CONTINUOUS HARMONIC STRUCTURE IN J.S. BACH’S TRIPLE FUGUES IN
THE WELL-TEMPERED CLAVIER AND ART OF FUGUE

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This thesis explores how the harmonic structures of J.S. Bach's triple fugues interact with their formal, contrapuntal designs. It attempts to explain how each of these elaborate fugues is supported by a single, uninterrupted structure that holds the entire work together. In Bach's fugues one generally encounters large-scale goal-directed motion towards the concluding tonic; this continuous harmonic motion towards the final tonic is consistent with the aesthetics of the Baroque style, which valorizes constant motion or dynamism.
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CHAPTER 1
INTRODUCTION

1.1 Baroque Aesthetics in the Work of J.S. Bach

This thesis explores how the harmonic structures of J.S. Bach's triple fugues interact with their formal, contrapuntal designs. It attempts to explain how each of these elaborate fugues is supported by a single, uninterrupted structure that holds the entire work together. In Bach's fugues one generally encounters large-scale goal-directed motion towards the concluding tonic; this continuous harmonic motion towards the final tonic is consistent with the aesthetics of the Baroque style, which valorizes constant motion or dynamism.

Let us first consider the Baroque aesthetic of dynamism as manifested in the visual arts, and then explore how similar principles might apply to music. For example, Bernini's statue of David shown in Figure 1.1 is based on directed diagonal lines. As aptly described by Harris and Zucker, “Bernini shows us a less ideal, and more real David [than Michelangelo's]-- one who...is actively fighting Goliath...in the Baroque era we see compositions in the shape of diagonal lines, as in Bernini's David. The diagonal line immediately suggests movement and energy and drama.”¹ The sculpture's illusion of directed movement and energy are of utmost importance; the sculpture is in perpetual motion.

Baroque architecture reached its zenith with artists such as Borromini. Panofsky states: “Baroque architecture breaks up, or even curves, the walls, so as to express a free dynamic interaction between mass and the energies of the structural members, and to display a quasi-theatrical scenery that integrates the conflicting elements into a spatial ensemble, enlivened by

chiaroscuro values and even indicating a kind of osmotic interrelation between exterior and interior space.”

This passage describes Borromini's Sant'Ivo della Sapienza of Rome (see Figures 1.2-1.3). Every aspect of Borromini's church melds into a continuously growing entity. The courtyard connects with the arches, which blend further into the facade. Sprouting from the top of the building is a brilliant, twisting spire; rather than simply culminating straight up to a point, the spire seems to crescendo up and around until it reaches an ornate cross pointing to the heavens. There is an interplay of concave and convex structures over the entire building that contributes to the dynamic effect. The interior of Sant'Ivo della Sapienza makes use of the same integration and dynamism techniques, but additionally presents a high degree of intellectuality. Although the interior plan is contained in a simple geometric circle, within that circle a combination of triangles and rounded edges direct one's gaze higher and higher, towards the top of the dome.

Bach’s work, especially his fugues, conforms to the visual art’s aesthetic of dynamism or directed motion. The harmonic structure is actively progressing towards the goal of the final tonic. Due to the highly complex ornamentation of the basic structure, one often finds continuous revaluation of the harmony. The meanings of similar sonorities are always changing in ever-new contexts. A return to the tonic Stufe too early in the fugue could unacceptably suggest premature stasis. For this reason, after the harmony departs from the tonic Stufe at the beginning of the

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3 It is important to note that the term “Baroque” originally had a pejorative connotation, describing excessive and strange ornamentation; to call a work of art “Baroque” suggested that it was bizarre. Indeed, even by today’s standards, some Baroque art is strikingly grotesque. Take, for example, the adorned bodies of the saints in South German Baroque churches of Gutenzell and Weyarn, one of which appears in Figure 1.5. This grotesque use of ornamentation to honor a religious figure may be considered analogous to the “hyperchromaticism” sometimes found in the music of Bach and Zelenka. The complexity or “Baroqueness” of Bach’s music may be why it fell out of favor in the second half of the 18th century, for it did not conform to the later Classical aesthetics of clarity and apparent simplicity.
fugue, if the “tonic” sonority recurs well before the final cadence, it is generally to be reinterpreted by the deeper-level prolongation of a non-tonic harmony. The principle of undivided structure is readily apparent in J.S. Bach's single-subject fugues, due to their infrequent use of cadence in the original key; in other words, cadences on the tonic usually only appear at the very end. However, this idea requires more clarification for double and triple fugues, where there is often a cadence on the putative tonic before a new subject entry.

1.2 Baroque Aesthetics Shared between Catholic and Protestant Germany

The Baroque style was initially promulgated by the Catholic church during the Counter-reformation as a way of restoring Catholicism's prominence. From an art historical perspective, the Baroque style grew out of Mannerism, which exaggerated proportions and augmented features until they looked unnaturally ideal. Panofsky states that “in Italy, and in its earlier phases, Baroque means a revolt against Mannerism rather than against the `classic' Renaissance. It means a deliberate reinstatement of classic principles and, at the same time, a reversion to nature, both stylistically and emotionally.” Panofsky adds: “Baroque art gave up the principle of Manneristic sculpture of driving the spectator around the groups and figures by a rotating composition... Baroque statures and groups neither deny the conflict between a two-dimensional `view' and three-dimensional bodies, nor do they use this conflict to fill the beholder with a feeling of restlessness and dissatisfaction: they revert to the one-view principle, but this one view is no longer achieved by disciplining the composition to a kind of relief arrangement, but includes so many torsions, foreshortenings, and spatial values... that the `one-view' assumes the character of an imaginary picture plane on which are projected both plastic and spatial
elements.”⁴ Panofsky further elucidates the Baroque style, explaining that it “brought forth the modern landscape in the full sense of the word, meaning a visualization of unlimited space captured in, and represented by, a section of it.”⁵ The Baroque artistic aesthetic aimed to create a full, constantly moving, spatially unlimited, and realistic concept that could be viewed as a single unit. In this sense, Bach's multiple-subject fugues may be analogous to the art and sculpture of his time in their potentially vast directionality; perceiving any dividing cadence or premature return to the tonic Stufe would oppose these ideals.

1.3 Bach and the Baroque

Considering that Bach was an ardent Lutheran, one naturally asks, how and why Bach would be influenced by the “Catholic” Baroque aesthetic? However, in practice, the aesthetic ideals of the Baroque style transcended purely sectarian-religious ideals, so that many Protestant buildings also adopted the novel Baroque dynamic aesthetic. For instance, Frederick the Great (whom Bach visited in 1747), was in possession of a large number of Baroque paintings in his gallery at Sanssouci, despite favoring Protestantism. Although distant from the Baroque's Italian origins, the art of Germanic countries was greatly influenced by Baroque aesthetics. In his book, Baroque and Rococo, Bazin asserts: “It was the Venetians and the Lombards who had the idea of giving mobility to the ceiling space and who, rejecting the help of those architectural elements which the painters had been borrowing from the stage designers, dared to set whirling freely in the sky human figures delivered from the laws of gravity. The Germanic artists took up these researches and pushed them much further; they distorted the space and imparted to it swirling movements, by increasing the number of vanishing points so that the picture came to life for

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⁴ Panofsky, Three Essays on Style, 47.
⁵ Panofsky, Three Essays on Style, 53.
spectators situated in the different parts of the church. And indeed it was in the churches that this
art found its field of expression, for in the palaces - except in their grand staircases - the
dimensions were too small to allow full play for these speculations into the possibilities of
space.”6 7

In fact, one can see the influence of the Italian Baroque reaching as far north as Vor
Frelsers Kirke, Copenhagen (see Figure 1.4). Its spire, built right around the time of Bach's
death, exhibits a brilliant dynamic upward thrust, directly influenced by Borromini's Sant'Ivo
della Sapienza. The Baroque aesthetic was clearly dominant in Bach's lifetime, and he would
have encountered many examples. Indeed, the spread of Baroque aesthetics to Dresden is
especially relevant, for Bach concertized and conducted business there from 1717-41. Both
Augustus I and Augustus II, electors of Dresden, modernized the city in the Baroque and Rococo
styles in the late 17th and 18th centuries; they rebuilt the New Town, which burned in 1685
(Bach's year of birth) and founded Friedrichstadt, northwest of the Old Town. Dresden became a
center for Catholicism within Protestant Saxony due to a requirement that King Augustus the
Strong of Poland, Elector of Saxony, convert to Catholicism in order to ascend the throne. After
the King's death, Bach composed a Catholic Missa (rather than a cantata, which was not
permitted during the official mourning for King Augustus) with the goal of attaining the title,
“Electoral Saxon Court Composer.” Also, while in Dresden, Bach likely became acquainted with
Jan Dismas Zelenka, a fervent composer for the Catholic church. Bach did not simply stay in a
Protestant bubble; he was intimately familiar with Catholic artistic aesthetics.

7 Ruskin supports this assertion stating, “In the first decades of the eighteenth century, Italian influence dominated
German painting. Italian prestige in this field continued to be high throughout the century, and in 1750 Tiepolo
himself was summoned from Italy by the Prince Bishop of Franconia in order to decorate the Palace of Wurzburg.”
It is worth noting that Würzburg is only 95 miles from Bach's birthplace of Eisenach, Germany.
1.4 A Brief Introduction to Formal Terminology

In my descriptions of fugal form, large sections are split into two main categories: Expositions and Developments. While expositions within a fugue may come in many forms, the standard opening exposition presents a subject with alternating subject/answer entries. The Re-exposition presents the same subject from the first exposition with the same order of entering voices. A Counterexposition is built upon an already existing subject. However, in a Counterexposition the subject is not employed in rectus form; instead, it may be inverted or augmented etc. Often, I will label an “incomplete” exposition (one in which every voice is not given a subject entry) simply as “exposition” or, more rarely, “pseudo-exposition,” depending on how closely the exposition adheres to the standards of the opening exposition. A Double or Triple Exposition is an exposition that consists of two subjects or three simultaneous subjects respectively. To be clear, there is a distinction between an exposition of a second subject by itself and an exposition containing both the first and second subjects simultaneously. The former is simply an exposition, and the latter is a double exposition.

A fugal development is a broad term that encompasses episodes and “stray” middle entries. Developmental middle entries usually have no standard expositional relationship to the surrounding material. That is, there is no subject entry acting as answer to the stray entry. Generally, developments are comprised of one or more specific motivic figures that transition to a type of exposition. Less commonly, multiple developments in succession are delineated by weak cadences.

In my formal charts, for the most part, in terms of color, inverted motives are lighter shades than their rectus counterparts. It is almost always the case that the first version of a motif is considered the rectus version. Several minuses indicate diminution, while pluses indicate
augmentation. For the sake of simplicity, only one color is allowed in a specific measure, so that many subjective judgements were made regarding the motif that controls a given measure. Some charts include extra indications such as occurrences of the BACH motif and foreshadowing.

Figure 1.1: Sculpture of David with superimposed diagonal lines

Figure 1.2: Courtyard of Sant'Ivo della Sapienza
Figure 1.3: Dome of Sant'Ivo della Sapienza

Figure 1.4: vor Frelsers Kirke
Figure 1.5: Baroque ornamentation of Bavarian Saints’ remains
CHAPTER 2
EXISTING WORK ON FUGUES

2.1 Karol Berger

Karol Berger argues that Bach's fugues are based primarily on counterpoint, existing as the vessel through which Bach is able to show off his complex contrapuntal technique. While Berger makes many excellent points in support of this contention, he seems to believe that all other aspects of musical composition were deemed secondary by Bach. Berger observes a fugue as a product of three distinct operations. “First,” he states, “it was necessary to invent the subject and figure out what could be done with it contrapuntally; that is, it was necessary to produce the essential components of the exposition and set of demonstrations.”

The term, “demonstration,” refers to Berger's concept that there are various ways that Bach wishes to display a subject using different contrapuntal techniques. Berger claims the second process is deciding a logical tonal framework or plan for the piece. And the third process, which must follow the first two, would be to fit the exposition and demonstrations into the tonal framework.

Berger follows his description of these three processes saying, “Although each of the first two operations is essential, and although neither is the prerequisite for the other, they do not have equal weight in the process of composition, nor are they equally important to the aural experience and understanding of a fugue. Whereas a fairly basic level of musical literacy suffices for devising interesting and elegant tonal plans, inventing subjects capable of interesting and varied contrapuntal treatments requires an incomparably higher level of skill and imagination.”

To Berger, when listening to a fugue, the focus is the subject and what is being done with it.

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contrapuntally. He adds, “Performers and listeners tend to take a logical tonal plan for granted. Indeed, it hardly registers at all; given the temporal nature of music, the demonstrations have to appear successively, and so the order might as well be logical and shapely. Beyond that, the order is not of much interest. What matters are the subject and the demonstrations.”\textsuperscript{10}

It is possible to take issue with many of the ideas expressed in this passage. While the contrapuntal possibilities of a fugue subject must have been a source of great inspiration and joy to Bach, and may have served as the basis for many of his fugues (e.g. WTC I C major or WTC II Bb minor), demonstrating contrapuntal technique was not invariably Bach's primary focus. Oftentimes religious symbolism was key to the subject formation in Bach's fugues, as is evident in the subjects of WTC II F# minor, WTC I C# minor, and WTC I B minor fugues (discussed further in Section 6.3). There are also many fugues where the interludes between moments of contrapuntal ingenuity are expansive in order to create a more elaborate tonal plan. Not all fugues are as dense and garish as the WTC I C major fugue. In many cases, Bach does not “demonstrate” all of the contrapuntal manipulations of which a given subject is capable; as shown in the form charts in this thesis, many permutations of triple fugue entry are not used for whatever tonal, musical plan Bach had in mind. For instance, the first and last triple entry of \textit{Die Kunst der Fuge}'s \textit{Contrapunctus VIII} employ the same voicing while only four of the six possible permutations are used. It was clearly not Bach's goal to demonstrate all possibilities of the three subjects in \textit{Contrapunctus VIII}; rather, the enactment of the tonal plan clearly was a priority.

