaleidoscopic nature of the second subject, the violin, which has been silent during the first exposition of B¹, is adroitly and unobtrusively woven into the texture of B² with a melodic inversion of the prevailing theme (Measures 57-59). The overlapping effect, formerly produced by the elisions in the related Theme Br³, is now intensified by the violin's canonic interruption of the B² theme. The inverted B² theme is repeated in the left hand of the piano (measures 59-61) while the violin again disappears.

The violin's introductory arpeggio in measure 61 again produces the sensation of evolution as it emerges from the small octave established by the piano, and swells upward to the starting note of the B¹ theme, now one octave higher than before. Even the little lift provided by the three preliminary eighth notes of the piano enhances the sensation of outward expansion. The notes A, C, and F which formed the skeletal structure of the first statement of B¹ (see examples 37a and c, page 55), are again arranged
in a threefold reiteration of the Motive 6 retrogression (example 39). This introductory measure, therefore, may be regarded as a highly compressed development of Theme B¹.

Example 39. The Triple Retrogression of Motive 6

The pattern of the violin's repetition of Theme B¹ runs parallel to that of the piano's original statement for five measures (measures 62-66). In measures 67-68 a rhythmic augmentation of the chromatic scale prepares a phrase extension based on a repetition of the climactic measure 66, and extending from the second half of measure 68 to the first quarter of measure 74. In this extension, Brahms has combined elements from both themes of his second subject in further development. The bass line, beginning with the eighth note, D, in measure 67, and ending with the quarter note, D, in measure 70, bears so close a resemblance to contours represented at the end of Theme B¹ (measures 59-61), that its content may reasonably be considered a development of that theme (compare the melodic
shapes formed by the large notes in examples 40a and b). A transposed imitation of Motive 3 is also clearly outlined by the last four notes in this bass line (example 40b).

![Diagram of musical notes and text]

Example 40. Development of Theme B^2 in the Bass of the B^1 Phrase Extension

The six notes of the violin's zigzag scale design in measures 68-69 comprise a double development. First they represent a varied repetition of the original anacrusis in measure 65 (compare examples 41a and b); and second, the inverted shape of Motive 4 is formed by their broken-third pattern (bracketed in example 41b).

Motive 6, which was so thoroughly exploited in the second subject, makes one more return in the violin line leading to the cadence (bracket y in example 42).
Example 41. The Development of the B₁ Climax and Motive 4

The interval of the third has again emerged to participate in the extended repetition of Theme B₁, as well as to dominate the ensuing codetta section. Its strongest constituent, Motive 3mu4 makes a transposed appearance in measures 70-71 (example 42, bracket x). The third is also substantially represented in the final measures of the B₁ extension (example 42, brackets a and b).

Example 42. Transposed Imitations of Motives 3mu4 and 6

The codetta section (measures 74-83) is externally concerned with the development of Motive 1-tr as it appeared in the bridge's Br³ section and the second subject's B² interlude. The motive's four notes are evenly divided
between the violin and piano in measures 74-75 and 77-78, but for its third and final appearance in the codetta, the entire motive is given to the violin.

Example 43. The Development of Motive 1-tr in the Codetta, and the vertical Expression of the Third

The prevalence of the third in the codetta also stimulates internal development of the two other motives that were characterized by that interval. The employment of the diminished seventh harmony permits an inverted Motive 3mu4 to be expanded to five successive thirds in measures 76-77 (counting the augmented second as a minor third), and to seven thirds in measures 78-80.

Motive 4 also appears in inverted form if just the violin part is followed in measures 74-79.
Example 44. Extensions of Inverted Motive 3

Example 45. The Development of Inverted Motive 4

Two internal developments in the codetta still remain to be accounted for. The first involves the four melodic notes which appear in measures 75-76 between the two instrumentally divided versions of Motive 1-tr (example 46c). The second is embodied in the descending broken-chord pattern in measures 80-81 (example 46d). Both can trace their origin to the primal Motive 1-tr in theme $A^2$ (example 46a) through the transitional development of this motive in measures 36-37 of $B^2$ (example 46b). \(^{10}\) Again transformation by intervallic expansion is clearly visible.

---

\(^{10}\) The transitional development of Motive 1-tr was discussed on p. 44.
Example 46. The Transformation of Motive 1-tr by Intervallic Expansion in the Exposition Section

A striking comparison can also be made between the development illustrated in example 46d and the piano's descending broken-chord passage at the end of Br² (below).

Example 47. Transformed outlines of Motive 1-tr at the End of Br²

Harmonic development in the codetta has retrospective, as well as anticipatory qualities. In regard to the former aspect, the first two presentations of Motive 1-tr (illustrated in examples 43a and b, page 60) point directly back to the incipient Motive 1-tr (example 23, page 35) in that all are based on the same three notes (allowing for the enharmonic spelling of the last note). The violin's Motive 1-tr (example 43c), however, is directly related, note for note, to that motive's appearance at the beginning of Br³;
hence the bond between the close of the first subject (the cadential extension of $A^2$) and the introduction to the second subject ($B^3$), is melodically confirmed, and more easily recognizable in this compressed relationship. The harmonic function within each melodically identical group is not similar, however. Where formerly the notes $A$, $C$, and $F$ sharp were set in a concluding context (measure 19), their equivalents, $A$, $C$, and $G$ flat are now set in a beginning context at the opening of the codetta (measures 57-78). A comparison of the harmonic analysis in example 23 (page 35) to that in example 45 (page 61) discloses this phase in the harmonic development of Motive 1-tr. A second phase is revealed in a harmonic comparison of Motive 1-tr at the beginning of $B^3$ (example 30a, page 46) with its melodic equivalent at the close of the codetta (example 43c, page 60). Here the function is reversed, for now it is the former version which functions in a beginning capacity while the latter motive brings the exposition to a close.

Another form of compression is applied to the interval of the third which seems to have completely deposed the primal fourth. In the final measures of the codetta the third is not only expressed horizontally, but is given a vertical dimension as well (see the violin part in example 43c, page 60). Thus, through the great extensions of the inverted Motive 3mu4, and due to this final
condensation, the third has attained its highest development in the codetta.

The strongest reminiscent characteristic of the codetta is reflected in its last melodic note, $\text{A}$, which not only follows precedent by repeating the opening note of the codetta (the second quarter of measure $7\frac{1}{4}$), but reaches back to the first note of the entire Sonata, and by so doing, also establishes the first note of the development section in which the opening theme is revived.

While the melodic line of the codetta is concerned with the development of previous ideas, the bass simultaneously predicts the immediate future by establishing a pedal tone on $\text{F}$ for the entire ten measures of the section.
The Development Section

The forty-six measures of the development section may be grouped into four sections which are identified and outlined as follows:

- $Dv^1 (84-95)$
- $Dv^2 (96-107)$
- $Dv^3 (108-119)$
- $Dv^4 (120-129)$

Taking up the codetta's pedal tone idea and its final note, the development section abandons all other thematic material of the second subject and initiates a contrapuntal development of the germ-theme, beginning in its original key of D minor. The violin, in measures 84-85 is now entrusted with both lines of the germ-theme whose motives are outlined in example 48, below. Motive 2 is noticeably absent from the second measure which has now been modified so that Motive 3 (once expressed as an internal shape of Motive 2) is now prominently exposed in the second measure of the upper melodic line.\(^1\)

\(^1\)The satisfactory replacement of Motive 2 with one of its former internal components should help dispel any previous skepticism concerning the analysis of Motive 2 as a motive complex (see discussion on p. 15).
Example 48. Presentation of Five Motives by Violin

The violin's two measures are imitated a major third lower in the right hand of the piano (measures 86-87) while the violin restlessly animates the pedal, A, for one measure, and then returns to another presentation of Motive 3 in its original notation. The motivic texture in measure 87 is now four-dimensional, combining a fascinating stretto between the two versions of Motive three with a double development of Motive four and its interversion as illustrated below.

Example 49. Four-Dimensional Motive Development in Piano's Imitation
Example 50 (below) illustrates the shapes of Motives 5 (dotted lines) and 6 (enlarged, bracketed notes) which have returned to their original status as internal structures of the germ-theme.

Example 50. Internal Manifestation of Motives 5 and 6

When Motive 2 is finally permitted to make its appearance in measure 88 (example 51), it is given special recognition through repetition. As it passes from one instrument to the other, each entrance is dovetailed with the final note of the previous statement, a reminder of the elisions in Br3 and B2.2

Motive 1 is also strongly represented by repetition in measures 88-91 (indicated in example 51 by brackets marked x). Its inverted contraction is formed by the

---

2See discussion on pp. 46, 47, and 56.
diminished fourth encompassed by the extremities of the four statements of Motive 2 (example 51, brackets $\text{y}$).

Example 51. Repeated Transpositions of Motive 2 Combined with Imitations and Transformations of Motive 1

In keeping with his previous system of checks and balances, Brahms has included, as an internal manifestation, a revival of the earliest intervallic expansion of Motive 1.\(^3\) This is expressed vertically by the diminished sevenths which appear at the beginning of measures 89, 90, and 91 (example 51, brackets $\text{z}$).

The contrapuntal designs in measures 88-91 also incorporate motivic shapes and transformations. The violin's first four eighth notes in measure 88 are a rhythmically diminished transposition of Motive 3, while in the four eighth notes of the second beat, a retrogression of Motive 6 may be detected by eliminating the repetition of

\(^3\)This expansion, which occurred as the first interval of $A^2$, was discussed on p. 26.
G sharp (example 52a). Furthermore, if the last two eighths of the violin in measure 88 are grouped with the following half note, a melodic inversion of Motive 1-tr is discernible (example 52b). A closely related retrogression of Motive 1-tr is formed by the piano's counterpoint on the first beat of measure 89 (example 52c), after which the pattern of the violin's previous second beat is repeated.

![Example 52. Motivic Shapes within Counterpoint of Measures 88-91](image)

Before proceeding further, it is necessary to give additional consideration to the violin's contrapuntal figuration in the second beat of measure 88. Not only do the rising and falling harmonic intervals initiate a characteristic trait which largely governs the contrapuntal texture of the development section, but the entire movement is permeated by four-note patterns in which the direction of a pair of notes is reversed by a second pair. Examples 53a and b illustrate some of the more prominent occurrences in the exposition and some of the same typical patterns found in the secondary voices of the development
section.

(a) Reversed Interval Patterns in Exposition

Example 53. Melodic Structures based on Reversed Interval Patterns

A noticeable change in the contrapuntal melody occurs in the violin part on the last two eighth notes of measure 90 where the interval of the third is no longer reversed, but leads straight up to a descending passage of
broken sixths in measure 91. Here the pattern with which the piano ended the Br¹² section of the bridge (see example 47, page 62) is doubly reflected by the violin and the right hand of the piano (example 54). The piano's passage contains an outline of Motive 1-tr as was also demonstrated in example 47. The violin, however, presents a double transposition of Motive 3mu4.

Example 54. Double Transposition of Motive 3mu4 and Transposed Imitation of Motive 1-tr

The last four measures (92-95) of section Dv¹ are devoted to an external presentation of Motive 5 which has so far been concealed beneath the outward expression of the other motives. Here the previous development of this motive in the exposition section is summarized, for now in its original rhythmic and dynamic context from measures 3 and 4, Motive 5 is combined with a harmonic setting very similar to that of its development in measures 30-33 of the bridge section. A striking resemblance is especially
noticeable between the spelling of the vertical structures in measures 92 and 30, and also in the sequential repetitions in which the minor third rise is a common feature. Even the inverted outline of Motive 5, which was concealed in the texture of measures 30-33 (see example 26, page 41), is internally developed within the contrapuntal design of measures 92-95.4

\[ \text{Example 55. Internal Development of Inverted Motive 5} \]

\[ ^4 \text{Here is an instance in which an understanding of motive development will directly enhance performance, for if the pianist will stress the enlarged notes of example 55, the true beauty and meaning of the passage will be revealed to the listener. Furthermore, despite the subito pianissimo at the beginning of measure 96, the violinist should "lean" on the first E as it is the final note of the inverted Motive 5 which was begun by the right hand of the piano in the preceding bar, and therefore, demands resolution.} \]
Section $Dv^2$ (measures 97-107) is a slightly modified repetition of the twelve measures of $Dv^1$. The recent modulation to A minor in measure 90 of $Dv^1$ has caused the recurrence of the germ-theme in measure 96 to be sounded a fifth higher than before. Also the textural density is increased through the addition of the right hand of the piano which has now taken over the treatment of the germ-theme's bass line in a double development of three of its motives as illustrated below.

