For as much as we admire J. S. Bach’s music, we know relatively little about how he taught composition. One thing we do know is that Bach began instruction with figured-bass chorales. Bach’s chorale harmonizations are still part of the curriculum today, but they are usually used to teach harmonic analysis, not composition—that is, we use the same materials (chorale melodies), but to different ends. Thus, developing a clearer understanding of Bach’s pedagogical methods can inform modern-day pedagogy. But since very few pedagogical resources by Bach are available for study, inferences must be made from writings by his students and contemporaries. Fortunately, new manuscripts from Bach’s circle of pupils have recently come to light, promising further clues.

Among these new sources is the Sibley Choralbuch, rediscovered and assessed anew by Robin A. Leaver (2016). Contrary to Philipp Spitta and Hans-Joachim Schulze’s earlier appraisals, Leaver argues convincingly that the Sibley manuscript is indeed the lost Choralbuch that Breitkopf listed for sale in 1764. The description of the Choralbuch in Breitkopf’s original catalogue reads: “Complete choral book with figured basses for

1 Einige Regeln (1725) 1899) is conclusively attributed to J. S. Bach, whereas the authenticity of Vorschriften und Grundsätze (1738) 1994) is contested, though it likely stems from Bach’s immediate musical culture. See Braatz (2012) regarding its authenticity.

2 The recent discovery of a new multiple-bass source from Bach’s pupil Johann Christian Kittel (1732–1809) prompted Susan McCormick’s recent dissertation, which—with the exception of the Sibley Choralbuch—catalogues all of the known chorale books stemming from Bach’s pupils and grand-pupils (McCormick 2015, 4–9, 62–63, and 140).
240 melodies in use in Leipzig.”³ Leaver shows that the manuscript in Sibley Library matches Breitkopf’s description in four key points: 1) it is a “complete” book for the full church year; 2) it contains the same number of melodies (the difference due to how one counts); 3) it contains the same number of pages; 4) the melodies were common in Leipzig (ibid., 24). Only the price remains in doubt, as Schulze had pointed out—he believes 10 Thalers to be too low (1981, 129–30). It seems likely that the price was low because Breitkopf was uncertain as to the book’s value, the style being so different from Bach’s published vocal chorales. Indeed, this was the reason Spitta dismissed the Sibley manuscript, for he believed the style to be too simple for Bach. Spitta examined the Sibley Choralbuch in or before 1880, concluding that “The volume exhibits, neither in Bach’s handwriting nor in the composition of the chorales, a single trace of Bach’s style or spirit.”⁴ The settings in the Sibley Choralbuch are indeed simpler than Bach’s more harmonically adventurous keyboard settings for congregational singing,⁵ but that is precisely the point—the Sibley Choralbuch implies that Bach began his teaching in a much simpler, more homophonic style than is typically assumed. Leaver’s new assessment is that the Sibley Choralbuch likely stems not from Bach directly, as the Breitkopf description suggests, but from Bach’s circle of pupils in Dresden from about 1730 to 1740. The present article investigates the Sibley Choralbuch in a theoretical light following these findings.⁶

As Leaver has argued, the settings contained in the Sibley Choralbuch suggest that there were two separate Bach chorale traditions: the first is the well-known Choralgesang tradition based on four-part chorales from Bach’s cantatas and passions; the second, Choralbuch tradition, is not vocal but keyboard-centered.⁷ Because the second, Choralbuch style was often improvised, there remains less evidence of its existence. The Sibley Choralbuch is therefore significant because it sheds light on this lesser-known, keyboard-based, Bach chorale tradition. While the Sibley Choralbuch provided the impetus for Leaver’s claim that there were two separate Bach chorale

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³ “Bachs. J. S. Vollständiges Choralbuch mit Noten aufgestzten Generalbasse an 240 in Leipzig gewöhnlichen Melodien. 10 thl” (Schulze 1972, 166). Unless otherwise noted, all translations are my own.

⁴ “Das Büchlein zeigt aber weder Bachs Handschrift, noch auch im Satze der Choräle eine Spur Bachschen Stiles und Geistes” (Spitta 1899, 108n149). Translation by Clara Bell and J. A. Fuller Maitland.

⁵ These include In dulci jubilo (BWV 729a), Gelobet seist du, Jesus Christ (BWV 722a), Vom Himmel hoch (BWV 738a), and Lobt Gott, ihr Christen, allzugleich (BWV 732a).