There is no reason to accept Berger's assertion that Bach's tonal plans are less important than his contrapuntal plans. The only evidence Berger provides to support his hypothesis as to

the overriding importance of the subject’s contrapuntal possibilities are anecdotes related by C.P.E. Bach; the son mentions the joy that the father would take in exploring the capabilities of a given subject. However, these accounts disclose only one side of Bach's creative personality, and do not shed light on his remarkable harmonic imagination, which is no less an intrinsic part of his musical imagination. Also, Berger does not attempt to describe fugues beyond their foreground contrapuntal techniques, missing the possibility for broader parallelisms that may act as another kind of "demonstration." It is entirely possible that Bach (among many other composers) created tonal frameworks for their fugues that are deeply connected to their subjects. The discussion of the Bb minor fugue (WTC II) in the following section displays a profound relationship between subject and background.

2.2 Heinrich Schenker, William Renwick, Timothy Jackson, and Carl Schachter

The first to take a Schenkerian approach to the analysis of fugues was, in fact, Schenker himself. He discusses fugues with readings of Bach's *Chromatic Fantasy and Fugue* and the *Well-Tempered Clavier* Book I: Fugue in C minor. In the former, Schenker does not look far past the foreground, so the latter will be most relevant to this thesis. The exposition of a fugue is most often understood as a motion from tonic to dominant and back to tonic. However, even in this relatively early study, Schenker penetrates deeper into the structure, claiming that the exposition prolongs the tonic harmony. In this sense, the answer's “foreground dominant” stands as the upper 5th of the initial tonic harmony on a deep middleground level. The *Kopfton* is generally established within the exposition. For example, in the *Chromatic Fugue*, Schenker implies the *Kopfton* (5) appears as the opening note of the subject. In Schenker's later reading of

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the C minor fugue (see Figure 2.1), the Kopfion (also 5) appears with the entrance of the answer. In the C minor fugue, the Ursatz arpeggiates tonic harmony while hosting the descent from scale degree 5. Specifically, the Urlinie descends through 4 over VII to 3 over III in mm. 10-11. It continues to 2 over V in m. 16, and closes on 1 over I in m. 20. This structural close generates an octave descent of C to the final C in m. 29. It is important to note that Schenker did not continue his interpretation of the background structure past the tonic arrival in m. 20. The octave descent which follows m. 20 stands in the middleground. Schenker's reading of the C minor fugue has in mind the concept of perpetual motion towards a final goal, but closes the structure prematurely; there is too much static post-structural material. Most important, however, is Schenker’s later concept, the pseudo-Einsatz.

Timothy Jackson, in his article, The “Pseudo-Einsatz” in Two Handel Fugues, investigates Schenker's analytical development through his discussions with Reinhard Oppel regarding Handel's fugues in F Major (from HWV 427) and F Minor (from HWV 433). Jackson's discussion of the F major fugue centers around the interpretation of the tonic reprise. He poses the question, “in these fugues, does the return of subject and answer in the tonic--parallel to their presentation in the exposition--represent a structural return to tonic harmony, or is this tonic return subsumed within a through-composed harmonic progression?” Specifically,

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12 Schenker’s concept of the pseudo-Einsatz unfortunately never made it into publication until Jackson’s article. At first, the pseudo-Einsatz developed out of Schenker’s discussions with Angelika Elias in 1929 regarding the two Handel fugues. Soon after, in 1931, Schenker met with Reinhard Oppel, a renowned Bach scholar, to discuss the subject. During this meeting, Schenker imparted to Oppel his discovery of the pseudo-Einsatz, which he considered essential to a proper understanding of Baroque fugues of Handel and Bach. In Schenker’s graphs of Handel’s F minor fugue (Figure 2.7), he emphasizes the less structural nature of the “tonic” of m. 109 by writing “pseudo” twice.

in the case of the F Major fugue, the crux of the discussion centers on m. 35, where the subject returns in the tonic key. Jackson writes,

Schenker appears to have changed his mind on a point of fundamental significance, namely the relative values of the Stufen in this fugue. In all of Schenker's sketches, measure 35 represents a real return to the tonic, prolonging the tonic from the beginning of the fugue. But, in Elias's [Schenker's student] neat graph, the tonic in measure 35 is placed in parentheses to show that it is really the V-- not the I-- that is prolonged throughout. This change is significant, since it suggests that the reprise, which occurs in measure 35, is not supported by tonic harmony functioning as a Stufe, but rather that it coincides with a tonic chord caught within the dominant prolongation. Schenker's last interpretation--which devalues both the tonic return and the registral shift of the Kopfton--must have been deliberate and calculated. His final reading...asserts that, even though the subject appears to enter “in the tonic” in measure 35, this entrance is not on the same harmonic plane as the first presentation of the subject in the fugal exposition.14

Later in life, Schenker described the “apparent” tonic return as a pseudo-Einsatz, or pseudo-entrance within an alternate prolongation, as opposed to a true return of the tonic Stufe.

William Renwick's book, Analyzing Fugue: A Schenkerian Approach, must be mentioned, for it relates directly to this topic. However, I find some of Renwick's analyses and ideas to be problematic:

With few exceptions the tonal structure of fugues is one part at the deeper levels. That is it supports a single background melodic descent over a single underlying harmonic progression. Interruption plays no part in typical fugal structure...However, as the analyses indicate, fugue often exhibits structural returns to I in a manner not characteristic of other forms. When a tonic appears at the beginning of a sonata development or at the beginning of the second part of a binary form, it normally acts as a middleground passing-chord within a larger motion to a secondary key such as the subdominant. Thus it acts in a contrapuntal not a structural role. However, the repetitions of I that fugue frequently exhibits articulate important points of design, and at deep levels often act as reiterations of an underlying tonic prolongation.15

These “reiterations of an underlying tonic prolongation” tend to contradict Schenker’s concept of the pseudo-Einsatz. Generally speaking, Renwick’s “repetitions of I” may be reinterpreted within

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other prolongations. Take, for example, his analysis of the Bb minor fugue (WTC II), shown in Figure 2.2. He perceives each and every return of the subject in Bb minor to be a return to the tonic \textit{Stufe}. This creates many brief segments with odd progressions such as I-IV-V-VI-VII-I (see mm. 48-67 in Renwick’s analysis). Renwick fails to observe the motivic connections between the foreground subject and countersubject and the deeper middleground.

First, it is important to analyze the subject to understand the features that are expanded and amplified at deeper structural levels. There is no doubt that Bach was aware of melodic augmentation and that he was able to masterfully weave an augmented subject within a contrapuntal texture.\textsuperscript{16} It is probable that Bach would carefully consider the shape of his subjects, and that it would inform the background structures of his fugues. Jackson offers a reading (Figures 2.3-2.5) of the Bb minor fugue, proposing that the background parallels a freely ornamented and chromaticized version of the subject (See Figure 2.5). The head of the subject begins with an ascent from Bb to Db with a neighboring Eb in m. 2. The first two measures serve to establish Bb as tonic. The following eighth note passage in mm. 3-4 (the tail) produces a series of parallel thirds that reach up to F in m. 4. Most important to Jackson’s reading is the rising fifth from Bb in m. 1 to F in m. 4 that parallels the background structure.

The broader parallelism in the fugue’s large-scale bass progression makes its first departure from Bb through C in m. 33 to Db in the same measure. This motion to Db marks the entrance of the III \textit{Stufe}. Renwick reads a return to Bb as tonic in m. 42; however, this Bb could be understood as the preparation for a motion to Eb in m. 48. In this sense, the rising chromatic line Db (m.-33)-D-natural (m. 47)-Eb (m. 48)-E-natural (m. 52)-F (m. 53), parallels both the chromatic countersubject and rising third progression of the subject. Renwick fails to consider

\textsuperscript{16} See the C minor fugue of WTC II (m. 14) for an example of subject augmentation.
this parallelism; instead, he reads a continuing ascent to Gb then A-natural and Bb that produces
the strange progression mentioned earlier. Rather than moving up towards Gb, it is possible to
read a return to Db in m. 55, before the bass descends through Cb in m. 62 to Bb in m. 67. In
Jackson’s reading, measure 67 does not signify a return to the tonic \( Stufe \), as Renwick suggests.
Rather, the III \( Stufe \) remains in force. Indeed, it could be argued, that once the III \( Stufe \) is
achieved, there is no harmonic retrogression back to the tonic \( Stufe \). Rather, the move to Bb
minor in m. 67 may be interpreted as a motion from Db major to Bb minor, whereby Bb minor
now functions as the submediant of Db major. This motion to Bb minor as submediant now
aligns with the inverted subject canon. The fundamental principle, here, is to bring back the Bb
minor sonority supporting the inverted subject canon, but to give it a completely new unstable
harmonic meaning, which is dependent upon the larger-scale voice leading and harmonic
context. In other words, it is essential to Bach’s Baroque aesthetic to redeploy and manipulate
the subject (here the inverted canon) over the same (tonic) sonority but heard from the new
perspective of Db major. As suggested in Jackson’s graphs, the Bb minor chord as VI of Db
major, then moves to Ab major, V of Db major in m. 82. If we consider the even larger context,
across mm. 33-82, the bass descends from I (Db) to V (Ab) in Db major.

In Jackson’s reading, the final “return” to Bb, now Bb major in m. 90, has yet another
harmonic meaning. Here it functions as a deceptive resolution of the dominant of Db major
achieved in m. 82; additionally, Bb minor is modally transformed into Bb major so that it can
serve as the dominant of Eb, the upcoming IV \( Stufe \), which is achieved in m. 93. Thus, where
Renwick reads a tonic return in m. 90, Jackson takes a dominant to the IV \( Stufe \) in m. 93. D-
natural appears over Bb in mm. 90 and 92 to support the dominant function of the Bb entry. The
most improbable return to tonic in Renwick’s analysis occurs in m. 100, which is clearly part of a cadential six-four, as Jackson notes in his analysis.

In this fugue, Bach combines “hyperchromaticism” with harmonic reinterpretation of putative tonic returns to achieve a highly directed, chromatic tonal structure directed toward the real, final tonic. In my view, Renwick's analysis is far too static to accord with Baroque aesthetics of dynamism when the tonic prolongation often covers approximately 75% of a fugue. For example, in Renwick’s analysis of the Bb minor fugue (WTC II), every exposition is treated as a return to tonic, creating a tonic prolongation that subsumes 99% of the piece. Schenker’s concept of the pseudo-Einsatz, vital to our understanding of the ever-evolving forward moving harmony characteristic of Baroque fugues, is absent from Renwick’s book.

Carl Schachter further supports the idea of a single return to the tonic and pseudo-Einsatz in his study of the Bb Major fugue (WTC I). His middleground graph is presented as Figure 2.6. Similar to Schenker and Jackson, Schachter reads the tonic and Kopfton achieved in the fugal exposition. In this case, the subject culminates in a 3-line rather than a 5-line. Schachter interprets the motion to G minor in m. 25 as an arpeggiation towards the Eb major subject entry in m. 37. The C minor entry of m. 26 is understood as the beginning of a descending fifths sequence ending on Eb. Most important for our hypothesis of dynamic harmony is Schachter's treatment of the Bb Major subject entry in m. 41. It is difficult to read this passage as the ending tonic in a way analogous to Schenker's reading of the c minor fugue, for the foreground tonic is only fully realized in the middle of the subject entry (m. 43). Schachter states, “the Bb-chord is insufficiently stabilized to constitute a tonic of structural significance connected with the prolonged Bb harmony of the exposition. Instead I read it as the upper fifth of the sub-dominant
effecting a transition to the cadential dominant of bars 45-48.”¹⁷ In classical understanding, according to *Grove Music Online*, “it is generally understood that the fugue will end with some sort of statement of the subject in the tonic key. Any material following that statement is termed a coda.”¹⁸ This assertion incorrectly connotes that all “last entries” function as the structural return to the tonic. However, as we see in the Bb Major fugue, this return to the tonic does not occur; here, the “closing statement” acts as an *answer* to the subject in Eb, and only from Eb does the background progress. The dominant arrives in m. 45 and quickly resolves to tonic in m. 48.


Figure 2.1: Schenker's analysis of the WTC I C minor fugue

Figure 2.2: Renwick's analysis of the Bb minor fugue (WTC II)
Figure 2.3: Jackson’s analysis of the Bb minor fugue (WTC II) – Deep middleground and subject
Figure 2.4: Jackson's foreground analysis of the Bb minor fugue (WTC II) mm. 41-101

Figure 2.5: Jackson's background analysis of the Bb minor fugue (WTC II)
Figure 2.6: Schachter's analysis of the Bb major fugue WTC I
Figure 2.7: HWV 433, mvt. 4. Schenker’s graph, mm. 84-146
CHAPTER 3

PACHELBEL’S DOUBLE FUGUES

The thesis is organized in such a way that each fugue analyzed is more structurally integrated than the last. A “structurally integrated” fugue is one in which the delineations of formal features are blurred and the harmonic structure is less sectioned. To clarify, the means of organization for this thesis is, for the most part, not chronological. Still, there is a recognizable evolution of structural integrity from the fugues of Pachelbel to those of the high Baroque (Bach, Handel, Zelenka, etc.). Some of the first signs of this evolution are already present in the music of Pachelbel. The examples of this thesis are carefully chosen to illustrate possible ways of evermore tightly integrating fugues on multiple subjects. This chapter focuses on the progressive integration of Pachelbel’s double fugues as predecessors to the same integrative process in Bach’s double and triple fugues.