Example 56. Double Development of Motives 6, 3, and 4

It is important to note that the germ-theme's bass line has now experienced its second transformation. The first transformation transpired in measures 21-23 (example 25a, page 40) where a descending series of thirds replaced the original conjunct melodic pattern, extending the previous major sixth span to a minor seventh (A descending to B natural). The present transformation is more similar in design to the original bass line, but the intervallic span has been increased to an octave due to the fact that the
line no longer turns back upon itself at the beginning of the second measure. This expansion trend should be well remembered, for it is subject to future development.

The piano's imitation in measures 98-99 remains as before, save for its transposition, while the corresponding violin counterpoint undergoes some minor harmonic alterations. Although the Motive 2 imitations in measures 100-103 are placed in more widely spaced octave transpositions than in the corresponding measures of Dv₁, their intervallic relationships still serve the same essential motivic purpose (that is, the upward projection of the perfect fourth) as before, until in measures 102 and 103 the transitory modulations to D minor and G minor (see page 159 of Table 2 in the appendix) dissolve this relationship.

The contrapuntal density of measure 102 has increased over that of the corresponding measure 90 due to the insertion of an additional line in the right hand of the piano. Its first four notes mirror the characteristic figure of the rising and falling third, originally introduced by the violin in the second half of measure 88, and now more compactly grouped in the second beats of measures 102 (see item 5 in example 53b, page 70) and 103.

The violin's eighth notes in measure 102 (taking into consideration the octave transposition of the last two notes) are identical to the piano's figuration in measure 89 of the Dv₁ section. Also, measures 89 and 102
are both based on a similar transposition of Motive 2, beginning on B flat. Since measure 89 is set as a dominant ninth in D minor, the analysis of a brief modulation to D minor in measure 102 is justifiable. Measure 103 is essentially a transposition of measure 102 to the major third below, except that the violin's first and last notes have been slightly altered. In view of the argument supporting the previous transitory modulation to D minor, it would seem feasible to consider the present measure in the key of B flat major or minor. However, the fact that the Motive 2 contour, from its G down to its resolution note, D, is intervallically identical to the original Motive 2, plus the strong progression of supertonic seventh to dominant in G minor which is felt in measures 103 and 104, provides strong reason to accept an analysis of these two measures in G minor. The altered violin note, G, at the end of measure 103 also lends its weight to this analysis.5

By introducing the extra G minor modulation in measure 103, Brahms has forecast some significant changes in the following measures. Motive 5 now appears in the left hand of the piano, buried deep in the texture whose increased density has been maintained by the almost parallel contrapuntal lines of the violin and piano treble. Moreover, Motive 5, although retaining its original shape

5Mason's analysis places measure 104 in the key of G minor (op. cit., p. 193).
within measures 104-105 and 106-107, is subjected to intervallic expansion in measures 105-106 and 107-108. These expansions, combined with the sequential rises influenced by modulations to A minor (measures 105-107) and F major (measures 108-111), revive the outline of Motive 1 as illustrated in example 57. It should also be noticed that the inverted forms of Motive 5 are not combined with its transformations, but only with its original shapes.

Example 57. Reactivation of Motive 1 through Intervallic Expansion of Motive 5

The expansion of Motive 6 has now brought forth a significant feature in the contour of the contrapuntal line, which previously was only briefly suggested in the corresponding measures 92-95. It concerns the descending scale outline as illustrated in examples 58a and b. This outline
(a fragmentary version of Motive 3) in combination with the revived Motive 1, will play an important role in the counterpoint of section Dv\(^3\).

Example 58. Fragmentary Development of Motive 3

Section Dv\(^3\), the climax of the development section, begins on the crest of a great swell (extending from measure 105 through 109) which must be considered an expansion of the characteristic dynamic marking formerly associated with the central note of the prevailing Motive 5. This assumption is verified by the fact that the central note of Motive 5 (still treated in the left hand of the piano [measures 108-109]) is also expanded so that it becomes the rhythmic equivalent of its beginning note as follows: \[\text{[music notation]}\]. In addition, rhythmic expansion is also sympathetically expressed in the violin's counterpoint\(^6\) which has now combined its previous

\(^6\)The investigator believes that in performance, the left hand of the piano should dominate measures 108-111 due to its important motivic function.
fragmentary Motive 3 contours with an intervallic inversion of Motive 1 (example 59). The complete restoration of Motive 3 in its original notation is also perceptible when the Motive 1 interruption is by-passed as illustrated by the topmost bracket in example 59. The piano's right hand, which has inverted the development section's characteristic oscillating figure, underlines the violin's descending scale, at the same time preserving its former three-note pattern (see enlarged notes in middle voice, below).

Example 59. Rhythmic Expansion at Beginning of Dv³

In measure 111, Motive 5 is shifted to the violin line where a gradual rhythmic acceleration of its central note prepares the restoration (in measures 112-115) of its original Rhythmic-Motive-2 pattern.

Measures 112-115 are basically a repetition of measures 92-95, although there is no longer any hesitancy concerning the establishment of G sharp as the central tone of Motive 5. The greatest change, however, occurs
in the upward transposition of the last two measures which now rise a half tone higher than before. This harmonic evolution will be discussed presently.

Example 60. Rhythmic Acceleration of the Central Note of Motive 5

The essence of the four opening measures of Dv³ returns in its last four measures (116-119), but Motives 5 and 1 have both vanished. Motive 3 has finally achieved its full transformation in the form of an unbroken chromatic scale, even regaining its original perfect-fourth framework (example 61, bracket x). Simultaneously, the piano preserves a semblance of the motive's earliest chromaticization which appeared in measures 34-36 (compare examples 61a and b). A recollection of the codetta's seventh chord extensions of Motive 3mu4 is also preferred by the piano's descending arpeggios in measures 117 and 119.

Dv⁴, the closing section of the development, features an external double development of Motive 3 (bracketed
in example 62), and an internal treatment of Motive 5
(indicated by dotted lines in example 62). The broken-
sixth pattern is an intervallic inversion of the piano's
previous broken-third scale passage in measures 96-97, but
now the original upward-turn of the germ-theme's bass
melody has been restored, thus permitting the reinstatement
of the Motive 5 development. Indirect relationships
may also be traced to the violin's descending diminished
seventh chord in broken sixths (measure 91), and even
further back to the pattern associated with the early
chromatic expansion of Motive 3 in measures 34-36 (discussed in connection with example 61, above). A rhythmic
augmentation of this double development in measures 128-129
sets the stage for the recapitulation.

Example 61. The Total Chromaticization of Motive 3
Example 62. Double Development of Motive 3 and Internal Pattern of Motive 5 in Dv4

The harmonic scheme of the development section is governed by a pedal point on A which continues to sound in steady quarter notes throughout the entire forty-six measures. A glance at the key sequence in table 2 of the appendix (pages 159-161) reveals an overwhelming predominance of tonics on D or A. As a matter of fact, only six measures of the entire development are based on other keys. Furthermore, the two tonics, D and A, inevitably appear in alternation throughout the section, even when separated by another key. From this it may be assumed that a harmonic projection of the perfect fourth of Motive 1 has been implied in keeping with the previous sympathetic harmonic root movement in the germ-theme, and with the previous symbolic harmonic resolution of the germ-theme from its initial setting in D minor to its cadential setting in A minor at the end of the first subject. A condensation of this harmonic projection of the fourth is

7See p. 21.
8See p. 39.
demonstrated in the rapid modulation of minor keys from A through D to G in measures 100-103.

The conflict between minor and major has attained its largest dimensions. No longer is the minor tonality immediately challenged as in previous encounters, but now it is firmly established on the tonic, d, for six measures. The note, F, again displays its restless tendency when a modulation to A minor in measure 90 once more permits it to gain its sharp. The sharping trend spreads to measures 92-93 where the tonic triad is converted to major, and the G natural in the melodic line is elevated to G sharp upon its repetition. The dissolution of the minor tonality takes place in measures 102-107 where the three transitory modulations, in their avoidance of tonic chords, have saturated the texture with an abundance of major and diminished chords. These restless modulations, along with the restoration of F natural in measure 105, contribute immensely to the forthcoming climax in measure 108. As at the end of the bridge section, the note, F, is again established as the tonic of its major key. The victory of F major is brief in the development section, however, for after only two measures it is replaced by D minor.

An interesting comparison can be made between the key schemes of measures 30-34 in the bridge section and

---

9See pp. 21 and 48-49.
measures 110-114 in the development. Whereas formerly the modulation was upward by minor thirds from D minor through F minor to A\textsuperscript{b} major, it is now expanded by a major third in the first modulation, resulting in the key sequence: D minor, F sharp minor, A major. The note, F, is again responsible for this expansion, having once more converted the D minor tonic to major in measure 111. This elevation of D minor to D major, followed by F sharp minor is a significant harmonic evolution, for it predicts the pattern formed by the initial keys of the Sonata's first three movements.

The remainder of the development section reveals that even though the F major of measures 108-109 was quickly displaced, the major tonality has by no means been abandoned. The tonic, A, is given its first unconditional major setting in measures 114-119, and even the return of D minor at the end of the development is permeated by F sharps.

The Recapitulation

Brahms has sustained the sombre, contemplative mood of his development section in the return of the first subject by retaining its figurative treatment of the germ-theme outlines in both hands of the piano, and inserting the original germ-theme of the violin between them an octave lower than before. The increased density of texture more
effectively defines the modulations to F and C major (measures 131-133 and 135-137) which were perhaps somewhat disguised in the corresponding measures of the exposition due to the absence of complete vertical structures. Since the original bass outlines have been skillfully preserved in this new figural accompaniment, no additional motive development occurs within the first subject of the recapitulation; however, in view of the elaboration of its accompaniment, a harmonic development with respect to increased textural density must be acknowledged.

In order to preserve D as the tonic of his second subject, and yet carry out the modulatory scheme of the former bridge, Brahms has lengthened the first half of his Br\textsuperscript{1} section by nine measures, beginning with a different key, and introducing additional motivic material. The three and one-half measure introduction to Br\textsuperscript{4} (as the bridge extension has been labelled) is reminiscent of the repeated-note pattern of the original Br\textsuperscript{1}, only now the transposed retrograde outline of Motive 6 is formed through the extension of this repetition (example 63, bracket a). F sharp minor has replaced the corresponding former key of F major, the rising tendency of F being enharmonically demonstrated in the accompanying harmonic progression as indicated by dotted lines in measures 154-155 of example 63. Along with the expected return of Motive 2 in the violin (example 63, bracket b) the piano’s
upper voice outlines a transformed version of Motive 1-tr as indicated by bracket c, below.

Example 63. Motives 6, 2, and 1-tr in the Introduction to Br^4

The new motive which enters in measure 157 bears a close resemblance to the motive development that occurred in measures 10-11 through the combination of the varied Rhythmic Motive 2 and the transposed imitation of Melodic Motive 2.\(^\text{10}\) While the rhythmic pattern remains unchanged, the contour of the melodic line is altered. Yet, a melodic kinship between measures 157-158 and 10-11 is internally maintained, for the intervallic relationships within the small groupings of eighth and quarter notes are identical, even appearing in the same order (compare examples 64a and b).

\(^\text{10}\)See p. 29.
Example 64. Similar Rhythmic and Intervallic Patterns in A\textsuperscript{2} and Br\textsuperscript{4}

Although the downward transposition of the second pair of notes (A and F sharp) has destroyed the former image of Melodic Motive 2, it has in turn produced an extension of Motive 3\textmu{4} even utilizing the same notes of the original motive (not counting accidentals necessitated by the key change) as demonstrated by a comparison of examples 65a and b, below.

