BEETHOVEN'S TRANSCENDENCE OF THE ADDITIVE TENDENCY IN OPUS 34, OPUS 35, WERK OHNE OPUSZAHNL 80, AND OPUS 120

DISERTATION

Presented to the Graduate Council of the University of North Texas in Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

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Denton, Texas

December, 1989

The internal unity of the themes in a sonata-allegro movement and the external unity of the movements in a sonata cycle are crucial elements of Beethoven's compositional aesthetic. Numerous theorists have explored these aspects in Beethoven's sonatas, symphonies, quartets, and concertos. Similar research into the independent variation sets for piano, excluding Opus 120, has been largely neglected as the result of three misconceptions: that the variation sets, many of which were based on popular melodies of Beethoven's time, are not as worthy of study as his other works; that the type of hidden internal relationships which pervade the sonata cycle are not relevant to the variation set since all variations are, by definition, related to the theme; and that variations were composed "additively," that is, one after another, without any particular regard for their order or relationship to one another.

The purpose of this study is to refute all three of these incorrect assumptions. Beethoven was concerned with the order of variations and their relationship to one
another, and he was able to transcend the additive tendency in a number of ways. Some of his methods included registral connection, registral expansion, rhythmic acceleration, textural expansion, dynamics, articulation, and motivic similarities.

Chapter I contains a discussion of the role of the variation set in Beethoven's overall output. The teachers, composers, and works which may have influenced him are also discussed as well as his training in variation composition. Finally, those factors which Beethoven employed to unify his sets are listed and explained. Chapters II-V are devoted to detailed analyses of four striking variation sets: Opus 34, Opus 35, WoO 80, and Opus 120. Chapter VI presents a summary of the findings. It suggests that each of the sets investigated has a unique form and that each variation has a distinct place and purpose.
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CHAPTER I

BEETHOVEN AND THE VARIATION SET

But what if it were only your weak sight which misses the profound unity of inner relation [innere tiefe Zusammenhang] in each composition? If it were only your fault that the language of the master, understood to the holy of holies remains closed to you?

The independent variation set, that is, a set that is not part of a larger work, did not become the unified, ordered, integral whole we know today until Beethoven's time. Previously, dependent variation sets, those appearing as part of a larger work, did represent complete entities; however, independent variation sets were not always unalterable since the number and position of the individual variations was not always fixed. Three factors illuminate this point. First, several independent variation sets of the 1760's and 1770's were published in feuilleton fashion, that is, in installments. Second, individual variation sets often appeared in substantially different versions. Third, some published variation sets consisted of individual variations written by more than one composer.

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Beethoven's contribution to the emergence of the unified independent variation set was significant and profoundly influenced later composers. This study focuses on the techniques Beethoven employs to unify the cycle.

Variation composition was of central importance to Beethoven. It is significant that the first of his published works was the Dressler Variations and one of his last was the Diabelli Variations. Many of Beethoven's instrumental works composed before 1800 were variations or contain variation movements; independent variation sets were the most prominent. Between 1800 and 1812 variations were often used as part of a larger form; nearly half his instrumental works contain variations or movements influenced by variation technique. From 1818 on, Beethoven often integrated variation sets into the sonata cycle. Half of the works written during this period contain variations or variation-like movements. When variations are present, they often serve as the central focus of the entire composition. Some examples of works containing significant variations include the piano sonatas Opus 109 and Opus 111, almost all the late string quartets, and the Ninth Symphony.

Beethoven's approach to variation composition was highly original. Perhaps the first set in which he demonstrated this was the Venni Amore set composed in 1790. Otto Klauwell has written about it, and his remarks are
illuminating since they not only apply to this set but also to many of the later ones as well:

His freer approach, his broader view, and his bolder attack in the structure of the variations... even the large number of variations (Mozart never goes beyond twelve), which he himself exceeded only twice thereafter, is significant in this respect, and still more so are the richness and the many-sidedness of the variations; the principle of adorning and embellishing the thematic melody, which is still predominant in Mozart, is now put into the background by modifications of the theme, treated as a motif. In general Mozart tries to preserve the most significant melodic peaks of the theme in his variations as points of recognition; Beethoven, even in his early work, was able to fuse the free figure work of his immediate predecessor with the predominantly contrapuntal procedures of J. S. Bach and thereby achieve structures that not only modify the character on the surface but, delving deeper into its organism, give it a basically lateral illumination. The link between theme and its variations is then found only in its harmonic structure, which too on occasion is subject to considerable rebuilding.3

Beethoven gave the freest reign to his imagination in the larger independent variation sets, and for this reason they will be the focus of this study. Dependent variation sets tend to be more restrictive since they must fit into a larger overall structure. Both the length and character must not be so unusual as to disrupt the whole. Independent sets, on the other hand, have no such limitations. The possibility of composing both larger number of variations and freer ones not only permits greater variety but also

poses more complex problems of unity. For example, it is more difficult to close a longer set than a shorter one since the larger number of variations in the former tends to produce a greater momentum than the latter.⁴ As Donald Francis Tovey has stated,

Beethoven's highest art in variation-form is independent of the sonata. From his earliest display of pianoforte playing, the wonderful twenty-four Variations on a theme by Righini, to his supreme variation-work, the thirty-three on Diabelli's waltz, he uses and transcends every older means of variation and adds his own discoveries."⁵

The vast majority of Beethoven's independent sets was written for the piano, and several of these represent some of his greatest works in variation form. This study will be limited to works written for the piano; this will allow for a comparison to be made between works for the same medium and a better understanding to be reached regarding Beethoven's evolution of variation technique. Table 1-1 lists in chronological order Beethoven's total output in this medium.

In the previous quotation, Tovey states that Beethoven transcends older means of variation composition. What precisely does Tovey mean by the word "transcend"?

⁴Tovey, The Forms of Music (New York: Meridian Books, 1956), 245. "The momentum produced by the revolution of true variations in the orbit of the theme gives the key to the whole problem [of ending a variation set]."

⁵Ibid., 243.
TABLE 1-1  

BEETHOVEN'S INDEPENDENT VARIATION SETS FOR PIANO  

<table>
<thead>
<tr>
<th>Variation Set</th>
<th>Title</th>
<th>Composer</th>
<th>Opus/WoO</th>
<th>Key</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nine Variations</td>
<td>March by Dressler</td>
<td>WoO 63, c minor</td>
<td>1782</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twenty-four Variations</td>
<td>Righini's Arietta &quot;Venni Amore&quot;</td>
<td>WoO 65, D major</td>
<td>1790-1791</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thirteen Variations</td>
<td>Dittersdorf's Arietta &quot;Es war einmal ein alter Mann&quot;</td>
<td>WoO 66, A major</td>
<td>1792</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Six Variations</td>
<td>A Swiss Song</td>
<td>WoO 64, F major</td>
<td>before 1793</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twelve Variations</td>
<td>Haibel's &quot;Menuet à la Vigano&quot;</td>
<td>WoO 68, C major</td>
<td>1795</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nine Variations</td>
<td>Paisiello's &quot;Quant è più bello&quot;</td>
<td>WoO 69, A major</td>
<td>1795</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Six Variations</td>
<td>the Duet &quot;Nel cor più non mi sento&quot;</td>
<td>WoO 70, G major</td>
<td>1795</td>
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<td>Eight Variations</td>
<td>Grétry's Romance &quot;Une fièvre brulante&quot;</td>
<td>WoO 72, C major</td>
<td>circa 1795</td>
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<td></td>
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<tr>
<td>Twelve Variations</td>
<td>Wranitzky's &quot;Das Waldmädchen&quot;</td>
<td>WoO 71, A major</td>
<td>1796-1797</td>
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<td>Ten Variations</td>
<td>Salieri's &quot;La stessa, la stessima&quot;</td>
<td>WoO 73, B♭ major</td>
<td>1799</td>
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<td></td>
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<tr>
<td>Six Variations</td>
<td>Süssmayer's &quot;Tändeln und Scherzen&quot;</td>
<td>WoO 76, F major</td>
<td>1799</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seven Variations</td>
<td>Winter's &quot;Kind, willst du ruhig schlafen&quot;</td>
<td>WoO 75, F major</td>
<td>1799</td>
<td></td>
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<tr>
<td>Six Variations</td>
<td>on an Original Theme</td>
<td>WoO 77, G major</td>
<td>1800</td>
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<tr>
<td>Six Variations</td>
<td>on an Original Theme</td>
<td>Opus 34, F major</td>
<td>1802</td>
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<tr>
<td>Fifteen Variations and a Fugue</td>
<td>on an Original Theme</td>
<td>Opus 35, E♭ major</td>
<td>1802</td>
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Seven Variations on "God Save the King", WoO 78, C major, 1802-1803

Five Variations on "Rule Britannia", WoO 79, D major, 1803

Thirty-two Variations on an Original Theme, WoO 80, C minor, 1806

Six Variations on an Original Theme, Opus 76, D major, 1809

Thirty-three Variations on a Waltz by Diabelli, Opus 120, C major, 1819-1823

Unfortunately, he does not define the term or elaborate on the subject. Another author who uses the term is Charles Rosen. For example, Rosen writes that a number of Heinrich Schenker's analyses "go further than any others toward explaining the sense of a unity that transcends the apparently sectional exterior form which we find in so many works." This transcendental unity and its application to the independent variation sets are two central issues that will be addressed in this study. In other words, how does Beethoven achieve unity in a variation sets when, by definition, they are composed of many individual units? Rosen asks the following:

Is the unity that we sense in a work of art an illusion? Only a critical hypothesis? If it has any reality at all, then a description of its form will not merely name the parts but try to tell us why it seems one whole.

6Rosen, The Classical Style, 34.
7Ibid., 36.
The tendency toward segmental construction is a characteristic which affects not only variation sets but other forms as well. Rosen speaks of segmental construction, for example, in discussing the Baroque chorale prelude.

The successive modification to respond to the changing phrases of the chorale . . . is a way of writing that suits the additive nature of Baroque style: a building conceived little by little, modified as it proceeds, may give an impression of unity in the end, but is a different kind of unity from one designed as a whole and as a single form, although the former may be no less beautiful.8

Although Rosen believes that composing "additively" may produce beautiful music, he uses the word "additive" in a pejorative sense. It implies to him mere addition rather than organic growth; hence, a composition composed additively must, by definition, be incapable of a deeper internal unity. This is more clearly expressed in his discussion of the sonata:

In expanding the small but resilient symmetrical structure derived from the dance that was later called "sonata form," the problem was always how and where to add weight without undoing the proportions and wrecking the unity. The simplest solution was the addition of a long, slow introduction . . . : but this always remained an exterior device -- an additive concept, rather than a synthetic one . . . .9

8Rosen, The Classical Style, 93.
9Ibid., 269.
One method of avoiding the additive tendency in variation composition is to borrow elements from other forms; for example, the return of a theme at the end of a set may suggest the recapitulation in first-movement sonata form. The second movement of Opus 57 utilizes such a da capo, and its effect is highlighted by the rhythmic acceleration and registral ascension which precede it. Rosen remarks on the integration of these factors and their effect:

The most extraordinary part of the achievement is the feeling of release that comes with the return of the theme in its original form, and the resolving force of this 'recapitulation.' Through this, the variation form loses its additive character, and conforms to the dramatic and almost spatially conceived figures of sonata style.  

The effect of which Rosen speaks is only possible if the variations in this work display a specific arrangement rather than an arbitrary and, hence, additive one. Earlier composers and theorists recognized that certain combinations of variations were preferable to others, perhaps in an unconscious attempt to avoid the additive tendency. For instance, several seventeenth- and eighteenth-century treatises contain suggestions regarding the ordering of variations. Christopher Simpson's *The Division-Viol* of 1667 is a well-known example. In the chapter entitled

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"Concerning the Ordering of Divisions," he states that the note values should first be decreased, then increased, and then the stepwise motion should be changed to skips.

(1) ... play over the Ground itself, plainly and distinctly . . .

(2) ... You may then break it into Crotchets and Quavers; or Play some neat piece of slow Descant to it . . . .

(3) You may then break it into Division of a quicker motion . . . .

(4) When you have prosecuted that manner of Play as long as you think fitting . . . , and playing also sometimes loud and soft, to express Humour and draw on Attention.

(5) After this you may play some Skipping Division . . . changing still from one Variety to another; for variety it is which chiefly pleaseth: the best Division in the world continued, would become tedious to the Hearer . . . .

In the eighteenth century, both Jean-Jacques Rousseau and Johann Friedrich Daube commented that the variations must contrast. Rousseau stated that "it is necessary that each variation is characterized by those differences which sustain the attention and prevent boredom." In the

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11 Christopher Simpson, The Division-Viol, or the Art of Playing Ex Tempore upon a Ground, 2nd ed. (London: W. Godbid, 1667); facsimile ed. (London: J. Curzen and Sons, Ltd., 1955), Part III, Section 12, 56.

12 Jean-Jacques Rousseau, Dictionnaire de Musique (Paris: Chez la veuve Duchesne, 1768). "... il faut ... que le caractère de chaque variation soit marqué par les différences qui soutiennent l'attention et préviennent l'ennui."
twentieth century, Rosen has noted that composers in the classical period also adhered to certain procedures.

The simplest and most common variation scheme throughout the whole eighteenth century is to arrive at a climax by decreasing the note-values (i.e., increasing the speed) with each successive variation. In the latter part of the century, brilliance was achieved by making the last two variations a florid Adagio with coloratura effects followed by a brilliant Allegro, a scheme that could be both loose and mechanical to the point of superficiality. Another scheme was to enforce unity by a return of the opening tempo after the acceleration: for the return to have its full effect, a basically slow tempo was needed. ... 13

The foregoing explanation presents a vague description of the construction of a variation set and does not suggest any unifying factor other than increased rhythmic motion. Is it likely that Beethoven was satisfied to compose variation sets additively in this manner, or did he attempt to transcend this tendency in an effort to create an internally unified structure? The former possibility seems highly unlikely. Perhaps more than any other composer in the history of Western music, Beethoven displayed a great concern for formal balance and internal unity. This is evident in many of his compositions; the cyclical nature of the Fifth Symphony and the Ninth Symphony are but two examples. Regarding the late quartets, Kevin Korsyn has suggested that "each piece is profoundly unified; in spite

of the division into separate movements, each composition forms an integrated whole.\textsuperscript{14}

The question of unity in variation sets has usually arisen in only the case of the larger examples such as Opus 35, Opus 120, and the third movement of Opus 125. The answer, however, has often been incomplete. For example, Jürgen Uhde,\textsuperscript{15} Arnold Münster,\textsuperscript{16} Karl Geiringer,\textsuperscript{17} David Porter,\textsuperscript{18} and others contend that Opus 120 derives its unity primarily from an underlying formal structure suggested by various groupings of variations. Kurt von Fischer believes that Opus 35's form resembles that of a sonata.\textsuperscript{19} The shortcoming of this approach is that internal

\textsuperscript{14}Kevin Korsyn, Integration in Works of Beethoven's Final Period (Ph.D. dissertation, Yale University, 1983), 180. Korsyn's comments on the order of various movements are relevant here. He asks on page 199 "Why . . . aside from convention, should there be more than one movement? Why, for example, could we not reverse the order of the first movement and the finale, since the piece would still end in the same key?"


\textsuperscript{16}Arnold Münster, Studien zu Beethovens Diabelli-Variationen (Munich: G. Henle Verlag, 1982).

\textsuperscript{17}Karl Geiringer, "The Structure of Beethoven's Diabelli Variations," The Musical Quarterly I (1954), 496-503.


\textsuperscript{19}Kurt von Fischer, "Eroica-Variationen op. 35 und Eroica-Finale, Schweizerische Musikzeitung XC (1949), 282.
unity cannot be fully explained solely by the imposition of an external form. It also fails to answer several other questions. For example, if we accept Münster and Uhde's assertion that Variations XXIX-XXXIII form a fourth section or movement, why could Variation XXX (marked "Andante" and in c minor) not be substituted for Variation XXIX (marked "Adagio" and also in c minor)? Why could Variation XXX (marked "Tempo di Menuetto") not be the third variation in the group, allowing Variation XXXII's massive fugue to end the group and the whole composition?

Theorists who have studied the independent variation sets have generally examined the relationship between the theme and each variation. However, I am aware of no study which demonstrates the relationships among the variations themselves. Are they related in some way? What determines which variation should belong to a certain group and which should not? Are the variations arranged in a particular order, or are they just added together? Can variations be omitted? Why do certain ones seem more suitable for ending a set than others?

Several methods were available to Beethoven to relate one variation with another. These techniques and how they were used must be explored at this point. In the following discussion, the term "link" will be used to refer to those elements which provide a direct connection from one variation to an adjacent one; the term "cross-reference," on
variation to an adjacent one; the term "cross-reference," on the other hand, will refer to that technique which tends to relate two non-adjacent variations together. The characteristics which suggest links and cross-references are listed and discussed here:

1. **Structural similarities.** A variation results from basically one of two processes: (1) the varying of elements in a given structure or (2) the addition of material to it. In both cases, a variation must retain at least one aspect of the theme. In music of the classical period, this would ordinarily be the soprano, bass, or harmony of the theme. However, in some cases, such as Beethoven's Opus 120, the composer may wish to retain other characteristics such as dynamic treatment, phrase shape, phrase length, texture, or other elements. As a result, two variations which maintain one of more of these characteristics have a closer affinity to each other than two which do not.

One important method of varying a melodic line is diminution, the subdivision of notes into smaller note values. Allen Forte believes that diminution is crucial to an understanding of variation technique. He writes:

*Diminution . . . is central to improvisation which, as we know, played a major role in Beethoven's musical life . . . . As part of Beethoven's compositional technique, the traditional practice of diminution achieves great precision. Changes in diminution, whether in the sketches or in the autograph, invariably*
point to some problem in adjusting detail to the requirements of a longer span. And just as diminutional detail cannot be considered apart from rhythm, so longer melodic segments cannot be separated from harmony.20

The technique of diminution has a long history. Simple diminution of the melody of dance pieces was a common practice in sixteenth-century France and was sometimes indicated by the terms double, diminue, or plus diminue. In sixteenth- and seventeenth-century England, virginalists transcribed and transformed many vocal pieces for the keyboard. Simpson's The Division Violist describes the many possibilities of diminution in variation composition. In the eighteenth century, the diminution of the bass was discussed at great length in Friedrich Niedt's Handleitung zur Variation. Bass diminution is also an important factor in Part IV of the Attwood notebook.

To better understand the underlying structure of a variation and its relationship to that of the theme, it will be necessary to apply the reverse process of diminution to that variation. The result of stripping away certain non-harmonic notes and reducing it to larger rhythmic values will be referred to as a metric reduction. It is similar to a Schenkerian reduction in that both attempt to remove the unessential material; however, they differ in that the

unessential material; however, they differ in that the metric reduction preserves the underlying meter and rhythm of the model whereas the Schenkerian reduction does not.  

Metric reductions of tonal music are objective rather than subjective since they are based on the distinctions between consonance and dissonance. Since dissonances are removed in the metrical reduction, the only individual variations that will occur will be those reduced to different rhythmic levels. As a result, two researchers reducing a passage of eighth notes to an underlying quarter note motion would obtain identical results. The reduction of music to a more fundamental structure is not a recent phenomenon. For example, a musical passage and its metrical reduction are provided by Daniel Heinichen in Example 1-1.

2. **Motivic correspondences or similarities.** Two variations which share one or more common motives tend to be more closely related than two which do not. Motives may be melodic, rhythmic, or a combination of both. For example, a melodic motive serves as a link in in Example 1-2. A rhythmic motive which serves as a link between two variations is shown in Example 1-3.

3. **Figural correspondences or similarities.** This is identical with the section on motives, the key difference

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Example 1-1. Heinichen, a passage and its underlying structure.

Example 1-2. Opus 120, measure 1 of Variation XI and XII displaying the melodic turn motive.
Example 1-3. Opus 120, measure 1 of Variation IV and V displaying the rhythmic short-short-long motive.

being that figures, unlike motives, are not generally as distinctive and are not as fully developed. For example, two variations consisting primarily of arpeggios or scales would have a figural correspondence. Example 1-4 displays the arpeggio figure which links Variations I-III of WoO 80 together.

4. **Textural continuity or progressive change.** Three or more variations tend to be more closely related if their texture remains constant.\(^\text{22}\) Similarly, three or more variations tend to be more closely related if they display a progressive expansion or reduction of texture. They are

---

\(^{22}\) Two variations are not sufficient to determine whether a trend is occurring.
more closely related in all these cases since this aspect may clearly define the position of each variation since any change in the order would adversely effect the trend. Example 1-5 demonstrates the textural expansion that characterizes the beginning of Opus 35.

Example 1-5. Opus 35, measure 1 of the Basso del Thema (1 voice), A due (2 voices), A tre (3 voices), A quattro (4 voices), and the Thema (7 voices).

5. **Registral continuity or progressive change.** Variation order can also be determined by an upward or downward expansion of the register in contrary or similar motion. Example 1-6 displays the upward expansion that occurs in the second movement of the Sonata Appassionata, Opus 57.
Example 1–6. Opus 57, second movement, measures 1, 17, 33, 49, 71, 79 displaying an upward registral expansion.

Andante

6. Tempo continuity or progressive change. Two or more variations may be related by tempo continuity or three or more may be related by a progressive change. For example, Variations XXIX–XXXI of Opus 120 display tempo continuity; all are slow and together function as the penultimate adagio variation.
7. **Rhythmic continuity or progressive change.** Adjacent variations displaying rhythmic order tend to be more closely related to one another than those that do not. **Rhythmic continuity** occurs when two or more adjacent variations use the same basic rhythmic patterns; an example is the first three variations of WoO 80 which all employ continuous sixteenth-notes. **Progressive change** occurs when three or more adjacent variations display a gradual increase or decrease in rhythmic value. The more common example is the latter, since this results in a **rhythmic acceleration** which increases the tension and forward motion. Example 1-7 displays such a rhythmic acceleration.

Example 1-7. Opus 35, measure 1 of the Basso del Thema, the Thema, Variation I, and Variation II displaying rhythmic acceleration.
8. **Dynamic continuity or progressive change.** Variations may be joined together by sharing a common dynamic or by exhibiting a progressive dynamic change. An example of the former occurs in Opus 34; the theme as well as every variation begins piano. The Allegretto of the Symphony in A major, Opus 92, displays the latter, in this case, a dynamic crescendo. The theme and Variation I are piano; Variation II begins a crescendo which culminates in a fortissimo at the beginning of Variation III (measure 75).

7. **Articulatory continuity.** Two or more variations displaying identical or similar articulation patterns tend to be more closely related than two which do not. Example 1–8 displays Variations I–II of Werke ohne Opuszahl 80; both are marked *leggiermente* and are to be articulated in the same manner.

Example 1–8. WoO 80. Measure 1 of Variations I and II displaying common articulation and touch.
9. **Shared rhythmic strata.** Two variations which display one or more common rhythmic strata tend to be more closely related than two which do not. Maury Yeston defines rhythmic stratification as "an elucidation of rhythmic structure that is characterized by levels of meaning."\(^{23}\) This suggests that almost every musical pattern contains different levels of rhythmic activity.

Physically, when any musical work is played, its gross rhythmic structure is . . . the resultant of all its constituent rhythmic patterns . . . . Finding such [internal] configurations . . . is an act of analysis in which the analyzer discovers by means of certain criteria what is, in effect, a pattern that is contained within a larger pattern, a rhythmic sub-pattern of the piece.\(^{24}\)

One of Yeston's examples displaying two rhythmic levels is presented in Example 1-9.\(^{25}\) The top staff represents a metric reduction of the soprano in 3/4 meter, the primary rhythm of this piece. The second staff from the top displays a conflicting secondary rhythmic stratum which is "dissonant" to the first since it suggests 3/2 meter.

Rhythmic stratification is a useful tool for finding rhythmic similarities among variations. For instance,

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\(^{24}\) Ibid., 37.

\(^{25}\) Ibid., 104.
Example 1-9. Wolfgang Amadeus Mozart, Sonata in F, K. 332, movement I, measures 5-8 displaying two rhythmic strata.

Example 1-10 demonstrates the link between Variations V and VI of WoO 80; the former's secondary rhythmic stratum of triplets foreshadows the latter's primary use of triplets.

Example 1-10. WoO 80, the link formed by the secondary rhythmic stratum in measure 6 of Variation V and the primary rhythmic stratum in measure 1 of Variation VI.
10. **Variation of a variation.** It is possible for one variation to represent a variation of another variation. There are three typical ways in which this may occur between two or more variations. In the first case, the parts in one variation may be exchanged in another as is shown in Example 1-11. In the second case, one part may be retained while another is altered as is displayed in Example 1-12. In the third case, one part may be retained while the another is replaced; this is illustrated in Example 1-13.

**Example 1-11.** WoO 80, measure 1 of Variations X and XI displaying an exchange of parts.
Example 1-12. WoO 80, measure 1 of Variations XV and XVI displaying the retention of one voice while another is varied.

Var. XV

Var. XVI

Example 1-13. WoO 80, measure 1 of Variations VII and VIII displaying the retention of one voice while another is replaced.

Var. VII

Var. VIII
11. **Registral connections.** A registral connection may be defined as two notes which are both related to one another and separated by intervening notes. The related notes are often highlighted by their structural importance and registral placement. Two types of connections may occur between registral notes: (1) dissonant to consonant and (2) consonant to consonant. (Consonant to dissonant is not possible since the second of the two must be the more stable). The dissonant note is defined as one that either is supported by an unstable chord or is not part of the tonic triad. Registral notes are often approached and left by leap since this draws attention to them; dissonant notes that are left by leap are referred to as "registrally isolated" and are especially important since they require a resolution to a following consonant registral note. Two variations, adjacent or nonadjacent, which exhibit one or more registral connections tend to be more closely related than two which do not. Registral connections may occur on different levels. A variation may exhibit a prominent note which is left abruptly; if in the following variation this note is resolved by step to another note or connected

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26 The concept of structural notes and registral connections may be understood as part of eighteenth-century species counterpoint and the art of diminution although they were never given these terms; more recently Heinrich Schenker has taken these concepts and used them as part of his reductive theory.
to the same pitch, the two variations are said to be
registraly linked. Example 1-14 displays such a registral
connection between the theme and first variation of WoO 80.

Example 1-14. WoO 80, measures 5-8 of the theme and 1-2 of
Variation I displaying the registral connection of $a^b$ to $g^2$.

12. Invariance. A particular gesture which occurs in one
variation and reappears unchanged in another despite
surrounding changes is an example of invariance. The
purpose of the reappearance is to remind the listener of the
source. The most common occurrence of invariance is the
unaltered reappearance of the theme at the end of a set.
However, other elements may serve as invariants: climax
notes, isolated pitches, striking chords or progression, and
rhythms. Two variations displaying these characteristics tend to be more closely related than two which do not. For example, the diminished chord is used in Opus 34 links every two successive variations even though each is in a different key. This is shown in Example 1-15.

Example 1-15. Opus 34, measure 6 of the theme and measure 2 of Variation I displaying invariance.

13. Bridge passages. An obvious link between two variations is established when they are joined by connecting passagework. An example of such a bridge is illustrated in Example 1-16.

14. Tonal and modal connections. One characteristic of sets written in the Classical era is that individual variations within a set generally remain in one key; another is that a temporary change of mode sometimes occurred in the middle of the set. The use of the opposite mode and...
different keys centers, while interrupting the set's overall key and mode, may often relate certain variations to one another and may also tend to define their position. The degree of relatedness and definition of position may range from the general to the specific. An example of a general case is represented by a variation set based on one theme which includes a change of mode for a single variation; the change would only vaguely define that variation's position since it is expected to occur in the middle of the set in Mozart's works or in the middle or penultimate position in Beethoven's. An example of specific definition would occur in a set of Haydn variations employing two themes (also called a double theme), one of which is in major and the other in minor; here the position of the following variations is defined by a definite pattern of mode changes. Tonal change may also define the position of variations from
the general to the specific. In the case of Beethoven's Opus 120, the fugue which precedes the final variation (C major) is in a different key (E♭ major). The fugue's key vaguely defines its position, since it cannot end the set, probably does not begin it, and probably occurs toward the end since an early occurrence would accentuate the tonal static quality of the remaining variations. A specific example of positioning occurs in Beethoven's Opus 34 in which every variation's order is established. Variations I-V are related by downward descending thirds; Variation VI breaks this cycle and is the only variation capable of ending the set since it is the first and only one in the tonic key.

14. Foreshadowing. Various tendencies used in one variation may foreshadow those which occur in a following one. An example may be found in Opus 35; the imitation in Variation V foreshadows that in Variation VI and the canon in Variation VII.

These concepts will serve as useful tools in our investigation of selected Beethoven variation sets. The conclusions that will be drawn from this study will be influenced by the works that are chosen for analysis. Which works have been chosen and why? It is beyond the scope of this dissertation to examine all of Beethoven variation sets in detail. I have chosen independent sets rather than
dependent ones since the viability of the former is not dependent on an additional surrounding structure for support. By limiting the discussion to independent sets, the number of sets to consider is greatly reduced; furthermore, they are limited to works for piano (the majority) and small ensembles. One set in particular has been recognized for its importance and will, as a result, be included in this dissertation: Opus 120. It represents a new manner of composing variations: strict adherence to the theme's melodic and harmonic outlines is no longer a requirement. Opus 120 anticipates many upcoming Romantic characteristics. Opus 34 and Opus 35 will also be included because, by Beethoven's own assessment, they were "written in quite a new style and each in an entirely new way." Opus 34 is unique for its descending-thirds key plan; Opus 35 is remarkable for its fugal finale. Finally, WoO 80 will be included because of its Baroque-like ostinato character and its large number of variations which, like Opus 120, pose a particular structural challenge. The chapters of this dissertation will be arranged in such a way that the

27 Donald Francis Tovey, *Essays in Musical Analysis: Chamber Music* (London: Oxford University Press, 1944), 124-125. Tovey notes that Diabelli refers to Opus 120 as the greatest work in variation form since J. S. Bach's *Goldberg Variations*.

early sets as well as those containing a small number of variations will be presented first. This will permit the reader to move from relatively simple examples of internal connections to the more complex. As a result, Chapter II will be devoted to an examination of Opus 34, Chapter III to Opus 35, Chapter IV to WoO 80, and Chapter V to Opus 120.

What factors influenced the development of Beethoven's variation technique? Unfortunately, no documentation exists which directly links his study under his many teachers to the evolution of his variation technique. No exercises remain from his student years which directly display his study of variation composition, no conversations specifically regarding his views on the subject have been recorded by his friends, nor does he reveal a great deal of information in his letters. Nevertheless, it will be shown that Beethoven was undoubtedly familiar with a number of treatises even though there are no records of what portions he may have found helpful. As a result, all that is left to the researcher is speculation as to how, when, and by whom he was influenced.

None of the instructional materials prepared by Beethoven for the Archduke Rudolph deal with variation technique. Beethoven's corrections of the Archduke's Forty Variations on a Theme by Beethoven do yield some clues which are described later. Finally, Beethoven's sketches for
various large-scale sets such as Opus 120 and the third movement of Opus 125 are extant and provide more speculative material. A study of the sketches, however, is beyond the scope of this study.

A brief survey follows of those individuals, treatises, and musical works which influenced Beethoven's overall compositional development. It will then be possible to speculate as to how each influenced his variation technique. However, this is not intended to be an exhaustive overview of Beethoven's overall training since we are only interested in those aspects which provide insight into his variation technique.

Christian Gottfried Neefe. Neefe was Beethoven's first important teacher. The instruction began around 1780; how long it lasted is unclear. Neefe undoubtedly had an influence on Beethoven's variation technique, especially since Beethoven's Dressler Variations were written under his tutelage. It is clear that Neefe instructed Beethoven in thoroughbass and composition and introduced him to Johann Sebastian Bach's Das wohltemperirte Clavier and Carl Philipp Emanuel Bach's Gellert-Lieder. Neefe himself wrote many variation sets, and it is quite likely that Beethoven

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29 This knowledge of J. S. Bach's music was of great benefit to Beethoven in establishing himself in Baron van Swieten's Viennese circle of music lovers.
modeled some of his works after them. For example, there are many similarities between Neefe's Roten Käppchen variations and Beethoven's Es war einmal ein alter Mann variations. Although each set is based on a different theme, the number, meter, and tonality of the variations are identical in both.  

Wolfgang Amadeus Mozart. Beethoven studied with Mozart for a short period which could not have exceeded two weeks in 1787. It is likely that Beethoven was influenced more by his knowledge of Mozart's variations than by any instruction he may have received from Mozart. Beethoven was probably familiar with some of Mozart's variations, especially since they were very popular at the time.

There is no record as to how often Beethoven met with Mozart or what transpired during the lessons; in addition, unlike the exercises written for Haydn and Albrechtsberger, not a single exercise for Mozart has come to light. Nevertheless, we may hypothesize as to what might have occurred and what the course of study might have been had Beethoven's


31 Thayer, Thayer's Life of Beethoven, 88-89. Ferdinand Ries reported that Beethoven received some instruction from Mozart during his visit to Vienna. Beethoven was apparently disappointed that Mozart never played for him. The lessons were abruptly terminated due to Beethoven's mother falling ill.
stay not been cut short. This speculation is based on the method of instruction that Mozart used with other students. The last of the preserved study books, that of Franz Jacob Freystädtler, is limited solely to exercises in species counterpoint.\textsuperscript{32} The cousin of Abbe Stadler was one of Mozart's better students. Twenty-six pages found in the Austrian National Library in Vienna contain various harmony exercises along with a few elementary counterpoint exercises.\textsuperscript{33} Mozart's most talented student, besides Beethoven, was Thomas Attwood. He studied with Mozart from 1785 to 1787 and is the only known student to have studied both music theory and free composition.\textsuperscript{34} His study has been the most carefully documented, and it is to this that we will now turn our attention.

The Attwood notebook consists of 144 sheets; however, only 267 sides contain notes and text. The manuscript has

\textsuperscript{32}Alfred Mann, Theory and Practice: The Great Composer as Student and Teacher (New York: Norton, 1987), 64.

\textsuperscript{33}Wolfgang Amadeus Mozart, Thomas Attwoods Theorie- und Kompositionsstudien bei Mozart, vol. X of Neue Mozart Ausgabe (Kassel: Bärenreiter, 1965), viii. The identity of the student remains unknown; indeed, she is also referred to in some sources as Städtler's niece. Robert Lach has discounted the speculation that Barbara Ployer was the student in question. See Robert Lach, "W. A. Mozart als Theoretiker", Denkschriften der philosophisch-historischen Klasse der Kaiserlichen Akademie der Wissenschaft, Vienna: A. Hölder, 1918.

\textsuperscript{34}Ibid.
not been carefully preserved, for the edges are worn and pages appear to be missing.\textsuperscript{35} The notebook is divided into four sections: the first is primarily devoted to exercises, the second and third to counterpoint, and the last to free composition and orchestration. The method of instruction may further be broken down as follows:

**Part I.** The course of study began with a presentation of triads and their inversion, the preparation of dissonances, and the construction of seventh- and ninth-chords. For all these exercises Mozart wrote a figured bass which Attwood was to realize; curiously, there were no exercises in which a given melody was to be harmonized.

**Parts II-III.** The instruction in counterpoint is more detailed and systematic. Mozart based his instruction closely on the famous *Gradus ad Parnassum* by Johann Joseph Fux; indeed, some of the examples in Attwood's notebook were borrowed from Fux and modified. Mozart teaching took Attwood from the first species up to contrapunctus floridus. The last portion deals with canon and fugue. Erich Hertzmann has pointed out that thirteen of the nineteen canons are not works of Attwood at all, but copies of

\textsuperscript{35}Ibid. This is has been suggested since several musical examples end abruptly in the middle of phrases without explanation.
of Mozart examples. The fugues may have been composed under Latilla's guidance rather than under Mozart's.

Part IV. This is a largely unordered collection of examples of free composition. There are examples of dissonance preparation and basse fondamentale as well as two-, three-, and four-voice examples of a given melody with a bass accompaniment first in quarters, then eighths, and then finally sixteenths. The remainder of this section consists attempts at composing string quartets and a few orchestral movements.

The preceding information allows us to form the following hypothesis. Beethoven had received a thorough training in thoroughbass from Neefe; his understanding of harmony was thorough, as may be seen in his works composed prior to 1787. In all likelihood, therefore, Mozart would have begun Beethoven on a study of species counterpoint, especially since Beethoven's weakness in this discipline

36 Ibid.

37 Felipe Cinque and Gaetano Latilla were Attwood's teachers during his earlier stay in Italy. The chronology of the fugues is hard to determine since they are written in an earlier handwriting and on a different paper, one produced in Naples. These fugues may have been some of the compositions that Attwood showed Mozart at their first meeting. "Soon after Attwood's arrival he showed a book of sonatas or lessons to the great composer who glanced at them, and said, I should have begun thus; in another place, this would have been my mode of proceeding." Edward Holmes, Life of Mozart, 1845.
would have been apparent to Mozart as it was to his following teachers. For example, Haydn immediately began Beethoven on a study of species counterpoint. Johann Schenk, on inspecting some of Beethoven's exercises for Haydn, remarked that there were mistakes in every key and that Beethoven was "unfamiliar with the preliminary rules of counterpoint."\(^{38}\) It is apparent that Beethoven, while studying with Albrechtsberger, had to struggle at times for the solutions. Albrechtsberger found many mistakes in Beethoven's counterpuntal exercises, particularly with answers to fugue subjects.\(^{39}\) It is highly likely that Beethoven, recognizing his contrapuntal weakness, may have asked Mozart for help in this area; this would shed new light on Count Waldstein's prophesy that "you will receive the spirit of Mozart through the hands of Haydn."\(^{40}\)

What are the characteristics of Mozart's variations that might have influenced Beethoven? Some of Mozart's sets for piano can be traced back to improvisations made during actual performance, and this perhaps explains why many works survive in different versions. Unlike Haydn, Mozart did not


\(^{40}\)Alfred Mann, *Theory and Practice*, 64.
include variations in his symphonies and did so only three times in his string quartets; however, they often occur in his serenades and divertimentos.

Fourteen of Mozart's independent variations sets for piano are extant. They were extremely popular during his lifetime as is suggested by the large number of editions and manuscripts. The themes were almost always popular songs, dances, or opera arias. The variations are typically of the melodic type with fixed harmony. A contrasting minor-key variation is almost always found in the middle of the set from the late 1770's on. It is important to note, however, that the adagio variation appears in his earliest independent variation cycles. The adagio variation is usually highly embellished and is followed by a fast final variation, often in a different meter. Occasionally the theme is repeated immediately after the adagio variation.

A brief examination of one of Mozart's best-known variation sets, _Ah! Vous dirai-je, Maman_, will illustrate many of the previously-mentioned characteristics. Although it was composed in Paris in 1778 and is therefore not a late work, it is presented here for two reasons. First, it is one of Mozart's largest sets, containing twelve variations. Second, it clearly demonstrates some of the unifying techniques that were previously discussed.

The set is characterized by its figural treatment of the melody while retaining the essential harmony and bass of
the theme. The theme is in rounded binary form and is twenty-four measures in length. The set displays the following connections:

Motivic connections. As shown in Example 1-17, Variations I and II are linked by a common motive which was foreshadowed by the turn in measure 23 of the theme. It provides a cross-reference to the final variation, No. XII, and thus suggests a correspondence between the beginning and end of the set.

Example 1-17. Mozart, Ah, vous dirai-je, Maman, theme, measure 23; Variations I and II, measure 1.

Figural connections. Variations II and III are linked by their use of the arpeggio. The leaps in the accompaniment of Variation X appear at the beginning of Variation XI.

Registral connections. The set displays no convincing registral connections.
Rhythmic continuity or progressive change. There are several examples of pairs of variations linked together by common rhythms or note values. Variations I and II are linked by their continuous sixteenth-note motion and Variations III and IV by their continuous triplet eighth motion.

This work does not contain a single example of rhythmic acceleration and climax over the span of three or more variations. Mozart seems to be more interested in rhythmic variety rather than progressive change.  

Textural continuity or progressive change. This work does not contain any large-scale textural changes. Minor fluctuations do occur, such as the growth from two-parts in the theme to the occasional use of three-parts in Variation I and four-parts in Variation II.

Dynamic continuity or progressive change. This form of connection does not apply since dynamic markings, with the exception of a solitary "f" in Variation II, are absent.

