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**Analysis of three works for solo flute : Partita in A minor by J.S. Bach, Fantasie in A minor by G.P. Telemann, and Sonata in A minor by C.P.E. Bach**

Nellie J. LaBerge

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*Nellie J. LaBerge*  
\_\_\_\_\_  
Nellie J. LaBerge

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The author of this  
thesis is

Nellie J. LaBerge  
P. O. Box 236  
Green St.  
Concord, GA 30206

The director of this  
thesis is

Dr. Susan Tepping  
School of Music  
College of Arts & Sciences

Analysis of Three Works for Solo Flute:  
Partita in A Minor by J. S. Bach,  
Fantasie in A Minor by G. P. Telemann,  
and Sonata in A Minor by C. P. E. Bach

A Thesis

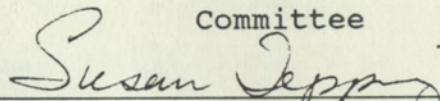
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1995

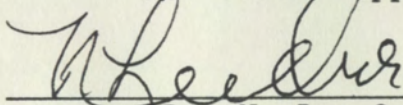
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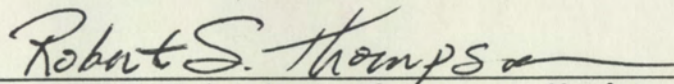
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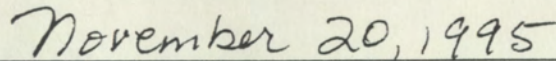
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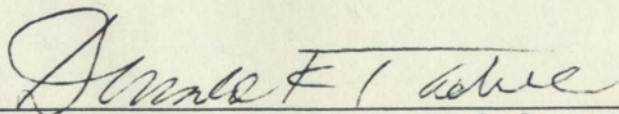
Dr. N. Lee Orr, Member



Dr. Robert S. Thompson, Member



Date



Dr. Donald K. Taebel  
Acting Director, School of Music

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valued heard and even less often analyzed. The best known, of course, are the sonatas and partitas for violin and the suites for cello by Johann Sebastian Bach, but these join a small host of violin works by N. von Pizer, F. Gewiniani, J. G. Albrand, J. P. von Wasthoff, and J. J. Walther, as well as works for viola by J. Schenk. One other instrument, the flute, was singled out for special attention. J. S. Bach gave us a magnificent partita, Georg Philipp Telemann a set of 12 fantasias, and Carl Philipp Emanuel Bach a sparkling sonata. Of these three works, only the Sarabande of the Bach partita has an analysis published.<sup>1</sup> Indeed, few analyses exist of single-line music in general, perhaps because of their apparent simplicity of texture, or the extra steps necessary to derive a harmonic analysis. The works to be analyzed in this study are:

Partita in A Minor for Solo Flute by J. S. Bach (early 1720s)

## CHAPTER 1

### INTRODUCTION

Composers in the Baroque period created a significant number of works for unaccompanied solo instruments which are seldom heard and even less often analyzed. The best known, of course, are the sonatas and partitas for violin and the suites for cello by Johann Sebastian Bach, but these join a small host of violin works by H. von Biber, F. Geminiani, J. G. Pisèndel, J. P. von Westhoff, and J. J. Walther, as well as music for gamba by J. Schenk. One other instrument, the flute, was singled out for special attention. J. S. Bach gave it a magnificent partita, Georg Philipp Telemann a set of 12 fantasias, and Carl Philipp Emanuel Bach a sparkling sonata. Of these three works, only the Sarabande of the Bach Partita has an analysis published.<sup>1</sup> Indeed, few analyses exist of single-line music in general, perhaps because of their apparent simplicity of texture, or the extra steps necessary to derive a harmonic analysis. The works to be analyzed in this study are:

Partita in A Minor for Flute Alone by J. S. Bach (early 1720s)



Fantasie in A Minor for Flute without Bass by G. P.

Telemann (1732-3)

Sonata in A Minor for Solo Flute by C. P. E. Bach

(1747)

J. S. Bach (1685-1750) may have been attracted to composing for unaccompanied strings as a result of his experience in writing lute music. He was the first to write for solo cello; the cello suites predate the six sonatas and partitas for solo violin. In his single flute work for this genre, Bach dealt with greater limitations than in the string works because the flute offered no possibility of double stops to create full chords at cadence points or sustained two-part writing (parallel sixths, for example), let alone the fugues of the violin sonatas. The flute partita nevertheless exhibits multi-voice texture on every page. Disjunct motion alternating among the registers sustains two, three, and sometimes four strands of melody.

Similar use of disjunct melody appears in the flute fantasias of G. P. Telemann (1681-1767). They are part of a large group of works for flute, violin, and recorder in various combinations without bass. Telemann, who had learned several instruments including the flute by age 10, sought to accelerate the spread of amateur music-making in the home. He accomplished this primarily by publishing large amounts of technically accessible instrumental music, but also by turning away from the learned style to embrace

the galante style characterized by clear structure, simple melodic line, and subordinate accompaniment. In the same two-year period in which he published the flute fantasias, Telemann also brought out 12 keyboard fantasias which even more clearly foreshadow the sonata form, especially in their use of motives. Telemann's compositions formed an important link between the late Baroque and the new Classical style.

The motivic variation which formed one of the salient characteristics of the style of C. P. E. Bach (1714-1788) appears to a certain extent in his sonata for flute alone. Perhaps more evident is the empfindsamer Stil (highly sensitive style) of which he was the chief proponent. In that style, melodies copied the ups and downs of emotional speech, rhythm and dynamics imitated dramatic dialog, moods alternated suddenly, and harmonies modulated abruptly to remote keys. This style resulted from the northward spread of the French connection between music and literature. Examples of the influence of empfindsamer Stil in the flute sonata include the measures of rest (m.91 in Movement I and m.93 in Movement III) and the fermatas in m.93 of Movement I and m.94 of Movement II.

Since the Schenkerian method deals with the counterpoint and voice leading of the essential bass and soprano lines in a piece of music, it is particularly well suited to tackling the problems peculiar to single-line music.

Discovering the structural bass in a single treble line is just as instructive as reducing four or more parts to two.

The chief tool of Schenkerian analysis is its unique style of graphing the structural elements. Chapters 3, 4, and 5 present the analyses of the three works under consideration. For each movement a set of graphs may be found at the end of the appropriate chapter. Each graph shows the score at the top of the page and successive levels of foreground and middleground below it. The presentation thus reads down from later to earlier in the composing-out process. Deep middleground and background levels, where included, are compressed into a shorter horizontal span and shown on a separate sheet. Readers wishing to hear performances of the music are referred to the following recordings:

J. S. Bach, *Sämtliche Flötensonaten*. Maxence Larrieu.

Philips 802 825 AY, n.d.

Telemann, *Twelve Fantasies for Solo Flute*. Paula

Robison. The Musical Heritage Society Inc., MHS

3046, n.d.

C. P. E. Bach, *Sonata in A Minor for Solo Flute*.

Gunilla von Bahr. BIS, CD21, 1987.

The three works in this study span a period of 25 or more years at the end of the Baroque era, so their analysis might be expected to show some signs of evolution in style. They are all in A minor, a fairly safe tonality for the

Baroque flute;<sup>2</sup> only one movement of the Telemann is in the relative major. In addition to application of Schenkerian methods, this analysis includes consideration of harmonic, rhythmic, formal, and idiomatic characteristics of the music.

THE TRANSVERSE FLUTE DURING THE FIRST HALF  
OF THE SEVENTEENTH CENTURY

The Golden Age of the Flute occurred in the eighteenth century with the creation of an exquisitely rich and varied repertoire for the instrument. Composers of the late Baroque were inspired by the extraordinary levels of virtuosity achieved by players active in all the musical centers of Europe. What kind of flute was it that made this possible?

The answer to that question interests, above all, the roadways players of the Baroque flute. But musicians performing the music of this period on modern flutes, as well as theorists and historians analyzing the music, may benefit from an understanding of the instrument for which it was written. Although the focus of this chapter is the history of the Baroque flute, the predecessors of that instrument will also be examined. The following features of the Baroque flute will be explored: construction, tone quality, pitch compass, dynamic range, intonation, transposition, and comparison with the modern flute.

## CHAPTER 2

### THE TRANSVERSE FLUTE DURING THE FIRST HALF OF THE EIGHTEENTH CENTURY

The Golden Age of the flute occurred in the eighteenth century with the creation of an exquisitely rich and varied repertoire for the instrument. Composers of the late Baroque were inspired by the extraordinary levels of virtuosity achieved by players active in all the musical centers of Europe. What kind of flute was it that made this possible?

The answer to that question interests, above all, the modern-day players of the Baroque flute. But musicians performing the music of this period on modern flutes, as well as theorists and historians analyzing the music, may benefit from an understanding of the instrument for which it was written. Although the focus of this chapter is the history of the Baroque flute, the predecessors of that instrument will also be examined. The following features of the Baroque flute will be explored: construction, tone quality, pitch compass, dynamic range, intonation, transposition, and comparison with the modern flute.

### The Transverse Flute Before the Eighteenth Century

The cross flute, or transverse flute, arrived in Europe from the East during the twelfth century.<sup>3</sup> A simple cylindrical pipe of two feet or less in length, it was capable of bright and penetrating tones which made it well suited to military use in the Middle Ages. A round blowhole was cut laterally in the wall at the upper, closed end, and its equidistant finger holes produced seven scale tones. Overblowing the fundamental produced the octave, allowing a two-octave range.

By 1528, as Martin Agricola's advice about purchasing "Schweytzer Pfeiffen" or "Querpfeiffen" in sets indicates,<sup>4</sup> transverse flutes were being played in consort in the same way that viols and recorders were grouped. They were built in three sizes, each size having a range of over two octaves. The bass had G for its lowest pitch, while the tenor, which played both tenor and alto parts in the standard four-voice texture, sounded the fundamental D<sup>4</sup>,<sup>5</sup> and the soprano sounded A<sup>4</sup>. It is the flute in D which is the direct ancestor of the Baroque flute and the modern concert flute.

An inventory made of Henry VIII's instruments in 1547 lists several glass flutes,<sup>6</sup> but the usual material for Renaissance flutes was wood, especially boxwood. The smaller flutes could not be tuned by the player as they were made in one piece. The bass flute, however, measuring

approximately 32 inches from mouth hole to foot, was designed in two pieces, perhaps for convenience in transporting. (This feature foreshadowed the "German flute"<sup>7</sup> of the seventeenth century which was divided into three pieces for tuning purposes.) The bore was still cylindrical, but somewhat wider than that of the military Swiss fife with its shrill sound. (Widening the bore reduced the edge of the tone and sweetened it, allowing the instrument to assume a more important role in opera and court ensembles.

The transverse flute suffered something of a decline in the first half of the seventeenth century. As the earlier ideal of consort playing weakened in popularity, the soprano and bass members of the family were used less and the D flute had difficulty meeting the demands of the new expressive style evolving in the Baroque period. New technical advances in the construction of the string family outpaced those of the woodwinds, making the strings more versatile and popular than the winds. Once makers of woodwinds began to address these problems, virtually redesigning oboes, bassoons, and recorders as well as flutes during the second half of the seventeenth century, the literature for these instruments expanded as well. Of all the woodwinds, the flute was plagued with the worst fingering problems. It was built in D, which meant that the notes produced by uncovering consecutive finger holes formed

a D major scale. All other notes were thus chromatic notes and could be achieved only through cross-fingerings which were excessively complex and awkward. Players had difficulty matching the timbre of these chromatic notes to notes on either side and even greater difficulty with their intonation.

### The Hotteterre Flute

It is the French Hotteterre family of woodwind players and manufacturers who are generally credited with transforming these instruments. Their contribution to the flute world was a conical, one-keyed, three-piece model constructed around 1660 and appearing in Lully's orchestra by 1670.<sup>8</sup> Jean Hotteterre (1605-1690/92),<sup>9</sup> working in Paris, may have been the builder of this new flute. The first flute tutor, including fingerings, was written by another member of this illustrious family, virtuoso player Jacques Hotteterre le Romain (1674-1763).<sup>10</sup> It appeared in 1707 under the title Principes de la Flûte Traversière, ou Flûte d'Allemagne.

The improved Hotteterre model, which enabled players to develop a virtuoso technique and admirable tone quality, remained standard through the first half of the eighteenth century. The three sections of the flute in D were fitted together by tenon-and-socket joints. This division into smaller lengths allowed increased precision in the drilling



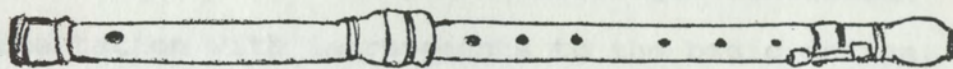
of the bore. The head joint, with its round mouth hole, was closed off at the end with a large, decorative headcap. The middle joint contained six finger holes, drilled slightly smaller than those on earlier flutes. The foot joint was drilled with a seventh hole covered by a brass or silver closed key. Pressure from the small finger of the right hand raised the key and opened the hole, producing D# more clearly and easily than the previous technique of partially covering the bottom hole had allowed. This key, in combination with the forked fingerings explained by Hotteterre in his tutor, rendered the flute fully chromatic for two octaves.

A third important feature, in addition to the new key and the three-piece construction, was the bore design. The head joint retained its cylindrical bore, slightly narrower than in the older design, but the middle section used an inverted conical bore. The diameter tapered from just under  $3/4$  inch at the upper end to approximately  $1/2$  inch at the lower end. The foot joint existed in three styles. The most common design continued the conical angle from the middle section, but straight cylindrical and slightly flared foot joints were also made. The acoustical properties of the conical bore not only improved tone quality but allowed closer spacing of the finger holes, a welcome arrangement for the players. The finger hole diameter had ranged from 7

to 11.3 millimeters in older flutes; the new, smaller holes were 6.7 to 6.9 millimeters across.<sup>11</sup>

Hardwoods typically chosen for Hotteterre flutes were boxwood, ebony, and cocuswood. The exteriors were often turned and carved in ornamental, craftsmanlike designs, particularly at the joints, where the wood was left thicker for strength. Ferrules of bone, ivory, or silver decorated the joints and caps. Foot joints were often ovoid, concealing the bore style.<sup>12</sup>

#### Example 1. Ovoid Foot Joint.



The result of these improvements was an instrument capable of the pure, sweet tone so well suited to the musical styles and the small ensembles of the eighteenth century. Its upper register was more responsive, although the lower octave was weakened by compromise. With the new key, the flute was fully chromatic and much more agile. The range extended from D4 to D6, plus some forced notes up to G6 but excluding F6.<sup>13</sup>

The widespread popularity of these instruments led other manufacturers to emulate the design modifications of the Hotteterres. Surviving instruments from around the turn of the century were made by Jean-Jacques Rippert, Chevalier (both in Paris), P. J. Bressan (in England), and Naust (in Strasbourg). This basic design remained standard throughout the eighteenth century and into the nineteenth, until Theobald Boehm began his radical transformation of the flute in the 1830s.

#### Changes and Improvements from 1720-1750

While tonal purity and technical agility contributed to the rising popularity of the Baroque flute, its flawed intonation and inflexible pitch encouraged continuing experimentation with improvements to the basic design. The first major change, which occurred in 1720, was the four-piece flute with corps de rechange. In order to cope with the many variations of pitch encountered in ensembles and keyboard instruments, a flutist needed some way to adjust his pitch to match. Accordingly, the middle section of the three-piece flute was divided into two separate sections with three finger holes in each. The upper middle section was available in several graduated lengths, known as corps de rechange (spare body sections). Now the flutist could choose a short section for higher pitch or a longer section for lower pitch. Early sets of three corps de rechange

permitted a range of a semitone; later sets reflecting the rising pitch standard included successively shorter sections totaling six and sometimes seven sizes.