3.1 Pachelbel’s Ricercari

Many of J.S. Bach's early lessons in music came from his elder brother, Johann Christoph Bach (1671-1721), who studied composition with Johann Pachelbel (1653-1706). For this reason, J.S. Bach was directly influenced by Pachelbel’s music in J.C. Bach's library. Walter Emery and Christoph Wolff write that, “The earliest organ chorales in the Neumeister manuscript, as well as such works as BWV749, 750 and 756, provide plausible examples of pieces [that J.S. Bach] composed before and around 1700 [when he was 15 years old or younger]. They are characterized by sound craftsmanship, observance of models provided by Pachelbel (his teacher’s teacher) and everywhere the sense of an endeavour to break away from
musical conventions and find independent answers.”19 The development of Bach's double and triple fugues arguably grows, at least in part, from his study of Pachelbel's double fugues. Bach's brilliant advances in fugal technique stem from an already developing form found in Pachelbel's music. Also, it is likely that Bach continued to be fully aware of Pachelbel's fugues past his studies with J.C. Bach. Therefore, in order to understand the context in which J.S. Bach developed, it is important to understand the architecture and mechanics of Johann Pachelbel's fugues.20

With regard to Pachelbel's fugues in general, Ewald Nolte and John Butt state,

Perhaps more than any other composer Pachelbel clarified the formal and technical concepts of the fugue and established its artistic principles for those who followed him. For him the fugue was a single entity without contrasting sections, and it generated a highly concentrated form of centripetal energy...He seems to have been one of the first composers to pair a fugue with a preludial movement; the most familiar examples of this type are the Prelude and Fugue in E minor and the Toccat and Fugue in Bb. Both pairs demonstrate his tendency to separate the homophonically orientated improvisational style from the imitative style and to make of each half a self-contained composition that could be performed on its own.21

The vast majority of Pachelbel's fugues are brief, lasting no longer than two or three minutes in performance. However, in his multi-subject fugues and Ricercari, Pachelbel aimed for an unusually lengthy and complex structure for his time. The term “Ricercar” supports this experimental nature. John Caldwell writes, “Originally the term ‘Ricercare’ was used for a piece


20 All fugues that this thesis discusses in detail are mature works of Bach. Das wohltemperierte Klavier II was compiled around 1742 and Die Kunst der Fuge was written in Bach's final decade of life sometime between 1740–50. This implies that Bach had ample time to study and improve upon the techniques of his predecessors and contemporaries. Even the C# minor fugue WTC I (composed 1722) was written well after Bach's time with his brother.

of preludial character for lute or keyboard instrument (as in the expression ‘Ricercare le corde’, ‘to try out the strings’), giving it a meaning comparable to that of ‘tastar’, ‘tañer’, ‘tiento’ etc.”

In other words, the term “Ricercar” literally means something along the lines of an experiment. Pachelbel’s most impressive strides come from his Ricercari in C minor and F# minor. Through a brief analysis of Pachelbel’s conservative Magnificat Fugues and forward-looking Ricercari, we will observe a progression away from subjects with entirely independent harmonic segments towards a more integrated harmonic/contrapuntal structure.

In Pachelbel’s simpler double fugues such as Primi Toni No. 12, Sexti Toni No. 1, and Octavi Toni No. 8, the subjects are distinctly separated by cadences and double bars. Primi Toni 12, for instance, begins with a section solely for the first subject. After a cadence and double bar, a new, separate fugue is played to introduce and develop a second subject. Again, after a cadence and double bar, a new fugue begins. The new fugue combines the previous two subjects simultaneously. In the Octavi Toni double fugue, there is progress towards unification, for the second subject is vaguely foreshadowed in the first segment. After a relatively weak cadence in m. 26, the first subject is played against a new sixteenth note motif that resembles the off-beat sixteenth note pattern that defines the second subject. Despite the foreshadowing, the subjects are still segmented by double bars and strong cadences.

The C minor Ricercari is still divided into three segments, split by cadences and double bars (see the form chart in Figure 3.1). However, Pachelbel introduces a more sophisticated approach to integration. The first section (mm. 1-51) describes only the first subject (S1). The second section (mm. 52-91) presents S1 in inversion (expressing a lament bass motif) and

develops the original and inverted subjects in its episode. There is a foreshadowing of the second subject towards the end of the second section. Finally, the third section (mm. 92-173) introduces the second subject (S2) and develops all the subjects together, adding use of S2 in inversion. The final section presents the subjects one at a time and creates a unified whole similar to that of future Bach fugues. On the other hand, the S1 only receives part of an independent exposition within the third section.

3.2 Form, Counterpoint, and Harmonic Structure of the F# minor Ricercar

While Pachelbel’s C minor Ricercar demonstrates considerable contrapuntal ingenuity, in the genre of double fugue, his Ricercar in F# minor makes far greater strides toward structural unity, as shown by form chart in Figure 3.3. Double bars no longer separate sections, and cadence points are overlapped by new contrapuntal material. Still hesitant to fully unify the contrapuntal material, Pachelbel allows the second subject (S2) a significant amount of time to enter after the “sub-fugue” cadences in m. 41. Measures 50-93 constitute an uninterrupted development of both subjects in their original and inverted forms.

Pachelbel experiments with the expositional entries as well, mixing the original subjects with their inverted counterparts. In a sense, the first exposition and development of the F# minor Ricercar conflates the first two analogous sections of the C minor Ricercar into a single section. S2 arrives in m. 41 with its own exposition that motions forward to a development based on the rectus S1 and S2. Measure 74 marks the first double entry of S1 and S2 in inversion. Pachelbel introduces a few clever alterations to the fugue subject, such as the scalar descent filling in the final notes of the entry in m. 84. The F# minor fugue does not have a clear double exposition. Rather, it integrates the subjects into an ever-developing structure.
It is still entirely possible to read this fugue’s harmonic structure in two parts, where the first part ends and second part begins in m. 41 (the end of the sub-fugue\textsuperscript{23} and beginning of S2). This is supported by the length of the fugue (93 measures), for the first part lasts 41 measures and the second lasts 53 measures; the fugue is split approximately in half by the cadence of m. 41. However, I believe that Pachelbel is striving for a more unified structure, and Bach may have gleaned inspiration from Pachelbel’s experimentation.

The overarching harmonic structure in Pachelbel's fugue follows a I-III\textsuperscript{5--6}-IV-V-I progression (see Figure 3.2). This harmonic structure is similar to that of Bach's Die Kunst der Fuge, Contrapunctus VIII, which will be discussed in detail in the next chapter (Chapter 4). In both fugues, the first subject is assigned its own complete “sub-fugue” to prolong the original tonic Stufe. In the Pachelbel, this tonic Stufe is prolonged until m. 41. III arrives in m. 23, IV in m. 28, and V in m. 39. A 5-6 exchange over IV occurs in mm. 28-32; F# (m. 28) rises to G# in 32. V appears in m. 35, resolving back to I (or the deeper level IV) in m. 41. Both Pachelbel and Bach use the S2 exposition as a way of transitioning to the III Stufe. In Pachelbel's Ricercar the III Stufe appears in m. 49. It is prolonged via 5-6 exchange to m. 61 and quickly progresses to the IV Stufe in m. 63. Like the first subject “sub-fugue” already discussed, IV is prolonged with a middleground progression. II/IV occurs in m. 74, prolonged via 5-6 exchange to m. 82. V/IV arrives in m. 84, which activates A (m. 82) to A# in m. 85 so that it may resolve to IV in m. 86. With the return to the IV Stufe, the music progresses to V in m. 87 and I in m. 88. The final tonic Stufe is prolonged briefly by a plagal extension.

The considerable majority of Pachelbel’s double fugues contain clear delineations of form (double bar lines) that force a break in the harmonic structure. It is only in his more

\textsuperscript{23} Sub-fugue refers to the “complete,” single-subject fugue within a double or triple fugue.
“experimental” Ricercari that these delineations begin to break down. While the C minor Ricercar is split into various sections, the final section could act as its own integrated double fugue. The complete lack of double bars in the F# minor Ricercar is a simple deviation from Pachelbel’s norms that allows for a profound integration of structure. The original tonic Stufe still comes with a clear cadence in m. 41, but the following material flows at a relatively consistent pace without such a strong cadence until the very end.
Figure 3.1: Form chart of Pachelbel's C minor ricercar
Figure 3.2: Analysis of Pachelbel's F# minor ricercar
Figure 3.3: Form chart of Pachelbel's F# Ricercar
CHAPTER 4

KUNST DER FUGE: CONTRAPUNCTUS VIII

Contrapunctus VIII has a similar structure to that of Pachelbel’s F# minor Ricercar in that there is a clear cadence to close the opening tonic Stufe (m.39) and the following music flows continuously to the end. In a sense, the Bach follows a nearly identical deep harmonic structure to that of the Pachelbel, only the Bach is on a significantly grander scale; Pachelbel’s Ricercar is 93 measures and Bach’s fugue is over double the length at 188 measures. Therefore, Bach must use many sophisticated strategies to prolong the various Stufen for such a great length.

4.1 Formal and Contrapuntal Characteristics

As an example of dynamism and continuous motion, I will first focus on Contrapunctus VIII from Bach's Die Kunst der Fuge. The fugue's form, as well as its underlying harmonic structure, is outlined in Figure 4.1. Contrapunctus VIII is comprised of three subjects. Measures 1-39 present an entire autonomous fugue based on subject 1 (S1). This S1 fugue consists of an exposition and developmental episode. The exposition follows a standard subject--real-answer--subject paradigm in the key of D minor. There is a brief link between the subject and its answer in mm. 5-6 that foreshadows the tail motif of subject 2 (S2). This link also occurs between the answer and the last expositional subject in mm. 10-11. The link should not be considered part of the subject, for it is dropped for the majority of remaining S1 entries. In the episode, the most notable manipulation of subject material occurs in mm. 21-25; Here, the subject appears between the “alto” and bass in stretto. The S1 fugue has its “final entry” and “final” motion to a cadence in mm. 35-39.
Immediately following, in m. 39, S2 is introduced alongside S1 in a double exposition. The first subject pair appears in D minor, the second in G minor, and the third in A minor. The end of the final expositional entry presents a stretto on subject tails (mm. 52-54), moving from the bass to “tenor” to soprano. Throughout the S1-S2 development of mm. 53-93, both subjects nearly always exist as a pair. One exception occurs in mm. 74-78, where S2 is joined by free counterpoint. An apparent half cadence ends the S1-S2 development in m. 93.

The third subject (S3) is an inverted and rhythmically altered version of the primary *Kunst der Fuge* theme, and it is given its own independent exposition. S3’s first entrance is concealed in the “alto” voice beginning in m. 94. It is followed by a tonal answer (mm. 99-103) and a real answer (mm. 105-109). The only strong hint of the other subjects occurs in mm. 98 and 99. There, S2’s head motif is scattered throughout the voices. The following development (mm. 110-146), surprisingly, presents no instance of S3 until the triple exposition of mm. 147-163. Rather, the episode of mm. 110-146 further develops S1 and S2. The most impressive use of the subjects occurs in mm. 125-129. S2 is played over two simultaneous instances of S1 that are a third apart. The second S1-S2 development ends with a thinning of textures and quickening of momentum in mm. 144-146.

The triple exposition (three subjects combined) begins in m. 147 with a subject in A minor and two real answers in G minor ending in m. 163. Each subject is represented in turn by each voice of the fugue. There is a brief developmental episode in mm. 163-182 that plays with all three subjects. An ingenious expansion of the BACH motif occurs in the bass of mm. 165-167. The final entry occurs in mm. 182-187, which leads to the final cadence in m. 188.

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24 *Die Kunst der Fuge* is a late, unfinished work by J.S. Bach consisting of 14 fugues and 4 canons. All of these pieces use a variation of a single subject, which I call the primary theme. One purpose of this work was to show the numerous musical and contrapuntal possibilities that such a simple subject could possess.
4.2 Harmonic Structure

The background structure of this fugue comprises a continuous harmonic progression without interruption, namely I-III-IV\(^{(7)}\)-V\(^{6-5}\)-I (see Figure 4.2 for the background and Figures 4.4-4.5 for foreground). Each Stufe gives rise to its own uninterrupted middleground structure, often involving bass arpeggiation of the Stufe. Measures 1-39 contain a complete single-subject fugue based on S1 that represents an expansion of the original tonic Stufe. The motion to F major as III in m. 16 relates back to the significance of the pitch F in S1 itself, which is discussed later in detail. Within the first fugue, F major as III is prolonged by an uninterrupted structure of its own. Thinking in F major, I in m. 16 undergoes a 5-6 exchange in m. 18, which is prolonged until III\# is reached in m. 21. On the surface, the harmony on the downbeat of m. 21 is a cadential 6/4-5/3 motion, suggesting an upcoming return to the tonic Stufe. However, the C\# produced in m. 21 is lowered to C-natural when A returns in m. 24. This modal shift is deceptive; the apparent V\#3 of D must be retrospectively revalued as III/F. Still in the local context of F major, III moves to II in m. 26, then to V in the following measure (m. 27). The return of the root position I occurs in m. 28, which undergoes a 5-6 exchange through C\# in m. 34 to become “I\(^6\)” in m. 35. In this way, the F major chord of m. 16 is transformed into “D minor” in m. 35 via a 5-6 exchange. However, this D minor chord does not represent a return to the tonic Stufe; rather, the deeper middleground progression I-III-I\(^6\)-V\(^7\)-I completes only in the final measures of the opening fugue (mm. 38-39). In this way, the opening fugue is unified by the bass arpeggiation, I-III (m. 16)- V (m. 38)- I (m. 39), which outlines the D minor tonic triad.

