Journal of Music Theory Pedagogy

Volume 35 Article 1

1-1-2021

Corralling the Chorale

Chelsea Burns

William O'Hara

Marcelle Pierson

Katherine Pukinskis

Peter Smucker

See next page for additional authors

Corralling the Chorale

Authors

Chelsea Burns, William O'Hara, Marcelle Pierson, Katherine Pukinskis, Peter Smucker, and William Van Geest

Corralling the Chorale[1]

CHELSEA BURNS, WILLIAM O'HARA, MARCELLE PIERSON,
KATHERINE PUKINSKIS, PETER SMUCKER, AND
WILLIAM VAN GEEST

Introduction

We begin with an anecdote from one of our contributors:

> Shortly after receiving my PhD, I was hired into a one-year position. In this position, I was tasked with teaching within a pre-existing music theory curriculum at a state school with a large performance program. As is customary and encouraged by all of the most popular textbooks on the market (including the one we used), this "Theory I" course focused on harmony and voice leading through the framework of four-part chorale-style SATB writing. Partway through the semester, one of my students, a vocalist, came to office hours for help with a musical she was writing. She said she couldn't quite get it to sound right. When she showed me her work, I saw why: she had painstakingly harmonized every single note of the vocal line with a different chord, in four voices in SATB range, and attempted to avoid parallels and adhere to all of the other good practices of voice leading we had learned in class. When I explained to her that musicals involved a different set of textural, harmonic, and voice leading considerations, she looked disappointed, even a bit betrayed. I showed her some examples and sent her on her way, and she was ultimately able to make something much more stylistically appropriate. But I can't help but think that this moment of disillusionment could have been avoided.

Clearly, the instructor failed to make some important caveats about the limitations of the theory discussed in class. But should this mistake have been so easy to make? The situation described in this anecdote came about partially because of the teacher's relative newness in leading a core curriculum, but it is not exclusively a reflection of their experience level. After all, the course was not entitled "The Theory of Common Practice Classical Music, Abstracted through the Practice of Four-Part Writing." Nor were there alternative courses offered covering different kinds of theories about different kinds of music. Is it any wonder that a student might have walked away assuming that what was on offer was a compositional and analytical guide to music, writ large? SATB chorales require significant teaching *around* to clarify the difference

1 The authors would like to give special thanks to Jennifer Snodgrass, who has given her time generously and supported this project from its early stages.

from other contexts. For example, when four-part paradigms are used for learning harmony and voice leading (e.g., the question "which voice should one double in first inversion?" assumes a four-part texture), and when Bach chorales form a large part of the instruction, it is easy for students to get the sense that this kind of structure is not merely one possibility among many, but rather a universal model for how composition might work. And while this anecdote is striking, it is not unique. When teaching with textbooks that highlight SATB paradigms, it is not uncommon for students to get confused about harmonic pacing or idiomatic textures in their own compositions. Moreover, students coming from AP music theory courses have been primed to focus on SATB voice-leading guidelines.[2] This is something that the authors have heard from many colleagues as well.

Four-part chorale-style writing and analysis are so central to music theory pedagogy that it is difficult to imagine a curriculum without them. Yet, as much as music theory instructors rely on chorales to teach general principles of music, chorales are specific in structure, and their origins lie in a specifically German religious tradition. This raises some important questions: are chorales effective for the purposes to which we put them? What pedagogical possibilities do they obscure? What can our reliance on this genre tell us about North American music theory and its commitments or anxieties? In sum: are we right to depend on SATB writing as we do? In this colloquy, we seek to engage with these questions by examining the role of the chorale in the undergraduate theory curriculum and proposing pedagogical approaches that delay, reconceptualize, or replace it.

The essays that follow critically examine the role of four-part writing in North American music theory pedagogy and provide perspectives on "corralling the chorale." This project emerges from a study group that meets monthly to discuss current issues in music theory pedagogy. The group convened a panel during the 2019 Annual Meeting of the Society for Music Theory and discussed the topic with a number of other pedagogues thereafter.[3] Theorists also responded to the panel on the SMT-

2 The 2020 AP Music Theory sample questions prioritize four-part voice-leading exercises for analysis and writing: https://apcentral.collegeboard.org/pdf/ap-music-theory-exam-2020-sample-questions.pdf. Accessed August 5, 2021. This creates a chicken-and-egg situation where the materials on the AP test and undergrad theory mutually reinforce one another, and it is difficult to change one without destabilizing the other. For more on the tribulations of curricular change around SATB writing, see the essays in this colloquy by Chelsea Burns and Peter Smucker.

3 The panel was recorded and may be viewed online. See Chelsea Burns, William O'Hara, Marcelle Pierson, Katherine Pukinskis, Peter Smucker, and William van Geest—Jennifer Snodgrass, Respondent, "Corralling the Chorale: Moving Away from SATB Writing in the Undergraduate Music Theory Curriculum," November 2019. SMT Conference Panel, 1:36:35. https://www.youtube.com/watch?v=-TGc7SO4jMI.

discuss listserv.[4] As we received informal and formal feedback on these submissions, our discussions shifted. It is our hope that the field of music theory will continue to grapple with the implications of its reliance on four-part writing, and that this colloquy will be a useful entry point into the discussion around this practice.

We are hardly the first to question the chorale's privileged position in music-theory pedagogy.[5] Controversy surrounding the chorale has proliferated recently, with some authors calling for its rejection,[6] some defending its prominent role,[7] and some calling for modifications of its use.[8] These discussions come within a broader reconsideration of music theory curricula, exemplified perhaps most visibly by a 2014 report commissioned by the College Music Society,[9] but visible also in recent curricular overhauls such as those of Harvard University (2017) and University of Southern California (2018).

The anecdote above describes a student who left her theory classroom lacking critical perspective: she understood the stylistic practices of chorale-writing to be those of musical composition in general. We take this student's experience as illustrative of common issues in the Anglo-American music theory classroom, and our essays address her situation in different ways. In the first essay, William van Geest demonstrates that this student is likely a common one. Through a corpus study of undergraduate music-theory textbooks, he shows that the chorale occupies a privileged position in American music theory, both in the frequency with which chorales—and particularly those of J. S. Bach—arise and in the idiosyncratic ways in which authors handle them compared with non-chorale repertoire. Geest also shows how this handling, according to which the chorale is presented as a distinctive music-theoretical object, renders it conspicuously similar to a conception of musical structure widely held in the field. Marcelle Pierson establishes the high stakes of the common tendency to conflate "good" voice leading with voice leading in the style of Bach. She concludes by offering a number of ideas for repositioning and reframing voice leading within the undergraduate curriculum.

The third and fourth essays focus on the promise and challenge of curricular change, at both the classroom and institutional levels. Our student's theory curriculum

4 See "Corralling the Chorale: Moving Away from SATB," SMT-Discuss, https://discuss.societymusictheory.org/discussion/507/corralling-the-chorale-moving-away-from-satb.

5 See Piston (1941, 56).

6 See Kulma and Naxer (2014), and Richards (2015).

7 See Follet (2013), Burstein (2020), and Remeš (2017).

8 Chenette (2018).

9 Sarath, et al. (2014).

is heavily determined by forces of labor that are more than likely invisible to her; Chelsea Burns examines the barriers to changing an SATB-heavy curriculum, including labor inequity, retraining, and instructor anxieties. Because existing instructional materials overwhelmingly rely on SATB examples, an instructor interested in novel approaches will find herself without readymade tools. Burns argues that while curricular change is a worthwhile undertaking, acknowledging and addressing its significant costs must be part of the process. Next, Peter Smucker examines how curriculum change may affect three constituencies: students, faculty, and administrators. The negative experience of our student should be concerning to all constituencies. Smucker compiles hypothetical scenarios and practical advice relevant to curriculum change in order to draw attention to both positive and negative impacts upon these three constituencies.

The fifth and sixth essays describe alternative curricular paths, imagining ways that our student could have developed a sense of context around and through her study of music theory. Katherine Pukinskis proposes decentering the chorale in music theory courses. She offers repertoire examples that can stretch conversations of harmony and voice leading to include student interpretation and performance as well as considerations of rhythm, motivic material, phrasing, and repetition. William O'Hara picks up the thread of voice leading, suggesting one way in which it may be studied outside of the context of four-part chorale-style writing: a sample curriculum on Neo-Riemannian theory that introduces undergraduates to current questions regarding the subdiscipline's renewed focus on voice leading. This alternative approach to voice leading instruction opens opportunities for students to apply what they know about voice leading outside of the four-part setting, to study non-canonical repertoires from new perspectives, and to engage with current debates and new directions in the field.

One thread that runs throughout these essays is the reconsideration of what voice leading means and what its role should be in the undergraduate theory curriculum. Pierson's essay addresses this directly, questioning assumptions about what constitutes "good" voice leading—assumptions that pervade and structure the traditional music theory curriculum. Pukinskis's and O'Hara's essays demonstrate, respectively, how curricula could focus on holistic concepts aside from voice leading and how curricula could conceive of voice leading differently.

It is not our aim to suggest a new one-size-fits-all curriculum to replace the existing one; we believe there may be many effective responses to the deficits of the status quo. We also affirm the importance of broader conversations about curricular revision, taking on issues beyond the scope of these essays. As we reevaluate the role of chorales in our classrooms, though, we do hope to contribute to the larger project of

critically assessing the assumptions and values embedded in North American theory curricula as a whole.

This project is urgent, given the increasingly diverse goals of our students and the increasingly varied musical worlds they enter after graduation. Just as music theory itself is a living discipline, evolving with new creative horizons, so too must music theory pedagogy shift in response to students' needs and ambitions. Today there may be students who still benefit from traditional voice leading instruction on the basis of the chorale. But there are also many who look more like the student in our opening anecdote, whose musical aims were not served but instead were thwarted precisely by the chorale-driven method. As music theorists and pedagogues, our task is to enable and inspire students, leading them toward competency relevant to the professional lives ahead of them. If our practices are not enabling and inspiring, but instead are provoking confusion and frustration, then it is time to reevaluate those practices and see how we can do better.

The Chorale in American Music Theory: A Corpus Study of Leading Textbooks

WILLIAM VAN GEEST

Music theorists widely acknowledge the chorale's privileged position, and specifically the chorale harmonizations of Johann Sebastian Bach, in American music-theory pedagogy.[1] William Caplin, for example, writes of "the powerful immersion of most theorists in the Bach chorales."[2] Alexander Rehding calls Bach's chorale harmonizations "the quintessential music-theory teaching material."[3] Certain theorists have noted this position by way of challenging it. Sam L. Richards, for example, questions the wisdom of insisting that students "master the voice-leading conventions of an imagined rule-mongering Platonic Bach" before engaging with more current repertoires.[4] Alexander Sanchez-Behar, who observes that Bach's chorale harmonizations have long been "the gold standard in the study of four-part writing and harmony," shows that these pieces in many cases depart from the principles that theorists invoke them to illustrate.[5] While many agree on the prominent position these works enjoy, there exists to date no thorough, critical investigation of the chorale in American music theory. Just how pervasive is the chorale? And why does it occupy the privileged position that it does?

In this essay, I approach these questions through a corpus study of leading undergraduate music-theory textbooks. The corpus of textbooks in this study was established from responses to a questionnaire that I issued in spring 2018 to practitioners of music theory. In the questionnaire, I asked respondents what textbook(s) they used to teach required undergraduate music-theory courses. This question returned ten textbooks (Example 1).[6]

1 While "American" may just as well refer to North and South America, I use it in this essay in the sense referring to the United States of America for reasons of brevity.

2 Caplin (2004, 73).

3 Rehding (2016, 252).

4 Richards (2015).

5 Sanchez-Behar (2018).

6 Respondents were asked not only what textbook they use for music theory instruction required of all undergraduate music majors, but also the percentage (in ten-percent increments) of the time with which they use that textbook, so that they could select multiple textbooks and weight their use of each textbook. Percentages in Example 1 refer to each textbook's share of the sum of total percentages (n=126). I have omitted here responses that do not provide a percentage, responses for textbooks only named once, and responses of "no textbook" or "in-house materials." For a similar

Textbook	%
Clendinning and Marvin, *The Musician's Guide to Theory and Analysis*, 3rd Ed. (2016)	30.0%
Burstein and Straus, *Concise Introduction to Tonal Harmony*, 1st Ed. (2016)	20.6%
Kostka, Payne, and Almén, *Tonal Harmony, with an Introduction to Twentieth-Century Music*, 7th Ed. (2013)	18.7%
Laitz, *The Complete Musician: An Integrated Approach to Theory, Analysis, and Listening*, 4th Ed. (2016)	13.2%
Aldwell, Schachter, and Cadwallader, *Harmony & Voice Leading*, 4th Ed. (2011)	12.2%
Roig-Francolí, *Harmony in Context*, 2nd Ed. (2011)	1.6%
Benjamin, Horvit, Koozin, and Nelson, *Techniques and Materials of Music: From the Common Practice Period Through the Twentieth Century*, 7th Ed. (2015)	1.4%
Snodgrass, *Contemporary Musicianship: Analysis and the Artist*, 1st Ed. (2015)	1.2%
Turek and McCarthy, *Theory for Today's Musician*, 2nd Ed. (2014)	0.8%
Shaffer, Hughes, and Moseley, *Open Music Theory* (2014)	0.3%
Total	100.0%

Example 1.
Textbooks in the corpus.

Through this corpus study, I provide evidence for the chorale's privileged status in American music theory, both in the frequency of its appearance and the varieties of ways in which authors use it. I also discuss music theorists' unusual handling of the chorale. I note theorists' overwhelming preference for the four-part chorale harmonizations of Johann Sebastian Bach, but I also show how their presentation of these pieces, which is idiosyncratic relative to other repertoire, casts these pieces as musical abstractions. The effect of these practices, I argue, is the constitution of a distinct music-theoretical object. I conclude by exploring authors' reasons for employing chorales, also proposing a reason they do not state explicitly: the visual and conceptual resemblance between this music-theoretical object and a widely held conception of musical structure.

survey with some different results, see Murphy and McConville (2017, 201–3).

Many of my observations will be familiar to American music theorists, possibly to the point of banality. On one hand, this is partly the point: the familiarity of these practices and doctrines hinders our appreciation of just how unusual they actually are, not to mention their consequences. On the other hand, the cumulative effect of these observations is significant, touching as it does some of the field's common practices and fundamental beliefs. I should clarify that my aim here is not to criticize theorists' use of the chorale. While I believe there to be good grounds for such criticism in certain contexts, my aim is instead to bring to light the chorale's privileged status and idiosyncratic handling in American music theory. I hope that the present study serves as a point of departure for further consideration—of our goals and our assumptions, and of how our practices relate to these.

Frequency of Chorales and Special Features

To assess the prevalence of chorales in this corpus, we might begin by examining how frequently they appear as musical examples.[7] Over the entire corpus, 9.1% of musical examples are chorales—that is, approximately one example in every eleven (Example 2).[8] The four textbooks with the highest proportions of chorales, as it happens, are also the four textbooks explicitly devoted to harmony. In these textbooks, about one example in every eight is a chorale, or 12.9%.[9] Even if not staggering, these proportions are substantial. Among these chorales, however, some striking patterns emerge: first, a marked preference for one instantiation of the term "chorale" among multiple possible, and second, an overwhelming preference for chorales matching this description composed by J. S. Bach.

Before examining these chorales in greater detail, the term "chorale" calls for some consideration. To this point, I have applied the term wherever authors apply it;[10] but this usage differs in important respects from the term's usage beyond American music theory. These differences may be observed in comparison with the entry for the term "chorale" in *Grove Music Online*, the foremost English-language music dictionary. According to the authors of this this entry, Robert L. Marshall and Robin A. Leaver, the

7 By "musical examples," I mean musical repertoire that an author presents in score notation and has not been altered, apart from "reducing" it (e.g., to a small number of staves).

8 I admit here under "chorale" any work that the author explicitly calls by this term, whether in the caption of the example in question or in the text in which authors discuss it. These identifications are basically uncontroversial; for example, they fall cleanly within the definition provided in *Grove Music Online*, which I discuss later.

9 Weighting according to the popularity of each textbook changes these results only slightly: 12.3% of examples are chorales.

10 See fn. 8 above.

Textbook	No. exx.	No. of chorales	% chorales
Clendinning and Marvin	401*	30	7.5%
Burstein and Straus	323	46	14.2%
Kostka, Payne, and Almén	222*	19	8.6%
Laitz	341*	7	2.1%
Aldwell, Schachter, and Cadwallader	478	71	14.9%
Roig-Francolí	297	34	11.4%
Benjamin, Horvit, Koozin, and Nelson	35*	3	8.6%
Snodgrass	72	0	0.0%
Turek and McCarthy	296*	24	8.1%
Shaffer, Hughes, and Moseley	95	0	0.0%
Totals	**2,560**	**234**	**9.1%**
Totals in harmony textbooks	1,320	170	12.9%

* = examples from chapters on atonal music omitted

Example 2.
Chorales as a proportion of total musical examples.

chorale is "[t]he congregational hymn of the German Protestant church service." The authors continue:

> In modern English usage, "chorale" can apply either to the hymn in its entirety (text and melody) or to the hymn tune alone. Moreover, following a German practice common in the 17th and 18th centuries, the term is often used to refer to simple harmonizations of the German hymn tune, as in "Bach chorales" or "four-part chorales."[11]

For present purposes, I will highlight several aspects of this definition. To begin with, a chorale is, according to Marshall and Leaver, a religious work of German provenance. A chorale is also a sung work, and it constitutes either a tune or a tune plus text; according to the authors' main definition, then, a chorale is not a harmonization. But they also add—almost as a concession—a sense whereby the term is not restricted to a tune alone, but also applies to a fuller setting of a tune.[12]

11 *Grove Music Online*, s.v., "Chorale," by Robert L. Marshall and Robin A. Leaver, accessed 30 May 2018, http://www.oxfordmusiconline.com.proxy.lib.umich.edu/grovemusic/view/10.1093.

12 In light of these definitions, I will use chorale-related terms in the remainder of this article as follows: I only use "chorale" when seeking to collect all possible instantiations of the term, or by way of preserving the ambiguity in a given author's use of the term; wherever possible, I use either "chorale tune" or "chorale harmonization/setting." Moreover, I limit my use of these terms to where the object in question has Lutheran origins; consequently—and departing from the other authors in this colloquy—I do not use the term in reference to any homophonic, vocal (notionally or actually), four-part texture.

How does the *Grove* definition compare with what are identified as chorales in these textbooks? Example 3 provides data for three categories, the first two pertaining to musical texture. As it happens, in the entire corpus only three examples identified as "chorales" constitute a tune alone; the remaining present a more complex texture. Among these more complex textures, only four are so-called "figured-bass" chorales—that is, presenting only the chorale tune, a bass line, and thoroughbass figures. All remaining chorales—97.0%—are of the four-part, largely homophonic variety familiar to music theorists. Thus, at least with respect to texture, the chorales in this corpus bypass Marshall and Leaver's main definition, instead corresponding to the definition offered almost as an addendum: that is, the great majority are harmonizations, not tunes alone. Patterns also arise in this corpus with respect to which composers are represented. As the final column in Example 3 shows, the overwhelming majority (96.1%) of the chorales in question are settings by J. S. Bach. Thus, the chorales in these textbooks skew heavily both toward a sense of the term less prominent outside of music theory and toward the settings of a single composer.

Textbook	No. of chorales	Tune only	FB chorales	Non-JSB
Clendinning and Marvin	30	-	-	-
Burstein and Straus	46	1	1	3
Kostka, Payne, and Almén	19	2	-	2
Laitz	7	-	-	1
Aldwell, Schachter, and Cadwallader	71	-	3	2
Roig-Francolí	34	-	-	1
Benjamin, Horvit, Koozin, and Nelson	3	-	-	-
Snodgrass	0	-	-	-
Turek and McCarthy	24	-	-	-
Shaffer, Hughes, and Moseley	0	-	-	-
Totals	**234**	**3**	**4**	**9**

Example 3.
Musical features of chorales in corpus.

With a clearer sense of which chorales are represented here, their proportion among all musical examples stands in sharper relief: in four textbooks—three of which are harmony books—chorales arise at a frequency comparable to that of piano sonatas, the most frequently occurring genre (Example 4). But this comparison does not tell the whole story: the category of piano sonata includes a far greater textural

variety than do chorale harmonizations. It is remarkable that a category with so homogeneous a texture should arise with such frequency. Moreover, recalling that almost all of these chorale harmonizations are by J. S. Bach, this composer–genre combination should be compared against other composer–genre combinations. As Example 5 shows, Bach chorale harmonizations are the most frequently occurring combination in five textbooks and second most frequent in two others—and thus, perhaps the most frequently occurring composer–genre combination in American music-theory textbooks.

Textbook	No. of Chorales	No. of Pno. Son.
Clendinning and Marvin	30	67
Burstein and Straus	46	51
Kostka, Payne, and Almén	19	35
Laitz	7	56
Aldwell, Schachter, and Cadwallader	**71**	65
Roig-Francolí	34	35
Benjamin, Horvit, Koozin, and Nelson	3	7
Snodgrass	0	1
Turek and McCarthy	24	29
Shaffer, Hughes, and Moseley	0	21
Total	**234**	**367**

Example 4.
Comparison of incidence of chorales to that of piano sonatas.