The renewed linear emphasis upon the third has produced its corresponding vertical complement as can be observed in the parallel third patterns which support the reiterations of Motive 6 throughout the new Br\textsuperscript{4} section.\footnote{An earlier vertical expression of the prevailing melodic third was discussed on p. 63.}

Although the illusion of imitation is created by the overlapping repetitions of Rhythmic Motive 1 and the
transformed Rhythmic Motive 2 in measures 157-161, true contrapuntal imitation does not occur until Melodic Motives 1 and 2 are recombined in their original rhythmic context in measures 162-168. These measures (illustrated in example 66a) show a relationship to the opening measures of the exposition's bridge section in regard to the timing of the thematic entrances, however, the ascending series of fourths formed by these entrances (transposed in example 66b) are traceable to the overlapping entrances of Motive 6 in measures 88-90 of the development section.  

![Example 65. Comparison of Motive 3mu4 to its Extension in Br4](image)

Three internal motive developments in Br4 remain to be discussed. First, the outline of Motive 6 appears in the new motive in measures 157-158 as outlined by bracket x in example 64b (page 86); second, the original span of Motive 3mu4 has been restored in the bass of measures 162-163 due to the application of rhythmic augmentation (example 67a);  

12See example 51, p. 68.
and third, the outline of Motive 1-tr is perceptible in measures 166-167 as indicated in example 67b.

Example 66. Ascending Series of Fourths Produced by Contrapuntal Imitation in Br\(^4\)

Example 67. Internal Developments of Motives 3mu4 and 1-tr in Br\(^4\)

Beginning with measure 168, the remainder of the recapitulation's bridge shows little difference from its counterpart in the exposition (measures 30-47). The ascending modulations in thirds now begin with b minor which has been introduced chromatically on the second quarter of measure 164. When the A major resolution is consummated on the downbeat of measure 176, it is converted, as before, to a dominant seventh harmony, thus preparing
the key of D major for the second subject.

The second subject also follows its previous course until the violin's restatement of $B^1$ is reached. The first noticeable difference is found in the preliminary tones of measure 199 which, due to the limitations of the violin's lower range, must be somewhat altered. The first four notes instead of expressing a retrogression of Motive 6, now form a retrogression of Motive 3 whose intervals have been altered by accidentals due to the prevailing key change.

![Example 68. Retrogressions of Motives 3 and 6 in Preliminary Tones of Recapitulation's $B^1$](image)

Although the next four measures of the violin remain unaltered, a subtle warning of the forthcoming radical change is suggested in the piano accompaniment whose pattern has deviated from its previous contour in measures 62-65 so that it now resembles an inversion of the accompaniment to the opening statement of $B^1$ in measures 48-53.

The great change takes place in measure 204 where once more Brahms has associated the key of F major with
a climax. Thus, F sharp is again supplanted by F natural, making its final appearance as a tonic in the first movement. This section of the violin's B\textsuperscript{1} theme represents a substantial reduction of the corresponding section in the exposition, an alteration which has been necessitated by the lengthening of the recapitulation's bridge. Nevertheless, Brahms has preserved the illusion of phrase extension by including a compressed repetition of his climactic melodic contour. The shape of Motive 6 as well as three inverted forms of Motive 1 are visible in the violin melody as illustrated in example 69, below. Observe that the interval of the fourth is revived in this concluding section of the second subject whereas the third dominated the corresponding section of the exposition.\textsuperscript{13}

Example 69. Motives in Altered Close of Second Subject

Measures 208-217 no longer function in a closing capacity as did the corresponding measures 74-83 of the exposition. Now, set in a series of upward modulations,

\textsuperscript{13} See p. 59.
they form a bridge to the coda, continuing to develop the former codetta motives as well as adding the more recent motivic material of Br. Although the external motivic developments are comparable to those in the codetta and in Br, a new internal development consisting of the rising fourth followed by the falling fourth (outlined as Motive 1 in example 70) reverts back to the contour of the original germ-theme.

Example 70. Internal Manifestation of Motive 1 in Bridge to Coda

The Coda

The coda opens with a climactic setting of the first subject whose grandeur is attributable to: an amplified dynamic marking, accelerated harmonic rhythm, thickened texture, and increased amplitude in the contour of the bass line resulting from the widening of its characteristic melodic leaps. Although the violin's melodic line has remained unaltered during the repetition of A, the new harmonic scheme has brought about a significant
change in the piano part. The descending melodic line, which was originally doubled in bass and treble, is now relegated completely to the piano's right hand while the left hand creates an entirely new bass melody. Example 69 illustrates the motive patterns arising from this altered treatment of the first statement. Bracket a outlines Motive 3 while brackets b show two retrograde outlines of Motive 6, no longer disguised by intervening bass notes. In a developmental sense, Brahms has combined his first and second subjects, for it was the retrograde outline of Motive 6 that formed the skeletal outline of B\(^1\).\(^{14}\) Bracket c encloses a group of notes that substitute for the staggered, descending thirds of Motive 4. A compromise has now taken place in which Motive 3 (bracket a) is extended into measure 219 leaving room for only one of Motive 4's thirds. Simultaneously, two conjunctly joined, descending thirds (an incomplete version of Motive 3mu4 [bracket d]) are unfolded in the bass. In this context, it becomes clear that the explanation concerning the derivation of Motive 3mu4 as a mutation of Motives 3 and 4 is no mere hypothetical supposition.\(^{15}\) As a result of its downward extension, the germ-theme's bass

\(^{14}\)See p. 54.

\(^{15}\)The derivation of Motive 3mu4 was discussed on pp. 37-38.
line (now in the piano treble) has attained its final transformation, reaching past its former octave expansion\(^{16}\) to the major ninth (outlined by bracket \(f\) in example 71).

![Example 71. New Motive Combinations in Coda's Theme A\(^1\) and Final Transformation of Germ-Theme Bass Line](image)

Brahms has also incorporated an idea from his development section into this final treatment of his first subject by combining his motive 5 in measures 220-221 with its inversion (example 71, brackets \(e\)).

The second four-measure group of the coda's Theme A\(^1\) also shows alterations in the upper and lower lines of the piano part. While the Motive 3 outline in measure 222 (example 72, bracket \(a\)) is identical to its equivalent in measure 5, a new melodic shape in the following measure (bracket \(c\)) forms an enlarged shadow of the violin's concurrent Motive 2. The retrogression of Motive 6 has now

\(^{16}\) Former transformations of the germ-theme's bass line were discussed on pp. 73-74.
been rhythmically augmented in the bass (example 72, bracket b).

Example 72. Motives in the Continuation of Coda's Theme A1

An internal development involving the intervallic expansion of Motive 1-tr is also disclosed in the upper piano line in measures 220, 221, 224, and 225 (example 73). These wide intervallic transformations have evolved from the progressive expansions of this motive in the bridge and codetta sections of the exposition.17

Example 73. Transformations of Motive 1-tr through Intervallic Expansion in Coda

17See example 46, p. 62.
The piano part in the $A_2$ section of the coda returns to its original form; however, the entire section is compressed through the removal of its central phrases 2 and 3. In this way, Brahms has avoided the former modulation to $A$ minor, thus setting his two-measure return of $A^1$ (measures 234-236) in the tonic key.

The development theme returns in measure 236, taking up the cadential D as its pedal tone, and unfolding its undulating modification of the germ-theme in the upper voices as before. The first significant change is revealed in measure 248 where the melodic action (previously based on Motive 5) is suspended for two measures. As a result of the disappearance of Motive 5, the former obbligato violin melody of Measures 108-111 has become the leading motive in measures 250-253. The left hand of the piano now produces a counter melody which, through the expansion of its fourth in measures 252-253, seems to be striving for an accurate inversion of the dominating violin melody. Instead, the true destination of the bass line (measures 254-256) turns out to be a final rhythmic augmentation of the Motive 6 retrogression (outlined by lowest bracket in example 74).  

Into these four concluding measures of the coda's development section, Brahms has compressed the essence of

\footnote{Compare the bass lines of examples 74 and 71, p. 93, bracket b.}
the entire movement. The Motive 6 retrogression has previously been acknowledged as a representation of the second subject. 19

Example 74. Motive Development in Final Measures of Coda's Development Section

The development section's melodic line is still continued by the violin which, in rhythmic diminution, has preserved the chromatic characteristics of its Motive 3 transformation. 20 Furthermore, the principle of expansion has also been maintained; for this transformation, whose origin in measures 34-36 was predicted by the insignificant three-note chromatic pattern of theme A2, 21 has now (through constant expansion) reached the apex of its development. Yet within its unprecedented span of a

19 See pp. 92 and 54.
20 See example 61a, bracket x, p. 80.
21 See measure 17 and the first note of measure 18 in example 13, phrase 4, p. 26.
diminished seventh, the original notation of Motive 3 is preserved (circled notes in example 74).

A modified outline of the germ-theme, stripped of its formerly integrated Motive 5, appears in the uppermost voice of the piano (example 74) while the neighboring tone figure of that motive (by no means forgotten) is now represented in the next lower voice by the notes D-C-D in measures 255-256. Even the frequently transformed Motive 4 is suggested in the pattern formed by the violin's two pairs of notes in measures 256-257 (example 74, bracket x).

Theme A\(^2\) is also represented in this four-measure condensation of the first movement in a threefold relationship. First, the descending diminished seventh (enclosed by the topmost bracket in example 74) is an untransposed retrogression of the opening interval in Theme A\(^2\) (see example 13, phrase 1, page 26); second, Rhythmic Motive 2, which received a varied treatment in the second measure of Theme A\(^2\) (see example 14, page 28), now appears in the upper line of measure 254, altered only by the substitution of dots for the former eighth rests; and third, the last four notes in the first phrase of Theme A\(^2\) (in which a transposition of Motive 2 was also represented, example 17, page 30) are now imitated by the violin's notes in measures 256-257 (example 74, bracket x).

The seven closing measures of the Allegro are
devoted to a farewell statement of the germ-theme's two opening measures. The transformation of the germ-theme's bass, which was introduced in the piano treble of measures 218-219, is now restored to the piano's bass staff. The overlapping repetitions of Motive 2 sustain a memory of similar treatment in the development section while Motive 5 is simultaneously revived in the middle voices of the piano.

Example 75. Combination of Motives 2 and 5 in Cadential Section

The fate of F, in regard to its future in the next two movements, is decided in the coda. The elaborate setting of D minor has completely taken over the opening of A\textsuperscript{1} whose former modulation to F major is totally disregarded. The subsequent modulation to C major (measures 223-225) is retained, however, as the piano accompaniment prepares to assume its former shape in the forthcoming A\textsuperscript{2}.

The telescoping of phrases 1 and 4 in Theme A\textsuperscript{2} brings about a harmonic development for the germ-theme
which at last rises from, and resolves to, its tonic, D (measures 234-236). In confirmation of this resolution the former dominant pedal tone of the development section is also resolved, in a sense, to its counterpart on the tonic. Yet there is a shade of doubt, for $F$, the third of the tonic chord, has again taken on the sharp, and in so doing, has permitted this chord to be converted to a dominant in G minor. The inherently unstable seventh degree of the G minor scale, fluctuates between its natural and sharp positions with relatively little notice in the next eight measures (236-243), but when D minor is restored, the conflict is again brought to the foreground. The F natural makes its final appearance in the descending bass line of the germ-theme (measure 258) as the crescendo of the rising Motive 1 triumphantly proclaims F sharp and the major tonality victorious.

