PART I: A NIGHTTIME TRILOGY FOR SAXOPHONE AND PIANO

A dissertation submitted to the College of the Arts of Kent State University in partial fulfillment of the requirements for the degree of Doctor of Philosophy

by

Jason Tad Howard
August 2010
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>iv</td>
</tr>
<tr>
<td>I. MIDNIGHT</td>
<td>1</td>
</tr>
<tr>
<td>II. NIGHTMARES</td>
<td>27</td>
</tr>
<tr>
<td>III. DREAMS</td>
<td>49</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

I would like to express my gratitude to my advisor Dr. Ralph Lorenz, whose consistent guidance and encouragement helped me to produce this dissertation and whose method of teaching helped me to see the value of Schenkerian analysis early in my career at Kent State University.

I would like to thank my advisor Dr. Frank Wiley, whose patience allowed me to experiment through multiple “false starts” until I had established the best ensemble for the dissertation and whose guidance showed me possibilities beyond my initial instincts.

I would like to express my appreciation to all of the members of my committee for their dedication and support, especially as I reached the completion of my dissertation and my degree.

I would like to offer my gratitude to Joseph and Susan Plinta, whose encouragement and support made the pursuit of my degree possible, especially early on.

I would like to thank my siblings, Micah, Ethan, Jeremy, and Esther, for always displaying confidence in all of my endeavors and encouraging me to continue as a composer.

I would like to thank my parents, Walter and Patricia Howard, who gave me the gift of music and a strong work ethic. Without the sacrifices they made for me and my siblings, none of us could have reached our potential.
I would like to offer my greatest thanks to my wife, Kay. Her constant devotion, encouragement, patience, help, and love kept me focused on the work at hand, prevented me from giving up, built me up when I was discouraged, and allowed me to complete my degree. Without her, I could not have done this. I love you and thank you with all of my heart.
I. Midnight

"Praying"

Soprano Sax.

Piano

ad lib.
"Praying"

57

60

63
"Sleeping"
II. Nightmares

Prelude: "Approaching the house"

Alto Sax.

Piano
"Why did you leave me here so long?"

$q \approx \pi 

* ad lib.
"I told you so."
"The skeleton in the choir"

sustenuto, pedal ad lib.
III. Dreams

Slow, Calm \( \dot{=} 60 \)

"Floating"
increasingly agitated and intense
gradually calming

"Pleasant Dreams"

Very Calm
slightly faster, freely
increasingly agitated and intense

agitated, intense, faster

\( \begin{array}{c}
\text{increasingly agitated and intense} \\
\text{agitated, intense, faster}
\end{array} \)
"Pleasant Dreams"

Very Calm

"Floating"

Slow, Calm $\frac{d}{t} = 60$
PART II: A SCHENKERIAN ANALYSIS OF SUITE NO. 1 FOR UNACCOMPANIED CELLO BY J. S. BACH

A dissertation submitted to the College of the Arts of Kent State University in partial fulfillment of the requirements for the degree of Doctor of Philosophy

by

Jason Tad Howard
August 2010
# TABLE OF CONTENTS

LIST OF FIGURES ................................................................. v

CHAPTER
I. INTRODUCTION ............................................................... 1

II. PRÉLUDE ................................................................. 6
   The Primary Tone and Tonic Prolongation ......................... 6
   Prolonging the Second Degree ...................................... 11
   Performance Implications of the Surface Level .................. 14
   Middleground Performance Implications ......................... 19
   Conclusion ................................................................. 24

III. ALLEMANDE .............................................................. 25
    Section One: Primary Tone Prolongation and
    Introduction of the Second Degree ............................. 25
    Section Two: Prolonging the Second Degree .................... 29
    Beyond the Interruption ............................................. 32
    Middleground Performance Implications for the First Section .34
    Middleground Performance Implications for the Second Section .37
    Middleground Performance Implications for the Third Section .39
    Conclusion ................................................................. 40

IV. COURANETE .............................................................. 41
    Section One: Primary Tone Prolongation ......................... 41
    Section Two: Prolonging the Second Degree ..................... 42
    Section Three: Prolongation Beyond the First Interruption .... 44
    Section Four: Prolonging the Second Degree
    Before the Second Interruption .................................. 46
    Section Five: The Fundamental Structure
    Beyond the Second Interruption .................................. 47
    Middleground Performance Implications for Section One ....... 48
    Middleground Performance Implications for Section Two ....... 49
    Middleground Performance Implications for Section Three .... 50
    Middleground Performance Implications for Section Four ....... 52
    Middleground Performance Implication for Section Five ....... 52
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>V.</td>
<td><strong>SARABANDE</strong></td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Section One: Prolongation of the</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Primary Tone and the Second Degree</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Section Two: The Interruption and Beyond</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Middleground Performance Implications for Section One</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Middleground Performance Implications for Section Two</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Conclusion</td>
<td>63</td>
</tr>
<tr>
<td>VI.</td>
<td><strong>MINUET NO. 1</strong></td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Section One: Prolongation of the</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Primary Tone and the Second Degree</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Section Two: Second Degree Prolongation,</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Interruption and Beyond</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Middleground Performance Implications for Section One</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Middleground Performance Implications for Section Two</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>Conclusion</td>
<td>73</td>
</tr>
<tr>
<td>VII.</td>
<td><strong>MINUET NO. 2</strong></td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>Section One: Prolongation of the</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>Primary Tone and the Second Degree</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Section Two: The Fundamental Structure</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Following the First Interruption</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Section Three: Achieving the Second</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>Degree and Beyond the Second Interruption</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Middleground Performance Implications for Section One</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>Middleground Performance Implications for Section Two</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Middleground Performance Implications for Section Three</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>Conclusion</td>
<td>84</td>
</tr>
<tr>
<td>VIII.</td>
<td><strong>GIGUE</strong></td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Section One: Prolongation of the</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Primary Tone and the Second Degree</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Section Two: Completing the Prolongation</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>of the Second Degree and Prolongation of the Primary Tone Following the First Interruption</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Section Three: Prolongation of the Second Degree</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>Section Four: The Fundamental Structure</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Beyond the Second Interruption</td>
<td></td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 1. Prolongation percentages in the Prelude……………………………………..101

Figure 2. Percentage of movement completed before the interruption in single-interruption movements……………………………………………………………101

Figure 3. Percentage of each movement dedicated to the prolongation of the initial primary tone………………………………………………………………………102

Figure 4. Percentage of Allemande dedicated to each prolongation area………………103

Figure 5. Percentage of Sarabande dedicated to each prolongation area………………105

Figure 6. Percentage of Minuet No. 1 dedicated to each prolongation area…………..105

Figure 7. Percentage of movement completed before the first interruption and before the second interruption in two-interruption movements…………………106

Figure 8. Percentage of Courante dedicated to each prolongation area………………107

Figure 9. Percentage of Minuet No. 2 dedicated to each prolongation area…………..109

Figure 10. Percentage of Gigue dedicated to each prolongation area…………………..109

Figure 11. Combined prolongation areas for all movements…………………………111

Figure 12. Number of foreground and middleground neighbor figures per movement..117

Figure 13. Concentration of foreground and middleground neighbor figures per movement……………………………………………………………………117
CHAPTER I: INTRODUCTION

The purpose of this dissertation is to provide an organized method for understanding Johann Sebastian Bach’s Suite No. 1 in G major and to educate performance decisions. This is achieved through a multi-level Schenkerian analysis of each movement and a detailed discussion of each movement’s structural properties.

Between nine and thirteen levels of graphs are used for each movement. I use a larger-than-average number of graph levels so that the relationships among the foreground, middleground, and background can be clearly seen. This approach is particularly important for individuals consulting this dissertation who may be less familiar with the Schenkerian method.

There are nearly 75 different editions of the Six Suites for Violoncello without Bass Accompaniment readily available for the original instrument.¹ At least twelve additional editions are available for viola,² and another two for the bass.³ At least another 24 arrangements or editions are available for various solo instruments from the brass, woodwind and percussion families or for various ensembles.⁴ And over one hundred


⁴www.loc.gov/fedsearch/metasearch/?cclquery=bach+cello+suites&search_button=GO#q
recordings of the suites, in whole or in part, are available to the public. The availability of the suites, not just for the cello, but for several other instruments, underlies the fact that this collection of suites holds a prominent position, not just in the repertoire of cellists, but in all music literature. Yet, the available literature discussing the actual performance or structure of this music is very limited.

Bach himself left very little in the way of guidance for performing this music since bowing and dynamic indications are seldom present in the manuscript and often unclear when they are there. Performers often rely on approaches handed down from one cellist to another (perhaps from teacher to student), instinct, personal preference, and various printed editions. A systematic approach that truly evaluates the musical events within each movement is probably quite rare and is certainly not available in published form for the majority of the movements within the six suites. While the above-mentioned methods for evaluation certainly all have value, a systematic theoretical approach can provide a different, more organized way of approaching this music and of making educated performance decisions.

Joel Lester recognized a similar void regarding printed discussions of violin repertoire. He set out to rectify the situation by providing a “performance and analytic”
guide addressing Bach’s solo violin works. In his discussion, Lester uses this approach to determine appropriate phrasing and dynamics.

The goal of this project is similar. I use Schenkerian analysis as a vehicle to facilitate a better understanding of Bach’s Suite No. 1 in G major and to educate performance decisions. Chapters II through VIII provide a verbal explanation of the graphs of each movement of the suite, revealing the underlining structures of this suite. Each chapter will also use these graphs to suggest performance decisions. In addition to informing performance decisions, the graphs are an effective vehicle for revealing the underlying structural similarities that unite the suite, as well as the characteristics that make each movement unique. It should be noted that the goal of this study is not to suggest what Bach’s intentions or thought processes were in composing this music. Nor does this study claim to provide the only accurate interpretation of these movements. Undoubtedly there are other equally logical and effective approaches to the study of this suite that can, and probably should, be undertaken.

In *The Masterwork in Music, A Yearbook, Volume 2*, Heinrich Schenker demonstrates an analytical approach via graphs for a single complete movement from the six suites. This approach will serve as a model for the current study. In his analysis of the Sarabande from Bach’s Suite No. 3, Schenker identifies an eight-note fundamental

---


line supported by a I-V-I bass arpeggiation. He discusses the importance of dynamic shading for an effective performance and demonstrates how the analysis of this movement can be used to decide what dynamics should be used. He suggests using chromatic alterations as musical events deserving special emphasis and therefore recommends crescendos going to and decrescendos going from those musical events.

In keeping with this model, I have evaluated each movement individually for fundamental lines, bass arpeggiations, interruptions, prolongations, tonal areas, harmonic progressions, melodic arpeggiations, step progressions, and neighbor figures. These preliminary evaluations revealed a three-line fundamental structure in each movement.

Using these evaluations, I determined the building-up and resolution of tension for each movement, prolongation areas, step progressions, and neighbor figures. As a general rule in this discussion, I suggest using dynamic level and fluctuation in use of vibrato to bring out the increase and decrease of tension presented by the musical structures. Although each chapter in this study discusses tension and release in detail, it is not reasonable to consider every instance of fluctuation within these pages. It is left to the reader to interpret and apply the graphs for some of the more minuscule details revealed herein.

With so many editions available, selecting the best as the basis for the graphs was vital. In 2000, Bärenreiter published *6 Suites a Violoncello Solo senza Basso*, edited by Bettina Schwemer and Douglas Woodfull-Harris. This comprehensive collection is presented in three volumes. Volume I is a music volume that contains a printed version of
the suites derived from the five primary sources: the Anna Magdalena Bach manuscript
copy from between 1727 and 1731, the Johann Peter Kellner manuscript copy from 1726,
the anonymous copy from the eighteenth century, the anonymous copy from the late
facsimiles of these sources. I selected this edition as the basis of the graphs for the above
reasons. Unlike other edition, it provides the suites in a pure form, without any added
bowings, fingerings, or dynamics. It presents the material in such a way that
discrepancies amongst these early sources can easily be identified. Where a discrepancy
exists, I adhered to the Anna Magdalena source.
CHAPTER II: PRÉLUDE

A three-step fundamental structure serves as the guiding force for the Prélude and effectively divides the movement into two large sections. The first section, measures 1 through 19, is essentially a prolongation of the primary tone B and the supporting tonic harmony. The second section, measures 20 through 42, consists primarily of a prolongation of the second degree A of the fundamental line and the upper fifth D of the bass arpeggiation. The final step of the fundamental structure arrives in measure 42 and, since it is not prolonged, may be considered part of the second section (see Appendix A for all graphs referenced in this chapter).

The Primary Tone and Tonic Prolongation

As can be seen in Graph A, the initial tonic G statement of the bass arpeggiation is established with the first note of the movement. The primary tone B of the three-step fundamental line is reached via arpeggiation from the G. In the first measure, the primary tone is prolonged through a series of tonic arpeggiations and lower neighbor tones.

In the second and third measures, an upper neighbor is introduced that remains in effect into the deep middleground levels. This neighbor tone is initially supported by subdominant and then dominant harmony. As with the primary tone in measure 1, the upper neighbor is prolonged through a series of arpeggiations and lower neighbors.

The primary tone returns in measures 4 and 5 and is once again prolonged through...
a series of arpeggiations and lower neighbors. The primary tone is supported by tonic harmony in measure 4 and by mediant harmony in measure 5. The mediant root E is approached by a descending three-step progression from an inner voice. Throughout the harmonic progression described above (I-IV-V-I-VI) for the first five measures, the bass voice prolongs the tonic G. This prolongation is consonant except when it occurs below dominant harmony in measure 3.

Graph C shows an ascending fourth progression that traverses the first four measures, moving from D to G. This progression provides the counterpoint to the neighbor figure spanning the same four measures. Graph B shows a descending third progression from measure four to five that moves from G to E and links the first passage with the next.

Graphs D and E show that the underlying structure of the first four measures is simply the statement of the primary tone B above the tonic G of the bass arpeggiation. The upper neighbor C remains as the principal means of embellishing the primary tone in the opening measures.

The primary tone statement in measure 5 serves as the genesis of two lower-level descending third progressions: one, four measures in length, extending through measure 8 and the other, ten measures long, extending through measure 14.

The second step A of the shorter third progression is introduced in measure 6 with the support of secondary dominant harmony (V/V) and is prolonged through measure 7 with dominant harmony. As with the primary tone B, the A is prolonged through a series
of arpeggiation and neighbor figures. Graph C shows that the bass C-sharp is approached by a descending third progression. Two features set this prolongation apart from the similar prolongations that have already taken place in the preceding measures: first, this prolongation represents the first time the prolonged pitch is not set above the tonic G in the bass; second, this is the first time the prolongation includes an example of a very brief reaching over, the D above the A, thus introducing the highest register to this point in the movement.

The final step G in this progression is achieved in measure 8 above mediant harmony. Unlike the first example of mediant harmony, in measure 5, this occurrence places the harmony in root position. This event produces several significant effects: first, a deceptive progression is created for the first time in the movement; second, the arrival of the final step in this progression is weakened because it is supported by mediant rather than the expected tonic harmony; and third, a sense of continuation is created harmonically that contradicts the coinciding melodic arrival point.

In Graph E, measures 5 through 8 are shown as an unsupported third progression above mediant harmony. This graph helps to show that these measures serve as prolongation of the first step of the ten-measure third progression beginning in measure 5.

The second step A of the ten-measure third progression is reached in measure 9 and is prolonged through measure 13. In each of these five measures, the A is supported by a different harmony: secondary dominant (V7/V) in measure 9, dominant in measure 10, secondary leading (VII7/II) tone in measure 11, supertonic in measure 12, and
secondary leading tone (VII/VI) in measure 13. While this prolongation once again features arpeggiations, the use of the neighbor figure is greatly reduced. Neighbor figures only occur three times during this passage: the first time as an incomplete neighbor in measure 9; the second and third occurrences both take place in measure 11. Two new approaches to the prolongation are featured: several large leaps (sixths, sevenths, and octaves) in measures 9 and 10, and stepwise progressions, especially third and fifth progressions.

An ascending third progression spanning measures 10 to 12 moves from A to C. Graph C shows that the C is achieved in measure 12 before it returns to A in measure 13 via a consonant leap.

The final step G of this ten-measure third progression arrives in measure 14. As in the final note of the four-measure third progression, this G is initially supported by mediant harmony. However, the harmony is transformed to the tonic via an eighth progression at the conclusion of the measure. The G is primarily prolonged via stepwise progressions and a neighbor figure.

Graph G shows that measures 4 through 14 can be read as an unsupported third progression originating with the primary tone B. This third progression, as well as the upper neighbor figures in measures 2 and 3, 15, and 17 and 18, serve as the principal means of prolonging the primary tone.

In measure 15, Bach introduces a structural upper neighbor C that connects the initial primary tone B with a lower-voice statement of the primary tone in measure 16.
This C is supported by inverted dominant harmony. The low F-sharp serves as a lower neighbor to the tonic G, stated in the bass voice in measures 14 and 16.

The restatement of the primary tone B in measure 16 is weakened by two factors: first, B is stated in a lower octave rather than the obligatory register; second, the supporting harmony is transformed from tonic to secondary dominant (V7/IV) by the introduction of F-natural. The B is once again prolonged through the use of arpeggiation and neighbor figures.

The upper neighbor C returns in measures 17 and 18. This presentation of the neighbor figure is very similar to the initial presentation in measures 2 and 3. Once again, the neighbor is initially supported by subdominant harmony and then by dominant harmony with a tonic pedal in the bass. In fact, measure 18 is identical to measure 3. However, measure 17 differs from measure 2 in three ways: first, the C is presented in a lower register; second, the arpeggiations span only a sixth rather than a tenth; and third, the foreground neighbor aspect of the prolongation directly embellishes the third above the C rather than the C as in measure 2. The octave transfer from the lower-register C in measure 17 to the upper-register C in measure 18 facilitates the return to the obligatory register in measure 19.