⁶ A modern edition of the Sibley Choralbuch is forthcoming (Leaver and Remeš, eds. 2018).

⁷ Leaver terms the Choralbuch and Choralgesang styles “keyboard” and “vocal,” respectively (2001, 62; 2016, 29). I prefer the names “Choralbuch” and “Choralgesang” because these styles are not necessarily bound to specific instruments (i.e., keyboard or voice), though they often are.
traditions, I will draw on a variety of eighteenth-century German sources to substantiate and develop Leaver’s hypothesis, with a particular emphasis on reconstructing the pedagogical process of harmonizing chorales according to contemporaneous sources. My main argument is that Bach’s chorale-based pedagogy bridges from the homophonic Choralbuch style to the ornamented Choralgesang style through multiple-bass realizations. The implications for pedagogy today are that we, too, should begin in a simpler, homophonic style with a more consistent emphasis on outer voices and thoroughbass.

The first part of this article describes Bach’s two-stage pedagogical method and illustrates the Choralbuch and Choralgesang styles of realization. The second part examines the first stage of Bach’s method, where the outer voices and figured bass are given. The third part investigates the second stage, where students compose multiple original basslines and figures to a given chorale.

**J. S. Bach’s Pedagogy and Choralgesang vs. Choralbuch Styles**

C. P. E. Bach’s oft-quoted description of his father’s pedagogy is my point of departure:

In composition [J. S. Bach] started his pupils right in with what was practical, and omitted all the dry species of counterpoint that were given by Fux and others. His pupils had to begin their studies by learning pure four-part thoroughbass. From this he went to chorales; first he added the basses to them himself, and they had to invent the alto and tenor [what I call “Stage 1”]. Then he taught them to devise the basses [note the plural: “basses”] themselves [“Stage 2”]. He particularly insisted on the writing out of the thoroughbass in parts. [Presumably later,] In teaching fugues, he began with two-part ones, and so on.

The realization of a thoroughbass and the introduction to chorales are without doubt the best method of studying composition, as far as harmony is concerned (Wolff 1998, 399).

The quotation tells us that after teaching the basics of thoroughbass, J. S. Bach introduced chorales in two stages, as outlined in Example 1. In Stage 1, students receive a chorale melody in the highest voice, plus a bassline and figures, and are asked to supply inner voices and ornamentation. Thus, Stage 1 focuses on texture, since the outer voices and harmony are given. Sources relating to Stage 1 have single basses, like the Sibley Choralbuch, which because of its water mark can be traced to Dresden around 1730–40 (Leaver 2016, 19–20). As Leaver mentions, Bach had three students active in Dresden around this time: C. H. Gräbner (1705?–1769), W. F. Bach (1710–1784), and

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8 Interestingly, C. P. E. Bach makes no mention of chorales in his Versuch über die wahre Art das Clavier zu spielen (1753/62).
G. A. Homilius (1714–1785). Since no relevant sources survive from Bach’s Dresden students, I will turn to musicians outside the Bach circle to help illuminate Stage 1. These are Michael J. F. Wiedeburg (1720–1800), Justin Heinrich Knecht (1752–1817), and Johann Gottlob Werner (1777–1822). All three were contemporaries with Bach’s first generation of pupils, were active in central Germany, and at least two were admirers of Bach.\footnote{See Knecht (1795–98, 3:18) and Werner (1805, 4).} Even though Wiedeburg, Knecht, and Werner were not Bach pupils, the fact that they describe, in detail, techniques which were likely common knowledge to educated eighteenth-century musicians like Bach makes them particularly suitable sources in the present context.

<table>
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<td>TYPES OF SOURCES</td>
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**Example 1**

Overview of J. S. Bach’s two-stage pedagogical method and related sources.

According to C. P. E. Bach’s quote, Stage 2 of Bach’s method focuses on outer-voice counterpoint and harmony; only the chorale melody is given and the student’s task is to compose increasingly complex basslines and inner voices. Sources relating to this stage contain multiple basslines for each chorale. The writings of Bach’s students Johann Christian Kittel (1732–1809) and Johann Philipp Kirnberger (1721–1783), as well a musician outside the Bach circle named David Kellner (c. 1670–1748), will help illuminate this second stage.
Translation (text for verse one; not in original): “Now let us give thanks to the Lord and honor him on account of his gifts which we have received.”

Example 2.
Nun laßt uns Gott dem Herren from the Sibley Choralbuch (anon. ms., likely Dresden, c. 1730–40).