To be sure, musical examples reflect only one facet of music-theoretical activity represented in these textbooks. I dwelled upon this type of activity because among the various materials found in these textbooks, they are handled the most consistently and therefore most readily afford meaningful comparison. Two other types of material are exercises and supplemental anthologies. While the considerable variation across these textbooks as regards these materials—including the fact that not every textbook offers them—precludes examining them as systematically as musical examples, some insights regarding the presence of chorales in exercises in this corpus may be gleaned here. As Example 6 shows, all textbooks but one employ chorales for analytical exercises (e.g., harmonic analysis), and all but three use them for compositional practice (e.g., harmonizing chorale tunes). Moreover, for those textbooks wherein chorales are not employed for analytical exercises or compositional practice, all but

one nevertheless use four-part, homophonic, notionally vocal configurations for them—that is, configurations corresponding closely in texture to the chorales that appear so frequently in musical examples. In short, the substantial representation of chorales in the domain of musical examples also finds echoes among the exercises in these textbooks. Even where textbooks do not use chorales for these exercises, they use musical configurations that correspond closely to the chorales that figure so prominently among musical examples.

	Highest Incidence		Second-highest Incidence	
Textbook	**Composer/Genre**	**No.**	**Composer/Genre**	**No.**
Clend./Marv.	Mozart, pno. son.	40	**J.S.B., chorale harms**	**30**
Burst./Straus	**J.S.B., chorale harms**	**43**	Mozart, pno. son.	20
Kostka et al.	**J.S.B., chorale harms**	**17**	Mozart, pno. son.	16
Laitz	Beethoven, pno. son.	23	Mozart, pno. son.	21
Aldwell et al.	**J.S.B., chorale harms**	**64**	Mozart, pno. son.	25
Roig-Franc.	**J.S.B., chorale harms**	**33**	Mozart, pno. son.	20
Benj. et al.	Beethoven, pno. son.	5	[see note * below]	3
Snodgrass†	Mercury, pop songs	10	[see note ** below]	3
Turek/McCar.	**J.S.B., chorale harms**	**24**	Beethoven, pno. son.	22
Shaffer et al.	Mozart, pno. son.	11	Beethoven, pno. son.	6

* The second-place position in Benjamin et al. is a four-way tie between chorale harmonizations by J. S. Bach, keyboard pieces by J. S. Bach, orchestral pieces by Mozart, and vocal pieces by Mozart, all of which had three representatives.
† Determining composer–genre combinations in Snodgrass, *Contemporary Musicianship* is difficult, given the challenges in popular music of both assigning authorship (Snodgrass credits performing artists principally and composers secondarily—including with classical music—and moreover many performances involve modifications to the original composition) and of determining genre. Here, I count pieces where either the performing artist or the composer is the same person. Moreover, I attempt agnosticism on questions of genre in popular music by—admittedly problematically—simply applying the label "pop song."
** The second-place position in Snodgrass, *Contemporary Musicianship* is a four-way tie between pop songs by Jackson and Ritchie, pop songs by Adele, anonymous folk songs, pop songs by Porter and Fitzgerald, and pop songs by Joel, all of which had three representatives.

Example 5.
Highest and second-highest incidence of composer–genre combinations.

	Exercises	
Textbook	Analysis	Composition
Clendinning and Marvin	Y	Y
Burstein and Straus	Y	N, but SATB
Kostka, Payne, and Almén	Y	Y
Laitz	Y	N
Aldwell, Schachter, and Cadwallader	Y	Y
Roig-Francolí	Y	Y
Turek and McCarthy	Y	Y
Benjamin et al.	N, but SATB	N, but SATB
Snodgrass	Y	Y

Example 6.
The incorporation of chorales in exercises.

Visual and Aural Representation of Chorales

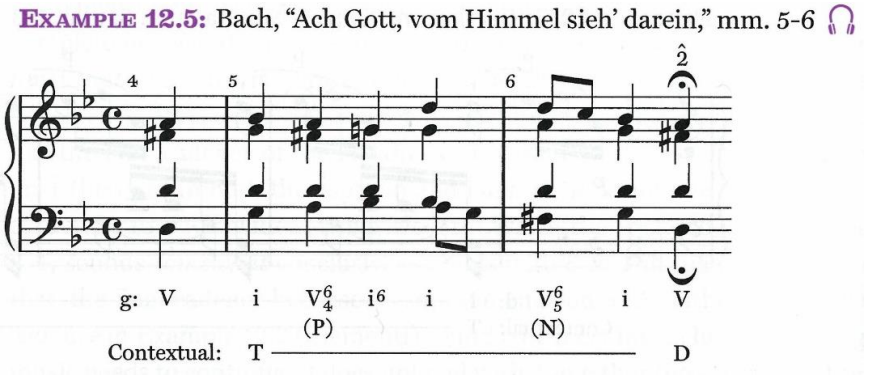
I will now examine how chorales are cited and presented, both visually and aurally. These techniques, I argue, suggest a conception of these works as primarily abstract music-theoretical objects. In brief, the practices of identifying chorales in these textbooks, whether by means of a text or a number, isolate them from their original context: these chorales not only are distanced from the larger liturgical works from which they were drawn, but are in fact autonomous, independent from both these larger works and a liturgical context. These practices instead assume the existence of an intermediary between chorale harmonizations and the larger musical works within which they first emerged. The typical practices of visual presentation also cast chorales as abstractions; these practices intimate a vocal nature, but stop short of presenting chorales as truly vocal works. Thus, these chorales' vocality remains only notional. Finally, the aural presentation of chorales typical in these textbooks reinforces the impression not only that chorales are not vocal works, but that instrumental details of their sonic rendering are immaterial. As a result of these practices, chorales are presented as musical abstractions, fit above all for the contemplation of pitch configurations. Remarkably, however, chorales are handled in these regards differently from other repertoires; with non-chorale works, indications of the larger contexts within which these works originated and their instrumentation are present, and, when these are vocal works, not only their texts but also translations of these texts are provided.

The practices of citing chorales in these textbooks effectively separates them from their original context. Example 7 reproduces a chorale in a format typical for these textbooks. As this example shows, chorale harmonizations are typically identified by means of the composer's name, a line of text and/or a number, and a reference to the measures from which an excerpt is taken. Yet what precisely the text here refers to is unclear: is it an inspiration for the piece—as, for example, with a tone poem—a title, an incipit, or something else? The initiated, of course, will know that the text is an incipit—that is, the opening text of a hymn's first verse—if not that identifying chorales by their incipit is a custom hundreds of years old. But employing this custom in the present case introduces confusion and distances the setting from the larger work within which it originated. For one thing, this practice centers attention on the tune, whereas textbooks are rarely interested in a chorale harmonization's tune, per se; instead, their interest typically lies with the tune's setting, as the attribution to J. S. Bach—at least, in Example 7—makes clear. For another thing, the incipit does not correspond with the text that Bach set.[13] Bach composed this setting as the final movement of his cantata *Ach Gott vom Himmel sieh' darein* ("Ah God, Look Down From Heaven"; BWV 2).[14] For this movement, Bach sets the sixth verse of the chorale, which begins "Das wollst du, Gott, bewahren rein" ("May you, God, keep it pure"). The text provided here, then, is a *faux ami*; rather than information about the setting, it provides information about the tune set.[15]

13 The texts that authors who employ this practice typically use derive from the first two editions of Bach's chorale harmonizations, which several members of J. S. Bach's circle compiled in the two decades following his death. The first volume (comprising 100 settings) of the first edition was published by Friedrich Wilhelm Birnstiel in 1765, with a second volume (comprising another 100 settings) following it in 1769. The second edition was published by Johann Gottlob Immanuel Breitkopf in four volumes from 1784 to 1787, and it comprised the 371 settings—including most of those in the first edition—that most today consider canonical. For a summary of the various early editions of this collection, see Wachowski (1983). An English-language discussion may be found in Dirst (2012).

14 The fact that the text used to identify the musical example is the same one used to name the cantata owes only to the fact that the work happens to be a chorale cantata, and thus begins with the first verse of the chorale in question—the same text by which chorales are by convention named. If the text by which a textbook author identifies a chorale harmonization matches that which Bach sets in a cantata, the match is incidental: the compilers of Bach's chorale harmonizations made no effort to make the incipits they assigned them—which are still in use today—correspond to the texts that Bach originally set (see Wachowski 1983, 55).

15 That authors do not translate these texts furnishes further evidence of their essential irrelevance to the examples that they introduce: as Example 8 (discussed below) shows, most authors translate texts that appear in their musical examples of non-chorale repertoire, whether as a caption or as an in-score text.



Example 7.
Typical visual representation of a chorale (from Clendinning and Marvin, *The Musician's Guide to Theory and Analysis*, 232).

Another practice for identifying chorale harmonizations common in these textbooks is by means of a number.[16] While presumably more helpful for tracing a harmonization back to the context for which it was written than a misleading incipit, this practice interposes another work between the harmonization and its original context—namely, a collection within which this harmonization would be a member, with the number in question indicating the setting's cardinal position in the collection.[17] Yet this practice hides information that the other practice provides: any connection to a text, no matter how confusing. The only explicit indication of the piece's original liturgical and vocal nature is the term "chorale" typically used in conjunction with the number.

Identifying chorale harmonization by means of a text in the way typically practiced, then, presents confusion. Identifying them by means of a number, moreover, nearly suggests that the harmonization is a musical abstraction. Neither practice, however, offers information about the piece's having originated in the context of a larger work—in the case of Example 7, a cantata; instead, the harmonization is presented as an autonomous work, complete unto itself.

16 Example 12 shows a chorale harmonization identified according to this practice.

17 The numbering most common in present-day editions was established in the so-called *dritte Auflage* of the collection, which was published in 1832 by Breitkopf and Härtel. That this information would be helpful to trace a given harmonization back to its original context presumes that the collection consulted contained this information, which many existing editions indeed do not (which, to be sure, is in about half the cases unknown).

	Chorales			Non-chorale Rep.	
Textbook	Staves	Text	Transl	Text	Transl
Clendinning and Marvin	2	N	N	Y	Y
Burstein and Straus	2	N	N	Y	Y
Kostka, Payne, and Almén	2	N	N	Y	N
Laitz	var.	var.	var.	Y	N(e)
Aldwell, Schachter, and Cadwallader	2	N	N	Y	Y
Roig-Francolí	2	N	N	Y	N
Benjamin et al.	2	N	N	Y	Y
Snodgrass*	2	var.	N	Y	Y
Turek and McCarthy	2	N	N	Y	N

* The entries for Snodgrass in this table reflect the chorales that she provides as exercises, since she offers no chorales as musical examples.

Example 8.
Aspects of chorales' visual presentation.

The visual presentation of chorales typical in these textbooks is similarly vague with respect to these pieces' purpose and intended instrumentation. As Example 7 illustrates, chorale harmonizations are typically presented on two staves, with two musical lines per staff and without in-score text. (Aspects of chorales' visual presentation across this corpus may be seen in Example 8.) This format omits several types of information. For example, while typically a musical text contains clear clues as to how a piece is to be performed, these textbooks are ambiguous with chorales. On one hand, textbooks preserve certain aspects of these pieces' vocal origin: they often describe the pieces as SATB (Soprano, Alto, Tenor, and Bass, a standard four-part vocal configuration), call their constituent lines "voices," and impose constraints on their harmonization according to the limits of the human voice. On the other hand, other aspects of their presentation countervail a vocal conception—most obviously, the absence of in-score text, but also the setting on two staves.[18] Moreover, no other obvious instrumental realization suggests itself based on this notation, nor is there any other indication of the realization intended. The closest match is a vocal conception, but only a vague, notional one. The result is again a sort of musical abstraction, indeterminate with respect to its intended sonic rendering.

A comparison with practices for notating non-chorale vocal works in these textbooks reinforces the chorale's special status for American music theory. With non-chorale vocal works, individual voices are typically provided their own staves, and these staves are labelled with the voice part(s) in question. Moreover, sung texts

18 The only other context in which multi-part vocal music is commonly set on just two staves is hymn books; but again, this is in conjunction with a text, whether in the score or below it.

and their translations are typically provided, where applicable (Example 8). Chorales, however, are afforded none of this apparatus.

Finally, the practices of aural presentation in these textbooks further reinforce the impression of chorales as musical abstractions. In the recordings accompanying textbooks, where applicable, most chorales are performed on non-voice instruments, and usually keyboard instruments (Example 9). In so doing, the vocal origins of this piece are obscured, since the piece's text is thereby omitted. In three cases in this corpus, moreover, chorales are performed on multiple different instruments in these recordings. This practice gives the impression that chorales' instrumentation is in fact incidental to them, that their value lies somewhere other than in their sonic rendering. In this regard, too, chorales are handled differently in these textbooks: usually, performances feature works' original instrumentation—including for vocal works, which are typically performed with their accompanying texts sung.

	Chorales		Non-chorale Rep.	
Textbook	Instrument-ation	Texts Sung	Instrument-ation	Texts Sung
Clendinning and Marvin	pno, org.	N	variable	var.
Burstein and Straus	pno.	N	variable	Y
Kostka, Payne, and Almén	org.	N	faithful	Y
Laitz	variable	var.	variable	Y
Aldwell, Schachter, and Cadwallader	-	-	-	-
Roig-Francolí	pno.	N	variable	var.
Benjamin et al.	var. (no voice)	N	faithful	Y
Snodgrass*	vocal quart.	Y	faithful	Y
Turek and McCarthy	pno.	N	faithful	Y

Example 9.
Aspects of chorales' aural presentation.

In summary, then, the practices of presentation in these textbooks reflect, first of all, chorale harmonizations' isolation from the rich context for which they were composed, and secondly their reconstitution as musical abstractions. The chorale is here no musical genre in itself, but instead a texture whose utility lies in the demonstration of theoretical principles pertaining to pitch and its organization.

Why Chorales?

Given the prominent role that chorales play in these textbooks and their unusual handling, it is worth exploring why they are used to this extent and in these ways. Authors offer a variety of reasons for this. While space constraints prevent a thorough

discussion of this topic, I present a variety of such reasons in Example 10. In these passages, authors appeal to biology, musical practice, and compositional procedure; the instantiation of chorales preferred in these textbooks—again, a four-part, notionally vocal, largely homophonic harmonization of a chorale tune—corresponds to what is "natural," "basic," "common," "the norm."

Biology:

- Four-voice homophony employs "the natural combination of high and low men's voices plus high and low women's or children's voices" (Aldwell, Schachter, and Cadwallader, 93)
- "[T]he SATB format conforms to the ranges of the basic male and female voice types" (Turek and McCarthy, 179)

Musical practice:

- Four-voice textures are "the most common vocal and instrumental textures encountered in tonal music" (Kostka, Payne, and Almén, vii)
- "[S]ince the sixteenth century the four-part texture has come to represent the norm, especially in vocal music" (Aldwell, Schachter, and Cadwallader, 93)

Compositional procedure:

- "Voice-leading rules reflect conventions that for centuries have been considered the foundation of compositional craft" (Roig-Francolí, 123)
- "[V]oice-leading principles endure for a simple reason: They produce 'musical' results" (Turek and McCarthy, 166)

Example 10.
Justifications for employing chorales and/or "chorale style."

There is, however, a reason for using chorales that authors may gesture toward here but do not state outright: an appeal to the resemblance between these chorales and a widely held conception of what I, following the field's parlance, will call "musical structure."[19] The details of this conception may be gleaned in part from authors' statements about musical structure. Miguel Roig-Francolí, for example, teaches that "[w]hen we listen to music, we hear two dimensions of sound. … Horizontally, music is made up of melodies or lines; vertically, of chords or harmonies."[20] According to Steven Laitz, "Tonal music of the common-practice era was generally conceived

19 I leave aside here the legion difficulties involved in positing the existence of musical structure in the first place, let alone the assumption that any such structure should be primarily pitch-based. If anything, these beliefs are more tenuous than any I discuss here, yet of course they underlie them. One of the few works, to my knowledge, that critically considers the music-theoretical strategy of positing a concept of structure in the sense I have in mind here is Benjamin (1982).

20 Roig-Francolí (2011, 55).

in four voices, although not every piece of tonal music literally uses four voices at every possible moment. Rather, a four-voice framework underlies compositions that may have many more than four voices."[21] Edward Aldwell, Carl Schachter, and Allan Cadwallader, in describing a similar conception, state that in such frameworks, "chords change on almost every beat." Finally, Laitz also adds that one may "reduc[e instrumental] music to its 'essence,' omitting pitch doubling and compacting the voices into a single register (approximately three octaves)."[22] From such statements, which are found to varying degrees across this corpus,[23] several distinct features of this conception may be distilled:[24]

1. (tonal) music has two dimensions, a "vertical" and a "horizontal"
2. music consists of discrete lines
   a. that are notionally vocal
   b. of which there are four, and
   c. whose number remains constant
3. music is homophonic
4. music's range corresponds to that of an SATB choir
5. music's harmonic rhythm is basically uniform, and
6. versions of works corresponding to these tenets may be uncovered through a process of "reduction"[25]

21 Laitz, (2016,174). See also Benjamin, Nelson, Horvit, and Koozin (2015, 280, 284); Clendinning and Marvin (2016, 166); and Roig-Francolí (2011, 55).

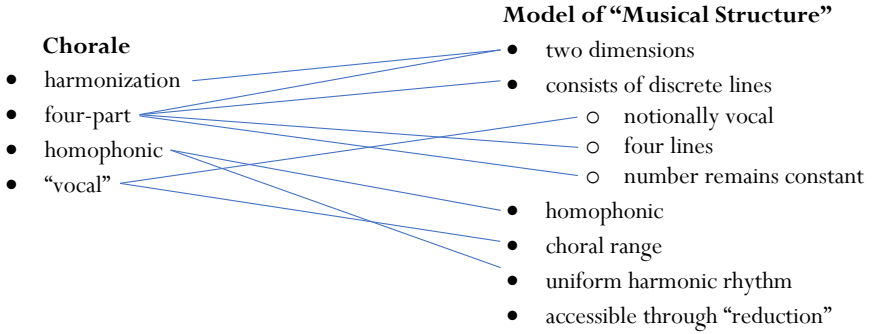
22 Laitz, (2016, 174). See also Kostka, Payne, and Almén, (2013, 70); Aldwell, Schachter, and Cadwallader (2010, 692–6).

23 To be sure, it is rare that explicit statements alone in a given textbook account for every one of these principles; authors usually only explicitly state a number of them. Yet that they hold to them can be gleaned from assumptions embedded in their language, on one hand, and on the other hand, from their reliance on a texture that corresponds to this conception to illustrate music-theoretical principles, as we will see momentarily. That authors rarely state all of these principles explicitly but nevertheless rely on this model in their illustrations indicates the extent to which they either are not aware that they hold these beliefs or that they believe them to be universal.

24 While I have phrased each of these statements in the form "(tonal) music is *x*," following the form that such statements often take, implied in this formulation, and others often cited in this connection, is the qualification "on some level deeper than 'the piece'" (on this, see the previous note). The necessity for this qualification is particularly pronounced with respect to the sixth statement.

25 This last tenet stands out from the others in describing not the features of this conception, but instead how it relates to musical works—specifically, how "structure" may be discovered in musical works, as it were. I investigate this notion in a forthcoming study.

While this conception likely is familiar to many music theorists, I isolate and enumerate its tenets so as to render explicit what are widely held but often unarticulated beliefs. I also wish to underscore both the significant ideological work that such claims perform, and the contingency, even tenuousness, of each individual claim; defending any of them—where this is indeed possible—would require considerable theoretical work and yet more tenuous claims. Despite the fragility of this conception of musical structure, authors often make remarkably strong claims with respect to it. Aldwell, Schachter, and Cadwallader, for example, frequently refer to the "essential"[26] notes of a given texture or refer to elements of a piece considered under this conception as "real."[27] Such language suggests that the "framework" this conception produces is in fact a truer version of the piece from which it is derived. Laitz, moreover, suggests that such frameworks have remarkable powers. At one point, he observes that the "deeper relationships" of such a framework "control[s] surface events," by which he refers to a piece.[28] Elsewhere, he calls this framework "generating" with regard to another piece.[29] Thus, the powers of this framework are considerable.



Example 11.
Correspondences between the preferred instantiation of chorale and "musical structure."

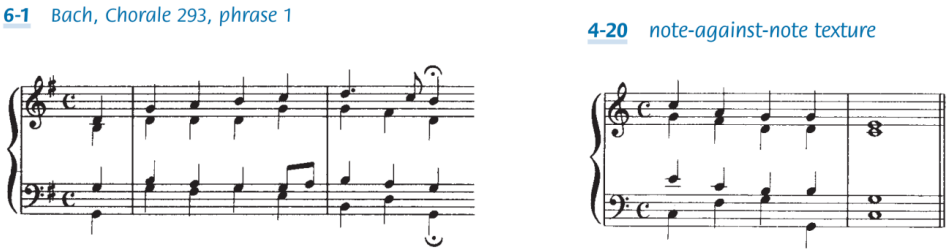
26 The authors refer "the most essential tones of the melody" of a Clementi piano sonatina, "the essential voice leading" of a piece by Brahms (386), and "*leav[ing] out filling voices that add nothing essential to the texture*": Aldwell, Schachter, and Cadwallader (2010, 46–7, 385–6, and 692; italics original), respectively.

