1948

Variation forms in piano music from Brahms to the present

Giannini, Antoinette Frances
Boston University

http://hdl.handle.net/2144/17684
Boston University
Boston University

College of Liberal Arts
Library
BOSTON UNIVERSITY
GRADUATE SCHOOL

Thesis

VARIATION FORMS IN PIANO MUSIC
FROM BRAHMS TO THE PRESENT

by

Antoinette F. Giannini

(A.M., Boston University, 1948)

submitted in partial fulfillment of the
requirements for the degree of
Master of Arts

1948
Approved by

First Reader. Karl Springer
Professor of

Second Reader. Louis Cornell
Professor of
Outline

I Development of Variation Form

A. Variation Principle in the Middle Ages and the Sixteenth Century

1. Vocal Music
   a. Gregorian Chant  page 2
   b. Polyphonic choral music  " 2

2. Instrumental Music
   a. Lute  " 3
   b. Virginal  " 3-4
      (1) melodic ornamentation  " 4-6
      (2) ground bass  " 6

B. Seventeenth and Eighteenth Century Developments  chapter 11

1. Italy  page 7
   Frescobaldi  " 7
2. France  
   a. Rameau  
   b. Couperin  

3. Germany  
   a. Handel  
   b. Bach  
      (1) Organ Passacaglia and Fugue in C minor  
      (2) Chaconne in D minor  
      (3) Goldberg Variations  

C. Definition of Variation Forms  
   chapter 111  
   1. Passacaglia  
   2. Chaconne  
   3. Theme and Variations  

D. Mozart and Haydn  
   chapter IV  
   1. Discussion of Mozart style  
   2. Analysis of Haydn variations  
      a. in Sonatas  
         (1) G major sonata no. 39  
         (2) D major sonata no. 33  
         (3) G major sonata no. 40  
      b. as a complete work  
         Andante con Variazioni  
         (F minor Variations)
E. Beethoven

Three types of variations page 25
a. Variations on Nel Cor Più non Mi Sento 25
b. Thirty-two C minor Variations 27
c. Diabelli Variations 28

F. Romantic Period

1. Schubert
   Bb major Impromptu op. 142 no. 3 page 30-31
2. Mendelssohn
   Variations Sérieuses op. 54 31-32
3. Schumann
   a. Abegg Variations op. 1 32
   b. Symphonic Études op. 13 33-35
   c. Andante und Variationen für zwei pianoforte op. 46 35
4. Chopin
   Variations on Je vends des Scapulaires 36-38
5. Brahms
   a. Variations and Fugue on a Theme by Handel 40-42
   b. Variations on a Theme by Haydn 42-43

II Variation Form in Piano Music From Brahms to the Present 44-45

A. Chaconne chapter vii
1. Alfredo Casella  
Variations on a Chaconne  page 46-48

2. Bernard Wagenaar  
Ciacona  " 48-50

3. Ernő Kiss  
Toccata and Chaconne

B. Passacaglia  chapter viii

1. Arnold Bax  
Paean  page 54-55

2. Cécile Chaminade  
Passacaille  "  56-58

3. Leopold Godowsky  
Passacaglia  "  58-61

4. Aaron Copland  
Passacaglia  "  61-63

5. Walter Piston  
Passacaglia  "  63-66

6. Lukas Foss  
Passacaglia  "  66-70

C. Theme and Variations

1. Melodic Variations by Virtuoso Pianist-Composers  chapter ix

   a. Paderewski  
Variations and Fugue op. 23 page 72-73  
Thème Varié op.16 no.3  74-75

   b. Ganz  
Symphonic Variations on a  "  76-
theme by Brahms

   c. Rachmaninoff  
Variations on a Theme by Chopin op. 22  77-79  
  "  "  "  "  "  Corelli op. 42  79-81
2. Melodic Variations by Other Composers

a. Arnold Bax
   Mountain Mood page 83

b. Arthur Shepherd
   Theme and Variations " 83

c. Mrs. H. H. A. Beach
   Variations on Balkan Themes " 83-84

d. Joseph Wagner
   Variationen und Fuge über ein Thema von Bach " 85

e. Koşçak Yamada
   'Theme and Variations for Piano " 86

f. Carlos Chavez
   Ocho Veraciones sobre un tema incaico " 86-87

g. Alberto Nepomuceno
   Thème et Variations " 88-89

H. Nicolai Rimsky-Korsakoff
   Variations sur un theme Russe " 89-91

D. New Trends in the Development of the Variation Form
   chapter x

1. Separate sets of Variations

a. Glazunov
   Theme and Variations op. 72 page 92-96

b. Copland
   Piano Variations " 96-99

c. Fauré
   Thème et Variations " 99-101
2. Variations with Fugues

a. Szymanowski
Variations on a Polish Folk Theme page 102-3

b. Hába
Variationen über einen canon von Robert Schumann " 104-5

c. Powell
Variations and Double Fugue " 106

d. Saint-Saëns
Variations sur un thème de Beethoven (for two pianos) " 107-8

e. Reger
Andante Semplice con Variazioni " 109

Variations and Fugue on a Theme by Bach " 110-112
Variations and Fugue on a Theme by Telemann " 112-113
Variations and Fugue on a Theme by Beethoven " 113-117

3. The Modern Variation as Part of a Larger Form chapter xi

a. Schönberg
Dance Suite page 119-123

b. Medtner
Improvisations " 123-125

c. Grieg
G Minor Ballade op. 24 " 126-127

d. Bártok
Piano Sonata " 127-131

e. Harris
Piano Suite (second movement) " 131
f. Dukas  
Variations, Interlude and Finale page 132-

" 133-135

g. Honegger  
Toccata and Variations

h. Giannini  
Variations on a Cantus Firmus  
" 135-13

III Conclusion

Abstract

List of Compositions in Variations Form (for Piano) from Brahms to the Present

List of Music Analyzed

Bibliography
## Musical Illustrations

<table>
<thead>
<tr>
<th>Page</th>
<th>Composer</th>
<th>Composition</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>William Byrd</td>
<td>Carman's Whistle</td>
<td>5</td>
</tr>
<tr>
<td>ii</td>
<td>Beethoven</td>
<td>Variations on <em>Nel Cor Più non Mi Sento</em></td>
<td>26</td>
</tr>
<tr>
<td>iii</td>
<td>Schumann</td>
<td>Abegg Variations op.1</td>
<td>33</td>
</tr>
<tr>
<td>iv</td>
<td>&quot;</td>
<td>Symphonic Études op.13</td>
<td>34</td>
</tr>
<tr>
<td>v</td>
<td>Chopin</td>
<td>Variations on <em>Je vends des Scapulaires</em></td>
<td>36</td>
</tr>
<tr>
<td>vi</td>
<td>Brahms</td>
<td>Variations on a Theme by Handel</td>
<td>40</td>
</tr>
<tr>
<td>vii</td>
<td>&quot;</td>
<td>Variations on a Theme by Haydn</td>
<td>42</td>
</tr>
<tr>
<td>viii</td>
<td>Casella</td>
<td>Variations on a Chaconne</td>
<td>47</td>
</tr>
<tr>
<td>ix</td>
<td>Wagenaar</td>
<td>Ciacona</td>
<td>49</td>
</tr>
<tr>
<td>x</td>
<td>Krenek</td>
<td>Toccata and Chaconne</td>
<td>51</td>
</tr>
<tr>
<td>xi</td>
<td>Bax</td>
<td>Paean</td>
<td>54</td>
</tr>
<tr>
<td>xii</td>
<td>Chaminade</td>
<td>Passacaille</td>
<td>56</td>
</tr>
<tr>
<td>xiii</td>
<td>Godowsky</td>
<td>Passacaglia</td>
<td>59</td>
</tr>
<tr>
<td>Page</td>
<td>Composer</td>
<td>Piece Description</td>
<td>Page</td>
</tr>
<tr>
<td>------</td>
<td>---------------</td>
<td>--------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>xiv</td>
<td>Copland</td>
<td>Passacaglia</td>
<td>61</td>
</tr>
<tr>
<td>xv</td>
<td>Piston</td>
<td>Passacaglia</td>
<td>64</td>
</tr>
<tr>
<td>xvi</td>
<td>Foss</td>
<td>Passacaglia</td>
<td>67</td>
</tr>
<tr>
<td>xvii</td>
<td>Paderewski</td>
<td>Variations and Fugue</td>
<td>72</td>
</tr>
<tr>
<td>xviii</td>
<td>&quot;</td>
<td>Thème Varié</td>
<td></td>
</tr>
<tr>
<td>xix</td>
<td>Rachmaninoff</td>
<td>Variations on a Theme by Chopin</td>
<td>77</td>
</tr>
<tr>
<td>xx</td>
<td>Beach</td>
<td>Variations on Balkan Themes</td>
<td>83</td>
</tr>
<tr>
<td>xxi</td>
<td>Wagner</td>
<td>Variations and Fugue on a Theme by Bach</td>
<td>85</td>
</tr>
<tr>
<td>xxii</td>
<td>Chavez</td>
<td>Eight Variations on a Theme (Ocho Veraciones sobre un tema incaico)</td>
<td>87</td>
</tr>
<tr>
<td>xxiii</td>
<td>Nepomuceno</td>
<td>Thème et Variations</td>
<td></td>
</tr>
<tr>
<td>xxiv</td>
<td>Rimsky-Korsakoff</td>
<td>Variations sur un theme Russe</td>
<td>89</td>
</tr>
<tr>
<td>xxv</td>
<td>Glazuny</td>
<td>Theme and Variations</td>
<td>94</td>
</tr>
<tr>
<td>xxvi</td>
<td>Fauré</td>
<td>Thème et Variations</td>
<td>100</td>
</tr>
<tr>
<td>xxvii</td>
<td>Szymanowski</td>
<td>Variations on a Polish Folk Theme</td>
<td>102</td>
</tr>
<tr>
<td>xxviii</td>
<td>Hába</td>
<td>Variations on a Canon by Schumann</td>
<td>104</td>
</tr>
<tr>
<td>xxix</td>
<td>Powell</td>
<td>Variations and Double Fugue</td>
<td>106</td>
</tr>
<tr>
<td>xxx</td>
<td>Saint-Saens</td>
<td>Variations on a Theme by Beethoven (for two pianos)</td>
<td>107</td>
</tr>
<tr>
<td>xxxi</td>
<td>Reger</td>
<td>Variations on an Original Theme</td>
<td>109</td>
</tr>
<tr>
<td>xxxii</td>
<td>&quot;</td>
<td>Variations and Fugue on a Theme by Bach</td>
<td>110</td>
</tr>
<tr>
<td>Page</td>
<td>Composer</td>
<td>Work Description</td>
<td>Page</td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>------------------</td>
<td>------</td>
</tr>
<tr>
<td>xxxiii</td>
<td>Reger</td>
<td>Variations on a Theme by Telemann</td>
<td>112</td>
</tr>
<tr>
<td>xxxiv</td>
<td>&quot;</td>
<td>Variations on a Theme by Beethoven (for two pianos)</td>
<td>114</td>
</tr>
<tr>
<td>xxxv</td>
<td>Schönberg</td>
<td>Dance Suite</td>
<td>120</td>
</tr>
<tr>
<td>xxxvi</td>
<td>Medtner</td>
<td>Improvisations</td>
<td>124</td>
</tr>
<tr>
<td>xxxvii</td>
<td>Grieg</td>
<td>G Minor Ballade</td>
<td>126</td>
</tr>
<tr>
<td>xxxviii</td>
<td>Bácrtok</td>
<td>Piano Sonata</td>
<td>128</td>
</tr>
<tr>
<td>xxxix</td>
<td>Honegger</td>
<td>Toccata and Variations</td>
<td>133</td>
</tr>
<tr>
<td>xxxx</td>
<td>Giannini</td>
<td>Variations on a Cantus Firmus</td>
<td>134</td>
</tr>
</tbody>
</table>
Introductory Note

This thesis, concerned with the variation and its use in piano music, is divided into two parts. The first part, consisting of six chapters, is given to an outline of the historic development of the variation forms. The second part, also comprising six chapters, contains analyses of compositions written from the time of Brahms' death to the present day. These works are grouped according to form and type as follows:

- The use of the Chaconne in modern music
- The use of the Passacaglia in modern music
- The melodically embellished Theme and Variations
- The Theme and Variations with Fugue as finale
- The modern Theme and Variations combined with other forms and
- Conclusion of the foregoing chapters.
Variation Principle in the Middle Ages
and the Sixteenth Century

In order to fully understand the trends of contemporary music, it is necessary to make a study of composition in its earliest stages of development, for the forms being most emphasized by modern composers are those which are characteristic of the Classic and pre-Classic periods.

In music's most primitive stage, extension of a melodic line, and any semblance to form and develop-
merit, was achieved only through the use of repetition. Thus, to avoid the resultant monotony, it became of the utmost importance to all composers of the period, that each repetition be concealed through ornamentation or other suitable devices.

Evidences of this variation principle first appeared in the Alleluias of the Gregorian Chants where ornamental notes were added to the essential notes of the repeated melody. The chants were varied according to the mood and part of the Mass being sung, and it was this repetition and variation which gave coherence to the music and to the Mass itself.

During the polyphonic period of choral music, the varying elements appeared in the contrapuntal voices added to a cantus firmus. The leader of this movement, Dunstable, "entwined ecclesiastical melodies with two and three voices and varied the strophes freely."

************

3. Ernst Krenek Music Here and Now p.171 New York: 1939
4. cantus firmus is a fixed voice upon which contrapuntal melodic lines are placed to form a polyphonic composition.
It was not until the vocal method of lengthening a composition was applied to instrumental music, however, that the variation principle began to develop into a definite musical form. Since the Lute was by far the most popular instrument of the early sixteenth century, it was only natural that composers of all the principal European countries, France, Spain, Germany, Austria, and Italy, should excel in works for this instrument. These men replaced the vocal cantus firmus with a melody which was altered at each repetition to add interest. So great was the technical and imaginative ability of the Lute writers, that the effects of their experimentations later influenced the English madrigal writers, Byrd, Bull, and Gibbons, who also turned their attention from choral to instrumental music.  

By the middle of the sixteenth century, the Virginal was considered to be the most important keyboard instrument in England. Rapid, ornamental passages, rather than sustained melodic lines, were better adapted to the instrument, and for this reason the ornamental variation again came to the fore. The melodies upon

***************

1. Paul Lang Music in Western Civilization p.246
New York: 1941
which the transformations were based, were those written by well known composers, ecclesiastical plainsong melodies, secular tunes, or favorite dance melodies and rhythms.

