

THE BEHAVIOR OF THE BASS LINES
OF THE TRANSITIONS IN BEETHOVEN'S SONATAS

by

ROSE MARIE DITTO

B. S., Manchester College, North Manchester, Indiana, 1959

A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Music

KANSAS STATE UNIVERSITY

Manhattan, Kansas

1965

Approved by:

Major Professor

LD
2663
R4
1965
D617
C.2

ii

TABLE OF CONTENTS

	Page
INTRODUCTION	1
ANALYSIS OF THE PIANO SONATAS	3
SUMMARY	42
ACKNOWLEDGMENT	44
BIBLIOGRAPHY	45

INTRODUCTION

The expositions of Beethoven's Piano Sonatas contain transitions found between the first and second themes. This paper is concerned with the behavior of the bass lines of these transitions and the study of the basic designs and techniques of Beethoven in modulating from one theme to another theme. Beethoven wrote thirty-two piano sonatas, four of which are not in the sonata-allegro form and do not contain transitions of the type under study. Therefore, they are excluded from this paper.

In this study the term transition is used to denote a passage designed to connect two successive themes in the sonata form. Such a passage can also be referred to as a bridge passage. The two themes are generally found in different keys which in some way have a logical connection.

In most of the transitions, three sections will be designated; the preparation, modulation, and confirmation. The preparation section refers to those measures which begin the transition and which use either material of the first theme or new material; it will be in the original or home key. Following the preparation, a modulatory passage generally moves from the home key to the new key of the second theme. Either one or a chain of modulations may take place. The final section is the confirmation section which establishes or anchors the new key of the second theme before it enters. The fundamental chord generally used is the dominant chord of the new key.

In several of the sonatas, reference will be made to material which is characteristic of the dissolved form. A dissolved form occurs when a

complete thematic unit, instead of moving into its implied cadence, pursues another harmonic course which leads it into a half cadence.

Throughout this paper terms and abbreviations which may be unfamiliar to the reader will appear. They are as follows:

Numbers above the staff - measures

Large M - major

Small m - minor

S. T. - second theme

Prep. - preparation

Mod. - modulation

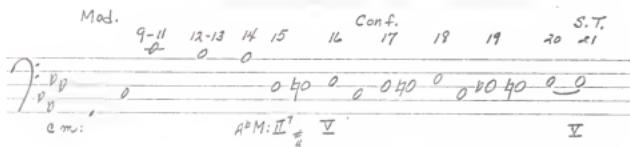
Conf. - confirmation

ANALYSIS OF THE PIANO SONATAS

SONATA IN F MINOR

Op. 2, No. 1, Allegro

The transition begins in measure nine without a preparation, and ends in measure 20. It is constructed on this plan:



This transition, unlike most, has no area on the tonic chord of the home key; rather, it starts on a C minor triad after a half cadence as if beginning a counterstatement.

The transition rests upon a bass line moving down the A-flat major or C minor scale in measures 11 to 14, the A-flat major scale being felt by the behavior of the second theme. Thus, the second theme which begins in measure 21 is in the relative major key of the home key, F minor.

At the closing of the modulating section, measures 15 and 16, the supertonic seventh chord (II^7) followed by its alteration of the fourth scale step leads to the dominant of A-flat major. This pattern is then repeated twice before continuing on the dominant with the second theme.

SONATA IN A MAJOR

Op. 2, No. 2, Allegro Vivace

The preparation begins in measure 32 with the tonic of A major, then modulates to E major. The transition ends with measure 57 as the second theme begins on the tonic of E minor. It is constructed on this plan:

Prep.	Mod.	Conf.	
32-33 34-35 36-37 38	39-41 42-47 48	50 52 54-57 58	S.T.
$\begin{array}{cccc} \text{A M:} & 0 & \#0 & \#0 \\ \hline \end{array}$	$\begin{array}{cccc} 0 & \#0 & \#0 & 0 \\ \hline \end{array}$	$\begin{array}{cccc} 0 & 0 & 0 & 0 \\ \hline \end{array}$	$\begin{array}{cccc} 0 & 0 & 0 & 0 \\ \hline \end{array}$
	E M:		EM:

Measures 38 to 47 outline the major dominant chord of E major. Then the E minor scale is partially outlined with the reduction of measures 48 to 57 as follows:

$\begin{array}{ccccccc} 48 & 50 & 52 & 53 & 54 & 58-S.T. \\ \hline \end{array}$
$\begin{array}{ccccccc} 0 & 0 & 40 & 50 & 40 & 0 \\ \hline \end{array}$

It is understood that the major and minor modes of any given key are used interchangeably; therefore, either a major key or its tonic minor may be prepared and confirmed by the same dominant.

