

A Comparative Review of Five Music Fundamentals Textbooks

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With so many fundamentals textbooks available right now, one would think that the market is already saturated; yet each year, we receive a few more complimentary copies of the latest (and supposedly greatest) fundamentals textbooks. When I receive these books I begin to wonder, how many ways are there to explain pitch notation or how to spell a triad? What does this textbook offer my students that others do not? And perhaps most importantly, how will this book help them understand how music works more deeply than some other text? Although the basic topics included in a fundamentals textbook are typically the same, textbook authors take a number of different approaches to these topics, and these approaches have become more varied in recent years. Some new textbooks emerge to address new types of students—such as millennials, who are often digital natives. Others may be linked to new teaching techniques, such as the current emphasis on the flipped classroom. Still other textbooks simply seek to tweak and improve existing practice. All of these changes represent an attempt to better engage our students.

We often think that students are the sole audience for a textbook, but the instructor is also an important part of that audience. After all, it is not necessarily the seasoned master instructor, expert in the field, who teaches music fundamentals. Fundamentals classes are frequently taught by an adjunct or full-time faculty member whose area is applied studies, or by a graduate assistant who is gaining valuable teaching experience. These instructors may not know every possible way to teach intervals, and they may not know which examples from the repertoire will illustrate a specific concept in the clearest way. These instructors rely, in part, on textbooks and supplemental materials to guide them through teaching the class. So textbooks and their coordinating materials not only have to engage the student through clear explanations and reinforcing exercises but also have to offer the instructor flexibility and pedagogical support. The textbooks selected for this review attempt to accomplish this in a variety of ways.

This review compares five of the more recently published fundamentals textbooks: *Elements of Music* by Joseph Straus; *From Sound to Symbol: Fundamentals of Music* by Mícheál Houlihan and Philip Tacka; *Music Fundamentals: A Balanced Approach* by Sumy Takesue; *Principles of Music* by Philip Lambert; and *Applied Music Fundamentals: Writing, Singing, and Listening* by Jena Root.¹ After providing a summary of each text's main pedagogical approach and features, I present perspectives from colleagues "in the field"—those who teach and/or coordinate lower-level undergraduate music theory—to contextualize the summaries. The final section of the review compares each text's approach to important topics in the fundamentals curriculum, specifically pitch notation, rhythmic notation and meter, major and minor scales, intervals, and triads.

TEXTBOOK SUMMARIES

Although all these textbooks feature the same core topics, each author's unique pedagogical philosophy underlies the presentation of material. Additionally, all of the texts feature some sort of supplemental interactive component. The differences among pedagogical philosophies and the inclusion of interactive materials seem aimed at addressing perceived changes in the level of interest, preparedness, and engagement of today's students. The relationship between these perceived changes and the approach of each textbook will be explored later in "Observations from the Field."

Straus's *Elements of Music* offers the most traditional approach of the five textbooks. The writing style is straightforward, clear, and concise, and there are plenty of exercises (both in-class activities and more formal written assignments) from which the instructor can choose. One of the main features of the text is an anthology of core musical works. The examples and exercises feature excerpts from this core set of works, so students are presented with excerpts from the music literature, rather than from a "manufactured" set of

¹Joseph N. Straus, *Elements of Music*, 3rd ed. (Upper Saddle River, NJ: Pearson, 2012), first published in 2003; Mícheál Houlihan and Philip Tacka, *From Sound to Symbol*, 2nd ed. (New York: Oxford University Press, 2012), first published in 2009; Sumy Takesue, *Music Fundamentals: A Balanced Approach*, 2nd ed. (New York: Routledge, 2014), first published in 2010; Philip Lambert, *Principles of Music* (New York: Oxford University Press, 2014); and Jena Root, *Applied Music Fundamentals: Writing, Singing, and Listening* (New York: Oxford University Press, 2014).

pieces. The inclusion of complete works also allows the instructor to delve into analysis and discuss how fundamental concepts relate to musical performance and composition in “real life.” The music in the anthology represents multiple styles, including common practice European composers (e.g., Mozart, Bach, Chopin, Schubert, and Robert Schumann) and American composers representing jazz or popular genres, as well as a nod to world music with the inclusion of a tango. Anthology recordings are included on a compact disc. The anthology does not include any post-tonal twentieth century or contemporary works, an omission that Michael Buchler notes in his review of a prior edition of the text.²

The text is organized into six main chapters, which are further divided into bite-sized lessons, most of which could be covered within one class period. The organization into discrete chapters allows for some flexibility in the order of presentation. For example, although rhythm is featured in the second chapter, an instructor could decide to begin with rhythm rather than pitch. Each chapter ends with a supplemental lesson on additional topics related to the chapter (e.g., C clefs, octave designation, modes, more advanced rhythmic concepts, seventh chords other than the dominant, and voice leading practices). Each lesson offers in-class activities that ask students to sing, take dictation, or perform. This helps the student internalize the featured concepts in a more tangible and direct way than practicing the concept only through written exercises. Many lessons include some sort of composition exercise, offering yet another way for students to engage with the material.

In comparison to the other texts, the online, interactive, and other supplemental materials are somewhat limited for Straus’s text. As noted earlier, an accompanying CD provides recordings of the works in the anthology. Additionally, Finale versions of written exercises are available on a supplemental website. The website also features brief, ten-question chapter quizzes, flashcards, and links to other resources that relate to writing and research.³ Although this website is basic, the writing and research tools could be helpful for a fundamentals class that includes a writing component, such

²Michael Buchler, “Joseph N. Straus: *Elements of Music* Reviewed,” *Journal of Music Theory Pedagogy* 17 (2003): 82. The post-tonal repertoire is not well represented in the other reviewed texts either.

³The publisher includes links to writing and research tools as part of the student resource package for all textbooks that include an online Pearson MySearchLab component.

as a non-major course offered as part of the general education curriculum. Other supplemental materials include a downloadable instructor's manual that features teaching tips and suggestions for additional topics, as well as an answer key for the textbook exercises.

Lambert's *Principles of Music* also offers a more traditional approach to the teaching of fundamentals. Its twenty-six lessons are each compact and succinct enough to give the student a sense of continuity when moving to the next topic. Each lesson includes study questions and written exercises that "reinforce concepts from that lesson and build upon previous lessons."⁴ But this textbook lacks singing exercises, which are found in every other text reviewed here. However, numerous rhythm performance exercises are included in rhythm lessons throughout the text. Because the topics are discrete within each lesson, topics can easily be covered out of the presented order, giving the instructor some flexibility in course design.

A unique pedagogical feature of Lambert's text is the central focus placed on the piano keyboard for learning pitch notation. The opening lessons guide the student through an orientation to the keyboard, while simultaneously introducing concepts such as octave equivalency, the C scale, chromatic scale, accidentals, enharmonic spellings, and half steps and whole steps, all using the keyboard as the tool of choice. Pitch notation using staves and clefs does not appear until the fifth lesson, fifty-one pages into the text, where the keys on the keyboard are directly linked to pitches on a staff using either the treble or bass clef. This initial focus on the keyboard would be suitable for students who are taking a beginning piano class simultaneously with fundamentals. After the staff is introduced, the use of the piano fades; instead, Lambert uses repertoire to introduce subsequent concepts. Given the initial emphasis placed on the keyboard, I expected it to be used as a tool for presenting new material throughout the text, but it is not.

However, the piano remains a primary tool in many of the CREATE! activities that conclude each chapter. Some CREATE! activities ask students to improvise using a given pitch collection or compose a melody at the piano using a particular concept. Other CREATE! activities ask students to compose a piece modeled on a representative set of works. Listening lists and a set of original character pieces by Lambert are available on a companion website; these resources

⁴Lambert, *Principles of Music*, v.

provide repertoire that both illustrates various concepts from the text and serves as model compositions. The character pieces are also suitable for performance by beginning piano students. Through the CREATE! activities, students not only interact with representative pieces through study and performance, but are also asked to apply what they have learned to their own compositions.