Variation of a variation. This set displays no complete example of this technique; nevertheless, isolated incomplete examples do occur. For example, measures 1-8 of Variations

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41 Examples of rhythmic acceleration do exist in other variation works by Mozart. For example, an acceleration occurs in *Ein Weib ist das herrlichste Ding*. Variations I and II are linked by eighth-note motion, Variation III employs triplet eighth-notes, and Variations IV-V are linked by sixteenth-notes.
examples do occur. For example, measures 1-8 of Variations employs triplet eighth-notes, and Variations IV-V are linked IX are identical to those of VIII if the nonharmonic tones are removed. See Example 1-18.

Example 1-18. Mozart, Ah, vous dira-je, Maman, measures 1-8 of Variations VIII and IX.

Invariance. Variations VIII and IX are linked by their identical use of suspensions in measures 3-7. These suspensions also provide a valuable cross-reference to Variation IV and II. The chromatic line g-f#-f-e-e-b-d which appears in measures 9-12 and 13-16 provides a cross-
reference to Variation X where it appears in measures 4-7, 9-12, 11-14, 13-16, and 20-23. This line provides a cross-reference to Variation V where the line is first suggested.

**Franz Joseph Haydn.** Elector Maximilian Franz and Count Ferdinand Waldstein sent Beethoven to Vienna in 1792 to study with Haydn. The lessons continued until the end of 1793 and were devoted entirely to a study of species counterpoint through Johann Joseph Fux's method. As a result, it is likely that Beethoven learned more about Haydn's variation technique through his familiarity with his works rather than through his lessons.

Haydn's contribution to the reemergence of theme and variations as an important form was substantial, and many of his multi-movement works contain variations or variation-like movements. Georg Joseph Vogler's remarks on Haydn's role as a variation composer are illuminating:

The first man to teach us variations in general, who distributed them to all instruments, who, added to the merit of being phrasically great, invents songs and themes himself, is the incomparable Haydn. He, a true Phoebus . . . showed us in symphonies how we should write variations.\(^{42}\)

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\(^{42}\)Georg Joseph Vogler, *Verbesserung der Forkel'schen Veränderungen Über das englische Volkslied "God Save the King"* (Frankfurt am Main: Varrentrapp and Wenner, 1793), 8. "Der erste Mann, der uns allgemeine Variationen gelehrt, der noch zum Verdienste Phraeologisch gross zu seyn, jenes, Gesänge und Themen selbst erfinden zu können, gesellet, ist der unnachahmliche Haydn. Er, ein wahrer Phoebus . . . zeigte uns in Sinfonien, wie wir variiren sollen." (My translation.)
Elaine Sisman has done extensive research on Haydn's variations. She notes that his earliest variations resemble those of Carl Philipp Emanuel Bach and belong to the thoroughbass type or to the type which combines thoroughbass and melodic variations.

Haydn's variation technique underwent numerous changes. Melodic variations predominate from about 1770 on. The cantus firmus principle can be found frequently. Haydn sometimes developed single motives in the codas of variation works, a technique that became important to Beethoven. Changes of time signature and tempo are rare, and major-minor changes occur only in cycles that combine the variations with other formal principles. Most sets contain a reprise of the theme, that is, either a literal return to the entire theme (bass, soprano, and harmony) or to its melody at or near the end of the series. Finally, Haydn often employs a double theme (two themes, the beginnings of which are often similar) as the basis of his variations.

One of Haydn's largest independent sets is the Arietta con Variazioni in A major which contains the unusually large number of eighteen variations; most of his sets do not exceed one dozen. Unlike the melodic figuration of the Mozart example, this one is best characterized as a constant.

harmony set, that is, one in which the outline of the harmony and bass are retained while the soprano is freely composed. Also unlike many of Mozart's cycles, this one does not contain a change of mode, a literal return or reference to the theme, a change of meter, or a coda attached to the final variation. The penultimate variation is somewhat slower than the surrounding ones (it is marked "un poco più lento"), yet it does not display the grandeur, finely-wrought ornamentation, rhythmic variety, or improvisational character which characterizes Mozart's adagio variations.

Rhythmic continuity or progressive change. This set does not exhibit this characteristic; indeed, it appears to be a random collection of different rhythms which were purposely chosen for variety. For example, triplet eights occur in Variation I, eighths in Variation II, sixteenths in Variations III-IV, triplet eighths in Variation V, eighths in Variation VI, sixteenths in Variation VII, and so on.

Registral connections. These occur infrequently, and when they do they are of questionable validity. Example 1-19 illustrates two simple occurrences: an $a^2$ link between Variations VII and VIII and a multiple-note link between Variations VIII and IX.
Example 1-19. Haydn, *Arietta con Variazioni* in A major:
(a) measure 16 of Variation VII and measure 1 of Variation VIII.

Motivic and figural connections. The number of motivic connections are surprisingly few, especially since Haydn in general made greater use of motives than Mozart. The connections which do occur often stem from unessential figures rather than from key motives which are developed in a variation. For example, the appoggiatura figure introduced in Variation XII provides a link to Variation XIII. This is shown in Example 1-20.
Example 1–20. Haydn, Arietta con Variazioni in A major, a comparison of measures 11–16 of Variation XII and measures 1–3 of Variation XIII.

Variation of a variation. There are no clear and substantial examples of this in Haydn's set. Variations III and IV come the closest to this procedure; sixteenth-note scales which occur in the right hand of the former are taken up by the left in the latter. This is illustrated in Example 1–21.

Other possible connections are either too infrequent or questionable to list. For example, dynamics and articulation are not indicated in the manuscript, hence no
Example 1-21. Haydn, Arietta con Variazioni in A major, measure 1-2 of Variations III and IV.

conclusions may be drawn regarding these two types of connections. The set does not exhibit a careful approach to textural density and changes randomly from a two- to a four-part texture. No invariant features are observable. Finally, as previously mentioned, there are no changes of key or mode.

In summary, Haydn's set exhibits fewer connections than Mozart's example did and, as we shall see, far fewer than those that will be uncovered in the Beethoven sets explored in Chapters II-V. Indeed, the connections in Haydn's work are so few that it is likely that they are more the result of chance than of careful planning.

The Haydn and the Mozart sets which were examined were largely representative of the overall variation technique for each composer. A study of Beethoven's cycles written before 1800 reveals that his conception was much closer to
that of Mozart than of Haydn; this tendency is also discernible in the later works analyzed in Chapters II-V.

Johann Georg Albrechtsberger. Albrechtsberger was Beethoven's teacher for approximately fifteen months during the period from 1794 to 1795. He instructed Beethoven in counterpoint and fugue. Nottebohm summed up Beethoven's progress under Albrechtsberger's tutelage in this way:

The instruction which he received from Haydn and Albrechtsberger enriched him with new forms and media of expression and these effected a change in his mode of writing. The voices acquired greater melodic flow and independence. A certain opacity took the place of the former transparency in the musical fabric. Out of homophonic polyphony of two or more voices, there grew a polyphony that was real. The earlier obbligato accompaniment gave way to an obbligato style of writing which rested to a greater extent on counterpoint. Beethoven has accepted the principle of polyphony; his part-writing has become purer and it is noteworthy that the compositions written immediately after the lessons are among the purest that Beethoven composed.44

Albrechtsberger was well known for his treatises on composition (1790) and figured bass (1791); perhaps more importantly, Albrechtsberger was recognized by Haydn as the best composition teacher in Vienna.45 He did not write a

44Thayer, Thayer's Life of Beethoven, 148-149.

single independent set of variations. As a result, one may assume in general that Beethoven's variations display greater contrapuntal agility after 1795. However, it is difficult to speculate as to what specific influence Albrechtsberger may have had on the development of Beethoven's variation technique.

Beethoven was familiar not only with music of his time but of previous eras. He held two Baroque composers in particularly high regard: Johann Sebastian Bach and George Frideric Handel.

Johann Sebastian Bach. Beethoven had played Bach's Well-Tempered Clavier in its entirety as a young man. It is highly likely that he was also familiar with other Bach works, particularly the Goldberg Variations.46 Chapter IV will suggest that Beethoven was well acquainted with Bach's D Minor Chaconne for Violin.

George Frideric Handel. Beethoven regarded Handel as the greatest of all composers and owned a copy of the three sets of Lessons for the Harpsichord and the Six Fugues or Voluntaries. Chapter IV will also suggest that Handel's

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46 Several authors such as Donald Francis Tovey and William Kinderman have commented on the similarities between Variation XXXI of Beethoven's Diabelli Variations and Variation XXV of Bach's Goldberg Variations.
chaconnes had a direct influence on Beethoven's Thirty-two Variations on a Theme in C Minor.

How familiar was Beethoven with the important treatises of his time? Warren Kirkendale believes that Beethoven's knowledge of theoretical writings must have been extensive.⁴⁷ In 1809 Beethoven began arranging a composition book for Archduke Rudolph. Kirkendale reports that Beethoven drew his examples from the following sources:

- **Glareanus, Heinrich**  
  *Dodekachordon* (1547)

- **Zarlino, Gioseffo**  
  *Le Institutioni harmoniche* (1558)

- **Fux, Johann Joseph**  
  *Gradus ad Parnassum* (1742)

- **Mattheson, Johann**  
  *Der vollkommene Capellmeister* (1739)

- **Riepel, Joseph**  
  *Anfangsgründe zur musikalisichen Setzkunst* (1752)

- **Marpurg, Friedrich**  
  *Abhandlung von der Fuge* (1753-4)

- **Bach, Carl P. E.**  
  *Versuch Über die wahre Art das Clavier zu spielen* (1753-62)

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⁴⁷Warren Kirkendale, *Fugue and Fugato in Rococo and Classical Chamber Music*, trans. Warren Kirkendale and Margaret Bent (Durham: Duke University Press: 1979, 206-219. In addition to the works listed, Beethoven had a surprising knowledge of the old masters. Research by such authors as E. F. Schmid, Thayer, Nottebohm, and MacArdle has revealed that Beethoven studied or made copies of many works by Franco-Flemish composers, Italian composers of the Renaissance and Baroque; in addition, he studied specific pieces by Palestrina, Byrd, Muffat, Fux, Caldara, J. S. Bach, Graun, Reutter, Wilhelm and C. P. E. Bach, Haydn, Albrechtsberger, Mozart, and especially Handel. This is not
Sulzer, Johann Georg Allgemeine Theorie der schönen Künste (1771-74)
Kirnberger, Johann Die Kunst des reinen Satzes (1771-79)
Türk, Daniel G. Von den wichtigsten Pflichten eines Organisten (1787)
Türk, Daniel G. Kurze Anweisung zum General-bassspielen (1791)
Albrechtsberger, Johann Gründliche Anweisung zur Composition (1790)
Knecht, Justin Heinrich Vollständige Orgelschule (1795-98)
Vogler, Georg Joseph Choral-System (1800)
Choron, Alexandre Principes de composition des école d'Italie (1808-9)
Koch, Heinrich Handbuch bey Studium der Harmonie (1811)

What can the sketchbooks reveal about Beethoven's views on how to arrange variations and to transcend the additive tendency? William Kinderman has studied the sketches for the Diabelli Variations and notes that Beethoven was careful not to disturb the original 1819 surprising since Beethoven is reported to have said that "there is hardly any treatise which would be too learned for me. I have not the slightest pretension to what is properly called erudition. Yet from my childhood I have striven to understand the intentions of the better and wiser people of every age. Shame on an artist who does not consider it his duty to achieve at least as much" (224).
arrangement when he added the remaining variations around 1823. Kinderman states:

A comparison of Beethoven's preliminary draft with finished work is shown .... It will be seen that Beethoven did not change the order of the variations from his draft when he finished the work in 1823. He did, however, insert the present Variations I and II at the beginning, and Variation XV at the middle of the work .... The Diabelli variations as we know them are thus to a great extent the product of two superimposed conceptions.48

Susan Kagan has made an exhaustive study of the relationship between Beethoven and his only composition student, Archduke Rudolph. Beethoven's corrections of the Archduke's Forty Variations are revealing. Kagan notes that Beethoven made dozens of corrections and emendations; in the Introduction and Finale, some measures were even added or eliminated. The most relevant and important observation for this dissertation is that Beethoven did not tamper with the order of the set.49

In summary, the purpose of this dissertation is to explore how and to what extent Beethoven transcends the additive tendency. We will explore those factors which relate variations to one another and we will investigate the


internal order of variations to better understand how the whole is unified. As Korsyn has stated, "we are not interested in describing a succession of isolated events; we want instead to discover what makes the piece more than a series of notational signs."50

50Korsyn, Integration in Works of Beethoven's Last Period, 3.
CHAPTER II

SIX VARIATIONS IN F MAJOR, OPUS 34

Introduction

In a letter dated October of 1802, Beethoven offered his Opus 34 and Opus 35 to Breitkopf and Härtel. These two variation sets differed noticeably from his previous ones; Beethoven remarked that they were both "written in quite a new style and each in an entirely different way. . . . Each theme in them is treated independently and in a wholly different manner. . . . I myself can assure you that in both works the style is completely new for me."¹ More revealing is a letter received by Breitkopf and Härtel on December 26, 1802 in which Beethoven stated that "inasmuch as these variations differ noticeably from my earlier ones, instead of designating them like the former ones merely by number, I have included them in the numerical list of my greater musical works, and this all the more because the themes are original."²

A striking aspect of Opus 34 is its departure from the usual practice of maintaining a single tonal center; every

²Ibid.
variations is in a different key. F major appears in the
theme, D major in Variation I, B♭ major in Variation II,
G major in Variation III, B♭ major in Variation IV, c minor
in Variation V, and F major in Variation VI. Each key, with
the exception of the last one, is a third lower than the
previous one. In addition, the theme and first three
variations are not tonally closely related. The movement by
third is remarkable for appearing in 1802 and foreshadows a
similar practice used in the Romantic era.

Key relationships by thirds is a topic discussed by
Heinrich Schenker in Free Composition.³ The descending
thirds are integrated into the tonic by their progression to
the dominant which first appears in minor in Variation V and
changes to major in the transition to Variation VI. The
tonal plan is illustrated in Example 2-1. The diagram
strongly suggests that the ordering of the key relationships
(and hence the variations themselves) is not mutable, for
any change of position would render the underlying form
meaningless.

Although Beethoven never again employed a similar tonal
plan in one of his independent variation sets, Opus 34's
influence may be felt in variations which are part of multi-
movement works. The third movement of the Ninth Symphony,

³Heinrich Schenker, Free Composition, edited and
translated by Ernst Oster (New York and London: Longman,
1979).
for example, is based on a double theme and the following
tonal plan influenced by thirds: B♭-D-B♭-G-E♭-B♭. The
fourth movement also display third relationships. The
"Heiligendankgesang" movement of Opus 132 also employs a
double theme and a tonal plan which alternates the lydian
mode (F finalis) with D major. Finally, the second movement
of Opus 127 has a theme in A♭ major and a variation in E
major and partial one which begins in D♭ major and changes
to c♯ minor.

There are many examples of third relationships in works
not based on variations. For example, in the first movement
of the G Major Sonata, Opus 31 No. 1, the second theme
group is in B major rather than in the dominant, D major.
The first theme group of the Waldstein Sonata is in C major
whereas the second is in E major. Charles Rosen has noted
Beethoven's extensive use of the third in Opus 106.⁴

⁴Charles Rosen, The Classical Style: Haydn, Mozart,
Beethoven (New York: W. W. Norton, 1971), 409-422.
Why did Beethoven choose a tonal plan based on descending thirds for Opus 34? Herbert Viecenz observes that the tonal tension and resolution typical for a first-movement sonata form is lacking in the common theme and variation set.\(^5\) Rosen has supplied perhaps the best explanation for the unusual key relationships in Opus 34:

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Essentially static and decorative, almost always in one key so that the interplay between harmonic tension and general texture could only be on the level of small details, variations presented a problem to the dramatically conceived classical style. Even the rigidly fixed proportions of the form were alien to it. Relatively early in his career, Beethoven made a striking attempt [with Opus 34] to overcome the harmonically static nature of the form.\(^6\)
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The very problem of ending a variation set may be the key to Beethoven's decision. Since all variations of a set are normally in the tonic key, some factor other than key must indicate the end of the set. This problem has long plagued composers, and Tovey summed it up by saying that "the momentum produced by the revolution of true variations in the orbit of the theme gives the key to the whole problem...of the coda in a set of variations."\(^7\) Composers

\(^5\)Herbert Viecenz, "Über die allgemeinen Grundlagen der Variationskunst, mit besonderer Berücksichtigung Mozarts" in Mozart Jahrbuch II (1924), 210-211.

\(^6\)Rosen, The Classical Style, 437.

\(^7\)Donald Francis Tovey, The Forms of Music (New York: Meridien Books, 1956), 244.
have traditionally broken this momentum with a variety of means: fugues, codas, the return of the theme, and bravura variations. By allowing all but the last variation to be in non-tonic keys, the return to the tonic in the final variation allows for a tonal solution to the problem.

Is there a unifying inner logic to the key selection? And do the different keys not tend to dissolve the unity of the set? Rosen suggests that the basic succession of keys is coloristic rather than structural. He says that "there is nothing in the theme, or, for the most part, in the variations themselves that implies such treatment." He also goes on to say that "these F major variations, therefore, in spite of their great charm and unusual lyric fullness, represent a purely exterior attempt to break out of the decorative formula imposed by the variation form." However, this chapter will suggest a larger degree of integration exists than Rosen believes.

Another unusual aspect of Opus 34 is the extensive changes in meter. Viecenz has noted that the changing of meters can be an important formal principle in the overall

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8Otto Klauwell, Ludwig van Beethoven und die Variationenform (Langensalza: Hermann Beyer und Söhne Verlag, 1901), 16. The author suggests that the choice of key, meter, and character makes each variation more independent.


structure of a variation set. However, because the tempo and mood also change along with the meter, these variations represent an early attempt at character variations.\(^{11}\) Prior to Opus 34, Beethoven in general did not drastically tamper with these elements; however, he embraced them in Opus 34, perhaps in a new effort to provide more contrast. Unfortunately, this poses a new problem: how does a composer unify a set containing such diverse variations when it is not already unified by one common key? Perhaps Beethoven himself was not totally satisfied with Opus 35's tonal scheme, for he never returned to it again in his independent piano works. The mediant tonal relationship did, however, set the stage for the \textit{Ninth Symphony}, and the diversity of characters foreshadowed similar changes in the \textit{Diabelli Variations}.

\textbf{Theme}

The structure of the theme is A B A. The two A sections are both eight-measure parallel periods which end

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\(^{11}\)Kurt von Fischer, "Zur Theorie der Variation im 18. und beginnenden 19. Jahrhundert," \textit{Festschrift Schmidt-Görg} (Bonn, 1957), 125. According to Gerber's \textit{Lexicon} (1812, II, 87), K. Christian Fasch's variations of 1782 and 1787 were supposed to have been the first character variations. "Fasch [war] der erste gewesen seyn, welcher in die gegenwartig beliebten Variationen mehrere Mannigfaltigkeit und Verschiedenheit der Charaktere gebracht habe." Despite Fischer's reference, an even earlier set is the \textit{Aria allemanda con alcuni variationi} of 1677 by Alessandro Poglietti (d. 1683). Written as a birthday present for the Austrian empress, several variation programmatically describe various subjects relating to the Austrian empire.
with perfect cadences in F. The B section, on the other hand, is six measures long, is made up of a four-measure phrase with a two-measure extension, and tonicizes the dominant. It is likely that Beethoven varied the length of the middle section to avoid the monotony and predictability that another eight-measure phrase might produce. Why then is the phrase not four measures? One explanation is that this length would not have been sufficient to emphasize the tonicization of V, and eight measures would have made the melodic figure in measure 12 unbearably repetitious.

The soprano of the theme is composed largely of steps and is more suggestive of an elegant art song than a folksong. The texture is relatively full and reaches as many as nine simultaneous notes as on the downbeat of measure 2. The soprano line is emphasized by the frequent doubling at the octaves as occurs in measures 1-2, 5-6, 15-16, and 19-20 and thirds as in measures 1, 3-4, 9-10, 15, 17-18, and 19. Unlike many of the earlier variation themes, this one is slow and majestic. The cantabile effect is further enhanced by the stepwise motion of the outer parts. Finally, the pedal point on F in measures 1-2, 5-6, 9-10, 15-16, and 19-20 lends a static quality to the theme.

The soprano is, with the exception of the b-naturals in measures 4 and 8, completely devoid of chromaticism. The harmony is also diatonic, the predominant chords being I, IV, and V. The IV chord occurs seven times and is emphasized by its placement on the beat. It is especially prominent at the beginning of the B section in measure 9; this is shown in Example 2-2. The IV chord's primary function is to prolong the tonic harmony.

Example 2-2. Opus 34, theme, measures 1 and 9.

\[ \text{Adagio} \]

The notes $c^2 - d^2 - c^2$ in measure 1 represent an important unifying element and will be hereafter referred to as the neighbor-tone motive. It is used extensively in both the soprano and bass as can be seen in measures 3-4, 9, 15, and 17-20. It also occurs on a larger scale in measures 7-8, 8-10, and 21-22. Example 2-3 displays some occurrences of this motive. The neighbor-tone will also appear in all of the succeeding variations. For example, it plays an obvious
role in the beginning of Variation III and it also foreshadows the prominent trills in Variations I and VI.

Example 2-3. Opus 34, theme, measure 1; Variation I, measures 5-6; Variation VI, measures 57-59.

The ornament in measure 11, the turn, may be considered as an extension of the neighbor-tone. It will be referred to as the turn motive and will occur in the following variations in both its four- and five-note form. Example 2-4 illustrates its appearance in Variation I.
One of the most striking sonorities is the \( \text{vii}^7 \) supported by the F pedal point on the downbeat of measures 6 and 20. Many eighteenth- and nineteenth-century theorists, including Jean-Philippe Rameau and Simon Sechter, viewed the \( \text{vii}^7 \) as a dominant ninth chord with a missing root. Beethoven may well have also held this view and employed the \( \text{vii}^7 \) as a substitute to replace the \( V^7 \). In addition to providing variety, this chord will serve as a link. For example, certain pairs of variations employ enharmonically-equivalent diminished seventh chords with differing resolutions. This provides a subtle connection as is illustrated in Example 2-5.
Example 2-5. Opus 34, the enharmonically-equivalent diminished seventh chords between variation pairs.

A metric reduction of the theme is given in Example 2-6. The c² is given unusual prominence by its frequent occurrence on the beat. For example, it appears on the downbeat of measures 1, 3, 5, 10, 12-15, 17, and 19. The reduction also illustrates the underlying harmonic simplicity created by the I, IV, V, and V/V chords.
Example 2-6. Opus 34, theme, a metric reduction.
The rhythm in measure 4, a dotted sixteenth followed by a thirty-second, suggests a new motive which is a diminution of the previous measure's dotted-eighth followed by a sixteenth. This will be referred to as the rhythmic motive, and it foreshadows the opening of Variations II, IV, V, and VI. The motive is illustrated in Example 2-7.

Example 2-7. Opus 34, the rhythmic motive in Variations II, IV, V, and VI.
The theme as well as the following variations are primarily diatonic. Chromaticism does have a superficial effect on Variations III, V, VI, and most noticeably on I. This used of chromaticism is foreshadowed in measures 4-5 of the theme by figure $a^1-b^1-b^1-c^2$.

Example 2-8. Opus 34, theme, measure 4; Variation I, measures 7 and 12; Variation IV, measures 4 and 21-23; Variation VI, measures 3-4.
The arpeggio $c^1-f^1-a^1-c^2$ in measure 5 is another element which will influence the following variations. It is most extensively employed in the final variation as is shown in Example 2-9.


Variation I

Variation I is in D major, a minor third down from the theme's key of F major; nevertheless, the general tessitura is higher than that of the theme and results from a registral expansion up to $d^3$.

The ornateness of this variation provides a striking contrast to bare structure of the theme. The thirty-second note passages produce a tranquil and even static quality rather than an animated one. Tovey points out that Beethoven
"uses embroidery variations as means of obtaining extraordinary repose in slow movements."\(^{13}\)

The variation and theme are linked together in at least two ways. First, the pitch a in measure 22 acts as a common-tone connection between the two. Second, the registraly isolated b\(^{1}\) in measure 21 finds its resolution in the a\(^{1}\) in the upbeat to Variation I. This is illustrated in Example 2-10.

Elaborate melodic ornamentation is an essential ingredient in this variation. The florid passagework in the soprano often ingeniously covers the thematic outline by placing a majority of the essential notes in weak metric

Example 2-10. Opus 34, the connection between measures 21-22 of the Thema and measure 1 of Variation I.

\(^{13}\)Tovey, Form, 242.
positions. The metric reduction in Example 2-11 reveals these observations more clearly. It also reveals that the theme's basic harmonic progression is combined with both substitutions and decorative chords. For example, the vii\(^7\) in measure 2 is noteworthy for two reasons: first, it substitutes for the V\(^7\) chord in the theme; second, it provides the previously discussed enharmonic link to the theme's vii\(^6\). A vii\(^7\)/V is used as a substitute for vii\(^6\) in measure 10. The vii\(^7\)'s in measures 6 and 20 are decorative additions since rests occurred at the corresponding places in the theme.

The structure of Variation I does differ slightly from that of the theme. Although the proportions remain identical, the second A section is not a mere repeat of the previous one, but rather a variation of it. The beginning of each section is given in Example 2-12.

The turn and neighbor-tone motives as well as chromaticism appear in this variation. The turn, for example, is the basis for the ornamentation in the first A section and the turn symbol in measure 1 announces its relevance. Both four- and five-note versions make their appearances here; the former is found most prominently in measure 3, as is illustrated in Example 2-13, and the latter in measure 6.

The turn motive is concealed in parts other than the soprano. For example, the middle voice in measures 1-2, 5-
Example 2-11. Opus 34, Variation I, a metric reduction.
Example 2-11 continued.
Example 2-12. Opus 34, Variation I, measures 1-2 and 15-16.

6, and 15-16 contains the notes $f^\# -g^\# -f^\# -e^\# -f^\#$. A variant of this figure is suggested in the bass of measures 3 and 17 by the notes $f^\# -g -f^\# -c^\# -d$. This is illustrated in Example 2-14.

Example 2-14. Opus 34, Variation I, the turn in measures 1-2 and 3.

The neighbor-tone motive is suggested by the abundant trills. It first appears in measure 5 and is suggested by the trill-like upbeat to the first measure. The trill is essential for sustaining the registrally important $d^3$ in measure 6. Example 2-15 demonstrates that it occurs again in measure 19; here the trill is carefully notated to assure a specific rhythmic performance and possibly to emphasize the neighbor-tone motive. The motive also occurs in the following measure where a variation of the ascending diminished arpeggio (originally found in measure 6) appears.

Example 2-16 reveals that the neighbor-tone motive may be concealed. It appears in measure 17 as the highest notes of the variation: $d^3-e^3-d^3$.

Example 2-16. Opus 34, Variation I, measure 17.
The chromaticism in Variation I contrasts with the diatonicism in the theme. This shift is signaled in a number of ways. For example, the first note of Variation I, g♯, is a nonharmonic tone. Portions of chromatic scales also occur, as the d♯1-e1-e♯1-f♯1-g1-g♯1-a1 line in measures 4-5. Additional examples occur in measures 7, 12-13, and 21. A illustrative passage is displayed in Example 2-17.

Example 2-17. Opus 34, Variation I, measure 21.

Variation II

Example 2-18 illustrates that the note d which concludes Variation I provides a link not only between Variations I-II but also Variations II-III. In addition, the d acts as a leading tone to the e♭ of Variation IV.

The first measure is cross-related to the theme by the rhythm motive of a dotted-eighth, sixteenth, and eighth. The first chord, B♭-d-f, serves as a foundation; it

14 It should be noted that much of the chromaticism in Opus 35 is the result of the notes a1-b♭1-b♭-c♯2 in measures 4-5 of the theme.
Example 2-18. Opus 34, the connection of Variations I-IV by using d as a common-tone and as a leading-tone.

Var. I

Var. II

Var. III

Var. IV

reappears in measures 2-3 and as the three highest notes of the soprano.

The B♭ arpeggio in measures 2-3 has its origin in the ornamental arpeggio introduced in measure 5 of the theme. It is also factor in measures 7-8, 17, and 21-22. Example 2-19 illustrates a variant of the arpeggio which occurs in measure 8. It clearly outlines an arpeggio. As we shall see, this figure will reappear in Variation III and will provide a valuable link between the two variations.

Example 2-19. Opus 34, measure 8 of Variation II and measure 7 of Variation III.
Jürgen Uhde has remarked that the first four measures constitute a dialogue. He suggests that it occurs between the low register of the first two measures (the question) and the higher register of the next two measures (the answer).  

Example 2-20 displays the striking substitutions for the sforzando $V^7$ chord and its resolution to $I$ in measure 2 in Variation I. For example, the progression in measure 6 is $vii^07/vi-vi$. An unexpected variant occurs in measure 20 with the movement $vii^03-vii^07/\bar{V}$, the second chord being also highly unstable and requiring a resolution. The $vii^07$ chord first occurred in the theme and its appearance here provides a minor link with the theme. However, it differs notably from the theme and the two adjacent variations by its lack of simultaneous pedal point.

Example 2-20. Opus 34, Variation II, measures 1-2, 5-6, 15-16, and 19-20.

15 Jürgen Uhde, Klavierstücke und Variationen, 350.
The neighbor-tone motive occurs in measures 1, 5, 15, and 19. Often it is intermingled with the $f^2-e^2-f^2-d^2-c^2$ outline found in measures 9-10 of the theme. The triads in measure 9 of Variation II are suggestive of the arpeggio motive originally based on measure 1's Bb triad. Finally, the chromatic line is prominent in measures 11 and 14. This is illustrated in Example 2-21.

A harmonic surprise which must not be overlooked occurs in measure 19. The use of a minor iv is both unexpected and unique to this variation. As shown in Example 2-22, a second surprise occurs in measure 20, for the listener hears the same diminished chord as in measure 6 but now as part of an entirely new progression, $\text{vii}^0 _3 - \text{vii}^0 _7 / V - I^6 _4 - V^7 - I$. $i^6$ or to $- \text{vii}^0 _7 / V$. 

Example 2-22. Opus 34, Variation II, measures 6 and 20-21.
Variation III

This variation is characterized by an uninterrupted flow of eighth-notes. Similarly, the articulation is a uniform legato. Finally, this variation displays a certain static quality due to the extensive use of pedal points in both soprano and bass.

The neighbor-tone motive is the basis of much of this variation. This is apparent not only as a surface detail in measures 1, 12-13, and elsewhere, but also as a middleground feature as shown in Example 2-23.

Example 2-23. Opus 34, Variation III, measures 8-10.

The use of a diminished chord with a underlying pedal point occurs frequently in this variation; the vii⁰/G pedal in measure 2 and the vii⁰⁷/G pedal in measure 6 are but two examples. The chord on the third beat of measure 12 is also such a chord and may be labeled as a vii⁰⁷/A pedal, although it may also be interpreted as a Vᵇ⁹-😮. This chord, shown in
Example 2-24, is of special interest; its employment results in the appearance of the neighbor-tone motive. The resulting harmonic progression is unique to this variation.


Other figures occur in addition to the neighbor-tone motive, although on a much more limited scale. Example 2-25 illustrates that measure 4 contains not only the neighbor-tone motive but also chromaticism and the f-e-f-d-c outline found in measures 9-10 of the theme.

Example 2-25. Opus 34, Variation III, measure 4.
Finally, measure 20 presents an unexpected \( e^b^3 \) which resolves to \( d^3 \) in the same measure. This \( e^b^3 \) is an expansion of the register. It prepares the registral limit of Variation IV and thereby links the two variations together as shown in Example 2-26.

Example 2-26. Opus 34, the \( e^b^3 \) link between Variations III and IV.

This variation carries the heading "Tempo di Menuetto" and is in 3/4, a triple meter which appears for the first and only time. Example 2-27 illustrates that the placement of this variation is crucial, for the meter suggests a symmetrical and chiasmic structure.
Example 2-27. Opus 34, the central position of Variation IV.

A descending $b^b-g-e^b$ arpeggio opens the variation; the second note, $g$, provides a common-tone connection to the previous variation which ended on $g$. Furthermore, the arpeggiation and rhythm of these first three notes provide a cross-reference to a similar figure in measure 11 of the theme.

Example 2-28 displays the first four measures of Variation IV. The soprano and bass outlines of the theme are easily recognizable in the first two measures of the A section and somewhat less obvious in the next two. The bass
makes use of the chromatic fragment G-A\textsuperscript{b}-A-B\textsuperscript{b} in measures 3 and 4. The soprano contains the turn motive, and the thirds foreshadow the similar movement in the B section. The movement from b\textsuperscript{b1} to g\textsuperscript{1} in measure 4 is the same as that which opened the variation. This measure also contains the chromatic fragment as well as the neighbor-tone motive in both hands.


A V\textsuperscript{7} chord over a tonic pedal occurs on the first beat of measure 2 in Variation IV. Example 2-29 reveals that this chord also occurs at the identical location in the Thema and, as a result, serves as a cross-reference. The V\textsuperscript{7}/tonic pedal in Variation IV also links it to Variations III and V.
Example 2-29. Opus 34, measures 1-2 of the Thema and Variation IV.

The first four measures again display a question-and-answer character. As may be seen in Example 2-30, the first two measures differ noticeably from the next two, not so much by register as by rhythm.

Example 2-30. Opus 34, Variation IV, measures 1-4.
The highest note, $e^b_3$, occurs in measures 7 and 20. As was demonstrated in Example 2-26, it serves as a registral connection to the sforzando $e^b_3$ in measure 20 of the previous variation. Example 2-31 demonstrates the octave transfer of this note down to $e^b_2$ in measures 19-22 in Variation IV.

Example 2-31. Opus 34, Variation IV, measures 19-22.

Measures 9-13 of the B section are shown in Example 2-32. This section is characterized by soprano octaves and an active bass which moves in thirds and sixths with the upper parts. Measures 12 and 13 are cadential, and the soprano movement from $f$ (5) to $d$ (3) in $B^b$ is suggestive of the opening thirds $b^b$ (5) to $g$ (3) in $E^b$.

This variation contains a rhythmic acceleration in that has been absent in all of the previous variations. Example 2-33 displays the gradual change in note-values from eighths
(measure 15) to sixteenths measure 17), triplet sixteenths (measure 19), and finally thirty-seconds (measure 20).

The rhythmic acceleration reinforces the climactic arrival of the highest note, $e^b_3$. Its importance is further highlighted by its longer length, accompanying sforzando marking, and following descending chromatic line.

Example 2-33. Opus 34, Variation IV, measures 15-22.

A metric reduction of Variation IV is given in Example 2-34. It reveals that $e^b_2$ in measures 2, 8, 16, 22 and $e^b_3$ in measures 7 and 20 are important goal notes. The $f^3$ in measure 12 serves as a registral upper neighbor tone to the $e^b_3$ notes. The reduction also reveals that the arpeggio not only serves as an upbeat but also as the basis for other passages. For example, its outline appears in measures 2-3 as $g^2-e^b_2-b^1l-g^1$, in 10 as $b^1l-e^b_2-g^2$, and in 11-12 as contra $B^b-D-F-B^b$. 
Example 2-34. Opus 34, Variation IV, a metric reduction.
Example 2-34 continued.
Variation V

This variation is linked to the previous one in two ways. First, it begins by prominently displaying the three-note tonic chord; Variation IV did so in arpeggiated form. Second and more important, both are linked by the identical rhythmic motive. The motive is appears in Variation V as a dotted sixteenth, thirty-second, and (implied) eighth; in the previous variation it appeared as a dotted eighths, sixteenth, and (implied) quarter.

Variation V is unique in that it is the only variation in a minor key. Its tonic, C, fits logically into the tonal movement by third downward. The brief use of C major in the transition (measures 23-28) allows the tonic also to serve as the dominant for the final variation in F; the movement by fifth downward breaks the pattern of descending thirds and permits a strong sense of tonal closure.

The opening four measures again displays the question-and-answer between phrases that has characterized Variations II and IV. Furthermore, all three variations are related by the long-short-long rhythmic motive.

The vii\(^{07}\) sonority is found in several locations. Example 2-35 displays two of the most striking examples which occur in measures 4 and 6 where it serves as vii\(^{07}/V\). Its appearance in measure 6 is highlighted by its sforzando marking.
Each section of this variation ends with a strong cadence. The one in measures 7-8, for example, progresses from V to i with the strong soprano movement of 7 to 8; in addition, the tonic chord is repeated three times and is spaced over a large area of the keyboard. The A section is to be repeated for the first time.

Two characteristics of the opening of the B section in measure 9 are the broken octaves and the rising arpeggio in the left hand. Example 2-36 illustrates that both characteristics were foreshadowed in measure 2.
The B section modulates to the minor dominant (g) rather than to the relative major (E\textsuperscript{b}), thus avoiding a duplication of the previous variation's tonality. In the transition back to the second A section, the rhythmic motive is used in a question-and-answer manner in measures 12-14; this is further emphasized by the exchange of parts that occurs in measure 14. This is shown in Example 2-37.

Example 2-37. Opus 34, Variation V, measures 12-14.

Example 2-38 displays the harmonic surprise which occurs in measure 19; I is employed instead of the expected i for the second phrase of the A section. The listener is again surprised by the return to c minor in measure 21.

Example 2-38. Opus 34, Variation V, measures 19-22.
By introducing the major I chord in measure 19, Beethoven foreshadows the upcoming transition that leads to the final variation. This passage consists of measures 23-28 and is a prolongation of V7 in F major. These measures are displayed in Example 2-39.


A metric reduction of Variation V is provided in Example 2-40. It reveals that the theme's soprano and bass outlines are clearly present, even in a highly ornamented passage such as measure 3 which combines arpeggiation with the minor version of the theme's g1-a1-g1-f1-e1 outline. It also reveals that measures 9-13's rapid melodic motion is a mere embellishment of g1-a1-g1 in the soprano; the bass's movement is from the C implied at the end of the A section to the G in measure 12. Similarly, the underlying harmonic motion is also simple: i (measure 8) - iv (9) - i (10) - V7/V (11) - v (12) changing to V (14).
Example 2-40. Opus 34, Variation V, a metric reduction.
Example 2-40 continued.
**Variation VI**

As may be seen in Example 2-41, the 6/8 meter of Variation VI provides a contrast to the 2/4 meter of Variation V. In addition, the first phrase of Variation VI reveals some chromaticism. However, the openings of both variations are also similar. First, both make use of the neighbor-tone motive. Second, the tempo (allegretto) is the same for both. Third, the first measures of both variations also suggest a harmonic similarity if not an actual link since the IV chord that is prominent in measure 1 of the theme is carefully avoided in Variation V and VI.

Example 2-41. Opus 34, measures 1-2 of Variations V and VI.
Variations II and VI are the only two variations which avoid the use of a dominant or leading-tone chord over a tonic pedal point. Example 2-42 illustrates this cross-reference.

Example 2-42. Opus 34, a comparison of measure 2 of Variations II and VI.

The eighth-note f^2 in measure 4 signals the return of the appoggiatura figure. This figure originated in measures 20-21 of Variation IV and is used extensively in Variation VI. It reappears in a number of different guises and positions. As may be seen in Example 2-43, it occurs in measures 12 and 13 as part of a suspension. Example 2-44 illustrates that it becomes increasingly important in measure 15, the return of the A section, where it is a grace note. Finally, Example 2-45 suggests that it is also responsible for the two-note ornamentation that occurs in measures 17 and 18.
Example 2-43. Opus 34, Variation VI, measures 12-13.

Example 2-44. Opus 34, Variation VI, measures 14-15.

Example 2-45. Opus 34, Variation VI, measures 17-18.
A metric reduction of Variation VI is given in Example 2-46. The theme's outline is again clearly present, suggesting that the soprano and bass have been heavily ornamented. The reduction shows particularly close harmonic and melodic ties to the theme in measures 3 and 12-15. In addition, $c^2$ is prominent in measures 1, 5, 12-15 and 19 and provides a link not only to measures 23-28 of the previous variation but also to measures 30-40 of the present one.