SONATA IN C MAJOR

Op. 2, No. 3, Allegro con brio

The extended inherent preparation begins in measure 13 and continues through measure 26. It is an inherent preparation because it lies in the second member of the first theme group. This is a form in which there is a grouping of two themes within the principle theme area. The bass line of this section moves as follows:

Prep.	13-19	21	22	23	24	26
7:	0	0	44	1	1	1
C.M.:	I	V	I	0		

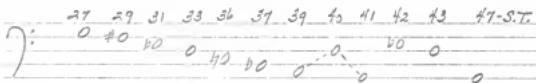
The tonic and dominant are the predominant chords, ending in the dominant to prepare for the modulating section of the transition which begins with the tonic of G minor in measure 27.

The modulating passage, measures 27-46, is built on the following bass:

Mod. 27 29 30 31 32 33 35 36 37 38 39 40 41 42 Conf. 43-46 S.T.
 J: 0+0-40 50 0 0+0 0 40 40 0 0+0 0 0 0 0 0 0
 GM: dm: am: gm:

Op. 2, No. 3 (cont'd)

The modulations are controlled by the steady descent of the bass from G in measure 27 to G-sharp in measure 38. This can be reduced to the harmonic minor scale of G minor as follows:



The last four measures anchor or confirm on the dominant of G minor which also is the dominant of G major; thus the second theme opens in G major which is the dominant of the home key.

SONATA IN E-FLAT MAJOR

Op. 7, Allegro molto e con brio

The transition begins in measure 17 and continues through measure 40.

The bass line is as follows:

Prep.	17	Mod.	Conf.	S.T.
	25	27	31	33 35+40 41
$\begin{array}{c} \text{F} \\ \text{B} \end{array}$	0 0 0	0 0 0	0 0 0	0 0 0
E ^b M:	A ^b M:	B ^b M:		

The transitional bass line shows simplicity with many measures of material written on only a few chords. A partial use of the A-flat major scale is used in the bass line of the preparation, measures 17 and 25. In measures 27 and 29 the bass notes used are in reality the dominant seventh chord of B-flat minor.

The second theme is found to be in the dominant minor of the home key.

SONATA IN C MINOR

Op. 10, No. 1, Allegro molto e con brio

As in the Sonata in F minor, Op. 2, No. 1, this transition has no area on the tonic chord of the home key. It begins on the fifth scale tone of the A-flat major scale after a perfect cadence in C minor. The modulatory section begins in measure 32 with the transition ending in measure 55. The bass line proceeds as follows:

Mod.

Conf. S.T.

A^bM: F^bM: D^bM: E^bM: +6

The general plan is a movement downward as modulations take place on centers a third apart: A-flat major, F minor, D-flat major, into a French sixth in E-flat major.

The bass line can also be shown as a descending scale on A-flat major, changing the mode with the scale tone of C-flat in measure 45, and ending on the dominant of E-flat major.

Op. 10, No. 1 (cont'd)

The second theme, measure 56, is in E-flat major, the mediant of the home key. This is an innovation of the pattern generally found which uses the dominant key as the key of the second theme.

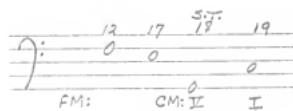
SONATA IN F MAJOR

Op. 10, No. 2, Allegro

Following a first theme of only eleven measures, the transition begins in measure 12 and ends in measure 18. The construction of the bass line is as follows:



After modulating to A minor in measure 17, the E major chord or dominant chord is used as the confirmation. Terminating a transition of the dominant of the mediant key, giving the effect of a phrygian cadence in the key of the dominant, was a common procedure. Reduction of the bass line is as follows:



The second theme does not continue in A minor, but rather in its relative major, C major, which is the key of the dominant.

SONATA IN D MAJOR

Op. 10, No. 3, Presto: Sonata form

This transition begins in measure 16 and ends in measure 22. The bass line lies as follows:

Prep. 16 17 18 19 20 Mod. 21 22 23

D.M.

Beginning in measure 19 the D major scale is found which switches to its relative minor, B minor, as it proceeds to the dominant, F-sharp, in measure 22. There is not an area found confirming the dominant, but rather only the octave of F-sharp for three beats.

The second theme continues in B minor which is the submediant key of the home key and the supertonic key of the dominant key.

D.M.

As shown: in measure 31 the second theme modulates to F-sharp minor, then in measure 35 to A major, the dominant of the home key.