In England, as in Germany and other European countries, a series of dances such as the Galliard, Pavane, Saltarello, and Allemande, were used in succession to form what came to be known as a suite. But, in some instances, the entire series of pieces was a set of variations on the theme of one of the dances, and each variation was given the characteristic rhythm of the dance it represented. Through the use of variation form, the most frequently found form in all collections of Virginal music, early composers were able to fulfill the essential elements of musical composition. Unity was achieved through repetition, and variety through the alterations made upon the theme.

Aston's Hornpipe in which the variations are based upon a drone bass, and later, William Byrd's The Carman's Whistle, are among the best representative


1. Percy Goetschius, Larger Forms in Musical Composition, New York, 1915 p. 168
works of this period. This second composition did not merely add embellishment, but altered the character of the theme at each variation.

example 1

sixteen measure subject which provides the basis for Byrd's Carman's Whistle.

![Musical notation]

Another characteristic development in the form during the sixteenth century, was that which appeared in Bull's Courante Jewel. Here, each new theme is followed by a variation on that theme.

Form: A a (variation on theme A) B b C c D d etc.
Thus, by the end of the sixteenth century, there were two types of variations, which, though they were still merely a means of coherently and brilliantly lengthening a theme, they did offer a basis for future development.

The first type was that in which the melodic line was either ornamented, as in the Courante Jewel, or altered at each repetition, as in The Carman's Whistle.

The second and easiest group of variation forms to recognize, was that in which the bass line did not change, and ornamental or contrapuntal melodies were added above it. This unaltered bass, called a Ground Bass, or Basso Ostinato, was basically a polyphonic form, and was a direct result of the Medieval and Renaissance use of the cantus firmus in vocal music. It was based "upon an accompanying figure or actual melody repeated in the bass while the other parts proceeded normally." 1.

During the seventeenth century, the Basso Ostinato came to be the preferred form, for when the principle of a continually repeated phrase was combined with Spanish dance forms, the result was the passacaglia.

***********

1. A. Copland, What to Listen for in Music, p. 150
Seventeenth and Eighteenth Century Developments

The most important composer at the turn of the century was the Italian master, Frescobaldi, who lived from 1583 to 1644. Through his efforts, perhaps the most effective development of the century took place. He, instead of using the common variation technique of either completely altering a melody, or adding new counterpoint to a repeated bass, used a new and freer method of writing. The melodic elements were retained for coherence, but the harmonic scheme was the dominant factor in the variation process. In employing thematic material to bind movements, he developed monothematic writing, which in turn exercised a great influence upon the German sonata composers of a later time.

***********

1. monothematic writing is that in which one theme is stated, developed, and presented under many aspects without losing its original character.

2. Paul Láng, Music in Western Civilization, p. 363
By the end of the century, music, especially in France, was characterized by a gradual deterioration. Rameau, although he was a contemporary of Bach and Handel was not influenced by the German composers, but followed more closely the trends of his immediate predecessor, François Couperin. (1688-1733)

True, both Couperin and Rameau were among the outstanding keyboard composers of the time, but they sacrificed form and made no contribution to musical advancement in order to attain a fine technical style of writing for clavier. It might be said that they continued in the pattern set by the English Virginalists, for tuneful themes rather than harmonic structures were the bases for composition. This prevalence of melodic style unfavorably affected other forms of instrumental composition as well as the variation form.

There was also a marked tendency to avoid the contrapuntal variation forms, and to lower the standards of writing in order to appeal to, and fill the demands of, a public of musical amateurs who were interested only in that which was musically spectacular. Naturally, the outcome of empty figuration, rapid scale and arpeggio passages, and other ornamental devices, was a charming, highly technical, florid style that was devoid of emo-
tional expression and musical value.

Bach and Handel

All that which occurred in music prior to the latter part of the seventeenth century, appears to the present day observer, a process of experimentation and evolution of musical ideas and principles. Each stylistic innovation was a stepping-stone to the forms which began to culminate in the works of the two German masters, George Frederick Handel, and Johann Sebastian Bach.

Born in the same country, and in the same year, 1685, the two composers emerged as entirely diversified musical personalities. Whereas Handel became the proponent of the ornamented, melodic variation, Bach became the outstanding figure in the polyphonic method of variation.

Among the harpsichord works of Handel, there
are several examples of variations upon a ground bass, but, even here, the changes are almost entirely in the direction of melodic embellishment. Yet, though the harmonic structure is quite evident, the methods of alteration which are characteristic of Handel, are extremely simple and unimaginative as compared to those of his contemporary.

The pronounced figurative qualities of the French school are in marked evidence in all his works for instruments, and climactic points are achieved at all times, only through a gradual increase in tempo.

The best known, and perhaps most typical of Handel's keyboard compositions, is the Harmonious Blacksmith. Based upon a beautiful melody, the variations are ornamentations of the melodic line, and the reduction of note values effect a climax.

Bach, on the other hand, did not use ornamentation of the melody as a method of variation. Having realized the importance of the harmonic as well as the melodic possibilities of composition, he made far greater contribution to the variation form than

did any of his predecessors.

Being chiefly interested in contrapuntal writing, he used the Basso Ostinato, Chaconne, and Passacaglia, and though the best of these are for violin or organ, to omit mentioning them would be to disregard a major development in the progress of musical composition.

The Organ Passacaglia and Fugue in C minor, and the unaccompanied Violin Chaconne in D minor are among the greatest of their type. The subject of the former is an eight measure phrase upon which twenty variations are built. At first, the theme is in the bass with the counterpoint added above. Later, the theme moves to an upper part and the counterpoint is written below and around the subject.

The most outstanding set of variations, that is, variations on a subject other than a ground bass figure, are the Goldberg Variations which were originally written for Harpsichord with two manuals.

Published in 1724, the work consists of an Aria and thirty variations. The Aria itself appears as a Sarabande in Anna Magdelene's Little Organ Book of 1725.

**********

1. Ralph Kirkpatrick, Goldberg Variations by J.S.Bach editor's preface New York, 1938
1.
Canons, an unusual feature of this work, appear at every third variation, and at increasing intervals.

That is --

variation iii is a canon at the unison
variation vi is a canon at the second
variation ix is a canon at the third
variation xii is a canon at the fourth
variation xv is a canon at the fifth
variation xviii is a canon at the sixth

Then,
variation xix is a canon at the seventh
variation xxiv is a canon at the octave
variation xxvii is a canon at the ninth

In addition to these variations, the tenth is a fughetta, and other contrapuntal movements are quite similar to the Bach Two Part Inventions. The Finale restates the Aria as in its original presentation.

These variations are of particular interest for this period of time, for though they are written in contrapuntal style, the harmonic progression which is implied in every variation provides a connecting link.

***************

1. "Canon is a polyphonic composition in which all the parts have the same melody throughout, although starting at different points." Willi Apel, Harvard Dictionary of Music p.112
Definitions of Forms

Prior to the Baroque period, there had been no actual defining of the various forms, for composers of the earlier periods made no distinction, particularly between the passacaglia and the chaconne. In many instances, these names were used for works which were written in an entirely form. But, with Bach's compositions, points of differentiation could be marked, and from these the characteristic qualities of works of later periods were founded.

The Theme and Variation and basso ostinato forms being fairly well established for this period, the main and almost futile issue of all times became that of distinguishing and defining the passacaglia and chaconne. Futile, in that all attempts to discover the original sources of each, and all attempts to compare their

1. Baroque period was that period which lasted from 1600- to 1750
distinctive elements led to as many conclusions as there were compositions. This was due to the close relationship of the two forms which rendered the slight differences almost imperceptible.

It is generally agreed upon, at the present time, that both the passacaglia and chaconne were derived from Spanish or Italian folk dances in 3/4 meter. The passacaglia was always in minor, while the chaconne could be either in the major or in the minor.

But, on all other points of definition, there was, and is to the present day, an extremely wide range of opinion. The most accepted and basic distinctions are best defined and illustrated in Percy Goetschius' book, Larger Forms in Musical Composition.

The passacaglia, he maintains, is closely related to the basso ostinato, for it is "a continuous variation based on a clearly distinguished ostinato which normally appears in the bass, but may be occasionally transferred to the upper voices." Example of this is the Bach **Passacaglia** which was mentioned previously.

1. According to Hugo Norden, assistant professor of composition at Boston University, College of Music, the chief difference is a rhythmic one. The chaconne, though in 3/4 time, has a characteristic pattern \[ J J J J \]

2. published by G.Schirmer, New York, 1915
This transference of subject is denied by some theorists who attempt to differentiate between chaconne and passacaglia by contending that the theme must continually remain in the bass in the passacaglia, while the theme of the chaconne may move to an upper part. This contention, as will be shown later, is entirely erroneous, for composers, in writing passacaglias, have used the theme in upper voices.

The theme of the passacaglia is usually announced unaccompanied in the bass, and is followed by contrapuntal variations which may be altered as follows:

1. rhythmic modifications
2. embellishment of the theme
3. transference of the theme to a higher part as a sequence or in another key
4. inclusion of a coda or codetta (extensions)

The chaconne, also based upon an eight measure subject, "is a continuous variation, in which the 'theme' is only a succession of chords which serve as a harmonic basis for each variation." The alterations may be the same as those of the passacaglia, but Goetschius negatively distinguishes the qualities of the chaconne as compared to those of the passacaglia.

**********

1. Martin Bernstein, Introduction to Music p.76
New York, 1941
The chaconne is not:

1. a *basso ostinato*, but a series of chords in succession, from which a melodic line arises, and which is always present.

2. treated *polyphonically*, but *homophonically* or *harmonically*

In addition to this, the chaconne may have:

3. change in *mode*, but not in *key*

4. no *alteration* of themes and no *extensions*, except for the last variation which may have a *coda* or *codetta*.

In the last analysis, Goetschius maintains that it "is the polyphonic character of the passacaglia which distinguishes it from the chaconne and variation form," and that the chaconne may be classed as a low form of variation, while the passacaglia may not be classed as such.

Aaron Copland carries this further and says that the chaconne is a *stepping-stone* between the passacaglia

***************

1. Percy Goetschius, *Larger Forms in Musical Composition* notes on passacaglia pages 29-31, notes on chaconne on pages 40-58
and the theme and variations. Unlike the passacaglia, the chaconne has harmonic outline as well as a ground bass, and the first statement of the theme of a chaconne is like the first variation of a passacaglia.

Throughout the seventeenth century, the polyphonic variation forms were the preferred patterns of composition, and the peak was reached with the works of Bach. Nevertheless, it appears to be a natural tendency in all fields of artistic endeavor, that, a certain amount of perfection having been attained, there follows a decrease rather than increase of interest in that which has been perfected.

Composers succeeding Bach were not exceptions to the rule. Instead of directly continuing the chaconne and passacaglia principles of composition which had been so tremendously advanced by Johann Sebastian Bach, and which would seem to be the natural result of all that which had taken place, composers gradually tapered off in their use of the ostinato forms. With few exceptions, they turned their attention to the more undeveloped, but freer, more emotional style of the theme and variations form.

************

1. Aaron Copland, What to Listen For in Music
Perhaps the best definition of the theme and variation form is the following passage taken from Martin Bernstein's, Introduction to Music.

"Variations are a series of melodic, harmonic, or rhythmic transformations of some self-contained theme; these transformations may follow each other without pause or they may be in themselves self-contained pieces terminating in a full close. Variation fulfills the desire for repetition and contrast, and are often grouped in order of complexity and brilliancy, thus producing an additional effect of organic growth."
Haydn and Mozart

The second half of the eighteenth century was characterized by the desire of all musicians who wrote variations, to find new means of altering a given subject and thus developing the variations. The major musical personages of the time were Franz Josef Haydn and Wolfgang Amadeus Mozart. These men, in many respects, might be compared to each other in the same manner as were Bach and Handel, for their relationship was much the same.

Though Haydn was born in 1732, twenty-four years before Mozart, he outlived his contemporary, and developed a more advanced and more mature style than did Mozart.
This was in part due to the strong impression made upon Mozart by the French Clavecinists, Rameau and Couperin, and later, by Handel. These men had focused their attention upon melodic rather than contrapuntal and harmonic methods of writing, and so to Mozart, the variation form meant nothing more than a display of technical ability.

Another factor which determined this outcome was Mozart's skill at the keyboard. He was an excellent performer, and it was said, "Mozart in his early years did not need to write piano sonatas or variations, he improvised them."  

As compared with later composers, the Mozart variations were short both in length and number, for there were usually only six or eight and never more than twelve variations on a theme. He also chose his themes from works of other composers and folk melodies. Thus, works such as Variations on Ah, vous dirai-je, Maman (K.265) and Mio Caro Adone by Salieri, (K.265) are commonly found in Mozart collections.

***********

1. Alfred Einstein, Mozart p. 239 New York, 1945
Mozart did devise a form which became quite evident in all his variations. The theme, usually in two parts of eight measures each, was clear-cut, and remained in a tonic-dominant harmonic relationship.

The first variation was close to the melody, but was followed by two or three variations which were harmonically freer. These in turn were followed by a variation which modulated to the relative major or minor of, and depending upon, the original key.

The second to last variation was invariably extended to include an unbarred cadenza that led directly into the final variation where the clear features of the Theme were again resumed.

In this form, Mozart demonstrated grace and clarity of style, but theoretically, there was not the inventiveness, nor the maturity which Haydn attained.

The Haydn variations, though fewer in number, were nevertheless, more polyphonic, more complicated than those of Mozart. This came about through Haydn's striving to vary more than the melody, and in some instances, all but the cadences and pauses of the Theme were altered.
Where Mozart always wrote in terms of the piano, Haydn thought in an idiom typical of instruments other than the keyboard, and so it is that passages which cause the pianist greatest technical difficulty, are those passages which are more characteristic of strings than of piano.

The following is a discussion of the analyses of several of the Haydn variations. Haydn, like Mozart, used the variation as a complete work in itself, but also as a part of another large form, the sonata form. In the Haydn variations, however, there is occasionally not only a succession of variations on an opening theme, but a combination of what appears to be Rondo and Variation form.

Examples of this are:

1. **G Major Sonata** number 39

   In this sonata there are two themes, A and B.
   The form is: A B A varied C A varied and coda

2. **D Major Sonata** number 33 third movement:

   A theme in two parts
   B theme in two parts
     Variation on all of A
     Variation on all of B
   A first eight measures as originally presented
   Variation on all of A
3. **G major Sonata number 40** first movement:

This also has two themes, the first in G major, the second in g minor.

The form is:

A (aba) in G major
B in g minor
A varied but in G major
B varied in g minor
A varied in G major

4. **The F minor Variations** or **Andante con Variazioni**

These variations are among the most important and best written works in this form. As in the work described above, (G major Sonata no. 40) there are two themes. The first is in minor and the second in major, so that each variation entails an alternation of modes.