27 In reference to a piano piece by Brahms, the authors observe, "[t]he reduction shows that the piece begins with three real parts"; and that "[t]he reduction in Example 19-3 shows that the Mendelssohn excerpt [a *Song without Words*], too, has only three real voices": Aldwell, Schachter, and Cadwallader (2010, 99–100, 333) respectively.

28 "Our analyses will always go deeper than simply labeling surface events, for it is these deeper relationships that actually control the surface events": Laitz (2016, 153).

29 "Mozart's surface embellishments have now been reduced to the generating four-voice struc-

But why bring up this conception of musical structure in a discussion of the chorale? To begin with, it exhibits distinct similarities to the instantiation of the chorale preferred in these textbooks: the features of this instantiation map neatly onto the elements of the conception just outlined (Example 11).[30] The similarities go deeper: the way in which this conception is typically presented visually—that is, in musical notation—is so similar to textbooks' presentation of chorales as to be almost identical (Example 12).



Example 12.
Similarity between the notation of both chorales and "musical structure" (from Aldwell, Schachter, and Cadwallader, 2010, 93 and 59). Cengage Learning Inc. Reproduced by permission. www.cengage.com/permissions

The resemblance—in both concept and visual presentation—between the instantiation of chorales preferred in these textbooks and this widely held conception of musical structure raises an obvious question: Is this similarity merely coincidence, or does it indicate some relationship between the two? As it happens, there is strong evidence for the latter: authors' terms for the notational representation of musical structure just described often involve the term "chorale," such as "chorale style" or "chorale texture."[31] Indeed, it seems likely that this connection further enhances the chorale's privileged status in the field, since working with the chorale harmonizations so prized by the field seems hardly different than working with music on the "essential," quasi-*Urmusik* level that this model of musical structure seeks to describe.

ture": Laitz (2016, 153).

30 The one tenet that has no correlate in these chorale harmonizations is the last, as Example 11 shows—logically, as this very tenet sets a musical work apart from a structural model.

31 Presumably for these reasons, many music theorists do call any four-part homophonic texture a "chorale," whether or not it has any connection to Lutheran religious practice—as, for example, is the practice in the other papers of this colloquy. The authors of the textbooks in question, however, only rarely employ such a broad sense of the term.

Yet the relationship is probably also bi-directional: the close connection to J. S. Bach of the field's chorale-related practices likely rubs off on the model in ways that enhance its plausibility *qua* model. For example, illustrating some harmonic or voice-leading principle via a four-part chorale harmonizations by Bach lends the principle—and tacitly the four-part homophonic medium within which the principle is couched—the authority of a composer that American theorists consider perhaps the most canonic, if not the standard for harmonic and voice-leading principles.[32] The result is a tight circle of mutual reinforcement between chorales and this conception of musical structure.

Conclusion

I have shown that American music-theory textbooks rely substantially on chorales, as indicated by the high proportion of their occurrence among musical examples or in the broad diversity of uses to which they are put. The instantiation of chorales preferred in these textbooks, moreover, is a four-part, largely homophonic, notionally vocal setting of chorale tunes, and settings by J. S. Bach crop up with particular frequency. I have also shown how the chorale's unusual role in American music theory is reinforced by the ways in which the chorale is presented, ways that are wholly unlike those in which non-chorale repertoires are presented. Specifically, the chorale is depicted, both visually and aurally, as a musical abstraction—without a particular instrumentation, history, or function—and thus rendered a distinctly music-theoretical object. As it happens, this image of the chorale aligns closely with a conception of musical structure widely held in American music theory. Indeed, given the designation of "chorale style" for visual depictions of the latter, it is likely that this similarity is more than accidental, and that the similarity further contributes to the chorale's prominence and stature, and vice versa.

Any element that features so prominently in a field, but particularly one treated so idiosyncratically, calls for critical consideration: why do we rely on chorales to the extent that we do? Undoubtedly, answers to this question will vary, depending on a given institution's or theorist's values and curricular goals. As such, this paper is an invitation to consider values and goals—not only our own, but those of the field as a whole: for example, how did the chorale come to be adopted into American music theorizing in the first place, and how is its privileged position maintained?[33] What conceptions of music do these practices afford, and what conceptions do they exclude?

32 An example of this attitude is the cottage industry of corpus studies based upon Bach's chorale harmonizations.

33 I explore these and related questions in my dissertation, provisionally entitled, "From Musical Work to Model of Musical Structure: A Genealogy of the Chorale in American Music Theory."

What repertoire does it consequently legitimize—or inordinately normalize—and what repertoire does it exclude?[34]

34 In a recent article, Philip A. Ewell discusses the exclusionary power of what he calls, borrowing on the work of Joe Feagin, music theory's "white racial frame:" Ewell (2020). Both American music theory's substantial reliance on chorales and the conception of musical structure I describe above may constitute concrete examples of this frame, particularly in light of the hiddenness of both to many of American music theory's (majority white) practitioners. See also Palfy and Gilson (2018).

Reconsidering the Role of Voice Leading in the Undergraduate Theory Curriculum[1]

MARCELLE PIERSON

This colloquy arose from a Society for Music Theory conference panel that provoked strong responses from varied perspectives. These responses ranged from excitement at the prospect of burning it all down and starting again to more cautious tones of "yes, but . . ." Among those in the latter category was a response written by David Huron and posted to SMT-Discuss, in which he expressed concern about "the possibility of throwing out the voice-leading baby with the chorale bathwater."[2] I appreciated Huron's thoughtful response, not least because of the discussion it engendered amongst our panel members and in how it prompted me to articulate my own concerns about the prominent role that voice leading plays in the traditional undergraduate theory curriculum (a role examined by William van Geest in his dissertation work as well as his contribution to this colloquy).[3] In the current landscape, voice leading hardly seems in danger of being thrown out of the undergraduate theory curriculum entirely. This essay does, however, argue that it is past time to question its dominant role therein, and in many cases, to move voice leading aside in order to make room for other musical considerations. In short, I argue that the baby and bathwater metaphor, implying as it does that voice leading is a monolith, conceals some of the more interesting possibilities for decentralization; it is actually very possible—even desirable, I argue—to adapt or curtail the study of voice leading in pursuit of different pedagogical goals.

In what follows, I will explore what voice leading actually means when we discuss it in the context of undergraduate music theory and then address arguments for the "hard" and "soft" skills it helps students develop, pointing to skills that are, in turn, neglected through a heavy emphasis on what I call "Bach-style voice leading." I will conclude with a range of ideas for repositioning the role of voice leading in the undergraduate theory curriculum.

1 This essay came about as a result of intensive collaboration with my colloquy co-authors; my thanks to them and to other early readers, including and especially Philip Ewell.

2 "Corralling the Chorale: Moving Away from SATB," SMT-Discuss, accessed July 6, 2020, https://discuss.societymusictheory.org/discussion/507/corralling-the-chorale-moving-away-from-satb.

3 William van Geest, "From Musical Work to Model for Musical Structure: A Genealogy of the Chorale in American Music Theory," (Ph.D. dissertation, University of Michigan, in progress).

Bach-Style Voice Leading

I take the most general definition of voice leading to be parsing simultaneities into separate "voices" and thinking about how those voices move both individually and in relation to one another. This broad concept would apply equally to a number of different traditions; one can discuss, say, the parallel fourths and fifths of heavy metal chords or the characteristic voicings of traditional jazz piano accompaniment. When we discuss voice leading within the undergraduate theory curriculum, however, the definition becomes far more specific. The *Grove Dictionary of Music* is representative of this specificity: it collapses voice leading into the article for part-writing, putting voice leading in brackets after the subject entry to indicate these terms are interchangeable, and furthermore insists "each line must . . . have a melodic shape as well as a rhythmic life of its own" in its first sentence. It then defines a number of the voice-leading rules familiar from music theory textbooks as exemplary of "good part-writing."[4] This definition reflects the reality that we almost never discuss voice leading in a value-neutral context. Instead, we teach our students "good" voice leading—the kind of note-against-note movement that will result in something stylistically akin to Bach's music, and particularly his chorale harmonizations.[5]

The collapse between voice leading, "good" voice leading, and voice leading in the style of Bach shows how music theory pedagogy can be especially insidious in terms of perpetuating bigotry. This comes about because the "rules" we teach are easily taken out of the context of the works from which they derive, rendering their origins opaque. It is noticeable if we present a repertory composed largely or entirely of white, heterosexual, European, able-bodied men; less so if we present a system of analysis derived from works of people fitting that description, that then disproportionately values works by those same people. Philip Ewell has recently undertaken a trenchant critique along these lines, identifying the "white racial frame" of music theory, wherein whiteness is taken as the default position from which other positionalities derive or deviate.[6] In the latter half of this essay, I will speak briefly about possibilities for taking a more holistic and comparative approach to teaching voice leading. For now,

4 *Grove Music Online*, s.v., "Part-Writing," by William Drabkin, accessed May 29, 2021, http://www.oxfordmusiconline.com/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-0000020989.

5 Stylistically akin, but certainly emphasizing some elements and deemphasizing others, as well as codifying practices that were more flexible in contemporary practice. For more on Bach chorales in undergraduate pedagogy, see Sanchez-Behar (2018).

6 Ewell (2019 and 2020). Ewell derives the term "white racial frame" from sociologist Joe Feagin; see Feagin (2013).

though, I will continue to refer to the precepts covered in virtually all music theory textbooks aimed toward the core theory sequence as "Bach-style voice leading," in order to emphasize its status as a style rather than a universal mandate.

The Practical Applications of Bach-Style Voice Leading

Given the amount of time so many current and former undergrads, including myself, have spent learning the intricacies of Bach-style voice leading, and dominant role it plays in music theory curricula across North America, one would hope that it has broad and powerful applications; in particular, that the skills acquired when learning Bach-style voice leading would aid in students' musical lives, which include writing, performing, and listening to music. This section considers the development of practical skills (that is, skills directly related to music-making and composition) that Bach-style voice leading promotes, as well as those it might leave by the wayside.

First, however, I would like to address a separate line of argumentation invoked by some advocates of Bach-style voice leading. This approach is represented by David Huron's 2001 essay that attempts to root Bach-style voice leading in perceptual principles such as "tonal fusion" (the tendency to hear octaves and fifths as one "sound image") and "pitch proximity" (the tendency to hear proximate pitches as continuous lines).[7] Huron's reasoning relies on cognitive processes that are natural or innate and thus argues implicitly for the inherent superiority of Bach-style voice leading, elevating it to something more fundamental and less contingent than a style. Huron is careful to note throughout the essay that one might pursue different goals than individuated voices, and he also notes several perceptual principles that are not capitalized upon in the Bach-style voice leading precepts. The essay, however, lacks any kind of comparative element; the possibility of goals other than individuated voices within a tonal context is acknowledged, but not pursued. It assumes that there is a "natural" way to listen to music, when in fact the meaning of musical structure is (at least in large part) culturally determined. One must question a methodology that leads to the conclusion that something as complicated and specific as Bach-style voice leading is in any way natural or innate; my experience has been that it takes many hours of intensive training to get students to begin to hear parallel fifths in four-voice textures, indicating that this skill is far from inborn.

7 Huron (2001). Huron also pursued this line of reasoning in his response on SMT-discuss: "Incredibly, research in auditory scene analysis dovetails almost perfectly with the conventional canonic part writing rules one finds in most textbooks." https://discuss.societymusictheory.org/discussion/507/corralling-the-chorale-moving-away-from-satb.

Outside of arguments about cognitive processes, one argument for Bach-style voice leading points toward its ability to orient students within a particular culture. This argument proceeds along the lines that it is important for students to be able to create stylistically appropriate music in a particular genre (any genre really, but we happen to focus on common practice classical music), thus justifying our practice of model composition. One unassailable application of Bach-style voice leading is toward a replication of the complexities of Bach chorales, and more broadly, I have found that students immersed in Bach-style voice leading can apply these skills fairly directly to arrangements for a cappella and church singing groups. The applications of Bach-style voice leading can reach beyond these limited examples, but not without adjustment. It can be a useful launchpad for the study and creation of works in Baroque-style counterpoint, such as Bach-style fugues and inventions, although one must discuss rhythmic figuration and form before students can create these kinds of pieces on their own. One can also follow Bach-style voice leading in many common-practice piano sonatas by composers like Mozart, Haydn, and Beethoven, although one must account for a slower harmonic rhythm, different rhythmic figuration, and the disappearance and reappearance of voices at different points. These are the most common applications in the traditional theory sequence,[8] and it is worth noting the lack of demographic diversity in this paragraph thus far. There have been robust attempts to find examples of Bach-style voice leading outside of this demographic, usually extending to isolated works written by white women and sometimes people of color.[9] These projects improve representation in the music theory classroom—a valuable contribution—but they do little to move outside of the framework of valuation exemplified by the collapse of music theory pedagogy into voice leading in general and Bach-style voice leading in particular. They risk substituting tokenism for real, structural diversity work. In fact, Philip Ewell makes the point that such techniques may actually serve to reinforce deeply embedded assumptions that music's origins lie in white culture.[10]

For an instructor wishing to reach beyond common-practice classical music, the applications of Bach-style voice leading become ever less direct and more needful of adaptation. In Western pop music, especially music outside of progressive rock, $\hat{7}$ is often lowered; tendency tones become unruly and, in the case of sevenths, often devoid of tension; blues scales introduce their own logic of tendency and relation between melody and harmony; power chords and piano arrangements delight in parallel

8 Again, see the work of William van Geest for empirical justification for this claim.

9 See musictheoryexamplesbywomen.com and composerdiversity.com for two such projects.

10 Ishida (2020).

motion; inverted chords are a rare occurrence; etc. The set of adjustments becomes even more dire, of course, once we venture outside of triadic music altogether. I have deliberately presented this set of adjustments in a provocative way, in that it assumes that Bach-style voice leading is the origin point of voice leading, if not its enduring gold standard. While this is not necessarily the way that music theory instructors conceive of its status, it would be easy for undergraduate students to get the sense that it is, given the emphasis on it in textbooks and tonal theory curricula writ large. Framed as such, music outside the common-practice canon presents itself as badly behaved, or, worse, as less valuable. This failure to address non-classical music on its own terms is inadequate to the polystylistic world our students inhabit, and to the ways in which they may want to apply music theory in their futures as musicians and scholars.

It should be clear that learning Bach-style voice leading will allow students to compose stylistically appropriate music in only a very limited number of genres. Scholars defending the practice acknowledge this to varying degrees; in so doing, some point to a set of more generally applicable practical skills developed through learning Bach-style voice leading. Diane Follet, for instance, lists "fluency with key signatures, chord spelling, and inversions; an understanding of the difficulties inherent in minor because of the mutable nature of scale degrees 6 and 7; and a new appreciation for the challenges of music composition."[11] Similarly, Derek Remeš lists the skills gained through his adapted chorale-style teaching: "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."[12] These skills are exactly those prioritized in my own conservatory undergraduate education, and will be familiar to most of the music theorists reading this essay, through their own educations and/or teaching. Some of them *are* broadly applicable, but others are only applicable to some common-practice classical music, and still others are not very useful at all outside of a classical music context. They beg the question: is the amount of time we spend on an intimate knowledge of inversions, or the melodic minor scale, or cadential closure, commensurate with the importance of these concepts in our students' musical lives? Is this the musical knowledge that will most help them continue with a life in music, professionally or otherwise?

11 Follet (2013).

12 Remeš (2017).

Conversely, it is important to keep in mind musical topics that students will not necessarily master through the practice of Bach-style voice leading, especially when it is the dominant concern of a curriculum. The material in a theory curriculum is a zero-sum game; we have a certain number of weeks with our students at a certain number of credit hours, and our students have limited time and energy to give. Here is a list of topics that do not lend themselves to four-part homophonic textures and have little to do with Bach-style voice leading:

- Form
- Rhythm and meter
- Analysis (especially analytical writing)
- Harmony
- Timbre
- Classical music after 1900 (although there's often a separate class for this)
- Blues-based progressions and scales
- Score reading and orchestration
- Music production[13]

Some of these topics are covered in traditional theory sequences: a curriculum might have a separate form and analysis class, or might fit some formal study into, say, Theory III. Roman numeral analysis also forms a big part of most theory curricula, although students are often (in fact, hopefully) asked to analyze music that bears little resemblance to the chorale-style compositions they complete for their homework. Similarly, T–PD–D harmonic syntax is usually taught alongside Bach-style voice leading, although I have found that students retain both topics better when they are approached separately. Certainly any study of form or harmony will yield generalizable results to some extent, but the traditional approach to these forms, objects of analysis, and harmonic structures are also most often so tied to classical music that they do not transfer easily or intuitively onto other genres of music: witness the story of the undergrad writing a musical with which we began this colloquy.

Study of the above topics may very well build some of the individual skills Follet and Remeš list: a study of form, analysis, harmony, blues-based progressions, or score reading would all solidify the concept of key signatures, for instance. The individual skills that end up being important across a wider variety of music should become clear when those musics become a substantive presence in the classroom. But these topics

13 Sam Richards gives more ideas, although he focuses more on topic areas than skills. See Richards (2015).

also build skills not listed by Follet and Remeš, because they are not well addressed by Bach-style voice leading. To name one crucial example, could one really argue that rhythm, as an element of music at large, deserves less time than the specificities of Bach-style voice leading?[14]

In sum, the study of Bach-style voice leading has relatively limited applications in terms of model composition, and while it does build generalizable practical skills such as fluency with key signatures, those skills that matter across a wider cross-section of genres can also be taught by approaching those genres with tools better suited to them. Such approaches would be more effective and inclusive, and would bring other important skills and topics to the center rather than the periphery.

Voice Leading and "Soft Skills"

As any experienced pedagogue knows, we are always teaching a set of "soft skills" above and beyond the material at hand: curiosity, growth mindset, multitasking, problem-solving, cooperation and communication with peers, etc. In her defense of part-writing, Diane Follet notes a number of those skills, claiming that students learning part-writing "are learning to grapple with competing demands in the face of limited resources . . . they are developing a level of mental agility that will foster success in other domains."[15] I, myself, once had a student say during a species counterpoint unit that counterpoint was like life in that "nothing is ever perfect—that if you ace it in one way it's going to end up not ideal in another. Like, there's no perfect music."[16] There's certainly wisdom there, for music and for life. Again, though, it seems like this ability to hold multiple parameters in tension could be developed through other means: the relationship of melody to harmony, the relative levels of different parts in a final mix using music production software, the relationship between a formal structure like verse-chorus-bridge and the adaptations and deformations thereof.

More importantly, Bach-style voice leading fails to address as many "soft" skills as it does practical skills. For instance, a curriculum that focuses exclusively on one set of rules will necessarily neglect the skill of comparative analysis. If students leave the course believing that one set of rules applies generally, they have not been taught to engage in a comparison of one set of rules with another, and they certainly have not been taught to consider what values these rules encode. As Cora Palfy and Eric Gilson point out, even when an instructor is careful to note the limitations of a theory, an emphasis on that theory will lead to a "hidden curriculum" where students internalize

14 Cohn (2015) makes this particular argument at length.

15 Follet (2013, 13–14).

16 Quotation is a paraphrase based on my memory.

the implicit valuation of that theory.[17] A class focused on a single repertoire will always implicitly value that repertoire, first because of the exclusion of other musics and second (and more insidiously) because theories of music tend to create a positive feedback loop around their central repertoires where they reward analysis of music that conforms more to those theories.

When discussing the role of classical music in the curriculum, I have often heard instructors say that there is value in introducing students that may not be familiar with classical music to the genre. I am happy to concede that classical music has value—it has played an absolutely formative role in my own life—but I cannot see the case for it being more important than any other kind of music, or a better vehicle for the kinds of soft skills under discussion here. Given the impossibility of identifying a single music with which students are familiar in a given classroom, I suggest that theorists try to develop a curriculum that cuts both ways in terms of familiarity: to have students both engage with music outside their comfort zone *and* develop the ability to adapt concepts directly to music they already care about.

An exclusive or dominant focus on Bach-style voice leading necessarily neglects important "soft skills" such as comparative analysis, critical reading, and engaging openly and curiously with music both familiar and unfamiliar. This set of skills, related to the valuation and understanding of difference, should be an extremely high priority in a twenty-first century humanistic education.

Decentering Bach-Style Voice Leading

This short essay has so far focused on critique rather than solution; I felt that it was important to define Bach-style voice leading and contextualize it within the white patriarchal frame of music theory before moving forward with ideas for working against this frame.[18] Although the work of critique is far from done, the following section sketches out five ideas for decentralizing Bach-style voice leading in the undergraduate music theory curriculum, moving from the least to most extreme (full disclosure: my own practice lies somewhere in the middle, as a mix of ♯2 and ♯4). Some aspects of these ideas are combinable while others are mutually exclusive.[19]

17 Palfy and Gilson (2018).

18 In this, too, I follow Philip Ewell: "Of course we should seek solutions to the problems created by our racialized structures, but we must also reframe how we understand race in music theory, which we cannot do if we rush to find solutions to problems we do not yet understand or even acknowledge." Ewell (2020).