Op. 10, No. 3 (cont'd)

Beethoven, upon numerous occasions, started the second theme group on keys other than those upon which they ended. Consequently, the transition would be directed accordingly.

SONATA IN C MINOR (SONATA PATHETIQUE)

Op. 13, Allegro di molto e con brio

Beginning in measure 19 is a bass line which continues until the entrance of the second theme in measure 51, during which the form of the first theme is dissolved, a transition realized, and a preparation made for the new key of E-flat major. This is illustrated by the following:

The first appearance of the theme ends with a C minor chord in measure 19; but its repetition ends with a G major chord in measure 27. This results in a dissolved form.

The bass line movement is as follows:

Prep.				Mod.	Conf.	S.T.
27	30	31	34	35	38	39
0	0	0	0	0	40	0

Op. 13 (cont'd)

The preparation centers around the dominant which with ease goes into the dominant (first inversion) of A-flat major. Chromatically the bass moves into E-flat minor and confirms its dominant for the second theme. With the home key being C minor, it would be expected that the second theme would lie in its dominant, G minor or G major. Instead, the relative minor of its dominant (E-flat relative minor of G major) is used.

SONATA IN E MAJOR

Op. 14, No. 1, Allegro

The transition begins in measure 13 and continues to measure 22.

The simple bass line is as follows:

Prep.	Mod.	Conf.
	13 16	- 17-22
	0 0 #0 0	
E M:	I <u>IV</u> <u>Vm:</u>	

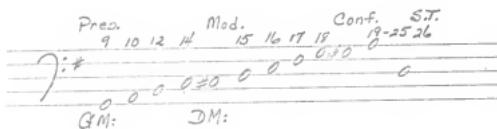
The bass moves chromatically to the dominant of the new key, B major, which is the dominant of the home key. Only three tones are used in the bass, but an area of ten measures is covered with their use.

SONATA IN G MAJOR

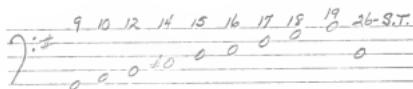
Op. 14, No. 2, Allegro

This transition begins in measure nine and extends through measure 25.

The bass line moves as follows:



Basically the bass line is the ascending scale of D major as it rises from G in measure nine to A in measure 19 in the octave above as shown:



The scale line movement ends on the dominant to confirm it for the new key of D major of the second theme, D major being the dominant of the home key.

SONATA IN B FLAT MAJOR

Op. 22, Allegro con brio

Measure 11 begins the transition which continues through measure 21.

The construction is as follows:

Prep. II	Mod.	Conf. S.T.
	14	15
7 8 0 1 7 8 0	0 0 0 0 40 40	0 0

Reduction:

The passage is reduced to a scale of F minor descending to the scale tone of C, the dominant of the new second theme key. The preparation outlines the B-flat major tonic chord in measures 11 to 13, then modulates chromatically to arrive to F minor. The confirmation on the scale tone of C begins in measure 16 and continues through measure 21. Then the second begins in F major, the dominant of the home key.

SONATA IN D MAJOR (PASTORALE)

Op. 28, Allegro

After a perfect authentic cadence the transition begins in measure 40 and extends through measure 62. The bass line movement is as follows:

Prep. 40 41 42 43 44 45 46 47 48 49 50 Mod. 51 52 53 54 55 Conf. 56 57 58 59 60 61 62 63

The diagram shows a bass line with two staves. The first staff starts with a bass clef, a key signature of one sharp (F#), and a common time signature. It has six measures with note heads '0' or 'o'. The second staff starts with a bass clef, a key signature of one sharp (F#), and a common time signature. It has five measures with note heads '0' or 'o'. Below the staves, 'D M.' is written under the first staff, 'A M.' is written under the second staff, and 'f#m: II' is written at the end.

Measures 44 through 51 show the descending A major scale, then it appears partially again, measures 52 to 55, and stops on its dominant with a confirming area.

The second theme opens on the dominant of F-sharp minor, the relative minor of A major, instead of A major as would be expected. However, the second theme soon moves to A major as the following bass line shows:

The diagram shows a bass line with two staves. The first staff starts with a bass clef, a key signature of one sharp (F#), and a common time signature. It has four measures with note heads '0' or 'o'. The second staff starts with a bass clef, a key signature of one sharp (F#), and a common time signature. It has three measures with note heads '0' or 'o'. Below the staves, 'f#m: I' is written under the first staff, 'I' is written under the second staff, and 'A M: I-II'-I' is written at the end.

