Chorales in J. S. Bach's Pedagogy: Recasting the First Year Undergraduate Music Theory Curriculum in Light of a New Source

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Inspired by new evidence about J. S. Bach's teaching method, this article offers an historically informed perspective on teaching part writing while striving to achieve the College Music Society's curricular goals of integration, creativity, and diversity. The key is an emphasis on transferrable skills, which are honed in the simplified context of hymn tune harmonization and then applied to more diverse settings through analysis and model composition. Transferrable skills sharpened in this method range from basic (figured bass, chord spelling, voice-leading, harmonic analysis, and vocal and keyboard experience) to more advanced (formal and cadential analysis, ornamentation, composition with compound melody, and reductive analysis). The resulting method is historically informed, pedagogically appropriate, internally consistent, fundamentally musical, and always contextualized.

Introduction

Long-standing curricular assumptions in music theory and musicology have been increasingly questioned in recent decades in favor of a more culturally inclusive and less technical curriculum. We see such concerns raised in the 2014 College Music Society (CMS) manifesto (Myers et al. 2014), numerous articles,[1] and in recent curricular changes at Harvard.[2] Part writing, often described as unnecessary and outdated, is one of the most common targets in this debate. For instance, the CMS manifesto states that "both the effectiveness of [four-part, Bach-style part writing] and the narrow horizons toward which it aims need to be carefully assessed from a contemporary, creative vantage point" (Myers et al. 2014, 36). And Kulma and Naxer (2014) write that "musicians in the past century have moved beyond part writing as the only model of good music making. [A modern] view of music history and style requires a more general approach, and de-emphasizes the centrality of eighteenth-century part writing." Clearly part writing and other traditional music-theoretical

1 See Schubert (2011), Freeman (2014), Covach (2015), Kulma and Naxer (2014), Lowe (2015), and Richards (2015).

2 As of fall 2017, the traditional theory and history sequences at Harvard are no longer required of music majors. See Leifer (2017) and Robin (2017).

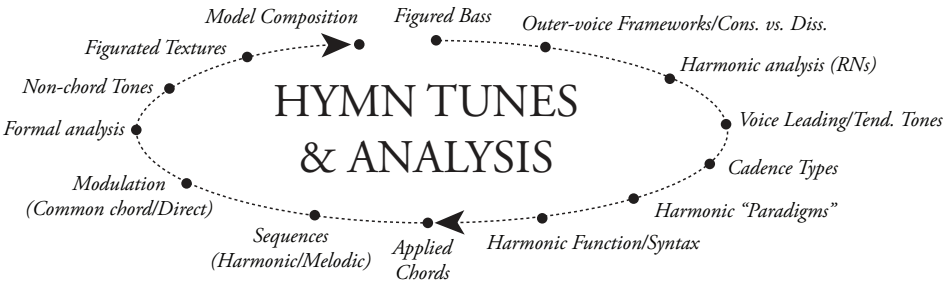
topics lay in the crosshairs of curricular reform. So, Why learn part writing? What use, if any, does it serve today?

To answer these questions, let us begin with the CMS manifesto's laudable pillars of integration, creativity, and diversity (Myers et al. 2014, iii). In accordance with these goals, I propose a method of teaching part writing that aims to integrate various basic skills in order to enable creativity later in diverse contexts. Ironically, this "new" method does not take "a more general approach," as Kulma and Naxer propose, but instead has its roots in the most traditional of sources: J. S. Bach's chorales. I argue that chorales are ideal tools for teaching transferrable skills. A focus on transferrable skills is among the best strategies for preparing students to succeed in our pluralistic musical culture, because no single curriculum can teach everything that each student needs. But before a concept can be transferred to a new context, it is helpful to introduce the idea first in a simple environment. This environment functions like a conceptual "home base" against which to understand other styles.[3] However, this pedagogical strategy, which relies on a stable stylistic reference point (chorales), works against the important goal of curricular diversity. To counteract this, I supplement my part writing method with the analysis of a diverse range of music. In this way, analysis—defined here as the recognition of a pattern in a new context—is the student's first act of transfer. Similarly, model composition is another, more creative act of transfer. Therefore, at the center of my proposed curriculum is the interplay between part writing, analysis, and composition as tools for promoting integration, creativity, and diversity through transferrable skills.[4]

Example 1 outlines this interplay more specifically. Hymn tunes (i.e., modern chorale melodies) and the analysis of a wide range of repertoire form the axis around which numerous other tonal theory topics revolve. Like J. S. Bach's teaching, this first-year curriculum begins with figured bass, shown here at the 12 o'clock position. But the more significant similarity with Bach is the use of outer-voice frameworks (as described below), together a harmonic outlook informed by eighteenth-century German figured-bass theory. Beginning at 12 o'clock in Example 1, my two-semester curriculum proceeds clockwise through progressively more advanced topics,

3 My intent is not to suggest that Bach's chorales are the fount from which all other styles and genres spring (as his student Kirnberger believed). Rather, in my experience, students benefit from consistent, concrete points of reference, and chorales are useful tools in this regard.

4 It should be noted that the CMS manifesto was in part responding to the changing needs of music curricula which often serve non-musicians. The method proposed here is intended for the professional training of future musicians (be it at a conservatory or elsewhere), not for music appreciation courses.



Example 1
Hypothetical First-Year Tonal Theory Sequence Revolving Around Hymn Tunes and Analysis.

concluding with model composition.[5] Some readers may feel a year is too long to wait for composition, especially in a curriculum which supposedly values creativity. My personal experience, however, has been that students are too often asked to be creative before honing the technical parameters to enable creativity in the context of model composition. The results are often mediocre, in part because of a lack of restricting guidelines. Hymn tunes, which act as a curricular through-line in my method, are an ideal environment for introducing the technical parameters and guidelines to enable creativity, because hymn tunes are simple, singable, playable, complete pieces of music that nevertheless conform to pedagogical needs.[6] That is, hymn tunes are like miniature laboratories where I introduce theoretical concepts first in a simplified context, later applying and developing these concepts in the analysis of at times drastically different repertoire. Though this article focuses primarily on my part writing method, analysis also occurs in tandem with part writing throughout my one-year curriculum. Analysis can encompass any kind of music—the guiding idea is simply that the hymn tunes introduce the analytical parameters. In sum, my curriculum takes Bach's outer-voice part-writing method as its starting point and uses hymn tunes to consolidate many basic theoretical topics in an integrated way, later applying these concepts more creatively in analysis and composition.

Thus far I have made strong claims for what may seem like a rather unoriginal method. As we will see, my approach borrows ideas from many sources, but it also differs

5 I have tried to list the topics in Example 1 in order of increasing difficulty, but naturally one may choose to order them differently.

6 The reader may wonder why a method that claims to be rooted in J. S. Bach's pedagogy does not use the same chorale melodies that Bach used. I describe my reason for preferring more modern hymn tunes in Part II below.

from current part writing methods in at least seven important ways: 1) my approach uses hymn tunes, which are tonally closed, complete pieces of music, not fragments; 2) unlike Bach's chorale melodies, the hymn tunes I use lack non-chord tones and are never modal, which simplifies the harmonization process; 3) unlike Bach's chorales, hymn tunes are often periodic or sentential, allowing for simple formal analyses; 4) unlike many part writing exercises today, hymn tunes are especially designed for singing and are simple enough to play at the keyboard—singing and playing keyboard are both important transferrable skills; 5) in my method, students work either from an outer-voice structure or a melody, and are never asked to simply compose a chord progression out of nothing; 6) my hymn harmonizations constantly recycle five voice-leading patterns which serve as "chunks" (see Exx. 13 and 14), encouraging pattern recognition; and 7) my method borrows from eighteenth-century German figured-bass theory by focusing on bass scale degrees as harmonic determinants. Therefore, the resulting method is contextualized (1), relatively simple (2), conducive to formal analysis (3), fundamentally musical (4), concrete (5), internally consistent (6), and historically informed (7). The impetus for the development of this new method was the recent re-identification of a source from Bach's students.