The coda, measures 22-39, also serves as a bridge passage for the return of the theme. The IV chord, which is purposely avoided in measure 1, is used frequently here. Measures 26-34 suggest a temporary shift to f minor, providing a reference back to the previous variation's use of the minor mode. Beginning in measure 29, the note c is given great emphasis in both the soprano and bass in preparation for the return of the theme. This focus on c is highlighted by the employment of the neighbor-tone motive and the progression Fr$^+6$ to V. This is illustrated in Example 2-47. The note c is also emphasized by the trills in measures 38 and 39. As we shall see, the trills will also provide a link to the Adagio. The coda is also noteworthy for the secondary rhythmic stratum suggested in measures 32-34. This stratum suggests four beats per measure which provides a link to the slow quadruple pulse of the Adagio. This is shown in Example 2-48.
Example 2-46. Opus 34, Variation VI, a metric reduction.
Example 2-46 continued.
Example 2-47. Opus 34, Variation VI, measures 29-30.

Example 2-49. Opus 34, Adagio molto, measures 3-5.

frequently in the Adagio molto as in measures 5-7, 9-16, and 18-20. This is shown in Example 2-50.

The B section, measures 9-14, makes prominent use of the arpeggio. The bass consists of arpeggiated sextuplet sixty-fourth notes; the sextuplets were foreshadowed by the use of 6/8 meter in Variations II and VI. Example 2-51 illustrates that the thematic outline is clearly present in both the bass and the soprano.

Both the theme and the Adagio contain a V7 - I cadence in measures 21-22. However, the registral isolation of the b5 in measure 21 of the Adagio and the lack of a connection
Adagio molto

Jürgen Uhde, Percy Goetschius, and Hugo Leichtentritt have described the Adagio molto as a seventh variation which also functions as a da capo of the theme. Leichtentritt felt that the Adagio represented the uniting of theme and a virtuoso cadenza. It contains a wide range in note values; for example, eighth notes occur in measure 1 and one hundred twenty-eighth notes in measure 20.

The first two measures of the Adagio are nearly identical to those of the theme. Elaborate ornamentation in the soprano begins in measure 3 (measure 42 of Variation VI). The neighbor-tone and appoggiatura figures occur in measure 42. The first of several bravura ascending passages is introduced in measures 43; the figuration was foreshadowed by the short cadenza which precedes the Adagio in measure 39. As Example 2-49 illustrates, the bravura passage terminates on a f2 trill while the thematic outline of the soprano continues in the left hand.

The trill and the arpeggio are two prominent elements. The trill was foreshadowed in Variation I and VI; it appears

16 Jürgen Uhde, Klavierstücke und Variationen, 346.

17 Percy Goetschius, The Larger Forms of Musical Composition, 77.


19 Ibid., 102.

to an a\textsuperscript{2} in the following measure suggest that complete closure does not occur at this point. As Example 2-52 illustrates, the codetta formed by measures 22-25 provides the necessary registral connection as well as an additional appearance of the first phrase of the theme.

Example 2-52. Opus 34, Adagio molto, measures 21-25, the registral isolation and resolution of b\textsubscript{b}z.
Summary of Formal Implications and Internal Connections

In this chapter I have attempted to reveal those factors which link and integrate the variations into a unified whole. The most significant element which establishes the variation order is the tonal movement downward by third. Another is the chiasmic metric structure suggested in the discussion of Variation IV. I have also shown in this chapter that each variation is linked to its neighbor by various common motives, the neighbor-tone and rhythmic motive being the most prominent. Finally, an additional and crucial element is the use of registral connections to link neighboring variations together.

Table 2-1 summarizes the keys, common-tones, registral connections, harmonic progressions, and meters which suggest connections between variations. Because I have demonstrated in this chapter that every variation contains the neighbor-tone and rhythmic motives, these have been omitted from Table 2-1 since they do not add to our understanding of the ordering process. Table 2-1 suggests that none of Opus 34's variations could be interchanged without seriously affecting the integrity of the overall form.

To illustrate better the underlying unity of Opus 34, let us construct two hypothetical variants. In the first case, we could eliminate Variations II and IV. This would produce the key scheme F-D-G-c (changing to C)-F and the root motion ↓5 ↓5 ↓5 ↓5. In the second case, we could
Table 2-1. Opus 34, the internal links and cross-references. The symbol "*" stands for cross-reference. Numbers have been provided on the left column to facilitate the tracking of characteristics across several pages.

<table>
<thead>
<tr>
<th></th>
<th>Theme</th>
<th>Var. I</th>
<th>Var. II</th>
<th>Var. III</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tonic</td>
<td>3rd down</td>
<td>3rd down</td>
<td>3rd down</td>
</tr>
<tr>
<td></td>
<td>F major</td>
<td>D major</td>
<td>G major</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>E-G-B&lt;sub&gt;b&lt;/sub&gt;-D&lt;sub&gt;b&lt;/sub&gt;</td>
<td>E-G-B&lt;sub&gt;b&lt;/sub&gt;-C&lt;sup&gt;#&lt;/sup&gt;</td>
<td>F&lt;sup&gt;#&lt;/sup&gt;-A-C-E&lt;sub&gt;b&lt;/sub&gt;</td>
<td>F&lt;sup&gt;#&lt;/sup&gt;-A-C-E&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>d measure 22</td>
<td>d measure 22</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Theme</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Coda</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>2/4 meter</td>
<td>2/4 meter</td>
<td>6/8 meter</td>
<td>2/2 meter</td>
</tr>
<tr>
<td></td>
<td>* Adagio</td>
<td></td>
<td>* Var VI</td>
<td>* Var V</td>
</tr>
</tbody>
</table>
Table 2-1 continued. Opus 34, the internal links and cross-references.

<table>
<thead>
<tr>
<th>Var. IV</th>
<th>Var. V</th>
<th>Var. VI</th>
<th>Coda-Adagio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 3rd down E♭ major</td>
<td>3rd down C minor</td>
<td>tonic F major</td>
<td>tonic F major</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 D-F-A♭-C♭</td>
<td>D-F-A♭-B</td>
<td>prominent D♭ in Coda</td>
<td>E-G-B♭-D♭</td>
</tr>
<tr>
<td>4 b♭_g-e♭ upbeat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 3/4 meter</td>
<td></td>
<td>6/8 meter * Var II</td>
<td></td>
</tr>
<tr>
<td>6 e♭_3 measure 20</td>
<td>e♭_3 measure 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 e♭1-g₁ measure 22</td>
<td>e♭-g upbeat</td>
<td>Theme *</td>
<td></td>
</tr>
<tr>
<td>8 3/4 meter</td>
<td>2/4 meter * Var III</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
eliminate Variations I and III, producing the key scheme F-Bb-Eb-c (changing to C)-F and the root motion |5]|5]|3]|5. Both of these plans display logical tonal movement, and it also appears that several links could be conceived as shown in Example 2-53.

Example 2-53. Two hypothetical variants of the variations order in Opus 34.

Plan I

Adagio

Thema

Var.I

Var.II

Var.III

Var.IV

Plan II

Adagio

Thema

Var.I

Allegro ma non troppo

Tempo di Menuetto

Var.II
Example 2-53 continued.

Could either one of these two plans represent a satisfactory solution, especially since each appears to have logical tonal and melodic links? For a first-rank composer as concerned with unity as Beethoven, the answer must be a resounding "no." First, in Beethoven's scheme the strongest tonal movement (from C major down by fifth to F major) occurs between the last two variations and nowhere else. In both of the hypothetical models, however, tonal movement by fifth downward occurs between other variations; as a result, they do not have as strong a sense of tonal closure as does Beethoven's model. Second, the internal arrangement of the hypothetical sets destroys the diminished seventh chord's role as a subtle link between pairs of variations. Third, the chiasmic metric structure suggested in the discussion of Variation IV would altered. It is clear, then, that Beethoven's arrangement constitutes an integrated structure which cannot be altered without adversely affecting its unity.
CHAPTER III

FIFTEEN VARIATIONS WITH FINALE ALLA FUGA, OPUS 35

Introduction

Opus 35 was Beethoven's most ambitious independent variation set for piano up to 1802; it contained both a larger number of variations than any of his previous sets and a complete fugue. He remarked in a letter of October 18, 1802, to Breitkopf and Härtel that this work and Opus 34 were composed in an entirely new manner. Unlike his previous sets, he considered these two works sufficiently substantial to merit their own opus numbers.¹

Opus 35 was one of Beethoven's first variations sets to be relatively well received by the public and critics alike. The editor of the Allgemeine Musikalische Zeitung not only dedicated most of the February 22, 1804, issue to it, but also took the unprecedented step of honoring Beethoven by placing his portrait on the cover.²

The theme of this work apparently held an unusual fascination for Beethoven, since he used it in four works. It first appears in 1801 as the seventh of the Twelve

¹Opus 35 is actually the earlier of the two works.

Contredances for Orchestra, WoO 14, and later in the same year as the finale of The Creatures of Prometheus, Opus 43. Opus 35, composed in 1802, marks its third use, and the finale of the Eroica Symphony, Opus 55, its fourth in 1804. Ludwig Misch believes that the composer continued to return to the theme not only because he was fond of it but also because he felt that he had not exhausted all of its possibilities.

Two characteristics distinguish Opus 35 from all other variation sets of the period. The first is the introduction consisting of the bass of the theme and three cantus firmus variations; the second is the fugal finale. In a letter dated April 8, 1803, to Breitkopf und Härtel, Beethoven stated that he did not consider the fugue to be a variation.

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3The manuscript of "Prometheus" is not extant. The work was first published as Opus 24 as an arrangement for piano by Artaria in 1801. Confusion occurred when Mollo mistakenly published the F Major Violin Sonata as Opus 24 instead of Opus 23, No. 2, its original designation. When Hoffmeister and Kühnel published the parts for the overture in 1804, they reassigned it as Opus 43 to avoid confusion. This number was later applied to the whole work.

There also has been confusion as to which was composed first, WoO 14 or Opus 43. Nottebohm was of the opinion that Opus 43 was the earlier of the two; however, current scholarship suggests that WoO 14 was composed first. See Georg Kinsky and Georg Halm, Das Werk Beethovens: Thematisch-Bibliographisches Verzeichnis seiner sämtlichen vollendeten Kompositionen (Munich: G. Henle Verlag, 1955), 450 and 102-104.

Opus 35 is Beethoven's first set to contain a complete fugue.\(^5\) Imitative sections do occur in earlier sets such as *Tänze* und *Scherzen*, *La stessa la stessima*, and *Kind willst du ruhig schlaffen*, but these are fugatos rather than true fugues.\(^6\)

No piano variation set by Haydn or Mozart contains a similar introduction and fugue; as a result, Beethoven's composition must have been truly striking for its time. His fugal finale seems especially appropriate since he was intimately acquainted with many of Bach's works, particularly *The Well Tempered Clavier*. Charles Rosen believes that the fugue represents Beethoven's attempt to enlarge eighteenth-century forms by referring back to earlier models such as Bach's *Passacaglia* and *Fugue in C Minor*.\(^7\)

Since both Opus 35 and the last movement of Opus 55 are based on the same theme, the relationship between the two should be investigated. Is one simply a different version of the other, as Rosen seems to suggest?\(^8\) A careful

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\(^5\)Ibid.


\(^8\)Ibid., 437-438. Although Rosen does not explicitly state the relationship between the two, he erroneously leads
examination reveals that the finale of Opus 55 bears only a superficial resemblance to Opus 35 and must be considered an independent work. Opus 35 contains fifteen variations (or twenty if the three bass variations and the two variations in the Andante con moto are included) and a fugue; the finale of Opus 55, on the other hand, contains only four variations (or six if the two bass variations are included) and two fugatos. In addition, the performance medium of each differs greatly. As Donald Francis Tovey stated, "The style and treatment of the variations in the Eroica Symphony are far more gorgeous than that of in the Pianoforte Variations, Op. 35, but the pianoforte variations contain many transformations of the theme that would be entirely unrecognizable as such if they occurred in the Symphony." Tovey believed that the thematic way of listening to sonata themes extends to variations as well, so that variations in

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9Kurt von Fischer, "Eroica-Variationen op. 35 und Eroica-Finale," Schweizerische Musikzeitung, XC (1949), 282-286. Fischer analyzes both works and concludes that the differences are so numerous that each must be considered an independent work. He goes on to state that Opus 35's overall form suggests the three movements of a sonata cycle and that Opus 55's form suggests first-movement sonata form.

10Donald Francis Tovey, Beethoven (London: Oxford University Press, 1965), 124.
sonatas tend to adhere more strictly to the theme and often involve melodic embroidery; independent sets, on the other hand, may contain some variations that display more freedom.

Opus 35, unlike Opus 34, maintains the key of $E^\flat$ major in a majority of the variations; however, a few exceptions do occur. For example, the relative key, $c$ minor, is the basis of Variation VI and the coda of Variation XV. Variation XIV is in $e^b$ minor, and this key is suggested in Variations VIII and X. The fugue is an important source of tonal movement; it provides a relief to the tonal rigidity and monotony set up by the variations. Furthermore, it is precisely the fugue’s tonal instability that necessitates the stable \textit{Andante con moto}.

\textit{Introduzione col Basso del Thema}

Opus 35 has an unusual opening consisting of a single chord followed by only the bass of the theme. These two elements contrast strongly; the former is marked fortissimo and has an eight-part texture whereas the latter is pianissimo and monophonic.

The beginning of Opus 35 bears a resemblance to that of Opus 55. Both rely on unusually short introductory gestures. Example 3-1 presents the opening of each.

The opening chord foreshadows the theme in two ways. First, $g^2$ is the highest note of the chord and is what Heinrich Schenker would refer to as the theme’s Kopfton or
Example 3-1. The beginnings of Opus 35 and Opus 55

Allegretto vivace

Op. 35
Komponiert 1802

Allegro con brio

Op. 55

head-note. Second, the thick texture of each chord is similar. The following analysis will demonstrate that the theme is a culmination of the textural growth begun by the single-part presentation of the theme's bass.

A unique aspect of Opus 35 is the appearance of the bass without the soprano or harmony. This presents difficulties to the uninitiated listener. Upon first hearing, the listener in all likelihood assumes that he is listening to the theme's soprano melody rather than that of the bass. The following three cantus firmus variations on this portion of the theme provide no additional information that might contradict this contention. Surprisingly, the Thema itself may be mistaken for a fourth cantus firmus variation. It is only with the appearance of the first variation of the
Thema that the listener can comprehend the relationship of the theme's soprano and bass to one another.

The bass of the theme is noteworthy for several reasons. It contains unexpected whole rests in measures 9 and 11; these are especially striking, especially since the line is so exposed. The melody is unusually simple. Each of the first four notes, for example, occupies an entire measure. As a result, the unaccompanied bass seems somewhat plain and even uninteresting by itself, yet it is this very characteristic which allows Beethoven great compositional freedom. Interestingly, this bass as well as that of Opus 43's finale both begin with the notes $e^b-b^-b^-B^-e^b$, whereas that of WoO (Werk ohne Opuszahl) 14 begins with $e^b-b^-b^-b^-e^b$. Rosen refers to Opus 35's bass as "emphatically awkward" and believes that Beethoven designed it to prevent any suggestion of the Baroque passacaglia.

The fermata in the measure 12 reappears in every variation and provides a degree of unpredictability as to what will follow. For example, the cadenzas which occur in the A due and in Variation II are an elaboration of the held note. Does the cessation of movement caused by the fermata...

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11 Irving Kolodin, *The Interior Beethoven* (New York: Alfred A. Knopf, 1975), 134-137. The author discusses the significance of this alteration. It not only lends more interest to the bass, but also reinforces the contention that WoO 14 was composed before Opus 43.

contribute or detract from the unity of the individual variations and the entire set? One explanation is that although the rhythmic motion does indeed temporarily cease, the harmonic motion does not; the unstable dominant is suspenseful since it requires a resolution.

The form of theme's bass is identical that of the upcoming "Thema." There are two repeated sections; the first is an eight-measure phrase and the second two four-measure phrases. The last four measures, although consisting of new material, do resemble measures 3-6; as a result, a form that is suggested | |: A : | |: B 1/2A' : | |, also known as rounded binary. The first eight measures begin on the tonic and end on the dominant; the second eight measures begin on the dominant and end on the tonic. The harmonic progression in measures 1-4 of the Thema, I-V-V-I, is mirrored by the bass's first four notes, e♭-b♭-B♭-e♭.

The A section displays two additional characteristics. The first is a noticeable rhythmic acceleration; measure 1 contains half-notes, measure 5 quarter-notes, and measure 7 eighth-notes. The intervallic change is also noteworthy. As illustrated in Example 3-2, measures 1-4 involve large leaps by fifth (and its inversion, the fourth) whereas measures 5-8 make extensive use of half-steps.

The bass of the theme suggests a degree of mirror symmetry due to the occurrence of the softest dynamics and largest leaps at its beginning and the end. More striking

is the rhythmic symmetry; the acceleration that occurred in measures 1-8 suggests a retrograde in measures 9-16.

Example 3-3. Opus 35, the symmetrical melodic and rhythmic aspects of the bass.

Surprisingly, the bass melody as presented in the introduction is not strictly maintained in any of the variations or in the complete theme itself. For example, its appearance is marked by a gradual downward register shift. One explanation is that this helps to propel the
melody to the final Eb, the lowest note. However, this shift is avoided in the rest of the work by placing measures 9-16 an octave higher, as Example 3-4 demonstrates:

Example 3-4. Opus 35, A due.

The appearance bass of the theme by presented by itself and its appearances in the subsequent variations differ in that the $A^b$ in measure 12 of the former often is avoided in at the same position in the latter. Example 3-5 reveals the reason: an $A^b$ in the bass would provide an unacceptable
dissonance against the $a^2$ located at the same position in the soprano of the theme. As we shall see, however, the $A^b$ will reappear in the fugue as an essential unifying factor.

Example 3-5. Opus 35, measures 12-16 of the Thema.

A Due

The $A$ due is a cantus firmus variation. The counterpoint to the theme's bass bears a striking correspondence to the theme's soprano, even though the latter does not appear until after $A$ tre and $A$ quattro variations.\textsuperscript{13} The

\textsuperscript{13}Jürgen Uhde, Klavierstücke und Variationen, Vol. I of Beethovens Klaviermusik (Stuttgart: Philipp Reclam, 1968), 361. My observations on the $A$ due conflict with those of Uhde who maintains that this variation avoids any suggestion of the theme's soprano.
counterpoint in this variation has the closest relationship of the three cantus firmus variations to the soprano of the theme.

Example 3-6. A comparison of the soprano in the A due and the Thema.
Example 3-6 continued.

The A due displays two distinctive features: chromaticism and syncopation. The former is introduced in measure 2 by the c♯1 nonharmonic tone's resolution to the d1. As may be seen in Example 3-7, movement by semitone occurs in every measure thereafter; it has its roots in the semitone motion in measures 6-8 of the bass of the theme. This movement becomes more prominent in measure 7 (b♭1-a1-a♭1-g1) and finally culminates in the chromatic scale in measure 12. Furthermore, semitone motion is suggested by the outline f1-e1-e♭1-d1 in measures 8-10 and 11-12.14

The frequent syncopation of the counterpoint helps to unify the A due. It also provides a cross-reference to the appearance of the soprano of the theme in measure 51 of the fugue. Finally, the emphasis on syncopation provides one explanation for why Beethoven did not compose a longer

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14 The e1 is a nonharmonic tone; nevertheless, it is prominent due to its placement on the downbeat.
Example 3-7. Opus 35, the chromaticism in the A due.

chain of semitones in measures 6-8. As Example 3-8 shows, it would have been easy for Beethoven to compose a longer descending chromatic line in measures 6-7 by omitting the use of syncopation.

Example 3-8. Opus 35, A due, measures 6-8 recomposed.
A metric reduction of the "A due" is provided in Example 3-9. The harmonic progression foreshadows that of the theme; it also provides the basis for the following two variations. Measures 6-8 even suggest the theme's secondary dominants. Also noteworthy is the transferred resolution of the A♭ in measure 11 to the G in measure 13.

Example 3-9. Opus 35, a metric reduction of the A due.

A short cadenza and tempo change occur in measure 12; these have an influence on the variations which follow. As we shall see later in this chapter, a cadenza and tempo change also occur in Variation II.
A Tre

Although the title suggests three real parts, there are actually only two; the third one is suggested by register shifts in the left hand. As we shall see, this technique also appears in Variations VIII and XI. Example 3-10 illustrates this shift of register. It may also be observed from this example that bass of the theme is an octave higher than in the A due; as a result, it is a middle part rather than the lowest.


The harmonic progression suggested in the A tre is nearly identical to that of the A due. The somewhat nebulous secondary functions in measures 6-8 of the previous variation are more easily identified here. This is illustrated in Example 3-11.

The halting motion created by the extensive use of syncopation in the A due gives way to the uninterrupted
Example 3-11. Opus 35, a comparison of measures 6–8 of the A due and the A tre.

movement by eighth notes. The latter is further enhanced by the consistent flow of the phrases across the bar-line.

Example 3-13 a rhythmic subtlety of the A tre: the acceleration in the dialogue between the upper and lower voices. This process culminates in measures 9-12 in which all three voices are heard simultaneously. This rhythmic acceleration complements the rhythmic acceleration which occurs in the first eight measures of the theme.

Example 3-13. Opus 35, A tre, measures 1-2, 5-6, and 8.

As may be seen in Example 3-14, the soprano outline of the upcoming Thema is not as clearly present in this variation as it was in the A due. If the A due foreshadows the theme's soprano and the A tre does less so, will the A quattro continue the trend? The study of the next variation will indeed support this assumption.
Example 3-14. Opus 35, the questionable implication of the soprano of the theme in measures 1-4 of the A tre.

This variation continues the migration upward by octave of the thematic bass begun by the A due variation. As a result, this melodic line becomes the highest as well as the most prominent voice. Because of this upward movement, it is clear that this variation as well as the two previous ones constitute a unified group, the individual parts of which have a specific order.

Another element which unifies this group is the rhythmic acceleration which culminates in the A quattro.

The introduction moves largely in half-notes along with some quarters and eighths, the A due in eighths constantly interrupted by syncopations, the A tre in flowing eighths, and the A quattro in sixteenths.
A final element which tends to define the position of each musical unit is textural expansion. The introduction is basically a single voice doubled in octaves; the A due is two-voiced, the A tre three-voiced, and the A quattro four-voiced.

Example 3-15 is a metric reduction of this variation. The harmonic structure is closely related to that of the previous two variations. The secondary dominants that were previously implied in measures 6-7 are now explicit.

Example 3-15. Opus 35, a metric reduction of the A quattro.
Example 3-15 continued.

The "A quattro" is similar to the "A tre" variation in that neither clearly suggests the upcoming outline of the theme’s soprano in measures 1-8; nevertheless, there are two hidden references. As may be seen in Example 3-16, the inner parts of the first two measures of the A quattro seem to suggest the first four notes of soprano of the Thema. Furthermore, measures 9-10 also foreshadow the theme. Both the A quattro and the theme make use of a lower neighbor tone figure to begin the B section in measure 9. The shape of measures 9-10 is remarkably similar in both.

Example 3-16. Opus 35, a comparison of measures 1-2 and 9-10 of the A quattro and the Thema.
Example 3-16 continued.

The soprano is rhythmically more animated than the bass and displays a certain independence from it. The soprano introduces two new and distinctive rhythms: a dotted quarter followed by an eighth, and two sixteenths followed by an eighth. The latter links the theme to the A quattro. Furthermore, with the exception of measures 5-6, none of the soprano's note values are identical to those of the bass. Measures 9 and 11, empty in the bass, contain sixteenth-note scales in the soprano. It may be conjectured that these scales purposely lack a memorable melodic profile so that they may be extensively varied or omitted in subsequent variations. Ironically, measures 9-12 also suggest a grouping based on increasing melodic definition. These measures are empty in the introduction's bass. The A due introduces the interval from f¹ to a⁰. The A tre expands this with the movement of B⁰ to a⁰ in the bass. The A
quattro displays a sixteenth-note scale which moves from $b^b$ to $ab^1$. Finally, the entire soprano emerges in the theme.

An important characteristic of the soprano is its intervallic content; the third is the dominant force. The metric reduction shown in Example 3-17 displays the melodic aspect of the soprano. The thirds help explain why Beethoven moves from $e^b^2$ to the nonharmonic $g^2$ instead of the chord-tone $f^2$ in measure 15. The reduction also illustrates that the scale in measure 9 is reducible to a series of thirds.

Example 3-17. Opus 35, Thema, a metric reduction displaying the prominent use of thirds.
The theme's texture of five or more parts represents the culmination of the textural expansion that began with the basso theme. It provides a logical order to the units that would be destroyed if one were removed or placed in a different position. The concept of addition of voices to the texture is significant for another reason: it foreshadows the fugue, the exposition of which is based on the addition of voices.

An unusual aspect of the theme is the upward rather than downward movement of the $\text{b}^2$ in measures 12-13. As shown in Example 3-18, this suggests a voice exchange, especially since the resolution of the seventh of the dominant chord, $G$, occurs in the bass rather than the soprano.

The highest note, $c^3$, is in measure 14. It occurs late in the theme and is left registrally isolated as it is in many of the variations. Why does Beethoven place this note so late, and where is its registral connection? Many small-scale connections may be found, such as to the prominent $b^2$'s in measures 4-6 of Variation I. More important, however, is the long-scale connection to the penultimate chord shown in Example 3-19.

Example 3-19. Opus 35, the registral connection of $c^3$ of the Thema to $b^2$ in the Finale.
Variation I

The chief characteristic of this variation is the figural embellishment of the theme's soprano. The harmonic progression is essentially the same as that of the theme. The bass melody and accompanying chords also closely follow those of the theme; however, it may be observed in Example 3-20 that the rests which normally occur in measures 9 and 11 of the bass of the theme have been replaced by eighth-notes.

Example 3-20. Opus 35, Variation I, measures 9-12.

Three types of figuration help to unify this variation internally: (1) the arpeggio, (2) neighbor tone, and (3) appoggiatura. The arpeggio first appears in measures 1 and 4; it reappears in broken octaves throughout the rest of the variation, as in measures 6, 9-12, 13-14, and 16. It also provides a link to the next variation which, as we shall see, also makes extensive use of this figure.

The neighbor tone appears frequently and may be found in measures 1, 3, 4-5, 8-9, 13-14, and 14-16. Like the
arpeggio, this figure links this variation to the next one; however, Example 3-21 illustrates that the neighbor tone also relates this variation back to the alto and bass of the theme in measures 5-6.

Example 3-21. Opus 35, the neighbor-tone figure in the Thema, Variation I, and Variation II.

The appoggiatura is the least important of the three unifying figures for two reasons. First, it is not independent, but always appears in conjunction with the neighbor-tone figure. Second, it does not directly link this variation with the complete theme or Variation II. We will have to wait until Variation IX for the appoggiatura's reappearance.
Variation II

The arpeggiation characteristic of the previous variation is continued and expanded in this one, thus providing a link between the two. Furthermore, the opening arpeggio in the soprano of the A due suggests a relationship to Variation II; the first four pitches of each, $b^b-e^b-g-e^b$, are identical.

Example 3-22. Opus 35, measure 1 of the A due and Variation II.

This variation does not retain the thematic soprano and bass outlines as clearly as the previous one; they may be concealed or absent. Measures 5-8 are especially noteworthy in this regard. As may be seen in Example 3-23, the soprano of the theme is absent while the bass of the theme is clearly prominent and migrates from the left hand in measure 5 to the right in measure 6.
Example 3-23. Opus 35, measures 5-8 of the Thema and Variation II.

The rhythm of the left hand, three eighth-notes slurred to the downbeat of the next measure, provides a cross-reference to the "A tre" which also employs this phrasing in measures 13-16. This is shown in Example 3-24.

Variation III

This variation maintains the basic harmonic structure of the theme while continuing to obscure the bass and soprano outlines. Variations I through III are arranged in order of increasing thematic vagueness. For example, the theme presents the material, Variation I ornaments it with light figuration, Variation II increases the amount of figuration while retaining less of thematic outline, and Variation III continues this trend to the point of almost losing the thematic outline.

One of the chief characteristics of this piece is the consistent use of right-hand chords on the off-beat; this will link this variation with measures 9-16 of the next one.

Although Variations II and III appear dissimilar, they are linked by the consistent use of three-note groups in the right hand. Indeed, a metrical reduction of measures 1-3 of Variation II makes this relationship clearer. Furthermore, the articulation in the left hand of three eighth-notes slurred across the bar-line to an eighth in Variation II is similar to the phrasing in measures 2-3 and 4-5 of Variation III. This is illustrated in Example 3-25.

Variation III is also related to more distant variations. For example, the rhythm of two sixteenths followed by an eighth also occurs in the A quattro. Similarly, Example 3-26 demonstrates that Variation III is related to the A due by the emphasis on the half-step.
Example 3-25. Opus 35, measures 1-3 of Variations II and III.

Example 3-26. Opus 35, Variation III, the semitone motion in measures 1-8.

The c\#o chord with B\textsuperscript{b} pedal in measure 2 is an appoggiatura chord. It as well as the following one (D major / B\textsuperscript{b} pedal in measure 4) introduce an element of chromaticism. Is the c\#1 in measure 2 foreshadowed by the
c\#\textsuperscript{2} in measure 15 of Variation II? If so, this pitch tends to provide a cross-reference for these two variations.

Example 3-27 shows that the embellishment of d by c\# first appears, however, in measure 2 of the A due variation; as such, it provides a cross-reference to Variation III.

Example 3-27. Opus 35, a comparison of measures 1-4 of Variation III and the A due.

The harmony changes on the beat for the first eleven measures. However, Example 3-28 illustrates that this pattern is altered in measures 12-16; the harmonies are syncopated and the rate of change accelerates.

Example 3-28. Variation III, measures 12-16.
Variation IV

This variation suggests an etude in rapid left-hand sixteenth-note scales and arpeggios. It is similar to the previous one in that the theme's soprano and bass outlines are often disguised or absent. One part may even suggest another as in measures 6-8 where the soprano takes up a fragment of the theme's bass.

Example 3-29. Opus 35, Variation IV, measures 5-8.

An interesting variation of the theme's outline occurs in the B section, measures 9-12. The only connection of the soprano with the theme is the retention of the $a^\flat$'s; whereas these notes occur in the theme only after being preceded by ascending scales, they occur first in this variation and are followed by descending thirds. The $B^\flat$ bass notes of the theme in measures 9-12 are embellished here by sixteenth-note arpeggios; this is shown in Example 3-30.
As previously mentioned, each section of the theme is clearly defined and the form resembles rounded binary. In this variation, however, the last two sections (measures 9-12 and 13-16) are more similar than dissimilar. This is due to two factors. First, the placement of the right hand chords on the beat, a characteristic of the A section (measures 1-8), does not recur in the 1/2A' section (measures 13-16). Second, left-hand scales in the A section also do not return. As may be seen in Example 3-31, if it were not for the fermata and quarter notes in measure 12, the distinction between the B and 1/2A' would not be clear.
The harmonic progression, unlike the melodic lines, precisely follows that of the theme. Even such details as the vii\(^6\)/V in measure 7 and the seventh in the ii\(^6\) in measure 14 are retained.

The placement of the right hand chords on the beat in measures 9-16 has an effect other than just differentiating the A from the B section: it also suggests a underlying secondary metric level. Example 3-32 shows that this characteristic links this variation with the previous one; as we shall see, it also links it with the next one.

Example 3-32. Opus 35, the secondary rhythmic link between Variations III and IV.
Variation V

This variation is a simple melodic variation of the soprano and bass. This provides a noticeable contrast to the treatment of the previous two variations in which the thematic outline was not always readily apparent. The bass, which in the previous variations appeared in skeletal form, is embellished here so that it becomes a cantabile melody.

Syncopation is an important unifying element in this variation and is most obvious in the last four measures. Beethoven highlights three of these syncopations by giving them sforzando markings. Another example is the $a^b_2$ marked with a fermata in measure 12. The syncopation suggests a second rhythmic stratum. Example 3-33 reveals that this layer is very similar to those demonstrated in the previous two variations and links them together; in addition, it provides a cross-reference to the $A$ due.

Example 3-33. Opus 35, Variation V, the secondary rhythmic stratum.
Example 3-33 continued.

The bass in measures 1-12 of Variation V differs from that of the Thema in that the former has been transformed into a more cantabile line by the addition of a few notes. The harmonic progression in measures 5-7 is slightly varied and simplified; this is especially noticeable since the preceding variation followed the theme's harmonic plan closely. The next variation will provide even more harmonic variety by retaining the soprano of the theme while beginning in the key of the relative minor. As a result, Variations V and VI are weakly linked by their emphasis on harmonic exploration.

Variation VI

This variation is the first one to begin in a key other than the tonic. Does this represent a mere reharmonization or something more? Why does it occur here? As Example 3-34 shows, this variation roughly divides the set into two equal portions.
Example 3-34. Opus 35, Variation VI's position in the set.

This variation is the only one to have a varied repeat for the measures 9-16 and not for measures 1-8. This is necessary for two reasons: (1) the first cadence is in C minor while the second is in E♭ major, and (2) the imitating voices exchange roles the second time.

Measures 9-12 are important for two reasons. First, the aforementioned freedom which characterizes these measures allows c1 to replace the expected b♭ at the beginning of the scale. Second, the next variation is a canon, a strict form of polyphony, and Variation VI's imitation foreshadows it. These points are illustrated in Example 3-35.

Variation VII

The title "Canone all'octava" is somewhat misleading, since only the first and last section of the variation's

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15 To make this link obvious, Beethoven physically joins the two variations by providing a scalar bridge between the two.
Example 3-35. Opus 35, the contrapuntal foreshadowing of Variation VII in measures 9-12 of Variation VI.

Canone all' ottava

A B 1/2A' form are canonic; the middle section provides a sharp contrast with its low register, thick chords, and fortissimo louder marking.

Canonic writing is harmonically confining in the sense that the subject itself dictates the harmony. As a result, this variation takes liberties with the theme's harmonic progression. The chords in the first eight measures of the theme are I V₇ I V₅° I V₆°/ii II V₅° I VII₉/V V; in the canon it is I V I V I V I V.

In addition to the harmonic simplification that this variation demonstrates, Beethoven also takes liberties with the soprano and bass outlines of the theme. Indeed, it is often difficult to determine which of the two voices is being represented in the canon. This variation is an example of what Tovey meant by variations in independent
sets displaying greater freedom; some may follow only the phrasing or harmonic progression of the theme.

The canonic writing reveals two additional points. As may be seen in Example 3-36, the first is an awkward passage in measure 2 which contains unresolved dissonances. If the $e^b_2$ is considered to be consonant, then both the $d^3$ and $f^3$ are left unresolved. If the $e^b_2$ is considered to be dissonant and the $d^3$ and $f^3$ consonant, then the implied harmonic change from I to V would occur between the first and second beat, an unlikely possibility.

Example 3-36. Opus 35, Variation VII, measures 1-3.

The second point is that a plagal cadence is suggested in place of the usual authentic cadence in measures 15-16; this occurs because last five soprano notes (c-$e^b$-g-f-$e^b$) and rhythms of the theme are retained. In addition, the metric reduction provided in Example 3-37 displays $e^b_2$, $c^2$, and $a^b_2$ are the primary notes in measure 14.
Example 3-37. Opus 35, Variation VII, a metric reduction of measures 13-16.

The sectional divisions of the rounded binary form are more obvious in some variations than in others. Variation IV is an example of a variation in which the divisions that are not clearly differentiated; the sixteenth-note rhythm and the texture remain relatively constant throughout. On the other hand, Example 3-38 illustrates that the divisions in Variation VII are unmistakeable. The A and 1/2A' sections are polyphonic whereas the B section is chordal. The texture changes from the two voices of the outer sections to the seven-voice chords of the middle section. Finally, the return of A in measure 13 is further emphasized by the exact repetition of the opening three notes of the variation, $b^2 - g^2 - e^b3$.

Variation VIII

Measures 1-8 of this variation are similar to the A tre in that both use two voices to suggest a three-part texture. Example 3-39 illustrates that the soprano and bass of the theme are often incomplete or absent. Tovey would regard this variation as unrecognizable in Opus 55.


![Musical Example]

The harmonic progression differs subtly from that of the theme. For example, a vii\(^7\) substitutes for the V\(^7\) in measures 2-3. The progression is also simplified; in place of I \(V_v^6/\text{ii} II V_v^6\) I vii\(^{07}\)/V I\(^6\) V, Variation VIII employs I V vii\(^9\)/V V.

As Example 3-40 displays, the third is given special prominence, particularly in the highest voice. For example, \(E^b-g^2, f^2-d^2, e^b2-a^b1, g^1-b^b1\) occurs in the left hand in measures 1-4. The third appears again in measures 9-10 with \(f^2-d^2\). Finally, the emphasis on this interval is responsible for not only the parallel thirds in measures 11-14, but also for the sixths—their inversion—in measures 14-16. The third will provide for link to the next variation.
Example 3-40. Opus 35, Variation VIII, the emphasis on the third.

The chromatic line $a^2-b^2-b^2-c^3$ appears in measures 12-14. Example 3-41 reveals that it also appeared in the previous variation and serves as a link between the two.

Example 3-41. Opus 35, the chromatic link between Variations VII and VIII.
Variation IX

The bass of the theme is clearly present in this variation whereas it was not in the previous one; however, the soprano of the theme is difficult to follow. The grace notes in the left hand outline the bass of the theme; this is a practice which did not become common until the Romantic period. (An example is Variation XXIV of the Handel Variations by Johannes Brahms.) Each grace note precedes a $B^b$ which serves as a dominant pedal point in measures 1–12. The use of pedal point is a characteristic that will link this variation to the next.

The right hand has constant third doublings; this is especially apparent in measures 5–8. The third links this variation with the previous one. In addition, there are many leaps, some requiring a high degree of pianistic skill to execute as Example 3-42 illustrates:

Example 3-42. Opus 35, Variation IX, measures 5–8.
The reduction of measures 1-8 provided in Example 3-43 reveals that the harmony basically changes once per measure (with the exception of measures 5-7) and that the fundamental soprano movement is from $g^2$ to $f^2$. The reduction also shows the presence of the neighbor-tone motive.

Example 3-43. Opus 35, Variation IX, a metric reduction of measures 1-8.

Example 3-44 shows that the bass introduces a new motive in measures 9 and 11. It is represented by the notes $B^b-c^b-B^b-A^b-B^b$ and will be referred to as the turn motive. The $c^b$ which is the top note is significant for, as we shall see, it will play an important role in foreshadowing subsequent variations.

Example 3-44. Variation IX, the turn in measures 9-11.
Variation X

This variation not only contrasts with the previous one but also complements it. Whereas the theme's bass is clearly present and the soprano is not in Variation IX, the soprano is present in measures 1-8 and the bass is entirely absent in Variation X. The right hand consists of arpeggio figuration. The left hand consists of two consecutive pedal points, the first on $B^b$ and the second on $E^b$. This pedal point usage strongly links this variation to the previous one. The metric reduction in Example 3-45 makes these characteristics clear.

Two additional characteristics are chromaticism and the diminished triad. The former appears as double appoggiaturas in measures 2 and 4:

$$\text{c}^\# - \text{d} \quad (\text{m. 2}) \quad \text{and} \quad \text{d}^\# - \text{e}^b \quad (\text{m. 4})$$

The appoggiaturas provide a cross-reference to Variation III. Chromaticism and the diminished chord produce the prolongation of $\text{vii}^0/V$ in measures 5-7 as Example 3-46 illustrates. Both characteristics appear again in measures 13-15.

Both the first and second endings of the first part display the turn which first appeared in the Variation X. This figure will also provide a link to the next variation. In addition, the use of $c^b2$ in measures 9-12 is unexpected.
Example 3-45. Opus 35, Variation X, a metric reduction.

is unexpected and may appear as an upper neighbor tone to the $b^b$. It becomes clear in measure 12, however, that this $c^b$ is more important than the $b^b$ since it serves as the seventh of an implied vii° chord. Furthermore, it is the longest note and is emphasized by a fermata. Finally, this note links this variation with the Variations X and XI.

The $c^b_3$ in measure 10 is registrally isolated until its connection to $b^b_2$ in measure 11. This $c^b_3-b^b_2$ motion and the turn not only provide a link to the previous variation, but also to the next one as Example 3-47 demonstrates.

Example 3-47. Variation X and XI.

Why does Beethoven emphasize the foreign $c^b$ when he seemingly could have just as easily employed $c$? We have already observed that this note links this variation to the previous two. Another explanation is that the $c^b$ foreshadows the key of $e^b$ minor which, as we shall see, appears in Variation XIV.
Variation XI

One characteristic that is immediately apparent is the frequent change of register in the right hand. This hand not only leaps within the soprano ($b^2_{b2}$-$b^{1}_{b1}$-$b^2_{b2}$ in measures 2-6) but also within the bass ($e^{3}_{b3}$-$A^3_{b}$-$B^3_{b}$-$B^3_{bb}$-$E^3_{b}$ in measures 13-16). This variation complements no. VIII which employed large register changes in the left hand.