19 A related list for moving away from part-writing is given in Kulma and Naxer (2014).

(1) Teach Bach-style voice leading in a way that moves away from chorale writing. The most effective way I have seen this accomplished is to focus on two-voice textures, looking at bass and melody from different classical genres to understand how two voices move against each other in a common-practice classical context. In this case, students would experience a certain amount of relief from the pressures of keeping track of four voices at once, while being able to reproduce outer voice structures from this repertoire.

(2) Teach Bach-style voice leading later in a curriculum.
Many institutions are moving away from teaching Bach-style voice leading in the first semester of a theory sequence, preferring to wait until students have a bigger-picture sense of the study of music theory and harmony in particular. This approach works well in situations where some students may not be required to take the entire sequence of theory, or in modular curricula where they can choose for themselves whether to take a class in traditional counterpoint techniques as opposed to other topics.

(3) Teach Bach-style voice leading comparatively.
One way to decenter Bach and his stylistic progeny from a curriculum is to offer a unit or class on voice leading that approaches the topic more generally, with different repertory serving as examples. Such an approach would involve defining voice leading as generally as possible and then showing, say, a Bach chorale in comparison with a punk song in comparison with a jazz piano solo transcription in comparison with modal species counterpoint in comparison with the vocal arrangements for a doo-wop band. Each of these traditions has its own logic of voice leading, and giving students a bird's-eye view of the ends to which voice leading is used will, in many cases, be more useful than spending many semesters gaining proficiency in any one style.

(4) Move away from Bach-style voice leading and toward a more generalized approach.
Rather than being comparative, this approach presents one set of voice leading precepts that have the widest possible applicability beyond Bach. Several scholars of popular music have discussed voice leading in a more generalized context of triadic music that includes genres like pop, blues, rock, R&B, country, contemporary Christian, and hip hop alongside classical music. Voice leading concerns that cut

across triadic music might include fluency of voices (as achieved especially through mostly stepwise motion) and the existence of tendency tones, although what those tendency tones are may change across genres.[20] Limiting one's discussion of voice leading to these topics would constitute a less style-specific approach that allows students to work more fluidly across and between genres.[21]

(5) Do not teach voice leading at all.

It seems fair to say that some kind of study of voice leading (defined in its broadest sense) would be an important part of any music theory curriculum focused on triadic harmony. Every North American undergraduate curriculum I am aware of does focus to a large extent on triadic harmony. But non-triadic music exists, of course, and people study it both within and outside of institutions of higher education. My institution, for instance, hosts an African drumming ensemble and a gamelan ensemble, neither of which are triad-based traditions and both of which involve the transmission of what I would consider music theory in order for participants to communicate and play together. These ensemble leaders spend very little or even no time discussing voice leading, which raises intriguing possibilities for music theory curricula as a whole.

Conclusion

In light of the rapidly changing landscape of undergraduate music education, reconsidering the way we teach voice leading must be a central part of the larger reconsideration of how theory sequences are constructed and the values they espouse. Bach-style voice leading in particular is highly specific and easily applicable only within a limited set of musical practices; focusing on it exclusively devalues and even precludes the study of other relevant topics and the development of important skills, both practical and "soft." I have offered a number of suggestions for decentering Bach-style voice leading and situating it in a more appropriate context and perspective. This contribution is meant to be a starting point in critically considering the role of voice leading in general, and Bach-style voice leading in particular, in our theory curricula.

20 My sincere thanks to Drew Nobile for helping me think through the implications and applications of voice-leading outside classical music. For his relevant work, see Nobile (2011, 2014, 2015, 2020).

21 Timothy Chenette has outlined a number of voice-leading applications in genres like jazz, a capella, doo-wop tunes, etc. and Dave Molk and Michelle Ohnona have written about polystylistic approaches as a way of creating an anti-racist music theory classroom. See Chenette (2018); Molk and Ohnona (2020); Molk, (2019).

Resolving Chords to Resolve Anxieties: Challenges to Minimizing SATB Voice Leading in the Curriculum

CHELSEA BURNS

In this set of essays, several of my colleagues present potential avenues for shifting curricular practice—creative possibilities and ways to effectively cover critical pedagogical elements that typically are addressed through SATB exercises. However, any proposal incurs costs: changing a curriculum is expensive and unwieldy, both in terms of labor and materials. Moreover, this labor is often unacknowledged or invisible at the higher levels of administration; given an increasingly exploitative and precarious job market, we owe it to ourselves and incoming faculty to be honest about these issues. In my brief contribution, I will raise some of the concerns and constraints that can accompany these shifts: limited knowledge about our students' future needs, issues of sequencing and coordination, a dearth of textbook resources that facilitate this change, personal retraining needs, labor costs, and more broadly, inquiry about what remains of a "shared knowledge base" for undergraduate music students. In order to address any proposal to shift our undergraduate curricula, we must first know how that shift will work within the limitations of our time and expertise, and what challenges we are likely to face.

My discussion of these matters is rooted in my experience teaching across a wide variety of institutions, as well as talking with friends and colleagues at other schools. Since finishing my PhD, I have taught core undergraduate music theory at three universities. The first was a liberal arts-oriented program offering a Bachelor of Arts in Music (Harvard University), the second was a conservatory-style program with a high percentage of performers (Eastman School of Music, University of Rochester), and my third and current post is a school of music within a large public university (Butler School of Music, University of Texas at Austin). These programs differ in a number of ways, such as basic instructional format (lecture/section versus small classes), number of semesters, size of program, student backgrounds, strengths and challenges, and relationship to applied faculty. In each, I have had some latitude on what I included or emphasized in the curriculum. My experiences at disparate institutions have allowed me to see common threads across contexts, as well as ways in which these settings have distinct needs. From this, I draw a set of observations that are not about any individual school, but rather more general ethical and labor issues as well as anxieties one may encounter in shifting away from a "conventional" theory curriculum, with SATB writing forming part of that normative approach.

Lack of Knowledge about Students' Future Needs

While some programs have surveyed their graduates to hear about what has served them well following graduation[1], most of us do not know in any specific or systematic way what happens with students' theory skills after they graduate. We do not know *how* they use the materials, or even *if* they have used them beyond the college theory classroom.

Moreover, we cannot be sure if alumni would say that they found something useful simply because they now have it as a topic they can teach in their own future lessons or classes: how much of "use" is simply the recirculation of a tool one learned in their undergraduate experience, rather than a meaningful concept that elucidates musical relationships found with frequency in the repertory their students are learning? (I am looking at you, augmented-sixth chords.) Part of the point of undergraduate music theory is to support a level of basic musical literacy and competency in future generations of students (i.e., many of our current students will have their own students in the future). But what counts as basic competency? How often do students use their knowledge of SATB voice-leading rules outside of teaching and learning about them in a music theory-class context?

The question of skills versus concepts is slippery here. Are we teaching a student to identify a musical event/structure, or to use it in a more holistic way within their own playing and teaching? Like many theory faculty, I spent the 2020–21 school year preparing a mix of asynchronous videos and online lessons for my students' theory experience this year, owing to the global health crisis. For me, this situation laid bare the false nature of "content delivery" implied in college courses; my students still received the main curricular content points, but they missed critical aspects of the rich environment in which students work through ideas together—discussing and sharing while they try to solve thorny problems, listening together, considering possibilities and weighing the implications of each. In short, forming an active community of learners. How do our current analytical tools support or hinder the development of this kind of rich learning environment? As Marcelle Pierson mentions in her essay, this online shift has made more obvious the mix of hard and soft skills that students gain in the classroom.

Regular and probing discussions about the needs of our students after graduation would help shape the curriculum in productive ways.[2] And such discussions must engage more broadly with what a musician's work constitutes today. This work

1 See, for example, Snodgrass (2017 and 2020).

2 This idea is not new, of course. See, for example, Ed Sarath et al. (2016).

will likely yield different responses from different student populations; to that end, schools will have distinct curricular needs depending upon the careers in which their graduates find themselves. As Peter Smucker notes in his essay, these answers also depend upon their unique institutional context.

Curriculum Sequence

Many of us teach part of a sequence of courses. Rather than covering the entire curriculum ourselves, we often precede and/or follow colleagues, needing to slot into a broader trajectory that encompasses the undergraduate core curriculum. In such cases, one necessarily teaches a curriculum that is compatible with the other units. As a result, one may not have the freedom to omit certain pedagogical approaches because they are assumed to be part of the sequence. It is understood that one's course will build upon skills that students have developed already or prepare them for what their next theory professor will expect them to be able to do. This flow of concepts—and necessary give and take coordinating with colleagues—may make it difficult to omit tools that are widely used in other semesters of the theory curriculum or that are assumed knowledge in other undergraduate music courses.

Textbook Limitations

As William van Geest noted in the opening essay, the materials that are currently available strongly push an SATB-heavy teaching approach, and thus do not readily facilitate teaching that minimizes or omits this structure. The most popular textbooks in our field provide resources designed to ease the heavy lifting of assignment creation and implementation through workbooks and supplemental online resources. In my experience, students who spend significant money on these materials are frustrated when they do not commensurately use them in the course. Further, if you choose to eschew the workbook, you will effectively become your own content-creation machine—designing, building, and distributing materials that will provide a careful balance of modes of practice and the right challenge level for your students. Even with carefully customized assignments, the reference guide of the textbook will frequently refer to analytical points of contact that are not quite as relevant for your course, creating a mismatch for students between reference materials and the practices of your theory classroom.

Limitations of Personal Experience and Labor/Time Investments

A task of curriculum change is one of not only course redesign, but also self-training. Many of us were trained in programs that used SATB exercises as a central paradigm for understanding harmony and voice leading; reframing that is a task

not only for our students, but also ourselves—teaching ourselves new ways of understanding and communicating these concepts.

This is not a prohibitive barrier, of course—nor is the question of textbook materials. In my experience, most of us do not limit ourselves to publisher-packaged resources. Nevertheless, the labor required to address both a lack of readymade instructional materials and a potential lack of personal training is significant. This is especially true for an adaptation minimizing a ubiquitous vehicle for teaching harmony and voice leading. Redesigning a large number of assignments is a major task, one that takes not only an initial redesign but also years of evolution and adaptation. And learning to use frames that are different from the ones with which you were trained is not only difficult but also uncomfortable; it requires you to face your own analytical weaknesses or challenges, and robs you of vehicles from your own musical learning that you may have found very effective or perhaps even—dare I say—fun.

Employment Status and Inequity

For faculty with high teaching loads or contingent contracts, the lack of both time and job security serves as a serious impediment to course redesign. It requires faculty to engage in a task that crushes their effective hourly wage, often without guarantee of being able to draw upon that work in future years. The recent covid-related collapse of the music-academic labor market has borne out just such fears, with non-renewal of contracts on courses that faculty have often spent hundreds of hours preparing. Given the documented race and gender inequalities in academia, wherein underrepresented groups disproportionately form the ranks of contingent faculty, this is also an issue of labor inequity.[3] In the current academic environment and economic crisis, these inequities are exacerbated; faculty who have taught in institutions for many years are being let go unceremoniously, their countless hours of labor tossed to the side and assumed to be easily replaceable. Curricular redesign requires stability of faculty employment to happen effectively and equitably.

Anxieties about "Keeping Up" with Other Programs

Let us say that you have worked things out so that you can undertake the labor

3 See, for example, "The Annual Report on the Economic Status of the Profession," American Association of University Professors (AAUP), May 2019, https://www.aaup.org/report/annual-report-economic-status-profession-2018-19; "Promoting Racial and Ethnic Diversity in the Faculty: What Higher Education Unions Can Do," American Federation of Teachers, 2010, https://aft.org/sites/default/files/facultydiversity0310.pdf; and Danielle Fosler-Lussier, "'What Can the AMS do?' The Scholarly Society and the Academic Jobs Crisis," *Musicology Now* May 16, 2019, https://musicologynow.org/what-can-the-ams-do-the-scholarly-society-and-the-academic-jobs-crisis/.

of changing your courses. Do you want to actually do it? You may be concerned about how your students will fare when they leave your program and go on to take theory placement tests elsewhere. Perhaps you are concerned about comments like this one, which appeared in August of 2019 on Twitter: "Doing graduate theory entrance exams, and seriously wondering . . . what is happening with undergrad theory at other institutions?"[4] In my own curricular anxieties, I fear that my students could face precisely this kind of reception, one that engenders shame in their training and implies that they lack essential knowledge of musical structure. Of course, in keeping the status quo, we would reaffirm a system that perpetuates itself perhaps based more upon anxieties and inertia than on current practical use.

Goals of a Shared Knowledge Base

In addition to labor costs and anxieties about our graduates being criticized or ridiculed, we face a more existential question about our work as music theorists—both teachers and scholars. There is real loss in removing materials that have been shared among (a body of largely white, upper-middle-class) undergraduate music students across North America for decades. While shifting techniques can make space for a different range of concepts and skills, theorists will unquestionably lose some long-standing traditions and practices. Perhaps one might get the sense that the material they learned in their own undergraduate studies is no longer valuable, or was maybe only ever artificially valuable. What were we doing with the hours we spent memorizing the alto range or learning that inner voices have different rules from outer voices? Moreover, what does this potential discarding mean about the relationship between undergraduate analytical techniques and the musics that students study—is this responding to a change in repertories, or was this always a farce of some kind? If it was once considered closely connected to the music our students were learning, does that mean that musicians in the academy are losing a rich and deep understanding of real musical practices, or more broadly, concert music writ large? What happens to the shape of our musical worlds, and those of our students? Every change in emphasis requires a rebalancing and a reconsideration of priorities, values, and deeply held assumptions.

While SATB writing is obviously not the whole world of our music-theoretical experience, it can feel like a synecdoche for the ways in which we have received and transmitted knowledge of musical structure. As Poundie Burstein recently reiterated, SATB exercises have long been defended as a critical vehicle for voice leading,counterpoint, reduction analysis, and understanding of vocal independence.[5]

4 Blasco (2019).

5 Burstein (2020).

To rethink such basic and fundamental aspects of our field is to rethink the priorities; if we still want to teach elements of voice leading and counterpoint, we will need to consider alternatives such as those Pierson proposes in her essay. Are these still the foci we even want in our curricula?

Concluding Thoughts

The questions I have asked in the preceding sections are not meant to be rhetorical, nor are they intended to be leading, with obvious answers. In order to consider the pedagogical vehicles we use, we must address each of these questions in turn—need, use, equity, labor, and values.

Some of the issues I have described arise from a mismatch between the trends of the field and the current offerings of textbooks—an unsurprising gap emerges between the two, given the necessities of change in the field and the slower timelines of textbook development and publication. As curricula and textbooks shift, we will also see changes in graduate placement exams and other unfolding effects. Perhaps there will be less shared vocabulary about musical structure among musicians, reflecting distinct needs and different institutional backgrounds. Perhaps we will find that the shared sets of musical rules reflected in SATB part-writing exercises were not so important after all.

In relation to broader questions of change and stability, we might take the perspective of João Biehl and Peter Locke, who write about anthropologies of becoming, "Instead of viewing people in terms of core principles or as fully bounded by structure or form, [one] attends to people's transformations and varied agencies, and to the ways in which power itself is shifting and contingent—less a solid, stable entity than a product of . . . ongoing struggle." They go on to advise that we make "space for unfinishedness, and bodies, power, and things [that] do not remain frozen in place."[6] As our ever-unfinished field continues to reassess and shift, we must allow space for these transformations to take place, both at the individual instructor level, and at the institutional level. Such transformations will likely be more extensive than simply excising or minimizing SATB exercises: the musicians we teach today are not the musicians of thirty years ago. Indeed, we ourselves are not the same—as theorists, as musicians, or as members of society.

These shifts are important, and it is worth facing challenges to make them. But we should not ignore the real costs and risks that such changes entail.

6 Biehl and Locke (2017, 6).

Administering Pedagogy: Navigating the Institutional Impacts of a Changing Theory Curriculum

PETER SMUCKER

You are convinced. It is time. You want to implement a brand-new theory curriculum and are considering whether to eliminate or significantly reduce SATB part-writing tasks. Evolving pedagogies, cultural shifts, and new technologies have compelled you to move toward or experiment with a new curriculum, but your colleagues or administrators may not so easily be convinced that such modifications are in their best interests, or in the interests of the students and the institution.

In this essay, I will briefly summarize perspectives from informal interviews and discussions I have had regarding institutional impacts of curricular changes. While these perspectives do not emerge from informed surveys or empirical studies, they do arise from real experiences and conversations, likely common to many of us in the field. The goal of this essay is to use SATB writing to model a decision-making process for curricular changes. Building upon Chelsea Burns's essay, I consider how curricular changes may affect three constituencies: students, faculty members, and administrators. I also draw on my own experience as the Director of Music Theory at Stetson University's School of Music, an all-undergraduate institution with approximately 200 music majors. In the second half of this essay, I offer three common scenarios that music theory faculty may encounter in the process of curricular change, along with practical advice on how to navigate these scenarios successfully.

The roles and experiences of students, instructors, and administrators are all intricately intertwined, fueling the overall success of an institution. The perspectives of each, however, may not always have common goals. For example, as teachers we likely think about designing a curriculum in the best interests of our students for their educational and professional development. Might there be other considerations for curriculum design that would benefit from having an administrator's standpoint? Not all music theory instructors have the experience of being an administrator (and vice versa), thus an alternative perspective can help inform decisions that might impact the institution on different "altitudes," as one administrator put it. That is, a 100-foot view (our immediate needs for one class) varies from the 1,000-foot view (impacts of curriculum across a music theory department), which varies from a 10,000-foot view (how the music theory curriculum impacts an entire school of music). Moving between the specific and broad views of a curriculum from the perspectives of our three constituencies enables a better informed, unified perspective for the institution.

Students

In discussions with my own students, reactions are mixed regarding the value of SATB exercises. Many take it as simply one of the many skills in which they must become reasonably proficient to get to "the end" of their core studies in music theory. Some enjoy "figuring out" the best possible solutions within a prescribed rubric while others find it tedious, uninteresting, and *inapplicable* to their interests. Whether or not they enjoy SATB exercises, we should not ignore the latter issue of pertinence, as the opening anecdote of this colloquy displays. Is it relevant simply because it strengthens critical thinking skills, or is there more to it than that? Perhaps more valuable than asking current students what they think about SATB writing would be to obtain input from students and alumni after they have completed their studies in music theory. An attempt to establish the value of current curricular needs based on student experiences from the past certainly has its challenges, however. When was the last time you talked to an alumnus—not in the field of music theory—about their experiences of SATB writing? Still, broadening our view of how the curriculum affects our students is a worthwhile endeavor, both for the curriculum's direct impact (they use SATB writing for teaching, arranging, etc.) and *indirect* impact (thinking critically about problem solving and understanding hierarchical, functional relationships).

Whether we view students from the standpoint of an instructor or administrator, curricular changes should be made with the students' best interests in mind. Empowering our students to become well-rounded musicians and global citizens should inform any debate on curriculum.[1] From the perspective of administrators or faculty, the way students relate to an institution can fall into three categories: recruitment, retention, and placement. How might a move away from SATB writing affect each of these?

For recruitment and retention, programs often promote what makes them unique when compared to other institutions. A curriculum that "bucks the trend" or stands out as unique could be selling points to a prospective student, or help keep students by promoting how their current experience is distinct from other places. Conversely, an unusual curriculum might be met with dismay by incoming students who scored highly on the AP Music Theory exam. If your program does not include SATB writing, could it frustrate applicants who may be seeking college credit? This may be hard to say, as a survey by William van Geest shows that 67.9% of respondents report

1 For more on the tension between the curriculum and generating a well-rounded student and global citizen, see Katherine Pukinskis's essay in this colloquy.

that undergraduate placement exams do *not* assess part-writing.[2] Thus it is worth considering how the absence of SATB in your curriculum and placement exams align with incoming student expectations.

Placement of students after their undergraduate experience reflects back on their institution. Like recruitment and retention, if the accepted norm is a SATB-reliant curriculum, how will *not* having that experience help or hinder their placement into graduate programs, and might it affect placements into remedial theory courses? Furthermore, if not exposed to SATB writing as an undergraduate, the likely necessity to take a graduate remedial course solely for learning SATB writing can involve out-of-pocket expenses and additional coursework that do not count toward the graduate degree. In the same survey mentioned above, 39.7% of respondents report that their graduate theory placement exams do not assess part-writing. If 60% of these exams do assess SATB writing, are you (including your administration and institution) willing to eliminate SATB writing in your undergraduate curriculum? Does this risk your department or school being marked as having "unprepared" students for graduate studies in music? Faculty members and administrators should carefully weigh these curricular influences on their students' journey through their institution.

Faculty

How might a changing curriculum affect the faculty at your institution? It is possible that any general changes to a music theory curriculum will have a rippling effect through several other classes, and therefore affect your colleagues. Specific changes involving SATB writing may be more localized to certain aspects of only a few courses. For example, you may have classes with coordinated curricula such as music theory, aural training, and functional keyboard. Altering the voice-leading practices in the theory classroom may allow more flexibility in these classes (e.g., keyboard classes may move away from "functional keyboard" with reliance on voice leading). It is likely that many of your colleagues encountered SATB writing in their own training. Whether or not they embrace it for their own teaching is a different story. Have you talked to your choral ensemble conducting colleagues about a de-emphasis of SATB learning? Perhaps it would not bother them, but they may also value the ability to connect their pedagogy with SATB practices in the theory classroom. Fostering a collaborative relationship with your colleagues by seeking simple input from them can readily establish a positive work environment.

