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J. S. Bach's Suite in C Major for Violoncello Solo: An Analysis through Application of a Historical Approach

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J.S. BACH'S SUITE IN C MAJOR FOR VIOLONCELLO SOLO: AN ANALYSIS THROUGH APPLICATION OF A HISTORICAL APPROACH

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by

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INTRODUCTION

J. S. Bach's *Six Suites for Violoncello Solo* are a unique part of the cello repertoire. Their magnitude, complexity, and most of all, the fact that these works, like the *Sonatas and Partitas for Solo Violin*, were written for a solo instrument without a supporting bass part (which was unusual for their time of composition), make them especially challenging for understanding and performing.

Not only performance traditions have been lost since the composition of the suites (during Bach's years in Cothen, 1717-23) but also traditions that can shed light on aspects of the compositional thinking behind the conceiving of these works. The goal of this study is to reach a better understanding of the third of the six, the C major suite, through analysis that will take as a starting point theoretical writings of the time of its composition. Two historical approaches will be applied to the analysis of the piece. The first is based on the art of rhetoric, which in the early eighteenth century, was considered to be closely related to music. The relation between the two doctrines is evident not only from the musical borrowing of rhetorical terms, but also from the use of rhetorical processes in musical composition. The second approach is based on thoroughbass, which in Bach's time not only supported the upper voices as a part of the musical texture but in many cases was the very source of the musical work.

The thoroughbass tradition has brought to the development of many commonly used formulas and patterns. Such thoroughbass formulas underlay many musical works, particularly in genres which had their source in improvisation, such as the prelude. The prelude of the C major suite will be examined in light of these

improvisation based traditions.

For the purpose of setting the theoretical background against which the C major suite will be analyzed, several contemporary sources have been chosen. Johann Mattheson's writings will provide the basis for the rhetorical approach, which is discussed extensively in his *Der Vollkommene Capellmeister*.[1] The thoroughbass approach to analysis will be based mostly on the writings of Friederich Erhardt Niedt, whose treatise *Der Musicalische Handleitung*[2] was evidently familiar in the Bach circle.[3] The analysis of the prelude and its relation to the tradition of improvisation will be examined in light of Carl Philipp Emanuel Bach's discussion of improvisation in his *Versuch uber die wahre Art das Clavier zu spielen.*[4]

The theories offered by these contemporary writings may provide a basis more suitable to the analysis of the suite than later approaches to form and structure, such as the binary form model. The writings, however, will only be taken as a starting point for the analysis itself. The goal of the analysis presented is not to force the theory upon the music, but rather to try to understand aspects of the compositional thinking behind the piece through the examination of compositional methods and tools offered by contemporary writers.

The focus of this study will be the third of the violoncello suites, the C major suite. Analysis of the other suites in the set may provide additional insight on the ideas discussed.

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[1] Johann Mattheson, *Der Vollkommene Capellmeister* (Hamburg: Herold, 1739) trans. Ernest C. Harris as *Johann Mattheson's "Der Vollkommence Capellmeister": A Translation and Commentary* (Ann Arbor: UMI Research Press, 1981).

[2] Friederich Erhardt Niedt, *The Musical Guide*, trans. and ed. Pamela L. Poulin (Oxford: Clarendon Press, 1989).

[3] Pamela L. Poulin, "Niedt *Musicalische Handleitung*, Part I and Bach's '*Vorschriften und Grundsatze...*': A Comparison," *Music Review* 52, no. 3 (1991): 171-89.

[4] Carl Philipp Emanuel Bach, *Essay on the True Art of Playing Keyboard Instruments*, trans. and ed. William J. Mitchell (New York: W. W. Norton & Company, 1949).

CHAPTER I

A RHETORICAL APPROACH

A. *Inventio:* the Thematic Idea

1. The Rhetorical concept of *Inventio*

According to the traditional discipline of rhetoric, the process of preparing, structuring and executing the oration was separated into five divisions: *inventio* (finding the subject), *dispositio* (ordering the argument), *elocutio* (stylization and decoration), *memoria* (memorization), and *pronunciatio* (delivery).[5] During the Baroque, music and rhetoric were regarded as closely analogous disciplines. The rhetorical process was often borrowed and adapted into music. Many theorists, including Kircher, Bernhard, and later Mattheson, applied the complete fivefold rhetorical division to music.

The first of the five rhetorical divisions is *Inventio*: the process of discovering the subject for the oration by the orator, or when applied to music, the process of finding the theme for the musical piece, a step which precedes actual composition. Finding the invention, as Mattheson described it, begins with determining the theme, the key, and the meter.[6] All of these elements should be considered in light of the purpose of the piece and the affection it was intended to portray. The resulting

[5] Marcus Fabius Quintilianus, *The Institutio Oratoria*, 2 vols, trans. and ed. Charles Edgar Little (Nashville, Tennessee: George Peabody College, 1951), 115-116.

[6] Mattheson, *Der Vollkommene Capellmeister*, 283.

invention would be the source for the next step in the rhetorical process, the *dispositio*, through which the theme is developed and the piece is constructed.

Although the ability to find good inventions was considered a gift, it was also thought of as a learnable art. Eighteenth century theorists suggested different methods to aid the beginning composer in developing this skill. An interesting aspect of these methods is the attempt to use simple, often preexisting musical subjects, and to develop them into new inventions. Mattheson, in his *Der Vollkommene Capellmeister*, described one such method. In the chapter titled *On Melodic Invention*[7] he demonstrated ways of conceiving inventions through elaboration of simple melodies, or through the combination and rearranging of preexisting melodic patterns taken from other works. Next, Mattheson presented his *Loci Topici*, a term borrowed from rhetoric meaning "subject areas." The rhetorical *Loci Topici* were intended to assist the orator in finding subjects by providing sources for deriving inventions. Mattheson applied that idea to music, suggesting different ways to manipulate and vary the musical material. These methods include rhythmic changes, inversion, permutation, repetition, imitation, transposition, and canon.

Another example of using simple preexisting material to derive new inventions is found in F. E. Niedt's *The Musical Guide.*[8] Niedt showed how a simple thoroughbass pattern could be used as a source for melodic elaboration. First, he demonstrated how to vary the bass line, then, how to derive from it melodic inventions, or in his own words, "the manner in which skilful variations can be executed in the discant of the right hand."[9] Eventually, Niedt showed how to use a simple thoroughbass pattern as the basis for a complete dance suite.

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[7] Ibid., 281-99. See Joel Lester, *Compositional Theory in the Eighteenth Century* (Harvard University Press, 1992), 162-63.

[8] Niedt, *The Musical Guide,* 73-178.

[9] Ibid., 101.

These examples illustrate the Baroque aesthetic ideal of economy of means, using limited material as the basis of a musical composition. According to this ideal, the simpler and more limited the subject for invention is, the more inventive and ingenious is the art of the composer.[10] In the Baroque, sources for inventions were found in materials as simple as a chordal or a melodic pattern. Inventions could be recycled and reused, or taken from other compositions. At the next stage, the invention itself becomes once again the source for further inventive elaboration, developing through the process of *dispositio* into a complete work.

The concept of the theme as holding an inherent potential for development is expressed most clearly, as indicated by Laurence Dreyfus, in the title page to Bach's two-voice inventions. The title designates the purpose of the set of keyboard pieces as showing the amateurs the way of "not only getting good inventions, but developing the same satisfactorily,"[11] putting the emphasis on the development of the invention as the focus of the piece. According to Dreyfus:

> This important notion of development or realization implies that a successful invention must be more than a static, well-crafted object, but instead like a mechanism that triggers further elaborative thought from which a whole piece of music is shaped.[12]

The use of a small amount of material as the basis for an elaborate composition is, according to Lester, "a consistent feature of Bach's style" and the source of its inventiveness:

> Bach's exemplary pieces are unfailingly inventive. An astute eighteenth century musician might well have recognized why: namely, Bach's remarkable ability to open with a small amount of thematic or motivic material

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[10] Joel Lester, "J. S. Bach Teaches Us How to Compose: Four Pattern Preludes of the *Well-Tempered Clavier,*" *College Music Symposium* 38 (1998): 40.

[11] Laurence Dreyfus, *Bach and the Patterns of Invention* (Cambridge: Harvard University Press, 1996), 1.

[12] Ibid., 3.

> and work with the material in ever more complex ways to create rhetorical musical argument.[13]

Bach's ability to discover the potential in the simple material, unravel its inherent inner nature and develop it into an inventive composition was considered his genius. This notion was already expressed in Bach's time, in the obituary published by Bach's student J. F. Agricola and son C. P. E. Bach:

> No one ever showed so many ingenious and unusual ideas as he in elaborate pieces such as ordinarily seemed dry exercises in craftsmanship. He needed only to have heard any theme to be aware—it seemed in the same instant—of almost every intricacy that artistry could produce in the treatment of it.[14]

For Bach, the concept of *inventio* involved not only the invention of a theme but just as much the unraveling of the possibilities it holds and of the quality which makes it a good source for further elaboration. In the process of *inventio*, a choice of simple musical material as subject emphasized the creativity in its elaboration and the inventiveness of the complete piece derived from it. Such basic, simple musical material can be found in the subject of the C major prelude (mm. 1-2), a descending C major scale followed by a descending arpeggio. Through the application of the rhetorical concept of *inventio*, the following sections will explore the role of the prelude's subject as the source of its *inventio*, or theme. Next, the subject will be examined as the source for the structure and thematic material in the prelude as a whole. Eventually, the subject of the prelude will be examined in relation to the other movements of the C major suite, as the source for *inventio* in them as well.

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[13] Lester, "Bach Teaches Us How to Compose," 40.

[14] Christoph Wolff, "'The Extraordinary Perfections of the Hon. Court Composer': An inquiry into the Individuality of Bach's Music," in *Bach: Essays on his Life and Music* (Harvard University Press, 1991), 393.

2. The Prelude's Theme as an *Inventio*

The running figure in the first measure of the prelude, concluding with the low C in the second measure, is the subject upon which the prelude is structured. It consists of a descending scale followed by a descending arpeggio, covering the scope of two octaves, from the middle C to the low C (the lowest note on the cello). This simple, almost trivial piece of musical material is the source for the *inventio* of the prelude, and, as will be later shown, for the invention of the themes of the other movements as well.

A closer look at the subject reveals its special design: the first octave descends by step (occupying two quarters of the measure). The second octave is a faster, leaping descent (occupying only one quarter and continuing into the next). The result is a strong, energy accumulating descent into the low C, which functions as a focus of gravitation. This strong descending motion is balanced only by the repetition of G (C-G-E-G), which provides a slight delay before the final release into the low C. At the same time, the repetition of G strengthens the sense of gravitation through a descending fifth.

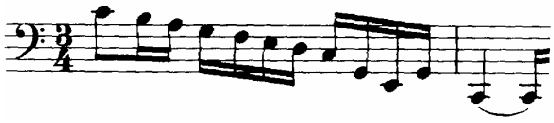
The descending direction of the subject is somewhat unusual, in particular in the opening of a musical work (the descending run may sound like a concluding gesture rather than an opening one). It creates the need for a change of direction to balance the descent and to reassume the initial pitch. In this sense, the low C functions not only as a point of gravitation, but also as the initial drive for the ascent back to the original pitch (mm. 2-7). Only when middle C is reached in m. 7, the full theme or *inventio* of the prelude is completed.

The falling quality of the subject can be illustrated by a comparison to other falling subjects (example 1-1). The subjects of both *Courante* of the French Suite

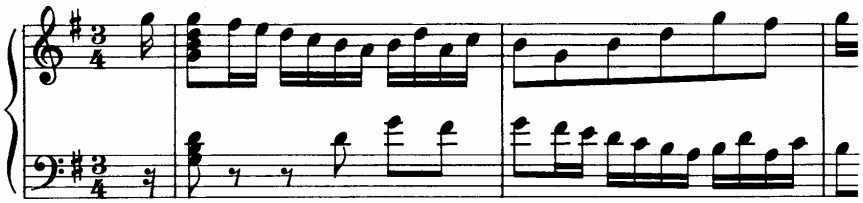
no. 5 in G major and the prelude of the Violin Partita in E major include figures that are similar to the figures that form the subject of the C major cello prelude: the *Courante* includes a descending scale, and the E major prelude includes a falling arpeggio. In the *Courante*, which consists of a descending scale but no arpeggio, the arrival on G, the focus of gravitation, is more gradual. The result in this case is different from the C major prelude, and the falling impression is not as strong. In the E major prelude, which consists only of an arpeggio, the fall is very sudden. It does not have the same "reaching" quality, through a route directed towards the low note, as in the C major prelude. In all three subjects the descent is compensated for by an ascent back to the initial pitch.

Example 1-1. Subjects compared.

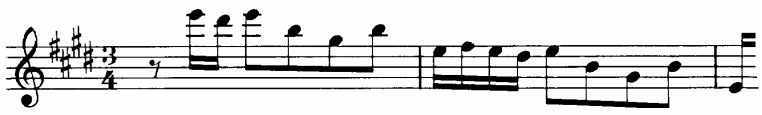
Prelude, Cello Suite in C major, subject.



Courante, French Suite in G major, subject.



Prelude, Violin Partita in E major, subject.



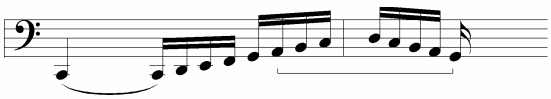
While mm. 1-2 are the subject of the C major prelude, mm. 1-7 form the *inventio* or theme on which the movement is based. The *inventio* (mm. 1-7) has two main roles: to provide thematic material for the piece and to define its key.[15] In the *inventio*, the subject is developed into a larger unit: the fast descent is balanced by a much slower and gradual ascent. It takes one measure for the fall from the middle C to the low C, and five measures for the climb back. In addition to the reestablishment of the opening, middle C, mm. 1-7 provide a harmonic frame to the prelude, defining the tonality through I - V7 - I progressions.

The thematic material found in the subject and in the *inventio* derived from it is later developed into a full movement. For example, the sequence beginning in m. 7 is based on mm. 2-3 (example 1-2.a.), and the sequence beginning in m. 15 is partly based on m. 3 (example 1-2.b.) Other fragments of the *inventio* can be traced throughout the movement. The full statement of the subject, however, is reserved for the end, and the striving towards it is one of the processes that give a forward drive to the prelude.

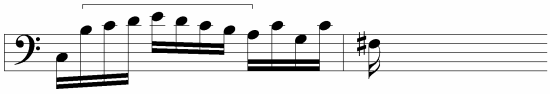
Example 1-2. The *inventio* as a source of thematic material in the prelude.

1-2. a.

Mm. 2-3



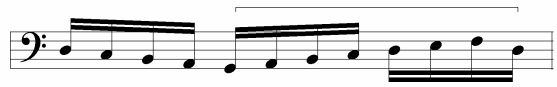
M. 7



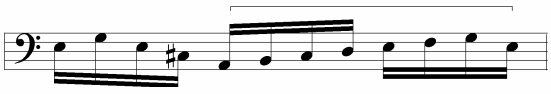
[15] Dreyfus, *Bach and the Patterns of Invention*, 10-20.

1-2.b.

M. 3



M. 15



The process of returning to the original subject is done through several stages: first, the reestablishment of the low C. This low note, at the extreme of the cello's register, is the original gravitation center of the theme and fulfills the same role in the movement as a whole. After the fast fall to the low C in m. 2, it is found again only toward the middle of the movement (m. 37). The descent toward it is long and gradual, through a series of descending sequences and falling lines. Its arrival marks a change of direction, beginning an ascent towards the dominant pedal in mm. 45-60.

The next appearance of the low C is found towards the end of the movement, in m. 71, ending a long cadential progression. Again, it marks a change of direction, but in this case it is the original subject that can be perceived here as inverted. A closer form of the subject is found in mm. 78-79, but with disruptions, since it starts with E and ends with E-flat, as part of a chromatic bass progression. Low C is finally established in mm. 81-88, the tonic pedal, but the full statement of the theme appears only in the concluding measures (mm. 87-88).

A second process that takes place in the movement is an alteration of linear and arpeggiated textures. These textures can also be traced back to the two parts of the subject, the descending scale and the descending arpeggio. The two sequential progressions mentioned above, starting in m. 7 and in m. 15, use stepwise motion

taken from the *inventio*. In the latter, an arpeggio is introduced. From here on an arpeggiated texture, which refers back to the second part of the subject, becomes more and more predominant, reaching its peak in mm. 45-60 at the dominant pedal. M. 61 begins a gradual return to the original linear texture, enabling the return of the full subject.

These processes, which in addition to controlling the texture in the movement provide a sense of direction, have their source in the prelude's *inventio*. The *inventio* can therefore be understood as the source of the movements in two levels: in providing thematic material for the prelude and as the source for the overall processes that shape its design. In yet another level, the *inventio* itself is derived from a smaller unit, the subject, which in the case of the C major prelude stands out for its simplicity, but at the same time is thoughtfully designed.

3. The Subject of the Prelude as the Source for Inventions in Other Movements

The prelude's subject can be seen as the source for invention in the other movements of the suite as well. Each of the dance movements presents a different version of the initial elements: the descent, the running scale, and the arpeggio. Each version is different, according to the nature and characteristics of the dance. Some of the inventions refer to the stepwise descent and other to the arpeggiated, leaping descent, but in most of them, a descending motion is maintained. The *Gigue* is the only exception, with an ascending theme that can be considered an inversion of the original subject. The scope of the descent is also variable: in the *Allemande* and the *Courante*'s themes the full, two-octave scope is realized, down to the low C. In the other movements, however, there is only a one-octave descent or less.

In addition to descending motion of their subjects, most of the dance movements themes reflect the tonic and dominant-seventh contrast that is found in the prelude's theme. In most of them there is a tonic statement followed by a dominant statement, which leads to a cadential progression. The resolution of the seventh (F-E) is significant in most of the movements.