The S2 exposition of mm. 39-53 marks the transition from the I Stufe of the opening fugue to the definitive arrival on the III Stufe, F major. The first entry of S2 moves from D minor (m. 39) to G minor in m. 43. The G minor in m. 43 serves as the auxiliary predominant to the F
The F major Stufe is prolonged via another 5-6 exchange extending from m. 49 to m. 92. In the upper voice, this 5-6 exchange is facilitated by an upper neighbor of F, namely the bass G in m. 57; the D that is attained as the fifth of G (m. 58) is prolonged to the return to F in m. 92. Unlike the pseudo-recursive progressions of the tonic Stufe, which prolong multiple harmonies with their own progressions, the prolongation of the local F major tonic here is achieved via prolongation of a middleground neighbor tone. Let us consider the voice leading in the bass in detail, since it relates motivically to S2. In the bass, G initiated in m. 57 rises through A and B-natural in m. 61 to C in m. 62, and then continues through C# in m. 63 (vi7/D) to D in m. 64. This ascending fifth is immediately followed by a descent through C-natural in m. 67 to Bb in m. 71. A voice exchange reestablishes G in the bass in m. 74. At this point, Bach overlays multiple motivic parallelisms. The double neighbor that plays such a vital motivic role in S2 is paralleled by the bass's motion from G to A in m. 82 to F# in m. 84 back to G in m. 85. Measures 86 and 87 unfold another vi7/D, which resolves to D in m. 88. D quickly falls back to G in m. 89. In m. 92, F returns in the bass and, with it, the culmination of the middleground 5-6 exchange as discussed earlier.

Rather than initiating a new Stufe, as one might have expected, S3 marks a motion within the ongoing F major prolongation (mm. 49-143) from F (I) to its mediant, A (III), which is prolonged until m. 143 via its own complete harmonic progression arpeggiating A: A (I, m. 93)-C (I6, m. 109)-E (m. 122)-A (m. 124). On the surface, m. 93 acts as a half cadence. However, at a deeper level it serves a “deceptive” function as III/III. This is directly related to the cadential
motion of m. 21, which served as III/III on a smaller scale. A major, acting as I in m. 93, is prolonged until m. 108. While the C# that appears in m. 93 is altered to C-natural as a way of diverting the listener's expectations, this C# suggests at a foreground level that the music will return to the D minor global tonic. However, the assertion of C-natural in m. 95 creates modal instability transforming the A major of m. 93 into A minor in m. 101. This modal transformation of A major into minor is further supported by the S3 expositional entries. The first S3 entry (mm. 94-98) suggests D minor; the second (mm. 99-103) acts as a tonal answer in A minor, and the third (mm. 105-109) hosts a real answer in A minor. Through these last two entries, A minor gains influence over the course of this exposition. In the bass, the A of m. 108 ascends through B-natural, C-natural in m. 109, C# to D in mm. 113-114. Locally, D acts as V of G (V/natural-VII/A minor), resolving to G in m. 119; however, this motion to G is again deceptive, since Bach raises G to G#, the leading tone of A, in m. 121, and prolongs this pitch via voice exchange to m. 123. The voice leading in this passage indicates that the D of m. 114 functions, in a more background sense, as IV of A minor, which leads to V (E in m. 123) resolving to I (A in m. 124). In other words, G (m. 119) acts as the “upper third” of E (m. 123). This E starts as an inactive dominant in m. 119 that is activated by G# in m. 121. The now active dominant of m. 123 resolves in m. 124. Measure 124 is further marked as a significant goal due to the rising upper voice in the preceding measures and sudden thinning of the texture in the following measures.

A, prolonged through mm. 125–135, supports a subdominant answer (mm. 125–129) answered by the subject (mm. 131-135). This prolongation of A may be supported by Bach's use of register. It is possible to have a subdominant answer (or any kind of close key relationship
between subject entries), especially in the middle section of a fugue.\textsuperscript{25} After the answer/subject entrances complete on A in m. 135, the bass moves to G in m. 139, as II of F, immediately leading to V in m. 140. The importance of this dominant is underscored by the rising ornamentation in the upper voice. V resolves back to I (F) in m. 143. To summarize, over the course of mm. 92-143, the bass arpeggiates the III \textit{Stufe} as F (m. 92)–A (mm. 93-135)–C (m. 140)–F (m. 143).

Shortly thereafter, the triple exposition of mm. 147-163 ushers in the motion to the IV \textit{Stufe} or G minor (m. 157). G rises through G\# in m. 167 to A in m. 168 as II of G minor. In the context of G minor, its V arrives in m. 170, first as D minor. V is prolonged by the triple entry of mm. 170-174. It is most important to recognize that the D minor from m. 170 on becomes activated as the dominant of G minor in m. 175, rather than signifying a return to the tonic at this point. The upper voice’s D in m. 175 returns to the higher register lost in m. 171. This return of register coincides with the resolution of V42 to I6 in mm. 175-176. The bass’s Bb (m. 176) then unfolds to the return of the G \textit{Stufe} in m. 178. G rises through G\# in m. 180 to A as the V \textit{Stufe} (m. 180). The final triple entry occurs in mm. 182-187 with an apparent return to the tonic \textit{Stufe}. Often, the final entry of a fugue is considered a return to tonic. However, I argue that this

\textsuperscript{25} The exposition of Pachelbel's \textit{Ricercar} in C minor might best be understood as following a subdominant answer-subject paradigm due to the recognizability of the inverted lament motif that serves as the proper subject (mm. 4–7). In fact, the third entry, usually ascribed to the subject, appears in the same manner as the second entry, and the following fourth entry appears on the subdominant. All this is somewhat supported by the Dorian key signature employed by Pachelbel, which may express a dichotomy between tonalities of G minor and C minor. That being said, it is possible to perceive the opening as a tonal dominant answer. However, this is a subjective topic. Also interesting to note is the exposition of Bach B minor fugue of WTC I where the subject is followed by a tonal answer in the dominant key a fifth \textit{below} the subject. It was entirely common to write a \textit{Ricercar} of the renaissance in a manner similar to fugue where the “answer” appears in the “subdominant.” One example would be Giulio Segno's \textit{Ricercar quintus}. It is also common for the subject/answer paradigm to be reversed within the body a fugue. Even at the opening of a fugue, the subject/answer paradigm is often reversed by Bach. Take, for example, the exposition of the very first fugue of the WTC, which opens with subject–answer–answer–subject, or the exposition of the G minor violin sonata's fugue which opens in the same way. In \textit{Contrapunctus VIII}, the absence of S3 in mm. 125–135 keeps one from making a distinct judgement on the pairing of these tonalities, for S3 is the only subject with a distinction between subject and answer; S1 and S2 always appear as real transpositions.
putative “tonic” should often be understood within an alternate prolongation, corresponding to Schenker's concept of the *Pseudo-Einsatz*. In *Contrapunctus VIII*, the final triple entry is better understood as a plagal motion within the prolonged V *Stufe*; C# and E in m. 180 rise to D and F# in m. 181, falling back to C# and E for the return of the V *Stufe* in m. 187. This assertion is supported by the journey of F# in m. 181, which dissipates in the following measures. F# (m. 181) falls through F-natural (m.183) to E in m. 187. In a sense, the ending represents a grand expansion of the common *cadenza doppia*, where the upper voice’s C# (m. 180) rises to D (m. 181) and falls back to C# (m. 187) over an understood V *Stufe*. In this triple fugue, then, intermediary motions to the putative “tonic” are to be interpreted as motions within large-scale prolongations of non-tonic harmonies. To support these contentions regarding apparent tonics, the following paragraphs explore how they are paralleled or referenced in later structural levels.

The first subject of *Contrapunctus VIII* immediately presents a dichotomy between the tonalities of D minor and F major. Because the entirety of *Die Kunst der Fuge* is in D minor, the opening D of *Contrapunctus VIII* clearly sounds like tonic. However, if one considers just the first three notes of the subject in isolation, there is a strong implication of F major due to the emphasis on C as the dominant of F (see Figure 4.3). F is also emphasized as a goal by the descending line from the opening D down to F on the downbeat of m. 4. This F then serves as the pivot point in the subject's overall contour. In other words, the tonic harmony is prolonged from the opening until the F of m. 4, which then progresses through to the end of the phrase model\(^{26}\) in mm. 4-5. It is also worth noting that only two notes of the subject are accentuated by an

\(^{26}\) Steven Laitz defines the phrase model as “the harmonic motion of tonic (T), through pre-dominant (PD), to dominant and tonic at the cadence (D or D-T) [which] guides a phrase from its beginning to its cadence.”
ascending fourth: F and D. I believe Bach uses this dichotomy to inspire the growth of III as the lengthiest middleground harmony in mm. 16-38 and the most prominent Stufe from mm. 49-156.

The “first inversion” tonic harmony unfolding in mm. 1-4 generates several middleground parallelisms. One parallelism spans the fugue's exposition. The first subject entry cadences on D in m. 5, the answer cadences on A in m. 10, and the second subject entry purposefully evades D to allow for a cadence on F in m. 16. The cadential points of each subject entry outline F-A-D. Another parallelism is derived from the importance of the III in the subject. The III harmony dominates mm. 16-38 via prolongation and 5-6 exchange. The 5-6 exchange offers a reinterpretation of the “first inversion D minor” harmony that better fits the aesthetics of dynamism. This same sort of 5-6 exchange occurs on a deep middleground level from mm. 49-92.

S2 is constructed in such a way that it may produce the BACH motif in retrograde given that it is in the proper transposition. The occurrences of the BACH motif may be viewed in Figure 4.1. Timothy Smith suggests that the use of the BACH motif in a subject of running eighths represents Bach as a “brook.” This idea is discussed in further detail in my analysis of the F# minor fugue. It is also worth noting that in m. 75 the bass presents the only augmented version of the BACH motif (in retrograde) within the fugue. Perhaps the augmented motif points to the importance of the descent to G in m. 76.

As mentioned earlier, S3's entry is concealed within the contrapuntal web. The harmonic structure subtly supports the new entry. Rather than coinciding with a new Stufe, S3 marks a motion from I/III (m. 49) to III#/III (m. 93) still remaining within the III prolongation. While this progression to III#/III is a major juncture in the harmony, it should not be interpreted as a motion to the V of the tonic Stufe. Since such an interpretation would halt the fugue's forward motion.
Furthermore, from a design perspective, S3 is not entirely new material; rather, it is an inverted variation of the subject that runs through the entire work. Perhaps it is for this reason that Bach did not feel the need to introduce a new harmonic Stufe at S3’s entry.

The triple exposition of mm. 147-163 realizes the motion to the IV (G) Stufe in m. 157. The first entry of the triple exposition heralds the return of the Urlinie scale-degree 3 and shifts the F major harmony of m. 142 to A in m. 148. F major moves to C in m. 152, which then proceeds to D major (F becomes F#) as the dominant of G minor, the IV Stufe, in m. 156. Thus, to be absolutely precise, the arrival of the IV Stufe in m. 157 aligns with the second entry of the triple exposition. The final expositional entry confirms G as the structural IV. We now begin to see a pattern in this fugue that Stufen are, in a sense, produced from various expositions; Stufen do not necessarily occur at the beginning of a fugal exposition. Rather, expositions act as transitions into new Stufen. For instance, the III Stufe arrives in m. 49 towards the end of the S1-S2 double exposition and the IV Stufe arrives in m. 157 towards the end of the triple exposition.

In conclusion, the deep structure of Contrapunctus VIII is nearly equivalent to the Pachelbel Ricercar, but because of its breadth, the Bach finds ways of prolonging its Stufen with many recursive progressions. Each of these progressions has its own directed motion, which “keeps the story going” from beginning to end. Still, the structure is not entirely integrated, for the cadential gesture and stop in contrapuntal motion of m. 39 is overpowering.
Figure 4.1: Form chart of Contrapunctus VIII
Figure 4.2: Deep middleground of *Contrapunctus VIII*

Figure 4.3: Characteristics of S1
Figure 4.4: Foreground graph of *Contrapunctus VIII* p. 1
Figure 4.5: Foreground graph of *Contrapunctus VIII* p. 2
CHAPTER 5

KUNST DER FUGE: CONTRAPUNCTUS XI

With Contrapunctus XI one sees a deviation from the tonal plans of Pachelbel and Contrapunctus VIII. The structure of Contrapunctus XI is centered on deep level parallelisms of the primary subject. These parallelisms produce grand portions of musical material, each prolonging a single continuously growing Stufe.

5.1 Formal and Contrapuntal Characteristics

Contrapunctus XI of Die Kunst der Fuge is extraordinarily dense in its use of motivic material. It includes three subjects, a lament countersubject, and all of their inversions. The subjects of Contrapunctus XI are directly related to those of Contrapunctus VIII; the first subject of VIII is the inverted second subject of XI (S2), the second subject of VIII is the inverted third subject of XI (S3), and the third subject of VIII is the inverted first subject of XI (S1). For simplicity's sake, from this point forward, I refer to all motivic figures in terms of the fugue in which they appear. See Figure 5.1 for the fugue's contrapuntal form.