2 These survey results are in van Geest, "From Musical Work to Model for Musical Structure: A Genealogy of the Chorale in American Music Theory" (Ph.D. dissertation, University of Michigan, in progress).

Consider the impacts on faculty from an administrator's standpoint (and if you are not sure, ask them). To continue with the example of a coordinated curriculum, an administrative view may point out that decentralizing an element of a coordinated curriculum can create necessary changes to other courses, potentially creating additional labor for your colleagues. Furthermore, an administrator should consider how your proposed changes can affect your colleagues, including retention and hiring of current or future faculty. Would the added labor of curriculum changes for contingent faculty intensify their already heavy (and likely underpaid) workload? Could this add to the challenges of your administrator finding people to teach sections of a class that do not contain certain curricular elements? Elimination of SATB writing in a single theory class might not affect any of your colleagues, but it is certainly worth weighing how it could.

Administration

Are your administrators aware of the shifts in the music theory field? Should they be? It is easy to assume that the theory curriculum has no effect on your school's administrators, but as we have already considered above, changes to your theory curriculum can impact your colleagues, which is very much under the purview of your administration. Your relationship to the administration therefore matters a great deal and your choices for the music theory curriculum can affect this relationship. Furthermore, it is important to communicate how simple changes to a curriculum may have larger impacts on the institution that could affect your administration and their duties. Central to this discussion should be your department or school's mission. SATB writing will not likely be included in any mission statement, but the realization of that mission statement is dependent on course offerings and their curricula. Beyond this, consider how your administrator might use your innovations in the curriculum to your, the department's, and the institution's advantage. These could be realized in faculty spotlights (i.e., resource sharing with your campus colleagues), reports to the board of trustees, or institutional workshops that highlight faculty innovation. Your administrator may look favorably on these opportunities to promote your work, which could even include grant money for curriculum redesign. While there are not necessarily hard lines between the institutional missions of conservatories, music departments, and schools of music, certain curricula (such as those with the absence of SATB writing) may be better suited to one type of institution, and your administrator should be aware of this if they are not already. Additionally, does the institution have any accreditation to consider? Your administrator might also be concerned with how such a shift in a curriculum could affect or fulfill accreditation requirements.

Scenarios for Discussion

For all these perspectives, we may start to compile positive or negative valences on specific aspects and dimensions of the proposed curriculum change. These valences can either be cumulatively supportive or oppositional of each other, or approach ambivalence. And while this essentially amounts to a weighing of pros and cons, the emotionally positive and negative reactions to change is worth weighing, especially if you ultimately hope to build a positive partnership between you, the theorist, and all other aspects of your institution. The following three scenarios seem to be frequent topics of discussions that come up in informal conversations at conferences and at our institutions. If we place these within the confines of an altered SATB curriculum, what positive or negative valences may arise? Furthermore, what practical steps might we take as we weigh these valences?

Scenario #1. Your department chair says to you, "You're the expert in music theory. I'll support whatever curriculum changes you want."

While this may seem ideal, it may end up creating negative valences due to the lack of partnership between the faculty and administration. Even though faculty may have final say in curricular matters, demand more of your administrators. Point out that curriculum changes may have the various institutional impacts highlighted above. You are indeed seeking a partnership with the institution and not simply because you are driven by a recent trend in music theory pedagogy. Your administrator should be aware of the three constituencies discussed here, but perhaps not of the connections to the theory curriculum. Positive valences can emerge from working more closely with your administration, even though it will require more work on both sides. Yet through difficult, cooperative work can come opportunities. Thus, do not settle for a blank check; rather, demand more from your administrators:

1. Ask them *how* they will support you with this change. What resources can they offer?
2. What information can they provide regarding incoming students (such as the average incoming student's musical literacy)? Work with them to show them why a certain curricular change might address the students across the recruitment-retention-alumni spectrum.
3. Ask them for their time. If you have meetings with them, make it efficient and focused. Working closely with administrators can pay off for you professionally by building trust and a positive working relationship.

Scenario #2: Resistance to change. You've proposed changing the music theory curriculum so that it reduces or alters the SATB skills. Some of your faculty colleagues don't want to change how they use SATB skills in their courses.

While you might be convinced of the appropriateness of a curricular change, your other colleagues might not be. Telling them that you are right because you are the theorist and that is the trend that you see at conferences you attend would likely elicit a negative reaction. You might instead try convincing your administrator of your perspectives, gather evidence for its benefits, and then present it to your colleagues. Such backing from your administrator could help, although this still may be viewed with ambivalence, particularly if political tensions exist between faculty (including tenured, non- or untenured, and contingent) and the administration. The most positive reactions would likely come from opening a dialogue with your colleagues. This inclusion can empower them to be a part of the forward movement on the issue, even if the ultimate decision may still not align with what your colleagues want. If you face resistance to change, consider these practical steps:

1. Identify the reasons for resistance and write them all down. We should not assume it is as simple as "I just don't want to do anything differently." You may be surprised at what your colleagues value in the curriculum.
2. Get your colleagues involved. I know, more work right now, though potentially less work in the future. Try gathering your colleagues together with some initiatives for reevaluating the curriculum *before* you present your ideas for change. You may find that there is already common ground.
3. Ask for help from your administrators. If you anticipate resistance from your colleagues, approach your administrator to ask for their advice. Such open dialogue can help build trust between you and the administration.

Scenario #3: The textbook debate. You and your colleagues have been prompted to reevaluate your theory textbook because of the recent buzz at a conference, an administrative directive to reduce costs for students, or a recent visit by a publisher representative.

Considering the detailed analysis of textbooks in William van Geest's essay, as well as Burns's consideration of how textbooks and its associated curriculum can affect faculty labor, it should be no surprise that many of our "real-world" conversations regarding textbooks have both positive and negative reactions. Adoption of a textbook is a different question than why SATB writing is valuable pedagogically, but they

remain inextricably connected. From the perspective of an instructor, the limited use or elimination of textbooks that primarily rely on SATB components may create significant work in developing course materials. Would this work fall on other colleagues, including contingent faculty? If so, such a change might seem unfavorable. From the perspective of an administrator, the elimination of a textbook might make the program look attractive due to lower course costs and as an alternative learning environment, ultimately contributing to student satisfaction ratings. However, would an increase in labor from course preparation factor into faculty loads, affecting faculty distribution or compensation? Additionally, as Katherine Pukinskis discusses in her essay, what other cultural and societal factors (e.g., the decolonization of a curriculum) will play into the choice of a textbook? Does that support the current initiatives of your institution? This is all a lot to balance, so I offer a few pieces of advice:

1. Take your time. A hasty decision means you may not have considered all the implications for the various constituencies. At Stetson, we vetted a textbook for an entire year before adopting it, at times comparing how our lessons might necessarily change over the next few years.
2. Ask whether it is the right time. Again, taking my own experience as an example, it just happened that in my second year of teaching at Stetson, one tenured music theory professor retired while another took an administrative position. This began my process of reflecting on what changes, if any, could occur in the curriculum.
3. Focus on the students. Carefully consider how this will impact your students. Will it save them money? Is that an identified concern at your institution? Circling back to our student experience that opened this colloquy, will this benefit your students in their future goals of music making?
4. Consult your institution's mission. Institutions have different visions for the type of student they want to produce, and the curriculum is no small part of that. Are you trying to change the type of institution through your curriculum? SATB part-writing may (or may not) be integral to realizing your school's mission.

In this essay I have offered a collection of ideas that are common during discussions of curricular changes at music theory conferences and in music departments. My contribution provides a foundational view for the interconnectivity of three constituencies—students, faculty, and administrators—and practical considerations

for how they must interact to strengthen any curricular decisions. The previous three scenarios are hypothetical, but certainly possible. From the standpoint of music theory pedagogy (either theorists in training or veteran educators), what other scenarios warrant discussion regarding SATB inclusion in your curriculum? Before you decide to completely overhaul your curriculum, it is worth it for you (for the benefit of your students, colleagues, and administrators) to consider these and other scenarios, while systematically thinking through their institutional impacts.

Decentering the Chorale in Undergraduate Music Theory Courses: Why and How

KATHERINE PUKINSKIS

The chorale was a central tenet of my own experience in music theory courses as an undergraduate. It permeated in-class activities, workbook assignments, aural skills quizzes, and final exams to such an extent, I assumed that if I mastered the analytical and creative assignments in that grand staff, four-voice format, that I would *know* a significant slice of music theory. Now as a teacher, I understand that undergraduate music theory is much more than what I learned in my required studies, and, as a living, breathing, evolving pedagogical endeavor, an undergraduate music theory course today *should* be different from what *I* learned when I was a student. Many instructors have made strides to create greater representational diversity in the material presented as examples in their classrooms.[1] While diversifying my repertoire choices in class was a good first step, the ways in which music theory is framed in those courses still privileges a narrow body of work;[2] changing the repertoire is not enough. As outlined by Dylan Robinson's letter "To All Who Should Be Concerned," the "additive inclusion" of more diverse materials maintains power rather than "giving over space for IBPOC leadership to determine the parameters for change."[3] My choice to redesign the undergraduate theory courses I teach was sparked by a desire to make my classrooms more equitable for students and to create clear connections for application of their work in class to their pursuits outside of it. When I began this shift in my own course design, the pervasive insistence on four-part writing and analysis via the chorale was the first fixture I tackled, and it is the focus of this essay.

The body of this essay begins with a discussion of large-scale and semester-wide adjustments I have made to reframe my courses to decenter the chorale, and an outline of shifted learning outcomes to reflect the changes in daily, in-class work. I then turn my attention to the classroom experience and submit musical examples that could take the place of chorales in coursework; these materials are not framed

1 Projects like musictheoryexamplesbywomen.com and musicbyblackcomposers.org, textbooks like Snodgrass (2016) and new theory courses across the country taught by many reading this article are all fueling the necessary shift of music theory pedagogy in the United States. Moreover, the Society of Music Theory has explicitly indicated a special interest in pursuing more inclusive pedagogy with the inaugural award for Diversity in Course Design: https://societymusictheory.org/grants/dcd.

2 The naming and discussion of music theory's "hidden curriculum" is outlined in Palfy and Gilson (2018). For a more detailed exploration of the "white racial frame" in music theory, see Ewell (2020).

3 Robinson (2019, 137–38).

as 1:1 replacements, but instead highlight an element characteristic of chorale-style exercises alongside parameters historically underexplored in undergraduate theory classes or underexplored in chorale-based examples. In the spirit of these discussed changes, this essay delays direct engagement with the chorale until an equitable framework of other musical parameters is established. I close with a brief discussion of timing, reframing, and situating the chorale if it is required curricular content at your institution.

Large-Scale Considerations and Framing

Some instructors may need to balance an institutional pressure to teach a specific slice of repertoire in a particular course with a personal desire to decentralize canonized materials and methods, but the normative curriculum tokenizes diversity[4] and reinforces the values of the canon.[5] In my courses, I redistribute time to engage with a wide reach of analytical techniques, practices, repertoire, and questions to help students see space for their own interests and ideas in the classroom, alongside—rather than in conflict with—those historically requisite in music theory classes. My first step in restructuring was shifting my own expectations for students and communicating these expectations as tangible, digestible goals. In my course design, I reconceptualize learning outcomes to frame music theory in the broadest sense: students explore new material (or explore familiar material in a new way), situate their findings alongside existing information (an act of scaffolding), and develop a language competency to talk about those ideas. This expansion of scope makes space for students to find value in the work whether they pursue a graduate degree or a career in music, continue to engage with music as a hobby, or leave music entirely and focus on any other area; the goals are widely applicable. With this breadth of application in mind, I prioritize methods and repertoire that help them work in flexible settings, whether that is creating arrangements for their a capella group, performing at an open mic night, or talking to collaborators about producing music for a short film in another class. Additionally, the soft skills[6] learned in the theory classroom can inform their lives beyond the degree: writing, critical listening, formal reasoning, empathy, collaborative work.

4 In his 2017 roundtable contribution for the *Journal of Music History Pedagogy*, Alejandro Madrid writes that diversity is always an act of tokenism.

5 For a deeper dive into pressures and expectations associated with curricular change, see Chelsea Burns's essay.

6 For more on soft skills, see Marcelle Pierson's essay in this colloquy.

Keeping in mind how my students may use their skills outside of class helps to create a balance of focus during our time together. Having taught predominantly at private liberal arts institutions, my theory classes are populated by music majors, music minors, and non-music majors; students have widely varying ideas about how these classes fold into their larger undergraduate experience. At the beginning of each semester I get to know how my students interact with music and I make space in class to discuss what I call "in the wild" applications—ways we can put skills into practice outside of the frictionless vacuum of a pristine, clean-edged example in a homework assignment. Surely the classical canon may be part of someone's performance repertoire, but they may also need to prepare brand-new works, interact with electronics, or perform as a soloist or as part of an ensemble. They may work with a conductor or be the conductor, or they may need to speak with audiences who want to know about a piece without accessing it via technical vocabulary. They may want to teach their a capella group a new arrangement or compose a one-act musical. The extra time put into the beginning of each semester builds plenty of connections to spread naturally throughout the course; I am able to point out examples of "in the wild" links that are directly relevant to the students in the class, further making space for each of them as they are.

In my teaching, I aim to acknowledge and deconstruct white framing of music theory. I find that it is critical for avoiding the situation Margaret Walker describes in her article "Towards a Decolonized Music History Curriculum":

> Presenting European art music, its history, theory, and notation, as not only more worthy of study than other musics, but also as unique and inimitable, positions white culture as a pinnacle of human achievement rather than one of many various, equally valuable, and often entangled global artistic practices.[7]

Once we are in class, I prioritize acknowledging and deconstructing the inherent white framing of music theory in my classes. In our very first meeting, I take time to explain that all music is open to the same level of our attention and analytical rigor, but the languages, labels, and approaches we may enact to engage with each piece require nuance and flexibility. Rather than compare every piece to the same set of metrics for assessment (harmony being the most common), I frame the practice of music theory as building a new container for each song, informed by the builder's own agency to frame their hearing with any number of parameters as the foundation—text, rhythm, performer interpretation, texture, instrumentation, and many others. The thread of visualization and metaphor extends to discussion about the potential for common

7 Walker (2020).

materials to be used in multiple containers, that the materials themselves might be flexible or porous instead of rigid, and that the containers should be imagined as lidless; able to spill over or extend above the anticipated limits of the vessel.

A certain amount of flexibility is necessary to parse the inner workings of a musical moment, which is different from pushing it into a rule-based box. I set aside class time to discuss when and where certain guidelines originate, and to track the development of practices over time. In the context of Western classical music, students have historically learned to avoid dissonance, but if one must use it, do it in passing and on weak beats; resolve the leading tone upward in an outer voice, but it is okay in an inner one; a predominant tonal area must be followed by the dominant, but not all IV-sounding chords are technically predominant. Of course, each of these constraints is historically situated and genre-specific. Students identify and converse with this content and recognize historically typical tendencies, but they also learn that these practices are not rigidly fixed. Additionally, these detours outside of the prescribed constraints and parameters are the parts of music that catch us off guard and pull us in: a surprising resolution, an added measure in an expected four-measure phrase, a pivot to a more distant key than anticipated. Students also learn that different tools function more or less effectively in a given analytical moment; in the middle of that Villa-Lobos etude, it is likely that a student's counterpoint knowledge will not serve them in the same way as their ability to identify harmonic sequences, track motives, and engage with the guitar's topography as a factor in the performance of the piece. In short, there are many ways in, and the method students choose contributes to the efficacy of their analysis.

In-Class Opportunities for Change

When choosing repertoire, I prioritize instrumentations and formatting that look like the scores or repertoire students engage with outside of class; this increases their initial investment in the course material by showing them ways in which this work can be relevant to their "life outside." Students still practice realizing figured bass and doing Roman numeral analysis in class, but they also read piano/vocal scores, work with DAWs to compose, and realize accompaniments based on chord changes in a pop song or jazz chart. They have discussions about which labeling system—Nashville numbers, Roman numerals, pop/slash notation, to name a few—best serves their purposes for representing harmony, advocating for their choice by citing score-, listening-, and performance-based evidence to support their argument. Seeing the music for Kristen Anderson-Lopez and Robert Lopez's "For the First Time in Forever" from *Frozen* in close proximity to Clara Wieck [Schumann]'s "Ich hab' in deinem Auge" develops a flexibility that makes space for multiple genres in the course.

In her chapter "Embodied Pedagogy" from *College Music Curricula for a New Century*, Sonia Tamar Seeman writes, "humans learn through the juxtaposition of familiar and unfamiliar experiences."[8] Throughout the semester, I incorporate repertoire that encourages a variety of methods in order to develop dexterity when they encounter new music outside of class. While Seeman's focus is ethnomusicology and history courses, her work applies directly to music theory. She continues, "all exercises should be aimed at increasing students' understanding of the varieties of musical sounds and effects in the world beyond their taken-for-granted assumptions."[9] By diversifying the musical examples and tools in assignments, the jump from a theory exercise into an opera rehearsal or a song cover a student is writing for their a capella group becomes smaller. With the changes I outline below, I focus on ways to incorporate topics—such as harmony and voice leading—historically taught with chorale-based repertoire alongside other musical parameters historically omitted from Bach-style voice leading exercises.

Voice Leading

I introduce the concept of voice leading by asking students to "sing the next note" after playing the first seven notes of a descending major scale. This practice reinforces student's experiences of expectation, tension, and resolution within contexts that are familiar to them, made comfortable through countless exposure.[10] It is an activity that also helps students find their own place in a theory class; this kind of framing values their lived and embodied experience, and their ability to engage with music even if they do not yet have the specialized vocabulary to communicate what is happening. As Elizabeth Hellmuth Margulis illuminates in her discussion of the relationship between participation, technical vocabularies, and understanding in her book *On Repeat: How Music Plays the Mind*,

> [D]espite their initial inability to identify the relationship of the last two phrases to the first two, once it was pointed out to them, they nodded with recognition. They had not been able to verbalize the relationship, but once it had been verbalized for them, they were able to match that characterization with an experience they'd already been having. They didn't react as if they now heard something different in the music, but rather as if they now had a way of talking about something they had already heard.[11]

8 Seeman (2017, 193–94).

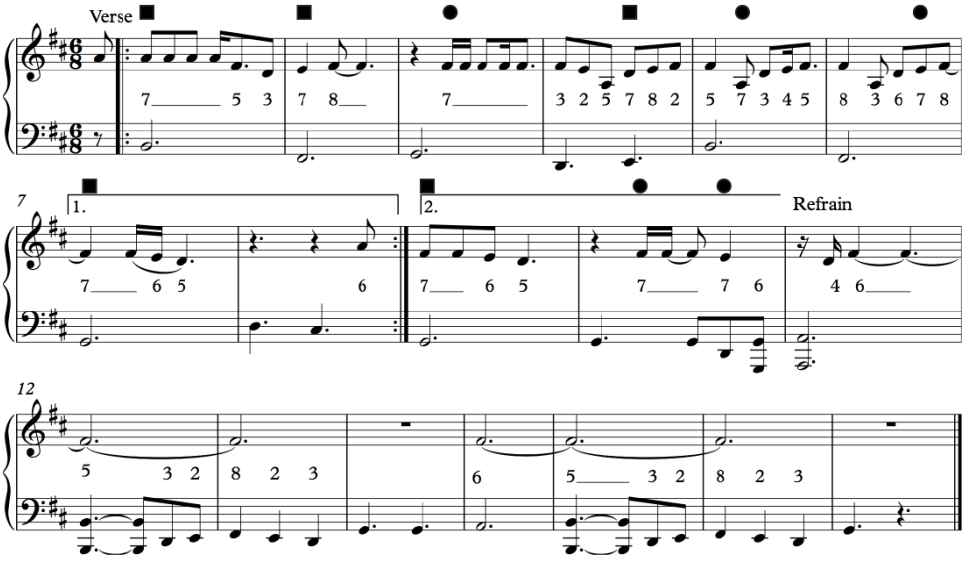
9 Seeman (2017, 194).

10 Embodied work and experience are integral parts of knowledge and significant tenets of feminist pedagogy. For more on this topic, see Ahmed (2017).

11 Margulis (2014, 156).

The lived experience of singing the descending major scale moves us into conversations about tension and tendency, and we play around with the subversion of culturally inherited expectations. I pose experience-forward questions: "Sing a descending major scale and stop on $\hat{2}$; how do you feel?" "If you hear C–B–A, do you have enough information to complete the series? If not, what are some possible directions you might head with these ingredients?"

