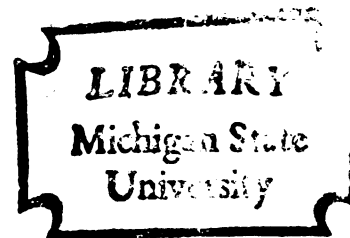


ASPECTS OF MODULATION IN THE  
EIGHTEENTH - CENTURY KEYBOARD SONATA

Thesis for the Degree of Ph. D  
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ABSTRACT

ASPECTS OF MODULATION

IN THE

EIGHTEENTH-CENTURY KEYBOARD SONATA

by

Alexander Joseph Turco

Composers in the eighteenth century treated the keyboard sonata primarily as a modulatory form. This study proposes to investigate all aspects of modulation in the eighteenth-century keyboard sonata, including the areas of tonal stability which surround the modulatory areas. For the most part, the eighteenth-century keyboard sonata contains two distinct areas of tonal stability, and two distinct areas of modulation.

In the sonatas of Domenico Scarlatti, the two main areas of tonal stability are: (1) a short incisive opening area, and (2) a more elaborate area, in the new key, at the end of the first part (A) of the sonata. The first area is used only once, while the second area is used twice - as the closing section of each part of the sonata.

The areas of tonal stability in the sonatas of C. P. E.

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Bach are tenuous and constantly move in and out of other areas. In the later sonatas of Haydn and Mozart, however, there is a return to the stability seen in Scarlatti's works. More important is the appearance of thematic considerations which prolong the opening tonic area and give it an importance which, in Scarlatti, was seen only in the new key area.

The two primary areas of modulation in the eighteenth-century keyboard sonata are contrasting in character. The first one entails a single key movement, in the early part of the sonata, from the tonic to the dominant, or from the tonic minor to its relative major. The second area comes after the double bar, i.e. in the A' part, and contains several modulations to more distant keys.

The main conclusions of this study will illustrate the following modulatory characteristics. The opening modulation of A in Scarlatti is varied in approach. Sometimes several short sections employing different modulatory devices constitute the modulation. At other times a single technique is used, such as the blurring of the old key prior to establishing the new key. In the sonatas of Haydn and Mozart, two techniques are invariably used to execute the opening modulation: (1) the half cadence in the tonic, which needs no alteration in the recapitulation; and (2) the half cadence in the dominant, which must be altered in the recapitulation.

Modulation after the double bar (A') in Scarlatti's



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works may immediately turn to the tonic, or may remain in the dominant for a while. Sometimes the type of tonality used creates a tonal ambiguity. Often the intervening modulations on the way back to the tonic are logical steps within the tonic key itself.

The modulations after the double bar in C. P. E. Bach's sonatas are brief and numerous and without distinguishing features.

In Haydn's works thematic considerations begin to play a major role in the unfolding of the modulations after the double bar.

In the sonatas of Mozart six modulatory effects are characteristic of his development section:

1. The abrupt modulation from major to minor at the double bar,
2. The modulatory treatment of thematic material from the exposition,
3. The modulatory treatment of non-thematic material,
4. The presence of new thematic fragments,
5. The emphasis of a key other than the tonic at the end of the development section, and,
6. The use of "dead-end" modulation in which a new tonal level is sustained, but without the chordal progressions necessary to establish a definite key.

ASPECTS OF MODULATION  
IN THE  
EIGHTEENTH-CENTURY KEYBOARD SONATA

by

Alexander Joseph Turco

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Alexander Turco

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the first of these is the fact that the  
the second is the fact that the

the third is the fact that the

the fourth is the fact that the

the fifth is the fact that the

the sixth is the fact that the

the seventh is the fact that the

the eighth is the fact that the

the ninth is the fact that the

the tenth is the fact that the

the eleventh is the fact that the

the twelfth is the fact that the

the thirteenth is the fact that the

the fourteenth is the fact that the

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## INTRODUCTION

Composers in the eighteenth century approached the keyboard sonata primarily as a modulatory form. The studies of Ratner<sup>1</sup> into the theoretical sources of the period reveal that the keyboard sonata was invariably defined as a bipartite modulatory form. Each section of the bipartite form was characterized by certain key relationships. The relationship in the first section, which henceforth will be referred to as the A section, was the tonic-dominant key relationship. It was achieved in two steps: (1) the establishment of the tonic and the transition to the dominant; and, (2) the establishment of the dominant and the close therein.

In the second section of the bipartite form, henceforth referred to as the A' section, the reverse relationship, dominant-tonic, was used. Again this was achieved in two steps: (1) harmonic elaboration of the dominant and return to the tonic; and, (2) restatement of the first section in the tonic key. Hence, the standard scheme of a sonata movement reveals itself as a series of key relationships.

The late eighteenth-century theorist, Kollmann, in Essays

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<sup>1</sup> Leonard Ratner, "Harmonic Aspects of Classic Form", JAMS, vol. 2. (1949), p. 159.



On Practical Musical Composition, London, 1799,<sup>2</sup> defines a sonata as "a long movement" divided into two large sections, each section in turn consisting of two subsections (Table 1, p. 3). The first subsection usually ends in the key of the dominant. If the sonata begins in a minor key, its relative major may be used, but its dominant is preferred. This is a consistent aspect of key relationships in the sonata. The second subsection contains the first elaboration of keys. It uses keys closely related to the tonic, in distinction to more remote keys used in the third subsection. Keys a third and fifth apart are favored, and a full modulation may be concluded only on those degrees. This subsection, then, ends on the dominant or relative major. These first two subsections comprise the A part of the bipartite form.

The third subsection, i.e. the section immediately after the double bar, contains the second elaboration with modulations to more distant keys. The fourth subsection returns to the original key and is naturally similar to the first subsection. The third and fourth subsections, then, clearly comprise the A' part of the bipartite form.

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2 As quoted by Ratner.

Table 1, An Eighteenth-Century View of Sonata Form

|                              |                    |                                                                                                                                                                                                                                                                                              |
|------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| "A long movement" (Kollmann) | First subsection - | This subsection should end in the key a perfect fifth or minor third up from the tonic.                                                                                                                                                                                                      |
|                              | Second subsection- | This subsection contains the <u>first</u> elaboration using modulations to closely related keys a third and fifth away in distinction to the more distant modulations of the third subsection. No "formal degrees", i.e. firm keys may be established except to keys a third and fifth away. |
|                              | Third subsection - | The <u>second elaboration</u> occurs in this subsection and uses modulations to more distant keys. More abrupt modulations or enharmonic changes occur.                                                                                                                                      |
|                              | Fourth subsection- | This subsection contains a return to the tonic key with a <u>third</u> elaboration similar to the first subsection.                                                                                                                                                                          |

The first elaboration, i.e. the new key area of A, is really more of a continuation of a new key than an elaboration of several keys. Modulations may occur within it, but this subsection must end on the third or fifth degree. Clearly the first and fourth subsections are similar. However, the use of the term, "elaboration" in the fourth subsection, and not in the first, is somewhat puzzling.

The ample theoretical evidence, such as Kollmann's description, which documents the eighteenth-century sonata as a modulatory form, provides the impetus for this study, which will approach the bipartite sonata through the modulations contained therein. Thematic evidence will be cited from time to time as it reinforces, or fails to reinforce, major modulations. However, to approach the sonata

previous to Beethoven from a thematic point of view, as is so common, is incongruous in the light of its contemporary theoretical sources.<sup>3</sup> Furthermore, the popular view of the sonata as a form made up of three sections: exposition, development and recapitulation, is equally untenable. Granted that these three elements exist; but, as they are commonly understood, they do not adequately define the content of the eighteenth-century bipartite sonata. Conventional terminology implies thematic connotations. Exposition brings to mind two themes, one in the tonic, the other in the dominant. Development implies a motivic manipulation of the theme, a practice hardly seen in this century. Recapitulation implies the restatement of the opening themes in the tonic key. No such thematic considerations are a part of the early sonata, and these appear only in the later part of the century. This entire approach is illogical in view of the actual musical structure and contemporary theoretical writings. The early sonata must be considered from a modulatory, not a thematic point of view. Basically, it is an expositional form in two parts.

The aim of this study is to examine the **manner** and style of modulation in the eighteenth-century keyboard bipartite sonata. The four composers selected for this study are Domenico Scarlatti, C. P. E. Bach, Haydn and Mozart. Each created certain individual modulatory characteristics which contribute to the general study of modulation in the sonata form. Chapter I will first identify and discuss the tonally **stable areas**, that is, **areas** in which there is little or no modulation. The function and relationship of these areas to the modulatory areas will be noted. Several distinct arrangements of tonally stable **areas**

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3 See footnote 1.

will be presented and illustrated. Most of the discussion will center on Scarlatti's works, since they provide many interesting aspects on this subject which are often overlooked. Later eighteenth-century sonatas will also be examined and related to Scarlatti's works.

In contrast to a tonally stable area, such as the beginning of A and the end of A', modulatory areas are those in which a modulation is imminent, as in the transitional passage between the first and second theme in the late eighteenth-century sonata; or those in which several short-lived or suggested keys are employed, as in the beginning of A'.

Chapter II and Chapter III deal with the modulatory areas and comprise the major portion of this study. Chapter II investigates the main modulation found in A: the movement from the tonic to the dominant key. Chapter III investigates the series of modulations commonly found after the double bar, at the beginning of A'. This area is basically explorative; its function being to establish, to varying degrees of stability, other keys and eventually to return to the tonic key. A wide variety of types of modulation will be noted. There are abrupt modulations, usually from major to minor and vice versa; sequential modulations; modulations with and without accompanying thematic fragments; modulations which cause the ear to lose tonic orientation, by purposely wandering about, in order to create a greater impact when tonal orientation is restored; and finally, modulations which set up certain types of harmonic motion which seem to hover, ricochet or move deceptively in and around intervening key areas.



CHAPTER I  
THE AREAS OF TONAL STABILITY

Scarlatti: The Opening Tonic Area in A.

The keyboard sonatas of Domenico Scarlatti are invariably in bipartite form. The first part always contains two major areas of tonal stability, the tonic and the dominant; while the second part contains one area of stability, that of the restored tonic. The opening of each sonata is always characterized by an incisive tonic area of short duration.<sup>1</sup> K. 16 (Example 1, p. 7) is typical in that the opening tonic takes up only 13 measures in a work of 112 measures.

However, the brevity of its duration is compensated for by its firmness. A solid cadence at measure 6, followed by a new melodic figure, which is repeated immediately, and another strong cadence at measure 13, sets up a tonic base which possesses sustaining power, and provides the solid tonal plane from which the succeeding modulation occurs.

In measures 14 through 17, a new melodic figure is introduced. It is still primarily in the tonic key but cannot be considered

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1 K. 54, 4 measures out of 58; K. 115, 8 measures out of 108; and K. 421, 8 measures out of 142. The sonatas are identified according to Kirkpatrick's catalogue as found in his edition. See bibliography.

Example 1. Scarlatti, D. Sonata in B Flat Major, K. 16,  
measures 1 - 34.

**Presto** 

III

6

12

18

24

30

an integral part of the opening tonic area because it turns out to be the beginning of the modulatory section. In other words, the modulatory section often begins rather prominently in the tonic key but is distinguished from the area which precedes it by a firm cadence and a new melodic figure.

The opening of a Scarlatti sonata sometimes consists of a short series of sections each firmly in the tonic key and each characterized by a distinct melodic figure, as in Example 1. The last of these sections is often used as the opening section of the modulatory area, which, in its turn contains a short series of distinct sections. At other times the opening section uses only one distinct segment which is not used in the modulatory area.

There are two different approaches used here. In the first there is an accumulation of sections. The last one, in the tonic, most often turns out to be the opening of the modulatory section.<sup>2</sup> In the second approach there is a clearer separation between the opening tonic section and the modulatory area.<sup>3</sup>

Occasionally the opening area does not employ the additive technique at all but replaces it with a "technique of expansion" which simply repeats the opening melodic and harmonic figure through the use of sequence.<sup>4</sup> In this way several keys are touched upon, but the solidity of the section is retained through the repetition of the

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2 K. 28 and K. 44.

3 See footnote 1.

4 K. 3, K. 84 and K. 519.

figure. The additive process, however, is by far more common.

Scarlatti: The New Key Area in A.

The second area of tonal stability in A is found toward the end of the section. It is usually in the major dominant for sonatas beginning in either major or minor. Sometimes the relative major is used for the latter. This area has a very strong foundation. Scarlatti uses several techniques which set up a tonal stability of unquestionable proportions: (1) he may precede this last section with a section in a minor key which acts as a "tonal foil", i.e., a contrasting section which causes the last section of A to burst forth in a bright major key; (2) he may reiterate, in the last section, an incessant dominant-to-tonic harmonic figure; and (3) he may enrich its texture with sixths, octaves and rapid hand crossings. Often these three techniques are employed in one sonata and the effect is particularly striking. Such is the case in K. 44 (Example 2, p. 10).<sup>5</sup> The key of C major is being approached. It is first lightly established in measures 31 - 42. Then a sudden shift to minor in measures 43 - 66, the tonal foil, throws into relief the outburst of C major at measure 66. C major is then reinforced by an incessant pattern in sixths and octaves in measures 66 - 82. Since the sudden shift to minor in measures 43 - 66 highlights the establishment of the final key, its function assumes the role of a tonal foil.

A section parallel to the one just described naturally

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<sup>5</sup> See also: K. 54, measures 21 - 28; K. 96, measures 78 - 114; and K. 115, measures 40 - 46.

Example 2. Scarlatti, D. Sonata in F Major, K. 44,  
measures 28 - 82.

The image displays a musical score for a piano sonata by Domenico Scarlatti, specifically the Sonata in F Major, K. 44. The score is presented in six systems, each consisting of a grand staff (treble and bass clefs). The measures are numbered at the beginning of each system: 28, 35, 42, 49, 56, and 63. The key signature is one flat (B-flat), and the time signature is common time (C). The notation includes various musical symbols such as notes, rests, accidentals, and dynamic markings like 'L' (piano) and 'F' (forte). A 'FOIL' marking is present above the staff starting at measure 42. The score concludes with a double bar line at the end of the sixth system.

(Continued Next Page)

**Example 2. (Continued)**

The musical score consists of two systems of piano music. The first system, labeled with measure 69, spans measures 69 through 75. It features a complex texture with rapid sixteenth-note passages in both the treble and bass staves. The second system, labeled with measure 76, spans measures 76 through 82. This system continues the intricate patterns, with the right hand showing some melodic development and the left hand maintaining a steady, rhythmic accompaniment. The notation includes various musical symbols such as beams, slurs, and dynamic markings.

occurs toward the end of A'. It possesses the same material, including the tonal foil, but of course is entirely in the tonic key, measures 121 - 152.

**Scarlatti: The Quasi-Stable Area after the Modulation.**

It has been noted that the A section opens and closes with the tonality firmly established. In addition to these two main areas, the short area after the modulation should be considered. The modulatory area itself ends with a firm cadence in the key of the dominant or relative major. Prior to this cadence, the new key has been sounding for some time, but, due to the modulatory character of what preceded it, it is not heard as a firm key until a strong cadence is sounded. Thus in addition to the firm areas which delimit A, we now have another tonal area of limited stability after the opening modulation and before the foil. Its beginning is usually marked by the appearance of a new thematic fragment, and its ending is made distinct by a firm cadence. (See Example 2, p. 10, measures 31 - 42)<sup>6</sup> At first Scarlatti uses the new key lightly, then throws it into relief through the use of the tonal foil, and then comes back to it with conviction in the final section after the foil. A parallel construction is used in the A' section after the modulations which come immediately after the double bar.