Both themes are rich and complicated, and are treated in polyphonic style. The entire work consists of two themes, two sets of variations on each theme, and a coda. "In aspects of harmony and color, this important work anticipates the first beginning of romantic style." 1.

***********

New York, 1946
[Text content missing]
Beethoven

"If the Classic masters such as Bach, Handel, Haydn, Mozart, and later Schubert, Weber, Mendelssohn, and Schumann, wrote numerous and beautiful variations, none among them treated the form with as much predilection as Beethoven."

The reason for this preference was in the possibilities that the variation form had for providing freedom in the treatment of a single theme. Beethoven, however, followed Haydn in striving to make the variation more than a succession of alterations upon a given theme.

************


p. 36-47

"Si des maîtres classiques, tels que Bach, Handel, Haydn, Mozart, Schubert, Weber, Mendelssohn, Schumann, etc. ont écrit des nombreuses et fort belles variations, aucun d'entre eux n'a traité cette forme avec autant de préélection que Beethoven."
Of the Beethoven variations, there appear to be three distinct types, which show, in spite of great independence of style, influences which were also in the works of earlier composers.

These types are to be grouped as follows:

1. pre-Bach influence with stress placed upon basses and harmonies
2. Rameau, Couperin, Mozart influences in melodic figuration.
3. structural and melodic elements equally balanced

In this last and most typical Beethoven group, a complete break in the conservative treatment of variations was made, for instead of using the obvious features of the subject material, Beethoven used every possible feature as the variable motif.

An example of the undeveloped, purely melodic variation is the set of six variations on the duet *Nel cor piú non mi sento* (op.180). Written in 1795, the composition is characteristic of the purely ornamental variation. The theme is in two parts, A and B, and never

**********

1. *Nel cor piú non mi sento*, duet from the opera *La Molinara*, by Paisiello.
loses its character in form or harmony, for the variations are figurations, ornamental passages, added to the melody.

example 2

Theme

\[\text{variation 1} \quad \text{variation iv}\]

\[\text{variation vi}\]
Like Haydn, Beethoven used the variation as a form within the sonata form. (Sonata in E major and Sonata in E flat major, op.109 and op.111) The variation movement of Sonata op.57, the Appassionata is based upon a chordal theme, but the variations are obviously only figurative passages on the theme, and have no changes in key, harmony, or rhythm.

The Thirty-Two Variations in C minor, op. 191, written in 1806-7, are among the best representatives of Beethoven works. These variations are in the typical pre-classic form, and "though not so named by the composer, they are really a chaconne." ¹

The outstanding features of the work are, in reality, those which are characteristic of a chaconne. The theme, eight measures in length, is in one part form, in minor, and the harmonic progression, a chromatically descending pattern, is maintained throughout all the variations. The only harmonic change is that which occurs in the twenty-second variation, from minor to relative major, and lasts for five variations.

In this work alone, the many different influ-

---

¹ Clarence Lucas, *Musical Form* p.154 New York, 1908
ences are demonstrated, for some of the variations are merely ornamentations of the theme, while others, such as the twenty-second variation which is a canon, are in contrapuntal forms.

The Diabelli Variations, (op.120 and written in 1823) based upon a waltz theme, and of a later Beethoven period, were more transformations than variations upon a theme. In importance, these variations might be compared to the Goldberg Variations of Bach.

In writing variations, Beethoven employed all methods of altering a melody. Harmonic changes were made in some, rhythmic changes in others, and in some instances, only musical periods and cadences were retained.
The Romantic Period

As the variations of Beethoven were of various types, so it gradually came to be realized that there were several ways in which variations upon a theme could be written. The theme or subject could be sixteen, twenty, or twenty-four measures in length, in two part song form, or in what appeared to be three part form. The subject was a melody as compared to the repeated bass figure or chord progression of the ostinato, passacaglia, and chaconne forms.

Though each variation, complete in itself, might lead directly into the next variation, generally each one had its own full cadence. Also, the subject of the opening theme was retained, the first variation always having the subject as originally presented, but growing freer as the entire work progressed.

In spite of this last point, the variation might be independent of the melody and be related in
another manner, namely, through the melody, harmony, rhythm, or form. Changes could be made in mode, key, meter, rhythm, and a combination of these ordinarily provided the alternative figures.

The longer the theme, the greater was the tendency to elaborate rather than duplicate the subject material. Naturally, elaboration gave rise to a greater freedom of development than did duplication.

The foregoing explanation was more applicable to composers of the Romantic period as a whole than to any other group of men of any other period. The basso ostinato and other polyphonic forms were, with few exceptions, almost entirely disregarded, and the theme and variations with its emphasis on either the melody or form came to the foreground with several excellent representative works.

Though he followed Beethoven chronologically, Schubert who lived from 1797 to 1828, did not follow the master musically, for Schubert's style was one of pure and extremely lovely melodies, free from contrapuntal devices, and harmonically uncomplicated. Thus it is not*******

1. Percy Goetschius, Larger Forms in Musical Composition.
surprising to find that the Schubert variations are akin to those of Mozart, for they are both simple in melodic developments.

This is illustrated in the B flat major Impromptu, opus 142 number 3. The theme is in two parts, a primary and secondary subject A and B, of eight measures each. The five variations retain the essential harmonies, form and melodies, and are predominantly elaborations upon a theme.

Whereas the variations were superficial works, primarily written to show the virtuosity of composers and performers, with Schumann and Mendelssohn it became important as a form, and as a complete composition.

The most famous of the Mendelssohn variations, because they were in the classic spirit of seriousness in contrast to the showy, ornamental variations of that day, were called the Variations Sérieuses (op.54). ¹

In two part form, the Theme and all its variations, with the exception of the fifth, modulate from d minor to its relative major F, and then back to the original key of d minor. (The fifth variation modulates from d minor to D major and back to the minor.)

¹ Clarence Lucas, Musical Form
there are one billion $100 bills that will one day be
replaced by a smaller and more durable material

concluded: the likelihood of a
discovery of a new material that will solve the
problem of its replacement is low. Therefore, the

invention of new materials is necessary. However,
the process is long and requires significant

investment. In addition, the current material is

already widely used and has been tested in various

scenarios. Therefore, it is unlikely that a new
discovery will occur in the near future.

Conclusion: the current material is efficient and
durable, and there is no need for an immediate
replacement. Future research should focus on

improving its performance and reducing its cost,

rather than searching for an entirely new material.

References:
[1] The current material is reported to have

been used in various applications, including

construction and electronics. It has been

compared to other materials and found to be

superior in terms of durability and cost.

[2] The material has been tested in various

environments and has shown consistent
durability. The results of these tests are

available in various scientific journals.

[3] The current material is reported to have

been used in various countries, and its

performance has been evaluated by experts in

the field. These evaluations are available in

various reports and publications.
The melody is obviously presented in each variation, but undergoes contrapuntal treatment as a canon in the fourth movement, and a fughetta in the tenth.

An unusual feature of the Variations Sériesées is the connection between two and three variations. For example, variations one and two, three and four, eight and nine, sixteen and seventeen, are related by the manner in which the material is used. This close relationship of particular variations also appeared in earlier compositions and can be compared in this respect to the 1. Beethoven C Minor Variations.

Schumann, unlike Mendelssohn, wrote several sets of variations, including the Abegg, Two Piano Variations, and the Symphonic Études.

The first set, the Abegg Variations, op.1, published in 1832, has as its main subject or motif, those notes which spell the name Abegg. It is said that the theme is used in such manner as to bring memories of a dance through strong rhythm and harmonic feeling. There are no new subjects, for the second, or B section

************

1. F.Mendelssohn-Bartholdy, Seventeen Variations Sérieuses, op.54 in d minor (1841) Edited by Percy Goetschius p.5, footnote
is in reality, A in reverse.

example 3

```
A theme               B theme
```

The three variations retain their concise form, but the harmony is overloaded in the first two variations. The Finale, however, is freer and far more intelligible.

The Symphonic Études, op.13, although quite definitely a two part theme, is one of those works in which a theme implies incipient three part form. The primary subject, A, is in c sharp minor, and is eight measures long. The first four measures of B are in G sharp major, but the last four measures are again in c sharp minor and are like the last four measures of A. Hence, measures twelve to sixteen are like measures five to eight.

************

[The image contains a musical notation diagram, likely representing a musical piece or a musical instruction. The content of the diagram is not clearly legible due to the resolution and quality of the image provided.]
Here, the form and harmony are the common elements, with the melody and the rhythms as the variables. The melodic changes are not actual alterations of the melody, but additions of new melodies to the original themes. The main subject, four descending e sharp minor chords, appear in the first variation, but with a new melody added to it.

Rhythmic changes appear in the fourth variation from C to 12/8 time, and in variation five to 2/4 time.

example 4

Theme variation i and later combined with subject in upper part

variation ii

This variation has a new melody above bass and harmony of the theme.
On the whole, the entire work is a set of free variations for Schumann did not adhere to the conventional patterns.

The Andante und Variationen Für Zwei Pianoforte op.46, because they are so closely bound together, are not considered to be real variations, but more the andante (in variation form) often found in sonatas and symphonies. The theme has great depth so that the variations expand and amplify the subject by a web of figure work. Each variation explains the theme which is introduced in fresh shape depending upon the variation.

Though much used by Romantic piano composers, the theme and variations was inferior from the artistic or theoretical point of view. As the French Clavecinists used the variation to display technical skill in performance, so did most of the Romantic composers, with the exception of those already mentioned and Brahms, rest the variation on a standard of much free fantasy, and little contribution was made to the progress and development of the form. Among this class of men were Chopin and Liszt.

************

Both men, prodigies in pianistic ability, wrote to show the technical aptitude of performers. 1. The Chopin, Variations on La ci darem la Mano, and 2. Je vends des Scapulaires, are excellent examples of this melodic, figurated style.

The following are excerpts from variations on the theme of Je vends des Scapulaires, and show the purely elaborate methods which Chopin used. The work begins with a long introduction, and the Theme, in B flat major, is in three part form, A B A with a four measure coda.

example 5

Theme (A subject only)

1. Theme is from the duet from opera Don Giovanni-Mozart 2. based upon a Rondo by Ludovic
Up to the time of Liszt and Wagner, the variations were considered and developed as a form, either as a complete work, or as part of another form such as the sonata. With Liszt and Wagner, however, there was a reversion to the essence of the variation, the principle rather than the form of the variation.

Though this might appear to many a far cry from the variation, the leitmotif principle which Wagner used in his music dramas were varied according to the leading characters and circumstances of the operatic action.
and methods for finding it with the help of
mechanical or biological systems. In the quest for a
better understanding of nature and its laws, we must
continue to explore new ways of measuring and analysing
the data. As Albert Einstein once said, "The only
absolute certainty is uncertainty."
In the B minor Sonata, Liszt achieved a development of thematic material by transforming the main theme and thus bringing into play the idea of the variation.

In spite of these developments, and in spite of the works by Schumann, Mendelssohn, etc., no new advancements occurred. It might be said that the variation form was actually at a standstill from the time of Beethoven to the time of Brahms.
Like all other composers of the nineteenth century, Brahms favored the variation form. But, having accepted the theme and variations as a form of expression of musical ideas, he did not follow the Romantic tendencies of freely harmonizing and embellishing a melody. Instead, after writing two sets of variations, Variations on a Hungarian Song, opus 21 number 2, and the Variations on a Theme by Robert Schumann opus 9, in 1853, he became interested in the classic forms. Using the Bach Goldberg Variations as a model, he returned to the basic rules of composition in which the most important and fundamental requisite was that harmonies might be rich and full, and the structure more important than the melody. The result of this was the composition, Variations on an Original Theme opus 24, which was written in 1856.

The three later sets, however, are more characteristic of the mature Brahms. These three are the Variations and Fugue on a Theme by Handel opus 24, which
was written in 1861, the Variations on a Theme by Paganini opus 35, a highly technical work which cannot be compared to the others artistically, and the Variations on a Theme by Haydn.

The Variations and Fugue on a Theme by Handel demonstrate Brahms' independence but complete mastery of the style and form of the variations. Based upon a short Aria in B flat major, the composition includes twenty-five variations of a predominantly rhythmic nature. For example, the first variation places accents upon the second half of each beat, while the second variation combines triplet and eighth note patterns.

Variation five, in addition to rhythmic alteration, also changes in mode from major to minor.

example vi  Aria (four measures)

Variation six, a canon in the octave, continues in minor, but the seventh variation finds an immediate
return to the major. In this movement, there is present a rhythmic pattern which, when repeated over a tonic-dominant pedal point, serves to connect variations seven and eight. In like manner, when this pedal point is carried over into the next variation, the relationship between variations eight and nine is also strengthened.

b. variation vii

The minor mode re-appears for a single movement at the thirteenth variation, while accentuation of weak beats, a typical Brahms' device, is present in the fifteenth variation.

c. variation xv

A canon is used to develop the sixteenth variation, while the bass of the Aria is evident on the second, third, and fourth beats of variation seventeen. The Aria is presented in 12/8 time, a pastorale, in variation nineteen, but returns to 4/4 time in the following variation of chromatic harmonies. The twenty-first variation modulates for the first time in the entire work to the relative minor, but returns to B flat major the last four variations.

The work is brought to a close with a four part
fugue, the subject of which is derived from the Aria.

The Variations on a Theme by Haydn opus 56 b for two pianos, was Brahms' last extensive composition for piano, (written in 1873) and, though it was originally meant for orchestra, it might be used as another example of Brahms' genius in this type of composition.

The A and B sections of the two part theme are related to each other through rhythmic figure.

example vii A and B subjects

Perhaps more than any other composer of his period, Brahms used the contrapuntal forms and styles of writing. Like Schumann, his first variation introduces a new theme or melodic subject above the original subjects.

The harmony remains basically the same in each variation, but the manner in which the voices are transferred,
and addition of new material adds to the interest constantly. Variation three, for example, introduces the bass of the theme above, and as counter-melody to, the melody. When this is repeated, the bass and upper voice are transferred to the inner voice, and the ornamented melody is added above.

While the fourth variation is similar to a Bach invention, the fifth is like a scherzo, and very technical in its virtuoso doubled thirds and octaves. The sixth variation continues the rhythmic pattern to the fifth, but is followed by a movement in 6/8 time, a pastorale in character.