Choralgesang style (ornamented)

Original key: G major. Text replaced for comparison with Example 2. Continuo doubles bass voice and includes no figured bass.

Translation (text for verse one; not in original): “Now let us give thanks to the Lord and honor him on account of his gifts which we have received.”

Example 3.
J. S. Bach’s setting of Nun laßt uns Gott dem Herren from Cantata BWV 165, O heiliges Geist und Wasserbad.
Examples 2 and 3 illustrate the difference between the *Choralbuch* and *Choralgesang* styles. In general, the *Choralbuch* style is vertically oriented: it is more triadic, consonant, diatonic, and disjunct; moreover, it was often improvised in the context of organ accompaniment for congregational singing, where only the chorale was sung. In contrast, the *Choralgesang* style is horizontally oriented: it uses more dissonant figures, suspensions, is more chromatic, and has faster note values and more conjunct motion; in addition, the Choralgesang style was less often improvised, instead being written out for concerted music where each of the four voices were sung.

All chorales in the Sibley *Choralbuch* are presented in the same manner and the same style as Example 2: the chorale tune is provided in the soprano part along with a figured bassline in a simple, unornamented style, as a student would receive in Stage 1 of Bach’s method. The student would then compose or improvise the inner voices, either in a lesson with Bach, alone at home, or during the church service at the organ. Example 3 is Bach’s vocal setting of the same chorale. Its numerous non-chord tones and tonicizations are typical of the *Choralgesang* style. Such settings, which are often used for harmonic analysis today, originate mostly from Bach’s cantatas and passions and were originally written for choir. C. P. E. Bach writes in the preface to the first edition of his father’s chorales in 1765 that he reduced them from four to two staves to make them easier to read at the keyboard. This condensed format has led generations of musicians and teachers to often mistake Bach’s vocal settings for keyboard music, even though the inner voices are unidiomatic for the keyboard. Indeed, Emanuel Bach makes special note of the “natural flow of the inner voices and bass, which are what above all distinguish these chorales” (Wolff 1998, 379). Given their popularity today, it is surprising to learn that C. P. E.’s first edition of his father’s chorales sold poorly. According to Matthew Dirst, the chorales were “controversial even among admirers, who questioned their style and utility while praising their creator’s mastery of Harmonie” (2012, 35). Abbé Vogler (1749–1814) and Carl Maria von Weber (1786–1826) even deplore Bach’s vocal chorales’ lack of “noble simplicity” and “dignity” (Blume 1974, 346). The newly rediscovered Sibley *Choralbuch* implies the existence of a second, simpler, keyboard-based Bach chorale tradition that was, in fact, quite similar to eighteenth-century norms

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10 The chorales were “originally set out on four staves for four singers. They have been presented on two staves to accommodate lovers of the organ and the clavier, since they are easier to read in that form” (Wolff 1998, 379). Regarding the format of Bach’s chorales, see Dirst (2012, 44-47).

11 Critics of Bach’s vocal chorales may have also confused them for keyboard music, specifically congregational accompaniment, which was traditionally more conservative. For example, Johann Christoph Kühnau (1735–1805) acknowledged Bach’s settings as masterpieces but considered them too difficult and inappropriate for church (1786, iv).
for *Choralbuch* settings. In addition to its function in organ chorale accompaniment during the church service, the *Choralbuch* style was likely the starting point in Bach’s pedagogical method.

**Stage 1: Adding Inner Voices and Ornamentation**

In the first stage of Bach’s method the chorale and figured bassline are given, and the student adds the inner voices. The fact that the outer-voices and figures are predetermined focuses the student’s attention on textural matters—that is, the number of voices and their degree of ornamentation. Example 4 outlines five types of texture described variously in the writings of Knecht, Werner, and Wiedeburg. Types 1 and 2—the “Close [eng] Style” and the “Spread [zerstreut] Style”—are relatively straightforward. Type 3 begins to add ornamentation. The bottom of Example 4 lists Knecht’s subtypes 3.1, 3.2, etc. These add ornamentation to the bass alone, then to the lower three voices, and then to all voices, including the chorale melody, ending with Type 3.4, which uses imitative counterpoint in the accompanying voices. Type 4 is the “Full-voiced [vollstimmig or vollgriffen] Style,” where the player supplies as many notes as possible between the outer voices; as long as the outer voices move in good counterpoint, parallel and direct motion with the middle voices is tolerated. Thus, the “Full-voiced Style” affords organists and harpsichordists a degree of dynamic control by varying the number of voices. Type 5 is the “Unison style” [im Einklang], which is used exclusively in congregational singing and thus is not the focus of the current study.