In the aforementioned arrangements of areas of stable tonality, the strongest are at the end of the A and A' sections. All that precede them, except for the cursory beginning, drive

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<sup>6</sup> See also: K. 3, measures 28 - 36; and K. 132, measures 17 - 24.



toward these two final areas. The tonality in A and A' is always stronger at the end than at the beginning.

#### Scarlatti: A Second Arrangement of Tonally Stable Areas

There is a second arrangement of stable areas which counterbalances the tonal emphasis placed at the end of each section noted in the first arrangement. In this variation the lightly established first appearance of the new key area is extended into a major section. The tonally contrasting section, or tonal foil, comes next followed by the last section. But now the tonal emphasis is more balanced, and the effect of the last area is lessened or balanced by a similar area prior to it, and separated from it by the tonal foil. K. 115 is typical. (Example 3, p. 14)<sup>7</sup> The initial appearance of the new key is extended into a major section in measures 21 - 32. The tonal foil follows, measures 32 - 40, setting off the final section of stability in measures 40 - 46. But now the initial appearance of the new key, measures 21 - 32, and the final appearance of the new key, measures 40 - 46, are balanced in importance. Some structural changes may occur along with this new emphasis on the first appearance of the new key. In the examples listed in footnote 7, K. 96 omits the transitional modulation from the opening section to the new key. It simply cadences on the dominant followed by the dominant key area. K. 119 first uses the new tonality in the minor mode.<sup>8</sup> In accordance with the parallel pattern of these sonatas, the same procedures are also used in the A' section. (For a comparison of these two arrange-

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7 See also: K. 96, measures 26 - 48; and K. 119, measures 36 - 51.

8 Note the extreme dissonance and thick texture of this particular tonal foil, measures 56 - 73.

Example 3. Scarlatti, D. Sonata in C Minor, K. 115,  
measures 1 - 47.

Allegro Longo 407

XV

6

11

16

21

25

(Continued Next Page)

## Example 3. (Continued)



ments, see Table No. 2, p. 17 and compare the A and B elements).

A Scarlatti sonata, then, may have two or three areas of stable tonality in the A section, and one or two in the A' section.

Considering the A section first, if there is only one, it is obviously at the end of the section. If there are two, which is more common, they are the opening tonic section and the closing dominant section, with emphasis on the latter. If there are three, then the two appearances of the new key area are about equal in emphasis. In the first and third instance, the opening tonic section is secondary.

Since the A' section follows closely the construction of the A section, the same number of stable areas will be found in A' minus one, since the opening of A' is always a modulatory area.

In consideration of the huge output of sonatas by Scarlatti, noteworthy variations naturally abound. K. 517 and K. 421 use the second arrangement but omit the tonal foil. The two appearances of the new key merge into one long one making each section of the bipartite form very uneven, being overbalanced on the new key side. Conversely, K. 84 and K. 519 use the sequential extension principle in the opening section. This prolongs it with the result that the tonality of the opening section is strengthened, while the tonality of the new key is weakened.

Table 2, The Areas of Stable Tonality and Modulation in a  
Scarlatti Sonata

The A Section

|                                                                  |                                                                                    |                |                                                         |
|------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------|---------------------------------------------------------|
| Short incisive tonic opening using one or more distinct sections | Modulation to and establishment of the new key area either lightly, or extensively | The tonal foil | Repetition of the new key area with an enriched texture |
|------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------|---------------------------------------------------------|

The A' Section

|                                                                                                 |                |                                                         |
|-------------------------------------------------------------------------------------------------|----------------|---------------------------------------------------------|
| Various modulations ending with the reestablishment of the tonic either lightly, or extensively | The tonal foil | Repetition of the new key area with an enriched texture |
|-------------------------------------------------------------------------------------------------|----------------|---------------------------------------------------------|

Scarlatti: The Coincidence of New Melodic Material

Each of the various areas of a Scarlatti sonata, be it tonally stable or modulatory in character, has a further determining factor, a distinct new melodic figure. The strongest areas, which are located at the end of A and A', possess a forceful new figure of virtuoso-like proportions, spread over several octaves and abounding in leaps and hand crossings.<sup>9</sup>

The tonal foil, in like manner, usually has its own melodic figure<sup>10</sup> but it is of a different character. It is more

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<sup>9</sup> See Example 2, p. 10, measures 66 - 82; Example 3, p. 14, measures 40 - 46; as well as K. 54, measure 21; K. 115, measure 40; and K. 519, measure 73.

<sup>10</sup> See Example 3, p. 14, measures 32 - 40; as well as K. 96, measure 49; and K. 132, measure 25.

narrow in range, shorter in duration, and has a tendency to turn in on itself, resulting in a circular, repetitive type of motion. In keeping with the intent of its surroundings, it is in sharp contrast to what follows.

The initial appearance of the new key, after the opening modulation and before the tonal foil, has a different melodic figure than the last appearance of the new key.<sup>11</sup> The character of the figure is weak except in those sonatas in which this area is expanded.<sup>12</sup>

The use of melodic figures after the double bar is not regular. Usually one or more of the previous ones are used with little attention paid to the opening figure of the sonata. Comparable sections in A' use the same figures as in A. Further variety is given to some areas through the use of two or more figures.<sup>13</sup>

#### C. P. E. Bach: The Lack of Broad Tonal Areas

The keyboard sonatas of C. P. E. Bach<sup>14</sup> present a different approach to well-defined areas of stable tonality. Such areas invariably are characterized by a shortness of duration and a lack

11 See Example 2 and cf. measures 31 and 66, as well as K. 54, cf. measures 9 and 21; and K. 96, cf. measures 25 and 94.

12 See footnote 4.

13 K. 96, cf. measures 78 and 94; measures 26 and 33.

14 See bibliography for edition used. This edition contains both early and late sonatas.

of definite points of demarcation. Furthermore, the harmony makes liberal use of secondary dominants which tend to set up brief points of modulations within a tonal area. In consequence, such areas are weak in comparison to the tonal solidity in corresponding areas in Scarlatti. There is a constant fluctuation between the tonic key and other keys. Upon reaching a new key, C. P. E. Bach does not use sufficiently strong harmonic progressions to establish the key for any length of time. This procedure, coupled with his incessant use of chromatic harmony, causes new key areas to be tenuous. Often the entire A section appears to be a string of short segments loosely connected. (Example 4, p. 20)<sup>15</sup>

Part of the reason for this characteristic lies in Bach's approach to form. Most of his sonatas are in the usual bipartite form. First and third movements use this form, while second movements favor other forms. Bach, like Scarlatti, follows the eighteenth-century view of the sonata as a modulatory form, one in which the main element is the presentation of the tonic and the movement to, and exploration of, the dominant and the return. The journey back to the tonic, after the double bar, touches upon other closely related keys. Bach, however, carries out this format without the clear-cut sectionalism seen in Scarlatti. More important are other elements significant of the later development of the sonata. These are primarily stylistic elements and deal with

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15 See also: Sonata in F Major, Volume I, no. 2; and Sonata in G Major, Volume I, no. 6. References are always to the first movement unless otherwise noted.

16 Sonata in C Major, Volume I, no. 1.

Example 4. Bach, C. P. E. Sonata in B Minor, vol. I, no. 3,  
measures 1 - 20.



thematic structure and rhapsodic abruptness. They will be treated in Chapter III. From a point of view of modulation, Bach's contribution is that of fluency and dramatic use of key change. The former is a natural by-product of a rich, chromatic use of harmony.

A composite step-by-step analysis readily shows the more fluent use of keys which replaces the rigid sectionalism seen in Scarlatti. A typical sonata of C. P. E. Bach opens with a melodic figure in the tonic. This figure may be Baroque in style<sup>16</sup> or more like a theme typical of the late eighteenth century.<sup>17</sup> Themes of this latter type are usually of short duration. They last for only a few measures before disintegrating into melodic fragments. Some movements may even begin with introductions in keys away from the tonic before settling in the tonic key.<sup>18</sup>

A modulation follows and the new key area is established without a distinct new melodic idea,<sup>19</sup> or firm cadence. At times there is a new theme which is somewhat independent of the first theme,<sup>20</sup> but always sounds like a rhythmic continuation of the first one. The old key area, the new, and the area between, however, lack the precision and definition of content and intent so noticeable in Scarlatti. Each is subject to fleeting modulations, weak cadences, and a lack of a schematic use of figuration. After the double bar,

<sup>16</sup> Sonata in C Major, Volume I, no. 1.

<sup>17</sup> Sonata in F Major, Volume I, no. 2.

<sup>18</sup> Sonata in B Minor, Volume I, no. 3.

<sup>19</sup> Sonata in B Minor, Volume I, no. 3; Sonata in G Major, Volume I, no. 6.

<sup>20</sup> Sonata in A Major, Volume I, no. 4; Sonata in F Major, Volume I, no. 5; Sonata in G Major, Volume II, no. 1.



there are many brief modulations before the return of the tonic. At best, firm areas of tonality are found at the beginning of the tonic and dominant in A, and at the recapitulation. The liberal use of chromatic harmony, which always implies other keys, weakens the stability of all other areas.

It is true that in the development of the sonata, stable areas of tonality were the foundation of the form. In C. P. E. Bach's sonatas, the harmony does not sharply define such areas. From this point of view the form is weak. On the other hand, as previously stated, he imparts to the sonata a fluency of key change which is a natural by-product of chromatic harmony. This along with his flair for the dramatic is probably his most important contribution to the development of the sonata. It was manifested not in his immediate successors, but later in the works of Beethoven.

#### Haydn and Mozart: Clarity and Balance

In the sonatas of Haydn and Mozart, the areas of tonal stability are apparent and need little comment. What is distinctly new is the regularity of the construction of these areas. This is brought about by a clear use of key, distinct thematic material and firm cadences. Like Scarlatti, the harmony of each stable section is very tonal avoiding the many glances at other keys seen in C. P. E. Bach's sonatas. The opening tonic is always accompanied by a prominent theme. The new key, however, does not always carry a new theme and there are still many mono-thematic expositions in Haydn's early piano sonatas. Mozart's piano sonatas invariably have a new second theme, but caution must be used before assuming that "thematic

dualism", as it is often called, exists in such works. Although most of them are contrasting in character,<sup>21</sup> some second themes sound more like the continuation of the first theme<sup>22</sup> and hardly create a vital relationship with the first one. This is a trait to be seen only in later sonatas.

By the late eighteenth century the various arrangements of stable tonal areas in the sonata form become fixed and little artistic variation occurs. The interesting arrangements found in Scarlatti, see Table No. 2, p. 17, and the fluency noted in C. P. E. Bach's sonatas are replaced by a regular use of two stable areas in the exposition, and one in the recapitulation. Of course there are compensating factors, namely thematic. The basic structure of the theme, its balance, repetition and variation, is another new element in the late eighteenth-century sonata. The areas of stable tonality remain basically the same as they were in Scarlatti. Their use may not be so varied, but, on the other hand, it is articulated by the regular use of firm tonalities and attendant thematic material.

#### Summary

A review of the eighteenth-century bipartite keyboard sonata form shows that both A and A' had its own area or areas of tonal stability. The A section usually exhibits two such areas: a short introductory area in the tonic, and a longer one in the

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21 K. 284, 332, 333.

22 K. 280, 283, 545.



dominant. This broad outline is subject to creative individual treatment. Scarlatti pays little attention to the opening tonic quickly moving to the new key. He strongly emphasizes the latter by stating it, moving away from it, and restating it after using three different melodic figures to reinforce this procedure. C. P. E. Bach, on the other hand, treats the two major keys of the first part as generating points. He initiates the respective keys but does not emphasize the relationship of the two keys by firmly stating each. Many times each key has its own melodic figure. Usually the first one is a well-developed figure, or theme, while the second lacks enough distinction to call it either. Haydn and Mozart add clarity and balance to the two key areas.

The A' section of the bipartite form possesses one area of tonal stability: the return of the tonic. Scarlatti uses the same technique to set up this area as he did its counterpart in the A section. It is stated, moved away from, and restated with emphasis. In C. P. E. Bach, this area represents the most stable area in both sections. Not only because the material first heard in two keys in the first half is now heard in one, but because of the feeling of tonal stability after the far-flung modulations following the double bar. In Haydn and Mozart, the recapitulation represents the stable area in the last part of the form. It is often varied somewhat to offset the sameness of key, especially in the transition from the first to the second theme.

One final point should be noted in the study of the areas of tonal stability. Tonal stability does not preclude short modulations or the use of secondary dominants. Any basic triad may be



embellished by its own dominant without interrupting the harmonic flow and stability of a given key, providing the triad embellished is treated as a chord in the given key and not emphasized as a new tonic. In Scarlatti this does not usually occur. His stable areas are forcefully outlined by primary chords, namely tonic, subdominant and dominant. The above technique is found only in modulatory areas. In contrast, C. P. E. Bach uses this technique incessantly and his stable areas are always subject to glances toward other keys. Haydn and Mozart resort to a clearer tonality due to a slower harmonic rhythm. Secondary dominants are commonly used but within the key, and do not confuse the sounding key. Therefore, in all instances, tonal stability is relative to the harmonic style of the composer.

## CHAPTER II

### THE MUSICAL MANNER AND EFFECT OF MODULATION: THE MAIN MODULATION IN THE A SECTION

There are two areas of modulation in the eighteenth-century keyboard bipartite form. The first area, located near the beginning of the A section, is a relatively short one, except in Scarlatti, occurring between the opening tonic and the new key, which is usually the dominant key. The second area, located at the beginning of the A' section, is a larger area and uses several keys. The function of the first area is transitional, while the function of the second area is explorative. Invariably, the explorations of this second area end in the direction of the tonic. In the works of Scarlatti, there is the additional modulation to and from the tonal foil, which is an area of diversion within the second key. (See Table No. 2, p. 17) The function and manner in which these various modulatory areas are handled is different and peculiar to each major keyboard composer of the eighteenth century. The purpose of this chapter is to investigate the style and musical effect of the modulations in the A section.

Scarlatti: The Opening Modulation, Three Types.

The opening modulation serves the primary function of changing the tonality from the tonic to its dominant or relative

major in the case of a minor tonic. These are the usual key relations found at the beginning of most sonatas. In Scarlatti's works, this area offers many interesting details. Three types will be shown which illustrate the variety of approach to this opening modulation.

The first type is an example of an approach in which various components, or short sections, make up the modulation. The second type uses, as its main attribute, the blurring of the old key prior to moving to the new key. The third type is the most common; it is the half cadence modulation in which the opening tonic section terminates on a half cadence, followed by a pause and the sounding of the new key with a new melodic motive. These three factors comprise this particular type of modulation. The half cadence, in and of itself, is only the initial factor and obviously cannot produce a modulation. These implications are understood throughout this work whenever the term "half cadence modulation" is used.

K. 16 is typical of the first type<sup>1</sup> (Example 1, p. 7). The sonata opens with a short exposition of the tonic key, measures 1 - 13. The area of modulation begins at measure 7 and is consummated in measure 34. It contains, within itself, four noticeable components, each with a separate function. (1) Measures 7 - 13 present new material in the tonic key different from the opening tonic material. (2) Measures 14 - 17 present the same material but with the first hint of a new key occurring in measure 15, with the use of the B natural appoggiatura. This appoggiatura looks toward the

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1 See also K. 28 and 44.

key of C major, especially when its rhythmic prominence and repetition are considered in measure 17. Thus the first hint of modulation is toward C major, the supertonic, or dominant of the dominant, a common procedure. Measures 7 - 13 are pivotal since they contain the material, both melodic and harmonic, from which the ensuing modulation is executed. This is also a common procedure. Scarlatti often uses two or more melodic figures in the opening tonic section, each separated by a strong cadence. Very often the last figure is altered and repeated in the modulatory section proper. Therefore, upon assimilating Scarlatti's style, these last figures, in the opening tonic area, are heard as the beginning of the modulatory section, despite the fact that they are unquestionably in the tonic key. In this sonata, compare measures 7 - 13 with measures 14 - 17.