The Finale, following the eighth variation in B flat minor, is built upon a basso ostinato of five measures derived from the theme.
Variation Form in Piano Music from Brahms to the Present

From Brahms to the twentieth century, the variation form was completely ignored by important piano composers such as Debussy, Ravel, Palmgren, Loeffler, MacDowell, and others. Nevertheless, some of the most interesting variations in all piano literature were written immediately after Brahms' death, and more particularly, by those modern composers who appeared shortly after the turn of the twentieth century.

While music of previous generations presented few problems, for even in the freest variations the structure and rhythmic forms remained comparatively
stable, in modern music, not only the melody, but the rhythmic, and in fact, all but the basic outline of the original theme was changed. "At present, even the form has been added to the possible 'Variables' in modern music."

More than ever, the essential elements of composition, unity, symmetry, and variety or contrast were stressed, and it became inevitable that interest should revert to the more strict forms of the basso ostinato, the passacaglia, and the chaconne. This revival made a great appeal because of the limitless number of possibilities which each variation on a ground figure presented in a hitherto fundamentally strict form.

************

1. Karl Eschman, Changing Forms in Modern Music chapter vii p.129 Boston, 1945

To maintain cleanliness, the work area should be kept clean and tidy.

Instructions should be followed carefully to avoid errors.

Proper tools and equipment should be used for the job.

Safety is the most important aspect, and all necessary precautions should be taken.

Failure to follow these guidelines could lead to accidents or damage.
As previously demonstrated, the chaconne is closely related to the passacaglia in form. The outstanding characteristic of the chaconne, however, is a theme which arises from a chord progression that may be introduced in any voice, and which never loses its essential nature in the variations.

In spite of the relationship of the passacaglia and chaconne, modern composers have almost completely neglected the chaconne in favor of the passacaglia. This is particularly true of American composers of this generation.

An example of a chaconne written after Brahms is the set of Variations on a Chaconne written by the Italian composer, Alfredo Casella, in 1903.
Even here, however, the work is not a real chaconne, but a set of variations on a chaconne subject.

The subject, a chordal theme, eight measures in length, in f minor, is very close to the Corelli La Follia.

example viii

The rhythmic pattern is in agreement with that which is said to be typical chaconne rhythm. (see footnote on page 13)
Though the melody is charming, and shows evidence of great possibilities for variation, there is very little of interest in this work, for Casella treats the melody in much the same manner as did the very early composers. There is not even the depth or musical insight which was found in the polyphonic style of Brahms, but mere figuration, scale passages, arpeggios, and Alberti figuration, which serve to embellish the theme.

The ten variations merely present re-arrangements of melodic ornamentations, but the work does have a Finale which is a four part fugue in the key of f minor. This is the only variation which employs a contrapuntal form.

A second contemporary work is the Ciacona written in 1942 by Bernard Wagenaar, a naturalized American of Dutch birth, who is at present a professor of composition and orchestration at the Juilliard School of Music in New York City.

Based upon a four measure harmonic progression, the seven variations which follow add no new features,
but are primarily ornamentations on the subject. This is especially true of the first three variations where the entire subject is taken in the left hand, and the right hand provides the figuration. The fourth variation, however, presents the subject in augmentation, thus extending it to sixteen measures.

example ix

subject

a. variation iv subject extended
In the fifth and sixth variations, there are again alterations, but the subject remains in the bass. The seventh variation presents the subject in altered rhythmic pattern \( \text{J. J} \mid \text{J. J} \) over a pedal on D, and the work ends with a three measure Coda.

Though this work is a true chaconne, in accordance with the definition of the form, it is not quite as highly developed a composition as the combination Toccata and Chaconne opus 13, written in 1922 by Ernst Krèneck, an Austrian-Czechoslovakian composer who is now living in this country.

Supposedly based upon a chorale, Ja Ich Glaub an Jesum Christum by Johann Sebastian Bach, the subject is stated in the opening measures of the Toccata, and again, with words, at the beginning of the Chaconne.

The Chaconne itself appears to be in three distinct parts. Since the harmony is not maintained, but the bass is clearly evident through seventeen repetitions, the first part might almost be called a passacaglia. At the seventeenth variation, however, the subject is presented in diminution in the bass and gradually moves to an upper voice.
The second section, in which the subject is no longer sustained in the bass, is a freely and obscurely developed section.

a. variation xvii

bass in diminution

Beginning with a fragmentary diminution of the subject repeated five times in the bass, the third part continues with a restatement of the entire subject.
b. repeated fragment of the subject

\[\text{\includegraphics[width=\textwidth]{image.png}}\]

This is followed by twenty measures in which the first three notes of the subject are used as an important motif.

The work ends with three complete re-statements of the subject. The first is written enharmonically in the bass, the second in octaves in the right hand, and the final presentation is exactly as it originally appeared.

The unusual characteristics of this work, which appears to be more passacaglia than chaconne, render the composition more interesting to the analyst than the other two works which were here discussed.
FEDERAL \-

OPERA TIONS \-

FEDERAL \-

OPERA TIONS \-

FEDERAL \-

OPERA TIONS \-

FEDERAL \-

OPERA TIONS \-

FEDERAL \-

OPERA TIONS
Passacaglia

In spite of the developments in the chaconne, and the theme and variations form, the passacaglia affords the modern composer the most interesting, and the greatest number of possibilities as far as variations are concerned. In nearly all passacaglias by contemporary composers, the first variations present the subject simply in the bass, but as the work progresses, the theme is moved to an upper voice. This transference of the subject is denied by many theorists who define the passacaglia by contending that the bass must remain as a ground bass and must not be placed in another position.
Arnold Bax, the modern English composer, had published in 1943, a Paean which, having a four measure bass subject, is definitely in passacaglia form.

The subject, announced alone in the left hand, is harmonized in the first and second variation, and then is transferred to the right hand in the third variation.

example x1 subject

A repeated figure appears in an inner voice in the fourth variation and then continues into the fifth variation. (a)

A.

In the sixth variation, the subject is again
resumed in the bass, and above it is added an harmonic progression from which is derived a counter-melody. (b) This shifting of the subject from one voice to another continues in the following variations, but in the thirteenth it is presented over a pedal on B flat chord.

Variation sixteen sees a change in the time signature to 5/8 time. Here the subject is repeated in diminution over a pedal on A and continues in this manner through variation seventeen where a counterpoint is added to the subject. (c)

The eighteenth and final variation has the subject in augmentation and achieves a fortissimo climax.
The method is as follows: in order to determine the number of trees in a forest, one must first choose a point in the forest and then walk a certain distance in a straight line from that point. This distance is typically measured using a compass and a tape measure. Once the first tree is reached, a second point is chosen and the procedure is repeated. The number of trees encountered along the way is recorded and the process is continued until all the trees in the forest have been counted. This method is efficient and accurate when carried out by experienced workers.

The method is as follows: in order to determine the number of trees in a forest, one must first choose a point in the forest and then walk a certain distance in a straight line from that point. This distance is typically measured using a compass and a tape measure. Once the first tree is reached, a second point is chosen and the procedure is repeated. The number of trees encountered along the way is recorded and the process is continued until all the trees in the forest have been counted. This method is efficient and accurate when carried out by experienced workers.
Opus 130, written in 1909 by the French woman composer, Cécile Chaminade, is also a passacaglia, but one in which the variations create still another form. The subject of the Passacaille, and the development of its variations are among the simplest on record, but the entire work takes on a three part form, A B A, which is unusual.

example xii

subject
been held to date to establish any clear
conviction, of which we, unfortunately, are henceforth unable
to have any, considering the evidence we have on hand. The
remains mentioned in our list contain nothing which can
be called real evidence of a battle and, therefore, hold
nothing of value whatever for the writer.

J. A. H. St.

[Diagram]
The first presentation of the subject, as shown above, is not the common single melodic line, but a harmonized subject with ornamentation above it. The first four variations are melodic alterations on the subject, and variations five to eight are merely repetitions of the first four. The ninth variation, a restatement of the subject, brings the A section to a close.

The tenth, and opening variation for the B section, presents the subject in augmentation. (a) Upon this are built six more variations. After this, the A section, comprised of the subject and four opening variations with a final restatement of the subject, are repeated.

a.

subject augmented for the B section
to the problem of "3D X-ray"

This is a method for obtaining three-dimensional information about objects by using X-rays. The technique involves placing the object in a chamber where it is exposed to X-rays from different angles. The resulting images are then analyzed to reconstruct a 3D model of the object.

The historical development of 3D X-ray imaging began in the early 20th century with the work of Wilhelm Conrad Röntgen, who discovered X-rays in 1895. Since then, the technology has advanced significantly, with improvements in detector technology and computational methods.

Current applications of 3D X-ray imaging include medical imaging, industrial non-destructive testing, and materials science. In medicine, it is used for imaging the inside of the human body, particularly for the detection and characterization of tumors and other diseases. In industrial applications, it is used to inspect parts and assemblies for defects before they are shipped.

Despite its many benefits, 3D X-ray imaging also poses some challenges, including the need for precise alignment of the X-ray source and detector, the need for large and expensive equipment, and the potential for exposure to radiation during the imaging process.

In conclusion, 3D X-ray imaging is a powerful and versatile technique with a wide range of applications. As technology continues to advance, it is likely that we will see even more innovative uses for this imaging modality in the future.
This development is by no means a common occurrence in the passacaglia form, and except for the repeated subject, might not even be considered a passacaglia by some theorists.

In 1927, Leopold Godowsky, naturalized Polish-American pianist and composer, wrote a Passacaglia in tribute to Franz Schubert, "on the eve of the one hundredth anniversary of Franz Schubert's death."

The original source of the subject is the famous eight measure introduction to the B minor, the Unfinished Symphony, by Schubert. This subject is retained in the bass, but at the eighth repetition, it moves to an upper voice.

Until the twenty-third variation, when there is a key change to B major, there are no outstanding alterations. However, the twenty-seventh and twenty-eighth variations are treated canonically.

************

1. Godowsky, L. Passacaglia. prefatory remark, New York, 1927
These variations, being primarily ornamental in nature, have no unusual characteristics, but after the forty-second variation, there follows an epilogue and cadenza which lead directly into the fugue. This three part fugue is in turn followed by the subject in A minor, and then augmented in the key of E minor. Over this augmentation, the subject is simultaneously re-stated as in its original rhythm.

The passacaglia ends with two complete restatements of the subject in B minor, increasing in dynamics to a fff close.
Although the fugue is an unpretentious one, the use of fugal forms is not common in passacaglias, and in this particular work, provides the most unusual feature.

The modern composer, more particularly the modern American composer,

has retained and enhanced the solemn, noble character of the passacaglia. Although devices of presenting the main theme are often complicated, the American composer has manipulated them so that in reaching the ear, it is not a mesh of contrapuntal lines trying to disguise the theme beyond recognition, but a transparent veil through which the original theme is practically always visible.

in the rapidity of note values, and at the same time, a gradual loss of the basic form.

As in his Piano Variations which will be discussed later, Copland uses a rhythmically varied motif as the basis of the Passacaglia which was written in 1922.

example xiv

subject

Typical of all modern works, and thus related to the older classic forms, the first five variations retain the eight measure theme in a low range, and add little of contrapuntal interest.

The sixth variation presents four measures of the subject in retrograde, while the seventh vari-
ation is the sixth variation in backward progression.

a. variation \( \mathbf{1} \)

As in the composer's Variations, the relationship between movements is also present here. The ninth variation is merely the eighth inverted, while the theme in the tenth and eleventh is augmented to equal sixteen measures instead of the original eight measures.

The theme is presented in diminution in the twelfth variation, and this diminution becomes a fourteen measure repeated bass figure.

b.

Variation xii in diminution and used as a ground bass.
The document appears to be a handwritten note or letter. The handwriting is clear, and the content is readable. The text is in English and discusses some form of correspondence or communication. The context is not entirely clear due to the quality of the handwriting and the style of the note. It seems to be a formal or business-like communication, possibly involving a request or notification. The document is signed at the bottom, indicating it may be a letter or a formal note.
The finale has the bass subject in the left hand, with a diminution of the subject in \((c)\) triplet rhythm in the right hand. The Passacaglia ends on a four measure pedal of G sharp, and an eight measure coda.

Contrapuntal devices are again the important features of the nineteen Passacaglia variations written by Walter Piston in 1943. Augmentation, diminution, inversion, retrograde motion, canon, fugato, and ostinato are well in evidence, and double counterpoint is as important as are the many rhythmic changes.

The theme, four measures in length, and in 5/8 time, is conventionally presented in the left hand.
On the seventh and eighth variations, the subject is transposed up a whole tone to c sharp.

Variations nine to fifteen are treated in contrapuntal style, with a definite link made between several of the alterations. An example of this, in this particular work, is the eleventh variation which is based, not upon the preceding movement, but upon the two preceding variations, nine and ten. Here, the ninth and tenth presentations are introduced in inverted order.
The page contains a document with handwritten text that is not clearly legible. It appears to be a page from a text-based work, possibly discussing technical or scientific content.
b. variation ix

```
\[ \begin{array}{c}
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
\end{array} \]
```

```
\[ \begin{array}{c}
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
\end{array} \]
```

c. variation xi with contrapuntal entrances of voices, is similar to Bach in style.

```
\[ \begin{array}{c}
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | \hline
\end{array} \]
```

The subject appears on the accented notes of the following rhythmic pattern \( \frac{3}{4} \) \( \frac{3}{4} \) in the seventeenth and eighteenth variations.

The last variation, however, has a double presentation of the subject. The left hand continues that which occurred in the preceding variation, while the right hand re-iterates the original introduction of the thematic material. At the same time, the inner voice provides a sustaining harmony on B, and all com-
bined, these elements arrive at a tremendous climax.

Piston displays his skill as a technician in his handling of the contrapuntal forms in this work. "His style is marked by adherence to classic form, and by a rich contrapuntal texture in which canon appears prominently but without scholastic aridity."

In 1941, Lukas Foss, a young Boston composer, wrote a Passacaglia which was based upon a four measure subject, and which had twenty-one variations developed upon its theme.

The subject, introduced in the bass in octaves, remains in the bass for five complete variations. (this being the same number as the Piston and Copland Passacaglias)

************

The fundamental concepts of modern neural theory.
The sixth variation, however, begins a fifth higher, on the dominant of C, but at the same time, the original statement is carried on in an inner voice.

example xvi

subject

The seventh variation is rhythmically altered, and this affects the eighth variation, for they are linked by the figure which appears in the upper voice. The bass of the eighth, however, is again changed in rhythm.

a. rhythmic variation of vii
Variation thirteen has by far one of the most interesting and most complicated developments used in music of this period, for several contrapuntal methods are used. The first measure has the opening measure of the theme in diminution, while the second measure has this in contrary motion, followed by the original pattern of the next measure also in diminution. The next two measures then proceed to state the entire subject in diminution, in retrograde motion, and inverted.

b. variation xiii

The fifteenth and sixteenth variations are related in the use of the g f g motif of the theme (second measure) as the alternating figure with the theme which is augmented.

c. variation xv
The theme in diminution appears in a contrapuntal form in the seventeenth variation, for it is a canon.

d.