Substituting the corps de rechange altered the proportions of the instrument enough to affect the octave intonation. This problem was remedied by adjusting a cork stopper in the head joint. Pulling out or pushing in the stopper could be facilitated by a screw extending through the cork and threaded through the end cap. Another occasion for adjusting the cork stopper was recommended by Quantz in his essay, On Playing the Flute:<sup>14</sup>

. . . if you wish to moderate the tone of the flute and play somewhat more softly, as is required in the Adagio, you must cover the mouth hole with your lips a little more. . . . Since, however, the flute becomes a little lower as a result, you must also have a screw attached to the plug found in the head piece with which you can press the plug the breadth of a good knifeback further into the flute, in order to raise the flute from its normal level as much as your softer playing and the increased covering of the mouth hole require. . . . This makes the flute shorter, and thus higher; and in this fashion you can always remain in tune with the other instruments.<sup>15</sup>

Also in the very early 1720s, flute builders attempted to extend the range down to c4. A longer foot joint housed the new hole and its key, as well as a hole and key for C#4. This change did not become standard, perhaps because the extra length upset the proportion of tube lengths to bore and consequently distorted the scale.

The next tuning device to be tried involved the foot joint again. Termed a register, this consisted of a lower division of the foot joint which could be slid into the main portion of the joint by means of telescoping metal tubes lining the internal joint. Six graduated rings allowed a total adjustment of 15 millimeters.<sup>16</sup> Quantz rejected this device as affecting only the D and not the following notes. His solution was to introduce a division of the head piece where the scale would not be distorted. A lengthened tenon provided room for an adjustment, foreshadowing the modern tuning slide.<sup>17</sup>

A creation of Quantz's which did not fare as well was the second key which he had added to his flute by a maker in Paris in 1726. The object of this key was to provide for the difference between D# and E $\flat$  in the mean tone system of tuning. His foot joint thus had the usual D# key and the additional E $\flat$  key one comma higher in pitch. The "small" and "large" keys worked to differentiate certain other enharmonic pairs, while still others had to be achieved by embouchure adjustment.<sup>18</sup>

In outward appearance the Baroque flute became slimmer and more streamlined through the first half of the eighteenth century. The ovoid foot joint was abandoned for a straight one, and the head cap became small and plain due to the constant need to adjust the cork stopper beneath it.

Some flutes were manufactured in reverse for left-handed players, but, in fact, the only feature to be reversed was the foot joint key. Left-handed players were not at all rare; France's finest flutist in the middle of the century, Michel Blavet, played left-handed.<sup>19</sup> Important builders included Jacob Denner (Nuremberg), the two Thomas Stanesbys, father and son (London), Charles Bizey (Paris), J. M. Anciuti (Milan), and Jean-Hyacinth-Joseph Rottenburgh (Brussels).

#### Tone Quality and Dynamics

In the Essay, Quantz thoroughly analyzed the factors involved in producing a beautiful tone on the Baroque flute. His ideal of a strong, clear sound, "thick and masculine,"<sup>20</sup> could best be achieved with a fairly wide inside tube diameter, a proportionately thick tube wall, and a hard, dense wood for the material. He recommended ebony for the purest, loveliest tone and boxwood for durability. Makers used boxwood most often, but cocuswood, kingwood, lignum sanctum, and grenadilla were also popular. Ivory was second to wood as a satisfactory material. To compensate for its

slightly weaker tone, the ivory bore could be lined with metal. This modification was also made to wooden flutes occasionally, but it resulted in undesirable changes in the tone of the instrument. Quantz made his opinion clear: "Anyone who wishes to make the tone of the flute shrill, rude, and disagreeable can have it cased with brass, as some have tried."<sup>21</sup>

Modern flutists can easily identify with the problems Quantz described in analyzing one other tonal factor, the embouchure.

. . . on the flute, because of the embouchure, tone quality suffers if you leave off for even a few days; in addition, contrary weather, coldness or heat, and even certain foods and drinks can easily put the lips out of condition, so that it is almost or totally impossible to play.<sup>22</sup>

The tone of the earlier Baroque flute is characterized by Donington as "soft and cooing;" the later Baroque instrument "sounds louder and more focused."<sup>23</sup> Either one may have trouble projecting in a room insufficiently resonant or a hall too large. Two techniques helped the eighteenth-century flutist overcome his instrument's narrow dynamic range. The first was to resist the habit when playing with harpsichord of copying its terrace dynamics exclusively. The familiar wedge-shaped crescendo and diminuendo signs were common early in the eighteenth

century, and instrumentalists delighted in a constant nuance of dynamic gradations even within block contrasts.

Articulation patterns gave flutists another means of projecting a line with the limited volume of the instrument. Quantz discussed four basic attack syllables: ti, di, tiri, and did'll (double tongue).<sup>24</sup> The ordinary articulation involved a slight separation between notes, rather than today's usual legato; this also helped delineate the flutist's line.<sup>25</sup>

One way of comparing the tone qualities of the Baroque and the modern flute is to analyze the strengths of the upper partials for each in its various registers. A study of sound-spectra data produced in the Sonic Analysis Laboratory at the New England Conservatory was reported by Anne Shreffler in the Galpin Society Journal in 1983.<sup>26</sup> The Baroque flute examined in the study was a one-keyed conical model made by Roderick Cameron as a copy of a flute by Rottenburgh, c. 1735. Sound spectrum analysis revealed exactly opposite spectral characters in the two flutes. On the Baroque flute the low notes lack strong upper partials, and the spectrum increases and richens as the register ascends. On the modern flute the low register is richest in upper partials while the upper notes "become almost sine-like."<sup>27</sup> Shreffler finds an "absolutely organic relationship"<sup>28</sup> between the music of the period and the instrument. Her analysis of the Sarabande from J. S. Bach's Partita in A



Minor for solo flute shows registral contrasts to be integral to the structure of the piece. She maintains that this spectral-registral building of tension is lost when the music is performed on the registrally homogeneous modern flute.<sup>29</sup>

Another way of comparing the two flutes involves the perspective of modern flutists who have become proficient at playing the old flutes. An interview with Teresa Texeira,<sup>30</sup> flutist with the Atlanta Musica Antiqua, yielded an interesting description of three Baroque models. The Rottenburgh copy, c. 1750 (four-piece, one-keyed model) Ms. Texeira characterized as rich in the low register, still round and easy to play in the mid-range, and beautiful at the top but not above G6. She notes that on this flute the A6 at the end of the first movement of Bach's Partita in A Minor is a difficult note to play. By contrast, a Grenzer copy which she plays will speak more easily in the top range, but its low register is less full. A Bressan flute c. 1720 possesses a very strong low register and a narrower sound in the middle register, and it is somewhat stiff in the high range, especially past F6.

#### Intonation and Pitch Problems

The most persistent flaw of the Baroque flute, attested to by present-day players of original instruments, was poor intonation. Even in the basic natural scale of D major the

F# was low. Other notes particularly out of tune were B $\flat$ 4, G#4, G#5, F4, and F5. This left very few tonalities which could be regarded as comfortable for the flute. Keys with more than three sharps or flats were totally unsuitable, and even the safest keys (C, D, G, and A major) contained a few problems. Quantz warned against the problem in his Essay:

Pieces set in very difficult keys must be played only before listeners who understand the instrument, and are able to grasp the difficulty of these keys on it; they must not be played before everyone. You cannot produce brilliant and pleasing things with good intonation in every key, as most amateurs demand.<sup>31</sup>

Out-of-tune notes required a constant search for alternative cross-fingerings. They could also be tuned by rolling the flute inwards or outwards or by lipping up or down, but all of these remedies were apt to cause a change in the note's timbre. The resulting unevenness of tone or timbre was a characteristic which some consider a part of the instrument's color and expressiveness. Flutists, however, constantly struggled with intonation problems that were the result of flaws in the instrument. The octaves, for example, were a little sharp as a result of the bore design.<sup>32</sup> This had to be corrected by blowing the low notes more strongly and the high notes more gently. Certain precise chin and lip movements were required for this which,

if overdone, could change the timbre and pitch unpleasantly. On any given note the player could vary the pitch by a half step or more without changing the fingering. The variables affecting pitch and intonation were many.

The identity of any given pitch was itself a problem in the Baroque period because there were no reliable standards of pitch. The value for A4 in vibrations per second varied from 350 to 500, or about a fifth.<sup>33</sup> Approximate national standards existed in Germany, France, and Italy, with German pitch in the mid-range, but varying as much as six commas (two-thirds of a tone). French chamber pitch settled a minor third below and the Venetian choir pitch a minor third above.<sup>34</sup> Wind instruments seemed to use the French chamber pitch; German organs were frequently in choir pitch.

In order to play in tune with other instruments at such unpredictable pitch levels, musicians used the Renaissance idea of instrument families built in several pitches. For the first half of the eighteenth century Christopher Addington has assembled a list of eight types of flutes in thirteen different pitches. They include bass flutes in D, G, and A, flûtes d'amour in B $\flat$  and B, concert flutes in C, D, D $\sharp$ , and E, the terzette in F, descants in G and A, and the piccolo in D.<sup>35</sup> Addington shows that any of these flutes may have played at different pitches in different performances through the players' use of two or more clefs. The French violin clef, commonly used in the early part of

the century, was in a convenient major-third relationship to the G (treble) clef. Composers rarely indicated which flute they had in mind, so players were left to choose for themselves.

With so many variations of musical clef, flute size, and ensemble or keyboard pitch, it is evident that the skill of transposing at sight was a basic requirement for the Baroque flutist. It is also understandable that much early flute music provided either an optional continuo accompaniment or none at all.

Despite the enduring weaknesses of the Baroque flute, many players mastered it and drew great admiration from the public. Flutists like Hotteterre, Buffardin, Quantz, Blavet, and Frederick the Great inspired the flute's popularity among amateurs who took up the instrument in great numbers. The best teachers (and many lesser ones) published methods and tutors, and composers produced a fine body of flute literature.

All of this popularity may have hurt the flute by exposing its flaws, for its reputation began to suffer among composers. New keys were gradually added after 1750, but it was not until Boehm's complete remodeling in 1847<sup>36</sup> that the flute became equal to its task. Cherubini's famous comment, "The only thing worse than one flute is two,"<sup>37</sup> reflected the flute's inability to adapt to the needs of ensemble playing.

### CHAPTER 3

#### PARTITA IN A MINOR FOR FLUTE ALONE BY J. S. BACH

The surviving copy of the Partita in A Minor by J. S. Bach dates to the early 1720s, so it was presumably written at Cöthen. Four binary dances comprise the requisite movements of the suite: Allemande, Corrente, Sarabande, and a Bourrée Anglaise in place of the usual Gigue. A possible reason for the formidable technical challenge presented by the Partita is explained by Hans-Peter Schmitz in his preface to the Bärenreiter Urtext edition:

It can be taken as certain at least of the Allemande that there was an earlier version for a stringed or keyboard instrument and it is precisely on this account that the music presents technical problems such as will preoccupy every true flautist for the rest of his life. His approach to this movement will be unlike that to any other work in the entire literature of the flute; he will always attempt it, he will never quite master it.<sup>38</sup>

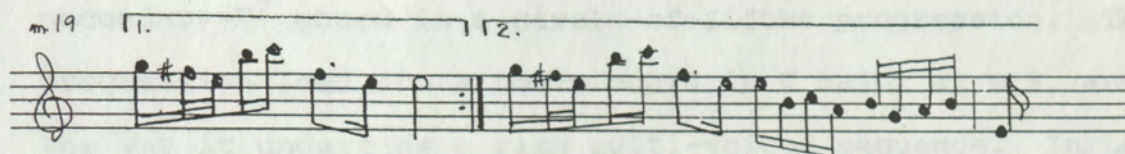
### Movement I. Allemande

Bach exploited the entire range available on the Baroque flute when he composed the opening Allemande of his Partita in A Minor for unaccompanied flute. Choosing A as tonic permitted him to reach down to the flute's lowest pitch, the easily produced and warm-colored D<sub>4</sub>, as a predominant and to toss off a tonic arpeggio ending on A<sub>6</sub>, which is the top of the useful range, for a brilliant finish.

The formal arrangement of the Allemande is simple open binary, and its Ursatz consists of a descent from  $\hat{3}$  over a pair of bass arpeggiations. The third-line descent is interrupted shortly before the double bar;  $\hat{3}$  is recovered halfway through the second section. (See Example 3.) The graphs for this movement, Examples 2 and 3, are located on pg. 43.

The accompanying graph does not include the actual score because the music runs along in continuous sixteenth notes so that Level 1 may easily be read as the score. After an initial sixteenth rest on beat one (m.1) the sixteenth-note rhythm is invariable except for the cadence pattern in m.19. (See Ex. 4.)

Example 4. Cadence, m.19 of Score.



**Measures 1-6: Anstieg; initial prolongation of  $\hat{i}$ .**

An arpeggiation from  $\hat{5}$  through  $\hat{1}$  to  $\hat{3}$  forms an Anstieg in the first two beats. Level 1 contains the lower-neighbor decoration of  $\hat{1}$  as well as the reversal of the arpeggio as it falls down to the tonic note of the bass line. A secondary beam (L.1 and 2) outlines the bass arpeggiation from mm.1-6 which prolongs the tonic.

Level 1 also shows two cases of exact repetition in the first three bars. The opening gesture of eight notes recurs immediately to fill the first measure, then m.2 is repeated verbatim in m.3. This last pattern, an accordion-like motion between  $i$  and  $vii^{o7}$ , centers the top line on E before it descends to C ( $\hat{3}$ ) in the low range. In m.5 the melody rises through a  $V^7$  arpeggio to D6, an upper-neighbor cover tone serving as a reminder of the true octave of the Urlinie.

**Measures 6-14: Bass arpeggiation through III to V.**

In m.6 the bass moves up to C as the root of a secondary  $V^7$  chord in a circle-of-fifths progression. This progression leads to a tonic chord in C major at m.9, and on the way it underpins a rich multi-voiced sequence. In Level 2 the soprano rises an octave to create intervals with the bass of a third and a tenth; simultaneously an alto voice unfolds from the soprano note to form a fifth and a sixth. This pattern appears four times before resolving on C at m.9. Now a rising circle-of-fifths progression travels through A minor to B minor whose tonic chord appears at m.14. This is the V of the first bass arpeggiation in the fundamental structure.

**Measures 14-19: Descent to  $\hat{2}$  and interruption; prolongation of V.**

The linear motion takes a temporary downturn in mm.14-16. A descending line of a fourth appears in Level 1 over a descending circle-of-fifths harmonic progression (iv-VII-III-VI-ii-V). The previous 3-10 sequence is balanced here by a 10-3 sequence. In these same measures a local bass arpeggiation (L.2) brings the bass note of the structural dominant down to the lower octave where it remains until the completion of the first underlying bass arpeggiation in the second half of the movement.



In m.16 a chromatically ascending bass (L.3) and a pair of secondary dominants drive a quick ascent toward B5. This high B, representing the descent of the top line to  $\hat{2}$  and the dramatic focus of the first half, arrives on the second sixteenth note of m.17. Thus it is offset from its expected emphasis by a quarter of a beat. Similarly, it is offset from its supporting note E in the fundamental structure by three measures. Following the interruption, in m.17, of the descent, B is prolonged in the bass as a dividing dominant in the arpeggiation stretching from m.14 to m.19 (L.4). This B supports the top line in its descent to E by two nesting lines of a fifth (L.3).