Allemande* and *Courante

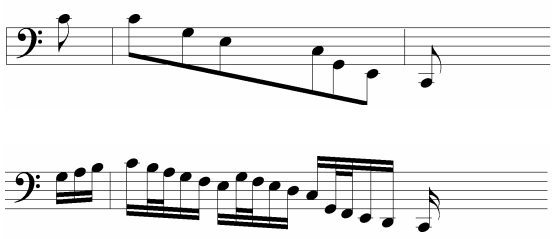
The *Allemande* and the *Courante* will be discussed together because of the close relationship between their subjects. Both subjects are derived from the descending arpeggio in the prelude's subject. When placed together, the *Allemande*'s subject seems like a decorated version of the *courante*'s subject (example 1-3). The result is, however, very different, in accordance with the difference in the character of the two dances and the affections that were commonly attributed to them. The *Allemande* was considered a calm, serious dance, and the *Courante*, from the French word *courir* (run), was a running, flowing dance.[16] In the *Allemande*, connecting notes fill in the leaps and thus slow down the pace of the descent, which almost seems like gradually going down stairs if compared to the very rapid and sudden fall in the *Courante*. Adding to that is the rhythmic difference: like the prelude, the *courante*'s subject continues into the second measure, resulting in a rhythmic shift of an eighth note that contributes to the forward motion of the movement. There is no such shift in the *Allemande*, which is characterized by a more reserved nature. The *Courante* presents the fastest descent in the suite, reaching the full two-octave scope within one fast measure. In the *Allemande* the full scope is realized as well, but moving gradually through several steps.

In both dances, the subjects, on the tonic, are followed by statements of the dominant seventh, leading into cadential progressions. These form the complete inventions of the movements (mm. 1-4 in the *Allemande* and mm. 1-8 in the *Courante*). As in the other movements, the seventh (F) in the dominant statement begins the progression towards the cadence. In the *Allemande*, the initial upbeat (G-A-B-C) is answered in parallel by C-D-E-F in mm. 1-2, emphasizing the seventh and the

[16] Mattheson, *Der Vollkommene Capellmeister*, 451-68.

dissonance that will be resolved only in the cadence. In the *Courante*, the dominant statement (mm. 3-4) ends with a low F that is resolved in mm. 7-8 by the tonic harmony concluding the theme.

Example 1-3. *Allemande* and *Courante* subjects compared.



Sarabande

According to Mattheson, the *Sarabande* "permits no running notes, because *Grandezza* abhors such, and maintains its seriousness."[17] Unlike the other dances of the C major suite, the *Sarabande* does not have a running descending subject, but rather descends gradually, in accordance with the calm, solemn nature of this dance.

In a first glance, the connection between the prelude's subject and the *Sarabande* is less noticeable than in the other movements. However, the descending motion of the prelude is maintained in the contour of the *Sarabande*'s first phrase (mm. 1-5). A descending line, starting from the middle C, is drawn into E in m. 5. This line is sometimes implicit, as presented in example 1-4. Unlike the fast descent of the prelude's subject, the descending line in the *Sarabande* is gradual and slow, and is prolonged even more by the insertion of a chromatic note (B-flat). The descent results from a series of suspensions, which emphasize the typical *Sarabande* rhythm of a stressed second beat, with the dissonant note placed on the second beat and resolved on the third.

Once again, the dominant-seventh note F fulfills an important role, and its dissonant quality is emphasized. Its resolution is withheld in m. 4, delayed to the first beat of the next phrase (E in m. 5) where it appears in a different register.[18] The delay creates dominant tension and a sense of continuity. Adding to this is the disturbance of the usually symmetrical structure (4+4) of the *Sarabande*.

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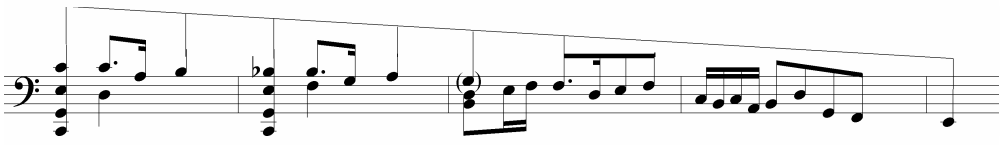
[17] Mattheson, *Der Vollkommene Capellmeister*, 461.

[18] See Heinrich Schenker, "The Sarabande of J. S. Bach's Suite No. 3 for Unaccompanied Violoncello," trans. Hedi Siegel, *Music Forum* 2 (1970): 274-82.

Example 1-4. *Sarabande,* subject.



Bourree I

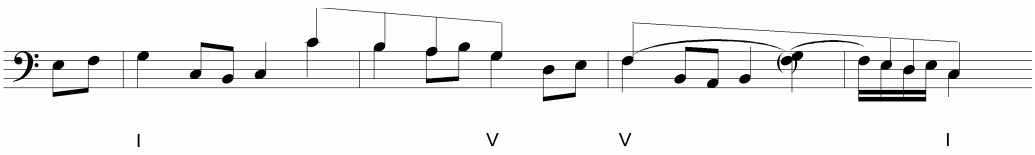
The *Bourree* was described by Mattheson as a calm, pleasant, easygoing dance.[19] It is characterized by duple division and symmetry of phrases. In the C major *Bourree*, the descending octave subject is equally divided into two parallel tetrachords: C-B-A-G (mm. 1-2) - F-E-D-C (mm. 3-4) (example 1-5).

The descent of the subject is offset by many ascending gestures, including the upbeat and the octave ascending leap in m. 1. The scope of the descent is also shortened into one octave. However, the descending octave is maintained in a slightly varied form.

The division of the descending scale is in accordance with the antecedent-consequence structure of the phrase and the harmonic progression of: I – V, V – I (see example 1-5). The note F of the dominant-seventh chord again plays a significant role. With the division of the octave into two tetrachords, C starts the tonic statement and F the dominant statement. It is also used as a suspension in m. 4, increasing dominant tension.

[19] Mattheson, *Der Vollkommene Capellmeister*, 454.

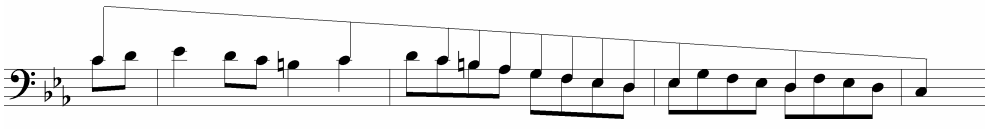
Example 1-5. *Bourree I*, subject.



Bourree II

The second *Bourree*, in the minor mode, presents a different variation on the descending scale subject. A C minor scale descends in a more gradual manner (mm. 1-4), slowing down with the concluding notes (See example 1-6). The second part of the theme (mm. 5-8) modulates to E-flat major and concludes with a descending E-flat major scale, which presents a transposition of the prelude's subject (mm. 7-8).

Example 1-6. Bourree II subject.



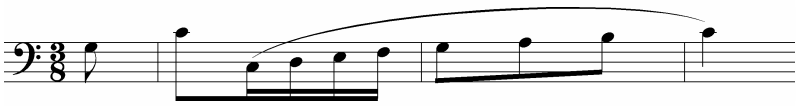
Gigue

The affection usually attributed to the *Gigue* was joyful and lively. It is characterized, according to Mattheson, by "ardent, fleeting zeal that soon subsides."[20] Of all the movements in the C major suite, the *Gigue* is the only dance in which the direction is changed, and the descending scale inverted into an ascending C major scale. This change corresponds with the joyful affection associated with it.

The suite is concluded, therefore, with an inversion of the prelude's subject, though an echo to the falling octave subject can be found in the octave leap opening the *Gigue*. Also, the beginning of the second part of the *Gigue* does not repeat the Gigue's subject, but rather presents a descending running figure, an ornamented version of the original descending C major scale.

Once again, the *Gigue*'s subject consists of a tonic statement and a dominant statement. The note F (of the dominant-seventh) is at the peak of the line, initiating a descending progression, which takes place in the following sequence.

Example 1-7. *Gigue*'s subject.



[20] Ibid., 457.

B. *Dispositio:* the Compositional Process

1. The Rhetorical *Dispositio* and its Application to Music

After having found or invented musical materials for the composition through the act of *inventio*, the next step in the musical-rhetorical process included the disposing and arranging of these materials. This was done through the second of the five rhetorical divisions, the *dispositio*: the process of ordering the presentation of the arguments. In this process the order of events is determined, and the oration, or musical composition, is structured. The argument is presented, developed, examined, and reestablished by the following of six stages:[21]

(i) *exordium:* introduction, with the purpose of preparing the listeners and gaining their attention to the speech to follow.

(ii) *narratio*: narration or the statement of facts, sometimes identified as *thema.* Intended to present the case in a brief, clear and precise manner, avoiding vagueness or contrary ideas.

(iii) *propositio*: discourse, examination of components or parts of the main argument.

(iv) *confirmatio*: corroboration, examines ideas alluded to in the *exordium* and *narratio*. May include the device of *digressio*, indirect reference, or in music, a delay as a means of cadential reinforcement.

(v) *confutatio*: refutation of contrasting views.

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[21] Quintilianus, *The Institutio Oratoria*, 131-41. See also Andrew D. McCredie, "The Problem of the *Dispositio*–The Question of Time in the Interdisciplinary Perspectives of Music and Rhetoric–A Contribution to the Historiography of the Metarhetoric of Music," *Musica Antiqua* 7 (1985): 8-10.

(vi) *peroratio*: conclusion. Repeats the basic argument, usually in a shortened form. Should be especially persuasive and move the audience by reaching a climatic point.

An association between musical structure and the rhetorical *dispositio* is found among German theorists starting from the sixteenth century.[22] However, the first theorist who applied the full six parts of the oration to music was Mattheson, stating that:

> Our musical disposition is different from the rhetorical arrangement of a mere speech only in theme, subject or object: hence it observes those six parts which are prescribed to an orator.[23]

Mattheson followed the rhetorical formula closely. In the chapter dealing with the *dispositio*[24] he presented the following structure for the musical oration. When applied to music, the *exordium* is the introduction, intended to reveal the main goal of the piece as well as to prepare and stimulate the listeners. The *narratio* points out the "meaning and character of the discourse." These two parts are compared to the opening instrumental ritornello and to the following vocal entry of an aria by Marcello, used by Mattheson as an example, respectively. The third part, the *propositio*, appears after the first caesura and "contains briefly the content or goal of the musical oration." The *confirmatio* is characterized by many repetitions and the re-introduction of former ideas. The *confutatio* presents "foreign-appearing ideas," dissonances, and syncopation, which are then resolved. The last part, the *peroratio* or conclusion, "must produce an especially emphatic impression, more so than all other

[22] Ibid., 17-18.
[23] Mattheson, *Der Vollkommene Capellmeister,* 470.
[24] Ibid., 469-84.

parts." Mattheson suggested a "stronger accompaniment," (a more intense harmony)[25] as well as a pedal point as a means of achieving affective expression.

Of the six parts of the musical oration, the *confutatio* stands out as the place for musical contrast. The rhetorical role of confuting objections to the main argument was translated, in its musical application, to the resolution of oppositions to the theme. Such oppositions may include, in addition to dissonances and foreign keys, inverted forms of the theme. The element of syncopation mentioned by Mattheson is understood by Gregory Butler as rhythmic opposition or "contrary time", a term used by contemporary theorists to describe rhythmic shift, for example from a strong to a weak beat.[26]

Even if eighteenth century composers did not follow the exact *dispositio* scheme in actual composition, it has been asserted that the scheme underlay, to some degree, compositional thinking of the time. According to George Buelow:

> While neither Mattheson nor any other Baroque theorist would have applied these rhetorical prescriptions rigidly to every musical composition, it is clear that such concepts not only aided composers to a varying degree but were self-evident to them as routine techniques in the compositional process.[27]

Mattheson himself warned against rigid application of the *dispositio* scheme to composition:

> It would frequently sound very pedantic, despite the correctness, if one were scrupulously to restrict himself to them [the six parts of the oration], and would always measure his art according to these academic limitations.[28]

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[25] Gregory G. Butler, "Fugue and Rhetoric," *Journal of Music Theory* 21 (1977): 97-99.
[26] Ibid., 84-92.
[27] George J. Buelow, "Rhetoric and Music," in *The New Grove's Dictionary of Music and Musicians*, ed. Stanley Sadie (London: Macmillan, 2000).
[28] Mattheson, *Der Vollkommene Capellmeister,* 470.

When criticized for forcing his theory upon Marcello's aria (which Mattheson used as an example),[29] Mattheson responded by explaining that in a high-level composition the six-part structure occurs naturally to the composer, even without being aware of the underlying scheme:

> Marcello, to be sure, has given as little thought about the six parts of a speech in composing the aria I quoted in *Kern*, as in his other works; but one concedes that I have quite plausibly shown how they must be present in melody. That is enough. Experienced masters proceed in an orderly manner, even when they do not think about it.[30]

Thus for Mattheson, the *dispositio* scheme was the natural basis of "good" compositions, even when the composer did not consciously intend to follow it. While this statement may not be self-evident in every composition, it seems that in some ways rhetorical thinking has necessarily influenced the eighteenth century approach towards musical composition. The process of presenting an idea, developing and examining it, then bringing in opposing ideas and resolving them to reestablish the initial idea was part of rhetorical as well as musical thought of the time.

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[29] Mark Evan Bonds, *Wordless Rhetoric: Musical Form and the Metaphor of the Oration* (Cambridge: Harvard University Press, 1991), 87-88.

[30] Mattheson, *Der Vollkommene Capellmeister,* 62.

2. The Rhetorical Structure of the C major Prelude

Dispositio, in the eighteenth century concept, is the process of developing the initial idea or *inventio* into a full-scale piece. It is impossible to say whether Bach or any other composer was aware of it while composing. However, it is clear that rhetorical processes had influenced compositional thought of the time. The notion of first inventing an idea, then developing it through a series of processes that included its examination, dissection, contrasting, and reinforcement, was natural and self-evident.

The following analysis is an attempt to apply the six parts or the rhetorical oration to Bach's prelude of the C major cello suite. As a free musical form, unrestricted by dance rhythms and steps, the prelude is found to be the most suitable for the application of the oratory scheme. Mattheson's description of the musical oratory will be used to examine the musical rhetorical structure of the prelude.

Exordium: (mm. 1-2) the descending run in the opening of the prelude is the introduction to the musical oratory, presenting the theme and preparing the tempo and the atmosphere of the piece. The first measure, continuing to the low C in the second measure, fulfills the main purpose of the *exordium*: calling for the listener's attention. Such runs were often used in the opening of works. Niedt, in his discussion of the composition of preludes, suggested this practice and used it for the beginning of his exemplary prelude:

> It also sounds very good if, at the beginning of a prelude, a run starts in the discant, goes down into the bass and then comes to rest on a full chord.[31]

[31] Niedt, *The Musical Guide,* 157.

Narratio: (mm. 2-7) the rhetorical *narratio* presents the *thema* of the oratory, in a brief and clear manner, avoiding any vagueness.[32] The main purpose of this part, according to Mattheson, is to present the "meaning and character" of the piece.[33] Mm. 2-7 contain the full theme or *inventio* of the prelude. In addition to the presentation of thematic material, these measures provide the harmonic frame to the prelude, establishing C major tonality and reinforcing it through the use of I - V7 - I progressions. As required from the *narratio*, it is clear and precise, with no "vagueness" that would have been caused by the modulation to other tonalities.

Propositio: (mm. 7-44) the *propositio* or discourse is the examination of the components of the main theme. According to Mattheson, it occurs after the first caesura in the music.[34] This corresponds with m. 7 of the prelude, when the presentation of the theme ends on the first note (C) of the measure. The following section presents a series of sequences in which components of the theme are used as thematic material. Other tonalities are explored, through which the theme can be examined in a different light.

Confirmatio: (mm. 45-71) after the diversion to different tonalities, the *confirmatio* or corroboration reestablishes the original C major tonality through the use of a dominant pedal. Mattheson stressed the element of repetitions in the *confirmatio*.[35] It corresponds with the repeating broken chord texture in this section. The device of *digressio*, a delay as a means of cadential reinforcement typical to the rhetorical *confirmatio,*[36] can also be found here. Mm. 61-70 delay the expected arrival of C major, taking another harmonic turn before the final arrival in m. 71.

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[32] McCredie, "The Problem of the *Dispositio*," 8-9.
[33] Mattheson, *Der Vollkommene Capellmeister,* 471.
[34] Ibid.
[35] Ibid.
[36] McCredie, "The Problem of the *Dispositio,*" 8-10.

Confutatio: (mm. 71-82) *confutatio* is the refutation of contrasting opinions, and in music it is characterized by "foreign appearing ideas, " dissonances, syncopation, or "contrary time". All of these elements can be found in mm. 71-82 of the prelude: the surprising V2 chord in m. 77, where a tonic chord is expected to conclude the cadential progression, stands out for its dissonant bass note (the first in a descending chromatic bass progression in mm. 77-80). M. 79 is even more striking for its foreign harmony and the dissonant sound. These are resolved through the cadential progression in mm. 80-82.

The ascending scale in m. 71, marking the beginning of the gradual reappearance of the theme, can be seen as an inversion of the original descending scale subject, and can thus form a contrast to the theme.[37]

Another foreign element suggested by Mattheson is contrary time. Such rhythmic shift takes place in mm. 71-77 where the ascending scale figure is shifted from the second sixteenth note (the rhythmic pattern that prevails throughout the prelude)[38] to the third sixteenth note. The confusion culminates in mm. 75-77 in the change from full measure rhythmic group to the quarter note group, eventually resulting in a surprising rest, the first stop in the constant sixteenth note motion.

Peroratio: (mm. 82-88) the *peroratio* concludes the rhetorical oratory, repeating, in most cases, the main argument in an even more persuasive and moving manner. Mattheson suggested a pedal point and a "stronger accompaniment" (more intensive harmony) to achieve such affective expression. Both can be found in this section of the prelude: the concluding tonic pedal (mm. 82-88) as well as a richer harmonic texture achieved by the use of chords through a full cadential progression. The concluding measures bring the first full repetition of the main argument.

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[37] Butler, "Fugue and Rhetoric," 85.
[38] See pp. 34-35.

C. Expression of the Affections

1. The Baroque Concept of Affections

The association between music and rhetoric was especially close with respect to the goal of both disciplines: the arousal of affection, or a rationalized emotional state, in the listener. Just as the orator was required to stimulate listeners and to arouse a certain passion (love, joy, anger, sadness, etc.), the composer was expected to do the same through music. Though affection was usually determined by the text, the requirement for an affective expression applied to instrumental music as well. According to Mattheson:

> Even without words, in purely instrumental music, always and with every melody, the purpose must be to present the governing affection so that the instruments, by means of sound, present it almost verbally and perceptibly.[39]

To achieve an expressive unity, every element of the musical composition was to contribute to the general affection. Quantz mentioned the following affective devices as a means for the performer to determine the affection of the piece: the mode (major or minor), intervals (large or small), articulation (slurred or articulated), rhythmic patterns, and dissonances.[40] Other elements taken into consideration were tempo, texture, instrumentation, melodic range, and the choice of musical-rhetorical figures. All of these were chosen and structured according to the intended affection the piece was to elicit.