Variation eighteen is like its predecessor transposed a half tone lower. The last three variations reach a forte climax with g or c being sustained in the right hand, the theme appearing in the middle voice, and a pedal on e and b. In the twenty-first variation, the theme is clearly and markedly in the bass.

It appears that in this Passacaglia, as well as in others, the most prominent changes are
caused by the use of contrapuntal methods of writing, and by the changing of note values and accents of the subject to conform to the polyphonic rules of composition.
Interest in the polyphonic forms, though it grew to be most predominant, did not completely destroy interest in the theme and variations. Yet, it is interesting to note, that those composers who used the theme and variations, were to a great extent concert pianists and interested in composition from the viewpoint of the performer. As it was generally true of Handel, Mozart, Chopin, Liszt, and all composer-pianists of past eras, so it is true of present day pianists who turned to composition, that there were no new, no modernistic tendencies, but positive inclinations towards the characteristic traits of composers who preceded them.
In this category are classified works by Jan Ignace Paderewski, Rudolf Ganz, and Sergei Rachmaninoff, all three being rated among the best pianists of all times.

The original theme of the Paderewski Variations and Fugue opus 23, published in 1906, is in three part form (A B A) and each part is eight measures long. This melody is very simple, and presented, with the exception of the B part, without harmonic implications.

example xvii

Theme A subject

The variations are clearly melodic, but at the sixth and seventh variations, only a part of the subject is used in diminution. After this, the entire melody, slightly altered through syncopation, is resumed.
These nineteen variations are simple ornamentations of a melody which end with a not too complicated fugue based on a four measure subject.

c. fugue subject

There appear in these variations several characteristics which are reminiscent of earlier composers. The ornamentation of Mozart, form of Schumann, and the changes from mere ornamental to more contrapuntal methods of variations, as in the Diabelli Variations of Beethoven.

Paderewski's Thème Varié, in which the two part theme and subsequent variations are closely related to the works by Robert Schumann, has a five
note motif which appears as a prominent element in this piece. The form of the theme of this composition which was published approximately fifteen years after the Variations and Fugue, consists of an A and B part, both eight measures long, and with the last four measures of B closely related to the first four measures of A. (found also in the Schumann Symphonic Études)

example xviii

Opening two measures of the theme from which the five note motif is derived.

\[
\begin{array}{c}
\text{The first variations are somewhat like the Mozart in style, for the melodic line closely links the variations to the theme, and the alterations made through figuration upon the melodies.}
\end{array}
\]

But the next variations, like those of Beethoven, are more independent and show far more interesting features. The theme, though still clearly marked, is augmented in the fourth variation, so that
eighth notes now become quarter notes. The entrances and treatment of the subject here is also canonic in style

\[ \text{\textit{variation iv}} \]

The next variation changes to 3/4 time, the key to minor, and the form into a real three part form with a repetition of A at the end. (A B A)

The same changes in key, (d minor) in meter, (2/3 time) and a pedal on A, over which the melody is presented, are the outstanding characteristics of the following variations.

The Finale in A major makes only slight reference to the harmonic structure of the theme, but in the Coda, the subject is repeated several times in the original key.
A billion people in one day

The day is a billion people in one day.

The billion people in one day.
The Symphonic Variations on a Theme by Brahms, written by the contemporary pianist, Rudolf Ganz, are extremely free. This freedom, however, lies in the separation of the variation from the chosen thematic material, and not in the methods by which the thematic material was varied.

The work, dedicated "In memoriam Johannes Brahms," begins with a long choral introduction which is heavy in character. The theme, taken from the song Der Schmied by Brahms, is in two part form. The melody of the song is taken by the right hand, while the original piano accompaniment is taken by the left hand. However, very little use is made of the theme in the variations, for the free variations only occasionally refer to the theme. The outstanding qualities of the work are: chromatic passages, long ascending and descending scale passages, three separate voices, and a retention of two part form with only slight changes in the harmonic scheme.

As is commonly found in the themes and variations of the present, there is a greater freedom of expression than ever before, but nothing of the unusual development is introduced here.
The Rachmaninoff *Variations on a Theme by Chopin* opus 22, written for piano two hands in 1896, is again a display of the virtuoso pianist-composer's talent. The Chopin C minor *Prelude* is melodically altered to develop every possible technical aspect of the pianist's skill, and in several respects, the variations are like the Chopin compositions.

The first variation is an ornamental outlining of the theme which is repeated in the second variation under a slight alteration of the theme itself.

example \( \text{xix} \)
The fifth variation has the theme rhythmically altered (a) while the sixth variation, even in its appearance on the printed page, resembles Chopin.

\[ \text{The twelfth variation (b) uses the five opening notes of the theme in canon-like entrances, and the seventeenth changes key to B flat minor.} \]

From this movement, the variations become noticeably bigger, freer, and more difficult for the performer.
The text is not legible due to handwriting quality. It appears to be a page from a book or a document, possibly containing an excerpt or discussion.
The twentieth variation includes a cadenza and then the theme in augmentation (c) while the next variation begins with a repeated bass figure derived from the theme in diminution. (d)

![Musical notation image]

c.

d.

The last, the twenty-second variation has a tremendous development of the theme in C major, and closes with a restatement of the theme and a twenty measure coda which may be omitted.

The Rachmaninoff Variations on a Theme by Corelli opus 42 in D minor for solo piano, (1932) on the other hand, are of more interest from the standpoint of the analyst. The original Corelli work is a chaconne, but the Rachmaninoff version is in every respect developed into a theme with variations.
The first two variations, as required by principles of good writing are closely related to the theme, but the following variations gradually take on more distinctive elements and become bigger and more independent in their development.

Though the melody and harmony, as found in the chaconne form, remain the same throughout, there is a variance in rhythmic patterns, for the theme is presented in various time values, such as the triplets and sixteenth note figures, as well as in diminution.

Another rhythmic device appears in the alternation of meters, 4/4, 2/4, and later, 3/4 time all appearing in one variation. In the thirteenth movement, 9/8 and 6/8 time alternate to cause changes in time values. Another feature of this particular movement is that it is followed by an Intermezzo which may be omitted if the performer chooses to do so.

At the half way mark of the entire work, there is a complete modulation when the theme is restated in the key of D flat major.
The changing of rhythms occurs more frequently in the subsequent variations, but the coda of the twentieth and final variation is a re-statement of the theme in the original key.

Though the nature of the subject material would imply a chaconne, the treatment of the subject is, without a doubt, that of theme and variations, for many of the individual variations, besides being based upon a two part theme, have extensions, introductory measures, and complete cadences.

As has been pointed out previously, these compositions by pianists of renown are interesting, but more from the angle of performance than that of composition. The following works in this chapter, though they are by writers of entirely different circumstances, may all be classified in this same category.

Arnold Bax, in direct contrast to his more complicated works and the *Paean*, used simple

1. *Paean*, a passacaglia, is described on p.53-55
melodic ornamentation in his Mountain Mood, a melody and variations for pianoforte. The two part theme is sixteen measures long and is maintained in two variations.

The American composer, Arthur Shepherd, also wrote in 1905, a set of variations on a simply harmonized melody of sixteen measures, which is in no manner developed or altered, but merely ornamented.

Another American composer, Mrs.H.H.A. Beach, wrote in 1906, two sets of Variations on Balkan Themes for piano solo, but also arranged for two pianos, four hands.

The theme, twenty-four measures long, has a four measure introduction, A and B subjects of eight measures each, and a four measure coda.

example lxx

A

B
(Any text from the image is not transcribed due to poor quality.)
The following variations omit this introduction, but the theme, though highly ornamented and rhythmically changed, is always present.

The second set of variations apparently may be used in continuation of the first set, for the variations from one group to the other are numbered consecutively. Here, the ninth variation presents the theme in c sharp minor, the tenth is in 3/4 time and is marked Tempo di Valse, and the eleventh is an interlude to the twelfth and final variation.

The molto lento closing passage, repeats the four notes which characterize the work (first stated in the introduction) in the key of E flat major.
Joseph Wagner's variations (published in 1934) based upon a theme taken from Johann Sebastian Bach's English Suite number five in E minor, maintains the melody with only slight figuration throughout the twelve movements, and toccata finale.

The greatest problem in this work is again one of performance, for the technical demands are great. This is especially true in the fifth variation, the sixth variation which is a perpetual motion, and the twelfth which is a capriccio. Aside from this, there is little in the Variationen und Fuge über ein Thema von Bach, opus 6, which would be of interest to the theorist.

example xxi

(an illustration of pianistic writing which is almost impossible for the performer is taken from the fifth variation)
The only composer of the Orient with a representative work in this form, is Kosçak Yamada, who became interested and concerned with the development of music in Japan. Through his founding of the Tokyo Symphony Orchestra, he was able to introduce and further the advancement of Occidental music in the East.

Nevertheless, his composition written in 1919, Theme and Variations for piano, is of the conventional type. In two part form, the melody is sustained, undergoes no drastic changes in rhythm, and merely adds much figuration and ornamentation.

Practically the same thing may be said to be true of the Brazilian, Alberto Nepomuceno, and the Mexican, Carlos Chavez. Both men contributed compositions for piano in this form, but neither of them employed a complex style of writing.

The Ocho Veraciones sobre un tema incaico by Chavez, is a melodic work built on a simple eight measure subject with accents which characterize South American rhythms.
Beginning in 5/4 time, the rhythmic meter is the only feature in the eight variations which is changed to any great degree.

The first variation, still in 5/4 time, adds an elaboration on the theme in the left hand, while the second, and each variation thereafter, changes as follows:

\[
6/16 \ 5/4 \ 2/4 \ 5/4 \ 4/4 \ -- \ --
\]

The sixth variation has the subject on the off beat, and the seventh has a very slight harmonic change. Otherwise, with the extensions of the subject resulting from rhythmic patterns causing the only alterations, there are no melodic or harmonic changes.
Alberto Nepomuceno's Theme et Variations is also a purely ornamental composition. The ornamentation in this case, however, seems to be based more upon the harmony which outlines the melody, than the melody itself.

examples xxiii

opening measures of the theme

The third variation changes to A major, 10/8 time, and as in the first variation, appears to take on a kind of three part form, with slight reference to A after the B part.

The sixth variation, using the same harmony and melody, changes the time signature to 3/4, and the rhythmic pattern to . In this movement both A and B are repeated.

With the exception of ornamentation, nothing unusual occurs until the twelfth variation, when the melody is set to a pattern not commonly found except
in music of South America. (a) The thirteenth variation returns to a minor, and the theme is repeated over a sustained trill on E.

\[ \text{variation xii rhythmic pattern} \]

The Variations sur un Theme Russe by Rimsky-Korsakov, was published in 1900, and is one of the few variations of its kind.

The subject, a typical folk melody, is fourteen measures long, and its variations, one by each of seven outstanding composers, maintain this melody and harmony with little change.

example xxiv
The first variation, and only one actually written by Rimsky-Korsakov, is closely related to the theme, for the melody is repeated in the right hand with ornamentation in the left hand.

The second variation, by Winkler, presents this ornamentation in the right hand in 6/8 time, and with accents on the melodic intervals.

The third variation, by Blumenfield, is in 2/4 time, and marked Allegretto Scherzoso. The only change in the statement of the theme occurs at the fifth measure pause and at the last measure, for here the notes are held for four measures.

Sokolow's fourth variation grows more complicated. Still in 2/4 time, the mode changes from major to minor, and the theme is stated over a pedal on f and (a) repeated figure in the left hand. The melody is also divided so that the first eight measures are stated first on A, then transposed a fourth higher to D. After five repetitions of the eleventh measure, the variation proceeds to a normal close.

a. [Musical notation image]
...
Joseph Wihtol changes the rhythmic pattern to \( \frac{4}{4} \) \( \frac{3}{4} \) while Alexander Liadow uses the subject in augmentation in the seventh variation, and ornamentally in 5/8 time in the seventh.

The Finale, Alla Polacca, is by Glazunov who uses the subject rhythmically altered in various keys. (A a Db A)

Though the work is by several different composers, the movements progress as smoothly as any other set of melodic variations by a single composer.

The compositions described in this chapter, although they provide much fine material for the pianist-performer, do not arouse much interest on the part of the analyst, for the form, harmonic structure, and the variations, are simple and quite evident.
New Trends in the Development of the
Variation Form

By far the best variations of the present century, from the standpoint of the theorist, are those written by composers whose creative imaginations were controlled by maximum attention to structure, form, counterpoint, and harmony. A highly decorative manner of writing for the express purpose of virtuoso artistry on the part of the performer, had no appeal for these men, and as a result, their compositions are of a more highly developed, a more advanced, musical standard.

The Glazunov Theme and Variations opus 72, based upon a one part, seven measure Russian melody which is simple and dance-like, is more advanced in
the manner in which it is treated than those already mentioned. There is none of the harshness or intricate contrapuntal style common to music of this century, yet these variations, written in 1901, are of great interest because of the manifold manner in which the short subject is used.

As in the Paderewski works (pages 72-75) there are present stylistic details which are eminent in compositions of other men. For example, the first five variations refer to the theme in the same way as did the variations written by Mozart and Beethoven in an earlier period. But, though the theme is present in some form or other, as the work progresses, the variations become freer, more independent.

Though in one part form, and though there are no new subjects or motifs introduced, each variation grows in length. These expansions are the result of short insertions, duplications, and augmentations, which in some instances almost outline a new form.

An example of this occurs in -
Variation viii

A eight measures in the key of A major
(B) eight measures based upon a sequence of A motif in the key of e minor
A eight measures in A major as at the beginning
(C) another eight measures based upon a sequence of motif from A
A repeated as at the beginning but with slight change for cadence. Over a pedal bass.

Coda of six measures

This variation is really one long movement
but there are present the vague outlines of rondo form.

Variation x

A subject is presented in the left hand for eight measures
(B) eight measures based upon the third and fourth measures of the theme, is repeated four times
A first eight measures repeated

table: example xxv

Theme of Glazunov Theme and Variations op.72
the conclusion

...
b. sequence based upon measures three and four of the theme which provides for a kind of development or B section in the tenth variation.

Variation xii

In this variation, the first two measures are exactly like those of the original theme, but in D major. The next four measures, however, are the following measures of the theme in diminution. After a repeat of these eight measures, the theme in diminution is used as a ground bass over which the subject is written in its original form.

c. diminution of measures three and four of the theme


d. diminution used as a ground bass
The return to A and the coda of this movement have the diminution in the right hand while the bass part has the theme.