**Measures 20-36: Change from minor dominant to major; prolongation of V and  $\hat{2}$ .**

After the double bar Bach plays again his opening repetition gambit, but he changes one note for a small jolt to the ear. Instead of falling back down to E, the local tonic, the arpeggio substitutes F#, shown as a neighbor note in the bass at L.1. As at the beginning, the notes of m.21 are repeated in m.22 but with the last three pitches transposed up an octave. In m.23 the tonic chord (E minor) changes chromatically to a  $V^7$ , providing a leading tone (G#) which initiates a long harmonic journey back to A minor. In mm.23-24 melodic sequences over transitory tonicizations of A minor and D minor produce the 6-10 voice exchanges marked

in L.3. In mm.25-36 Bach develops the opening motive, chromatically altering the arpeggio to produce a harmonic progression through D minor, G major, and C major to A minor. Since the approach to A minor is through its dominant, the structural dividing dominant E reappears after a ten-measure lapse, first in m.33 and again as the implied V-chord root in m.36 (L.2). Between these two dominants, the tonic A minor chords in mm.33-34 (L.2) serve as a dividing tonic rather than signaling the return of the structural tonic which actually happens in m.37. Level 4 demonstrates the result of all these repetitions, melodic sequences, voice exchanges, and harmonic progressions: simply a prolongation of  $\hat{2}$  over V.

**Measures 37-46: Recovery of  $\hat{3}$ ; second bass arpeggiation and final descent.**

Measure 37, when examined at Level 3 or 4, has the appearance of a strong cadence point and a likely location for a reprise where  $\hat{3}$  would return over the tonic. However, a glance at L.2 shows a weakening of the cadence by the arrival of tonic on a weak beat and the displacement of the recovery of  $\hat{3}$  by nearly three beats. The surface details of L.1 prove that this binary is not rounded: the tonic and return of  $\hat{3}$  do not involve opening material but are merely way stations in a scale passage surging toward more harmonic turmoil. Two secondary dominants propel a descending third-

line over a local i-V-i arch in mm.37-39. In m.41 the harmonic rhythm accelerates as a highly disjunct melody line forms a falling sequence of augmented fourths going to minor sixths. (See L.2) This prolongs the bass E until the cadence in m.43.

Now the tension is relaxed and the remaining three-and-a-half measure flourish resembles a coda. At the end of m.43 a line of a third in parallel tenths descends in the low range over a tonicization of iv (L.2). The iv chord evolves into a Neapolitan sixth which gives rise to parallel sixths descending a third in the middle range. The G# of the last sixth unfolds up to high E for a final third-line of parallel tenths in the high range descending to C. (The C is flagged to show its role as a reminder of  $\hat{3}$  before the final descent.) These three foreground descents reveal themselves deeper in the structure to be elements in an ascending gesture which arches up through the climactic E6 and curves back to C6. Undergirding the parallel tenths of this rising gesture are the predominant, dominant, and tonic tones of the last middleground bass arpeggiation.

At the final cadence, in m.45, Levels 1 and 2 show  $\hat{2}$  supported by the predominant, D. The last structural dominant falls under the A of a third-line which overshoots the tonic and descends to the leading tone, ultimately resolving to  $\hat{1}$  over the bass tonic. (In Levels 3 and 4, the B [ $\hat{2}$ ] is realized over the dominant.) The last one-and-a-

half bars consist of a tonic arpeggio which bubbles up from low E4 to a soaring A6.

### Movement II. Corrente

The spelling of Corrente as the title of the second movement of Bach's Partita in A Minor indicates that he used the Italian model, a robust dance with running figures in a quick triple meter. Its two sections are arranged in simple open binary form. An Urlinie from  $\hat{5}$ , with an interruption, is supported by three bass arpeggiations. (Refer to the graphs for this movement, Examples 5 and 6, located on pg. 44.

An important feature of this music is the focus on scale degree three. At the beginning, C is highlighted in the upper register and prolonged through a series of third-lines. Later on, after the interruption, the top line moves from  $\hat{2}$  to  $\hat{3}$  and dwells there several measures before unfolding to recover  $\hat{5}$  (see L.4). A corresponding emphasis on the mediant occurs in the harmony, again near the beginning where the relative major works as a tonic substitute, and after the double bar where a lengthy stretch of mediant harmony concludes by supporting  $\hat{5}$ ,  $\hat{4}$ , and  $\hat{3}$  of the interrupted descent (L.4). These features are discussed in greater detail in the following analysis.

**Measures 1-12: Anstieg and initial prolongation of i.**

An anacrusis on the dominant drops to tonic for the initial ascent, a stepwise climb from  $\hat{1}$  to  $\hat{5}$  which is revealed on Level 3 as the arpeggio  $\hat{1}-\hat{3}-\hat{5}$ . The conjunct ascent continues through the octave to  $\hat{3}$ . This high C, a sixth above the headnote of the structural soprano, introduces extended boundary play (L.3, mm.2-6). Lines of a third lead down to A, back up to C, and on up to E. An octave transfer, however, places the E back in the register from which the C originally unfolded. A middleground upper-neighbor figure continues the prolongation of  $\hat{5}$  (L.3, mm.7-12).

The bass line, meanwhile, has established the tonic (A) in the low register (m.1) and then descended in parallel tenths with the soprano to the dominant (L.2). Returning to A, the bass moves upward, again in parallel tenths, to C, the root of the tonic chord in the relative major. In mm.7-9 a sequence pattern propels the harmony through a circle-of-fifths progression in C major to ii (see flagged predominant in m.9, L.2 and 3) which goes to V in m.10. Instead of completing a I-IV-V-I arch in C major, the bass moves from G to G# which provides the root of the diminished-seventh chord signaling the return of the home tonic. Thus the mediant serves as a tonic substitute in a harmonic progression prolonging tonic over the first twelve bars. The progression may be outlined as follows: tonic--

tonic substitute--dominant of the tonic substitute--  
dominant--tonic.

**Measures 12-22: Motion to  $v$  in middleground arpeggiation;  
continued prolongation of  $\hat{5}$ .**

The harmony moves quickly through a secondary dominant to E minor. The resulting bass note, the E in m.14, is the dividing dominant of a middleground bass arpeggiation indicated by a secondary beam in Level 4. Boundary play again occurs in mm.14-19 which is similar to that described in mm.2-7. The highest note of the first pattern, D, functions as  $\hat{2}$  moving to  $\hat{3}$  in C major (mm.6-7); in the second pattern, the highest pitch is D#, working as the leading tone moving to  $\hat{1}$  in E minor (mm.17-18). That D# is the first in a series of five lower-neighbor D#s extending  $\hat{5}$  to the double bar. The first four of these neighbor patterns are labelled at Level 3, but the last is a foreground detail which shows up in m.22 at Level 1. Measure 22 constitutes an extension of the authentic cadence in E minor which closes the section.

**Measures 23-35: Completion of middleground bass arpeggiation; cover tone C.**

Measure 23 turns the preceding minor dominant into a  $V^9$  of the home tonic going to an A minor chord in m.24. The A in the bass at this point completes the beamed bass

arpeggiation of the middleground, but now the harmony moves toward the relative major. The bass line unfolds from A as tonic (m.24, L.4) to E as the third of a C-major chord (m.31). In this section, all in mediant harmony, the tonic chord appears usually in first inversion. This has the effect of emphasizing E in the bass long before the actual arrival of the minor dominant in m.43. The soprano unfolds in mm.23-24 from E to high C (L.3) which is prolonged by a neighbor figure, a descending third-line, and an ascending third-line which returns to C but does so with a transfer to the lower register (L.3, m.35).

**Measures 35-43: Interrupted descent; motion to v.**

The E in m.35, beat 2 (L.1 and 2) is flagged to show that  $\hat{5}$  is regained after the prolonged C cover tone, and to point out its function as a pedal. The pedal function explains its appearance in the midst of a D minor chord in m.41 (L.1). The flagged E there is the end of the pedal.

This portion of the music contains an example of motivic development at the middleground level. The tonic substitute pattern used in the first 12 bars of the movement is repeated here, with variations, to harmonize the initial descent and move to the minor dominant. The original tonic, A (L.4, m.24), is followed by a tonic substitute ( $I^6/III$ ). This moves to a dominant substitute (the  $I_4^6$  in C major) and on through a secondary dominant to the minor

dominant, E. The initial descent is thus supported by chords of the mediant. The D ( $\hat{4}$ ) coincides with G in the bass ( $I\frac{6}{4}/III$ ), and a secondary dominant supplies the bass line D# appoggiatura to the E (v) which supports  $\hat{2}$  (B). This progression is labelled in Level 4.

**Measures 43-52: Prolongation of  $\hat{2}$  over v.**

Immediately after an authentic cadence in E minor in m.44, a circle-of-fifths modulation begins the journey back toward A minor. A dominant-seventh chord ( $E^7$ ) in m.47 is labeled with a sharp (L.3) to show the change from minor to major dominant in the progression toward tonic. Even though the harmonic analysis shows A minor as early as m.46, the motion centers around the dominant, sustaining E in the bass. In m.43 (L.3) the B ( $\hat{2}$  of the interruption) unfolds to E. Then a series of three sequence patterns returns the top line to  $\hat{2}$  (flagged B in m.50) where it is prolonged by a lower-neighbor pattern over V-i-V in the bass.

**Measures 53-59: Completion of first bass arpeggiation; return of  $\hat{5}$ .**

Measure 53 is the point of arrival for the tonic. The bass note A completes the first structural bass arpeggiation and starts the second one. The headnote of the Umlinie is not regained immediately, however. Instead, it is approached through  $\hat{3}$ , unfolding from it seven measures after



the tonic return. The high C cover tone, emphasized at the beginning and middle of the Corrente, reappears near the end to smooth the voice leading of the fundamental structure (L.5). The C is prolonged by third-lines, a descending chromatic one in mm.53-55 (L.3) and an ascending one (mm.55-57) where B unfolds to D before settling back on C. In m.57, a sixth-line begins to descend from C6 to arrive at E5 in m.59 (third beat), returning  $\hat{5}$  for the final descent.

**Measures 59-62: Final descent.**

In the final descent of the Urlinie,  $\hat{5}$  through  $\hat{1}$  are supported by the alternating tonic and dominant bass notes in the last two overlapping structural bass arpeggiations. The headlong descent of the sixth-line begun in m.57 actually continues through the final descent to low A. This means that the complete line spans a tenth and makes it a middleground mirror of the foreground motive which opened the movement, the scale pattern rising from A4 to C6 in mm.1-2. Measure 61 balances the long downward sweep with a rising arpeggio so that the structural  $\hat{2}$  and  $\hat{1}$  appear in the upper register. The final measure, which consists of the cadential extension transposed intact from the double bar (m.22) in the manner of a cadence rhyme, brings the A ( $\hat{1}$ ) down to its proper register.

### Movement III. Sarabande

Considerable emphasis is placed on the mediant harmony in the Sarabande from Bach's Partita for Solo Flute. The harmony moves quickly from the initial key of A minor to the relative major (m.7) and stays there well into the second half of the binary movement. A look at the fundamental structure reveals an Urlinie from  $\hat{5}$  supported by two bass arpeggiations. Tones  $\hat{4}$ ,  $\hat{3}$ , and  $\hat{2}$  of the final descent are all supported by the last dominant. The graphs for this movement, Examples 7 and 8, are located on pg. 45.

#### Measures 1-8: Anstieg; motion to III.

A combination of line and arpeggio builds the Anstieg of this movement. The first tones of the structural bass and Urlinie are provided in the opening bar by stepwise motion from tonic to mediant and a skip up to  $\hat{5}$ . The melody in mm.5-6 repeats itself a step lower in mm.6-7 to facilitate the modulation to C major. The melodic sequence is evident in Level 1 and the score; the underlying harmonic sequence shows up best in Level 4. The bass moves from i to iv (ii in C major), then to V and I in the new key.

#### Measures 9-16: Prolongation of III and $\hat{5}$ .

A two-bar sequence pattern in mm.10-11 and 12-13 creates parallel tenths visible in Level 2 and propels the harmony through a I-IV-V-I progression which takes up this

entire eight-measure section. Mediant harmony (C major) thus stretches out to the double bar in m.16. Level 3 shows the underlying I-IV-V bass line with the predominant F flagged. At the same level, the top line E ( $\hat{5}$  in the original tonic) unfolds to G, ascends in a line of a third to B, unfolds back to G, and falls down to the original E as a recurrence of  $\hat{5}$ .

**Measures 17-28: Tonicization of ii (in C major) in the prolongation of mediant harmony.**

A quasi-inverted form of the beginning measure introduces the second half of the Sarabande, still in C major. The G# diminished and A minor chords in mm.19-20 seem to imply a return to the home key, but instead they lead to an area of D minor harmony (ii of C major). For the space of six measures D minor is tonicized through a series of i-V alternations. At Level 3 the D in the bass line is flagged to indicate the predominant function of this D minor area. The D moves to G (V in C major) and resolves to C. The prolongation of the mediant from m.17 to m.28 is indicated by a dotted slur.

**Measures 28-34: Motion to V.**

C major is construed as III of A minor in m.28, and the return of the original tonic is confirmed by a three-measure stretch of predominant harmony. This is represented in

Level 3 by the flagged D. Such durational weighting of the predominant causes enough tension to make the half cadence in m.34 an important one.

**Measures 35-41: Return of tonic; prolongation of i and  $\hat{5}$ .**

The exact return at m.35 of only one bar of the opening theme does not constitute a reprise. However, it is at least a point of arrival in A minor, and this is reflected in Levels 1, 2, and 3 where the tonic A returns to complete the first bass arpeggiation and begin the second. E is reiterated and then prolonged over two middleground bass arpeggiations (L.2), first by the neighbor tone F and then by a descending line of a third.

**Measures 42-46: Motion to V; final descent.**

The flagged F# in m.42 (Levels 2 and 3) signals the start of the predominant-to-dominant progression which brings back the dividing dominant E in the bass line at m.44. Scale degree four (D) occurs one beat earlier in the score and unfolds in the middleground (L.2) to G# in an arpeggio which reaches up to the high-octave D. Scale degree three of the Urlinie, thus appearing in the high octave, returns by a descending arpeggio to the original octave. These two arpeggios provide the alto notes of the voice-leading shown on Level 3. The alto G# is implied by a

melodic pattern which represents a final twist on the opening material: the first four pitches are reversed.

#### Movement IV. Bourrée Anglaise

An exact reprise of the first four measures constitutes the rounded aspect of the open binary form of the Bourrée Anglaise from the Partita in A Minor by J. S. Bach. The graph of the fundamental structure of this final dance movement (Ex. 10, L.4) shows a line from 5, with an interruption, supported by two bass arpeggiations. In each arpeggiation the dividing dominant supports more than one tone of the Urlinie. The resulting intervals between soprano and bass are represented by figured bass symbols below the Level 4 graph. The graphs for this movement, Examples 9 and 10, are located on pg. 46.

#### Measures 1-6: Anstieg and motion to III.

Five measures in the making, this Anstieg reaches its goal, scale degree five, at the point where the harmony cadences in the relative major. The initial ascent is a decorated line, construed at the deepest middle-ground level as a  $\hat{1}-\hat{3}-\hat{5}$  arpeggio. Decoration of the line includes a neighbor-note pattern (m.1) and a leap-and-fill pattern (mm.2-4, Level 2). The E which is shown unfolding from A in m.2 is flagged because it acts as a precursor of the first note of the Urlinie in m.6.

**Measures 6-20:** Prolongation of III and  $\hat{5}$ .

In mm.6-10 the top-line tone ( $\hat{5}$ ), alternating with its lower neighbor, is sandwiched between a G5 cover tone (flagged) and a G4 dominant pedal (Level 1). The mediant key is further prolonged in mm.11-16 by a I-IV-V-I progression (including secondary dominants) supporting an upper neighbor to the Urlinie  $\hat{5}$ . Level 3 depicts the upper neighbor most clearly, but Level 2 includes three pairs of slurred notes which float above the top line in boundary play and tend to obscure it. Example 11 provides a separate staff for the boundary play in order to clarify the hierarchy of lines in the three-voice texture.