The return of the primary tone B in measure 19 marks the conclusion of the 19-measure prolongation of the primary tone that helps define the opening of this movement. In the foreground, this B is approached and prolonged in the same manner as it is approached and prolonged in the first measure of the movement: an arpeggiation from the
tonic G to the primary tone B, followed by a lower neighbor figure. An eighth progression leads from an inner voice tonic statement to a lower voice tonic statement. This motion is immediately followed by a fifth progression that helps to lead into the next section of the Prélude, which prolongs the second degree A of the fundamental line.

**Prolonging the Second Degree**

The second degree A is introduced in measure 20 and prolonged through measure 41. In measure 20, Bach introduces the second degree in a lower register and supports it with secondary dominant harmony (V7/V). In this measure, the A is prolonged through a series of arpeggiation and third progressions.

In measures 21 through 22, Bach supports the A with inverted dominant harmony. Emphasis is placed on the seventh C of the dominant harmony by placing it in the lowest register of the cello. The A remains in the lower register for measure 21 before transferring to the obligatory register via an arpeggiation in measure 22. This particular arpeggiation extends beyond the second degree A to D, which temporarily covers over the fundamental line. After this higher register is established, the second degree A of the fundamental line is immediately transferred back to the lower register.

An eighth progression at the conclusion of measure 22 is used to reestablish the A in the obligatory register in measure 23. Here Bach also establishes the dominant harmony in root position and introduces the upper fifth D of the bass arpeggiation. The A prolongation continues in measures 23 and 24 through the use of step progressions and
arpeggiations. Emphasis of the seventh C of the dominant harmony continues now by shifting it to a higher register. The C is also prolonged by the use of third progressions leading to it from below in measure 23 and above in measure 24.

In measure 25, the dominant root D is shifted to the lowest register. The A prolongation continues through the use of arpeggiations and a third progression. Midway through this measure, and continuing into measure 26, the harmony shifts to a pedal six-four chord above a dominant bass, embellishing the dominant. This dominant embellishment and the prolongation of the second degree A continue with the introduction of C-sharp in the latter half of this measure, thus suggesting secondary dominant (V/V) harmony. This harmony is confirmed in measure 27 when the entire seventh chord is arpeggiated throughout the measure.

The secondary dominant (V/V) is resolved from measure 27 to measure 28 when the upper register C-sharp resolves to D and the bass voice A moves to D. The dominant harmony is firmly established via arpeggiations in the first half of measure 28 and an eighth progression in the latter half of the measure, transferring the root D to the lowest register on the downbeat of measure 29.

After the low D on the downbeat of measure 29, the upper register is immediately reestablished via a leap up to the seventh C of dominant harmony. A series of downward step progressions in measures 29 and 30 temporarily moves the harmony from dominant to supertonic in the beginning of measure 31. Graphs C and D show that the initial and final tones of each of these downward step progressions form a pair of descending third
progressions, C to A, spanning measures 29 to 31.

Dominant harmony is reestablished on the second beat of measure 31. A pattern of arpeggiation and neighbor figures is combined with a double pedal, A and D, to prolong the harmony through measure 32 and into the opening of measure 33.

The double pedal, A and D, is continued in measures 33 and 34. Now it is combined with a series of upward step progressions. The harmony shifts between the dominant and pedal six-four chords above a dominant bass throughout these measures.

Graphs D, E, and F show an ascending third progression originating on the second degree A of the fundamental line. This progression spans measures 31 to 35 and is the only means of prolongation, other than alternating supertonic and dominant harmonies, that remains in effect into deep middleground levels.

A combination of two descending fifth progressions, C to F-sharp in the upper voice and A to D in the lower voice, spans from the downbeat of measure 35 to the downbeat of measure 37. In measures 37 and 38, an ascending chromatic scale above a dominant bass leads from the bass voice D to the leading tone F-sharp in the highest register of the Prélude, thus covering over the second degree A of the fundamental line. Graphs D and E show that the F-sharp is actually a leading-tone substitute for the second degree A of the fundamental line.

The F-sharp of measure 38 resolves to the highest note of the movement, G. This G is not the final step of the fundamental line since it occurs above the dominant pedal. Measure 39 is simply an embellishment of the dominant harmony, a pedal six-four above
the dominant bass. In measure 40, the harmony is a hybridization of the pedal six-four and the pure dominant, because the B returns to the second degree A in the obligatory register while the G is suspended in the upper register. The G finally resolves down to the F-sharp in measure 41, firmly establishing the dominant in the final measure of the prolongation of the second degree A of the fundamental line. However, the A is not present in this measure, having been replaced with the seventh C of the dominant.

The final degree G of the fundamental line arrives in the final measure of the Prélude. It does not occur in the obligatory register established at the outset of the movement. Instead, it is stated in the uppermost register established in measure 38. The G is not embellished or prolonged in any way; it is simply stated above an un-arpeggiated tonic triad. This measure also represents the conclusion of the bass arpeggiation, with the bass voice returning to the tonic G.

**Performance Implications of the Surface Level**

Many of the relationships shown in the foreground, Graph A, between and amongst the notes, are likely already recognized by many teachers and performers. The adjacent relationships illustrated in the graph fall into four basic categories: arpeggiations, neighbor figures, step progressions, and leaps.

In the Prélude, the arpeggiations fulfill one of two roles. The first role is to sustain harmony and to prolong individual pitches. An example can be seen in the first measure of the movement. The arpeggiations allow both the opening note G of the bass
arpeggiation and the primary tone B to be prolonged throughout the measure while simultaneously presenting complete tonic harmony. In this instance, and similar instances throughout the movement, the individual elements of the arpeggiation (the chordal skips) need not be emphasized. This approach holds true because these individual elements function collectively to prolong individual notes on the surface level and to sustain complete harmony.

The second role of arpeggiation figures is to move from one register to another. An example can be seen in measure 22. Here the arpeggio is used to move from low C, the lowest note on the cello, to high D, a repetition of the highest note in the movement to this point. While the arpeggiation still presents complete harmony, it does not sustain the harmony in the same way as the first arpeggiation type. And, although notes being prolonged, in this case the second step A of the fundamental line and the upper fifth D of the bass arpeggiation, may occur as part of the arpeggiation, they do not receive the same amount of emphasis as they would in another setting. In this instance, the low C and the high D provide a clear beginning and end, respectively, to the gesture.

The composite nature of the arpeggio still restricts the emphasis of individual elements (the chordal skips). However, the clear beginning and end to the gesture establish the figure as melodic in nature. This melodic role seems to justify greater emphasis for the individual elements of the second type of arpeggiation than in the first type.

Neighbor figures constitute the second relationship category. In this movement,
complete neighbors are far more common than the incomplete type. The first complete neighbor figure occurs in the first measure: the lower neighbor to the primary tone B. All of the surface-level neighbor figures are lower neighbors and serve to prolong individual pitches. In fact, the notes being prolonged are usually the primary tone B, its upper neighbor C, and the second step A of the fundamental line.

Incomplete neighbors are far less common. In fact, only two occur in the movement, the more significant one being the lower neighbor, C-sharp, to the high D in measure 22. Because there are only two and because they are incomplete, they create an increased sense of tension that is released upon their resolution.

The third relationship category of the foreground is step progressions. Surface-level step progressions are far less common in this movement than arpeggiations or neighbor figures. These step progressions fulfill two basic roles: filling in space between two tones of the same harmony or filling in space between two tones from different harmonies. The initial example of type one occurs at the end of measure 5. In this instance, the third progression simply serves as a means of returning to B after the tonal skip to D. In context, the tonal skip possesses more melodic and harmonic interest than does the step progression. The middle tone, C-sharp, of the third progression is a typical passing tone, connecting two consonant pitches, and it requires little if any emphasis.

The initial example of the second role of step progressions can be found at the end of measure 19 going to the first note of measure 20. The first and fourth notes, G and D respectively, belong to the tonic harmony found in measure 19. The fifth and final note of
the progression, C-sharp, marks the beginning of the new harmony (V/V). The second and third notes, F-sharp and E respectively, are simply passing tones. Since this fifth progression begins in one harmony and ends in another, a strong sense of direction is established. This type of step progression uses melodic means to produce harmonic motion and therefore demands greater emphasis than the first type, both in this instance and in all others.

Leaps constitute the final adjacent relationship type in the foreground. Because many leaps occur within the Prélude as part of arpeggio figures, it is important to make a distinction between these and other types of leaps. For the purposes of this discussion, the term “leap” will refer to a dissonant melodic interval greater than a fourth or a consonant melodic interval that is unusually large or that does not conform to the description of the two types of arpeggiations presented earlier. The first leaps occur in measure 9: first an upward leap of a seventh, from A to G, followed shortly thereafter by another upward leap of a seventh, from E to D. The combination of these two leaps serves to move the music quickly from a lower register to the upper register despite the descending step progressions found in the measure. The striking nature of these leaps, and others like them, suggests the use of greater emphasis when performing these intervals.

Of course these four foreground relationship types, arpeggiations, neighbors, step progressions, and leaps, do not occur in isolation but in various combinations throughout the movement. Recognizing the individual relationship types and how they interact with each other is an important step in achieving greater understanding of the movement’s
structure and executing a superior performance. I will now revisit two of the examples examined above to see how the relationship types are combined.

The first measure of the movement has already been considered in two instances. It contains arpeggiations of the first type, sustaining harmony and prolonging individual notes. It also contains lower neighbor figures. In this instance, the primary tone B is being prolonged by both of these foreground relationship types, and therefore it is logical to conclude that the B will receive greater emphasis than the other notes within the measure. One possible execution of this emphasis is a slight crescendo moving toward the B and the subsequent neighbor figure followed by a slight decrescendo moving away from the B. The second half of the measure may be performed in a similar manner.

Measure 22 has also been considered twice already. This measure contains both arpeggiations of the second type, suggesting directional movement from the low C to the high D, and an incomplete neighbor, suggesting greater tension toward the top of the figure (especially on C-sharp) and an overall emphasis of the high D that represents the release of the tension. This increase of tension and emphasis of D can be accomplished with a crescendo leading to the C-sharp. However, since the dynamic level may already be quite loud at this point in the movement, an alternative means of emphasizing the individual melodic elements, especially the incomplete neighbor, may be necessary. The performer could also employ techniques such as altered bow strokes, altered vibrato, or ritardando to achieve the desired effect.
Middleground Performance Implications

Most of the adjacent foreground relationships discussed above also have middleground counterparts. The neighbor figures and step progressions identified in the middleground graphs hold particular interest because they clarify relationships that are often obscured in the foreground, particularly by the arpeggiations found there. Many of these musical events have already been identified and discussed, and several others are clearly illustrated in the graphs. Therefore, I will focus our attention primarily on those phenomena that are particularly useful in determining the shape of the two larger sections of the Prélude that have already been identified (the first section, the prolongation of the primary tone B and the supporting tonic harmony, spans measures 1 through 19). The second section, essentially the prolongation of the second degree A of the fundamental line and the upper fifth D of the bass arpeggiation, spans measures 20 through 42. Since these events have already been discussed in detail, I will simply identify the basic elements that should be brought out.

In the first section, three events hold particular interest in determining the form and delineating smaller segments: the upper neighbor figure of the first four measures, the descending third progression spanning measures 4 through 14, and the upper neighbor figures from measures 15 to 19.

The performance of the first four measures should be guided by the upper neighbor figure. The upper neighbor C serves as a departure from the primary tone B. This creates a degree of tension that is intensified by the arrival of F-sharp in the middle
voice of measure 3. The F-sharp combines with the upper neighbor to create a tritone. The upper voice moves down from C to B while the middle voice moves up from F-sharp to G. These movements provide the simultaneous resolution of both the upper neighbor figure and the tritone, creating a greater sense of release and a degree of conclusiveness to this segment. The performer may wish to bring out these phenomena by emphasizing the upper neighbor C as well as the F-sharp. The increase in tension may be augmented through the use of crescendo and intensified vibrato leading to measure 3, followed by a slight decrescendo and relaxation of vibrato after the resolution in measure 4.

The second segment is expressed as a third progression spanning measures 5 through 14. Each of the three steps of this third progression has its own expansion and harmonic support. The initial tone of this third progression is the primary tone B, which is prolonged by a shorter third progression spanning measures 5 through 8. Each step of this third progression, as well as the supporting bass notes (E, C-sharp, D, E), should be brought out. The second degree A is prolonged from measures 9 to 13 and sustains an increase in tension through the use of secondary function harmonies. The prolongation is achieved via an ascending third progression in measures 10 to 12 and a tonal skip from C back to A from measure 12 to measure 13. These upper-voice events and the bass support (A, D, C, D-sharp) should be emphasized in performance. The final step G of the third progression arrives in measure 14 and has the smallest amount of expansion in this segment. An upper neighbor A prolongs the G while the bass moves from E to G. This measure serves as the conclusion of this segment and provides a point of release for the
tension that built up during the course of the descending third progression.

The third segment of the first section begins in measure 15 and continues through measure 19. This segment begins with an upper neighbor C that connects the primary tone prolongation of measures 1 through 14 with the primary tone expansion of measures 15 to 19. The upper neighbor is immediately resolved to the primary tone B in measure 16. Measures 16 through 19 bear a striking resemblance to measures 1 through 4 and therefore carry the same types of tension and resolution. The main difference between the first segment and this segment is that this segment begins in a lower register and with a neighbor tone C. Because of this difference, the music carries a greater sense of tension from the outset. The tension is increased when the upper neighbor C returns to the obligatory octave in measure 18, coinciding with the return of the tritone formed with F-sharp. Therefore, the use of greater crescendo and vibrato, as compared to the first segment, would be appropriate in the execution of this passage.

The second section may be divided into five segments. Since the majority of the second section occurs above a bass pedal D, these five segments are not as clearly delineated as the first section. In fact, the justification for the end points of the first and second segments of the second section is not tonal but rhythmic. Since the rhythm of the Prélude is essentially continuous sixteenth notes, it seems logical that any divergence from that rhythm should be viewed as significant. The first segment begins in measure 20 and continues to midway through measure 22 when the rhythm is interrupted by a fermata on the high D. This end point is further corroborated by a sudden shift in register
and a change from arpeggiated figures to scalar figures immediately following the fermata in the foreground. These two and a half measures are primarily an arpeggiation of a harmonic progression (V/V to V) and a motion from the lowest register of the cello to the upper register of the movement. One way to bring out these two elements is to perform the passage with a gradual crescendo that gains momentum in measure 22.

The second segment begins immediately after the fermata and continues to the downbeat of measure 29. Once again the endpoint is determined by the rhythm: a single eighth note at the conclusion of a scalar passage. An arpeggiation from the second degree A of the fundamental line leads up to E-flat, the highest note to this point in the movement, at the opening of this segment. A descending third progression leads back to the A in measure 25 before another ascending third progression leads to C-sharp in measure 26. This C-sharp gains harmonic support when the bass voice finally shifts from the dominant D to the supertonic A in measure 27. This progression marks the first significant shift from the dominant in the bass in this second segment. This secondary dominant harmony resolves to the dominant in measure 28. The passage ends with an octave transfer from the middle voice D to the bass voice D on the downbeat of measure 29. The performer will likely open this segment with a soft dynamic level and perhaps even with a slightly slower tempo. A gradual crescendo and increase in tempo leading to measure 26 will effectively bring out the arrival of the C-sharp. Sustaining this dynamic level through measure 27 will emphasize the secondary dominant and the bass shift to A. A gradual decrescendo through measure 28 to the downbeat of 29 following the
resolution of the secondary dominant will bring the segment to a conclusion.

The third segment of the second section extends from measure 29 through measure 37. This segment opens with a pair of descending third progressions in the upper and lower voices moving from C to A from measure 29 to measure 31. These paired linear progressions lead from dominant harmony to supertonic before an extended dominant pedal passage that occurs in measures 31 to 37. Over this pedal, an ascending third progression in the upper voice moves from the second degree A of the fundamental line to C on the downbeat of measure 36. The C marks the climax of the passage before a pair of descending fifth progressions leads from C and A to F-sharp and D on the downbeat of measure 37 to conclude the segment. The C in measure 36 can be emphasized via a gradual crescendo from measure 29 to measure 36 followed by a decrescendo from measure 36 to the downbeat of measure 37.

The fourth and final segment of the second section spans from measure 37 to the end of the movement. This passage consists of three basic events. First, the second degree A of the fundamental line is replaced by the leading tone F-sharp. Second, the F-sharp is transferred from an inner voice to the highest register of the movement. Lastly, the dominant harmony and the F-sharp are resolved to the tonic in the final measure. A rapid crescendo throughout measure 37 will serve to emphasize the F-sharp and the octave transfer. The louder dynamic may be sustained through to the final measure. The performer may execute a slight decrescendo while sustaining the final tonic to facilitate the release of tension upon the final resolution from dominant to tonic harmony.
Conclusion

I have identified the three-step fundamental structure that serves as the guiding force for the Prélude and effectively divides the movement into two large sections. The first section, measures 1 through 19, prolongs the primary tone B and the supporting tonic harmony. The second section, measures 20 through 42, encompasses the prolongation of the second and final degrees (A and G) of the fundamental line and the supporting bass arpeggiation. I have defined four types of adjacent relationships (arpeggiation, neighbor figures, step progressions, and leaps) that are featured both in the foreground and the middleground. These structures have been identified and play a significant role in shaping the movement both on the surface and in deeper levels.