S1 (of XI) is a variation of the subject that runs throughout Die Kunst der Fuge. As in Contrapunctus VIII, S1 is broken into characteristic segments that are three notes long. All segments excluding the first outline a third (F-E-D or C#-D-E) that presents the basis for deeper parallelisms. The exposition for S1 spans mm. 1-17. The free counterpoint within the exposition and the following development (mm. 17-27) makes extensive use of the final segment of S1 (m. 4) in rectus and inversus (regular and inverted forms). In this way, the “sub-fugue” of mm. 1-27
stands as a cohesive, organic whole. Like in *Contrapunctus VIII, Contrapunctus XI*'s “sub-fugue” hosts a “final” statement of the subject (mm. 22-26).

The second half of m. 27 marks the beginning of the S2 exposition. This exposition begins with a countersubject (CS) placed above the subject in mm. 28-30. The countersubject is given greater autonomy as a recurring motif when the bass plays its inverted form in mm. 30-32. Often in fugues, as more rests accrue in a given voice, it becomes increasingly likely to enter with important motivic material. The bass voice of mm. 30-32 only rests within the exposition of S2 until m. 30. It rests again after m. 32 until the countersubject (rectus) returns once more in m. 35. The isolated entrance of CS in mm. 20-32 is unusual for Bach. Perhaps Bach is pointing to its importance, for it is a descending lament figure (an important figure that will return several times in our discussion of other fugues). Moving forward, mm. 31-32 present an important recurring motif in the alto voice. The motif consists of straight eighth notes thrusting forwards and upwards through an ascending fourth (A4 motif). S2 is given to the tenor voice in mm. 34-37. The counterpoint of S2 and its CS is inverted, showing the pair's contrapuntal versatility. Measures 38-42 primarily plays with the A4 and lament motifs before the bass entry of S2 in m. 43. Oddly, the soprano is never given a full statement of S2 within the S2 exposition. Rather, the music proceeds to a development starting in m. 47.

The development of m. 47 starts with transitional material that moves towards a section of interplay between CS inversus and S2 inversus (mm. 54-71). In other words, the lament figure is ubiquitous in most of this development. Measure 71 displays the culmination of many lament figures at a cadence on A. From m. 71 a counterexposition based on S1 inversus begins. This

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27 It should be noted that the gray segments of my form chart do not necessarily imply unique, free contrapuntal material; I decided against highlighting every motif to avoid confusion. The elements that are given specific colors, however, are consistently highlighted throughout the form chart of the fugue.
exposition resembles that of Contrapunctus VIII's third subject because of its placement after S2 and its inversion. The subject entries are slightly irregular, with subject statements in A minor (mm. 71-75) and D minor (mm. 76-80) followed by an answer in D (mm. 80-84), and finally a subject entry in D (mm. 84-88).

Immediately following the S1 counterexposition is a double exposition containing entries of S2 as well as the new S3 (mm. 89-97). In essence, S3 (first spanning mm.89-92) is a rising scale that begins with a relatively long syncopated quarter note followed by a series of rising eighth-note figures. The way in which these eighth-note figures are designed allows for the appearance of many BACH motifs throughout the fugue, as in Contrapunctus VIII. However, now that the subject is inverted from its counterpart in Contrapunctus VIII, the BACH motif may shine in its rectus, i.e., correct form. The number of transposed BACH motifs is quite large, so the form chart only takes note of BACH motifs that occur with the literal pitch classes, Bb-A-C-B-natural. The length of S3 is variable. In fact, the first entry of the exposition (mm. 89-91) uses its characteristic “BACH-y” eighth note pattern four times while the second entry only uses the pattern twice. The bass is not assigned a proper S3 entry within the exposition (similar to the absence of a soprano entry in the S2 exposition).

The following material spanning mm. 97-145 is entirely developmental. It is impossible to strictly delineate the various “sub-developments,” yet one of many possible interpretations is given in the form chart. The first development (mm. 97-114) deals with an entry of S1, an entry of S2 inversus, many layers of S3 inversus, and an instance of CS inversus to accompany S2 inversus. The weakened cadence of m. 114 marks the beginning of the next development (mm. 114-129). This development employs the rectus versions of S2, CS, and S3 in alternation with the inversus versions of S3 and CS. The stronger cadence in m. 129 marks yet another
development (mm. 129-146), which consists of S3 in rectus and inversus, S1 rectus, S2 rectus, and a few instances of CS in rectus and inversus.

The cadence on C in m. 146 is a pivotal moment in which all three subjects first appear together. Normally, one would expect a full triple exposition to occur at this point. However, Bach uses mm. 149-157 to transition (using primarily rectus and inversus S3) to an interpolated “pseudo-exposition,” starting in m. 158. This exposition, based on S1 rectus and inversus concurrently, injects the triple exposition with powerful symbolism. The use of chiastic figures is undeniable, especially in the entry of mm. 164-168, which likely had religious significance for Bach (see Section 6.3). The importance of mm. 164-168 is enhanced by the inverted lament figures on either side of the bass's entry (mm. 162-163 and 168-169). Also, during the inverted lament of mm. 168-169, the soprano hosts a BACH motif. Measures 169-175 sound climactic, moving to a strong dominant A in m. 174. However, Bach uses S2 in the bass to deceptively evade a cadence in m. 175. Measures 174 to the end, therefore, complete the triple exposition initiated in m. 146. The trend of missing expositional entries is continued, for every subject of the triple exposition is only heard three times, leaving an entry of each subject void in a certain voice (no S1 in the bass, S2 in the alto, or substantial S3 in the soprano). Measure 181 showcases one more interesting contrapuntal device: a diminution of the lament figure.

5.2 Harmonic Structure

The breadth of Contrapunctus XI is so grand that it can be difficult to follow its deeper structures without defaulting to an interpretation with consistent tonic returns (à la Renwick). However, Contrapunctus XI employs brilliant long-range voice exchanges and motivic parallelisms to tether its structure to a unified, ever-unfolding whole. In the deepest sense, Contrapunctus XI is supported by the large-scale harmonic progression, I-VI<sup>5/6</sup>-V<sup>6/4-5/3</sup>-I (see the
deep middleground and foreground graphs in Figures 5.2-5.3). As in *Contrapunctus VIII*, the opening tonic *Stufe* is prolonged through the opening “sub-fugue” spanning mm. 1-27. This sub-fugue is prolonged with its own middleground descent in the upper voice. The *Kopfton*, 3, is achieved in m. 19, continuing with a middleground descent to 2 over V in m. 25, and closing on 1 over I in m. 27. Bach provides a subtle and intriguing foreshadowing of the second subject within the prolongation of the middleground scale degree 3 (mm. 19-23). An inner voice rises from D (m. 19) through Eb and E-natural (mm. 19-21) to F in m. 23. These tones organically “evolve” into the CS of mm. 28-29.

Rather than introducing or transitioning to a new *Stufe* with the entrance of S2 (m. 27), Bach transitions away from D on a deep middleground level towards E in m. 38. This action is realized via a large-scale chromatic voice exchange; specifically, D and F from the opening are exchanged with F and D# in m. 37. The augmented sixth (!) pushes outward to E in m. 38 (after the second S2 subject entry). The E in the upper voice of m. 38 must be implied as the resolution of the D# leading tone; the upper voice of m. 37 presents a common cadential trope\(^2\) in which the leading tone (C#) is deceptively lowered to C-natural in m. 38, transforming into the lamenting CS motif. The music from mm. 38-60 serves to unfold E down to C as the dominant of F. This unfolding of E to C begins with a descending fifth motion from E to A in m. 47. A is prolonged to m. 51, where there begins an outward, scalar motion between the outer voices towards G and Bb in m. 53. G as the dominant of C is prolonged in mm. 53-60 by a double neighbor figure in the bass. The bass's G in m. 53 rises through G# in m. 56 to the upper

\(^2\) For a clear example of this trope that resolves in the expected fashion, see mm. 180–181 of *Contrapunctus VIII*. The soprano holds D as the dominant, A, arrives in the bass, creating a 4–3 suspension. D resolves to C#, which acts as the leading tone, resolving to D in m. 181.
neighbor, A, in m. 57. F# as lower neighbor appears in m. 59, resolving to an understood G in m. 60. On the surface, however, the bass makes use of the lamenting CS to arrive at C in m. 61.

C as the dominant of F is prolonged through mm. 61-88 by means of a large-scale internal auxiliary cadence. First, there is a motion from C to D as V to VI in F in mm. 61-77. C then unfolds to A in m. 67, at which point the upper voice transforms C into C#, the leading tone to D. In this way, the upper voice allows the bass's A in m. 67 to act as the dominant of D, resolving to D in m. 77.²⁹ D as VI of F in m. 77 moves to G as II in m. 85, then to C as V in m. 88, resolving to F as I in m. 89. This internal auxiliary cadence in mm. 61–88 supports the upper line’s descent 3-1 in mm. 67 - 89. The bass motion from the opening D to F in m. 89 completes a large-scale third progression D-E (m. 38)–F (m. 89) that parallels the thirds that comprise S1 on the foreground. With the culmination of this third progression in m. 89, the music is now ready to progress to a new Stufe.

Measure 90 marks the beginning of the VI (Bb) Stufe whose arrival is aligned with the third subject exposition. The VI Stufe (Bb) spans m. 90 to m. 182 (about half of the fugue). Bb (m. 90) is prolonged by moving to its “upper third,” D (m. 169), before Bb is regained in m. 181. The rising-third progression Bb-C-D becomes a colossal enlargement of the third progressions embedded in the first subject, now transposed down a third from D-E-F in the first part. As shown in Figure 5.3, A as a lower neighbor to Bb is prolonged through mm. 95-106 until it unfolds down to F in m. 108 as the dominant of Bb, which is recaptured in m. 109 and again in m. 114. Now, the third progression from Bb in m. 114 through C in m. 146 to D in m. 169 is

²⁹ The strong cadence on A in m. 71 looks to be deeply structural. However, I argue that its structural importance is undermined by the motivic material. The counter-exposition of m. 71 does not introduce a new subject. Rather, it inverts S1. The more structural Ursatz motion from I to VI is fulfilled with the introduction of the third subject in mm. 89-90.
realized in an exceptionally complex, chromatic way. Beginning in m. 114, Bach employs a very striking tritonal progression from Bb major (m. 114) to E major (m. 121). The E major of m. 121 can be understood retrospectively as #IV of Bb major. Following the bass in the course of the densely chromatic passage of mm. 114-120, Bb ascends to B-natural in m. 120, which then resolves directly to E major in m. 121 as its dominant. Prospectively, now E major can be revalued as the “upper third” of C major in m. 146; in other words, E major becomes III#3 of C.

In order to stabilize C major in m. 146, the G# of the E major chord must be lowered to G. Bach “corrects” chromatic G# to diatonic G by means of the descending-fifth sequence (E-A-D-G-C) that fills in the descending third between E and C. More specifically, measures 121-146 serve to unfold E to C via descending-fifth sequence; E moves through A in m. 129, D in m. 132, and G in m. 145, resolving as dominant to C in m. 146. At a deeper level of structure, Bb (m. 90) can be understood as rising through the chromatic B-natural of m. 120 to C in m. 146. Once the C of m. 146 has been secured as a passing chord coming from Bb, at a deep middleground level, C rises through C# in m. 168 to D in m. 169.

At a shallower level of structure, the C of m. 146 is prolonged to m. 168 by a series of complex chromatic passages, starting with a pair of chromatically ascending whole step patterns. The first instance occurs with the motion from C (m. 146) through C# to D in m. 153. At this point, the D of m. 153 acts as the dominant of G, arriving parenthetically in m. 155. Similar to the chromatic motion, C-C#-D, in mm. 146-153, the parenthetical G (m. 155) rises up through G# in m. 157 to A in m. 158. A acts as the dominant towards D in m. 159, pushing further still towards G in m. 160. The G of m. 160 is an important shallow middleground goal, for it acts as an interpolated dominant to the C’s of mm. 146 and 168. The G minor harmony of m. 160 is activated by B-natural in m. 168 as the dominant of C. B-natural (m. 168) pushes upwards to the
C of the following beat. The rise to D in m. 169 is the culmination of the massive third progression originating in the VI, Bb, Stufe discussed earlier.

The Bb Stufe is picked up by the bass in m. 175 as a foreground deceptive resolution, brilliantly conceived by threading the original instance of S2 into the attempted cadence on D (mm. 174-175). Now that Bb is reestablished in m. 175, VI undergoes a chromatic 5-#6 exchange in m. 181; F-natural (m. 175) rises to G# (m. 181) in a deep sense, allowing VI to evolve into an augmented sixth. This incredible evolution is reminiscent of the earlier augmented sixth in m. 37 that also carried deep structural significance. The augmented sixth of m. 181 undergoes a voice exchange in the following measure, creating a highly dissonant “French” diminished third harmony (G#-Bb-D-E) at the very end of m. 182. Measure 183 resolves the pent up dissonance of the predominant diminished third harmony to the cadential V Stufe. The Kopfton (3) in m. 183 still sits at the top of the staff. The cadential six-four, when resolved in the penultimate measure, brings the Kopfton, 3, down to 2. The final measure resolves to the tonic Stufe and the Urlinie's scale degree 1.

G# seems to play a special role in the end of Contrapunctus XI as it tries to reach up to the dominant, A. The first G# of note occurs in m. 121, where it is subjugated down to G-natural as the “upper fifth” of C (m. 146). It is not until mm. 181-182 that there is a structural, functional rise of G# to A in m. 183. Perhaps the foreground motion to the distant key of E major in m. 121 relates to Bach’s symbolic representation of Kreuzer, for E major has 4 sharps or crosses that are so foreign to the key of D minor. The tritone relationship mentioned earlier between Bb (m. 114) and E (m. 121), plus the G# subjugation to G-natural (mm. 121-146) may represent Christ’s painful bearing of the cross. On the other hand, the G# of mm. 181-182 that rises to A in m. 183
may represent a much more optimistic “lifting” of the cross to counteract the darker symbolism of mm. 114-146.