The most important element in determining the affection was the theme itself. Thomas Mace advised the performer trying to find the affection of a musical work to examine the theme first:

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[39] Mattheson, *Der Vollkommene Capellmeister,* 291.

[40] Johann Joachim Quantz, *On Playing the Flute,* trans. Edward R. Reilly (New York: Schirmer Books, 1966), 125-26.

> Examine it [the theme] and observe the first bar, which speaks the intent, or conceit of the whole lesson; each bar varying a little; yet tasting of the first, or alluding thereunto.[41]

Other theorists described the invention of a theme as a process that cannot be separated from affective considerations. The three steps of invention as described by Mattheson[42] and Kircher[43] are as follows: first, a theme should be chosen that would best express the text or, in instrumental music, the intended affection of the music. Next, a key should be chosen, and then the rhythm, both in accordance with the desired affection. The determination of affection was, therefore, the primary consideration in the process of invention. The goal of the invention was to best express the desired affection.

The concept of affection is closely related to the use of rhetorical figures. Traditionally, the insertion of rhetorical figures belongs to the third stage of the compositional process, the *elocutio*. This stage, following the *inventio* and the *dispositio*, completes the act of composition by decoration and stylization of the piece. Just as in rhetoric figures of speech were used by the orator in order to decorate, emphasize, and arouse the listener's emotions, musical rhetorical figures were used by the composer to stir the emotions and to arouse the desired affection through music.

Dietrich Bartel indicates the connection between the third stage, the *elocutio*, and the first stage, the *inventio*. With the goal of establishing a specific affection, composers searching for a suitable invention often turned to text representation as a source for ideas, as in the use of rhetorical figures. According to Bartel "with the

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[41] Thomas Mace, *Musick's Monument, or A Remembrancer of the Best Practical Music* (London, 1676) Facsimile with transcriptions and commentary, ed. J. Jacquot and A. Souris (Paris, 1958), 116. See Gregory G. Butler, "The Projection of Affect in Baroque Dance Music," *Early Music* 12 (May 1984): 201-02.

[42] Mattheson, *Der Vollkommene Capellmeister,* 283.

[43] See Dietrich Bartel, *Musica Poetica: Musical-Rhetorical Figures in German Baroque Music* (Lincoln: University of Nebraska Press, 1997), 77-80.

inventio thus linked to text-expression, this first step of the rhetorical process was directly linked to the third step, *elocutio*."[44] Musical rhetorical figures, therefore, could be used as another source for musical invention.

With this understanding, trying to determine the affection expressed in the music should start with an examination of the theme or invention as the source for the general affection in the piece. Other elements that can help determine the affection are the rhythm and key, which were also chosen carefully in consideration to the desired affection, and finally, the selection of rhetorical figures. Rhythmic patterns, intervals and the use of dissonances, as mentioned by Quantz, can also contribute to the understanding of the affection. In a more general way, the affection can be sensed in the atmosphere of the music, since it is supposed to be found in almost every element of the composition.

[44] Ibid., 77-78.

2. The Affection of the Prelude

In an attempt to get a sense of the possible affection in the C major prelude, this section will focus on the three steps of invention as described by contemporary theorists. The three steps include the invention of a theme, the choice of a key, and the choice of rhythm. All of these choices should be made in a way that would best express the affection that the music was intended to arouse. Therefore, an examination of these elements can help to determine the possible affection of the prelude.

First, the prelude's theme will be examined in relation to the rhetorical figure *tirata*, to which it shows some closeness. The *tirata*, according to contemporary theorists, is a running figure ascending or descending in a stepwise motion. The following are some contemporary definitions of the *tirata*:

> The *tirata* occurs when a number of similarly stepwise ascending or descending running figures are linked together at their subsequent pitches. It can be either *defectiva*, *perfecta*, or *aucta*. *Defectiva* refers to a *tirata* which exceeds a fifth but does not reach the octave. *Perfecta* refers to a *tirata* which spans an octave exactly. *Aucta* refers to a *tirata* which exceeds an octave.[45]

> *Tirata* means a stroke or line, and especially a row of numerous notes of the same duration which either ascend or descend by step. The figure consists of a row of eighth or sixteenth notes, almost always preceded by a sixteenth rest and followed by a note of longer duration.[46]

> [The *tirata*] actually means a shot or spear throw, and not a stroke or line, as most commentators insist, for the voice is not simply pulled through or lined in but forcefully bolts upward or downward, resulting in a rapid spurting commonly exceeding a fifth, and at times, albeit less frequently, even encompassing an octave.[47]

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[45] Wolfgang C. Printz, *Phrynis Mytilenaeus oder Satyrischer componist* (Dresden/Leipzig, 1696), pt. 2 p. 64, in Bartel, *Musica Poetica*, 410.

[46] Johann G. Walter, *Musicalischen Lexicon* (Leipzig, 1732) in Bartel, *Musica Poetica*, 410-11.

[47] Mattheson, Der Vollkommene Capellmeister, 117 in Bartel, Musica Poetica, 411.

The *tirata*, according to these definitions, is a stepwise run that can be either ascending or descending, and is categorized by its scope: the "perfect" though less common figure, is of a complete octave. The running quality of the *tirata* is strengthened by the swing created by a typical rhythmic characteristic, a preceding sixteenth rest, and by the contrast with a longer note, a point of destination that provides relief. Mattheson referred to the *tirata* as a spear throw, an image followed by expressions such as "forceful bolting" and "rapid spurting," which give some sense of the affection Mattheson related to this rhetorical figure.

The prelude's subject (mm. 1-2) consists of a descending octave scale followed by an arpeggio. The descending octave can be considered a "*tirata perfecta*." The descent into the second octave continues the same motion, giving the impression an even larger fall. It concludes with a long note, a cease in the rapid motion. The choice of a descending direction is significant to the understanding of the affection: in a descending motion, the powerful spurting described by Mattheson seems to be operated on by a gravitational power pulling the line down, like a waterfall, rather than directed at a point of destination to which it should be thrown like an arrow. In the C major prelude, the power is emanating from the low C, which functions as a gravitational center.

Secondary to the theme, the choice of key was the next step in determining the desired affection. An association between keys and the affections was common in the Baroque and had its roots in an earlier attempt to assign certain characteristics to the church modes, following the ancient Greek concept of ethos. Some theorists provided lists of keys and their affective meanings. However, such descriptions should be considered carefully, since they reflect a subjective point of view rather than a general principle common to Baroque composers. As stressed by George J. Buelow, no one

set of rules regarding this matter or the affections in general existed in the Baroque.[48] Moreover, many Baroque theorists expressed their reservations regarding the attribution of affection to the keys.[49] Even Mattheson, after giving a list of seventeen keys and their affective meaning, warned that keys may be perceived differently by different people, according to their own temperaments.[50]

Yet, it is interesting to look at Mattheson's description of the key of C major, which can shed some light on the possible affection of the C major prelude, or even the suite as a whole:

> C major has a rather rude and bold character, but would not be unsuited to rejoicing and other situations where one otherwise gives full scope to joy. Notwithstanding, a qualified composer can reshape it into something quite charming, specially when he chooses well the accompanying instruments, making it suitable also for application to tender situations.[51]

The third step in the process of invention was the choice of rhythm. Naturally, text considerations affected this choice when composing to text, but nonetheless, affection was to be taken into account in instrumental music as well.

Walter's *Lexicon* definition of the *tirata* stressed the typical rhythmic pattern of this figure. According to Walter it is "almost always preceded by a sixteenth rest and followed by a note of longer duration." In the C major prelude, the opening eighth note, which stands out within the constant sixteenth note texture, can be seen as replacing a sixteenth note rest. Other statements of the subject in the prelude support this, for example, its partial statement in m. 6 and the return of the subject in m. 78.

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[48] George J. Buelow, "Johann Mattheson and the Invention of the *Affektenlehre,*" in *New Mattheson Studies*, ed. George J. Buelow and H. J. Marx (Cambridge University Press, 1983), 396.

[49] Bartel, *Musica Poetica*, 40-46.

[50] Buelow, "Mattheson and the Invention of the *Affektenlehre*," 402.

[51] George J. Buelow, "An Evaluation of Johann Mattheson's Opera, *Cleopatra* (Hamburg, 1704)," in *Studies in Eighteenth-Century Music,* edited by H. C. Robbins Landon in collaboration with Roger E. Chapman (New York: Da Capo Press, 1979) 98-99.

Moreover, a shift of a sixteenth note is apparent throughout the prelude, with the melodic lines continuing into the next measure, just like the subject itself in mm. 1-2. This shift gives a forward drive to the constant sixteenth note motion in the prelude. At the same time, the longer note, typically ending the *tirata*, forms a focal point to which the rapid motion is directed.

In consideration of the possible affection in the movement, all of these elements should be seen as contributing to the general affection. The first element, the subject, is characterized by a great fall. It is pulled down, as if to a center of gravitation, drawn by a natural force. It is contrasted by a much slower climb back to the initial pitch, like an attempt to overcome this great power. The rapid scalar motion, the *tirata*, gives the sense of a powerful forward motion, described by Mattheson as a shot or a throw. It is emphasized by the forward swing created by a rhythmic shift of a sixteenth note. The prelude's key, C major, is described by Mattheson as rude, bold, and joyful. The combination of theme, rhythm, and key brings to mind words like power, courage, boldness, heroism, and optimism, which may describe the possible affection of the movement.

D. Conclusion

The subject of the C major prelude (mm. 1-2) stands out for its simplicity. It consists of a descending C major scale, followed by a descending arpeggio. By the application of a rhetorical approach, this chapter attempted to examine the descending gesture which forms the subject of the prelude as a source for creative thinking in the C major suite. Through the rhetorical process of *inventio*, the finding or inventing of a theme for the work, this simple musical material becomes the source of a complex composition.

The ability to invent was the talent that Bach looked for in his students. According to C. P. E. Bach: "As for the invention of ideas, my late father demanded this ability from the very beginning, and whoever had none he advised to stay away from composition altogether."[52] In the Baroque, the talent for invention was expressed not only in the composition of original new themes, but also in the ability to "find" the invention in preexisting sources. This concept was expressed by Heinichen[53] and Mattheson, [54] who applied the rhetorical concept of *Loci Topici*, the rhetorical subject areas, to music. The *Loci Topici* were intended as an aid for composers looking for ideas, providing them with means of finding an invention using resources such as the text, the use of preexisting figures and melodies, and the manipulation of preexisting musical materials.

The C major suite stems from this second notion of invention as elaboration, of the composer's creativeness expressed in the discovering of the subject's potential

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[52] Hans T. David and Arthur Mendel, *The Bach Reader* (New York: Norton & Company, 1945), 279.

[53] George J. Buelow, *Thorough-Bass Accompaniment according to Johann David Heinichen* (Berkeley: University of California Press, 1966).

[54] Mattheson, *Der Vollkommene Capellmeister*, 281-99.

and elaborating it into an inventive piece. Only in the case of the C major suite it is not musical or textual preexisting material that was being used, but rather a descending scale, a basic, trivial gesture. The choice of it as a subject allowed Bach to demonstrate his inventiveness and virtuosity in creating a complex piece from a limited source.

Through the process of *inventio*, the unraveling the potential of the descending scale subject, a full theme is derived from it by contrasting the fast descent with a gradual, slower ascent (m. 1-7). The analysis of the prelude shows how the full theme can be seen as the source of farther elaboration in the prelude, by providing it with thematic material, controlling the texture and the compositional processes in the movement. In another level, the descending scale subject was examined as the source of inventive thinking in the suite as a whole. In analyzing the themes of the dance movements, most of them reflect either the scalar or the arpeggiated descending motion of the prelude's subject.

The next stage in the rhetorical process, following the invention of a theme, is the *dispositio*, the disposition and structuring of the thematic materials into a well arranged work. Taking as a starting point the musical-rhetorical *dispositio* scheme presented by Mattheson, the C major prelude was examined and analyzed. The analysis presented stems from the assumption that the compositional process codified by the *dispositio* scheme, the process of presenting the theme, examining its components, reaffirming it, resolving contrasting elements, and eventually reestablishing the theme in a more convincing and affective manner, was natural and self-evident in the eighteenth century, even if an exact following of the scheme was not intended.

Finally, a rhetorical approach to analysis cannot ignore what was considered to be the central goal of both music and rhetoric, the arousal of the affections. Striving towards this goal affected every element of the musical composition, in particular the choices of a theme, rhythm, and key. However, with no general rules as to the affections and their musical application existing in the Baroque,[55] it is impossible to conclude as to the intended affection of the C major cello suite or any other work of the time. Still, an attempt to examine it from an affective point of view can be valuable to the analysis as well as the performance of the cello suites, and possibly help in the understanding of the special character and atmosphere of each suite.

[55] See Buelow, "Mattheson and the Invention of the *Affektenlehre.*"

CHAPTER II

A THOROUGHBASS APPROACH

A. Thoroughbass in Composition during the Early Eighteenth Century and in the Bach Circle.

2. Thoroughbass and Composition.

The role of thoroughbass as a basis and a source for musical composition in the early eighteenth century is evident from its extensive discussion in theoretical sources. Thoroughbass realization was often discussed in relation to composition or improvisation and was sometimes considered an act of composition in itself. J. D. Heinichen, in his treatise entitled *Thoroughbass in Composition,* expressed this notion:

> No music connoisseur will deny that the Basso Continuo or so-called thoroughbass is, next to [the art of] composition, one of the most important and most fundamental of the musical sciences. For from what source other than composition itself does it spring forth? And what actually is the playing of a thoroughbass other than to improvise upon a given bass the remaining parts of a full harmony or to compose to [the bass]?[56]

In the second part of his *Musical Guide*, entitled *Guide to Variations* or *On the Variation of the Thoroughbass*, F. E. Niedt showed how a simple preexisting thoroughbass progression can produce, through variations in the realization of the bass, a complete dance suite. A similar approach was presented by C. P. E. Bach, in the last chapter of his *Essay.*[57] Although in this chapter Bach discusses the realization

[56] Buelow, *Thorough-Bass Accompaniment according to Johann David Heinichen*, 275.
[57] Bach, *Essay on the True Art of Playing Keyboard Instruments*, 430-45.

of standard thoroughbass progressions in respect to improvisation rather than written compositions, it is based on the same idea as the variations on a thoroughbass in Niedt's *Musical Guide*. Both stem from the perception of the bass line as a preceding element, the first step in the process, while actual composition is achieved through its realization.

With realization of thoroughbass underlying compositional thought of the time, it was often used as a pedagogical tool, in particular in the Bach circle. According to C. P. E. Bach, it was an important part of his father's method of teaching:

> In composition he started his pupils right in with what was practical, and omitted all the dry species of counterpoint that are given in Fux and others. His pupils had to begin their studies by learning pure four part thoroughbass. From this he went to chorals; first he added the basses to them himself, and they had to invent the alto and tenor. Then he taught them to devise the basses themselves. He particularly insisted on the writing out of the thoroughbass in [four real] parts. In teaching fugues he began with two part ones, and so on. The realization of thoroughbass and the introduction to chorales are without doubt the best method of studying composition, as far as harmony is concerned.[58]

The use of thoroughbass practice in composition is evident from exercises and works surviving from the Bach circle. One such example is an assignment given to Bach's student Heinrich Nicolaus Gerber, who was required to realize a bass line taken from a violin sonata by Albinoni.[59] Gerber's son, Ernst Ludwig Gerber, described the course of his father's study with Bach, which was concluded with the realization of Albinoni's bass:

> The conclusion of the instruction was thoroughbass, for which Bach chose the Albinoni violin solos; and I must admit that I have never heard anything better than the style in which my father executed these basses according to Bach's fashion, particularly the singing of the voices.[60]

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[58] David and Mendel, *The Bach Reader*, 279.

[59] Phillip Spitta, *Johann Sebastian Bach*, trans. C. Bell and J. A. Fuller-Maitland (New York: Dover Publications, 1951), 2:388-98.

[60] David and Mendel, *The Bach Reader*, 265.

Preexisting bass lines, sometimes borrowed from other pieces or even from other composers, were often used in the Bach circle.[61] In some cases, a preexisting bass line was used to produce an all new composition. Such example is found in the case of the Sonata for Violin and Continuo, BWV 1021, the Trio Sonata BWV 1038, and its arrangement for *cembalo obligato* and violin, BWV 1022.[62] All three works share the same bass line. It has been assumed that the Sonata BWV 1021 is the earliest one, composed by Bach, and that the Trio Sonata and its arrangement were conceived as student exercises using a preexisting bass line taken from the earlier work.[63] According to David Schulenberg, this example exhibits a technique particularly close to Niedt's method of composition through variation of the bass.

Thoroughbass as a source for composition was used not only in homophonic genres. According to Schulenberg, "a clear harmonic framework underlies many of Bach's fugue subjects, and even the combination of the subject and its countersubjects is often harmonically conceived." This is especially evident from examples such as the *Goldberg Variations*, where the same predetermined harmonic progression is used in all variations, including canonic and fugue variations.[64]

Other examples of the use of thoroughbass to conceive fugues are found in student assignments of fugal studies. The manuscript entitled *Precepts and Principles for Playing the Thoroughbass or Accompanying in Four Parts*[65] includes fugal exercises based on a given thoroughbass and realized by a student. The manuscript, in

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[61] See appendix, David Schulenberg, "Composition and Improvisation in the School of J. S. Bach," *Bach Perspectives* 1 (1995): 41-42.

[62] David Schulenberg, "Composition as Variation: Inquiries Into The Compositional Procedures of the Bach Circle of Composers," *Current Musicology* 33 (1982): 65-74.

[63] Ibid., 65.

[64] Schulenberg, "Composition and Improvisation," 13.

