

Contributors

Brent Auerbach is Professor of Music Theory at the University of Massachusetts Amherst. His research on formalizing musical motive and extending its applications for analysis is presented in his book, *Musical Motives: A Theory and Method for Analyzing Shape in Music* (Oxford University Press, 2021). Other research interests include the group-mathematic properties of harmonic sequences, theory pedagogy, and the aesthetics of Baroque counterpoint. He has published articles in the *Journal of Music Theory*, *Music Theory Online*, *Theory and Practice*, *Intégral*, and in *The Routledge Companion to Music Theory Pedagogy*, edited by Leigh VanHandel (2020); since 2022 he has served as editor-in-chief of the journal, *Music Theory Online*.

Ben Duinker is a researcher with the McGill-based ACTOR (Analysis Creation and Teaching of Orchestration) Partnership, a multi-institution organization dedicated to the study of timbre and orchestration. He previously held a SSHRC (Social Sciences and Humanities Research Council of Canada) postdoctoral fellowship to study analysis and performance of contemporary music at the University of Toronto. Since receiving his PhD in Theory and MA in Percussion Performance from McGill University, Duinker has published widely on a variety of topics, and performs, records, and tours as a chamber musician. www.benduinker.com

Jennifer Shafer England is Assistant Professor at Montana State University, where she coordinates the theory and aural curricula. Her research interests are mathematics and computation in music and music theory pedagogy. She has published in *Engaging Students* and *The Routledge Companion to Aural Skills Pedagogy* and has presented at various regional and national music theory and music theory pedagogy conferences. She has also served on the editorial board of *Engaging Students*, is on the editorial board for the Resources section of the *Journal of Music Theory Pedagogy*, and is the Program Committee Chair for the 2024 Pedagogy into Practice conference.

Jason Yin Hei Lee is a PhD student in music theory at McGill University and holds degrees from the University of British Columbia and the Chinese University of Hong Kong. His research interests include Cantonese popular music, computational music theory, and the relationship between music and language. He has presented at meetings of the Society for Music Theory and the Royal Musical Association and earned a Best Student Paper award at the 2022 meeting of the College Music Society Northwest Chapter.

Victoria Malawey is Professor of Music at Macalester College, with scholarly interests in voice, song analysis, popular music, gender studies, and pedagogy. Their book, *A Blaze of Light in Every Word: Analyzing the Popular Singing Voice* (Oxford University Press, 2020) won the 2023 Wallace Berry Award given by the Society for Music Theory. Malawey's article, "'Find Out What It Means to Me': Aretha Franklin's Gendered Re-Authoring of Otis Redding's 'Respect'" (*Popular Music*, 2014) won the International Alliance of Women in Music Pauline Alderman Award for best article in feminist music scholarship in 2015. More at victoriamalawey.com.

Rachel E. Mann is Associate Professor of Music Theory at the University of Texas Rio Grande Valley. Her research includes the music and writings of exiled Catalan composer, Roberto Gerhard; music theory pedagogy; and educational technology. She is reader for

the AP Music Theory Exam and content developer for the NSF-funded, part-writing and analysis app, *Harmonia* by Illiac Software. Her work is published by Ashgate, Cambridge Scholars Press, Routledge, the *Journal of Music Theory Pedagogy*, and the British Academy by Oxford University Press.

Joel Phillips is Professor of Music at Westminster Choir College and recipient of Rider University's Distinguished Teaching Award. Phillips is co-author of three textbooks in *The Musician's Guide* series published by W. W. Norton. His compositions are published by G. Schirmer, Inc., Transcontinental Music Publications, GIA, and Mark Foster Music. A long-time member of the *Journal of Music Theory Pedagogy* editorial board, Phillips also served for five years as Chief Faculty Consultant for the AP Music Theory Exam. Phillips is a founding member and past president of the Music Theory Society of the Mid-Atlantic and a former editor of the Society for Music Theory's *Newsletter*.

Notably, Phillips won [Grand Prize in the 2015 Bulwer-Lytton Fiction Contest](#), an international competition that selects from among thousands of entries the supposed opening sentence to the worst of all possible novels.

Katrina Roush is an Assistant Professor of Music Theory at the University of Texas Rio Grande Valley. She has held previous visiting and adjunct teaching positions at Indiana University, Butler University, and Michigan State University. Her research interests include information literacy and its potential uses in music theory pedagogy, collaboration with librarians, issues of equity and diversity among students in the music theory classroom, and the analysis of individual listening experiences. She also helped found *SMT-Pod*, the premier peer-reviewed audio publication for music theory research, where she currently serves as Chair of the Production Team.