(3) The third component, measures 18 - 22, uses the material of measures 14 - 17 repeating it, but starting on the dominant of the tonic key. The above mentioned appoggiatura then inflexes the tonality toward the key of G major, the altered supertonic of the new key, F major, or the dominant of the dominant of the new key. However, this key is not used, and the old dominant chord, F, becomes the new tonic. This is confirmed in measures 22 - 23.

(4) The last component contains the new key, F major, reinforced with the new melodic material, in measures 22 - 34. Thus the simple modulation from B flat major to F major is enhanced by two glances at other keys, C major and G major.

The usual analysis of this modulation results in calling



it a common chord modulation with the old dominant equalling the new tonic in measures 20 or 22. This terminology is, of course, correct. But it is somewhat inadequate in that it gives no indication of the musical effect of the modulation, that is the subtleties noted thus far; namely the implied keys, the use of melodic figuration, and the accumulation of various elements or components, each contributing its own musical effect to the modulation as a whole.

Thus, the above modulation is distinguished by an embarkation point well-established in the old key, followed by a new figure, first stated in the old key and then in the new, followed by the arrival in the new key, which is emphasized by the new figuration. Other Scarlatti sonatas, which use this same general type of opening modulation, may present other arrangements, but the essential element is the enchainment of segments, each with a special function.

The fact that the same melodic material at the end of one key is used for the beginning of the other effects a particularly smooth type of modulation, and gives the impression of two fairly equal keys on the same plane. In contrast, composers of a later era often use one theme for the opening tonic, another for the dominant, and sometimes even a third for the transitional section. Be that as it may, the cohesiveness or relationship of the two keys in later works differ from a similar relationship in Scarlatti's sonatas. The former gives the impression of two contrasting or separate key areas at two different levels, while in Scarlatti, the feeling is more one of equality.

The second general type of opening modulation is easier



to describe; the main element is the blurring of the old key before emerging out of this ambiguity into an area which clearly points to a certain tonality. In K. 3, (Example 5, p. 31) the establishment of the new key, relative major, is particularly heightened by several factors. To begin with, the opening tonic area in this sonata employs the expansion technique, in which the opening figure is quickly used in several keys by means of sequence. The tonic is in the key of A minor and, within the first ten measures, there are modulations to C major, D minor and E minor. A chromatically descending passage<sup>2</sup>, measures 11 - 15, blurs the already vague tonality of E minor. Emerging from the blurring are three diminished seventh chords which clearly move the tonality to E minor, D minor and C minor. From there the mode is changed and the intended tonality, C major, is reached, measure 29.

K. 54 is similar. There is the customary short opening in the tonic, measures 1 - 4. Then follows the blurring of the tonic, not the obliteration of it, measures 5 - 8. At measure 8, the tonic emerges out of the blurring clearly cadencing on the dominant. The new key simply begins after this cadence with a new figure. The process is common enough, but is heightened by the preceding four measures.

K. 545 (Example 6, p. 32) presents a transitional area of modulation, measures 7 - 20, which, for all its apparent ambiguity,

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<sup>2</sup> Note how this chromatically descending passage also serves as the tonal foil, cf. measures 36 - 44 and measures 86 - 92.

Example 5. Scarlatti, D. Sonata in A Minor, K. 3,  
measures 9 - 35.

*resto*

I

9

17

25

33

Example 6. Scarlatti, D. Sonata in B Flat Major, K. 545,  
measures 5 - 24.

**Prestissimo**

LX

5

10

15

20

b6 5 b6 5

basically uses the blurring principal. The basic key movement is from B flat major to G minor. As is so common in Scarlatti, the modulatory passage begins with a new melodic figure in a clear-cut tonic key area, measures 7 - 10. Then follows the area of tonal obscurity, measures 11 - 19. In it tonal orientation is lost, which renders the arrival at the new key more satisfying. The harmony used is not so complicated as it appears. The underlying principle is the typical bass progression moving along the scale degrees of flat six-five-one.<sup>3</sup> The flat sixth scale degree is usually harmonized by a minor IV in first inversion, or a major VI in root position, as in measures 15 and 17 where both are used. The intended key at this point is C minor. Here it receives the embellishment of a dominant seventh, in measures 11 through 14, reinforcing the movement from the flat sixth scale degree to the fifth. The ambiguity of the passage is further deepened by an unexpected ending. The fifth scale degree, harmonized by the dominant seventh chord, measures 16 and 18, unexpectedly embellishes itself with a diminished seventh chord, measure 19, changes its mode to minor, measure 20, and establishes itself as a tonic instead of resolving to the key of C major.

In these three examples, K. 3, 54 and 545, which illustrate the emergence of the new key out of an area of tonal haziness, a dynamic relationship is set up between the new key and the old key. The intensity of the relationship is largely due to the manner in

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3 See Kirkpatrick's Domenico Scarlatti, p. 207 ff.

which the transition is effected. It is one thing to move from one well-established key to another well-established key, and still another to move from a well-established key area to a hazy area, and then to a new well-established key. The relationship between the two areas in each case cannot help but be different. The latter is unquestionably more intense.

Probably the most common type of modulation to be found between the opening tonic and dominant key is type three: the half cadence type. In this approach, the tonic key cadences on its dominant, a pause follows, and then the composition is renewed in the new key with a new motive. By the late eighteenth century, this technique becomes a veritable cliché found in innumerable sonatas, its most common use being between the initial sounding of the tonic and dominant keys in the A section. This type of key change is a particularly smooth one despite the fact that there is no modulation per se, i.e., no transition from one key to the next. If there is a transition or modulation, it is the half cadence in the old key and the pause. Cadencing on the dominant was an accepted type of close and proved a very useful modulatory device at this point since, in the recapitulation, it leads neatly back to the tonic. The half cadence looks in two tonal directions, toward the tonic, and toward the dominant.

K. 421 (Example 7, p. 35) contains a more interesting variant of this type. The half cadence between the opening tonic, C major, and dominant, G major, is in the surprising key of the dominant, measure 29, i.e. V in G major, a D major dominant chord.

Example 7. Scarlatti, D. Sonata in C Major, K. 421,  
measures 1 - 36.

Allegro

XLII

9

16

23

31

It is customary in the case of modulations of this general type, to expect the key after the pause to be that of the last chord prior to the pause. If this sonata were conventional, the half cadence would be on a G chord, dominant of the tonic, C major, and the new tonality after the pause would be in that key, G major. But Scarlatti prematurely modulates to the dominant and ends with a half cadence. Or, to put it another way, he "over-modulates" by one key. However, after the pause Scarlatti treats the D major chord not as a tonic, as expected, but as a dominant. He cadences in the expected key at measure 36, but not before five measures of D major, measures 31 - 36, almost confirming it as the new key instead of G major. This technique of "over-modulating" is common enough in later sonatas, but somewhat unique in Scarlatti's works.

So much for the end of the modulatory section of K. 421. There are earlier features to be considered. The modulation which occurs at measure 36 begins at measure 8 where the opening tonic section ends on a half cadence. The modulatory section proper, measures 9 - 30, abruptly begins in G minor, the dominant minor. Four measures of G minor are followed by four measures of A minor using the same material. Then four additional measures of A minor, with new material, are followed by four of G major, plus a five measure extension and the half cadence, which is the crux of this discussion. Illustrated here is the common Scarlatti procedure of keeping the figuration the same while modulating to the next key. If another modulation is to follow, then the figuration is changed before modulating, again resulting in two different figures within one key: one left over from the modulation from the previous key,

and one to be used to modulate to the next, measures 13 - 21. Hence there is considerable activity before the half cadence in the unexpected key. Not only do we have an unusual treatment of a common half cadence, but also, prior to it, an enchainment of components described above. What often begins as a simple discussion of a common technique must often be enlarged to encompass all features which in some way bear on the modulation itself. As in K. 421, a string of musical devices often leads up to the actual point of modulation. The accumulation of events is as much a part of the key change as the pivot chord itself. In fact, without this broad approach, the modulations themselves appear commonplace. Their effect is only apparent in context.

K. 119 also illustrates a typical half cadence modulation, measures 35 and 36. Here it is what precedes and follows the modulation, and not the modulation itself, i.e. pivot chord, which renders the key change effective. In this sonata, it is the use of a distinctive modulatory figure at the beginning of the modulatory section, measure 19, and the unexpected use of the dominant minor key, measure 36. Other examples show that in K. 96 there is no modulatory section at all, measures 25 and 26, which may be due to the fact that the opening tonic section is well-developed, measures 1 - 25. The opening section simply ends on a half cadence and the new section begins in the dominant key. K. 115 contains the more usual modulatory section, measures 9 - 21. Here the half cadence is enlivened by repetition and a new figure, measures 16 - 19, having been preceded by some tonal blurring, measures 9 - 14.

The classification of Scarlatti's modulations into three general types is naturally somewhat artificial. Many sonatas mix the various elements with varying degrees of emphasis on one or the other. For the most part, however, three characteristics are used for the opening modulation: (1) a compilation of various melodic and harmonic components, (2) a blurring of the original tonic key, and (3) the use of a half cadence. The actual unfolding of each type is, of course, peculiar to each sonata.

#### Scarlatti: The Modulation to and from the Tonal Foil

For the most part there is but one major modulation in the first part of the bipartite form. In Scarlatti's works, however, there is the additional modulation to and from the tonal foil. This modulation usually takes the form of a change of mode, from major to minor, and back. It is an abrupt change of key clearly moving away from the mainstream major sound of the sonata. It always sounds like a tonal apposition, an "aside". It is also characterized by strong figuration and a different texture.<sup>4</sup> The feeling of apposition is largely due to the repetitiveness of the harmony and melody. It purposely does not employ the forward motion of primary chordal movement which is a constant element in Scarlatti's harmony. Instead it uses a small circular harmonic motion. Everything about the foil is in contrast to its surroundings: melodic figuration, texture, harmonic movement and tonality. The abrupt shift of mode, which delimits it, causes it to be unhesitatingly lifted out of the flow of the composition, and then

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<sup>4</sup> See Example 2, p. 10, measures 43 - 50; and Example 3, p. 14, measures 32 - 40.

dropped back into it, aided by the added vigor of a sudden shift to major. Here modulation serves the special function of heightening a new key area by momentarily moving away from it. The technique itself is not new, but the artistic emphasis placed on it is peculiar to Scarlatti's works.<sup>5</sup>

There is always a wide range of noteworthy variation of the essential characteristics of any section of a Scarlatti sonata. The modulation to and from the foil may be replaced by other elements. In K. 519 the tonic exposition is the expansion kind. Its last key overlaps the key of the foil destroying the usual effect of a sudden shift to minor. However, the sudden shift to major at the end of the foil is preserved. In this case the foil is replaced by a quasi-pedal point, which, assuming the role of the foil, points out the final tonality of the section. One further distinguished variant is noted in K. 119 in which an extraordinary accumulation of dissonance is effectively employed to set up the final tonality.<sup>6</sup>

#### C. P. E. Bach: The Opening Modulation

It has been previously noted how changeable form is in C. P. E. Bach's sonatas. A precise distinction between the areas of tonal stability and the areas of modulation is missing. This approach permeates his sonatas making it difficult to ascertain

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5 K. 28, measures 33 - 42; the foil in K. 492 has two distinct textures.

6 See Kirkpatrick's explanation of such clusters of dissonances in Domenico Scarlatti, p. 229 ff.

which modulation, at the beginning of the movement, will turn out to be the modulation to the dominant. Additional features, which would help to give clarity and function to this modulation, are not present. Cadences are weak and blurred. Key stability is a tenuous matter, and melodic figuration, or theme-like opening motives, are not used with any consistency. Most of the time the dominant key emerges with some kind of nondescript melodic material. Often the thematic articulation is so inarticulate as to cause the establishment of the dominant key to be in doubt up to the final cadence of the A section. In contrast, there are other times when the opening melodic material is used again in the dominant key<sup>7</sup> thereby highlighting its appearance.

C. P. E. Bach uses the same basic technique to reach structurally important keys as he does to accomplish simple fleeting modulations. A secondary dominant or diminished chord often serves to change the key quickly without much notice. Other composers, especially Scarlatti and late eighteenth-century composers, approach a major modulation with much care and ingenuity; always indicating, in some way or other, the pending change of key. We already have noted the extraordinarily fruitful way in which Scarlatti modulates to the new key in the A section. Subsequent discussion will reveal a similar ingenuity in Haydn and Mozart, especially in the return of the tonic in A'. C. P. E. Bach, on the other hand, uses nothing to herald either the initial modulation to the dominant, or the return of the tonic in A'. In fact,

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7 Sonata in F Major, Volume I, no. 2.



the incessant use of minute modulations and the lack of sectionalism render the return of the tonic very weak. It is only the concurrent return of the opening figure, or theme, which marks it. There is no tonal tension set up which demands it.

A few examples will illustrate C. P. E. Bach's treatment of the opening modulation. In the short twenty measures which comprise the A part of the first movement of the Sonata in B Minor, Volume I, no. 3 (Example 4, p. 20) Bach uses four musical ideas. The first one, measures 1 - 4, serves as an introduction to the tonic, B minor. The second one, measures 4 - 8, presents what appears to be the opening theme in the tonic; however, within four measures, the theme is dissipated and the tonality moves to G major. The same procedure marks the third section, measures 8 - 16. Something resembling a theme begins but never becomes one, and the tonality reaches the expected dominant, F sharp minor. One would expect the fourth idea, measures 16 - 20, to confirm the dominant. This it does, but in a weak manner using a figure which resembles the opening one.

There is no clear-cut modulatory plan. The journey from B minor to its dominant takes in, rather prominently, G major; besides alluding to E minor and C sharp minor. Furthermore, once the new key is attained, it is barely confirmed. The function of the second and third ideas, especially the latter in G major, is almost incidental. They neither enhance nor point to the dominant key. The use of other keys along the way to the dominant



does not insure a more dramatic arrival at the dominant. Such would be the case in Scarlatti. He would set them off in such a way as to make the arrival at the dominant more satisfying. The constant merging of keys in C. P. E. Bach, however, results in a circuitous route to the dominant, rather than a direct one. The use of other keys weakens the arrival of the dominant, since its relationship to the tonic is practically lost.

The first movement of the Sonata in G Major, Volume I, no. 6 (Example 8, p. 43) contains a similar diffuseness of sections which lack a clear-cut function. Briefly, there are five ideas or sections. The first one, measures 1 - 7, establishes the key and presents two ideas: some brief introductory chords and a thematic fragment at measure 3. It ends with a half cadence in the tonic. Section two, measures 7 - 11, uses some nondescript figuration and cadences firmly in the tonic. Section three, measures 11 - 16, starts with a strong figure but it soon disintegrates and there is a quasi-modulation to the dominant. Section four, measures 16 - 20, rambles on starting from the tonic, and chromatically moves to the dominant. This section, as it turns out, proves to be the modulatory one, but without anything to give it character. Section five, measures 20 - 25, confirms the new key but again without any thematic incisiveness. This last section, i.e., the new key area, cannot help but be weak as it is in all of C. P. E. Bach's sonatas. The reasons are basic: (1) the sections which precede it are too similar to it; (2) there is nothing to render the last section imminent, nothing to throw it into relief; and, (3) it consistently uses nondescript figuration. In other words, everything

Example 8. Bach, C. P. E. Sonata in G Major, vol. 1, no. 6,  
measures 1 - 26.

*Allegretto moderato.*

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has a tendency to sound too much alike to give any element, be it an area of tonal stability or an area of modulation, any overt distinction or precise function.