Part I: Bach's Method and a New Source

Harmonic analysis of Bach's published vocal chorales and harmonization of chorale melodies have been mainstays of theory and composition classrooms for centuries. However, a recently rediscovered source suggests that we can come closer to imitating Bach's method (Leaver 2016).[7] The anonymous manuscript, held in the Eastman School of Music's Sibley Music Library, likely originates from Bach's students in Dresden from about 1740. The "Sibley Choralbuch" contains 227 figured-bass chorales and may be a copy of the chorale book Bach used with his students (Leaver 2016, 31). This finding implies that Bach began his students not with the harmonic analysis of ornamented chorales, as we often do today, but with the realization of figured-bass chorales in a simple, unornamented, homophonic manner that I call the *Choralbuch* style. This term is intended to differentiate the homophonic, keyboard-oriented style from Bach's more ornamented vocal chorale settings, or *Choralgesänge*.[8]

7 The "Sibley Choralbuch" was already known to Hans-Joachim Schulze (1981), but Schulz identified it as not coming from Bach's students. See Remeš (2017).

8 C. P. E. Bach uses the word *Choralgesänge* in his publications of his father's vocal chorales. Instead of "*Choralbuch*" and "*Choralgesang*," Leaver (2001) calls these styles "keyboard" and "vocal" because of the settings in which they occur in Bach's writings. I prefer the former names because I do not wish to

I describe the "Sibley Choralbuch" and Bach's pedagogy in greater detail in Remeš (2017), which is summarized below.

We know figured-bass chorales featured prominently in Bach's teaching because of Emanuel Bach's description of his father's pedagogy:

> In composition [J. S. Bach] started his pupils right in with what was practical, and omitted all the *dry species* [i.e., decontextualized exercises] 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 [Stage 1]. Then he taught them to devise the basses [note the plural] themselves [Stage 2]. He particularly insisted on the writing out of the thoroughbass in parts [*Aussetzen der Stimmen im Generalbasse*]. [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.[9]

This description suggests that Bach used chorales in two stages, as outlined in Example 2. In Stage 1, the student receives a chorale melody, bassline, and figures, and supplies the inner voices. Later, in Stage 2, only the chorale melody is given and the student supplies the bassline, figures, and inner voices, often supplying multiple basslines to a given chorale melody.[10]

	STAGE 1	STAGE 2
STUDENT RECEIVES	Chorale, Bassline, and Figures	Chorale only
STUDENT PROVIDES	Inner voices	Bassline, Figures, and Inner voices
PEDAGOGICAL FOCUS	Texture	Harmony & Two-Voice Counterpoint
TYPES OF SOURCES	Single-Bass Sources	Multiple-Bass Sources

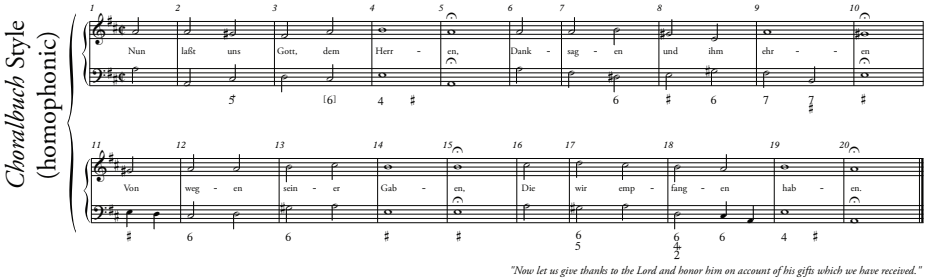
Example 2
Overview of J. S. Bach's Two-Stage Pedagogical Method and Source Types.

imply that each style is necessarily bound to a specific instrument, though it often is.

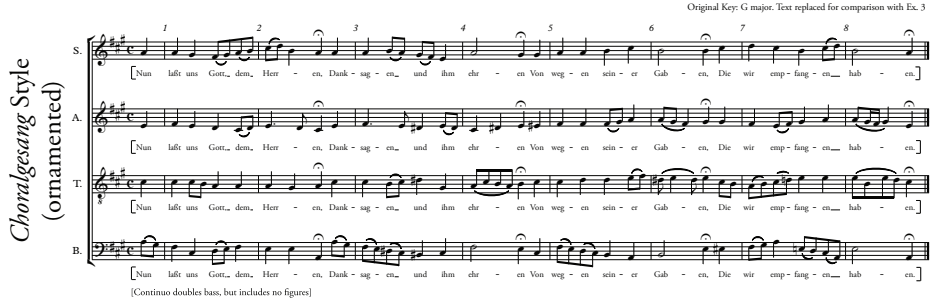
9 Wolff (1998, 399), commentary added by the author of this article. Interestingly, C. P. E. makes no mention of chorales in his *Versuch über die wahre Art das Clavier zu spielen* (1753/62). Heinrich Christoph Koch, however, describes many styles of setting chorales in the section titled "On Counterpoint" in his *Versuch einer Anleitung zur Composition* (1782, 230–374).

10 Sarah McCormick (2015) surveys the majority of known multiple-bass sources from Bach's students.

As already mentioned, we can generalize two styles of chorale harmonization.[11] The *Choralbuch* style (homophonic, keyboard-oriented) corresponds to that of the "Sibley Choralbuch," as shown in modern transcription in Example 3. In general, the *Choralbuch* style is more triadic, consonant, disjunct, diatonic, vertically oriented, has a half-note pulse, is often improvised at the keyboard, and is used for organ congregational accompaniment where only the chorale is sung. In contrast, Example 4 presents Bach's *Choralgesang* setting (ornamented, vocal-oriented) of the same chorale from Cantata 165. The *Choralgesänge* use more dissonant figures, suspensions, and faster values, are more conjunct, chromatic, horizontally oriented, have a quarter-note pulse, and are written out for concerted music where all four voices are sung.



Example 3
Nun laßt uns Gott dem Herren for Keyboard from the *Sibley Choralbuch*
(anon. ms., likely Dresden, ca. 1740).



Example 4
J. S. Bach's Vocal Setting of *Nun laßt uns Gott dem Herren*
from Cantata BWV 165, *O heilges Geist und Wasserbad.*

11 Ulrich Kaiser (2002) makes a similar pedagogical division between *Kantionalsatz* (homophonic, as exemplified by Heinrich Schütz) and *Choralsatz* (ornamented, as exemplified by J. S. Bach's vocal chorales).

In sum, Bach's two-stage method begins with an outer-voice figured-bass structure while students supply the inner voices. Later, students write multiple basslines and harmonizations to a given chorale melody. The goal of each stage was likely to provide a pedagogical bridge between *Choralbuch* to the *Choralgesang* styles through increasingly embellished realizations.