The cyclic treatment of the note, A, has been carried through to the end. Not only has the coda ended on its starting note, but the entire movement has done likewise. The harmonic evolution of this final statement of the germ-theme has been eloquently summed up by Mason as follows:

---

22 This modulation to the subdominant is in sympathy with the present transposition of Motive 1 (D rising to G), and therefore represents a form of harmonic development similar to the complementary intervallic relationships between harmonic root movement and melodic line discussed on pp. 23-24.
For the first time, the D of the upward-fourth motive [Motive 1] is no longer the reposeful D of the tonic of D minor [as in measure 2]. It is now at last the intensely dynamic D of the dominant of G minor, the subdominant key. And the A to which it falls is no longer the mild third-step of F major [as in measure 3], nor even the rather sad but resigned root of the dominant chord of D minor of the bridge cadence [measure 24]. It is now the fifth of the tonic-chord, but of D major, not D minor. It combines, that is to say, the finality of tonic harmony with the suggestion of questioning, of further possibilities, of the fifth step; and both of these it combines with the generous warmth of D major. Still further to emphasize this new-found contentment and warmth, the second measure of the original motive is repeated in three different registers, ending in the full glow of the G string and with the piano backing it with a rich arpeggio of D major, in all the deliberation of triplet motion. It is the perfect, broad, happy cadence for a nobly-planned movement.23

CHAPTER V

THE INFLUENCE OF THE GERMAN-THEME MOTIVES
UPON SUBSEQUENT PRINCIPAL
THEMATIC MATERIAL

Adagio

Donald Francis Tovey referred to the Adagio movement as a "Cavatina"—that is to say a single melody achieving the spaciousness of an entire movement by expanding without allowing a middle section to partition itself off."¹ Three statements of this "melody" (subject) are separated by two transitions as outlined in tables 3 and 4 (pages 162-164) of the appendix. Each subject (excepting the abbreviated closing statement) and each transition contains two melodic ideas which are designated as A¹ and A² for the former, and Trans¹ and Trans² for the latter.

The harmonic scheme is much simpler than that of the Allegro, consisting almost entirely of alternations between the tonic D major and the dominant, A with a brief excursion into G major during the extension of the second A² section (see table 4). Thus the harmonic

The symbolization of Motive 1's perfect fourth is maintained as in the preceding movement. The tranquil Adagio is now completely dominated by the major tonality. Yet, two brief glimpses of the almost forgotten F natural serve as reminders of its past importance as well as forewarnings of its future return. The first appearance (in the violin part of measures 21-24) points backward to its farewell in the Allegro (measure 258, bass line), for the melodic settings in both movements are based on the original notation of the germ-theme's Motive 3 (compare examples 76a and b). The second exposure of F natural (measures 51-52) is associated with the retrogression of Motive 6 whose fourth is increasingly expanded in keeping with the expansion tendencies of the first movement; consequently, a progressive proclivity might be envisioned here (example 76c).

Example 76. Two Settings of F Natural in Adagio, and Comparison to Final F in Coda of Allegro

\[\text{See p. 80.}\]
In the final appearance of Theme A\(^1\) (measure 67),
the substitution of C natural (in the accompaniment) for
the previous C sharp, has induced a harmonic development
similar to that of the Allegro, in which the opening
theme is converted to a closing theme.\(^3\)

The general contour of the Adagio's melodic line
has been strongly influenced by the reversed interval
patterns of the first movement's melodic shapes (compare
the specimens in example 77 to those in example 53,
page 70).

![Example 77. Reversed Interval Patterns in Melodic Line of Adagio](image)

The Allegro's characteristic cyclic treatment of
a starting note is also continued in the Adagio's A\(^2\) and
Trans\(^1\). Both sections begin on the note, A, rise in a high
arch, and descend to a conclusion on the same note (see
measures 9-18 and 19-24).

Rhythmic Motive 1 (originally associated with

\(^3\)See p. 38.
Melodic Motive 2) forms the strongest motivic tie between the Adagio's subject and the germ-theme, for it has now become the rhythmic setting for the Adagio's Theme A. The vertical alignment of the two melodic shapes (examples 78a and b) not only demonstrates this striking rhythmic relationship, but also suggests an affinity in linear contour. Internal outlines of Motive 5 (dotted lines) and the outlines of the perfect fourth of Motive 1 (brackets x) are visible in both motivic groups.

Two developmental interpretations may be applied to the perfect fifth at the end of the Adagio's opening motivic group (example 78a, bracket y). First, on the basis of the foregoing observations, which have linked this group with the germ-theme, it would seem logical to consider

---

4Inverted outlines of Motive 5 are also visible in the sixteenth note groups of measures 3 and 7 in the Adagio, while other ascending outlines of Motive 1 appear between the first and third sixteenth notes of measures 4, 6, and 7.
the concluding interval as an intervallic inversion of the germ-theme's initial rising fourth (Motive 1). The second interpretation contends that the descending fifth is an expansion of the melodic inversion of Motive 1. Validation for this assertion lies in the fact that the external intervallic profile of the Adagio's opening group is more accurately analyzed as a derivation of the synthetic Motive 1-tr, and not as a direct descendant of the germ-theme. Example 79a shows motive 1-tr as it appeared in the Br3 section of the Allegro's exposition. The passage has been transposed in conformance with the key of the Adagio. The Adagio's opening group (example 79b) may actually be analyzed as an interversion of the Br3 motive, while the simplified repetition of the Adagio's melody in measures 5-6 (example 79c) serves to reenforce this theory of the Adagio's thematic derivation. Since the last interval of Motive 1-tr was originally analyzed as an expansion of the inverted Motive 1,5 it is only logical to analyze the terminating fifths of its derivative groups in the Adagio as similar expansions of the same motive. By the same token, the ascending third in the Adagio melody may be considered a contraction of Motive 1.

An untransformed, but melodically inverted Motive 1 is strongly represented in the piano accompaniment to the

---

5The origin of Motive 1-tr was discussed on pp. 35-37.
Adagio's Theme $A^1$ (example 80, brackets x). The interval of the third, which gradually gained equality to the fourth in the Allegro, is now closely combined with that interval as illustrated by the y brackets, below.

Example 79. Derivation of Adagio Melody from Motive 1-tr

Example 80. Combination of Inverted Motive 1 with the Interval of a Third in Adagio Accompaniment
This unpretentious accompaniment figure will be subject to important future development; hence its relationship to the past must be more firmly established. If the first two measures of the germ-theme’s bass line are transposed down a minor third (example 81a), and their barlines are vertically aligned with the opening barlines of the Adagio’s accompaniment (example 81b), it becomes apparent that a skeletal outline of the germ-theme’s bass line has been preserved, thus establishing a new and significant transformation.  

![Example 81. Comparison of Adagio's Accompaniment Melody to Transposition of Germ-Theme's Bass Line](image)

The Adagio's A\textsuperscript{2} follows the example of its formal counterpart in the Allegro by expanding the intervallic structures of the preceding section, and yet preserving

---

6This skeletal outline of the germ-theme bass was discussed earlier in connection with the derivation of Motive 6 (see pp. 18-19).
a thematic relationship. A comparison of the preparatory sixteenth notes in measure 9 (example 82b) to the simplified repetition of the Adagio's opening group in measure 5 (transposed in example 82a) demonstrates that the opening motive of Theme A^2 is a retrogression of the Adagio's main motive.

Example 82. Comparison of A^2 Opening Motive to Transposed Repetition of A^1 Motive

Three germ-theme motives are also visible in the melodic line of the Adagio's A^2 (example 83a). The inversion of Motive 5 is centered on the melodically (tonically) accentuated notes in measures 9-11, while outlines of Motives 1 and 2 appear in their original order in measures 11-12. If this analysis of the Motive 2 transformation seems weak due to the absence of the final note and the semi-tone alteration of the fourth note, an imitation in the bass of measures 12-13 (example 83b) discloses more convincing evidence of this evolution; for here Motives 1 and 2 (in part) are represented by a reappearance of their
Example 83. Outlines of Motives 1, 2, and 5 in Theme A^2 of Adagio

The skeletal outline of the germ-theme which appeared in the upper part of the piano in the summarizing measures (254-257) of the Allegro (see example 74, p. 96) is now repeated with the same notation in the bass of measures 16-18.

Example 84. Skeletal Outline of Germ-Theme in Bass Line of Adagio

Like the bridge sections in the Allegro, the transitions of the Adagio serve as development sections. The characteristic pattern formed by the melodic grouping of four sixteenth notes in A^2 is inverted by the sixteenth note passage at the beginning of Trans^1 (compare examples
85a and b), while simultaneously the piano's right hand expands its original descending perfect fourth to an augmented fourth (see measures 19-20).

Example 85. Theme $A^2$ and Its Melodic Inversion in Trans

The Adagio's accompaniment figure is promoted to thematic prominence in measures 25-32 of the first transition section, while underneath, the violin revives Motive 5 in a reproduction of its original Rhythmic-Motive-2 setting (measures 25-28). The Allegro's double development formula (an intervallic contraction of Motive 1 followed by its expansion)\(^7\) is now applied to the inversion of Motive 1 in Trans\(^2\) (see example 86).

The pedal tone on A, which was such an outstanding feature in the Allegro's development section, returns in measures 25-34 of the Adagio as an important unifying agent for the two movements. Furthermore, it achieves a similar

\(^7\)See pp. 35-36.
resolution to a pedal on D in the Adagio's closing measures (67-75).

Example 86. Double Development of Inverted Motive 1 in Trans2

In the last four measures (33-36) of Trans2, the intervallic contractions of the inverted Motive 1 are radically increased in the piano's right hand, while in the bass, a corresponding enlargement of the motive produces a series of descending perfect fifths. The terrace-like descending melodic line of the original accompaniment figure has been somewhat preserved by both parts, although the pattern of Rhythmic Motive 2 has now been promoted from its former accompaniment role to a superior position in the melodic line. The resulting semi-chromatic scale outline, which appears in the piano's upper voice (enlarged notes in example 87a), is intervallically identical to the early expansion of Motive 3 in the Allegro (outline transposed in example 87b). In addition, the slightly altered pattern of the long absent Motive 4 makes a reappearance (example 87a). This motive will play an increasingly important

---

8The original semi-chromatic transformation of Motive 3 was discussed on pp. 42-44.
part in future development.

Example 87. Semi-Chromatic Transformation of Motive 3, and Return of Motive 4 at End of Adagio's First Transition

The most noticeable change in the repetition of the Adagio's subject (measures 37-50) appears in the accompaniment whose textural density has been substantially increased through the addition of inner voices and a triplet elaboration in the left hand. Although the piano's upper voice now doubles the melodic line, its second voice carries out an important motivic function. Instead of supplementing the skeletal outline of the germ-theme's bass (still preserved in the present bass line), it introduces a transposed outline of Motive 3 (example 88). Only the interlocking thirds of Motive 4 would now be needed to complete the representation of the complete germ-theme bass line in measures 37-38.

An untransposed version of Motive 3 is also attached to the transposed Motive 1 in the closing measures
(47-48) of the subject's repetition (example 89); thus supporting the analysis of germ-theme derivatives in the corresponding measures 11-12.9

Example 88. Transposed Motive 3 and Germ-Theme Bass Outline in Accompaniment to Second Statement of Adagio's A¹

Example 89. Motives 1 and 3 in Second Statement of A²

Due to the extension of Trans¹ in the second interlude, the Trans² section has been abbreviated. In devoting this section entirely to the restoration of Motive 4 (example 90), Brahms has forecast that motive's significant development in the future.

Another restoration takes place in the cadential measures (74-75) of the Adagio. Motive 1, which has been inverted, contracted, and expanded throughout the movement, is finally set right side up in its original notation by the right hand of the piano.

In mood, the third movement may rightly be classified as a scherzo, for as William Murdoch observed, "Brahms never conceived anything more playful or more playful or more

\[10\] For the sake of brevity, this movement will hereafter be referred to as Poco Presto.
elfin than this." However, in regard to form Mason made the following comment:

We are not surprised to find a mind imaginative enough to make such an Allegro out of three motives and such an Adagio out of one theme needing for the lighter business of a scherzo none of the traditional properties of literal repetition and a separate trio, but on the contrary able to beat its whole texture from five saucy notes as a skillful chef beats a meringue from the white of an egg. 

Nevertheless, a three-part form with coda serves as the framework for the Poco Presto, with the central division functioning as a development section. The main subject of the first (principal) section, consisting of two thematic ideas (A₁ and A₂) is introduced by the piano. After a brief transition (Bridge-1) the violin assumes leadership, and the main subject is repeated with a more elaborate accompaniment in the piano. The material of Bridge-1 is now expanded to almost thematic proportions in Bridge-2 which leads directly to the development section. Here a new theme (D) is introduced and combined with developmental treatment of Themes A₁ and A₃. The elimination of the main subject's repetition in the third division of the movement makes room for the beautiful Bridge-3 (an expansion of Bridge-1) and the nostalgic coda.