The soprano and bass of the theme are treated with great freedom. For example, the soprano only occasionally displays a prominent thematic note such as the $d^2_{2}$ in measure 2, $e^2_{b2}$ in measure 4, the $b^2_{b2}$'s in measures 5-6, and the $a^2_{b2}$ in measure 11. Furthermore, the soprano is altogether absent in measures 6-8 and 14-16 when the right hand is in the bass register. The bass of the theme is not carefully preserved for much of the piece; however, it does appear in measures 13-16 as may be seen in Example 3-48.

This variation makes extensive use of two forms of the turn: first, as three triplet sixteenth-notes follow by an eighth-note in measure 1; second, as an ornament in measure 13. This figure has a strong unifying effect; Example 3-49 shows that it provides a vital link to Variations X and XI.

Example 3-49. Opus 35, the turn in Variations IX, X, and XI.

The left hand has much obvious note repetition. Some striking repetitions occur in the right hand as well, not only on the surface as in measure 1 with the four repeated b^b notes, but also on a broader level, such as the emphasis on the general pitch class b^b in measures 1-8. The latter suggest a hidden pedal point, and the reduction in Example 3-50 makes this clear. The pedal point is significant because it provides a strong link between this variation and the previous two.
Example 3-50. Opus 35, Variation XI, a metric reduction.
Variation XII

This variation is similar to Variation IX in that it makes extensive use of third doublings. The theme's bass is discernible in measures 1-4 and 10-16; the soprano appears briefly in measures 5-6, 9-10, and 13-14. The harmony is close to that of the theme; even the secondary functions in measures 6-8 are retained.

While all of the variations begin with some form of an upbeat, most do not systematically retain it to prepare every internal phrase. This characteristic links this variation with the previous two. Its employment here is significant because of the resulting harmonic syncopation.

The opening $b^b$ is significant because it links Variations IX-XIII together as shown in Example 3-51. Furthermore, the $b^b - e^b$ motive at the beginning of Variation XII strengthens this tie by appearing in Variations IX-XI.

Example 3-51. Opus 35, the common use of $b^b$ as the opening note and the $b^b - e^b$ motive.
Measures 9-12 contain two-measure phrases; measures 13-16 are displayed in Example 3-52 and contain only half-measure phrases. Measure 15 is striking since the characteristic pattern of harmonic syncopation is broken by the shorter duration of the $I_4$ chord.

Example 3-52. Opus 35, Variation XII, measures 12-16.

Variation XIII

The similarities between this one and Variation IX are numerous. Both make extensive use of pedal points, the former in the uppermost voice and the latter in the tenor. Both make extensive use of grace notes. Finally, both selections are characterized by numerous difficult leaps.

A striking feature of this variation is its thick sonority: the accompaniment's six-note chords added to the soprano and bass produce a thick eight-note texture which strongly resembles that of the theme. Furthermore, this variation, like the complete theme, represents the culmination of a textural expansion. This growth begins with the
single attack points of Variation X and continues with the predominant three-note texture of Variation XI and the four-note texture found in measures 7-8 of Variation XII.

The metric reduction given in Example 3-53 displays the static nature of Variation XIII. It also illustrates the simplification of the harmonic scheme, particularly in measures 6-8 which dispense with the V/ii, ii, and I chords of the theme.

Example 3-53. Opus 35, Variation XIII, a metric reduction.
Variation XIV

This variation is noteworthy for the use of the parallel minor and the psychologically slower tempo resulting from the use of longer note values; both characteristics incorrectly suggest to the uninitiated listener that this might be the penultimate variation. The perceived slower tempo signifies the continuation of the rhythmic deceleration that began with Variation XII. Another important characteristic is the prominence accorded the bass melody by placing it unornamented in the soprano in measures 1-8; as a result, the appearance of the soprano of the theme in Variation XV is more effective.

This variation is the first double variation, that is, a variation in which the repeat is both written out and altered. The form of Variation XIV is A A' B 1/2A' B' 1/2 A". Each section which is repeated is also marked by the exchange of soprano and bass lines.

The harmonic progression differs markedly from those of Variations XI-XIII. The latter are relatively simple and involve one chord change per measure; the former is more exploratory and changes as often as four times per measure. This variety and richness is especially evident, for example, in measures 4-8, where the progression is VI V^6+/VI VI V^7/N N6 vii° Ger^6 i_4, V. The striking Neapolitan chord occurs again in measures 15, 22, and 30. The music is also colored by nonharmonic tones, such as the suspensions in
measures 18-20 and the anticipations in 20-23 and 28-31. This may be observed in Example 3-54.

Example 3-54. Opus 35, Variation XIV, (a) suspensions in measures 17-20 and (b) anticipations in measures 28-32.

This variation reintroduces smooth stepwise motion; the previous five emphasized leaps. Long scalar lines, particularly evident in the bass in measures 1-5 and in the soprano in measures 9-16, foreshadow not only the next variation but also the fugue. This characteristic links all three together.

Variation XV

This double variation marked "Largo" displays the most elaborate ornamentation of the set. This figuration will contrast sharply with the stark half-notes of the upcoming fugue subject. The variation is linked to the previous one
by its slow tempo and its also being a double variation. Example 3-55 shows that, unlike Variation XIV, it increases dramatically the figuration in each repeated phrase.

Example 3-55. Opus 35, Variation XV, measures 1 and 9.

Although the soprano outline is carefully maintained throughout, the theme's bass is not. Three factors contribute to this. First, in an effort to highlight the position of this final variation, Beethoven reserves for it a new and expressive chord progression. Previously, all of the variations employed the progression I V V I or some variation of it for the first four measures; here it becomes I V ii vi. The latter is a harmonic sequence which is a natural result of closely following the thematic soprano which itself forms a sequence. Second, the neglect of the thematic bass makes its appearance as the subject of the following fugue more powerful and urgent. Third, the harmonic richness produced by the new progression allies this variation with that of the previous variation.
A second aspect of Variation XV is the metric change to 6/8. This has a two-fold effect. On the one hand, it emphasizes the difference of this last variation from all of the previous ones; on the other hand, the metric dissonance caused by the new meter suggests that something must follow in order to re-establish metric consonance. Example 3-56 shows that the new meter provides a cross-reference to Variations IX and XIII, both of which foreshadow the change.

Example 3-56. Opus 35, the metric foreshadowing of 6/8 in Variations IX and XIII.

Var. IX

Var. XIII

Why is there a need for a coda, and why is it in the relative minor instead of the tonic? Why does Beethoven not connect measure 31 to the fugue as shown in Example 3-57 and thereby avoid the seemingly awkward transition from the end of the coda to the opening of the fugue? There is no registral connection of the coda's g to the fugue's Eb. Furthermore, the dominant of c minor is left unresolved; the first four notes of the fugue suggest Eb major, not c minor.
Example 3-57. Opus 35, a hypothetical version of the connection between Variation XV and the Finale.

This variation is the most substantial and imposing of all fifteen, especially in terms of the larger number of notes. The upcoming finale, however, rivals its importance not only in length but also in its contrapuntal manipulation of the theme's bass. The coda is introduced as a means of separating these two pillars. This is accomplished by character change and tonal instability. The former refers to the avoidance of both the elaborate figuration of Variation XV and the polyphony of the fugue. The latter refers to the shift to c minor which disrupts the tonal stability of $E^b$ major established at the beginnings of Variation XV and the fugue.

The soprano of the theme appears in unornamented form and the rhythm is presented in diminution in measures 32-35;
the first four notes of the bass of the theme are also present in measures 32-33 and 34-35. The underlying key of c minor provides an unusually strong cross-reference to Variation VI. Example 3-58 shows that the harmonies of both are identical:

Example 3-58. Opus 35, measures 32-34 of Variation XV and measures 1-3 of Variation VI.

C minor is noteworthy for another reason: the movement from the minor coda to the major fugue parallels the relationship between Variations XIV and XV. This is illustrated in Example 3-59.

Example 3-59. The interlocking minor-major relationship in Variations XIV and XV and the Fuga.

minor -----> major

Variation XIV  Variation XV - Coda  Fugue

minor -----> major
The coda is unstable not only on a large scale as has been suggested, but also internally on a smaller scale. For example, Beethoven purposely avoids any authentic cadence in c minor. The first phrase modulates to f minor; the second phrase, while returning to c minor, ends with a half cadence and prolongs the unstable dominant. As may be seen in Example 3-60, this G major chord provides a cross-reference to the introductory Eb major chord and its g².

Example 3-60. Opus 35, a comparison of the Introduction with the Finale.

**Finale alla Fuga**

Although Beethoven had written fugatos in earlier variation sets, Opus 35 is the first set in which he employed a complete fugue as a finale. How is its inclusion in Opus 35 justified, especially when it differs both formally and stylistically and from the variations?
Tovey considered a central problem of variation composition to be how to bring a set to a satisfactory close. A fugue is one method; here it serves as a logical conclusion because Beethoven carefully prepared its appearance. Fugal expositions are based on the principle of the successive addition of parts. The introduction is based on the same technique; it begins with a single line (the bass of the theme) and each of the succeeding cantus firmus bass variations contains an additional voice. As a result, the introduction provides a satisfying balance to the fugal finale. This is made all the more apparent by the use of $e^b-b^b-b^b-e^b$ in half notes at the beginnings of both.

The preceding variations provide tonal stability and clear formal divisions; the fugue, on the other hand, does largely the opposite. For example, all of the variations except VI are tonally stable despite the variety of secondary dominants and leading-tone chords present in some. Furthermore, all are 32 measures in length if repeats are included. The fugue, on the other hand, contains many striking modulations; in addition, the sectional divisions are far from clear. The tension and instability that the fugue produces requires the relaxation and stability which the upcoming *Andante con moto* will provide.

The often rapid shifts of tonality, lack of clear cadences, and vagueness of sectional division make a discussion of major key areas difficult. Helpful signposts are
often provided by the entrance of the subject. As a result, the major tonal areas are E\text{b} major (measures 1-14), c minor (28-32), E\text{b} major (42-47), f minor (52-54), g minor (57-59), C major (62-65), A\text{b} major (77-82), and E\text{b} major (90-103 and 111-132).

The tonal instability is partially a result of Beethoven's unorthodox answer (b\text{b}1-e\text{b}2-e\text{b}1-a\text{b}1) to the subject (e\text{b}1-b\text{b}1-b\text{b}-e\text{b}). The traditional answer as taught by Marpurg, Albrechtsberger, and others to the subject should have been b\text{b}-e\text{b}1-e\text{b}-b\text{b} (nonmodulatory) or b\text{b}-f\text{b}-f\text{b} (modulatory). The appearance of a\text{b}1 as the fourth note of the answer and its brief tonicization (IV in E\text{b} major) permits Beethoven to avoid the predictable appearance of V and weaken the tonal stability of the tonic-dominant relationship in the fugue exposition as well as elsewhere.

Why did Beethoven choose this particular answer? Was it a purposeful diversion from the rules or an incorrect choice? It is my opinion that the former is the case, especially since Beethoven was acquainted with the fugues from J. S. Bach's Well-Tempered Clavier since his youth. Nevertheless it must be noted that, although Beethoven's study with Albrechtsberger from about January 1794 to May 1795 included a thorough grounding in counterpoint, his essays in fugue were haphazard.\textsuperscript{16} Many of the fugues were

\textsuperscript{16} Kirkendale, Fugue and Fugato in Rococo and Classical Chamber Music, 205.
only completed with Albrechtsberger's assistance. Nottebohm, for example, points out several mistakes in Beethoven's fugal answers. Indeed, the number of errors is so pronounced that Nottebohm concludes that Albrechtsberger did not succeed in teaching Beethoven how to compose a correct answer.\textsuperscript{17}

The freedom given the answer is also bestowed on some of the subsequent appearances of the subject. Beethoven explores not only the melodic but also the modulatory possibilities as well. For example, the subject's appearance in measures 33-36 suggests a tonal movement from C major to $b^\flat$ minor. Similarly, the theme's presence in measures 52-55 and 57-60 suggest changes from $f$ minor to $g$ minor and $g$ minor to $c$ minor, respectively. Example 3-61 displays these and other appearances of the subject in both (a) complete and (b) incomplete forms.

\textsuperscript{17}Gustav Nottebohm, \textit{Beethoven's Unterricht bei J. Haydn, Albrechtsberger und Salieri}, Vol. I of \textit{Beethoven's Studien} (Leipzig: Rieter-Biedermann Verlag, 1873), 191-197. Many of the fugal answers to Albrechtsberger's collection of fugue subjects are incorrectly answered and are so marked by Albrechtsberger; for example, the answers to Nos. 3, 11, and 14 all contain mistakes. In addition, Albrechtsberger allows some mistakes to stand or is unaware of their presence, as in the four-voiced fugue No. 2, the two-voiced fugue No. 4, the four-voiced fugue No. 5, and in the "Fuge all' octava". Nottebohm observes that Beethoven has missed two important rules: (1) when a subject closes in the tonic, the answer must move to or suggest the dominant, not the subdominant; (2) the characteristic half-step (mi-fa) in the tonic for the subject needs to occur at the same position in the answer.
Example 3-61. Opus 35, Fugue, (a) various complete appearances of the subject.
Example 3-61 continued. Opus 35, Fugue, (b) various incomplete appearances of the subject.

Example 3-62 illustrates that the soprano of the theme, although not serving as the fugue subject, does make three somewhat disguised appearances, first in measures 52-54 (f minor), then in 57-59 (g minor), and finally in 62-65 (C major). The syncopation which obscures its presence provides a cross-references to the A due.
Example 3-62. Opus 35, the soprano of the theme in the fugue.

Sequences play a vital role; several unusually long ones are of particular interest. For example, measures 37-41 display the following root motion by fifth downward: $E_b-A^b-D^b-G-C-F-B^b-E^b-A^b$. The same movement occurs fifteen times in measures 65-76 along with a harmonic acceleration from half notes (measure 65) to quarter notes (measure 73). This is illustrated in Example 3-63.

Example 3-63. Opus 35, Fugue, measures 65-77.
There are several other examples of sequence. A pattern of a descending fifth followed by a descending third occurs seven times in measures 81-90. Finally, a series of nine ascending fourths occurs in measures 118-123.

It was noted earlier in the discussion measure 12 of the Thema that the bass A♭ found in the introduction is often avoid when the soprano a². As is illustrated in Example 3-64, Beethoven acknowledges and emphasizes this omission by emphatically repeating the A♭ in measures 123-128. It is important also to note that the bass and harmonic progression in measures 129-133 correspond exactly to measures 13-16 of the Thema.
Example 3-64. Opus 35, Fugue, measures 123-133.

Andante con Moto

The Andante con moto consists of two additional double variations and a short coda, making the actual number of variations seventeen rather than fifteen (or twenty, if the three introductory cantus firmus variations on the bass of the theme are included). The Andante provides the tonal stability necessary for closure that the fugue lacked. It also establishes a melodic balance; the soprano of the
theme returns prominently after having played a secondary role in the fugue. Finally, the fugue's 132 measures played at an allegro tempo psychologically balance the 73 measures of the Andante.

A striking characteristic of Variation XVI (measures 1-32 of the Andante) is the return of the soprano of the theme in unornamented form. Example 3-65 illustrates that the bass, rhythm, and harmonic progression in measures 1-8 are also similar to those of the theme. All these elements suggest a da capo return. This effect is further heightened by the long ascending scale which precedes the Andante, just as one did the theme.

Example 3-65. Opus 35, measures 1-4 of the Thema and the Andante con moto.

18 The harmonic motion is changed by the elimination of V/ii, ii, and vii°/V in measures 6-8. The bass is simplified in measures 6-8 from its original pattern of e♭-d-e♭-e-f-d-e♭-A-B♭ to e♭-B♭-G-d-e♭-B♭.
The right-hand accompaniment pattern of two sixteenths followed by an eighth appears in the preceding example. Although this represents a small modification to the theme, it provides an important rhythmic link to the foregoing fugue as Example 3-66 displays:


A rhythmic acceleration occurs in Variation XVI. Whereas the left hand accompaniment in measures 1-8 consists entirely of eighth-notes, in measures 9-16 it contains sixteenth-notes. Similarly, the right hand accompaniment of two sixteenths followed by an eighth accelerates to a trill on $b^\flat$. This is illustrated in Example 3-67.

Example 3-68 demonstrates that the use of progressively shorter note values continues the internal acceleration; triplet sixteenths occur in measures 18-19, 24-25, and 16-32, and thirty-second notes follow in measures 26-27.
Example 3-67. Opus 35, a comparison of measures 1-4 and 9-12 of the Andante con moto.


The seventeenth and final variation occurs in measures 32-63 of the Andante. The bridge passage in measure 32 and the continuation of the triplet-sixteenth and thirty-second note motion links this variation with the preceding one. This is shown in Example 3-69.
This variation is also a double variation. Each repeated phrase is varied by a rhythmic acceleration; for example, measures 1–8 (33–40 of the Andante) contain triplet sixteenth notes, whereas measures 9–16 (41–48) contain thirty-seconds. The soprano of the theme makes a prominent and surprise appearance in the bass; the longer note values make it clearly audible. The theme's harmonic progression remains unchanged except for its simplification in measures 6–7 and 14–15. The bass of the theme, so much in evidence in the fugue, is absent in the first sixteen measures.

A characteristic of this final variation is its emphasis on $e^b_3$. The previous variations made use of this pitch, but none perhaps as dramatically as this one. The $e^b_3$ occurs in measures 4 (36 of the Andante), 12 (43), and 21–23 (53–55). Example 3–70 shows that its importance is further highlighted by the long rising scales that lead to the final appearances in measures 29–31 (61–63).
Example 3-70. Opus 35, Variation XVII, measures 29-31 (61-63 of the Andante).

The coda begins in the measure 64 of the Andante and is ten bars long; it contains a rhythmic acceleration which is shown in Example 3-71. Measures 1-4 of the theme are presented in diminution in measures 64-66, allowing for one final presentation of the theme's soprano and bass in their original orientation. The two-measure phrase is then repeated and varied in measures 66-68. From this point on, the figures are presented in diminution two more times as the harmonic rhythm accelerates to the end.

Example 3-71. Opus 35, the rhythmic acceleration in measures 64, 68, and 70 of the Andante con moto.
Summary of Formal Implications and Internal Connections

This chapter has shown that each musical unit is related to at least one other by means of a common rhythmic or melodic motive, harmonic pattern, texture, register, dynamic, articulation, or tempo. Some units are so strongly linked that they form groups which in turn gives rise to an underlying internal form.

Some groups are more clearly defined than others. The first distinctive one consists of the introduction's bass and three cantus firmus variations. The individual units are not only joined together by many of the elements listed above, but also by two trends. The first and most obvious is the gradual textural increase from the solo bass to the four-part A quattro. The second is the octave rise of the bass of the theme in each successive unit. Another group is formed by Variations VIII-XIII which are united by the common use of B₃ pedal points. Variations XIV and XV comprise still another and are related by their harmonic richness and slower perceived tempo. A final one consists of the fugue and Andante con moto, itself a subgroup of two variations and a codetta.

The division of the Thema and Variations I-VII into groups is not as easily accomplished and is perhaps even unwarranted.¹⁹ For example, the thick texture and fortissimo dynamic in measures 15-16 of Variation III suggest the end of a group. This assumption is weakened,
however, by the continuation of the sixteenth-note motion in Variation IV that began in the previous variation. Is Variation IV an ending point? Variation V's eighth-notes seem to signal a dramatic change from the previous sixteenths. This hypothesis is also weak, since Variation IV's conclusion is not particularly strong; the dynamic is piano and the final right hand chord is off the beat.

Table 3-1 presents the groupings. Two important cross-references should be noted: (1) the theme and Variation XVI; (2) the introduction and the fugue.

Table 3-2 summarizes the links and cross-references discussed earlier in this chapter. Cross-references are too numerous to label as "c-r" as in the previous chapter and are labeled instead with asterisks. The table shows that most variations have at least one common characteristic which link them to others.

19 See Fischer, "Eroica-Variationen op. 35," 284. He considers the theme and Variations I-III to form a group, IV-VII another, and VIII-XIII still another; unfortunately, he does not explain on what he bases these divisions. Fischer goes one step further and asserts that Opus 35's underlying form is suggestive of a sonata cycle (and, to a lesser extent, a sonata-allegro movement). The theme and variations I-XIII form the first movement, variations XIV-XV the second, and the finale the third. Admireable as this observation may be, it has serious flaws. For example, the last movement of a sonata does not typically begin allegro and end adagio. Furthermore, the length of the first movement (including the introduction) dwarfs that of the second just as the finale does. Finally, Fischer's divisions of the first movement into three parts bear no relationship to the exposition, development, and recapitulation of a sonata-allegro movement.
Beethoven recognized that Opus 35 was a unique and important work. We have explored not only some of its virtues but also its problems. It raises many aesthetic questions, such as how Beethoven united a large number of often disparate variations, how he provided for balance and cohesion, and how he might have justified the inclusion of certain elements such as the introduction, fugue, and Andante con moto. In the next two chapters we will investigate WoO 80 and Opus 120, works which surpassed Opus 35 in length and complexity and set a new standard of excellence.
Table 3-2. Opus 35, the internal links and cross-references. The symbol "*" stands for cross-reference.

<table>
<thead>
<tr>
<th>Th. B.</th>
<th>A Due</th>
<th>A Tre</th>
<th>A Qtr.</th>
<th>Thema</th>
<th>Var. I</th>
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<td>1</td>
<td>-- half-step --</td>
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<td>2</td>
<td>* c♯</td>
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<td>rhythm-</td>
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<td>----- neighbor tone -----</td>
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<tr>
<td>4</td>
<td>bᵇ-eᵇ</td>
<td></td>
<td>g-eᵇ</td>
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<tr>
<td>5</td>
<td>-cantus firmus technique-</td>
<td></td>
<td>arpeggio</td>
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<td>6</td>
<td></td>
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<td>textural growth</td>
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<td>7</td>
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<td>rhythmic acceleration</td>
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<td>8</td>
<td></td>
<td></td>
<td>--octave ascent by theme's bass--</td>
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Table 3-2 continued. Opus 35, links and cross-references.

<table>
<thead>
<tr>
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<th>Var. III</th>
<th>Var. IV</th>
<th>Var. V</th>
<th>Var. VI</th>
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<td>bridge</td>
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<td>4</td>
<td>b♭−c♭</td>
<td>right hand offbeat</td>
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<td>5</td>
<td>sarpeggio</td>
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<td>a−b♭</td>
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<td>6</td>
<td>right hand</td>
<td>3-note chord</td>
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<td>altered harmony</td>
<td>b−c</td>
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<tr>
<td>7</td>
<td>rhythmic acceleration</td>
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<td>altered bass</td>
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Table 3-2 continued. Opus 35, links and cross-references.

<table>
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<th>Var. IX</th>
<th>Var. X</th>
<th>Var. XI</th>
<th>Var. XII</th>
<th>Var. XIII</th>
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<td>7</td>
<td>prominent right hand thirds</td>
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prominent right hand thirds
Table 3-2 continued. Opus 35, links and cross-references.

<table>
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<tr>
<th>Var. XIV</th>
<th>Var. XV</th>
<th>Fugue</th>
<th>Var. XVI</th>
<th>Var. XVII</th>
<th>Codetta</th>
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<td>--harmonic exploration--</td>
<td></td>
<td>double variation</td>
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<td>2</td>
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<td>-- V-I bridge --</td>
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<td>3</td>
<td>--------scales---------</td>
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<td>4</td>
<td>----slower attacks----</td>
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<td>( \overrightarrow{\text{rhythm}} )</td>
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<td>5</td>
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<td></td>
<td>theme's soprano</td>
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<td>6</td>
<td>penultimate major</td>
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<td>7</td>
<td>penultimate minor</td>
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<td>minor major</td>
<td>rhythmic acceleration</td>
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CHAPTER IV

THIRTY-TWO VARIATIONS IN C MINOR, WERK OHNE OPUSZAHL 80

Introduction

As the only set to take up the Baroque [ostinato] form again, it stands apart from all Beethoven's other variations. It is, stylistically, a remarkable precient work as well, a forecast of the revival of Baroque rhythmic development and harmonic movement that was to produce Romanticism. Its immediate popularity testifies to the direction in which music and taste were moving.¹

As the above quotation, Charles Rosen believes that Beethoven's 32 Variations on an Original Theme in C Minor, WoO 80, is a unique work. It is a contains varied technical demands and a large number of variations. It also was one of Beethoven's first to receive a favorable review in the Allgemeine Musicalische Zeitung.² Reviews of earlier works were often negative, and some even scathing; one need only read some of these criticisms of what are now regarded as conservative works in order to appreciate the misunderstanding they initially created. For example, in the review of Beethoven's variations on André Ernest


²For a discussion of this review, see Robin Wallace, Beethoven's Critics (Cambridge: Cambridge University Press, 1986), 18.
Gretry's "Une fievre brulante," the critic described Beethoven as a fine keyboard performer but doubted "whether he is equally fortunate as a composer." His variations on Salieri's "La stessa, la stessima" received a similarly negative review; the critic stated that "Herr van Beethoven may be able to improvise, but he does not understand how to write variations."

WoO 80 is best described as being a chaconne, a form uncommon not only for the Classic period but also for Beethoven. It is significant that, having explored the form, Beethoven chose never to employ it again as the basis for an independent variation set. Indeed, the chaconne does not reappear until the Romantic period.

The number of variations, thirty-two, is large when compared with other variation sets of the Classical period. Neither Haydn nor Mozart composed any sets with a comparable

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3Ibid., 7.
4Ibid., 7.
5Charles Rosen and Arnold Schoenberg describe WoO 80, however, as a passacaglia.
6The last movement of Brahms's Fourth Symphony displays characteristics of both a passacaglia and chaconne. Interestingly, there is evidence this movement was modeled on Beethoven's WoO 80. Both works display a minor-major-minor key scheme, both are in 3/4 time, and both have an ascending melody which moves from 1 to 5. The number of variations is also similar: thirty-two for Beethoven and thirty for Brahms. See also J. Peter Burkholder, "Brahms and Twentieth Century Classical Music," 19th Century Music VIII (summer 1984), 75-83.
number of variations. Beethoven's largest work preceding WoO 80 was the 24 Variations on a Theme by Righini. The short theme, typical for a chaconne, perhaps encouraged Beethoven to compose an even larger number of variations. Baroque chaconnes normally contain themes of four or eight measures, and large numbers of variations were not uncommon. For example, G. F. Handel's Chaconne in G Major contains sixty-two variations and Benedetto Marcello's Ciacona of circa 1720 contains 110.\(^7\)

In order to better understand WoO 80, it is necessary to first define the term "chaconne." Unfortunately, there is considerable confusion over the term, and a single precise description is not possible.

Many theorists have attempted to define the chaconne in purely harmonic terms. Leon Stein describes the chaconne as a series of variations derived from a harmonic series whereas the passacaglia makes use of contrapuntal embellishments above or below a given melody. Percy Goetchius's definition is more detailed:

The theme of the chaconne is not a basso ostinato, but consists primarily in the chord-succession upon which the thematic sentence is erected. Out of these


\(^8\)Leon Stein, Structure and Style (Evanston: Summy-Birchard, 1962), 143.
chords emerges a melody, the air or tune of the dance, in the uppermost part, which in many cases is so definite and lyric as to appear to be the real thematic thread. And this may, to some extent, be the case—the chords then representing the natural harmonization of that melody... It is, however, positively distinctive of the chaconne that the chord-succession is retained as basis, with a few natural or interesting modifications and modulations... The recurring bass is merely a consequence, by no means limited of the retained chord-successions out of which the structure is really evolved.

Other theorists have preferred to take a linear rather than a harmonic approach to the chaconne. Heinrich Schenker takes the unusual stance that the soprano plays an important role. His comments in his Free Composition are illuminating, especially since the soprano of Beethoven's theme does play an important role in WoO 80.

In the chaconne a short theme, designed to support a large number of variations, is usually given to the soprano. In the brevity of its theme and the profusion of its variations the chaconne is related to the passacaglia, which accounts for the frequent confusion of the two forms in the older literature. The difference between them lies in the role played by bass and soprano. The difference between passacaglia and chaconne perhaps lies in the fact that the chaconne tends

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10This view is particularly interesting since Goetschius, on page 49 of The Larger Forms of Musical Composition, remarks of WoO 80 that "it is evident... that the upper melody, beautiful and significant as it is, is an external auxiliary, not recognizably present in more than a half-dozen of the thirty-two variations." The following analysis will indicate, however, that Beethoven does in fact employ the soprano of the theme more frequently than Goetschius suggests.
toward songlike diminutions, while the passacaglia tends to emphasize a prolonged bass arpeggiation.\textsuperscript{11}

Many theorists and musicologists including Kurt von Fischer, Georg Reichert, Johann Mattheson, and J. G. Walther, believe that the chaconne is a basso ostinato form. Mattheson's definition in his \textit{Neu-Eröffnetem Orchester}, is particularly insightful:

The ciacona or chaconne is an instrumental or vocal piece (or a combination of both) that typically has a four-measure subject in \(\frac{3}{4}\) time and a basso ostinato which is repeated as many times as necessary to support the modulating couplets or variations.\textsuperscript{12}

The basso ostinato in a chaconne has two important characteristics. First, Walther writes that the subject may itself be varied and used in diminution.\textsuperscript{13} Second,

\begin{itemize}
  \item \textsuperscript{11}Heinrich Schenker, \textit{Free Composition} (New York: Longman, 1979), 145.
  \item \textsuperscript{12}"Ciacona oder Chaconne ist eine Instrumental, oder Vokal, auch wohl von beyden zusammen gesetzte Piece, welche einen obligaten Bass, und gemeinlich ein Subjectum von 4 Tacten im Triple hat, der so offt wiederholt wird als die chaconne Couplehts oder Variationes darüber modulieren... soll." My translation. Johann Mattheson, \textit{Neu-Eröffneten Orchester} (1713), 184f.
  \item \textsuperscript{13}Johann Walther, \textit{Lexicon} (1732). "The bass-subject itself may be varied and used in diminution, although it cannot be lengthen in beats." ("Es kann aber auch das Bass-Subjectum selbst diminuirt und verändert, allein den Tacten nach nicht verlängert werden.")
\end{itemize}
Mattheson comments that the bass may be treated with greater freedom than a passacaglia bass.\(^\text{14}\)

This freedom may be the reason for the confusion as to whether the chaconne is based on harmonic or linear repetition. Fischer remarks that that "since the passacaglia and chaconne basses are often treated with much freedom and often represent no more than certain determinate harmonic successions, these pieces transgress frequently to variations with constant harmony."\(^\text{15}\)

Despite the differing opinions expressed by various authors on the definition of the chaconne, certain aspects are clear. The chaconne has its origin in dance music and is usually in triple meter. The second beat tends to be accented, and the key may be major or minor. It began first as a series of chords and eventually evolved into a basso ostinato form. The theme is generally brief and consists of a single phrase ending on the dominant. Many basses are built upon the descending tonic to dominant tetrachord, although many variants and other patterns were used.\(^\text{16}\) The bass notes are often of equal value and the harmony usually changes once per measure. The relationship between this

\(^{14}\)Mattheson, op. cit., 185. Regarding the chaconne, he says "that these may differ with greater freedom from the given theme in the bass than those [passacaglias]. (Dass diese mit grösserer Freiheit vom vorgesetzten Themate im Basse weichen darff als jene passacaglia). My translation.

basic descending pattern and the theme of WoO 80 may be seen in Example 4-1.

Example 4-1. A chaconne bass and the bass of WoO 80.

The basso ostinato theme is characteristically unornamented and even somewhat lifeless. Robert Nelson explains:

As a result of its slow speed, its prevailing conjunct movement, and its quietly monotonous rhythm, the ostinato bass has a neutral, sometimes even a drab effect...Although its lack of individuality is explainable in part by the fact that the theme is in the bass, not all of its indecisiveness is so attributable, for baroque basses in general are alive and interesting; in greater part its lack of intrinsic interest appears to stem from the complete absence of figuration.17


Perhaps one of the most important aspects of the chaconne is its continuous structure; the ideal is not of variations that are separate but that smoothly join together to form a unified whole. This occurs frequently in WoO 80; many variations, such as I-III and X-XIV, contain passages which link one variation to another. The pairing of variations is common, although the grouping of three is less so.\textsuperscript{18} As Nelson explains, "underlying all these different groupings is the evident desire of the composer to secure a degree of unity and cohesiveness greater than that obtainable through the use of constantly new ideas."\textsuperscript{19}

Larger dimensions of form are achieved by the use of contrasting modes or keys. As may be seen in Example 4-2, George Frederick Handel's Chaconne in G Major is divided into three sections; the form and proportions closely resembles Beethoven's plan, although on a smaller scale.

Example 4-2. Key scheme of Handel's Chaconne in G Major

\begin{center}
\begin{tabular}{l l l l}
Key: & G major & G minor & G major \\
Variations: & I-X & XI-XVI & XVII-XXI \\
\end{tabular}
\end{center}

\textsuperscript{18}See Nelson, \textit{Variation Technique}, 70; his comments on groups of three bear a direct relationship to the first three variations of WoO80. He states that "the organization of these groups sometimes resembles that of the song variation, wherein the soprano is figured in one variation, the bass in a second, and often the two parts are figured simultaneously in a third." This is exact pattern for Variations I-III.

\textsuperscript{19}\textit{Ibid.}, 71.
It is likely that the chaconnes of Handel influenced Beethoven, especially since he revered Handel and was well acquainted with his music. Furthermore, there is evidence that the music of Johann Sebastian Bach was also a great influence. His famous Chaconne in D Minor, the last movement of the Partita for Violin in D Minor, closely resembles WoO 80. Both works follow the minor-major-minor key scheme and the theme for each is eight measures long. Finally, there are thirty-two variations in both works; of these, eight-measure units are used thirty-one times in WoO 80 and twenty-eight times in the Chaconne.

Several authors have commented on Handel's influence on WoO 80. For example, see page 4 of Peter Hauschild's preface to Gerhard Erber's edition of Beethoven Variationen (Leipzig: Peters, 1970). Charles Rosen also draws a similar conclusion on page 401 of The Classical Style.

See Rosen, The Classical Style, 385. Bach's importance to Beethoven is well known. Beethoven was thoroughly familiar with the Well-Tempered Clavier since his youth, that he copied passages from Bach's works, and that he had personal copies of the Inventions and the Art of the Fugue. Scherchen believes that Beethoven was familiar with the Chaconne since it had been published in Cartier's L'Art du Violon in 1798. See Hermann Scherchen, The Nature of Music translated by William Mann (Bristol: Western Printing Service Ltd., 1950), 110.

Although ostensibly there are thirty-two variations in Beethoven's work, an additional one occurs in the coda of the final variation, bringing the total to thirty-three. This is also noted by Jürgen Ude, Beethovens Klavierstücke und Variationen (Stuttgart: Philipp Reclam, 1968), 418.
The Theme

Beethoven's theme is reducible to two linear components, a soprano and bass which move in contrary motion. As may be seen in Example 4-3, both display a high degree of chromaticism.

Example 4-3. WoO 80, a metric reduction of the theme.

Chromatic subjects of fugues, grounds, and other works are often found in Baroque works; however, it is somewhat unusual for Beethoven to choose a chromatic theme for this independent variation set. Beethoven typically chooses melodies that are relatively free of chromaticism and suspensions, and WoO 80 is one of the most chromatic.\(^{23}\)

\(^{23}\)The lack of chromaticism in Beethoven's other independent variation sets is largely attributable to the themes themselves which were usually popular arias by other composers. Nevertheless, even Opus 34 and Opus 35 which are based on original themes make only limited use of chromaticism.
The movement of the outer voices permits a rich and varied harmony which is somewhat unusual for such a short theme. There are several different types of chords (major, minor, dominant seventh, and augmented sixth) and they occur in different positions (root, first, second, and third inversion). It is likely that Beethoven purposely avoided repeating any chord exactly the same way. Finally, even the last two measures are striking since they imply the progression iv–V–i without the use of chords.

The German augmented sixth chord in measure 5 deserves special attention. In several of the following variations Beethoven substitutes a V/V in place of this chord. The V/V provides a cross-reference for Variations V, VII, VIII, and others. Why does Beethoven choose to use V/V and not another chord as a substitute for the German augmented chord? Perhaps the best explanation is provided by Simon Sechter (1788-1867) who believed that the German augmented sixth chord may be interpreted as having two roots, one on the supertonic, the same root as V/V, and one on the submediant.\(^{24}\) Example 4-4 displays Sechter's interpretation of the former case.\(^{25}\) His approach to altered chords is

\(^{24}\)Many twentieth-century theorists, however, regard the raised subdominant (\(F^\#\) in c minor) to be the root of this chord. Robert Ottman, for example, labels the chord as \(\#iv^G\). Robert Ottman, Advanced Harmony (Englewood Cliffs: Prentice-Hall, 1972), 208.

\(^{25}\)See Simon Sechter, Die richtige Folge der Grundharmonien oder vom Fundamentalsatz und dessen
Example 4-4. Sechter's analysis of the Ger\textsuperscript{+6} chord.

that they all have a diatonic basis. Although he views the progression Ger\textsuperscript{+6} to V as a outgrowth of iv\textsuperscript{6} to V, Sechter maintains that the supertonic (d in Example 4-4) is the understood root and explains it as follows:

To make the movement from the seventh chord of the fourth scale step to the triad or seventh chord of the fifth scale step more natural, the ninth chord of the second scale step must be either actually included or imagined between the two chords.\textsuperscript{26}

\textsuperscript{26}Ibid., 31. "Um den Schritt vom Septachord der 4ten zum Dreiklang oder Septaccord der 5ten Stufe naturgemäss zu machen, muss der Septnonaccord der 2ten Stufe dazwischen entweder wirklich gemacht oder hinein gedacht werden."
In the second case, Sechter describes the augmented sixth chord as a "Zwitterakkord", that is, a hybrid chord. It thus also belongs to the larger category of "Stellvertreter" or "position-substitute," that is, a chord which may function enharmonically as another chord. Since the chord may be respelled as a $V^7/N$ ($A^b-c-e^b-g^b$ in C minor, for example), Sechter maintains that the submediant may also serve as a root.

The theme's structural climax occurs in the sixth measure with the soprano $a^b$ supported by the F bass and subdominant harmony. This point serves as the goal of the outer voices's progression and is emphasized by the long duration (four beats) of the iv chord. In addition, this climax point represents the widest registral spacing, the thickest in texture, the loudest dynamic (note the sforzando marking), and the most interesting rhythmic stress as a result of its surprise placement on the second beat. This highpoint has far reaching significance, especially for the soprano; the $a^b$ (a-natural in Variations XII - XVI) recurs as the highest tone in a majority of the variations.

The surprising appearance of the iv chord on the second beat of measure 6 will serve as a vital factor in linking variations together. The placement of the chord is striking not only rhythmically, but melodically and harmonically as well. For example, the harmonic rhythm was one harmony per bar in the preceding measures; here, however, the pattern is abruptly altered. Beethoven emphasizes this change by marking the iv chord to be performed sforzando. The listener is surprised to hear that the goal of the bass's chromatic descent is not the G of a V chord as is customary with many Baroque chaconnes, but the F of the iv chord.

How does Beethoven avoid progressing to the typical (and predictable) V chord? Since the i\(^6\) chord in measure 6 does not progress to V and moves instead to the sforzando iv chord, it is not cadential. The i\(^6\) is simply a passing chord. The important characteristic associated with measures 5-6, however, is not the i\(^6\) but the resulting dissonant voice exchange shown in Example 4-5.

A lesser composer probably might not have ventured to include the rhythmic surprise and dissonance in measure 6. It would have been much easier to compose a more predictable theme such as the one given in Example 4-6.

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28 The exceptions are Variations II, XVII, XX, XXI, XXIV (the a\(^b3\) is covered by the b\(^b3\) appoggiatura), XXVII, XXVIII, and XXXII.
However, such a theme is more predictable and would likely become tiresome after thirty-two repetitions.

Example 4-5. WoO 80, theme, the voice exchange in measures 5-6.

Example 4-6. WoO 80, theme, a hypothetical version of measures 5-8.