Part II: Adapting Bach's Method for Today's Classroom

To adapt Bach's method for the today's classroom, I present hymn tunes in five ways.[12] They form a sequence of increasingly difficult part-writing activities in order to build creative independence on a small scale. I begin with a complete harmonization, which acts as a model. Each subsequent type removes a "support," first omitting the inner voices, then the harmonic analysis, and finally, the bassline. Thus, the five ways imitate Bach's Stages 1 and 2. This sequence requires the student to take on first more analytical and then more creative decision-making responsibility. Creative freedom culminates in the still relatively restricted environment of the model composition project (Part IV). Later composition projects in year two are of course necessary. The fifth and final way of presenting hymn tunes is the solution with full realization and analysis.

Example 5 outlines the five ways of presenting hymn tunes in the classroom, which I designate "Types." The types progress through the preparatory model (Type 1), the easiest activity (Type 2), the intermediate activity (Type 3), the target activity (Type 4),[13] and finally the solution (Type 5). Students receive a variety of different hymn tunes at each stage—I use the same tune in the following examples only for demonstration purposes. Teachers might introduce a hymn tune in Type 1 during class and assign it as homework to analyze, play, and sing. Later, when students are ready, they can begin Type 2 and so on. At each stage, the "answer" (Type 5) can provide quick correction and a point of departure for discussion, though there are sometimes multiple correct solutions.

12 My website provides a freely accessible database of hymn tunes for use in my proposed curriculum (http://derekremes.com/teaching/partwritingresources/). All tunes are organized into five types and employ the same set of harmonic paradigms and cadences throughout with slurs indicating phrase divisions (in order to simplify harmonic analysis).

13 One reason that Type 4 is an appropriate target activity is that the addition of a bassline to a given melody is the main component of the "Free Response Question 7" on the Advanced Placement (AP) Music Theory Exam.

TYPE	DIFFICULTY	STUDENT IS GIVEN	STUDENT PROVIDES
1	Preparatory	Four voices only	Figures and Roman Numerals
2	Easier	Outer voices with Figures and Roman Numerals	Inner voices
3	Intermediate	Outer voices with Figures	Roman Numerals and Inner Voices
4	Target Activity	Soprano only	Alto, Tenor, Bass, Figures, and Roman Numerals
5	n/a (solution)	Four voices, RN's, figures, formal labels	Nothing (for modeling, correction, and singing)

Example 5
Five Ways of Using Hymn Tunes in Today's Undergraduate Theory Classroom.

Examples 6 through 10, all of which use the same hymn tune (again, merely for demonstration purposes), correspond to the five types in Example 5. Example 6 demonstrates the preparatory Type 1, where students are given a four-voice realization as a model and supply only the figures and Roman numerals. Here the student becomes familiar with hymns through singing, playing, and harmonic analysis (figured bass plus Roman numerals). A formal analysis is optional in Type 1. Example 7 illustrates the preparatory Type 2, in which students compose only the alto and tenor voices to a given outer-voice framework that includes an harmonic analysis. Phrases, which are always marked with slurs, begin with given complete, four-voice chords. By starting in the same position, students' solutions are more likely to correspond with the given answer, streamlining both realization and grading.[14]

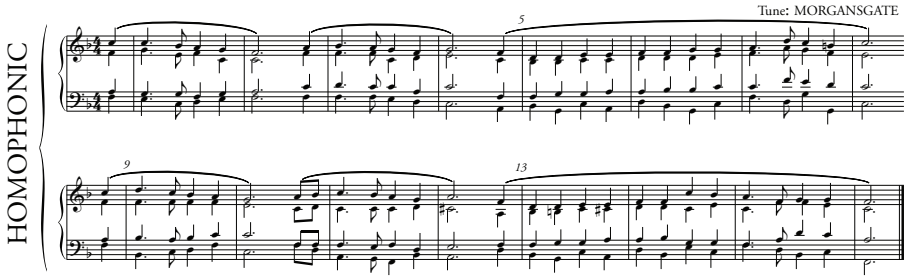
Example 8 shows Type 3, the intermediate activity, which resembles the given outer voices and figures in Bach's Stage 1. Type 3 differs from Type 2 only in that the Roman numerals are not given. Here students supply the inner voices, Roman numerals, and formal analysis themselves. Example 9 displays Type 4, the target activity, and is similar to Bach's Stage 2, in which he only provides the chorale melody. (I describe the process of adding a bassline to a given chorale melody in Part IV below.)

Example 10 gives the full solution, or Type 5.[15] Admittedly, the solutions are

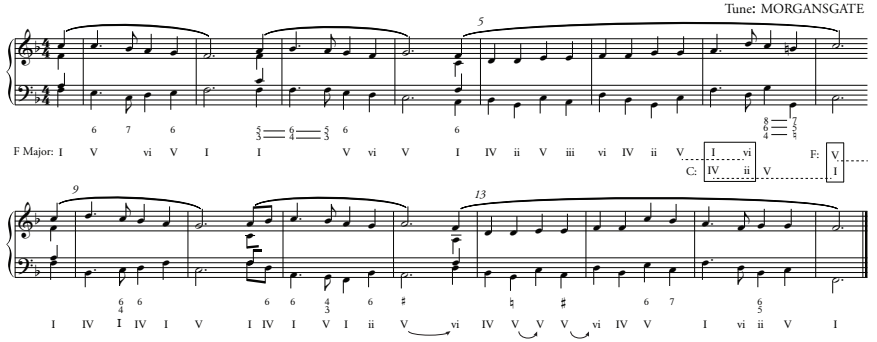
14 Some may object that giving the starting chord of each phrase makes it too easy. If this is the case, then simply assign more exercises or bump students up to Type 3 or 4. My philosophy is to to make tasks easier in the beginning stages so that students perceive their progress more readily.

15 The solutions for Type 5 include function symbols because I believe they are helpful to students when combined with the identification of the bass scale degree, shown as a superscript. The dual function of a harmony in a common-chord modulation is shown with two adjacent symbols. I would not require that students add function symbols in Types 1–4; I include them in the answers simply for reference.

somewhat cluttered, but this is a byproduct of their analytical comprehensiveness. Eventually students can describe every aspect of each hymn—a miniature composition—using figured bass and Roman numerals,[16] as well as labels for cadences, harmonic paradigms (see Example 13), sequences, modulation, and form. Most importantly, students gain an intuitive sense of these concepts through the physicality of singing and playing keyboard. Both are invaluable because they provide students with immediate aural feedback, helping to match an harmonic phenomena with an analytical label. I also advocate for "self-accompaniment" at the keyboard in private.[17]



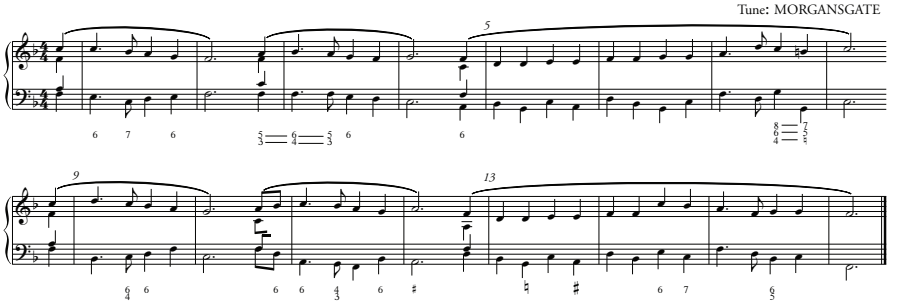
Example 6
Type 1—Student supplies figures and Roman numerals (optional: form analysis).