Kaylee Therieau is currently a second-year MA student in music theory at the University of British Columbia. She holds a prior degree in music education (BS) from Elon University where she completed an undergraduate thesis project on music theory pedagogy practices in middle and high school ensemble classrooms. Her current research focuses on public music theory in 19th-century women's periodicals.



JOURNAL
OF
MUSIC THEORY
PEDAGOGY

Volume 37 2023

JOURNAL OF MUSIC THEORY PEDAGOGY

David Thurmaier, CO-EDITOR
University of Missouri, Kansas City

Melissa Hoag, REVIEWS EDITOR
Oakland University

Christopher Winders, PRODUCTION

Rebecca Jemian, CO-EDITOR
University of Louisville

Daniel B. Stevens, RESOURCES EDITOR
University of Delaware

David Marvel, WEBSITE EDITOR
Rose State College

Editorial Review Board

David Castro
St. Olaf College

Juan Chattah
University of Miami

John Check
University of Central Missouri

Timothy Chenette
Utah State University

Kevin Clifton
Sam Houston State University

Trevor de Clercq
Middle Tennessee State University

Frank Doyle
Five Towns College

Samantha M. Inman
Stephen F. Austin State University

J. Daniel Jenkins
University of South Carolina

Sarah Marlowe
Eastman School of Music

William Marvin
Eastman School of Music

Greg McCandless
Appalachian State University

Jan Miyake
Oberlin College and Conservatory

Jeremy Orosz
University of Memphis

Joel Phillips
Westminster Choir College of Rider
University

Nancy Rogers
Florida State University

Elizabeth Sayrs
Ohio University

Peter Schubert
McGill University

Jennifer Shafer
University of Delaware

Gordon Sly
Michigan State University

Loretta Terrigno
Eastman School of Music

Go to <https://digitalcollections.lipscomb.edu/jmtp/> for access to the current volume and past issues of the journal, as well as for instructions to contributors.



The Gail Boyd de Stwolinski Center
For Music Theory Pedagogy
Steven G. Laitz, Director
Jennifer Sterling Snodgrass, Assistant Director

Copyright 2023, The Board of Regents, The University of Oklahoma

Contents

Volume 37

FROM THE CO-EDITORS 1

ARTICLES

One Bite at a Time: JENNIFER SHAFER ENGLAND 3
Writing in the Theory Classroom

Rhythmic Theory Pedagogy, Ways of BENJAMIN DUINKER 35
Knowing, and Experiential Learning

Reining in Pitch and Pitch-Class Motives: BRENT AUERBACH 67
Rules for Improving Analytic Outcomes
in the Tonal Theory Classroom

Applications of Information Literacy to KATRINA ROUSH 119
Teaching Music Analysis

REVIEWS

Review of *Open Music Theory Version 2* VICTORIA MALAWAY 153
by Mark Gotham; Kyle Gullings; Chelsey Hamm;
Bryn Hughes; Brian Jarvis; Megan Lavengood;
and John Peterson

Review of *Expanding the Canon:* RACHEL MANN 161
Black Composers in the Music Theory Classroom
edited by Melissa Hoag

Review of *Foundations of Aural Skills* JENNIFER SHAFER ENGLAND 169
by Timothy Chenette,
with contributions by Daniel Stevens

Review of *Hearing Form: Musical Analysis* JOEL PHILLIPS 181
with and without the Score, and
Anthology for Hearing Form: Musical
Analysis with and without the Score
by Matthew Santa

CONFERENCE REVIEW

Report on the 2023 Workshops in Music Theory JASON YIN HEI LEE 187
Pedagogy at the University of British Columbia
KAYLEE THERIEAU

RESOURCE

Model Composition in the Post-Tonal Classroom: DEREK J. MYLER
Three Templates and Sample Realizations ZACHARY BERNSTEIN

CONTRIBUTORS 203

From the Co-editors

We are pleased to present Volume 37 (2023) of *Journal of Music Theory Pedagogy*. This volume features four articles that engage with a variety of pedagogical topics in creative and applicable ways. **Jennifer Shafer England** presents a thorough overview of recent scholarship on writing in the theory classroom, and then builds upon this work with her own contributions of numerous examples of possible assignments, approaches, and ideas. **Benjamin Duinker**'s article addresses rhythm theory pedagogy through an approach that synthesizes performance, analysis, and composition, and includes case studies from a diverse musical repertoire. **Brent Auerbach** offers pedagogical applications of the concepts in his 2021 book about musical motives. **Katrina Roush** demonstrates how techniques of information literacy can be applied to undergraduate analysis classes.