I defined the general role each of these adjacent relationships play in performance and subsequently discussed examples of each type of surface level structure and how it may be interpreted in performance. I also identified middleground structures that segment the two large section and the implications these structures have for performance decisions.
CHAPTER III: ALLEMANDE

A three-step fundamental structure with an interruption serves as the guiding force for the Allemande and effectively divides this binary movement into three large sections. The first section, measures 1 through 16, consists primarily of the prolongation of the primary tone B and the supporting tonic harmony, but it concludes with the initial motion to the second degree A of the fundamental structure and its harmonic support. The second section, measures 17 through 24, consists primarily of a prolongation of the second degree A of the fundamental line and the upper fifth D of the bass arpeggiation, up to the point of interruption. The third section, measures 25 through 32, consists of the entire fundamental structure following the interruption, including the primary tone B, the second degree A, the final degree G, and the complete supporting bass arpeggiation (see Appendix B for all graphs referenced in this chapter).

Section One: Primary Tone Prolongation and Introduction of the Second Degree

The first notes of the movement present initial statements of both the tonic G of the bass arpeggiation as well as the primary tone B of the fundamental line. The primary tone is prolonged immediately by a descending third progression originating with the initial statement of the primary tone. This first statement also serves as the point of origin for another descending third progression that extends into the second measure. This descending third progression has harmonic support in the form of a local bass
arpeggiation (G-D-G). The upper fifth D of this arpeggiation is prolonged via an ascending eighth progression moving from the bass voice to the upper voice, facilitating the statement of the conclusion of the bass arpeggiation in the upper voice. Following an incomplete neighbor figure, the primary tone B is reestablished, now in the bass voice so that the registers of the bass arpeggiation and the fundamental line are temporarily inverted. An eighth progression immediately transfers the primary tone back to the obligatory register at the conclusion of the second measure.

In measure 3, an upper neighbor C is introduced that remains in effect into the deep middleground levels. This neighbor tone is supported initially by supertonic harmony and then by dominant harmony. The upper neighbor is prolonged by a generally downward arpeggiation that leads to the supertonic bass in the first half of the measure. In the second half of the measure, an upward tonal leap followed by a pair of ascending third progressions leads from the dominant bass back to the upper neighbor.

The primary tone B returns in measure 4, initially with the support of tonic harmony. In the second half of the measure, a descending fifth progression in E minor begins, transforming the primary tone from the third degree of G major to the fifth degree of E minor on the local and middleground levels. The primary tone is prolonged first by an upper neighbor figure and then by an unsupported descending third progression. The fourth degree A is introduced in measure 5 as part of subdominant harmony and is prolonged by an ascending third progression that connects the fourth degree with the bass support C that has been transferred above the fundamental line. The third degree G is
prolonged via a lower neighbor figure and has no harmonic or bass support. The second degree F-sharp is prolonged and supported by the material that immediately precedes its statement: an arpeggiation of dominant harmony, with the bass support B once again stated above the fundamental line, and a descending third progression moving from A to F-sharp. The final degree of this progression is reached in measure 6 and prolonged by a descending arpeggiation that ends with the lower fifth (I) E of the local bass arpeggiation, now in the lowest register.

In measure 6, the role of the E harmony transforms from tonic in E minor to submediant in G major. This harmony serves as the genesis of a circle-of-fifths progression that ultimately leads back to the tonic in G major. An upper neighbor figure paired with an ascending third progression leads from measure 6 into measure 7 where secondary dominant harmony (V7/V) is established. This harmony is prolonged by a series of third progressions that moves between G and E, a pair of leaps from G to C-sharp and back, and one statement of the bass support A near the end of the measure. The C-sharp serves as a raised upper neighbor to the primary tone B deep into the middleground levels. This neighbor figure is returned to its natural state, C-natural, in measure 8 where it is supported by dominant harmony. The measure is marked by an outline of the dominant seventh chord, moving from the bass D to the outer voice C.

The neighbor figure and the circle-of-fifths progression are both resolved with the return of the primary tone B and tonic harmony in measure 9. In the middle of the measure, a pair of third progressions leads from B and G to G and E, respectively. This
motion effectively substitutes tonic harmony with submediant harmony, the initial harmony of another circle-of-fifths progression. The primary tone in this measure also serves as the genesis for an ascending third progression spanning measures 9 through 11. The second degree, C-sharp, of this ascending progression is introduced in measure 10. It is prolonged via several arpeggiations within secondary dominant harmony (V7/V) and neighbor figures. An arpeggiation up to E introduces the highest pitch to this point in the movement. The final step D in this progression is reached in measure 11 above dominant harmony.

The dominant harmony in measure 11 is prolonged by a combination of tonal leaps and step progressions. A descending third progression leads from the bass voice D in measure 11 to the primary tone B in measure 12, once again transferred to the bass register. The material in measure 12 is a tonal transposition, down a perfect fifth, of the material in measure 11. A descending third progression moves from G in the final beat of measure 12 to low E on the downbeat of measure 13.

A combination of ascending leaps and third progressions outlines secondary dominant harmony (V7/V) and quickly moves from the lowest register of the movement to the highest note G. In measure 14, the high G is transformed from the seventh of the secondary dominant harmony to an upper neighbor to the leading tone F-sharp above dominant harmony. Dominant harmony is prolonged via an arpeggiation down and up. A descending third progression beginning on D moves back to the primary tone B on the downbeat of measure 15.
The primary tone is prolonged by a pair of descending third progressions. The tonic harmony supporting the primary tone is replaced by secondary dominant harmony (V7/V) supporting the initial presentation of the second degree A of the fundamental line in the second half of the measure. The second degree is prolonged by a descending third progression and a tonal leap. In measure 16, the second degree is supported by dominant harmony and the upper fifth D of the bass arpeggiation. An arpeggio figure, first ascending and then descending, prolongs both the second degree A and the upper fifth D. An ascending third progression originating from the primary tone B in measure 15 and ending with the high D in measure 16 facilitates a smooth transition from the primary tone to the second degree. This third progression also serves to link the opening support of the second degree A with the preceding prolongation of the primary tone B to form the first section of the Allemande.

**Section Two: Prolonging the Second Degree**

The second section of the Allemande opens with the continued prolongation of the second degree A of the fundamental line and the upper fifth D of the bass arpeggiation. In measure 17, both of these structural pitches are prolonged by a combination of downward chordal leaps and upward step progressions. A descending third progression in the bass leads from D in the opening of the measure to B on the downbeat of measure 18.

A sixth progression leads from the second degree A of the fundamental line in
measure 17 to a middle voice C in measure 19. The G and F-natural of this sixth progression are supported by an inverted G major-minor seventh chord. The G of the sixth progression is prolonged via a lower neighbor figure, an ascending tonal leap, an ascending third progression, a descending tonal leap, and finally a descending third progression that returns to G. The F-natural is prolonged by a lower neighbor figure and an ascending tonal leap.

The final three steps E, D, and C, of the sixth progression are presented without harmonic support at the opening of measure 19. The final step C is presented in a middle voice before an immediate transfer to the upper register.

This upper voice C serves as the primary tone of a middleground three-step fundamental structure with an interruption in A minor that extends from measure 19 to measure 24. The primary tone C is presented with tonic A support, in the bass voice. The C is prolonged above the tonic and then the inverted supertonic D in the bass via a pair of octave transfers and a lower neighbor figure.

The second degree B and its middle voice support, G-sharp, are approached by a pair of third progressions leading into measure 20. The B is prolonged in the foreground by a descending tonal leap followed by a descending third progression that establishes the B in the bass register. The upper register B also serves as the genesis of an ascending third progression that leads to D on the downbeat of measure 21. The second step C of this progression is presented in the second half of measure 20. It is prolonged by a combination of third progressions and a tonal leap. The final step D of the third
progression is presented above root position supertonic harmony. A descending third progression leads from the bass voice B back to inverted dominant harmony supporting the upper voice B. The upper voice B is then prolonged by an ascending tonal leap followed by a descending third progression before the interruption occurs.

The primary tone C following the interruption of this middleground fundamental structure is presented above tonic harmony in measure 22. A descending sixth progression is used to prolong the C before the second degree of the structure is presented in a modified form, B-flat instead of B-natural, above Neapolitan harmony. The B-flat is prolonged first by a lower neighbor figure and then by an ascending third progression.

A descending third progression leads from the B-flat in measure 22 to a middle voice G-sharp in measure 23. The G-sharp reestablishes dominant harmony and ultimately leads back to the expected version of the second degree, B-natural. The B-natural is presented above dominant, supertonic, and finally dominant harmony before the final step A of this middleground fundamental structure is reached above tonic harmony A in measure 24.

The tonic harmony in A minor is quickly transformed to supertonic harmony in G major; the final degree A of the middleground fundamental structure is reinterpreted as the second degree of the overall fundamental structure. After it is supported by supertonic harmony in the opening of measure 24, it is then supported by dominant harmony in the second half of the measure. A descending fifth progression originating with the bass D in measure 24 moves back to the tonic G at the point of interruption.
Beyond the Interruption

Whereas the opening presentation of the primary tone B of the fundamental line and the lower fifth G of the bass arpeggiation were presented simultaneously in the opening measure of the Allemande, the reintroduction of the primary tone in measure 25 after the interruption is temporarily delayed by the insertion of an incomplete neighbor figure C that is presented along with dominant harmony support. Once the primary tone B is reestablished, it is prolonged via a combination of ascending and descending step progressions, a neighbor figure, and a tonal leap.

Measures 26 to 29 present an extended development of the upper neighbor C to the primary tone B. A pair of descending third progressions spanning measures 26 to 28 moves from high E to the upper neighbor C in the upper voice and from C to A in the bass voice. Each step of this third progression is also expanded. The E in measure 26 is presented above subdominant and then supertonic harmony and is prolonged via a combination of ascending and descending step progressions. The second step D of the progression is presented in measure 27, first above mediant harmony and then above submediant harmony. The D is prolonged by a combination of descending step progressions and tonal leaps. The final steps, C and A respectively, of the pair of descending third progressions are reached in the first beat of measure 28. The C, which is actually the upper neighbor to the primary tone, is first presented above supertonic harmony in the first half of the measure and then above dominant harmony in the second
half of the measure. The C is prolonged via a combination of tonal leaps and step progressions.

A descending fifth progression leads from the dominant D in the bass, to the tonic G in measure 29. However, this G is actually an anticipation of the tonic harmony that will support the primary tone B in the second half of the measure. The expansion of the upper neighbor C continues in the first half of this measure and is supported by an arpeggiation of dominant harmony.

After the primary tone B is reintroduced in the second half of measure 29 with tonic support, it is prolonged by an ascending third progression ending on D in measure 30. The second degree of this third progression is supported by inverted secondary dominant harmony (V7/V in second inversion), which is arpeggiated on the surface level. The final step D of the progression is supported by dominant harmony, also arpeggiated on the surface level.

The D serves as the starting point for a descending third progression that extends to the primary tone B in measure 31. This statement of the primary tone is not in the obligatory register, obscuring the third progression until the primary tone is restored to the obligatory register in graph C. However, the primary tone is never literally stated in the obligatory register again on the surface level. This primary tone B is prolonged via an incomplete neighbor, an ascending tonal leap, and a descending third progression that leads to the tonic bass support G.

The second degree A of the fundamental line is presented very briefly at the
conclusion of measure 31 with minimal prolongation. As with the final presentation of
the primary tone B, the final statement of the second degree A (the only statement
following the interruption) is not in the obligatory register. It is prolonged by an
ascending tonal leap that is embellished by an incomplete neighbor and supported by the
upper fifth D of the bass arpeggiation.

The obligatory register is reestablished in the final measure with the presentation
of the final step G of the fundamental line. The final lower fifth G of the bass
arpeggiation provides tonic support. The G is prolonged by a pair of arpeggiations, first
ascending, and then descending. The ascending arpeggiation temporarily transfers the
octave from the obligatory register to the highest note of the movement before the
descending arpeggio reestablishes the obligatory register at the close of this movement.

**Middleground Performance Implications for the First Section**

As stated at the outset of this chapter, the fundamental structure divides the
Allemande into three main sections: the prolongation of the primary tone B and the lower
fifth of the bass arpeggiation plus the initial statement of the second degree A of the
fundamental line (measures 1 through 16); the prolongation of the second degree of the
fundamental line up to the point of interruption (measures 17 through 24); and the
remaining presentation of the fundamental structure following the interruption (measures
25 through 32).

The first section itself may be divided into three smaller segments. The first of
these extends from the opening measure to the middle of measure 4. In measures 1 and 2, the primary tone B is presented and prolonged via a descending third progression followed by a leap back to B. Measure 3 presents the upper neighbor C to the primary tone, which is supported first by supertonic harmony and then by dominant harmony. This segment is concluded with a return to the primary tone B that resolves the tension presented by the upper neighbor C and the dominant harmony in measure 3.

This tension is particularly significant in guiding the performance of the first four measures. A general crescendo throughout the first two measures leading to measure 3 will facilitate the emphasis of the upper neighbor C. The performer may sustain this tension throughout measure 3 by maintaining the volume and perhaps even continuing the crescendo to the dominant harmony. The performer may execute the release of tension following the resolution in measure 4 through the use of decrescendo.

The second segment of the first section begins midway through measure 4 and extends through measure 6. This segment is marked by a descending fifth progression with harmonic support in E minor. The performer may give slightly greater emphasis to this fifth progression and the supporting bass notes through slight elongation or use of more vibrato. A gradual crescendo from the beginning of this segment, followed by a decrescendo after the arrival of the final step E of the fifth progression, will facilitate the demarcation of the entire segment.

The relative brevity of the first two segments is counterbalanced by the third and final segment of the first section which, at ten measures in length, is four measures longer.
than the first two combined. This seems appropriate since this segment opens with a presentation of an upper neighbor figure (first C-sharp, then C-natural) with harmonic support (V7/V to V7) that lasts for two measures (seven and eight) and remains in effect into the deep middleground levels.

Because this segment opens with the upper neighbor figure to the entire primary tone prolongation of the first section, it is important to emphasize these pitches (C-sharp and C-natural) immediately. This can be achieved via a swift crescendo leading to the C-sharp in measure 7. Even greater emphasis can be facilitated by executing the neighbor tones, C-sharp in measure 7 and C-natural in measure 8, as well as their bass support, A and D respectively, with a slight elongation and greater vibrato.

The upper neighbor figure is resolved to the primary tone in measure 9, providing a degree of relief from the tension of the previous two measures. However, the release of tension is lessened by the repeated harmonic progression, I-V/V-V. This harmonic progression supports an ascending linear third progression in the first and third iteration, measures 9 to 11 and 15 to 16 respectively. The three harmonic progressions provide a sense of growing tension within each statement. The tension is temporarily relieved with the resolution to the tonic at the conclusion of the first two progressions. However, there is an overall sense of tension that is created from the first iteration to the second.

The second harmonic progression supports an overall motion from the lowest register of the cello, in measure 13, to the highest register of the movement, in measures 13 and 14. This rapid movement from low to high register combined with a suspended
incomplete neighbor in the highest register produce the increased sense of tension. The performer can emphasize this tension via a fast crescendo leading to the incomplete neighbor. The tension may further be emphasized by a slight elongation of the supporting bass (A to D) and the incomplete neighbor and its suspension in measures 13 and 14.

There is a release of tension following the resolution of the incomplete neighbor in measure 14. This release of tension is sustained from measure 14 into 15 as the harmony moves from the dominant (V7) of the second harmonic progression to the tonic (I) of the last. A descending third progression leading back to the primary tone above the beginning of the last successive harmonic progression (I-V/V-V) also facilitates the release of tension. The performer may bring out this sense of release via a gradual decrescendo following the resolution of the incomplete neighbor.

The third successive harmonic progression, measures 15 and 16, supports two significant linear events. The first is the initial presentation of the second degree A of the fundamental line. The second linear event is an ascending third progression from the primary tone B up to D. The ascending third progression combines with the final iteration of the repeating harmonic progression to unify the initial statement of the second degree A with the preceding prolongation of the primary tone.

**Middleground Performance Implications for the Second Section**

The second section, measures 17 to 24, consists entirely of the remaining prolongation of the second degree A of the fundamental line before the interruption. Like
the first section, the second section is divided into three segments; however, these segments function with less independence than the three segments in the first section.

The first segment, measure 17 through the opening of measure 19, is marked by two events: one harmonic and one linear. The harmonic motion is from dominant (V) to supertonic (II). The linear motion is a descending sixth progression originating with the second degree A of the fundamental line and ending on C in an inner voice. These two events serve as an introduction to the second segment and therefore should be executed with a gradual crescendo leading to the second segment. The performer should also take care to bring out each note of the descending sixth progression.

The second segment extends from measure 19 to measure 24. This segment presents supertonic harmony fully developed with a replication of the fundamental structure, with interruption, in A minor. There is an increase in tension throughout the initial presentation of the second degree B of the lower-level fundamental line that can be emphasized through the use of crescendo leading to the interruption at measure 22. Following the interruption, there is a temporary sense of relief that may be brought out via a slight decrescendo.

Tension is once again built up through measures 22 and 23 as the flat form of the second degree, B-flat, is presented and then corrected to the natural form, B-natural. This tension may be emphasized through the use of crescendo leading to the arrival of the final step A of this lower-level fundamental line in measure 24.

The final segment of the second section lasts only one measure. It consists of the
final prolongation of the second degree A of the fundamental line and the supporting harmonic motion (II to V). There is an initial relief of tension with the supertonic harmony (II) that continues to the dominant harmony (V) to conclude the section.