---

12 Op. cit., p. 197  
13 The thematic plan and key scheme of the third movement are outlined in tables 5 and 6 on pp. 165-168 of the appendix.
The harmonic prophecy of measures 110-112 of the Allegro’s development section\textsuperscript{14} has now been fulfilled, for the D major of the Adagio is succeeded by F sharp minor in the Poco Presto. Since the major tonality is reluctant to relinquish its former position of superiority in the second movement, a tonal conflict, similar to that in the Allegro, is revived. The chromatic characteristics of Theme A\textsuperscript{1} make it difficult for F sharp minor to gain a strong foothold; consequently, three complete appearances of this theme inevitably terminate in A major. The minor tonality is also challenged in the two statements of Bridge-2 in which the third of the tonic is again chromatically raised as so often happened in the Allegro. In addition, F natural makes a determined bid to regain its former prominence, especially in the development section where it is strongly established as the tonic of both its minor and major tonalities (measures 75-110). The inclusion of Theme A\textsuperscript{1} in these keys of F minor (measures 91-97) and F major (measures 99-105) provides another illustration of harmonic development in which very little thematic alteration has been involved.

Harmonic complexity is offset by melodic simplicity in the third movement whose thematic material is

\textsuperscript{14}The key plan of the Sonata's first three movements was forecast by a modulation from D minor to F sharp minor in which the former key had its third degree chromatically raised. See pp. 82-83.
entirely based on the falling third. As a result, the long neglected Motive 4 becomes a prevailing force within the movement, as well as a strong connecting link to the germ-theme. Its internal concealment in the opening theme is exposed when the descending third patterns are extracted and consecutively arranged as in example 92b. A vivid memory of the previous movement is also preserved in the striking resemblance of the present melodic shape to the pattern of the Adagio's accompaniment as follows:

Example 92. Motive 4 in Poco Presto, and Comparison of Poco Presto's Melodic Pattern to Adagio's Accompaniment Pattern
As the movement progresses, the Motive 4 contour is more openly exposed (examples 92 c-e). The diminished thirds in the top line of example 92d and the bass of example 92f reflect the altered reappearance of Motive 4 in the Adagio (example 87a, page 112).

Motive 3 plays a strong role in relating the thematic material of the Poco Presto to the Sonata's germ-theme. Its chromatically transformed contour is revived in the outline of Theme A¹ (abridged for clarity in example 93a), in the corresponding violin accompaniment (example 93b), and at the end of the retransition where it is combined with repetitions of its diatonic form (example 93g). Note that the full contour of the germ-theme's bass line (previously reduced in the Adagio's accompaniment) has been restored in the upper line of example 93g.
The descending filled-in third which is encountered throughout the movement must also be analyzed as a transformation of Motive 3 in keeping with the analysis of the transformation of the germ-theme's bass line in the Allegro's coda. ¹⁵

These transformations are indicated by the x brackets in examples 93c-f. The y brackets throughout example 93 indicate expansions of Motive 3, while the unmarked brackets outline its untransformed contour. It should be observed that the scalewise bass line in example 93j is a variation on the earlier, corresponding violin accompaniment to Theme A¹ (measures 1-4) in which the original chordal outline has been filled in. At the end of the movement, Brahms develops this idea even further by spreading the same notes over five octaves (example 93k).

The two rhythmic motives of the germ-theme are also well represented in the Poco Presto. A transformation of Rhythmic Motive 2 forms the characteristic design of theme A¹ (example 94a), and is later combined with a transposition of its old partner, Melodic Motive 5 (example 94b). An inverted Motive 5 (dotted lines) is also combined with varied forms of Rhythmic Motive 2 (examples 94c and d). Even the original dynamic characteristics have returned in the last example.

¹⁵See pp. 92–93.
Example 93. Motive 3 and Its Transformations in Poco Presto
Example 93 -- Continued

Example 94. Rhythmic Motive 2 and Melodic Motive 5 in Poco Presto

Rhythmic Motive 1, in its first appearance, assumes the same proportions as in the Adagio theme (example 95a). By the end of the development section, however, it has resumed its original dimensions (example 95b). The completion of this developmental cycle signifies the future discontinuance of Rhythmic Motive 1 which will be found to make no further appearance in the Sonata's final movement.
The remaining melodic motives are given sparse treatment in this movement. Motive 1 is most appreciably represented in the bass line of Theme D (measures 65-69) whose notes, (representing chord roots) form a succession of fourths and fifths. An incomplete Motive 3mu4 may be seen in the first three notes of the opening violin accompaniment (measures 1-3). Its full form is represented in the descending piano arpeggios of measures 21-22, and in the violin's first four notes of Bridge-2 (beginning on the second beat of measure 53). Motive 6 is mostly hidden in the various arpeggio accompaniment patterns; however, its inversion is melodically exposed in the violin's three ascending notes (D, G sharp, B) in measures 147-148 of Bridge-3.

As in the case of Rhythmic Motive 1, two other elements which have been developed in the first two movements make their final appearance in the Poco Presto. First, the skeletal outline of the germ-theme, which
appeared in the Allegro's coda (example 74, page 96) and at the end of the Adagio's main theme (example 84, page 109), is now distributed between the violin and piano in the varied repetition of Bridge-2 (example 96); and second, the cyclic treatment of thematic terminal notes demonstrates its conclusive manifestation in the first and last notes of the entire movement as well as of the coda.

Although the reversed interval pattern which was found as a characteristic feature of many previous melodic contours is not abolished, its four-note design is largely converted in the third and fourth movements, to a more rapidly turning zigzag pattern. In this way, Brahms has replaced the general serenity of the two opening movements with a more agitated atmosphere in the last two movements. The only representative of the old four-note pattern is the characteristic group of eighth notes in measure 4 (example 97a) and its numerous repetitions throughout the movement. The accelerated three-note reversed interval pattern is illustrated in examples 97b-d.
One important development in the Poco Presto remains to be discussed. The germ-theme's bass line, whose outline of interlocking fourths fulfilled an important function in the Adagio, now receives an additional transformation in the sixteenth note passage of measure 12. An interchange of its two central notes has created an interversion in which the two interlocking fourths are telescoped (or overlapped) as indicated by the brackets in example 98. The total intervallic span of a sixth, however, remains unchanged.
Presto Agitato

The form of the fourth movement has been outlined in Tables 7 and 8 (appendix, pages 169-175) as sonata-allegro, although prominent rondo characteristics are also present. In reference to analyzing the movement in either form, Evans correctly observed that "neither result is quite satisfactory if we limit our observation to the mere matter of outline; but this is precisely one of those movements in which Brahms, no doubt of set purpose, allowed wealth of material to influence dimension." One notable unifying feature in the forms of the Presto Agitato and the Allegro is found in their codas both of which begin with the first subjects of the respective movements.

With the restoration of the minor tonality in the third movement, the conflict between major and minor has come to an end. Now the minor tonality regains its unequivocal supremacy over the first and third subjects, the development section, coda and bridge sections. The major tonality, on the other hand, is restricted to its traditional domain, the second subject; and even here it is replaced by minor keys in the closing measures of the section's two themes.

Although the Poco Presto's key of F sharp minor

---

is completely discarded in the Presto Agitato, its tonic note still battles for survival. F sharp's strongest bid for leadership takes place in measure 10 of theme $A^2$ where the F natural of the melodically corresponding measure 6 has been chromatically raised. Other F sharps appear throughout the movement in connection with the minor keys of A, E, and G, but the downfall of the sharp is signalled in the climactic entrance of the recapitulation (measure 171) where Theme $A^2$ now returns in the key of F minor. Although F sharp persists as late as measures 319-323 of the coda, the tonal conflict has been decided in favor of F natural whose key of D minor brings the movement to an animated conclusion.

A harmonic relationship exists between the Presto Agitato's Theme $A^1$ and the Allegro's germ-theme in that both begin on the dominant chord of D minor which resolves to tonic on the first beat of the second measure. Although Theme $A^2$ evolves into a melodic development of $A^1$, its first two measures (5-6), showing little melodic change, may be considered the first harmonic development of the opening theme. Here the dominant is followed by an augmented mediant seventh chord (measure 6) which is further developed in the corresponding repetition (measure 10) into a major-minor tonic ninth chord. The previously mentioned climactic return of $A^2$ in the key of F minor also involves a harmonic development in which the opening chord is now
tonic (measures 171-172) progressing to a supertonic seventh on the second beat of measure 173.

The Presto Agitato's opening theme receives two harmonic developments which convert it to a closing theme. The first occurs at the end of the first subject's final appearance in the coda (measures 307-310). Theme A\(^1\), still in the key of D minor, now begins on the tonic note which is harmonized by the submediant chord (compare the harmonic analyses in examples 100a and b, page 129). The second, and concluding harmonic development, takes place in measures 325-330 in which the A\(^1\) motive is set in an expansive deceptive cadence on the submediant of D minor.

The zigzag melodic contour, which replaced the former four-note reversed interval pattern in the third movement, is very much in evidence in the Finale. Its association with the prominent thematic material of the movement has been indicated by brackets in table 7 on pages 169-172 of the appendix.

The skeletal outline of the germ-theme's bass line, which was formerly represented in the bass of the Adagio's main theme,\(^17\) has now become the basic motivic idea of the fourth movement. No longer is it necessary to transpose the original germ-theme bass line to another key, for by merely raising it three octaves (example 99a), its outline

\(^{17}\)See p. 104.
almost coincides with that of the Presto Agitato's opening theme (example 99b). Even the flaw produced by the diminished fourth in the Finale's second measure is correctly resolved by the eventual harmonic transformation of Theme A1 in the coda (example 99c).

Example 99. Comparison of Presto Agitato's Theme A1 to Triple-Octave Transposition of Germ Theme's Bass Line

The memory of the third movement is also expressed in the long descending series of thirds (example 99b, upper bracket) which are again destined to be filled in as the movement proceeds. As in the Allegro, Brahms has developed an entire movement from its first four measures, and since its opening theme represents the original germ-theme bass line (from which all six prime motives were derived) as well as significant features of the middle movements, the Presto Agitato may be considered a summary
of the entire Sonata.

Strong collaboration is provided by the bass line to the Presto Agitato's Theme $A^1$ (example 100a) in which a modified image of Motive 1 (bracket $x$), is followed by two retrogressions of Motive 6 (brackets $y$). It is interesting to observe that the harmonic evolution of theme $A^1$ in measures 307-310 of the coda has caused an interchange in the motivic elements of the bass line so that now the image of Motive 1 is preceded by the Motive 6 retrogressions (example 100b). Not only are the descending thirds and fourths in the piano's treble complimented by the rising thirds (brackets $z$) and fourths in the bass melody, but both lines are rhythmically governed by the pattern of Rhythmic Motive 2 which also dominated the main theme of the third movement.

Example 100. Germ-Theme Motives in Presto Agitato's Opening Bass Line and Its Harmonic Evolution in Coda
The corresponding violin accompaniment adds its contribution to the opening motive complex with an internal expression of Motive 1.

Example 101. Motive 1 in Violin Accompaniment to Presto Agitato's A^1

Theme A^2 (measures 5-12) introduces the earliest development of the Presto Agitato's opening idea. An evolution of Rhythmic Motive 2 has taken place, in which its accent has now been shifted from the short central note to the rhythmically accentuated third note of the group (measure 6). The series of eighth notes, beginning on the second half of measure 7, represents a compressed inversion of the opening theme's descending thirds which have now regained the original dimensions of Motive 3mu4 (example 102, bracket a). The characteristic filled-in third (bracket b) of the Poco Presto follows in the first half of measure 8; and when (as in the earlier example 93a, page 120 it is linked to the following note, the descending scale line of Motive 3 reappears (bracket c).

The opening measures of Bridge-1 may also be interpreted as a development of the Presto Agitato's Theme A^1 in that the identical notes are employed in a different
order. The dotted lines in example 103 trace the notes of this interversion (example 103a) to their original positions in the main theme (example 103b). Furthermore, the outline of Motive 1 is also formed by the terminal notes of each group (brackets x).