SONATA IN G MAJOR

Op. 31, No. 1, Allegro Vivace

The transition is found beginning in measure 49 and continues through measure 65. The movement of the bass is as follows:

Prep.	49-52	53	Mod.	Conf.							
	49-52	53	54	55	56	57	58	59	60	61	62
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
(G M): I											

Reduction:

	49	53	64	66
	0	0	0	0
	0	0	0	0
	0	0	0	0
(G M): I	II			
X Mm: I	I			

The transition is very simple when reduced to the three basic tones with the basic chord progression of tonic to subdominant to dominant of the new key, B minor. This turn, measures 53 to 56, is reiterated, measures 57 to 60, and extended which leads to the second theme.

The second theme lies in B major which is the mediant of the home key rather than the dominant of the home key as would be expected.

SONATA IN D MINOR

Op. 31, No. 2

In measure 22 the transition begins and it ends with measure 41.

The bass moves as follows:

Prep. 22 23 26 27 30 Mod. 31 32 33 34 35 36 37 38 39 40 42

Bass line: I II Am VI III I II II I

Reduction:

22 26 30 32 34 36 35 39 40
Aug. 2nd
I II Am VI III I II II I

This unique transition uses a chordal bass line as it ascends scale-wise to the dominant scale tone of the new key of A minor. The reduction shows the scales of D minor and A minor with the raised fourth scale tone of D-sharp used to enter into the second theme. There is no area on the dominant of the new key for the confirmation.

Op. 31, No. 2 (cont'd)

Use of the augmented second occurs twice. First, between F and G-sharp which gives the harmonic minor scale and secondly, between C and D-sharp, due to the raised fourth scale tone, D-sharp.

As expected the second theme continues in the key of A minor, the dominant of the home key.

SONATA IN E-FLAT MAJOR

Op. 31, No. 3, Allegro

The transition begins in measure 18 and extends to measure 45. The outline of the bass is as follows:

The diagram consists of two staves of music. The top staff starts at measure 18 and ends at measure 40. The bottom staff starts at measure 33 and ends at measure 45. Both staves are in common time (indicated by 'C'). The top staff has an E-flat major key signature (indicated by 'E♭M:'). The bottom staff has a B-flat major key signature (indicated by 'B♭M:'). Measure numbers are written above the notes, and some notes have small numbers below them. The top staff's notes are: 18, 25, 26, 27, 28, 29, 30, 31, 40, 32. The bottom staff's notes are: 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 36.

The bass movement in measures 18 to 26 is reiterated in measures 27 to 28. The bass patterns of measures 35 to 36 and measures 39 to 40 are also restated in measures 37 to 38 and measures 41 to 42, respectively.

Reduction:

This is a reduction of the bass line from the first staff. It shows the notes: 18, 32, 33, 35, 44, 46. The reduction uses fewer notes than the original staff, capturing the essential harmonic progression.

Op. 31, No. 3 (cont'd)

After looking at the reduction of the bass line movement, the basic structure can be seen as a move from the home key tonic to its dominant followed by a descending melodic minor scale of B-flat minor. The second theme lies in the major mode of B-flat rather than the minor mode, either of which would be the dominant of the home key.

SONATA IN G MINOR

Op. 49, No. 1, Andante

This sonata and the following one, Op. 49, No. 2, are among the early sonatas written by Beethoven and are known as the Two Easy Sonatas.

The transition begins with measure nine and continues through measure 15. The bass line moves as follows:

Prep.	9	10	11	12	13	14	15	S.T.
J: v	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
v	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
gm:				B.M:			II	

The preparation states a repetition of the first theme which dissolves as it modulates in measure 12. Measures nine and 10 show portions of the G minor scale with the ascending melodic minor used in measure 10.

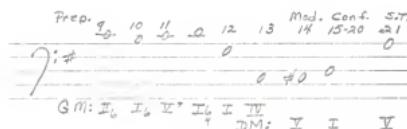
The modulating section ascends chromatically to F, measures 13 to 15. Since F is the dominant of the new key, B-flat major, it is confirmed in measure 15 before proceeding into the second theme which lies in B-flat major, the relative major key of the home key, G minor.

SONATA IN G MAJOR

Op. 49, No. 2, Allegro ma non troppo

The transition begins in measure nine and extends to measure 20.

The bass line proceeds as follows:



In this second easy sonata the first theme is stated, then completely repeated which gives a period.