The bigger and freer each variation becomes, the more important it is to maintain a strong tie with the theme, and this Glazunov does in his set of excellently developed fourteen variations, through rhythmically varying the melody, and using each rhythmic pattern as a basis for developing still another idea.

The Piano Variations, written by Aaron Copland in 1930, might be likened to the Glazunov Theme and Variations, for changes in rhythm and in form are as important in the former as they were in the latter composition.

Copland has extraordinary feeling for musical forms, and this is especially evident in his Piano Variations.

The theme, grave and in 3/4 time, is ten measures long, and of no definite form. There is, however, a four tone germ motif (e c d# c#) which, ever present in melodic intervals, is varied in rhythmic
shape.

As in the Glazunov composition, there are constant changes in meters to be found in every variation. Unlike the Glazunov work, this set of variations is extremely dissonant, for the melody and its counter-melody are ordinarily stated at intervals of the seventh or ninth.

Also among the outstanding features are the contrapuntal devices, including canons, ground basses, etc.

When, in variation nine, the four note pattern is used a number of times in ascending order, it becomes a repeated bass figure for the upper part.

Like the Mendelssohn Serious Variations, where two or three variations were grouped together by the manner in which the material was used, the Copland Variations also have a strong link between several of the variations. For example, movements ten and eleven overlap, and each time the motif of four notes enters, it is raised a half step and forms a sequence.

Variations fifteen, though all of them
have many metrical alterations, has change on every measure.

\[ \frac{2}{4} \quad \frac{5}{4} \quad \frac{3}{4} \quad \frac{1}{4} \quad \frac{7}{8} \quad \frac{3}{8} \quad \frac{5}{8} \quad \frac{7}{8} \quad \frac{3}{8} \]

This same variation is related to the fourteenth variation in that the patterns remain the same, but the left hand repeats and alternates with the right hand subject, and as a result, the theme is expanded to thirty-three measures.

The next variation, the sixteenth, changes from binary to ternary form, for the eight measures of A are repeated at the end. This change in form is the connecting point between this variation and the seventeenth.

The last two variations, nineteen and twenty, present the motif in chord form, and the Coda is heavy through the use of ninth chords in the right hand, and augmented, repeated octaves in the left hand.

The Piano Variations present traditional problems of composition, but, although they are not pleasing to the ear, technically, in their very construction and harshness, they stimulate the musical
Copland writes of his own variations,

The author's own Piano Variations, based upon a comparatively short theme, reverses the usual procedure by putting the simplest version of the theme second, naming 'theme' what is properly speaking, a first variation. The idea was to present the theme after the first few variations in the bass, then move it to an upper or middle part.

Of the Theme et Variations opus 73 by Gabriel Faure, the French pianist Alfred Cortot writes,

the wealth of material in this work, its depth of emotions, and the quality of its musical texture, make it undoubtedly one of the finest and most precious things in the literature of the piano for all time. It alone, is enough to defend French music of our time from the glib critic whose battery of reproaches includes those of frivolity and of dessicated elegance, to say no more.

In reality, this work, written in 1901, is most unusual, for though the melody is sustained through-

*************

1. O. Thompson, Great Modern Composers, New York, 1941 p.44
2. A. Copland, What to Listen for in Music, p.159
out the eleven variations, the twenty measure subject is different from that commonly found in variations. Within these twenty measures, five phrases alternate to give a kind of A B A B A form.

Instead of ornamenting the melody, the subjects are altered through interesting rhythmic changes.

example xxvi opening measure of the theme

\[
\begin{align*}
\text{a. variation ii melody in the inner voice in quarter notes, and in upper voice on the off beats.}
\end{align*}
\]
b. variation iv melody on the accented note of each beat.

[Music notation]


c. variation vii melody in diminution and treated contrapuntally

[Music notation]

Among the foremost Polish composers of all times is Karol Szymanowski. Having begun to compose in about the year 1902, he naturally displayed a definite predilection for the use of Polish folk melodies as his subjects, and this is illustrated

*********

in the Variations on a Polish Folk Theme, opus 10.

The work begins with a nine measure introduction in which is contained a short chromatic figure that later appears in conjunction with new material.

example xxvii

The theme itself, is sixteen measures in length and in traditional two part form. But the first measures of B are merely inversions of A, and once again, motifs are employed in order to bind movements and develop the composition.

a. first measure of A  b. first measure of B

The five note pattern quoted above is used in augmentation, and in sequences, in the second and sixth variations. The eighth variation, marked "Marche funebre," also has a two measure sequence based upon
these five tones. The movement begins low on the keyboard, but each repetition of the motif gradually works higher, until a fortissimo is reached three octaves higher.

In variation three, the chromatic progression taken from the introduction alternates with the measures of the A part of the theme.

The work ends with a fugue which uses the five notes augmented to half notes as the subject.

\[ \text{This particular composition is an} \]
\[ \text{excellent example of the rich chromatic, decorative} \]
\[ \text{style of Szymanowski, and "here, incentive of folklore was merely accidental and without any significant} \]
\[ \text{influence on the style of that particular work."} \]

**********

The well known advocate of quarter tone music, the Czechoslovakian Alois Hába, wrote for piano in 1923, *Variationen über einen canon von Robert Schumann*, opus 1 b.

The sixteen measure theme is a four part canon by Schumann. This theme is merely ornamented by Hába in his variations, but through entrances of the voices, he maintains the canon style of the original.

example xxviii

![Musical notation](image)

The first four notes provide a motif which is always present, even when the entire subject is not used. But in the fourth variation, the subject is rhythmically altered (a) and in the fifth, the subject is placed over a pedal on C.

a.
The sixth variation is a waltz-like movement with the first two measures as the basis of the structure, while the seventh variation is developed around an adaptation of the fifth measure of the subject. (b)

\[ \text{Music notation for variation 6} \]

The tenth variation is also derived from the fifth measure, while the twelfth presents the fifth and sixth measures in retrogression. (c) The fourteenth variation has, in the left hand, the subject in diminution under a retrograde movement of the first two measures of the theme, (d) and the work closes after the fifteenth variation, with a four part fugue also based upon the first four measures of the theme.

\[ \text{Music notation for variation 10} \]

\[ \text{Music notation for variation 12} \]

\[ \text{Music notation for variation 14} \]
The use of the fugue as a closing movement to variations was also used by the American, John Powell, in 1911, in his Variations and Double Fugue, opus 20.

The theme, originally by F.C. Hahr, is simply harmonized in B flat minor, and is eight measures long. With the exception of slight alterations on the rhythm of the subject, and the addition of ornamentation, the melody and harmony are retained throughout the seventeen variations.

There is one key change, from B flat minor to major in the tenth variation, and back to the minor in the thirteenth.

example xxix

The fugue, the subject of which is a rhythmic alteration of the original theme (a) has as its finale, a restatement of the theme.
In 1874, the year after Brahms’ death, another composition using the contrapuntal fugue form as a finale to a set of variations, was written by Camille Saint-Saens. The *Variations sur un theme de Beethoven* opus 35 for two pianos, opens with a nineteen measure introduction, and then presents as its theme, an exact statement of the Trio from the Minuet (third) movement of the Beethoven *Sonata in Eb* opus 31 number 4.

\[\text{example } \text{xxx}\]

first four measures of the theme

\[
\begin{array}{c}
\text{pn. 1} \\
\text{pn. 2} \\
\text{pn. 1}
\end{array}
\]

The first three variations are embellishments of the theme, but the fourth presents the theme in inversion. (a) The next three variations maintain the form, harmony, and melody with slight rhythmic changes, but the eighth variation, *Alla marcia funebre*,

\[
\text{example } \text{xxx}
\]

first four measures of the theme

\[
\begin{array}{c}
\text{pn. 1} \\
\text{pn. 2} \\
\text{pn. 1}
\end{array}
\]
changes to c minor and has a repeated rhythmic figure in the bass of the second piano over which the first piano plays a slight alteration of the theme. (b)

After a repetition of the introduction, there follows a fugue in which inversion, diminution, and augmentation of the theme are used as episodic developments.

c. fugue subject

The work closes with a tremendous chromatic octave development in both piano parts.
Max Reger, a composer of Bavarian extraction, was first instructed in music by his father, who was an elementary school teacher and music master, and later, by Hugo Riemann.

Much of the composer's best work is in the variation form, but those in which the themes are taken directly from other composers are exceptionally fine compositions. In particular, those themes which are "taken from Bach and Beethoven give him the support most immediately sympathetic with his own nature."  

The Andante Semplice con Variazioni illustrates this observation. This subject is derived from opus 77a, the Serenade in D major by Reger himself. The twenty measure, three part theme, is simply harmonized in A major, and the five variations merely add ornamentations to the theme. The third variation, however, uses and develops a two measure fragment of the subject.

\[\text{example xxxi a.}\]

************

Included among the most outstanding of the Reger compositions are the Variations and Fugue on a Theme by Mozart for piano and orchestra, the Variations and Fugue on themes of Bach and Telemann for piano solo, and the Variations and Fugue on a Theme by Beethoven for two pianos, four hands.

The Variationen und Fuge über ein Thema von Johann Sebastian Bach, opus 81, is derived from a fourteen measure theme in B minor. This theme is evident in the first three variations, but in the fourth variation, a Vivace movement, the melody appears on the second note of each beat, preceded by an appoggiatura.

example xxxii

a. Theme

b. variation iv
The fifth variation, comprised of sequences based upon the first two measures of the theme, continues into a five measure interlude which is injected at this point.

b. variation v

Following this, the remaining nine variations grow freer in harmony and structure. The melody, present in all movements with only slight changes in accentuation, is introduced in different keys from the eighth to the thirteenth variation. Here, at the fourteenth and final variation, however, it returns to the original key of B minor. The work closes with a four part fugue which reaches a full climax through the use of heavily harmonized chords in all four voices of the subject.
A light, graceful, Minuet theme in B flat major, provides the material for the Variationen und Fuge über ein Thema von Telemann also by Reger.

Throughout the twenty-three variations, the three part form, the melody, and the basic harmonic structure are all retained. The most evident alterations are those which place the melodic line on beats other than those in which the melody originally occurred.

example xxxiii

a. theme

b. variation xiii

c. variation xiv
In the sixteenth and seventeenth variation, there is a modulation to the key of B flat minor, the chords, however, continue to correspond to those of the Theme. These highly ornamental, melodic variations, are concluded with another four part fugue which closes with a restatement of the fugal subject.

As compared to the other Variations by Reger, this set is of a lighter nature in thematic material and in treatment, than that which is generally considered to be more characteristic of Reger.

The theme of the Variationen und Fuge über ein Thema von Beethoven opus 86, for two pianos four hands, is taken from the Three Bagatelles in B flat major, opus 119 number 11. In two part form, A and B are linked by a two measure, rather chromatic, sixteenth note bridge, and ends with a four measure coda. This is present in each of the variations.

example xxxiv  Theme  A part
In the variations, Reger either repeats the entire theme, or develops a fragment of this theme.

b. variation ii in which the first three notes are used as a motif. This movement and the fifth variation are closely related through this pattern of notes and rhythms.
b. 

\[ \text{\begin{music}
\begin{lrbracket}
\begin{musicnote}[e4]
\end{musicnote}\begin{musicnote}[f4]
\end{musicnote}\begin{musicnote}[g4]
\end{musicnote}\begin{musicnote}[a4]
\end{musicnote}
\end{lrbracket}
\end{music} \]

c. the entire four part subject is used in variation iv with the voices distributed over the two piano parts.

\[ \text{\begin{music}
\begin{lrbracket}
\begin{musicnote}[e4]
\end{musicnote}\begin{musicnote}[f4]
\end{musicnote}\begin{musicnote}[g4]
\end{musicnote}\begin{musicnote}[a4]
\end{musicnote}
\end{lrbracket}
\end{music} \]

In any case, whether Reger uses the entire theme, or only a fragment of the subjects, his style is extremely complex, harmonically, contrapuntally, and rhythmically. This latter point is best shown in the first variation where the melody is in marked evidence, but the first piano has thirty-second notes, against triplets in the first piano part.
Reger's genius in handling contrapuntal writing is proven in the Finale, or thirteenth variation, which is a fugue whose subject is a free adaptation of the theme subject A. The six statements of the subject alternate with short developments of the fragments of the subject.

d. episodes taken from the subject and counter-subject.

e. subject and counter-subject of the fugue

The climax of the fugue is very similar to that common to Bach. The theme of the
variations in augmentation is above a counterpoint of the fugue subject, and this in turn is followed by a restatement of the fugue subject in the bass. The last six measures Coda is marked fff, and has the fugue subject in octaves in one piano, with doubled chords of the harmony of the theme in the other piano.

Certainly no one can dispute that, "no composer has applied himself to the form with greater seriousness than Max Reger------!"

1. Grove, Dictionary of Music and Musicians, p. 455
The Modern Variation as Part of a Larger Form

As has already been demonstrated, a favorite device of composers is to climax the variation with a fugue based either upon the original subject or an adaptation of the subject. But perhaps the characteristic which will stand out as a typically twentieth century development, will be the practice of combining variations with, and in, other forms, and the use of the varied subject in a suite, as was common to the sixteenth and seventeenth centuries.

This latter is demonstrated in the Dance
Suite of Schöenberg and the Medtner Improvisations.
The variations within another form is represented
by the Grieg Ballade in G minor, the Bartok Sonata,
and the Harris Piano Suite. The Toccata and Variations
of Honegger, the Dukas Variations, Interlude, and
Finale, and the Variations on a Cantus Firmus by
Vittorio Giannini, are excellent examples of the theme
and variations as combined with other forms.

As early as 1903, the Austrian composer,
Arnold Schönberg, who was born in 1874, began to show
a complete mastery of strict classic forms. Thus, it
was not surprising to find that in 1923 he had written
a Dance Suite, a form typical to the sixteenth and
seventeenth centuries, but in which he had also used
perhaps the most radical of all modern developments,
the twelve tone scale.

This suite, opus 25, consists of six pieces:
Praeludium, Gavotte, Musette, Intermezzo, Menuet, and
Gigue, all of which are based upon three four note motifs
1.
and their inversions.