**Example 11. Boundary Play.**

(m. 6) m. 12 13 14 15 16

The image shows two staves of musical notation. The top staff is a single treble clef staff with five lines. It contains notes for measures 12, 13, 14, and 15. Measure 12 has a note on the first line (G5) with a slur above it and a 'c.T.' label. Measures 13, 14, and 15 have notes on the second line (A4) with slurs above them. The bottom staff is a single treble clef staff with five lines. It contains notes for measures 12, 13, 14, and 15. Measure 12 has a note on the first line (G5) with a slur above it and a 'N' label. Measures 13, 14, and 15 have notes on the second line (A4) with slurs above them. There are also notes on the first line (G5) with slurs above them, and a secondary beam connecting notes in measure 13.

The cadence pattern (mm.17-20) completes the descending line of a third begun in m.6 and highlighted by a secondary beam.

**Measures 21-34: Descent to  $\hat{4}$ ; motion to D minor (iv).**

Following the double bar, a reminder of  $\hat{5}$  initiates a descending third-line to C which then rises through a chromatic passing tone to D (m.25), representing  $\hat{4}$  in a preliminary descent of the Urlinie (Level 2). The bass line travels from C through A to arrive at D in m.25 simultaneously with the D which is  $\hat{4}$  of the fundamental top line. This flagged D represents the subdominant character of the bass line supporting  $\hat{4}$  from m.25 through 34.

**Measures 35-40: Descent through  $\hat{3}$  to  $\hat{2}$ ; motion to V.**

In this six-bar section the subdominant harmony moves on to the dominant key by way of the tonic. The dividing dominant of the fundamental structure's first bass arpeggiation appears (m.38) as the root of the V-chord in a half cadence in A minor. One beat later the outlining of a tonic six-four chord (in A minor) supplies the C which is  $\hat{3}$  of the Urlinie (Level 2). In m.40  $\hat{2}$  follows as part of an E minor chord. The last two tones of the interrupted Urlinie descent occur in the high octave; in Level 4 they are transferred to the original range of the Ursatz.

**Measures 40-45: Prolongation of  $\hat{2}$  and V.**

Alternation of the  $i^6$  and iv chords in E minor produces parallel tenths (marked in Levels 2 and 3) and sustains the dominant harmony supporting  $\hat{2}$ . This arrangement is further

prolonged by a line of a fifth descending over two bass arpeggiations evident in Level 2.

**Measures 46-54: Unfolding of  $\hat{2}$  to  $\hat{5}$ ; motion to  $i$ .**

Proper voice-leading at the deepest middleground level demands the reappearance of E in the top line before the return of tonic at the reprise. The final note of the descending line described in the previous paragraph is this E, flagged at m.46 (Level 2) and shown as unfolding from  $\hat{2}$  in the Level 4 graph. A circle-of-fifths progression supports a descending third-line and leads to an important half cadence at m.54, the set-up for the reprise.

**Measures 55-65: Return of  $\hat{5}$  over  $i$ ; prolongation of  $\hat{5}$ .**

The E which arrived in m.46 as a "promissory note"<sup>38</sup> for the reprise is emphasized anew as the anacrusis to m.55.

Here the opening theme returns, and its tonic A closes the first bass arpeggiation of the Ursatz and opens the second. Scale degree five is prolonged by a descending line of a fourth followed by a rising line back to E. The rising line is supported by first-inversion chords. After unfolding to A in m.60 the top line returns to E by a descending fourth-line shown on Level 1.



**Measures 65-70: Final descent.**

The bass line rises through the mediant in m.65 to the dominant (Level 3) as the top line begins its final descent. Scale degree four appears as the seventh over the dominant (L.3). Arpeggio figuration carries the top line up to the ninth of the V chord before it returns to the octave and drops down to C in a resumption of the descent. Both  $\hat{3}$  and  $\hat{2}$  are supported by the dominant; the tonic returns in the bass only in the final measure where it supports  $\hat{1}$  in the same octave. Third-lines descending from  $\hat{3}$  and  $\hat{2}$  (m.69, L. 1) provide the alto notes A and G# of the voice-leading represented by the figured bass symbols at Level 3.

Ex. 2. J. S. Bach: Partita in A Minor,  
Allemande, Levels 1-2.

Ex. 3. J. S. Bach, Partita in A Minor,  
Allemande, Levels 3-4.

37 38 39 40 41 42

Chord diagrams: [V<sup>4</sup>] V [ii<sup>o</sup>] V<sup>m9</sup> V i V<sup>4</sup> i iv V<sup>6</sup> [vii<sup>o</sup>] iv [vii<sup>o</sup>] III [vii<sup>o</sup>] N<sup>6</sup> vii<sup>o7</sup> i<sup>6</sup> iv ii<sup>o</sup> vii<sup>o7</sup> V<sup>7</sup>

Measure 42: +4 — 6 +4 — 6 +4 — 6 +4 — 6 arp.

43 44 45 46

Chord diagrams: i<sup>6</sup> V i [V<sup>7</sup>] iv<sup>6</sup> [V<sup>7</sup>] iv N<sup>6</sup> i<sup>6</sup> V<sup>7</sup> i<sup>6</sup> vii<sup>o</sup> i ii<sup>6</sup> i<sup>6</sup> V i

Measure 46: 10 — 10 — 10 6 — 6 — 6 10 — 10 — 10 — 10

Empty musical staves for measures 47-50.

Ex. 2 J.S. Bach: Partita in A Minor - Allemande, Levels 1-2.

Musical notation for measures 1-6. The first staff (1) contains a melodic line with various ornaments and slurs. The second staff (2) contains a bass line with chords and slurs. Chord symbols are written below the second staff: *a: i*, *vii<sup>o7</sup>*, *i<sup>6</sup>*, *V<sup>7</sup>*, *i*, *vii<sup>o7</sup>*, *i<sup>6</sup>*, *V<sup>7</sup>*, *i*, *iv<sup>6</sup>*, *i<sup>4</sup>*, *iv<sup>7</sup>*, *V<sup>7</sup>*, *C: [vi]*, and *[V<sup>7</sup>]*. Fingerings are indicated by numbers 1-5. Ornaments and slurs are marked above the notes in the first staff.

Musical notation for measures 7-12. The first staff (1) continues the melodic line. The second staff (2) continues the bass line. Chord symbols below the second staff include: *IV*, *ii*, *V*, *iii*, *vi*, *IV*, *V<sup>6</sup>*, *I*, *V<sup>7</sup>/IV*, *[vii<sup>o7</sup>]*, *V<sup>7</sup>*, *a: [ii]*, *iv*, and *V<sup>7</sup>*. Fingerings like *3-5-6-10* and *3-5-6-10* are shown. Ornaments and slurs are present.

Musical notation for measures 13-18. The first staff (1) continues the melodic line. The second staff (2) continues the bass line. Chord symbols below the second staff include: *e: [iv]*, *V<sup>7</sup>*, *i*, *iv<sup>7</sup>*, *VII*, *III<sup>7</sup>*, *VI*, *ii<sup>o7</sup>*, *V*, *vii<sup>o7</sup>*, *i<sup>6</sup>*, *[vii<sup>o7</sup> V<sup>6</sup>]*, *iv<sup>7</sup>*, *[vii<sup>o7</sup> V<sup>6</sup>]*, *V<sup>6</sup>*, *[vii<sup>o</sup>]*, *IV<sup>6</sup>*, *[vii<sup>o7</sup>]*, *III<sup>6</sup>*, *[vii<sup>o</sup>]*, *N<sup>6</sup>*, *vii<sup>o</sup>*, *i<sup>6</sup>*, *iv*, *ii<sup>o</sup>*, *vii<sup>o7</sup>*, and *V<sup>7</sup>*. Fingerings like *10-3*, *10-3*, and *10-5* are shown. Ornaments and slurs are present.

Handwritten musical score for measures 19-24. The score consists of two staves, labeled 1 and 2. Staff 1 contains a melodic line with various ornaments and slurs. Staff 2 contains a bass line with chords and slurs. Chord symbols are written below the staves:  $i$ ,  $V$ ,  $i$ ,  $N$ ,  $V^6$ ,  $i^6$ ,  $V$ ,  $i$ ,  $V^6$ ,  $i^6$ ,  $V^7$ ,  $i$ ,  $[V^7]$ ,  $a: [i^6]$ ,  $V^6$ ,  $i$ ,  $[V^7]$ ,  $d: [i^6]$ ,  $V^7$ . Performance markings include "5th", "p", "N", "3rd", "r.t.", and "arp.".

Handwritten musical score for measures 25-30. The score consists of two staves, labeled 1 and 2. Staff 1 contains a melodic line with slurs and ornaments. Staff 2 contains a bass line with chords and slurs. Chord symbols are written below the staves:  $i$ ,  $[V^7]$ ,  $C: [V/V]$ ,  $V^7$ . Performance markings include "3rd".

Handwritten musical score for measures 31-36. The score consists of two staves, labeled 1 and 2. Staff 1 contains a melodic line with slurs and ornaments. Staff 2 contains a bass line with chords and slurs. Chord symbols are written below the staves:  $I$ ,  $a: [III^7]$ ,  $[V^7]$ ,  $iv^7$ ,  $[V^7]$ ,  $V^7$ ,  $i^6$ ,  $V^7$ ,  $i$ ,  $ii^7/iv$ ,  $iv^6$ ,  $[V^7]$ ,  $iv$ ,  $V^4/VII$ ,  $V^4$ ,  $iv$ ,  $vii^07$ ,  $V^7$ . Performance markings include "5th".

Ex. 3 J. S. Bach: Partita in A Minor - Allemande, Levels 3-4.

Musical notation for levels 3 and 4, measures 1-10. Level 3 (top staff) features a treble clef and a 3/4 time signature. It includes a triplet of eighth notes at the beginning, followed by a series of eighth and sixteenth notes with various accidentals (sharps, flats, naturals). A 4th interval is indicated above the staff. Level 4 (middle staff) shows a similar melodic line with a natural sign and a flat. Below the staves, the fingering '10 - 10 - 10 - 10' is written. Chord symbols III, V, and V are placed below the bottom staff. A measure rest 'a:' is shown on the left. The piece concludes with a double bar line and a fermata.

20 25 30

Musical notation for levels 3 and 4, measures 11-20. Level 3 (top staff) continues the melodic development with a 5th interval indicated. It includes a triplet of eighth notes and a 3rd interval. Level 4 (middle staff) shows a melodic line with a sharp sign and a 5th interval. Below the staves, the fingering '6 - 10 6 - 10' is written. Chord symbols -# and V are placed below the bottom staff. The piece concludes with a double bar line and a fermata.

35 40 44 45

Musical notation for levels 3 and 4, measures 21-30. Level 3 (top staff) features a triplet of eighth notes and a 3rd interval. It includes a series of eighth and sixteenth notes with various accidentals. Level 4 (middle staff) shows a similar melodic line with a sharp sign. Below the staves, the fingering '10 - 10 - 10' is written. Chord symbols V and i are placed below the bottom staff. The piece concludes with a double bar line and a fermata.

Ex. 5. J. S. Bach: Partita in A Minor,  
Corrente, Score and Levels 1-3.

Ex. 6. J. S. Bach: Partita in A Minor,  
Corrente, Levels 4-5.

Ex. 5 J.S. Bach: Partita in A Minor - Corrente, Score and Levels 1-3.

1 2 3 4 5 6 7 8 9 10 11 12

Score

1 a: (V) i (V) i v<sup>6</sup> VI ii<sup>6</sup> V C: [i] vi vii<sup>o</sup> V I IV vii<sup>o</sup> iii vi ii V a: [vii<sup>o7</sup> vi] V i

1

2

3

13 14 15 16 17 18 19 20 21 22 23

Score

1 [vii<sup>o7</sup> V<sup>7</sup>] v<sup>4</sup>- i<sup>4</sup> V<sup>5</sup>/VIII vii<sup>o</sup> e: [i] iv vii<sup>o7</sup> V i<sup>6</sup> V<sup>4</sup>-<sup>5</sup>/<sub>3</sub> i [vii<sup>o</sup> V] V<sup>7</sup> i V i (iv V<sup>4</sup>-<sup>5</sup>/<sub>3</sub> i) a: V<sup>9</sup>/iv

1

2

3

v<sup>4</sup>-



24 25 26 27 28 29 30 31 32 33 34

Score

C: [iv -7 V<sup>7</sup>/V V -7 vi IV ii V I<sup>6</sup> I IV ii -7 V<sup>7</sup> I<sup>6</sup> [V<sup>7</sup>] IV [V<sup>6</sup>] V

1

2

3

35 36 37 38 39 40 41 42 43 44

Score

(C:) I<sup>6</sup> IV<sup>7</sup> I<sup>6</sup> IV<sup>3</sup> ii V<sup>6</sup> I<sup>6</sup> I vi ii<sup>6</sup> I<sup>6</sup> [vii<sup>o7</sup>] V<sup>6-5</sup> vii<sup>o7</sup> iii i [vii<sup>o3</sup>]

1

2

3

V<sup>6</sup>-

45 46 47 48 49 50 51 52 53

Score

[V<sup>7</sup>] a: [ii iv] vii<sup>o</sup> V<sup>7</sup> i [vii<sup>o</sup> V<sup>7</sup>] V i V i iv<sup>7</sup>

1

2

3

3rd (2) 3rd 3rd

7 10 7 3 7 3 6 10 10 7

54 55 56 57 58 59 60 61 62

Score

[V] III -7 VI iv ii vii<sup>o</sup> V<sup>7</sup> i VI iv<sup>7</sup> V VI iv ii<sup>o</sup> [vii<sup>o</sup>] iv N vii<sup>o7</sup> i V<sup>7</sup> i V i (iv V<sup>4=5</sup> i)

1

2

3

3rd 3rd 6th 6th 3rd 2 4 3 2 1

10 7 10 7 10 3 7 5 3 7 5 3 7 5 3 7 3 2 1

3rd 6th

3 2 1

V<sup>7</sup> i V i

r.t.

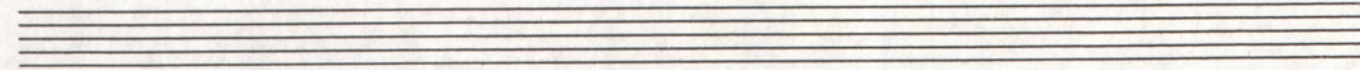
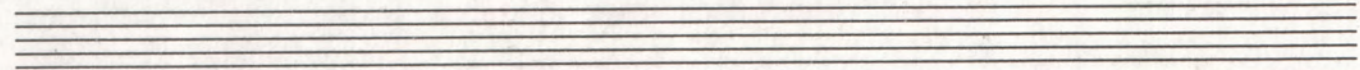
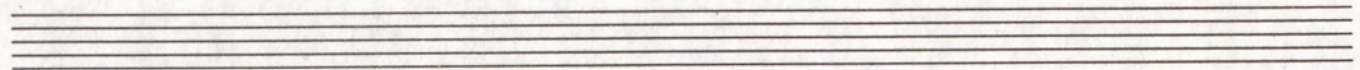
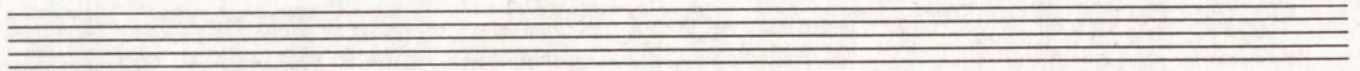
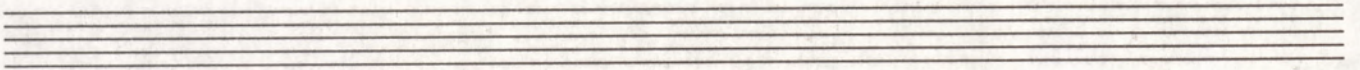
Ex. 6 J.S. Bach: Partita in A Minor - Corrente, Levels 4-5.