Having students sing or perform in multi-part textures helps them locate the embodied preference for keeping common tones and limiting distance covered between pitches, a practice utilized in many different genres and repertories. We might sing through the alto and bass lines of a Bach chorale as a repertoire example, but the bass line alongside the melody of "Burn" from *Hamilton: An American Musical* (see Example 1) reinforces the tenets of voice leading as a practice of understanding tendency, tension, and resolution. Questions like "how did it feel to sing this line?" and "where did you feel conflict with the other line? How is that conflict resolved in the music?" are fruitful ways to have students explore concepts of dissonance and resolution (broadly defined), and it allows them to experience and hear these practices in music of many different styles and genres.



Example 1
Author's transcription of verse and refrain of "Burn," from Lin-Manuel Miranda, *Hamilton: An American Musical*. Squares indicate a strong beat dissonance, and circles indicate a weak beat dissonance.

With "Burn," students can label intervals between voices and look for repetition and patterns of motion between stability and instability. The recurring, insistent 7th in the verse yields great discussion about the difference between passing and metrically accented dissonance, as well as our ability to normalize something that initially seems out of place by methodic repetition. Students can talk about implied harmony: what notes in a chord may be omitted while still communicating enough information about its function? We can zoom in on the bass line and make choices about whether a note is taking on a melodic function as a non-chord tone or truly implying a change in harmony.

Framing context into the course decenters harmony and voice leading as the pillars around which a theory course is historically built. "Burn" is both a living example and an educational tool in its natural form. Because of the solo voice and skeleton accompaniment, the text is easily understood as part of the mechanism of the song, and the exposed interaction between melody and bass line help Miranda's text pack the punch that it does.[12] Though the text was omitted from Example 1 to make space for intervals and the discussion of voice leading, it is an integral part of the discussion in my classroom. We can launch into conversations about large-scale form, highlighting that the verses are riddled with 7ths but they are absent in the chorus, or that the former is flooded with dense language and the latter is one word: burn. I might ask my students to think about how these differences between formal sections influence their understanding of the song's narrative: what is highlighted for them? By including text in the conversation alongside harmony and voice leading, we explore how musical parameters interact with one another, building an understanding of the piece as a whole dependent on each of its parts.

Harmony: Two Examples

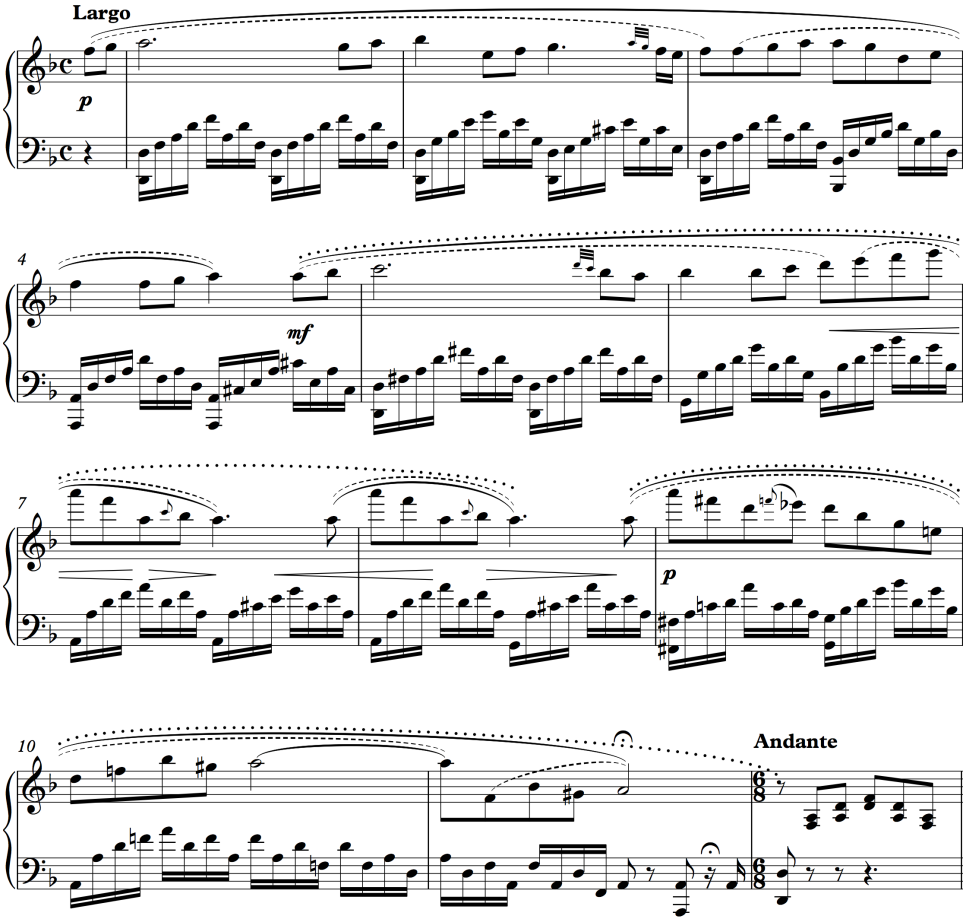
In the earliest weeks of the semester, I take time to talk about meter, rhythm, motive, phrase, ensemble, form, and closure without explicitly engaging these topics within the framework of harmony. We look at how instruments interact with one another, where they double or pass foreground material back and forth. Though a Bach-style chorale example presents a transparent positioning of melody in the top voice, harmony anchored by the bass voice, and inner voices supporting both, the

12 Historically, the homophonic texture of a chorale in a Bach cantata provided a textural clarity in performance that helped it function as a vehicle to communicate text, yet words in a chorale are rarely discussed when presented in an undergraduate theory course. As William van Geest illuminated in his essay (see Example 1.8), almost all presentations of chorales in the top nine Anglo-American theory textbooks appeared without text or translation, though most non-chorale repertoire features both a text and a translation.

form's single-use function—an exploration of harmony through homophonic voicing—limits its capacity to connect the topics explored to the students doing the exploring. By planting harmony in a field among many other musical elements, students have more access points to enter into and then navigate a work, even if the destination is harmonic analysis. They are able to draw connections between tempo and audible harmony, agogic accents and non-chord tones, or the ear's ability to chunk material together based on volume (dynamics and the number of instruments playing the same pitch) or placement on strong or weak beats of a measure. The examples below still engage with the tenets of chorale-style exercises, but situate them alongside additional musical parameters often excluded from that repertoire.[13]

For those working at institutions that still require a thorough exploration of canonical repertoire, there are countless examples that clearly present material for harmonic exploration that also fold in additional skills. For those whose classes require an engagement with common practice European repertoire, I have had success using excerpts from pieces like Fanny Hensel's *Das Jahr* (Example 2) and Joseph Haydn's Piano Trio in A-Flat Major, Hob XV:14, 2nd movement (Example 3). These pieces can be substitute material for exploration that has historically relied on chorales. In the Hensel, the early version of the June movement ("Juni") provides a clear harmonic rhythm with limited non-chord tones in the bass clef, and the separation of textures makes this a great example for early score study. Students can label harmony, identify non-chord tones, and point out cadences. The harmonic support is stretched over two to four beats, allowing students time to calibrate into one chord before moving to the next, a luxury not afforded in the harmonic rhythm and notated performance tempi in many of Bach's chorales. With the slower harmonic rhythm already apparent, students can get a sense of the harmony as part of the piece without sacrificing the forward motion of the music. In a chorale, an instructor may have to slow the tempo of performance to give students ample time to hear each sonority before moving to the next, sacrificing the musicality (forward motion) of the original example in service of a more "plunky and clunky" pianistic realization that communicates the ingredients at hand. Because of the distinct lines and registral space in the Hensel, students are also able to practice focusing their listening to foreground the melody, the bass clef ostinati, or even the resulting inner voices created at the top of the accompanying line. Additionally, the melody presents an opportunity to discuss interpretive phrasing choices informed—and confused—by the play between cadential harmonic motion and the manipulation of the "eighth, eighth, quarter" pattern.

13 For a list of these topics, see Marcelle Pierson's essay in this colloquy.



Example 2
Fanny Hensel, *Das Jahr*, "Juni" (first version) mm. 1–12. Solid, dashed, and dotted lines indicate possible phrasing choices (non-exhaustive).

As a student I remember having a hard time understanding why the doubling and parallel voicing guidelines in Bach-style voice leading were so strict, when I often saw doubling in chamber, orchestral, and choral repertoire. In a Haydn symphony, for instance, the cellos and double basses (and sometimes bassoon) often doubled one another, resulting in what *looked like* parallel motion from the dominant lens of the chorale. The pitches a composer chooses to double play a significant role in how an audience hears the balance of the ensemble and how harmony is communicated, but the rigidity of constraints in a chorale-style example or assignment do not accurately

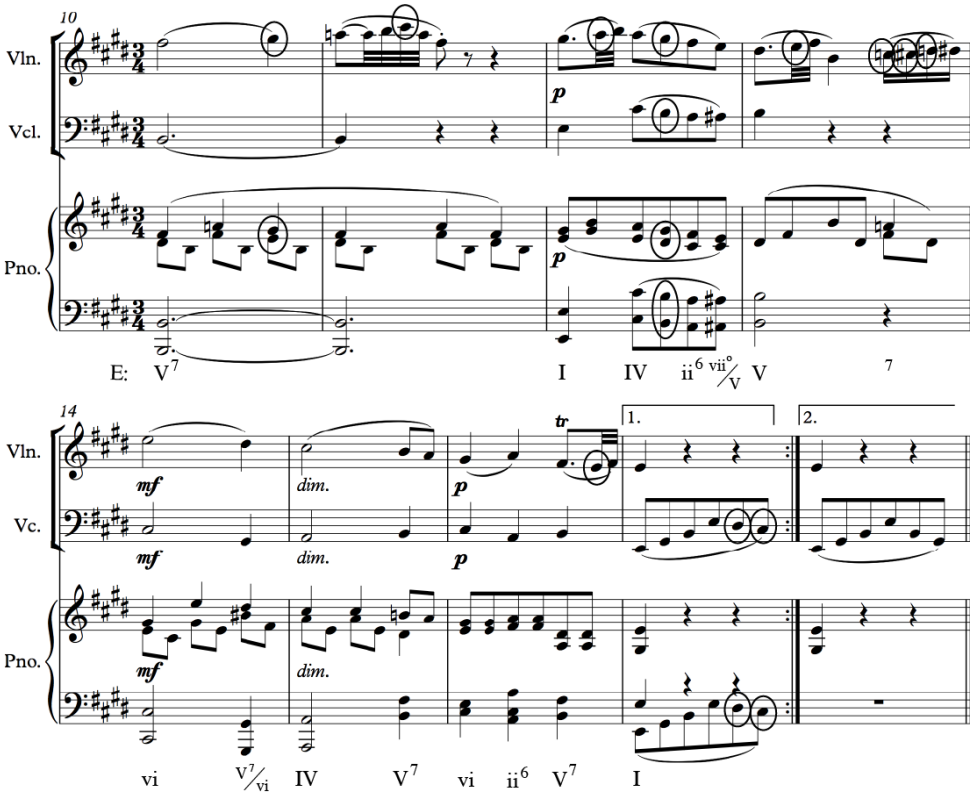
reflect the doubling practices of composers in work beyond that given instrumentation in that specific time period. For this reason, doubling and parallel motion are part of the discussion from the beginning of the semester, but both are presented as compositional techniques that shape how harmony is digested by the listener.

Example 3 shows Haydn's piano trio, which I use to prompt discussion about levels of harmony; the cello plays "in harmony" with the violin, but its doubling of the piano's bass clef highlights the harmonic progression. The clarity of both harmonic and melodic motion makes this a great early example for students learning to read a score with multiple instruments, yet still locks into questions of harmonic syntax, chord labeling, and voice leading. The trio's isolated and singable melody in combination with the methodical ostinato also shows how non-chord tones can smooth out space between chord tones and build tension.

One particular intricacy in this example prompts a discussion about a performer's agency to shape the listener's experience by their own interpretation of the score.[14] In many recordings of this piece, trios take liberties with the *Adagio* tempo and dynamics moving from mm. 12–14; changes range from a crescendo into the downbeat of m. 13 or a crescendo into a *subito piano* at the downbeat of m. 14, to small or significant *rallentandos* in passages with consecutive eighth or sixteenth notes. These choices help shape whether or not a listener hears the last eighth note in m. 12 as chromatic non-chord tones or an applied vii^{o7} of V. The *rallentando* into the downbeat of measure 14 and the *subito* (or not) *piano* draws our ear to enhance the effect of the deceptive motion across the barline. Though these articulations are not notated in the score, these nuanced changes draw out certain elements of the piece to shape interpretation.

Additionally, the Haydn excerpt provides material for discussion about deceptive motion and expectation, which can, again, be tied back into performer interpretation and agency. This piece can be used to talk about metric accents, motivic variation, and orchestration related to registral spacing choices. Further, these non-harmonic parameters help students see and hear how harmony moves, and how harmonic analysis informs choices about these other threads of analytical work. I have had success using this Haydn excerpt for creative projects, too; students can draw visual maps of this piece, sample it into an original EDM song, stretch and compress the melody into to 4/4 and 5/8 (and perform it!), and harmonize the melody to omit all deceptive motion.

14 This example could provide significant traction for students in schools of music or conservatory environments. For those who are aiming for a career in performance, a conversation like the one outlined in this paragraph provides a direct connection between their work in a theory class and their work in studio lessons or chamber music.



Example 3
Joseph Haydn, Piano Trio in A-Flat Major, Hob XV:14, II *Adagio* mm. 10–18.
Non-chord tones are circled. Deceptive motion occurs in mm. 13–14 and 14–15.

If You Include SATB Materials

In my course design, Bach-style voice leading has become one small unit of focus used to reinforce predominantly Western musical content, which is in turn one slice of the whole music theory course; in some of my courses in liberal arts environments—even in the core theory sequence for BA majors—I do not bring it up at all. At the institutions where I have been required to teach this material, students are already familiar with many of the themes and tools of the practice when the four-part chorale unit arrives late in the semester, as they have been identifying them as tendencies in other, non-chorale repertoire. They understand this particular practice is one small part of the larger elements of music theory, rather than a central tenet of their music education.

The biggest payout of delaying the historical practice of four-part writing via the chorale is that the rigidity of Bach-style voice leading in these isolated examples is limited to the topic. Up to this point, students have come to understand common practices and tendencies in voice leading and harmony within the scope of Western music across many genres and their homework assignments have been framed to foster curiosity and communicate understanding rather than check for errors and deduct accordingly from a perfect score. The introduction of these constraints after laying the foundation of flexibility and agency also continues conversations about "good" voice leading or harmonic syntax. From the first day of class, our generative and analytical work acknowledges historical and genre-based practices, but refrains from positioning one method above any others. Students learn to see commonalities across styles and develop tools for navigating their differences. They approach Fanny Hensel with the same rigor as Lin-Manuel Miranda, and recognize that the parameters of what makes each composer's music work cannot be forced into the same analytical container.

Conclusions

I can easily see the substitutions and adjustments laid out in this essay applied in conservatories and large schools of music; however, my primary experience is teaching in liberal arts programs, whose agendas have ranged from insisting on the prioritization of the Western classical canon to those that actively decenter it. Liberal arts environments are positioned to imagine a syllabus that decentralizes the chorale; the changes I mention above have made space for a broader range of analytical practice and exploration that is sensitive to the multiplicity of student backgrounds, identities, and learning goals present in undergraduate liberal arts communities.

Students should see a clear application of their work inside a music theory class to their music-making outside of the course. More broadly, that work also contributes to a critical understanding of contexts and techniques that are at the heart of degrees in music. The possibilities for applying skills learned in an undergraduate theory course vary significantly between different degree programs, and I believe our classes should reflect the larger environments in which we teach. There is no one-size-fits-all music theory course. We can do better at recognizing and making space for students by widening the scope of what undergraduate theory can be, both in small substitutions and larger changes. As part of this shift, I encourage framing in-class discussion to stretch content that is typical of chorale-based exercises—particularly harmony and voice leading—into conversation with rhythm, phrasing, repetition, student interpretation, and performance. This act is but one step in a process of deeply considered change.

Neo-Riemannian Theory as Voice Leading Pedagogy

WILLIAM O'HARA

While voice leading in undergraduate music theory courses is often assumed to be tied to chorale harmonization or species counterpoint, Neo-Riemannian theory (NRT) offers another way of engaging deeply with the succession of harmonies and the movement of individual voices, and which offers a different view of musical structure. As a tool that offers insight into relationships both between individual triads and across large spans of music, NRT helps students understand the numerous roles that voice leading can play in various styles of music. In so doing, it offers them a foothold into new repertoires, building upon students' knowledge of harmony or voice leading and exploring both in productively different ways. That is to say, it offers one way of supporting David Huron's suggestion that voice leading is relevant for much more than four-part chorales.[15] In this essay, I will describe one model for including NRT in core undergraduate courses, and outline a sample modular curriculum that draws on current research in the field.[16] This framework may be adapted freely in order to introduce students to exciting, advanced concepts in music theory; to incorporate non-canonical repertoires; to connect the music theory classroom to other areas of music, the humanities, and mathematics; and to offer a gentle introduction to many of the concepts introduced in the course on twentieth-century techniques that often ends the theory sequence. While it is true that incorporating NRT does not, on its own, counteract the strong focus on harmony (to the detriment of other topics, such as rhythm) that Marcelle Pierson's contribution discusses, I will argue that it can help students to think differently about previously learned materials (such as repertoire they have already studied through the lens of diatonicism), demonstrate how simple concepts can be expanded to generate new theoretical insights, and introduce

15 Huron (2019).

16 In this essay, I use the term "Neo-Riemannian theory" to refer to a broad spectrum of transformational and geometric approaches to the properties and syntax of triads and seventh chords: what Richard Cohn describes as "that branch of transformational theory that takes consonant triads for its objects, and subjects those objects to transformations that minimize voice leading"; see Cohn (2012, 40). I apply the label whether they belong directly to the Neo-Riemannian lineage that follows from publications like Lewin (1987) and Hyer (1995); to the tradition of scale theories and mathematical mappings of triadic space such as Hook (2002); to geometric accounts of musical space such as Callender, Quinn, and Tymoczko (2008, 346–48) and Tymoczko (2011). While Cohn reflects on the inappropriateness of the label for contemporary triadic theories, I believe that "Neo-Riemannian" still usefully and intuitively describes a constellation of related theories, even if their scope has expanded far beyond the original influence of Hugo Riemann.

repertoires less frequently studied in music theory classes.

I am not the first to advocate for NRT's inclusion in the undergraduate curriculum. Nora Engebretsen and Per Broman (2007) offer a comprehensive introduction to the topic, presenting analytical, compositional, and even ear-training exercises to introduce undergraduates to triadic transformations.[1] Given NRT's expansion over the past fourteen years, however, the time is right for a new exploration of the topic that builds on the foundation laid by Engebretsen and Broman. Over that time, at least two major changes have swept through the field. First, contributions such as Steven Rings's *Tonality and Transformation*, Dmitri Tymoczko's *A Geometry of Music*, Suzannah Clark's *Analyzing Schubert*, Richard Cohn's *Audacious Euphony*, and Frank Lehman's *Hollywood Harmony* have all found new ways to expand, synthesize, and unify the insights offered by Neo-Riemannian theories. The latter two scholars especially have emphasized the voice-leading properties of triads over the metaphors of movement and transformation that characterized NRT's early days. Cohn has described triads as ideal voice-leading objects due to their group structure (which allows them to lead smoothly from chord to chord in several ways), while Tymoczko has positioned triads within a much larger model of trichordal (and other cardinality) voice leading in geometric space.[2] Second, in addition to this methodological refocusing, many scholars have expanded the scope of Neo-Riemannian theory, applying its insights to popular music,[3] film music,[4] video game music,[5] jazz,[6] and other styles. Because of the growth of NRT over the past decade, and the field's growing interest in triadic and seventh-chord transformations as voice-leading phenomena, the study of Neo-Riemannian theory is more vital—and more relevant for undergraduates—than ever.

Transformations

I teach NRT near the end of the third semester of a four-semester sequence, the last semester of which is focused primarily on post-tonal music. By the time we approach the unit, students are generally familiar with the basics of chromatic harmony and form, along with a thorough grounding in harmony (including chorale-style part writing), counterpoint, and figured bass from the first year of music theory. The curriculum I employ is structured in five steps: Transformations, Abstraction,

1 Engebretsen and Broman (2007).
2 Cohn (2011, 33–41) and Tymoczko (2011, 65–115).
3 Capuzzo (2004); and Forrest (2017).
4 Murphy (2013); and Lehman (2018).
5 Reale (2015).
6 McClimon (2016) and (2017).

Multiple Perspectives, Extensions, and Applications. Some of these steps may be covered quickly, while others can unfold across several class sessions, depending upon the amount of time available. The first three are the most important for the purposes of this article, and will be discussed in the greatest detail. Example 1 offers a brief summary of the curriculum.