[65] Johann Sebastian Bach, *Precepts and Principles for Playing the Thorough-Bass or Accompanying in Four Parts*, trans. and ed. Pamela L. Poulin (Oxford: Clarendon Press, 1994), 41-45. See Alfred Mann, Theory and Practice: The Great Composer as Student and Teacher (New York: Norton, 1987), 10-12.

the handwriting of Bach's student Carl August Thieme, is attributed to Bach and assumed to consist of lecture notes dictated by him.[66] Similar fugal assignments, based on a given thoroughbass progression, were given by Handel in his composition lessons to Princess Anne.[67] These exercises exemplify the role of thoroughbass as a starting point for the compositional process and as a plan underlying the composition.

In the previous chapter, the rhetorical principle of using limited means as a source for the composition of elaborate works was discussed in relation to the invention and elaboration of subjects. In a similar manner, bass lines were often recycled and reused, sometimes to produce new compositions based on preexisting bass lines. This idea is demonstrated in both clarity and detail by F. E. Niedt in his *Musical Guide*, where a variation technique is used to derive various movements from a single bass line. The following sections will examine Niedt's demonstration in an attempt to understand the principles behind Niedt's technique. Finally, the thoroughbass progression underlying the C major cello suite will be derived and examined.

[66] J. S. Bach, *Precepts and Principles*, xiii.
[67] Mann, *Theory and Practice*, 7-39.

B. Niedt and the Technique of Variation over a Thoroughbass Progression

1. Niedt's *Musical Guide* and its Relation to the Bach Circle

The idea of using a single preexisting bass line as the source of several different works or movements is demonstrated most clearly in Niedt's *Musical Guide*. The second part of this treatise, entitled *Guide to Variations*, includes, according to the title page, "instructions on how one can invent all sorts of things such as preludes, Chaconnes, *Allemande*s, etc. from a simple thoroughbass."[68] In a step-by-step path toward achieving this goal, Niedt started from presenting patterns for elaborating a single intervallic progression in the bass line, proceeded with the application of different figurations to the upper-part, and eventually showed how to join the parts into a complete composition. The final product of Niedt's demonstration is a dance suite, which includes a prelude, Chaconne, two *Allemande*s, two *Courante*s and their Doubles, two *Sarabande*s, three *Minuets*, and two *Gigues*. All of the movements are derived from a single, simple thoroughbass progression, with slight adaptations to the meters and characteristics of the various dance movements.

Niedt's treatise is especially important for this thesis in view of the relation of Niedt's work to the Bach circle and to techniques used in the circle. Compositions by Bach, his students, and sons exemplifying the use of a similar principle led David Schulenberg to the conclusion that "the principles taught by Niedt were known and used in the Bach circle."[69] Schulenberg even ascribed Bach and his students to the same North-German tradition expressed by Niedt's *Musical Guide*.[70]

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[68] Niedt, *The Musical Guide*, 64.

[69] Schulenberg, "Composition and Improvisation," 42.

[70] David Schulenberg, "Composition Before Rameau: Harmony, Figured Bass, and Style in the Baroque," *College Music Society* 24/2 (Fall 1984): 131.

The relation between Bach and Niedt is farther suggested by evidence according to which Bach may have been familiar with Niedt's treatise and has even used it in his own teaching. The manuscript attributed to Bach and entitled *Precepts and Principles for Playing the Thoroughbass* is in fact a paraphrase, with some additions and omissions, of the first part of Niedt's *Musical Guide*. It is assumed to consist of lecture notes, dictated by Bach to his students at the Thomasschule in Leipzig.[71]

The idea expressed in the second part of Niedt's *Musical Guide,* of composition through bass realization and through variations over a single bass line, is found in both Bach's output and his method of teaching. For this reason, and due to Bach's possible familiarity and interest in Niedt's treatise, examining Niedt's method would be of value for the analysis of Bach's C major suite from a thoroughbass point of view.

[71] Pamela L. Poulin, "Niedt *Musicalische Handleitung*, Part I and Bach's '*Vorschriften und Grundsatze...*': A Comparison," *Music Review* 52, no. 3 (1991): 171-89.

2. Niedt's *Guide to Variation*

The first step in the path towards realizing a bass line into a complete composition, in Niedt's demonstration, is the elaboration of a single bass interval. Niedt suggested numerous patterns for all possible ascending and descending intervals. In the end of this course, the patterns are applied to a simple, figureless, four-measure bass line. Niedt took special care to present examples in different meters.

The perception of the bass as representing a harmonic progression, rather than a melodic line, becomes clear from examining the patterns suggested by Niedt. In many of them it is not the discussed interval that has been varied, but the harmonic unit represented by the bass note. Example 2-1 is one of the variations suggested by Niedt for a descending fourth interval:

Example 2-1.[72]

After having explained how to vary the bass line, Niedt's demonstration proceeds, using the same simple thoroughbass progression, with variations of the upper-parts. To a basic chord figuration (C-E-G-C) various possible variations are presented through operations such as inversion, diminution, and rearrangement of the notes. When this stage is completed and presented over a figureless bass, figures are brought in (namely, inversion as well as dissonant chords). Eventually, both bass

[72] Niedt, *The Musical Guide*, 84.

elaboration and the upper-part figurations are applied to a 22-measures-long bass line, resulting in a small composition.

Having achieved this goal, Niedt's demonstration continues to the composition of a complete dance suite. For this purpose he chose a different, 16-measures-long bass progression, including figures. Niedt referred to this bass progression as "the foundation of my invention."[73] It will be used as the basis of the prelude, Chaconne, and the dance movements of the suite.

[73] Ibid., 165.

3. The Bass as a Flexible Skeleton

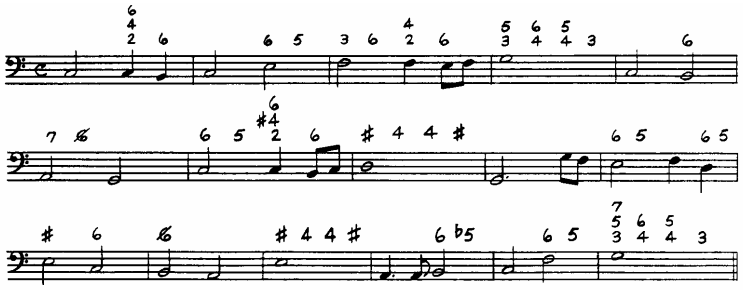
Niedt stressed the idea that "every piece, no matter how short it may be, has its own nature, its own special characteristic and mark by which it can be distinguished from all other pieces."[74] In order to be adjusted to dances of different meters, structures, and characteristics, certain flexibility is required from the "foundation bass." It is treated as a flexible structural skeleton and as a subject for various modifications and adjustments. Niedt's variation suite is very different, in this respect, from strict variations such as the *Goldberg Variations*.

A significant structural modification is done at the very beginning of the process (example 2-2). After having presented a prelude and a Chaconne, Niedt turned to the composition of the other dance movement. In order to be used for these, Niedt explained, the bass should be divided into two parts or reprises:

> If we care to go further now and write an *Allemande* from the prescribed bass, then it will be necessary to divide the bass into two reprises, so that the first section can be closed in the *Quinta Modi* [on the dominant]. Here the key is C and, therefore, the cadence must be in G. This must be observed wherever two reprises occur.[75]

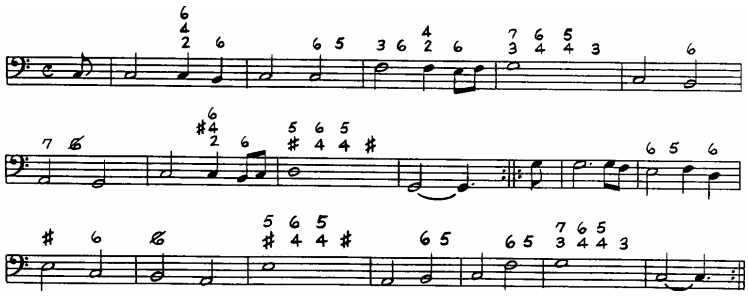
Example 2-2. Niedt's foundation bass and the *Allemande* bass. [76]

Foundation bass



[74] Ibid., 164.
[75] Ibid., 163.
[76] Ibid., 156, 164.

Allemande bass[77]



In addition to this basic change, other changes and modifications, involving almost every characteristic of the bass, are found in the bass plans and in their actual realizations. Through the following examples of bass characteristic that have been altered, a conclusion may be reached as to the role of the bass as a flexible skeleton.

Structural Changes: Expansion of the Bass

According to Niedt, the prelude is the movement in which the bass can be treated with most freedom:

> To return now to our *Praeludium*, the theme could, without any loss, be extended by several notes in the actual execution, so that a whole measure—or several measures—could be made from a half measure. A *Praeludium* should not be limited to a particular length; the more unaffected and natural it is, the better it turns out.[78]

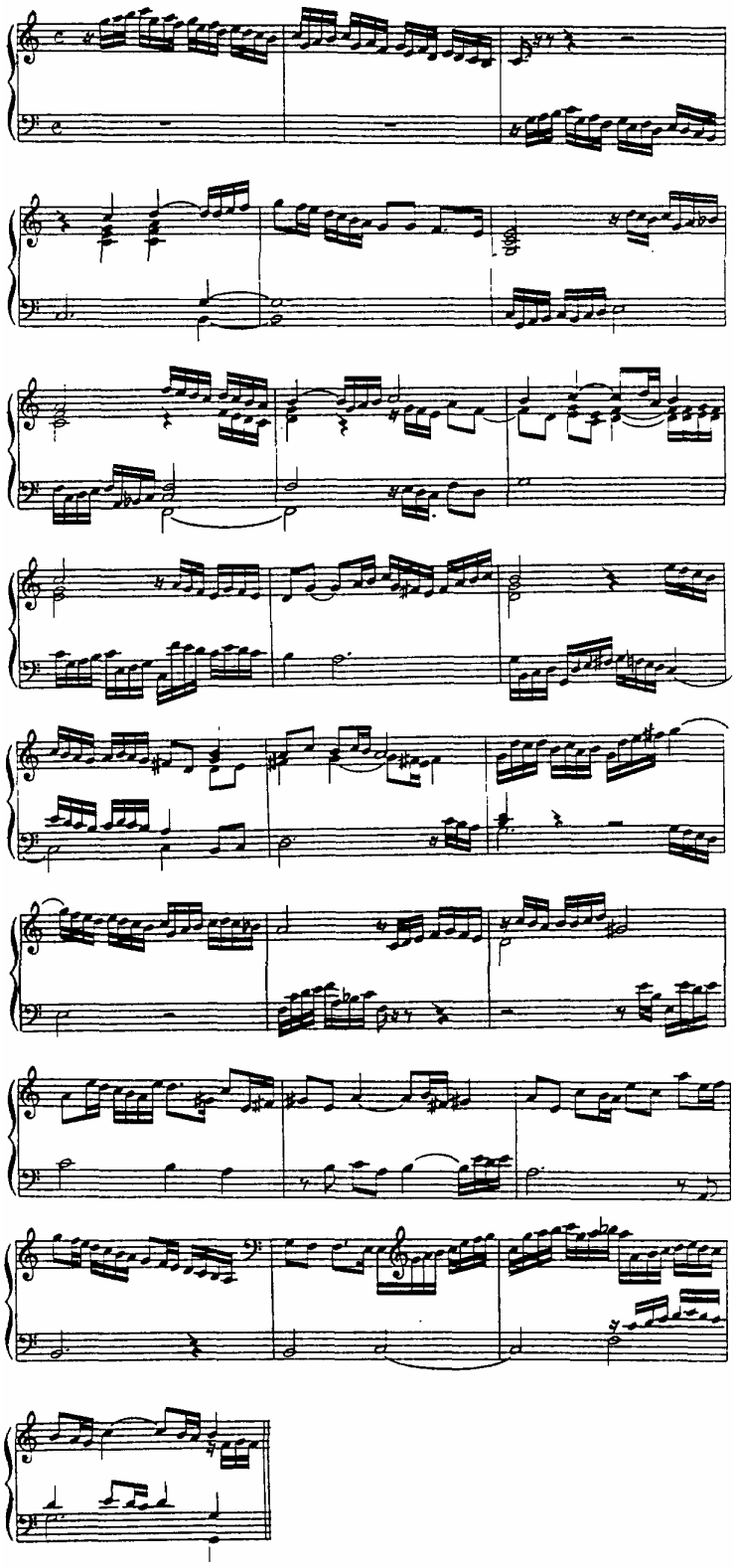
Indeed, Niedt treated the prelude's bass freely, expanding the 16-measures foundation bass to 22-measures (the prelude is 25-measures-long; however, the initial three are an introduction or a "run" that is an addition to the bass plan.) Example 2-3

[77] The C in the second half of measure 2 of the *Allemande bass* is apparently mistaken and should be E as in the foundation bass.

[78] Ibid., 159.

presents the complete prelude. When compared with the foundation bass (see example 2-2), the expansion of the basic model is apparent.

Example 2-3. Prelude.[79]



[79] Ibid., 159-61.

Change of Meter

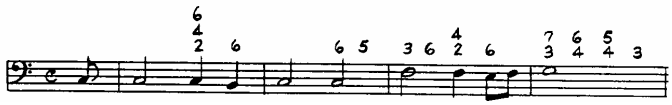
The need to adjust the bass to different meters was stressed by Niedt:

> The variations which have been shown here can be changed into triple metre and thus assume a different character according to the nature of the various metres. Some notes are lengthened or shortened and some are omitted now and then if one wants to maintain the variations shown above.[80]

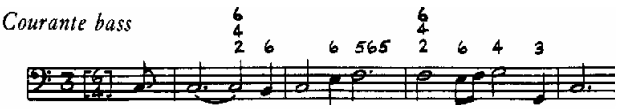
The necessity of rhythmical flexibility is obvious when trying to adjust a single bass progression to the meters of five different dances. The change of meter was done with a certain amount of freedom, as can be seen in example 2-4. As a result from the change of meter, other changes occur as well. The most prominent changes involve the number of measures in each dance, the stressing of the notes (the relationship of strong and weak beats,) and the phrasing. In example 2-4, in the *Allemande*, F is a downbeat (m. 3), while in the *Courante* it is a weak beat (m. 2). The first phrase in the *Allemande* is concluded by a half cadence, while in the *Courante* it is a full cadence.

Example 2-4. *Allemande* bass, first phrase, *Courante* bass, first phrase.[81]

[*Allemande bass*]



Courante bass



[80] Ibid., 76.
[81] Ibid., 164, 167.

Change of Harmonic Structure

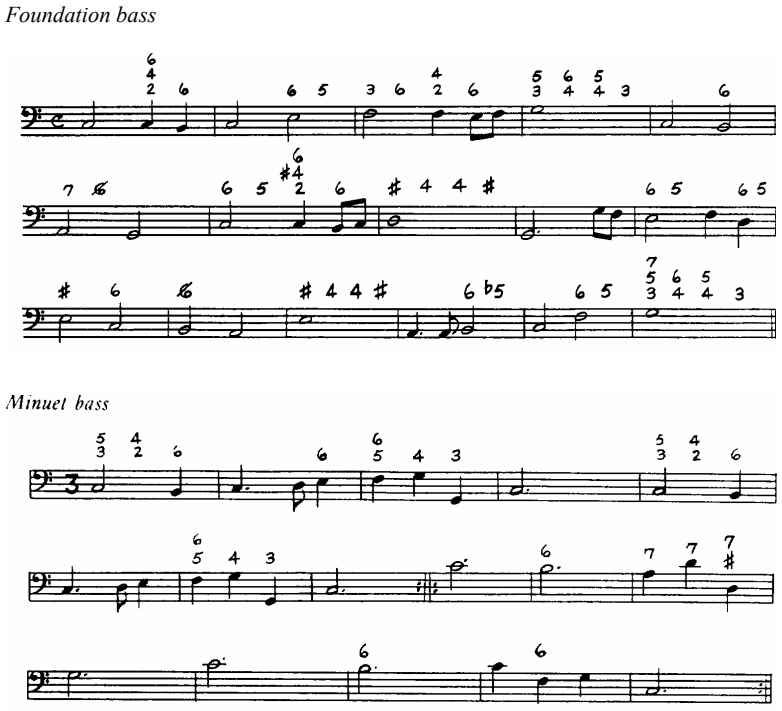
Some dances, such as the *Minuet*, require a different harmonic structure. Mattheson, who edited and annotated the second edition of Niedt's *Musical Guide*,[82] explained this requirement in an editorial note:

> With Allemandes and Courantes for the Clavier, it is traditional to have the first reprise close on the fifth; with Sarabandes, Gigues, Minuets, Passepieds, Rigaudons, and other pieces, however, this rule does not hold. If these are written in a major key, then the closing of their first reprise is frequently in the main key.[83]

The three examples of *Minuets* brought by Niedt confirm this rule. The change of harmonic structure requires a more substantial modification of the foundation bass, as can be seen in Niedt's examples. Example 2-5, presenting the bass plan to *Minuet I*, is in fact a simplification of the foundation bass. In addition to the change in the cadence concluding the first reprise, the second reprise omits the A minor cadence found in all other dances and in the foundation bass, while a "new" cadence in G major is inserted. These changes were probably done to adjust the harmonic structure to the needs of a simpler, shorter dance.

[82] Ibid., xxi.
[83] Ibid., 163-64.

Example 2-5. Foundation bass, *Minuet I* bass. [84]



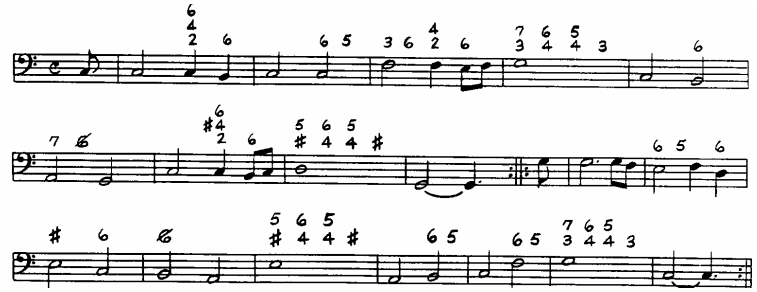
Omissions of Bass Notes

In most of the dances the foundation bass is found in full, though with inner changes of notes relationship resulting from the metrical changes. In the *Minuet*, as discussed above, the need for a simpler structure required a simplification of the foundation bass. While in *Minuet I* this was done through fragmentation of the foundation bass, *Minuet II* is shortened and simplified through the omission of bass notes. In example 2-6 presenting *Minuet II*, the bass note E in m. 3 is omitted. M. 11 in *Minuet II* is parallel to mm. 12-13 in the *Allemande* bass. In this case, the descending bass line (E-C-B-A) is altered in the *Minuet* through the omission of the middle notes (C-B).