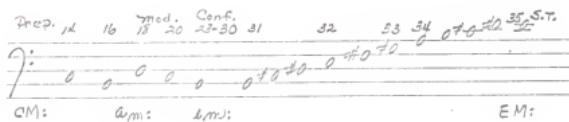
A usual chord progression appears in the preparation, followed by a modulation, measure 14, to D major, the new key of the second theme. The confirmation, measures 15 to 20, is presented on the dominant of the home key (tonic of the new key) rather than the usual procedure of using the dominant of the new key. This may be due to the fact that the second theme begins on the fifth scale tone and can be harmonized with the dominant chord. Thus the tonic rather than the dominant chord is chosen to prepare for the new key.

SONATA IN C MAJOR

Op. 53, Allegro con brio

The transition begins in measure 14 and continues through measure 34.

The bass line moves as follows:



From C major the transition modulates to its relative minor, A minor, then to its dominant of E minor. After confirming E minor in measures 23 to 30, the E major scale is clearly outlined in measures 31 to 35. The second theme continues in E major, the mediant of the home key.

Beethoven's true genius of composition again shows as only five chord changes occur within sixteen measures of material, measures 14 to 30. During these five chord changes the whole transition (preparation, modulation, and confirmation) are presented and two modulations have taken place. Then before the second theme appears the E major scale prepares the change in mode from E minor to E major.

SONATA IN F MINOR (APPASSIONATA)

Op. 57, Allegro assai

The transition begins in measure 16 and ends with measure 34. The composition of the bass line is as follows:

Prep. 16 17 20 23 25 27 28 29 31 32 33 S.T. 35

f m: *A.M.:*

Reduction:

16 17 20 23 25 27 28 29 31 32 33 35 S.T.

f m: *A.M.:*

Short preparatory and modulatory sections are found with an extensive confirmation. The reduction shows a confirmation on a pedal point of E-flat, measures 23 to 33, together with a chromatic descending scale, measures 25 to 33, to E-flat which confirms the new key of A-flat major. Instead of proceeding to the dominant of F minor for the new key, Beethoven chose the relative major to F minor (A-flat major) for the second theme beginning in measure 34.

SONATA IN F-SHARP MINOR

Op. 78, Allegro ma non troppo

Following an introduction of four measures, the transition begins in the eighth measure of the Allegro section and extends through measure 23. The following shows the bass line structure:

Prep.	8	9	10	11	12	13	Mod.	15-19	20	22	23	24	Conf. S.T.
$\text{F}^{\#}$	$\text{F}^{\#}$	0	0	0	0	0	D	0	0	0	0	0	$\text{C}^{\#}\text{M}$
$\text{G}^{\#}$	$\text{G}^{\#}$	0	0	0	0	0	D	0	0	0	0	0	$\text{C}^{\#}\text{M}$

After an extensive preparation, measures eight to 13, the transition modulates in measure 14 through the submediant, D minor, into C-sharp major, the dominant of the home key. Again the modes are used interchangeably as C-sharp major rather than C-sharp minor is chosen for the new key. The dominant of the new key is approached through altered chords, measures 20 to 23, confirmed, then resolved to the tonic as the second theme begins in measure 24.

SONATA IN G MAJOR (SONATINA)

Op. 79, Presto alla tedesca

The transition begins in measure eight and extends through measure

23. The bass line moves as follows:

Prep. 8 9 10 0 0 Mod. 12 Conf. 10 20 23 5%
7: # 0 0 0 0 0 0 0 0 0 0

The preparation uses an ascending scale to the tonic of the new key of D major, measures 8 to 12. The confirmation begins with the dominant of the home key, measure 12, or the tonic of the new key, then uses a chord progression of I, VI, IV altered, VI, and V as the bass moves to the dominant of the new key. The chord progression is unusual in that the movement uses submediant chords and an altered subdominant chord rather than the more usual dominant and tonic chords.

The second theme then opens in measure 24 in the key of D major, the dominant of the home key.

SONATA IN E-FLAT MAJOR

(Sonate Caracteristique: Les adieux, l'absence et le Retour)

Op. 8la, Allegro

The sonata opens with a 16 measure introduction followed by the Allegro section. The bass line of the first theme of the Allegro is as follows:

3 4 5 6 7 8 9

E♭M:

The interest lies here in the four measure phrase, measure five to nine, which uses a portion of the scale of E-flat major and ends on the tonic chord. As a part of the transition this scale portion again appears in measures 10 to 13 ending with the dominant chord, thus dissolving the form.