One of the most important rhythmic characteristics of the theme as well as the whole set is the frequent occurrence of two notes against three, also known as a hemiola. The hemiola will have far-reaching effects in the
succeeding variations. Not only will this 2:3 proportion serve as a link between variations, but it will also give rise to rhythmic uncertainty at those places where Beethoven wishes to avoid predictability. A characteristic closely related to the hemiola is the suggestion of a secondary rhythmic stratum in duple time against a primary rhythm in triple time. Example 4-7 displays two such strata which are present in measures 7-8 of the theme.

Example 4-7. WoO 80, theme, the primary stratum in triple and the secondary stratum in duple in measures 7-8.

Measures 6-8 contain an unexpected harmonic rhythm which stands in sharp contrast to the predictable one-chord-per-measure rhythm of the first five measures. Example 4-8 shows that the harmonic pattern in measures 5-8 is not random but symmetrical.

Example 4-8. WoO 80, theme, the symmetrical harmonic rhythm in measures 5-8.

Beethoven purposely avoids a strong sense of melodic closure in the soprano. This is accomplished in two ways. First, although the a^b^2 in measure 6 is resolved internally by g^1 in measure 7, a registral resolution to g^2 does not occur. The absence of a g^2 is especially noticeable since the a^b^2 is emphasized by its long duration, sforzando marking, thick supporting chord, and high registral placement. The lack of closure in the soprano of the theme is a crucial aspect which propels the music forward. The metric reduction in Example 4-9 displays the registral isolation of the a^b^2.

Example 4-9. WoO 80, theme, a metrical reduction of measures 6-8 of the soprano.
Second, the strongest cadence occurs when the soprano moves from the supertonic or leading tone to the tonic and the harmony moves from dominant to tonic. In the last two measures, Beethoven avoids this melodic motion and even avoids clearly defining the harmonic motion by failing to provide any chordal support.

The theme is an important source of motives. Jürgen Uhde suggests that the notes g-c-e form the first motive, an unusual view since the first note is part of the accompaniment rather than the soprano. Nevertheless, this motive does help to explain the beginnings of Variations I, IV, and V as Example 4-10 illustrates.

Example 4-10. WoO 80, the g-c-e motive in the theme and Variations I, IV, and V.

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30 Jürgen Uhde, Beethovens Klavierstücke und Variationen, 403.
A motive which frequently reappears is the leap of a third followed by a step in the opposite direction. It first appears in measures 1–2 as $c^2-e^b^2-d$. Furthermore, its inversion, $a^b^1-f^1-g^1$, occurs in measure 7.

A variant of this motive is represented by $c^2-e^b^2-d^2-g$ (also appearing occasionally as $e^b^2-c^2-d^2-g^1$) and is shown in Example 4-11. This motive will be used extensively in Variations XVII and XXVIII.

Example 4-11. WoO 80, theme, the $c-e^b-d-g$ motive.

Example 4-12 displays two related motives which occur in measure 2: the leap of a fifth and a scale outlined by a fifth. The latter is suggested by the outline of the

31 See Arnold Schoenberg's Fundamentals of Musical Composition (New York: St. Martin's Press, 1969), 171-175. He suggests that that $e^b$ and $c$ may be exchanged, soprano of the theme, $c^2-d^2-e^2-f^2-(f^b^2)-g^2$. In addition, it
plays a significant role in Variations VII and XVIII.

Example 4-12. WoO 80, theme, the open fifth and scalar fifth motives.

Having examined the theme in some detail, we may now turn our attention to the ensuing variations. As a preview, it is necessary to mention that this work may be divided into three large sections. Despite these divisions, however, I will attempt to show in this chapter that each variation has its own logical place and that each is related to another.

Beethoven uses several techniques in WoO 80 inter-connect the variations. For example, the use of paired variations will be an important unifying factor. In addition, rhythmic intensification, registral expansion, registral connections, harmonic similarities, and motivic inter-relationships will all serve to unify the composition.
Variations I

Variation I is characterized by its incessant sixteenth-note arpeggios and repeated notes. The chromatic bass of the theme is clearly recognizable despite several octave transfers. In addition, the metric reduction in Example 4-13 reveals that the soprano line g₂-g₂-e₂-f₂-f#₂-g₂-a₂-b₂-g₂-c₂ loosely follows the outline of the theme.

Example 4-13. WoO 80, Variation I, a metric reduction.

The supporting harmony differs in the third measure; vii⁰⁶₅ of iv is substituted for the original V₄² of IV. Although this appears to be an insignificant change, this tendency for slight adjustments will take on a great deal of importance for the purpose of variety and unity. Why does Beethoven use this substitute for the original secondary dominant? The answer may lie in the writings of Jean-Philippe Rameau and Simon Sechter. Rameau maintains that
both a V and a vii (or vii\(^7\)) are really the same chord; in the case of the latter, the sixth scale degree has been substituted for the fifth.\(^{32}\) Example 4-14 reveals that Sechter, on the other hand, believes that a vii\(^0\) (or vii\(^o^7\)) can be an independent chord; however, when it progresses to the tonic, the real root of the vii\(^0\) chord is understood to be the fifth scale degree. He writes: "When a triad built on the seventh scale degree rises to one on the first scale degree, then so must the first [example] be understood as representing the seventh chord of the fifth degree containing a major third."\(^{33}\)

Example 4-14. Sechter's interpretation of vii\(^0\) to i.

\(^{32}\)Rameau believes that the vii\(^o^7\) chord is not an independent chord built on the raised seventh scale degree, since the chord does not contain the "perfect" chord (i. e., a major or minor chord). For further reading, see Matthew Shirlaw, The Theory and Nature of Harmony (Sarasota: Birchard Coar, 1970), 86-87.

\(^{33}\)"Wenn nach dem Dreiklang der 7ten erhöhten jener der 1ten Stufen folgen soll, so muss ersterer als erste Verwechselung des Septaccordes der 5ten Stufen mit grosser Terz gelten." Sechter, Die richtige Folge der Grundharmonien, 80.
It would have been easy for Beethoven to have followed outline of the theme exactly, yet a recomposed version shown in Example 4-15 is less interesting than the original. The seeming irregularity in the theme caused by the initial g^2's is the result of Beethoven's effort to provide a registral link between the a^b^2 of the theme and the g^2 of Variation I. Furthermore, this allows the right hand to begin with the notes g-c-e^b, a motive that will serve as a connecting link to several other variations.

Example 4-15. WoO 80, Variation I, a recomposed soprano, measures 1-2.

There are many more important aspects to Variation I. For example, a new register is introduced by the a^b^3 in measure 6. This note is left registraIly isolated; despite its apparent resolution in a lower octave in measure 7 (a^b to g), Example 4-16 illustrates that it is not until measure 7 of Variation III that the note receives a registral resolution.
Example 4-16. WoO 80, the registral resolution of the $a^b_2$ in measure 6 in Variation I to the $g^3$ in measure 7 of Variation III.

The predictable rhythmic pattern set up in the first five measures is again broken in the sixth measure. Beethoven is intent on preventing monotony; as we shall see, some change will take place at this point in practically every variation.

**Variation II**

Variation II is clearly intended as a variation of the first variation, and the Variation III will serve as the logical conclusion to both. That these three variations are all linked together is apparent not only from their continuous sixteenth-note arpeggios, but also from the connecting bridges between the variations. As Example 4-17 illustrates, Variations I and II are very similar, the major difference being the exchange of soprano and bass. They each begin by emphasizing the pitch class g (specifically,
g^2 in Variation I and g^1 in Variation II) with the repeated sixteenth-note pattern. Each has the same fundamental chromatic bass line, and the harmonies are practically identical, the only exception being the V instead of i^6 on the downbeat of measure 6. The soprano of the previous variation has also been slightly altered so that it can serve as a bass.

Example 4-17. WoO 80, a comparison of measures 1-3 of Variations I and II.

The metric reduction of this variation provided in Example 4-18 also reveals a characteristic which is often hidden in the inner parts: a succession of parallel tenths. This interval will be a key unifying factor in the following variations.
Example 4-18. WoO 80, Variation II, a metric reduction displaying parallel tenths.

Variation III

Variation III serves as the logical conclusion to the sixteenth-note momentum begun by the first variation. The metric reduction in Example 4-19 reduces it to its bare framework; as a result, the parallel tenths that were concealed in the first two variations are now clearly recognizable.

Example 4-19. WoO 80, Variation III, a metric reduction displaying parallel tenths.
An unusual harmony, flat V, appears in measure 3. This chord does not often occur in a typical chord progression of the Classical period; it is best be understood as the result of the contrapuntal motion of the outer voices. A succession of chromatic sixth chords occurs in measures 2-4.

This variation marks the end of the first subgroup of variations. The registral isolation of the $a^{b3}$ in Variation I permits a cross-reference to the $a^{b3}$ in measure 7 of Variation III. Measure 7 serves several important functions. First, its importance within the variation itself is marked by the outward surge of the two voices from $b$ and $g$ in measure 6 to the $a^{b3}$ and FF on the downbeat of the next measure. Second, the simultaneous arrival at the $a^{b3}$ and FF represents a culmination of a large registral expansion for all three variations and the theme. Third, it represents the surprising dissolution of the hidden metrical pattern of the repeated notes. In Variations I and II, the repeated note pattern was not fixed; sometimes it would begin on the second sixteenth (Variation II, measure 1), the third one (Variation I, measure 1), or the fourth one (Variation I, measure 3). However, as shown in Example 4-20, it consistently falls on the third sixteenth in Variation III, thereby creating the secondary rhythmic background of a pattern of two beats in a three-beat measure. This pattern is abruptly broken in measure 6, but the structural emphasis is delayed until measure 7.
Finally, the melodic climax of the soprano on $a^b_3$ is supported by a new and unstable chord: $\text{vii}^0_7$. This chord produces a harmonic syncopation which is displayed in Example 4-20. Although $\text{vii}^0_7$ occupies four beats in measures 6 and 7, it serves to prolong the $V$ harmony which precedes and succeeds it. This prolongation of $V$ emphasizes the cadential progression to the $i$ chord in measure 8. As a result, this cadence is crucial in bringing the first subgroup of variations to a close. As Example 4-21 illustrates, the finality of the cadence is further emphasized by the cessation of the sixteenth-note motion in measure 8; Variations I and II did not discontinue their sixteenth-note motion at their V-i cadences.
Although the $a^b_3$ is resolved in its correct register, Beethoven leaves a new note registrally isolated: the $e^b_2$ in measure 8. We shall have to wait until Variation V to find a registral connection.

**Variation IV**

This variation provides a strong contrast to the previous group of variations. This change is effected by the new registral restriction, staccato articulation, reduced rhythmic drive, and textural augmentation from two to three parts. The rhythmic deceleration goes beyond a mere reduction from sixteenth-notes to triplet eighths; the soprano and bass rhythms are further reduced to quarter notes (here eighth notes followed by eighth rests).
The accompanying inner voice begins with the g–c–e\textsuperscript{b} motive. The triplet rhythm of this inner part is important, for it psychologically represents a 3:2 (actually 3:4) change from the previous rhythm. This ratio will provide a vital connection to the next two variations. The triplet figure also seems to display itself in augmentation throughout the soprano as eighth notes followed by eighth rests; this is shown in Example 4-22. However, once Beethoven has established a seemingly predictable rhythmic pattern, he breaks it in measure 6.

Example 4-22. WoO 80, Variation IV, measures 5-8.

Since many of the hidden links between variations involve rhythmic and metrical ambiguities and transformations, the possibility of a different grouping of notes created by the sfp in measure 6 should be noted. A hypothetic version which transforms measures 5-8 from 3/4 to 4/4 meter is given in Example 4-23:
Finally, Beethoven varies the harmony by again reharmonizing the $a^b_2$ with a half-diminished ii$_6^g$.

This chord will reappear later in Variation XXV and will thus serve as a cross-reference across a vast space of music.

**Variation V**

This variation differs noticeably from the previous one. For example, it provides additional rhythmic interest with its alternation of four sixteenth notes with four eighth notes. Furthermore, the outline of the soprano of the theme is again visible ($e^b_5$-$d$-$e$-$f$-$f^#$-$g$-$a^b$), thus relating it back to not only the theme but also to Variation I.

However, a closer examination reveals that this variation
has surprisingly close links to the previous one. The g-c-e\textsubscript{b} motive is again found at the beginning; the chromatic neighbor tones in the previous variation now appear as appoggiaturas on the third beats. However, the link is still deeper. Example 4-24 illustrates the implied superimposition of 6/8 on the prevalent 3/4 meter, thus creating another layer of 2:3.

Example 4-24. WoO 80, Variation V, measures 1-3.

Several new chords are introduced. The appearance of the \( V^7/V \) chord in measure 5 is of special interest. As previously mentioned, a Sechterian analysis of the Ger\textsuperscript{16} chord in the theme reveals that the implied fundamental is d rather than f:\#; as a result, a V/V (built on d in c minor)
is a logical substitute. As Example 4-25 illustrates, this new chord will serve as a cross-reference for Variations V, VII, and VIII.

Example 4-25. WoO 80, a comparison of measure 5 in Variations V, VII, and VIII.

This variation avoids completely the chromatic bass of the theme and replaces it with leaps produced by the movement of chord roots. This skipping bass will serve as a connection to Variations VII, VIII, XVII, XVIII, XIX, XX, XXVI, XXVII, XXVIII, and, to a lesser extent, Variations X, XI, and XXI.

The secondary rhythmic stratum displayed in Example 4-24 permits a link to Variation VI. The opening fortissimo chords of Variation VI emphasize the importance of three-note groups. Example 4-26 displays the rhythmic connection between Variations V and VI.
Example 4-26. WoO 80, the rhythmic connections between Variations V and VI.

Example 4-27 reveals that Variation V contains a great deal of rhythmic interest. In addition to the secondary rhythmic stratum discussed earlier, measures 6–8 display a variety of underlying rhythms.

Finally, this variation and the next one are linked by a registral connection. As shown in Example 4-28, the $f^3$ in measure 6 of Variation V is left registrally isolated until the arrival of $e^b^3$ in measure 1 of Variation VI.
Example 4-27. WoO 80, Variation V, the rhythmic strata.

3\hfill 4\hfill primary stratum
J J J
measures 1-6

6\hfill secondary stratum
J J
measures 1-6

Composite attack points
measures 1-6

\begin{center}
\begin{tabular}{l}
\hline
\hspace{2cm}
\hline
\end{tabular}
\end{center}

Syncopation (left hand)
measure 7

Implied rhythm
measure 7

Syncopation (right hand)
measure 7

Implied rhythm
measure 7

Example 4-28. WoO 80, the registral connection between Variations V and VI.
Variation VI

Variation VI is characterized by a triplet eighth-note rhythm, numerous leaps, and sforzandi and staccato markings. A portion of the bass of the theme, the chromatic descent from c to G, reappears. The ab3 in measure 7 which represents the soprano climax is absorbed as a part of the dominant harmony; previously it had typically been supported by a subdominant harmony.

This variation is linked to Variations IV and V by the continuity of articulation; all three are to be played staccato. They are also linked by the increase in dynamic level from piano to fortissimo. Although no dynamic indication is given for Variation V, a louder dynamic than the Variation IV is implied by the introduction of a thicker texture. Example 4–29 demonstrates these two connections between Variations IV–VI.

Example 4–29. WoO 80, measure 1 of Variations IV, V, and VI.
Variation VII

Variation VII contrasts sharply with the preceding variation. Perhaps the most obvious change is the abrupt return to pianissimo after the fortissimo storm of notes. The individual parts, especially the inner ones, are more limited in their movement. The character of the whole piece is influenced by the sustained, tranquil nature of the left hand and the legato step-wise motion of the right hand.

The soprano makes considerable use of the scalar fifth motive. It represents the logical completion of the space left open by the last two notes, $g^2$ and $c^2$, of the previous variation. Beethoven purposely places the dissonant passing tones on the beat and the consonant ones on the weaker portion. Example 4-30 illustrates that the $g^2$ and $c^2$ link Variations V and VI together. The scalar fifth motive also provides a cross-reference to Variations X, XI, XVII, and XXII.

Example 4-30. WoO 80, measures 7-8 of Variations VI and measure 1 of Variation VII.
The elements of surprise and uncertainty reappear in measure 6. For the first time, a consonant note occurs on the downbeat \( b^1 \), yet it is the \( a^{b^3} \) which receives the agogic and registral accent. As a result, the \( a^{b^3} \) is introduced after the first beat rather than on the second beat where it typically occurred previously. A secondary rhythmic stratum is suggested by the soprano as is shown in Example 4-31.

Example 4-31. WoO 80, Variation VII, measures 6-7.

Variation VIII

This variation is a clear outgrowth of the preceding since the left hand portions of both are identical. As Example 4-32 shows, the usually unpredictable sixth measure is surprisingly predictable here, since it is only a more animated copy of the last three measures of Variation VII.
Example 4-32. WoO 80, measure 6 of Variations VII and VIII.

The variation is reminiscent of an octave study. The soprano contains much figuration, and, as Example 4-33 illustrates, a thinly disguised outline of the soprano of the theme. The outline is more clearly discernible here than in any of the previous variations; it will reappear in Variation XII.

Example 4-33. WoO 80, Variation VIII, measures 1-2.
Variation IX

The use of sixteenth-note sextuplets in this variation continues the rhythmic acceleration that began with the triplet eighth-note motion in Variation IV. The use of six against four provides a link to those variations employing the two-against-three rhythm.

The theme's soprano outline is lightly decorated and easily recognizable. The $e^b_2-c^2$ progression is a variant of the initial $c^2-e^b_2$ notes of the theme. A characteristic of this variation is the use of two-note groups in the soprano, the first note of which is a chromatic appoggiatura. These groups predominate until the pattern is abruptly broken in measure 6 by the appearance of an $a^b_2$ which is sustained for three beats. The appearance of this two-note chromatic figure is will provide a link with Variations XVI, XXIV, XXV, and especially XXX.

The bass follows the chromatic descent of the theme for only the first four measures. Beethoven deviation from the original bass in measure 5 permits the substitution of $vii^0_3$ in place of the German augmented sixth chord or $V/V$. This is made clear by the hypothetical version displayed in Example 4-34 which shows that Beethoven could have followed the bass of the theme more closely.

The rising alto line is of special interest since it outlines a perfect fourth from $g^1$ to $c^2$. This rising line is reminiscent of the first four notes in the soprano of the
theme, $c^2-d^2-e^2-f^2$. Example 4-35 illustrates this relationship.

Example 4-34. WoO 80, Variation IX, a hypothetical version of measures 4-6.

Example 4-35. WoO 80, a metric reduction of the soprano of the theme and the alto of Variation IX.

This scalar fourth should not be discounted as coincidence, for it acts as a link to the next two variations. Example 4-36 demonstrates how the scalar fourth motive serves as the basis of Variations X and XI.
Example 4-36. WoO 80, the scalar fourth motive in Variations X and XI.

As in some previous variations, the register is left open at the end of Variation IX to permit a connection to the next variation; in this case it is the $g^2$ in measure 8 which is left registrally isolated. Example 4-37 suggests that its registral connection is to the $g^2$ in measure 1 of Variation X. In addition, Variations IX and X are linked by the continuing rhythmic acceleration that began in Variation IV. Finally, it is possible that the trills in measures 7-8 of Variation IX foreshadow the use of shorter note values (thirty-second notes) in Variation X.

Example 4-37. WoO 80, the registral connection of $g^2$ between Variations IX and X.
Variation X

Variation X borrows a number of elements from previous variations and combines them. For example, the soprano of Variation VII is closely related to that of Variation X. Both make extensive use of the scalar fifth motive. Example 4-38 demonstrates that the soprano of Variation X differs from that of Variation VII only in that the duration of the first note of each phrase has been lengthened and the fourth note of each phrase has been omitted. As a result, the notes which occur on the beat now tend to be consonant rather than dissonant. This change produces not only variety but also a melodic line which is capable of serving as a bass in Variation XI.

Example 4-38. WoO 80, a comparison of measures 1-2 in Variations VII and X.
The thirty-second notes of the bass continue to intensify the rhythmic drive begun directly in Variation VII and indirectly in Variation IV. The bass figure is a highly animated version of the previous variation's scalar fourth motive. This rhythmic drive is continued without interruption into the next variation, and the intensity is dissipated only by the arrival of the major mode in Variation XII.

The bass dispenses with the chromatic bass of the theme and again employs the scalar fourth motive in combination with a portion of the root movement pattern established in Variations V, VII, and VIII. As a result, the harmonies in the first four measures are nearly identical to those of Variations V, VII, and VIII.

A registral connection exists between the $a^{b3}$ in measure 6 of Variation X and the $a^{b3}$ in measures 6-7 of Variation XI. Although the first note appears to resolve immediately to $g^3$, Example 4-39 demonstrates that its short length compared to the preceding note and its placement on the weak portion of the beat suggest that it should be regarded as a passing tone within the prevailing harmony.

**Variation XI**

Variation XI forms a pair with the preceding one; the most significant difference between the two is the exchange of soprano and bass parts. As a result, the harmony remains
unchanged. This variation serves as the culmination of the first group of minor variations, thus bringing to an end the first of the three main sections.

Variations X and XI are cross-related to Variations I and II since both pairs exchange soprano and bass. There are, however, several subtle differences. The first pair is marked "leggiermente," while the second is marked "sempre forte." The first pair is based on sixteenth notes which are neutral in their ability to be preceded by longer or shorter note values; the second moves in a whirlwind of thirty-second notes which only find relief in the quarter notes of Variation XII.

**Variation XII**

A new section is signaled by the change from the minor mode of the preceding variation to the parallel major in Variation XII. A new beginning is also implied by the abrupt deceleration from the thirty-second notes in Variation XI to the quarter notes in Variation XII. A
crucial element is the unornamented reemergence of the soprano of the theme.

The bass of Variation XII does not follow the familiar pattern of descending semitones moving from tonic to dominant; instead, the pattern is inverted and ascends as shown in Example 4-40.

Example 4-40. WoO 80, the bass of Variation XII, measures 1-8.

The soprano in measures 3-4 of the theme is composed of the notes e²-e²-g²-f²-f¹; in Variation XII, however, the notes have been changed to e¹-g¹-e¹-f¹. This change, a result of the g¹-e¹-f¹ motive, links all of the variations in the major mode together as a group. This is illustrated in Example 4-41. As a result, none of the variations in the major mode could be exchanged for any of the minor ones, even if they were harmonically readjusted.

The metric reduction given in Example 4-42 shows that parallel tenths reappear in this variation; here they ascend
chromatically rather than descend. The ascending fourth (g–a–b–c) in the inner parts is also noteworthy since it will provide a link to the following variation.

Example 4-42. WoO 80, Variation XII, a metric reduction.
**Variation XIII**

The soprano of Variation XII is used as a cantus firmus in Variation XIII. It occurs in the bass while a florid counterpoint is woven against it. The $c^2-g^1-c^2$ opening is a result of the scalar fourth motive evident in Variations X and XI. Example 4-43 illustrates that even though the soprano of the theme occurs in the bass, portions of it are also recognizable in the soprano as well.

Example 4-43. WoO 80, Variation XIII, measures 1-2.

A metric reduction of this variation is provided in Example 4-44 and reveals internal linear chromaticism.

Furthermore, the bass of Variation XII makes its presence felt in the first few measures of the soprano of Variation XIII before being absorbed into the inner parts. Finally, the soprano also suggests the c-e-d-g motive.
Example 4-44. WoO 80, Variation XIII, a metric reduction of measures 3-6.

The a\textsuperscript{1} climax of the cantus firmus in measure 6 receives a new harmonization: V\textsuperscript{7}/ii (a-c\#-e). The c\# in this chord will provide a cross-reference to Variations XV and XVI which, although not employing this chord, do use this note in conjunction with an a\textsuperscript{3} climax note to produce a IV\textsuperscript{+} chord.

There are two new elements which are introduced in this variation. The first is the figure suggested by the notes c\textsuperscript{2}-b\textsuperscript{1}-c\textsuperscript{2} in measure 1; it is shown in Example 4-45 and will be hereafter referred to as the neighbor-tone figure. This variation contains several appearances of this figure, and it provides a link between this variation and the next one.

The second element is harmonic syncopation. Whereas the e of the g-e-f motive served as an appoggiatura in
Example 4-45. WoO 80, Variation XIII, the neighbor tone in measures 1-3.

Variation XII, here it is a consonant tone because the harmony does not change until the second beat of measure 4. This syncopation, shown in Example 4-46, is another vital characteristic that will link this variation with the following one.

Example 4-46. WoO 80, Variation XIII, measures 3-4.
Variation XIV

Variation XIV poses a specific technical challenge to the performer: double thirds in each hand. This technique is a logical extension of the parallel tenths that were used as the basis of numerous variations.

There are several similarities between this variation and the previous one. The soprano of the theme reappears in the bass as a cantus firmus and is doubled in thirds; the upper voice is also doubled in thirds and continues the sixteenth-note movement begun in Variation XIII. Both variations have the same harmonic syncopation in measures 3-4. The a which serves as the climax note of the cantus firmus in measure 6 is supported by a chord with the same root (a) but by a different function (vi) and quality (minor). Finally, both make use of the neighbor-tone figure. Example 4-47 illustrates these characteristics in measures 4-6 of Variation XIV.

Example 4-47. WoO 80, Variation XIV, measures 4-6.
The ascending chromatic bass line found in Variation XII reappears in the bass accompanied by triplet figuration. The soprano outline of the theme is also ornamented but easily recognizable.

One of the chief characteristics of the upper part is the use of syncopation to avoid the placement of a new note on a downbeat. Does the syncopation have its origin in the harmonic syncopation first found in the measures 6-7 of the Variation XII? This seemingly remote possibility appears less unlikely when it is recognized that syncopation, whether explicit or implicit, plays a major unifying role in every one of the major variations; ultimately, it may have originated with the harmonic syncopation found in the theme between measures 7-8.

The upper part contains other important elements. The scalar fifth is perhaps the most obvious, particularly in the measure 2. In addition, the g-e-f (c-e^b-d) motive is also employed and links this variation with its neighbors. The reduction in Example 4-48 illustrates these motives.

The a^2 climax in measure 6 is dramatically emphasized by its repetition an octave higher. The importance of this leap should not be underestimated; Example 4-49 illustrates this aspect by comparing measures 6-7 of Variation XV to a hypothetical version which does not contain the octave leap.
Example 4-48. WoO 80, Variation XV, a metric reduction of measures 2–3.

Example 4-49. Measures 6–7 of Variation XV compared with a hypothetical version.
Variation XVI

The bass and harmony of Variation XVI are identical to that of Variation; the soprano of the former can be best described as a rhythmic variant of that of the latter. Since both these variations are nearly identical, why did Beethoven include Variation XVI? The answer lies in the fact that sixteenths in Variation XVI complete the rhythmic acceleration from the triplet eighths in Variation XV; as a result, Variation XVI provides a convincing culmination to the variations in major. In addition, the 3:4 polyrhythm is rhythmically more exciting than the straight triplets of the previous variation. Triplets eighths, which were the basis of the previous variation, are combined here with sixteenths to form the new polyrhythm.

In summary, all of the variations in the major mode are integrally linked to one another. Connecting and unifying elements include motives (in particular, the g-e-f motive), harmonic repetitions (Variations XV and XVI), harmonic syncopations (Variations XIII and XIV) and common rhythms (Variations XIII and XIV). Variations XII, XV, and XVI are make use the ascending chromatic bass. Finally, a registral expansion takes place among the variations in major which further defines their individual position. The a which serves as a climax note is the focus of this expansion; in Variation XII it appears as an a¹, in Variation XIII as an a², and in Variations XIV-XVI as an a³.
Parallels exist between group in major formed by Variations XII-XVI and minor group formed by the theme and Variations I-XI. Both groups begin with a theme in long note values (quarters) and experience a rhythmic acceleration. Although the group of major variations does not have as pronounced a rhythmic acceleration as the minor group, it also does not have the same number of variations with which to successfully build an equivalent momentum.

Variation XVII

The reappearance of the minor mode signals the beginning of the third and final section. A trio texture of two imitative upper parts supported by a bass is presented for the first time. As Example 4-50 illustrates, the opening notes of the theme, c-e\textsuperscript{b}-d-g, are used as a subject for imitation. The scalar fifth motive found in Variation X is combined with the neighbor-tone in measures 2, 4-5, and 7-8.

All of the notes found in the soprano of the theme can be observed in the first five measures of this variation, although they do not occur in one single voice. Example 4-51 depicts this outline.

The bass line is derived from the root position pattern found in Variations V, VII, VIII, X, and XI. Its appearance here is noteworthy, especially since it was excluded from the variations in the major mode.
Example 4-50. WoO 80, Variation XVII, the c-e\(_b\)-d-g figure in measures 1-2.

Example 4-51. WoO 80, Variation XVII, the outline of the theme.
A\textsuperscript{b2} does not serve as a point of melodic climax in the soprano of Variation XVII as it has in so many other variations. It does, however, appear as the highest note of the tenor in measure 6 as a\textsuperscript{b1}. In addition, the imitative voices switch from the upper parts to the lower ones beginning in measure 6. The entrance of each of the lower parts is marked sforzando in order to draw attention to it.

**Variation XVIII**

Several of the previous variations have served as miniature technical studies; for example, Variation XIV was an exercise in consecutive thirds for both hands and Variation XVI an exercise in four notes against three. Variation XVIII is a study in rapid scale passages.

As in the previous variation, the leaping bass is used instead of the descending chromatic one. The leaping bass was also used in Variation XVII and, as a result, links the two variations together. In contrast to the previous variation, however, Variation XVIII has thick chords placed in the bass register.

The thirty-second note scales are an extension of the scalar fifth motive. The ascending soprano outline of the theme is clearly visible as the first and last note of each scale passage. The metric reduction in Example 4-52 reveals this outline.
Example 4-52. WoO 80, Variation XVIII, a metric reduction.

The sforzando markings in measures 6–8 emphasize the following notes: \( g^3 \), \( a^b3 \), \( f^3 \), \( d^3 \), \( a^b2 \), \( g^2 \), and \( c^2 \).

The diminished chord suggested by the second through fifth notes these will link this variation and the next one. The \( a^b3 \) in measure 6 will also provide an additional link. Although an \( a^b2 \) appears an octave lower and is internally resolved to \( g^2 \) in measure 7, the \( a^b3 \) is left registrally isolated. As Example 4-53 illustrates, its registral connection will occur in measure 6 of the next variation.

Harmonic syncopation occurs in measures 6–7. Each of the scale passages anticipates a new harmony, suggesting that the change occurs before the beat instead of on it. This is illustrated in Example 4-54. It is noteworthy that this syncopation begins in measures 6 since it is here that which Beethoven consistently has maintained a degree of melodic, rhythmic, and harmonic unpredictability.
Example 4-53. WoO 80, the registral connection of a\textsuperscript{b} between Variations XVIII and XIX.

Example 4-54. WoO 80, Variation XVIII, the suggested harmonic syncopation in measures 6-7.

**Variation XIX**

This variation introduces a new subgroup of variations united by their common use of triplet sixteenth notes. Variation XIX is similar to Variation I in two ways. First, both make extensive use of the arpeggio. Second, the
The soprano outline in each variation is identical: g^2-e^2-f^2-f#2-g^2-a^2-b^2-g^2. The similarities between Variations I and XIX are shown in Example 4-55.

Example 4-55. WoO 80, a comparison of measures 1-2 of Variations I and XIX.

The leaping bass rather than the descending chromatic bass of the theme occur in Variation XIX. This bass links Variation XIX to Variations XVII-XVIII and XX-XXI which also use this bass.

Example 4-56 reveals descending chromatic thirds in the inner voices. This chromaticism is again suggestive of the chromatic bass of the theme and, although it is absent in the bass, it is present in the middle parts.

Example 4-57 illustrates that the neighbor tone motive provides an important link to Variations XVII and XX.
Example 4-56. WoO 80, Variation XIX, the descending chromatic thirds in measures 1–3.

Example 4-57. WoO 80, the neighbor tone link between Variations XIX and XX.

Variation XIX is linked to Variation XVIII by the common use of $vii^g7$. This chord occurs in measures 6–7 of both variations. Example 4-58 illustrates that the notes of this chord which are emphasized by sforzando markings in Variation XVIII also reappear in their same order in Variation XIX.

The $ab^3$ in measure 6 of Variation XIX has a registral connection to the $ab^3$ in Variation XVIII. The rhythmic
Example 4-58. A comparison of Variations XVIII and XIX.

of this note is unexpected, since it and its supporting vii⁰⁷ harmony anticipate the expected appearance on the second beat. As Example 4-59 demonstrates, this syncopation links the two variations.

Example 4-59. WoO 80, a rhythmic comparison of Variations XVIII and XIX.
Variation XX

This variation is linked to the previous variation by the common use of triplet sixteenth. It is also linked by its continuation of the forte dynamic level.

The bass is the main source of melodic interest. As shown in Example 4-60, it represents a combination of the scalar fifth and the neighbor tone figures. Despite its ornamentation, the bass also outlines the leaping pattern on the downbeats of measures 1-4. This use of the leaping bass links this variation with the previous three.

Example 4-60. WoO 80, Variation XX, the scalar fifth and neighbor tone figures in measures 1-2.

The right hand, on the other hand, contains the chromatic bass and harmony of the theme in measures 1-4 of Variation XX. The chords are also syncopated, a characteristic that will link this variation with the next.
The sixth measure again serves as a point of surprise and unpredictability. Although an $a^b2$ occurs on the second beat, the note is obscured by the $b^2$. The melodic highpoint does not occur at all in the right hand of measure 6, but instead in the left hand with the bass rise to $a^b$ on the downbeat of measure 7. This is shown in Example 4-61.

Example 4-61. WoO 80, Variation XX, measures 6-8.

Variation XXI

Variation XXI is a variant of Variation XX and thus the two form a pair. The primary difference between them is an exchange of voices; in this respect, they are similar not only to Variations I and II but also to Variations X and XI. An additional difference between Variations XX and XXI is the treatment of the $a^b$ in measures 6-7. As previously mentioned, the true melodic climax of Variation occurs in measure 7 with the bass rise to the $a^{b1}$. In Variation XXI,
however, the a\(^b2\) which occurs one the second beat of measure
6 is the melodic climax of the soprano. It is noteworthy
that this note is dissonant against the bass G, suggesting
that it is a nonharmonic tone or the ninth of a V\(^b9\). Its
immediate resolution to g\(^2\), as shown in Example 4-62,
suggests that the former is the case.

Example 4-62. WoO 80, Variation XXI, measures 6-7.

Variation XXII

This variation serves as the conclusion of the first
subgrouping in the third large section. Canonic writing is
employed for the first time and hence each hand eventually
plays the same material. The scalar fifth motive serves as
the basis of the melodic material. As Example 4-63
illustrates, this variation is a logical successor to
Variations XX and XXI since each contains the outline of the
scalar fifth motive.
Example 4-63. WoO 80, measure 1 of Variations XXI and XXII.

Only the basic tonic and dominant harmonies are suggested in measures 1-2 and 6-8 because of the restrictive harmonic nature of canonic composition. (The harmony arises from the interaction of the subject with its succeeding entrances.) Each measure seems to suggest a root position chord; the resulting series of root movements is a form of the leaping bass line and links this variation to all of the previous minor variations in this section.

The third and fourth measures are of special interest since they suggest an unusual progression, bvii – iv. These two measures result from the transposition of measures 1-2 down a whole step and the adjustment of the fourth chord from major to minor. Beethoven could have continued this pattern by placing VI – III in measures 5-6. This probably would have been unacceptable to Beethoven because of the increase in predictability, the divergence from the harmonic progression of the theme, the delay in the confirmation of c
minor, and the premature introduction of the crucial $a^b$. As Example 4-64 illustrates, Beethoven instead places an $a^b$-natural in measure 5 (suggesting a $vi^0$ chord) and a $b$-natural in measure 6 (suggesting a $vii^0^7$ chord).

Example 4-64. WoO 80, Variation XXII, measures 5-6.

![Musical notation](image)

The placement of the $a^b^3$ comes on the downbeat of measure 6 and is supported by the implied $vii^0^7$ of the previous measure. This rhythmic placement is identical in Variation XX and thus serves as a link between the two variations. Unlike in the previous variation, however, the $a^b^2$ is clearly a chord tone. As Example 4-65 demonstrates, the underlying chord progression in measures 6-8 is $i^6 - vii^0^7 - i$.

Two more unifying factors must be mentioned. First, in a broad sense, the left hand is a melodic form of syncopation. Some degree of syncopation exists in Variations
XVIII-XXI, and this characteristic links Variation XXII to them. Second, Variation XXII is linked to Variation XVIII by the common dynamic level, forte.

Example 4-65. WoO 80, Variation XXII, measures 6-8.

Variation XXIII

This variation differs from the previous one by its lower register, more stationary soprano, and softer dynamic level. These characteristic separates this variation from the previous one and signals the beginning of a new subgroup.

The soprano line is almost completely static; the only change is the $g^1-a^1-f^1-g^1$ inflection in measures 6-7. As a result, the soprano functions primarily as a long pedal point on $g^1$. This produces several clashes with the
underlying harmonic progression. Two of the most notable are those simultaneities occurring in measure 4 (AA-g-c\textsuperscript{1}-f\textsuperscript{1}-g\textsuperscript{1}, a IV with the g pedal) and measure 5 (AA\textsubscript{b}-g-c\textsuperscript{1}-f\#1-g\textsuperscript{1}, a German augmented sixth chord with the g pedal). These are illustrated in Example 4-66.

Example 4-66. WoO 80, Variation XXIII, measures 5-6.

The lack of melodic activity in the soprano causes the bass line to take on additional prominence. The bass follows the chromatic bass descent of the theme which has not appeared since Variation X. This return after such a long absence also signals the beginning of a new. As we shall see, the bass line will also serve as a link to the next two variations.

The FF bass note in measures 6-7 supports the melodic climax note a\textsuperscript{b}1. Both notes are part of a dominant harmony. The FF, which is the seventh of the chord, appears to be left unresolved in measure 7. The bass and soprano exchange
voices in measure 7; as a result, the FF is transferred to f₅, and a resolution of the f₅ to e₅ occurs in measures 7-8 as Example 4-67 displays.

Example 4-67. WoO 80, Variation XXIII, measures 6-8.

This variation is related to its neighbors in a number of ways. For example, it is linked to the previous variation by the use of a common dynamic level (pianissimo) and, as shown in Example 4-68, similar harmonic and melodic syncopations. As we shall see, Variation XXIII will also be linked to the following variation in three ways. First, both are part of a dynamic crescendo which will culminate in Variation XXVII. Second, Variation XXIV is part of a registral expansion (as demonstrated in the first measure of each variation) which begins with g₅ in Variation XXIII and culminates with e₅ in Variation XXVII. Example 4-68 gives the first measure of Variation XXIII and XXIV for comparison. Third, the metric reduction of Variation XXIV
Example 4-68. WoO 80, measure 1 of Variations XXIII-XXV.

Example 4-69 reveals the presence of descending parallel tenths. As we shall see, the next two variations also contain this structural outline; as a result, this provides a common link in Variations XXIV-XXVI.

Example 4-69. WoO 80, Variation XXIII, a metric reduction.
Variation XXIV

Unlike the previous variation, the main melodic interest is focused in the right hand rather than the left. Although the soprano outline of the theme is clearly visible, only a portion of the chromatic bass is present. The left hand is limited to short interjections of the harmony. Example 4-70 illustrates these points.

Example 4-70. WoO 80, Variation XXIV, measures 1-3.

As shown in Example 4-71, this variation bears a resemblance to Variation I. Both employ ascending arpeggios followed by repeated notes in measure 1 and descending arpeggios and repeated notes in measure 2. Both variations are marked to be played softly.
Two motives are especially prominent in this variation: the neighbor tone and the appoggiatura. The latter has its origin in the semitone motion $e^b_2-d^2$ in measures 1-2 of the theme; this relationship is more apparent during performance, since the sixteenth note $e^b_2$ almost becomes an appoggiatura at a quick tempo. These two motives will serve as links to the next variation which, as may be observed in Example 4-72, also makes extensive use of them.

Example 4-72. WoO 80, measures 2-4 of Variations XXIV and XXV.
Example 4-72 continued.

Notes marked "sforzando" are used extensively in measures 6-8 to mark the begin of scalar third groups. As illustrated in Example 4-73, the scalar third will be a prominent motive in Variation XXVI. This motive serves as a cross-reference between the two variations.