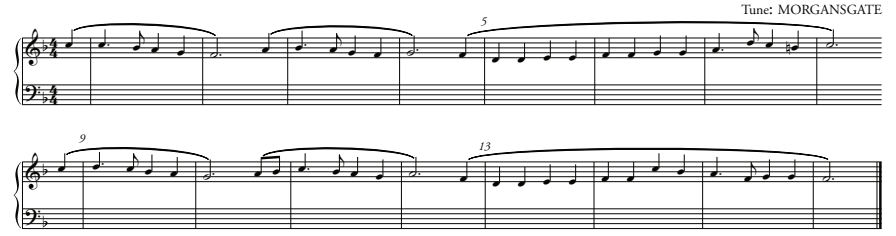
Example 7
Type 2—Student is given outer voices, figures, and RNs;
student supplies the inner voices (optional: form analysis).

16 I use an arrow to point to a secondary dominant's resolution. This is problematic, however, in the case of a deceptive resolution. In the latter case I would use "slash" notation (e.g., V/vi).

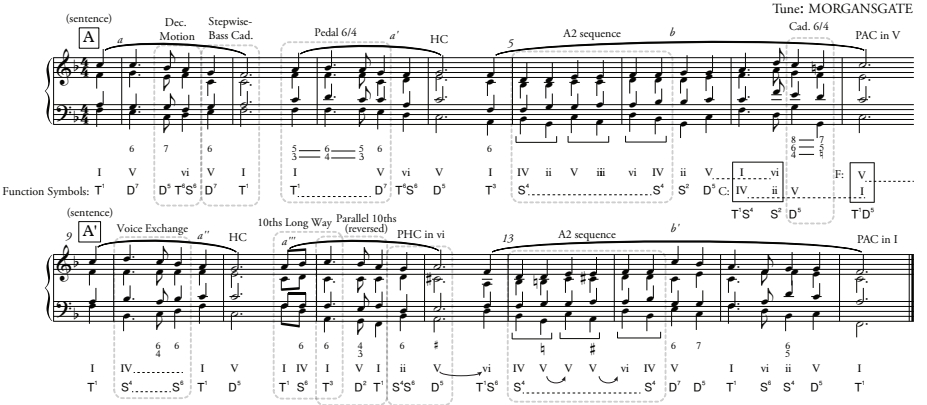
17 My harmonizations are in chorale style, where the tenor is written in the bass staff and is generally lower than in keyboard style, where it is written in the upper staff. Chorale style is difficult for non-



Example 8
Type 3—Student is given outer voices and figures;
student supplies RNs and inner voices (optional: form analysis).



Example 9
Type 4—Student is given the melody only and supplies the
lower three voices, figures, and RNs (optional: form analysis).



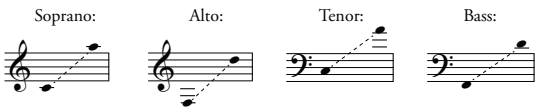
Example 10
Type 5—Full solution (for modeling, correction, singing, and playing).

keyboardists to read and to play, which is a hindrance to self-accompaniment. Should chorale style prove too difficult, students can sing one voice while playing two others.

Part III: Summary of Supporting Topics

The outer rim of Example 1 includes what I call "supporting topics." These analytical topics form the students' introduction to the technical parameters which enable creativity in the context of model composition: vocal ranges, 6/4 chords, harmonic paradigms, the "Big 25," cadence types, non-chord tones and ornaments, and formal analysis. Before I explain these further, I wish to emphasize that my definitions outlined below do not claim applicability for all styles of music. Rather, they hold true most of the time in the artificial pedagogical context of my original hymn harmonizations. However, as I will show at the end of Part IV, the end goal of analysis is eventually to break out of this artificial system so that students can grapple with the ways in which composers depart from expected norms, thereby producing expressive effects.

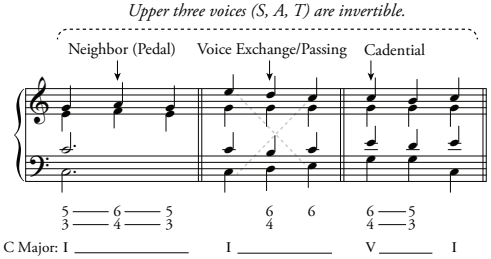
1) **Vocal Ranges**: Though the outer voices are given in Type 3 (in effect reducing the chances students will exceed vocal ranges), I still consider it important for students to know the range of each voice part. Example 11 proposes a simplified model of SATB ranges that makes them easier to memorize: each range is an octave plus a sixth, and the soprano/tenor and alto/bass pairs relate by octave. (For this simplicity I am willing to sacrifice an alto range that goes too low and tenor that goes too high.)



Example 11
Simplified Vocal Ranges for Part Writing.

2) **6/4 Chords**: Example 12 illustrates types of 6/4 chords. I focus on the same three types that Nadia Boulanger taught her students: neighboring (i.e., pedal), passing, and cadential.[18] All of my hymn harmonizations use only these three types. I recommend that students practice writing, singing, and playing these three 6/4-usages in isolation in a few different keys as a preparatory activity to Type 1 exercises, in which students can later practice identifying these 6/4 chords in Type 1 exercises. Note that the upper three voices of Example 23 are invertible at the octave.

18 Nadia Boulanger's teaching is preserved to some extent by her long-time student, Narcís Bonet. See Bonet (2006, 110–112). For a thoughtful recent reassessment of 6/4 chords, see Temperley (2017).



Example 12
Three Types of 6/4 Chords (Bonet 2006, 110–112).

In order to help students understand the harmonic syntax outlined in this curriculum, the teacher should emphasize that 6/4 harmonies rarely receive their own Roman numeral (or functional symbol) because they are dissonant contrapuntal elaborations.[19] This is also true of the cadential 6/4; even though the Roman numeral "V" is placed under the 6/4 figure, it actually applies to the 5/3 harmony. The interval of a fourth in the cadential 6/4 is always some kind of non-chord tone: either a suspension, passing tone, or appoggiatura (i.e., incomplete neighbor).

3) **Harmonic Paradigms**: The passing 6/4 also serves as one of the three voice-leading "paradigms" in Example 13, the other two being "Parallel 10ths"[20] and "10ths the Long Way." Like schemata, paradigms identify common voice-leading patterns.[21] Together, the five patterns in Examples 12 and 13 help simplify the harmonization process because they occur over and over in my collection of hymn tune harmonizations. If students can recognize the outer-voice scale degrees, keeping in mind the possibility that the upper voices are inverted (but usually not in my harmonizations), it becomes easier to fill in the inner voices through the process of "chunking."

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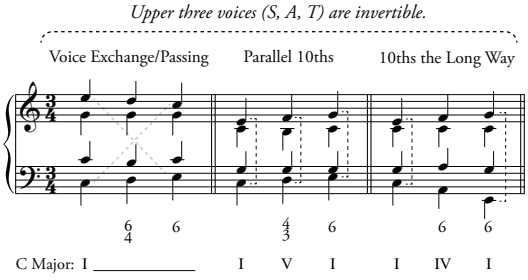
19 Advanced students may be curious to know why this is so. Without going into the controversial status of the fourth throughout music history, I have found it helpful to explain that fourths that include the bass are considered "primary" and therefore dissonant, whereas fourths between upper-voice are considered "secondary" and therefore are tolerated.