Examples 5 through 9 work progressively through the types given in Example 4. Example 5 provides three different types of realization using the same chorale tune as in Example 2, but in C major. Example 5a is Type 1, or the “Close Style.” Here the right hand takes the upper three voices while the left hand takes the bass (often called “keyboard style” today). Werner writes that the “Close Style” is the oldest type, already known in Martin Luther’s time, but it is still in use in 1805. But according to Werner, the “close style” is not suitable to human voices because the tenor is too high; moreover, the “pleasing middle range of the organ lies unused” (1805, 4). Example 5b is Type 2, the “Spread Style,” which essentially moves the alto voice of 5a down an octave. Werner describes how this method is superior to the “close style” because it remedies the above-mentioned problems: the tenor is now low enough to be sung and the middle range of the organ is not ignored; moreover, according to Werner, the “spread style” is easier to read (ibid., 4–5).

The “Full-voiced Style” appears in Example 5c, where, according to Knecht and Wiedeburg, parallel octaves and fifths are allowed (Knecht 1795–98, 3:76; Wiedeburg
Examples 6 through 9 begin to add ornamentation. Example 6 is Type 3.1, an ornamented bass. Here Knecht adds passing notes in smaller values than the chorale, which moves in half notes. In Example 7 Knecht offers three ways of varying the lower three voices, keeping the chorale in the soprano unaltered. Example 8 shows two ways of ornamenting all voices, including the chorale melody: Knecht gives the unaltered melody (for singing) in the top staff of Example 8a and the ornamented version (for playing) in the middle staff. Example 9 is Knecht’s subtype 4.2, a variation on the “Full-voiced Style” where parallels are not allowed. According to Knecht, five- and six-voice textures are possible in this style, as shown in Examples 9a and 9b, respectively. As these various harmonizations show, the types outlined in Example 4 introduce progressively more complex textures: we began with an unornamented, Choralbuch style (Example 5) and ended with six independent voices in a more ornamented, flowing, Choralgesang style (Example 9b). Were such ornamentation techniques unique to Knecht? Or is it likely that, after beginning
Example 5
Three styles of realizing *Nun läßt uns Gott dem Herren*, from Knecht’s *Orgelschule* (Leipzig, 1795–98).

Example 6
Type 3.1: Varied bass (and harmony) using *Liebster Jesu, wir sind hier*, from Knecht’s *Orgelschule* (Leipzig, 197–98, 3:83).

Example 7
Type 3.2: Varied middle voices and bass using *Nun danket alle Gott*, from Knecht’s *Orgelschule* (Leipzig, 1795–98).
Example 8
Type 3.3: All voices ornamented, from Knecht's Orgelschule (Leipzig, 1795–98).

a) O heil'ger Geist, kehr bei uns ein [Wie schön leuchtet der Morgenstern] (3:93–94)
    Einfache Melodie zum Singen ["Unornamented melody to sing"]
    Figurirte Melodie zum Orgelspielen ["Ornamented melody to play on the organ"]

b) Allein Gott in der Höh sey Ehr (3:95–96) Unadorned melody in top staff is not in original.

Example 9
Type 4.2: Five or six independent voices, from Knecht's Orgelschule (Leipzig, 1795–98).

a) Five voices: Ach bleib mit deiner Gnade (3:79)
    Fünfstimmig, Mit obligatem Pedal.

b) Six voices: In allen meinen Thaten (3:80)
    Sechsstimmig, Mit obligatem Pedal.
with the simple style of the Sibley Choralbuch, Bach challenged his students to write increasingly complex realizations that began to imitate the highly ornamented style of his Choralgesang settings? Two accounts of Bach’s playing and teaching would seem to suggest the latter. First, in Arnstadt Bach ornamented a chorale melody with such “strange tones” that he confused the congregation (Wolff 1998, 399)—clearly he was no stranger to varied harmonizations. Second, according to Johann Gottthilf Ziegler in a letter dating 1746, Bach advised him to play “not offhand but according to the Affekt of the words” (ibid., 336). If what Christoph Wolff says is true, that Bach’s genius lay in his ability to probe “the possible” in the art (2000, 338), then it seems likely that, at least with some students, Bach would have introduced chorale harmonization techniques similar to those given by Knecht in order that students’ accompaniments would have the potential to better reflect the meaning of the text at any given point. That a chorale harmonization reflect the meaning of the text was also a central point in both Kittel and Kirnberger’s treatises as well. Thus, the ornamentation techniques in Stage 1 represents both a pedagogical strategy for beginning composers and a means of textual expression for advanced organists accompanying congregational singing.