The materials on the companion website are limited to the listening lists, recordings of examples from the textbook, and the set of character pieces; thus, of all the texts reviewed here, this one offers the least online interactivity. However, instructors can bundle the textbook with access to Leigh Van Handel's "Music Theory Skill Builder," an online resource that features drills and self-exams related to music fundamentals concepts.⁵

In the preface to *Music Fundamentals: A Balanced Approach*, author Sumy Takesue sets out to answer the obvious question: what is a "balanced approach"? According to the author, the text offers balance between narrative information and drills, between the approach to the non-music major and the "fledging music major," between the textbook, workbook, and interactive website, and between global, classical, and popular musical examples.⁶ Indeed, Takesue attempts to engage all students in the fundamentals classroom through the use of varied activities. Musicianship-based activities include keyboard exercises, singing (with solfège and numbers), ear training exercises (including online drills), and rhythm exercises. In-text drills, interspersed throughout each module, allow students to gain fluency with each concept as they learn about it. Additionally, Takesue includes cultural and historical notes, a feature unique to this text, providing additional context to the theoretical concepts presented.

⁵Information about "Music Theory Skill Builder" (Oxford University Press, 2013) can be found at <http://global.oup.com/us/companion.websites/umbrella/mtsb/mtsb.html>. "Music Theory Skill Builder" can be bundled with any Oxford music fundamentals text for a small additional fee; students can also purchase access to the online tool separately. For a review of this web resource, see Anna Stephan-Robinson, "Review of Leigh Van Handel, *Music Theory Skill Builder* (Oxford University Press, 2013)," *Music Theory Online* 20, no. 3 (2014), <http://www.mtosmt.org/issues/mto.14.20.3/mto.14.20.3.stephan-robinson.php>.

⁶Takesue, *Music Fundamentals: A Balanced Approach*, xiii-xiv. The author claims the textbook features 45 percent classical repertoire, 20 percent American pop/jazz/folk tunes, and 35 percent global repertoire (such as Chinese folk melodies, Celtic session tunes, and Israeli folk songs).

Takesue's text is organized into sixteen modules, with each focusing on a single pitch or rhythm concept. This type of presentation allows for some flexibility in the ordering of the material. For example, a rhythm module could be assigned simultaneously with a pitch module. Portions of modules could even be rearranged if desired, because the in-text exercises offer practice opportunities as each concept is presented.

Takesue's module on form includes a basic introduction to the small forms typical of the musical repertoire included in the text (binary, ternary, AABA). One might expect a brief tutorial on how to compose using a particular form, but there are no composition exercises at this point in the text. Instead, some workbook exercises interspersed throughout the text ask students to compose a rhythm or use a particular pitch collection to compose a melody.

One of the most engaging features of Takesue's accompanying website is the "Music Theory Trainer." This tool offers typical nuts-and-bolts spelling and identification exercises, as well as listening and performing activities such as aurally identifying intervals and triads, and tapping rhythms. Within the text, students are prompted to visit the "Music Theory Trainer" to practice various drills. These drills mirror the in-text exercises and workbook pages at the end of each chapter. Furthermore, the online format offers a more interactive way for students to receive feedback. Student scores can be emailed to the instructor, making the online exercises useful homework or quiz assignments to help students gain fluency. Other, more typical features of the website include streaming audio for all musical examples in the text and flashcards focusing on vocabulary, pitch identification, and key signatures. The website also features downloadable appendices to the text. Some of the appendices are included in the textbook (the glossary and sections on acoustics, C clefs, modes, and non-dominant seventh chords). One online-only appendix contains keyboard exercises focusing on scales, triads, and chord progressions. Other online-only appendices feature analysis worksheets that introduce a musical work and ask pertinent questions about fundamental aspects of the piece (notation, keys, intervals, chords, cadences, and form); this is a succinct way of bringing together the topics in the text. These worksheets could also lead to an instructor-designed writing project or a more in-depth analytical project or presentation. The instructor manual includes some teaching tips, notes regarding the website, and an answer key for selected exercises from the textbook.

In *From Sound to Symbol*, Houlahan and Tacka reverse the traditional “symbol-to-sound” pedagogical approach to teaching fundamentals. In this textbook-workbook, students are guided through the experience of a particular concept or musical element before it is defined. The authors claim that “[b]y exploring rhythmic and melodic patterns through kinesthetic, aural, and visual activities before learning the traditional names and terms, students internalize musical knowledge rapidly—and we’ve found that it sticks with them.”⁷ This approach shares some characteristics with inquiry-based learning in the way it presents students with the problem to explore before explicitly defining related concepts.

The musical examples used to introduce concepts throughout the text are short, simple excerpts from folk and classical genres, allowing students to easily sing, play, and memorize the examples. After memorizing or internalizing the sound of an example, students are asked to analyze and draw a representation of what they have heard (helping them to process and better understand their experience), and finally describe what they have heard using musical terms. For example, when introducing the minor pentachord, students listen to, memorize, and sing the Hungarian folk song “Kis kece lányom.” They next analyze the phrase construction of the song, the placement of beats within each phrase, the location of the lowest and highest pitches, and the opening pitch. Students then draw the melodic contour of the song and use their representation to help sing the rhythms of the tune. Finally, the text illustrates how solfège syllables align with the melodic contour, leading to a representation of the song in written musical notation. The song’s pitches are then examined in greater detail in order to identify the half and whole steps; it is only at this point that the construction of the minor pentachord is articulated.

Although the concept of a “sound-first” approach as it is presented here is compelling, I am not convinced that the text goes far enough in helping the student make the leap between experiencing sound and, in this case, understanding how the construction of the minor pentachord maps onto the singing of specific intervals in the song. The analysis of the experience needs further development. Why not ask students to identify where they hear the smallest interval? Where is it within the pentachord? What is tonic, where is it heard, and how does the placement of the smallest interval relate to tonic? How does this pentachord compare to the major pentachord? This type of further inquiry depends on the instructor.

⁷Houlahan and Tacka, *From Sound to Symbol*, xviii.

Although Houlahan and Tacka's approach reverses the traditional symbol-to-sound presentation, the organization of the text is quite traditional. Each of the twelve chapters is divided into subsections and concludes with key terms, suggestions for further practice, notes for using the accompanying musical skills CD, and a musical score to which students can apply their newly-acquired knowledge in a more complex setting. Written exercises that can be easily torn out and turned in as homework assignments are also included at the end of each chapter. The practice suggestions incorporate performance (through singing and rhythm exercises related to the musical examples in the chapter), conducting, aural analysis and error detection, memorization tasks, and activities that incorporate improvisation and composition. However, most of the practice suggestions are very generic and do not offer much guidance to the student. This is especially noticeable in the suggestions for improvisation and composition, as the same basic wording appears every time: "First select a meter and length for the composition, then decide what form to use (for example, ABBA). Create an improvisation or composition using only known rhythms and scales."⁸ So, although the attempt is made to include improvisation and composition as an activity, the text does not provide guidance beyond merely reminding the student and instructor that this is a possibility. Because the goal of the final chapter is to compose a song, providing shorter composition exercises throughout the book would help guide the student toward this culminating project. However, the companion website does offer improvisation and composition exercises that feature specific instructions, such as using particular pitch collections, rhythmic constructions, and so on.

Supplemental materials include two CDs packaged with the textbook in addition to the companion website. One CD contains audio tracks for each musical example in the book; the other provides interactive tutorials, additional drill exercises, and dictation examples that students can access on their computers. The website offers flashcards and supplementary musicianship exercises (available as downloadable PDFs). The musicianship exercises include sight singing (solo melodies and duets), rhythm exercises (including duets), keyboard exercises, exercises to aid the development of musical memory, and improvisation and composition exercises. Clear instructions are provided before each set of sight singing exercises, reminding students how to independently tackle this

⁸Houlahan and Tacka, *From Sound to Symbol*, 164.

sometimes daunting and scary task. Instructor resources for this text include lesson plans, teaching strategies, additional aural skills and dictation exercises, and video clips from the authors' classrooms that demonstrate how to guide a class through a particular activity or concept from the text.

Root's *Applied Music Fundamentals: Writing, Singing, and Listening* begins by asking students to consider why they love music and why they repeatedly listen to their favorite song or movie soundtrack. As Root asks, "Why does music have the power to evoke such visceral and emotional responses in us?"⁹ On the surface, this might not be a terribly revolutionary question to ask; I am sure we have all asked a similar question of our students at some point. What intrigues me about this, though, is Root's attempt to have a conversation with students from the very beginning of the preface. This two-way inquiry sets the tone for the book. Furthermore, asking students to imagine the sound of their favorite song represents a different version of the sound-first approach. This sound-first approach is carried throughout the text as most chapters invite students to sing or listen to an example melody so that they can experience the concept before it is defined and explained in the text. *From Sound to Symbol* also shares this pedagogical approach, but Root's presentation flows more naturally.