Example 102. Motives 3mu4 and 3 in Presto Agitato's Theme $A^2$

Example 103. Bridge-1 as Interversion of Presto Agitato's $A^1$

These same measures (17-18) are also strongly related to measures 10-11 of the Allegro in which a transformation of Rhythmic Motive 2 was combined with a transposed imitation of Melodic Motive 2.\(^\text{18}\)

\(^{18}\)The transformation of Rhythmic Motive 2 was discussed on p. 27 while its combination with Motive 2 was presented on p. 29.
A comparison of the original development of these motives (untransposed in example 104b), with this late development in the fourth movement (example 104a) provides significant evidence of the unity that prevails throughout the entire work.

Example 104, Combination of Transformed Rhythmic Motive 2 and Melodic Motive 2, and Comparison to Original Combination in Allegro

During the course of Bridge-1, the filled-in third undergoes an important development, in which it gradually breaks the bond of its former pattern of three consecutive eighth notes. The first rhythmic transformation takes place in measures 18-19 as illustrated in example 105a, and is repeated in measures 22-23 and 26-29. At this point, the development of the third takes a new course, for in measures 30-31 it has wrought a significant change on the Presto Agitato’s main motive (example 105b, bracket x) whose previous reiterations in measures 20-21 and 24-25 were unaltered. The piano’s interruption in measure 31, seems to fulfill the
The main theme (B¹) of the second subject is revealed to be the object of the previous development. Its initial three, and four-note descending scales (measures 38-42) were anticipated in the transformation of the A¹ motive in measures 30-32 (compare example 106 with example 105b, brackets x and y). Even the first three
notes (E, D, C) of the second subject find their prototypes in the $A^1$ transformation as well as in the recently discussed bass notes (example 105d) which serve to link Bridge-1 to Theme $B^1$.

![Example 106. Motives in Theme $B^1$ of Presto Agitato](image)

The intervals of the third and fourth experience a retroactive development in measures 43-46 of theme $B^1$, whereby they have again acquired a pure form, the intervening filler notes having been eliminated. Furthermore, the inverted image of Theme $A^1$ which now evolves from the interchange and inversion of these two intervals provides a direct relationship between the first and second subject (compare examples 107a and b). A comparison of items b and c in example 107 also discloses a strong tie between these measures of $B^1$ and a substantial portion of the germ-theme's bass line.

The formerly disjunct fourth and third are now conjunctly joined in measures 47-48 so that an inversion of Motive 6 is produced (example 108, bracket $x$). Again a double relationship can be observed, since the inverted retrogression of Motive 6 was contained in the bass line.
of the Presto Agitato's $A^1$ (example 100a, brackets $y$, page 129), as well as the fact that Motive 6 is the representative of the full germ-theme bass line. In addition, Motive 3 and an internal reinstatement of Motive 4 are also visible in this climactic arch (measures 47-50) of the second subject (example 108, brackets $y$ and $z$).

![Example 107. Inverted Outline of $A^1$ in Second Subject, and Comparison to Germ-Theme Bass Line](image)

Example 107. Inverted Outline of $A^1$ in Second Subject, and Comparison to Germ-Theme Bass Line

![Example 108. Motives 6, 3, and 4 in Presto Agitato's Second Subject](image)

Example 108. Motives 6, 3, and 4 in Presto Agitato's Second Subject

The bass line of $B^1$ also points back to Theme $A^1$ by assuming an identical rhythmic pattern in measures 43-48 and simulating the ascending arpeggios of the latter's bass line.
Theme $B^2$ is essentially a varied repetition of $B^1$, however, two new unifying elements are worthy of mention. First, a closer bond to the Presto Agitato's first subject is provided in measures 55 and 57 where the piano's right hand restores the inverted retrogression of Motive 6, an important feature of the opening bass line (example 109); and second, the alternating syncopations between the two hands of the piano throughout the $B^2$ section recall the accompaniment pattern of the Allegro's first subject.

Example 109. Inverted Retrogression of Motive 6 in Theme $B^2$

Bridge-2 (measures 73-77) begins with a rhythmic diminution of the four-note melodic pattern which characterized measures 43-46 and 61-64 of the second subject (example 110, bracket a). Its immediate development into an externalized presentation of the inverted, zigzag thirds of Motive 4 (brackets b) is followed by a triple renewal of Motive 3mu4 in the descending diminished seventh chord passage (brackets c).

The extended repetition of Bridge-2 in measures
107-113 also includes an internal formation of the inversion of Motive 5 (example 111).

Example 110. Development of Second Subject's Characteristic Melodic Pattern, and Motives 4 and 3mu4 in Bridge-1

Example 111. Internal Development of Motive 5 in Extension of Bridge-2

Theme C₁ of the third subject presents a development of the first subject's Theme A² in which the characteristic filled-in third of Bridge-1 is also featured. In addition three germ-theme motives are outlined in the four opening measures (77-80). Bracket x in example 112a outlines the familiar Motive 3 while bracket y reveals an internal expression of Motive 2 whose untransposed original outline is illustrated in parentheses for comparison. An inversion of Motive 5 with accent restored to the short note is shown by the dotted lines in example 112b.

At the same time, a connection with Theme B¹ is maintained by the piano's right hand whose accentuated eighth notes outline an inversion of that theme's opening
notes (enlarged notes in example 113) while the left hand produces an inversion of Motive 3.

Example 112. Motives 2, 3, and 5 in Theme C\textsuperscript{1}

Example 113. Inversions of the Theme B\textsuperscript{1} 
Motive and Motive 3 in Theme C\textsuperscript{2}

The continuation of C\textsuperscript{1} (measures 80-84) places the inversion of Motive 3 in the violin, while the characteristic filled-in third is transferred to the piano's right hand (example 114, brackets a and b). A subtle projection of Motive 1-tr might also be analyzed in these five measures as indicated by bracket c below.
The ascending sequences in measures 88-91, have followed the example set by measures 30-36 of the Allegro in which the harmonic image of Motive 3mu4 (caused by a modulatory series of keys in rising thirds) is combined with its ascending melodic image (example 115, brackets a). At the same time, Motive 4 reenters in the piano's right hand with its original notation restored (brackets b).

Example 114. Motives 3, l'tr, and Filled-in Third in C

Example 115. Motives 4 and 3mu4 in C

19Discussed on pp. 49-50.
The inverted Motive 4 pattern of Bridge-2 is carried over into $C^2$ (measures 96-107) in rhythmic augmentation (example 116, brackets a), thus preparing for the return of Bridge-2 in measures 107-113. Since Bridge-2 was a development of thematic material from the second subject, it may be assumed that $C^2$ is a second generation descendant of the same ancestor.

Example 116. Inverted Motive 4 in $C^2$

A more direct tie to the second subject is visible in measures 104-105 of $C^2$. Here the violin carries out a rhythmic diminution of the earlier arch contours from measures 47-50 and 65-68. In regard to the latter reference, the notation and dynamics are identical (compare examples 117a and b).

The spirit of the Allegro's expanding bass line is also expressed in $C^2$ by the expanded intervals of measures 99-103 and the continued syncopation. Moreover,

---

20 Discussed on pp. 24-25.
the ascending chromatic bass line in measures 96-102 of $C^2$ might be considered an even further extension of the chromatic transformation of Motive 3 which was constantly developed throughout the Allegro (example 118).

Example 117. Identical Contours in Second Subject's $B^2$ and Third Subject's $C^2$

The elaborate treatment of the thematic material of $A^2$ in Theme $C^1$, is counterbalanced by its simplified development in $Dv^2$. Here only a skeletal outline of the original theme is presented: first, by the violin in measures 134-141; next, by the right hand of the piano in measures 142-149; and finally in the bass (measures 150-157). The violin's counterpoint in measures 142-149 (repeated by the piano in measures 150-157) exposes Motives 1, 3, and 4 as illustrated in example 118b. A shadow of the Presto Agitato's second subject can also be detected (compare example 118b to 118a).

The recent conjecture concerning the association of the chromatic bass line in $C^2$ as an inverted extension of
the Allegro's Motive 3 transformation is substantiated in $Dv^2$ where the span of the violin's first rising chromatic group is limited to the motive's original fourth (example 119).

Example 118. Motives 1, 3, and 4 in Counterpoint of $Dv^1$; and Comparison to $B^1$

Example 119. Inverted Chromatic Transformation of Motive 3 in $Dv^2$

The contrapuntal expansion of Theme $A^2$ upon its return in measures 171-194 of the recapitulation provides a new setting for several old motives. The return of Motive 3mu4 in the bass of measures 173-174 (example 120b) is remarkably similar to its original appearance in
measures 21-23 of the Allegro (transposed for comparison in example 120a, below).

Example 120. Comparison of Motive 3mu4 in Recapitulation of Presto Agitato to Its Source in Allegro

The violin's contrapuntal eighth notes in measure 177 represent an intervallic transformation of Motive 2 (example 121, bracket x), while the ensuing repetition of the descending third (measures 178-179) furnishes a reminder of the characteristic design of the third movement (compare examples 121a and b).

Example 121. Transformations of Motive 2 and Poco Presto Outline in Recapitulation of Presto Agitato

The rising sequences of measures 190-191 produce
another abbreviated inversion of Motive 3mu4 which is immediately followed in measures 192-193 by a restoration of that motive to its normal proportions and melodic direction.

Example 122. Abbreviated Inversion and Restoration of Motive 3mu4 in Recapitulation of Presto Agitato

While the thematic material in the return of Bridge-1 remains essentially the same as that in the corresponding bridge of the exposition, a significant change has taken place in the bass, for now the pedal tone of the Allegro's development section has returned (measures 194-209). Otherwise except for the necessary harmonic adjustments the remainder of the fourth movement's recapitulation is a repetition of its exposition.

The cadential theme of the coda (measures 311-337) begins by developing motives of Theme A² and Bridge-1 in the piano and violin, respectively (measures 311-315). Upon its repetition (beginning in measure 315), the development of Theme A² is extended further by the violin (measures 317-319).21

---

21It is vitally important that the relatively low violin notes in these measures be heard in performance, for they are definitely a continuation of the piano's thematic idea.
Example 123. Development of $A^2$ in Coda, and Comparison to Original Source

The continuation of the Bridge-1 development in measures 319-325 contains outlines of Motives 4 and 3mu4 as indicated below.

Example 124. Motives 4 and 3mu4 in Coda

Since the entire thematic content of the fourth movement evolved from its first subject, the brief return of this subject's characteristic outline in measures 325-330 may be considered a summary of the movement. Thus it may be said that the first and last movements of the Sonata are associated through their codas both of which share in
this summarizing quality. Moreover, through the harmonic alteration of the fourth note in this final statement of the Presto Agitato's $A^1$ motive, the true contour of the Allegro's opening bass line (the generator of all germ-theme motives) has been restored. In this respect it may be said that the entire Sonata has been symbolically summarized.

22 The summarizing characteristics of the Allegro's coda were discussed on pp. 95-97.

23 Previously discussed on p. 127.
CHAPTER VI

SUMMARY AND CONCLUSIONS

The Prime Motives

Six melodic motives and two rhythmic motives, generated by a simple four-measure theme, provide the raw material from which Brahms created a magnificent sonata of large proportions. The composer has demonstrated his predilection for motive development by introducing all six melodic motives within the first two measures, and developing them immediately in association with the introduction of the rhythmic motives in measures 2-4. Moreover, Motive 1, based on the ascending perfect fourth, received its earliest development in the creation of Motives 2, 3, 4, and 6, all of which were decidedly influenced by that interval. Motive 5 (the only melodic motive not influenced by Motive 1) is further distinguished from the others in that it is exclusively associated with the origin of Rhythmic Motive 2 (the remaining melodic motives having been developed within the initial Rhythmic Motive 1); and through this association, Motive 5 is characterized by a dynamic swell, the only dynamic feature possessing developmental potential.
Developmental Devices

Imitation (including transposition, inversion, retrogression, augmentation, and diminution), variation, and transformation (involving intervallic alteration, interversion, and mutation) are the tools with which Brahms shaped his motivic material into the externally varied, but internally related themes of the composition. In addition, two synthetic motivic tools are formed at the end of the Allegro's first subject. Motive 1-tr is the product of the double intervallic alteration (contraction plus expansion) of Motive 1, and Motive 3mul4 is derived as a mutation of Motives 3 and 4.