Stage 2: Composing New Basslines and Middle Voices

In the second stage of Bach’s method, students begin composing their own basslines and middle voices to a given chorale. Whereas Stage 1 addressed texture and ornamentation, Stage 2 focuses on harmony and simple two-voice counterpoint. According to Kirnberger, the bassline is written first, and then figures are added afterward (1982, 284). For this reason, the third section of this article has two parts, the first of which discusses the process of composing basslines alone, or what I call “Stage 2a.”

Stage 2a: Composing New Basslines

Example 10 shows Kirnberger’s classification of harmonic types, which I label A, B, C, and D (Kirnberger 1982, 284–86). All four harmonic types rely on the idea of chordal inversion to identify the root, which shows Rameau’s influence on Kirnberger. Type A allows for triads in any inversion from scale degrees one, four, and five, with the possibility of the dominant chord having a seventh; Type B includes inverted triads on all diatonic degrees; Type C has inverted triads from degrees one, four, and five of neighboring keys within one accidental, and especially secondary dominants; and lastly, Type D includes secondary dominants from remote keys, enharmonic progressions, and sudden harmonic shifts. Example 11 shows some common types of basslines, a
classification which builds on Susan McCormick’s survey of several multiple-bass sources (2015, 25). Generally speaking, basslines may be diatonic or chromatic, conjunct or disjunct, move in parallel or contrary motion to the chorale melody (a feature Kirnberger emphasizes [1982, 305]), isorhythmic with the chorale or in faster values, and the bass may have suspensions, pedal points, or may even imitate the chorale. These factors—*not* Fuxian species counterpoint, Emanuel Bach’s quote emphasizes—constitute the student’s introduction to two-voice counterpoint, where the upper voice is predetermined by the chorale melody, and the student supplies the bassline. Kirnberger demonstrates how basslines become more smooth and interesting by moving progressively through Types A, B, C, and D. Thus, there is a pedagogical progression implied within this four-fold classification, since the basses in Type A lack variety and become smoother and more interesting with each progressive increase in harmonic resources. Since Kirnberger was a student of Bach, it is possible Kirnberger’s classification may represent the use of new ideas borrowed from Rameau to describe a procedure Kirnberger learned from Bach.

An example from Kittel (Bach’s final and supposedly “star” pupil) demonstrates how this pedagogical progression may have worked in Bach’s pedagogy. To illustrate, Kittel’s harmonizations (Example 12) are labeled with Kirnberger’s harmonic types (Example 10) and bass types (Example 11). Composing the bassline (Stage 2a) is a
Example 12

Kittel’s harmonizations of *Jesu meine Freude* from *Der Angehende Praktische Organist* (Erfurt 1808, 1:30–32).
separate step from composing the figures and middle voices (Stage 2b) in theory, but in practice, one assumes that a fluent knowledge of the Rule of the Octave (discussed below) would mean that the student already knows which figures are implied by a particular bass scale degree. That is, Stages 2a and 2b are only separate in theory. That is why Stage 2a is illustrated using Example 12, even though this example includes middle voices.

Examples 12.1 through 12.7 all ornament the same chorale phrase, shown above in the single staff. The central point conveyed in these examples is that each harmonization becomes increasingly more complex, gradually progressing from nearer to Type A in Kirnberger’s classification to nearer Type C (never reaching Type D, however). That is, like Knecht, Kittel’s harmonizations transition from more Choralbuch-like to more Choralgesang-like. The difference is that the “complexity” now focuses on harmonic, rather than ornamental variety, as in Stage 1. After Example 12.7, the ornamentation “resets” for the next phrase of the chorale melody in Example 12.8, and Kittel starts over in a simpler style with the description “natural bass,” meaning diatonic and mostly triadic. Although Kittel’s path from simple to complex harmony does not traverse Kirnberger’s four-fold classification (A, B, C, and D) exactly, it is clear that for both Bach pupils, each chorale phrase functions like a cantus firmus, or stable reference point, for increasingly complex harmonizations.12

**Stage 2b: Adding Figures and Middle Voices**

After having composed a bassline, students add figures and middle voices. Example 13 outlines the most prevalent types of figures in a manner similar to the bassline types in Example 11. (“N” stands for “neighbor” and “P” for “passing.”) Examples 14 through 17 come from a very important treatise by David Kellner (1670–1748) called Treulicher Unterricht (Hamburg 1732). Though Kellner never studied with Bach, his treatise is relevant to the present article for several reasons. First, Georg

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<td>Suspensions</td>
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**Example 13**

Types of figures (i.e., Middle Voices).