The goal of mastery lies at the heart of *Applied Music Fundamentals*. While text explanations may be lengthier than some of the other textbooks reviewed here, Root's purpose is clear: she is intentionally guiding the student through the *how* and the *why* of learning fundamental concepts. For example, in the chapter on intervals, the author walks the student through six examples of identifying interval size and quality. She doesn't simply define what an interval is, give a bit of information about size and quality, and then leave it up to the students to figure the rest out for themselves. Each example presents a series of questions to ask and a way to think about the task of interval identification. By doing this, Root helps students develop their own method of efficient and accurate interval identification. The memorization strategies at the end of each chapter help students practice the techniques they have learned in the chapter. The text guides the student through making flashcards for each concept and teaches the student how to use the flashcards to master the concept before moving on to the next piece of the fundamentals puzzle. Some chapters offer strategies for

⁹Root, *Applied Music Fundamentals*, xv.

using the keyboard to practice a particular concept. Whatever the practice strategy, the aim is mastery of the concept.

Each of the nine chapters includes both a pitch and a rhythm component, which is unique to this text. This design ensures that students think about both aspects of music as they progress through the course. Additionally, there is no need for the instructor to rearrange materials in order to cover a rhythm and pitch concept simultaneously. In addition to the typical fundamentals topics, the last chapter (the “postlude”) presents more advanced topics including diatonic triads and Roman numerals in major and minor keys, an introduction to voice leading, secondary triads, and advanced rhythmic topics such as irregular meter and hemiola. Appendices introduce additional topics, including C clefs, chromatic solfège (movable *do* solfège is used throughout the text), modes, and seventh chords. Each chapter begins with a list of chapter goals, essentially the learning outcomes for the chapter. These goals are restated at the end of each chapter, and a statement reminds the student that they should be able to do each of the outcomes “with speed and accuracy” before moving on to the next chapter, placing the responsibility for learning the material on the student.

Besides written exercises, the exercises at the end of each chapter include singing and rhythm exercises, composition exercises, and a few activities unique to this text. “Drills to Go” are practice drills that can be done without the book or any other supplemental material or device. Examples include memorizing a particular exercise in the chapter and singing it “as you go about your day,” or speaking a chant designed to help students internalize interval qualities or sizes by using note names that represent each interval. Each chapter also includes classroom activities for students to lead. The description of the activity is addressed to the students, guiding them first to master a particular aspect of a concept before leading the class. This is an effective strategy because students tend to take ownership of and really learn material if they know they will lead the class. Listening and analysis activities, called “Informed Listening,” ask students to aurally analyze particular aspects of a piece, allowing them to study a piece in detail while reinforcing both the pitch and the rhythm concepts presented in the chapter. Because there are likely too many examples to assign in class, Root encourages instructors to devise their own playlists from the examples used for the Informed Listening activities.

One great feature of this text is the varied repertoire used for these activities. There is an impressive blend of traditional classical works (e.g., Bach, Chopin, and Haydn) and popular music spanning numerous decades, including songs written during the lifetime of today's student. Artists include Booker T. & the M.G.'s, The Eagles, The Beatles, Phish, Ben Folds Five, and Alicia Keys, among others. The use of tunes and artists that are more contemporaneous with today's students is an attempt to engage students by meeting them where they are.

As with the other textbooks, there is a supplemental website for *Applied Music Fundamentals*, but this is limited to Spotify playlists (with some recommended links) for the Informed Listening activities and listening examples from the text. Each example on the website is marked in the text with a special icon; some examples include interactive features such as hearing individual voices, notes, or related scales. The website for the textbook does not offer interactive quizzes or other materials; however, the online "Music Theory Skill Builder" is available to bundle with this text as it is with Lambert's *Principles of Music*.

In addition to the typical fundamentals topics, some texts introduce a variety of additional topics. Takesue, Lambert, Straus, and Houlahan and Tacka feature material on the dominant seventh chord in their textbooks. Takesue includes a module on small forms, while Straus addresses form through his discussion of cadences and the use of tonic and dominant within a phrase. Houlahan and Tacka's text also features chapters on form, while Lambert's and Root's books do not address this topic.

Table 1 compares some of the features included in each of the reviewed textbooks. In the next section, I highlight some of these features and how they relate to perceived changes in the student population in our classrooms.

Features	Houlahan and Tacka, <i>From Sound to Symbol: Fundamentals of Music</i>	Lambert, <i>Principles of Music</i>	Root, <i>Applied Music Fundamentals</i>	Straus, <i>Elements of Music</i>	Takesue, <i>Music Fundamentals: A Balanced Approach</i>
Singing Exercises	Exercises and melodies (on website)	No	Exercises	Exercises and melodies	Exercises and some melodies
Solfège (movable do)	Yes (<i>la</i> -based and <i>do</i> -based minor); also uses Takadimi	No	Yes (<i>do</i> -based minor)	No	Yes
Listening Exercises	Yes (guided exercises are used in-text only, not presented as assignments)	No	Yes (with and without questions)	No	Yes (on website)
Ear training or dictation exercises	Yes (on CD)	No	Yes	Yes	Yes
Composition Exercises	Yes (on website)	Yes	Yes	Yes	Yes
Keyboard Exercises	Yes (on website)	Limited to initial chapters on pitch	Yes	Yes	Yes (on website)
Repertoire	Folk tunes, classical	Classical, folk tunes, self-composed	Classical, popular, jazz (including post-1990)	Classical, some popular	Classical, global folk tunes, American popular/jazz
Additional Topics	Chord progression and harmonic function, cadences, embellishments, cadential $\frac{6}{4}$, 12-bar blues, composing a song	Swing eighths and syncopation in ragtime	Voice leading (very brief)	Harmonic function, melody harmonization, embellishment and prolongation, cadential $\frac{6}{4}$, phrase and cadence, voice leading	Phrase structure, cadences, binary form, ternary form, 32-bar form, 12-bar blues
Interactive software component	Yes, CD	Requires "Music Theory Skill Builder"	Limited, online, but more available through "Music Theory Skill Builder"	Limited, online	Yes, online ("Music Theory Trainer")

Table 1

OBSERVATIONS FROM THE FIELD

What is it like teaching lower-level music theory right now? Are the students really changing as much as we believe? To gain a sense of the changes that have occurred in the classroom over the past few years, I asked professionals in the field to respond to four questions about student interest levels, student preparedness, pedagogical changes they have made, and criteria for selecting course materials. Some responses to these questions correlate with the unique pedagogies and features described in the textbook summaries, as noted in the discussion below.

I am grateful to my colleagues who participated in this informal interview: Michael Ericson (Western Illinois University), Jaime Henke (University of Wisconsin-Madison), Julian Hook (Indiana University), Jennifer Iverson (University of Iowa), and Gene Trantham (Bowling Green State University).¹⁰ These professors represent a mix of faculty who teach music theory courses. Hook, Iverson, and Trantham are professional music theorists who teach mostly music majors. Henke is also a professional music theorist who teaches a range of courses, often to non-music majors. Ericson is the oboe professor at Western Illinois University and also teaches theory courses. The institutions at which they teach range from mid-size regional public universities to among the largest public universities.

Question 1: In comparison to 5, 10, or 20 years ago, how have student interest levels changed with respect to the topic of music theory and music fundamentals?

The general consensus is that student interest levels in the topic have not changed. This is not surprising, especially because the majority of students who take music theory courses are music majors. Although they may not be interested in the topic itself, they are interested in doing well in the class because it is part of their major. If the course is for non-music majors, the student is there because they do have an interest in the topic. As Jaime

¹⁰ Each professor was contacted first via email (sent on March 6, 2014) to ask for their participation. Then, the interview questions were either emailed to the professor or a phone interview was arranged. Email responses to the interview questions were received from Ericson (March 21), Henke (March 11), Hook (March 17), and Trantham (April 15). A phone interview was conducted with Iverson on March 27.

Henke (University of Wisconsin-Madison) puts it, "The music theory fundamentals course I teach is for non-music majors who take the class as an elective, so they are always very interested in the subject, and welcome the break from their required classes." Jennifer Iverson (University of Iowa) notes that non-music majors seem to be more interested in notation. They want to write their own music, so sometimes it is more difficult to get them to engage with all of the topics in a fundamentals class equally. Background experience also plays a role in a student's interest level, as Gene Trantham (Bowling Green State University) states:

Incoming students who have had some theory (aural skills) training as part of their private lessons usually have an interest in theory or, at least, some understanding of its importance in their basic musicianship training. Most of our music majors have had some theory training. Music minors and musical theater majors usually do not. Therefore, the minors and musical theater majors often do not have much interest in music theory.