It must be kept in mind that the sonatas in this collection include early ones as well as late ones. Some are close to the old Baroque dance-binary form; while some, those mentioned above, illustrate the new sonata style which leads to the sonatas of Haydn and Mozart. Hence, the latter are more fruitful for this study. In passing, it may be noted that the older type flows along smoothly, gradually moving away from the tonic and modulating to the dominant, arriving there without special distinction. The entire first half is conceived as a single unit based on one figure which is spun out in typical Baroque fashion. No incipient themes or capricious modulations are found in these sonatas.<sup>8</sup> They are rather plain and similar to countless other bipartite sonatas of this type.

Scarlatti and C. P. E. Bach, The Opening Modulation Compared

In comparing the use of modulation in Scarlatti and C. P. E. Bach, it becomes apparent that the modulation to the dominant for Scarlatti was a tonal goal to be reached through a forceful accumulation of sections, each one leading to and setting up the new key. This feeling of directness to the new key is not experienced in C. P. E. Bach's sonatas. No scheme is discernible which gives a feeling of logical continuity to the end of the section. Snatches of themes and key areas present more of a mosaic pattern of form in which the modulation

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<sup>8</sup> Sonata in C Major, Volume I, no. 1; Sonata in A Minor, Volume 3, no. 1.

to the new key is secondary. This is in contrast to the strong linear feeling in Scarlatti created by a constant leaning toward the final cadence of the A section.

#### Haydn and Mozart: Thematic Considerations

In the late eighteenth century, the general form of the A part of the sonata takes on a new characteristic. Formerly, the tonal exposition of the two keys was the single main element. Now there is an accompanying thematic emphasis, especially with the opening tonic key area. This emphasis was already seen in C. P. E. Bach's sonatas. Many of his openings use incipient themes in the late eighteenth-century style in contrast to Baroque motivic figuration. This trend continued; and by the time of Haydn and Mozart the opening tonic area not only offered a stable exposition of the tonic key, but also presented a significant theme.

We have come a long way from Kollmann's description (p. 3) which stressed the exposition of various key areas and did not even mention thematic considerations. Kollmann's description obviously fits the earlier eighteenth-century sonatas of Scarlatti better than it does the later works of Haydn and Mozart. A comparison between the opening tonic area of a Scarlatti and Haydn or Mozart sonata will quickly reveal the differences.

Not only does the late eighteenth-century sonata stress key and theme in the opening tonic, but also in the new key area, although to a noticeably less extent. Thus the A section of the sonata now consists of two equally important key areas, though the latter is longer in length. In C. P. E. Bach, the emphasis was mainly upon the first key area, with the attainment of the new key area relegated to an

incidental role. The opposite was true in Scarlatti. In Haydn and Mozart, the two areas are brought into balance. The role of the opening modulation, then, becomes overly simple. Its function is to change the tonality from the tonic to the dominant, so that the new key area may be used, often with a theme of its own. The two areas are in balance and the modulation exists to move the tonality smoothly from the one to the other. It does not stress or highlight the latter over the former as in Scarlatti.

The actual treatment bears this out. Many times the opening modulation is perfunctory. A more skillful use is reserved for the development section. The two key areas in the exposition are considered two different tonalities in which to state a separate theme. A dynamic relationship was not created between the key areas as, for example, in the works of Scarlatti.

#### Haydn and Mozart: The Opening Modulation, Two Types

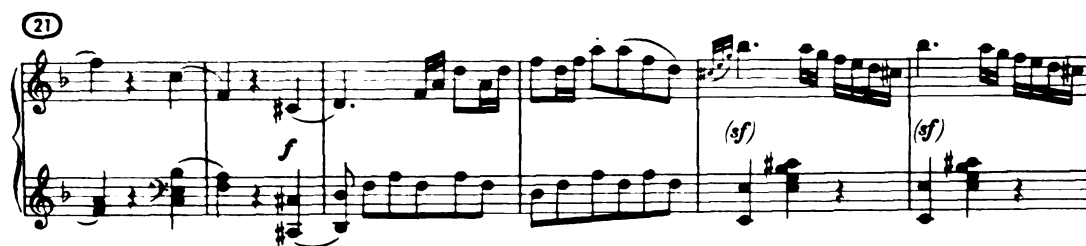
Traditionally late eighteenth-century composers used two types of modulations at this point, each basically a half cadence type. The first, and most common, modulates, in the transitional section, to the dominant key without a strong emphasis of its tonic chord, but with a strong close on a half cadence in the dominant key. Thus a sonata which begins in F major will modulate, in the transitional section, lightly to C major, but will end with a strong half cadence in the key of C major, i.e. on a G major chord. A pause follows and the new theme begins in C major, thereby securing the new key. The main aspect of this modulation is the establishment of a strong V-I harmonic movement between the last chord of the transitional section and the beginning

of the new key area. This has to be handled carefully for if the modulation in the transitional section is too firm, then the V-I progression over the pause will not sound strong and fresh. The approach to the dominant half cadence in the new key is often elaborated by long repeated rhythmic patterns and harmonic embellishments. There are times, however, when the modulation to the dominant key, prior to the pause, is extensive; yet the cadence is still on the dominant chord of the new key, so that the harmonic movement over the pause may be the dominant-tonic relationship. Subsequent study of modulation in the A' section will show how composers preserve this fresh V-I relationship in the recapitulation where there is, in effect, no modulation needed between the A and B themes.

Mozart's Sonata in F Major, K. 332, measures 21 - 45

(Example 9, p. 48) illustrates this procedure. The opening thematic material ends in measure 22 in the key of F major. A long transitional section, measures 22 - 40, touches upon several keys including the key of the upcoming second subject, C major. The allusion itself, however, is in C minor, measure 37. The key of C minor is only hinted at and is primarily sustained by its dominant. The relationship, then, from the end of the transitional section to the beginning of the B theme, measure 40 - 41, is a strong tonic to dominant, here re-enforced by a change from minor to major.

In the recapitulation, this type of modulation obviously must be altered lest the movement end in the dominant key. Usually the transitional section of A is repeated but must be changed to end on a half cadence in the tonic and not the dominant. It is a fairly

Example 9. Mozart, W. Sonata in F Major, K. 332, measures 21 - 45.

easy matter to set up a strong V-I feeling in the exposition where the B theme begins, since a modulation to a key a fifth away takes place. In the recapitulation no such modulation dare take place and yet the harmonic movement to the B theme, i.e. second theme, invariably sounds like a fresh V-I feeling in a new key. This is accomplished by alluding to other tonalities before landing on the tonic half cadence prior to the B theme. These tonal excursions, in the transitional section of A', cause the V-I harmonic movement, which introduces the second thematic group, to sound as if a new key were being established, as in A, when, in reality, it is the same key returning after a brief suspension.

This same transition, illustrated in Example 9, is now seen in the recapitulation (Example 10, p. 50). The intended key is F major, i.e. the key of the B theme in the recapitulation, measure 177, but F major is its embarking point, measure 154. Therefore, to make the arrival point of F major sound fresh in measure 177, the tonality moves away from F major and then back to it lightly, emphasizing its dominant. Then the movement from the end of the transitional section to the beginning of the B theme retains the strong V-I relationship used in the exposition. In other words, a modulation occurs which seems to go somewhere but really goes nowhere.<sup>9</sup>

The second major type of opening half cadence modulation simply ends on the dominant of the tonic key. Sometimes it is embellished by its own dominant which gives it a feeling of a modulation.

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9 For additional examples of type 1 see: K. 280, movement 3; K. 309, K. 332, movements 1 and 3; K. 333; and K. 533.



**Example 10. Mozart, W. Sonata in F Major, K. 332, measures 21 - 45.**

The musical score is presented in six systems, each with a measure number in a circle at the beginning. The key signature is one flat (F major), and the time signature is 4/4. The notation includes treble and bass staves with various musical symbols such as notes, rests, accidentals, and dynamic markings.

- Measure 148:** The right hand begins with a series of eighth notes, while the left hand provides a steady eighth-note accompaniment.
- Measure 153:** The right hand features a triplet of eighth notes. Dynamic markings *(sf)* (sforzando) are present in both hands.
- Measure 160:** The right hand has a triplet of eighth notes. Dynamic markings *(sf)* are present in both hands.
- Measure 165:** The right hand has a triplet of eighth notes. Dynamic markings *(sf)* are present in both hands.
- Measure 169:** The right hand has a triplet of eighth notes. Dynamic markings *(sf)* are present in both hands.
- Measure 173:** The right hand has a triplet of eighth notes. Dynamic markings *(sf)* are present in both hands.

The effect is somewhere between a half cadence in the tonic, or a light cadence in the dominant key. This cadence is very practical, for it can then be followed by a confirmation of the dominant key, as it is in the exposition, or without change it can lead back to the tonic, as it often does in the recapitulation. The strong dominant-tonic relationship over the pause, characteristic of the first major type, is not present at all in the exposition, and only sometimes in the recapitulation, providing the composer moves away from the tonic in order to freshen the half cadence at the end of the transitional section.

The first movement of K. 281 in B flat major (Example 11, p. 52) is an example of this second type with a note-for-note parallel in the recapitulation. Measures 8 - 17 of the exposition are exactly the same as measures 8 - 17 of the recapitulation.<sup>10</sup> The strong V-I relationship over the pause, measure 17, characteristic of the first major type is not present. On the other hand, K. 279 illustrates how the dominant-tonic relationship over the pause in the recapitulation can be revitalized and does not have to be identical. To begin with, there is hardly a transitional section in and of itself, but the approach to the half cadence in the exposition is clearly in C major, measures 14 - 16<sup>11</sup>. In the recapitulation the approach to the half cadence is extended. It begins in measure 62 and extends to measure 70. It begins in C major but moves to F major, and to D minor. Then

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10 For additional examples of type 2 see: K. 280, K. 283, K. 284 and K. 545.

11 Note how the following tonality is delayed by a modulation to its supertonic.

Example 11. Mozart, W. Sonata in B Flat Major, K. 281,  
measures 1 -17.

**Allegro**

3

5

9

12

15

*tr*

*sf*

*p*

*f*

*p*

it moves to G major which is the half cadence in the tonic.<sup>12</sup> These excursions heighten the G chord making it sound like a fresh key in appearance when, in reality, the fresh key turns out to be itself. It is a noteworthy variant where a note-for-note parallel is usually used.

### Summary

As in Chapter I, our study thus far has placed much emphasis on Scarlatti's works. Attention has been drawn to his varied approach to the major modulation in A. The emphasis is justified not only by the music but by the desire to bring to light certain facets of Scarlatti's style. The most interesting point, musically speaking, is the variety of effects to be found in his approach to modulation. The relationship between two stable key areas is largely dependent on the type of modulation or modulations which come between them. At times the key relationship appears equal or similar. Other times, the blurring modulatory interval seems to stress the second key. Finally, if a series of sections is used, the accumulation of forward motion inevitably stresses the last area, i.e. the new key area. Whatever the case, Scarlatti's major modulations are always bold and decisive. They become imminent measures ahead of time, and are invariably enhanced by new figuration or dovetailing figuration.

No matter how C. P. E. Bach's sonatas are viewed, they are always puzzling. Musical effects, especially modulatory ones, seem to be weak due to an abundant use of fleeting modulations which lack distinguishing features. As previously noted, the redeeming feature

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<sup>12</sup> The fact that the "new" key of C major is preceded by a modulation to its supertonic only enhances the whole procedure.



of C. P. E. Bach's sonatas is probably his dramatic improvisatory flair. Much is often made of his contribution to sonata form. Internal evidence does not seem to bear this out. He does not alter the basic sonata form in any way. He does, however, impart to it new stylistic attributes: fluency of key change, thematic articulation and an improvisatory quality. But by and large, his style of composition did not idiomatically fit the form to any great degree. The broad key planes and juxtaposition of sections did not suit his rhapsodical style, which was more at home in his Fantasies and in his renowned ability to improvise.

In the hands of Haydn and Mozart, the opening modulation falls into two related categories. Both serve as a smooth tonal ladder leading from one key to the other. Beyond this, its finest musical attribute is an occasional excellent theme. By the late eighteenth century the sonata form became a strict formula, and there was little use of the variety of approaches seen in Scarlatti's works. Composers were more interested in themes than keys. Even in the development section the use of keys is somewhat perfunctory. It is the attendant thematic factors which prove more interesting.

### CHAPTER III

#### THE MUSICAL EFFECT AND MANNER OF MODULATION: MODULATION IN THE A' SECTION

This chapter begins with a presentation of the general modulatory properties to be found in the A' section of Scarlatti's sonatas. Four characteristics will be presented as illustrative of Scarlatti's approach to modulation in A'. Each will be supported with examples.

The discussion, upon reaching the works of C. P. E. Bach, centers on his innovations in form. Dance-binary and incipient sonata allegro form will be presented and explained. The use of modulation is seen to be the same in both variants.

Haydn's development sections present a more fruitful study. Many types of modulatory motion are noted in them, as well as a new basic approach to modulation after the double bar; one in which thematic material plays a prominent role.

The chapter closes with a long investigation into the consummate works of Mozart, and the six major traits found in his development sections.

## "Development Section", A Misnomer

Traditionally the modulatory section of A' is called the "development section". Even the most casual appraisal of this area in the eighteenth century will reveal the misnomer. Hardly ever is any of the thematic material found in the A section subject to motivic development. To be sure, restatement with variation in other keys occurs everywhere, which may be considered as a type of development in and of itself, but restatement and development are not synonymous techniques. This section, even in the late eighteenth century, follows the traditional scheme for sonata movements, that of key expansion. Hence it is expository and not developmental in character. The latter approach is more appropriate for sonata form in the next century. The sparing use of the term, "development section" in this study is always subject to the above qualifications.

## Scarlatti: The Four Characteristics

Scarlatti's sonatas exhibit a careful use of balance between the sections found in A and A'. (See Table No. 2, p. 17) Observing this balance from the end of each section backwards to its beginning, it is noted that the last two sections, the tonal foil and the final key area, are the same except, of course, for key. Prior to the tonal foil an area of modulation in both A and A' occurs, but here differences abound. In A the main purpose was to reach the closest related key directly and set up an interminable drive to the end of the section. The characteristics of this modulation were listed at the beginning of Chapter II. Our attention is now directed to the properties of the



modulations after the double bar. Here a different purpose is observed; modulation is now more excursive.

There is an abundant variety of procedures found at this point in Scarlatti's works. As with modulatory characteristics in A, there is no rigid pattern or consistent use of certain procedures which would result in a neat classification or collation of the numerous modulatory effects. In general, however, certain aspects are commonly used.

(1) Very often after the double bar, the tonality immediately turns to the direction of the tonic; that is, there is little use of the dominant key, or any other foreign key, in A'. Confirmation of the tonic may be far off and briefly interrupted by other keys, but the direction of the tonality is fairly clear.

(2) At other times there is a fair amount of dominant key area before the tonality moves to other keys.

(3) Hazy tonalities sometimes make it difficult to ascertain what the key actually is. Tonic and dominant, major and minor may freely intermingle. The tonality may move in the direction of a certain key only to avoid it at the last minute. Or the expected arrival at a key may be altered at the last moment to suggest another key immediately.

(4) Many times the modulations to other keys lay out a logical pattern of tonalities which lead back to the tonic. These tonalities act as stepping stones for the return to the tonic. They



may even be primary chords in the tonic key. At other times this logical unfolding of the modulations is missing, and the keys being used sound more digressive in nature.

These then are the general attributes to be found at the beginning of A' in Scarlatti's works. Examples will now be given which illustrate them. Usually one or two of these properties will constitute the main element of a modulatory section. Rarely are they all found within one development section.