**Middleground Performance Implications for the Third Section**

Unlike the first two sections, the third section, measures 25 to the end, is not divided into multiple smaller segments. It encompasses the entire fundamental structure following the interruption. After the primary tone is reintroduced above tonic harmony, several measures (26 to 29) are dedicated to an upper neighbor figure. The neighbor C is initially supported by supertonic harmony and then by dominant harmony. Tension builds once the dominant harmony is introduced below the neighbor figure in measure 28 and as the final resolution back to the primary tone approaches in measure 29. The performer may emphasize the neighbor figure and this tension through the use of crescendo (particularly in measures 28 and 29) and greater vibrato on the neighbor tones.

After the primary tone B is reestablished above tonic harmony, there is a slight release of tension. This release can be brought out by the use of decrescendo. The release of tension is short lived, though. Tension builds through the remaining prolongation of the primary tone B and continues through the brief presentation of the second degree A in measure 31. The tension is partially a result of the rapid presentation of the second degree. The performer may emphasize this tension through the use of crescendo.

The final step of the fundamental line and the lower fifth of the bass arpeggiation
arrive in the final measure. They are prolonged by an arpeggio figure, ascending and descending, throughout the measure. The tension of the entire movement is released during this arpeggiation, especially during the descending portion. The performer may facilitate this release through the use of slight decrescendo.

**Conclusion**

I have identified the three-step fundamental structure that serves as the guiding force for the Allemande and effectively divides this movement into three large sections. The first section, measures 1 through 16, consists of the prolongation of the primary tone B and the supporting tonic harmony as well as the initial motion to the second degree A of the fundamental structure and its harmonic support. The second section, measures 17 through 24, consists primarily of a prolongation of the second degree A of the fundamental line and the upper fifth D of the bass arpeggiation, up to the point of interruption. The third section, measures 25 through 32, consists of the entire fundamental structure following the interruption.

I identified middleground structures that segment the first two large sections and the implications these structures have for performance decisions. I also identified the structures that operate within the final section and their role in shaping performance of the movement.
CHAPTER IV: COURANTE

A three-step fundamental structure with two interruptions serves as the guiding force for the Courante and divides this movement into five sections. The first section, measures 1 through 8, consists entirely of the initial prolongation of the primary tone B and the lower fifth G of the bass arpeggiation. The second section, measures 9 through 18, consists entirely of the initial prolongation of the second degree A of the fundamental line and the upper fifth D of the bass arpeggiation. The third section, measures 19 through 28, begins with the continued prolongation of the second degree A of the fundamental line and continues with the entire prolongation of the primary tone B following the first interruption. The fourth section, measures 29 through 35, consists of the entire prolongation of the second degree A of the fundamental line before the second interruption. The fifth, and final, section, measures 36 to the end, consists of the entire fundamental structure following the second interruption (see Appendix C for all graphs referenced in this chapter).

Section One: Primary Tone Prolongation

The opening section of the Courante, measures 1 through 8, prolongs the primary tone and supporting tonic bass via a lower-level three-step fundamental structure. The first notes of the movement present initial statements of both the tonic G of the bass arpeggiation and the primary tone B. The primary tone is prolonged through measures 1
and 2 by way of ascending and descending third progressions and a lower neighbor figure.

The second degree A of the lower-level fundamental structure is introduced in measure 3 above inverted supertonic bass support. It is prolonged via ascending and descending third progressions that ultimately lead to dominant harmony support for the second degree A in measures 4 and 5. Ascending third progressions in measure 4 help to outline dominant harmony. These same third progressions establish the opening pitch C of a descending third progression that spans measures 5 and 6 and reestablishes the second degree A. The harmony and bass support temporarily shift back to the supertonic in measure 6 before the dominant is reestablished in measure 7.

The final step G of the lower-level fundamental structure is reached in measure 8. It is immediately left by leap in favor of the primary tone B of the overall fundamental structure. The primary tone is then prolonged by a descending sixth progression to close out the passage.

**Section Two: Prolonging the Second Degree**

The second degree A of the fundamental line is introduced in the opening measures of the second section, measures 9 through 18, and is prolonged throughout the section in the key of D Major. The opening measures (9 through 14) of this section also serve as the genesis of a lower-level five-step fundamental structure with an interruption in the new key in which A is reinterpreted as the primary tone of the lower-level
fundamental line.

A is first approached by a descending arpeggio (E, C-sharp, A) outlining the dominant triad in the key of D. A descending fifth progression, spanning measures 9 and 10 and originating with the E at the top of the arpeggio, also leads back to the primary tone A of the lower-level fundamental line.

After a brief departure to submediant harmony at the end of measure 10, supertonic harmony is prolonged through measures 11 and 12 via a descending third progression in the upper voice and a supporting circle-of-fifths progression in the bass. Dominant harmony is reintroduced in measure 13 before the tonic D is finally achieved in measure 14. Tonic harmony is prolonged via a repeated neighbor figure beneath an ascending sixth progression (F-sharp to D) that reaches over the primary tone A.

The fourth, third, and second degrees of this lower-level fundamental structure are introduced above dominant harmony in measure 15. The fourth degree G is expanded by a set of three descending third progressions that lead to the dominant bass. The third and second degrees, F-sharp and E respectively, are presented without any expansion before the interruption occurs at the end of the measure.

The remainder of the lower-level fundamental line is presented in measures 17 and 18. The lower-level primary tone A is expanded via a double neighbor figure but without harmonic or bass support. The fourth and third degrees, G and F-sharp respectively, are presented without any expansion or support. The second degree E is presented with dominant bass support A and is expanded via a descending third
progression that replaces the second degree with the leading tone C-sharp. The leading tone is resolved to the final step of the progression D that is presented in the lowest register of the cello in measure 18.

Section Three: Prolongation Beyond the First Interruption

The third section, measures 19 through 28, opens with the final portion of the prolongation of the second degree A of the fundamental line and continues with the entire prolongation of the primary tone B following the first interruption. In measure 19, A is reinterpreted as the second degree of the fundamental line and D major harmony is transformed from the tonic of D major to the dominant in G major. The A is prolonged by a descending fifth progression that extends throughout the measure. The A is also prolonged via an arpeggiation that leads to the bass D, which is then prolonged by an ascending third progression.

After the interruption, between measures 19 and 20, an approach to tonic harmony is initiated. A descending fifth progression extends from the D at the end of measure 19 to the G in the bass of measure 22. A descending third progression moves from the high D at the beginning of measure 20 to the primary tone B in measure 22. The initial tone D is expanded with a descending sixth. The C is prolonged via a descending fifth progression in measure 21.

Before the primary tone is established in the obligatory register in measure 22, it is presented in a lower register in measure 21. The lower register primary tone is
prolonged by an ascending sixth followed by an ascending third progression. This prolongation effectively moves the primary tone back to the obligatory measure. Once the primary tone B is presented in measure 22, it is prolonged by a descending third and an ascending third, a neighbor figure, and a descending third progression. This primary tone presentation also serves as the primary tone of a lower-level five-step fundamental structure with interruption in E minor that extends from measure 22 to measure 29.

The fourth step A of this lower-level fundamental structure is presented in measure 23 above dominant harmony. The A is prolonged via tonal leaps and a descending third progression. The supporting bass B is presented above the A and is prolonged by an upper neighbor figure.

The third degree G is presented in measure 24 above the tonic E. The G is prolonged by tonal leaps that connect it directly to the supporting bass, a neighbor figure, and a descending third progression.

The second degree F-natural is presented in the lower form in measure 25 as part of Neapolitan harmony. The supporting bass A is presented above the second degree. The second degree F-natural is prolonged via neighbor figures and tonal leaps. The second degree is corrected to F-sharp in measure 26 and presented as part of dominant harmony. The second degree is prolonged by a descending third progression and tonal leaps before the lower-level interruption at the end of the measure.

Following the interruption, the fifth through second degrees are presented in
measure 26 with minimal bass support, G moving to the dominant B. The only step to be prolonged is the second F-sharp which is extended by a descending third progression that establishes the leading tone. The final degree E is achieved in measure 28 and prolonged by an ascending sixth progression.

**Section Four: Prolonging the Second Degree Before the Second Interruption**

The fourth section begins in measure 29 and extends through measure 35, encompassing the entire prolongation of the second degree A of the fundamental line before the second interruption and the upper fifth D of the bass arpeggiation. The section begins with a neighbor figure to the closing E of the third section. The neighbor figure is prolonged by a pair of descending leaps that establishes secondary leading tone harmony (VII/IV) that effectively transforms E from the root of the submediant at the conclusion of the preceding section to the third of subdominant harmony in the opening measure of the fourth section.

Subdominant harmony is established with the supporting bass C in measure 30. An ascending sixth progression leads from the subdominant C to the initial statement of the second degree A in measure 31. By the time the second degree is reached, the harmony has been transformed to secondary dominant (V7/V). The harmony and the second degree are both prolonged throughout the measure via a series of arpeggiations.

The secondary dominant resolves to the third inversion of the dominant in measure 32. As in the preceding measure, the harmony and the second degree A are both
prolonged by arpeggiation.

Instead of resolving to tonic harmony in measure 33, the dominant moves to another secondary dominant, the modified tonic (V7/IV). This harmony is prolonged by tonal leaps and third progressions. It resolves to the subdominant at the end of the measure. A descending third progression moves from high C above the inverted subdominant back to the second degree A of the fundamental line in measure 34.

The second degree is presented above dominant harmony in measures 34 and 35. The A is prolonged via ascending and descending third progressions and an upper neighbor figure. The supporting bass temporarily departs from the dominant from measure 34 into 35. However, dominant harmony is never truly disrupted, and the bass moves back to the dominant at the end of measure 35 just before the end of the section and the second interruption.

**Section Five: The Fundamental Structure Beyond the Second Interruption**

The final section extends from measure 36 to the end of the Courante and encompasses the entire fundamental structure beyond the second interruption. The tonic bass is presented at the opening of measure 36 and prolonged throughout the measure by a repeating upper neighbor figure. The primary tone B is presented early in the measure, but in the bass register. The primary tone is prolonged throughout the measure by an ascending sixth progression.

An upper neighbor C is introduced in measure 37 above dominant bass support. It
is prolonged by several descending third progressions. The upper neighbor reestablishes the obligatory register and resolves back to the primary tone B in measure 39.

The final presentation of the primary tone extends from measure 39 into measure 41. A descending third progression from D back to the primary tone is the principal vehicle for this portion of the primary tone prolongation. The D is established and prolonged in measure 39. It is prolonged by lower neighbor tones, tonal leaps, and a descending third progression. The second step C of this progression is presented in measure 40 and prolonged in the same manner as the D in the previous measure. The first two steps of the third progression are supported by a circle progression that culminates with dominant harmony.

The final step of the third progression, the primary tone, is achieved in measure 41 above tonic harmony. The primary tone B is prolonged by a lower neighbor figure. The second degree A of the fundamental line is introduced as part of supertonic harmony. As the second degree is prolonged by a third progression descending to the leading tone, the bass moves to the upper fifth D of the bass arpeggiation. The final step G of the fundamental line and the lower fifth G of the bass arpeggiation are both established in the final measure without any prolongation to conclude the movement.

**Middleground Performance Implications for Section One**

Section one extends from the first measure of the Courante through measure 8. A lower-level three-step fundamental structure gives shape to this passage. The initial
presentation of the primary tone B and its bass support G quickly give way to the second degree A. The second degree is presented in measure 3 and prolonged through measure 7. It is prolonged in the middleground by an ascending leap of a third and a descending leap of a third. The A is supported by a pair of supertonic to dominant progressions. The final step G of the lower-level fundamental structure arrives in measure 8. The primary tone of the background fundamental line is reestablished at the conclusion of measure 8.

After the initial prolongation of the primary tone B in measures 1 and 2, tension builds throughout measures 3 to 7 as the second degree A of the middleground fundamental line is prolonged. The tension intensifies toward the end of this prolongation as the leading tone is introduced. The tension is then released with the arrival of the final step of the progression in measure 8. The performer can bring out this structure by executing a crescendo throughout the prolongation of the second degree A and a decrescendo once the final step G is established.

**Middleground Performance Implications for Section Two**

The second section extends from measure 9 to measure 18. In this section, the second degree A of the fundamental line and the upper fifth D of the bass arpeggiation are prolonged via a middleground five-step fundamental structure with an interruption in the key of D major. The second degree of the background fundamental line is presented as the primary tone of the middleground fundamental structure. It is prolonged primarily above dominant harmony in the new key in measures 9 through 13. Tension builds
throughout this passage until the tonic is established in measure 14.

Tonic harmony continues to support the middleground primary tone A throughout measures 14 and 15. The fourth, third, and second degrees (G, F-sharp, and E, respectively) are presented above dominant harmony in measure 16 before the interruption. Tension builds throughout this passage and is carried through measure 17 despite the interruption as the first four steps (A, G, F-sharp, and E) of the middleground fundamental line are presented in rapid succession above dominant harmony. The tension is finally released at the end of the section with the arrival of the final step D of the middleground fundamental line in measure 18.

The performer can enhance the presentation of the building tension in this section through a pair of crescendos. The first crescendo would begin in measure 9 and continue until the arrival of the tonic D in measure 14, at which point a sudden drop in dynamic will bring out the temporary release of tension. The second crescendo will extend through measure 17. The performer can emphasize the release of tension that accompanies the arrival of the tonic in measure 18 by allowing the sound to dissipate following the initial attack.

**Middleground Performance Implications for Section Three**

The third section, extending from measure 19 through measure 28, opens with the final portion of the prolongation of the second degree A of the fundamental line, and the upper fifth D of the bass arpeggiation. Since this final stage of prolongation reinstates D
major harmony as the dominant in the key of G, rather than the tonic in the closely related key of D in the previous section, this material naturally possesses greater tension than it did at the conclusion of the previous section. This tension is sustained until the primary tone B and tonic harmony are reestablished in measure 21.

The prolongation of the primary tone, constituting the remainder of section three, is achieved via a middleground five-step fundamental structure with interruption in the key of E minor. A minimal amount of tension occurs accompanying the presentation and prolongation of the fourth degree A in measure 23. Furthermore, this tension dissipates quickly when the third degree G is presented above the tonic E in measure 24.

Greater tension begins to build in measure 25 as the second degree is presented and prolonged in its lowered state, F-natural. Tension continues to build as the second degree is corrected to the expected form F-sharp. Any expected release of tension is temporarily thwarted by the interruption following measure 26, the presentation of the primary tone above inverted harmony in the beginning of measure 27, and the rapid presentation of the fourth, third and second degrees (A, G, and F-sharp, respectively) of the fundamental line above dominant harmony at the conclusion of measure 27. The release of tension finally arrives with the arrival of the tonic E in measure 28.

The performer can express the opening tension through the use of a dynamic level louder than that used at the conclusion of the previous section. The initial release of tension can be achieved through a lower dynamic level in measure 21. A slight crescendo culminating in measure 23 followed be a decrescendo back to measure 24 will bring out
the slight increase of tension and its release. A more significant crescendo may extend from measure 25 until the tension is released with a slight decrescendo in measure 28.

**Middleground Performance Implications for Section Four**

The fourth section, measures 29 through 35, consists of the entire prolongation of the second degree A of the fundamental line before the second interruption. Two principal middleground events mark this section: a tonal leap from the second degree A of the fundamental line to C (in measure 33) and back (measure 34); and movement from inverted supertonic harmony to the dominant D.

Tension builds as the initial harmony, supertonic, goes through surface level transformations. Tension reaches its peak in measure 34 and is sustained through measure 35 as dominant harmony is established below the second degree A of the fundamental line. A crescendo beginning in measure 31 and extending to measure 34 will bring out the mounting tension. Tension can be sustained throughout the remainder of the section by maintaining the volume achieved at the conclusion of the crescendo.

**Middleground Performance Implication for Section Five**

The final section of the Courante, measures 36 to the end, consists of the entire fundamental structure following the second interruption. This section may be divided into three smaller segments: first, the prolongation of the primary tone via an upper neighbor figure C with dominant harmonic support (measure 36 to 39); second, the prolongation of
the primary tone via a pair of simultaneous descending third progressions, D to B and B to G (measures 39 to 41); and third, the presentation of the second and final degrees, A and G respectively, of the fundamental line (measures 41 and 42).

In the first segment, tension builds as the upper neighbor C is approached, and that tension is sustained as the C is prolonged above dominant harmony in measure 38. The tension is given its release in measure 39 with the arrival of the primary tone B in the obligatory measure. The increase in tension may be brought out via a crescendo. The tension may be sustained by maintaining the louder dynamic level in measure 38. Because the upper neighbor C remains viable in several middleground levels and because it plays a vital role in reestablishing the primary tone in the obligatory register, it seems logical that this pitch should be given even greater emphasis through vibrato and slight elongation. A decrescendo will bring out the release of tension upon the arrival of the primary tone.

This release of tension must be very brief and minimal, however, because the arrival of the primary tone in the obligatory register in measure 39 also serves as the genesis of the second segment. Tension builds quickly and peaks in the middle of the third progressions, measure 40. The building of tension may be brought out through the use of crescendo.

The expected release of tension at the conclusion of the third progressions is virtually nullified by the arrival of the third segment that is marked by the rapid presentation of the second degree and the final degree (A and G, respectively) of the
fundamental line. The second degree features minimal prolongation, and the final step is presented with no prolongation at all. Therefore, the high dynamic level established in measure 40 should be sustained, and perhaps even increased, until the final notes, G over G, are presented. Once the final notes are reached, natural dissipation will provide the release of the tension that has built throughout the segment and the section.

A Note on Multiple Interruptions

The Courante is marked by two interruptions of the fundamental structure. One interruption tends to create an increase of tension for two reasons: first, the expected resolution of initial tension is delayed; and second, the presentation of the entire fundamental structure tends to occur in a relatively small amount of time after the interruption.

If this is true for fundamental structures involving one interruption, the effect of two interruptions on the development of tension must be even greater. The expected resolution is postponed, not once, but twice. Then, the entire fundamental structure after the interruption is presented in a significantly shorter span of time.