In summary, the tonic Stufe of Contrapunctus XI grows from D (m. 1) through E (m. 38) to F (m. 89) before a clear cadence introduces the third subject and the VI Stufe. The VI Stufe, like the tonic Stufe, acts as the fountainhead for a broad, rising 3rd, parallelism: Bb (m. 90)–C (m. 146)–D (m. 169). These broad parallelisms make for the vast majority of the fugue, showing that the use of parallelisms is an equally powerful prolongational strategy to those used in Contrapunctus VIII or Pachelbel’s Ricercar.
Figure 5.1: Form chart of Contrapunctus XI
Figure 5.2: Deep middleground of *Contrapunctus XI*
Figure 5.3: Foreground graph of Contrapunctus XI
CHAPTER 6

WOHLTEMPERIERTE KLAVIER II: F# MINOR

Bach's Fugue in F# Minor is the first triple fugue to be discussed to withhold a cadence in the original key until the very end. The entrance of various subject expositions do not point to new Stufen as they did in the Contrapuncti considered earlier. Rather, the subject expositions act together to fulfill a singular harmonic task: unfolding the tonic Stufe. Only after the subjects arrive does the structure progress forward to new Stufen.

6.1 Formal and Contrapuntal Characteristics

Bach's Fugue in F# Minor is a triple fugue (see Figure 6.1 for a chart of its form). A graph displaying the characteristics of the fugue's subjects is provided in Figure 6.2. The first subject (S1), featuring a descending 5–line, encompasses the opening to the downbeat of m. 4. Other significant surface features include the interval of a sixth (m. 1, between beats 3 and 4) and the double neighbor around C# in mm. 1–2. The second subject (S2), starting in m. 20, supports a 3–line beginning with A. The G# (m. 20) acts as a passing tone to F#, and, as the harmony changes over the barline into m. 21, 2 is implied over E#. 1 is achieved on beat 2 of m. 21 with F#. Especially significant from a foreground perspective is the fourth outlined by the first four notes of the subject. Starting in m. 36, the third subject (S3) articulates another 5–line spanning G# (m. 36) to C# (m. 37), which acts as V of F# (m. 38).

The first exposition follows a standard subject–tonal–answer–subject paradigm in which there is tonal adjustment to just the first note of the answer. There is a brief link between subject and answer consisting of an ascending scale. This ascent immediately reverses the descent that is so characteristic of S1. The link between answer and subject (mm. 7–8) parallels the 5–line descent with upper neighbor (C#–D–C#–B–A–G#–F#) from S1 via a clever instance of voice
crossing. As the final voice enters in the bass, the upper two voices fragment the head motif of S1, playing its original and inverted variants in stretto. From a purely contrapuntal perspective, the first development (mm. 12–20) is relatively difficult to distinguish from the exposition, for the fragmentation of S1 only becomes more dense; there is hardly any free counterpoint in the dense fog of S1 material. Also, Bach's common use of S1’s beginning downward arpeggiation consistently deceives the listener into expecting a full subject entry when it is only a fragment.

Measures 20–24 mark the exposition of S2, which plays with fragmentation and stretto even before every expositional entry arrives. The first entry appears in F# minor in m. 20. The inner-voice entry seems to arrive in m. 21; however, it is a deceptive entry that only makes use of the head motif. In fact, it is the soprano voice that presents the full second subject entry in B minor (mm. 21–22). Before the second entry completes, the inner voice articulates another S2 head motif (m. 22). Finally, the third iteration of the head motif in the inner voice continues to the tail motif in mm. 22–23, this final entry briefly emphasizing E as local tonic (however, as the voice leading sketches show, E functions as dominant of A). A “redundant” entry occurs immediately afterwards in the bass (mm. 23–24) that motions to A major. The four entries of the exposition, therefore, follow a descending fifths pattern (F#–B–E–A) that departs from the A cadence of m. 20 and returns to A in m. 25. At m. 25, another development begins, containing instances of S1 (mm. 29–31 and 34–37), S2 and fragmentations of their motifs. Again, Bach hardly deviates from subject material during the second development.

Measures 34–37 contain a full statement of S1, slightly altered to better act as a bass line for the cadence to C# minor in m. 37. The entrance of S3, arriving in m. 36, is gracefully intertwined with the cadential motion V-I in C# at this juncture. Normally such a cadence would precede and announce a new subject exposition (as is the case for S2's exposition in m. 20). But
here Bach aims to blur the lines between sections of the fugue, which further supports the idea that dynamism is a paramount goal of the Baroque aesthetic. This blurring is especially pronounced as the music moves further from the opening, for the dynamic sixteenth-note motion from m. 36 continues uninterrupted to the final cadence of the fugue.

The first entry of S3 (mm. 36–38) first suggests C# minor, but leads to F# in the bass in m. 38. The motion to F# overlaps with the second entry, which leads to B minor in m. 39. As in the overlapping S3 entries one and two, entry three suggests B minor until the latter half of m. 39. Then there is another “redundant” entry in mm. 39–40 that returns to C# as local tonic. For a significant majority of the S3 exposition, the entries also follow a descending fifths pattern. To summarize, the subject entries follow the descending-fifth pattern C#–F#–B returning to C#.

Notice that the return to C# tonality from m. 37 to m. 41 has a similar circular nature to the S2 exposition.

The following development (mm. 41–54) utilizes almost exclusively S3 material with free counterpoint (at least at a surface level perspective). Parallelisms will be discussed further in section 6.2). The single striking exception occurs in mm. 51–54, where there is a sort of “stray entry” of S1 in B minor. From a formal perspective, this entry is somewhat out of place as it comes at the end of the S3 development and before the triple exposition of mm. 55–69. This aberrant entry of mm. 51–54 will be discussed further in the following section.

The triple exposition (mm. 55–69) combines all three subjects in various ways, bringing the fugue to its close in m. 70. The first entry begins in m. 55 where the soprano enters with S1 and the inner voice with diminutions of S2, until a full presentation of S2 arrives in m. 56, when the bass hosts S3 in a flurry of unending sixteenth notes. The key suggested here is F# minor. The link between first and second entries (mm. 57–60) introduces a pseudo-canonic passage in
the upper voices, which starts with the inverted head motif of S1. The second entry (mm. 60–63) employs a more distinct occurrence of S2 and S3 (they are introduced with a preceding rest) while S1 grows out of the sixteenth-note texture built earlier by S3. A link consisting of inverted S1 head motifs on a bed of S3 sixteenths and S2 quarters extends from the motion to C# in m. 63 through m. 65. The third and final entry of all three subjects occurs in mm. 66–69 with a motion back to F# minor. This time, all three subjects have distinct entries. One oddity in the triple exposition of this fugue is that only S3 is given to every voice; S1 appears in the soprano twice, and S2 appears in the inner voice twice.

6.2 Harmonic Structure

The background structure follows the harmonic progression, I^5–6–IV^5–6–V^6/4–5/3–I (see Figures 6.3 and 6.5-6.8 for the deep middleground and foreground graphs respectively). The opening F# Stufe is prolonged through m. 48, expanded via deep middleground unfoldings. In contrast to the Kunst der Fuge examples in which the new subjects each transition further from the original tonic Stufe, here each subject of the F# Minor fugue exclusively unfurls the opening tonic; subject two unfolds to A in m. 20, and subject three to C# in m. 37. In this sense, the three different subject expositions act together as the macro-exposition from which the harmonic structure departs. In fact, this tonal schema is paralleled within the first fifteen measures, even before the second subject enters. The first subject exposition expands the tonic, and immediately afterwards there is an S1 head entry in the key of A (m. 13), followed by an S1 head entry in the key of C# (m. 14). In other words, the bass takes the first tonic arpeggiation of mm. 1-17, and expands it on a grander scale as F# (m. 1) –A (m. 20) –C# (m. 37) –F# (m. 38) to underpin the exposition of the three subjects.
Let us consider this exposition in a bit more detail. The motion from F# to A in m. 20 is facilitated by a series of sequential descents in mm. 16–20. The descent in the bass follows a scale from F# to E as the dominant of A. The upper voice takes the S1 entry of mm. 16–19 one step further in its descent, reaching E in m. 19. Then, the E of the soprano (m. 19) rises to G# (m. 20), creating a voice exchange with the bass that emphasizes E as the dominant of A. The purpose of moving to A (arriving in m. 20) is to unfold to C# in m. 37. This motion is fulfilled by the insertion of a middleground passing tone, B, that is prolonged from m. 27, and rises chromatically through B# in m. 34 to C# in m. 37. The motion from A (m. 20) to C# (m. 37) in the bass is accompanied in the top voice by a large-scale parallelism of the C#–D (m. 27) –B(#) –C# (m. 37) double neighbor figure that is featured throughout S1. The S2 entry in the soprano of m. 21 picks up the Kopfton (scale degree 5) as the primary tone from which the double neighbor is generated. As the bass motions to B in m. 27, the soprano reaches D as an upper neighbor to C#. The soprano's B# in m. 36, procured via voice exchange from the inner voice's B# in m. 34, acts as the lower neighbor to C#. The Kopfton then returns, completing the double neighbor figure, in m. 37.

From m. 37 the harmonic structure is now finally ready to move away from the tonic Stufe, for it has completed its unfolding of the tonic harmony (F# for S1, A for S2, and C# for S3). The first motion occurs with the third entry of S3 in the bass of m. 38. F# in the bass in m. 38 heralds a reiteration of the tonic Stufe that here experiences a 5–6 exchange, transforming the harmony from the expected F# minor to a D major six-three chord; the inner voice moves from C# (m. 1) to D (m. 38) over the bass's F#. This 5–6 exchange is crucial to the move away from F# minor, since it facilitates a motion to G# in m. 43 without producing parallel fifths (C#–D# and F#–G#). The first motion to G# is in m. 41, which seems to act as the dominant of C# (G#
major). However, moving forward, B# (m. 41) is lowered to B-natural in m. 43 and G# is granted its own right as foreground tonic. As already observed, at a deeper structural level, this G# of m. 43 acts as a passing tone leading from the F# (Stufe) through the A# of mm. 47–48 to the B or IV Stufe of m. 49.

The IV Stufe receives tremendous emphasis since it is prolonged through to the penultimate measure of the fugue. While D major seems to be accorded a certain weight in m. 51, it is quickly abandoned for a return to B minor; rather, here the bass briefly unfolds to D as the “upper third” of B. A voice exchange of B and D operative between mm. 49 and 51, connects the bass's B in m. 49 to the soprano's B in m. 51. At the same time, the D in the soprano of m. 49 moves into the bass in m. 51. This voice exchange is then reversed at the end of m. 53. The prolongation of B to m. 54 is also supported by the B minor S1 “aberrant entry” in mm. 51–54. The IV Stufe unfolds to its “upper fifth,” F#, in m. 55 with the first triple entry. F# is prolonged via the F#-A voice exchange to m. 57, after which the bass arrives on C# in m. 59. This C# of m. 59 is significant as a deep-level passing tone connecting the B Stufe of m. 49 with the D# of m. 62. A colossal, doubly chromatic voice exchange involving B, B#, D, and D#, spanning mm. 49 and 62, connects the IV Stufe, with C# achieved in m. 63, as II of B minor. More precisely, B in the bass of m. 49 moves to B in the inner voice of m. 62, while D-natural in the soprano of m. 49 moves to D# in the bass of m. 62. In m. 63, thinking in terms of B minor, and the relationship of fugal design to structure, the motion from I to II is also activated by the completion of the second triple entry. II is prolonged by yet another chromatic voice exchange spanning mm. 63–66 involving C#, E, and E#. Here, within the aegis of the C# prolongation, E in the soprano of m. 63 moves to E# in the bass of m. 66 while C# in the bass of m. 63 moves to the C# in the soprano of m. 66. As the final triple entry begins in m. 67, so does the prolongation of V of B minor. A final
voice exchange between F# and A from mm. 67–69 completes the prolongation of V of B minor, resolving back to I (the IV Stufe) on the last eighth of m. 69. For the very last sixteenth of m. 69, the IV Stufe undergoes a 5–6 exchange before progressing to the V Stufe in m. 70. Only in the final measure does the structure close upon the final tonic F# minor Stufe.

6.3 Symbolism in Bach's Fugues

The great significance of the motion to the IV Stufe in m. 49 is supported by Timothy Smith's symbolic reading of several fugues that include the F# minor from WTC II. Smith believes that the first subject of the F# minor fugue relates back to the subject of the B minor fugue from WTC I, and the third subject of the F# minor fugue relates back to the second subject of the C# Minor fugue from WTC I (to be discussed in Chapter 8). The similarities are most striking between the F# Minor and C# Minor fugue subjects, both of which contain a constantly flowing texture of sixteenths or eighths respectively. Smith claims that these fugues are grouped together for a reason: they carry significant religious symbolism relating to Jesus' cross and crown of thorns.