20 While the "Parallel 10ths" paradigm includes a dissonant 6/4, I make an exception to my above-stated rule and do include a Roman numeral and function symbol for this chord. Note also the non-standard figured-bass symbol for the cadential 6/4 resolving to a 4/2 chord in Example 15. I have found that students struggled to compose upper voices to this progression because of the change of bass. For this reason, I prefer the notation: 6/4-6/4/2. The two horizontal lines (6-6 and 4-4) indicate the motion of individual voices above the bass and clarify the unusual circumstance that the dissonant fourth resolves to another (augmented) fourth.

21 "Paradigm" is roughly equivalent to "schema" in its focus on outer-voice scale degrees, but lacks the latter's cognitive connotations.



Example 13
Three Primary Voice-Leading "Paradigms."

4) **The "Big 25"**: Example 14 presents the "Big 25."[22] This table aims to simplify the harmonization process by limiting the available chords. As in Heinichen's 1728 treatise, *Generalbass in der Composition* (which Bach knew), the scale degree of the bass voice provides the primary organizing factor in this table (given across its top row).[23] Yet unlike Heinichen, Example 14 also categorizes each harmony into rows according to harmonic function. Students may use this table as a reference

	Best Progressions: 1. T - S - D - T 2. T - D - T 3. T - S - T (but not ii-I)	BASS SCALE DEGREE						
		$\hat{7}$	$\hat{1}$	$\hat{2}$	$\hat{3}$	$\hat{4}$	$\hat{5}$	$\hat{6}$
FUNCTION	TONIC (T) (I, iii, vi)	——	I, $I\frac{5\text{-}6\text{-}5}{3\text{-}4\text{-}3}$	——	I^6, iii	——	——	vi
	SUBDOMINANT (S) (ii, IV, vi)	——	$ii\frac{4}{2}$	ii, ii^7	——	ii^6, IV, $ii\frac{6}{5}$	——	vi, IV^6, $ii\frac{4}{3}$
	DOMINANT (D) (V, vii^o)	V^6, $V\frac{6}{5}$	——	$V\frac{6}{4}$, vii^{o6}, $V\frac{4}{3}$	——	$V\frac{4}{2}$	V, V^7, $V\frac{6\text{-}5}{4\text{-}3}$ $V\frac{6\text{-}6}{4\text{-}4}$, $V\frac{8\text{-}7}{6\text{-}5}$ $\frac{2}{}$ $\frac{}{4\text{-}3}$	——

*In the minor mode, only chord qualities change.

Example 14
The "Big 25" (Primary chords in common practice style—model composition is limited to these in Step 3, Ex. 21).

22 I borrowed the idea of restricting students' harmonic vocabulary from Seth Monahan's "Big 18" as taught at the Eastman School of Music. I thank the anonymous reviewer who pointed out the similarities between Example 14 and Figure 1.1 in Gauldin (1988, 11), the now-dated zig-zag model of Roman numerals. While both Example 14 and Figure 1.1 use Roman numerals and label function, the organization of Example 14 by bass scale degree fundamentally changes how students interact with the table. Example 14 is therefore less abstract than Figure 1.1 and more closely connected with figured-bass theory, specifically the rule of the octave.

23 Bach sold Heinichen's treatise out of his home. Johann David Kellner's treatise, *Treulicher Unterricht* (2nd ed., 1737), borrows much from Heinichen and includes a table similar to Example 14 (96–97). The first English translation of Kellner's treatise is forthcoming (Remeš and Leaver, eds. 2018).

when composing their own basslines in Type 4 and during the composition project, discussed below in Part IV. The top left corner of the table identifies three functionally normative progressions: 1) T–S–D–T; 2) T–D–T; or 3) T–S–T (but not ii–I).[24]

5) **Cadence Types**: Students often ask "What is the difference between tonicization and modulation?" The table in Example 15 provides a brief (albeit overly simplified) answer to this question that I have found pedagogically appropriate. It shows eight common cadence types on a continuum of varying degrees of finality. The faded color in the left-most column shows that the difference between tonicization and modulation is one of degree and not kind. Four cadences—perfect authentic, imperfect authentic, plagal, and stepwise-base—result in a modulation when they occur in a non-tonic key. In addition, a tonicized half cadences are stronger (or more conclusive) than applied chords, which typically occur mid-phrase and therefore do not form cadences. (I define cadences here as phrase-ending events.) I exclude the deceptive cadence/deceptive motion from the continuum, as its effect is ambiguous regarding tonicization. I would encourage students to use this table (as with Example 14) as a

	CADENCE TYPE	PHRASE ENDS WITH…	FINALITY
Modulation (when in a new key)	Perfect Authentic (PAC)	$V^{(7)}$ - I with $\hat{1}$ in soprano	More conclusive (generally)
	Imperfect Authentic (IAC)	$V^{(7)}$ - I with $\hat{3}$ or $\hat{5}$ in soprano	
	Plagal Cadence (PC)	$IV^{(6)}$ - I	
	Stepwise-Bass Cadence (SBC)	$V^{(7)}$ - I with either chord in inversion	
Tonicization	Tonicized Half Cadence (Ton. HC)	$V^{(7)}$ - V (applied chord may be inverted)	
	Phrygian Half Cadence (PHC)	iv^{6} - V	
	Half Cadence (HC)	$V^{(7)}$ (preceding chord not specified)	
	Applied Chords *	$V^{(7)}$ - ?	Less conclusive (generally)
	Deceptive (DC) / Dec. Motion (DM)	$V^{(7)}$ - "not I" (usually vi)	

*Not actually cadences because they occur within phrases.

Example 15
Categorization and Description of Cadence Types.

24 In practice, these three models are over-simplifications that admit many exceptions. Moreover, they are secondary to the contrapuntal motion of the bass voice when it comes to determining inner voices. Lastly, the theory of harmonic function arose in the late nineteenth century with the work of Hugo Riemann and thus is ahistorical in a study based on Bach's teaching. Despite all this, I nevertheless think the idea of functionally normative progressions is useful, so long as students do not become bound to it.

reference when identifying cadence types in Types 1–3, writing their own basslines in Type 4, and analyzing pieces. For instance, in Type 4, students might first determine the cadential notes and then fill in the remainder of the bassline.

6) **Non-Chord Tones and Ornaments**: Example 16 outlines four types of non-chord tones: neighbor (N), passing (P), suspensions (SUS), and pedal points (PED). Chordal leaps (CL), which are by definition chord tones, are included as additional embellishments. Varying factors are shown on the right, providing some notion of the sheer variety of non-chord tone types. These concepts will be applied in the composition project.

NON-CHORD TONES / EMBELLISHMENTS	VARYING FACTORS			
Neighbor (N)	Accented/ Unaccented	Diatonic/ Chromatic	Complete/ Incomplete	Upper/ Lower
Passing (P)	Accented/ Unaccented	Diatonic/ Chromatic	n/a	
Suspension (SUS)	Consonant/ Dissonant	Prepared/ Unprepared	Upward/ Downward Resolving	n/a
Pedal Point (PED)	(usually) tonic or dominant		soprano, inner, or (most often) bass voice	
Chordal Leap (CL)	(By definition these are chord tones, but are included as embellishments.)			

Example 16
Types of Non-Chord Tones & Ornaments.