7 12 14 23 24 31 39 41 42 43 47 53 59 60 61

4

5

a: i III i v<sup>4</sup>-# i I' ii' I<sub>4</sub>, [V] v<sup>4</sup>-# i V' i V i



Ex. 7. J. S. Bach: Partita in A Minor,  
Sarabande, Score and Levels 1-3.

Ex. 8. J. S. Bach: Partita in A Minor,  
Sarabande, Level 4.

Ex. 7 J.S. Bach: Partita in A Minor - Sarabande, Score and Levels 1-3.

Score

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

a: i iv<sup>6</sup> V -9 i V i C: [iv ii] V I (V) I V<sup>7</sup> I<sup>6</sup> vii<sup>06</sup> I IV<sup>6</sup> (vi<sup>4</sup>) ii<sup>6</sup> vii<sup>0</sup> ii V<sup>7</sup> I IV V<sup>6-5</sup> I

1

2

3

Score

17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

I (vi) [vii<sup>07</sup> V] vi i ii<sup>0</sup> V i<sup>6</sup> ii ii<sup>0</sup> V<sup>6</sup> i V<sup>7</sup> i V<sup>6</sup> -9 a: [III] i vii<sup>07</sup> V i iv<sup>7</sup> (vii<sup>0</sup> iv) i<sup>6</sup> (vii<sup>0</sup> i<sup>4</sup>) ii<sup>0</sup> V

1

2

3

35 36 37 38 39 40 41 42 43 44 45 46

Score

Chord symbols:  $i$ ,  $iv$ ,  $ii^\circ$ ,  $V$ ,  $i$ ,  $V$ ,  $i^6$ ,  $vii^\circ$ ,  $i$ ,  $vi^\circ 7$ ,  $vii^\circ 3$ ,  $i^6$ ,  $ii$ ,  $V^7$ ,  $i$ ,  $V_{4-3}^{6-5}$ ,  $i$

Handwritten markings:  $w$ ,  $M$ ,  $3rd$ ,  $r.t.$ ,  $N$ ,  $(5)$ ,  $(\#)$ ,  $\hat{4}$ ,  $\hat{3}$ ,  $\hat{2}$ ,  $\hat{1}$

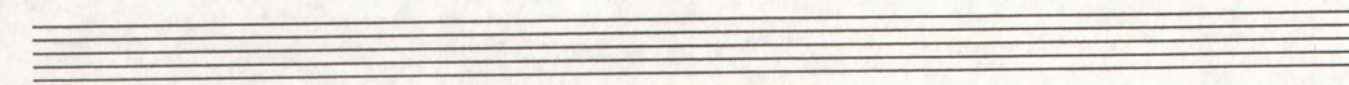
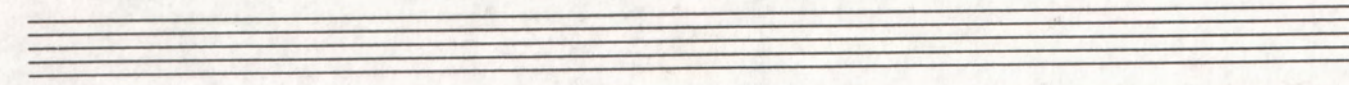
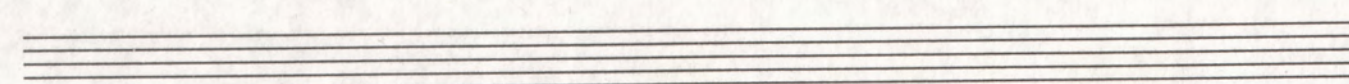
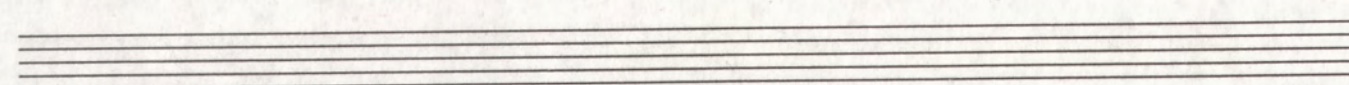
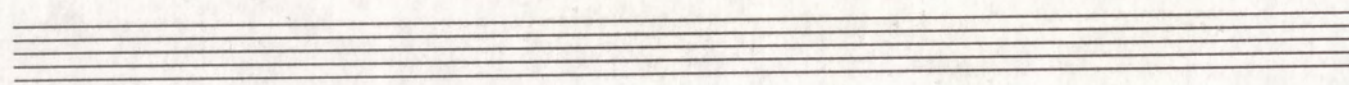
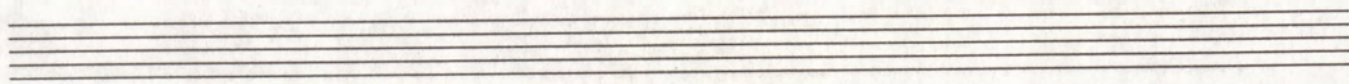
Chord symbols at the bottom:  $V_5^7$ ,  $6$ ,  $5$ ,  $4$ ,  $3$ ,  $i$

Ex. 8 J. S. Bach: Partita in A Minor - Sarabande, Level 4.

6 17 31 34 35 44 45

4

a: i III iv V i V  $\frac{7}{5}$   $\frac{6}{4}$   $\frac{5}{3}$  i



Ex. 9. J. S. Bach: Partita in A Minor,  
Bourrée Anglaise, Score and Levels 1-3.

Ex. 10. J. S. Bach: Partita in A Minor,  
Bourrée Anglaise, Level 4.



Ex. 9 J.S. Bach: Partita in A Minor - Bourrée Anglaise, Score and Levels 1-3.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

Score

i vii° i i<sup>4</sup> V<sup>7</sup> i<sup>4</sup> V C: [V<sup>6</sup> V<sup>6</sup> I -<sup>4</sup> V<sup>7</sup> I<sup>4</sup> V<sup>7</sup> I<sup>6</sup> V I [V<sup>7</sup>] IV [V<sup>6</sup>] V I<sup>6</sup> ii vii° V I V I vii<sup>oc</sup>

1

2

3

23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41

Score

[vii<sup>o7</sup> V] vi d: V i V<sup>6</sup> i V<sup>6</sup> [vii<sup>o6</sup>] V<sup>7</sup> i V<sup>7</sup> i V<sup>7</sup> i<sup>6</sup> V i a: [V<sup>7</sup>/VII V<sup>7</sup>/III] vii<sup>o7</sup> V e: i<sup>4</sup> i<sup>4</sup> iv

1

2

3

Ex. 9 cont.

Reprise

42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59

Score

(e:) i<sup>6</sup> iv<sup>b</sup> ii<sup>o</sup> V i ii<sup>oc</sup> V<sup>4-3</sup> i a:[V<sup>1</sup>] iv [V<sup>7</sup>] III i vii<sup>o</sup>/iv (V 4th) vii<sup>o</sup>/III (IV i<sup>6</sup>) III i V i V i i<sup>6</sup> V<sup>7</sup> i<sup>6</sup> V vi<sup>oc</sup> vi<sup>oc</sup>

1

2

3

60 61 62 63 64 65 66 67 68 69 70

Score

i<sup>6</sup> V i iv [vii<sup>o</sup>] [V<sup>2</sup>] [vii<sup>o</sup>] III iv V -7 -9 i V i

1

2

3

V<sup>7</sup> 6-5 4-3 i

Ex. 10 J.S. Bach: Partita in A Minor - Bourrée Anglaise, L. 4.

25 39 40 46 55 65 69

a: i III V  $\frac{4-5}{4-3}$  i V  $\frac{5-4-3}{5-4-3}$  i

Empty musical staves for practice.

#### CHAPTER 4

#### FANTASIE IN A MINOR FOR FLUTE WITHOUT BASS BY G. P. TELEMANN

The Fantasia in A Minor is one of the Twelve Fantasies for Transverse Flute without Bass composed in the years 1732 to 1733. Telemann produced a considerable output of works for one or several flutes or violins without continuo.

"Destined for the musical amateur or the instrumental student, they represent authentic documents of Baroque music intended for playing, in which an original spirit is at work."<sup>40</sup> Since each fantasia is in a different key or mode, the collection offers clues about which keys a composer could safely use with the hope of satisfactory results from the average player on the current instrument. The twelve fantasies are in the following keys: A major, A minor, B minor, B $\flat$  major, C major, D minor, D major, E minor, E major, F $\sharp$  minor, G major, G minor.

#### **Movements I & II: Grave and Vivave<sup>41</sup>**

The short first movement of Telemann's Fantasia No. 2 in A Minor, marked Grave, forms a florid introduction to the Vivace, leading directly into it from an elaborately

ornamented half cadence. Because of this harmonic arrangement, the two movements are analyzed as one unit.

The Vivace does not fit comfortably into any formal stereotype, but it does bear a surprising resemblance to fugue process in its handling of the opening subject and in its key scheme. Example 14 diagrams the movement, showing those features.

Example 14. Vivace, Formal Scheme.

Mm.	12	18	26	33	37	49	53
	T1	T1	T2	T1	T2	T1	T2
	i	v	III	iv	→ i - V - i	i - iv - V - i	
	Exposition	Episode	Middle	Episode	Final	Closing	
			Entrance		Entrance	Section	

The first theme, T1, is characterized by disjunct motion. Leaps of sixths and sevenths between the low and middle registers outline the soprano and bass of the multi-voice texture with hints of an alto voice at the beginning (C in m.12) and end (B and A in m.15). Each reiteration of

T1 is exactly like mm.12-16 (first note), except for the register of the last two notes and the key.

In contrast, T2 evolves differently each time it appears. Its three elements--the rising tonic arpeggio followed by octave leaps in m.26, the sixteenth-note descending scale pattern in mm.29-30, and the parallel tenths in m.31--are treated freely to create episodes and a closing section.

The fundamental structure of the two-movement unit is a line from  $\hat{5}$  supported by two overlapping bass arpeggiations. A prominent feature, a descending fourth-line in the soprano, stands out in the background graph (Ex. 13). The graphs for these two movements, Examples 12 and 13, are located on pg. 58.

**Measures 1-11 (Grave): Introduction and initial prolongation of i.**

Three quarter notes outlining the tonic triad in the first bar provide an Anstieg to  $\hat{5}$ . In the second measure the bass travels down a third from A to F, completing a sequence pattern which is repeated twice at descending pitch levels: i, VII, and VI (L.1.). The falling sequence pattern draws the soprano down from  $\hat{5}$  in a line of a third (mm.1-6, L.2). In an immediate reversal, the soprano rises a third over parallel sixths to regain E, supported by the dominant

in m.11. A strong half cadence closes the Grave and leads into the Vivace.

**Measures 12-18 (Vivace): Anstieg; motion to v.**

The Anstieg rising to the head note of the Uralinie in m.12 parallels the  $\hat{1}-\hat{3}-\hat{5}$  arpeggio at the beginning of the Grave. Here, in T1, A is strongly implied in the eighth-rest; C follows with a passing tone to E. The descending sequence pattern spawns a series of 7-6 suspensions and a descending third-line in the soprano, both evident in Level 1. As the harmony circles back to tonic in m.16, that A minor chord becomes the pivot in the modulation to E minor. In mm.16-18 the harmony moves from iv through  $V^7$  to i in the minor dominant key, while the top line unfolds from E up to C and then moves down to B,  $\hat{5}$  in the new key.

**Measures 18-26: Motion to mediant harmony.**

In mm.18-22 T1 is presented in E minor. Note that the last two notes of T1 are displaced by an octave. The same descending sequence pattern, 7-6 suspensions, and descending third-line occur at the new pitch level. (See L1 and 2). In m.22 where the harmony returns to E minor, this chord again serves as the pivot chord in a modulation to the mediant, C major. This modulation is confirmed through a circle-of-fifths progression in the harmony and a sequence pattern in the melody. Level 2 (mm.22-26) shows the 8-5-3

sequence pattern and the falling third-lines which result. Closer to the background, in Level 3, these elements are revealed to be a neighbor tone in the top line and a descending third-line in the bass.

**Measures 26-32: Prolongation of III.**

Repetition of the C major (tonic) triad establishes the mediant harmony. The arpeggio in m.26 echoes through mm.27-28 before the harmony moves on to a IV-V-I progression in mm.29-31. (See score.) Thus, the first 32 measures of this Fantasie have served to prolong E in the soprano and A (i) in the bass. (See L.4.)

**Measures 33-42: Motion through iv and V to i.**

In mm.33-36 T1 returns in the subdominant. This D minor area is represented at Level 3 by a flagged pre-dominant (D) in the bass supporting a high D in the soprano. The high D represents the second pitch in a descending line of a fourth, indicated by a secondary beam in Level 4. As the predominant gives way to a dominant chord at m.41, the soprano unfolds to a B and then moves to C, which is the third note ( $\hat{3}$ ), as the bass line returns to tonic in m.42.

**Measures 42-48: Completion of descending fourth-line.**

Scale degree three and its tonic foundation last seven measures while the harmony progresses through such delaying



tactics as Neapolitan sixth chords, deceptive cadences, and repetition. (See score, mm.12-35.) Level 3 shows three voices in open spacing, necessitating wide leaps through these measures. The resulting register shifts add to the technical brilliance of this Vivace. As the bass moves to V in m.48, the soprano arrives on  $\hat{2}$ , the last note of the descending fourth-line.

**Measures 48-59: Reminder of  $\hat{5}$ ; final descent; second bass arpeggiation.**

The final statement of T1 in m.49 re-establishes  $\hat{5}$  as the bass proceeds from E up through G# to A, completing the first structural bass arpeggiation (m.49, L.3). The E is flagged at all levels in m.49 to highlight its role as a reminder of the structural  $\hat{5}$ . In the final descent,  $\hat{4}$  is supported by V in the bass ( $V^7$  chord in m.52);  $\hat{3}$  coincides with the final tonic of a middleground bass arpeggiation (m.53, L.3);  $\hat{2}$  occurs over a predominant D (L.4, m.57) and moves down in a third-line to  $\hat{7}$  as the bass D rises to E; the bass and soprano lines converge on A as  $i$  and  $\hat{1}$  in the final measure.

### Movement III: Adagio

The short third movement of Telemann's *Fantasie in A Minor*, marked Adagio, provides a quick splash of contrasting color in the relative major. Its nine measures are through-

composed upon a framework consisting of a single set of nesting bass arpeggiations and an Urlinie from  $\hat{3}$ . (See the deep middleground graph, Ex. 16.) The graphs for this movement, Examples 15 and 16, are located on pg. 59.

The Anstieg, an elaborated stepwise pattern moving from C6 to E6, arrives at  $\hat{3}$  by the beginning of measure 2. The elaboration is of the leap-and-fill variety, spiced with lower appoggiaturas (F# and B). These two figures alternate three times to form the first phrase ending at measure 2, beat 3. The bass arpeggiations, however, prolong the tonic past this point and through the first half of the second phrase (m.3, beat 3).

The two bass arpeggiations which nest inside the large overall one are seen most clearly in Level 2 of the graph. The more local arpeggiation is accomplished in m.1; it supports the Anstieg. A slightly longer-range one is completed in m.3, beat 3. This arpeggiation contains the neighbor pattern G-F-G which effectively stretches out the dominant for several beats before resolving to C. The resulting bass line serves as underpinning for the 8-7-3 voice-leading pattern in the top line. This is labeled on Level 1 of the graph.

In the section between m.3, beat 4 and m.6, beat 3, the tonic is further extended by an upper-neighbor area indicated as ii on the graph (Level 3). The 8-7-3 pattern of m.3 is repeated in sequence a step higher in m.4, resolving

on F on beat 3 with the root D understood. This neighbor chord, D and F, is itself prolonged when the top line rises a third and then falls back down a third by m.6, beat 3. This creates the parallel tenths on Level 1 of the graph, in m.5.