4-73. WoO 80, measures 6-8 of Variation XXIV and measures 1-3 of Variation XXVI.
A metric reduction of Variation XXIV is given in Example 4-74. It clearly displays a melodic hemiola which occurs in measures 6-8. The reduction also reveals that the $a^b_2$ and $f^2$ in measure 6 do not respectively resolves to $g^2$ or $e^b_2$ since the underlying harmony is $vii^6^7 (b - d^1 - f^1 - a^b_1)$. As a result, the $a^b_3$ and $f^3$ are registrally isolated and will provide a registral connection to the following variation.

Example 4-74. Variation XXIV, a metric reduction.

Finally, it should be noted that this variation makes continuous use of the triplet eighth notes. This characteristic provides a cross-reference to Variations IV and XV.
Variation XXV

Variation XXV is closely related to the preceding variation by a number of motives. The neighbor tone, which was prominent in Variation XXIV, is used extensively in Variation XXV, appearing on every beat in measures 1, 3, and 5. Both variations also employ the appoggiatura. These characteristics are shown in Example 4-75.

Example 4-75. WoO 80, Variation XXV, measures 1 and 2.

A metric reduction is given in Example 4-76. Unlike the previous variation, the outline of descending tenths is clearly visible.

The soprano outline of the theme is not present. Unlike the previous variation, however, the chromatic bass of the theme occurs in the left hand. As may be observed in Example 4-77, the bass notes and rhythm in measures 1-6 are identical to those of Variation IV; this provide a cross-reference between the two variations.
Example 4-76. Variation XXV, a metric reduction.

Example 4-77. WoO 80, measures 1-6 of Variations IV and XXV.
Although an $a^b_2$ occurs on the second beat of measure 6, it is the $a^b_3$ which may be found on the downbeat of measure 7 that is of great interest. The $a^b_3$ is not left isolated as often was in previous variations. However, the $d^3$ in the same measure is left isolated. Example 4-78 illustrates that the $d^3$ is registraly connected to the $c^3$ which occurs in measure 1 of Variation XXVI.

Example 4-78. Measures 7-8 of Variation XXV and measure 1 of Variation XXVI.

A rhythmic surprise does occur in this variation as a result of the placement of the $a^b_3$ melodic climax note on the downbeat of measure 7. This is noteworthy since this the only other times it occurs is in Variations III, VII, VIII, and XXII.
Variation XXVI

The soprano outline of the theme is clearly visible in this variation. The melodic climax of the soprano is provided by the a\textsuperscript{b} on the second beat of measure 6. It is also the third note of a scalar third, a motive which appears prominently in this variation as well as the next. This note is supported by a vii\textsuperscript{07} harmony and is left registrally isolated; its connection occurs in measure 6 of Variation XXIX.

The third doublings play a vital role in this variation; they provide a cross-reference not only to Variation XIV but also a link to Variation XXVII. Example 4-79 permits a comparison to be made between Variations XIV and XXVI. The third doublings are used in conjunction with the scalar third motive which appeared prominently in Variations XVI and XXIV. The neighbor tone motive provides a cross-reference between Variation XXVI and XIII.

Example 4-79. WoO 80, measure 1 of Variations XIV and XXVI.
The metric reduction given in Example 4-80 reveal the underlying descending thirds in measures 1-4. This provides a link to the previous variation which also contained this outline.

Example 4-80. WoO 80, Variation XXVI, a metric reduction of measures 1-4.

This variation and the next one employ the leaping bass instead of the descending chromatic one. Variation XXVI is linked to Variation XXVII by the common dynamic level (forte), the third doublings, and the scalar third motive. More subtle, however, is the rhythmic crescendo that begins in this variation and culminates in Variation XXIX. The rhythmic acceleration can be observed as a result of the rhythmic patterns given here: Variation XXVI, eighth notes and some sixteenths; Variations XXVII-XXVIII, continuous sixteenths; Variation XXIX, triplet sixteenths.
Variation XXVII

This variation forms a pair with the previous one. Both have nearly identical harmonic progression and make considerable use of the scalar third motive and third doublings.

Variation XXVII serves as a dynamic and textural culmination of processes which began earlier. The dynamic crescendo to "forte" began with the "pianissimo" in Variation XXIII. The textural growth to seven-note chords began with the two-part structure found in Variation XXV.

A new figure occurs in Variation XXVII which is a combination of the scalar third of the previous variation with the c–eb–d fragment of the theme. It is shown in Example 4-81.

Example 4-81. WoO 80, Variation XXVII, measures 1–2.
The $e^{b2}-d^{2}-e^{2}-f^{2}-f^{#2}-g^{2}-a^{b2}$ variant of the soprano outline of the theme is present. As may be seen in Example 4-82, it is employed in conjunction with the internal chromatic descending thirds found in the previous variation.

Example 4-82. WoO 80, Variation XXVII, measures 1-3.

Variations XXVI and XXVII both employ register shifts; however, they are much more frequent in the latter. They suggests that this variations was conceived orchestrally rather than pianistically. Example 4-83 displays transcription written on four staves rather than the original two.

Although both Variation XXVI and XXVII are closely related, the melodic climax suggested by the $a^{b2}$ in Variation XXVII occurs in another new position: on the second sixteenth of the first beat of measure 6. Example 4-84 illustrates that it implies an unusual harmonic as well as melodic syncopation.
Example 4-83. Variation XXVII, a transcription of measures 1-2.

Example 4-84. WoO 80, Variation XXVII, the harmonic syncopation in measures 6-8.
Variation XXVIII

This variation bears a superficial resemblance to Variation XVII; both employ upper parts which are in a high register high and to be played legato, identical harmonic progressions, and similar figuration in the left hand. Variation XXVIII is less complex in that there is only one simple melodic line in quarter notes instead of the two imitative lines found in Variation XVII. The soprano does, however, make limited reference to the expanded c-\(e^\text{b}_1-d\) fragment found in Variation V and to the \(c^2-\text{e}^\text{b}_2-d^2-g^2\) motive of the theme. This is shown in Example 4-85.

Example 4-85. WoO 80, Variation XXVIII, measures 1-3.

This variation is linked to its neighbors by the leaping bass. However, the reduction given in Example 4-86 reveals that the chromatic bass of the theme is also present in the left hand. The reduction also reveals underlying parallel tenths between the highest soprano notes and the chromatic line in the tenor.
This variation differs from others in that the appearance of $a^h$ in measure 6 does not represent melodic, rhythmic, or harmonic culmination. Indeed, a melodic climax seems to be avoided altogether in Variation XXVIII, perhaps highlight the $a^h$ climax in measures 6-7 of the following variation. The internal voice-leading of the $a^h$ in measures 6-7 of Variation XXVIII is noteworthy. As Example 4-87 illustrates, the last four notes of the soprano of the theme, $a^h$-f-g-c, is discernible as a result of the implied voice transfer from the left to the right hand.

**Variation XXIX**

This variation represents the culmination of a rhythmic acceleration which began in Variation XXVI. Variation XXVI is composed of eighths and some sixteenths, Variations XXVII-XXVIII of continuous sixteenths, and Variation XXIX of continuous triplet sixteenths.
Example 4-87. WoO 80, Variation XXVIII, measures 6-8.

The metric reduction provided in Example 4-87 reveals that descending tenths are present. Measure 3 contains an striking harmony: a flat V chord. It occurred previously in Variation III and thus serves as a cross-reference. This chord results from the transposition of the i to V harmonic progression in measures 1-2 down a full step to produce the progression flat-vii to IV. This is shown in Example 4-88.

Example 4-88. WoO 80, Variation XXIX, a metric reduction.
The melodic and harmonic climax of this variation and subgroup occurs in measure 6; here is displayed the widest registral spacing, loudest dynamic, and most repetitive pattern (the $a^b3$ is struck six times before it is resolved by the $g^3$). As Example 4-89 illustrates, this climax is supported by a $ii_{6}^{b}$ and the lowest note of the composition, FF.

Example 4-89. WoO 80, Variation XXIX, measures 6-7.

Variation XXX

This variation marks the beginning of the third and last subgroup in the third major section. It is similar to Variations XXIII and XII in that it represents a dramatic change of register, range, rhythmic intensity, and dynamics. Whereas the previous variation was technically difficult and characteristically agitated, Variation XXX by comparison is uncomplicated and relaxed. Despite its elegant simplicity, this variation still contains numerous surprises. The
chromatic bass and soprano outlines of the theme are present. The soprano, however, is of special interest since it is now fully chromatic. As a result, this chromatic soprano represents the inversion of the chromatic bass. The passing tones in the soprano are accented by their consistent placement on the downbeat of measures 2-4. They represent the extension of the $f^\# - g - a^b$ melodic progression that has been so vital for the whole set. This is especially apparent in Example 4-90 because the $g^2$ of the soprano is supported by a $i^6_4$, itself a passing function.

Example 4-90. WoO 80, Variation XXX, measures 1-8.
There are two harmonic changes. Instead of the i chord occupying the entire first measure as was the case in all of the previous variations, there is a modest embellishment, i-V₄\textsuperscript{3}. The second measure has also been modified; in place of the usual V chord there is a vii\textsuperscript{0}⁷.

This variation marks the beginning of a final drive to the last variation. This is accomplished in several ways. The first is by rhythmic acceleration; the quarter notes in Variation XXX will eventually culminate in the thirty-second notes in Variation XXXII. A second way is by registral expansion. The soprano of Variation XXX begins on a c¹, Variation XXXI on c², Variation XXXII on c³, and the coda (measure 8 of Variation XXXII) on c⁴, the highest note of the entire set. A third way is by dynamic crescendo; the "pianissimo" of Variation XXX will eventually culminate in the "fortissimo" in measure 8 of Variation XXXII.

**Variation XXXI**

This variation acts as a da capo of the theme. The soprano of the theme is presented without ornamentation and is doubled at the octave, a characteristic which will link this variation to the next one. The chromatic bass of the theme is replaced by thirty-second note arpeggios which contain a C pedal point and recall the harmonic progression of the theme. This pedal point not only suggests that the variation set is about to come to an end but also links this
variation with the next. Measures 1-7 are noteworthy since quintuplet thirty-seconds are introduced which were foreshadowed by the upbeat to measure 3 of the theme.

The German augmented sixth chord which occurred in measure 5 of the theme is replaced by a new chord, vii\(^7\)/V. It functions here as a chromatic passing chord between the iv in measure 4 and the V\(^7\)/V in measure 6. It will also reappear in the next variation and will serve as an additional link.

\textbf{Variation XXXII}

The previous variation introduced the soprano of the theme in octaves; Variation XXXII fills in these octaves with rising scales. Because the first scale begins in measure 8 of Variation XXXI, Beethoven is able to use it to dovetail the end of Variation XXXI with the beginning of Variation XXXII. This is shown in Example 4-91.

\textbf{Example 4-91.} WoO, measure 8 of Variation XXXI and measure 1 of Variation XXXII.
The pitch class $a^b$, which has served as the melodic climax in measure 6 of almost every variation, is overshadowed in Variation XXXII by the approach to and the arrival on $c^4$ in measure 8. The $a^b$ is not forgotten, however; it reappears prominently in measures 12-14 and is marked sforzando. The melodic apex of the transition, measures 8-18, occurs in measure 15 with the $a^b^3$ supported by a $vii^0^7$ chord. More important, however, is the $a^b^3$'s registral connection to the final climactic $a^b^3$'s in measures 43-47. Example 4-92 illustrates that its final appearance is marked by a storm of octaves which lead to the final cadence.

Example 4-92. WoO 80, Variation XXXII, the registral connection of $a^b^3$ from measure 15 to 47.
Variation XXXII may be regarded as consisting of a variation and a coda. This can be further reduced to the following: a seven-measure variation (measures 1-7); an eleven-measure transition (measures 8-18); a seven-measure variation (measures 19-25) and a seven-measure extension (measures 26-32); an eighteen-measure codetta (measures 33-50). Measures 8-18 display a noticeable slowing of the harmonic rhythm and the absence of the theme. This transition consists of only tonic and dominant functions. Example 4-93 illustrates the resolution of the $a^1$ in measure 12 to $g^1$; the short-range resolution occurs in measure 12 and the long-range one in measure 17.

Example 4-93. WoO 80, Variation XXXII, measures 12 and 17.

A thirty-third variation occurs in measure 19. The soprano consist of rising scales, the first notes of which outline the soprano of the theme. The scales are divided into units of two sixteenth notes, the first of which is often altered chromatically. The resulting chromatic passing tones and neighbor-tones are illustrated in Example 4-94 and provide a strong cross-reference to Variation XXX.
This thirty-third variation lacks a strong sense of closure since a V-i cadence does not occur in its seventh and eighth measures (measures 25-26 of Variation XXXII); indeed, the movement of V to i is not completed until measure 33.

The purpose of the codetta which forms measures 33-50 is to reiterate the V to i cadence. In addition to its harmonic function, the codetta recalls certain melodic fragments of the theme. For example, measures 41-43 contain the opening rhythm of the theme: a quarter rest, a double-dotted quarter, a sixteenth, and a quarter. The c₂-eᵇ₂-d₂ opening of the theme returns in retrograde as d₂-eᵇ₂-c₂ in measures 44 and 46. In addition, Example 4-95 illustrates that the final appearance of the aᵇ₃ in measure 47 is significant because it is transferred to aᵇ¹ and resolved to g¹ in measure 48.
Example 4-95. WoO 80, Variation XXXIII, measures 47-48.

Example 4-96 displays two more characteristics of the codetts which assist in bringing WoO 80 to a convincing conclusion. First, Beethoven deliberately avoids chromaticism by employing exclusively the notes of the C minor harmonic scale. Second, the finality of the V-i cadences in measures 48-50 is reinforced by the 7 to 8 movement in the soprano.

Example 4-96. WoO 80, Variation XXXIII, measures 48-50.
Summary of Formal Implication and Internal Connections

Table 4-1 displays the most important links and cross-references discussed in this chapter. These links and cross-references are established by the common use of motives, figures, and harmonic progressions as well as registral connections, dynamic growth, and rhythmic accelerations. The table demonstrates that each variation is related to another by at least one method. For example, it is clear that the $a^b_2$ in measure 6 makes a registral connection to the $g^2$ in measure 1 of Variation I. Certain prominent notes are also commonly used to link two or more variations; for example, both Variations III, V, and VI are registrally connected by the use of an $e^b_3$. Motivic occur perhaps the most frequently. For example, Variations XXII-XVI make use of the figure $g-e-f$, a variant of the $c^2-e^b_2-d^2$ opening of the theme.

The arrangement of the variations is of paramount importance. Each has its own logical position; in most cases it would be impossible to exchange one for another or to eliminate one without affecting the integrity of the whole work. For example, Variation III represents the culmination of the sixteenth-note drive in Variations I and II, and to exchange it with another would result in an anti-climactic sequence of events. It is clear, then, that Beethoven has endowed WoO 80 with a unity that clearly transcends the additive tendency.
Table 4-1. WoO 80, Links and cross-references.
The symbol "*" stands for cross-reference.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Var. I</th>
<th>Var. II</th>
<th>Var. III</th>
<th>Var. IV</th>
<th>Var. V</th>
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<td>--- 2:3 stratum ---</td>
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<td>-- exchange parts --</td>
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<td>2 chromatic bass line</td>
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<td>3(g)-c-e\textsuperscript{b}</td>
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<td>4 soprano-(fragment)----</td>
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<td>6</td>
<td>------------------ piano ------------------</td>
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<tr>
<td>7</td>
<td>-- connecting passagework --</td>
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<td>8</td>
<td>------------------ repeated notes ------------------</td>
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<tr>
<td>9</td>
<td>a\textsuperscript{b2}------------------g\textsuperscript{2}</td>
<td>*a\textsuperscript{b3}</td>
<td>*a\textsuperscript{b3}</td>
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Table 4-1 continued. WoO 80, links and cross-references.

<table>
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<th>Var. VII</th>
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Table 4-1 continued. WoO 80, links and cross-references.

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Table 4-1 continued. WoO 80, links and cross-references.

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- exchange of identical rhythms
- leaping bass (root motion)
- chrom. frag. *
-chrom. tenths
--- scalar fifth
--- forte
--- connecting passagework
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Table 4-1 continued. WoO 80, links and cross-references.

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<th>Var. XXX</th>
<th>Var. XXXI</th>
<th>Var. XXXII</th>
<th>bridge</th>
<th>Var. XXXIII</th>
<th>codetta (CODA)</th>
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<td>—C pedal point—</td>
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<td>—chromaticism</td>
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<td>4</td>
<td>—soprano outline of theme—</td>
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<td>5</td>
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<td>ab3</td>
<td>a b3</td>
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<td>(a^3)</td>
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<td>c1</td>
<td>c2</td>
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CHAPTER V

THIRTY-THREE VARIATIONS ON A WALTZ BY DIABELLI, OPUS 120

Introduction

Beethoven's Opus 120 is his greatest single achievement in variation form. Hans von Bülow called the work a "microcosm of Beethoven's genius, a compendium of the entire tonal realm."¹ Tovey noted that Diabelli praised the fugue and placed the set next to Bach's Goldberg Variations in importance.² Diabelli felt that Beethoven's variations were in a separate category from those of other composers; as a result, he published Beethoven's work as Part I of the Vaterländischer Künstlerverein and the fifty separate variations submitted by other composers as Part II. In addition, Cappi and Diabelli made the following announcement in the Weiner Zeitung on June 16, 1823:

We present here to the world Variations of no ordinary type, but a great and important masterpiece worthy to be ranked with the imperishable creations of the old Classics. . . . The most original structures and ideas, the boldest musical idioms and harmonies are here


²Donald Francis Tovey, Essays in Musical Analysis: Chamber Music (London: Oxford University Press, 1965), 124-5.
exhausted; every pianoforte effect based on a solid technique is employed... This work is interesting from the fact that it is elicited from a theme which no one would otherwise have supposed capable of working-out [in such a manner].

Recent research by William Kinderman\(^4\) and Arnold Münster\(^5\) has revealed that Opus 120 was composed between 1819 and 1823. Earlier scholars such as Gustav Nottebohm and Alexander Wheelock Thayer were unaware of the earliest sketches in the Wittgenstein Sketchbook and thus mistakenly reported that a majority of the work was done in 1822. Thayer in particular was influenced by Anton Schindler's unreliable assertion that the work grew in a haphazard fashion from six or seven variations to twenty-five and then to thirty-three.\(^6\)

Opus 120 appeared after a ten-year hiatus in variation composition. In 1819 the composer and publisher Anton Diabelli invited fifty composers to submit one variation each based on his waltz theme; they were to be collected and published as the *Vaterländischen Künstlerverein*.

\(^3\)Tovey, *Essays: Chamber Music*, 124.


\(^6\)Schindler erroneously reported that Diabelli sent out his invitations during the winter months of 1822 and 1823. This is contradicted by the variation submitted by Carl Czerny found in Nationalbibliothek in Vienna and dated May 7, 1819.
Beethoven, one of the composers who received the theme, at first showed little interest in the project, describing Diabelli’s theme as a "Schusterfleck." Eventually Beethoven decided to use it as the basis of a large set of variations, one that would rival the collection submitted to Diabelli by the fifty composers.  

Kinderman discusses Beethoven’s initial plan of 1819 and shows that it was not altered. When the first draft was enlarged in 1822 and 1823, Beethoven kept the order and added two new variations at the beginning, one in the middle, and several more toward the end.  

Unlike previous variation sets in which at least melodic shape or harmonic progression is retained, the Diabelli set breaks new ground by using the theme not so much as a model but rather as a source of raw material. Often all that remains of the theme is its metrical background of two sixteen-measure phrases. For example, the relationship of the fugue to the theme is distant; they are related primarily by falling fourths and pitch repetitions.

Philip Barford has noted that Opus 120 has all of the characteristics of Beethoven's third period such as forceful counterpoint, trills, and slow contemplative sections. 

7 Jürgen Uhde, Beethovens Klaviermusik (Stuttgart: Philipp Reclam, 1968), I, 503.  
8 Kinderman, Beethoven's Diabelli Variations, xvii–xviii.
A great deal of literature has been devoted to this work. Opus 120 more than any other Beethoven variation set has been the subject of numerous discussions concerning internal form. Jürgen Uhde\(^9\) recognizes four sections, David Porter\(^{11}\) and Arnold Münster\(^{12}\) five, and Karl Geiringer\(^{13}\) eight.

Table 5-1. Opus 120's sectional divisions.

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\(^{10}\)Uhde, *Beethovens Klaviermusik I*, 553–555.


\(^{12}\)Münster, *Studien*, 175.

The Theme

Tovey describes the theme as "rich in solid musical facts." This statement presents a paradox since it is the lack of a memorable soprano or bass which permits Beethoven greater compositional freedom. It is likely that Diabelli was aware of this when he conceived his theme. Because both the soprano and bass are so skeletal, the theme presents more of a harmonic framework than a melodic one. This characteristic may have had great appeal for Beethoven; Charles Rosen remarks that "it may almost be stated as a rule in Beethoven that the longer the work the simpler the material that goes into it. Both the range and the length of the Diabelli Variations were made possible by the existence of a theme with primitive virtues."

One primitive virtues is the use of sequences in measures 9-13 and 25-28. These sequences are responsible for Beethoven referring to the theme as a "Schusterfleck." They prove to be a benefit rather than a liability; they introduce secondary harmonic functions which add variety and limited chromaticism. They are also the basis for much of Beethoven's harmonic experimentation.

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14 Tovey, Essays: Chamber Music, 126.


16 Münster, Studien zu Beethovens Diabelli-Variationen, 16.
The theme consists of two sixteen-measure sections, each of which is to be repeated. Each section consists of two eight-measure phrases which may be further subdivided into the pattern $4 + 4 + 2 + 2 + 4$. The overall form is $A B A' B'$. It is significant that while the harmonic and melodic aspects of the theme may be drastically altered, these basic proportions are usually maintained. Each section displays harmonic acceleration; for example, the rate of harmonic change in measures 1-4 and measures 5-8 is one time, measures 9-12 seven times, and measures 13-16 eight times.

A metric reduction eliminating both nonessential chords and repetitions is given in Example 5-1. This theme is characterized by a paucity of nonharmonic tones; the only ones that occur are associated with the eighth-note figures in the left hand as in measures 3, 7, 19, and 23. The reduction also reveals a harmonic acceleration in each section, although the number of essential chord changes is less than in the actual theme. As we shall see, Beethoven adheres more closely to certain portions of the theme than others. Melodically, the most significant lines are $c^2$ (measures 1-4) - $d^2$ (measures 5-8 and 17-20) - $e^2$ (measures 21-24) in the soprano and $c$ (measures 1-4) - $G$ (measures 5-8 and 17-20) - $c$ (measures 21-24 and 32) in the bass. Other lines are less carefully followed, such as $e^{1}-f^{1}-f^{\#1}-g^{1}-g^{\#1}-a^{1}$ in measures 8-13. Harmonically, the underlying framework
Example 5-1. Opus 120, theme, a metric reduction.
is I (measures 1-4) – V\(^7\) (measures 5-8) – V\(^7\) (measures 17-20) – I (measures 21-24) – V (measure 31) – I (measure 32).

One latent aspect of the theme, syncopation, will prove to be an important characteristic in a majority of the variations. As may be seen in Example 5-2, melodic anticipation, a form of syncopation, is suggested by the c\(^2\) which is part of the upbeat figure d\(^2\)-c\(^2\)-b\(^1\)-(c\(^2\)).

Example 5-2. Opus 120, theme, the implied melodic syncopation.

Vivace

This syncopation occurs again in measures 4-5 and less obviously in 16-17 and 20-21. In the following variations it will appear not only melodically but harmonically as well. The latter is especially noteworthy since it does not literally appear at any point in the theme.

The theme contains an abundant store of motives for development in the variations. These are listed here:
1. The descending fourth \((c^2-g^1)\) in measure 1 and its extension, the fifth \((d^2-g^1)\), in measure 5. Example 5-3 demonstrates that the fourth is especially prominent in measures 1-8 of the bass.

Example 5-3. Opus 120, theme, measures 1-8.

\[\text{Vivace}\]

2. The upbeat figure \(d^2-c^2-b^1-c^2\), hereafter referred to as the turn motive. A variant, \(c^2-d^2-c^2\), will be referred to as the neighbor-tone motive. Example 5-4 displays these motives.

Example 5-4. Opus 120, theme, measure 1: the turn and neighbor-tone motives.
3. The figure $e^1-f^1-a^1$, referred to as the rosalia figure because it occurs in conjunction with a harmonic sequence. Its inversion, $b^b-a-f$, occurs simultaneously in the bass of the theme. More common, however, is the $e^1-f^1$ variant, referred to as the two-note chromatic motive. These two motives are illustrated in Example 5-5.

Example 5-5. Opus 120, theme, measures 8-13: the rosalia and two-note chromatic motive.

4. The repeated note motive. Example 5-6 illustrates this motive which first occurs in measures 1-4 of the theme and consists of the repetition of $g^1$.

Example 5-6. Opus 120, theme, measure 1-4.
5. The figure $e^1 - f^1 - f#1 - g^1 - g#1$, referred to as the chromatic line, shown in Example 5-7.

Example 5-7. Opus 120, theme, measure 8-13, the chromatic line.

![Chromatic Line Example](image)

6. The figure d-c-B-A-G, referred to as the scalar line. It occurs in measures 19-20 of the theme and is shown in Example 5-8.

Example 5-8. Opus 120, theme, measures 19-20, the scalar line.

![Scalar Line Example](image)
7. The rhythm first implied by the bass in measures 1-2 and more explicitly in 25-28. It will be referred to as the "long-short-long" motive and is shown in Example 5-9. It will often manifest itself in the form of dotted rhythms in the upcoming variations.

Example 5-9. Opus 120, theme, measures 1-4, the implied long-short-long rhythmic motive.

Variation I

This march in 4/4 provides both contrast and similarity to the 3/4 theme. William Kinderman has noted that Variation I and II were later additions to the original plan. Their purpose is to provide a smooth transition from the theme to the remaining variations since the latter often do not follow closely the melodic or harmonic outline of the theme. As a result, Variation I preserves many aspects of the theme. For example, the soprano outline is

Kinderman, Beethovens Diabelli Variations, 84-85.
maintained, most notably the c²-d² movement. The repeated g's in measures 1-8 and d²'s in 17-19 provide a link to the theme. A portion of the bass outline is present in the form of the c (measure 1) and G as well as the G-c movement in the last two measures. The descending fourth motive also occurs in the bass, this time filled out with passing tones in the first four measures. Much of the theme's harmonic progression is maintained, such as the I (measures 1-4), V⁷ (5-8), V⁷/IV (8 and 9), IV (9-10), V⁷ (16-19), and V⁹/₂, I⁶, V, I (28-32).

The deviations from the theme foreshadow many of the techniques that Beethoven will employ in the remaining variations. His interest in the diminished triad and the fully diminished seventh chord as both colorful and ambiguous chords is displayed eight times; these chords do not appear once in the theme. As shown in Example 5-10, they serve primarily as passing chords such as the c⁹-e-g-b⁹ chord in measure 6. They also serve as independent substitutes for the secondary dominants of the theme; two examples are the V⁷/IV and the vii⁹/₂/IV in measure 24.

Example 5-10. Opus 120, Variation I, measures 6-7 and 24-25.
Many unusual chords appear here and foreshadow others that Beethoven will employ in the following variations. For example, many of the chords are the result of contrapuntal movement; this provides an explanation for the $1^\frac{4}{2}$ in measure 1 and as well as the $\text{vii}_4^6$ in measure 18. Beethoven emphasizes certain notes by using them as the basis of a new harmony. Example 5-11 illustrates that $b^b$ serves as the seventh of the $V^7/IV$ in measures 8-9; it also serves this function in the theme. In measure 11, however, it functions as the root of a major chord and produces the unexpected $b\text{VII}$.

Example 5-11. Opus 120, Variation I, measures 8-12.

Example 5-12 illustrates the harmonic syncopation which is introduced in measures 12-13. Although the syncopation occurs only once in this variation, it will become a pervasive element in many future variations.

Contour is also an important factor in Variation I.

Measures 12-16 of the first section display a pronounced

scalar movement inward to the $V_6^6$. As may be seen in Example 5-13, this characteristic is the basis for the entire second section which represents an outward expansion of the soprano and bass lines to the climactic $V$ chord in measure 31.

Example 5-13. Opus 120, Variation I, a metric reduction of measures 17-32.
Variation II

Variation II employs a variant of the $d^2-c^2-b^1-d^2$ turn motive, one which eliminates the second (and consonant) tone. This new figure, $d^2-b^1-c^2$, clearly appears in measure 2 and permeates the entire variation. The initial appearance of this motive is shown in Example 5-14.

Example 5-14. Opus 120, Variation II, turn variant (d-b-c).

The descending fourth and fifth are present in measures 1-8 of the soprano. The soprano outline is also present: $c^2$ (the upbeat to measure 1) - $d^2$ (measure 4 and 16) - $e^2$ (21, becoming $e^3$ in 25) - $f^3$ (25). The bass outline of the theme is represented by the $c$ (measure 1), $d-g$ (15-16), and $G-c$ (32).

As Example 5-15 illustrates, the $f^3$ in measure 25 is left registrally isolated; its continuation occurs in measure 31. The $f^3$ in measure 31 proceeds upwards chromatically, passing $f^#3$ on its way to the climactic $g^3$. 
Example 5-15. Opus 120, Variation II, measures 25 and 31-32.

The harmonic syncopation introduced in the previous variation is used more extensively here. It occurs in measures 8-12 and 15-16 of the first section. Its employment in measures 25-28, shown in Example 5-16, is coupled with unexpected rhythmic changes which produces metric ambiguity.


Beethoven's predilection for fully-diminished seventh chords is apparent here; these chords occur no less than sixteen times. They provide a link to the previous
variation and the following one. Example 5-17 shows that they often are merely the result of nonharmonic tones. (In this case, the $d^b$ in the bass serves as a upper neighbor tone.)

Example 5-17. Opus 120, Variation II, measures 21-23.

This variation is linked to the previous one by the adjacent secondary dominant and corresponding fully-diminished chord substitute. The metric reduction given in Example 5-17 eliminates those fully-diminished seventh chords which are unessential and reveals more clearly the secondary dominants.

Example 5-18. Opus 120, Variation II, a metric reduction.
Example 5-18 continued.
Example 5-18 continued.

Variation III

This variation is linked to the previous one by the same tempo and meter. This is particularly noteworthy in Opus 120 because Beethoven frequently changes both tempo and meter from variation to variation. Example 5-19 shows that the e^1 in the upbeat figure to Variation III provides a link to the e^3 of the previous variation. Furthermore, this pitch also provides an internal registral connection to the same pitch in measures 19 and 32.

Example 5-19. Opus 120, measure 32 of Variation II and measures 1, 19-20, and 31-32 of Variation III.
Example 5-19 continued.

The variant of the turn motive used to unify Variation II reappears in Variation III and thus provides an additional link. As Example 5-20 reveals, the first interval has now been expanded to a fourth, and the third note is now also followed by a fourth.

Example 5-20. Opus 120, measures 1-2 of Variation II and measures 1 and 4 of Variation III.

This motive also occurs extensively in the B and B' sections where it undergoes many transformations. Measures 20-24 are illustrated in Example 5-21 and are striking since they reveal the motive in its most concentrated form against the suspenseful diminished chord.

The outline of the theme is often difficult to follow. The soprano, for example, emphasizes e^2 rather than c^2 at the opening. The d^2 of the theme is present in measures 6 and 8; other thematic soprano notes are buried in inner parts, such as the e-f-f#-g-g#-a line in measures 9-13. Similarly, only some of the thematic bass is present. C and G appear prominently in measures 1-8, but other notes are either omitted, placed in an inner part, or embellished by an intervening chord such as the one which obscures the b^b-a motion in measures 9-10. Variation III does, however, follow the general harmonic plan of the theme which tonicizes IV, V and vi in the first section and IV and V in the second.
Beethoven substitutes many secondary leading-tone chords in place of the secondary dominants such as the $\text{vii}^{67}/\text{IV}$ for $\text{V}^{7}/\text{IV}$ in measure 9. Especially noteworthy is the introduction of the augmented sixth chord; it occurs both in its Italian form in measure 11 ($a^b-c^1-f^1$) and French form ($A^b-c-d^2-f^2$) in measure 29. As we shall see, the borrowed note $a^b$ introduced in this variation will play as significant a role in future variations.

The melodic and harmonic syncopation found in the previous variation is used more extensively here. It first occurs in measures 1-2 with the retention of all of the notes of the $\text{V}^{7}$ chord across the bar line. The syncopation is especially pervasive in the $B$ and $B'$ sections; a return to metric predictability occurs with the return of clear harmonic change on the downbeat as, for example, in measures 14 and 30.

Sequence is another important element; for example, measures 5-8 are a sequence of measures 1-4. Although Diabelli's themes employs this technique in measures 9-13 and 25-28, Beethoven takes special precautions not to lapse into the same melodic predictability displayed by the theme. For example, the $d^b-g^1-a^1$ and $g^1-db^2-c^2$ phrases in measures 8-10 are purposely avoided in the next two phrases although the harmony moves sequentially. A lesser composer might have followed them exactly, as is shown in Example 5-22. Measures 24-28 also display "sequential unpredictability."
Example 5-22. Opus 120, Variation III, a hypothetical version of measures 8-12.

The $f^3$ in measure 20 is left registrally isolated. Its connection occurs in measure 31, and it is resolved by the $e^3$ in measure 32. This is shown in Example 5-23.

Example 5-23. Opus 120, Variation III, measures 20 and 31-32.

Another characteristic of this variation is the use of long descending scalar lines. This first occurs in measures 1-4 ($e^2-d^2-c^2-b^1-a^1-f^1-e^1-d^1$) and measures 5-8 ($a^2-g^2-f^2-e^2$-...
d^2-d_b^2). Additional lines are hidden within the framework. The following line provides an example: d_b^2 in measure 8, c^2 in measure 10, b^1 in 12, a^1 in 13, and g^1 in 16. More striking is the suggestion of a chromatic line which spans the entire second section: d^1 in measure 17, d_b^1 in 20 transferring to d_b^2 in 24, c^2 in 26 transferring to c^1 in 27, b in 28, b_b^-a^-a_b in 29, g-f^# in 30, f-c in 31, and d-c in measures 31-32.

Variation IV

Imitation marks the beginning of each section of this variation. This characteristic links Variation IV not only to measures 16-19 of the previous variation, but also to the next two. The texture is reminiscent of quartet writing. The link between Variations III and IV is further strengthened by the similarity of metric distance between entries, overall texture, and appearance of each successive entry in descending or ascending (as opposed to random) order. These similarities are shown in Example 5-24.

Example 5-24. Opus 120, measures 16-20 of Variation III and measures 1-3 of Variation IV.
Example 5-24 continued.

There are additional references to the previous variation which tend to link it to the present one. For example, the e²-d²-c²-b² soprano line in measures 1-2 of Variation III is incorporated into a new line in measures 2-3 of Variation IV. This is displayed in Example 5-25. The variant of the turn motive, which first occurred in Variations II and III, reappears here in measure 4.

Example 5-25. Opus 120, measure 1-4 of Variation III and measures 1-4 of Variation IV.
An important unifying element is the five-note rhythm, eighth-eighth-dotted quarter-eighth-quarter. A three-note fragment consisting of the first three notes, hereafter referred to as the short-short-long rhythmic motive, will reappear in other variations. As we shall see, this motive will provide an important link between this variation and the next one.

The thirty-one measures of this variation represent the first deviation from the thirty-two measures of the theme. The first phrase is affected; the dominant harmony that would normally occur in measure 5 and last for four measures is contracted to three measures. A hypothetical version which adds the missing measure is given in Example 5-26.

The soprano and bass outlines of the theme are not clearly visible, although some exceptions occur. For example, the $e^2-f^2-f^2#2-g^2-g^2#2-a^3$ chromatic line of the theme
Example 5-26. Opus 120, Variation IV, a hypothetical version of measures 5-8.

is suggested in measures 8-12. Harmonically, this variation follows the basic outline of the theme up to measure 25. Beethoven provides a surprise in the following measures by tonicizing iii, a harmony that plays a significant role in the next variation and hence links the two. Example 5-27 illustrates that measures 23-31 are also noteworthy for the melodic and harmonic syncopations which are present.

Example 5-27. Opus 120, Variation IV, a metric reduction of measures 23-31.
Variation V

The opening rhythm of two eighths followed by a half is nearly identical to that of the previous variation and hence helps to link the two. Furthermore, each section of both variations begins imitatively and adds voices one after another. Another common trait is that the opening figure of the first section is inverted in the second section.

This variation displays three noteworthy characteristics. First, Beethoven writes out the repeat of the second section. Second, the end of the first section and the beginning of the second section are in e minor rather than G major, the expected key. This use of e minor was foreshadowed in measures 26-27 of the previous variation. Third, Example 5-28 shows that the Neapolitan is introduced unexpectedly and tonicized in measure 27; it substitutes for V. One explanation for its employment is that the chord which precedes it, V/7, has g^b^ as its soprano, the enharmonic equivalent of the f#^2 which occurs at the same point in the theme.

Example 5-28. Opus 120, Variation V, measures 25-27 of Variation V compared to the same measures in the theme.
The soprano and bass of the theme do not play a crucial role in this variation. Harmonically, only the first eight measures and the last two reveal a strong relationship. The first section again reveals Beethoven's interest in the fully-diminished seventh chord. It occurs in measures 3-4 and 9-11. The g pedal point in measures 1-8 is noteworthy; it foreshadows the sustained character of measures 17-24. Finally, a secondary rhythmic stratum is suggested by the hemiola in measures 12-16.

The second section's harmonic syncopation which began in measure 17 is abruptly interrupted in measure 25. The resulting harmonic underpinning of the prevailing triple meter in measures 25-28 highlights the hemiola which takes place in measures 29-31 and is displayed in Example 5-29. The implied secondary metric stratum will have important implications for the next variation.

Example 5-29. Opus 120, Variation V, measures 29-31.
Variation VI

This variation, entitled "Allegro, ma non troppo e serioso," is characterized by trills and arpeggios, the latter providing a link to the next variation. The opening is marked by imitation and this provides a link to the previous variation.

The $b^2-c^3$ opening represents the third and fourth notes of Diabelli’s theme. The trill on $b^2$ makes the relationship to the turn motive of the theme more apparent, as is illustrated in Example 5-30.

Example 5-30. Opus 120, measure 1 of Variation I and VI.

The two-note figure based on the $b^2-c^2$ opening serves as an important unifying element and occurs in almost every measure. It appears not only in its semitone form as $b-c^1$ and $e^3-f^3$ in measures 4-5, but also in such expanded forms as F-d and G♯-e in measures 10-13 shown in Example 5-31. It is also produces unexpected inversions which helps Beethoven to avoid closure until the end of each section.
This same motive is also responsible for the hemiola in measures 13-14 and 28-30. The resulting implied secondary metric stratum displayed in Example 5-32 provides a link to the previous variation which also employed this device.

The soprano of the theme is suggested occasionally; for example, the following isolated notes provide an outline in the first section: $c^3-g^2$ in measure 1, $e^1$ in 8-9, $f^\#1$ in 10-11, and $g^\#1$ in 12. The bass of the theme is represented more clearly; this is illustrated in Example 5-33.
Example 5-33. Opus 120, Variation VI, measures 25-27.

The second section inverts the opening of the first section. Nevertheless, both sections, particularly the second, display a progressive registral expansion upward. \(B^b_3\) appears as the seventh of the \(V^7/IV\) in measure 23 and as an appoggiatura in measure 30. This expansion will be completed by the \(c^4\) in measure 32 of the following variation.

**Variation VII**

Arpeggiation was an important element in the previous variation; here its dominates the texture. Whereas in Variation VI each hand was given the same type of figuration and hence equal importance, in Variation VII the right hand has rapid arpeggiation patterns while the left moves more slowly. In addition to the common use of the arpeggio, the two variations are linked registraly. The \(c^3\) which closes Variation VI provides a clear connection; however, more obvious is the \(e^2\) and \(c^2\) connection shown in Example 5-34.
Example 5-34. Opus 120, the registral connection between Variations VI and VII.

Measures 1-8, 13, and 31-32 follow closely the harmonic structure of the theme. The remaining measures place harmonies in new locations, substitute ones with similar functions, or avoid them altogether. The first case occurs in measures 13-14 where the vi-V/V progression of the theme (measures 13-15) is condensed into measures 13-14. The second is represented by measures 18-24 in which vii°₅ is substituted for V⁷ and vii°⁷/IV for V⁷/IV. Another example is the substitution in measures 25-26 of iv in place of IV. The third occurs most notably in measures 11-12; here the dominant of the theme is avoided altogether and is replaced by the progression V⁷/iii-iii₆.