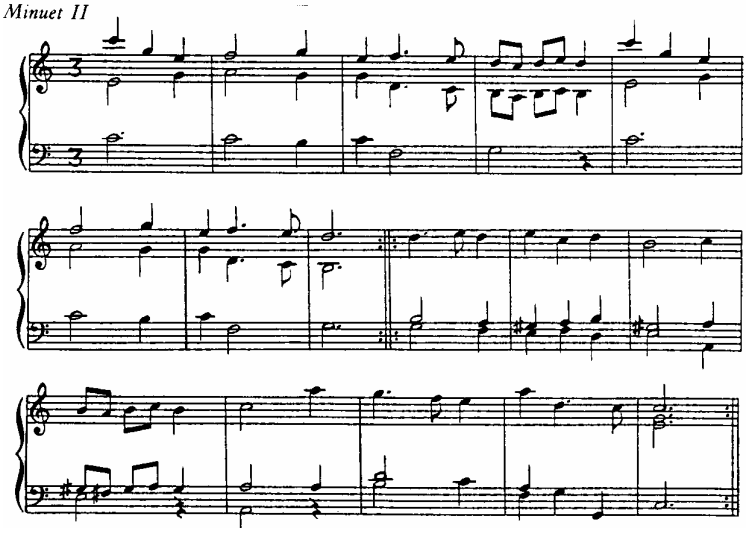
[84] Ibid., 156, 173.

Example 2-6. *Minuet II* compared with *Allemande* bass. [85]

Allemande bass[86]



Minuet II



[85] Ibid., 164, 174-75.
[86] See note 23 to this chapter.

Change of Figures

Another change is that of thoroughbass figures. Although less common in Niedt's examples, it proves that the foundation bass was not considered a strict harmonic formula, but rather a flexible line with the possibility of harmonic change above it. Slight changes take place in the opening of the second reprise in both the *Sarabande* and *Minuet II*. In both these instances, the change is not found in the bass plan, only in its realization. In the example above (2-6) the realization of the bass note E is by a raised third figure (E major chord), while in the other dances and in the bass plan it was realized by a sixth figure (an inverted C major chord).

Implicit Bass Notes

Since the main role of the bass is a structural one, not a melodic one, bass notes may in some instances be implicit in the harmony even without appearing in the texture. In other words, the bass may be in the background of the composition but not explicitly spelled out. Such example can be found in Niedt's prelude, m. 20 (see example 2-3). From looking at the foundation bass we know that the bass in this measure should be E, which is missing from the lower part. However, the harmonic unit represented by E and by the figures above it (an E major chord) is present. Therefore, it is implicit in the music and can be concluded even without Niedt's given foundation bass.

In conclusion, from examining Niedt's examples it becomes clear that the thoroughbass in not meant to be strictly maintained, but shows much flexibility. Changes in the thoroughbass may be made in accordance with the intended genre and its characteristics. It can be expanded through the prolongation of certain notes, or shortened, with parts of it fragmented or omitted. The harmonic structure may be changed, and cadences may be inserted or skipped. The partition and phrasing of the bass may also be treated in different ways as seen in many of the variations. Even the figures over the bass may change, with the bass notes maintained but representing a different harmony. At the same time, the bass is not required to always appear as a melodic part and can occasionally “disappear” though still fulfill its function as the source of the harmony.

It seems that the main role of the thoroughbass is to provide musical material to be used as a source for elaboration. It draws a structural basic plan, but such that can be altered and adjusted to the structures of the dance genres. That the thoroughbass is intended mainly as a source for the compositional process can be concluded from the fact that Niedt put the emphasis on the final product, the movements derived from the thoroughbass, rather than the maintaining of the bass line as a unifying element. It is the technique of thoroughbass elaboration, not the thoroughbass itself that stands in the center of Niedt's discussion.

C. A Thoroughbass Analysis of the C major Suite

1. Thoroughbass in Bach's Works for Solo Instruments

The absence of thoroughbass in Bach's suites for cello solo and in the sonatas and partitas for violin solo was unusual for the age of their composition. According to Joel Lester, this irregularity was stressed by Bach himself, who emphasized the lack of thoroughbass in the autograph score of the Violin Sonatas and Partitas, writing in the title page: "Six Solos for Violin without Accompanying Bass."[87]

Before attempting to apply a thoroughbass analysis to Bach's cello suite, a question should be raised as to whether these solo works can be perceived, at least from a theoretical point of view, as composed over a thoroughbass. Is there a harmonic plan underlying the melodic line, and can it be deduced from it?

The fact that the solo line does imply an underlying harmonic progression is evident from the various arrangements that were done to Bach's solo works, some of them by Bach himself. These include arrangements to harmonic instruments such as the cembalo, organ, and lute, as well as arrangements, done by Bach, of the *Preludio* from the E major Violin Partita as the sinfonia to Cantatas no. 120a and no. 29.[88] According to Bach's pupil Agricola, Bach himself "often played [the works for solo violin] on the clavichord, adding as much in the nature of harmony as he found necessary."[89]

Adding a thoroughbass to a solo line was practiced in the Bach circle and may have even been used in Bach's teaching. Such an example may be provided by the

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[87] Joel Lester, *Bach's Works for Solo Violin: Style, Structure, Performance* (Oxford University Press, 1999), 4.

[88] Ibid., 23.

[89] Ibid., 22-23.

Flute Sonata in C major, BWV 1033. Robert L. Marshall has suggested that the source of this work is in a compositional exercise carried out by the young C. P. E. Bach or by another pupil. According to Marshal, the flute's solo line was originally composed by J. S. Bach as a solo work, while the adding of a continuo part was assigned to one of Bach's pupils as a compositional exercise.[90] This kind of exercise, in which a thoroughbass is added to a melodic line, is the opposite of the one that is assumed to be in the basis the composition of the Trio Sonata BWV 1038, mentioned above, in which a new melodic line was composed to a preexisting thoroughbass.

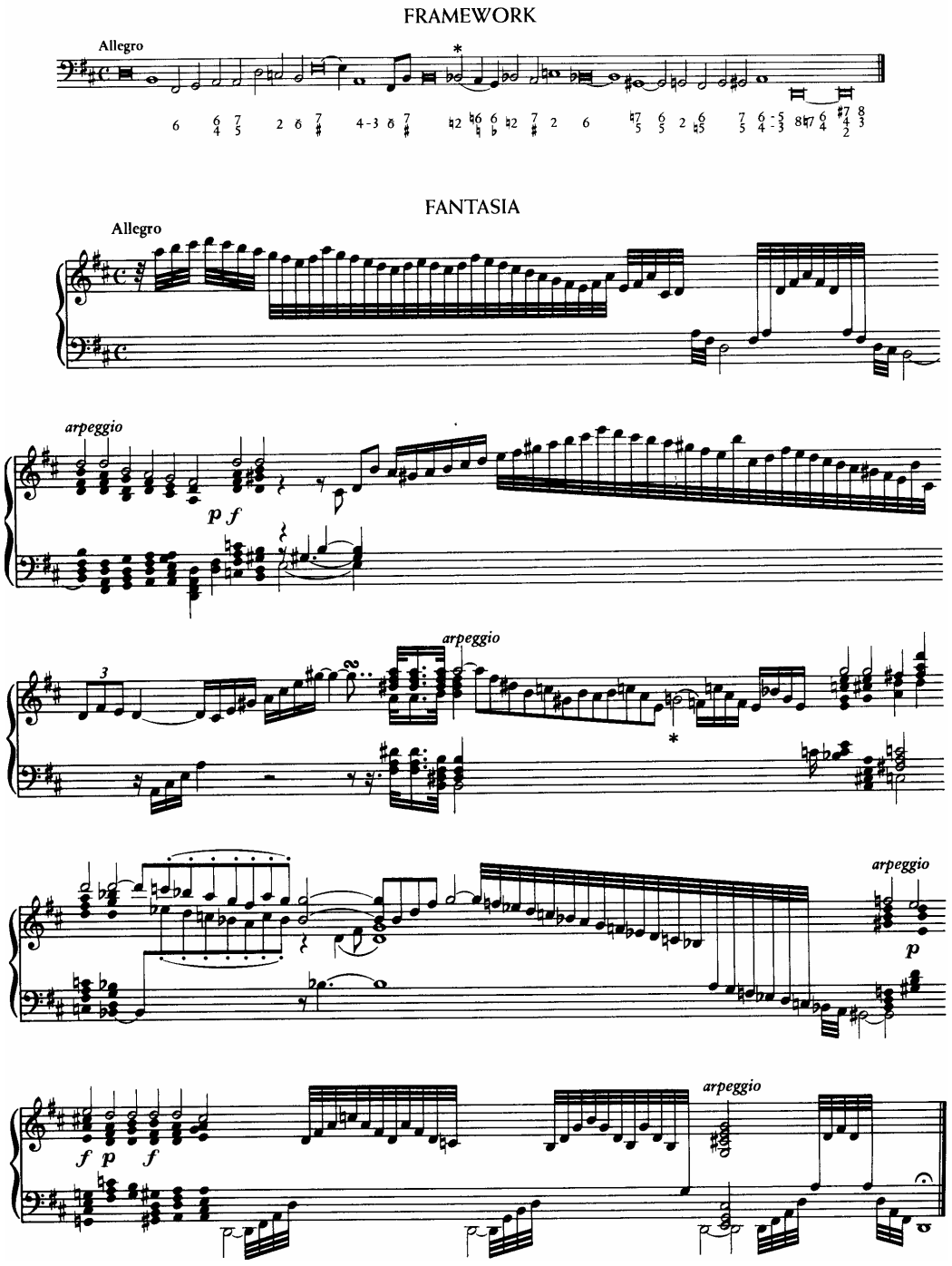
Other examples that may shed light on the problem of the underlying thoroughbass in solo works are those in which a preexisting thoroughbass plan is found along with its realization. In some cases, the bass found in the thoroughbass plan is not given in full in the actual realization. It is only implied by the texture. Such an example is found in Niedt's prelude, discussed above.[91] A similar example is found in the last chapter of C. P. E. Bach's *Essay on the True Art of Playing Keyboard Instruments*.[92] The chapter discusses improvisation through elaboration of a basic thoroughbass plan. It is concluded by an example of a complete, written-out fantasy along with its "framework," meaning the thoroughbass used as a basis for its improvisation (example 2-7).

[90] Robert L. Marshall, "J. S. Bach's Compositions for Solo Flute: A reconsideration of their Authenticity and Chronology," *Journal of American Musicological Society* 32 (Fall 1979): 463-98.

[91] P. 52.

[92] Bach, *Essay on the True Art of Playing Keyboard Instruments*, 430-45.

Example 2-7. C. P. E. Bach, Fantasy in D Major.[93]



[93] Charles Burkhart, *Anthology for Musical Analysis*, 5th ed. (New York: Harcourt Brace College Publishers, 1994), 146.

The framework consists of a complete bass plan with its figures. In the realization, however, the bass part does not appear in full. Three of the bass notes are missing from the realization, while at the same time are being realized in the upper-parts. In other words, the thoroughbass plan found in the framework is maintained, even though the bass part is missing in this section of the work. The harmony can still be deduced from the upper-parts.

J. S. Bach's solo works stem from the same concept: thoroughbass does not necessarily form a consistent melodic bass part, but still provides the harmonic framework and the structural plan for the piece. The function of the thoroughbass is maintained even when absent from the texture. In such cases, the harmony may be implied by the other parts or even by a single solo part.

The perception of the solo works as written above an implied thoroughbass allows us to examine their overall structural plan. Also, assuming that at least in some instances preexisting plans have been used, thoroughbass formulas and conventions may be traced. This is the case in the C major prelude, which will be discussed in Chapter 3.

2. The Thoroughbass Underlying the C major Suite

In examination of the harmonic structures of the dance movements of the C major suite, the similarity between them is striking. Their close relationship may imply the possibility of a common thoroughbass source to all of them, in the same tradition as the one presented in Niedt's *Musical Guide*. This possibility will be explored in the next section. The current discussion will focus on the detailed thoroughbass analysis of the five dance movements.

All five movements follow a basic plan, which may be expended or simplified according to the length and special characteristics of the dances. The first reprise begins with a "frame":[94] a cadential progression or a tonic pedal, establishing the main key (C major). Following the frame, a modulation to the dominant key (G major) takes place, which may be expanded by sequences or a dominant pedal. It is concluded by a cadence in the dominant key. The second reprise begins with a thematic repetition in the dominant key and quickly moves to the sixth degree (A minor), establishing it through a full cadence (in all movements except the *Sarabande*). Some of the longer movements pass through additional keys (F major, D minor) before returning to the main key (C major). In most of the movements, the return to the main key is parallel to the modulation and conclusion of the first reprise. However, a clear attempt has been made in some of the movements to maintain a certain relationship between the two reprises, sometimes by shortening the process of returning to the main key in the second, longer reprise.

[94] Lester, "J. S. Bach Teaches Us How to Compose," 34.

The *Allemande* and the *Courante* are in a close accordance with this basic plan. The connection between them is especially striking and clearly implies a pair of variations. The *Sarabande* contains some diversions from the basic plan, most prominently a cadence in the second degree (D minor) rather than the sixth (A minor). The *Bourree* is a short dance that requires a simplified structure, while the longer *Gigue* goes through the basic plan, expanding it through the insertion of dominant pedals.

The notation in the following examples uses whole notes for main harmonic goals, half notes for prolonged harmonies, cadential progressions, and to highlight harmonies common to several dance movements. Solid notes are used for other harmonies.[95]

Allemande (example 2-8)

The *Allemande* consists of two equal reprises, 12-measures-long. It begins with a frame (mm. 1-4) presenting the theme and establishing the main key. M. 5 begins the transition to G major, the dominant key, expanded by a sequence (mm. 7-9). Following is a subdominant pedal (ii 6/5) and a series of descending sixth chords leading to a cadence in G major.

The second reprise begins with an incomplete thematic repetition in G major, followed by a modulation and a cadence in A minor (m. 17). After passing through other keys (F major and D minor) a return to the main key begins in parallel with the first reprise. It is shortened, however, by skipping the descending sixth chords sequence and moving directly to the cadence in C major. This allows the two reprises to be of same length.

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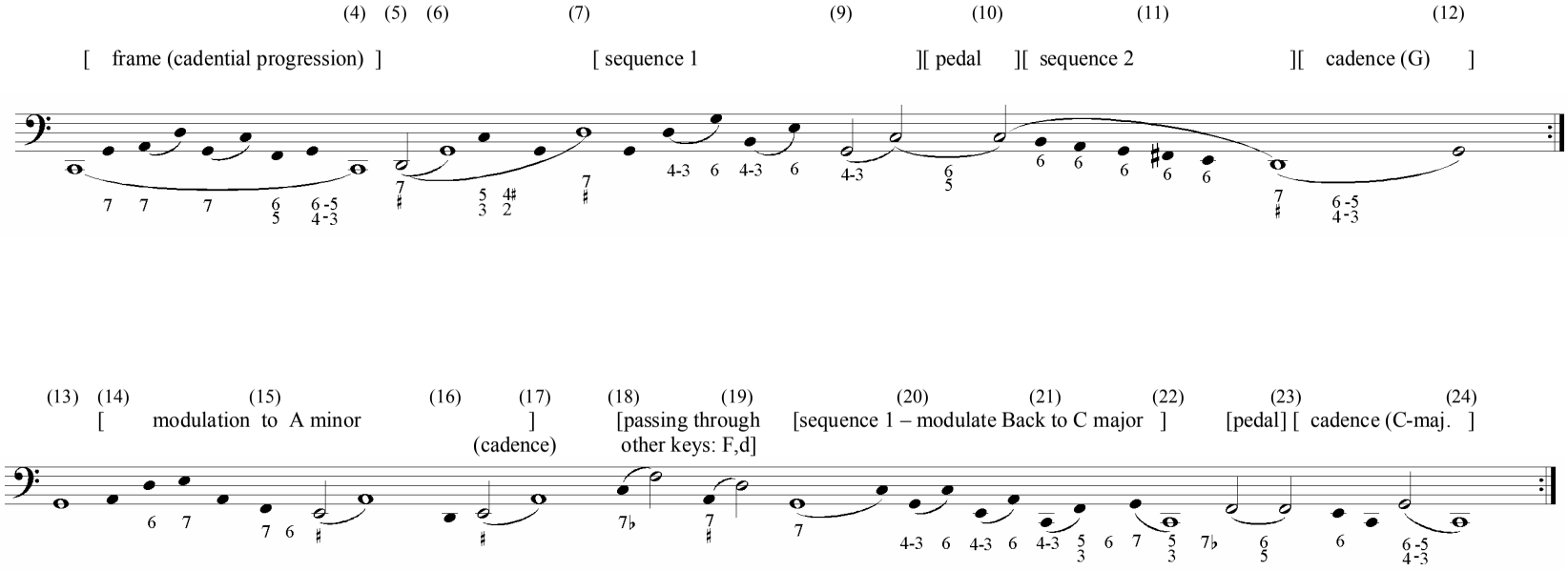
[95] Ibid.