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12 Kirnberger, Koch, and Wiedeburg repeatedly refer to the chorale as a cantus firmus (Kirnberger 1982; Koch 1782, 231–374; Wiedeburg 1775). While one tends to associate the term with species counterpoint today, in the eighteenth century it merely referred to a melody—either a Protestant chorale or a Catholic chant.
Philipp Telemann (1681–1767), godfather to C. P. E. Bach, endorsed the second edition, showing Kellner’s basic accuracy and an indirect link to the Bach family. Second, Kellner’s treatise was enormously popular, going through eight editions between 1732 and 1791, the first of which sold 2,000 copies (according to Telemann’s preface). Such an impressive print run stands in stark contrast to Johann David Heinichen’s (1683–1729) monumental treatise, Der General-bass in der Composition, which only had one edition in 1728. But Heinichen is still relevant for us because Bach knew his treatise, selling copies of it from his home in Leipzig (Leaver and Zager 2017, 18). Yet Heinichen’s treatise is clearly aimed at the extremely gifted, would-be Kapellmeister, whereas Kellner’s treatise is intended for less gifted pupils who would take more modest positions. Because of this difference in intended audience, Kellner’s treatise is more representative of the average level of knowledge that most eighteenth-century German keyboard players possessed. Bach’s more famous pupils tend to be remembered, but one should keep in mind that he had a constant stream of students of varied abilities. This is all to say that one should not discount Kellner as a window into Bach’s musical culture merely because Kellner’s treatise is aimed at less talented students. Besides, Kellner borrows heavily from Heinichen anyway. In sum, Kellner’s basic accuracy, popularity, introductory level, and his connection to Heinichen and Telemann justify his inclusion here, even though Kellner was not a Bach student.13

Examples 14 through 17 provide the most important figures in Kellner’s treatise. All are taken from the second edition (1737) because this is the one Telemann endorsed. Example 14 is Kellner’s Rule of the Octave, which assigns normative figures to each bass degree in ascending and descending conjunct motion.14 The Rule of the Octave is the basic point of departure for harmonizing unfigured basses, but of course basslines do not always move by step and are not always this consonant. Kellner says that some variety (i.e., leaps) comes through chordal inversion [Umkehrung or Verkehrung], as shown in Example 15. According to Kellner, the unprepared dissonant bass note F at Example 15c is justified through an inversion of the parts in Examples 15a and 15b.15 Unlike Kirnberger, Kellner’s (and Heinichen’s) understanding of inversion exists

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13 The first English translation of Kellner is forthcoming with a modern edition of the Sibley Choralbuch (Leaver and Remeš, eds. 2018).

14 The figures are Kellner’s; the ascending harmonization is borrowed from Rameau, but it corresponds exactly to Kellner’s figures.

15 Kellner writes, “Those who are not fully educated in this matter are confused, and ask ‘From where does this unprepared dissonance [at Example 15c] come?’ because, for all they know, this is the only way such an inversion may be allowed. The following example [Example 15] serves to explain this matter. At (c), the second note [bass note F] represents an inversion of the parts that had occurred in the second chords of (a) and (b)” (1737, 40). “Diejenigen, so in dieser Sache keinen vollkommenen Unterricht haben, verwundern sich, woher
independently from Rameau’s fundamental bass theory—for Kellner, and indeed, most Germans in the first half of the eighteenth century, inversion simply means a swapping of parts, without reference to a generative root. Thus, as Example 15 demonstrates, the Rule of the Octave may also determine the implied harmony of leaping basslines, even when they involve unprepared dissonances.16

![Hypothetical realization after Rameau, Traité de l’harmonie, who uses the same figures (1722, 232):](image)

![Hypothetical realization (my own):](image)

**Example 14**
Kellner’s figures for the Rule of the Octave from *Treulicher Unterricht* (2nd ed. 1737, 31).

![Hypothetical realization after Rameau, Traité de l’harmonie, who uses the same figures (1722, 232):](image)