The bass of the theme is clearly present only in measures 1-8, 16, 31-32. The variation begins with the descending fourth (c⁴-g³), but it is quickly lost in the ensuing arpeggiation; the theme's d² also makes a short appearance in measure 5. More noteworthy is the suggestion
of the soprano of the theme in the bass of Variation VII. Measures 8-9 contain the notes e and a; these not only represent the inversion of the opening descending fourth, but also the outer notes of the theme's e-f-a rosalia figure. Furthermore, all three notes are present; however, as Example 5-36 displays, the second and third appear in reverse order. The inversions which result from using these as bass notes prevent strong cadences and hence a strong sense of closure. This characteristic links this variation with the previous one and also, as we shall see, to the following one.


The beginning of the second half suggests an inversion of that of the first; this approach was observed in the previous variation. The soprano of the theme is also suggested in the bass of measures 18-28. Example 5-36 displays a rising sequence which occurs in measures 28-31; here Beethoven seems to welcome harmonic and melodic predictability rather than avoid it.
This variation displays the following gradual registral ascent: \(e^3\) (measure 1), \(f^3\) (19), \(g^3\) (24), \(a^3\) (27), \(b^3\) (31), and \(c^4\) (32). A similar ascent occurred in the previous variation and suggests an additional link between the two.

**Variation VIII**

The "Poco vivace" indication is similar to the previous variation's "Un poco più Allegro." The two variations are more clearly linked, however, by their common employment of 3/4 meter and dotted half notes. Moreover, the slow-moving soprano in Variation VIII forms a necessary complement to the equally slow bass in Variation VII.

The left hand figuration in the first section consists largely of the two-note chromatic appoggiatura figure (b–c) that played such an important role in Variation VI. Rather than outlining the thematic bass in the first sixteen measures, the c–d–e–f–f\#–g–g\#–a movement follows the soprano
outline of the theme. The bass continues to suggest the soprano outline with the notes B-c-d in measures 13-15. The right hand in measures 1-8 consists of two scalar thirds, e²-d²-c² and f²-e²-d²; it is the last note rather than the first of each figure which suggests the c²-d² soprano outline. Measures 5-8 are noteworthy for the tonicization of ii and its substitution for V. The dominant harmony is also avoided at its expected employment in measures 11-12. These characteristics are displayed in Example 5-37.

Example 5-37. Opus 120, Variation VIII, measures 1-16.
A metric reduction of the second section, measures 17-32, is provided in Example 5-38. It reveals that the soprano opening makes use of the scalar third in measures 17-20 and 21-24, although in ascending rather than descending form. The $a_2$ in the second case is harmonized by a fully diminished seventh chord which itself acts as a passing chord between two $\text{vii}^0/\text{IV}$ chords over a C pedal point. The bass outlines the G-c figure in measures 17-21, after which it breaks with the outline and begins a scalar descent of an octave. The $d_2-e_2$ outline of the theme is suggested in measure 20; especially noteworthy is return of the soprano outline in clearly recognizable form in measures 25-32. These last eight measures avoid closure until the last measure by weakening the resolutions of the secondary leading-tone and dominant chords. For example, the $\text{vii}^0/\text{IV}^2$ proceeds to an unstable $\text{IV}^6$ in measures 24-25, the $\text{V}^7/\text{iii}$ to $\text{iii}_4^6$ in 26-27, and the $\text{vii}^0/\text{V}$ to $\text{I}_4^6$ and eventually $\text{V}_2^4$ in 27-28. This cadential avoidance links this variation with the previous two which employed the same technique.

Example 5-38. Opus 120, Variation VIII, a metric reduction of measures 17-32.
Variation IX

Variation IX is the first variation to be in the minor mode. C minor will again appear toward the end, with the trilogy represented by Variations XXIX-XXXI. It is significant that the only change of tonal center occurs in Variation XXXII since this departure from C necessitates an additional variation (Variation XXXIII) in order to return to the original tonal center.

The turn motive is the basis of this variation. It appears not only on the surface as in the first four notes, but also on a deeper level as with $g_{b2}^2-f_2^2-e_2^2-f_2^2$ in measures 24-25 and $f_2^2-g_2^2-a_{b2}^2-g_2^2$ in 27-30. Example 5-39 illustrates the grouping by two that occurs at the opening.
Example 5-39. Opus 120, Variation IX, measures 1-4.

The second section is noteworthy for three reasons. First, measures 17-24 tonicize an unexplored region, the Neapolitan. Unlike the grouping by two's in measures 1-8, measures 17-20 display a single long arpeggiation of the V/7, A♭-c-e♭-a-b-c-l-e♭l-a♭l. As a result, A♭ is again given special prominence. The A♭ will also reappear in measure 9 of the next variation. Second, tonal ambiguity is produced in measures 25-29 by an extension of the chromatic movement in measures 9-12. Noteworthy are the chromatic line f♯2-g2-a♭2 and the somewhat unusual chromatic ascent of three fully diminished seventh chords, the last of which resolves to a i6. This chord succession suggests a link to measures 21-24 of Variation VIII and 59-60 of Variation X. Example 5-40 reduces the music in these measures to its underlying framework by eliminating rhythmic and melodic complexities.
Example 5-40. Opus 120, Variation IX, a reduction of the chords in measures 24-32.

Metric ambiguity is produced by the syncopation, both melodic and harmonic, in measures 24-32. This characteristic is present in all the variations to some degree and serves to unite them; nevertheless, it is so prominent here as to suggest the underlying secondary rhythmic stratum which is shown in Example 5-41.

Example 5-41. Variation IX, the suggested secondary rhythmic stratum in measures 24-32.
Example 5-41 continued.

Variation X

Scales, parallel sixth chords, and long pedal point trills are the chief characteristics of this variation. It is the first double variation; the repeat of each section is written out and differs substantially from its origin. It also carries the fastest tempo marking to this point, "presto."

Measures 1-8 display many features of the theme. The $c^3$ in measure 1 and $d^3$ in measure 5 reflect the thematic outline. A $c^#3$ serves as a passing tone between the $c^3$ and $d^3$; although the $c^3$ is only a passing tone, it foreshadows the chromaticism and appoggiatura figure that appear later in the variation. Furthermore, the repeated $g$'s in the right hand suggest the repeated right-hand chords in the theme. The octave scales in the left hand represent an extension of the scalar motive. The downbeats of measures 1
and 4 also suggest the soprano outline. The harmonic motion of I-V7 is identical to that of the theme.

The leaps in measures 9-16 contrast with the stepwise motion of the previous measures. This section avoids the tonicization of IV; instead, I and vi are emphasized. The vi arrives in measure 11 rather than 13.

Measures 17-32 are a variation of measures 1-16. Example 5-42 permits a measure-by-measure comparison of these two sections as well as the next 32 measures. The example shows that the two internal variations always switch parts; for example, octave scales in the left hand of measures 1-8 are transformed into the parallel sixth chords in the right hand of measures 17-24. Similarly, the g2's in measure 1-8 become the trill on the g pedal point in measures 17-24. Measures 25-32 differ substantially from measures 9-16 in that they tonicize ii and make extensive use of the fully diminished seventh chord and the appoggiature figure.

The CB' section occurs in measures 33-48. As in the opening, the repeated g2's and octave scales are again present in measures 33-40. Measures 41-44 provide melodic contrast as well as a tonicization of iv. The g1 pedal point found in measures 13-16 reappears in 44-47. The latter is especially important since its suggested continuation in measure 48 prevents the resolution of the Vb9 and the premature closure of the variation.
Example 5-42. Opus 120, Variation X rearranged to illustrate its internal variation.
Example 5-42 continued.
Example 5-42 continued.
Measures 49-64 are a variation of the previous sixteen measures. As before, the right and left hands exchange roles. Measure 57 contains a harmonic surprise; the resolution of the $\text{vii}^{07}/\text{iv}$ does not occur here but rather in the next measure. The placement of the $\text{iv}$ chord on the last beat not only slights its effect as the resolution but also makes it appear as a passing chord to the following $\text{vii}^{07}/\text{V}$. Measures 59-64 are similar to 28-31 in that both make extensive use of the appoggiatura figure and the diminished seventh chord. Three diminished seventh chords take up all of measures 59-60 and ascend chromatically. The final chord spans six octaves, a large distance even for Beethoven.

Unlike the previous variation and, as we shall see, the following one, Variation X does not consistently display melodic and harmonic syncopation. For example, it is entirely absent in measures 9-15 and 41-44. It is present, however, at the ends of sections as in measures 25-31 and 47-63.

**Variation XI**

The turn motive, $d^2-c^2-b^1-c^2$, is used as the basis of this variation. The position of the semitones is largely maintained wherever the figure appears, resulting in the appearance of several altered tones such as the $f^\#1$, $d^\#2$, and $c^\#2$ in measures 1-4. As we shall see, this motive will provide a link to the next variation.
The turn figure consists of two nonharmonic tones: the $d^2$ appoggiatura and the $b$ lower neighbor. Eliminating these nonharmonic tones suggests that both melodic and harmonic syncopation occur across the bar line in every measure. The metric reduction given in Example 5-43 makes this clear.

The reduction also reveals the influence of the chromatic appoggiatura. This is particularly evident in measures 8-12 and 24-28. It shows Beethoven's fondness for the fully diminished seventh chord; it occurs five times Example 5-43. Opus 120, Variation XI, a metric reduction.
Example 5-43 continued.
in measures 10-14 and is suggested four times in measures 23-26. Measures 10-12 are noteworthy not only for the secondary leading-tone chords which suggest ii and iii, but also for their apparent lack of resolution. For example, the vii$_0$7/ii does not move to ii and the c$^\#1$ and b$b^1$ are not resolved. A vii$_0$7/vi substitutes for the vii$_0$6$_3$/iii's expected progression to iii; the resolution accompanied by a change of register.

Measures 29-31 introduce a hemiola. Example 5-44 illustrates this secondary rhythmic stratum in more detail. This hemiola was foreshadowed by the three soprano notes against two tenor notes in measure 10.

Example 5-44. Opus 120, Variation XI, the hemiola suggested in measures 29-31.
**Variation XII**

Parallel thirds and sixths characterize this variation as well as the successive sixth-chords in measures 17-22 and 29-31. These were foreshadowed by the parallel thirds in measures 17, 19 and 22-24 of the previous variation.

Example 5-45 illustrates that the opening figure, $b-c^1-b-c^b-d^1-c$, is used extensively in this variation. When it appears in its harmonized form, the second, fourth, and sixth rather than the first, third, and fifth notes often represent the underlying harmony. The first note acts as a chromatic appoggiatura; this provides one explanation for much of the following chromaticism such as the $c^\#$, $a^\#$, and $d^b$ in measures 6-8.

Example 5-45. Opus 120, Variation XII, measures 1-3 and 6-8.
Example 5-46 illustrates that the turn motive is embedded in the opening figure; it appears in its retrograde form as $c^1-b-c^1-d^1$. This motive provides an additional link to Variation XI which employed it extensively in its original form, $d^2-c^2-b^1-c^2$.

Example 5-46. Opus 120, measure 1 of Variation XI and XII.

A metric reduction of Variation XII is provided in Example 5-46. It reveals that every measure contains a harmonic syncopation across the bar line; this characterizes not only the previous variation but, as we shall see, the following one. It also displays Beethoven's continued preference for secondary leading-tone chords in place of secondary dominants. This choice provides an additional explanation for the use of mode mixture. For example, the note $d$ could have been used in place of the $d^b$ in measures 8-10; however, this would have resulted in half-diminished leading-tone chords on the third beat of measures 8-9.
Example 5-47. Opus 120, Variation XVI, a metric reduction.
Example 5-47 continued.

The reduction again displays Beethoven's freedom in following the outline of the theme. The soprano and bass of the theme are not clearly maintained; only a few notes invite comparison, such as the c\textsuperscript{1} and c\textsuperscript{2} in measure 1 and the f\#\textsuperscript{2}-g\textsuperscript{2} and d-G movement in measures 15-16. There is also much harmonic freedom; even the predictable progressions to which other variations adhere are modified in Variation XII. For example, the I-V\textsuperscript{7} progression in measures 1-8 of the theme becomes I-vi\textsuperscript{7}\textsuperscript{0} and V\textsuperscript{7}-V\textsuperscript{7}/IV in 17-24 becomes vii\textsuperscript{0}-vii\textsuperscript{0}/IV.
A harmonic surprise occurs in measures 11-12 as a result of Beethoven's slight alteration of the sequence that begins with the upbeat to measure 9. The model is three beats in length and consists of the progression vii⁰⁷/IV-IV; it is then repeated with the soprano and alto parts exchanged. It next appears a step higher, tonicizing V. The surprise is its next appearance: it is not an altered repetition as before but a transposition up by step which tonicizes vi. This phrase is then repeated two more times with alterations before eventually tonicizing the dominant in measure 16.

Three more characteristics of Variation XII must be mentioned. First, the first AB section avoids large register changes whereas the second section contains two large upward expansions in measures 17-22 and 24-28. Second, Beethoven eliminates the repetition of the first section and writes out the repeat of the second. The resulting form, ABCB'CB', links this variation with the previous one (which has the identical form if the indicated repeat is taken). Third, measures 23-28 contain a C pedal point; it supports a rising soprano which represents an extension of the initial chromatic appoggiatura motive, g²-a b²-a²-b b²-b (implied)-c¹. Furthermore, the pedal point itself consists entirely of the turn motive. Example 5-48 suggests that this provides still another link to Variation XI which employs the notes d b-c-B-c in measures 24-25.
Example 5-48. Opus 120, a comparison of measures 24-25 of Variations XI and XII.

Variation XIII

Whereas variations usually imply an elaboration of a theme, this acts as a reduction. All unnecessary figuration has been eliminated, leaving a quasi-skeletal structure. This characteristic allows this variation to begin a new subgroup, one which for the following four variations will be based on an increase in figuration, overall number of attack points, and harmonic exploration.

Example 5-49 demonstrates that this variation exploits four aspects: silence, chord repetition, dotted rhythms, and contrasting dynamics and registers. The first is the most striking since no other variation magnifies the importance of rests to this extreme. The first three chords, for example, are followed by four beats of silence. The rests help to separate a forte and thick texture from a piano and
thin one. They also appear between the numerous register changes as from $c^2$ to $c^1$ in measures 1-3. Finally, the rhythmic motive of a dotted eighth followed by a sixteenth permeates the entire texture.

Example 5-49. Opus 120, Variation XIII, measures 1-5.

It is reasonable to expect a variation having hardly any ornamentation to display a close affinity to the theme, but such is not the case. Although some elements are retained, this variation diverges from the thematic outline in a number of ways. As if to announce the independence of the variation, Beethoven harmonizes the opening $c^2$ with a vi rather than a I chord. Indeed, the vi is given additional prominence by appearing unexpectedly in measures 9-11. The beginning of the next section is no less unusual, for the $b^b$ in measure 17 suggests bVII. This note was prominent in the measures 23-25 of the theme and permitted the tonicization of IV. Variation XIII further highlights this note by
retaining it for nine measures (17-25). Finally, Beethoven avoids tonal stability in measures 26-31 by unexpected tonicizing the mediant in measure 27 and by placing unstable second inversion chords on the downbeats of measures 25-27.

The reduction provided in Example 5-50 facilitates the study of the linear movement by eliminating registral changes and the consistent harmonic syncopation. Portions of the c-d-e-f-f♯-g outline of the theme appear in both the AB and CB' sections. This provides a link to measures 10-14 of Variation XIV in which the line d²-e²-f²-f♯²-g² appears.

Example 5-50. Opus 120, Variation XIII, a metric reduction.
Example 5-50 continued.

Example 5-50 also reveals a harmonic acceleration not only within each section but also within the entire variation. For example, the harmony changes only twice in measures 1-8, accelerates to once per bar in measures 9-16, reverts back to once every four bars in measures 17-24, and completes the acceleration by changing twice per bar in measures 25-32. The acceleration on the immediate foreground level in each section is further highlighted by the increase in the number of attack per measure which is not represented in the reduction. For example, the attacks for each of the four measures (upbeats included) in the first section are: measures 1-4, 5 attacks; 5-8, 5; 9-12, 6; 13-16, 13. The second section contains the following attacks: 17-20, 5; 21-24, 5; 25-28, 8; 29-32, 12 (second ending).
**Variation XIV**

The rhythm of a double-dotted eighth followed by two sixty-fourth notes is similar to the rhythm of a dotted eighth followed by a sixteenth which occurred in the previous variation. This rhythmic similarity produces a fragile link between the two variations.

Example 5-51 displays those elements which characterize this variation. The neighbor tone figure is an important unifying factor and occurs at least once in every measure. Another is underlying use of arpeggiation which is predominant in measures 1-4 and 9-12. Finally, chromaticism is a third element.

Example 5-51. Opus 120, Variation XIV, the various motives in measures 1-8.
The first section begins with two canonic voices, the second entering one beat after the first. The voices are supported by low thick chords. The second section is also canonic, but there they ascend rather than descend.

The soprano of the theme is minimally present. Its highest notes, a\textsuperscript{1}-b\textsuperscript{1}-c\textsuperscript{1}, occur in measures 10-13 and appear in measures 5-7 of Variation XIV. The bass and harmonic progression of the theme are more clearly evident, particularly in measures 1-5 and 9-12.

The second half of each section contains numerous harmonic surprises. For example, measure 5 contains the expected tonicization of the subdominant, but by measure 8 the mediant rather than the dominant is tonicized. This is shown in Example 5-52. The V\textsuperscript{7}/\textit{iii} in measure 6 and the V\textsuperscript{7}/\textit{vi} in measure 7 foreshadow a similar progression in Variation XXVIII.

Example 5-52. Opus 120, a comparison of measures 6-7 of Variation XIV and measures 25-29 of Variation XXVIII.
Example 5-52 continued.

Measures 13-16 are noteworthy for two reasons. First, ii is tonicized not only in measure 13 but also again in measure 15. Second, as Example 5-53 demonstrates, many chords are resolved deceptively.

Example 5-53. Opus 120, Variation XIV, measures 13-16.

The diminished seventh, although not as predominant as in other variations, is a familiar element. It is used as a
neighbor chord \((g^\#-b-d-f)\) and as a passing chord \((d^\#-f^\#-a-c)\) in measure 7. It also is used in the form of \(vii^9/ii;\) this frustrates the expected resolution of the \(V^7/IV\) in both measures 12-13 and 15. This is shown in Example 5-54.

Example 5-54. Opus 120, Variation XIV, measures 12-13 and 15.

A reduction of this variation is provided in Example 5-55. It reveals the importance of the underlying arpeggiation in measures 1-4 and 9-12. The circle of fifths is revealed in measures 4-7 by the root movement \(g-c-f-e-a.\) Finally, important harmonic syncopations are also apparent, especially the one occurring in measures 12-13.
Example 5-55. Opus 120, Variation XIV, a metric reduction.

Variation XV

This variation is the only one to end the first section in the tonic rather than the dominant. The character suggested by the tempo marking "Presto scherzando" contrasts sharply with the previous "Grave e maestoso" of the previous variation. The two variations are linked, however, by the common rhythmic motive of two short note values preceding a
longer one. The motive in Variation XV consists of two eighths followed by a quarter; in the preceding variation it was two sixty-fourths followed by a double-dotted eighth (or quarter tied to it, as in measure 1). The quick tempo, "Presto scherzando," links this variation to the next two which are to be played "Allegro." Chromaticism, especially in conjunction with the neighbor tone motive, provides a link to Variation XVI's chromatic appoggiaturas.

The phrasing of this variation differs from that of the theme. For example, in measures 1-8 and 17-24 the phrasing is 2 + 2 + 2 + 2 instead of the theme's 4 + 4; in measures 9-16 and 25-32 it is 8 rather than 4 + 4. The construction is further influenced by the articulation. The first eight measures of each section are staccato and the last eight are legato.

In addition to the new phrasing, the treatment of range is also noteworthy. The beginning of each section is confined to approximately an octave; a gradual expansion occurs in the middle until the widest range is reached close to the end.

Two motives predominate: they are the turn (along with it shortened form, the neighbor tone) and the chromatic appoggiatura. The soprano outline of the theme is more easily discernible than that of the bass. For example, in measures 1-8, the leaps c^2–g^1 and d^2–g^1 are plainly present as well as the thematic repetition of g^1.
The bass, although beginning on \( c^1 \), quickly abandons the outline of the theme; the outline is regained only in the last four measures with the notes BB-C-FF-GG-C.

Harmonically, only measures 1-8 closely follow the theme. Other measures only approximate those of the theme. For example, the \( V^7 \) of the theme in measures 17-20 is present but must compete with the chromatic neighbor chord \( \#1^7 \).

The \( V^7/IV \) in measures 21-24 of the theme never occurs; it is represented by the tonic triad which competes with \( V^9 \).

Measures 9-16 are striking. The harmonies are, for the most part, nonfunctional; they result from the contrary motion of the bass against the soprano and from the sustained nature of the inner parts. The sonority \( e^b-g-b^b-d^b \) (measures 11-12), for example, will reappear in subsequent variations and function either as \( V^7/VI \) or enharmonically as a German augmented sixth chord; here it passes to \( vii^0 \). Measure 13 briefly contains a German augmented sixth chord in the subdominant key which resolves to \( I^6_4 \) in the same measure; its ultimate resolution is the C major chord in measure 16 which serves as the tonic in C rather than the dominant of F.

A metric reduction of Variation XV is given in Example 5-56. It reveals more clearly the theme's harmonic outline in the A and C sections and the deviations from it in the B and B' sections. Although measures 25-26 avoid the expected IV harmony, Beethoven maintains a connection by providing \( f^# \) and \( f \) in the bass which support \( V_3^6/V \) and \( V_2^4 \) chords.
Example 5-56. Opus 120, Variation XV, a metric reduction.
Variation XVI

Broken octaves and the chromatic appoggiatura figure permeate this variation. As Example 5-57 displays, the appoggiatura figure appears on several different levels; for example, it occurs as the d\#-c eighth-notes in measure 1, b\#1-a\# quarter notes in measures 4-5, and A\#-G whole notes in measures 12-14.

Example 5-57. Opus 120, Variation XVI, the appoggiatura figure in measures 1, 5, and 12-14.

A prominent rhythm is a quarter followed by a dotted eighth and sixteenth. As we shall see, it reappears in the left hand of Variation XVII and strongly links the two. Furthermore, the two variations are connected by the continuous use of sixteenth notes. Finally, Example 5-58 shows
that Beethoven implies a connection between the two variations by providing a linking passage for the left hand in measure 16; the last note, d, is dissonant and is resolved by the c at the beginning of Variation XVII.

Example 5-58. Opus 120, measure 16 of Variation XVI (second ending) and the upbeat to measure 1 of Variation XVII.

A metric reduction of Variation XVI is given in Example 5-59. It reveals that the soprano outline of the theme is present at the beginnings of the A, B, and C sections; for example, c³-g² occurs in measure 1, d³-g² in 2-3, g¹-d² in 8-9, and g¹-e² in 10-11. This corresponds exactly with that of Variation XV and links the two. The basic harmonic progression of the theme is also represented in much of the variation. There are two notable exception; measures 12-13 in which IV is avoided, and measures 14-15 in which vi is tonicized. Measures 12-13 deviate to the Neapolitan; this
Example 5-59. Opus 120, Variation XVI, a metric reduction.
is the result of subtle chromatic inflection. The expected resolution of V7/IV in measure 11 is thwarted by holding the e² and g¹ across the bar line and raising the c² to c²♯, producing a vii⁰⁴/ii. The bass Bᵇ then moves down first to A and then G♯ which is enharmonically equivalent to Aᵇ. The c♯² at the beginning of measure 12 is respelled as dᵇ by the end of the same measure. The e¹ is a chromatic appoggiatura which leads to the f¹ of measure 13 and thus suggests the Neapolitan chord (Dᵇ-f-aᵇ). The last beat of the measure suggests a V⁷/Neapolitan, but the f♯¹ instead of a gᵇ¹ signals an Italian augmented sixth chord which leads the listener back to the tonic key.

Three other factors characterize this variation. The first is the arpeggiation in the left hand which occurs in measures 1-4 and 8-11. The second is the use of the numerous secondary leading-tone chords in measures 4, 5, 6, 7, and 12. Third, the aᵇ which has a prominent place in Opus 120 as a borrowed note serves here as a pedal point for measures 12-13.

**Variation XVII**

This variation, like the one before it, is a perpetuum mobile. The common use of uninterrupted sixteenth-notes links the two. The two variations are also linked by the rhythmic motive of a dotted eighth followed by a sixteenth. Pedal points play a vital role in Variations XVII, and this
suggests an additional link to the previous variation which made use of a pedal point in measures 12-13. Finally, both are related by their common length of 16 measures, half that of the theme.

There is abundant figuration, much of which is the result of the chromatic appoggiatura figure; it effectively obscures the melodic lines by occurring prominently on the beat. For example, the fundamental melodic outline in measure 1 is represented by the line $e^2-g^2-f^2-e^2$ rather than $f^2-f^#2-e^2-d^2$. The metric reduction in Example 5-60 illustrates this outline by stripping away the ornamentation.

Example 5-60. Opus 120, Variation XVII, a metric reduction.
Example 5-60 continued.
As the reduction in Example 5-60 shows, the theme is freely treated both harmonically and melodically. The only obvious outlines are those at the beginnings of phrases; examples include the descending fourth (c–G) in measure 1, the descending fifth (d–G) in measure 2 and its inversion (G–d) in measure 8, and the rising sixth (G–e) in measure 10. Harmonically, only measures 1-3, 7-10, and 15-16 bear a close resemblance to the theme. The IV chord, which occurs in measures 9-10 and 25-26 of the theme, is carefully avoided at the corresponding locations in Variation XVII. As a result, the vi receives an unusual amount of attention; instead of occurring only at its expected position in measure 7, it also occurs in measures 5 and 11-12. The emphasis on this chord provides a connection to the next variation in which an unexpected tonicization of vi takes place in measures 2-3.

Measures 10-14 contain the most harmonic interest. The a\(^{1}\) in measure 10 first appears as an upper neighbor tone to the underlying V chord and then returns enharmonically as g\(^{#1}\) in a V\(^6\)/vi chord. The suspense is further heightened by the avoidance of resolution to a root position vi chord. Finally, the climax occurs with the appearance of a #VI chord on the last beat of measure 12. Its root is a tritone from the C major tonic, thus making it one of the most foreign chords in the whole of Opus 120. It has been labeled V/vii in the reduction although it does not resolve
to vii (b minor); instead, it is resolved deceptively as V–VI in b minor key, the VI leading back to C major by serving as V. The importance of the F# chord is highlighted in four ways. First, the previous rhythmic pattern in the bass of a dotted-eighth, sixteenth, and quarter is broken by the appearance of the half-notes. Second, syncopation is introduced in measure 12 and occurs often enough to suggest a secondary rhythmic stratum. Third, the Contra F# is the lowest note up to this point and is preceded by a leap of a seventh downward. Fourth, the F# completes the rising bass line begun at the beginning of the variation: G (measure 1) – A (measure 5) – B (measure 6) – c (measure 7) – d (measure 8) – c (measure 11) – f# (F# in measure 12).

**Variation XVIII**

The two motives which appear together as well as separately are the chromatic appoggiatura and the turn. The former links this variation with the previous one. The consistent use of these motives, especially the appoggiatura, causes the thematic harmonies and outlines to be displaced so that they always appear off the beat. For example, the vii⁰⁷ chord rather than I occurs more often on the beat in measures 1–2. This is illustrated in Example 5–61. By removing the nonessential chords resulting from the appoggiatura motive, however, the thematic outline is clear; this is shown in the metric reduction in Example 5–62.
Example 5-61. Opus 120, Variation XVIII, the turn in measures 1-4.

Example 5-62. Opus 120, Variation XVIII, a metric reduction.
Example 5-62 continued.

\[ \text{(vii\textsuperscript{67}) I}^6 \text{ V I} \quad \text{I} \quad \text{V}^7/\text{IV} \quad \text{(vii\textsuperscript{67}) IV} \]

\[ \text{I}^6 \quad \text{I}^6 \quad \text{I}^6 \quad \text{I}^6 \quad \text{(ii)} \quad \text{V} \]

\[ \text{I}^6 \quad \text{I}^6 \quad \text{I}^6 \quad \text{I}^6 \quad \text{(ii)} \quad \text{V} \]
The metric reduction in Example 5-62 reveals that this variation adheres more closely to the harmony of the theme than to its soprano or bass outlines. For example, the harmonies of the theme are implied in the following measures: I in measures 1-2, V in 5-8, IV in 9-10, V in 11-12, vi in 13-14, V in 16-20, V'/IV in 21-24, iv (replacing IV) in 25-26, V in 27-28, and I-V-I in 29-32. The reduction also reveals the internal harmonic syncopation which characterizes many other variations. More important, it reveals certain harmonic peculiarities. For example, vi is substituted for I in measures 3-4. The diminished seventh chord is especially prominent in the second section, appearing as secondary leading-tone chords in measures 23-24, 25, 26, and as a neighbor chord in measure 30.

This variation displays two additional noteworthy characteristics. First, the textural changes are striking here; the homophony in measures 1-8 and 17-24 is contrasted with monophony in measures 9-16 and 24-25. Second, a long hemiola occurs in measures 24-28. This displacement of the underlying metric pattern links this variation with Variation XVII which, although not containing a hemiola, does suggest a metric displacement in measures 12-15.

**Variation XIX**

This variation in many ways follows the soprano, bass, and harmonic outlines of the theme more closely than many
of the other variations. This is surprising, especially since the opening of each section is canonic and thus provides certain compositional restrictions that did not occur in the other variations. Example 5-63 illustrates the relationship of Variation XIX to the theme.

The semitone movement in contrary motion which characterized measures 8-16 and 24-29 of the theme appear at the corresponding locations in this variation but in similar motion. The semitone motion foreshadows the more extensive use of this interval in the following variation.

Metric surprises occur frequently. For example, if each canonic voice in measures 1-8 and 16-23 is accented identically, a listener would be unable to ascertain the position of the downbeat since the interval between entries is only one beat. Beethoven highlights this uncertainty by unpredictably changing the rhythmic pattern several times in the broken arpeggios. The metric reduction in Example 5-63 reveals these changes by eliminating many nonessential tones which do not occur on the beat.

An additional metrical surprise and complication occur in measures 29-32. Beethoven again avoids a consistent rhythmic pattern; the sense of a definite downbeat after measure 29 is complicated not only by the syncopations but also by the two sforzandi in measures 31-32. This is illustrated in Example 5-64.
Example 5-63. Opus 120, Variation XIX, a metric reduction.
Example 5-63 continued.

Example 5-64. Opus 120, Variation XIX, measures 29-32 (second ending).
Variation XX

The low register and long note values of Variation XX present a strong contrast to the previous variation. As a result, Variation XX marks the beginning of a new subgroup that will end with Variation XXIII. Three characteristics join them together: the first is a progressive rhythmic acceleration from dotted half-notes to sixteenths; the second is the gradual increase in tempo from andante to assai allegro; the third is the progressive shortening of the length of each variation (32 measures for Variation XX, 24 for XXI, 18 for XXII, and 16 for XXIII).

The beginning of each section is imitative; this characteristic links this variation with the previous one. The subject of the first section is C–GG–GG–AA–GG and incorporates not only the descending fourth motive (C–GG), but also the theme's characteristic use of repetition (GG–GG–[AA]–GG) and the neighbor tone motive (GG–AA–GG). The neighbor tone eventually predominates and, as we shall see, is largely responsible for some of the unusual harmonies which occur in this variation. The second section inverts the initial fourth and augments it so that a new subject emerges, G–c♯–d–e–f. It is shortened to the first three notes in measure 21 and this new figure also plays an important role. Example 5–65 illustrates these motives in the first four measures.
This variation contrasts strongly with the internal tonal stability and harmonic fidelity to the theme that the previous variation demonstrated. A metric reduction of Variation XX is given in Example 5-66. Some of the basic harmonies of the theme are present; nevertheless, it appears to have been Beethoven's intention to purposely surprise the listener and arouse his curiosity in a number of ways. For example, the opening stable I of the theme is introduced in measure 3 of Variation XX as an unstable $I_4^6$ by delaying the entrance of its root. The frequent use of the fully diminished seventh chord also introduces an element of uncertainty and variety. For example, the vii$^0_7$ in measure 4 not only provides relief from the predictable I and V but also emphasizes the borrowed tone $a^b$. The vii$^0/ii$ which follows not only replaces the expected resolution to I but also serves as a passing chord to $V_3^6$ in measure 5. Other examples may be found, as in measures 6 (GG-e-g-c$^{#1}$) and 28.
Example 5-66. Opus 120, Variation XX, a metric reduction.
(d-b-f^1-a^b). The fully diminished seventh chord is also used occasionally as a neighbor chord and occurs in connection with the neighbor tone motive. Some examples occur in measures 8 (f-b-d-a^b), 27 (E-d^b-b^1-g^b), 30 (G^#-c^1-f^1-b^1-d^2 over a C pedal), and 31 (F-d^1-a^b^1-b^1 over a C pedal).

Several other unusual chords and progressions which contribute to the tonal uncertainty must be mentioned. For example, the unstable g^#-e-d-b chord in measure 9 (V^6/vi, appears between two other unstable chords, both minor v^7's. The middle one acts as a neighbor chord, yet the bass is spelled as g^# rather than a^b. One explanation is that since the same chord occurs again in measure 10 as a passing chord, two different spellings were unnecessary. Beethoven perhaps wanted to suggest vi, the normal resolution of this chord, since it was tonicized in the first section of the theme. Beethoven's avoidance of the resolution provides an explanation for the emphasis on vi in the following variation. The two chords in measure 11 are harmonically related since they suggest vii^07/IV in the key of b minor. If the first three chords in measures 11-12 are compared to the first three in measures 21-22, the following is clear: the first chord in measure 11 is enharmonically equivalent to B^b-e-g-d^b (vii^07/IV). Such a spelling would have produced two noticeable voice-leading problems with the previous chord: a diminished third in the soprano and in the
bass. Finally, the German augmented sixth chord produces a harmonic surprise. It first appears in measure 24 as $G^b-d^b-b^b-e$ and again in measure 28 as $E^b-d^b-b^b-g$, the $d^b$ acting as a $c^\#$. It should be noted that the unstable second-inversion chords which follow the German augmented chords lead to other unstable chords. Indeed, stability is tentatively regained only with the last chord of the variation.

**Variation XXI**

The large-scale division of the theme into four phrases each 8 measures long is emphasized in Variation XXI. Sections I and III, measures 1-4 and 13-16, represent contractions of measures 1-8 and 17-24 of the theme. These contrast strongly with sections II and IV. I and III are to be played *allegro* and *fortissimo*; furthermore, they are characterized by staccato markings, consecutive octave leaps of up to five octaves, repeated chords, and wide ranges between parts. The accompanying harmonic progressions correspond to those of the theme. They also clearly highlight the bass of the theme, a part that is often not given as much prominence as the soprano. Sections II and IV, on the other hand, are to be played *meno allegro* and *piano*; the passages are legato and scalar, and the range is more narrow. It is here that the harmonic progressions diverge from those of the theme. The submediant receives unusual emphasis by its tonicization in measures 5-6 as well.
as 9-10. The mediant is tonicized in measures 7-8, and this will provide a cross-reference to Variation XXVII. It is only with the upbeat to measure 11 that the expected tonicization of V appears. The last section, measures 17-24, is harmonically more conventional, tonicizing IV and then V before returning to I; the harmonic interest lies primarily with the secondary fully-diminished seventh chords.

The diminished chord is an important characteristic of this variation and provides a link to the previous one. With the exception of the last measure, one of these chords occurs in every measure of the second and fourth sections. The reduction in Example 5-67 illustrates their placement and resolution. The reduction also illustrates the rhythmic hemiolas which occur in measures 9-12 and 20-24.

Several motives serve to unify this variation. The chromatic appoggiatura appears frequently in conjunction with the vii⁰⁷ as was revealed in Example 5-66. A new figure consisting of the notes d-b-g♯-a-b-c accompanies the vii⁰⁷; it often occurs with its simultaneous inversion in the other hand. This figure is shortened in measures 9-11 and 19 to four notes and is doubled in thirds.

This variation contains several links to its immediate neighbors. For example, both Variations XXI and XX (as well as XIX) invert the first half's opening figures in the second half. The introduction of the a♭¹'s in measures 22-
Example 5-67. Opus 120, Variation XXI, a metric reduction.
23 of Variation XXI foreshadow their prominent reappearance in measure 9 of the following variation. Variation XXI is also linked to its neighbors by its continuation of the rhythmic acceleration that began with the half notes in Variation XX and will end with the sixteenths in Variation XXIII.

**Variation XXII**

This variation is unique to the set in two ways. First, Beethoven indicates that it is based on Mozart's "Notte e giorno faticar," and as a result is the only marked parody. Second, it is the only one to be entirely monophonic.¹⁸

The variation consists of eighteen measures. The theme's soprano outline and harmony are recognizable in measures 1-8; the first two measures of the theme's bass are suggested by the opening four notes, c-g-c-g. The descending fourth (c₂-g₁ in measure 1) and descending fifth (d₂-g₁ in measure 3) are also present and are illustrated in Example 5-68.

The aᵇ opening of the second section is a surprise, especially since it is a semitone above the expected V that occurs in the theme. Aᵇ is foreign to the key of C major;

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¹⁸For a detailed discussion of parody in Opus 120, see William Kinderman, *Beethoven's Diabelli Variations*, 68-75.
Example 5-68. Opus 120, Variation XXII, the outline of the theme in measures 1-8.

Molto Allegro alla "Notte e giorno faticar" di Mozart

nevertheless, this borrowed note has been repeatedly emphasized in a number of variations, so its appearance here is not a shock. The transition from A♭ in measures 9-10 to E in measures 11-12 is also striking. The soprano of the theme is again discernible from measure 12 until the end as is illustrated in Example 5-69.

Finally, this variation is linked to the following one in four ways. First, both are in the same meter, 4/4. Second, both carry approximately the same tempo designation: "Molto Allegro" and "Assai Allegro," respectively. Third, both are related by their condensed length, Variation XXII occupying 18 measures and XXIII 16. Fourth, they both
continue the rhythmic acceleration begun in Variation XX which will terminate in Variation XXIII.

Example 5-69. Opus 120, Variation XXII, measures 11-18.

Variation XXIII

This variation is reminiscent of a Czerny étude. It bustles with unabated activity, pausing momentarily for the fortepiano chords in measures 1, 3, 5, 9, and 11. It also serves as the culmination of the rhythmic acceleration that began in Variation XX.

The turn motive is a prime characteristic of this variation. It appears in both hands in its original and inverted form. An altered version occurs in measure 5 with the notes c⁰→b⁰→a→c; this figure is used as the basis of the sequence in measures 5-7 and 13-14.
The thirty-two measures of the theme have been compressed to sixteen. Several prominent features of the theme are present. Some examples are presented here: the \( c^3 \), \( C \), and accompanying I chord in measure 1; the \( d^3 \), \( G \), and V in measures 3; the \( B^b \) and \( V^7/IV \) in measure 5; the \( g^2 \) in 9, the \( b^b_2 \) and \( V^7/IV \) in 11.

Two enharmonic surprises occur in this variation. The first occurs in measure 9 with what appears to be a \( vii^0/ii \) but functions instead as a \( vii^0/iv \) since the bass \( c^2 \) acts as a \( d^b \). The second occurs in measure 12. What appears to be \( V^7/IV \) functions as a German augmented sixth chord in e minor since the soprano \( b^b_2 \) acts as a \( a^#2 \).

**Variation XXIV**

Variation XXIV is unusual because it is labelled "Fughetta" and because it contains thirty-three rather than thirty-two measures. Its rhythm consists almost entirely of eighth and quarter notes. It begins a new grouping of variations again based on rhythmic acceleration.

This variation provides a cross-reference to other contrapuntally influenced variations such as XIX, XIV, XI, VI, and IV. Its title, however, suggests a stricter approach. It also serves to foreshadow the upcoming fugue (Variation XXXII) which represents the climax of Opus 120.