7) **Formal Analysis**: Example 17 sketches a three-tiered formal hierarchy using the phrase as the primary formal unit.[25] In this curriculum, I define a phrase as a 2- to 4-bar grouping ending with a cadence. To simplify analysis, I always identify phrases using slurs in my harmonizations. Therefore, the primary analytical activity regarding form in my method is not the determination of phrase boundaries, but rather in determining how phrases combine into larger formal units like periods, sentences, or phrase groups. Periods are defined as consisting of two phrases (either 4 + 4 or 2 + 2 bars) in the pattern *a* + *a′* or *a* + *b*. Sentences have three phrases (either 2 + 2 + 4 or 1 + 1 + 2 bars), usually displaying the pattern *a* + *a′* + *a″* or *a* + *a′* + b. A "phrase group" usually has three phrases and acts as a catch-all term for sections that are not periods

25 I recognize that my definitions of "sentence," "period," and "phrase group" will not satisfy everyone. In my opinion, clarity and consistency are overriding concerns in a pedagogical context.

or sentences.[26] In each category, the last phrase is usually the strongest, according to the hierarchy given in Example 15. Phrases may be also broken down into (usually melodic) sub-units that may not end with a cadence. Each level of the hierarchy has its own labeling scheme, which the reader will recognize from Example 10.[27]

	NAME	SIZE	LABEL	DESCRIPTION
	Period, Sentence, or Phrase Group	Larger	**A**, **A'**, **A"**, **B**, **C**	**Period**: 2 phrases; usually 4 + 4 or 2+ 2; a + a' (ant. + cons.) or a + b **Sentence**: 3 phrases; either 2 + 2 + 4 or 1 + 1 + 2 **Phrase group**: 3 phrases (i.e., neither of above) **Periods, sentences, and phrase groups**: last cadence is usually the strongest **Variants**: Double Period (4 phrases) and Nested Sentences
Primary Formal Unit →	Phrase		*a, a', a", b, c*	2- to 4-bar grouping ending with a cadence (I identify phrases with slurs.)
	Sub-phrase	Smaller	*x, x', x", y, z*	(Melodic) sub-units within phrase that may or may not end with cadence (often 1 or 2 bars)

Example 17
Three-Tiered Form Hierarchy for Hymn Tune Analysis.

Part IV: Synthesis through Composition and Analysis

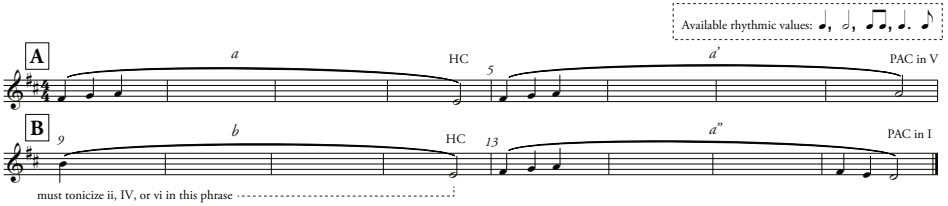
The model composition project is the capstone of my two-semester curriculum. It aims to integrate all the preceding concepts outlined in Example 1 in a creative, yet still appropriately restricted, context. The composition project has seven steps which progress from a single-line melody to the harmonization of that melody and, finally, to the ornamentation of this four-voice texture in a variety of ways. Although I created this method, it mirrors Bach's pedagogical strategy by progressing from homophony to ornamentation. One important difference, however, is that I tried to make this approach more applicable to the average student today by tailoring it specifically to single-line instrumentalists.

Example 18 presents a hypothetical prompt as a 16-bar rounded binary form, similar to eighteenth-century minuet-trio instrumental movements (except that the texture is chorale-like). Students fill in the missing bars with a single-line melody (Step 1). Beginning with a single line provides the opportunity to address basic melodic issues of contour and gap-fill (the principle by which a leap is followed by a step in the opposite direction). By defining the last pitch of each phrase, melodies are guaranteed to conform to the prescribed cadences. Moreover, the first, second, and

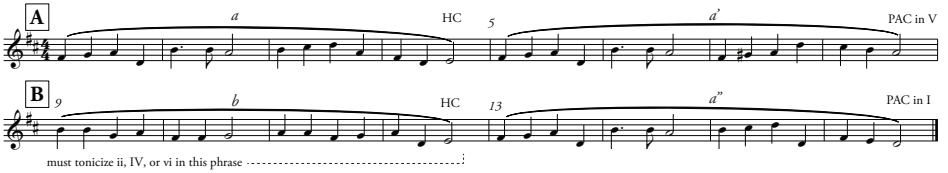
26 Many of these ideas are borrowed and adapted from Laitz (2016).

27 I identify mm. 1–8 and 9–15 as sentences in my formal analysis of Example 10. At a higher formal unit the entire hymn tune could be interpreted as a parallel period consisting of two 8-bar sentences.

fourth phrases all begin with scale degrees "three-four-five," ensuring a sufficient degree of similarity to warrant the formal labels *a*, *a′*, *a″*. Example 19 is my realization of the given prompt. Students may write multiple melodies, choosing the most singable and interesting one for the next step.



Example 18
Hypothetical Model Composition Prompt (Miniature Rounded Binary Form).

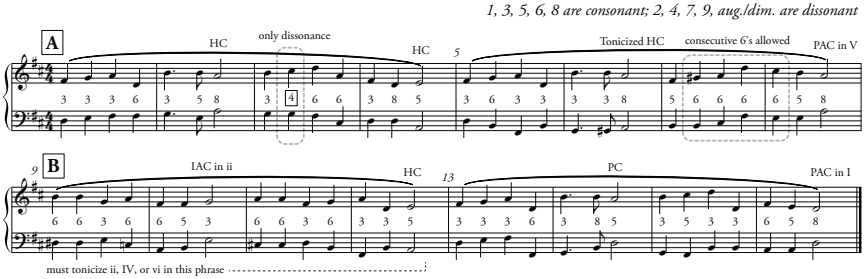


Example 19
Hypothetical Realization of Ex. 18 (Step 1).

Step 2 is to add a bassline, as shown in Example 20. First, students should complete the cadences, since these are predetermined. Second, students should look for soprano scale degree patterns that match the five paradigms in Examples 12 and 13. For instance, the succession $\hat{3}$–$\hat{4}$–$\hat{5}$ allows for both "Parallel 10ths" and "10ths the Long Way." Lastly, students should use consonant intervals (3, 5, 6, and 8) to fill in the remainder of the bassline.[28] Note the string of four parallel 6-chords in mm. 7–8, which is usually not allowed in species counterpoint: like Bach's, my approach does not subscribe to species counterpoint methodology.