K. 96 (Example 12, p. 59) utilizes one of the simpler procedures, the immediate return to the direction of the tonic at the beginning of A' (characteristic 1). Here A' begins in D major, the tonic, but the key is not solidified until 24 measures later in measure 138, after the half cadence in D major, the pause, and the use of melodic material from A, measure 26. Along the way, measures 115 - 138, D major is kept sounding mainly through the repeated harmonies on A. Harmonic progression is partially suspended while the harmonies on A keep pointing to the direction of D major, measures 126 - 138. The short modulation to A major, in measure 126, enhances the entire process. The effect of this modulatory section is mainly one of hovering over the new key before genuinely landing on it, and initiating harmonic motion in it. This is a very effective and common type of modulation often found prior to the return of the tonic in A'. Later composers extensively use this type of modulation before the return of the tonic, i.e., recapitulation. The entire modulatory section of A' in this sonata, although it is relatively short, very effectively employs this procedure exclusively.

**Example 12.** Scarlatti, D. Sonata in D Major, K. 96,  
measures 115 - 139.

48

The image displays three systems of musical notation for measures 115 through 139 of Scarlatti's Sonata in D Major, K. 96. Each system consists of a grand staff with a treble and bass clef. The key signature is D major (two sharps). Measure numbers 115, 123, and 131 are printed below the first staff of each system. The notation includes various musical symbols such as eighth and sixteenth notes, rests, and slurs, indicating a complex melodic and harmonic structure.

K. 44 (Example 13, p. 61) is another example in which the modulatory section after the double bar is brief and uses one element, the immediate return to the tonic. Here the return is to the tonic minor first, measures 83 - 100. It is interesting to note that in both of these examples the attendant melodic material is unimportant. When prominent melodic material from A is used in the A' section, Scarlatti invariably presents it in a more stable tonal environment. Conversely, when the tonality is hazy, there is an absence of prominent melodic material.

In contrast to other eighteenth-century composers, it is rare to find the opening material of A repeated literally at the beginning of A' in the dominant key. K. 16 (Example 14, p. 62) is such an exception, measures 60 to 70. In addition to this exceptional twist, and in further illustration of the characteristics listed above, this sonata shows a particularly strong emphasis of the dominant key after the double bar, both in duration and attendant melodic material (characteristic 2). This section also shows the very logical keys Scarlatti uses as he moves back to the tonic (characteristic 4). F major and C minor, dominant and supertonic, are used as stepping stones along the way back to the tonic B flat major. Each step, or key, is clearly punctuated and no haziness exists.

The tonally ambiguous beginning of the A' section of K. 119 (Example 15, p. 63) is a masterful example of how Scarlatti can create intensity through a build-up of texture, while using only a few harmonic points as he moves back to the tonic (characteristic 3). The key at the double bar is A major, D minor is the tonic. The



Example 13. Scarlatti, D. Sonata in F Major, K. 44,  
measures 83 - 100.



Example 14. Scarlatti, D. Sonata in B Flat Major, K. 16,  
measures 60 - 85.



Example 15. Scarlatti, D. Sonata in D Major, K. 119,  
measures 96 - 134.

The image displays a musical score for a piano sonata by Domenico Scarlatti, specifically measures 96 through 134 of the Sonata in D Major, K. 119. The score is written for piano (p) and is in D major, indicated by two sharps (F# and C#) in the key signature. The tempo is marked 'Allegretto'.

The score is organized into four systems, each containing a grand staff (treble and bass clefs). The measures are numbered 96, 100, 116, and 128 at the beginning of their respective systems. The notation includes various musical symbols such as notes, rests, accidentals, and dynamic markings (p for piano). The piece concludes with a double bar line and repeat dots at the end of the fourth system.

modulatory section begins with a favorite Scarlatti device, that of slowing down and almost suspending harmonic movement, coupled with the use of tonal ambiguity. The key at the double bar is A major, but Scarlatti deftly inflexes it back to D minor by sounding an A and a B flat, a ninth above A. This clearly outlines the V9 of D minor. He continues to play on the dominant of D minor, measures 96 to 111, but never consummates the tension. Instead, a gradual emphasis of E minor, the altered supertonic, begins at measure 113. E minor is first embellished by a dominant seventh chord built on F sharp, resolving to the first inversion of E minor, measures 113, 114 and 115. Then the embellishing chord becomes a richer and thicker D sharp diminished seventh, measure 116, 117 and 118. Next a dominant is used, measures 119 to 124. It is preceded by its own embellishing chord, measure 121, 122 and 123. Thus a gradual build-up of the dominant of E minor increases the intensity of the key only to have it turn out not to be an important tonic area, but to be, after all, only the II chord of the tonic, measure 126 - 130. Scarlatti purposely prepares the way for a certain tonality, which upon arrival, turns out not to be a prominent key area as the ear is lead to anticipate, but a primary chord along the way to the tonic key (characteristic 4). The strong approach to the key gives it an inevitable feeling of importance. A long passage in it is expected. This eminence is denied and the arrival quickly points to another direction, usually the tonic. All this illustrates the overriding principle found after the double bar; that is, to get back to the tonic. In this instance, Scarlatti uses two steps; first he hints at the tonic, and secondly, he strongly embellishes its supertonic before arriving at the tonic. It is the

masterful use of the various procedures used to return to the tonic that is the crux of a Scarlatti development section.

Our final example is accumulative in that it shows the ingenious way in which Scarlatti utilizes a few devices to produce a highly effective section. In K. 132 (Example 16, p. 66) we note, to begin with, the abrupt modulation over the double bar, from G major to F minor. However, at best F minor is a tenuous key. The presence of two foreign tones, D flat and B flat, with tonic harmony, interfere with its stability, measures 39 to 42. The next key used is D minor at measure 46.

The modulation which changes the tonality from F major to D minor uses two deceptive resolutions, both moving up a half step. In measures 42 the dominant of F major resolves deceptively up a half step to a major triad (D). D, in turn, resolves up a half step to a C minor triad in first inversion. At this point the key of G major is imminent with the harmony on its minor subdominant. Measure 44 confirms this feeling, but what appears as a tonic six-four in G major changes function and becomes a tonic, measures 45 and 46. Furthermore, a strong half cadence in it, measure 48, and a restatement of melodic material from A, measure 49, lead to its confirmation in measure 52. The final modulation occurs in measures 56 to 57 moving the tonality to the tonic C minor. A hovering, wandering tonality, coupled with an intense texture result in a dramatic and incisive development section.

A compilation of these examples shows that K. 96 and K. 44 illustrate how the tonality may quickly return to the tonic after

Example 16. Scarlatti, D. Sonata in C Major, K. 132,  
measures 39 -58.

Measures 39-42. The right hand features a continuous eighth-note pattern with grace notes. The left hand plays a steady eighth-note accompaniment.

Measures 43-46. Measure 43 is marked *Tremolo*. The right hand has a melodic line with grace notes, while the left hand continues with eighth-note accompaniment.

Measures 47-50. The right hand plays a series of eighth-note chords and single notes. The left hand provides a consistent eighth-note accompaniment.

Measures 51-54. The right hand features a more complex melodic line with grace notes. The left hand continues with eighth-note accompaniment, marked with a *L* (lento) dynamic.

Measures 55-58. The right hand has a melodic line with grace notes. The left hand continues with eighth-note accompaniment, marked with a *L* (lento) dynamic.

the double bar (characteristic 1). K. 16 is an example of the opposite; emphasis on the dominant key area before moving to other keys (characteristic 2). K. 132 and K. 119 give evidence of the treatment of hazy and capricious tonalities (characteristic 3), while along with K. 16 also illustrate how many of the internal modulations turn out to be logical steps back to the tonic key (characteristic 4).

In Scarlatti the modulations after the double bar lead to an intermediary section, the tonal foil, before returning to the tonic. The foil in A' inevitably loses some of the effectiveness it had in A. This is due to the fact that it follows a section, that is the modulatory section after the double bar, which contains some of its own properties, mainly key change and the suspension of harmonic movement. Thus at times it sounds like part of the modulatory section. Its beginning lacks the distinction seen in the A section. The jump to minor is less effective after a modulatory area than after an area of stable tonality. On the other hand, the return of the final tonic in A', after the foil, continues to be highly effective.

#### Scarlatti: Thematic Material in A'

One final and major point should be brought up concerning the use of keys and melodic figures in the last part of A'. It has been previously pointed out that the initial appearance of the dominant and the final one in A respectively used different figuration. These two different melodic figures are then used in A' in the tonic key after the modulatory section. The initial figuration used at the very beginning of the sonata does not play an important part in the



last half, or first half for that matter, of the sonata. If it does appear in A', it is incidental. The return of the tonic does not bring with it the accompanying melodic figuration used at the opening of A. Instead it uses those of the dominant key in A. Interest in these sonatas definitely lies in the latter half of each part. The two pillars are the attainment and establishment of the dominant in the first part, and conversely, the attainment and establishment of the tonic in the second part. The accompanying melodic figures bear this out. The opening figuration has no role in the A' section because it is a point of departure and not arrival. Melodic figures which accompany points of arrival appear again at the parallel point of arrival in the second part. This is a unique parallelism not to be noted in any other eighteenth-century keyboard bipartite music.

Scarlatti's sonatas are amazingly parallel except for the beginning of each section. What takes place in the first part is likely to take place in the second part. Of course, the key sequence is reversed. The area which is unpredictable follows the double bar. It may use figuration from any or several of the previous sections. It usually moves through several keys, but without fail leads back to the tonic. At this point, then, the sonata proves an almost exact parallel to the first half beginning at the first appearance of the dominant. The same keys, except in reverse sequence, and melodic figuration, are used.<sup>1</sup> In consequence, the same modulations are used with practically the same effect, with the main exception stated above.

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1 K. 16, K. 44, and K. 115.



### C. P. E. Bach: Two Sonata Form Variants

From the standpoint of form, C. P. E. Bach is a transitional composer. Evident in his numerous sonatas are elements of the traditional Baroque dance-binary form, as well as the incipient sonata allegro form. His dance-binary sonatas follow the typical bipartite form and sometimes are rounded, thus giving the illusion of an incipient sonata allegro form. In contrast, his sonata allegro form works are always divided into the three traditional sections: exposition, development and recapitulation. These terms are used advisedly since the thematic connotations traditionally associated with them (see Chapter II, p. 26) are just coming into use.

It is no coincidence that the dance-binary sonata uses the old-fashioned Baroque figuration for melodic material, while many in incipient sonata allegro form use themes which approach the thematic structure of later composers.

This melodic style is marked by an abandonment of motivic play for short phrase groupings which are juxtaposed, repeated and varied in many ways. Period structure replaces the "spinning out" of the older motivic style. In its simplest form, the new melodic style is in question and answer form, or thesis and antithesis form. It tends to generate homophonic texture, slow harmonic rhythm, metric regularity and broad tonal planes. Although there is often only one theme where two are expected in the exposition, the melodic style still sets it apart from the dance-binary sonatas.

The three distinguishing features which separate the incipient sonata allegro form from the older dance-binary type are: (1) the melodic

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style, (2) the area after the double bar, and (3) the return of the tonic in A'.

Table 3, THE TWO SONATA FORMS USED BY C. P. E. BACH

|                            | <u>Dance-Binary Form</u> <sup>2</sup>               | <u>Incipient Sonata Allegro Form</u> <sup>3</sup>                                        |
|----------------------------|-----------------------------------------------------|------------------------------------------------------------------------------------------|
| Melody:                    | Motivic                                             | Periodic                                                                                 |
| Area after the double bar: | Thematically insignificant                          | Contains the opening themes with pursuant modulations; a rudimentary development section |
| Return of the tonic in A': | May bring with it the opening figure, i.e., rounded | Always uses the opening theme or themes in the tonic                                     |

The first movement of the Sonata in C Major, Volume I, no. 1, is a very simple example of the older dance-binary form. The melodic style is clearly motivic in structure with the usual attendant contrapuntal features. There is no change in the character of the melody throughout the short movement. Upon reaching the double bar, the movement moves through a few keys before the reappearance of the opening motive. Hence, this is an example of what is often called the "rounded binary" form.

In contrast the opening movement of the Sonata in F Major, Volume I, no. 2, illustrates the incipient sonata allegro form. The

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2 Sonata in C Major, Volume I, no. 1, movements 1 and 3; Sonata in A Major, Volume I, no. 4, movements 1 and 3; Sonata in G Major, Volume II, no. 1, movement 3; Sonata in A Minor, Volume III, no. 1.

3 Sonata in F Major, Volume I, no. 2; Sonata in F Major, Volume I, no. 5; Sonata in G Major, Volume I, no. 6; Sonata in G Major, Volume II, no. 1.

melodic style anticipates the Classicists by breaking away from the clichés of Baroque figuration. The opening measures exhibit a new type of melodic construction and accompaniment. Statement and restatement of a short motive over a homorhythmic texture, balance and periodicity, and the slower harmonic rhythm are all hallmarks of the late eighteenth-century sonata style. There is also a rudimentary development section after the double bar.

These variations in the bipartite sonata form indicate the changes taking place in the sonata at this time. Within the framework of the traditional key relationship, a new emphasis is being placed on melodic considerations and the restatement of them at the end of the composition. In C. P. E. Bach's sonatas, we find many movements which open with a well-conceived theme. This theme is often used, in part, after the double bar in other keys. Inevitably it returns, in the tonic, in the recapitulation. Thematic articulation in the dominant key in A is, however, still far off. For the most part some melodic distinctiveness accompanies the new key. Often two "themes" are seen near the end of A, clearly foreshadowing the "closing group" in later sonatas. The new key may have two distinct melodic configurations, but neither is noteworthy from a thematic point of view, or in comparison to the opening theme. Often they consist only of figuration.<sup>4</sup> Tonally the way has been prepared for the second theme and closing group, but, as yet, they do not appear with any consistency.

#### C. P. E. Bach: Modulation in the Development Section

In view of the future development of the sonata, it is more fruitful to examine those sonatas of C. P. E. Bach which are in early

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<sup>4</sup> Sonata in G Major, Volume II, no. 1; Sonata in D Minor, Volume III, no. 2.

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sonata allegro form. The A' sections of these works contain two distinct sections: development and recapitulation. Modulations mainly occur, of course, in the development. The recapitulations also contains some modulations.

The development section is, in these works, in an early stage and one cannot hope to find evidence of the skillful handling of thematic material common in the works of later composers. Beyond a doubt, this is the weakest part of a C. P. E. Bach sonata. For the most part it is made up of snatches of themes with commonplace figuration accompanied by inordinate modulations. These modulations are often in sequentail clusters of two, three, or four, and are fleeting and transitory in character. Three sequential harmonic clichés or patterns comprise a vast majority of the modulations.

The first follows the circle of fifths in which the old tonic becomes the new dominant.

The second leads to a new key, a whole step above the old. The new dominant, usually in the first inversion, leads from the one to the other without the use of any other chords. A modulation of this type from C major to D major would simply be: C major, A major<sub>6</sub>, D major, resulting in the chromatic bass line C-C sharp-D.

The third type leads to a whole or half step below the old key. Again the only chord in between is the dominant. Usually it is a fully diminished  $VII^{\circ}_7$  on the leading tone of the new key. A modulation from A major to G major would then be effected by the simple interpolation of the  $VII^{\circ}_7$  of G on F sharp. This results in

the bass line A-F sharp- G.

There is no pattern to the use of themes in the development. Any of those found in A may be used along with some new material. The more successful sections submit the first theme of the A section to some variation and exploration in other keys. In between can be found non-thematic figuration. Less successful sections contain too much figuration moving about from key to key. Throughout nothing is created to highlight or lead to the return of the tonic. The final modulation to the recapitulation is a major point in Scarlatti, Haydn and Mozart. With C. P. E. Bach it is an incidental point.