Because the audience is so broad, a fundamentals textbook author has to find a middle ground between "good" classical examples and other repertoire, such as popular songs or international folk tunes, that may be more familiar to the student. While all five textbooks feature some combination of classical and folk or pop tunes, Takesue's *A Balanced Approach to Music Fundamentals* and Root's *Applied Music Fundamentals* make the most concerted effort to offer a wide variety of repertoire. Takesue presents music by American popular artists as well as examples of global music, and Root's varied selections include songs written during the student's lifetime.

Question 2: Have you noticed a change in student preparedness for music study at the undergraduate level as compared to 5, 10, or 20 years ago?

The interviewees have noticed changes in student preparedness. Michael Ericson (Western Illinois University) sums up the general trend found in the responses:

I think the best of our students are *better prepared* than they used to be. However, the middle and lower ends of the class (academically speaking) are seemingly *much weaker* than they were 20 years ago. After you get past the top 20-25% of the class, it seems that students have virtually *no* previous knowledge of music fundamentals.

Jay Hook's data, collected from results of Indiana University's Basic Musicianship Test given to incoming freshmen prior to the school's implementation of their summer online fundamentals course, seem to support Ericson's observation. Hook notes that "in general the pass rate seems to have crept upward over the years, from about 50 percent in the early 1990s to about 60 percent in the years 2005-10."

Despite the upward trend in preparedness, students seem to be less prepared in the area of aural skills, including general listening skills. Trantham relates this to student background:

Generally, the pianists and string players have stronger aural skills (again, reinforced as part of their private lessons or ensemble experience). In general, vocalists and instrumentalists have good "aural skills" where they can imitate what they hear (perhaps a result of rote learning). However, they do not connect the terminology with the sound. Twenty years ago, students tended to have a better understanding of theory AND aural skills (especially how they are related). Now, these items seem to be less connected.

Textbooks that use the sound-first approach or include listening and musicianship exercises attempt to address the aural skills deficiency Trantham outlines. Houlahan and Tacka take the sound-first approach as their main pedagogical approach, and all of the reviewed textbooks incorporate listening, playing and/or singing exercises. In the past, these materials may have been considered supplemental, but given the decline in a student's ability to connect theory with sound, exercises and other activities focused on sound and performance have become necessary.

Henke has also noticed "a large change over the years in the ability of students to learn and process aurally, which of course plays a role in both learning the concepts of music theory as well as aural skills." Henke points out that current students seem to rely on learning through visual methods (learning from a book or a computer), and as a result, "there just doesn't seem to be the same intensity to capture what is said in lecture, even to write down important things, like what will be on the upcoming exam, etc." I have noticed a similar trend in my own classroom, although I have also noticed more note taking during the past year than in

previous years. Henke's solution is "to emphasize and encourage the learning and processing of information via aural rather than just visual methods. This is a skill for any career." This solution immediately brings to mind the Informed Listening activities that are included in Root's *Applied Music Fundamentals*. Because these activities do not rely on a score, students must focus on processing and analyzing the aural stimulus that is presented to them.

Question 3: What pedagogical changes have you made as a result of changes in student population, student preparedness, and student engagement?

To address the lower-performing students in class, Ericson includes "two to three days per semester when [he] release[s] the top students from class, so that [he] can spend a bit of time reviewing material...with those who are struggling." One of Iverson's techniques to help struggling students is to present multiple approaches to the same topic. For example, she includes a variety of visual aids and kinesthetic reference points in addition to the piano. She also introduces a primary approach to a concept but then shows secondary and tertiary ways to approach the same material. Students can then select the method that works for them and use another method to check their answers. As will be discussed later in the comparison of each text's approaches to particular topics, a few texts in this group outline multiple methods for approaching a given concept.

Additionally, instructors and textbook authors alike are making efforts to include more technology in the classroom. Hook mentions "the increasing incorporation of online components and other technology in the classroom (we've experimented with clickers, videos, assignments submitted online, and so on)." Trantham notes, "I also try to use more technology (Blackboard/Canvas as well as the internet) so that students will have easy access to materials, information that can assist them with their skill development." Each textbook featured in this review includes some sort of online component, utilizing technology to help students access information. Straus even includes Finale worksheets so students can complete homework exercises on their computer and email the file to the instructor. Several texts with online quiz components make it possible for students to submit their quiz results online to the instructor. Textbook publishers seem well aware of this pedagogical change and incorporate it into their texts, some more effectively and with more interactivity than others.

Question 4: When selecting materials for a lower level theory class, such as fundamentals, what do you look for? Which criteria do you apply in choosing materials? Have these criteria changed from 5, 10, or 20 years ago?

Hook states, "The trick is finding something that combines what we think is an appropriately high intellectual level with good readability and 'friendliness.'" Iverson emphasizes the value of a simple writing style, with figures and terms clearly laid out. She also mentions the inclusion of "musically-connected exercises" and creative activity associated with real music. The CREATE! activities at the end of each lesson in Lambert's book address this need, since one goal of these activities is to study real music and apply specific observations related to the lesson's concepts to an improvisation or composition.

The incorporation of aural skills activities into fundamentals study is also mentioned in a number of responses. As Henke states, "The primary criteria that has changed over the years regarding materials is that the students must now be able to hear as well as read everything." Trantham also notes the need for "accessibility (easy to read, easy to understand, easy to access sound files, recognizable examples—both popular and classical) and application (lots of worksheets and examples)." While Trantham's call for accessibility certainly includes easy access to musical recordings, it can also apply to the availability of singing and ear training exercises. All of these texts feature easy access to musical examples, either through their websites or on a CD; the availability of streaming audio on the internet helps instructors tremendously. Root emphasizes this by including Spotify playlists on the website, thus facilitating access to some of her more recent listening examples.

While some of the elements we look for in textbook materials have changed, the basic desire for a readable, accessible text that explains concepts clearly yet succinctly remains. In the following section, I outline ways in which each textbook approaches specific topics, with an eye toward these basic criteria.

APPROACHES TO SPECIFIC TOPICS

This section compares the approach of each text to the following topics: pitch notation, rhythmic notation and meter, major scales, minor scales, intervals, and triads.

Pitch Notation

Four of the five texts reviewed begin with pitch notation. The exception to this is Houlahan and Tacka's *From Sound to Symbol*, which begins with rhythmic notation. Although each author presents notation topics in a particular order, instructors can easily rearrange the order of presentation according to their preferences. Three different pedagogical approaches for teaching pitch notation are presented in these texts.

One approach is to introduce pitch notation through the use of the keyboard. Lambert's *Principles of Music* and Houlahan and Tacka's *From Sound to Symbol* do this. This approach corresponds to Lambert's main pedagogical technique: using the keyboard to orient the student. Lambert begins with an introduction to the keyboard and the identification of middle C. All Cs are identified on the keyboard, and this is used to illustrate the definition of the octave. Lambert then zooms in and focuses on the space between the Cs. Through this, he introduces the musical alphabet, the C scale, and the chromatic scale. Lesson 1 concludes here, and study questions and exercises are dedicated to helping the student master what has been presented thus far. The presentation of the chromatic scale in lesson 1, described as adjacent piano keys within the octave, is expanded in lesson 2 with the introduction of accidentals. Through this, the topic of enharmonic equivalence is broached. Lambert gives a few examples of how the spelling of a pitch depends upon context and the direction of the melodic line. Lesson 3 illustrates half steps and whole steps through the use of the keyboard, the differences between chromatic and diatonic half steps, and the whole tone scale. The introduction of the whole tone scale at this point is driven by the focus on the keyboard; rather than focusing on its unique sound and typical uses, the whole tone scale is used to reinforce naming whole steps. The link between the keyboard and the staff is finally made in lesson 5, where the staff, clefs, ledger lines, the grand staff, and octave designations are introduced. The

typical mnemonic devices for naming notes on lines and spaces of the staff are presented, too. Study questions and written exercises help reinforce the concepts in all of the lessons pertaining to pitch notation. These exercises review concepts from prior lessons as well. CREATE! activities help to bring all of the concepts of pitch notation together.

Given Houlahan and Tacka's emphasis on sound-to-symbol pedagogy, it is surprising that their use of the keyboard does not exploit its aural capabilities. Instead of beginning with sound, the pitch chapter introduces the keyboard with letter name labels. Inserting the element of sound here would be easy to accomplish, but students are never asked to listen to an example or play the keyboard. Instead, students "look" at the keyboard and are told that higher sounds are to the right and lower sounds to the left. This could easily become a directed activity. For example: Play a string of adjacent keys on the piano. As you move right, what happens to the sound? As you move left, what do you notice?