The transition begins in measure 10 and continues to measure 34. The construction of the bass line is as follows:

Prep.: 10 11 12 13 14 15 16 17 18 19 20 21 22 23-24 25-26 27-28 29-30 31-32

E♭M: I II III IV V VI VII VIII

A♭M: I II III IV V VI VII VIII

Op. 81a (cont'd)

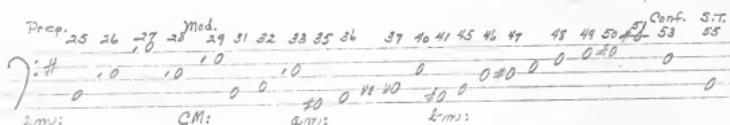
After the preparation, measures 10 to 13, which uses the scale pattern of E-flat major, the transition modulates, measure 15, and falls on a portion of the B-flat minor scale, measures 18 to 20. The confirmation, measures 23 to 33, is on the dominant scale tone (F of the key of B-flat) and is preparing the second theme for either the major or minor mode. The scale passage in measures 30 to 32 clearly identifies the mode as that of B-flat major and then leads into the second theme which begins in measure 34.

SONATA IN E MINOR

Op. 90

The transition begins in measure 25 and continues through measure 54.

The bass line moves as follows:



The preparation, measures 25 to 29, stays in the realm of two tones, E and B, which are the tonic and the dominant tones of E minor. It should be noted that these tones are found in octaves, not chords, thus keeping all voices in unison until the appearance of the dominant chord of C major, measure 29. In measures 29 to 35 a pattern is found of a major sixth followed by a reverse half-step. Within each pattern a dominant chord resolves to a tonic, first in C major and then in A minor. The bass line then progresses chromatically in measure 37 and arrives to the new key of B minor in measure 45.

The bass line ascends in measures 46 to 50, confirms the dominant of B minor in measure 53, then begins the second theme in measure 55. The new key of B minor is the dominant of the home key.

SONATA IN A MAJOR

Op. 101, Allegretto ma non troppo

The transition is found in measures five to 15. The bass line progresses as follows:

Prep. 5 6 Mod. 8 9 10 11 Conf. 13 14 15
 $\begin{array}{ccccccccc} 7 & 0 & 40 & 20 & 0 & 0 & 0 & 0 & 0 \\ 7 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{array}$

A.M.: $\begin{array}{c} \text{D} \\ \text{E} \\ \text{M} \end{array}$

$\begin{array}{ccccccccc} 0 & 0 & 15 & 0 & 0 & 16 & 17 & 18 & 19 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{array}$

$\begin{array}{c} \text{VI} \\ \text{VII} \\ \text{I}_4 \end{array}$

Reduction:

Prep. 5 6 Mod. 7 8 9 10 11 Conf. 12 13 14 15 16 17 18 19
 $\begin{array}{ccccccccc} 7 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 7 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{array}$

A.M.: $\begin{array}{c} \text{D} \\ \text{E} \\ \text{M} \end{array}$

$\begin{array}{c} \text{II} \\ \text{III} \\ \text{I}_4 \end{array}$

The short preparation, measures five and six, is a dissolved form of the first theme and progresses chromatically in measure six to the dominant of the new key which is E major. Beginning in measure nine the bass line ascends the E major scale, then states the dominant chord in measure 15 before entering the second theme in measure 16.

Op. 101 (cont'd)

The second theme, measure 16, begins on the submediant chord and does not complete the resolution of the dominant chord until measure 19 where a second inversion of the tonic is found. The new key of the second theme is the dominant of the home key.

SONATA IN B FLAT-MAJOR

(Grosse Sonate fur das Hammer-Klavier)

Op. 106, Allegro

The transition is found in measures 35 to 62. The following shows the bass line movement:

Prep. mod. Conf.

B^bM: I₄ I₆ GM: I

The transition is quite simple in that mostly tonic and dominant chords are present. The preparation, measures 35 to 37, is in the tonic chord of the home key which in its first inversion transforms into the dominant chord of the new key in measure 38. This transformation or modulation in measure 38 is as follows:

B^bM: I GM: I

The technique of using the open octave results in a simple, yet definite modulation.

Op. 106 (cont'd)

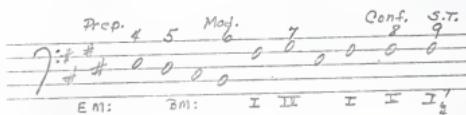
Following the modulation the dominant of the new key is confirmed with the alternation of the dominant and tonic chords. In measures 43 to 46 a portion of the harmonic G minor scale appears along with the pedal point of the tone of D.

The second theme which begins in measure 63 lies in G major and introduces an entirely new key. A key signature change appears between measures 44 and 45.