**Example 15**
Kellner on chord inversion (2nd ed. 1737, 40).

16 Kellner writes that “While it may often seem that, in modern compositions, composers omit preparations when they are forced to do so, in reality, this arises from the inversion [Verwechslung] of voices, because, at the moment of the dissonance, the bass trades places with an upper voice, a topic which was already mentioned in certain places [in this treatise]” (1737, 89). “Indessen scheinet es oft in den modernen Compositionen, als wann
Example 16 reproduces Kellner’s two tables of signatures, in which he gives all the most common abbreviated figures on the left, and the required intervals to be added on the right. Such a concise reference of available figures would be very useful for harmonizing an unfigured bassline. But Kellner’s most useful and enduring contribution to figured bass pedagogy is shown in Example 17. Whereas the Rule of the Octave in Example 14 focuses mostly on consonance, the two tables in Example 17 summarize Kellner’s conception of dissonance. These tables outline a method for adding dissonant figures to an unfigured bassline in the clearest manner of any source known to the present author. The tables are essentially a digest of Heinichen’s chapter on unfigured basses (1728, 2:725–768). Indeed, that Wiedeburg referenced these tables fifty years after its publication is an indication of their lasting pedagogical value (1765–75, 3:2).

As in the Rule of the Octave, the first parameter in Example 17 is the scale degree of the bass note, listed in the left-hand column. The second parameter is the type of

die Componisten, da, wo es nothwendig erfordert wird, die Präparation nicht observiret: Solches aber entstehet nur aus der Verwechselung der Partien, weil bey der Dissonanz die Baß-Note in die Ober-Stimme, und eine von den Ober-Stimmen in den Baß gesezt werden, wovon an einigen Orten schon vorher Erwehnung gethan.”
bass motion: either ascending or descending, and either conjunct or disjunct. The four columns to the right show how the available dissonant figures depend on the type of bass motion: first, for ascending stepwise motion; next, for descending stepwise motion; then, for either ascending or descending stepwise motion; and finally, in the far right

Example 17
Kellner’s tables of available dissonances (2nd ed. 1737, 96–97).
column, for leaps, which has the most available dissonances. In sum, Examples 14 through 17 represent the essentials of a very popular method for training eighteenth-century German students to figure an unfigured bassline. In fact, these examples likely represent a base level of knowledge that many students were familiar with. And since Example 17, in particular, is a refinement of many of Heinichen’s ideas, and because Telemann (godfather to Emanuel Bach) endorsed the second edition of Kellner, it is all the more likely that J. S. Bach may have used similar methods with his own students and conceived of this process in a similar way. If Bach’s students were to use a method similar to Example 17, their task would be simplified because the chorale melody is always given. That is, a given soprano note restricts the choice of figure for a given bass note, simplifying the harmonization process.

Kittel and Kirnberger, two of Bach’s students, provide the best models for how Stage 2 of Bach’s pedagogical method works in practice. Multiple-bass chorales figure prominently in both of their pedagogical methods, and they both claim their methods come from Bach, at least in part. Example 18 is from a manuscript attributed to Kittel (1791). The chorale is given at the top, followed by eight basslines. Each chorale phrase is labeled in brackets using Kirnberger’s harmonic types (Example 10) and the bassline descriptions (Example 11), just as in Example 12.

The most notable feature of these eight basslines is that they begin in the homophonic Choralbuch style and end in an ornamented Choralgesang style. This is more due to a gradual acceleration of surface rhythm (from half notes to quarter notes) than due to a progression through Kirnberger’s harmonic Types A–D, even though the last harmonization does use all Type C. At this point it must be emphasized that while the Choralgesang style is usually used for voices, it need not be. Basslines six and seven in Example 18 are indeed ornamented, but the leaps resemble a more active, instrumental style than flowing, vocal style. Still, the overall trend exhibited in the eight basslines is toward smaller note values, more tonicizations, and more suspensions. These factors are in keeping with the description of the Choralgesang style given in the first part of this article.

Example 17 includes only one chromatic alteration: the raised fourth degree. The same occurs in Wiedeburg’s table for harmonizing chorales (1765–75, 3:359). Wiedeburg dedicates two chapters to chorale harmonization and includes a chorale with one hundred basses (1765–75, 3:504–534)! I discuss Wiedeburg in greater depth in my forthcoming dissertation, which addresses the compositional pedagogy of Bach and his contemporaries.