It can readily be expected that in C. P. E. Bach's recapitulations some variation or lack of consistency will occur. This is usually seen in the incomplete use of the thematic material of A, and in the use of extended modulation in the recapitulation.<sup>5</sup>

#### The Three Sonata Variants Compared

A quick comparison of the three basic variants of keyboard bipartite form in the eighteenth century, the sonata allegro form, the dance-binary, and the special bipartite-orientated treatment by Scarlatti, reveals that important key areas are usually accompanied by some kind of melodic distinction. In Scarlatti it was usually associated with the new key area. The dominant boasted the most incisive melody, especially the last appearance in A and A'. In the case of the dance-binary and incipient sonata allegro form of C. P. E. Bach, the thematic emphasis is now on the opening of each section, as

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5 Sonata in F Major, Volume I, no. 2; Sonata in D Minor; Volume III, no. 2.

in the dance-binary type, or in the opening and recapitulation, as in the sonata allegro type. Conversely, with Scarlatti, it was the opening tonic that was incidental. With later composers, it was the succeeding dominant, at least at first. The works of Haydn and Mozart substantiate this shift in thematic emphasis. Again the broad outline of the bipartite sonata form remains constant. All innovations consist of a change of emphasis and a change in compositional style. The modulatory outline remains intact.

C. P. E. Bach's significance as a composer lies in his emotional outlook on music. The clarity of purpose and dynamic effect of modulation as seen in Scarlatti's works, were foreign to C. P. E. Bach's temperament. In his sonatas modulation resulted in a fluency of key change, without distinguishing features, which rendered the development section lacking in tonal contrast. Too much tonal contrast resulted in very little actual contrast. The final effect, then, of modulation in C. P. E. Bach's sonatas is weak in comparison to modulation in Scarlatti, Haydn and Mozart.

#### Haydn: Two New Features in the Development Section

The development section in the sonatas of Haydn and Mozart present a clearer and more logical unfolding of its elements than those in C. P. E. Bach's development sections. The logical musical structure of the development section resembles the clarity of design witnessed in Scarlatti's sonatas. Certain characteristics occur frequently enough to become mannerisms. Unlike the earlier sonatas of Scarlatti and C. P. E. Bach, the development section in Haydn and Mozart takes on noticeable prominence. Key explorations are now mainly

coupled with thematic considerations, which give such explorations cohesion. At times, usually toward the end of the development section, unrelated figuration takes over moving quickly about in several keys. The prominence of the first characteristic balances the dullness of the second. In such instances, the development section is not weakened by the figuration, but given relief from the thematic material prior to the recapitulation. The figuration serves as a wedge between the thematic fragments in the earlier part of the development section, and the complete restatement of them, i.e. the recapitulation. This gives validity to the use of seemingly innocuous figuration after the rather skillful opening of the development section, which is often based on thematic and tonal excursions.

In the more ingenious development sections, certain specific types of harmonic motion are used. Each type is modulatory in character. For example, there is a sequential type of harmonic motion which is the result of a short series of quick modulations to nearby keys. Another type is the "anticipation and denial" procedure where a key is made imminent but never reached. A third type is the harmonic motion resulting from an abrupt key change. These modulatory techniques, although certainly not new, assume a more prominent role in the development section of Haydn's sonatas and thereby distinguish them from all forerunners.

Two further harmonic modulatory motions or procedures are, however, more unique to Haydn. Here we see them used with regularity for the first time. (See pp. 81 ff. and Examples 19, 20 and 21) The first is a type of modulation which clearly moves to a specific key,

but upon reaching the intended key does not establish the tonality of the new key. The resulting harmonic motion, then, gives the illusion of a "dead-end". That is, movement to a specific key but none upon reaching the new key. The second type deals with a calculated loss of tonal orientation, always at the end of the development section, which renders the beginning of the recapitulation more effective.

Thematic considerations and harmonic modulatory motions are the major features of this investigation into the make-up of Haydn's development sections. The use of thematic material from the exposition, along with non-thematic patterns, will be illustrated first, followed by a discussion of specific types of harmonic motion which results from modulation.

#### Haydn: Thematic Considerations

The development section of the Sonata in G Minor, no. 44 (Example 17, p. 77) is an example of Haydn at his best. It is entirely made up of thematic fragments in various keys and is relatively free of figuration. The key of the sonata is G minor. The key at the double bar is B flat major. A quick modulation results in C minor and a statement of the A theme, measure 32. Using a fragment of A, a sequential figure briefly moves to G minor, measure 34, and F minor, measure 36. Measure 36 also presents a part of the transitional theme which, in the exposition, was the bridge between G minor and B flat major. Here it moves the tonality back to G minor, measure 39. Then using another part of the transitional theme, measure 39, Haydn quickly moves to C minor, measure 41. The technique

Example 17. Haydn, J. Sonata in G Minor, Vol. IV, no. 44,  
measures 31 - 54.

31

34

37

40

43

46

49

51

*cresc.*

*decresc.*

*(poco ritardando)*

*a tempo*

*cresc.*

*dim.*

used here is of prime importance and at the very core of much of what is found in the development section of the Classical sonata. An entire theme, or a good part of it, is stated in a different key, to be followed by brief, fleeting modulations to other keys using fragments of the theme just heard.

Next follows the B theme in C minor, measure 42. The last element in the section, measures 45 to 51, is typical of the technique described above. The A theme is sequentially heard in B flat major, measure 45, and C minor, measure 46, followed by a fragment of it moving through F minor, B flat major and E flat major. The E flat chord is then turned into an augmented six-five chord, measure 51, and the recapitulation begins. The final and decisive modulation results from an enharmonic use of the E flat chord. It represents a commonly used modulation at this point, that of descending a half step to the dominant of the key of the recapitulation.

The entire development section of the first movement of this sonata was made up of statements of thematic material in other keys, followed by the fragmentation of the theme and more modulations. Musically speaking, it is the most satisfying type of development section to be found in Haydn.<sup>6</sup>

Sonata in C Major, no. 35, has a development section in the first movement which is overlaid with unrelated figuration. The first twelve measures after the double bar present thematic

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<sup>6</sup> Other examples are the development sections of the first movements of the Sonatas number 50, 51, 41 and 38.

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material in an unaltered form, which adds some distinctiveness to the opening of this section. Then follows a long period of figuration which, by no means, has much compositional value. It relentlessly moves about through some closely related keys of no particular consequence. The recapitulation emerges from the dullness, but is certainly not highlighted by it. The Sonata in A Flat, no. 46, in similar fashion, has a development section which is interrupted by a long section of unrelated figuration which has little bearing on the outcome of the movement. Both of these examples are in contrast to those sonatas which depend on thematic considerations for the basis of the development section.

A reasonably balanced development section, one which has both elements and uses them in a constructive way is the Sonata in C Sharp Minor, no. 36. (Example 18, p. 80) The key at the double bar is E major. B1, there are two B themes, begins in E major and leads to F sharp minor and B2, measure 38. Next, the key of C sharp major is set up rather prominently and in typical fashion. An augmented six-five chord descends on a G sharp triad, measure 42, followed by a pause, measure 43. But this tonal anticipation of C sharp major is denied and the key of G sharp minor is used with the A and B2 themes, measure 44. Now comes the figuration which has some value in this situation, measures 51 - 65. It moves to other keys and relieves the composition from thematic material which, for just the right amount of time, and executed in the right way, results in a natural musical effect.

The rise in the importance of the development section in

Example 18. Haydn, J. Sonata in C Sharp Minor, Vol. III, no. 36.  
measures 34 - 65.

37

41

47

53

59

65

Haydn goes hand in hand with the change in thematic construction characteristic of Classical composers. The basic approach in the modulatory section also parallels the new approach to thematic construction. The one enhances the other. Themes are made up of small melodic periods, which, in the development section, can be readily used to effect short fleeting modulations often carried out sequentially. Themes are comprised of balancing parts. In the development sections the first part of a theme is often stated in a stable key, while the second element modulates. In Classical writing, the balance and coherence in thematic writing is reflected in the logical unfolding of the development section.

#### Haydn: Harmonic Modulatory Motion

Probably the most common type of modulatory motion found in Haydn's development sections is the sequential variety which quickly moves through several keys in short order. The implied tonic may actually be reached, or it may be altered to point to another tonal direction. This type of modulatory motion, which usually follows the circle of fifths, darts about among keys ricocheting off arrival points. It gives the feeling of a circular or zigzagging motion. It is in contrast to the other types of harmonic motion, be they modulatory or not, and is typically found in development sections. Such is the case in the first movement of the Sonata in E Flat Major, no. 52, measures 50 and 51. (Example 19, p. 82) It is a moot point to argue if this passage is in one key or implies other keys. The point is that any dominant sound outside the key looks in another tonal direction, no matter how casually. Thus the keys of F major, D minor, B flat major, and G minor are inflected or hinted at though not

Example 19. Haydn, J. Sonata in E Flat Major, Vol. IV, no. 52,  
measures 49 - 52.



consummated. Modulation, especially in the development section, is not a matter of black and white. The hazy areas in between are not to be passed over. Taken as a series they contribute a distinct, though often overlooked, type of modulatory motion.

Measures 51 to 64 of the Sonata in E Minor, no. 34 (Example 20, p. 84) further illustrate these minute modulatory points which, when strung together, constitute a specific type of modulatory motion. After the pause in measure 50, the tonality jumps to C major. For the next twelve measures the same material is used in a sequential manner. The musical value lies in its tonal movement. The first diversion comes in measure 55. The expected C major chord is replaced by a fullydiminished seventh chord on C sharp. This inflects the key of D minor which ensues in the next measure. Likewise in measure 58, the expected D minor chord is replaced by a fully diminished seventh chord on D sharp. This implies the key of E minor which is reached in first inversion, measure 59. In measure 60, a dominant on F sharp moves to B minor in the next measure. This small series of anticipated tonal points, their arrival or denial, is the crux of such passages. They are seemingly inconsequential, but do constitute a type of modulatory motion found in development sections. They are a part of the variety of compositional elements which are the basis for the developmental treatment of thematic material. The anticipation and denial technique and the circle of fifths procedure are the two most common types of harmonic motion resulting from modulation. Other types, more unique in nature, will be mentioned later.

Abrupt key changes, usually after a pause, are common enough

Example 20. Haydn, J. Sonata in E Minor, Vol. III, no. 34,  
measures 46 - 63.

The musical score is presented in two systems. The first system, labeled with measure 46, contains measures 46 through 51. The second system, labeled with measure 56, contains measures 56 through 63. Each system consists of two staves: a treble staff and a bass staff. The key signature is one sharp (F#), and the time signature is 4/4. The notation includes various musical symbols such as notes, rests, accidentals, and dynamic markings like 'f' (forte) and 'p' (piano). The piece concludes with a double bar line and repeat dots at the end of measure 63.

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especially at the beginning of development sections. Such abrupt key changes, or "jump modulations", from major to minor, and vice versa, are too numerous to need explanation. To illustrate, though, how highly effective such a common procedure can be, "jump modulation" over the double bar in the first movement of the Sonata in B Flat Major, no. 41 is noted. "Jump modulations" at this point are a cliché, but hardly ever a major third away. Another unusual and highly effective jump is in the fourth measure of the development of the Sonata in E Flat Major, no. 38. At this point the tonality abruptly moves up a half step, and the attendant use of the main theme enforces the effect.

The modulatory characteristics mentioned thus far deal with thematic aspects and tonal motion, and have given an overall view of the manner and effect of modulation in the development section of Haydn's keyboard sonatas. A great deal of attention has been given to features which accompany the modulations. The modulations, in and of themselves, are not important. What is, is their context and accumulative effect. What has been said so far is typical of Haydn.

The finest artistic effects of modulation are best seen in the late and mature works of Haydn. The following example (Example 21, p. 86) is typical in content but not in effect, for it surpasses by far the more common Haydn development section.

The development section of the Sonata in C Major, no. 50, (Example 21, p. 86) emanates from an exposition rich in thematic material. The development is divided into five sections each of



Example 21. Haydn, J. Sonata in C Major, Vol. IV, no. 50,  
measures 52 - 103.

The image displays a musical score for a piano sonata by Joseph Haydn, specifically measures 52 through 103 of the Sonata in C Major, Vol. IV, no. 50. The score is written for piano and consists of five systems of music, each with a grand staff (treble and bass clefs). The key signature is C major, and the time signature is 3/4. The score includes various musical notations such as notes, rests, accidentals, and dynamic markings. Measure numbers 52, 58, and 64 are indicated at the beginning of their respective systems. The notation includes slurs, ties, and phrasing slurs. The score concludes with a double bar line and repeat dots at the end of the fifth system.

(Continued Next Page)

## Example 21. (Continued)

67

*p*

*pp open Pedal*

*p*

*cresc.*

*cresc.*

*p*

*B*

*dim.*

*(cresc.)*

(Continued Next Page)

## Example 21. (Continued)

Musical score for Example 21 (Continued), measures 87-97. The score is written for piano (p) and includes dynamic markings such as *pp*, *cresc.*, *f*, *dim.*, and *sf*. The notation features complex rhythmic patterns, including sixteenth and thirty-second notes, and various articulations like slurs and accents. The key signature is one sharp (F#).

Measures 87-97 are shown. The score includes dynamic markings such as *pp*, *cresc.*, *f*, *dim.*, and *sf*. The notation features complex rhythmic patterns, including sixteenth and thirty-second notes, and various articulations like slurs and accents. The key signature is one sharp (F#).

which is defined by a close of some kind or other. The sections are:

1. Measures 54 to 60
2. Measures 60 to 64
3. Measures 64 to 73
4. Measures 73 to 89
5. Measures 89 to 102

Section 1 begins with an abrupt change from G major to G minor. A thematic element from the B group is used sequentially as the tonality changes from G minor to D minor, back to G minor, and then to F major where the section ends. The procedure is simple enough, i.e. sequential modulations using a thematic element from the exposition.

Section 2 may be considered a part of 1, or a short transitional section. It uses a motive from the main theme in a stable F major. This key stability distinguishes it from the first section.

Section 3 is important for two reasons: it contains a small portion of the main theme and a unique type of modulation which seems to go nowhere, a "dead-end" modulation. The main theme is hinted at in measures 64 and 65, the first of two such allusions. At measure 66 the tonality abruptly changes to minor in order to facilitate the upcoming modulation to E flat major. When the E flat chord is sounded, it is elongated by a kind of Alberti bass and a melody which is repetitive and sequential. The ear cannot really accept the tonality as E flat since more than an E flat chord sound is needed to consummate convincingly a modulation to the key of E flat major. Yet the duration of the E flat sound becomes convincing. The essence of this "dead-end"



modulation is its ambiguity. Is it or is it not a new key center? The question can only be answered by what follows. While this particular type of modulation is being effected, the ear cannot for certain tell what is happening. The important thing is to recognize the character and effect of the type of modulation being used. In this case, it so happens to sound first like a bona fide modulation to E flat major, but the beginning of the next section renders it a long dominant. This is a unique type of modulatory motion which can be classified with the others previously mentioned.

Section 4 is one of those sections common to development sections. It is basically a section void of important thematic borrowings and depends upon figuration which moves rather ambiguously through short-lived keys. It possesses tonal feints and diversions. Imminent arrival points may be thwarted or consummated, and, in general, the ear often loses a sense of tonal orientation despite the fact that each modulatory action may be comprehended. The key is A flat major. It then passes through F minor and C minor on its way to F major and A minor. But then, in measure 83, a dominant seventh chord on B clearly points to the key of E which is avoided. The last two beats of measure 85 point to the key of D which is avoided and replaced by a prominent six-four chord and dominant in G; which, in turn, is inflected to point to C. The expected C is replaced by an A minor triad, preceded by its own dominant, with a B in it. By this time all reasonable orientation is lost, and the sudden ending on or in E major is a welcome relief to the ear, although E major, in and of itself, is a "dead-end" modulation. This quasi-loss of tonal orientation is a distinct feature of development sections. The degree of



its effect is dependent more on its musical fabric, texture and rhythm, rather than on its harmonic basis. Again we are dealing with a type of modulatory motion, one which contains an aimless tonal element.