Students should be aware that consonant/dissonant status is independent of diatonicism/chromaticism. That is, consonance can be chromatic and dissonance diatonic. If students choose to use dissonance, it must be one of the figures in the "Big 25" and exhibit correct resolution of tendency tones (Ex. 20, m. 3). Interval identification helps identify parallel and direct fifths and octaves. It also aids students

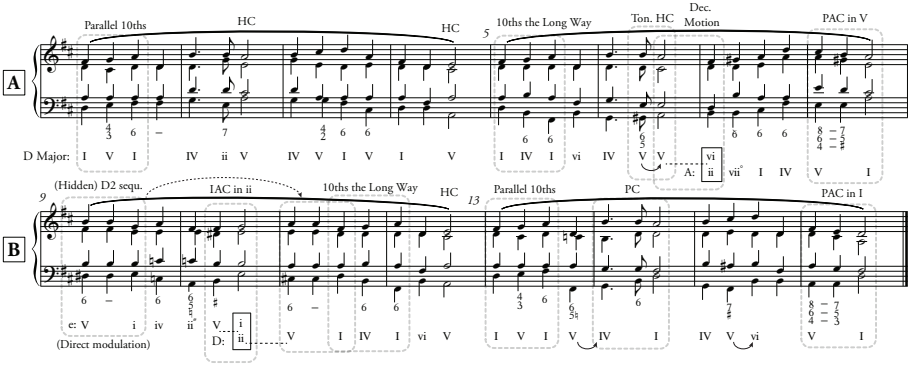
28 Another useful idea may be the "PIP principle"—begin with a perfect consonance, use imperfect consonances in the middle, and end with a perfect consonance. The "PIP principle" was coined by Markus Jans, who extended an idea by Klaus-Jürgen Sachs [Sachs (1974, 121)]. In practice, its applicability to hymn tune harmonization may be limited because it was originally developed to describe Renaissance duets.



Example 20
Bassline and Intervals Added to Ex. 19 (Step 2).

in understanding that figured bass indicates intervals and not chord-tones (a common source of confusion in my experience). In an imitation of Bach's multiple-bass method, where multiple basslines are written to a given chorale melody (Stage 2), students could write at least three basslines and choose their favorite one for the next step. Students might even patch together the best passages from their various basslines to make a superb one.

Example 21 adds inner voices, figures, and Roman numerals (Step 3).[29] This is equivalent to Type 3, except here, students harmonize and analyze their own bassline without figures provided. This is where the "Big 25" is especially useful in narrowing down the possible chords available for a given bass scale degree. The fact that the soprano line is also given restricts chord choice even further, simplifying the task.



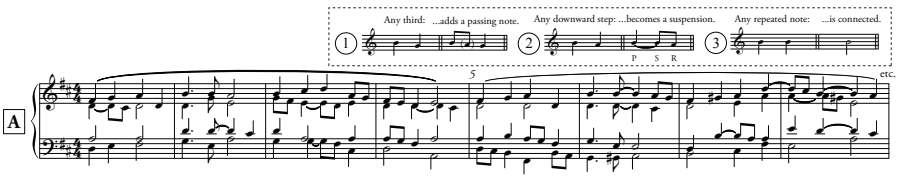
Example 21
Middle Voices, Figures, and RNs Added to Ex. 20 (Step 3).

29 Example 21 omits an analysis of functions to conserve space. As mentioned earlier, I include function symbols in Type 5 solutions, but would not normally require students to produce them.

Now we begin to add ornamentation, as shown in Example 22 (Step 4). Students follow a simple procedure, as shown in the box above the staff:

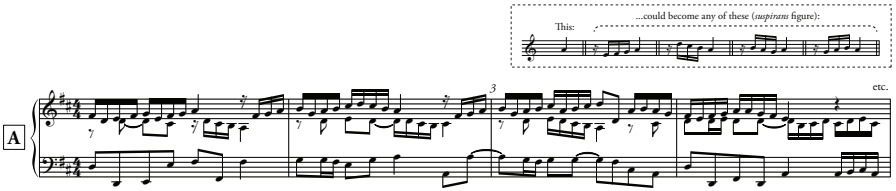
1) Fill in any interval of a third with a passing note;
2) Tie over any note that descends by step, creating a suspension;
3) Tie any repeated note.

In my opinion, this method of writing suspensions is significantly easier than that in species counterpoint. Given a consonant structure, almost any voice can be suspended by delaying descending stepwise motion, allowing the teacher to skip complex discussions about the three events in a suspension (preparation, suspension, resolution) and their consonant/dissonant status. Still, the three steps outlined above may result in parallel fifths or octaves (for instance, when direct motion is filled in by step), requiring some additional proofreading. The kind of simple ornamentation illustrated in Example 22 proves ideal for both singing as a choir or performance by a brass ensemble. Students might also add text to their hymns if they wish.



Example 22
Simple Ornamentation (Step 4).

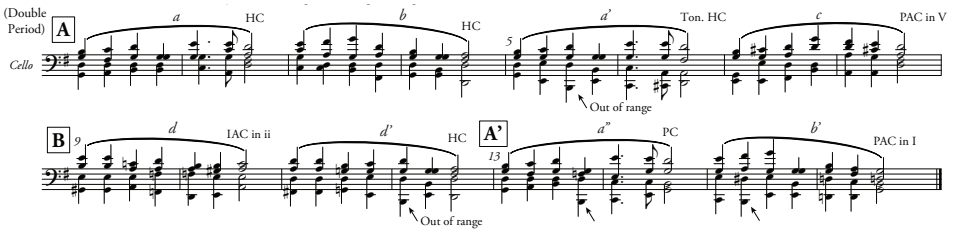
The next step increases creative independence by introducing more complex instrumental textures. Example 23 adds yet more ornamentation to Example 22, creating an instrumental trio. This step is more difficult because it is less restricted, but therefore also offers more creative possibilities. As shown in the box above the score, there are four ways a *suspirans* figure can ornament a given pitch. I applied these patterns to the soprano line of Example 22 while ornamenting the other voices in a similar style. The middle voice in Example 23 combines the alto and tenor voices in Example 22. This type of texture is ideal for a string or woodwind trio, providing an opportunity to engage single-line instrumentalists, hopefully increasing their "buy-in" as to the value of hymn tune harmonization.



Example 23
Complex Ornamentation—Figurated Instrumental Trio from Ex. 22 (Step 5).

Alternate Ornamentation Possibilities

The next three examples (Exx. 24–26) outline an alternate, simpler method of ornamenting Example 21 specifically for a single-line instrument. First, students transpose their harmonizations into a suitable range and key for their primary instruments (Step 6)—Example 24 is for cello.[30] (Note that the slurs here are rewritten to occur every two bars instead of every four; an alternate formal analysis is given.)



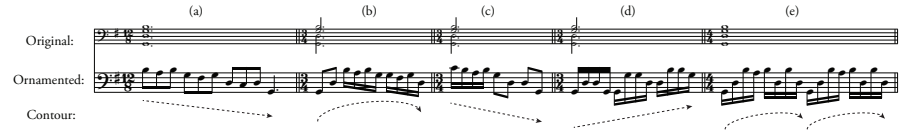
Example 24
Transposition of Ex. 21 to Suit Student's Primary Instrument (Step 6).

Example 25 gives five hypothetical patterns for the single-line embellishment of a chord, shown in the lower and upper staves, respectively. The patterns use neighbor tones, passing tones, and chordal leaps, which are described in Example 16. Students may first find it helpful to determine the overall contour of the figure they wish to use, as shown by arrows beneath the staff in Example 25.

With Example 26 (Step 7) we finally reach both the culmination of the composition project and the fruition of my two-semester curriculum. Each chord from Example 24 now takes up the space of one measure, which is repeated in the style of a Baroque prelude.[31] The specifically Bachian contribution that my method makes available is that,

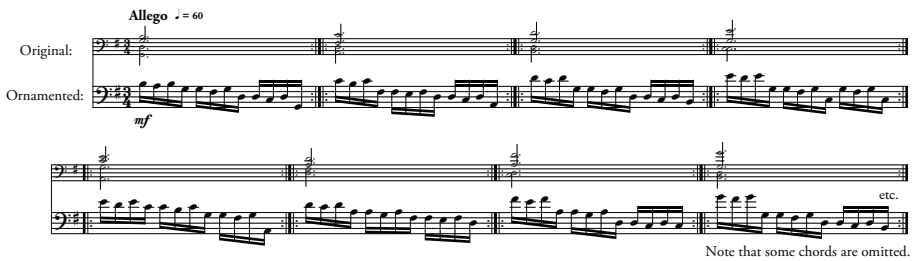
30 String players will prefer sharp keys, while brass and woodwind players will prefer flat keys. Single notes or entire passages may be transposed if range is an issue.