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Example 18

Kittel's multiple basses for *Liebster Jesu wir sind hier* from 25 Chorale... (ms., Erfurt, 1791).
Example 19 by Kirnberger exhibits the same overall trend from the *Choralbuch* style to the *Choralgesang* style, but in a different way than Kittel. Whereas Kittel used more varied rhythms and more conservative harmonies (never reaching Type D), Kirnberger’s settings remain in half notes throughout and become much more chromatic. For example, consider the last two basslines—Type D in Kirnberger’s classification. Given the criticisms of the complexity of Bach’s vocal chorales quoted above, it seems likely that this level of chromaticism would not usually be appropriate for organ accompaniment of congregational singing, which was Kittel’s primary goal. Rather, Kirnberger is testing how far he can take the chromaticism as a compositional exercise. Thus, Kittel and Kirnberger’s different approaches to multiple-bass harmonization are the result of their different goals: Kittel is training organists to accompany congregations, while Kirnberger is training composers. For this reason (and as a rhetorical appeals to *copia*, or abundance), Kirnberger is adamant that countless variations are possible beyond the twenty-six harmonizations he gives. Therefore, it seems that Stage 2 in Bach’s pedagogy was designed to explore the full range of harmonic resources and ornamental possibilities with the chorale melody held constant as a *cantus firmus*. Such a pedagogical strategy would be especially fitting for a composer like Bach, whose explorations of “the possible” in nearly every genre and style of his day still move and fascinate listeners three centuries later.

**Summary and Conclusion**

Leaver’s recent reassessment of the Sibley *Choralbuch* suggests the existence of two distinct styles of chorale harmonization in Bach’s pedagogy—the *Choralbuch* style and the *Choralgesang* style. I argue that Bach’s two-stage method described by C. P. E. Bach bridges between the two types of realization. In Stage 1, which addressed texture, Types 1, 2, and 4.1 belong to the homophonic *Choralbuch* style, whereas Types 3 and 4.2 belong to the ornamented *Choralgesang* style. In Stage 2, which addresses harmony and simple outer-voice counterpoint, realizations in the *Choralbuch* style tend to use harmonic Types A and B because these are diatonic. In contrast, the *Choralgesang* style tends to use Types C and D because these are more chromatic. The chorale remains a *cantus firmus*, or fixed point of reference throughout both stages. Eventually the restriction of the *chorale* framework was discarded and Bach’s lessons

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19 The quoted descriptions in Example 19 are Kirnberger’s; the bracketed text is mine.

20 He writes that “We cannot help being amazed at the variety that harmony offers. The harmonies that could be used with this melody are not at all exhausted by these twenty-six basses. If one now considers that at least as many melodies can be written to each of these basses, that each melody can be changed again in countless ways by florid counterpoint—what wealth, what diversity!” (Kirnberger 1982, 305–6).
Example 19

Kirnberger’s multiple basses (selection from 26 total) from The Strict Art (1982 [1771–91], 300–305).
would then address fugal composition. But even here the pupil was not completely untethered, because the conceptual framework of figured bass had been internalized and likely continued to inform the composition of free, contrapuntally oriented works. That is, upper voices were still determined primarily by the bass scale degree in both harmonically and contrapuntally oriented genres.

Bach’s ordering of topics—figured bass, chorale harmonization, fugue—implies that he viewed an understanding of figured bass as a prerequisite to the study of fugue. And since Bach was training composers, it seems likely that his pedagogical method would reflect his own compositional outlook. Although one often associates figured bass more with harmony than with counterpoint today, the pedagogical method reconstructed in this article (and, indeed, the early seventeenth-century origins of figured bass) suggest that one should view thoroughbass as equally capable of describing vertical and horizontal dimensions of music. These findings suggest two directions for the future: first, an increased reliance on figured bass and bass-degree-oriented thinking in analyses of contrapuntal genres; and second, a more consistent emphasis on figured bass and the Rule of the Octave in music theory pedagogy, regardless of whether one is teaching “harmony” or “counterpoint.”

Like Bach’s method, where the chorale was a musical cantus firmus for realizations that bridge from homophony to ornamentation, so should figured bass act as a conceptual cantus firmus—a theoretical bridge between harmonic and contrapuntal modes of thought.

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21 McCormick (2015, 246) and Renwick (2001, 1–8) also describe a pedagogical progression from figured bass to fugue in connection with J. S. Bach.

22 The strict division between “harmony” and “counterpoint” which became so prevalent in the Paris Conservatory in the nineteenth-century (and largely characterizes present-day thought) was foreign to the eighteenth century.
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