Section 5 contains those teasing elements which are evocative and render the end of the development section so evasive. Here a segment of the main theme is reiterated over static harmony. This is always a suspenseful moment since the ear knows something is about to happen, but doesn't know quite what to expect. The texture thins out and the dynamic level is down to pp before it turns out to be an inconsequential modulation to D minor, measure 95. Now the process begins again starting from D minor. C major, the tonic key, is hinted at in measure 98, but is passed up for G major, its dominant, which is a very common device, i.e., over-modulating by one key to the dominant of the intended key. The opening motive of this last segment of the development section has been used a total of 17 times within twelve measures. This additional feature adds to the build-up of tension and its eventual relaxation in the commencement of the recapitulation.

Citation of compositional techniques never adequately reveals the artistry of the composer. In the case of modulation they are too countless even to attempt such a precise codification. Throughout this discussion only those modulations associated with unique musical effects have been noted. It is hoped generalizations have been avoided because a type of modulation effective in one sonata may be perfunctory in the next. The goal here has been to illustrate the musical

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uniqueness of various types of modulations, and to set aside other occurrences which may be commonplace. The artistic use of modulation is foremost and its technical considerations secondary.

#### Mozart: Six Modulatory Characteristics in the Development Section

In the most advanced sonata writing of the eighteenth century, the keyboard sonatas of Mozart, six consistent modulatory traits are noted in the development sections. All of these characteristics are inexorably tied to key change. They are, in some respects, similar to some of the modulatory aspects seen in Haydn's development sections. Mozart's treatment, however, is more varied and unique. The musical effects resulting from the use of these modulatory devices are more abundant and noteworthy. The modulatory characteristics are:

1. The change of mode from major to minor over the double bar,
2. Modulatory treatment of thematic material from the exposition,
3. Modulatory treatment of non-thematic material,
4. The presence of new thematic fragments,
5. The emphasis of a key other than the tonic at the end of the development section, and
6. "Dead-end" modulations.

All of these traits are rarely found together in one development section. Most often, one or two elements make up the essence of a particular development section. By far, the modulatory treatment of thematic material from the exposition, characteristic 2, is the most significant trait to be found in Mozart's development sections,

as well as the development sections of other late eighteenth-century composers.

(1) The change of mode from major to minor usually occurs over the double bar which separates the exposition from the development section. Invariably a strong cadence and a pause in the rhythmic flow brings the exposition to a close. The new minor key simply begins after the pause. This type of key change sounds abrupt because it is without a gradual transition from one key to the other.

A shift to the minor mode, or vice versa, always opens up a new series of keys which can be easily attained. In Mozart's sonatas the jump to minor, at the beginning of the development section, accordingly signals an upcoming series of modulations. The new minor tonic, in and of itself, is not important. It is rarely established; instead, it invariably leads to other tonalities. Neither is it important that the ensuing modulations may be used with thematic or non-thematic material; that is, thematic attendant factors may or may not occur. The main point is that a short series of modulations is imminent.

These modulations introduced by the jump to minor tend to classify themselves into two approaches. In one<sup>7</sup>, a short series of modulations, sometimes using a thematic fragment, is set off, and several nearby keys are lightly touched upon. In the other<sup>8</sup>, a

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7 K. 279, K. 284, K. 332 movements 1 and 3; K. 333, K. 545, K. 547.

8 K. 280, movement 3; K. 283, movement 3; K. 309, K. 533, K. 576.

thematic fragment, or part of a theme, is presented in several different keys, each key being fairly well-established, and connected by a simple and smooth modulation. Often, after several statements, or partial statements in two or three keys, the fragment is abandoned and non-thematic figuration moves through another key or two before leading to a new idea in the development section. The basic technique, in each instance, is the same. The switch to minor begins a short series of modulations which usually use some thematic fragment. The difference lies in the fluidity of the ensuing key changes, and the solidarity of the keys reached in the modulatory sequence. A moving in and out of keys is noted in the former, while the latter is distinguished more by prominent statements of thematic material in reasonably well-established keys which are a part of the modulatory sequence. The following examples will illustrate the first approach, while those beginning on page 96 will illustrate the second approach.

In K. 279 (Example 22, p. 95) the tonality of G minor, which is introduced by an abrupt or "jump modulation" over the double bar, sets off a string of modulations which move through four lightly established keys: D minor, C major, A minor, G minor and F major, before the idea is abandoned. After that, another pattern takes place, one with a prominent new melodic idea, and two more keys are sounded: F major and C major. The first series of modulations has at its beginning the common jump to minor. This jump and the ensuing modulations it sets off are in essence a single modulatory entity.

A similar situation is seen in K. 332, movement 3. The

Example 22. Mozart, W. Sonata in C Major, K. 279,  
measures 39 - 47.

The image displays a musical score for measures 39 through 47 of Mozart's Sonata in C Major, K. 279. The score is written for piano and is organized into three systems, each containing a treble and bass staff joined by a brace. Measure numbers 39, 42, and 45 are circled at the beginning of their respective systems. The key signature is one flat (B-flat), and the time signature is 4/4. The notation includes various musical symbols such as notes, rests, slurs, and trills (marked 'tr'). The first system (measures 39-41) features a melodic line in the treble staff with eighth-note patterns and a supporting bass line. The second system (measures 42-44) continues the melodic development with similar rhythmic patterns. The third system (measures 45-47) concludes the passage with trills in the treble staff and a final cadence in the bass staff.

change to minor signals the beginning of a series of brief and simple modulations to tonal levels rather than keys proper. Again the figuration used throughout the modulatory pattern is adapted from the opening theme of the exposition. The pattern moves to C minor, G major, C major, and F major. F major, in turn, turns out to be the dominant of B flat major. With the sounding of B flat major a new idea takes over and the pattern, which was used four consecutive times for a total of twenty-one measures, is broken.

Although the shift to minor most commonly takes place right after the double bar, occasional internal jumps are noted which set off the same modulatory expectations as shown above. These internal jumps may not necessarily be preceded by a strong close and a pause, as is the case in the first movement of K. 332, measure 111. Here the shift to minor incites a long section of sequential modulations, ending with a "dead-end" modulation in A major.

K. 333, movement 1, illustrates a similar twist. In this development section the jump to minor occurs eight measures after the double bar, measure 71, after a strong opening section using a main theme fragment. All the expectations conjured up by the shift are fulfilled. An Alberti bass figuration ambles lightly on from F minor to C minor to B flat major, which is avoided for G minor. The series ends on a D major chord, which turns out to be a "dead-end" modulation in D major. Throughout the figuration is non-thematic.

Possibly the second type of unfolding of keys following the abrupt modulation at the double bar is more satisfying from a



tonal point of view, since the keys touched upon are a bit more stable. Also the thematic presentation is more pronounced, and less prone to modulatory figuration. The third movements respectively of K. 280 (Example 23, p. 98) and K. 283 (Example 24, p. 99) are examples of this technique. In both cases, two clear entrances of the themes are heard in two different keys, separated by a simple modulation. In K. 280, the B theme uses the minor key, C minor, just after the double bar, and B flat minor, nine measures later. In K. 283, a snatch of a new theme, so it appears, is heard in D minor, after the double bar, and in A minor, nine measures later.

Similar instances show that in K. 309 the opening theme is clearly heard in two statements: one in G minor, just after the double bar; and one in D minor, nine measures later. Additional keys are heard but with a less pronounced use of thematic material. In this development section, two clear statements of the opening theme in C major are heard in minor keys.

In K. 533 two fairly strong tonal areas occur with the opening motive of the A theme. The first one, immediately after the double bar, is in C minor; the second one, seven measures later, is in G minor.

In K. 576 the entire development section is based on one idea, the use of the first part of the opening theme in different keys. This fragment, and its variant, is heard in B flat major, G minor, B minor, E minor and A major. Simple and brief modulations connect each small key center. The whole series begins with the

Example 23. Mozart, W. Sonata in F Major, K. 280, third movement,  
measures 78 - 93.

The image displays a musical score for measures 78-93 of the third movement of Mozart's Sonata in F Major, K. 280. The score is written for piano and consists of two systems of staves. The first system begins with measure 78, marked with a circled '78' and a piano (*p*) dynamic. The second system begins with measure 84, marked with a circled '84' and a piano (*p*) dynamic. The music is in F major (one flat) and 3/4 time. The right hand plays a melodic line with eighth and sixteenth notes, while the left hand provides a harmonic accompaniment with chords and moving lines. The score includes various musical notations such as notes, rests, and dynamic markings.



Example 24. Mozart, W. Sonata in G Major, K. 283, third movement,  
measures 103 - 115.

54

(103)

*p* *f*

(109)

*p* *f*

typical change to minor mode. The erasing of the C sharp, when moving from an A major triad to an A minor triad, measure 59, paves the way for a quick modulation to B flat major, since all that is needed to create a dominant in the new key is to inflect the E to E flat. A third lower is added, F, and the complete dominant seventh is now sounding. This is what is meant by the earlier statement that a shift to minor opens up new tonal planes. A modulation from A major to B flat major is a distant modulation made easily accessible by the jump to A minor.

(2) The second major characteristic of a Mozart development section is the modulatory treatment of thematic material from the exposition. Inevitably the discussion of the first characteristic, the abrupt modulation to minor at the double bar, has already explored some areas of the second trait. This is unavoidable since the ensuing modulations may or may not use thematic quotations. Obviously, thematic quotations from the exposition need not be in this particular modulatory context. Our next step is to examine the presence of thematic material from the exposition which is subject to other modulatory influences.<sup>9</sup>

The third movement of K. 279 (Example 25, p. 101) contains a modest development section which not only illustrates this second technique, but also illustrates the two types of tonal levels which were discussed in conjunction with the first characteristic. The first twelve measures present six statements of the B theme on tonal degrees

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9 K. 279, movements 1 and 3; K. 280, K. 281, K. 283, movement 2; K. 309, K. 332 movement 3; K. 333, K. 533, movements 1 and 2; K. 545, K. 570.



Example 25. Mozart, W. Sonata in C Major, K. 279, third movement,  
measures 54 - 89.

The image displays a musical score for the third movement of Mozart's Sonata in C Major, K. 279, measures 54 through 89. The score is written for piano and features six systems of music, each consisting of a treble and bass staff. The key signature is C major, and the time signature is 3/4. The measures are numbered 54, 60, 66, 72, 78, and 84 at the beginning of each system. The notation includes various musical symbols such as notes, rests, accidentals, and dynamic markings like *p* (piano) and *f* (forte). The score is presented in a clear, black-and-white format, suitable for study or performance.

or steps, none of which can be called a solid key area. A two measure motive moves sequentially along these tonal points. Each step may suggest a key, but there is no verification forthcoming.

In contrast, in measures 76 and 81, the main motive of the A theme is clearly heard in E minor and D minor respectively. Each occurrence is followed by a modulatory tail. The first one leads to the D minor statement, the second one to C minor and the recapitulation. The prominence of the A motive, the modulatory intervals and the duration of the key combine to establish a short tonal plane; two planes to be exact. Both planes have a short but discernible duration and a smooth connection between them. This is in marked contrast to the sequential tonal steps or degrees found earlier in the development section. Both types of tonal areas use direct thematic quotations.

K. 280 contains a fragment of thematic material which is subjected to fleeting modulations. Starting with the eleventh measure of the development section, measure 67, the B theme is sounded four times as the harmony moves along the circle of fifths: D minor - G minor - C major - F major. Each step along the way is a tonal level capable of being expanded into a key area. But, of course, none is; it is not the desired effect. The desired effect, that is, the tonal goal of a Mozart development section, is not to wander about from key to key, but to set up fleeting tonal nuclei and brief planes of tonality, with or without attendant thematic material, in contrast to the broad areas of themes and keys in the exposition and recapitulation. The relationships between the keys attained are rarely

striking; they are usually closely related ones. What is more important is the calculated manipulation of degrees of tonal orientation and the accompanying thematic emphasis.

In K. 533, which is one of the larger sonatas in scope and breadth, the development section of the first movement relies heavily upon statements of A and B. The appearances of A were mentioned earlier since they were introduced by the typical shift to minor. There are eight entrances of the B theme, starting in measure 25, which is quite an emphasis. There is a single entrance each in D minor, G minor and C major, followed by five in F major. Each represents a brief but discernible tonal plane.

The second movement of K. 533 contains a development section which attains a high pitch of intensity through the incessant use of a fragment of the A theme. First, however, the opening motive of the A theme is heard several times touching upon D minor, B flat major and G minor. The build-up begins in the thirteenth measure of the development section, measure 59. It uses a short motive drawn from the latter part of the A theme. The texture is reinforced with sixths and octaves. The tonality centers around G and C minor. The number of upward moving repetitions, coupled with the dynamic accent and crescendo markings, accumulate in intensity reaching a unique level of feeling.

(3) The modulatory treatment of non-thematic material has already been covered, to some extent, in the discussion of the

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abrupt modulation to minor<sup>10</sup>. As previously described, the ensuing modulations after this shift may be accompanied by non-thematic material. Prominent use of such non-thematic sections, initiated by a shift to minor, are noticeably K. 332, measure 109 ff., and K. 333, measure 71 ff. In such instances, inconsequential transitory modulations are the norm.

Most development sections use mainly thematic quotations and some figuration with occasionally some thematic material. K. 284 is probably the only major exception. Its development section is made up entirely of non-thematic figuration.

Non-thematic figuration is always subject to what has preceded it in the exposition. In K. 284 the material of the development section has no immediate thematic connection to anything in the exposition. However, upon closer examination, it can be seen that the basic outline of the texture is used in the exposition, although not prominently so, cf. measures 30 - 33 with 52 - 59. This is usually the case with non-thematic material, and even new thematic material in the development section. Invariably something in the exposition, though it be of little importance there, is the basis for it.

The development section of K. 284 is comprised of three sections: measures 52 - 59, 60 - 65 and 66 - 71. Each contains non-thematic figuration of a slightly different kind. The first two

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<sup>10</sup> See Example 22, p. 95.



sections modulate, while the last section emphasizes D minor, which is the tonic key, but the "wrong mode", i.e. D major, not D minor, is the expected key. This is a favorite device which will be expanded upon later. (See characteristic 5) The first section, measures 52 - 59, modulates from the key of A minor to E minor and to B minor. The second section modulates from B minor to F sharp minor and E minor, and then to D minor. The entire development section is made up of patterned figuration moving sequentially to nearby keys.

Non-thematic material is usually of this kind of figuration or, as shown in characteristic 2, small segments tacked on to the end of thematic quotations. A third use is as in K. 280, where a few measures of it are heard at the beginning of the development section, without any reference to its surroundings. This type, as well as all other types, always modulate.

(4) Brief statements of entirely new thematic material are occasionally found in Mozart's development sections,<sup>11</sup> and are usually not subject to modulatory treatment. They are often delightfully contrasting interruptions, short strains of pure melody or playful bits of lyricism. Often they are found just after the double bar, but on occasions, are noted within the development section.

It is certainly unique to find such distinctive melodies, although they may occur only once or twice, in the development

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11 K. 279, K. 281, K. 283, movements 1 and 3; K. 332, movements 1 and 3; K. 547, K. 570.

section of the sonata form, where modulation, with or without melodic material from the exposition, is the norm. Only speculation, so it appears, can determine the reason for the appearance of such new tunes, since there is no structural element which calls for them. In keeping with the investigation of all aspects of modulation in the sonata, some noteworthy examples are given below. In and of themselves, they are not modulatory in character, but are a part of a modulatory section.