************

These four tone motifs are:

E F G Db   Gb Eb Ab D   B C A Bb

and their inversions are:

B A G Db   Ab Cb Gb C   Eb D F E

d example xxxv

Prelude which is the equivalent of the theme, for here the motifs and inversions are presented in their entirety.
These complex motifs are rhythmically altered in the following movements in order that they might comply with the required rhythmic patterns of each dance form.

a. Gavotte

b. Musette in which the motifs are combined
c. Intermezzo

Here, the entire first motif is played constantly in the right hand, and the left hand introduces the other two motifs.

d. Menuette has the subject in the bass

e. Gigue the motifs are again combined
If JC² rtf SCS &!
This work well illustrates the following quotation:

Schonberg, having realized that freedom and the twelve note scale system, each note means as much or as little as any other, has delimited and differentiated this plastic material into basic shapes which might substitute the fixed points provided by the key centres of classical music. The formula of notes he evolved carries his music well into the region of mathematics........

In addition to a Tema con Variazioni opus 55a, Nicolai Medtner wrote two Improvisations which also follow the variation form. The second of these, opus 47, has a twenty-five measure theme which ends with a long cadenza-like passage. The form of this theme, is the three part A B A form which is rarely found in variations.

Besides being a theme with variations, the work may also be classified as a suite, for the

***********

fourteen movements have definite titles of their own, and are in themselves short pieces. The theme is altered in accordance with the mood which is to be created in each piece.

example xxxvi:

Two measures of the theme

\[
\begin{array}{c}
\text{a. movement vi entitled Mid the Waves}
\end{array}
\]
b. movement xiii

Although this work is the only one of its kind, the composition might be compared to the ancient variation, in which a given theme was rhythmically and ornamentally re-arranged to fit the prescribed dance forms. In this manner, dance suites were created, all being based upon the same subject.
In one year and a half these new countries will have achieved the necessary economic and social transformation, and the working class and all the people concerned will have won another step in the social revolution. We are not impatient, but we are confident. We know that the future is in the hands of the people, and we believe in the victory of the workers' movement.
The Grieg G minor Ballade opus 24, published in 1876, proves to be another composition created on the principle of theme and variations. The theme is a Norwegian melody whose form resembles that found in works by Schumann, for, being in two part form, the last four measures of B are like the last four measures of A.

This form, melody, and harmony, are retained through twelve variations. The fourth variation, however, is a little freer than the preceding three, for it is based upon a motif derived from the fourth measure of the theme.

example xxxvii

Fourth measure of the Theme    Motif of variation iv

The fifth and sixth variations are technical ornamentations of the subject, with the seventh variation being a broad restatement of the theme.

Variation nine presents a rhythmic alteration
in $\frac{3}{4}$, and this is retained as a repeated bass figure in the tenth variation. The eleventh variation, again a rhythmic variation for the meter is changed to $6/8$ time, presents the theme in augmentation ($J$) in G major.

Variation twelve is a return to G minor and here the work closes with a prestissimo statement of the subject over a repeated bass, and a final Andante espressivo statement of the A subject.

The theme and variations used as a means of developing another large form, appears in the third movement of the Piano Sonata by Béla Bartók. Here, as in the Honegger Toccata and Variations which will be described later, the primary method of variation is through alterations in rhythm combined with melodic decoration.

In the theme alone, there are changes in time signatures from measure to measure. The form of the theme upon which the variations are made, is the common two part form, but the last four measures
of both A and B are merely repetitions of the first four measures, and this in itself is unusual.

example xxxviii

Theme

A part eight measures in length

\[\text{repeated}\]

B part eight measures in length

\[\text{repeated}\]

The first variation, has no rhythmic changes but a continuo bass, and three measure extension caused by tying over the final note of the second measure.

a. continuo bass
b. extension of the second measure

In variation two, the eight measure theme is repeated, but with rhythmic alteration. In order to keep the accents of the melody intact, the changes in time signatures are arranged so that the embellishments do not fall upon the important beats. (c)

In this variation, the B section is inverted.

Variation three has the A section embellished through auxiliary notes, but the following A and B are altered rhythmically. (e)
e. rhythmic alteration of B

The most unusual element in the variation as used in this particular work which was written in 1926, is the form of the entire movement. There are three consecutive variations following the initial presentation of the two part theme.

Variation one, A is melodically varied and then followed by the entire A and B sections of the theme rhythmically altered. This same is true of the second and third variations also.

It is said that Bartók's

secret of music lies precisely in the absence of any system of composition which can be verbally defined, though he made very interesting experiments with marked rhythms as the basis of form.

Though marked rhythmic developments are well in evidence in this particular work, it cannot be said that

**************

1. M.M. Scott, "Immanent Form," Music and Letters vol. 17 no. 4 October, 1936
form has been sacrificed in favor of a rhythmic basis, for the form, as unusual as that of the Haydn F minor Variations in his day, is quite evident.

Roy Harris, the contemporary American composer, also uses the variation as a form within a larger form. His Piano Suite, composed in 1938, is comprised of three movements entitled-

Occupation
Contemplation
Recreation

The second movement, Contemplation, begins with a statement of an Irish hymn tune. This tune is twenty measures long and in two part form. However, there are no lines of demarcation between theme and variations which follow, so that the work is an uninterrupted series of alterations in which the composer endeavors to develop the subject from the "sacred to the pantheistic secular."^2.

In his contrapuntal, highly developed style of writing, Harris tends towards Bach and the Flemish masters, but at the same time he believes that "music must be emotional rather than intellectual."

**********

1. description of F minor Variations on page 23
2. quoted from a letter from the composer to the writer of this Thesis in May, 1947
3. N.Slonimsky, "Roy Harris," Music Quarterly 33:1 Jan, 1947
Another work which is an example of fine writing by a French composer, is the Variations, Interlude et Finale sur un Thème de Rameau by Paul Dukas. This work, first performed in 1903, is based upon the minuet theme taken from the fourth suite of Pièces de Clavecin by Rameau. The development of the theme into a set of variations, according to Cortot, was inspired by the Diabelli Variations of Beethoven.

This work, like the Krenek Chaconne, might also be divided into three sections. The first part maintains the melody throughout the opening six variations. The second part provides interest through rhythmic alterations, while the third part prepares for the Interlude. In the eleventh variation, the first episode is repeated, and this leads into the Interlude which is improvisational in character. In the Finale, which is really a twelfth variation, the original theme appears in its entirety but amplified rhythmically.

************

1. French Piano Music by Alfred Cortot
One of the most unusual of the modern works, another combination of forms, is the Toccata and Variations written by Arthur Honegger and published in 1916.

The Toccata begins with a repeated figure which, after six measures, is transferred to the left hand where it is used as a repeated bass figure under the right hand melody.

Example xxxix

repeated figure

The Variations are related to the Toccata in the motifs of the two part theme.

a. A part of the theme of the Variations is related to the repeated figure of the Toccata. (above)
The repeated bass feature is carried over into the first variation where, the harmony being the same, the rhythmic changes on the subject provides the variation.

b. repeated bass figure of the first variation

The second variation changes to 9/8 time and has the leading motif in the bass with rhythmic changes.

c. rhythmic change of the subject

d. The following variations, though the harmonic structure and the basic melodic outlines are maintained,
and a separate section under discussion of the
resulting models for the nuclear models and their
nuclear reactions that could be used for these
 centered on the concept of nuclear models and their
resulting nuclear reactions that could be used for these
models.
the time signature, and the rhythmic structures change constantly. The repeated bass figure idea is kept to a certain degree.

e. variation iii Here, a change of key is made to E flat, chords give a ground bass effect, and the time signature changes to 6/8 time.

Variation four modulates to D flat major, and is in cut time, while the fifth variation changes to 8/8 time.

Honegger, like Copland, found that rhythmic changes afforded the best method of variation, for though the notes and melody remained basically the same, changes in rhythm could completely alter the character of the theme. Thus we find that rhythm, more than any other element, becomes the most important feature of the variation in works of this most recent period.
A most excellent example of modern variation writing is contained in this final illustration, *Variations on a Cantus Firmus*, by Vittorio Giannini, teacher of composition at the Juilliard School of Music.

Written in 1947, the composer has returned to the ancient custom of supplying a cantus firmus as the basis of composition. (see page 2) This particular cantus has been used by many composers, including Beethoven.

example xxxx

The twenty-four variations on this theme are divided to form four separate pieces, which in turn take on new forms.

The first piece, *Moderato*, contains variations one to ten and maintains the cantus,
which is harmonized in the initial presentation, predominantly, though rhythmically varied, in the bass. The tenth variation is a restatement of the first variation.

The second, an Aria, contains only two variations and might be compared to a two part form. The cantus firmus is augmented by insertions of a four note motif which later becomes a constantly repeated figure in an inner voice.

\[ \text{\begin{center} a. \end{center}} \]

This is followed by a Toccata which, as its title would imply, is more loosely constructed in regard to the cantus than its predecessors. The subject is no longer repeated in the bass, but throughout variations thirteen to twenty-two, it is more or less suggested through harmonic progressions.

The final set of two variations, the Interlude, is in three part form with the cantus firmus again in the bass.
In the words of the composer, "the problem was as follows: To write a series of variations so that each group would be a unified movement, but with the limitation that the cantus must be the basis of each variation. This last restriction made everything a 'tour de force,' like walking a tight rope without a net."

That the composer has succeeded in doing this is evident, for the cantus is absorbed into the development of each piece, and appears to be an incidental element in the entire work.

1. Written by the composer in a letter to the author of this paper in February, 1948
Conclusion

"Of all the existing forms, there is none which shows such infinite diversity as, from its very nature, does the variation form." 1. Because of this, it becomes almost impossible to deal with the subject exhaustively.

If this statement were true of variations of former periods, it became even more true during the period following Brahms, especially in the twentieth century. The composer was given an even greater amount of freedom in a form which heretofore provided

***********

for more freedom than any other form.

Composers of all times, in all phases of musical development, naturally revealed wide ranges of differences, but these differences were, and always will be controlled by the circumstances of the generation in which the composer lived and created.

"The modern composer appears to be writing at a time when all barriers of musical composition may be erased and he is free to do as he likes." As a result, composers chose to experiment with that which had proven to be, in the past, the least flexible element, the form. In doing this, it was found that, as a substitute for the form, another essential quality had to become the basis for composition. The melody, and the embellishment thereof, was no longer of any appeal, and so the contrapuntal forms, including canon, fugue, and contrapuntal devices such as retrograde motion, inversion, and ground basses, became the popular means of alteration.

***********

It also became interesting to note that since the time of Brahms, there again appeared the differences which separated and characterized composers such as Bach and Handel. Whereas the modern American-born composer reverted to the polyphonic passacaglia and chaconne, the contemporary European-born composer turned to the theme and variations as it was used by the early masters. Namely, in suites, as movements in larger works, and in combination with other forms such as the toccata and fugue.

The rhythm also became of the utmost importance. Augmentations, diminutions, numerous unheard of changes in meter, and shifting of accented beats, became common when combined with other contrapuntal methods of writing.

The theme and variation gradually adopted these changes, but ever present were the slight references to composers of the eighteenth and nineteenth centuries. The forms of the themes were ordinarily in the two part form characteristic of the romantic period, but gradually, as each set of variations progressed, the form was either altered or
completely destroyed. Each individual variation, however, continued to imply styles which were characteristic of composers from Bach to the present day.

Nevertheless, in the modern passacaglia, the short subject was adhered to through the use of leading motifs which might have occurred in the presentation of the subject, or through the retention of the entire thematic phrase. In this latter case, expansion and development came about as the direct result of combining rhythmic and contrapuntal elements of composition, and then making variations based upon this combination.

To many, to the listener in particular, contemporary methods of using and varying the old fundamental rules of composition may seem harsh and unmusical. The variation forms may appear to have lost much of their appeal to both audience and performer, but to the analyst, the modern passacaglia and variations are far more interesting than ever before. Now, the basic elements such as rhythm and form, as well as melodic and structural principles, are being varied.
There is evident in the music of the past fifty or sixty years, a marked reversion to the ancient form of the classic and pre-classic periods. In no less degree is this true of the variation forms, for contemporary writers, after the sole use of the theme and variations form during the Romantic period, decided to experiment with the ground bass forms, the chaconne and passacaglia of the Bach era.

Early in the history of the development of music, it was found that the only means of
lengthening or developing a composition was through the use of repetition. Exact repetition, however, resulted in sheer monotony, and it soon became clear that each repetition must present the subject with slight alteration in order to stimulate and create interest. This practice of alteration was carried from vocal to instrumental music, and by the end of the sixteenth century, there were two methods of variation. The first was that of altering, or adding ornamentation to, a given melody at each repetition, while the second type was that which was directly derived from the vocal use of a cantus firmus, and had a constantly repeated, unaltered bass over which new counterpoint was added. When this repeated bass principle was combined with Spanish dance forms, the results were the chaconne and passacaglia.

The first type, the melodic variation, was used to a great extent by George Frederick Handel while the ground bass, polyphonic forms were preferred by his contemporary, Johann Sebastian Bach.

The same difference existed later in the music of Mozart and Haydn, for while the Mozart vari-
ations were charmingly ornamented compositions, the Haydn variations were more complicated, and of a more advanced musical style.

Nevertheless, it was Beethoven who was credited with bringing the form to its highest stage of development. His works in this form might be divided, according to predominant influences into three groups; those which showed a pre-Bach influence, those in which the melodic variation provided a basis for composition, and those in which the melodic and structural elements were balanced.

After Beethoven, there were many sets of themes and variations, among the finest being those by Mendelssohn and Schumann, but even these contributed little to the actual development of the form.

Perhaps the greatest advancement was made, however, by Johannes Brahms in his Variations on themes by Handel, Paganini, and Haydn, for in these compositions, Brahms employed the polyphonic devices of an earlier century in combination with his own creative genius.
After Brahms' Variations on a Theme of sets Haydn, several of variations were written which were of the common romantic style of composition. But, with the turn of the twentieth century, new interest was roused not only in the theme and variations, but also in the strict polyphonic form, chaconne, and more particularly, the passacaglia.

In spite of numberless possibilities of these two forms, however, the theme and variations also maintained great popularity with composers of all nationalities. The purely melodic variations, counterpart to the Mozart and Schubert variations, appeared in works by modern pianist-composers such as Paderewski, Rachmaninoff, and Ganz, and in compositions of men who were still under the general influence of composers of the last century.

More advanced works in regard to structure, harmony, and counterpoint, were written by Glazunov, Fauré, Copland, while those variations which add a fugal finale provided for even greater interest. In this group, were included Szymanowski, Hába, Powell, and Reger variations.
The greatest move toward further advancement of the form, however, came with the use of modern harmonic and contrapuntal characteristics in conjunction with sixteenth, seventeenth, and eighteenth century forms. This was apparent, not only in the use of the passacaglia and chaconne by American composers, but in the theme and variation which had been combined with other forms such as the toccata, within a form such as the sonata, and to create another form such as the suite. This last group of characteristics had been carried out, with the exception of Roy Harris, and Vittorio Giannini, entirely by modern European composers.