Like Lambert's *Principles of Music*, Houlahan and Tacka illustrate whole steps, half steps, and accidentals on the keyboard. Then, the text proceeds to an introduction of the staff, clefs, ledger lines, octave signs, the grand staff, and octave designations. Although enharmonic spelling is defined, it is not thoroughly explained, which could confuse students. Enharmonic spellings are labeled on the keyboard but not shown in relation to staff notation. Written exercises call for locating pitches on the keyboard as well as identifying and drawing notes on a staff.

A second approach to pitch notation is to introduce the staff first, which is the technique used in Straus's *Elements of Music* and Root's *Applied Music Fundamentals*. The main difference between these two is when the keyboard is introduced. In the Straus, the keyboard is featured in the second lesson in the chapter dedicated to pitch, before he introduces clefs and the grand staff. Root saves the keyboard for chapter 2, after basic notation using clefs is covered. Straus uses the staff to illustrate ascending and descending musical contour and stepwise motion versus leaps. By showing staff notation before teaching note names, Straus helps the student focus on the notation's visual communication to a performer. Straus then introduces the musical alphabet as note names labeled on a keyboard illustration and continues his description of steps and leaps by showing these on the keyboard. The next three lessons in Straus's chapter focus on treble and bass

clefs and the grand staff; a supplemental lesson focuses on other clefs, the octave sign, octave designation, and double sharps and flats. Because they are introduced in a supplemental lesson, the impression is given that these topics are not necessary to the study of fundamentals. However, the octave sign and double sharps and flats probably belong in the main lessons. Exercises at the end of each lesson help students digest the smaller components that feed into pitch notation, and a variety of singing, note reading drills, and short dictation activities are included, giving the instructor plenty of reinforcing assignments to choose from.

While Root also begins with an introduction to the staff, she incorporates an element of the sound-first approach by asking students to hum or sing a tune they know, and then think about why their chosen tune might be written down. Here, the sound that is introduced is personal to the student, giving an opportunity to individualize the study of pitch notation. Root then proceeds to introduce the concept of “mapping” as a way to show the usefulness of the staff. The introduction of this concept helps the student to understand what the staff does, rather than simply showing what a staff is. This is followed by a clear description of how to write notes on the staff (this type of clarity in instructing students how to draw musical symbols can be found throughout Root’s text). Clefs are introduced next, and Root explains the reason for different clefs (a question that sometimes arises from the curiosity of our students).

The elements of pitch notation continue in chapter 2 by introducing the keyboard. Here Root appeals to the “digital native” by suggesting the use of a virtual piano or smartphone app while giving a rationale for developing keyboard skills. In this chapter, half steps, whole steps, accidentals, and enharmonic spellings are shown in relation to the keyboard. Root anticipates the student asking, “Why do we have different ways of spelling the same note?” She illustrates enharmonic spellings through a Scott Joplin piece, clearly showing just how messy the score would look if incorrect enharmonic spellings were used. This demonstrates one of the main differences between *Applied Music Fundamentals* and the other texts reviewed: Root’s text aims to show the reasons behind musical notation and theoretical concepts. Exercises at the end of chapters 1 and 2 include note labeling (using real musical examples rather than individual pitches on a staff), copying music from one clef or octave to another, sing and play activities, and informed listening with a variety of music examples. Because each chapter

includes both a pitch and a rhythm concept, a number of exercises incorporate both aspects as well. While this may be different from what some instructors are used to, it represents the intimate connection between pitch and rhythm in musical experience.

The third approach to pitch notation, taken in Takesue's *Music Fundamentals*, is to introduce the musical alphabet first. Takesue begins by comparing learning a language to learning to read music. After introducing the alphabet, students are asked to distinguish stepwise motion from leaps in a musical example and use in-text exercises to practice saying the alphabet with fluency. The keyboard is presented next to show the connection between note names and the layout of keys on the piano. Clefs are then shown, along with a description of how pitches are placed on lines and spaces. The treble clef, bass clef, and grand staff are all linked to the keyboard, and singing exercises are introduced along with movable *do* solfège. Pitch notation topics continue in module 4, beginning with an introduction to half steps demonstrated on the keyboard. Accidentals are defined, with small keyboard drawings illustrating the use of accidentals when naming notes. Enharmonic spellings are also shown in relation to the keyboard, although they are not linked to notation on the staff until a few sections later. The module continues by describing diatonic and chromatic half steps, the chromatic scale, whole steps, and double sharps and flats. Exercises are featured throughout each of these modules, both within the text, allowing students to practice concepts as they learn, and at the end of the modules in separate workbook pages.

Introduction to Rhythm and Meter

These five texts take two main approaches to the introduction of rhythmic notation and meter: a sound-first approach, with an emphasis on phrasing, pulse, and tempo, and a note values-first approach. The two more traditional texts, Straus's *Elements of Music* and Lambert's *Principles of Music*, begin their discussion of rhythm with a presentation of note values. Straus's chapter 2 is well organized and progresses in a logical manner, beginning with a lesson on quarter notes, half notes, and whole notes in $\frac{4}{4}$. Each subsequent lesson presents another bite-sized piece pertaining to rhythmic notation and time signature. Straus limits his presentation to $\frac{4}{4}$ for the first four lessons in this chapter; then duple meter ($\frac{2}{4}$ and $\frac{2}{2}$), $\frac{3}{4}$, and $\frac{6}{8}$ are each given one lesson. The limited focus on one

time signature per lesson (or over many lessons, in the case of $\frac{4}{4}$) allows students to focus on one thing at a time. They solidify their knowledge of basic rhythmic notation, including the use of dots, ties, and slurs while in the world of $\frac{4}{4}$; after gaining fluency in $\frac{4}{4}$, they move on to apply their knowledge to the other time signatures. This arrangement could allow the instructor to interweave individual rhythm lessons with lessons from the chapters on pitch. The chapter concludes with syncopation and a supplemental lesson on smaller rhythmic values and triplets. Other time signatures ($\frac{2}{8}$, $\frac{9}{8}$, etc.) are briefly summarized in a chart within the supplemental lesson but are not included in chapter exercises.

Straus's in-class activities (which could easily be assigned for out-of-class work) offer dictation, performance, and improvisation exercises. The written exercises include elements of composition, and at the end of each lesson, an exercise asks students to set a poem. Straus guides the student through this task clearly, and students are able to make stronger connections between the written notation and the rhythm when experienced through performance. Additionally, students are given the chance to consider textual meaning and how that might translate into musical reality.

Lambert's *Principles of Music* organizes rhythmic topics into modules that are interspersed throughout the text. Lesson 4 presents rhythmic notation and meter. Like Straus, Lambert begins by introducing the quarter note and half note, but unlike Straus, Lambert does not wait to introduce other note values. He also does not separate the introduction of simple quadruple meter from duple and triple simple meters. However, before describing the time signatures for simple meter, Lambert discusses patterning and grouping of beats into duple, triple, or quadruple groupings. He uses the number of syllables in names of fruits and vegetables to illustrate each meter type. Techniques such as this always bring laughter into the classroom, as students chant "ru-ta-ba-ga" or "pine-ap-ple"; this technique can effectively draw a memorable link between beat groupings and time signatures. Lambert also includes examples that have a beat value other than the quarter note, and there are exercises devoted to notating a rhythm in $\frac{4}{4}$ vs. $\frac{4}{2}$, for example. Later lessons introduce dotted notes, rests, and compound meter, and there are even lessons that focus on asymmetric meters and changing meters. Although these more advanced topics may be too much to include in a typical fundamentals class, this text offers students explanations, examples, and exercises for these more advanced rhythmic topics.

Music Fundamentals, *From Sound to Symbol*, and *Applied Music Fundamentals* all introduce rhythm through sound. Takesue's *Music Fundamentals* uses pulse and tempo as the entry points. After a bit of explanation, students are asked to clap the pulse and identify the tempo of five listening examples. Houlahan and Tacka take a different approach in *From Sound to Symbol* by having the student draw phrase marks to identify the phrasing of a listening example. Following that, the formal organization of the example is discussed. In both texts, the link between the initial listening activity and actual rhythmic notation is weak. Takesue immediately introduces a chart of rhythmic values and the mathematical relationships between those values. The discussion of pulse and tempo is never connected to notation until later in the same module when students determine the meter of given examples. Students do not use what they've experienced to derive rhythmic notation. They are, however, shown clearly how to count out a rhythmic exercise containing quarter notes and eighth notes in $\frac{4}{4}$, and counting illustrations are also given for examples of duple and triple simple meters. Takesue's counting approach continues in later rhythm modules that introduce other subdivisions in simple meter, additional beat values, and compound meter. Many written exercises reinforce the counting out of rhythms by asking students to write the counting syllables of an excerpt in addition to showing other musical elements such as motivic unity and accents. Students are asked to sing these excerpts as well, giving them the opportunity to link their understanding of the counting syllables to the sound and performance of the melody. A variety of ear training exercises, simple composition exercises, and some rhythmic dictation exercises are also included.