Consider K. 279. (Example 26, p. 107) The new melodic fragment occurs ten measures in the development section and is heard twice in the key of C major, measure 48. The very grace and balance, and the question and answer structure immediately distinguish it from its surroundings, and mark it as a phrase of new melody. It combines with a modulatory presentation of a fragment of the A theme to make up the entire development section.

K. 332 contains two short new themes, each of exquisite charm. In fact, each rivals the main themes of the respective movements in musical value. The one in the first movement (Example 27, p. 108) takes place right after the double bar. The one in the third movement (Example 28, p. 109) is in measure 112. Each one is heard but once. The ear is given only a glance at each.

K. 281 has an unusual development section in that it is made up entirely of four new thematic ideas, except for only two measures of the A theme. Immediately after the double bar the first new melody is heard in the first four measures. A short motive is heard and then several small extensions of it. It is accompanied by a fast Alberti bass figuration reminiscent of the second part of the B theme.

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Example 26. Mozart, W. Sonata in C Major, K. 279, third movement,  
measures 48 - 52.

The image displays a musical score for measures 48 through 52 of the third movement of Mozart's Sonata in C Major, K. 279. The score is written for piano and consists of two systems of staves. The first system covers measures 48 to 50, and the second system covers measures 51 to 52. The key signature is C major, and the time signature is 3/4. The notation includes various musical symbols such as notes, rests, trills (tr.), and dynamic markings (p for piano, f for forte). The first system begins with measure 48, marked with a circled '48' and a piano (p) dynamic. It features a trill in measure 49, marked with a circled '49' and a forte (f) dynamic. The second system begins with measure 51, marked with a circled '51' and a piano (p) dynamic. The score concludes with measure 52. The notation is clear and legible, with a focus on the melodic and harmonic development of the piece.



Example 27. Mozart, W. Sonata in F Major, K. 332,  
measures 94 - 109.

The image displays two systems of musical notation for measures 94 through 109 of Mozart's Sonata in F Major, K. 332. Each system consists of a grand staff with a treble and bass clef. The first system, labeled with a circled '94' at the beginning, spans measures 94 to 101. It features a piano (*p*) dynamic at the start, followed by a crescendo leading to a fortissimo-piano (*sfp*) dynamic in measures 97 and 98, and another *sfp* marking in measure 100. The second system, labeled with a circled '102' at the beginning, spans measures 102 to 109. It includes *sfp* markings in measures 102 and 105, and a piano (*p*) dynamic in measure 108. The notation includes various note values, rests, and phrasing slurs.

Example 28. Mozart, W. Sonata in F Major, K. 332, third movement, measures 111 - 119.

The image displays a musical score for measures 111 through 119 of the third movement of Mozart's Sonata in F Major, K. 332. The score is written for piano and consists of two systems, each with a treble and bass staff joined by a brace. The key signature is one flat (B-flat), and the time signature is 3/4. Measure 111 is marked with a circled '111'. The first system (measures 111-114) features a rapid sixteenth-note run in the treble staff of measure 111, followed by a series of eighth and sixteenth notes. The bass staff has a whole rest in measure 111, then enters with a half-note chord in measure 112, followed by eighth-note patterns. Dynamic markings include *p* (piano) at the start of measure 112 and *(sfp)* (sforzando piano) at the start of measure 113. The second system (measures 115-119) is marked with a circled '115'. It continues the melodic and harmonic development, with the treble staff featuring a half-note melody and the bass staff providing a steady eighth-note accompaniment. A *(sfp)* marking appears at the beginning of measure 115. The piece concludes with a final cadence in measure 119.

However, the melody is more lyrical in nature.

The second new melodic idea, measure 48 - 52, uses a simple rising bass line answered by an equally simple falling treble line. Its character is less lyrical, but it stands out clearly. It modulates from F major to F minor and C major. The third idea begins in measure 55 and extends to measure 60. Like the first one, it has a fast Alberti bass character and sounds more like figuration than melody. Finally the fourth idea in measure 61 is just a spurt of playfulness, but nonetheless catches the attention of the ear because of its texture and rhythm. Four short new thematic ideas and one brief statement of the A theme make up this varied development section.

K. 283 possesses three new little fragments of note. In the first eight measures of the development section in movement 1, a sprightly little portion of new melody is heard in strong contrast to the incessant eighth and sixteenth note rhythm of the entire movement. It is delightful, brief and the only contrast in this very short development section, if not the whole movement. The third movement has two new thematic fragments. The opening one is but four measures long and is repeated soon. A more improvisatory type of melody is heard in measure 147. It is repeated three times at different pitches in the same key before spinning out and leading to the recapitulation. It is typical of the evasiveness at the end of Mozart's development sections.

(5) The fifth trait deals with the unexpected shift of key

at the very end of the development section.<sup>12</sup> Usually a key other than the tonic is strongly anticipated by the sounding of its dominant, with certain harmonic embellishments, only to be denied by a deft shift to the tonic key. Sometimes there is no adjustment at all and the development will end in one key, or more accurately, on the dominant of a certain key, and the recapitulation will begin in another. The two keys, however, are invariably closely related. Furthermore, there are even sonatas in which the development sections do not begin in the tonic, but will make several false starts in other keys before moving into the tonic. The basic musical feeling created by all of these procedures is one of tonal anticipation and denial. The technique, like all the effects found in a development section, is inexorably tied to modulation. It is another of the many stylistic traits which comes about through the manipulation of keys.

Each movement of K. 280 (Example 29, p. 112) illustrates this trait. The surprise in measure 75 of the first movement is set up by a sequential passage, using the circle of fifths, beginning in measure 67; D minor - G minor - C major - F major - B flat major or minor. A triad on B flat in measure 75 is naturally anticipated by what preceded it. The B flat itself is reached but the harmonization turns out to be an augmented sixth chord in D minor. This is verified by the chords that follow: a tonic six-four in D minor, measure 76, a  $\text{VII}^{\text{O}}_7$  of the dominant of D minor, measure 77, and the extended sounding of the dominant of D minor, measure 78 and 79. Without any prominent use of the tonic, in root position, the key of D minor is firmly set up through the use of a chordal cliché: augmented  $\frac{6}{4} - \frac{6}{4}$

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12 K. 280, movements 1, 2 and 3; K. 283, movement 2; K. 309, and K. 545.

Example 29. Mozart, W. Sonata in F Major, K. 280,  
measures 61 - 83.

The image displays a musical score for measures 61 through 83 of Mozart's Sonata in F Major, K. 280. The score is written for piano and is divided into four systems, each containing a grand staff (treble and bass clefs). Measure numbers 61, 64, 73, and 78 are circled at the beginning of their respective systems. The key signature is one flat (B-flat), and the time signature is 4/4. The notation includes various musical symbols such as notes, rests, slurs, and dynamic markings like *f* (forte) and *p* (piano). The first system (measures 61-63) features a melody in the right hand with slurs and a bass line with chords. The second system (measures 64-66) shows a more active right hand with sixteenth-note patterns. The third system (measures 67-72) includes a change in dynamics to *p* and features more complex chordal textures. The fourth system (measures 73-78) returns to a *f* dynamic and includes triplet markings in the right hand.

-  $\text{VII}_7^{\circ}$  of V - V. However, the tonality is quickly changed to F major in measure 81, where a  $\text{VII}_7^{\circ}$  of A minor is treated enharmonically as a  $\text{VII}_7^{\circ}$  of C. This is followed by a six-four chord on C which naturally points to F major and the recapitulation in measure 83.

The ending of this development section consists of a chord in measure 75 which sharply breaks the harmonic sequence begun in measure 67. Then the "wrong key", D minor, is strongly anticipated only to be denied for F major at the last moment, thereby heightening the effect of the return of the tonic at the beginning of the recapitulation. The main tonal effect is that the intended key is rendered prominent, not directly, however, but obliquely.

In the brief development section of the second movement of the same sonata, K. 280, we have an example of the recapitulation actually beginning in the "wrong key", measure 33, before righting itself in measure 37. Two characteristics mark measure 33 as the beginning of the recapitulation in distinction to measure 37: the brief "dead-end" modulation to G major in measures 31 and 32, a type often found at the end of development sections; and the typical pause in measure 32 separating the development from the recapitulation. The key heard at the end of the development section is C minor, which is the key of the false start of the recapitulation. In this instance the "wrong key" is actually used for a statement of the theme in the recapitulation, and there is no quick change of tonalities to head it off.

In the third movement of K. 280, the development section



begins with two statements of B: the first one begins in C minor and modulates to G minor, the second one begins in B flat minor and modulates to F major. A short, non-thematic sequential tail then moves the tonality to D minor and clearly sets up that key. The development section ends with the usual sounding of the dominant with some embellishments, measure 102 - 106. The pause follows and the recapitulation begins in F major, the relative major of D minor and not D minor itself.

In these three movements we see three basic variations of the same technique. In the first movement, the "wrong tonality" was deftly changed just prior to the recapitulation. To state it another way, a key other than the tonic was rendered imminent only to be replaced by the tonic at the last moment. In the second movement the recapitulation actually begins in the "wrong key" before adjusting itself. In the last movement the development ends in the "wrong key" and the recapitulation begins in the "right key" without any modulation per se, but the relationship is very close and this type of "jump modulation" is very common. The musical effect is basically the same, one of anticipation and denial. The immediate effect, of course, is always peculiar to each sonata itself. This same technique varies in effect from sonata to sonata depending on attendant factors such as rhythm and texture.

The interesting tonal manipulations usually found at the end of the development section may be further illustrated with K. 309 which presents a different approach. In this sonata the development section does not end with the expected strong dominant emphasis in

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either the tonic or any other key. Instead, toward the end, the closing theme is heard, measure 82, in the key of A minor, which was established back in measure 73. The flow of the rhythm carries the momentum right into a clear statement of the A theme, measure 86. Neither the dominant emphasis nor the pause foretells the coming of A. Hence its appearance in measure 86 is somewhat surprising and sounds like the beginning of the recapitulation. However, by the third measure of this statement of A, it becomes recognizable as the melodic variant already used at the beginning of the development section, and not as a pure statement of A. On the other hand, although the melody is slightly altered, it could be the recapitulation except for the key. The ear is purposely teased, especially when the process is repeated in measure 90 at another pitch level. Finally, in measure 94, the tonic key is reached and the A theme is heard in unaltered form. In this sonata the "wrong key" effect causes the recapitulation seemingly to begin twice in the "wrong key" before righting itself. Furthermore the usual telltale signs of the recapitulation are avoided. Such a clear-cut appearance of the main theme suggests the beginning of the recapitulation but the rhythm does not. The evasiveness of the process is the point at hand.

Finally in K. 545, the recapitulation begins, without any foreshadows, in the "wrong key", measure 42, and stays there throughout the A theme before modulating to the "right key", measure 51, prior to the B theme, measure 58.

Throughout this discussion of "wrong key" and "right key" the crux of the matter lies in how a key is heard in relation to



surrounding keys. Some shifts are heard as abrupt adjustments at the last moment and are designed to draw attention to themselves. Others are subtle and the ear does not readily discern the fact that the "wrong key" was used. An expected key may be made imminent, to varying degrees, by the sounding and embellishment of its dominant which, in turn, affects the way the denial or attainment of that key is heard.

(6) The next characteristic, "dead-end" modulation, has been mentioned in the investigation of Haydn's sonatas. The same characteristic is a common part of Mozart's sonatas also.<sup>13</sup>

A "dead-end" modulation is one in which a certain tonal level is reached and rhythmically sustained, but without reinforcing primary chordal progressions needed to establish a really strong key feeling. Thus we are again dealing with a relative effect. Is the certain tonal level attained a key or is it not? Most of the times it is not; hence the term "dead-end" modulation. On the other hand, momentarily the ear is unsure if the new level will turn into a bona fide key, or if it is just a rhythmic elongation of a chordal or tonal level. Be that as it may, a distinct effect is noted, one in which a tonal level or plateau emerges and is sustained without harmonic motion; another musical effect borne out of modulation. The effect is sometimes noted as a prolongation of the dominant at the end of the development section. This emphasis, of course, effectively sets up the return of the tonic and the A theme after the pause. The

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13 K. 279, movements 1 and 3; K. 330, K. 332, K. 547, K. 570, K. 576.



last  $6\frac{1}{2}$  measures of the development section of the first movement of K. 279, measures 51 - 58, is made up of a continuous G major triad which, at first sounds like V in C major, then because of its duration, like the key of G major, and then finally back to a dominant effect in the last measure of the development section. The last nine measures of the development section of K. 330, measures 79 - 87 (Example 30, p. 118) is similar in effect.<sup>14</sup>

K. 279, movement 3, measures 72 - 76, K. 570 (Example 31, p. 119) measures 95 - 100, and K. 576, measures 79 - 83 are examples of dominant prolongation, or "dead-end" modulation within the development section, and not at the end as in the case of the above examples. The general effect is very similar. Each of these three latter examples sustains the dominant of the key just long enough to create a bit of doubt as to the tonality. A rhythmic close results on a half cadence followed by a pause and some important thematic material. Hence, the use is so parallel to the above examples that one often expects the recapitulation to begin at this point.

K. 332, measures 123 - 126, and K. 547, measures 100 - 106, give more of the feeling of a short static tonal plane emerging from a previous area of key mobility. A modulatory hiatus results, a suspension of the feeling of possible key change, and a momentary arresting of the forward motion of the harmonic rhythm.

All of these examples which illustrate the six prominent modulatory features of a Mozart development section are short, lasting

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<sup>14</sup> See also Example 21, measures 67 - 73, p. 86.

Example 30. Mozart, W. Sonata in C Major, K. 330,  
measures 82 - 90.



Example 31. Mozart, W. Sonata in B Flat Major, K. 570,  
measures 92 - 102.

The image displays a musical score for measures 92 through 102 of Mozart's Sonata in B-flat Major, K. 570. The score is written for piano and consists of two systems, each with a treble and bass staff. The key signature is one flat (B-flat major). Measure 92 is marked with a circled '92'. The first system (measures 92-96) features a melodic line in the treble staff with a slur over measures 93-94 and a forte dynamic marking 'f' in measure 95. The bass staff provides a steady accompaniment. The second system (measures 97-102) continues the melodic development in the treble staff, with a piano dynamic marking 'p' appearing in measure 101. The bass staff continues its accompaniment, ending with a sustained chord in measure 102.

for a few measures. This is understandable since the development sections themselves are relatively short. The overall effect of a development section is always due to a combination of some of these traits.

### Summary

It has been observed that the investigation of modulation in the A section of the eighteenth-century keyboard sonata is centered about one area: the transition from the opening tonic to the dominant key. Other modulations were present but without significant structural importance. They are the result of the composer's harmonic style and have little bearing on the overall form of the A section.

The subject of modulation in A' becomes more complex than that in the A section. Modulations in A' are very numerous and take on a wide variety of characteristics. While modulation in A was primarily transitional, modulation in A' is more explorative. In addition, modulation assumes an important relationship to thematic material, especially in the later sonata. This is a new and distinct characteristic.

The fecundity of Scarlatti's approach to modulation in the A' section proves to be equal to his varied approach seen in the A section. From a structural point of view, Scarlatti's modulations present numerous stylistic traits which give the overall sonata form a unique flexibility. Once more it is amply illustrated how the eighteenth-century composers viewed the sonata as a modulatory form consisting of a few basic modulations.



The sonatas of C. P. E. Bach, Haydn and Mozart are similarly based on this modulatory premise. Melodic considerations, especially in Haydn and Mozart, replace the variety of modulatory approaches seen in Scarlatti. Stylistically the sonata changes but the underpinning remains the same. Melodic considerations become more important to the extent that in the early part of the A' section, modulation becomes subservient to the sounding of fragments of the main themes. Only at the end of the development section, especially in the modulation immediately before the recapitulation, is modulation exploited for its own tonal and structural effect.



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