First of all, the flowing subject is comprised of a series of chiastic figures. Smith explains the influence of such figures on Bach's music through his discussion of the first subject of the C# minor fugue. Smith calls attention to the way in which the first subject of the C# minor fugue quotes the Advent chorale, Nun komm der Heiden Heiland, which he believes to be universally recognized as chiastic. Smith points to Bach's setting of the word “kreuzigen” in the St. Matthew Passion to further support his argument (see Figure 6.4).\(^{30}\)

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The constantly “flowing” subjects of the F# and C# fugues, also consisting of chiastic figures, may represent Bach himself. “Bach” means “brook” in German, which corresponds to the character of the flowing subject. Also, the (transposed) BACH motif is presented a few times within the C# minor fugue (see mm. 41–42, 48–49, and 64). Smith further suggests that these chiastic motifs have direct correlation to the numerological representations of Bach's name. If one assigns each letter of the alphabet a number: A=1, B=2, C=3, etc., counting the letters J and I both as 9 (as was customary in Germany at Bach's time), then the letters of a given word or name may be added together to produce a single number of symbolic significance. For instance, BACH = 14 or JSB = 29. It is believed that Bach had an affinity for inserting these numerological messages in his music. Perhaps it is significant that the F# minor fugue is the fourteenth of the WTC II, or that there are 29 uses of the chiastic motif in the same fugue.31

Most important to our discussion of the IV Stufe in the F# minor fugue is Smith's idea of the musical representation of Jesus' crown. To understand its use in the F# minor fugue, it will be helpful to understand Smith's discussion of the crown symbolism in Bach's life. He points to Bach’s monogram as part of the basis for his argument. Bach’s monogram (see Figure 6.5) is constructed using his initials, JSB, in florid calligraphy. The initials are superimposed on their retrograde (BSJ) to form many crosses. Above the crosses is a crown, which Smith believes relates to the carrying of Christ’s cross. This interpretation comes from a note that Bach entered in the notebook of his student, Fulda: “Christ will crown those who carry his cross.” Putting everything together – the use of JSB and BSJ to create crosses, the crown above the crosses, and the note in his student’s notebook – Smith postulates that Bach’s monogram is meant as a

31 It was not so unusual for a Baroque artist to portray himself in a biblical context. For example, Bernini’s David (the first example of dynamism discussed in the thesis) is also a self-portrait.
representation of Bach carrying Christ’s cross. Smith adds, “this explains why [Bach] ended many of his cycles, including Book I of the WTC, with the Latin words *Soli Deo Gloria* (To God alone be the glory)."\(^{32}\)

Smith hypothesizes that the crown is musically represented in several fugues of the WTC. The first important appearance of the symbolic crown occurs in the C# minor fugue. Smith's discussion begins with the flowing brook subject of the C# minor fugue:

The second subject waits to make its entrance until m. 36 where it is heard in the high voice... I shall call it the Brook motive... In m. 41 the Brook motive is heard in its melodic inversion. Unlike every other statement of the Brook motive the inverted statement is highly chromatic... Bach has signed his name three times [in the C# minor fugue]: once in m. 41 backward (HCAB), a second time in m. 48 forward (BACH), and a third time in m. 64 forward (BACH #2). The first two signings are especially significant... The marking is symbolized by the rhetorical device, known as *chiasmus*, where a motive is represented forward and later backward. In Bach's day (as even today) this type of framing was engineered to draw attention to what falls between. The Germans even have a word for what falls between; they call it the *Herzstück* or "Heart Piece." So the most important part of this fugue lies between Bach's two signature motives. That passage begins in m. 41. So mm. 41–43 is the passage of which I wrote that emanates from Bach's heart. I'm able to make this observation because these measures fall between the *chiasmus* that Bach created by signing his name backward HCAB and forward BACH.\(^{33}\)

In the C# Minor fugue, there is only one occurrence of the flowing subject in inversion, which features a chromatic ascent filled with *Kreuzer*. Smith suggests this is a representation of Bach carrying Christ's cross. In the F# Minor fugue, the inverted third subject does not appear until m. 47. At the same time, the bass and inner voice rise chromatically. Smith believes this chromatic ascent to be an allusion to the C# Minor fugue, representing Bach carrying the cross. Measures 47–48, which host the inverted subject, lead to the IV *Stufe* of m. 49. In Smith's words, “it seems

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\(^{32}\) Smith, "Fugue No. 4: C-Sharp Minor (Well-Tempered Clavier Book I)," 2002.

\(^{33}\) Smith, "Fugue No. 4: C-Sharp Minor (Well-Tempered Clavier Book I)," 2002.
as if its 3rd subject exists for one reason: to build to this moment.”34 There is only one other substantive instance of the inverted third subject that is found in mm. 52–53. It locally leads to B, like the statement of mm. 47–48.

These symbols may appear in all of the other fugues under discussion. For instance, *Contrapunctus VIII* is full of BACH and HCAB motifs in its second subject, which also consists of flowing eighth notes. *Contrapunctus XI* features symbolism like that of *Contrapunctus VIII*, since *Contrapunctus XI*’s subjects are the inverted counterparts of *Contrapunctus VIII*’s subjects. The G# minor fugue (discussed in the next chapter) makes use of many chiastic figures and symbols. In the F# minor fugue, however, the symbolism strongly supports the structural choice of the IV Stufe arrival. At a deeper level, the large-scale chromatic voice exchanges that support the IV prolongation (mm. 49-62) may reinforce Smith’s interpretation of the music.

This F# minor fugue uses an entirely novel structure to organize its subject expositions. Instead of moving forward to new Stufen, the subject expositions work together as a sort of “super exposition” that unfolds the tonic Stufe. There is no strong cadence following the super exposition until the final measure. In fact, the structure is similar to that of single-subject fugues, for there is a sort of exposition (mm. 1-40) that is followed by a development (mm. 41–54) until the “final entries” of mm. 55–69. The brief developments allotted to each subject within the super exposition (mm. 11–20 and 24–36), in this sense, may be understood as “super links” between expositional entries.

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Figure 6.1: Form chart of Bach's F# minor fugue

Figure 6.2: Foreground graphs of the first instance of each subject
Figure 6.3: Deep middleground graph of Bach's F# minor fugue (WTC II)

Figure 6.4: Kreuzigen symbolism in Bach's St. Matthew Passion
Figure 6.5: J.S. Bach's monogram
Figure 6.6: Foreground graph of Bach's F# minor fugue (p1)
Figure 6.7: Foreground graph of Bach's F# minor fugue (p2)
Figure 6.8: Foreground graph of Bach's F# minor fugue (p3)
Figure 6.9: Foreground graph of Bach's F# minor fugue (p4)
CHAPTER 7

WOHLTEMPERIERTE KLAVER I: C# MINOR

The integration of structure and contrapuntal design in the C# minor fugue surpasses any other fugue discussed in the thesis. The entrance of new subjects corresponds to the activation of new Stufen in a similar way to the two Contrapuncti. However, unlike the Contrapuncti, the C# minor fugue does not cadence and rest at the end of the first subject’s “sub-fugue.” Rather, the line between the tonic Stufe and the transition to the III Stufe is blurred by various non-harmonic tones. Like Contrapunctus XI, a great deal of the C# minor fugue is devoted to its dynamic growth through the use of larger motivic linear progressions. The symbolism of the C# minor fugue is closely related to the F# minor fugue, since in both fugues the rising chromatic “brook” subject, associated with Bach’s name, occurs.

7.1 Formal and Contrapuntal Characteristics

The formal-contrapuntal structure of the C# minor fugue is perhaps the most dense and complex of all of Bach's fugues. Expositions overlap, foreshadowing of tails, inversions, and augmentations abound, and the music has surprisingly little free counterpoint even though there are five voices. Although it is difficult to delineate any sort of exposition in the C# minor fugue, it is generally understood to have three subjects. However, it is debatable whether the subjects achieve full expositions before their developments begin. The form chart in Figure 7.1 takes one approach of many possible, for the form is so well-integrated that finding delineations of any kind is hardly possible.

Only the first subject (S1) receives a clear exposition in which every voice arrives sequentially and in ascending order (bass to soprano). The following development (mm. 17-34) is also standard, consisting primarily of developmental material from S1 and free counterpoint.
What makes this development section especially interesting is the foreshadowing of the second subject (S2) in augmentation. Bach pushes to another level the foreshadowing techniques of Pachelbel (see Chapter 3), introducing the S2 material as recurring “free counterpoint” (mm. 17-18, 24, 28, 31-32, 34). The augmented S2 material first appears immediately after the S1 exposition (m. 17), facilitating a constantly evolving form; rather than simply developing preceding material, mm. 17-35 provide an organic transition between first- and second-subject expositions. Even the inverted instances of S2 are foreshadowed by the augmented S2 figures of mm. 28 and 34.

Measure 35 marks the first “de facto” use of S2, which consists of a brief rising scale followed by a stream of eighth notes that ornament a larger descending scale. S1 continues to present itself throughout the S2 exposition, transforming mm. 35-65 into a double exposition. Again, the descriptor “double exposition” must be employed loosely here, since S2 does not have an exact length, nor do the voices all host the brief head motif of the rising scale. Additionally, the tenor voice hardly is assigned S2 material throughout the entire fugue. The expositional entry of S2 in the tenor would have to be the inverted entry from mm. 41-44. Just as S2 was foreshadowed within the S1 development, so too subject 3 (S3) is adumbrated within this double exposition; the S3 tail motif appears in mm. 40-41 and 46.

Timothy Smith points to a possibly important symbolic correlation with the F# minor fugue discussed in Chapter 6: S2 of the C# minor fugue is almost identical to S3 from the F# minor fugue, both representing Bach by the metaphor of “the flowing brook.” Measures 41-42 present the transposed retrograde of the BACH motif and mm. 48-49 the transposed recto version. Smith suggests that these two BACH motifs bookend a very important moment, specifically mm. 41-44, which project an inverted lament figure laced within the brook subject.
This passage, which corresponds to an important development in the harmonic structure to be discussed in the following section, may represent Bach “carrying the cross.” The transposed BACH motif is also used in the “mezzo-soprano” voice to close the S2 exposition in m. 64.

Progressing forward in the fugal design, S3 first appears in its full glory in the alto voice of m. 49. The subject head is characterized by an ascending fourth and its repeated upper note, “tolled” (bell-like) three times. The tail (already seen in the preceding double exposition) consists of an embellished leading tone that rises to the tonic. The S3 “exposition” can hardly be called an exposition, for the subject only ever appears in its complete form in the lower three voices; S3 appears in the soprano of mm. 52-53, but the tail is significantly altered. The mezzo hosts S3 in mm. 57-58, but the tail is never given its resolution. In any case, the entrance of S3 overlaps with the S2 exposition while S1 is still prevalent. Therefore, this section may be described as a triple exposition. It is noteworthy that S2 seems to be driven towards extinction while S3 becomes increasingly ubiquitous.

Around m. 65, the triple development begins, including all three subjects and the introduction of the unadorned, recto lament figure. In measures 71-73, the lament figure sounds against S3 and fragmentation of the inverted S2 brook motif. This passage presents perhaps the darkest, most climactic moment of the fugue. The lament figure conflicts with the rising brook motif and, as the lament achieves its final note, the bass enters in its lowest register with S1. Through the course of this development, S2 wanes greatly until the final development starting in m. 94, which avoids S2 entirely. The loss of S2 coincides with the extraordinarily dense use of S3 that leads to the final lament in mm. 101-105. This lament is no longer supported by any sort of inverted, uplifting S2 motion; rather, it sounds defeated. Perhaps the story told by this fugue is profoundly solemn: the original inverted lament is “carried” by Bach’s “brook,” the second
lament battles with the weakened, fragmented brook motif, and the final lament symbolizes the
final defeat and extinction of the brook motif. The remainder of the fugue only uses S1 and S3,
coming to a cadence in m. 112. The final tonic is expanded by incomplete entries of S1 and S3,
each of which tonicize the subdominant, F#. This creates a clash between the complete harmonic
progression arriving at tonic in m. 112 and the incomplete formal/motivic elements.

Perhaps, in the extinction of the his personal S2 “brook” motif, Bach aimed to
symbolically parallel Paul’s words in Romans 6:6, “For we know that our old self was crucified
with him so that the body ruled by sin might be done away with, that we should no longer be
slaves to sin.”35 The lamentations and extinction of S2 may represent the death of Bach’s “body
of sin,” leaving only the Kreuzer of S1 and the funeral bell tolls of S3. At least this may be the
case on the foreground. There is an even deeper motivic connection that portrays an underlying
optimistic connotation of such a death, which is to be discussed in the following section.

7.2 Harmonic Structure

The deep level harmonic structure of the C# minor fugue follows a progression of I-III5-6-
IV5-6-V-I wherein the original tonic Stufe is prolonged to m. 28 (Figures 7.2 and 7.3 are deep
middleground and foreground graphs respectively). This tonic prolongation is accomplished with
its own shallower progression, I5-#6-II#-V-I. The S1 exposition (mm. 1-17) prolongs the bass’s
C# before the motion is pushed onward via 5-6 exchange; G# of m. 19 is pushed up to A# in m.
20. II# is achieved in m. 21, acting as the dominant of V. The first instance of V (m. 22) is in its
minor form, but its dominant function is activated with the B# of m. 26. Interestingly, just before
V resolves to I in m. 28, B# motions back to B-natural in m. 27. By suspending the B-natural

35 Rom. 6:6.
into m. 28, Bach is able to blur the line between the end of the tonic prolongation and the motion towards the III Stufe. Even as C# seems to return in full in m. 29, it is subverted by the B minor entry of the subject of mm. 29-32.

Measures 28-35 act as transition to the III Stufe. First, the C# of the tonic Stufe is reinterpreted as VI of the III Stufe (E major). Thinking now in E major, VI (m. 28) moves to V in m. 32, resolving to I in m. 35. The definitive motion to the III Stufe occurs in m. 35 with the entrance of the second subject or “brook motif” in the highest voice. The motion to G# in m. 41 unfolds III to its upper third. Measures 41-44 mark the special “rising lament” that may have held symbolic meaning for Bach. It is at the end of this chromatic ascent that the bass motions from B through B# to C# (mm. 43-44), creating a 5-6 exchange over the E Stufe. III6 is prolonged until m. 49 where E is intensified to E# in the soprano. The intensification to E# facilitates the motion to F# in m. 51 as the IV Stufe.