The subject consists of the notes \( c^2-g^1-e^1-f^1-d^1-e^1 \); it suggests a I-V-I underpinning and appears first in the alto.
The answer appears in the soprano \( (g^2-c^2-b^1-c^2-a^1-b^1) \) and briefly tonicizes the dominant. The subject reappears in the bass in measure 5, and the exposition is completed in measure 7 by the answer in the tenor. The remainder of the first section serves as an episode, tonicizing first ii and then eventually V. Fragments of the subject are interspersed throughout the remainder of this section; for example, a-d-f-e, the first four notes of the subject in inversion, appear in the bass in measures 10-12. Two-note fragments emphasizing the descending fifth occur in measures 14 \( (d^1-g) \), 15 \( (e^2-a^1) \), 16 \( (a^2-d^2) \) and 16-17 \( (d-G) \).

The second section begins with another exposition, one based on the inverted form of the subject. The intervals are more freely treated; the subject appears in the alto as \( d^1-g^1-a^1-g^1-a^1 \), the interval between the second and third notes having been reduced from a third to a second. The answer in the tenor also takes liberties with the subject and presents it as \( g-d^1-e^1-f^1-e^1-g^1-f^1 \). The soprano presents the complete inverted subject for the last time in measure 20.

Measures 21-27 display a degree of tonal instability; Beethoven purposely avoid any suggestion of V-I. This tonal uncertainty is reinforced by the frequent references to the beginning of the subject which suggest unstable second inversion harmonies. An example occurs in measures 24-26 and is illustrated in Example 5-70.
Variation XXV

This variation is reminiscent of a Czerny étude and provides a cross-reference to Variation XXIII. It consists of repeated chords in the right hand chords based on the those of the theme and running sixteenth-notes in the left hand based on the turn motive. The variation is a perpetuum mobile; the rhythmic drive begun in the first measure continues until the end. It also has an unusual feature which links it with the previous variation: Variation XXV has only 31 measures and the "missing" measure balances the extra measure in Variation XXIV.

The harmony closely follows that of the theme for the first eight measures; several changes occur thereafter. For
example, measures 10-11 tonicize ii and 12-15 vi. The Neapolitan in measure 12 is noteworthy, for it will reappear again in measure 27. The first four measures of the second section (measures 16-19) are unusual in that they avoid the usual V_I and substitute V^7/IV instead. The harmonies progress as follows for the remainder of the variation: measures 20-23, iv; 24-25, V^4_2/N; 26-27, N^6; 28, V^4_2; 29, I; 30, ii^6_g-V; 31, I. These aspects are displayed in the metric reduction provided in Example 5-71.

The rhythmic motion of continuous sixteenth-notes and the 3/8 meter link this variation with the next one. This variation is also linked to the previous one by its position as the second of a group of four variations which display a gradual rhythmic acceleration.

Variation XXVI

This variation consists primarily of two figures, the arpeggio and the scalar third. The former occupies the first eight measures of each section, and the latter the last eight. The fully diminished seventh chord occupies a prominent place wherever the scalar third appears.

The music seems to imply 6/16 rather than the indicated 3/8 meter. The 3/8 links this variation with the previous one; the grouping of the music into two units rather than three will also link it to the next variation.
Example 5-71. Opus 120, Variation XXV, a metric reduction.
Variations XXVI and XXVIII are also harmonically linked. For example, both vary the theme in roughly the same location. More important, both make extensive use of fully diminished chords.

The harmony in measures 1-8 and 17-32 of Variation XXVI mirrors that of the theme. The use of sequence in measures 8-13 of the theme is mirrored in the present variation; Example 5-72 illustrates that instead of tonicizing IV, V, and vi, the chords emphasized here are I, ii, and vi.

Example 5-72. Measures 8-13 of the theme and Variation XXVI.
Variation XXVII

This variation is linked to the previous variation in a number of ways. For example, the triplets that constitute this variation were strongly foreshadowed by the groups of three notes found in the previous one. The triplets also continue the rhythmic acceleration begun by Variation XXIV and continued through Variation XXVI. The scalar third which predominates in measures 8–16 and 24–32 of the previous variation provides a strong link to measures 8–16 and 24–32 of the present one. Finally, the two are similar in that both invert the opening material in the second section.

The chromatic appoggiatura is extensively employed for the first eight measures of each section; it will provide an important link to the following variation. Another characteristic is the use of mode mixture and the fully diminished seventh chords, elements that will reappear in the following variation. The latter is suggested in measures 22–30.

The first section displays the descending fourth c–g in the left hand, followed by several repetitions of g not only in the bass but also in the soprano in measures 2–5 and 6–8. The harmony for the first eight measures follows that of the theme (I–V). However, a significant change occurs in the next four measures. Instead of emphasizing V and vi before the final cadence on the dominant, Beethoven centers around vi in measures 9–10 and iii in 11–12.
The second half follows the basic harmonic progression of the theme more closely. Measures 17-20 center on $V^7$, 21-24 on $V^7$ (and even $b7$)/IV, 25-26 on IV, 28-30 on $V^7$, and 31-32 on I.

The suggestion of fully-diminished seventh chords (or dominant ninth chords) provides a significant link to the following variation which also makes extensive use of this chord. Variation XXVII displays it in measures 19-20, 22-24, 25 ($E-G-b^b-d^b2$ on the third beat), 26 ($F^#-A-c^1-e^b1$ on the third beat), 27, and 30. Measures 24-31 are particularly noteworthy because of Beethoven's subtle harmonic choices: $vii^07$/$IV-IV$-$vii^07$/$IV-iv$-$vii^07$/$V-vii^07$/$V-V-vii^07$-$I$.

Had the two subdominant chords had been reversed, a closer relationship to the following chords and a more exact, albeit predictable, sequence would have resulted.

Variation XXVIII

An essential element of this variation is the chromatic appoggiatura which is found in every measure. It is evident not only in the first measures, but also especially in measures 16-23 where it occurs without any harmonic underpinning. This motive provides a strong link between this variation and the previous one.

Another distinctive characteristic is the extensive employment of the fully diminished seventh chord. Its appearance in a major key here and elsewhere is noteworthy
since it represents a dramatic use of mode mixture. Beethoven further highlights this chord by not only placing it on the beat (and its resolution off the beat) but also by marking certain notes to be played sforzando. The fully diminished seventh chord also provides a link between this variation and Variation XVII.

The major harmonic movement of the theme is followed for the first 26 measures and for the last two. In the first section, measures 1-4 center around I, 5-8 around V, 9 around IV, 10 around V, 11-12 around vi, and 13-16 around V. In the second section, measures 17-20 center around V, 21-24 around $V^7/IV$, 25-26 around IV and 31-32 around I. Harmonic variety results from avoiding the theme’s emphasis of V in measures 27-30; instead, Beethoven substitutes $V^7/iii$ in measure 27, $V^7/vi$ in 28, and IV and $V^7/V$ in 30. The resulting harmonic progression for the second half is thus more strongly influenced by the circle of fifths than the theme, as is evident by the following roots: g (measure 17), c (21), f (25), b (27), e (29) and even a (although it is used in passing fashion in measure 29).

One may wonder why Beethoven did not resolve the $V^7/vi$ in measure 29 directly to IV on the second half of the first beat in measure 30 rather than moving to another fully diminished seventh chord. One explanation is that Beethoven
purposely wished to avoid stability and a convincing resolution until the V-I cadence in the last two measures. Thus, unlike measures 25 and 26 where a resolution to IV occurs on the second half of the first beat, Example 5-73 illustrates that measures 27, 28, 29, and 30 contain no such resolution.

Example 5-73. Opus 120, Variation XVIII, measures 27-30.

The variation contains additional harmonic surprises. For example, Beethoven could have continued the chromatic appoggiatura figure in measures 6 and 7 by substituting e₃ in place of e. One explanation is that he was more interested in emphasizing the major tonic chord than the figure. Example 5-74 illustrates a striking a German augmented sixth chord which occurs in measures 14-15. It is notated as eᵇ−g−bᵇ−dᵇ rather than eᵇ−g−bᵇ−c#.
Example 5-74. Variation XXVIII, a metric reduction
Variation XXIX

This variation, entitled "Adagio, ma non troppo", begins a group of three slow variations which precede the fugue (Variation XXXII). It consists of only 12 measures and thus will serve as a cross-reference to Variation XXXI which has the same length. The theme is represented in condensed form, for its first eight measures are reduced to two in Variation XXIX.

One unifying characteristic is the third, both in its scalar and skipping version. The former occurs in measures 1, 3-9, and 10; the latter occurs in measures 1-4 and 9-10 in the bass and measures 7-8 and 11 in the soprano. Another characteristic, a prominent one in measures 1-8 and 16-24 of the theme, is the repetition of the g₁'s in measures 1-2, the c's in measures 8-9, and the a⁷₁'s in measures 9-10. Appoggiaturas and neighbor tones also play an important part.

The harmonies in measures 1-10 are relatively simple and clear. Chords normally change once per measure. Measures 7-8 are vary the second section's V⁷ and V⁷/IV chords by replacing them with V⁷/iv and iv. More striking, however, is the appearance of the Neapolitan in measures 9-11. As we shall see, this harmony will provide an important link to the next two variations.
Variation XXX

The tempo of Variation XXX (Andante) is one of the many links which unites Variations XXIX-XXXI. Variation XXX is linked to XXIX by the common use of the scalar third and dotted rhythm. It is linked to the next variation by its opening structural emphasis on e\textsuperscript{b}.

The texture, unlike the previous variation, is polyphonic and suggests quartet conception. The variation is only 16 measures in length (half that of the theme) and is unique in that the last four measures are to be repeated. Whereas the Variation XXIX's harmonies were simple and the harmonic motion was slow, here the opposite is true. The harmony may change as often as eight times per measure, as, for example, in measure 15. The listener is surprised by the tonicization of the Neapolitan, D\textsuperscript{b} major, in measures 3-5 and the appearance of the minor (!) mediant, e\textsuperscript{b} minor, in measure 6. The former links this variation with its adjacent neighbors. The vii\textsuperscript{07} chord is frequently employed as a non-functional neighbor chord; an example is the chord succession N\textsuperscript{6}-vii\textsuperscript{07}/iv-N\textsuperscript{6} in measures 4-5.

The first half of the theme is represented in measures 1-8. The theme's harmonic succession and melodic outline are freely transformed so that only the following remains: first, the c\textsuperscript{2}-g\textsuperscript{1} motive is embedded in the subject, e\textsuperscript{b}-d-c-a\textsuperscript{b}-g; second, the tonic prolongation in the first four measures of the theme is the basis for the first two
measures here (however, the theme's dominant prolongation of measures 5-8 is supplanted in measures 3-4 by the use of the Neapolitan); third, the rising sequences which constitute measures 9-13 of the theme are suggested here in measures 4-6; fourth, the theme's cadence on the dominant at the end of the first section is replaced here in measure 8 by the subdominant.

The second section of the theme is represented in measure 9 by the inversion and extension of the opening figure. Instead of emphasizing the dominant as in the theme, Variation XXX emphasizes the dominant of the subdominant. The V/V in measures 21-24 of the theme is represented instead by the dominant ninth of iv. The sequential nature of measures 25-28 of the theme occurs in measures 13-14. The bass in these measures not only emphasizes d♭, the Neapolitan note, but also the descending diminished fifth d♭-g. The soprano presents an inverted variant with the ascending diminished fourth e²-a♭²; afterwards it too employs the descending fifth motive. A final reference back to the Neapolitan is made in measure 15 before the V-i cadence in c minor in measure 16.

 Variation XXXI

"Largo, molto espressivo" is the indication given at the beginning; the slow tempo links this variation with the previous two. Furthermore, all three are united by the key
of c minor, the scalar third figure, the dotted rhythm, and
the use of the Neapolitan. Finally, this variation and the
previous one both emphasize e\textsuperscript{b} as the beginning structural
soprano note and foreshadow the key and opening pitch of the
upcoming fugue. The slow tempo and elaborate figuration
lead the uninitiated listener to believe that this is the
penultimate variation.

The thirty-two measures of the theme are condensed to
twelve measures. The first eight measures of the theme
which contain the harmonic motion I-V are reduced to only
two measures here. This variation shows much harmonic
freedom from the theme; only the following broad outline is
maintained: \[ | | I-V-I---V | | ..... I | |. \]

E\textsuperscript{b} rather than c\textsuperscript{2} is now the prominent soprano note,
and it is embellished by the f\textsuperscript{2} upper neighbor in measure
two, as the reduction in Example 5-75 displays.

The metric reduction given in Example 5-75 shows that
the e\textsuperscript{b} is prominent in a number ways. First, its presence
helps to prepare for the shift to the E\textsuperscript{b} major chord in
measure 4. Second, measure 7 begins in E\textsuperscript{b}. Third, the E\textsuperscript{b}
foreshadows the key of the upcoming fugue.

The first measure contains a wealth of material for
development. The variation begins with a thirty-second note
figure, the source of which is the turn. Its presence is
felt in almost every measure. The soprano in measure 1
displays the theme's descending fourth (c\textsuperscript{2}-g\textsuperscript{1}) and the
Example 5-75. Opus 120, Variation XXI, a metric reduction.
Example 5-75 continued.

repeated g\textsuperscript{1}'s. The movement by third (e\textsubscript{b2}-d\textsubscript{2}-c\textsubscript{2}) also foreshadows the b\textsubscript{b1}-a\textsubscript{b1}-g\textsubscript{1} movement in measure 7. Finally, the b\textsuperscript{1}-c\textsuperscript{2} appoggiatura figure in measure 1 helps to unify this variation. It appears many more times, as in measures 2-4 and 9-11. As we shall see, this figure is essential to the construction of the countersubject in the fugue; as a result, it links this variation with the fugue.

The second section, measures 7-11, is remarkable. The first measure is suggestive of Opus 110. The chromatic rising sixty-fourth note pattern in measure 8 foreshadows
the future Romantic style, in particular that of Chopin. The key movement is also noteworthy, particularly the sequential tonicization of $D_b$ major, $E_b$ major, $F$ minor, and the dominant of $C$ minor.

**Variation XXXII**

This variation is entitled "Fuga." Beethoven was careful to avoid designating the fugue as a variation in Opus 35; here, however, he labels it as the thirty-second variation. In addition, Chapter III revealed that Opus 35's fugue moved restlessly through several different keys; Opus 120's fugue, on the other hand, is centered primarily around $E_b$ major and $C$ minor. The latter is a double fugue and consists of three large sections. Finally, Variation XXXII is important because it is the first and only one not to adhere to the $C$ tonic.

The large proportions and complexity of the fugue suggest that it could satisfactorily serve as Opus 120's concluding variation. This seems especially true since the three preceding slow variations act together as a group to form what appears to be the traditional slow penultimate variation. However, the fugue's key of $E_b$ major makes it incapable of serving as a conclusion and necessitates the thirty-third variation which re-establishes the $C$ tonic.

The subject is tonal. The opening leap of a fourth ($e_b^2 - b_b^1$) in the subject is adjusted to a fifth when the
answer appears in measure 7 \((b^b-e^b)\). The subject is related to the theme by the opening descending fourth and by the repeated \(b^b\)’s which follow. The countersubject begins in measure 2; its slower moving half-notes contrast with the quarters of the subject. An important figure which permeates both the subject and the countersubject is the appoggiatura, although here this description describes two-note stepwise motion rather than a dissonance-to-consonance relationship. Example 5-76 displays these characteristics.

Example 5-76. Opus 120, Variation XXXII, measures 1-6.

The first exposition occurs in measures 1-26. The subject begins in the soprano, the answer in the bass with the upbeat to measure 8, the subject reappears in the tenor in the upbeat to 15, and the answer reappears in the alto in the upbeat to measure 21. An episode begins in measure 29.
utilizing the first six notes of the answer's head. The purpose of this section is to modulate to c minor. A second exposition, this time in c minor, begins in measure 35 with the answer. The subject then appears in the upbeat to measure 45; for the first time it is harmonized in sixths by the alto. The subject appears in stretto with entrances on the upbeat to measures 56 and 58.

Measure 64 begins a tonally more unstable section, the subject passing through a number of keys. The section ends in measure 85 with the return of the subject in E♭ major. The subject is presented in inversion in measure 64 and suggests f minor. An answer appears in modified form in measure 72. Measures 74–75 have been simplified from quarter notes to half notes. A partial stretto occurs in the bass in measures 73–76. Another answer appears in measure 76 in E♭ minor along with another partial stretto in measure 78. The answer is then fragmented and sequenced in measure 80. The shortening of the answer to four notes produces a feeling of acceleration, and an additional acceleration is produced in measure 84 with the further reduction of the answer to only two notes.

Measure 86 marks the disguised return to E♭ major and a third exposition. The return is disguised because of the accompanying chromaticism and the lack of a clear cadence. The subject enters in the soprano in measure 86; the answer which follows is given in inversion. This same answer is
doubled at the octave and occurs in the bass in measure 96. Its upward ascent is elongated and overlaps with another subject entrance in the soprano in measure 106. The $b^2-a^b-a^b$ fragment which ends it in measure 108 is then treated sequentially through measure 111, at which point the music dissolves into a series of overlapping subject heads and comes to rest on a $vii^0$ chord.

A second fugue begins in measure 117 is based on the first fugue subject and an entirely new countersubject. The latter begins simultaneously with the second note of the subject. This second fugue's character differs slightly from that of the first fugue; the second is more flowing due to the countersubject's eighth notes, to the general avoidance of leaps, to the subject's longer note values, and to less repetition.

The exposition begins in measure 117 with the subject in the soprano; the answer occurs in the bass in measure 121. The subject reappears in the alto in measure 125 and the answer reappears in the tenor in measure 129, although the first note has been adjusted from $b^b$ to $a^b$.

The opening of the second fugue is given in Example 5-77. Measures 133 to 141 are episodic and prepare the return of the original fugue subject in $E^b$ major in measure 142. This section moves to $F$ minor, and the subject is found two more times, first in the soprano in measure 135 and then in the tenor in measure 138.
The final exposition begins in measure 142. Here Beethoven combines the first fugue subject with the second countersubject. The first subject enters again in measure 146 and is this time accompanied by both the first and second countersubjects. The subject enters two more times, first in the soprano in measure 150 and then in the tenor in measure 154, both times beginning on $a^b$ rather than $b^b$. An $E^b$ pedal point occurs in measures 158-162 and supports the progression $I-V^7/IV-IV-vii^{07}-I$.

The "Poco Adagio" (measures 161-166) serves as an important transition to the final variation. Measures 161-2 form a two-measure phrase that is repeated twice and significantly altered each time. The first phrase consists of $vii^{07}-I$. The first chord of the second phrase combines
the $e^b_2$ and $g^2$ of the previous I chord with the $c^b_3$ of the $vii^0_7$ chord of measure 161. The third phrase begins with the same chord as measure 163; however, the $c^b_3$ has been respelled as $b^2$ and the $e^b_2$ as $d^#_2$. This permits a resolution to the $e$ minor, a key that is distant to $E^b$ major but closely related to C major, the key of the final variation. This is illustrated in Example 5-78.

Example 5-78. Measures 161-166 of Variation XXXII and measure 1 of Variation XXXIII.
Variation XXXIII

"Tempo di Menuetto, moderato (ma non tirarsi dietro)" is the heading that Beethoven gives here. Variation XXXIII is significant for a number of reasons. First, it re-establishes C as the tonic; second, it recalls the theme by returning to 3/4 meter and adhering to the melodic and harmonic outlines of the theme. Third, it bears a striking resemblance to the last movement of Opus 111. Fourth, the return to C major after the previous use of c minor in Variations XXIX-XXXI suggests that this variation will serve as the triumphal conclusion to Opus 120.

The metric reduction given in Example 5-79 reveals that the first eight measures of the theme are compressed into measures 1-4; similarly, the first eight measures in the second half of the theme are compressed into measures 13-16. Both of these compressions produce the unusual length of twenty-four measures instead of the usual thirty-two.

This variation retains three characteristics of the theme: the outline of the descending fourth, the repetition of the soprano note g, and the turn motive. The turn motive is especially crucial for the unity of this variation; it appears in its original form and as a variant in nearly

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19 For a discussion of this variation's relation to Opus 111, see Kinderman, Beethoven's Diabelli Variations, 115-118 and 126-130.
Example 5-79. Opus 120, Variation XXXIII, a metric reduction of measures 1-24.
every measure. In addition, the appoggiatura figure is also prominent as is suggested by the soprano's opening (a²–g²).

Measures 13–24 constitute the second half of the theme. The theme's primary harmonies for this section, V I IV V I, can be observed through this section. However, two changes occur. The first is the suggestion of the Neapolitan key in measures 18–19; its dominant, Aᵇ–c–eᵇ–gᵇ, is enharmonic to the German augmented sixth chord in measure 19 (Aᵇ–c–eᵇ–F♯) which eventually leads back to the key of C major. The second is the prolongation of ii; it occupies the space of one quarter-note in measure 30 of the theme; in Variation XXXIII it occupies twice as much space in measure 23 and is emphasized by the accompanying c♯'s.
Measures 25–33 are transitional, display the construction 2+2+3, and lead to an additional but only partial second variation. Example 5–80 reveals that one of the interesting aspects of this transition is the avoidance of a downbeat in measures 32–33.

Example 5–80. Opus 120, Variation XXXIII, measures 32–33.

The "additional" variation is loosely based on the theme's harmonic plan rather than either the soprano or bass outlines; in addition it displays note repetitions in the bass and parallel thirds and sixths in the upper parts. It is begins in measure 34 and ends in 38; measures 39–41 serve as an extension.

Measures 42–49 constitute the final section. The opening recalls the c\textsuperscript{3}–a\textsuperscript{2}–g\textsuperscript{2} opening of this variation. As is typical of closing sections, every measure except the last two consists of an alternation of tonic (two beats) and dominant (one beat). Unlike many endings, this one does not display a harmonic acceleration to the end. A rhythmic
acceleration, however, does occur. The dotted eighth and
sixteenth note rhythm found in measure 42 gives way to
steady sixteenths in measure 43, sextuplet sixteenths in 44,
and thirty-seconds in 45.

The last two measures, shown in Example 5-82, are a
touching close to Beethoven's piano variations. The piano
ending is unexpected; only the last chord is marked forte.
Two of the most important chromatic notes of the work, b\textsuperscript{b}
(necessary for the tonicization of IV) and a\textsuperscript{b} (the mixed
mode lowered sixth) make final appearances in the closing
scales (measure 48). The repeated g's which were so
prominent in the theme bring the soprano to a close.
Finally, the inconclusive e\textsuperscript{\textdagger} in the last I chord seems to
suggest that Beethoven did not intend Opus 120 to be his
last independent piano variation set.

Example 5-81. Opus 120, Variation XXXIII, measures 48-49.
Summary of Formal Implications and Internal Connections

As was mentioned in the introduction to this chapter, numerous authors have attempted to place the variations into specific groups. As Charles Rosen has said, "In the structure of the Diabelli, there is a clear attempt to consider the variations in large groups, as if to find a unifying equivalent for the several movements of a sonata of symphony." Based on the small-scale links and large-scale trends (registral expansions, rhythmic accelerations, textural similarities, and other factors) which have been discussed in this chapter, the following formal divisions are illustrated in Table 5-2.

Table 5-2. Opus 120, the sectional divisions based on the analysis presented in Chapter V.

<table>
<thead>
<tr>
<th>Group</th>
<th>Group</th>
<th>Group</th>
<th>Group</th>
<th>Group</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>II</td>
<td>III</td>
<td>IV</td>
<td>V</td>
<td>VI</td>
</tr>
<tr>
<td>Var.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5-3 summarizes the important links and cross-references which occur in Opus 120. It reveals the

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overlapping elements which unify this diverse set of variations. Unlike previous sets, the role of tempo and meter takes on special significance in relating one variation to another. Like the previous sets, however, this one again displays Beethoven's concern for internal unity.
Table 5-3. Opus 120, links and cross-references.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Var. I</th>
<th>Var. II</th>
<th>Var. III</th>
<th>Var. IV</th>
<th>Var. V</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4</td>
<td>4/4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 quarter notes</td>
<td>half notes</td>
<td>eighth notes</td>
<td>quarter notes</td>
<td>eighth notes</td>
<td>eighth notes</td>
</tr>
<tr>
<td>vivace</td>
<td>maestoso</td>
<td>poco allegro</td>
<td>poco piu allegro</td>
<td>allegro</td>
<td>vivace</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>attack point acceleration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 c-g fourth</td>
<td>scalar 4</td>
<td>short-short-long rhythmic motive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 repetition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 soprano outline</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>imitation</td>
</tr>
<tr>
<td>8 skip down/step up motive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(e^3) m.32</td>
</tr>
</tbody>
</table>
Table 5-3 continued. Opus 120, links and cross-references.

<table>
<thead>
<tr>
<th>Var. VI</th>
<th>Var. VII</th>
<th>Var. VIII</th>
<th>Var. IX</th>
<th>Var. X</th>
<th>Var. XI</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4 meter</td>
<td>4/4 meter</td>
<td>-3/4-</td>
<td>3/4 meter</td>
<td>eighth notes</td>
<td>4/4 meter</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 allegro</td>
<td>poco allegro</td>
<td>presto</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>acceler</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>attack point acceleration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>exchange of activity in l&amp;r hands</td>
<td>turn motive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>chromatic appoggiatura</td>
<td>d-c-b opening</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>imitation</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c^2 - e^3</td>
<td>g^2 - e^2</td>
<td>3rd up</td>
<td>3rd down</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5-3 continued. Opus 120, links and cross-references.

<table>
<thead>
<tr>
<th>Var. XII</th>
<th>Var. XIII</th>
<th>Var. XIV</th>
<th>Var. XV</th>
<th>Var. XVI</th>
<th>Var. XVII</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4 meter</td>
<td>4/4</td>
<td>2/4</td>
<td>4/4 meter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 eighth quarters dotted eighth eightths</td>
<td>eighths</td>
<td>sixteenths</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 poco piu moto vivace grave presto</td>
<td>allegro</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tempo accel</td>
<td>attack point acceleration</td>
<td>c-g fourth opening</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-- neighbor tone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 long-short-long rhythmic motive</td>
<td>appoggiatura</td>
<td>c\textsuperscript{4} \quad m. 16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>parallel 3rds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 measure</td>
<td>16 bridge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5-3 continued. Opus 120, links and cross-references.

<table>
<thead>
<tr>
<th>Var. XVII</th>
<th>Var. XIX</th>
<th>Var. XX</th>
<th>Var. XXI</th>
<th>Var. XXII</th>
<th>Var. XXIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3/4 meter</td>
<td>6/4</td>
<td>---------4/4 meter---------</td>
<td>3/4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>dotted</td>
<td>eighth</td>
<td>quarters;</td>
<td>3/4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>half-n. notes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>andante</td>
<td>allegro</td>
<td>molto</td>
<td>allegro</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>--tempo and rhythmic acceleration--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>--c-g opening--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4--chrom. app.</td>
<td></td>
<td></td>
<td>--soprano outline--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c\textsuperscript{4}</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. 32</td>
<td></td>
<td></td>
<td>registral expansion upward--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td>scalar scales</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>fourth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>24</td>
<td>18</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>measures</td>
<td>measures</td>
<td>measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>---diminution of length---</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5-3 continued. Opus 120, links and cross-references.

<table>
<thead>
<tr>
<th>Var. XXIV</th>
<th>Var. XXV</th>
<th>Var. XXVI</th>
<th>Var. XXVII</th>
<th>Var. XXVIII</th>
<th>Var. XXIX</th>
</tr>
</thead>
<tbody>
<tr>
<td>1--3/4--?-----3/8 meter------------------2/4</td>
<td>3/4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 eighth-----sixteenth-----triplet sixteenth</td>
<td>quarter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Andante-----allegro------vivace</td>
<td>adagio</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 --rhythmic &amp; tempo accel.--</td>
<td>--ornamental increase--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 $e^1$-----$e^2$----?-----$e^3$-----$e^3$-----$e^2$</td>
<td>$--slow--$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. 32 upbeat to m. 1</td>
<td>upbeat to m. 1; m. 30</td>
<td>upbeat to m. 1</td>
<td>scalar third--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 --three-note groups--</td>
<td>c minor--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 --scalar third--</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 -----appoggiatura-----</td>
<td>(chromatic)-----</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5-3 continued. Opus 120, links and cross-references.

<table>
<thead>
<tr>
<th>Var. XXX</th>
<th>Var. XXXI</th>
<th>Var. XXXII (Fugue)</th>
<th>Var. XXXIII</th>
<th>Coda</th>
<th>(Var. XXXIV frag.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 4/4</td>
<td>9/8</td>
<td>2/2</td>
<td>3/4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 eighth</td>
<td>thirty-second</td>
<td></td>
<td></td>
<td></td>
<td>sixteenth thirty-second</td>
</tr>
<tr>
<td>3 andante</td>
<td>largo</td>
<td></td>
<td></td>
<td></td>
<td>moderato</td>
</tr>
<tr>
<td></td>
<td>increased</td>
<td>ornamentation</td>
<td></td>
<td></td>
<td>rhythmic acceleration</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>repetition figure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>slow</td>
<td>appoggiatura figure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>scalar third</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c minor</td>
<td>C major</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>turn motive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 e b's</td>
<td>e b2</td>
<td>e b2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mm. 1- m. 1</td>
<td>upbeat</td>
<td>to m. 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER VI
CONCLUSIONS

It has been demonstrated in this dissertation that, in each of the four works analyzed, Beethoven goes beyond the process of varying a theme to create works in which each variation is related to other ones as well. Beethoven uses the techniques specifically discussed in Chapter I to unify the overall structure, provide a definite order for the variations, and transcend the inherent additive tendency that variation composition entails. It has also been shown that each set emphasizes one or more of these techniques, the most striking of which are summarized here.

Opus 34 departs from the standard practice of retaining the tonic for each variation of a set. In addition to the novelty of having variations in different keys, the order of keys is unusual; the tonic of each of the first five variations is a third lower rather than a fifth lower. With the exception of Variations IV (E\textsuperscript{b} major) and V (c minor), this results in a coloristic succession of foreign keys. The tonal plan fixes the order of the variations since any change would affect the logical sequence of keys. Furthermore, Opus 34 makes invariant use of the diminished seventh chord. This technique links the Thema and Variation I, Variations II and III, and IV and V.
The opening of Opus 35 prominently displays the technique of additive texture, an important factor which unifies the various sections that precede the appearance of the complete theme. The number of voices grows from one in the opening bass theme to as many as seven in the complete theme. Beethoven's use of additive texture at the beginning of Opus 34 also creates a balance at the end with the fugue's use of this technique in the exposition. The order and unity of Opus 35's introduction is further reinforced by the octave ascent of the bass theme in the a duet, a tre, and a quattro.

WoO 80 is notable for its extensive use of the "variation of a variation" technique. This device appears in more than one version. For example, small groups of variations which are united by the exchange of parts are formed by Variations I-II and X-XI. A second example occurs when one part is retained while the other is varied, as in Variations VII and VIII, XIII and XIV, XV and XVI, and XXXI and XXXII. WoO 80 is also notable for the unity displayed in the major section, Variations XII-XVI. One unifying factor is the consistent use of a variant of the soprano theme.\(^{1}\) Finally, another unifying characteristic of WoO 80 is the registral isolation of the ab2 in the sixth measure of the theme; it permits not only a short-range registral

\[^{1}\text{The theme's the octave leap of f}^{2}-f^{1}\text{ of measure 4 has been change to e}^{1}-f^{1}.\]
permits not only a short-range registral connection to the $g^2$ in measure 1 of Variation I but also a long-range one to the $a^2$ in measures 43, 45, and 47 of Variation XXXII. The pitch $a^b$ was shown elsewhere to provide many internal connections as well, such as between Variations XVIII and XIX, here present as $a^{b3}$.

Opus 120 is remarkable not only for the large number of variations, but also for their diverse characters. These two factors undoubtedly posed an enormous compositional problem for Beethoven in terms of creating a unified whole. One of the methods he employed to overcome this challenge was to isolate various motives in the theme and extensively unfold them in the variations; as a result, the variations could be related not only to the theme but to each other.

In addition to emphasizing particular techniques, each set displays a unique underlying structure. The combination of relationships between variations and the form support the hypothesis that each variation has a specific purpose and place in the composition. As a result, a reordering, addition, or elimination of variations would seriously impair the logic and unity of the sets. It may also be concluded that Beethoven did not follow one standard pattern when composing a variation set, but instead tailored the plan and techniques to suit his requirements.

Some of the formal plans are more easily discernible than others. Opus 34, perhaps because of its limited number
of variations, does not suggest clear division into groups. For example, the invariant use of the diminished seventh chord between pairs of variations does provide a link between them, but this link is not strong enough in the absence of additional connecting techniques to suggest that the pairs be grouped together. Indeed, the need for grouping is less important in this work than in other variation sets; as noted earlier, an important unifying force in Opus 34 is the key scheme. Furthermore, connections as well as divisions into groups may occur at several different levels. For example, Opus 34 does display a chiasmic metric structure. In addition, an arch is imposed on the structure by the return of the theme at the conclusion of the work. All these influences are shown in Example 6-1.

Example 6-1. Opus 34, different structural levels.
Opus 35 may be divided into three groups. The first culminates in the canon of Variation VII; the second with the Largo (Variation XV), and the third consists of the fugue and the return of the theme. These may be further divided into several subgroups, each of which is defined by the common use of one or more connecting techniques. These subdivisions are not always clear since the techniques often operate at different levels. For example, several subgroups exist in the first group. One is defined by the textual expansion which begins with the bass theme and concludes with the complete theme. A second is defined by the rhythmic acceleration which begins with the bass theme's half notes and concludes with Variation II's triplet sixteenths. A third is represented by the octave rise of the bass theme which begins in the a due and concludes in the a quattro. A fourth is formed by the offbeat accents found in Variations III-V. Finally, a fifth is formed by the imitation found in Variations V-VII. Example 6-2 displays these subgroups.

Example 6-2. Opus 35, the various subgroups found in the first group (Introduction through Variation VII).
WoO 80 has a well-defined three-part structure. The sections are delineated by several factors. For example, the last variation of the first group, Variation XI, represents the culmination of the rhythmic acceleration begun by Variation VI and the upper registral expansion begun by the thirty-second notes in Variation X. The second section is differentiated from the first by the use of the major mode in the former and minor in the latter. In addition, the variations in the major section makes use of a soprano melody which has been altered by a three-note motive. Furthermore, the major section occurs in the middle of the composition and produces an almost symmetrical structure. The third section's arrival is marked by the return to the minor key and the imitative texture. The overall structure is given in Example 6-3.

Example 6-3. WoO 80, the overall structure.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Variations I-XI</th>
<th>Var. XII-XVI</th>
<th>Var. XVII-XXXII</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-------minor-------</td>
<td>-------major-------</td>
<td>-------minor-------</td>
</tr>
</tbody>
</table>

The underlying formal plan of Opus 120 is perhaps the most difficult of the four sets to determine. As was noted in Chapter 5, numerous authors have offered a variety of
interpretations which further highlights the difficulty. Part of it stems from the wide variety of the character each variation displays and the freedom with which Beethoven displays in not following the exact outline of the theme. Nevertheless, if the techniques of connection presented in this dissertation are observed, the overall structure shown in Example 6-4 is suggested:

Example 6-4. Opus 120, the overall structure.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I-X</td>
<td>X-VII</td>
<td>XVIII-XVIII</td>
<td>XXIV-XXVIII</td>
<td>XXIX-XXXI</td>
<td>XXXII-XXXIII</td>
</tr>
</tbody>
</table>

One of the inherent difficulties every composer faces when composing variation sets is the successful termination of the variation process with its accompanying momentum. Beethoven's approach to ending the four sets discussed in this dissertation is to use standard practices in unique ways. For example, a common technique used by Beethoven's contemporaries is to bring back the theme at the end of the set. Beethoven's Opus 34, Opus 35, and WoO 80 all have literal repeats of the theme, yet each da capo is presented in an original manner. Opus 34's literal da capo lasts only two measures before the principal thematic notes are elaborated by copious figuration. The first half of
Opus 35's theme is literally repeated, but the next eight are varied; this produces a combination of a da capo within a double variation. Interestingly, this variation is then followed by another double variation which produces a rhythmic acceleration. WoO 80's return of the theme in Variation XXXI is marked by a bass pedal point which not only lasts for the full duration of the variation but also continues for eight measures into Variation XXXII. Only Opus 120 avoids a literal repeat. However, Variation XXXIII serves as an implicit return of the theme and also alludes to the second movement of Opus 111.

Beethoven uses a fugue in both Opus 35 and Opus 120 to break the variation momentum and to prepare the return of the theme. Since Beethoven does not wish these fugues to appear to be the conclusion of the sets but to serve as preludes to the final variations, he composed them in such a way as to suggest tonal instability. In the case of Opus 35, he accomplishes this in two ways. First, the fugue is highly modulatory. Second, the harmonic and rhythmic movement is halted by a seven-measure pause on an unstable V\(_4\) chord rather than on a stable I chord.\(^2\) Opus 120's fugue modulates less frequently and to closer keys than Opus 35's

\(^2\)The fugue does not end harmonically on this chord, but continues into the following cadence, the last chord of which represents the return of the theme: I\(_b\)-ii\(_6\)-V\(_4\)-V\(^7\). This cadence also represents the last four measures of the theme.
keys than Opus 35's fugue; its tonal instability results from its being in the "wrong" key of E♭ major. An additional variation is thus necessary to stabilize the set's overall tonality by reestablishing the original key of C major.

How the performance of these works will be altered based on the insights provided by this dissertation is an important question. The answer is that, except for major divisions, there should be little change. It should be noted that the majority of divisions between groups and subgroups delineated by the techniques discussed in this dissertation are theoretical. When Beethoven wishes for an important pause to enhance the expressiveness of a passage or to mark a division, he marks it in the score as he did, for example, between Variation XV and the Finale in Opus 35. Again, certain techniques tend to establish stronger and more clearly linked groups than others. For example, several consecutive variations which employ a particular motive may suggest a potential group or subgroup; however, the unity produced by this technique does not ordinarily imply that an actual separation should occur in performance between this group and the next. On the other hand, a group of variations which exhibits a long and continuous rhythmic crescendo or registral expansion is more likely to have a more definite conclusion. Here it is conceivable that the performer might wish to emphasize this division by making a
longer pause than usual or by accenting the final chord more strongly.

These four works suggest that Beethoven gradually moved away from the simple figuration of the theme which characterizes many of the variation sets of Haydn and especially Mozart. For example, both Opus 34 and Opus 35 generally maintain the outline of the theme, even though Beethoven's figural treatment transcends that of his contemporaries.\(^3\) WoO 80 may represent another step, for Beethoven does not strictly maintain the theme's outline. This is attributable to the chaconne-like character of the work; nevertheless, it is possible that Beethoven used this form simply because it provide an additional degree of freedom. The process of moving away from figuration is completed by Opus 120; it causes the very definition of "variation" to be reexamined due to the seemingly loose relationship between some variations and the theme. For example, some variations, such as VII and XXVIII, clearly retain only the theme's length while only vaguely following the theme's melodic or harmonic outline.

It has been demonstrated that the proportions of each set would be adversely affected by the removal or addition of any variation. This is perhaps most noticeable in Opus

\(^3\) Few previous composers other than perhaps J. S. Bach or Mozart could have composed such imaginative figuration as that found in Variation VI of Opus 34, Variation XV of 35, or Variation XXXI of Opus 120.
34 and WoO 80; any addition or subtraction would seriously affect the logic of the underlying tonal plan in the former and the balance of the three-part structure in the latter. Furthermore, any exchange of positions would have a similar effect. For example, all transcendental techniques that are progressive, such as rhythmic acceleration, textural growth, and textural expansion, would be rendered meaningless. The opening of Opus 35 would suffer considerably if the a due were substituted for the a quattro.

Beethoven's employment of techniques of transcendence is more frequent and consistent than those of Mozart or Haydn. All four of the works analyzed in this dissertation made extensive use of links and cross-references, whereas it was suggested in Chapter I that Mozart and Haydn made only sporadic use of them.

In conclusion, it has been shown in this dissertation that Beethoven's variations sets display an internal logic which has been largely unrecognized and misunderstood until now. Beethoven clearly attempts to relate one variation to another. An important aspect of Beethoven's method of relating variations to one another is that he may employ different techniques on more than one level at a time. This produces a strong sense of continuity which pervades both variation groups and entire works. It has also been demonstrated that Beethoven takes a unique approach to the
overall form and the internal connections of each of the four sets. It is hoped that study will lead to a better understanding of Beethoven's variation process and spur additional research into other variation works by Beethoven.
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