SONATA IN E MAJOR

Op. 109, Vivace ma non troppo

Following a first theme of four measures, the transition begins in measure five and continues through measure eight. The bass line moves as follows:



The bass line in measures four, five, and six shows a partial use of the E major scale. The following tones in measures six and seven give a normal chord progression which leads to the dominant of the new key. After confirming the dominant, it resolves to the tonic as the second theme begins using the new key of B major, the dominant of the home key.

SONATA IN A-FLAT MAJOR

Op. 110, Moderato cantabile molto espressivo

The transition is found in measures 12 to 19. The bass line is as follows:

Pre. 12 13 14 15 16 Mod. 17 18 19 S.T.
 E bM: II VI

The transition remains fairly simple and with little interest until measure 17 where a descending scale begins and continues to the entrance of the second theme in measure 20 where it appears in C minor before finally ending in its home key of E-flat major. No confirmation takes place.

The bass line is not the complete interest in this transition due to the movement of the upper voice. Therefore, the upper voice will also be discussed. It is as follows:

17 18 19 S.T.
 E bM:

Op. 110 (cont'd)

As the bass line descends, the upper voice moves in contrary motion and ascends to the scale tone of C.

The second theme begins in the new key of C minor, but ends in E-flat major, the dominant of the home key. The beginning chord is not the usual tonic or dominant chords, but rather a submediant.

SONATA IN C MINOR.

Op. 111, Allegro con brio ed appassionato

After an introduction of 16 measures the Allegro section begins. In measure 19 to 33 the transition takes place. The bass line moves as follows:

Prep. 19 20 21 22 23 24
Mod. 23 24

C.M.: E♭M:

Conf. 25 26 27 28 29 30 31 32 33 34

E♭M: A♭M:

S.T.

The transition involves an intervallic pattern in measures 20 to 23 which returns in measures 28 to 31. Measures 24, 25, 26, and 27 repeat a pattern of descending thirds.

Reduction:

Prep. 19 20 21 22 23 24 25 26 27 Mod. 28 29 30 31 32 33 34

E♭M: A♭M:

Op. 111 (cont'd)

Upon reducing the involved bass line it becomes very simply an ascending A-flat major scale beginning in measure 23. Beethoven used his ingenuity in elaborating upon a basic scale line.

From the home key of C minor the transition modulates to its relative major key of E-flat in measure 22. After adding one more flat (D-flat) which first appears in measure 24, the key signature of A-flat major is placed between measures 27 and 28. The second theme continues in A-flat major.

SUMMARY

Upon studying the transitions of Beethoven's Piano Sonatas, it was discovered that two basic devices are used in modulating from the first theme to the second theme. These devices are scale lines and functional chord progressions. The scale lines are either complete or partial and are representative of the diatonic and chromatic patterns.

The scale line movement generally ascends or descends on the scale of the new key. Op. 14, No. 2 is an example of an ascending major scale which predicts the key of the second theme. Opus 2, No. 3 is an example of a descending bass line which outlines the harmonic minor scale of the new key. The second theme, however, rests in the major mode. This is because the major and minor modes of any given key are used interchangeably. In some transitions the interchange is defined before the entrance of the second theme, as in Op. 53. Here the confirmation rests in minor, but the major scale is presented to define the mode before the entrance of the second theme.

A typical example of the chromatic scale line usage is in Op. 49, No. 1. The bass ascends chromatically to the dominant of the new key. The partial scale line is illustrated in Op. 2, No. 2. Following the confirmation, the bass line descends by using tones of the scale of the new key followed by the entrance of the second theme.

The functional chord progression involves chords which are purposeful and necessary for the arrival of the new key. Generally the progression is short and simple, as in Op. 31, No. 1.

Through the discussion of these two methods it has been demonstrated that the bass line alone predicts the new key of the second theme. Other factors revealed by the bass line are these:

1. Almost all of the transitions include the three sections: the preparation, modulation, and confirmation.
2. The new key chosen for the second theme is generally the dominant of the original key. Also used are the submediant, mediant, and relative major keys.
3. Frequently the second theme enters in a key which does not hold through its entirety. The true key appears later in the second theme material. An example of this is in Op. 10, No. 3.
4. Beethoven possessed a mastery of writing many measures of material with only a few chord changes. This is illustrated in Op. 53.
5. The transition in Op. 106 uses the technique of an open octave which results in a simple, yet definite modulation.

ACKNOWLEDGMENT

For guidance and assistance, the writer of this report is most grateful to Dr. Thomas Stuenenberg of Kansas State University.

Appreciation is also extended to the members of the committee for their fine cooperation.