31 Some chords are omitted to make the phrase flow more naturally. It is not necessary to use the



Example 25
Patterns for Single-Line Ornamentation using N, P, and CL's (see Ex. 16)
applied tot he first chord of Ex. 24.

while other current theory textbooks make similar paradigms and harmonic concepts available to students, they do not streamline them as a vehicle toward model composition where virtually any configuration of instruments and textures is available. Another advantage of my method is that the entire seven-step composition project is prescriptive enough for those without prior experience composing, yet also flexible enough to allow for an enormous range of possible ornamental figures; thus creativity is fostered within guidelines. One important transferrable skill especially targeted in the project is to show the immense variety possible from a limited stock of underlying patterns. Another skill is an understanding of how a single melodic line (Example 26) can project multiple voices that obey voice-leading norms (Example 24). This connection is crucial because the majority of music students (at least the performance majors) play single-line instruments.[32] Ideally, students would perform their compositions in a public concert at the end of the year. This kind of public accountability is a strong motivator for producing excellent work and mastering concepts. Although the composition project ends with a Baroque prelude, my intent is that students would continue to compose in less restricted contexts in the second year of theory.



Example 26
Final Result: Hypothetical Application of an Ornamentation Pattern to Ex. 24 (Step 7).

entire excerpt of Example 24, since the resulting piece would be quite long. The first two and last two phrases could suffice.

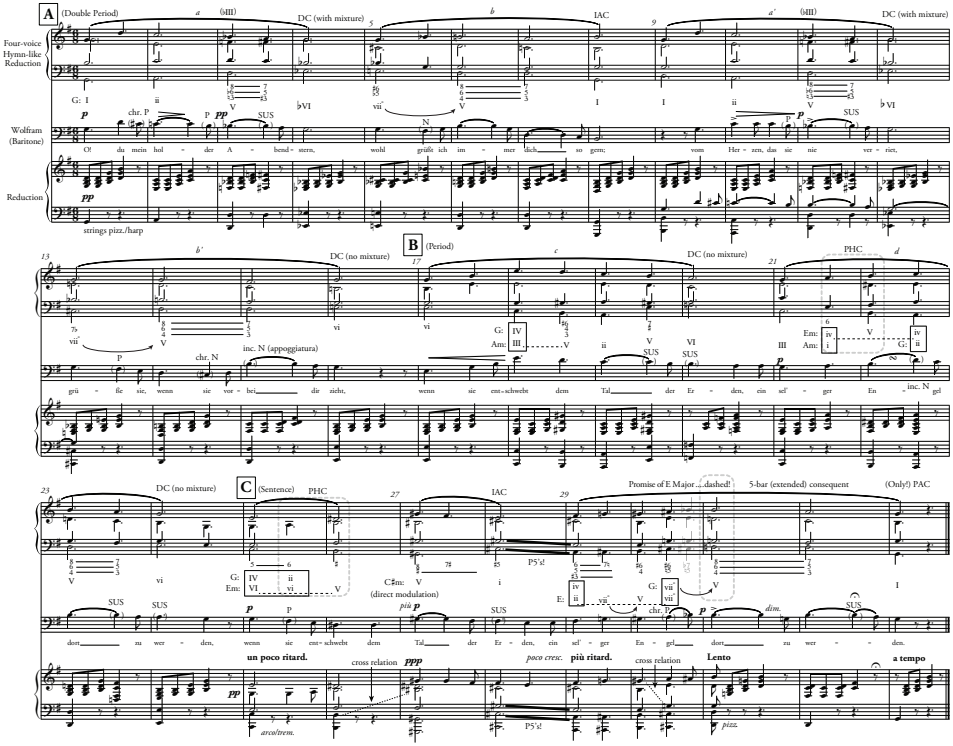
32 Vocalists can also perform original ornamented compositions that resemble Example 26, albeit with simpler figures that will allow for more time to breathe (compare Example 25). The same principle applies to wind and brass players.

Analytical Application

Up to this point I have largely ignored the analytical applications of my method. It is important to emphasize, however, that my curriculum applies the analytical tools developed with hymn tunes to diverse tonal styles throughout the two-semester sequence. This could include Baroque suites and chamber music, Classical symphonies and sonatas, and Romantic character pieces and Lieder, as well as the Great American Songbook, jazz, Broadway, rock, blues, electronic music, folk, Top-40 charts, film music, or minimalism. Though no one example will please every reader, I offer Example 27, the "Song of the Evening Star" from Wagner's *Tannhäuser*, to show one possible analytical application. Advanced students could create their own reductions, but I would supply one (or portions thereof) to the average student. Then, I would ask students to supply the harmonic, cadential, non-chord tone, and formal analyses. In this aria, theoretical concepts easily support questions for discussion, such as:

- Could the five deceptive cadences symbolize Wolfram's unrequited love for Elizabeth?
- Are the parallel fifths in m. 28 'wrong'? (and can music be 'wrong'?)
- Is the downbeat of m. 3 a modally distorted cadential 6/4 chord or flat-III in first inversion (or both)?
- Is the 6/4 chord on the downbeat of m. 30 cadential, passing, or does it change?
- Does Wagner use an A♯ and B♭ on the last eighth of m. 30 to suggest the enharmonic reinterpretation of the diminished seventh?

Such topics make this aria ideal for about the third semester of a two-year sequence.



Example 27

Wagner, *Tannhäuser* "Song of the Evening Star" (Act III, Scene 2, 25 bars after reh. A).

Summary and Conclusion

My goal has been to defend part writing by clarifying its goals and revitalizing its methods. The goal of part writing is not to perpetuate itself; rather, like all good pedagogy, its aim should be to teach transferrable skills. Among these skills is an understanding of how embellished textures, and especially single ornamented lines, can project multiple implied voices (i.e., compound melodies). This knowledge opens the door to simple reductive analysis (like Example 27), which asks whether pitches that are near in register yet separate in time are related, and if so, what this might mean in performance. Other more basic transferrable skills honed in my method include chord spelling, tuning one's voice within a chord, hearing multiple voices simultaneously, perceiving modulation, acquiring basic singing and keyboard skills, recognizing melodic similarity between phrases, assessing degrees of cadential closure, and harnessing the expressive potential of non-chord tones (especially suspensions) in composition. My method, which recasts Bach's "outer-voices plus figured bass" approach in a new light, integrates these skills and other music-theoretical topics within the simplified context of hymn tunes. This simpler pedagogical environment lays a solid foundation so that student can apply concepts creatively in more diverse analytical and compositional settings. Thus, rather than throwing out part writing, we can use this time-honored tradition to promote integration, creativity, and diversity in an historically informed way. With this article I hope to have rebuked the CMS manifesto's claim as to the "narrow horizons" of part writing—when taught properly, part writing can in fact help us define the horizon by giving us a concrete stylistic and conceptual vantage point.

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