Just as the III Stufe coincides with the entrance of S2 (m. 35), the IV Stufe coordinates with the entrance of S3 (m. 49). The F#, the IV Stufe is the most expansive of the fugue, lasting from m. 51 to m. 109. It is first prolonged by its own middleground progression, spanning mm. 51-88. This progression, I5-6-II#-V-I, is initiated with an unfolding of the F# Stufe (m. 51) to A in m. 57. Measures 60-65 prolong G# that functions as a passing tone leading from A (mm. 57-59) to Fx in m. 69. F# (m. 51) is intensified to Fx (m. 69) at the same time a 5-6 exchange materializes in m. 70. Thinking in F# minor, I then pushes forward to II# in m. 71, which falls to an inactive dominant, V, for the dramatic C# S1 entry of m. 73. C# is prolonged by the progression, I (m. 73)-IV6 (m. 81)-V (m. 82)-I (m. 84). Returning to the world of F# minor, C# acts as a return to V (m. 84), which activates its dominant function in m. 86 with the motion from E (m. 84) to E# (m. 86). The return to the F# (IV) Stufe appears in m. 88.
Forward progress from m. 88 on comes less from the harmonic motion of the bass; instead, dynamic motion is achieved by chromatic linear progressions in the highest voice. Let us take a step back and consider the top voice, which at its deepest level stems from the E in m. 15 as *Kopfton*. While E (m. 15) descends to C# (m. 112) on the deepest level, E also ascends a full sixth to C# in conjunction with the deep motions of the *Bassbrechung*. In doing so, the rise from E to C# in mm. 35-44, relating to Bach’s symbolic “carrying of the cross,” is profoundly paralleled over the course of the entire fugue! The *Kopfton*, E, pushes through E# in m. 49 to F# in m. 51 with the entrance of the IV *Stufe*; then, in a similar manner, F# (m. 51) pushes through G# in m. 82 to A-natural in m. 88. Therefore, the progression that expands the IV *Stufe* over mm. 51-88 is intensified by the rising line of the soprano from F# (m. 51) to A-natural (m. 88).

Measures 88-104 facilitate the soprano’s chromatic ascent from A-natural (m. 88) to A# (m. 104) by means of a descending linear motion filling in the diminished octave. More specifically, this descent is realized as follows: A falls through G# (m. 92) to G-natural in m. 95; the F# of m. 96 acts as a prolonged passing tone between the G of m. 95 and the E of m. 100; then E falls through D# (m. 101), C# (m. 101), and B# (m. 103) to the B-natural of m. 103, whereby B-natural, acting as C# dominant’s chordal 7th, resolves down to A# in m. 104. It is at this point (m. 104) that the IV *Stufe* returns, intensified as IV# to support A#.

The motion to G# in the bass of m. 105 suggests a motion to the V *Stufe*. However, a motion to the V would be premature at this point; instead this G# functions as an upper neighbor to F# serving to break up the direct chromatic succession in the bass. In other words, F#-Fx becomes F#-G#-Fx. Over the bass’s G# (mm. 105-108), the upper voice follows a linear progression of a sixth from G# (m. 105) to E (m. 108); in doing this, Bach re-attains the *Kopfton*, E, in m. 108 before it descends. Measure 109 hosts an Fx as further intensification of the IV
Stufe and a 5-6 exchange bringing C# up to D#. The motion to the real V Stufe is accomplished in m. 110 by another G# pedal in the bass. The inner voice's D#'s of mm. 110-111 serve as the Urlinie descent to scale degree 2. The Urlinie concludes in m. 112 on C# (1) supported by the harmonic resolution to the final tonic Stufe. Concurrently, the alto voice of m. 109 picks up the soprano’s A# from m. 104, rising out of the texture to B# in m. 110 and C# in m. 112.

Perhaps there is a triumph of the rising line over the descending Urlinie that overpowers the lamenting narrative previously discussed. In the deepest sense, Bach has “carried the cross” as he did in the foreground of mm. 35-44. The extinguishing of S2 past m. 94 may represent Bach’s “body of sin” dying with Christ. Perhaps Bach was participating in the idea that a true Christian believer vicariously participates in Christ’s death, in his crucifixion, and through that empathetic death, can achieve forgiveness of sins and salvation. In this sense, dying with Christ and carrying his cross are highly venerable and consecrated acts.

In conclusion, Bach integrates the structure of the C# minor fugue with all the strategies that have been discussed. The line defining the end of the tonic Stufe vs. the transition to the III Stufe is blurred by the overlapping of various suspensions and harmonic functions. The Stufen of the Ursatz progression are provided with several recursive progressions; the prolongation of IV (mm. 51-88), for example, provides its own progression wherein II provides its own prolongational progression (mm. 73-82). Finally, the Christological symbolism behind the chromatic ascent of mm. 41-44 is projected onto the deepest level of structure; the ascending sixth from E-C# in mm. 35-44 is paralleled in the background structure, moving the Kopfton, E (m. 15), to the final resolution, C# (m. 112).
Figure 7.1: Form chart of Bach's C# minor fugue (WTC I)
Figure 7.2: Deep middleground graph of Bach's C# minor fugue (WTC I)
Figure 7.3: Foreground graph of Bach's C# minor fugue (WTC I)
CHAPTER 8

CONCLUSION

If there is no single solely valid interpretation of any piece’s harmonic structure, different interpretations may shed light on various specific aspects of the music; nevertheless, when interpreting any piece, I would argue that it is essential to consider the aesthetics prevalent at the time of its composition. By contextualizing the analysis in this way, it is possible to better understand the composer’s intentions concerning the disposition of the deeper levels of structure. Previous research has posited a “circularity” in Bach’s aesthetics, suggesting a “circular infinity” through constant returns to the structural tonic. On the other hand, I propose that the type of “infinity” sought in Bach’s music is monodirectional: his search for “infinity” progresses forward, full of dynamic motion and increasing complexity. That Bach would have espoused such a forward-directed aesthetic is unsurprising, given that the surroundings in which he lived and worked were saturated with a dynamic Baroque art and architecture built “soli Deo gloria” (to the glory of God alone).36 By contrast, a circular aesthetic metaphorically would push the observer back to earth rather than towards the heavens.

In musical terms, the circular view of fugues produces interpretations like those of Renwick, which feature consistent returns to tonic prolongation. This style of analysis is simple to grasp and looks reasonable on the surface. However, I argue that it does not accord with the aesthetics of increasing complexity and forward motion valorized in the Baroque period. Ideally, once the music departs from the tonic Stufe, it does not return to it until the very end. Entrances that occur in the middle of a fugue over an apparent tonic are better understood within other...

36 Bach wrote “S. D. G." (soli Deo gloria) at the end of all his church compositions and also applied it to many of his secular works, including Das Wohltemperierte Klavier book 1.
prolongations. This idea is supported by Schenker’s later understanding of fugues through his concept of the *pseudo-Einsatz*, a “pseudo-entrance.” To recall, Schenker’s *pseudo-Einsatz* is a middle entry of a fugue subject over an apparent tonic, one that does not truly function as a tonic return.

In this study, I have shown various ways that Bach was able to create a constantly forward-progressing structure for his fugues through the use of several prolongational strategies. Indeed, these strategies are seen consistently in the triple fugues. First, there is the strategy of recursive progressions, which means that in Bach’s music, the underlying *Ursatz* progression is often adorned with similar progressions on a smaller scale. This strategy is ubiquitous throughout the fugues discussed here with *Contrapunctus XI* being an exception. The background harmonic structure of *Contrapunctus VIII*, for instance, follows the progression, I-III-IV-V-I. In this fugue, I, III, and IV each project their own progressions to prolong their respective *Stufen*; the original tonic and the mediant are prolonged with I-III-II-V-I progressions and the subdominant is prolonged with a I-II-V-I progression. With further analysis, one could discern even more fractal progressions within these progressions. In the case of the F♯ minor fugue, the tonic harmony is carefully unfolded over the tonic *Stufe*, and the IV *Stufe* is prolonged with a I-II-V-I progression. In the C♯ minor fugue it is once more the IV *Stufe* that receives a recursive progression, I-II-V-I. With this mode of analysis, a fugue’s closing statement (often understood as a tonic return) is often best understood as a local dominant to the upcoming IV *Stufe*.

*Contrapunctus XI* does not treat its final entry as V/IV, for it follows the expansion strategy of motivic parallelism. The dynamism of its structure is based upon a parallelism with its original subject, the primary theme of *Die Kunst der Fuge*; more precisely, the large-scale structure is derived from the rising third motive embedded within this primary subject.
*Contrapunctus XI* follows the background progression, I-VI-V-I. As we have shown, the D minor tonic *Stufe*, spanning approximately half of the fugue, unfolds from D through E to F. From the VI *Stufe*, Bb unfolds through C to D, just before the closing V-I motion. In this instance, the closing entry begins as the “upper third” of Bb and ends by completing the *Ursatz* structure.

Another pivotal use of motivic parallelism occurs in the C# minor fugue. Its second subject, possibly representing Bach as the “brook,” is introduced by a descending sixth from G# (m. 36) to B (m. 41). This descending sixth is then inverted and paralleled by a motion from E in the bass (m. 35) to C# (m. 44). This same ascent is projected at the deepest level in the upper voice, starting from the *Kopfton’s* E (m. 15) and ending with the *Ursatz’s* completion on C# (m. 112). This motivic linear progression acts to prolong portions of the IV *Stufe* that would be relatively static otherwise. In particular, I refer to mm. 88-104, which do not host recursive progressions over IV. Rather, this section is imbued with dynamism when the upper voice is lifted from A-natural (m. 88) to A# (m. 104).

The final major strategy of prolongation employed by Bach is the activation and deactivation of dominant functioning harmonies (“dominant uncertainty”). The motion from A to A# discussed in the previous paragraph may also be understood as an example of this technique. F# minor (m. 51) is prolonged to become F# major (m. 104). However, the dominant function of F# major (m. 104) is subsequently undermined by Fx (m. 109) moving deceptively to G# (m. 110) as the true background dominant. A clearer example of dominant uncertainty occurs in mm. 93-108 of *Contrapunctus VIII*. At this point in the fugue, the III *Stufe* is prolonged to m. 92 via 5-6 exchange. A (m. 93) appears to be the dominant that would return to the tonic *Stufe*. 
However, A major (m. 93) deactivates the dominant function by the modal shift to A minor in m. 108, redefining its role as III/III, and avoiding a premature return to the final tonic.

Taking Smith’s semantic analysis of Bach’s fugues as a starting point, I propose that Bach’s fugal structures are intimately connected with Christological symbolism. The first subject of *Contrapunctus XI*, for instance, consists of rising and falling thirds, which form many “crosses” [Kreuzer] throughout the fugue. Especially significant are mm. 158-162 and 164-168, where the first subject is played in rectus and inversus simultaneously. These simultaneous subject entries produce several Kreuzer in addition to those implied by the subject alone. At the deepest level, the rising thirds of the bass (D-E-F and Bb-C-D) form a Kreuz with the Urlinie. In the F# minor fugue, the “brook” motif metaphorically “carries the cross” up to the IV Stufe (mm. 47-49). The symbology of the F# minor fugue stems from that of the C# minor fugue, wherein the “brook” motif rises (mm. 41-44), activating a 5-6 exchange over the III Stufe. The ascending and descending occurrences of the C# minor fugue’s second subject in mm. 36-44 form yet another large scale Kreuz. As mentioned earlier, the ascending sixth from E-C# in mm. 35-44 is paralleled at the deepest level of structure, suggesting an uplifting ending.

It is also important to note that salient contrapuntal and formal characteristics align with important junctures in the harmonic structure. Oftentimes, certain changes in formal design serve similar functions across fugues. For example, the second subject exposition in a given fugue often serves to transition from the original tonic Stufe to the next harmonic juncture. The second subject exposition of *Contrapunctus VIII* (mm. 39-52) carries the music to the III Stufe in m. 49 just before the third subject entry in the bass. In *Contrapunctus XI*, the second subject exposition (mm. 27-47) fulfills the motion to E (m. 38) within the deep middleground rising third, D-E-F. In this case, the progression to E (m. 38) occurs after the second entry of the second exposition. The
second expositions of the F# and C# minor fugues, on the other hand, serve as *beginnings* to important harmonic progressions. The second exposition of the F# minor fugue unfolds the tonic to its “upper third,” and the second exposition of the C# minor fugue marks the motion from the tonic *Stufe* to the III *Stufe*. There is one instance in which Christological symbolism is privileged over contrapuntal design. The first entry of the F# minor fugue’s triple exposition (m. 55) is subsumed within a IV prolongation (mm. 49-69). However, the second entry (m. 60-63) transitions to II/IV in m. 63 and the third entry begins as V/IV.

In closing, analyzing Bach’s fugues through the lens of Baroque dynamic aesthetics illuminates broad motivic parallelisms and religious symbols. With this mode of analysis, Bach’s foreground materials are magnificently amplified to several layers of structure. The natural next step is to analyze more fugues with a dynamic analytical approach in order to find more prolongational and integrational strategies and connections throughout Bach’s fugal corpus. Taking it a step further, it would be fascinating to discover similar aspects in the compositions of Handel, Zelenka, and Telemann, who shared a similar aesthetic.
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