BIBLIOGRAPHY

- Goetschius, Percy. Homophonic Forms of Musical Composition. New York: G. Schirmer, Inc., 1924.
- Goetschius, Percy. Lessons in Music Form. Bryn Maur, Pa.: O. Ditson, 1932.
- Leichtentritt, Hugo. Musical Form. Cambridge: Harvard University Press, 1951.
- Thayer, Alexander Wheelock. The Life of Ludwig van Beethoven. New York: The Beethoven Association, 1921.
- Thayer, Alexander Wheelock. Thayer's Life of Beethoven. New Jersey: Princeton University Press, 1964.
- Tovey, Sir Donald Francis. A Companion to Beethoven's Pianoforte Sonatas. London: The Associated Board of the Royal Schools of Music, 1945.
- Tovey, Sir Donald Francis. Beethoven. London: Oxford University Press, 1945.

THE BEHAVIOR OF THE BASS LINES
OF THE TRANSITIONS IN BEETHOVEN'S SONATAS

by

ROSE MARIE DITTO

B. S., Manchester College, North Manchester, Indiana, 1959

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Music

KANSAS STATE UNIVERSITY

Manhattan, Kansas

1965

The expositions of Beethoven's Piano Sonatas contain transitions found between the first and second themes. This paper is concerned with the behavior of the bass lines of these transitions and the study of the basic designs and techniques of Beethoven in modulating from one theme to another theme. Beethoven wrote thirty-two piano sonatas, four of which are not in the sonata-allegro form and do not contain transitions of the type under study. Therefore, they are excluded from this paper.

In this study the term transition is used to denote a passage designed to connect two successive themes in the sonata form. Such a passage can also be referred to as a bridge passage. The two themes are generally found in different keys which in some way have a logical connection.

In most of the transitions, three sections will be designated; the preparation, modulation, and confirmation. The preparation refers to those measures which begin the transition and which use either material of the first theme or new material; it will be in the original or home key. Following the preparation, a modulatory passage generally moves from the home key to the new key of the second theme. Either one or a chain of modulations may take place. The final section is the confirmation section which establishes or anchors the new key of the second theme before it enters. The fundamental chord generally used is the dominant chord of the new key.

In several of the sonatas, reference will be made to material which is characteristic of the dissolved form. A dissolved form occurs when a complete thematic unit, instead of moving into its implied cadence, pursues another harmonic course which leads it into a half cadence.

Throughout this paper terms and abbreviations which may be unfamiliar to the reader will appear. They are as follows:

Numbers above the staff - measures
Large M - major
Small m - minor
S. T. - second theme
Prep. - preparation
Mod. - modulation
Conf. - confirmation

SUMMARY

Upon studying the transitions of Beethoven's Piano Sonatas, it was discovered that two basic devices are used in modulating from the first theme to the second theme. These devices are scale lines and functional chord progressions. The scale lines are either complete or partial and are representative of the diatonic and chromatic patterns.

The scale line movement generally ascends or descends on the scale of the new key. Op. 14, No. 2 is an example of an ascending major scale which predicts the key of the second theme. Opus 2, No. 3 is an example of a descending bass line which outlines the harmonic minor scale of the new key. The second theme, however, rests in the major mode. This is because the major and minor modes of any given key are used interchangeably. In some transitions the interchange is defined before the entrance of the second theme, as in Op. 53. Here the confirmation rests in minor, but the major scale is presented to define the mode before the entrance of the second theme.

A typical example of the chromatic scale line usage is in Op. 49, No. 1. The bass ascends chromatically to the dominant of the new key. The partial

scale line is illustrated in Op. 2, No. 2. Following the confirmation, the bass line descends by using tones of the scale of the new key followed by the entrance of the second theme.

The functional chord progression involves chords which are purposeful and necessary for the arrival of the new key. Generally the progression is short and simple, as in Op. 31, No. 1.

Through the discussion of these two methods it has been demonstrated that the bass line alone predicts the new key of the second theme. Other factors revealed by the bass line are these:

1. Almost all of the transitions include the three sections: the preparation, modulation, and confirmation.
2. The new key chosen for the second theme is generally the dominant of the original key. Also used are the submediant, mediant, and relative major keys.
3. Frequently the second theme enters in a key which does not hold through its entirety. The true key appears later in the second theme material. An example of this is in Op. 10, No. 3.
4. Beethoven possessed a mastery of writing many measures of material with only a few chord changes. This is illustrated in Op. 53.
5. The transition in Op. 106 uses the technique of an open octave which results in a simple, yet definite modulation.