For these reasons, the final section of the Courante, measure 36 to the end, possesses a great deal of tension. Although there are instances of internal release of tension, these should be minimized in favor of a performance that emphasizes the tension that is present in deeper middleground and background levels.
Conclusion

I have identified the three-step fundamental structure with two interruptions that serves as the guiding force for the Courante and divides this movement into five sections. The first section consists entirely of the initial prolongation of the primary tone B and the lower fifth G of the bass arpeggiation. The second section consists entirely of the initial prolongation of the second degree A of the fundamental line and the upper fifth D of the bass arpeggiation. The third section begins with the continued prolongation of the second degree A of the fundamental line and then the entire prolongation of the primary tone B following the first interruption. The fourth section consists of the entire prolongation of the second degree A of the fundamental line before the second interruption. The fifth, and final, section consists of the entire fundamental structure following the second interruption.

I identified middleground structures that segment each of the first two large sections and the implications these structures have for performance decisions. I also identified the role multiple interruptions play in creating greater tension in this movement.
A three-step fundamental structure with a single interruption functions as the background for the Sarabande and facilitates a division of the movement into two sections. Section one extends from the opening measure to measure 8 and includes the entire prolongation of the primary tone B and nearly the entire prolongation of the second degree A of the fundamental line. Section two begins in measure 9 and continues to the end of the movement. It includes the conclusion of the prolongation of the second degree A of the fundamental line and the entire presentation of the fundamental structure beyond the interruption (see Appendix D for all graphs referenced in this chapter).

Section One: Prolongation of the Primary Tone and the Second Degree

The Sarabande begins with the presentation of the primary tone B and the lower fifth G of the bass arpeggiation. The primary tone is prolonged by an upper neighbor figure that begins in measure 1 and continues into measure 2. The upper neighbor C is prolonged by a descending third progression and then an ascending third progression. The upper neighbor figure is supplied with harmonic support via an ascending third progression moving from D to F-sharp that suggests subdominant and then dominant harmony. The upper neighbor resolves to the primary tone B in measure 2. The B is prolonged by a descending third progression that reestablishes the tonic G and by an ascending tonal leap to D.
A descending fourth progression, extending from measure 2 through measure 3, moves from the D to the second degree A of the fundamental line. A pair of descending third progressions originating with the middle voice G in measure 2 reestablish the bass voice and introduce inverted supertonic harmony below the upper voice descending fourth progression.

Dominant harmony is established at the conclusion of measure 3 just prior to the introduction of the second degree A of the fundamental line and extends through measure 8. In measure 4, the second degree A is prolonged by a descending tonal leap followed by a descending third progression that establish the upper fifth D of the bass arpeggiation.

The second degree A of the fundamental line is prolonged from measure 5 through measure 7 via an ascending fourth progression ending on D. The first step A of the progression is prolonged by a pair of descending consonant leaps that establish dominant harmonic support. Tonic harmony is established in the second half of measure 5 and is prolonged via a series of tonal leaps and third progressions leading to the second degree B of the ascending fourth progression. A combination of tonal leaps and step progressions establish secondary dominant harmony (V7/V) in measures 6 and 7 that supports the third degree C-sharp of the fourth progression. The final step D of the fourth progression is achieved in measure 7.

Following the conclusion of the ascending fourth progression, the second degree A of the fundamental line is recast as the primary tone of a lower-level five-step fundamental structure in D major, spanning measures 7 and 8. The primary tone A is
prolonged via a descending third progression. The fourth degree G is approached by an ascending leap of a third in measure 7. The third step F-sharp is presented in measure 7 and extended by a descending leap that reestablishes the tonic D. In measure 8, the penultimate step E of the lower-level fundamental line is introduced above dominant harmony and prolonged by a descending leap to the leading tone. The final step D arrives in measure 8 and is extended by an octave transfer to the bass to conclude the first section.

Section Two: The Interruption and Beyond

The second section of the Sarabande begins in measure 9 where D major harmony is transformed from the tonic of the lower-level fundamental structure in D major that concluded the first section back to the dominant of G major. This transformation is facilitated by the introduction of the seventh C above D major harmony. After the upper fifth D is expanded briefly via a descending third progression, F-sharp to D, a second third progression leads from the seventh C back to the second degree A of the fundamental line.

After the interruption, between measures 9 and 10, the primary tone B is reintroduced. However, instead of returning above tonic harmony, the primary tone is presented above E minor harmony and is recast as the primary tone of a lower-level five-step fundamental structure in E minor spanning measures 10 through 12.

In measure 10, a pair of descending thirds originating with the primary tone B
outline tonic harmony (E minor) and establish the initial bass E of the lower-level bass arpeggiation. An ascending sixth progression beginning with D-sharp establishes dominant harmony and moves back to B, which serves as both the primary tone and the upper fifth of the bass arpeggiation.

Dominant harmony continues into measure 11 with a leap back to the D-sharp. An upper neighbor C is approached by an ascending third progression before returning to the primary tone B. A descending fifth progression leads from the primary tone B back to the lower fifth E of the bass arpeggiation and reestablishes tonic harmony. The measure continues with the presentation of the fourth and third degrees, A and G, of the lower-level fundamental line, each of which are expanded by a descending third.

Measure 12 presents the penultimate step F-sharp, which is expanded by a descending third to the leading tone D-sharp. The leading tone resolves directly to the final step E of the fundamental line. This lower-level five-step fundamental structure in E minor concludes with an octave transfer to the low E.

In measure 13, the primary tone returns briefly, displaced by an octave, as part of secondary leading tone harmony (VII/IV). The secondary leading tone resolves to the subdominant, which serves as the initial harmonic support for the upper neighbor C to the primary tone. An ascending sixth progression culminates with the upper neighbor at the conclusion of the measure.

The upper neighbor C is prolonged by its own upper neighbor D at the opening of measure 14. The D is expanded by a descending third progression. The D is given bass
support by a lower incomplete neighbor G-sharp to the supertonic A, which provides
harmonic support to the upper neighbor C in the second part of the measure. The upper
neighbor C returns on beat two above the supertonic. It is prolonged by a descending
sixth progression at the conclusion of the measure.

The D at the opening of measure 15 serves as the point of origin for a descending
third progression and an ascending fourth progression. The third progression leads to the
primary tone B, still displaced by an octave. The fourth progression leads to the tonic
bass G in the middle register. An upper neighbor C facilitates the return of the primary
tone B in the obligatory register at the conclusion of the measure.

In the final measure of the Sarabande, the upper fifth D of the bass arpeggiation is
introduced as support for the second degree A of the fundamental line. The A is
expanded, minimally, by the introduction of the leading tone. The leading tone resolves
directly to the final step G of the fundamental line. The lower fifth G of the bass
arpeggiation concludes the movement.

**Middleground Performance Implications for Section One**

The first section of the Sarabande, extending from the opening measure to
measure 8 and including the entire prolongation of the primary tone B and nearly the
entire prolongation of the second degree A of the fundamental line, can be divided into
two smaller segments. The first segment, which is divided into two subsections, extends
from the opening to measure 4. The first subsection, measures 1 and 2, is marked by an
upper neighbor figure (B to C to B) above tonic harmony. The upper neighbor C can be
emphasized by a crescendo leading to it and a decrescendo leading back to the primary
tone B.

The second subsection, measures 3 and 4, features a descent from D to the second
degree A of the fundamental line above harmony that moves from the inverted supertonic
to the dominant. Tension builds as the music approaches the dominant. This tension may
be brought out by the use of crescendo leading to the second degree above dominant
harmony.

The second segment of section one extends from measure 5 to measure 8. Like
the first segment of section one, this passage is also divided into two subsections. The
first subsection, measure 5 to the downbeat of measure 7, features an ascending fourth
progression, from A to D, above a harmonic progression that facilitates a modulation to D
major. Slight agogic accents and increased vibrato will facilitate emphasis of the four
steps of the fourth progression. A crescendo throughout this subsection, culminating with
the high D, may be used to bring out the mounting tension as the music begins to
modulate.

The second subsection, measures 7 and 8, of the second segment of section one
presents a local-level five-step fundamental structure in the key of D major. Here the
second degree A of the fundamental line is transformed into the primary tone of the
lower-level structure. As the primary tone, A possesses less tension than in the preceding
passage and therefore should be presented with a lower dynamic level. A crescendo will
help to bring out the tension that builds once the primary tone A is left and the music approaches the fourth degree E of the lower-level fundamental structure. The release of tension that occurs with the arrival of the final step D may be brought out with the use of decrescendo.

**Middleground Performance Implications for Section Two**

Like section one, section two, measures 9 through 16, is also divided into two segments. The first segment, measures 9 through 12, opens with the final portion of the prolongation of the second degree A of the fundamental line before the interruption. Since the A has been transformed again, now from the primary tone of a lower-level structure to the second degree of the fundamental structure, it, along with the supporting dominant harmony, possesses much greater tension than it did at the conclusion of the first section. Because of this greater tension, the music that opens section two should be presented either with a dynamic that is suddenly stronger or with a rapid crescendo that leads to the second degree A.

Following the interruption, between measures 9 and 10, the primary tone B is reintroduced. The B also serves as the primary tone of a lower-level five-step fundamental structure in E minor that extends from measure 10 through measure 12. The release of tension that occurs after the interruption may be brought out via a decrescendo while the primary tone is being presented. A crescendo may be used to bring out the tension that builds as the penultimate degree F-sharp of the lower-level fundamental line.
is approached. Tension is released with the arrival of the final step E of the fundamental line.

The second segment, measures 13 to 16, of the second section is divided into two subsections. The first subsection, measures 13 to 15, presents the primary tone and its upper neighbor C before returning to the primary tone. The tension caused by the upper neighbor is intensified by the prolongation of the C via its own upper neighbor D. This tension may be emphasized by the use of substantial crescendo culminating with the arrival of the C in the second part of measure 14. The release of tension that is associated with the arrival of the primary tone B in measure 15 may be brought out through the use of decrescendo.

The final subsection, measures 15 and 16, presents the primary tone, in the obligatory register, followed by the final two steps, A and G respectively, of the fundamental structure. The approach to the second degree A causes an increase of tension that can be brought out via a crescendo. The tension is short-lived due to the minimal prolongation and is immediately followed by the release of tension caused by the arrival of the final step G of the fundamental line. This release of tension may be brought out by a decrescendo and the natural dissipation of sound at the conclusion of the movement.

**Conclusion**

I have identified the three-step fundamental structure with a single interruption function that serves as the background for the Sarabande and facilitates a division of the
movement into two sections. Section one includes the entire prolongation of the primary tone B and nearly the entire prolongation of the second degree A of the fundamental line. Section two includes the conclusion of the prolongation of the second degree A of the fundamental line and the entire presentation of the fundamental structure beyond the interruption.

I identified middleground structures that divide the large sections and the implications these structures have for performance decisions. I also identified smaller divisions that operate within each segment of the two large sections and their role in shaping performance of the movement.
CHAPTER VI: MINUET NO. 1

A three-step fundamental structure with a single interruption functions as the background for Minuet No. 1 and facilitates a division of the movement into two sections. Section one extends from the opening measure through measure 8 and includes the entire prolongation of the primary tone B and the majority of the prolongation of the second degree A of the fundamental line. Section two begins in measure 9 and extends to the end of the movement. This section encompasses the conclusion of the prolongation of the second degree A of the fundamental line and the entire fundamental structure following the interruption between measures 9 and 10 (see Appendix E for all graphs referenced in this chapter).

Section One: Prolongation of the Primary Tone and the Second Degree

Minuet No. 1 opens with an arpeggiation from the lower fifth G of the bass arpeggiation to the initial presentation of the primary tone B. The primary tone is embellished by an upper neighbor figure C that is approached by an ascending third progression at the conclusion of measure 1. The primary tone returns at the beginning of measure 2 and is immediately embellished by a descending third progression that facilitates the transfer of the lower fifth G of the bass arpeggiation to an inner voice. The G is subsequently embellished by a lower neighbor F-sharp.

The upper fifth D of a lower-level bass arpeggiation is introduced at the
conclusion of measure 2 and is extended via an ascending third progression spanning measure 3. This third progression is married with an ascending third progression that extends from the primary tone B in the second measure to the high D at the conclusion of measure 3.

A descending tonal skip from D to B re-establishes the primary tone above the lower fifth G of the bass arpeggiation to open measure 3. Beat two of this measure includes the simultaneous introduction of the second degree A of the fundamental line and the upper fifth D of the bass arpeggiation.

The second degree A is prolonged in measures 5 and 6 via a descending third progression (C to A) above the supertonic A in the bass voice. The first note of the third progression is embellished by an upper neighbor D that is approached by an ascending third progression at the end of measure 5. Once the second degree is re-established in measure 6, a descending fourth progression (A to E) firmly establishes supertonic harmony.

The prolongation of the second degree continues through measures 7 and 8 above dominant harmony. An ascending third progression originating with F-sharp leads back to the second degree A of the fundamental line in measure 7. A descending third progression leads back to the F-sharp at the conclusion of measure 7. This descending third progression is coupled with an inner voice descending third progression (F-sharp to D) spanning the final two measures of the first section that re-establishes the upper fifth of the bass arpeggiation.
Section Two: Second Degree Prolongation, Interruption and Beyond

The first two measures (9 and 10) complete the prolongation of the second degree A of the fundamental line. A pair of ascending tonal skips move from the upper fifth D of the bass arpeggiation back to the second degree of the fundamental line. The second degree is prolonged by an upper neighbor B which is approached by an ascending third progression at the end of measure 9. A descending fifth progression leads back to the upper fifth of the bass arpeggiation immediately before the interruption between measures 10 and 11.

Following the interruption, the primary tone B is re-established via an arpeggiation of secondary leading tone harmony (VII/IV in E minor) in measure 11. The primary tone is prolonged by an ascending third at the conclusion of this measure and then a descending third progression that extends from the end of measure 11 to the downbeat of measure 14.

In measure 12, the first note D of the descending third progression is embellished by a descending third progression that also serves as a neighbor figure to the second step C of the progression. The C arrives at the end of measure 12 and is preceded in the same measure by subdominant A bass support in the key of E minor. In measure 13, the second step C is transformed into an incomplete neighbor to the upper fifth B of a lower-level bass arpeggiation. The B is approached by an ascending arpeggiation of dominant harmony that firmly establishes the key of E minor.

The B that arrives in measure 14 serves three functions: the continuation of the
primary tone of the overall fundamental structure, the conclusion of the descending third progression that began in measure 11, and the primary tone of a lower-level five-step fundamental structure in E minor extending from measure 14 through measure 16. The primary tone B is supported by tonic harmony and prolonged by a neighbor figure in measure 14. The fourth, third, and second degrees, A, G, and F-sharp, of the lower-level fundamental line are presented in measure 15. Of these three, only the second degree F-sharp is given any expansion. It is extended via a descending third progression that establishes the leading tone D-sharp and is supported by the upper fifth B of the bass arpeggiation.

The lower fifth E of the bass arpeggiation arrives in measure 16 and is immediately followed by the final step E of the lower-level five-step fundamental line in the upper voice. The role of this final step is weakened by its expansion: it is the initial tone of a descending third progression that establishes an incomplete neighbor C to the primary tone B of the overall fundamental structure.

The return of the primary tone B in measure 17 coincides with the return of the lower fifth G of the bass arpeggiation and the re-establishment of the key of G major. The impact of all of these elements is greatly reduced, however, for the following reasons. The primary tone is presented in the bass voice while the lower fifth of the bass arpeggiation is presented in the upper voice. Tonic harmony is transformed to secondary dominant harmony (V/IV) when F-natural is presented as part of a descending third progression (G to E) spanning measures 17 and 18. The F-natural is emphasized via an
ascending third progression (D to F) followed by a descending skip.

The final note of the descending third progression (G to E) is reached in measure 18. It is presented above the subdominant C in the bass and establishes inverted supertonic harmony. Supertonic harmony is transformed to secondary dominant harmony (V/V) in measure 19. An arpeggio from the C-sharp in the bass leads to the initial presentation of the second degree A of the fundamental line following the interruption.

The A is prolonged via a descending third progression (A to F-sharp) from measure 19 to 20 and then by a descending third establishing the upper fifth D of the bass arpeggiation and dominant harmony. The second tone G of the descending third progression is embellished by an ascending third progression (E to G) followed by a descending third.

Dominant harmony continues from measure 21 through 23. The upper fifth D of the bass arpeggiation is prolonged by an ascending third progression. An arpeggio leads from the upper fifth D of the bass arpeggiation to the second degree A of the fundamental line. The A is prolonged by an ascending third progression (A to C). The first two steps of this third progression are embellished by ascending thirds. The final step C is approached by an arpeggio originating with the second step of the ascending third progression in the bass.

Following this pair of third progressions, the harmony temporarily shifts to a cadential six-four before returning to the dominant. This corresponds to register transfer in the bass in measure 23. The final degree G of the fundamental line and the lower fifth
G of the bass arpeggiation are achieved simultaneously in the final measure of the movement.

**Middleground Performance Implications for Section One**

The first section of Minuet No. 1, extending from the opening measure to measure 8 and including the entire prolongation of the primary tone B and nearly the entire prolongation of the second degree A of the fundamental line, can be divided into two smaller segments. The first segment extends from the opening to measure 4. This first segment includes an upper neighbor C to the primary tone B followed by an ascending third progression originating with the primary tone. This third progression corresponds with the upper fifth D of a lower-level bass arpeggiation and the third progression (D to F-sharp) that embellishes that tone and establishes dominant harmony. The upper neighbor C and the tension it creates may be emphasized by a combination of slight crescendo and increased vibrato. Greater tension is created when dominant harmony is reached through the paired third progressions, therefore greater crescendo and a more significant increase in vibrato should be used during this portion of the segment. The tension is released when the primary tone B of the fundamental line and the lower fifth G of the bass arpeggiation return at the conclusion of this segment. This release of tension can be brought out via a decrescendo and relaxed vibrato in measure 4.