An octave line starting at m.6, beat 3, rises from E5 through a register transfer to arrive at the original E5 on beat 3 of m.7. The E is implied by the momentum of the rising line and also by the upper note of the trill<sup>42</sup> on beat 2. This implied E re-establishes  $\hat{3}$  just before the chromatic passing tone E $\flat$  in the descent of the Urlinie.

Beneath the E $\flat$ , a predominant F# (vii of V) increases the tension of the preceding seven-and-one-half measures of tonic prolongation, building that tension through rising arpeggiated figures and forming a bridge to the dominant of the structural bass.

In measure 9, an alto line (see L.2) arises out of the A emphasized as the high point in the preceding chord in m.8. This middle voice forms the intervals 3-4-5 over the dominant before merging with the bass and top line in the final tonic C.

#### Movement IV: Allegro

Telemann completed his Fantasie in A Minor with an open, rounded binary dance marked Allegro. Its background structure consists of two bass arpeggiations supporting a

descent from  $\hat{3}$  with an interruption. This short movement features several "promissory notes,"<sup>43</sup> pitches which foreshadow Urlinie notes. The graph for this movement, Example 17, is located on pg. 60.

**Measures 1-8: Anstieg and initial prolongation of tonic.**

The Anstieg combines arpeggio and line. The first four notes rise from  $\hat{5}$  through  $\hat{1}$  and  $\hat{2}$  to  $\hat{3}$  which is the headnote of the structural soprano. At Levels 2 and 3 this ascent is simply the arpeggio  $\hat{5}-\hat{1}-\hat{3}$ . C unfolds back to A immediately and then falls in an arpeggio to the lower octave to confirm the true range of the first structural bass note (L.2). The first four measures contain nothing but tonic harmony except for two accented lower neighbors (G#) whose implication of dominant harmony rescues this opening section from blandness.

An anacrusis (E) plus the first note in m.5 (A) complete the first middleground bass arpeggiation (L.2); the second arpeggiation spans mm.5-9 and supports a rising third-line. In the score mm.5-6 are repeated exactly as mm.7-8 so that the soprano line backtracks from C through B to start the third-line again from A to C. The effect of the repeated measures at Level 2 is a lower neighbor note prolonging  $\hat{3}$ .

**Measures 9-12: Motion to  $v$  and  $\hat{2}$ .**

The melody continues to rise in a sequence, supported by the same i-iv-V harmony, to B which is  $\hat{2}$  of the Urlinie. Level 2 plots the scalewise ascent through a seventh to move from  $\hat{3}$  in the lower register to  $\hat{2}$  in the upper register. This B is the high point of the first half of the movement and is recalled in a flagged promissory note near the end.

**Measures 12-18: Prolongation of  $v$ .**

A bass arpeggiation in mm.13-14 (L.1) establishes E minor under a stepwise and then arpeggiated pattern in the top line. In m.15 the falling chromatic line balances the rising one in mm.9-10. An authentic cadence at the double bar completes the second bass arpeggiation of this section (L.2). The two flagged Bs (L.1, m.16 and m.18) portray the deep-middleground sustaining of  $\hat{2}$  during the foreground prolongation of E.

**Measures 19-28: Change from  $v$  to V.**

This harmonic instability after the double bar is typical of the beginning of the B section in binary forms. The first four bars settle into D minor. Then a melodic sequence over IV-V<sup>7</sup>-I harmony moves through G minor to A minor which is confirmed by a half cadence at m.28. The flagged C and its underlying A minor harmony (see L.1 and 2

at m.26) presage the return of  $\hat{3}$  and tonic harmony at the reprise several measures later.

**Measures 29-34: Recovery of  $\hat{3}$  and prolongation of i.**

The reprise, starting with the anacrusis to m.29, restores  $\hat{3}$  after the interruption and brings back tonic A in the bass. The C unfolds to A (L.3) which is sustained through a neighbor pattern. Beneath that, a bass arpeggiation with predominant helps to prolong the tonic harmony until the descent.

**Measures 35-40: Final descent.**

A rising third-line with a register transfer returns to  $\hat{3}$  in the lower octave. Its harmonic underpinning furnishes the penultimate i-V-i arch before the final cadence.

The flag on the B of m.38 (L.1) calls attention to this note for two reasons. First, it is the only real appearance of  $\hat{2}$  at the end of the movement as  $\hat{2}$  is merely implied by the dominant harmony in the final descent. Additionally, this flagged note raises expectations of a resolution to A in the high range, but the payoff never materializes. Instead, the register shifts down an octave, creating a low-profile, almost whimsical finish for this Fantasie.

Ex. 12. Telemann: Fantasie in A Minor,  
Grave and Vivace, Score and Levels 1-3.

Ex. 13. Telemann, Fantasie in A Minor,  
Grave and Vivace, Level 4.

Ex. 12 Telemann: Fantasie in A Minor - Grave and Vivace, Score and Levels 1-3.

Grave 2 3 4 5 6 7 8 9 10 11 Vivace T1(i) 13

Score

1 a: i iv<sup>6</sup> VII III<sup>6</sup> VI IV<sup>7</sup> i<sup>4</sup> iv<sup>6</sup> V i VII<sup>6</sup> V<sup>6</sup> v<sup>6</sup>

2 3rd 3rd 3rd 3rd

3 3rd 3rd 3rd 3rd

14 15 16 17 18 T1(v) 19 20 21 22 23 24 25 26 T2(III) 27 28 29

Score

IV<sup>6</sup> iv<sup>6</sup> V<sup>7</sup> i V e: [iv] V<sup>7</sup> i VII<sup>6</sup> V<sup>6</sup> v<sup>6</sup> IV<sup>6</sup> iv<sup>6</sup> V<sup>7</sup> i V C: [iii] [V<sup>7</sup>] ii V<sup>7</sup> I (IV) ii

1 7-6 7-6 7-6 7-6 7-6 3rd 3rd 3rd 3rd

2 3rd 3rd 3rd 3rd 3rd 3rd 3rd 3rd

3 3rd 3rd 3rd 3rd 3rd 3rd 3rd



30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

Score  
 (C:) V I<sup>c</sup> IV V I d: [ii<sup>b</sup>] T1(iv) V v IV<sup>c</sup> iv<sup>c</sup> V<sup>7</sup> i V i [vii<sup>o</sup>] a: [VII] vii<sup>o</sup> i N<sup>c</sup> V VI i<sup>4</sup> N<sup>c</sup> V

46 47 48 49 50 51 52 53 54 55 56 57 58 59

Score  
 VI i<sup>4</sup> iv V<sup>7</sup> i T1(i) VI<sup>c</sup> IV<sup>c</sup> v<sup>c</sup> IV<sup>c</sup> iv<sup>c</sup> V<sup>7</sup> i V i T2(i) iv ii (i) iv ii (i) V i V i

Ex. 13 Telemann: Fantasie in A Minor - Grave and Vivace, Level 4.

1 12 33 41 42 48 49 51-2 53 57-8 59

a: i V i V i V i

Empty musical staves for practice.

Ex. 15. Telemann: Fantasie in A Minor,  
Adagio, Score and Levels 1-3.

Ex. 16. Telemann: Fantasie in A Minor,  
Adagio, Level 4.

Ex. 15 Telemann: Fantasie in A Minor - Adagio, Score and Levels 1-3.

Score

C: I V I V IV V<sup>7</sup> I [V] IV V<sup>7</sup> ii i vii<sup>o</sup> IV I<sup>6</sup> vii<sup>o6</sup> I vii<sup>o6</sup> I<sup>6</sup> IV V INV I Vii<sup>o7</sup> V V<sup>6</sup> I V I

1

2

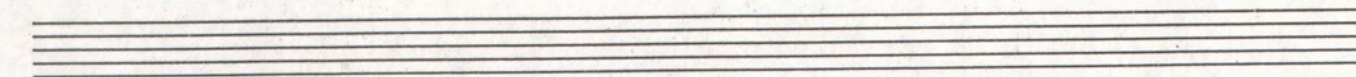
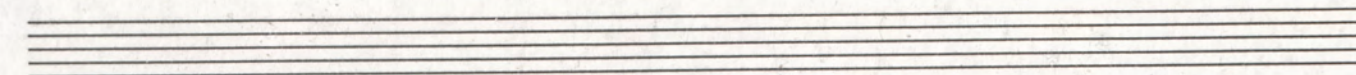
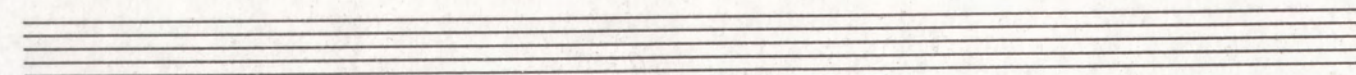
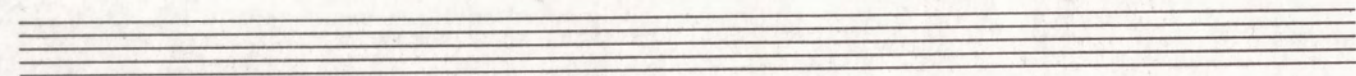
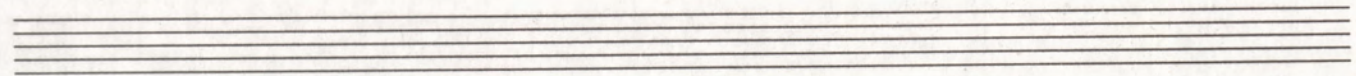
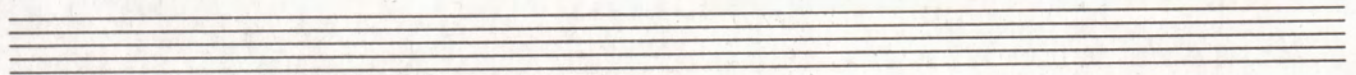
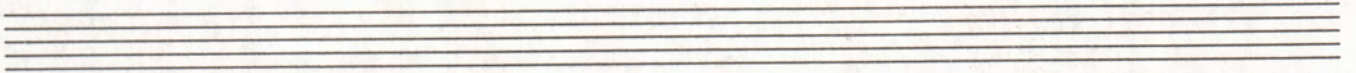
3

C: i V -7 I ii I vii<sup>o7</sup>/V V I

Ex. 16 Telemann: Fantasie in A Minor - Adagio, Level 4.

4

C: I V<sup>7</sup> I [vii<sup>o</sup>] V I



Ex. 17. Telemann: Fantasie in A Minor,  
Allegro, Score and Levels 1-3.

Ex. 17 Telemann: Fantasie in A Minor - Allegro, Score and Levels 1-3.

Score

5 10 15

a: i (V)i (V)i vii<sup>o6</sup> i V i vii<sup>o6</sup> i V i iv V i V i iv V i V i iv V -1 i V i iv

1

2

3

a: i

v -

Score

20 25 30 35 40

ii V -7 i V i IV V<sup>7</sup> I V V<sup>7</sup> i iv<sup>6</sup> V i (V)i (V)i [V] iv V i V i V i

1

2

3

- V

i

V i

## CHAPTER 5

### SONATA IN A MINOR FOR SOLO FLUTE BY C. P. E. BACH

C. P. E. Bach wrote his Sonata in A minor for Solo Flute in 1747, the same year in which his famous father visited him in Berlin and met his employer, Frederick the Great. Whether or not the son was mindful of the father's monumental Partita for Flute Alone, he produced a work quite different from it, one which stands on its own merits and is highly valued in the flute repertoire. The last movement, with its many sonata-like features, offers a clear illustration of the development of the rounded binary as a hybrid form toward the end of the Baroque era.

#### **Movement I: Poco Adagio**

The slow movement of C. P. E. Bach's Sonata in A Minor is a somber Poco adagio in three-eight meter. Its form is three-part, with no repeated sections. The opening A part emphasizes the mediant, C major, while the B section is in the minor dominant. An exact reprise of the opening theme signals the return of A in a brief closing section.

The Ursatz for this movement consists of an interrupted Ursatz descending from  $\hat{3}$ , supported by two overlapping bass



arpeggiations. The first motion from *i* to *v* includes an arpeggio through the mediant (Ex. 19, L.5), and this single black note in the background graph blooms into an area of mediant harmony 29 measures in length. (The graphs for this movement, Examples 18 and 19, are located on pg. 77.)

**Measures 1-8: Ansteig and initial prolongation of *i*.**

The first four notes neatly supply the first note of the structural bass, the Ansteig, and the headnote of the Urlinie, all in the intended registers. From the flute's low A, the line skips up an octave to establish the Urlinie register. From there, stepwise motion completes the initial rise to  $\hat{3}$ . Measure 3 confirms the two-voice structure of the melody as the bass moves down to F4 and later to D4 while the top line remains around A5 to C6. The initial key is confirmed by a half cadence, the first of many feminine cadences in this movement.

**Measures 9-24: Motion to mediant.**

Following the half cadence, a C-E-G arpeggio introduces the key of C major, and two I-V-I arches, visible at Level 3, confirm it. The top line retains its C through an arpeggio up to G and a line of a fifth back to C. (See Level 1 graph.) A brief excursion into D Minor (ii/III) starts at m.15 and serves to extend the mediant before a cadence in C at m.24.

**Measures 24-37: Prolongation of III.**

The mediant harmony continues to assert itself through a series of secondary dominants, a deceptive cadence, and a progression including a German sixth which resolves in a masculine authentic cadence in m.37. Level 2 reveals a leap-and-fill pattern in the bass where the line unfolds from C down to E and fills the interval back in through a 5-3 sequence. At m.30 the soprano ascends in a line of a third to E $\flat$ , a chromatic alteration common to the vii<sup>07</sup>/V, the minor tonic six-four, and the German sixth which lead to a V<sup>7</sup> in m.35. The D of the V<sup>7</sup> forms an upper neighbor tone prolonging C. Beneath the neighbor pattern lies a bass arpeggio with a strong predominant F# common to the same three chords. When the bass moves to the dominant in m.35, the G is prolonged, under a leap-and-fill pattern in the top line, until the authentic cadence on the downbeat of m.37.

**Measures 38-50: Motion toward v to support  $\hat{2}$ .**

After the strong cadence in C at m.37, the harmony becomes unstable as it moves toward the minor dominant. While the tonality goes from C major to D minor to E minor, the top line moves upward also, arriving at  $\hat{2}$  (B) over v (E) in m.45. Descending tenths lead to a half cadence in m.49, establishing the minor dominant key of this middle section. Motion to v is strengthened by the Italian sixth chord in m.48.

**Measures 50-61: Prolongation of v.**

Bach uses the B section, starting at m.50, to work with his opening theme in a new key. The bass ascends stepwise from G (of the  $i^6$  chord in m.50) to B (the dominant in m.56) in a reversal of the opening pattern where the bass descended by arpeggio to the subdominant and then rose to the dominant. A passage of disjunct motion highlights the compound nature of the melody in a set of rising parallel tenths which end in a voice exchange at m.60 and lead to a feminine cadence in E minor at m.61.

**Measures 62-69: Motion to tonic.**

The E of m.61 takes an upper neighbor tone, F, in the top line (L.2), and in the bass moves to D from which it unfolds to the leading tone of the A minor chord in m.63. (For a bird's-eye view of the harmonic implications of the G# leading tone, see L.4.) This bass line A is not yet the return of the structural tonic but a dividing tonic in a V-i-V arch ending with a half cadence in m.65 (L.3). Another V-i-V arch stretches to another half cadence in m.69. Over this second arch the top line E is prolonged by a pair of neighbor notes, lower and upper (m.67, L.2) and an arpeggio down to C in m.68 which serves at the next deeper level as a neighbor tone to B ( $\hat{2}$ ). Level (3) shows the origin of that B in an alto descent in mm.64-65 and traces

it via dotted slurs all the way back to the interruption in m.45.