Example 2-8. *Allemande.*

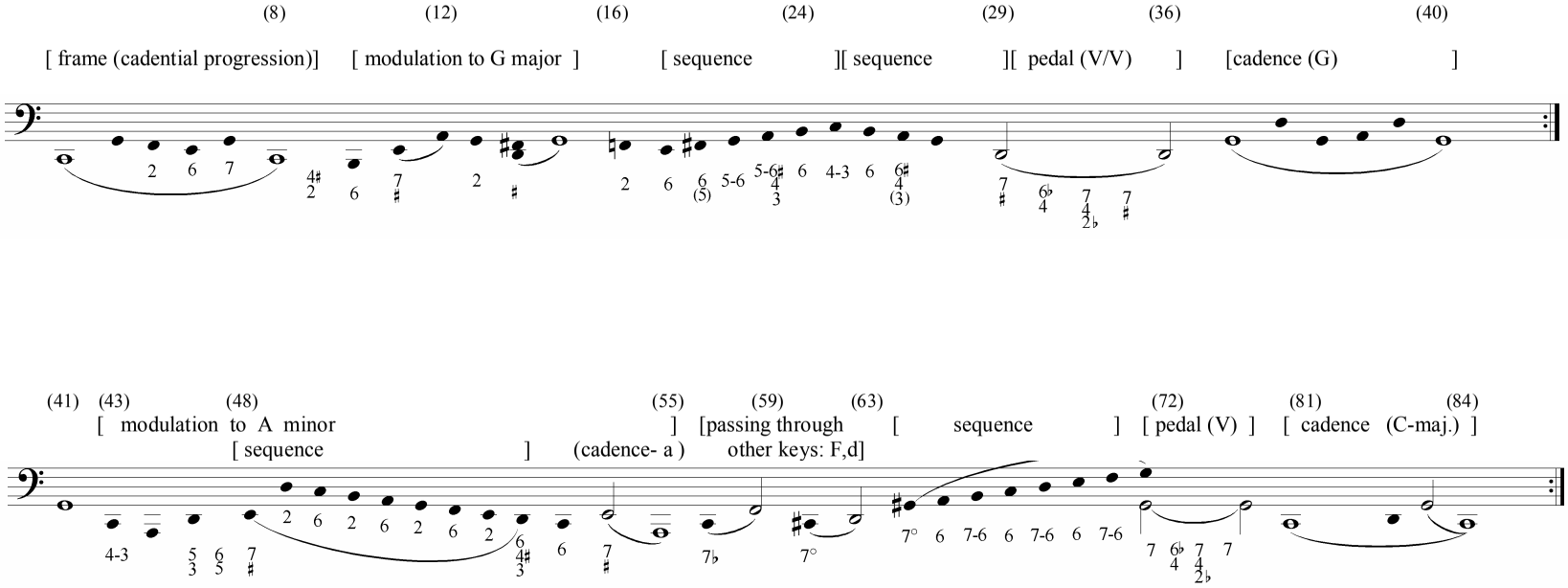


Courante (example 2-9)

The *Courante*, with two reprises almost similar in length (40- and 44-measures-long) follows the same basic plan as the *Allemande*. The main key is established through a frame (mm. 1-8), which consists of a cadential progression. Moving to G major begins in m. 9 through descending steps (A minor, G major) that form the beginning of a sequence. It is continued, with a change of direction, by an ascending sequence (mm. 17-24), which becomes increasingly intense by the shortening of the sequential units and increasing of harmonic rhythm. The sequence is concluded by C as the subdominant (an emphasis which is also found in the *Allemande*, with the pedal on C) leading to the V/V pedal in mm. 29-36 and to the final cadence in G major.

The second reprise begins with a repetition of the theme in the dominant. Like the *Allemande*, the theme is not complete and is leading to the beginning of the modulation to the sixth degree (A minor). The modulation is expanded by a sequence (mm. 48-51) that outlines, through a series of second and sixth chords, a stepwise descent of a full octave. Like the *Allemande*, other keys are passed through (F major, D minor in mm. 57-63). The arrival of the dominant pedal is achieved, in parallel with the first reprise, through an ascending sequence (mm. 65-71). Unlike the first reprise, the ascending sequence here is not balanced by a descending movement but ascends further (through almost an octave), increasing the intensity towards the pedal (mm. 72-80) and the final cadence.

Example 2-9. *Courante.*



Sarabande (example 2-10)

The *Sarabande* differs from the previous two dances in length as well as in structure. There is a different relationship between the two reprises: the second is twice as long as the first (8 and 16-measures). The balanced structure of the *Sarabande* does not allow as many sequences, and pedals would be implied as part of its homophonic texture.

The usual division of *sarabandes* is to four- and eight-measures phrases. A cadence is expected, therefore, in m. 4. However, in the C major *Sarabande*, this expectation is used to increase musical tension by avoiding a cadence at this point. The arrival at C, the establishing of the main key, is delayed and appears incompletely in m. 5 through a weak cadence, concluded by a sixth chord. Instead of a cadential progression used as a "frame" in the other movements, the establishment of the key is supported by a tonic pedal (mm. 1-3).

A similar phenomenon occurs with more intensity in the second reprise. The cadence in m. 12 is not only delayed, it is prepared through m. 12 and delayed to m. 13 but eventually completely avoided. The expected cadence in the sixth degree (A minor) is replaced by a seventh chord leading to a cadence in the second degree (D minor). This technique was described by C. P. E. Bach in his discussion of improvisation and the free fantasy:

> It is one of the beauties of improvisation to feign modulation to a new key through a formal cadence and then move off in another direction. This and other rational deceptions make a fantasia attractive.[96]

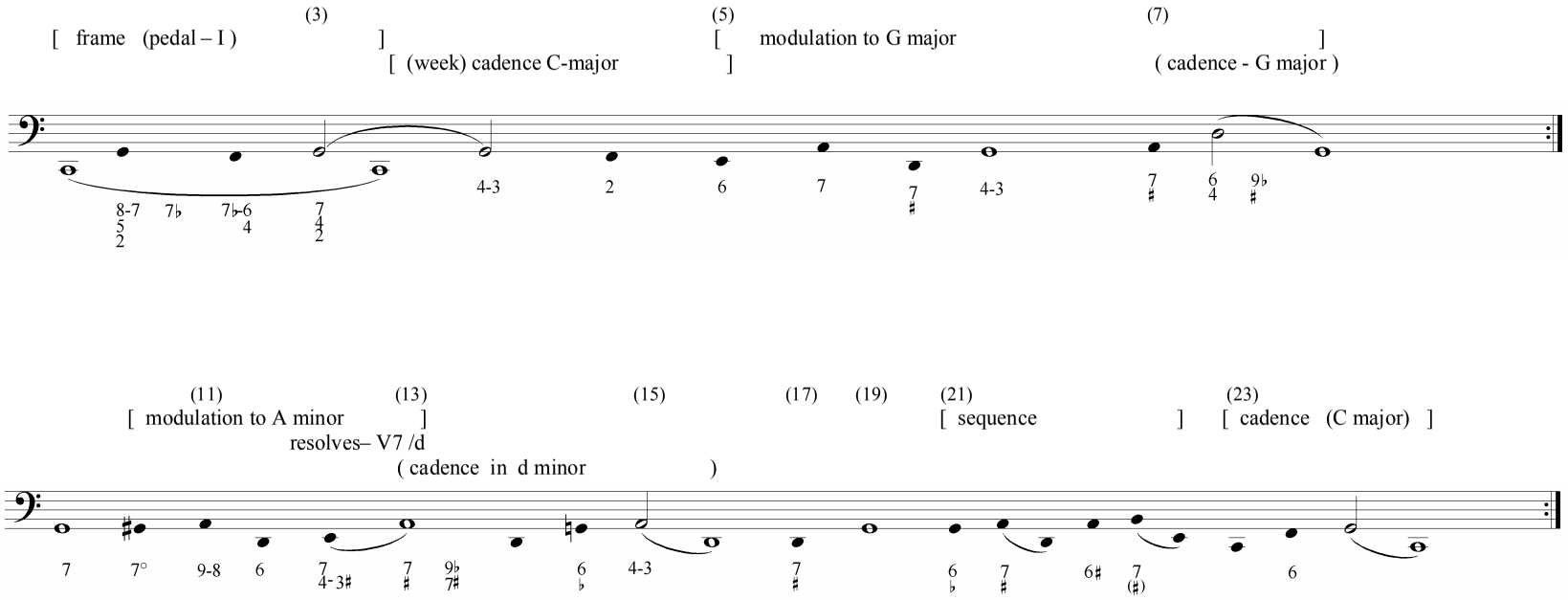
From a thoroughbass point of view, the bass note was given a different harmonic interpretation, though still maintained in the bass. The cadence in D minor

[96] Bach, *Essay on the True Art of Playing Keyboard Instruments*, 434.

(m. 16) in the middle of the second reprise is implied in the other movements, but fully realized only in the *Sarabande*.

The next eight measures consist of a cadence in G major (m. 20), which in this case appears in place, and then a return to the main key (C major) through a short sequence in mm. 21-22. Underlying the sequence is a chromatic ascent, adding to the increasing tension.

Example 2-10. *Sarabande.*



Bourree I (example 2-11)

The *Bourree* is a shorter dance that requires a simpler harmonic structure. In the first reprise, the frame consists of the complete theme (mm. 1-4) with a I-V-I underlying progression. M. 5 begins the modulation to the dominant key (G major) completed by a cadence.

The second reprise is longer and includes expansions through pedal point. It begins with a thematic repetition in the dominant key (mm. 9-10) leading directly to a modulation to the sixth degree (A minor) through a V/vi pedal (mm. 13-15), completed by a full cadence in A minor in mm. 15-17. From there a return to the main key begins (in this shorter movement, without passing through other keys). The return to the main key is expanded by a dominant pedal in mm. 19-26.

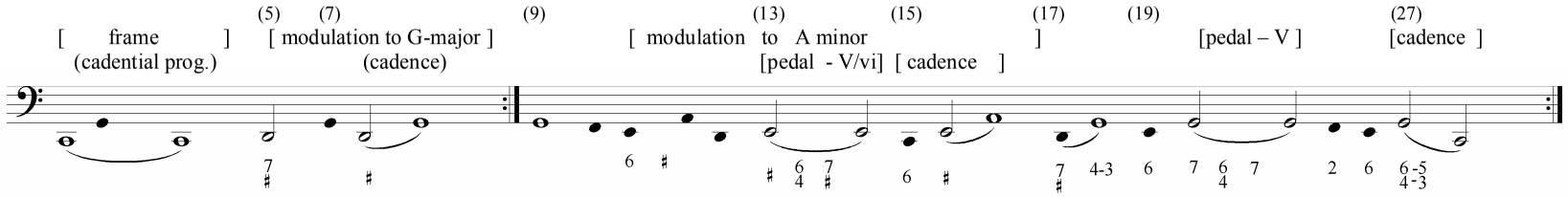
Bourree II (example 2-11)

With the transition to a minor mode (C minor), the second *Bourree* requires a different harmonic structure. Instead of the dominant key, a modulation to the third degree (E-flat major, the relative major key) takes place through the eight measures of the first reprise.[97] The second reprise consists of sixteen measures with a middle cadence in G minor (m. 16) and a return to the main key (mm. 17-24). The structure is simple with no expansions through pedals or sequences.

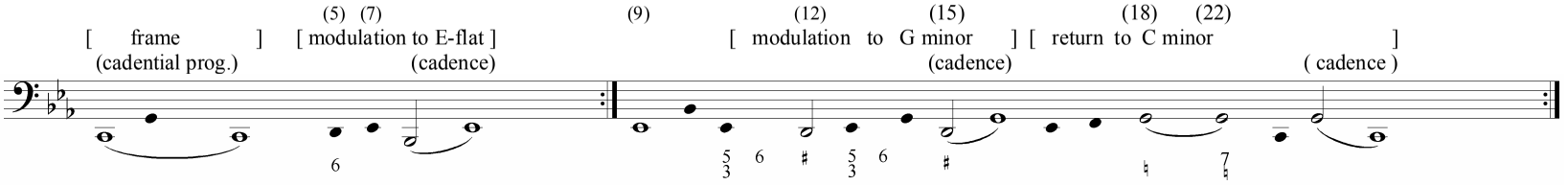
[97] See editorial note by Mattheson in Niedt, *The Musical Guide*, 163.

Example 2-11. *Bourree.*

Bourree I.



Bourree II.



Gigue (example 2-12)

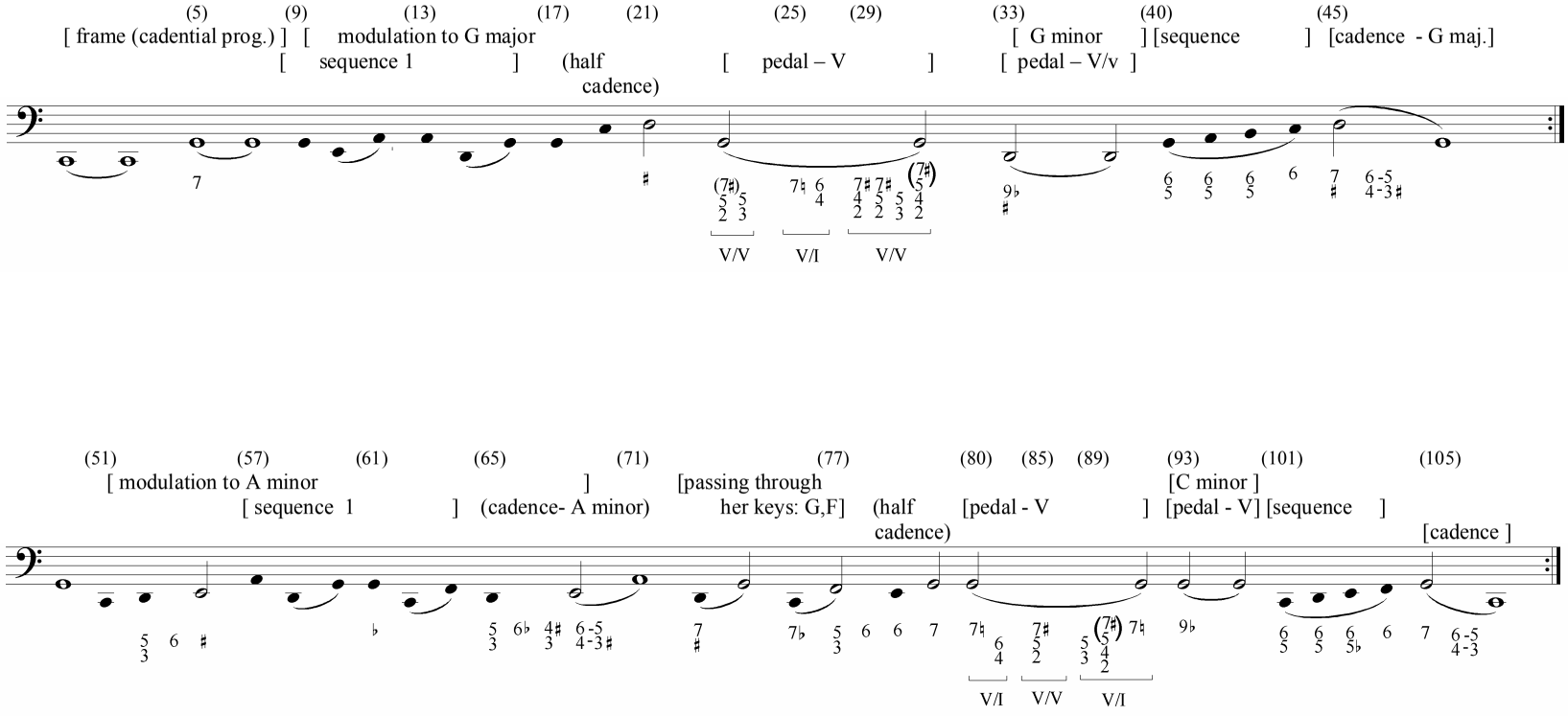
In considering the length of the *Gigue* and its expansion of the basic plan, the movement's structure is closer to the *Allemande* and the *Courante* than to the shorter dances (the *Sarabande* or the *Bourree*). Harmonically, however, the *Gigue* is less complex than the *Allemande* and the *Courante*. It consists of fewer sequences and is mostly expanded by long pedals.

The *Gigue*'s two reprises are 48 and 60 measures long, respectively, the second reprise longer because of the movement to other keys. Other than these sections, both reprises are highly parallel. The first reprise begins with a frame (I-V progression in mm. 1-8) followed by a sequence, which, similarly to the *Courante*, begins the motion toward the dominant key (G major) through a stepwise descent (A, G). The modulation to G major is expanded by a series of pedals: the first, a long dominant pedal (mm. 21-32) consists of three 4-measures parts that form V/V, V/I and V/V progressions, respectively. Continuing the dominant pedal, a short episode in the minor mode follows (G minor implied in mm. 33-40). Then a series of 6/5 chords lead to the final cadence in G major.

The second reprise is exceptional to the suite since, though mostly parallel to the first, it does not begin with a thematic repetition. The dominant key statement is followed by a sequence (parallel to the sequence in the first reprise) leading to a cadence in the sixth degree (A minor in mm. 69-72). The following phrase passes through other keys (F major, D minor), leading to a dominant pedal in mm. 80-92. Again, the pedal consists of three phrases, almost parallel to the pedal in the first reprise but starting from the second phrase, resulting in the following order: V/I, V/V, V/I (leading back to the main key rather than the dominant key). It is followed by a

parallel minor mode episode (C minor in mm. 93- 100) and by a series of 6/5 chords leading to the cadence in C major.

Example 2-12. *Gigue.*



3. A Possible Common Thoroughbass Underlying the C major Suite

The similarity between the harmonic plans of the C major suite dance movements brings up the possibility of a common source to all of them, found in a common thoroughbass progression underlying these movements. The thoroughbass skeleton, in this case, would be used with great flexibility and adjusted to the different structures and characteristics of the movements, as in Niedt's demonstration discussed above.

In example 2-13, the deduced thoroughbass progressions of the movements are aligned together, with a suggested common bass included. In this example, not only the similarity between the underlying bass lines is apparent, but also the ways in which they differ from the basic plan, exemplifying the same flexibility found in Niedt's examples.

The thoroughbass plan can be expanded in different ways. A bass note can be prolonged by a cadential progression (such as the “frame”,) by a sequence, or by a pedal, according to the length, complexity and character of the dance. Although “frames”, sequences, and pedals are found in all movements, the more complex dances, such as the *Allemande* and the *Courante*, include longer, more frequent sequences, while the simpler dances such as the *Bourree* and the *Gigue* are mostly expanded through the use of pedals. The *Sarabande* is limited in length and its balanced phrase structure limits the use of such means of expansion.

In the longer dances, the complete common bass is usually maintained. In the shorter dances, the *Bourree* and the *Sarabande*, the need for a simplification or a shortening of the bass comes about. The same problem was given several solutions in Niedt's examples of the three *Minuets* discussed above. Bach's solution in the case of the *Bourree* is similar to Niedt's, a simplification of the structure through omitting

parts of the complete common bass to create a simpler version of it. The first reprise moves, therefore, directly to the cadence in G major, while the second reprise omits the passing through other keys (F major, D minor), returning immediately to the main key.