Houlahan and Tacka abandon their initial listening example while they introduce the concepts of beat, pulse, and rhythmic values (in words first, not sounds). The link between notation, pulse, and meter is made more clearly in the next section of their text when a second musical example is used, and students are asked to tap the pulse, identify the phrasing, determine the number of beats in each phrase, and determine the groupings of the beats. This process of aural analysis continues in the next section where the authors guide students in identifying which beats have one sound versus two and ask students to draw a representation of the rhythm. In addition to using a counting system based on numbers (1 & 2 &, etc.), Houlahan and Tacka also introduce the Takadimi system of rhythmic solfège as

a way to translate the musical experience into rhythmic notation.¹¹ The initial rhythm chapter in the Houlahan and Tacka also includes rests, ties, and repeat signs (with different endings). Another chapter on simple meter adds the sixteenth note, dotted rhythms, and syncopation and introduces meter signatures having a beat value other than the quarter note. Compound meter (including duple, triple, and quadruple) is covered in a separate chapter, along with triplets, duplets, changing meters, and asymmetric meters. For all of the rhythm chapters, Houlahan and Tacka use guided listening activities to introduce most of the concepts. Written exercises are included in the text, and performance and composition exercises can be found on the website.

Root's approach to rhythm also begins with sound, but this time, it is the sound of a metronome beating. Then a musical example is introduced, and students are asked to clap the pulse while singing. Root gives the student a list of characteristics to notice, which helps to link the idea of beat with the notation of the musical example. Students experience the sound of the beat provided by the metronome, clap the beat of the excerpt, and see the notation while clapping. This same example is then used to demonstrate the concept of time signatures, the organization of beats into measures, and metric accent. Root limits the initial discussion of rhythm to simple meter with a quarter note beat; however, she does define compound meter and irregular meter. The repeat sign and augmentation dot are also introduced in the first chapter. As noted earlier, Root's is the only text that includes rhythm topics in every chapter. Subsequent chapters present rests, ties, syncopation, smaller beat subdivisions, triplets, simple meter with beat values other than the quarter note, compound meter, asymmetric meter, hemiola, and more advanced rhythmic groupings. Because rhythm is not isolated in a few chapters, it infuses all the exercises at the end of every chapter.

Major Scales

All five texts begin their discussions of major scales with C major as the representative, followed by an analysis of the arrangement

¹¹ See Richard Hoffman, William Pelto, and John W. White, "Takadimi: A Beat-Oriented System of Rhythm Pedagogy," *Journal of Music Theory Pedagogy* 10 (1996): 7–30. See also <http://www.takadimi.net> for more information about the Takadimi system.

of whole steps and half steps within the scale. This eventually leads to the naming of scale degrees, a brief discussion of tendency tones, the transposition of the major scale formula, and the formation and use of key signatures. The differences between the texts include whether the topic is introduced beginning with sound rather than notation, and whether tetrachords (or pentachords or hexachords) are included as part of discussion of the construction of the scale.

Straus and Lambert do not use the tetrachord to describe the intervallic construction of the major scale. While both texts take the C major scale as their basis and proceed immediately into an illustration of the intervallic pattern of the scale, Lambert introduces the concept of scale by analyzing "America," choosing to take the sound-first approach. In his analysis of how to find the key of the piece, he states, "Unlike the citizens of the democracy the song exalts, the notes of the starting-on-C version of 'America' are not all created equal."¹² He then deduces a set of principles that can be used to determine the key of a piece. This analysis links back to Lambert's discussion of "white-key scales" from the first lesson on pitch because he considers all of the various orderings of white keys in his analysis of the tune. This leads to a brief discussion of diatonic modes that, while interesting, seems a bit out of place at this point in the text.

Houlahan and Tacka begin their introduction to major scales more slowly by focusing first on the major pentachord and hexachord. They continue to use listening activities as the way to introduce a concept, asking students to listen to and memorize an example, draw its contour, and then analyze what they have heard. The first example contains only stepwise motion, and therefore analyzing the contour and applying solfège syllables is easy. The authors then link solfège to the pentachord itself, identifying the arrangement of whole steps and half steps, and then finally define the major pentachord. This process is repeated for the major hexachord, and later, in the second major scale chapter, the full major scale. The process of moving students from the sound of the music to the notation is effective, and it helps students to think critically about what they are experiencing. However, it is not clear that an entire chapter focusing on the major pentachord and hexachord is really necessary. Although students become very familiar with the major mode sound by the time they encounter the full scale, the exercises and activities featured in the pentachord/hexachord chapter are

¹² Lambert, *Principles of Music*, 95.

repetitive and seem like busy work; this becomes increasingly apparent when students are asked to do more of the same in the next chapter on the full major scale. Instructors could probably skip over the pentachord/hexachord discussion, especially because the chapter on major scales includes the intervallic pattern of the major scale as well as the definition of the major tetrachord.

While both Takesue and Root use the major tetrachord to illustrate the construction of the major scale, they do so in different ways. Takesue notes the arrangement of whole and half steps within the C major scale, as the others do, but then divides this arrangement into two major tetrachords. This is immediately followed by an exercise on finding tetrachords using the keyboard and notating them on the staff. Takesue proceeds to building the entire scale by linking two major tetrachords together. The text continues, as the others do, by transposing the formula to various keys, introducing scale degree names and tendencies, and eventually moving to the next module on key signatures.

Root begins a bit differently. She uses a musical example to illustrate how to take a pitch inventory and arrange the inventory in a stepwise order. The first example uses the C major scale, and she repeats the process with an example in B $\flat$ major. Students compare the two pitch inventories, listening to the similarity between the two scales as well as the tendencies of the pitches in context. Solfège syllables are then linked to the scale, and the pattern of whole and half steps is defined. Root encourages students to repeat the pattern beginning with any note of the keyboard, offering an opportunity to link sound, notation, and the concept of major scale construction. After this introduction, Root illustrates the division of the major scale into two identical tetrachords. She uses this to derive other scales, and then highlights the role of half steps in the construction of the major scale. This connection helps students understand the formation of major scales in a deeper way and can also assist with the memorization of scales. A discussion of major key signatures follows, emphasizing the order of sharps and flats. Another difference between Root's and the other texts is that she limits the initial discussion of major scales to keys with up to four sharps or flats in the key signature. In the continuation of the chapter, the concept is expanded to include all keys, including the enharmonic spellings of the keys with five to seven sharps or flats. This presentation of keys reflects Root's pedagogical goal of mastery by encouraging students to fully master the concept of scales in a limited fashion before extending the concept to all scales.

Minor Scales

A few patterns emerge when comparing the presentation of minor scales. Texts begin either by focusing on the intervallic construction of the minor scale or by linking prior knowledge of major key signatures to the relative key relationship. Texts also differ in their presentation of the natural, harmonic, and melodic “forms” of the minor scale. In actual pieces, these forms blend together based on melodic and harmonic tendencies. A piece is not written “in harmonic minor,” for example. Yet when minor scales are taught, students get the idea that a piece in a minor key must consistently use natural, harmonic, or melodic minor. The presentation of these concepts in a textbook shapes how students perceive the minor mode. By separating minor into different forms of the scale, the alterations for each form are clearly associated with a label, allowing for easier assessment of the concept through written exercises. However, an understanding of how minor scale alterations behave in music can be lost as students compartmentalize each form rather than thinking about why a specific alteration is used within a specific context. There is, of course, no one “right way” to present this information, and ultimately it is up to the instructor to clarify any misunderstandings that may exist.