**Measures 70-86: Return of  $\hat{3}$  over  $i$ ; prolongation of  $i$ .**

The reprise of the opening theme starting in m.70 is the arrival point for the structural tonic as well as  $\hat{3}$  of the Urlinie. The soprano line prolongs C first with a lower neighbor tone (m.74, L.2), then with a circle-of-fifths sequence pattern (mm.76-80), and again with a descending fifth-line in a sequence pattern that results in the parallel tenths of Level 1, mm.80-84. At m.85 in the score, a high B pops out above the texture as a reminder of the true register of the Urlinie. The disjunct motion tends to mask the origin of this note as a chromatic passing tone from B $\flat$  of the alto in m.84 to C in m.86. The various prolonging maneuvers in the top line are undergirded by two bass arches, each with a predominant tone (L.3).

**Measures 86-94: Final descent.**

These bars contain the last bass arch. Its dividing dominant is prolonged by an upper neighbor in m.87 and a lower neighbor in m.92. In the soprano a flurry of third-lines in both directions and both registers effectively sustain C until m.93 where  $\hat{3}$  of the final descent appears in the low octave. The resolution to A is also in the low range, as shown in Levels 1 and 2. Level 3, however,

returns the notes of the final descent to their proper register.

### Movement II: Allegro

Of the two repeated parts of the first Allegro movement from C. P. E. Bach's Sonata in A Minor, the second is twice the length of the first. The harmonic plan is open, cadencing in the relative major at the double bar and then moving through a second related key, E minor, before returning to the tonic.

The opening motive (Ex.23) reappears four times in the movement. At m.40 it is in C major with pitch alterations of the fifth and sixth notes. Just the opening gesture of four notes occurs at m.45 in A minor. At m.65 the first eleven notes of the opening phrase are repeated in E minor. The final return, mm.95-100, is an exact repeat of the full six-bar phrase. Another prominent melodic motive closes the first repeated section (Ex.24). This is the cadence rhyme pattern discussed later in this analysis. No other motives are repeated. Each new phrase group uses new material with only rhythmic or gestural similarities. Melodic unity is aided, however, by the underlying structure. Sections which appear quite different in their surface detail look more alike at deeper structural levels.

## Ex.23. Opening Motive.



## Ex.24. Cadence Rhyme.



Continuous use of arpeggios and disjunct motion creates two and sometimes three strands in the compound melody. There are melodic skips of all sizes including tenths and twelfths. The penultimate measure contains a downward leap of a fourteenth.

Feminine cadence patterns are a characteristic rhythmic feature of this Allegro. Examples such as the cadence in

m.6 crop up throughout. Indeed, aside from the final cadence, there are only three masculine cadences in the piece.

Several features contribute to the rounded quality of this movement. The first is the clear division of the second repeated part into two sections. The first of these sections achieves a somewhat separate identity not through melodic contrast but because of its harmonic digressions. The last ten bars of this part create a strong expectation of the return of the opening motive through the cadenza-like figures, the dominant pedal, and the culminating fermata. When the opening motive does return, it is a literal repetition of the entire first six-measure phrase. Reinforcing the rounding effect is a cadence rhyme that is much more than a gesture. The complete four-measure closing phrase from the first part is repeated exactly except for key and register.

**Measures 1-14: Anstieg: initial prolongation of tonic.**

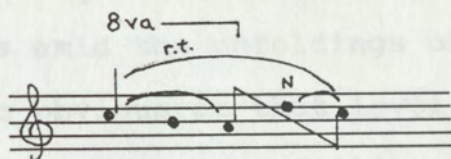
Graphs for this movement comprise Examples 20, 21, and 22, located on pg. 78. The level 4 graph in Example 22 outlines the background structure of the piece. The Umlinie is an interrupted line from  $\hat{3}$  supported by two bass arpeggiations.

The compound nature of the melody is immediately evident because in the first measure the A2 anacrusis can be

heard to lead downward and upward simultaneously (see L.1). It arpeggiates down to the first structural bass note and unfolds up to  $\hat{3}$  of the Urlinie in the simplest of initial ascents.

Levels 2 and 3 of the graph depict the means by which the first 14 bars prolong the tonic. The bass line spins out two nesting i-V-i arpeggiations, with a predominant added to the outer one by the last 3-7 sequence pattern. In the soprano a descending third-line and a longer-range octave-line are neatly tied together with the neighbor note D as shown in Ex.25. The composer embossed the same neighbor-note pattern upon the surface by setting the high C-D-C in relief against the lower-octave texture.

Ex.25. Measures 1-13



A single note, the B4 in m.14, accomplishes the transition to the relative major. Level 3 portrays the B as a passing tone in the bass.



**Measures 15-40: Motion to III; descending octave-line prolonging  $\hat{3}$ .**

A single note, the B4 in m.14, accomplishes the transition to the relative major. Level 3 portrays the B as a passing tone in the bass. From here C major holds sway to the double bar and beyond, 46 measures in all. Such emphasis on the mediant facilitates the continuation of  $\hat{3}$  in the top line. The third- and octave-lines noted in mm.1-13 reappear, spanning mm.16-40. A secondary dominant, however, in m.22 changes the B to B $\flat$  in this descent. As the octave-line passes through G5, it is supported by G4, the dividing dominant of the single beamed bass arpeggiation stretching from measure 15 to 40. Secondary bass arpeggiations are tucked in at the beginning (mm.15-20) and end (mm.36-40) of the larger one.

At the first foreground level (L.1) a 6-10 voice exchange occurs amid the unfoldings of the two voices in mm.18-20. Also obvious at that level are the rising tenths of mm.33 and 34, balanced by falling sixths in the cadence phrase (mm.36-38). The same phrase contains a 6-10 voice exchange at the second foreground level (L.2).

**Measures 41-64: Prolongation of III; descent to  $\hat{2}$  and motion to V.**

The first structural motion away from tonic occurs as the Urlinie dips down to  $\hat{2}$  in an interruption pattern and

the bass line moves to its first dividing dominant. One bass arch prolongs C major until the bass line unfolds, through a sequence of descending tenths, from C5 to E4, the structural dominant. Since E arrives as iii of C major, it is temporarily a minor dominant, represented on the graphs as  $V\flat$ .

In the soprano the third-line of the head motive recurs with its  $B\flat$  restored. The fifth note of the motive is altered in this C major version, with the result that it stays within the boundary of the Urlinie (m.41).

**Measures 65-94: Prolongation of  $\hat{2}$  over the dominant; change from  $v$  to  $V$ .**

The structural dominant shifts from the minor to the major mode when a chromatic alteration transforms the E minor chord into an  $E^7$  chord (m.85). This sets up the long dominant pedal section preparing for the return of the head motive in A minor. A descending line of a fifth (shown with a beam in Level 2) further emphasizes the dominant.

The first part of the cadence rhyme phrase occurs in mm.72-73, producing a sense of closure in E minor. Then there is some harmonic traveling through the parallel-tenth sequences shown at Level 2. D minor is tonicized briefly and then E minor returns for the switch from  $V\flat$  to  $V\sharp$  switch mentioned above.

**Measures 95-120: Recovery of  $\hat{3}$  and return of  $i$ ; final descent over second structural bass arpeggiation.**

In the final portion, the return of the opening motive in A minor achieves the recovery of  $\hat{3}$  and the repetition of the characteristic line of a third (mm.95-98). Although the ensuing melodic figures and harmonic patterns in mm.100, beat 2, to 106 are different from those in the corresponding mm.6, beat 2 to 14, they still produce the same descending octave-line visible in the Level 1 graph, as well as the parallel thirds of the deeper foreground, Level 2. In a typical over-shoot pattern, the Urlinie descends in a third-line from  $\hat{2}$  to  $\hat{7}$  before returning to  $\hat{1}$  (mm.116-120).

The first note of the bass line (m.95) completes the first background bass arpeggiation and begins the second one. In this final tonal arch, several nesting arpeggiations, featuring progressively stronger predominant elements, lend impetus to the drive toward the final cadence. The last predominant supports  $\hat{2}$  of the top line before the ultimate resolution.

### **Movement III: Allegro**

The final movement of C. P. E. Bach's Sonata in A Minor is marked simply Allegro, just as the previous movement is. However, its  $\frac{3}{8}$  meter invites a quicker beat and its rhythmic patterns create a rollicking, light mood to close the sonata. The open, rounded binary form approaches a

prototype sonata form here, for Bach establishes the dominant key well before the double bar with a prominent top line descent from  $\hat{5}$  to  $\hat{1}$  in E minor and five measures of coda-like material confirming the key.

An Urlinie from  $\hat{3}$  and a pair of bass arpeggiations comprise the Ursatz. The Urlinie is interrupted, and  $\hat{2}$  is prolonged over a section of minor dominant harmony. The bass line moves through the mediant at the double bar before completing the first of its two structural arpeggiations. The second arpeggiation supports the final descent of the Urlinie starting at the reprise. Graphs for this movement, Examples 26 and 27, are on pg. 79.

**Measures 1-13: Anstieg; initial prolongation of i.**

The Anstieg happens quickly in the second measure, a simple stepwise ascent from A5 to C6. Initial prolongation of the tonic can be seen, at Level 3 of the graph, in the bass arpeggiation stretching from m.1 to m.13. Level 3 also reveals a descending third-line in the soprano. Level 2 depicts the parallel tenths which bring the bass down to the dominant and the soprano down to E5 from which it unfolds to the B of the third-line. In m.13 the third-line is completed, back up in the original register. The tonic chord beneath the A undergoes a quality change and becomes  $I^{\frac{4}{2}}$  in order to lead to iv in m.15. This chromaticization,

evident in the harmonic analysis under the score, is simply labeled as tonic at Level 3.

**Measures 13-28: Movement to v and  $\hat{2}$ .**

In this section the top line descends to  $\hat{2}$  while the bass moves to E, establishing the minor dominant with a half cadence. A sequence of 9-10 suspensions results from secondary dominants in third inversion resolving to  $iv^6$  and  $III^6$  (Level 2). The same level shows a voice exchange from the tenth in m.15 to the sixth in m.21. The resulting descending third-line reverses itself and returns by parallel sixths to A before moving to the Urlinie  $\hat{2}$  in m.27.

**Measures 29-52: Prolongation of v (i in E minor).**

With the minor dominant established by the half cadence, the next portion prolongs it to the double bar. The bass travels down an octave (with a register transfer to keep it within the flute's range). This line includes the typical overshoot pattern, a line of a third down to the leading tone, before landing on E. Meanwhile, the soprano has paralleled the bass in tenths part of the way. The beamed notes in Level 3 delineate a sort of final descent for the first half of the binary, a descent from  $\hat{5}$  to  $\hat{1}$  in E minor. This is supported by two bass arches,  $i^6-vii^{06}-i$  and  $i-V-i$ , the second forming the only masculine cadence in the

piece so far. Coda-like passage work leads to the feminine cadence which closes the first half of the movement.

**Measures 53-68: Start of mediant area; prolongation of III.**

Abruptly after the double bar Bach goes to the mediant, C major. He confirms and prolongs it by a complete octave of descending tenths moving directly to a half cadence (m.68). This emphasis on the mediant lasts all the way to the reprise in m.102 and forms, in the deep middleground, a bass arpeggiation of A descending through E and C to A.

**Measures 69-90: Return to  $\hat{2}$  of the interruption.**

After the half cadence in m.68, the dominant persists until m.91. During this reign of the dominant, the B, which is  $\hat{2}$  of the interruption, reappears. This note is flagged in m.75 (L.3) where it unfolds from D on the previous line. Predictably, the return of  $\hat{2}$  leads to the C which is a harbinger of the recovery of  $\hat{3}$  in the Urlinie.

**Measures 91-101: Flagged harbinger of  $\hat{3}$ ; continued prolongation of III.**

The C which foreshadows the recovery of  $\hat{3}$  (flagged in m.91) is supported by C in the bass, still tonic in this mediant area. The measures from 91 to 101 continue the tonic harmony and retain the top line C by a rising series of parallel tenths. This produces a voice exchange, still

in tonic harmony. An authentic cadence in m.101 finishes the mediant harmony area and ushers in the reprise.

**Measures 102-149: Recovery of  $\hat{3}$ ; final descent.**

At the reprise, the bass unfolds from C to A for the second structural arpeggiation. At the same time the top line recovers  $\hat{3}$  after the interruption. That combination of  $\hat{3}$  over i is prolonged through three local bass arpeggiations, while three themes from the first section are being recapitulated in A minor. (Mm.102-113 equal mm.1-12; mm.114-121 are similar to mm.13-20; mm.122-125 equal mm.21-24.) One more theme, from m.69 in the second section, is presented in A minor as opposed to the original C major, before the coda-like material brings about the final descent through  $\hat{2}$  to  $\hat{1}$ , supported by v and i in the bass.

Ex. 18. C. P. E. Bach: Sonata in A Minor,  
Poco Adagio, Score and Levels 1-3.

Ex. 19. C. P. E. Bach: Sonata in A Minor,  
Poco Adagio, Levels 4-5.



Ex. 18 C.P.E. Bach: Sonata in A Minor - Poco Adagio, Score and Levels 1-3.

Score

a: i vi ii<sup>o4</sup> V<sup>6-5</sup><sub>4-3</sub> C:I V<sup>6-5</sup><sub>4-3</sub> vii<sup>o6</sup> V<sup>7</sup> I iv<sup>7</sup> V<sup>-1</sup> I d: vii<sup>o7</sup> V<sup>4</sup> i V<sup>2</sup> i<sup>4</sup> ii<sup>o6</sup> V<sup>6-5</sup><sub>4-3</sub> i C:ii

1

2

3

a: i

III

Score

V<sup>6-5</sup><sub>4-3</sub> -7 I<sup>6-5</sup><sub>4-3</sub> [V<sup>6</sup><sub>5</sub>] IV<sup>7</sup> [V<sup>6</sup><sub>5</sub>] V<sup>7</sup> [V<sup>6</sup><sub>5</sub>] vi<sup>7</sup> [V<sup>6</sup><sub>5</sub>] V<sup>6</sup> I V vii<sup>o7</sup> V i<sup>4</sup> Ger<sup>6</sup><sub>5</sub> V<sup>7</sup> I V I [vii<sup>o7</sup>] V ii [vii<sup>o7</sup>] V iii e: [I<sup>6</sup><sub>5</sub>]

1

2

3

Score

tr tr so ss 60 65 tr tr

(e:) v I<sup>tr</sup> V -7 i<sup>6</sup> iv<sup>7</sup> [vii<sup>o7</sup>] V<sup>9</sup> i ii<sup>o</sup> i<sup>6</sup> [vii<sup>o7</sup>] IV<sup>7</sup> vii<sup>o</sup> i<sup>6</sup> ii<sup>o</sup> V i [vii<sup>o7</sup>] a: [i<sup>6</sup>] V<sup>6</sup> i V<sup>6-5</sup> Ger<sup>6</sup> vii<sup>o7</sup> V

3rd

10 6

3rd

5

h # V

Score

Reprise 70 75 80 85 90

i<sup>6</sup> [vii<sup>o7</sup>] V i vi ii<sup>o</sup> V<sup>7</sup> i [V<sup>7</sup>] iv -7 [V<sup>7</sup>] [V<sup>7</sup>] VI<sup>6</sup> V<sup>9</sup> - v<sup>6</sup> IV<sup>6</sup> - iv v<sup>7</sup> III<sup>6</sup> N<sup>6</sup> V -7 i V vi i<sup>6</sup> [vii<sup>o7</sup>] V i

3rd

5th

10 10 10 10 10

3rd

5th

8ve

8th

3

V V i

Ex. 19 C.P.E. Bach: Sonata in A Minor - Adagio, Levels 4-5.