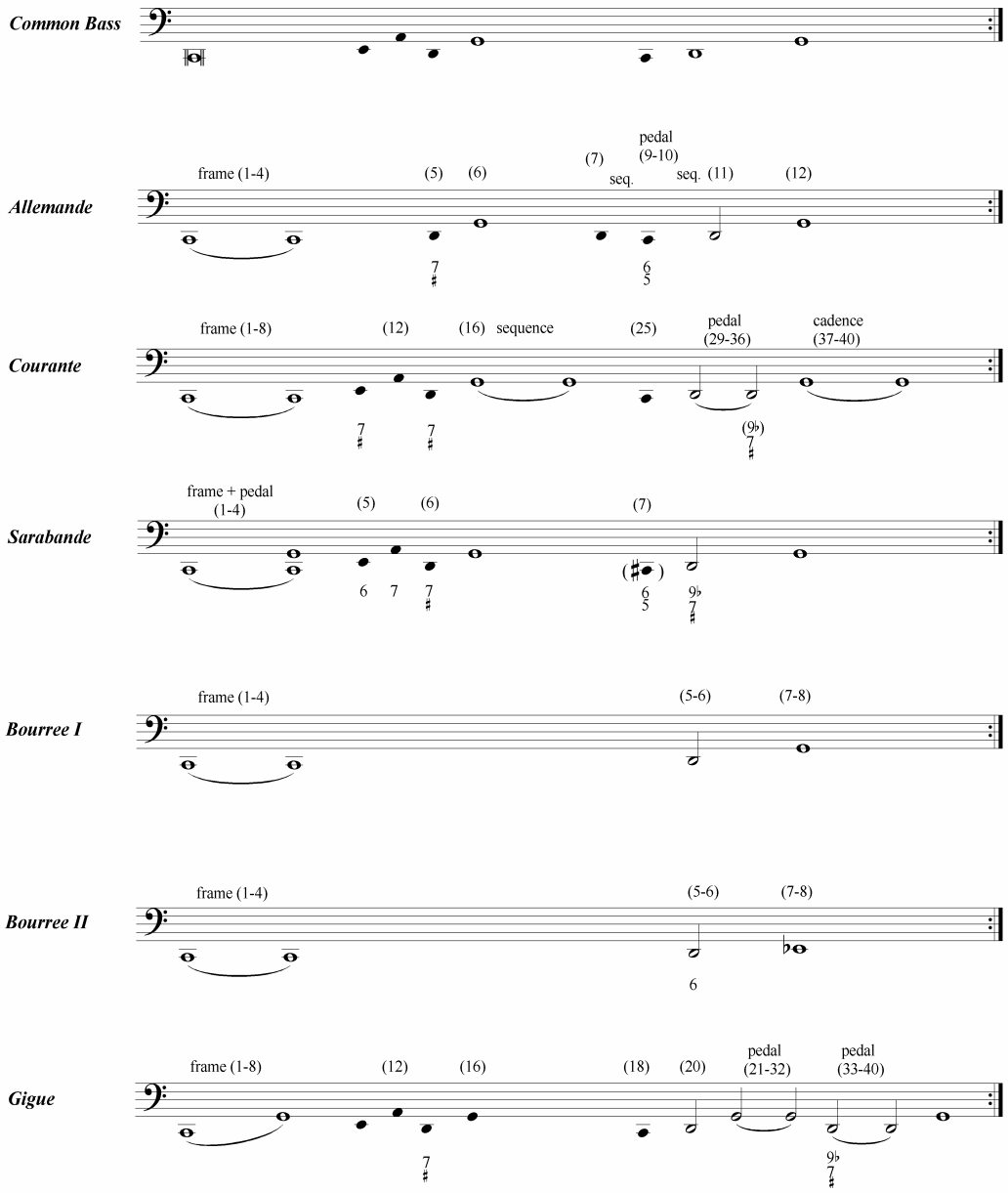
In the *Sarabande*, Bach's solution to the limited length was more inventive. In the first reprise, the “frame”, the prolongation of the initial bass note C, is joined with the transition to the next bass note E through the cadence in m. 5, concluded in a C major sixth chord (with E in the bass). This is an example for a change in figures. Instead of a cadential progression, the establishing of the main key is supported by a tonic pedal in the opening three measures.

In the second reprise, as shown above, an additional shortcut is taken. Through a deceptive move a cadence in the sixth degree (A minor) is prepared, but not realized. The bass note A appears not as a resolution but as a dominant chord, leading to a resolution in D minor. A part of the common bass is skipped, and the second degree (D minor), which is only passed through in the other movements, becomes a formal cadence.

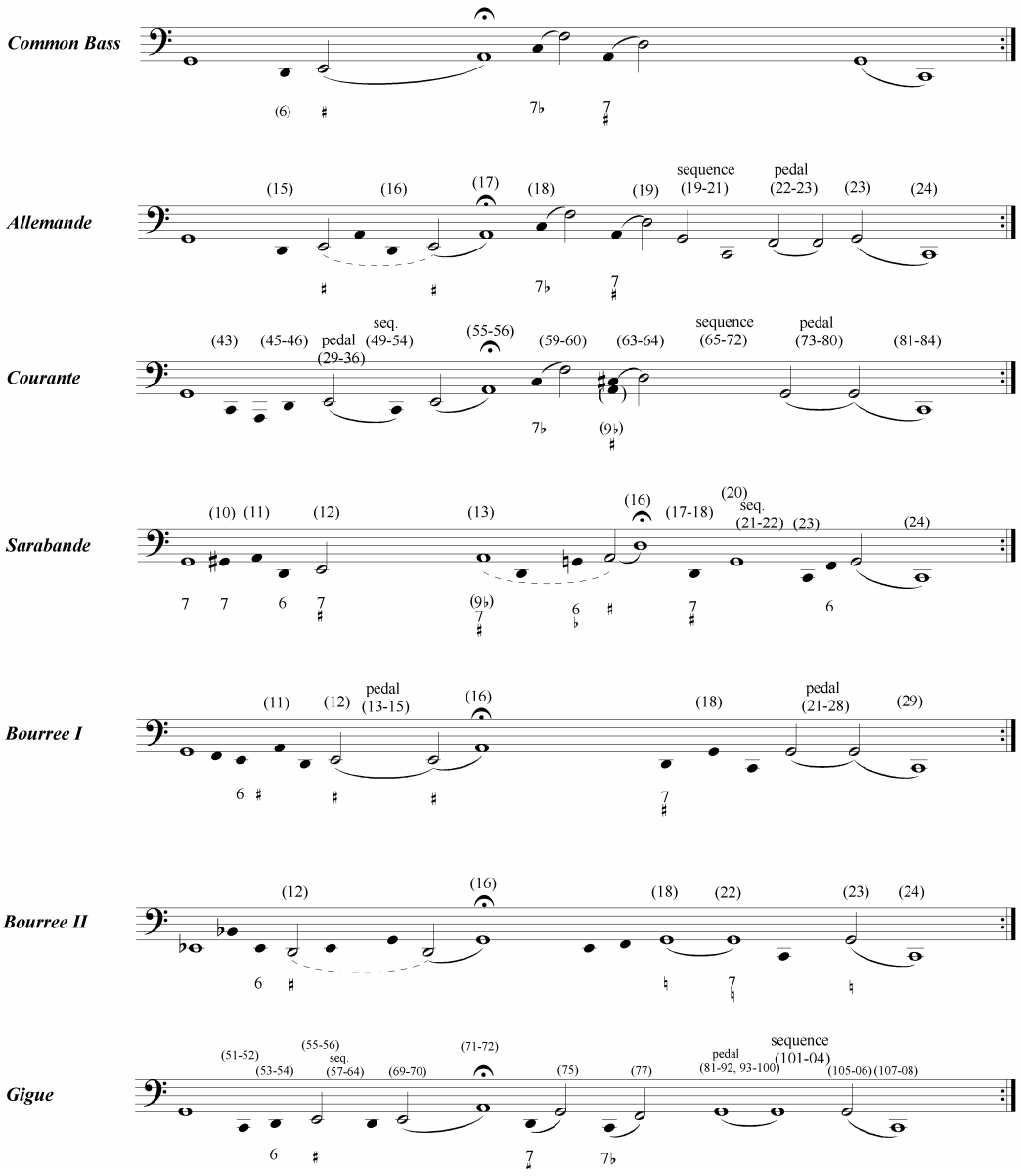
The second *Bourree*, with its minor mode, is an exception. Since the expected middle cadence would be the third degree (E-flat major) and not the dominant key (G major), it cannot possibly follow the basic plan of the other movements.

Example 2-13. Thoroughbasses compared.

First reprise.



Second reprise.



D. Conclusion

In the thoroughbass analysis of the C major cello suite, a striking resemblance between the thoroughbass plans underlying the movements is apparent. The close relationship between the dance movements may imply a common source to all of them, in the same tradition as the one represented by Niedt in the second part of his treatise, *The Musical Guide*.

In his book *Bach's Works for Solo Violin*, Joel Lester pointed to the Baroque application of the term "Partita" not only to a dance series, but also to sets of variations. Although Lester referred to the three Partitas, or sets of dance movements, in Bach's *Sonatas and Partitas for Solo Violin*, his explanation can shed light on the connection between dance series and variations in general:

> The Italian term "Partita"- literally meaning "little part" or "little division"- is commonly understood nowadays simply as one of the terms for a sequence of dance movements. But an older meaning of the term remained in use in Bach's lifetime: a set of variations. Bach himself used the term in the plural for sets of variations on chorales. There is a sense in which the entirety or part of several movements of each violin partita are variations of one another.[98]

A similar sense of connection between the movements is found in the C major cello suite, which seems to follow the same principle traced by Lester in several movements of the violin B minor and D minor Partitas.[99] The examination of the common thoroughbass plan underlying the movements can be significant to the analysis and understanding of their basic structure, and to the ways in which it was modified, expanded, or simplified according to the needs and characteristics of the different dances. Through such analysis a clearer picture of the internal hierarchy of the harmonic structure may be obtained.

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[98] Lester, *Bach's Works for Solo Violin*, 141.
[99] Ibid., 141-47. See also Lester, "J. S. Bach Teaches Us How to Compose," 40-41.

Yet, the connections between the movements should not be understood as implying a variation suite or a strict set of variation of any sort. It can be seen as the result of the very same rhetorical principle discussed in the previous chapter, which deals with the concept of *inventio* as derived from limited material. According to this principle, a simple preexisting piece of musical material may be used as the source for an elaborate piece, or in the case of the C major suite a series of movements, providing an opportunity for the composer to prove his genius and inventive ability. Just as the thematic connection between the movements results in a certain atmosphere which prevails in the suite, the use of an underlying common thoroughbass plan gives the set of dances a certain harmonic color. According to Lester:

> These thoroughbass similarities that relate different dances in a single partita to one another… help to lend an overall harmonic color to each partita, giving the sense that the various dance movements belong together with another in a larger cycle.[100]

It should be stressed that the role of the thoroughbass here is to provide a source for elaboration, and not to be used as a unifying element, as in the nineteenth century perception of overall unity. Therefore, the maintaining of the exact bass was of lesser importance. In Bach's C major suite as in Niedt's examples, the bass is used as a flexible skeleton. It can be altered, expanded, shortened, or not to be used at all. Unity, in this case, is not a goal, but a result of a compositional technique which puts an emphasis on the composer's ability to make an extensive use in a limited material.

[100] Lester, *Bach's Works for Solo Violin*, 145.

CHAPTER III

THE PRELUDE: IMPROVISATION AND THE USE OF FORMULA

A. The Prelude in the Eighteenth Century.

3. The Prelude and its Improvised Origin.

The practice of improvising a prelude as a way of tuning and warming up before playing a piece was maintained through the eighteenth century.[101] At the same time, a written, more stylized form of the prelude developed, still intended to prepare another movement or piece (most often a fugue or a suite). Although precomposed, the written prelude maintained many of the characteristics of the earlier, improvised prelude, such as the lack of a defined structure, a typical pedal point, either on the tonic or on the dominant, and most importantly, an improvisational character maintained through melodic and structural freedom and through the use of improvisation like figures. [102]

These characteristics are described in contemporary theoretical writings regarding the prelude, whether improvised or written. In the second part of his *Musical Guide*, Niedt included a short index of musical terms.[103] The index includes the following definition of the prelude:

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[101] Betty Bang Mather and David Lasocki, *The Art of Preluding 1700-1830: For Flutists, Oboists, Clarinettists, and Other Performers* (New York: McGinnis & Marx Music Publishers, 1984), 6-8.

[102] Edith Gerson-Kiwi, "Archetypes of the Prelude in East and West," in *Essays on the Music of J. S. Bach and Other Divers Subjects: A Tribute to Gerhard Herz*, ed. Robert L. Weaver, (University of Louisville, 1981), 60-68.

[103] Niedt, *The Musical Guide*, 133-55.

> *Praeludium* is derived from *praeludere*, which means to play before, therefore *Praeludium* means an introductory piece. Musically speaking, it is a beginning before a well-composed piece is begun, when the organ plays alone, so that the singers can check their pitch and the instrumentalists can tune properly without annoying the audience.[104]

Mattheson emphasized the structural freedom of the prelude and similar genres:

> Although all of these (the *Boutades, Capricci, Toccate, Preludes, Ritornelli*, etc.) strive to appear as if they were played extempore, yet they are frequently written down in as orderly manner; but they have so few limitations and so little order that one can hardly give them another general name than good ideas.[105]

At the same time, according to Mattheson, preludes and other improvised genres are still bound to the rules of harmony:

> This style is the freest and least restricted style which one can device for composing, singing, and playing, since one sometimes uses one idea and sometimes another, since one is restricted by neither words nor melody, but only by harmony.[106]

C. P. E. Bach added some more restrictions in his description of the prelude, restrictions reflected by the piece following the prelude:

> There are occasions when an accompanist must extemporize before the beginning of a piece. Because such an improvisation is to be regarded as a prelude which prepares the listener for the content of the piece that follows, it is more restricted than the fantasia, from which nothing more is required than a display of the keyboardist's skill. The construction of the former is determined by the nature of the piece which it prefaces; and the content of affect of this piece becomes the material out of which the prelude is fashioned.[107]

These definitions emphasize the prelude's close relation to the following piece. The role of the prelude is to set the atmosphere and affection, introduce the musical

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[104] Ibid., 142.
[105] Mattheson, *Der Vollkommene Capellmeister*, 465.
[106] Ibid., 217.
[107] Bach, Essay on the True Art of Playing Keyboard Instruments, 431.

material, and establish the key through long pedals. At the same time, the earlier improvisatory nature of the prelude was maintained and expressed in a less restricted design, with no defined formal structure.

4. The Use of Formula in the Prelude

According to David Schulenberg, "all improvisation is, to some degree, prepared ahead of time and is controlled by convention and conscious planning."[108] The lack of a defined formal structure in the prelude and its origin in the practice of improvisation encouraged the use of patterns and conventions, which included opening and cadential formulas, melodic patterns, and harmonic progressions over a pedal point or over a specific bass progression. Students and amateurs were encouraged to make use of such fixed patterns, as in the advice given by Niedt:

> The eager learner can imitate these and similar skilful patterns taken from compositions of good masters, or, after hearing such skilful passages and patterns, he can commit them forthwith to paper and see what they consist in. Let me assure him that he will suffer no harm from this practice, but will discover that, in time, he himself will think of many inventions.[109]

One such formula was a fixed harmonic progression over an ascending or a descending bass scale, known as the *Regle de l'Octave* (the rules of the octave). The progression found in Francois Campion's treatise from 1716,[110] as well as other similar formulas that can be found in almost every eighteenth century thoroughbass and composition treatise, were especially useful and popular at the time.[111] The *Regle de l'Octave* specified a unique harmony for each degree of the ascending and the descending scale. This enabled keyboard and lute players not only to accompany unfigured bass progressions, but also to improvise their own solo pieces over a given bass.

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[108] Schulenberg, "Composition and Improvisation," 5.

[109] Niedt, *The Musical Guide*, 158.

[110] Francois Campion, *Traite d'accompagnement et de composition, selon la regle des octave* (Paris : La Veuve G. Adam, 1716).

[111] Thomas Christensen, "The *Regle de l'Octave* in Thorough-Bass Theory and Practice," *Acta Musicologica* 64 no. 2 (1992): 91-92.

The use of the *Regle de l'Octave* as a tool for improvising preludes and free fantasies was discussed by many theorists,[112] including C. P. E. Bach. In his discussion of improvisation and free fantasia[113] Bach gave the following instructions for improvising a prelude:

> Following are the briefest and most natural means of which a keyboardist, particularly one of limited ability, may avail himself in extemporizing: With due caution he fashions his bass out of the ascending and descending scale of the prescribed key, with a variety of figured bass signatures; he may interpolate a few half steps, arrange the scale in or out of its normal sequence, and perform the resultant progressions in broken or sustained style at a suitable pace. A tonic organ point is convenient for establishing the tonality at the beginning and end. The dominant organ point can also be introduced effectively before the close.[114]

The instructions are followed by a variety of alternatives to the *regle de l'octave* basic formula, using, as Bach suggested, other possibilities of harmonization as well as different variants of the bass scale. The variety of possibilities led Thomas Christensen to the conclusion that "The obvious message behind all of Bach's variations is that the *regle de l'octave* represents only one of many possible scale harmonizations."[115] This kind of flexibility allowed the *regle de l'octave* to become a useful tool for imaginative composition, rather than a prescribed formula of a limited, basic progression.

The structure described by C. P. E. Bach can be summarized in the following way: An opening pedal point, a harmonic progression over an ascending or a descending scale, a dominant pedal point, and an ending tonic pedal point to reestablish tonality. This structure is indeed offered as a pedagogical means for

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[112] Ibid., 109-11, 63n.
[113] Bach, *Essay on the True Art of Playing Keyboard Instruments,* 430-45.
[114] Ibid., 431-33.
[115] Christensen, "The *Regle de l'Octave*," 110.

students and amateurs, yet it is found in many typical preludes by J. S. Bach, possibly also for pedagogical purposes.[116]

In his examination of four "pattern preludes" from the *Well-Tempered Clavier* Joel Lester describes the following model:[117]

Opening Frame	**Descending Octave-Scale**	(linking Progression)	**Dominant-Pedal**	**Closing Frame**
(Tonic-pedal or tonic-prolonging progression)	(one or two)			

This simple model which, as C. P. E. Bach describes, was a helpful means for improvising a prelude, underlies the four *Well-Tempered Clavier* preludes discussed by Lester in an increasing level of complexity. These preludes differ not only in the harmonic realization of the descending scale, but also in the ways in which the structure of the piece is derived from it. The scale can be broken in different points, sometimes in order to create parallelism. In other cases, more than one scale can be used, and different tonal areas of the scale can be emphasized. In sum, a variety of compositional possibilities can be derived from the basic, simple model described by C. P. E. Bach.