Unit	Concepts/Skills Taught	Sample Repertoire
Transformations	Introduce PLR transformations as simple voice leading phenomena	-- Schubert, Piano Trio in E<flat> (Op. 100), 1st mvt. -- Wieck, "Nocturne" from *Soirees musicales*
Abstraction	Discuss pitch vs. pitch class and "idealized" voice leading. Introduce *Tonnetz*	-- Beach, "Autumn Song"
Multiple Perspectives	Re-visit repertoire previously studied in mode mixture unit, apply Neo-Riemannian perspective	-- Schubert, "Schwanengesang" (D. 744)
Extensions	Numerous, at instructor's discretion. Alternate visualizations (chicken-wire torus, Cube Dance); mathematical/geometric underpinnings of NRT; additional transformations (S, N, H, etc.); seventh-chord spaces; history (Riemann, dualism)	Varies; my class emphasizes film soundtracks: *Vertigo* (1958), *Batman Begins* (2006), *Inception* (2010); other candidates include Chopin E Minor Prelude, Op. 28, No. 4 and other piano works (see Tymoczko 2011, 284-293)
Applications	Composition using pan-triadic vocabulary	Student film scores

Example 1
A Sample Modular Curriculum in Neo-Riemannian Theory.

My students begin their study of Neo-Riemannian theory with the canonical PLR operations: parallel, relative, and *Leittonwechsel* ("leading tone exchange"). Example 2 offers a simple guide to the transformations mentioned in this article.[7] After introducing the operations, I use simple and direct examples that demonstrate them clearly, preferably in distinct voices that students can hear and sing along with. For example, the passage in Example 1 is taken from late in the first movement of

7 In this essay, I presume that readers have some familiarity with Neo-Riemannian theory, but they need not be experts. For a comprehensive overview of transformations in common circulation, see Lehman (2018, 90). For an overview of the group-theoretic organization of the parsimonious transformations discussed in this essay (including some of the "alternative visualizations" mentioned in Table 1), see Cohn (2011, 83–109). While the systems outlined by Cohn and Lehman (and earlier, Lewin and Hyer) broadly intersect and agree with one another except in fine details, completely separate transformational vocabularies exist as well: see, for example, Julian Hook (2002)

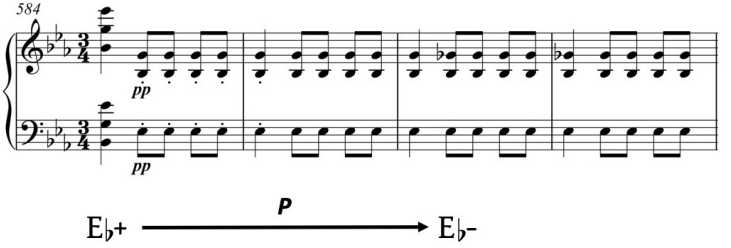
Franz Schubert's Piano Trio in E♭ op. 100. As Example 3a shows, each transformation is clearly audible in a single voice (as when G moves to G♭ at the top of the violin's double stop in m. 586), allowing students to grasp transformations first as simple voice-leading movements.[8] As shown in Example 3b, the entire passage outlines a complete cycle of alternating PL transformations, comprised of the major and minor triads on E♭, C♭/B, and G.

Transformation	Action on a C+ triad
P - parallel	C+ <-> C-
R - relative	C+ <-> A-
L - Leittonwechsel	C+ <-> E-
D - dominant*	C+ <-> G+
S - Slide	C+ <-> C♯-
N - Nebenwervandt	C+ <-> F-
H - Hexatonic pole	C+ <-> A♯-

Major triads are signified by +, minor triads by -. Each transformation listed here reverses itself, and can be chained together with others as a compound transformation (i.e. applying P and then L = "PL"). The first three transformations hold two tones while moving the third by a step; S and N hold one tone while moving the others by a half step; and H moves each of the triad's three tones by a half step.

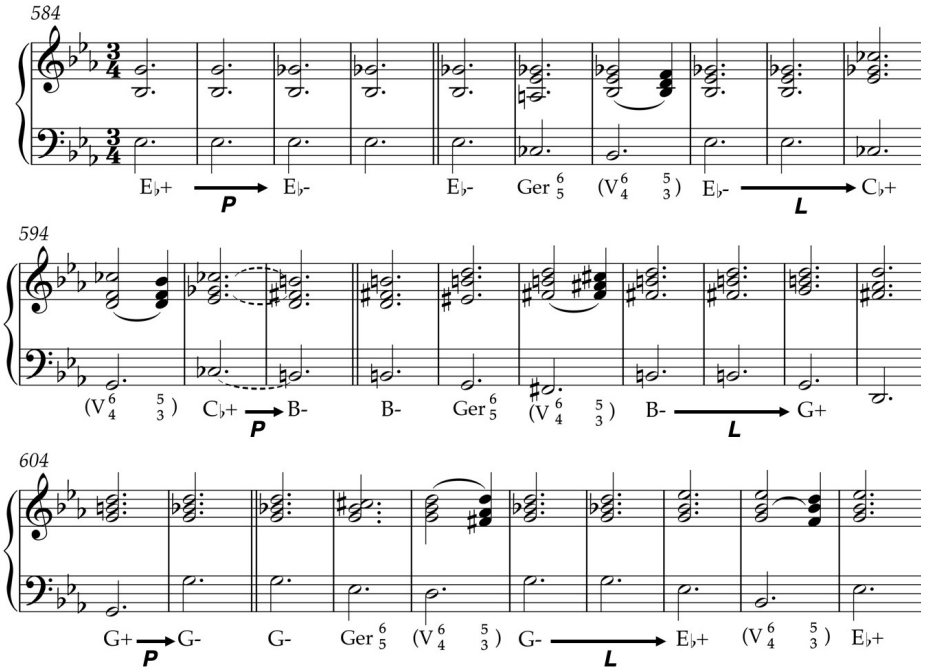
** The dominant transformation is not only a compound of two PLR transformations (L and P), but also a way of expressing the tonal relationship of tonic and dominant within an otherwise pantriadic context.*

Example 2
Triadic transformations mentioned in this article.



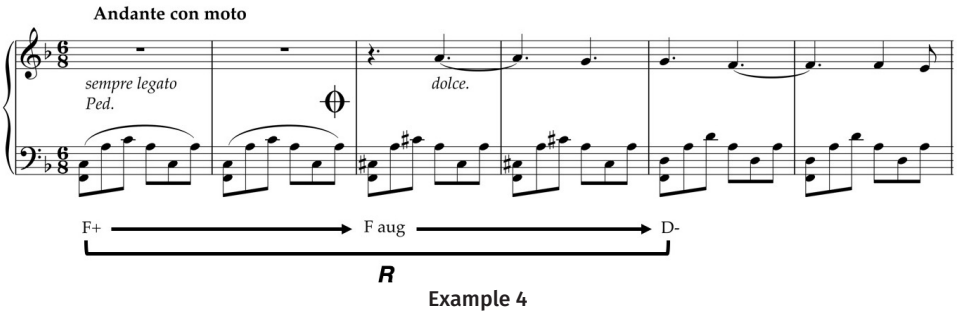
Example 3a
Example of direct transformation in Franz Schubert, Piano Trio in E♭ major (Op. 100), 1st mvt., mm. 584–87 (violin and cello parts only).

8 Richard Cohn outlines the first part of this passage in his discussion of PL cycles; see (2011, 27–28).



Example 3b
Reduction of Franz Schubert, Piano Trio in E♭ flat Major (op. 100), 1st mvt., mm. 584–613.

Example 4 depicts another excerpt I use frequently when initially introducing the PLR group of transformations. The opening measures of Clara Schumann's "Nocturne" (from *Soirées musicales*, op. 6, no. 2) contains a chromatic passing motion in the left hand that outlines the whole step traversed by the R transformation: C, as the top voice of F+, passes through C♯ in m. 3 (creating an augmented triad) to D in m. 5, arriving at D-. By studying examples like these (and completing simple worksheets that ask them to write transformations between various triads), students can practice the basic PLR operations until they become fluent with them.



Example 4

Clara Wieck [Schumann], "Nocturne," from *Soirées Musicales* (1836), Op. 6, No. 2, mm. 1–6

Abstraction

Near the beginning of *Audacious Euphony: Chromatic Harmony and the Triad's Second Nature*, Richard Cohn proposes a method for calculating the distance between any two triads, in terms of the "voice-leading work" necessary to move from one to the other. Movement by one semitone constitutes one "unit" of labor, so that moving from G- to G+ requires one unit of voice-leading work (B♭ to B), while G- to D+ requires two (G to F♯ and B♭ to A), and so forth. Of the subtle theoretical leap inherent in this analysis, Cohn writes:

> In counting common-tone connections in a particular passage, we have implicitly assumed that voice leading is *idealized*. In most compositions, tones freely transfer registers, and multioctave tone doublings liberally appear and disappear. We say that two triads have a common tone even when, in a particular setting, those tones appear one or more octaves apart. . . . When we speak of common tones, then, we are adopting a conception of *tone* that is allied with *pitch class* rather than pitch. There is nothing special about idealized voice leading; music theory teachers and scholars assume it every day of their working lives. It is so familiar, indeed, that it takes a special effort to acknowledge it.[9]

Along with helping to illuminate his conceptual framework, the passage above articulates both the power and challenge of abstraction in the music theory classroom. Music theories work by abstraction: their explanatory power comes from their ability to be generalized across a wide variety of musical situations. Many arguments for the value of teaching with four-part chorale-style exercises and species counterpoint rest on the idea that each imparts principles that can be applied much more broadly than worksheets and examinations.[10] While "laboratory" exercises may offer a certain utility, music theory's abstraction—that is, the gap between those exercises and

9 Cohn (2011, 6).

10 On the transferability of part-writing skills, see Marcelle Pierson's contribution to this colloquy.

musical practice, or in Cohn's terms between the movement of theoretical objects and musical ones—is too often left unexamined in undergraduate instruction, leaving students frustrated at what they perceive as capriciousness in the enforcement of rules, particularly when counterexamples are easily found in musical literature.[11]

The leap that NRT enacts—from parsimonious movement in single voices to compound transformations, registral shifts, and long spans of pan-triadic harmony—requires of students the same conceptual shift that chorales do: from the controlled "laboratory" environment of direct half-step movements and idealized models, to the more varied examples found in real scores. Making this leap is also preparation for the pitch/pitch-class distinction. After gaining familiarity with the basic operations and seeing them in action in simple textures, students are ready to approach less obvious examples, which can be taken from published analyses in any of the sources cited in this essay, or through the analysis of repertoire selected by the individual instructor. This offers an entry into the concepts of pitch classes and pitch-class space, by helping students to understand Neo-Riemannian operations not only as epiphenomena of parsimonious voice leading, but as transformations that operate on [037] triads. This offers a convenient introduction to pitch-class set theory.

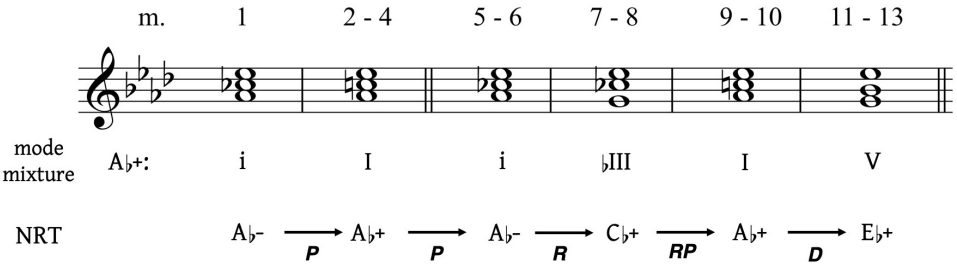
Analysis from Multiple Perspectives

One strategy for supporting the conceptual leap from concrete to idealized voice leading involves circling back and using triadic transformations as a way of re-interpreting previous musical examples. Until recently, my institution used Steven Laitz's *The Complete Musician* in its core theory classes. In Laitz's chapter on mode mixture, he cites the example of Franz Schubert's "Schwanengesang," an 1822 song on a text by Johann Senn unrelated to the later song cycle of the same name. "Schwanengesang" is notable for its sometimes uncertain key; despite its A-flat-major key signature, the very first chord heard is A-flat *minor*. Laitz uses the song to illustrate two forms of mode mixture: "melodic mixture," in which upper chord tones are altered to create chords of opposite mode quality (i.e., changing the diatonic major IV to the parallel minor's iv); and *harmonic mixture*, in which chord roots themselves are altered (such as ♭VI replacing vi in a major key).[12]

11 This is the source of despair for the student described in this colloquy's introduction. It should also be noted that neither the chorale's claim as a primary vehicle for contemplating harmony's abstractions, nor even the primacy of harmony itself as a topic of instruction, should be taken for granted; see the contributions by Marcelle Pierson and Katherine Pukinskis to this colloquy.

12 See Laitz (2012, 420–25). Laitz's distinction is similar to what Aldwell, Schachter, & Cadwallader (2011, 435–47) describe as "Simple" and "Secondary" mixture.

Much of the song, however, can also be read in terms of pan-triadic Neo-Riemannian operations. Example 5 represents the tonal structure of the first part of the song, as represented by several canonical transformations. After bouncing back and forth between the Parallel (P) major and minor, the song modulates to C-flat major: the Relative (R) major of A-flat minor. "Schwanengesang" then returns to the major tonic via an RP transformation, before shifting into a more diatonic mode as it tonicizes E♭. Here, then, the tonal plan *itself* can be explained in terms of pan-triadic relationships. From this case study, students can see and hear how parsimonious voice-leading relationships can occur across entire pieces of music—a global level of analytical insight less often offered by traditional instruction in chorale-style part writing.

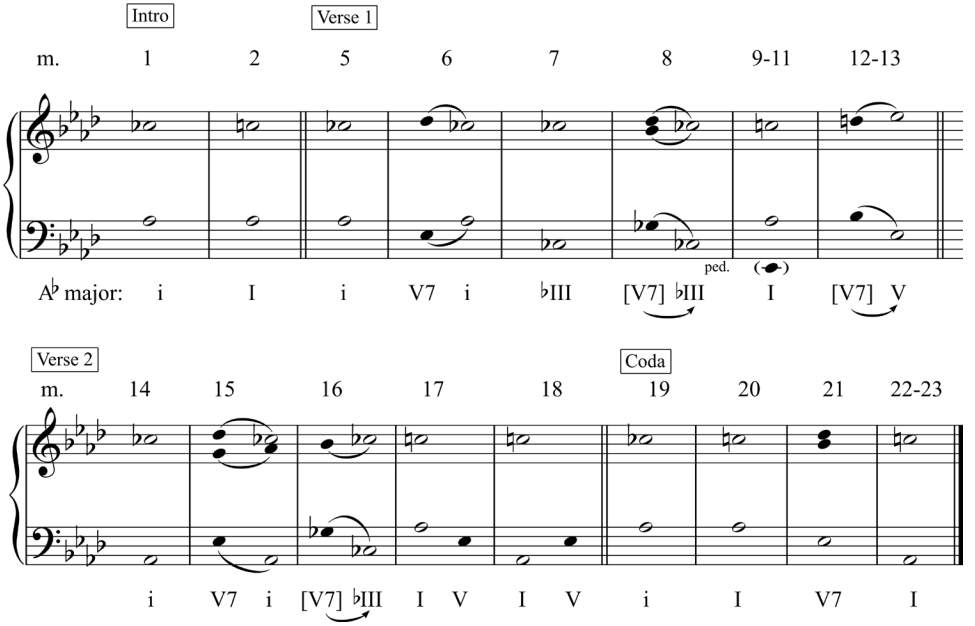


Example 5
Neo-Riemannian operations in Franz Schubert, "Schwanengesang," D. 744, mm. 1–13 (See also Clark 2016).

The same example can also be used as an ear-training exercise, in which students are taught how to follow a single essential pitch class throughout the entire song, or part of a song. In the case of "Schwanengesang," I ask my students to track whether a given harmony employs C♭ and C♮. This approach resonates with the listening/singing exercises described by Daniel Stevens, which ask students to sing simple, slow-moving "guide-tone" lines as an aid to harmonic dictation.[13] Rather than singing "do" and "ti" in order to differentiate between tonic and dominant (among other harmonies), as Stevens prescribes, Example 6 asks them to sing the two different forms of the third scale degree: the natural 3 and ♭3. This not only requires them to hear and harmonize with the two different modal inflections of the tonic chord that appear throughout the song (represented by the Neo-Riemannian P transformation), but also to track the tonicization of ♭III, which first emerges as an R transformation in m. 7 and returns

13 See Stevens (2016).

to the tonic as a compound RP in m. 9.[14] From the experience of tracking a single chromatic voice across the entire song, students gain a greater understanding of the structural principles of nineteenth-century chromaticism, as elucidated by Cohn—an alternate syntax (the "second nature" of his book's title) that organizes harmonies not by their acoustic consonance or diatonic affinity, but by their ability to partake in parsimonious voice leading.[15]



Example 6
Following C and C-flat in Schubert, "Schwanengesang," D. 744.

14 For an added challenge, instructors can ask students to sing the filled noteheads as well. Measures 8 through 13 are particularly challenging and rewarding!

15 This activity also mirrors an exercise proposed by Riemann himself, who mentions that students could be asked to imagine or perform a single pitch in all six of its possible major and minor triad contexts—a PLR cycle which would produce one of the honeycomb cells on the "chicken-wire torus" pictured in Example 8b. See "Ideas for a Study 'On the Imagination of Tone'" (1916), trans. Wason and Marvin (1992, 86–88).

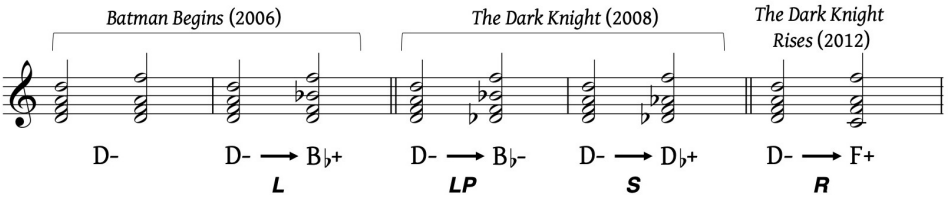
Extensions and Applications: Visual Representations and Film Music

At this point, my sample curriculum (see Table 1, above) opens up into numerous possibilities. Just as scholars have taken many approaches to Neo-Riemannian theory and its precursors and offshoots over the past thirty years, so too can instructors choose to emphasize or de-emphasize different aspects of the theory based on their own teaching style, the interests of their students, or the amount of space available in the curriculum. After an introduction to the canonical "PLR group" of transformations, for example, instructors may decide to include transformations such as "SLIDE" and the hexatonic pole.[16] They may decide to expand into seventh chords, or they may decide to emphasize the historical or intellectual underpinnings of the theory by historicizing the term *Leittonwechsel* or engaging with the issue of harmonic dualism, or they may even emphasize the mathematical elements of Neo-Riemannian theory. In the final section of this essay, I will detail two of the paths that I take, based on my own interests: visual representations of voice leading, and Neo-Riemannian theory in both the analysis and composition of film soundtracks.

Neo-Riemannian theory offers the opportunity to incorporate new repertoires into the undergraduate core curriculum—not only the highly chromatic nineteenth-century music originally addressed by the theory, but also popular music, film music, jazz, and other styles. I like to use it as a springboard to film music. For instance: Example 7, which adapts a diagram from Frank Lehman's *Hollywood Harmony* (2018), demonstrates how the simple minor-third motive from Hans Zimmer's score for Christopher Nolan's *Batman* trilogy is re-contextualized in various ways. The motive takes on new harmonic shades in each film, from our hero's first emergence on the streets of Gotham City (an L transformation, leading from D- to a B♭+ that Mark Richards [2012] calls "heroic"), to his moral compromises and failures (a tragic sounding B♭-), to his eventual triumph at the end of the trilogy.

In the later parts of the NRT unit, I also introduce my students to alternate visualizations of tonal space, and demonstrate how various diagrams can be used as analytical tools. Neo-Riemannian theory lends itself to compelling visual analyses, which students can use as they listen to music, and which they often enjoy producing themselves. Diagrams—whether of established musical spaces like the *Tonnetz*, or custom-made network analyses—can serve as listening aids, helping students to understand and track the affinities produced by parsimonious voice leading. Approaching these progressions from both auditory and visual angles helps to make

16 On SLIDE, see Lewin (1987)*;* and Lehman (2014, 61–100). On H, see Cohn (2011, 31–32 and 106–09).



Example 7
Harmonizations of the "Dark Knight" motive in Hans Zimmer's *Batman* scores (2006–12); adapted from Lehman (2018, 131).[17]

them more accessible and exciting for students, and can reveal new insights about compositional structures.[18]

Example 8a depicts a prominent chord progression from the beginning of Hans Zimmer's score for *Inception* (2010)—a set of chords that received a great deal of attention on the SMT-TALK mailing list when the movie first came out.[19] My interpretation, presents the passage as two sets of four chords each, related to one other by a single SLIDE transformation. Representing this music on the *Tonnetz*'s geometric dual, the "chicken wire torus" (as shown in Example 8b), demonstrates how visual diagrams can serve as a shorthand in Neo-Riemannian analysis.[20] The passage is revealed to be constructed from two iterations of the same sequence of transformations: S, RP, PL, and H.[21] These two chord loops appear on the diagram as the same shape—one red, and one blue—that are connected in the middle by a SLIDE. The visual representation helps to underscore that the "idealized" voice-leading is the same, even if the two halves of the excerpt are voiced differently and have a different bass line.[22]

17 Lehman's original diagram includes compound interpretations of some transformations (for example, S = LPR), supporting the argument that the transformations throughout the film series are not only increasingly dramatic, but that they enact an additive process, with each one building on the last. Lehman (2018, 131).