Thematic Derivation

The first movement, based on a sonata-allegro form, is the only movement of the four to adhere strictly to classic formal tradition. Its second subject is externally influenced by an inversion of Motive 3 within the Rhythmic-Motive-2 context, and by Motive 1-tr which, having been expanded to thematic proportions at the end of the preceding bridge, is recalled as the central section of the second subject.

The single theme of the Adagio is closely related to the germ-theme through its rhythmic pattern in which a slight variation of Rhythmic Motive 1 evolves. Although internal shapes of Motives 1 and 5 are represented in the
Adagio's opening melodic pattern, its actual derivation results from an interversion of Motive 1-tr. Contact with the germ-theme is directly maintained by the bass (later developed melodically in the second section of the movement's transition) in which the skeletal outline of the Allegro's opening bass melody is transparently developed. Strong germ-theme influence also governs the opening section of the Adagio's long transition (Trans\(^1\)) in which the progressively expanding inverted retrogression of Motive 6 is followed by an almost literal repetition of Motive 3. The Adagio theme's second section (A\(^2\)) evolves as a retrogression of the movement's main motive; consequently it might be regarded as an indirect descendant of the germ-theme.

The three sections of the Poco Presto are dominated by the falling third of the germ-theme's Motive 4 and the descending scale line of Motive 3. Relationship to the Adagio's bass is established in the characteristic three-note pattern of the Poco Presto's main theme, the influence of Rhythmic Motive 2 also being noticeable here. In addition, Rhythmic Motive 1 is exploited throughout the movement, appearing first with the same alteration as in the Adagio, and finally resuming its original proportions.

Although the formal structure of the Presto Agitato exceeds the limitations of both sonata-allegro and rondo, the movement displays remarkable unity in that all thematic
material is developed from its first four measures. Since these four measures are thematically based on the skeletal outline of the germ-theme bass (the generator of Motives 2-6), and are supported by modifications of Motives 1 and 6, it can be concluded that the fourth movement represents a summary of the entire sonata. Confirmation of this conclusion lies in the fact that the skeletal bass outline, itself, is represented in all four movements.

A skeletal outline of the melody formed by Motives 1 and 2 of the germ-theme also serves as a unifying element, appearing in the coda of the Allegro, the bass of the Adagio's Theme \( A^2 \), and in the varied repetition of the Poco Presto's Bridge-2.

Other Unifying Features

Aside from the development of specific motives, melodic unity is also achieved in various ways.

A four-note pattern, in which the direction of a pair of notes is reversed by a succeeding pair, characterizes many melodic contours in the first two movements. Although the reversed interval pattern is retained in the last two movements, the number of notes is reduced to three so that the formerly disjunct intervals are joined.

Intervallic contraction and expansion are constantly developed side by side throughout the sonata, the one counteracting the other.
The interval of the fourth which dominates the beginning of the Allegro is gradually equalled by the third as the movement progresses. The two intervals maintain equality in the Adagio, but the third advances to a superior role in the Poco Presto. Here a new development transpires in which the third is filled in with a passing note. Although equality is restored between the fourth and third in the Presto Agitato, the filled-in third continues its development, thus providing additional unification of the last two movements.

The cyclic treatment of the opening and closing note of a theme or section represents a unifying feature within the first two movements. This characteristic is greatly reduced in the Poco Presto, and completely abandoned in the Presto Agitato.

A cyclic role is also performed by the chromatic development of Motive 3 due to the fact that it appears within each movement. From its original span of a perfect fourth, the motive attains the ultimate dimensions of an octave in the Presto Agitato, after which it returns to its original fourth, but retains its chromatic alteration.

A uniform treatment is applied to the three codas of the sonata, all of which begin with the melodic material of the respective principal themes of their individual movements. Furthermore, the codas to the large first and fourth movements both contain brief sections in which the
essential thematic content of each movement is summarized.

The Influence of Dynamic Treatment upon Motive Development

The development of the dynamic feature, which first appears in combination with Melodic Motive 5 and Rhythmic Motive 2, is strictly limited to the simultaneous development of these two motives. Most of this developmental activity takes place in the Allegro, but some internal treatment is also included in the last two movements.

The Influence of Harmony upon Motive Development

In contrast to the limited influence of dynamic treatment upon motive development, harmony fulfills several important functions.

The dominating influence of Motive 1's perfect fourth is represented in the dominant-tonic root movement which provides the earliest harmonic setting for the germ-theme. The same influence is also reflected in the long pedal tone on A in the Allegro's development section which is answered by a D pedal in the coda. The pedal tone represents another cyclic feature in the sonata for it appears in the Adagio, still adhering to the A-D progression; and in the Presto Agitato where its original rhythmic treatment is revived.

Through altered harmonic treatment the principal themes of the first, second, and fourth movements are
subjected to a harmonic development in which they are transformed from opening to closing themes with little or no melodic alteration.

The conflict between the minor and major tonalities provides one of the most significant motivic forces in the sonata, for it influences the key sequence of the four movements. The elevation of F natural to F sharp in the D minor Allegro movement establishes the key of D major which forms the setting for the Adagio. The F sharp minor of the Poco Presto is founded upon a compromise in which the minor tonality is revived, but the F retains its sharp. The harmonic cycle is completed in the Presto Agitato where the key of D minor is finally restored.
TABLE 1
THEMATIC PLAN OF THE ALLEGRO
Exposition (1-83)

First Subject (1-24)

\[ A^1 \] (1-8; 22-24)

Bridge (24-48)

\[ Br^1 \] (24-34)

\[ Br^2 \] (34-40)
TABLE 1 -- Continued

Br$^3$ (40-47)

Second Subject (48-74)

B$^1$ (Pf., 48-56; Vn., 61-74)

B$^2$ (56-61)

C: Codetta (74-83)
TABLE 1 -- Continued
Development (84-129)

Recapitulation

First Subject (130-153)

\[ A_1^1 \text{ (130-137; 150-153)} \]
\[ A_2^2 \text{ (138-150)} \]

Bridge (153-185)

\[ Br_4^4 \text{ (153-167)} \]
TABLE 1 -- Continued

- Br¹ (second half of original Br¹ [168-172])
- Br² (172-178)
- Br³ (178-185)

Second Subject (186-208)
- Br¹ (186-194)
- Br² (194-199)
- Br³ (199-208)

Codetta (transformed into a bridge [208-217])

Coda

First Subject (abridged [218-236])
- A¹ (218-225)
- A² (226-233)
- A¹ (233-236)

Development Theme (236-257)

Closing Cadential Section (based on A¹ [258-264])
### TABLE 2
**KEY SCHEME OF THE ALLEGRO**

**Exposition (1-83)**

<table>
<thead>
<tr>
<th>First Subject</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A1</strong> (1-8)</td>
<td>d</td>
</tr>
<tr>
<td>F</td>
<td>(2-4)</td>
</tr>
<tr>
<td>d</td>
<td>(4-6)</td>
</tr>
<tr>
<td>C</td>
<td>(6-8)</td>
</tr>
<tr>
<td><strong>A2</strong> (9-21)</td>
<td>d</td>
</tr>
<tr>
<td>a</td>
<td>(15-21)</td>
</tr>
<tr>
<td><strong>A1</strong> (21-24)</td>
<td>a</td>
</tr>
<tr>
<td><strong>Bridge</strong> (24-48)</td>
<td></td>
</tr>
<tr>
<td><strong>Br1</strong> (24-34)</td>
<td>F</td>
</tr>
<tr>
<td>d</td>
<td>(27-31)</td>
</tr>
<tr>
<td>f (Transitory)</td>
<td>(31-33)</td>
</tr>
<tr>
<td><strong>Br2</strong> (34-40)</td>
<td>A flat (Transitory)</td>
</tr>
<tr>
<td>C</td>
<td>(38-40)</td>
</tr>
<tr>
<td><strong>Br3</strong> (40-47)</td>
<td>F</td>
</tr>
<tr>
<td><strong>Second Subject</strong> (48-74)</td>
<td></td>
</tr>
<tr>
<td><strong>B1</strong> (48-55)</td>
<td>F</td>
</tr>
<tr>
<td>C</td>
<td>(50-54)</td>
</tr>
<tr>
<td>d</td>
<td>(55)</td>
</tr>
<tr>
<td><strong>B2</strong> (56-61)</td>
<td>d</td>
</tr>
<tr>
<td><strong>B1</strong> (61-74)</td>
<td>F</td>
</tr>
<tr>
<td>C</td>
<td>(65-70)</td>
</tr>
<tr>
<td>F</td>
<td>(70-74)</td>
</tr>
<tr>
<td><strong>Codetta</strong> (74-83)</td>
<td>F</td>
</tr>
<tr>
<td><strong>Development</strong> (84-129)</td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>(84-89)</td>
</tr>
<tr>
<td>a</td>
<td>(90-101)</td>
</tr>
<tr>
<td>d (Transitory)</td>
<td>(102)</td>
</tr>
<tr>
<td>g (Transitory)</td>
<td>(103-104)</td>
</tr>
<tr>
<td>a (Transitory)</td>
<td>(105-107)</td>
</tr>
</tbody>
</table>
TABLE 2 -- Continued

| F           | (108-109) |
| d           | (110-111) |
| f#          | (112-113) |
| A           | (114-119) |
| d           | (120-129) |

Recapitulation (130-217)

**First subject** (130-153)

| A¹ (130-137) | d | (130-131) |
| F           | (131-133) |
| d           | (133-135) |
| C           | (135-137) |

| A² (138-150) | d | (138-143) |
| a           | (143-150) |

| A¹ (150-153) | a | (150-153) |

**Bridge** (153-185)

| Br⁴ (varied first half of Br¹ [153-167]) |
| f# | (153-160) |
| c# | (160-162) |
| f# | (162-164) |
| b  | (164-167) |

| Br¹ (second half of original Br¹ [168-172]) |
| b | (168-169) |
| d | (169-172) |

| Br² (172-178) |
| d | (172-173) |
| F | (Transitory) |
| A | (173-175) |

| Br³ (178-185) | D | (178-185) |

**Second Subject** (186-208)

| B¹ (186-194) | D | (186-188) |
| A | (188-192) |
| b | (193) |

| B² (194-199) | b | (194-199) |
| B¹ (199-208) | D | (199-204) |
| F | (204-208) |
TABLE 2 -- Continued

Codetta (transformed into a bridge 208-217)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>b</strong>&lt;sup&gt;b&lt;/sup&gt; (Transitory)</td>
<td></td>
<td>(208-209)</td>
</tr>
<tr>
<td><strong>b</strong> (Transitory)</td>
<td></td>
<td>(210-212)</td>
</tr>
<tr>
<td><strong>d</strong></td>
<td></td>
<td>(213-217)</td>
</tr>
</tbody>
</table>

Coda (218-264)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A&lt;sub&gt;1&lt;/sub&gt;</strong> (218-225)</td>
<td><strong>d</strong></td>
<td>(218-223)</td>
</tr>
<tr>
<td></td>
<td><strong>C</strong></td>
<td>(223-225)</td>
</tr>
<tr>
<td><strong>A&lt;sub&gt;2&lt;/sub&gt;</strong> (226-233)</td>
<td><strong>d</strong></td>
<td>(226-233)</td>
</tr>
<tr>
<td><strong>A&lt;sub&gt;1&lt;/sub&gt;</strong> (233-236)</td>
<td><strong>d</strong></td>
<td>(233-236)</td>
</tr>
<tr>
<td>Development Theme</td>
<td><strong>g</strong></td>
<td>(236-243)</td>
</tr>
<tr>
<td></td>
<td><strong>d</strong></td>
<td>(244-257)</td>
</tr>
<tr>
<td><strong>A&lt;sub&gt;1&lt;/sub&gt;</strong> (258-264)</td>
<td><strong>d</strong></td>
<td>(258-263)</td>
</tr>
</tbody>
</table>
TABLE 3
THEMATIC PLAN OF THE ADAGIO