Straus and Lambert begin their discussions of minor scales with a comparison between C major and A minor, focusing on the intervallic construction of the minor scale and then transposing this intervallic pattern to build other minor scales. Lambert avoids any mention of harmonic or melodic minor forms at this stage, while Straus acknowledges the possibility of scale degree alterations. Rather than categorizing these alterations as harmonic or melodic, Straus relates them to the dynamic tendencies within the minor scale and focuses on the practical use of these alterations. Lambert eventually includes a section on harmonic and melodic alterations and why they might be used, and discusses converting natural minor to the altered forms; until that point, he limits exercises and examples to the natural minor form. Lambert also includes a CREATE! exercise in which the student uses harmonic or melodic minor alterations to alter a minor melody composed for a previous lesson. I would love to see an additional prompt in which the student compares each version of the composition and reflects on the effect of the alterations on the sound of the melody.

Straus first introduces examples that use a minor scale with alterations, including chromatic embellishments; only then does the following lesson define the harmonic and melodic forms of minor. This gives the instructor the opportunity to discuss how embellishments and alterations in minor function within the context of a musical excerpt. Straus's singing and dictation exercises at the end of each lesson also regularly feature the use of the leading tone. The composition exercises do not limit the form of minor to be used, allowing the student to experiment with chromatic alterations.

Lambert's introduction of minor scales becomes less clear when he discusses scale families (for example, the white-key family consists of scales containing various orderings of the white keys on the piano). He links modes and the relative scale relationship as a modal rotation. However, this section seems superfluous since the concept of relative keys is not introduced until the next lesson.

Takesue introduces minor keys with a comparison of C major and A minor (i.e., relative keys). After a set of listening examples in which students compare the sound of major and minor, Takesue briefly discusses the relative key relationship, showing where half steps occur in major and minor keys and identifying the distance between the tonics of relative keys. Parallel keys are defined after all minor key signatures are presented. However, no further comparisons between the sound or construction of major and minor scales are made until the end of the module. At this point, Takesue discusses scale degree names, solfège syllables, and how to determine whether a piece is in major or minor. Takesue also includes a section on the three forms of the minor scale. She discusses why each form might be used, but it is not made clear that minor scale alterations often blend together in a single piece. The separation between the forms is further emphasized through exercises that ask students to identify which of the three forms of the scale a particular musical example uses.

Like Takesue, Root chooses to begin with the introduction of relative keys rather than focusing on intervallic construction. The chapter begins with singing "Hatikvah," the Israeli national anthem, and discusses the musical qualities that suggest a minor key rather than its relative major. Root then defines and compares relative keys, using the two key possibilities for this excerpt. A very clear visual aid illustrates how to derive the relative minor from a given major key; the parallel key relationship is also shown using a similar illustration. Root uses the relative key relationship

as a starting point for the comparison between parallel keys. She then defines “parallel key” and gives students multiple methods for finding the parallel key of a major or minor key, including adding or subtracting accidentals from the scale, as well as using the circle of fifths. Finding the correct parallel scale can be tricky for students, and outlining various methods helps students find a way that works for them. In the memorization strategies presented at the end of this first chapter on minor scales, Root guides students to create flashcards with charts that show both the parallel and the relative key relationships. These flashcards are then used in the written exercises.

Minor keys are featured again in Root’s next chapter, where the harmonic and melodic minor scales are introduced. Although these scales are presented individually, Root is careful to emphasize that music is not written using only one form of minor by stating, “it is more helpful to think of a single minor scale with variable sixth and seventh degrees.”¹³

Like Straus and Lambert, Houlahan and Tacka focus on scale construction, but mirroring their earlier approach to major scales, they present the minor scale through the minor pentachord, minor hexachord, and the minor pentatonic scales. Houlahan and Tacka give two versions of the same material in the chapters on minor scales: one version presents the material using *la*-based minor, while the other uses *do*-based minor. Each scale in the minor scale chapters is introduced through the text’s typical listening activities. The approach is the same whether presenting the minor pentachord, hexachord, pentatonic, natural, harmonic, or melodic scales: memorize a representative tune, analyze various aspects of it, draw its contour, figure out the solfège and rhythms of the melody, and finally produce a notated version of the example. By presenting limited forms of the minor scale first, students are exposed to the sound of the minor scale and become very familiar with its sound. However, as with their presentation of the major scale, this could take up more class time than necessary.

Houlahan and Tacka’s second chapter on minor scales is more traditional in its presentation of the three forms of minor and the parallel and relative relationships. In discussing the three forms of minor, they acknowledge that several forms of minor can be used within one piece. When introducing a new form of minor, the authors discuss scale degree names, interval construction, and an

¹³Root, *Applied Music Fundamentals*, 244.

approach to writing the scale form with accidentals.¹⁴ One unique element in the section on relative and parallel key relationships is the use of musical examples that feature a parallel or relative key relationship within the same excerpt. This reinforces the idea that composers change mode or even change tonic in a single piece. Although the presentation of minor is longer than in the other texts, students are exposed to a number of different listening examples through the introductory listening activity as well as the suggested listening examples.

Intervals

The traditional method of introducing intervals is to define the concept and present the ideas of interval size and quality. Each of the five textbooks takes this approach, with some slight variations in how interval quality is taught. There are three common methods: using interval qualities within the major scale to aid in interval identification, memorizing the interval qualities of pairs of notes without accidentals, and counting half steps. Straus's book is the only one of the five that focuses on using natural note pairings as a basis for identifying interval quality. The text spends one lesson on interval size, and subsequent lessons focus on a different combination of interval sizes: seconds and thirds; sixths and sevenths; and fourths, fifths, octaves and unisons. In each lesson, the natural forms of the intervals are shown before demonstrating how the quality changes when adding accidentals. Through these demonstrations, students learn about simple and compound intervals and interval inversion. Straus does not skip over interval relationships within scales, though. Two lessons focus on intervals found in major and minor keys. The concepts of consonance and dissonance are introduced in these lessons, and students begin to learn about the function of the tritone in defining a key. Written exercises reinforce the concept of melodic and harmonic intervals in musical excerpts, and singing exercises focus on the interval sizes within each lesson. The downside of this is that some singing exercises can be particularly difficult for beginning singers since these melodies are included to demonstrate larger intervals.¹⁵

¹⁴Of the five textbooks reviewed here, Houlihan and Tacka's *From Sound to Symbol* is the only one to present minor scales after intervals.

¹⁵In his review article, Buchler mentions this as a weakness in this chapter and in chapter 3 on scales.

Lambert's presentation of intervals begins with an excerpt by Bach, featuring C as a pedal point. Lambert discusses not only motivic characteristics of the excerpt but also how other pitches in the melody relate to the C pedal point. This leads to a discussion of intervals as they relate to the C major scale. Lambert then combines half-step counting with intervals that occur in the major scale; this is then repeated with the minor scale. Although the focus appears to be on using the major scale to assist in interval identification, the inclusion of half steps gives students another, albeit less efficient, method for finding intervals. The exercises also emphasize counting half steps; however, this portion of the exercises could easily be omitted. The section in lesson 18 on using intervals to analyze musical characteristics and motives within a piece is an especially effective feature of Lambert's presentation of intervals. Students begin to think about how interval size and quality can unify a piece, and these concepts are reinforced through the lesson's CREATE! activities.

Takesue's presentation of intervals uses the keyboard to illustrate interval size. While Takesue also discusses two methods for interval identification—counting half steps and using major key signatures—she shows a definite preference for using major key signatures as a reference point. She then demonstrates how major and perfect intervals from a major scale can be altered to become augmented and diminished intervals. Takesue complicates interval writing by offering the technique of interval inversion as the sole way to write descending intervals. This method is beneficial when dealing with larger intervals, and I appreciate the attempt to guide students through the problem of writing descending intervals; however, using interval inversion for intervals such as a major third is cumbersome. Takesue's exercises give students ample practice in writing and identifying intervals, and like Straus, Takesue uses musical excerpts to reinforce the concept of melodic and harmonic intervals.