1 6 9 38 45 61 62 63 65 70 93 94

4

a: i III V<sup>4</sup> — # (i V) i V i

5

Ex. 20. C. P. E. Bach: Sonata in A Minor,  
Movement II Allegro, Score and Level 1.

Ex. 21. C. P. E. Bach: Sonata in A Minor,  
Movement II Allegro, Levels 2-3.

Ex. 22. C. P. E. Bach: Sonata in A Minor,  
Movement II Allegro, Deep Middleground.

Ex. 20 C.P.E. Bach: Sonata in A Minor - Movement II Allegro, Score and Level 1.

Score

a: i V i<sup>6</sup> V i iv -7 VII -7 III VI ii<sup>o</sup> (vii<sup>o</sup>) V<sup>7</sup> i V or [V] C: I IV vii<sup>o</sup> I<sup>6</sup> IV V<sup>7</sup> I [V<sup>7</sup>] IV

a: i V i C: I

Score

[V] -7 ] V V<sup>7</sup> I V<sup>7</sup> I IV V vi V<sup>7</sup> I IV<sup>6</sup> vii<sup>o</sup> I IV<sup>6</sup> I<sup>4</sup> vii<sup>o6</sup> I<sup>6</sup> IV V I V -7

V 6 6 6 6 10-10 10-10 6 6 6 6 10 I

Score

I vi V/vi V<sup>7</sup> i V i<sup>6</sup> V<sup>7</sup> i V I<sup>6</sup> V<sup>7</sup> I IV<sup>6</sup> iii<sup>6</sup> ii<sup>6</sup> I<sup>6</sup> [vii<sup>o7</sup>] e:

3rd 3rd Pedal c.t. c.t. 4th 3rd

Score

65 70 75 80

Chords: e: i, iv, V, i, V, -7 (i) ← vi<sup>o</sup>, -ø7, vii<sup>o7</sup>, i<sup>6</sup>, iv<sup>6</sup>, i<sup>4</sup>, vii<sup>o4</sup>, i<sup>6</sup>, iv<sup>7</sup>, V, d: ii, vii<sup>o3</sup>, i<sup>6</sup>, vii<sup>o6</sup>, i

Ornaments: tr, c.T., 3rd

Score

85 90 95

Chords: vii<sup>o3</sup>, ii<sup>6</sup>, vii<sup>o6</sup>, ii, a: V, i<sup>4</sup>, V, i<sup>4</sup>, V, i<sup>4</sup>, V, i, V, i, V, i<sup>4</sup>, V

Ornaments: tr, c.T., 3rd, Pedal, 5th, 3rd, 8ve

Score

100 105 110 115 120

Chords: V<sup>7</sup>, i, [V<sup>2</sup>], iv<sup>6</sup>, [V<sup>2</sup>], III<sup>6</sup>, ii<sup>6</sup>, i<sup>6</sup>, [vii<sup>o7</sup>], V, i<sup>4</sup>, V<sup>7</sup>, -9, i<sup>4</sup>, ii<sup>o6</sup>, V<sup>7</sup>, i, iv, V, i, V, i, iv, i<sup>6</sup>, vii<sup>o</sup>, i<sup>6</sup>, iv, V, i

Ornaments: tr, c.T., 3rd, 8ve, 2

Ex. 21 C.P.E. Bach: Sonata in A Minor - Movement II Allegro, Levels 2-3.

Musical score for measures 1-45, Levels 2 and 3. The score is written for two staves (2 and 3) in treble clef. It includes various musical notations such as triplets, eighth notes, and sixteenth notes. Fingerings are indicated by numbers 1-4. Dynamic markings include *8ve* (octave) and *3rd* (triple). A metronome marking *Mm.* is present. Measure numbers 5, 10, 15, 20, 25, 30, 35, 40, and 45 are marked below the staves. A bass line at the bottom shows the sequence of chords: *a: i* and *III*.

Musical score for measures 46-90, Levels 2 and 3. The score continues with similar notation to the previous section, including triplets, eighth notes, and sixteenth notes. Fingerings and dynamic markings like *8ve* and *3rd* are used. A metronome marking *Mm.* is present. Measure numbers 50, 55, 60, 65, 70, 75, 80, 85, and 90 are marked below the staves. A bass line at the bottom shows the sequence of chords: *V 4-* and *4-#*.

Musical score for measures 91-120, Levels 2 and 3. The score concludes with similar notation, including triplets, eighth notes, and sixteenth notes. Fingerings and dynamic markings like *8ve* and *3rd* are used. A metronome marking *Mm.* is present. Measure numbers 95, 100, 105, 110, 115, and 120 are marked below the staves. A bass line at the bottom shows the sequence of chords: *i* and *V i*.

Ex. 22 C.P.E. Bach: Sonata in A Minor - Movement II Allegro, Deep Middleground.

a: i III V<sup>b</sup>-# i V i



Ex. 26. C. P. E. Bach: Sonata in A Minor,  
Movement III Allegro, Score and Levels 1-3.

Ex. 27. C. P. E. Bach: Sonata in A Minor,  
Movement III Allegro, Level 4.

Ex. 26 C.P.E. Bach: Sonata in A Minor - Movement III Allegro, Score and Levels 1-3.

Score

5 10 15 20

a: i  $\text{V}^{\flat 5}$  i  $\text{iv}^{\flat 6}$  VII  $\text{iv}^{\flat 6}$   $\text{ii}^{\flat 0 \text{c}}$  III $^{\flat 6}$  N $^{\flat 6}$   $\text{V}^{\flat 6}$  i  $\text{V}^{\flat 7}$   $\text{i}^{\flat 4}$  V  $[\text{V}^{\flat 2}]$   $\text{iv}^{\flat 6}$   $[\text{V}^{\flat 2}]$  III $^{\flat 6}$   $[\text{V}^{\flat 7}]$  VI $^{\flat 6}$  e:  $[\text{III}^{\flat 6}]$

1

2

3

a: i  $\text{V}^{\flat 6}$  (i)

arp. c.T. 6th 4th 3rd 3rd 3rd

3 6th 3rd 3rd 3rd

3rd 3rd 3rd

Score

25 30 35 40 45

$\text{iv}^{\flat 6}$  V i V i  $\text{V}^{\flat 5}$   $[\text{V}^{\flat 2}]$   $\text{iv}^{\flat 6}$   $[\text{V}^{\flat 2}]$  III $^{\flat 6}$   $\text{iv}^{\flat 6}$  i $^{\flat 6}$  VII $^{\flat 0 7}$  V i V

1

2

3

e:  $[\text{v}^{\flat 6}]$   $\text{i}^{\flat 6}$  VII $^{\flat 0 6}$  i V

2 3rd 2 3rd 3rd 3rd

2 3rd 3rd 3rd

Score

50 55 60 65 70

(e:) i iv i<sup>4</sup> V i C: I V<sup>6</sup> vi iii<sup>6</sup> IV I<sup>6</sup> ii V<sup>6</sup> I V I<sup>6</sup> V

1

2

3

i C: I V

Score

75 80 85 90 95

[vii<sup>o</sup>] V I<sup>6</sup> [V<sup>4</sup><sub>3</sub>] IV 4-3 [V<sup>6</sup><sub>5</sub>] V 4-3 V<sup>7</sup> I<sup>6</sup> V<sup>6</sup> I<sup>6</sup> ii<sup>6</sup> iii<sup>6</sup> IV<sup>6</sup> V<sup>6</sup> I

1

2

3

I<sup>6</sup> I

Reprise

Score 100 105 110 115 120

(c:) V I a: i V<sup>5</sup> i iv<sup>6</sup> VII iv<sup>6</sup> ii<sup>oc</sup> III<sup>6</sup> N<sup>6</sup> V<sup>6</sup> i V<sup>7</sup> i<sup>4</sup> V i i<sup>4</sup> [vii<sup>o</sup> V<sup>7</sup>] [V V<sup>4</sup>] [vii<sup>o</sup> V<sup>7</sup>] VI<sup>6</sup> VII<sup>6</sup>

Score 130 135 140 145

i vii<sup>o7</sup> V<sup>7</sup> i<sup>3</sup> V i -<sup>4</sup> V [vii<sup>o7</sup>] V -<sup>7</sup> i -<sup>4</sup> VI i<sup>4</sup> [vii<sup>o7</sup>] V<sup>7</sup> i V i V iv vii<sup>o</sup> V<sup>6-5</sup> i

V i V<sup>6</sup> — 5

V

i

Ex. 27 C.P.E. Bach: Sonata in A Minor - Movement III Allegro, Level 4

27 43 45 48 53 68 75 91 102 144 149

3 2 3 2 1

4

a: i v III i V i

## CHAPTER 6

### CONCLUSIONS

One formal element which the three works in this study have in common is the use, in one or more movements, of the binary design. Tracing this element from the Partita written by J. S. Bach in the early 1720s to the C. P. E. Bach Sonata of 1747 offers some clues about the evolution of that form toward the end of the Baroque era.

J. S. Bach cast the first two movements of his Partita in simple open binary form. In the third movement the return of the tonic coincides with a one-measure reminder of the opening theme, and the fourth movement's opening theme receives a four-measure reprise. The Telemann Fantasia contains only one binary movement, the Allegro, and that one is rounded by a four-bar reprise. In the C. P. E. Bach Sonata, Movements II and III are decidedly rounded, with reprises of six and twelve bars respectively.

Another progressive feature of the binary design which shows up well on the graphs is the increasing emphasis on a second key area, either the dominant or, more often in these minor movements, the relative major. This emphasis occurs early in the first section, replacing the older pattern of a

more gradual arrival at the second key by the double bar. C. P. E. Bach, in his sonata's first movement, composed an ABA Adagio which reveals the direction in which composers were heading by progressively tinkering at the binary design. The Adagio, with its second theme group in the relative major, its digression in the minor dominant (including a reworking of the first theme), and its recapitulation of the first theme as well as some of the digression material (now in the tonic), is a good illustration of early sonata form.

Compound melody, which appears continually in every movement of these works, forms the basis for the composers' technique of creating a multi-voice texture out of a single line. In each graph set, Level 1 shows the disjunct motion (leaps of all sizes, as well as smooth arpeggiation) of the compound melody. Level 2, however, reveals many instances of three- and sometimes four-voice texture where strands of inner voices are shown as chord tones in alignment with the structural bass and soprano lines.

The Schenkerian method of graphing also clarifies the aspect of register in the music. In most of the music examined, the registers of the structural soprano and bass lines were matched at each point by the register of the actual music. In the case of J. S. Bach's Allemande, the graph shows the music's own register correction where the bass line shifts down an octave after the interruption.

A question of performance practice is answered by the graph of the Bourrée Anglaise. Some players take the last two measures up an octave for a more brilliant finish to the Partita. Since the graph, however, proves the Urlinie to be in the low register throughout, such an alteration contradicts the inner logic of the musical design.

Schenkerian techniques aid significantly in developing a deeper understanding of the structure of a work and the relationship of every detail to the structure. The benefits of such analysis include more effective teaching and enhanced performance of these works.

#### Chapter 2

<sup>1</sup> Musical Instruments of the World: An Illustrated Encyclopedia by the Dietrich Group (US: Paddington Press, Ltd., 1976) 32.

<sup>2</sup> Howard Mayer Brown, "Flute," The New Grove Dictionary of Music and Musicians, ed. Stanley Sadie (London: Macmillan, 1980), vol. 6, 371.

<sup>3</sup> The system of octave designation used in this paper is the one which calls middle C "C4" and labels successively higher octaves "C5," "C6," etc.

<sup>4</sup> David Hurler, Musical Instruments: A Comprehensive Dictionary (Garden City, NY: Doubleday, 1964) 124.



## NOTES

### Chapter 1

<sup>1</sup> Ann Chatoney Shreffler, "Baroque Flutes and Modern: Sound Spectra and Performance Results." Galpin Society Journal 36 (1983): 88-96.

<sup>2</sup> See chapter 2 for a discussion of intonation problems in the Baroque flute.

### Chapter 2

<sup>3</sup> Musical Instruments of the World: An Illustrated Encyclopedia by the Diagram Group (US: Paddington Press, Ltd., 1976) 32.

<sup>4</sup> Howard Mayer Brown, "Flute," The New Grove Dictionary of Music and Musicians, ed. Stanley Sadie (London: Macmillan, 1980), vol. 6, 671.

<sup>5</sup> The system of octave designation used in this paper is the one which calls middle C "C4" and labels successively higher octaves "C5," "C6," etc.

<sup>6</sup> Sibyl Marcuse, Musical Instruments: A Comprehensive Dictionary (Garden City, NJ: Doubleday, 1964) 188.

<sup>7</sup> Nancy Toff, The Development of the Modern Flute (New York: Taplinger, 1979) 12.

<sup>8</sup> Toff 16.

<sup>9</sup> Jane Bowers, "Hotteterre," The New Grove Dictionary of Music and Musicians, ed. Stanley Sadie (London: Macmillan, 1980), vol. 8, 733.

<sup>10</sup> Bowers 735.

<sup>11</sup> Toff 17.

<sup>12</sup> See Brown, pp. 672-73 for more information.

<sup>13</sup> In the lower octaves F was problematic enough; the high F was too unreliable to be included in charts by Hotteterre and others. Later charts provided fingerings for G#3 and A3 (Toff 18-19).

<sup>14</sup> Johann Joachim Quantz (1697-1773), prominent flutist, flute maker, and tutor to Frederick the Great, wrote the most authoritative and comprehensive source of information on the eighteenth-century flute. Published in 1752 as Versuch einer Anweisung die Flöte traversière zu Spielen (Essay on Playing the Flute), the work is generally referred to as the Versuch or the Essay. This paper will use the latter for a short title.

<sup>15</sup> Johann Joachim Quantz, On Playing the Flute, trans. Edward R. Reilly (New York: Schirmer Books, 1996.)

<sup>16</sup> Toff, 22.

- 17 Quantz, the Essay, 34.
- 18 Ibid., 46.
- 19 Ibid., 47.
- 20 Ibid., 50.
- 21 Ibid., 50.
- 22 Ibid., 303.
- 23 Robert Donington, A Performer's Guide to Baroque Music (New York: Charles Scribner's Sons, 1993), 97.
- 24 Quantz, 71.
- 25 Donington, 285.
- 26 Anne Chatoney Shreffler, "Baroque Flutes and Modern: Sound Spectra and Performance Results," Galpin Society Journal 36 (1983): 88-96.
- 27 Ibid.
- 28 Ibid.
- 29 Ibid.
- 30 Teresa Texeira (founder of and flutist with World Music Consort and the Atlanta Musica Antiqua, and student of Baroque flutists Stephen Preston and Chris Krueger), personal interview, 28 May 1992.
- 31 Quantz, 200.
- 32 Ibid., 55.
- 33 Christopher Addington, "In Search of the Baroque Flute: The Flute Family 1680-1750," Early Music 12 (1984): 35.

34 Ibid.

35 Ibid., 37.

36 Toff, 65.

37 Ibid., 24.

### Chapter 3

38 Hans-Peter Schmitz, in the Preface to the Bärenreiter Urtext edition (1963) of J. S. Bach's Partita in A Minor for Flute Alone.

39 Edward T. Cone, "Schubert's Promissory Note," 19th Century Music 5.3 (1982): 235. In this article Cone coined the term "promissory note" as a paranomasia to describe the effect of a note which raises a certain expectation without immediately fulfilling it.

### Chapter 4

40 Günter Haußwald, Preface to the Bärenreiter edition of Telemann's Twelve Fantasies for Transverse Flute without Bass.

41 This spelling in the Urtext edition of Bärenreiter is evidently a misprint for Vivace.

42 The trill is indicated by the composer in the Bärenreiter Urtext edition.

43 Cone, p. 235.

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