Subject (1-18)

\[ A^1 (1-9) \]
\[ \text{Transition (19-36)} \]

\[ \text{Trans}^1 (19-24) \]
\[ \text{Trans}^2 (25-36) \]

Subject (37-50)

\[ A^2 (37-41) \]
\[ A^2 (41-50) \]
TABLE 3 — Continued

Transition (51-66)

$\text{Trans}_1^1$ (51-62)
$\text{Trans}_2^2$ (63-66)

Subject (67-75)

$A_1^1$ (closing theme [67-75])
TABLE 4

KEY SCHEME OF THE ADAGIO

Subject (1-18)

<table>
<thead>
<tr>
<th>A₁ (1-9)</th>
<th>D</th>
<th>(1-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A₂ (9-18)</td>
<td>A</td>
<td>(9-10)</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>(10-12)</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>(13-18)</td>
</tr>
</tbody>
</table>

Transition (19-36)

| Trans₁ (19-24) | A | (19-24) |
| Trans₂ (25-36) | D | (25-36) |

Subject (37-50)

| A₁ (37-41) | D | (37-39) |
| | A | (40-41) |
| A₂ (41-50) | A | (41-43) |
| | G | (43-46) |
| | D | (46-50) |

Transition (51-66)

| Trans₁ (51-62) | D | (51-62) |
| Trans₂ (63-66) | D | (63-66) |

Subject (67-75)

| A₁ (close theme [67-76]) | D | (67-76) |
TABLE 5
THEMATIC PLAN OF THE POCO PRESTO

Principal Section (1-64)

A¹ (1-16)

A² (17-25)

Bridge-1 (25-28)

A¹ (29-44)

A² (45-53)
TABLE 5 -- Continued

Bridge-2 (53-64)

Development Section (64-118)

D (64-69)

A¹ (69-75)
Bridge-2 (75-86)
D (86-91)
A² (91-110)

Retransition (111-119)

Principal Section (119-154)

A¹ (119-134)
A² (135-143)
Bridge-3 (143-155)

Extension of Bridge-3

Coda (155-181)
### TABLE 6

**KEY SCHEME OF THE POCO PRESTO**

**Principal Section (1-64)**

<table>
<thead>
<tr>
<th>Segment</th>
<th>Key</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>$A^1$ (1-16)</td>
<td>$f^#$</td>
<td>(1-5)</td>
</tr>
<tr>
<td></td>
<td>$b$</td>
<td>(5-8)</td>
</tr>
<tr>
<td></td>
<td>$f^#$ (transitory)</td>
<td>(8-9)</td>
</tr>
<tr>
<td></td>
<td>$A$</td>
<td>(9-16)</td>
</tr>
<tr>
<td>$A^2$ (17-28)</td>
<td>$c^#$</td>
<td>(17-25)</td>
</tr>
<tr>
<td>Bridge-1 (25-28)</td>
<td>$f^#$</td>
<td>(25-28)</td>
</tr>
<tr>
<td>$A^1$ (29-44)</td>
<td>$f^#$</td>
<td>(29-33)</td>
</tr>
<tr>
<td></td>
<td>$b$</td>
<td>(33-36)</td>
</tr>
<tr>
<td></td>
<td>$f^#$ (transitory)</td>
<td>(36-37)</td>
</tr>
<tr>
<td></td>
<td>$A$</td>
<td>(37-44)</td>
</tr>
<tr>
<td>$A^2$ (45-53)</td>
<td>$c^#$</td>
<td>(45-53)</td>
</tr>
<tr>
<td>Bridge-2 (53-64)</td>
<td>$a$</td>
<td>(53-64)</td>
</tr>
</tbody>
</table>

**Development Section (64-118)**

<table>
<thead>
<tr>
<th>Segment</th>
<th>Key</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>$D$ (64-69)</td>
<td>$a$</td>
<td>(64-69)</td>
</tr>
<tr>
<td>$A^1$ (69-75)</td>
<td>$a$</td>
<td>(69-75)</td>
</tr>
<tr>
<td>$A^3$ (75-86)</td>
<td>$f$</td>
<td>(75-86)</td>
</tr>
<tr>
<td>$D$ (86-91)</td>
<td>$f$</td>
<td>(86-91)</td>
</tr>
<tr>
<td>$A^1$ (91-110)</td>
<td>$f$</td>
<td>(91-96)</td>
</tr>
<tr>
<td></td>
<td>$F$</td>
<td>(97-105)</td>
</tr>
<tr>
<td></td>
<td>$f$</td>
<td>(106-110)</td>
</tr>
</tbody>
</table>

**Retransition (111-119)**

<table>
<thead>
<tr>
<th>Segment</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$f^#$</td>
</tr>
</tbody>
</table>

**Principal Section (119-154)**

<table>
<thead>
<tr>
<th>Segment</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>$A^1$ (119-134)</td>
<td>$f^#$</td>
</tr>
<tr>
<td></td>
<td>$b$</td>
</tr>
<tr>
<td></td>
<td>$f^#$ (transitory)</td>
</tr>
<tr>
<td></td>
<td>$A$</td>
</tr>
<tr>
<td>Section</td>
<td>Time</td>
</tr>
<tr>
<td>------------------</td>
<td>-------</td>
</tr>
<tr>
<td>$A^2$ (135-143)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridge-3 (143-155)</td>
<td></td>
</tr>
<tr>
<td>Coda (155-181)</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 7
THEMATIC PLAN OF THE PRESTO AGITATO
Exposition (1-113)

First Subject (1-38)

\[ A^1 \] (1-4)

\[ \begin{align*}
\text{Pf.} & \\
\text{Vn.} & \\
\end{align*} \]

\[ A^2 \] (5-13)

\[ \begin{align*}
\text{Pf.} & \\
\text{Vn.} & \\
\end{align*} \]

\[ A^1 \] (13-16)

Bridge-1 (17-38)

\[ \begin{align*}
\text{Pf.} & \\
\text{Vn.} & \\
\end{align*} \]

Second Subject (39-72)

\[ B^1 \] (39-54)

\[ \begin{align*}
\text{Pf.} & \\
\end{align*} \]
<table>
<thead>
<tr>
<th>Section</th>
<th>Time Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge-2</td>
<td>73-76</td>
</tr>
<tr>
<td>Third Subject</td>
<td>76-107</td>
</tr>
<tr>
<td>C1</td>
<td>76-96</td>
</tr>
<tr>
<td>C2</td>
<td>96-107</td>
</tr>
<tr>
<td>Bridge-2</td>
<td>107-113</td>
</tr>
<tr>
<td>First Subject</td>
<td>114-129</td>
</tr>
</tbody>
</table>

**TABLE 7 -- Continued**

**B2** (55-72)
TABLE 7 -- Continued

Dv\(^1\) (130-157)

Retransition (158-171)

Recapitulation (171-292)

First Subject (171-194)
  \(A^2\) (171-194)

Bridge-1 (194-217)

Second Subject (218-251)
  \(B^1\) (218-233)
  \(B^2\) (234-251)

Bridge-2 (252-255)

Third Subject (255-286)
  \(C^1\) (255-275)
  \(C^2\) (275-286)

Bridge-2 (286-292)

Coda (293-337)

First Subject (293-310)
  \(A^1\) (293-296)
  \(A^2\) (297-306)
  \(A^1\) (307-310)
TABLE 7 -- Continued

Cadential Theme (311-337)
TABLE 8
KEY SCHEME OF THE PRESTO AGITATO
Exposition (1-113)

First Subject (1-38)
A$^1$ (1-4)  \hspace{1cm} d  \hspace{1cm} (1-4)
A$^2$ (5-13)  \hspace{1cm} d \text{ (T)} \hspace{1cm} (5-13)
A$^1$ (13-16)  \hspace{1cm} d \text{ (T)} \hspace{1cm} (13-16)
Bridge-1 (17-38)  \hspace{1cm} d \hspace{1cm} C \text{ (T)} \hspace{1cm} (21-23)
\hspace{1cm} a \hspace{1cm} (23-24)
Second Subject (39-72)
B$^1$ (39-54)  \hspace{1cm} C \hspace{1cm} (39-46)
\hspace{1cm} e \hspace{1cm} (46-54)
B$^2$ (55-72)  \hspace{1cm} F \hspace{1cm} (55-62)
\hspace{1cm} g \text{ (T)} \hspace{1cm} (62-64)
\hspace{1cm} a \hspace{1cm} (64-72)
Bridge-2 (73-76)  \hspace{1cm} a \hspace{1cm} (73-76)
Third Subject (76-107)
C$^1$ (76-96)  \hspace{1cm} a \hspace{1cm} (76-88)
\hspace{1cm} C \text{ (T)} \hspace{1cm} (89-90)
\hspace{1cm} e \text{ (T)} \hspace{1cm} (90-91)
\hspace{1cm} a \text{ (T)} \hspace{1cm} (92-96)
C$^2$ (96-107)  \hspace{1cm} a \hspace{1cm} (96-107)
Bridge-2 (107-113)  \hspace{1cm} a \hspace{1cm} (107-113)
Development Section (114-171)
First Subject (114-129)
A$^1$ (114-117)  \hspace{1cm} a \hspace{1cm} (114-116)
<table>
<thead>
<tr>
<th>Section</th>
<th>Pitch Class</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TABLE 8 -- Continued</strong></td>
<td></td>
</tr>
<tr>
<td>( A^2 ) (118-125)</td>
<td>d</td>
</tr>
<tr>
<td>( A^1 ) (126-129)</td>
<td>d</td>
</tr>
<tr>
<td>( Dv^1 ) (130-157)</td>
<td>d, g, b flat</td>
</tr>
<tr>
<td>Retransition (158-171)</td>
<td>c#, f</td>
</tr>
<tr>
<td><strong>Recapitulation (171-292)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>First Subject</strong> (171-194)</td>
<td></td>
</tr>
<tr>
<td>( A^2 ) (171-194)</td>
<td>f</td>
</tr>
<tr>
<td></td>
<td>c</td>
</tr>
<tr>
<td></td>
<td>f</td>
</tr>
<tr>
<td></td>
<td>g</td>
</tr>
<tr>
<td></td>
<td>d</td>
</tr>
<tr>
<td><strong>Bridge-1</strong> (194-217)</td>
<td>d</td>
</tr>
<tr>
<td></td>
<td>a</td>
</tr>
<tr>
<td></td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>d</td>
</tr>
<tr>
<td><strong>Second Subject</strong> (218-251)</td>
<td></td>
</tr>
<tr>
<td>( B^1 ) (218-233)</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>a</td>
</tr>
<tr>
<td>( B^2 ) (234-251)</td>
<td>b, c (Transitory)</td>
</tr>
<tr>
<td></td>
<td>d</td>
</tr>
<tr>
<td><strong>Bridge-2</strong> (252-255)</td>
<td>d</td>
</tr>
<tr>
<td><strong>Third Subject</strong> (255-286)</td>
<td></td>
</tr>
<tr>
<td>( C^1 ) (255-275)</td>
<td>d, F (Transitory)</td>
</tr>
<tr>
<td></td>
<td>a (Transitory)</td>
</tr>
<tr>
<td></td>
<td>d (Transitory)</td>
</tr>
<tr>
<td>Section</td>
<td>Numbers</td>
</tr>
<tr>
<td>---------------</td>
<td>----------</td>
</tr>
<tr>
<td>C2</td>
<td>(275-286)</td>
</tr>
<tr>
<td>Bridge-2</td>
<td>(286-292)</td>
</tr>
<tr>
<td>Coda</td>
<td>(293-337)</td>
</tr>
<tr>
<td>First Subject</td>
<td>(293-310)</td>
</tr>
<tr>
<td>A1</td>
<td>(293-296)</td>
</tr>
<tr>
<td>A2</td>
<td>(297-306)</td>
</tr>
<tr>
<td>A1</td>
<td>(307-310)</td>
</tr>
<tr>
<td>Cadential Theme</td>
<td>(311-337)</td>
</tr>
</tbody>
</table>
Bibliography