Houlahan and Tacka again choose not to begin a chapter with sound. Of all of the textbooks, Lambert comes the closest to using the sound-first approach with intervals. Like the others, Houlahan and Tacka discuss ways to identify interval quality, but their clear preference is to relate intervals to the major scale. Similar to their presentation of major and minor scales, intervals are shown as they relate to the first note of the major and minor pentachord and hexachord, and then to the full major scale. This information again seems redundant. Additionally, the relationship of intervals to the minor pentachord and hexachord doesn't really make sense at this point, because this chapter on intervals (chapter 6) precedes the presentation of minor scales in chapter 8. Even in their exercises, they simply remind students to "imagine the first [note of the] interval is the tonic of a scale," with no mention of pentachords and hexachords.¹⁶ The technique of changing major scale intervals into other qualities is then demonstrated, and the chapter concludes with a summary of four methods for determining interval size and quality. Although the authors state that counting half steps "is not the most effective way of naming intervals," they do include a summary chart of all intervals and their number of half steps.¹⁷

Root's text again distinguishes itself as the text with the most student-centered guidance. A strength is the presentation of numerous interval construction and identification tasks throughout the chapter, along with detailed, step-by-step, descriptions of how to determine the answer.¹⁸ As with the majority of the other texts, she uses the major scale as the basis for identifying interval quality. Throughout the discussion of intervals, though, it is clear that Root is trying to provide students with many ways to think about interval construction. For example, she presents a visual technique to help the student imagine changes in interval size, using pencils to represent the ceiling and floor of a room. By raising the top pencil/ceiling, the room becomes bigger; therefore, raising the top note of an interval makes the interval larger. I have used a similar technique in class, asking students to use their hands to create a

¹⁶Houlahan and Tacka, *From Sound to Symbol*, 191.

¹⁷Houlahan and Tacka, *From Sound to Symbol*, 197.

¹⁸My favorite example is an interval identification example with A $\flat$ 2 and G $\flat$ 3 as the pitches. The first step she lists is "Don't panic." She then goes on to explain the technique of finding the answer just as clearly as with the other, less complex examples.

space, and as they raise and lower their hands, they change the size of the space. This kinesthetic technique often helps students figure out more difficult intervals. Although some might not consider visual techniques and step-by-step explanations to be essential elements of a textbook, these techniques and explanations can help students gain a deeper understanding of a concept and develop their own ways of consistently finding correct answers. The detailed explanations can also assist a student using the textbook independently of a class, or as part of an online class or flipped classroom approach. Of all of the texts, Root's written exercises for intervals seem the most complex, including many accidentals. If students don't work through the detailed solutions provided within the text, the written exercises will be more of a challenge than they already are.

Triads

Each textbook covers triad construction for major, minor, diminished, and augmented chord qualities, as well as inversions and Roman numerals in major and minor keys. The dominant seventh chord is also introduced in all textbooks except Root's, which relegates the discussion of seventh chords to an appendix. Straus offers a straightforward approach similar to the one in his interval chapter: memorize the qualities of the natural forms of triads (without accidentals). By doing this, however, he overlooks the augmented triad. Although its construction is described, the augmented triad is omitted from further discussion as well as from the exercises. The section on triad inversion includes a brief discussion of the arrangement of triads in actual music to show that triads are typically not seen in close position as pitches stacked in thirds. Lambert also includes a lesson on how triads are expressed in music, and Takesue begins with an example showing the difference between block chords and implied chords in a musical example. Root extends this topic and illustrates how to take an inventory of the pitches present in the music and how to analyze chord quality through a chord reduction technique.

Straus's coverage of triad inversions continues with a brief discussion of second inversion's relative instability compared to the other chord positions due to the harmonic interval of the fourth. Other texts do not highlight this important concept. In a later lesson, Straus omits the second inversion chord due to its specific

usage requirements. In his presentation of Roman numerals, Straus does not distinguish between chord qualities built on pitches in the harmonic minor scale versus other forms of minor. He simply shows how the dominant and the subtonic triads can change quality due to the typical alterations that occur in a minor key.

Lambert takes a slower, more deliberate pace than Straus in his coverage of triads and the dominant seventh chord. Lambert's methods for identifying and constructing triads include constructing the triad out of intervals or relating the triad to the major scale. The prose-based approach is more conversational than in other texts, although the steps required to build or identify a triad are slightly less clear. The discussion of Roman numerals and chord qualities includes a comparison of triads in major and minor keys that can help the student memorize the chord qualities for both. Lambert's coverage of the triadic variations resulting from using the leading tone in minor is clear, but he does not mention why these changes are effective or common. The alterations are described as if they are based purely on a composer's choice. Lambert introduces figured bass as the basis for identifying triad inversions. This is rather common in fundamentals texts; the one exception in this group of texts is Root's. Root introduces inversion symbols as symbols without associating them with figured bass, although she does explain that the symbols show intervals above the bass note. While all the texts introduce the dominant seventh chord, its inversions, and the accompanying inversion symbols in some fashion (Root includes this in an appendix), Straus and Lambert are the only two to discuss the added seventh as a dissonance that gives the chord extra momentum to resolve to tonic.¹⁹ Straus, Lambert, and Takesue also show how seventh chords other than the dominant seventh chord are spelled.

Like Lambert, Takesue approaches each triad type in a very deliberate way, offering multiple methods for constructing each type of triad. One interesting activity asks students to harmonize a melody using given chord symbols, Roman numerals, and inversions. This encourages students to write and think about triads within the context of music, and to link harmony with melody. As with the other texts, Takesue introduces Roman numerals and

¹⁹ Straus's discussion of dominant seventh chord resolution is reserved for his final chapter on functional harmony, where he also gives a brief introduction to melody harmonization, embellishment and prolongation, the cadential $\frac{3}{2}$ phrase and cadence, and voice leading.

scale degree names for triads in major and minor keys. Triads built from the harmonic minor scale are used to present Roman numerals in minor, omitting the major III chord and including the not-so-common augmented III chord; a note explains that the use of this triad is rare and that using the III from the natural minor scale is more common. Instead of using familiar chord symbols or commonly-used lead sheet symbols to indicate triads in inversion (C/E, for example), Takesue uses a format that identifies the triad root with a 1st or 2nd next to it to indicate the inversion (e.g., D1st). These symbols appear in the place of lead sheet symbols in a number of the exercises. This could be confusing to the student because this format is not one that is typically seen.

Houlahan and Tacka's discussion of triads begins with a listening example. Students are prompted to discuss the connection between the melody and the accompanying chords. This activity leads students to recognize that the chords are related to the melody, but there is no further elaboration of this offered within the text. The sound of each triad quality is then introduced to the student through a listening example using that type of triad. This is immediately followed by a description of how the triad is constructed using combinations of stacked major or minor thirds. As with the other texts, Roman numerals in both major and minor keys are presented. Similar to Takesue, the presentation of triads in minor is limited to harmonic minor. Thus the major III chord is not included as a typical triad in minor. And unlike Takesue, the authors do not mention that the augmented III chord in minor is relatively uncommon. Overlooking this important concept often results in student compositions that include this misunderstood chord.

Root also begins with a musical excerpt—a Bach chorale that features chords and passing tones. This fuels her discussion of how to take an inventory of pitches and arrange them in order to spell triads. The four qualities of triads are then introduced in two ways: they are constructed with the appropriate third and fifth above the root, and with stacked major and minor thirds. Roman numerals and triad types in major and minor are shown, but unlike the other texts, Root illustrates triads that result from all forms of the minor scale. She clearly notes those that occur most frequently. Although Root does not discuss the dominant seventh chord in the text, she does include a brief introduction to voice leading, which shows the role played by common tones in the smooth motion between certain triads. Straus presents aspects of voice leading as well, and

Houlahan and Tacka discuss typical harmonic progressions such as those that move from predominant to dominant and then resolve to tonic. Although the treatment of voice leading and harmonic progressions is far from complete in any of these texts, it can offer the student a taste of what is to come if they continue to study theory.

CONCLUSION

Each textbook reviewed features unique pedagogical approaches that help to address perceived changes in student engagement, preparedness, and interest in the subject of music theory. While a unique approach is important, textbooks still need to be clear, readable, accessible to students, and include a variety of exercises that allow students to practice concepts on multiple levels. Of the five textbooks reviewed, three stand out as offering the most engaging features. None of them is perfect, and they each have their quirks, but they also include the broadest range of characteristics that meet the changing needs in today's classroom. Takesue's *Music Fundamentals: A Balanced Approach* features an outstanding array of interactive online components, including appendices that incorporate listening, basic analysis, and keyboard skills. The text also features numerous exercises (written and aural) that reinforce concepts at key moments. Straus's *Elements of Music* offers readability, succinctness, and clarity in its presentation of concepts, and the inclusion of singing, ear training, written, and composition exercises gives students the opportunity to connect theory with practice. Finally, Root's *Applied Music Fundamentals: Writing, Singing, and Listening* offers a student-centered and student-friendly approach. Root is always careful to explain the *why* and *how* behind theoretical topics, rather than simply showing the what. Furthermore, Root's inclusion of a variety of strategies in the text aims toward mastery through multiple modes of engagement. The text is well suited for the beginning instructor as well, given the variety of exercises, the use of diverse repertoire, and the step-by-step approach to teaching the basics.