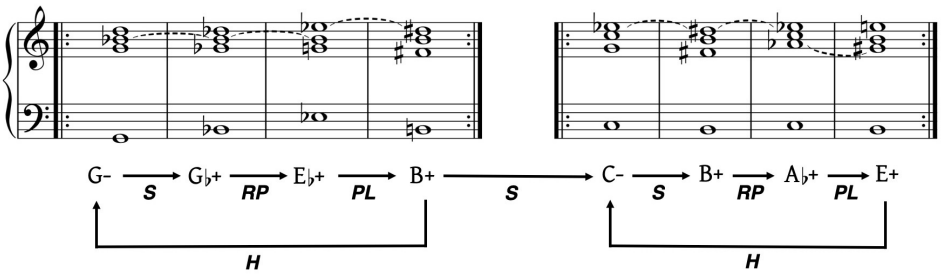
18 Analysis through voice leading diagrams can also open up a discussion about how theories and visual representations can shape our experiences, and especially our interpretations; see Clark (2017).

19 This discussion was launched by Stephen Taylor on August 10, 2010, and continued for several days afterward.

20 On the chicken-wire torus, see Douthett and Steinbach (1998, 246–49).

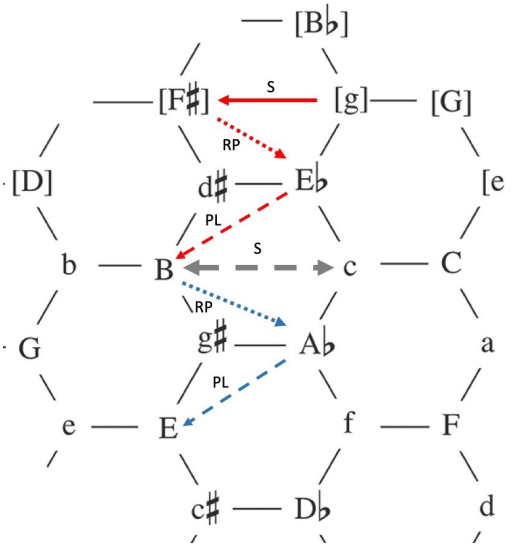
21 For a comprehensive lexicon of triadic transformations, see Lehman (2018, 93–94).

22 The notation of this excerpt also raises the issue of enharmonicism in NRT—one of the issues that originally motivated the theory; see Cohn (1996, 9–11). The fourth chord of the excerpt might be more simply notated as C♭ major rather than B major. In my lessons, and the transcription in this pa-



Example 8a

"Dream is Collapsing" from *Inception* (2010; reduction and annotations by author).[23]



Example 8b

Hans Zimmer, "Dream is Collapsing" chord progression from *Inception* (2010).

per, I have notated it in B both to correspond with most chicken-wire tori, and in order to avoid the clumsy C- to C♭+ motion that would result in mm. 5–6. The enharmonic difficulties are also a good topic to raise with students, as they help to explain the necessity of pantriadic rather than diatonic analysis.

23 In a slightly different analysis of this progression (which compares it to a similar progression from Bernard Hermann's 1958 *Vertigo* score), Frank Lehman transcribes the fourth chord as a C♭M^7, notating a B♭ held over from the preceding E♭+ (see Lehman 2018, 153–55). In order to simplify the transformations, I omit the seventh from the example I use with my own students; as Lehman notes, the chord seventh "requires some transformational massaging," which he accomplishes via a "fuzzy transformation" (see Lehman 2018, 93–94).

From these examples, students learn how film composers have used NRT's pan-triadic syntax to score minimal motives with creative harmonies; the theory is revealed to be a way of generating ideas about how a given interval or melodic line might be harmonized, and a model for their own compositions—another practical way of teaching students the many possibilities of close voice leading. As an extension of this lesson, in fact, I ask my students to write short scores for a silent film clip of their choice. While they do not have to use triadic transformations for this, many do, particularly when they choose to compose for sequences like the ethereal underwater observation port from *20,000 Leagues Under the Sea* (1916), or a suspenseful sequence from *Nosferatu* (1922). As they compose their scores, they draw on the compositional techniques learned in the unit, such as cycles of paired transformations; repeated transformational shapes as compositional building blocks; and reharmonizing simple motives with new, transformationally-related harmonies.

A unit on Neo-Riemannian theory can be invigorating for students, as it offers them new ways of thinking about chromatic music and of reinterpreting other frequently taught topics such as modal mixture through the lens of chromatic voice leading. Both the theory and the music it is most often paired with appeal directly to students: one of my students recently referred to Neo-Riemannian theory as "music theory cheat codes"—a way of looking at triads that made sense to him in a way that diatonic arrangements often did not. Neo-Riemannian theory relies heavily on the movement of individual voices, but its use in the classroom is not just to reinforce voice leading for its own sake, but to demonstrate how careful attention to the passage between notes and chords can be used to great musical effect.

Works Cited

"Promoting Racial and Ethnic Diversity in the Faculty: What Higher Education Unions Can Do." American Federation of Teachers (AFT), 2010. https://www.aft.org/sites/default/files/facultydiversity0310.pdf.

Ahmed, Sara. 2017. *Living a Feminist Life*. Durham: Duke University Press.

Aldwell, Edward, Carl Schachter, and Allen Cadwallader. 2011. *Harmony and Voice Leading*, Fourth Edition. New York: Schirmer.

Bach, Johann Sebastian. 1832. 371 *vierstimmige Choralgesänge von Johann Sebastian Bach*. Dritte Auflage. Leipzig: Breitkopf & Härtel.

———. *Johann Sebastian Bachs vierstimmige Choralgesänge*. 1784–7. 4 vols. Leipzig: Johann Gottlob Immanuel Breitkopf..

———. *Johann Sebastian Bachs vierstimmige Choralgesänge gesammelt von Carl Philipp Emanuel Bach*. 1765. Vol. 1. Berlin and Leipzig: Friedrich Wilhelm Birnstiel.

Benjamin, Thomas, Robert Nelson, Michael M. Horvit, and Timothy Koozin. 2015. *Techniques and Materials of Music: From the Common Practice Period Through the Twentieth Century*. 7th ed. Belmont, CA: Cengage Learning, Inc.

Benjamin, William E. "Models of Underlying Tonal Structure: How Can They Be Abstract, and How Should They Be Abstract?" *Music Theory Spectrum* 4 (1982): 28–50.

Biehl, João and Peter Locke. 2017. "Introduction." In *Unfinished: The Anthropology of Becoming*, edited by João Biehl and Peter Locke, 1–40. Durham, NC: Duke University Press.

Bigo, Louis, and Moreno Andreatta. "A Geometrical Model for the Analysis of Pop Music." *Sonus* 35, no. 1 (2014): 36–48.

Blasco, Scott, @scottblasco, "Doing graduate theory entrance exams, and seriously wondering... what is happening with undergrad theory at other institutions??" Twitter August 15, 2019 at 1:32 p.m., https://twitter.com/scottblasco/status/1162069664203063296.

Burns, Chelsea, William O'Hara, Marcelle Pierson, Katherine Pukinskis, Peter Smucker, and William van Geest. "Corralling the Chorale: Moving Away from SATB Writing in the Undergraduate Music Theory Curriculum." November 2019. SMT Conference Panel, 1:36:35. https://www.youtube.com/watch?v=-TGc7SO4jMI.

Burstein, L. Poundie. "Those Boring, Arcane Part-Writing Exercises." *Gamut* 9, no. 1 (2020). https://trace.tennessee.edu/gamut/vol9/iss1/3/.

Burstein, L. Poundie and Joseph Straus. 2016. *Concise Introduction to Tonal Harmony*. 1st ed. New York: W.W. Norton.

Callender, Clifton, Ian Quinn, and Dmitri Tymoczko. "Generalized Voice-Leading Spaces." *Science* 320, no. 5874 (2008): 346–48.

Caplin, William E. "The Classical Cadence: Conceptions and Misconceptions," *Journal of the American Musicological Society* 57, no. 1 (2004): 51–118.

Capuzzo, Guy. "Neo-Riemannian Theory and the Analysis of Pop-Rock Music." *Music Theory Spectrum* 26, no. 2 (2004): 177–99.

Chenette, Timothy. "Part Writing Can Be Student Centered." *Engaging Students: Essays in Music Pedagogy* 6 (2018). http://flipcamp.org/engagingstudents6/essays/chenette.html.

Clark, Suzannah. "Schubert Through a Neo-Riemannian Lens." 2016. In *Rethinking Schubert*, ed. Lorraine Byrne Bodley and Julian Horton, 275–94. Cambridge: Cambridge University Press.

———. "Resonant Blunders in the History of Tonal Theory." Keynote address delivered at the annual conference of the Music Theory Society of New York State, Hobart and William Smith Colleges, April 1, 2017.

Clendinning, Jane Piper, and Elizabeth West Marvin. 2016. *The Musician's Guide to Theory and Analysis*. 3rd ed. New York: W.W. Norton & Company.

Cohn, Richard. "Maximally Smooth Cycles, Hexatonic Systems, and the Analysis of Late-Romantic Triadic Progressions." *Music Analysis* 15, no. 1 (1996): 9–40.

———. *Audacious Euphony: Chromatic Harmony and the Triad's Second Nature*. 2012. New York: Oxford University Press.

———. "Why We Don't Teach Meter, and Why We Should." *Journal of Music Theory Pedagogy* 29 (2015): 5–24.

Dirst, Matthew. "Inventing the Bach Chorale." 2012. In *Engaging Bach: The Keyboard Legacy from Marpurg to Mendelssohn*, 34–54. Musical Performance and Reception, edited by John Butt and Laurence Dreyfus. Cambridge: Cambridge University Press.

Douthett, Jack, and Peter Steinbach. "Parsimonious Graphs: A Study in Parsimony, Contextual Transformations, and Modes of Limited Transposition." *Journal of Music Theory* 42, no. 2 (1998): 241–63.

Drabkin, William. "Part-Writing." In *Grove Music Online*, accessed May 19, 2021. http://www.oxfordmusiconline.com/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-0000020989.

Engebretsen, Nora, and Per F. Broman. "Transformational Theory in the Undergraduate Curriculum: A Case for Teaching the Neo-Riemannian Approach." *Journal of Music Theory Pedagogy* 21 (2007): 39–70.

Ewell, Philip A. "Music Theory's White Racial Frame." Plenary Presentation presented at the Society for Music Theory 42nd Annual Meeting, Columbus, Ohio, November 7, 2019. https://vimeo.com/372726003.

———. "Beethoven Was an Above Average Composer—Let's Leave it At That." *Music Theory's White Racial Frame* (personal blog). https://musictheoryswhiteracialframe.wordpress.com/2020/04/24/beethoven-was-an-above-average-composer-lets-leave-it-at-that/. April 24, 2020. Accessed April 25, 2020.

———. "Music Theory and the White Racial Frame." *Music Theory Online* 26, no. 2 (2020). https://mtosmt.org/issues/mto.20.26.2/mto.20.26.2.ewell.html.

Follet, Diane. "Tales from the Classroom - Why Do We Part Write?" *Journal of Music Theory Pedagogy* 1 (2013). https://jmtp.appstate.edu/tales-classroom-why-do-we-part-write.

Forrest, David. "PL Voice Leading and the Uncanny in Pop Music." *Music Theory Online* 23, no. 4 (2017).

Fosler-Lussier, Danielle. "'What Can the AMS do?' The Scholarly Society and the Academic Jobs Crisis." *Musicology Now*, May 16, 2019. https://musicologynow.org/what-can-the-ams-do-the-scholarly-society-and-the-academic-jobs-crisis/.

Huron, David. "Tone and Voice: A Derivation of the Rules of Voice-Leading from Perceptual Principles." *Music Perception* 19, no. 1 (2001): 1–64.

———. *Voice Leading: The Science Behind a Musical Art*. 2016. Cambridge, Mass.: MIT Press.

Hyer, Brian. "Reimag(in)ing Riemann." *Journal of Music Theory* 39, no. 1 (1995): 101–38.

Ishida, Lauren. "5 Questions to Philip Ewell (Author, *Music Theory and the White Racial Frame*)." I CARE IF YOU LISTEN, July 23, 2020. https://www.icareifyoulisten.com/2020/07/5-questions-philip-ewell-author-music-theory-white-racial-frame/.

Kostka, Stefan M., Dorothy Payne, and Byron Almén. 2013. *Tonal Harmony: With an Introduction to Twentieth-Century Music*. 7th ed. New York: McGraw-Hill.

Kulma, David, and Meghan Naxer. "Beyond Part Writing: Modernizing the Curriculum." *Engaging Students: Essays in Music Pedagogy* 2 (2014). http://flipcamp.org/engagingstudents2/essays/kulmaNaxer.html.

Laitz, Steven. 2012. *The Complete Musician: An Integrated Approach to Theory, Analysis, and Listening*. 3rd edition. New York: Oxford University Press.

———. 2016. 4th ed. New York: Oxford University Press,.

Lehman, Frank. 2018. *Hollywood Harmony: Musical Wonder and the Sound of Cinema*. New York: Oxford University Press.

———. "Schubert's SLIDEs: Tonal (Non)Integration of a Paradoxical Transformation." *Music Theory and Analysis* 1, no. 1-2 (2014): 61–100.

Lewin, David. "A Formal Theory of Generalized Tonal Functions." *Journal of Music Theory* 26 (1982): 23–60.

———. 1987. *Generalized Musical Intervals and Transformations*. New Haven: Yale University Press.

Madrid, Alejandro. "Diversity, Tokenism, Non-Canonical Musics, and the Crisis of the Humanities in U.S. Academia." *Journal of Music History Pedagogy* 7, no. 2 (2017): 124–29. https://www.ams-net.org/ojs/index.php/jmhp/article/view/238.

Margulis, Elizabeth Hellmuth. 2014. *On Repeat: How Music Plays the Mind*. New York: Oxford University Press.

Marshall, Robert L. and Robin A. Leaver. "Chorale." *Grove Music Online*. Accessed May 30, 2018. http://www.oxfordmusiconline.com.proxy.lib.umich.edu/grovemusic/view/10.1093/.

Mason, Laura Felicity. 2013. "Essential Neo-Riemannian Theory for Today's Musician." M.A. thesis, University of Tennessee.

McClimon, Michael. 2016. "A Transformational Approach to Jazz Harmony." Ph.D. dissertation, Indiana University.

———. "Transformations in Tonal Jazz: ii-V Space." *Music Theory Online* 23, no. 1 (2017).

Molk, Dave. "Teaching Inequality: Consequences of Traditional Music Theory Pedagogy." *NewMusicBox*, September 11, 2019. https://nmbx.newmusicusa.org/teaching-inequality-consequences-of-traditional-music-theory-pedagogy/.

Molk, Dave, and Michelle Ohnona. "Promoting Equity: Developing an Antiracist Music Theory Classroom." *NewMusicBox*, January 29, 2020. https://nmbx.newmusicusa.org/promoting-equity-developing-an-antiracist-music-theory-classroom/.

Murphy, Barbara and Brendan McConville. "Music Theory Undergraduate Core Curriculum Survey: A 2017 Update." *Journal of Music Theory Pedagogy* 31 (2017): 177–227.

Murphy, Scott. 2013. "Transformational Theory and the Analysis of Film Music." In *The Oxford Handbook of Film Music Studies*, edited by David Neumeyer, 471-99. New York: Oxford University Press.

Nobile, Drew. "Form and Voice Leading in Early Beatles Songs." *Music Theory Online* 17, no. 3 (2011). https://mtosmt.org/issues/mto.11.17.3/mto.11.17.3.nobile.html.

———. "A Structural Approach to the Analysis of Rock Music." *All Dissertations, Theses, and Capstone Projects*, February 1, 2014.

———. "Counterpoint in Rock Music: Unpacking the 'Melodic-Harmonic Divorce.'" *Music Theory Spectrum* 37, no. 2 (2015): 189–203.

———. 2020. *Form as Harmony in Rock Music*. Oxford University Press.

Palfy, Cora S., and Eric Gilson. "The Hidden Curriculum in the Music Theory Classroom." *Journal of Music Theory Pedagogy* 32 (2018): 79–110. https://jmtp.appstate.edu/hidden-curriculum-music-theory-classroom.

Piston, Walter. 1941. *Harmony*. New York: W.W. Norton and Co.

Rahn, Steven. "Motivic Transformation in the *Dark Knight* Trilogy (2005-2012)." *Music and the Moving Image* 12, no. 2 (2019): 40–60.

Reale, Steven. "A Musical Map of Hyrule: Video Games and Spatial Listening." Paper presented to the annual meeting of the Society for Music Theory, St. Louis, Missouri, 2015.

Rehding, Alexander. "Three Music-Theory Lessons." *Journal of the Royal Musical Association* 141, no. 2 (2016): 251–82.

Remeš, Derek. "Chorales in J. S. Bach's Pedagogy: Recasting the First Year Undergraduate Music Theory Curriculum in Light of a New Source." *Journal of Music Theory Pedagogy* 31 (2017) 65–92.

Richards, Mark. "Musical Themes in the *Dark Knight* Trilogy, Part 1 of 6: *Batman Begins*." *Film Music Notes* (personal blog). http://www.filmmusicnotes.com/music-of-the-dark-knight-trilogy-part-1-batman-begins/. December 13, 2012. Accessed May 17, 2021.

Richards, Sam L. "Rethinking the Theory Classroom: Towards a New Model for Undergraduate Instruction." *Engaging Students: Essays in Music Pedagogy* 3 (2015). http://flipcamp.org/engagingstudents3/essays/richards.html.

Riemann, Hugo. "Ideas for a Study 'On the Imagination of Tone'" (1916). Translated by Robert W. Wason and Elizabeth West Marvin. *Journal of Music Theory* 36, no. 1 (1992): 81–117.

Rings, Steven. 2011. *Tonality and Transformation*. New York: Oxford University Press.

Robinson, Dylan. "To All Who Should Be Concerned." *Intersections* 39, no. 1 (2019): 137–44. https://doi.org/10.7202/1075347ar.

Rogers, Michael R. 2004. *Teaching Approaches in Music Theory: An Overview of Pedagogical Philosophies*. 2nd ed. Carbondale: Southern Illinois University Press.

Roig-Francolí, Miguel A. 2011. *Harmony in Context*. 2nd ed. New York: McGraw-Hill.

Sanchez-Behar, Alexander. "Looking Forward, Looking Back: Reconsidering the Study of J.S. Bach's Chorales in the Undergraduate Curriculum." *Bach: Journal of the Riemenschneider Bach Institute* 49, no. 2 (2018): 330–44.

Sarath, Ed, et al. *Transforming Music Study from its Foundations: A Manifesto for Progressive Change in the Undergraduate Preparation of Music Majors*. Published online, College Music Society, January 2016. https://www.music.org/pdf/pubs/tfumm/TFUMM.pdf.

Seeman, Sonia Tamar. "Embodied Pedagogy." In *College Music Curricula for a New Century*, edited by Robin D. Moore. New York: Oxford University Press 2017. DOI:10.1093/acprof:oso/9780190658397.001.0001

Shaffer, Kris, Bryn Hughes, and Brian Moseley. *Open Music Theory*. Hybrid Pedagogy Publishing, 2014. Accessed 18 February 2019. http://openmusictheory.com/.

SMT-Discuss. "Corralling the Chorale: Moving Away from SATB." Accessed July 6, 2020. https://discuss.societymusictheory.org/discussion/507/corralling-the-chorale-moving-away-from-satb.

Snodgrass, Jennifer. *Contemporary Musicianship: Analysis and the Artist*. New York: Oxford University Press, 2016.

———. "Teaching Music Theory in the 21st Century." Unpublished presentation given at University of South Carolina–Columbia, 2017.

———. 2020. *Teaching Music Theory: New Voices and Approaches*. New York: Oxford University Press.

Stevens, Daniel. "Symphonic Hearing: Mastering Harmonic Dictation Using the Do/Ti Test." *Journal of Music Theory Pedagogy* 30 (2016): 111–74.

Turek, Ralph and Daniel McCarthy. 2014. *Theory for Today's Musician*. 2nd ed. New York: Routledge, Taylor & Francis Group.

Tymoczko, Dmitri. 2011. *A Geometry of Music: Harmony and Counterpoint in the Extended Common Practice*. New York: Oxford University Press.

———. "The Generalized *Tonnetz*." *Journal of Music Theory* 56, no. 1 (2012): 1–52.

van Geest, William. "From Musical Work to Model of Musical Structure: A Genealogy of the Chorale in American Music Theory." Ph.D. Dissertation, University of Michigan, in progress.

Wachowski, Gerd. "Die vierstimmigen Choräle Johann Sebastian Bachs. Untersuchungen zu den Druckausgaben von 1765 bis 1932 und zur Frage der Authentizität." *Bach-Jahrbuch* 69 (1983): 51–79.

Walker, Margaret E. "Towards a Decolonized Music History Curriculum." *Journal of Music History Pedagogy* 10, no. 1 (2020): 1–19. https://www.ams-net.org/ojs/index.php/jmhp/article/view/310.