Thus, it became apparent that the contemporary writer had turned to the least flexible elements of composition, rhythm and structure, and had attempted to vary them within ancient forms.
### Piano Variations Written From Brahms to the Present

<table>
<thead>
<tr>
<th>Composers</th>
<th>Works</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartók, Béla</td>
<td>Piano Sonata</td>
<td>1926</td>
</tr>
<tr>
<td>Bax, Arnold</td>
<td>A Mountain Mood</td>
<td>1915</td>
</tr>
<tr>
<td></td>
<td>Paean (passacaglia)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Passacaglia (ms)</td>
<td>1928</td>
</tr>
<tr>
<td>Beach, H.H.A.</td>
<td>Variations on Balkan Themes for solo and two pianos op.60</td>
<td>1906</td>
</tr>
<tr>
<td>Busoni, Feruccio</td>
<td>Etudes en forme de variation</td>
<td>1884</td>
</tr>
<tr>
<td></td>
<td>Variations and Fugue op.22</td>
<td>1884</td>
</tr>
<tr>
<td></td>
<td>Ten Variations on Chopin Theme</td>
<td>1922</td>
</tr>
<tr>
<td></td>
<td>Variations and Fugue on Frederic the Great theme</td>
<td>1917</td>
</tr>
<tr>
<td>Casella, Alfredo</td>
<td>Variations on a Chaconne</td>
<td>1903</td>
</tr>
<tr>
<td>Chaminade, Cécile</td>
<td>Passacaille op.130</td>
<td></td>
</tr>
<tr>
<td>Chavez, Carlos</td>
<td>Ocho Veraciones sobre un tema incaico</td>
<td>1926</td>
</tr>
<tr>
<td>Copland, Aaron</td>
<td>Passacaglia</td>
<td>1922</td>
</tr>
<tr>
<td></td>
<td>Variations</td>
<td>1930</td>
</tr>
<tr>
<td>Dohnanyi, Ernst</td>
<td>Variations op.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Passacaglia op.6</td>
<td></td>
</tr>
<tr>
<td>Composer</td>
<td>Work Description</td>
<td>Year</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Dukas, Paul</td>
<td>Variations, Interlude, Finale</td>
<td>1903</td>
</tr>
<tr>
<td>Dvorák, Antonín</td>
<td>Theme and Variations op.36</td>
<td>1876</td>
</tr>
<tr>
<td>Enesco, Georges</td>
<td>Variations on an Original Theme op.5</td>
<td></td>
</tr>
<tr>
<td>Fauré, Gabriel</td>
<td>Theme and Variations op.75</td>
<td>1901</td>
</tr>
<tr>
<td>Foss, Lukas</td>
<td>Passacaglia</td>
<td>1941</td>
</tr>
<tr>
<td>Ganz, Rudolf</td>
<td>Variations on a Theme by Brahms</td>
<td>1921</td>
</tr>
<tr>
<td>Giannini, Vittorio Glazunov, Alexander</td>
<td>Variations on a Cantus Firmus Theme and Variations op.72</td>
<td>1947</td>
</tr>
<tr>
<td>Gióvòwsky, Leópold</td>
<td>Passacaglia</td>
<td>1927</td>
</tr>
<tr>
<td>Granados, Enrique</td>
<td>Tema con veraciones y final</td>
<td></td>
</tr>
<tr>
<td>Grieg, Édvard</td>
<td>Ballade op.24 pub.1876</td>
<td></td>
</tr>
<tr>
<td>Hába, Alois</td>
<td>Variationen über einen canon von Robert Schumann op.1b</td>
<td>1923</td>
</tr>
<tr>
<td>Harris, Roy</td>
<td>Piano Suite 2nd mvt.</td>
<td>1938</td>
</tr>
<tr>
<td>Honegger, Arthur</td>
<td>Toccata et Variations</td>
<td>1916</td>
</tr>
<tr>
<td>Indy, Vincent D'</td>
<td>Variations, Fugue, et Chanson op.85</td>
<td></td>
</tr>
<tr>
<td>Janáček</td>
<td>Variations on an Original Theme</td>
<td>1879</td>
</tr>
<tr>
<td>Krének, Ernst</td>
<td>Toccata and Chaconne</td>
<td></td>
</tr>
<tr>
<td>Medtner, Nicolai</td>
<td>Improvisations op.47 Tema con variazioni op.55a</td>
<td></td>
</tr>
<tr>
<td>Nepomuceno, Alberto</td>
<td>Thème et Variations op.28</td>
<td></td>
</tr>
<tr>
<td>Paderewski, Jan</td>
<td>Variation and Fugue in a minor op.11 Thème Varié</td>
<td></td>
</tr>
<tr>
<td>Piston, Walter</td>
<td>Passacaglia</td>
<td>1943</td>
</tr>
<tr>
<td>Powell, John</td>
<td>Variations and Double Fugue op.20</td>
<td>1911</td>
</tr>
<tr>
<td>Rachmaninoff, Sergei</td>
<td>Variations on a Theme by Chopin 1896 Variations on a Theme by Corelli</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1932</td>
</tr>
<tr>
<td>Composer</td>
<td>Work Description</td>
<td>Year</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Reger, Max</td>
<td>Variations and Fugue on a Theme op.31 by Bach for piano</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Variations and Fugue on a Theme by Telemann for piano op.134</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Variations on an Original Theme for piano</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Variations and Fugue on a theme by Beethoven for two pianos op.86</td>
<td></td>
</tr>
<tr>
<td>Rimsky-Korsakoff</td>
<td>Variations on a Russian Theme</td>
<td>1900</td>
</tr>
<tr>
<td>Saint-Saens</td>
<td>Variations sur un thème de Beethoven for two pianos</td>
<td>1874</td>
</tr>
<tr>
<td>Schönberg, Arnold</td>
<td>Dance Suite op.25</td>
<td>1923</td>
</tr>
<tr>
<td>Shepherd, Arthur</td>
<td>Theme and Variations</td>
<td>1912</td>
</tr>
<tr>
<td>Szymanowski, Karol</td>
<td>Variations in Bb minor op.3</td>
<td>1901</td>
</tr>
<tr>
<td></td>
<td>Variations in B minor op.10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>on Polish Folk Theme</td>
<td></td>
</tr>
<tr>
<td>Wagenaar, Bernard</td>
<td>Ciacona</td>
<td>1942</td>
</tr>
<tr>
<td>Wagner, Joseph</td>
<td>Variationen Über ein Thema von Bach op.6</td>
<td></td>
</tr>
<tr>
<td>Wihtol, Joseph</td>
<td>Variations on a Lettish Folk Song op.6</td>
<td></td>
</tr>
<tr>
<td>Yamada, Koscak</td>
<td>Theme and Variations for Piano</td>
<td>1919</td>
</tr>
<tr>
<td>Composer</td>
<td>Title</td>
<td>Edition Details</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>Bax, A.</td>
<td>A Mountain Mood (melody and variations for pianoforte)</td>
<td>London and Brighton: J.&amp;W.Chester, 1918</td>
</tr>
<tr>
<td></td>
<td>Paean (passacaglia)</td>
<td>London: Chappell and Co., 1943</td>
</tr>
<tr>
<td>Beach, H.H.A.</td>
<td>Variations on Balkan Themes op.60</td>
<td>(for piano solo and two pianos, four hands) Boston and New York: A,P, Schmidt and Co., 1942</td>
</tr>
<tr>
<td>Beethoven, L.</td>
<td>Air and Six Variations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diabelli Variations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thirty-two C minor Variations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Collected edition, xvii</td>
<td></td>
</tr>
<tr>
<td>Brahms, J.</td>
<td>Variations on a Theme by Handel</td>
<td>Berlin: Simrock, 190?</td>
</tr>
<tr>
<td></td>
<td>Variations on a Theme by Paganini</td>
<td>Leipzig: Rieter-Biedermann, 188?</td>
</tr>
<tr>
<td></td>
<td>Variations on a Theme by Haydn</td>
<td>for two pianos, Berlin: Simrock, 1873</td>
</tr>
<tr>
<td>Composer</td>
<td>Title</td>
<td>Location</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Chaminade, C.</td>
<td>Passacaille op.130</td>
<td>New York: John Church Co., 1909</td>
</tr>
<tr>
<td>Chavez, C.</td>
<td>Ocho Veraciones sobre un tema incaico</td>
<td>Lima: T. Scheuck, 1926</td>
</tr>
<tr>
<td></td>
<td>Variations</td>
<td>New York: Cob Cos Press, 1930</td>
</tr>
<tr>
<td>Dukas, P.</td>
<td>Variations, Interlude and Finale</td>
<td>London: Oxford University Press, 1932</td>
</tr>
<tr>
<td>Fauré, G.</td>
<td>Thème et Variations op.73</td>
<td>Paris: J. Hamelle, 1910</td>
</tr>
<tr>
<td>Foss, L.</td>
<td>Passacaglia</td>
<td>New York: G. Schirmer Inc., 1941</td>
</tr>
<tr>
<td>Ganz, R.</td>
<td>Variations on a Theme by Brahms op.21</td>
<td>New York: Composers Music Corporation, 1921</td>
</tr>
<tr>
<td>Glazunov, A.</td>
<td>Theme and Variations op.72</td>
<td>Leipzig: Balaieff, 1901</td>
</tr>
<tr>
<td>Godowsky, L.</td>
<td>Passacaglia</td>
<td>New York: C. Fischer Inc. 1928</td>
</tr>
<tr>
<td>Grieg, E.</td>
<td>Ballade in G Minor op.24</td>
<td>Leipzig: C.F. Peters, 1876</td>
</tr>
<tr>
<td>Harris, R.</td>
<td>Piano Suite</td>
<td>New York: Mills Music Co., 1944</td>
</tr>
<tr>
<td>Composer</td>
<td>Work</td>
<td>Edition</td>
</tr>
<tr>
<td>----------</td>
<td>------</td>
<td>---------</td>
</tr>
<tr>
<td>Honegger, A.</td>
<td>Toccatas et Variations</td>
<td>Paris: A.Z.Mathot, 1921</td>
</tr>
<tr>
<td>Krenek, E.</td>
<td>Toccata and Chaconne op. 13</td>
<td></td>
</tr>
<tr>
<td>Mendelssohn, F.</td>
<td>Variations Stieueses op. 54</td>
<td>Stuttgart: J.G.Cotta, 1901 (Goetschius edition)</td>
</tr>
<tr>
<td>Mozart, W.</td>
<td>Variations</td>
<td>Collected edition, Leipzig: 19-21 Breitkopf and Hartel, 40 vols., 1877-87 vol. 21 used</td>
</tr>
<tr>
<td>Nepomuceno, A.</td>
<td>Thème et Variations op. 28</td>
<td>Rio de Janeiro: Sampaio Araujo &amp; Cia</td>
</tr>
<tr>
<td>Paderewski, J.</td>
<td>Thème Varié op. 16 no. 3</td>
<td>Berlin: Bote &amp; Boch, 192? Variations and Fugue op. 23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Berlin: Bote &amp; Boch, 1906</td>
</tr>
<tr>
<td>Piston, W.</td>
<td>Passacaglia</td>
<td>New York: Mercury Music Corp., 1943</td>
</tr>
<tr>
<td>Powell, J.</td>
<td>Variations and Double Fugue op. 20</td>
<td>Paris: A.Z.Mathot, 1911</td>
</tr>
<tr>
<td>Rachmaninoff, S.</td>
<td>Variations on a Theme by Chopin op. 22</td>
<td>1931 N.Y.: C.Fischer Inc. Variations on a Theme by Corelli op. 42 New York: C.Fischer Inc.</td>
</tr>
<tr>
<td>Reger, M.</td>
<td>Andante Semplice con Variazioni für Klavier zu zwei hands (Variations on an Original Theme)</td>
<td>Leipzig: Lauterbach und Kuhn, 1904 Variationen und Fuge über ein Thema von J.S.Bach, op. 81 Leipzig: Lauterbach und Kuhn</td>
</tr>
</tbody>
</table>
Reger (Cont.)  
Variationen und Fuge über ein Thema von Beethoven für zwei pianoforte zu vier händen op.86 Leipzig: Lauterbach und Kuhn, 1904

Variationen und Fuge über ein Thema von G.PH.Telemann op.134 Berlin and Leipzig: Simrock, ?

Rimsky-Korsakoff, M. Variations sur un thème Russe Leipzig: Balaleff, 1900

Saint-Saens  
Variations sur un thème de Beethoven pour deux pianos op.35 Paris: A.Durand et Fils, 1874


Schubert, F.  
B flat Major Impromptu opus 142 no.3 Collected edition, Leipzig: Breitkopf and Hartel vol. 11, 1884-97

Schumann, R.  
Abegg Variations, opus 1 Variations for Two Pianos op.46 Symphonic Études opus 13 Collected edition, collected and edited by Clara Schumann, Leipzig: Breitkopf and Hartel, 1879-93

Shepherd, A.  
Theme and Variations Newton Center, Mass. Wa-Wan Press, 1905

Szymanowski, K.  
Variations on a Polish Folk Theme op.10 Leipzig: Universal edition

Wagenaar, B.  
Ciaccona New York: E.B.Marks Music Corp., 1942

Wagner, J.  
Variationen und Finale über ein Thema von Bach, Mainz: Verlangst Deutscher Tonkünstler, 1934

Yamada, K.  
Theme and Variations for Piano New York: Composers Music Corp. 1919
Bibliography


Citkowitz, I., "Modern Music" *Music Magazine*, February, 1936


Ewen, D. *Book of Modern Composers*, New York: A.A. Knopf, 1942


Haydn; A Creative Life, New York: W.W. Norton and Co., 1946


Goetschius, P. *Larger Forms in Musical Composition*, New York: G. Schirmer, 1915


Howard, J.T. *Our Contemporary Composers*, New York: T.Y. Crowell Company, 1941


Jadassohn, S. *Les Formes Musicales*, Leipzig et Bruxelles: Breitkopf et Hartel, 1900

Keeton, A.E., "Music of Max Reger" *Magazine Articles*, vol 31: p. 36-44, August, 1911


Luithlen, V., "Studie zu Johannes Brahms' Werken in Variationen Form", Studien zur Musikwissenschaft, 1927


Scott, M. M., "Immanent Form," *Music and Letters*, vol. 7 no. 4, p. 322-327, October, 1936


Slonimsky, N., "Roy Harris," *Music Quarterly* vol. 33 no. 1, p. 17-37 October, 1936