The second segment of section one extends from measure 5 to measure 8 and includes the majority of the prolongation of the second degree A of the fundamental line.
The overall harmonic motion in this segment is from the supertonic (II) to the dominant (V). This harmonic motion corresponds with the approach to the second degree from a third above (C to A) and the continued prolongation of the second degree via a descending third progression to conclude the segment and the first section.

**Middleground Performance Implications for Section Two**

Section two, measures 9 through 24, divides into three segments. The first segment extends from measure 9 to measure 10 and includes the completion of the prolongation of the second degree A above dominant harmony. The primary middleground feature of this segment is the upper neighbor B to the second degree A. The tension created by this upper neighbor figure may be emphasized by a crescendo leading to the upper neighbor, and a decrescendo leading from it.

The second segment of section two begins immediately following the interruption (between measures 10 and 11) and continues through measure 16. This segment may be divided into two subsections. The first subsection, measures 11 through 13, begins with the initial presentation of the primary tone B following the interruption. The primary tone is prolonged by an ascending third (B to D) followed by a descending third progression (D to B). This subsection contains a great deal of tension for the following reasons: it starts with secondary leading tone harmony (VII/IV) at the beginning of a modulation to a new key, E minor; it concludes with dominant harmony in the new key. The inherent tension of this subsection may be emphasized via the execution of a rapid crescendo at
the opening and maintenance of the greater dynamic level once dominant harmony is achieved in E minor.

The second subsection, measures 14 through 16, of the second segment of section two consists entirely of a lower-level fundamental structure in E minor. Because this subsection begins with the tonic of the new key, it starts with a release of the tension created in the previous subsection. This release of tension can be achieved via a decrescendo at the opening of the subsection. Tension increases again when dominant harmony is reached in measure 15. This tension is short-lived because the dominant harmony is presented only briefly before tonic harmony is re-established in measure 16. Because of the nature of the two subsections that make up the second segment of section two, the overall effect is an increase of tension, executed with a crescendo, through the first subsection followed by a decrease of tension, executed with a decrescendo, through the second subsection.

The third, and final, segment of section two extends from measure 17 to the end of the movement. This segment opens with the return of G major and a presentation of the primary tone B and the upper fifth G of the bass arpeggiation. A descending third progression (G to E) leads to inverted supertonic harmony, signaling the upcoming arrival of the second degree A of the fundamental line. In measure 19, tension increases significantly with the actual arrival of the second degree A of the fundamental line and the transformation of supertonic harmony to secondary dominant harmony (V/V). Tension continues to build as a third progression (A to F-sharp) establishes dominant
harmony that is subsequently sustained through the penultimate measure. The increased tension can be executed by a significant crescendo throughout this segment. The tension is released with the arrival of the octave Gs, the final notes of the fundamental structure, in the final measure.

**Conclusion**

I have identified the three-step fundamental structure with a single interruption functioning as the background for Minuet No. 1 and facilitating a division of the movement into two sections. Section one includes the entire prolongation of the primary tone B and the majority of the prolongation of the second degree A of the fundamental line. Section two encompasses the conclusion of the prolongation of the second degree A of the fundamental line and the entire fundamental structure following the interruption between measures 9 and 10.

I identified middleground structures and the implications these structures have for performance decisions. I also identified smaller divisions that operate within each of the two large sections and their role in shaping performance of the movement.
CHAPTER VII: MINUET NO. 2

A three-step fundamental structure in G minor with a pair of interruptions functions as the background for Minuet No. 2 and divides the movement into three sections. Section one extends from the opening measure through measure 4 and includes the entire fundamental structure up to the first interruption. Section two begins in measure 5 and continues through measure 8. This section includes nearly the entire fundamental structure between the two interruptions. Section three extends from measure 9 to the conclusion of the movement and includes the very end of the fundamental structure just prior to the second interruption and the entire fundamental line following the second interruption (see Appendix F for all graphs referenced in this chapter).

Section One: Prolongation of the Primary Tone and the Second Degree

Minuet No. 2 opens with an arpeggio figure descending from the primary tone B-flat to the initial tone G of the bass arpeggiation. The primary tone, embellished by a lower neighbor A, is prolonged via a lower-level three-step fundamental structure that extends to measure 3. The second degree A of the lower-level fundamental line is achieved in measure 2 above minor dominant harmony with F-natural in the bass. The upper fifth D of the lower-level bass arpeggiation is presented at the conclusion of the measure. The final tone G of the lower-level fundamental structure is achieved in measure 3 and embellished with a lower neighbor F-sharp.
The impact of the lower-level fundamental structure is weakened by three factors: the inversion of the tonic in measure 3 is changed to first by a descending melodic sixth; the dominant harmony supporting the second degree is presented in the minor form and in inversion, with F-natural in the bass; this F-natural initiates a descending third progression (F to D) that extends beyond the conclusion of the lower-level fundamental structure. The second step E-natural of this third progression is presented in measure 3 as part of major subdominant harmony, also in first inversion. The final step D of this third progression is presented in measure 4 as the upper fifth of the overall bass arpeggiation. The second degree A of the fundamental line is achieved at the conclusion of the section via an upward arpeggiation from the bass D. The interruption between measures 4 and 5 establishes the conclusion of this section.

Section Two: The Fundamental Structure Following the First Interruption

Section two of Minuet No. 2 is nearly identical to section one. It extends from measure 5 through measure 8. The first three measures of both sections are identical in every respect. The difference occurs in the final measure of the sections. In measure 4, a six-note arpeggio figure spans the entire measure and establishes the upper fifth D of the bass arpeggiation and the second degree A of the fundamental line. The arpeggio figure spans the entire measure and includes an incomplete neighbor G to the leading tone F-sharp. The corresponding measure (8) from section two also establishes the upper fifth D of the bass arpeggiation and the incomplete neighbor resolving to the leading tone.
However, instead of reaching the leading tone as part of an arpeggiation that continues to the second degree of the fundamental line, the incomplete neighbor G is achieved via a large leap, and the leading tone represents the conclusion of the passage. The second degree A of the fundamental line is never achieved in section two.

**Section Three: Achieving the Second Degree and Beyond the Second Interruption**

The first measure of section three, extending from measure 9 to the end of the movement, maintains the dominant harmony established at the conclusion of the previous section and presents the second degree A of the fundamental line as part of an arpeggio figure originating with the upper fifth D of the fundamental line. The second interruption occurs midway through the ninth measure once the arpeggio is completed.

The dominant harmony in measure 9 marks the beginning of a circle-of-fifths progression (V-I {in G minor}-V/V-V-I {in B-flat major}) that extends through measure 13 and modulates to the key of B-flat major. This harmonic progression corresponds with a descending third progression (D to B-flat) that spans the same measures and ultimately re-establishes the primary tone following the second interruption. The first note of this descending third progression, presented in measure 9, is approached by an incomplete neighbor E-flat and prolonged by a descending fifth progression (D to G) that represents tonic harmony in G minor and extends through measure 10.

In measure 11, an arpeggiation of secondary dominant harmony (B-flat: V/V) leads to the second note C of the descending third progression. The C is prolonged by a
descending fifth progression (C to F) that represents dominant harmony in the key of B-flat major and extends through measure 12. A descending third progression (F to D) leads to inverted tonic harmony from measure 12 to 13. An arpeggio of the tonic leads to the final step B-flat of the descending third progression that originated in measure 9 and re-establishes the primary tone.

A lower-level three-step fundamental structure in B-flat major extends from measure 13 through measure 16. The primary tone D of this lower-level structure is introduced in an inner voice in measure 13 while the initial tone B-flat is presented in the upper voice. This allows the B-flat, which also functions here as the primary tone of the overall fundamental structure following the second interruption, to maintain prominence. As mentioned above, the primary tone is approached by an arpeggiation of tonic harmony in measure 13. It is subsequently embellished by a lower neighbor A and a descending consonant leap. In measure 14, the primary tone is approached by an arpeggiation of the subdominant. As in the previous measure, the primary tone is embellished by a lower neighbor A.

An ascending skip of a third (B-flat to D) establishes the primary tone D of the lower-level fundamental line in the obligatory register at the conclusion of measure 14. The second degree C of the lower-level fundamental line is presented in measure 15 as part of supertonic harmony. The second degree is prolonged via a descending third progression that ends with the leading tone A above the upper fifth F of the lower-level bass arpeggiation.
In measure 16, B-flat returns with the dual function of the primary tone of the overall fundamental structure and the final step of the lower-level fundamental line. An arpeggio figure leads to the lower fifth B-flat of the lower-level bass arpeggiation at the conclusion of the measure.

The key of B-flat major continues from measure 17 through measure 20 and is maintained via a circle-of-fifths progression (V/II-II-V-I). Secondary dominant harmony is arpeggiated throughout measure 17. A descending third progression (G to E-flat) facilitates the resolution of the secondary dominant to the supertonic from measure 17 to measure 18. Supertonic harmony is arpeggiated in measure 18. Dominant harmony is arpeggiated throughout measure 19, following the same pattern as measure 17. A descending third progression (F to D) facilitates the resolution of the dominant to the tonic from measure 19 to measure 20. The tonic is arpeggiated in measure 20, following the same pattern as measure 18, and serves as a pivot chord leading back to the key of G minor.

The key of G minor is firmly re-established in measures 21 and 22. Dominant harmony is arpeggiated in measure 21, following the same pattern found in measures 17 and 19. A descending third progression (D to B-flat) facilitates the resolution of the dominant to the tonic from measure 21 to measure 22. The arrival on B-flat in measure 22 signals the return of the primary tone, displaced by an octave. The arpeggiation of tonic harmony, nearly identical to the arpeggiations in measures 18 and 20, restores the primary tone to the obligatory register and re-establishes the initial tone G of the bass
arpeggiation.

The second degree A of the fundamental line is presented in measure 23 as part of inverted supertonic harmony. The second degree is prolonged by a descending third progression that establishes the leading tone F-sharp above the upper fifth D of the bass arpeggiation. The final step G of the fundamental line is presented in measure 24, displaced by an octave. This same G also serves as the lower fifth of the bass arpeggiation.

**Middleground Performance Implications for Section One**

The first section of Minuet No. 2, extending from measure 1 to measure 4, presents the entire fundamental structure before the first interruption, and it can be divided into two segments. The first segment, measures 1 through 3, prolongs the primary tone B-flat and the initial tone G of the bass arpeggiation via a lower-level fundamental structure. Tension increases as the second degree A of the lower-level fundamental structure is presented above the upper fifth D of the lower-level bass arpeggiation. Tension is released in measure 3 with the resolution to the tonic. The tension of measure 2 can be brought out by crescendo, and the release of tension in measure 3 can be brought out by decrescendo. However, because of the brevity of the return of the tonic, the release of tension in measure 3 is not so great as to justify a return to the opening dynamic.

The second segment of the first section includes a motion to the major subdominant in measure 3 and the presentation of the second degree A of the
fundamental line above the upper fifth D of the bass arpeggiation. Tension is created in measure 3 because the major form of subdominant harmony is used instead of the expected minor form. Tension continues to build through measure 4 with the introduction of dominant harmony, culminating with the arrival of the second degree of the fundamental line. This tension is more significant than the tension expressed in the first segment and can be brought out through the use of greater crescendo and increased vibrato. The overall effect of the entire first section is that of increasing tension; therefore, a general crescendo and increase of vibrato would be appropriate throughout the passage.

**Middleground Performance Implications for Section Two**

Because section two, measures 4 through 8, is nearly identical to section one, it is not necessary to recount the aspects already addressed above. Instead, I will focus on the elements that differentiate the two sections. The most significant difference is not content but proximity. Even though both sections open with identical content, section two begins with a release of tension, not inherent in section one, because it follows the interruption. This release may be brought about in performance through a decrescendo and the relaxation of vibrato. This proximity will therefore change the overall character of the music from continuously mounting tension, as in the first section, to release of tension followed by mounting tension in the second section.

The second difference between the two sections is content, specifically the
differences between measure 4 and measure 8. In the middleground, the primary
difference is that measure 8 uses the leading tone F-sharp as a replacement for the second
degree A of the fundamental line that is presented in measure 4. This postponement of the
expected tone results in greater tension, in comparison to section one, at the conclusion of
section two.

**Middleground Performance Implications for Section Three**

Section three, extending from measure 9 to the end, can be divided into three
smaller segments. The first segment, measures 9 through 16, may be divided into two
subsections. The two subsections are unified by the descending third progression (D to B-
flat) spanning measures 9 through 13. Each step in this progression should be brought out
through slightly intensified vibrato and agogic accent.

The first subsection, measures 9 through 12, begins with a great deal of tension
for two reasons: it begins with the final portion of the prolongation of the second degree
A of the fundamental line just prior to the interruption, between measures 9 and 10; it
modulates, via circle-of-fifths progression, from G minor to B-flat major.

In measure 9, dominant harmony is presented as a continuation of the harmony at
the conclusion of section two and therefore continues the tension that has already been
building for several measures. The tension is released to a small extent in measure 10
with the arrival of tonic harmony. This release is minimized because it occurs as part of a
circle-of-fifths progression facilitating a key change. The release of tension is also brief
because it is immediately followed by secondary dominant harmony (B-flat: V/V) that begins to rebuild the tension. Tension increases with the introduction of dominant harmony in measure 12, coinciding with the presentation of the second step in the third progression that unifies the two subsections of segment one. Therefore, the overall effect of this subsection is increasing tension. This can be brought out through crescendo and intensification of vibrato throughout the passage.

The second subsection, measures 13 through 16, of this segment provides release from the previous tension for four reasons: the modulation has ended and the new key, B-flat major, is established; a lower-level three-step fundamental structure begins; the final step of the unifying third progression is achieved; and the primary tone B-flat is re-established. Of course, these are not four separate events, but four different functions of the same event. The release of tension may be executed by a rapid decrescendo in measure 13, or by beginning that measure with a softer dynamic level, and by relaxing the vibrato.

Tension begins to build again in measures 14 and 15 as the harmony moves from the tonic, through the subdominant and to the dominant, supporting the second degree C of the lower-level fundamental line. The increase of tension can be accomplished through the use of crescendo throughout these two measures.

The tension is resolved in measure 16 with the conclusion of the fundamental structure. The release of tension may be brought out through decrescendo and perhaps even a slight slacking of the tempo. The overall shape of the first segment of section three
is an increase of tension, in measures 9 through 12, followed by a release of tension, measures 13 through 16.

The second segment of section three extends from measure 17 through measure 20 and can be divided into two subsections. The first subsection, measures 17 and 18, possesses an increase in tension with the presentation of secondary dominant (V/II) harmony followed by a release of tension with the resolution to the supertonic. This tension followed by release can be executed with a crescendo followed by a decrescendo.

The second subsection, measures 19 and 20, of this segment follows the same basic pattern as the previous subsection, measures 17 and 18. Tension builds with the presentation of dominant harmony and is released with its resolution to the tonic. As in the previous section, tension can be executed using a crescendo and the release can be executed with a decrescendo. Since the four measures of this segment constitute a circle-of-fifths progression, there is an overall sense of increasing tension throughout the passage until it resolves to the tonic in measure 20.

The final segment of section three extends from measure 21 to the end of the movement and marks the return to the key of G minor. This segment opens with a great deal of tension because it begins the key change with the presentation of dominant harmony. There is a release of tension with the resolution to the tonic. This release, however, is short-lived because the music quickly introduces the second degree A of the fundamental line, first above the inverted supertonic and then above the dominant. Tension is finally released in the last measure with the arrival of the conclusion of the
fundamental structure. The overall shape of this final segment is building tension until the release of tension in the final measure.

**Conclusion**

I have identified the three-step fundamental structure in G minor with a pair of interruptions that functions as the background for Minuet No. 2 and divides the movement into three sections. Section one includes the entire fundamental structure up to the first interruption. Section two includes nearly the entire fundamental structure between the two interruptions. Section three includes the very end of the fundamental structure just prior to the second interruption and the entire fundamental line following the second interruption.

I identified middleground structures and the implications these structures have for performance decisions. I also identified the segments and sub-sections that operate within each of the three large sections and their role in shaping performance of the movement.
A three-step fundamental structure in G major with two interruptions functions as the background for the Gigue and effectively divides the movement into four sections. Section one extends from the first measure through measure 12 and includes the initial prolongation of the primary tone B and the majority of the prolongation of the second degree A of the fundamental line before the first interruption. Section two begins in measure 13 and continues through measure 20. It completes the prolongation of the second degree of the fundamental line and presents the entire prolongation of the primary tone following the first interruption. Section three extends from measure 21 through measure 27 and includes the entire prolongation of the second degree before the second interruption. Section four begins in measure 28 and continues to the end of the Gigue. It presents the entire fundamental structure following the second interruption (see Appendix G for all graphs referenced in this chapter).

Section One: Prolongation of the Primary Tone and the Second Degree

The Gigue begins with the initial tone G of the bass arpeggiation, displaced by an octave. A descending arpeggio figure, embellished with double neighbor tones, extends from measure 1 to measure 2 and presents the primary tone B, also displaced by an octave, and the initial tone G in the obligatory register.

An ascending third progression (G to B) spanning measures 3 and 4 transfers the
primary tone to the obligatory register. The first two steps, G and A, respectively, are each embellished by their own ascending third progression. Measure 4 concludes with the initial presentation of the second degree A of the fundamental line and the upper fifth D of the bass arpeggiation.