[116] Lester, "Bach Teaches Us How to Compose," 33-46. See also Schulenberg, "Composition and Improvisation," 20-22.

[117] Lester, "J. S. Bach Teaches Us How to Compose," 34-35.

B. The Prelude of the C major Suite as Based on a Thoroughbass Formula.

1. Example of the Basic Prelude Model: The Prelude of the G major Suite

The prelude to J. S. Bach's G major cello suite (example 3-1), which is simpler in structure than the prelude of the C major suite, can be used here as an example to the basic prelude model. In the next section, the model will be applied to the C major prelude.

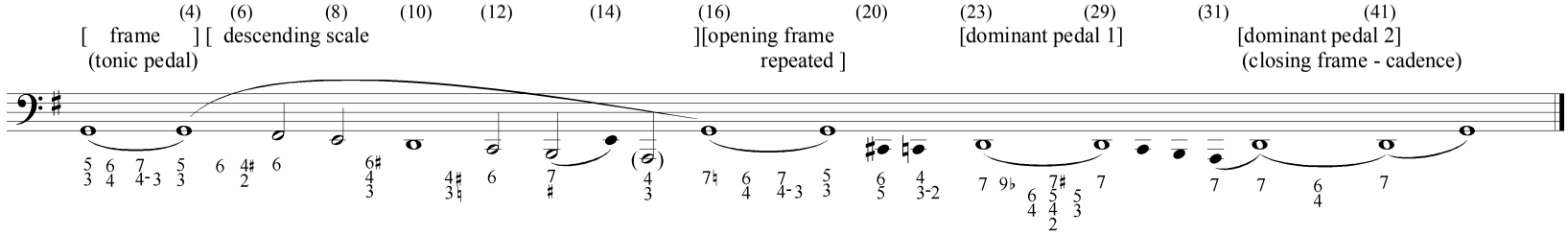
Following the basic model described above, the G major prelude consists of an opening frame, a descending octave scale, a linking progression leading to a dominant pedal, and a closing frame (which takes place over the pedal). The opening frame is formed by a cadential progression establishing the main key (mm. 1-4). It is continued by a descending G major octave bass scale (mm. 5-16). The first half of the scale (down to scale-step 5, D in m. 10) follows Campion's *regle* quite closely. The second half of the scale diverts from the basic *regle* formula to other keys: A minor on scale-step 4 (m. 12), the dominant of the E minor on scale-step 3 (m. 13), resolved by E minor in m. 14, breaking the scale at the third. Then, scale-steps 2 and 1 form a cadence back in the main key (mm. 15-16).

In order to reestablish the main key (G major), the thoroughbass formula of the opening frame is repeated in mm. 16-19, but with a different figuration in its realization. After a short linking progression (mm. 20-22), a dominant pedal takes place (mm. 23-29). It is intensified by a second dominant pedal (mm. 31-41) over which the final cadence, the "closing frame," is given. The dominant tension is held up to the end, and resolution of the dominant pedal comes about only in the last measure (m. 42).

The notation in the following examples is based on Lester's analysis:[118] Whole notes indicate main harmonies; half notes are used for notes in scales connecting main harmonic goals; solid notes for other harmonies.

[118] Ibid.

Example 3-1. Prelude, Suite in G major.



2. The Thoroughbass Plan Underlying the C major Prelude

The C major prelude (example 3-2) follows the same basic model exemplified by the G major prelude. Like the G major prelude, it consists of an opening frame, a descending octave bass scale, a linking progression, a dominant pedal, and a closing frame. Yet the C major prelude is a more elaborate version of this model, with faster harmonic rhythm, more sequences, linking progressions, and pedals.

In addition to this, the C major prelude includes one striking diversion from the basic model. Even though, like the G major prelude, the first half of the descending scale (down to scale-step 5, mm. 7-13) follows the *regle* formula quite closely, its second half (mm. 13-27) modulates to the sixth degree (A minor). As a result, the descending bass scale is concluded not by a tonic chord, as expected, but instead, its final note C is harmonized by an A minor sixth chord (vi 6 in m. 27).

The modulation to the sixth is established through a prolongation of scale-step 3 (E in mm. 17-24), harmonized as the dominant of the sixth degree. However, the expected cadence in A minor is avoided at this point.[119] In a continuous progression, without breaking the stepwise descent, scale-step 3 (E) is not resolved by an A minor chord, but followed by further descent. Scale-step 2 (D in m. 26) is reached through a chromatic descent (the chromatic step D# is inserted in m. 25) and harmonized by a diminished seventh (vii 6/4#/3 in A minor) leading to an A minor sixth chord on scale-step 1 (C).

The unexpected turn is taken through the establishing of scale-step 3 as the dominant of A minor and the avoidance of a resolution to the prepared cadential progression, which builds up the tension towards a late resolution on the sixth degree,

[119] The bass scale in the G major prelude is harmonized in the same way, but a cadence in the key of the sixth degree, following scale-step 3, is given, breaking the continuity of the scale. It is then concluded in the main key.

substituting the main key. The deceptive resolution requires the reestablishment of the main key, provided by the passage following the descending scale (mm. 27-37). In m. 37, the appearance of the "missing" tonic chord, toward which the descent was directed (though not completed), is the first point of relief in the prelude. In this measure, the low C, which has been missing from the texture since the initial thematic statement in mm. 1-2, reappears for the first time. The reappearance of the low C marks significant structural points in the prelude.[120]

After having reestablished the main key and having "found" the final step of the descending bass scale with its natural harmony, a change of direction occurs. A linking progression leading to the dominant pedal through a succession of seventh-chords, forming a stepwise ascent, takes place in mm. 37-44. The tension accumulated by the ascent is intensified by the long pedal. However, no resolution is given in the end of it (m. 61). Again, the resolution is delayed, as if the tension and speed accumulated through the dominant pedal pushes the motion a little bit further before a pause, provided by a tonic resolution in m. 71, can be taken.

M. 71 provides the resolution of the dominant pedal and begins the concluding part of the prelude (mm. 71-88). This structural point is again marked by the reappearance of the low C. It begins with the reestablishment of the dominant in (m. 76), which is again achieved through a stepwise ascent, accumulating tension to prepare the cadence. But even the conclusion of the prelude includes an unexpected turn. The closing frame is delayed, in mm. 76-81, by a chromatic, foreign-sounding descent, creating a sense of uncertainty. It is emphasized by the cease in the constant sixteenth note motion which was, up to this point, maintained throughout.

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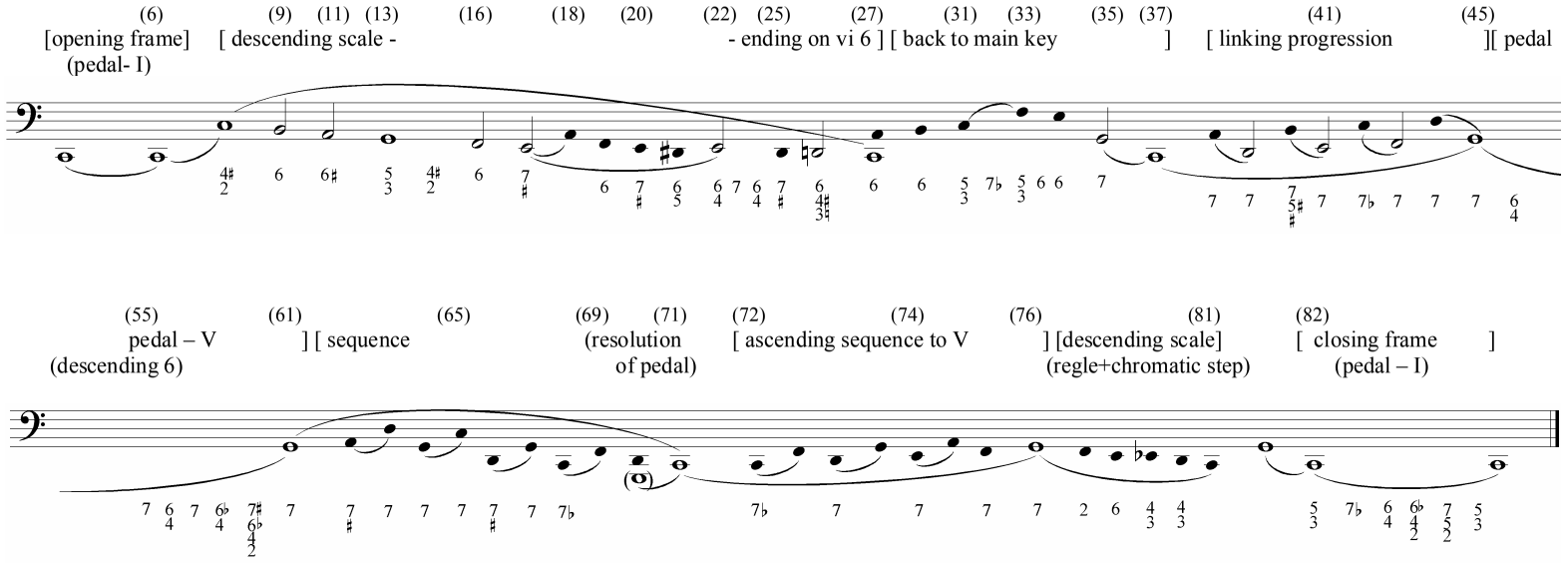
[120] See p. 12.

Eventually, a reaffirmation and a resolution of tension are finally provided by an elaborate closing cadence over a tonic pedal. It is marked by a third appearance of the low C in m. 81. From this point, the low C is established as a tonic pedal which persists to the end, as a closing frame to the prelude.

In sum, the C major prelude forms an extensive and elaborate realization of the basic prelude model. Its complexity results from the harmonic turn, as a result of which the descending bass scale is concluded in the "wrong" key. In addition to stressing the sixth degree as an important center in the prelude, the unexpected resolution creates harmonic tension which drives the prelude towards the missing tonic. This process is articulated in the texture by appearance of the low C. The building of tension and delay of resolution plays an important role in the C major prelude as a whole, contributing to its constant forward drive. Likewise, the resolution of the dominant pedal is delayed, and even the arrival of the final cadence is in interrupted by a foreign-sounding progression, bringing in different harmony as well as a change in texture and rhythm.

Example 3-2. Prelude, C major Suite.



3. A Conclusion from the Different Analytical Approaches

In the basis of both approaches to the analysis of the prelude presented here, the rhetorical approach and the thoroughbass approach, lies the Baroque ideal of the use of simple material to create an elaborate composition. This simple material may be the subject of the prelude, the descending scale, from which all thematic material is derived. The structure of the prelude, according to this approach, is unfolded through processes in the elaboration of the subject: it is articulated by the processes of descent and ascent, stepwise motion (as in the first octave of the subject) and arpeggio (as in its second part), and the establishing of the low C of the subject as a gravitation center for the prelude as a whole. In this approach, the prelude's main drive is the striving toward the restatement of the theme and the arrival at the low C.

In the second approach, the prelude is examined in light of its historical source in the art of improvisation through thoroughbass realization. The prelude is seen as an elaboration of a simple, basic model used by Bach in several other preludes. At the same time, the prelude should not be seen as another realization of that model, but more accurately, as an inventive variation of this model, with features unique to the C major prelude, which reflects its role in the suite as a whole.

The structure of the prelude, in this approach, is a result of an underlying thoroughbass plan. The main drive of the prelude is the striving towards reestablishing the main key, in particular because of the harmonic twist of the basic model that prevented its reestablishment at the end of the descending bass scale. Like the subject of the prelude, the main key is fully reestablished only in the concluding measures.

It is not surprising that the structure of the prelude as reflected by both approaches is similar. The thoroughbass “frame” opening the prelude corresponds

with the *inventio*, the theme of the prelude, fulfilling the double role of presenting the theme and establishing the main key. The reappearance of the low C in m. 37, the first step towards a restatement of the theme, occurs at the resolution of the descending scale. The delay in the harmonic resolution of the dominant pedal is parallel to the gradual restatement of the subject. The first "inverted" reappearance of the subject in m. 81, and the second reappearance of the low C, marks the beginning of a harmonic resolution to the pedal and the start of the concluding part of the prelude.

This structure reflects a compositional process, which can be described in the rhetorical terms of the *dispositio*: an argument is first presented by the theme or "frame," then examined to its components by sequences along the descending scale and considered in different lights provided by the harmonies of the scale's thoroughbass figures. Next the argument is confirmed by a dominant pedal, reestablishing the main key, and, right before its final restatement, is being once again questioned by a foreign-sounding passage, providing a contrast and dissonance. Finally, a closing frame of a tonic pedal provides a convincing restatement of the argument.

C. Conclusion.

The origins of the prelude are in an improvised or an improvised-like movement, with the purpose of preparing the following piece, setting the right atmosphere and affection, and establishing the key. Although the prelude of the C major suite belongs to the later, stylized written preludes, it still maintains many of these characteristics. The most obvious one is its use of a conventional thoroughbass formula, a practice common in improvisation.

In fulfilling its function of preparation, the C major prelude provides the right introduction for the C major suite. Its increasing harmonic tension, created not only by the long dominant pedal but also by a continuous delay in tonic resolution that takes part throughout the prelude, strongly establishes the key of C major. The descending octave C major scale, the source of invention of all movements in the suite, is of particular importance in the structure and texture of the prelude. Even the harmonic color of the suite, a result of a common basic thoroughbass plan underlying the dance movements, is reflected by the prelude. The harmonic twist of the basic prelude model, resulting in a sixth degree conclusion to the descending bass scale (replacing the conventional tonic conclusion), brings in the harmonic color of the sixth degree (A minor). This unique design, using an inventive variation of the basic prelude model, creates a connection between the prelude and the dance movements: the harmonic structure of the prelude reflects the A minor middle cadence found in almost all dance movements. Yet, along with the thoughtful design of the C major prelude, it still maintains a sense of freedom and lack of restrictions that conform to its improvisatory nature.

CONCLUSIONS

With all the differences in their origins, both approaches presented here, the rhetorical approach and the thoroughbass approach are in fact closely related.[121] Both stem from a single source: the rhetorical principle of economy of means, or the use of a small amount of thematic material in the source of the musical work. According to this principle, the artistry and innovation of the composer are mainly expressed in the ability to look into the subject, whether new or preexisting, to discover the potential hidden in it and to develop it further through the act of *inventio*. Unlike later periods, in which creativity was most emphasized, perfecting was in the center of the Baroque composer's work.[122]

The economy of means principle is found in each stage of the rhetorical compositional process: from the very first step in which the theme or *inventio* is "discovered," often derived from preexisting material, to the elaboration of the thematic material and its disposition into a complete work. The same principle, however, can be found in the act of bass realization: in this case the bass line is the subject, the preceding element which becomes the source for further elaboration through its realization into a musical work. The bass can be seen as giving an additional dimension to that of the theme by providing the skeleton for the structure of the piece.

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[121] As is evident from the analysis of the C-major prelude, in which both approaches to analysis showed a similar structure (p. 93-94 above).

[122] Dreyfus, *Bach and the Patterns of Invention*, 2.

Bach's C major cello suite shows features that make this work especially interesting from both respects. The thematic connections between the movements, as well as the derivation of thematic materials throughout the suite from a single basic subject, were the focus of the rhetorical analysis of the piece. The thoroughbass analysis of the suite revealed a different kind of connection in the harmonic similarities between the dance movements. These similarities may imply a common thoroughbass skeleton underlying most of the movements (with the second *Bourree* excluded), a skeleton that is elaborated, expanded, and adjusted to the different structures of the movements, which result from the requirements and characteristics of the various dance types.

In addition to revealing the underlying harmonic structure of the dance movements, the thoroughbass approach provides another perspective on the prelude. Through the application of a thoroughbass analysis the prelude can be seen as stemming from the tradition of the improvised prelude, which was often based on a preexisting thoroughbass formula. Such formula is found underlying the C major prelude. However, an innovative twist of the regular harmonic pattern gives a unique structure to this piece, reflecting in its stressing of the sixth degree the harmonic structure of the dance movements.

With these connections between the various movements of the C major suite, a question should be raised: is the C major suite in fact a variation suite? Joel Lester makes a distinction between two types of variations: the strict variations, such as the ones practiced in doubles (as in J. S. Bach's Violin Partita in B minor), and another type of freer variations which can be found in series of dance movements.[123] According to Lester:

[123] Lester, Bach's Works for Solo Violin, 141-47.

> Despite the fact that both the similarities between dances and their doubles and the similarities between different dances are types of variations, there is nonetheless a fundamental difference between these two variation techniques. The doubles are strict variations, in which melody, harmony, voice leading, harmonic rhythm, and phrasing remain quite similar to the model. The similarities between dance movements, by contrast, concern primarily the underlying thoroughbass progression—these variants differ in melody, in phrasing, and in some chordal inversions or progressions.[124]

The C major cello suite belongs to this second type of variations, a type which can be seen as resulting from a compositional technique focused on elaboration and perfection of preexisting material. This is the same technique described in detail in F. E. Niedt's *Guide to Variations*,[125] a guide which, according to Niedt, shows "a very easy method for varying, in many ways, the thoroughbass and the figures written above it, as well as how you can obtain many thousands on inventions through diligence and hard work, and, finally, how you can derive everything that you require from a simple thoroughbass."[126]

Variation technique is found in each stage of the compositional process: in the invention of the theme,[127] in the elaboration of the theme into a complete work, and in the realization of the thoroughbass. When applied to a multimovement work, such as a suite, the use of a variation technique provides an overall harmonic color to the work as well as a sense of unity and coherence, contributing to the distinct mood that can be sensed in each of the six cello suites.

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[124] Ibid., 145.
[125] Niedt, *The Musical Guide*, 56-232.
[126] Ibid., 178.
[127] For example, through manipulations of preexisting melodic patterns, as discussed in Mattheson, *Der Vollkommene Capellmeister*, 281-99.

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