Measures 5 through 7 present and prolong the upper neighbor B to the second degree A of the fundamental line. This upper neighbor is prolonged by a descending third progression (B to G) that spans the same three measures. The first two steps of this third progression are both embellished by a descending arpeggio figure. The lowest note of each of these arpeggio figures represents the first two notes of a linked descending third progression (E to C-sharp) in the bass voice spanning measures 5 to 8.

The final note G of the upper-voice descending third progression is not embellished by a descending arpeggiation. Instead, it is left by an ascending third (G to B) that re-establishes the actual upper neighbor. The upper neighbor is embellished by the descending arpeggio figure. The lowest note of this arpeggio establishes the first note E of a short third progression ending on the C-sharp that also concludes the longer bass-voice third progression. An ascending arpeggio re-instates the second degree A of the fundamental line above secondary dominant harmony (V/V) in measure 8.

An ascending third progression (E to G), with each note embellished by an incomplete neighbor, moves from measure 9 to 10 and leads back to the second degree A of the fundamental line. At this point, the second degree of the fundamental line also functions as the primary tone of a lower-level five-step fundamental structure in the key
of D spanning measures 10 through 12. The first three notes of the lower-level
fundamental line (A, G, and F-natural) are presented without harmonic or bass support
and, except for the primary tone that is decorated by an incomplete neighbor, have no
embellishment. The penultimate note E of this fundamental line is embellished by a
descending third progression that establishes the leading tone C-sharp and is supported by
the upper fifth A of the lower-level bass arpeggiation.

The final step D of the lower-level fundamental line is presented in measure 12. A
descending arpeggio connects it with the lower fifth D of the bass arpeggiation. A certain
amount of modal ambiguity arises in this lower-level fundamental structure because the
third step F-natural suggests the key of D minor but the final harmony, containing F-
sharp, suggests the key of D major.

Section Two: Completing the Prolongation of the Second Degree and Prolongation
of the Primary Tone Following the First Interruption

Section two, extending from measure 13 to measure 20, opens with the
completion of the prolongation of the second degree A of the fundamental line. In
measures 13 and 14, the upper voice prolongs the second degree of the fundamental line
via a pair of third progressions (A to F-sharp, and then F-sharp to A) and an ascending
third (A to C). All of this prolongation takes place over a descending third progression
(F-sharp to D) that transfers the upper fifth of the bass arpeggiation to the obligatory
register.

Following the interruption, between measures 14 and 15, the primary tone B is re-
established and prolonged following the same pattern set in the previous two measures: a pair of third progressions (B to G, and then G to B) and an ascending third (B to D) in the upper voice; and a descending third progression (G to E) in the bass voice.

While the pattern is nearly identical to the previous two measures, the function is quite different. The bass-voice descending third progression in measures 13 and 14 prolongs dominant harmony throughout. However, the descending third progression in measures 15 and 16 moves from tonic harmony to its submediant substitution.

The submediant harmony in measure 16 functions as the beginning of a circle-of-fifths progression that extends through measure 18 and ends with tonic harmony. This harmonic progression supports a descending third progression (D to B) that spans the same measures and re-establishes the primary tone. Each step in this third progression is embellished by an incomplete neighbor tone, either before or after.

The primary tone B in measure 18 also functions as the primary tone of a lower-level five-step fundamental structure in the key of E minor. There is a degree of tonal ambiguity in this passage for two reasons: the primary tone is still supported by a G in the bass, suggesting tonic harmony in the key of G major or inverted tonic harmony in E minor; the second step A of the fundamental line is supported by C in the bass, suggesting inverted supertonic harmony in G major or inverted subdominant harmony in E minor.

The actual modulation does not become clear until after the unsupported presentation of the third step G of the lower-level fundamental line in measure 19. At this
point, the penultimate step F-sharp of the lower-level fundamental line is presented and subsequently prolonged by a descending third progression that establishes the leading tone D-sharp in the new key. The upper fifth B of the lower-level bass arpeggiation clearly suggests dominant harmony in E minor. In measure 20, the arrival of the final step E of the fundamental line and the arpeggiation through tonic harmony to the lower fifth E of the bass arpeggiation confirms the modulation to E minor.

**Section Three: Prolongation of the Second Degree**

The first measure of section three, extending from measure 21 through measure 27, introduces the second degree A of the fundamental line as part of dominant harmony. A set of three descending third progressions, each spanning measures 21 through 23, facilitates the initial prolongation of the second degree and a motion to the upper fifth D of the bass arpeggiation.

The descending third progression from which the other two emerge moves from the second degree A of the fundamental line to F-natural. A descending third from each step of this descending third progression establishes each step of the bass-voice third progression (F-sharp to D). Each step of the bass-voice progression is embellished by an upper neighbor (G, F-natural, and E, respectively). The F-naturals present in both of these third progressions signal a temporary shift from major dominant harmony to minor harmony built on the fifth scale degree.

Each step of the third descending third progression (C-sharp to A) emerges as an
ascending third from the initial descending third progression. Each of these steps is embellished by its own ascending third progression. A descending arpeggiation in measures 23 and 24 returns the dominant harmony to the major form while continuing the prolongation of the second degree A of the fundamental line and the upper fifth D of the bass arpeggiation.

The second degree in measure 25 is prolonged by a pair of third progressions: an ascending third progression (A to C) spanning measures 25 and 26; and a descending third progression (A to F-sharp) spanning measures 25 to 27. Each step of the ascending third progression is embellished by an ascending third. The final step C of this third progression is further embellished by a descending third progression (E-flat to C).

The entire ascending third progression may also be read as an embellishment for the first step of the descending third progression. The second step G is embellished by a descending third progression (B-flat to G). The final step F-sharp is established without embellishment above the upper fifth D of the bass arpeggiation to conclude the section at the point of the second interruption.

**Section Four: The Fundamental Structure Beyond the Second Interruption**

The fourth section, measures 28 through 34, presents the primary tone B in the bass register above the initial tone G of the bass arpeggiation in measure 28. The primary tone is embellished by an ascending third progression while the initial tone of the bass arpeggiation is prolonged by a tonic arpeggiation.
An ascending third progression (G to B), spanning measures 28 to 31, establishes the primary tone in the obligatory register. The first step G of this progression is introduced in measure 28 as part of tonic harmony and sustained through measure 29 as part of subdominant harmony. It is embellished by a descending third followed by an ascending third progression. The second step A of the ascending third progression is presented in measure 30 as part of dominant harmony and embellished in the same manner as the first step G: a descending third followed by an ascending third progression.

In measure 31, the primary tone is achieved in the obligatory register as the final note of the ascending third progression. It is presented above tonic harmony and embellished in the same manner as the first two steps: a descending third followed by an ascending third progression.

Subdominant harmony is introduced in measure 31 and sustained through measure 32 by a pair of ascending third progressions: E to G in the bass voice, and C to E in the upper voice. Each step of the bass-voice third progression is embellished by an incomplete lower neighbor.

In measure 33, the upper fifth D of the bass arpeggiation is presented and functions as the genesis of an ascending fifth progression that establishes dominant harmony and ends with the second degree A of the fundamental line. The second degree is subsequently prolonged by a descending third progression, ending with the leading tone (F-sharp).

The final degree G of the fundamental line is presented in the final measure of the
Gigue. A descending tonic arpeggio establishes the lower fifth G of the bass arpeggiation to conclude the movement.

**Middleground Performance Implications for Section One**

Section one, extending from measure 1 through measure 12, includes the initial prolongation of the primary tone B and the majority of the prolongation of the second degree A of the fundamental line before the first interruption. This section may be divided into three four-measure segments. The first segment, measures 1 through 4, prolongs the primary tone, first via arpeggiation and then by ascending third progression, for the majority of its duration, and, therefore, possesses very little tension.

Some tension is present during the ascending third progression when the second step is achieved, but this is short-lived. Greater tension is felt with the arrival of the second degree A of the fundamental line above the upper fifth D of the bass arpeggiation to conclude the segment. Therefore, the overall shape of the first segment is increasing tension, but only toward the end. This increase in tension may be executed with a slight crescendo.

Tension is immediately increased at the opening of the second segment, measures 4 through 8, with the presentation of the upper neighbor B to the second degree A of the fundamental line. This heightened sense of tension is maintained for the majority of this segment as the neighbor tone is prolonged via a descending third progression. The expected release of tension that would usually accompany the resolution of a neighbor
figure is militated because the resolution is to the second degree A above secondary
dominant harmony (V/V). Therefore, this segment is marked by sustained tension greater
than the tension at the conclusion of the previous segment. This tension may be executed
with greater volume and intensified vibrato throughout.

Segment three, measures 9 through 12, continues the prolongation of the second
degree A of the fundamental line and the upper fifth D of the bass arpeggiation. This
prolongation is achieved primarily by a lower-level five-step fundamental structure in the
key of D. There is no release of tension from segment two into segment three because the
secondary dominant that concludes segment two is not resolved, and therefore the tension
continues throughout the majority of segment three. The tension actually increases with
the presentation of the penultimate tone E of the lower-level fundamental line above the
upper fifth A of the lower-level bass arpeggiation. Tension is finally released at the
conclusion of this segment with the resolution to the tonic in the key of D.

The overall shape of section has three phases. The first phase is a period of low
tension. The second phase features an increase of tension that is sustained throughout
segment two and into segment three. The final phase presents a release of tension.

**Middleground Performance Implications for Section Two**

Section two, measures 13 through 20, completes the prolongation of the second
degree A of the fundamental line and presents the entire prolongation of the primary tone
following the first interruption. Like section one, section two is also divided into three
The first segment, measures 13 through 16, is further divided into two subsections. The first subsection, measures 13 and 14, completes the prolongation of the second degree A of the fundamental line with two descending third progressions coupled together. Although these two measures represent the same harmony (D major) as the harmony at the conclusion of section one, this presentation of D major harmony is endowed with greater tension because it functions as the dominant in G major, rather than the tonic in D major. This shift in function and tension may be executed through a louder dynamic level and intensified vibrato.

The second subsection, measures 15 and 16, of this segment presents the initial prolongation of the primary tone following the first interruption. As in the previous two measures, prolongation is achieved by a pair of descending third progressions. In this case, the coupled third progressions move from tonic harmony to the submediant, both harmonies possessing much less tension than the dominant harmony. Therefore, the second subsection should be executed either beginning with a lower dynamic level or with a decrescendo.

The second segment, measures 16 through 18, elides with the end of segment one and the beginning of segment three. It combines a descending third progression (D to B) and a circle-of-fifths progression. Tension builds as the second step C in the third progression is presented above supertonic and then dominant harmony. That tension is resolved with the arrival of the final step of the third progression, the primary tone, above
tonic harmony.

The third segment, measures 18 through 20, continues the prolongation of the primary tone B via a lower-level five-step fundamental structure in E minor. Tension increases as the penultimate step F-sharp of the lower-level fundamental line is approached and ultimately achieved above the upper fifth B of the lower-level bass arpeggiation. Tension is released at the conclusion of the third segment with the resolution to the tonic.

Overall, section two opens with tension that is released before the first segment is completed. Tension then increases and dissipates two times before the conclusion of this section.

**Middleground Performance Implications for Section Three**

Section three, measures 21 through 27, includes the entire prolongation of the second degree A before the second interruption and can be divided into three segments. The first segment, measures 21 to 23, features a set of three descending third progressions. This segment possesses a significant amount of tension by virtue of presenting the second degree A and the upper fifth D of the bass arpeggiation. The tension intensifies, perhaps only slightly, as the harmony shifts from the major form of the dominant to the minor form. The tension of this segment may be brought out by beginning with a louder dynamic and intensified vibrato. Further crescendo can be used to emphasize the added tension accompanying the shift to minor.
Segment two, measures 23 and 24, continues the prolongation of dominant harmony and re-establishes the major form via a series of arpeggiations. The shift back to D major harmony signals a release of tension, but only a slight release since dominant harmony is still being maintained.

Segment three, measures 25 through 27, features the prolongation of the second degree of the fundamental line via an ascending third progression (A to C) and a descending third progression (A to F-sharp) above the upper fifth D of the bass arpeggiation. Because dominant harmony is sustained throughout the segment, the tension is maintained to its conclusion.

**Middleground Performance Implications for Section Four**

Section four, measure 28 to the end, presents the entire fundamental structure following the second interruption. This section is divided into two segments. The first segment, measures 28 to 31, presents the entire prolongation of the primary tone B after the interruption. The prolongation features an ascending third progression (G to B), supported by a lower-level bass arpeggiation. The segment opens with a lower level of tension than the preceding section. Tension builds as the second step of the third progression is presented above dominant harmony. The tension is finally released when the primary tone B is achieved above the initial tone G of the bass arpeggiation. The increasing tension and the subsequent release of tension can be achieved through a crescendo followed by a decrescendo.
The release at the conclusion of segment one is short-lived, as tension begins to build at the opening of segment two, measure 31 to the end. A crescendo can bring out this increasing tension as subdominant harmony is prolonged by a pair of ascending third progressions. The tension peaks as the second degree A of the fundamental line is established above the upper fifth D of the bass arpeggiation. The tension is ultimately released with the resolution to the tonic in the final measure of the movement. The overall shape of section four is primarily increasing tension, brief release of tension, increasing tension, and the final release of tension.

**Conclusion**

I have identified the three-step fundamental structure in G major with two interruptions that functions as the background for the Gigue and effectively divides the movement into four sections. Section one includes the initial prolongation of the primary tone B and the majority of the prolongation of the second degree A of the fundamental line before the first interruption. Section two completes the prolongation of the second degree of the fundamental line and presents the entire prolongation of the primary tone following the first interruption. Section three includes the entire prolongation of the second degree before the second interruption. Section four presents the entire fundamental structure following the second interruption.

I identified middleground structures and the implications these structures have for performance decisions. I also identified the segments and sub-sections that operate
within each of the four large sections and their role in shaping performance of the movement.
CHAPTER IX: STRUCTURAL SIMILARITIES AND DIFFERENCES

Having considered each movement individually, I will now discus some structural elements that contribute to the unification of the suite, as well as the uniqueness of each movement. I will determine the similarities and differences amongst the movements in several areas: mode, fundamental structure, interruption, prolongations, lower-level fundamental structures, and neighbor tones. Throughout this chapter, I use percentages for demonstrating the distribution of these structures and phenomena within a single movement and to facilitate comparison of these structures amongst multiple movements.

Mode

Perhaps the movement that stands out as the most different when making a cursory survey of all of the movements in this suite is Minuet No. 2. This, of course, is because it is the only movement presented in the minor mode. If mode is the most obvious factor that sets Minuet No. 2 apart from the other movements, it must also be the most obvious unifying factor for the other suite movements. In fact, it has been my personal experience that many performers and teachers of this suite believe mode to be the only, or at least the primary, unifying factor for each of the unaccompanied suites.

At first glance, there may seem to be little more that can be said regarding the difference of mode. However, the minor mode presents the opportunity to explore different keys in modulations, creating even greater contrast. In this case, Bach utilizes
the relative major key B-flat for eight measures, 13 through 20. The use of the minor mode also precludes a modulation to the key of E minor, a common feature of several of the other movements that will be discussed below.

**Fundamental Structures, Interruptions, and Prolongations**

Having considered all movements of the suite, it is clear that each movement has a three-step fundamental structure as a common feature. The differences that emerge when comparing all the fundamental structures of all the movements are the number of interruptions, the placement of the interruptions, and the duration of the prolongations.

The Prelude stands out as unique amongst the movements because it is the only one that does not have an interruption as part of the fundamental structure. The temporal distribution assigned to the prolongation of the primary tone B and to the prolongation of the second degree A are nearly equal at 46 percent and 52 percent, respectively. Only 2 percent of the movement is dedicated to the final step G of the fundamental line (see Figure 1). As the following discussion will demonstrate, the dedication of such a low percentage of the music to the final step is a common feature of all of the movements.

Three of the movements, the Allemande, the Sarabande, and Minuet No. 1, have a single interruption as part of the fundamental structure. Among these three movements, the placement of the interruption in the Allemande stands out as unique, occurring three quarters through the movement. The interruptions in the Sarabande and Minuet No. 1 occur significantly earlier, at 56 and 42 percent through, respectively (see Figure 2).
Figure 1. Prolongation percentages in the Prelude.

Figure 2. Percentage of movement completed before the interruption in single-interruption movements.
In each of these three movements, there are five areas of prolongation, compared to three areas of prolongation in the Prelude. In the Allemande, the amount of time, 47 percent of the movement, dedicated to the prolongation of the first primary tone is proportionately equal to the same prolongation area in the Prelude. However, this amount of time is significantly greater than that dedicated to the initial prolongation of the primary tone in any other movement. The initial prolongation in the Courante is the nearest in length, proportionately, and this area accounts for only 19 percent of that movement (see Figure 3).

Figure 3. Percentage of each movement dedicated to the prolongation of the initial primary tone.
The remaining areas of prolongation within the Allemande are significantly smaller than the initial area of prolongation, discussed above. The prolongation of the second degree prior to the interruption represents 28 percent of the movement. The area of prolongation for the primary tone following the interruption accounts for 19 percent of the movement. The areas of prolongation for the second degree after the interruption and for the final degree are 3 percent each (see Figure 4).

![Figure 4. Percentage of Allemande dedicated to each prolongation area.](image)

The Sarabande, another movement with a single interruption, opens with a prolongation of the primary tone that accounts for just 13 percent of the movement, the second shortest initial prolongation proportionally. However, the prolongation of the
second degree is exceptional, making up 44 percent of the movement. Only the Prelude, a movement without an interruption, has a greater single prolongation dedicated to the second degree. The prolongation of the primary tone following the interruption in the Sarabande represents 31 percent of the movement, nearly two and a half times the initial prolongation of the primary tone. The areas of prolongation for the second degree after the interruption and for the final degree are 6 percent each (see Figure 5).

The remaining movement with a single interruption, Minuet No. 1, displays considerably more balance than the other two single-interruption movements regarding the amount of time dedicated to each prolongation. The initial prolongation of the primary tone accounts for 17 percent of the movement. The following three areas of prolongation are nearly equal to each other: 25 percent each for the second degree before and after the interruption, and 29 percent for the primary tone after the interruption. This balance causes this movement to stand apart from the others in one respect: it is the only movement with an interruption in which the last prolongation of the second degree exceeds 7 percent of the movement. As is typical of each movement, the prolongation area for the final degree is quite short, only 4 percent of the movement (see Figure 6).
Figure 5. Percentage of Sarabande dedicated to each prolongation area.

Figure 6. Percentage of Minuet No. 1 dedicated to each prolongation area.
The remaining three movements, the Courante, Minuet No. 2, and Gigue, all have two interruptions of the fundamental structure. The interruptions in the Courante occur relatively late in the movement at 62 percent and 83 percent through. The interruptions in Minuet No. 2 occur significantly earlier, at 17 percent and 38 percent through. The interruptions in the Gigue are more evenly spaced at 41 percent and 77 percent through (see Figure 7).

![Figure 7. Percentage of movement completed before the first interruption and before the second interruption in two-interruption movements.](image)

In each of these three movements, there are seven areas of prolongation, compared to five areas of prolongation in each of the single-interruption movements and three areas of prolongation in the Prelude. The Courante displays a similar balance to the distribution observed in Minuet No. 1. The initial prolongation of the primary tone
represents 19 percent of the movement. The prolongation of the second degree prior to the first interruption is the largest area at just 24 percent. The prolongation of the primary tone following the first interruption accounts for 22 percent. The prolongation of the second degree before the second interruption makes up 17 percent of the movement. The prolongation of the primary tone after the second interruption represents 12 percent of the movement. Only the last two areas of prolongation, for the second degree and the final degree, are significantly shorter at just 3 percent each (see Figure 8).

Figure 8. Percentage of Courante dedicated to each prolongation area.

As mentioned earlier, Minuet No. 2, a two-interruption movement, stands apart from the other movements in the suite as the only one presented in the minor mode.
Perhaps it should not be surprising then that it stands out for additional reasons when its structure is examined. The opening area of prolongation for the primary tone accounts for just 13 percent of the movement, proportionately the second shortest opening prolongation in the entire suite. As noted earlier, the prolongation area of the final second degree in most of the movements is quite short; however, every prolongation of the second degree in Minuet No. 2 accounts for less than 10 percent of the movement: 3 percent before the first interruption; 7 percent before the second interruption; and 4 percent after the second interruption. The prolongation area for the primary tone following the first interruption accounts for 13 percent of the movement, as did the initial prolongation of the primary tone. The third prolongation area of the primary tone is exceptional at 56 percent, proportionally greater than any single prolongation within the entire suite. This prolongation stands out even more considering that it is located in a movement with four prolongations under ten percent, including the final scale degree at 4 percent (see Figure 9).

The remaining movement, the Gigue, is the last of the two-interruption movements. It begins with the shortest opening prolongation, proportionately, at just 12 percent. The prolongation of the second degree that follows represents the largest prolongation area in the movement, at 31 percent. The prolongation of the primary tone following the first interruption and the prolongation of the second degree before the second interruption represent 18 percent of the movement each. Each of the final three prolongation areas is shorter than the prolongation area that precedes it: 11 percent for the
Figure 9. Percentage of Minuet No. 2 dedicated to each prolongation area.

Figure 10. Percentage of Gigue dedicated to each prolongation area.
primary tone following the second interruption; 7 percent for the second degree following
the second interruption; and 3 percent for the final degree (see Figure 10).

**Combined Prolongation Areas**

Having considered the proportions of individual prolongations, the combined
proportions of prolongation areas of the primary tone and of the second degree within
each movement will now be considered. It is not necessary to give further consideration
to the prolongation areas of the final degree in each movement since these are always less
than 10 percent of any given movement (see Figure 11).

Four movements, the Prelude, Sarabande, Minuet No. 1, and Gigue, have more
than 40 but less than 50 percent of the movement dedicated to the prolongation areas of
the primary tone and more than 50 but less than 60 percent dedicated to the prolongation
areas of the second degree. All of these movements excepting the Gigue show balance
between these areas with a difference between the two areas of each movement totaling
between 4 and 6 percent.

The Gigue stands apart from the other movements as having the smallest
percentage, 41, of the movement dedicated to the prolongation areas of the primary tone.
Not surprisingly, it also displays the largest combined second degree prolongation areas,
56 percent. This difference of 15 percent between the two combined areas is the greatest
among the four movements with second degree prolongation areas exceeding 50 percent,
but this difference is dwarfed by two other movements, as shall soon be demonstrated.
Minuet No. 1 stands out as the most balanced with 46 percent of the movement dedicated to the primary tone prolongation areas and 50 percent dedicated to the second degree prolongation areas. This fact should not surprise us since this movement displayed the greatest balance regarding individual prolongation areas, as discussed above.

The other two movements, the Prelude and Sarabande, that have at least 50 percent of the movement dedicated to the prolongation areas of the second degree have a difference of just 6 percent between the prolongation areas of the primary tone and the second degree. The Prelude has 46 percent dedicated to the primary tone prolongation and 52 percent for the prolongation of the second degree. Of course, these are not combined prolongation areas because the Prelude has no interruption. The Sarabande has
44 percent of the movement dedicated to the prolongation areas of the primary tone and 50 percent dedicated to the prolongation areas of the second degree.

The remaining three movements, the Courante, Allemande, and Minuet No. 2, have over 50 percent of the movement dedicated to the prolongation areas of the primary tone. Of these three movements, the Courante displays the greatest balance with 53 percent for the prolongation areas of the primary tone and 44 percent for the prolongation areas of the second degree.

The Allemande has an exceptional two-thirds of the movement dedicated to the prolongation areas of the primary tone. This should not surprise us since I already know that it has the largest opening prolongation of the primary tone. With just 31 percent of the movement dedicated to the prolongation of the second degree, I find a difference of 35 percent, quite large, but not the largest.

The largest difference between the two combined prolongation areas, 68 percent, is found in Minuet No. 2 and eclipses all others. A truly impressive 82 percent of the movement is dedicated to the prolongation areas of the primary tone. Of course, such a large percentage is to be expected since over 50 percent of the movement is dedicated to a single prolongation of the primary tone. Only 14 percent of the movement is dedicated to the prolongation areas of the second degree, less than half the size of the next smallest percentage.
**Lower-level Fundamental Structures**

Each of the suite movements has at least one lower-level fundamental structure. While no movement has more than three lower-level fundamental structures, I shall demonstrate that they can still account for a large amount of music, especially in relatively short movements such as these.

Each major-mode movement, excepting the Prelude, features one lower-level five-step fundamental structure in E minor. All of these structures function as a prolongation of the primary tone. All of these take place in the latter half of the movement except for the one in the Allemande, which occurs in the first half of that movement. Only the E minor fundamental structure in the Courante includes an interruption. This fundamental structure also stands out as the longest among the E minor fundamental structures at seven measures, the third longest of any lower-level fundamental structure in the suite.

The Prelude presents a pair of overlapping lower-level fundamental structures. The key for both of these is ambiguous; the fundamental lines suggest G major, but the harmonic and bass support suggest E minor. The longer of these two fundamental structures spans ten measures, longer than any other lower-level fundamental structures in the suite.

Two movements, the Allemande and Courante, open with a lower-level three-step fundamentals structure in G major as part of the prolongation of the primary tone. Three movements, the Courante, Sarabande, and Gigue, include a lower-level five-step
fundamental structure in D major prolonging the second degree. Of the three, the one located in the Courante is the longest, at six measures. It is also the only one of the three to include an interruption.

The Allemande is the only movement to include a lower-level three-step fundamental structure in A minor as part of the prolongation of the second degree. This fundamental structure spans six measures and includes one interruption.

Not surprisingly, Minuet No. 2 is unique as the only movement to include lower-level fundamental structures in G minor and B-flat major. The movement opens with two three-step fundamental lines in G minor to prolong the primary tone. Later in the movement, a three-step fundamental structure in B-flat major prolongs the primary tone.

Minuet No. 2 joins the Allemande and the Courante as the only movements to include three lower-level fundamental structures. It stands to reason, then, that the lower-level fundamental structures in these movements constitute a higher percentage of the music than in the other movements: 55 percent in the Courante, 42 percent in Minuet No. 2, and 34 percent in the Allemande.

The Sarabande’s two lower-level fundamental structures make up 31 percent of the movement. The two in the Prelude constitute 24 percent of the movement. The two in the Gigue make up just 18 percent of the movement. The one in Minuet No. 1 represents a mere 13 percent of the movement.
Neighbor Tones

The neighbor tone plays a prominent role throughout the suite. At least one structural neighbor tone is maintained into the middleground levels of every movement except the two minuets. All of the movements feature neighbor tones, complete or incomplete, in the foreground.

Two of the movements, the Prelude and Allemande, feature three structural neighbors apiece. All of the structural neighbors in these two movements are used to prolong the primary tone. Both movements have a structural neighbor used in the prolongation of the initial primary tone. The Allemande features the longest prolongation of a structural neighbor, four measures. It is also the only movement to introduce the structural neighbor as C-sharp instead of the typical C-natural used to prolong the primary tone on all other occasions.

Only the Sarabande features two structural neighbor tones, both of which function as a means of prolonging the primary tone. It joins the Prelude and the Allemande as one of only three movements to use the structural neighbor as a prolongation of the opening primary tone.

The Courante and Gigue both feature just one structural neighbor tone. In the Courante, the structural neighbor prolongs the primary tone, as has been the case in every example so far. The structural neighbor in the Gigue is unique. It is the only one that prolongs the second degree of the fundamental line.

As mentioned earlier, neither minuet has a structural neighbor tone. However, the
two minuets do form a double, performed Minuet No. 1, Minuet No. 2, then Minuet No. 1 again. With this in mind, Minuet No. 2 can be considered as presenting the chromatic lower neighbor to the primary tone in Minuet No. 1. Therefore, Minuet No. 2 is unique as the only movement that functions entirely as a lower structural neighbor.

As already mentioned, every movement of the suite features neighbor tones, both complete and incomplete, in the foreground and early middleground. The number of neighbor tones and concentration of neighbor tones varies from movement to movement (see Figures 12 and 13).

The lowest number of neighbor tones, seven, and the lowest concentration, 5 percent, is found in the Sarabande. Three other movements have a similarly low concentration of neighbor tones, under 10 percent: 6 percent in the Prelude; 7 percent in the Allemande; and 8 percent in Minuet No. 1. A low concentration, however, does not necessarily indicate a low number of neighbor tones. While Minuet No. 1 only has ten neighbor tones, the Allemande has 29 and the Prelude has 37.

Minuet No. 2 stands out as having the highest concentration of neighbor tones, 31 percent, despite having only 16 neighbor tones throughout the movement. The second highest concentration, 21 percent, is found in the Gigue, which has 21 neighbor tones.

The Courante stands out as having the largest number of neighbor tones, 41. The concentration in this movement, 10 percent, is the third highest in the suite.
Figure 12. Number of foreground and middleground neighbor figures per movement.

Figure 13. Concentration of foreground and middleground neighbor figures per movement.
Structural Uniqueness

Having considered several structural factors that influence each movement of this suite, the remaining discussion will determine which movements are the most unique from a structural perspective.

Two movements, the Prelude and the Sarabande, are unique for just two structural features each. The Prelude is the only movement that does not have an interruption of the fundamental structure, and proportionally it has the longest individual prolongation of the second degree, 52 percent of the movement. The Sarabande has the lowest number of neighbor tones, just seven, and the lowest concentration: 5 percent.

The Courante and Minuet No. 1 are unique for three structural features each. The Courante has the latest overall interruption, 83 percent into the movement. The three lower-level fundamental structures in this movement account for the highest percentage, 55 percent, of any movement. This movement also has the highest number of foreground and early middleground neighbors at 41.

Minuet No. 1 is the only movement with just one lower-level fundamental structure. This accounts for the second unique feature: it has the lowest concentration of lower-level fundamental structures at just 13 percent. It is one of only two movements not to feature any structural neighbor figures. Of course, as discussed above, it could be considered the only movement to have its primary tone prolonged by another entire movement, Minuet No. 2.

The Allemande is unique for four structural features. It has the latest initial
interruption at 75 percent through the movement. The Allemande boasts the longest initial prolongation at 47 percent. It is the only movement with a lower-level fundamental structure in A minor. It is also the only movement to use C-sharp as a structural neighbor to prolong the primary tone.

The Gigue is unique for four structural features. It has the shortest initial prolongation, lasting just 12 percent into the movement. This movement also has the shortest combined primary tone prolongation areas, 41 percent of the movement, and the longest combined second degree prolongation areas, 56 percent of the movement. It is the only movement that features a structural neighbor as a prolongation of the second degree.

Just as Minuet No. 2 stands apart from the other movement based on its mode, it is apparent that it stands apart for more structural features than any other movement in the suite. It has the earliest interruption, 13 percent into the movement. It has the largest single prolongation, accounting for 56 percent of the movement. It has the largest combined prolongation areas for the primary tone, at 83 percent. It has the smallest combined prolongation areas for the second degree, just 14 percent.

Perhaps it is because of or to emphasize the different mode that these differences are present. The pitch class that plays the greatest role in setting this movement apart, B-flat, is brought to the fore by the lengthy primary tone prolongations and is further emphasized by lower-level fundamental structures in G minor and B-flat major. Conversely, the second degree A that this movement holds in common with all of the other movements of the suite is de-emphasized through the brevity of prolongation. It
joins Minuet No. 1 as one of just two movements that do not feature a structural neighbor tone. However, as already discussed, it could be viewed as the only movement that functions entirely as a structural neighbor, prolonging the primary tone of Minuet No. 1. Minuet No. 2 also is unique as having the highest concentration, 13 percent, of neighbor tones.
CHAPTER X: CONCLUSION

Because the earliest scores provide little in the way of performance instruction, and the many editions and recordings often suggest contradictory performance practice, I believe this study is a valuable asset to performers, students, and teachers. I have considered each movement in Bach’s first cello suite individually and identified the structures that define them, such as fundamental lines, bass arpeggiations, prolongations, step progressions, and neighbor figures.

I believe the Schenkerian graphs proved to be an effective tool for revealing the underlying structure of each movement. These graphs also facilitated the evaluation of the relationships, not just amongst adjacent notes, but also amongst notes across the movement. Revealing these relationships via these graphs is an important first step in discerning appropriate phrasing and dynamics.

In each movement I have identified a three-step fundamental structure as the background level. Most of these have at least one interruption. As I demonstrated in the previous chapter, the degree of emphasis on primary-tone prolongation areas versus second-degree prolongation areas varies from movement to movement, whereas the prolongation area of the final degree of the fundamental line is uniformly brief. And while all of the suite movements have neighbor figures at some level, the degree of prominence these hold from one movement to another varies significantly.

Although the intention of this project is not to make performance decisions, it
does provide additional guidance that individuals working with this suite would not otherwise have readily available. I have identified the use of fluctuation in dynamic level and the intensity of vibrato as acceptable and effective means to bring out variations in tension. I have also suggested the use of agogic accent, variation of dynamics, and variation in vibrato as ways to facilitate the emphasis of tones in the fundamental line, bass arpeggiation, and step progressions.

It is my sincere hope that performers, teachers, and students will find this study helpful as they encounter the first of Bach’s unaccompanied suites for cello. I believe this study will help individuals to apply similar methodology to any study of music. I also hope that this current project will lead to similar projects addressing the remaining five cello suites by Bach.
Appendix A

Schenkerian Graphs of Prélude
Prélude: Graphs A, B, and C

G: I

4-prg.
A

B

C
Prélude: Graphs C, D, and E
Prélude: Graphs E, F, and G

152
Prélude: Graphs G, H, and I
Appendix B

Schenkerian Graphs of Allemande
Allemande: Graphs A, B, and C
Allemande: Graphs C, D, and E
Allemande: Graphs E, F, and G
Allemande: Graphs G, H, and I
Allemande: Graphs I, J, and K
Appendix C

Schenkerian Graphs of Courante
Courante: Graphs A, B, and C
Courante: Graphs C, D, and E
Courante: Graphs E, F, and G
Courante: Graphs G, H, and I

G

H

I

G:

Courante: Graphs G, H, and I

207
Courante: Graphs I, J, and K
Appendix D

Schenkerian Graphs of Sarabande
Sarabande: Graphs A, B, and C
Sarabande: Graphs C, D, and E
Minuet No. 1: Graphs G, H, and I
Minuet No. 1: Graphs E, F, and G
Minuet No. 1: Graphs C, D, and E
Appendix E

Schenkerian Graphs of Minuet No. 1
Minuet No. 1: Graphs A, B, and C
Appendix F

Schenkerian Graphs of Minuet No. 2
Minuet No. 2: Graphs A, B, and C
Minuet No. 2: Graphs C, D, and E
Minuet No. 2: Graphs E, F, and G
Minuet No. 2: Graphs G, H, and I
Appendix G

Schenkerian Graphs of Gigue
Gigue: Graphs A, B, and C
Gigue: Graphs C, D, and E
Gigue: Graphs E, F, and G

G: G: G:

I 

◊3 ◊3 ◊3 ◊3

II 

◊2 ◊2 ◊2 ◊2

III 

◊5 ◊5 ◊5 ◊5

D:

5-prg.
Gigue: Graphs G, H, and I