This volume also contains reviews of recent materials and events that you will find to be thoughtful and considered. **Victoria Malawey** reviews the *Open Music Theory* online textbook, **Rachel Mann** reviews the recent essay collection *Expanding the Canon: Black Composers in the Music Theory Classroom*, **Jennifer Shafer England** reviews the new *Foundations of Aural Skills* online textbook, and **Joel Phillips** reviews *Hearing Form: Musical Analysis with and without the Score*. Finally, we also publish a review of the 2023 Workshops in Music Theory Pedagogy at the University of British Columbia. **Note:** To avoid any conflict of interest, Rebecca Jemian served as Reviews Editor for Rachel Mann's review of the book edited by *JMTP*'s Reviews Editor Melissa Hoag.

We are publishing a resource from **Derek Myler** and **Zachary Bernstein** about model composition in the post-tonal classroom.

We are grateful to Reviews Editor (and incoming Co-Editor) Melissa Hoag and Resources Editor Daniel Stevens for their fine work and support in putting this volume together. We also thank our Production Manager Christopher Winders and Web Manager David Marvel for their invaluable assistance. We wish to acknowledge Steve Laitz and Jennifer Snodgrass for their work on behalf of the Gail Boyd de Stwolinski Center and continued support of *JMTP*.

The editorial team is currently accepting material for Volume 38 (2024); instructions for contributors can be found at our [website](#).

We hope you enjoy Volume 37!

David Thurmaier, co-editor (University of Missouri-Kansas City)
Rebecca Jemian, co-editor (University of Louisville)

With this issue, Rebecca Jemian will finish her service as co-editor of the *Journal of Music Theory Pedagogy*. Before we were named as co-editors, I had known of Rebecca and her many contributions to music theory pedagogy, but we had never met in person. Any potential trepidation on my part was dispelled after our first meeting, when we discussed plans and working procedures for the journal. And now, after three years of collaboration and changes, I am grateful to have had Rebecca as a partner. I always appreciate her keen eye for detail, excellent editing skills, willingness to consider different opinions, and her dry sense of humor. I hope she's as pleased with the three volumes we edited together as I am.

All of us at *JMTP* wish Rebecca all the best in her retirement!

—David Thurmaier

One Bite at a Time: Writing in the Theory Classroom

BY JENNIFER SHAFER ENGLAND

Prose writing in the music theory classroom is often a daunting task for both instructors and students. For instructors, the very thought of the heavy grading load associated with writing assignments combined with the difficulty that we know students encounter when writing about music (especially if students' general written communication skills are still developing) can be overwhelming, even if we personally believe that our students would benefit from engaging in written communication about music. For many students, communication in written form is a skill that they are still developing, and writing about music only adds an additional challenge—especially when they are still immersed in learning the music theory concepts that they are now being asked to write about.

This article joins a developing tradition of seeking to develop ways and means to make this skill more manageable, palatable, *and* effective for both students and teachers. I first present a detailed literature review discussing methods and projects used by music theory instructors; these approaches feature a variety of learning outcomes, and projects range from “simple” content summary to analytical papers to metacognitive writing and other applications. These projects vary greatly in size and scope, presenting a wealth of ideas for implementation and providing feedback to students. I then present the design and implementation of two writing assignments I have used in my own classrooms: A series of small-scale analytical papers and a series of weekly journal entries which cover both content/fact-based approaches and reflective writing.



Writing about music, especially through an analytical lens, is correctly viewed as a challenging task. For an undergraduate who may already be struggling to apply music theory concepts in analysis, or even to understand those concepts in the first place, the thought of describing these concepts and their implications in writing can be especially daunting. This article describes the motivation, process, and results of two different implementations of small-scale writing assignments used to introduce students in a freshman-level harmony class to the skill of writing about music. The first implementation asks students to write a series of short analytical papers, and the second asks students to write short weekly journals summarizing and/or reflecting on content and activities from the course. Although the two sets of projects differ significantly in their content and scope, both projects aim to build students' experience with writing about music through a series of small, short, “bite-size”

N.B. The appendices are available at the following [link](#).

projects, seeking to capitalize on the improvement that comes with repeated practice. Some of the challenges in the practice of completing these projects are also described here, as well as revisions and improvements made along the way. After first discussing motivations for these curricular decisions, I will examine other recent publications on the implementation of writing in the music theory classroom, summarize the overall design of each project, discuss grading and feedback procedures, discuss student responses to the projects, and briefly include further improvements or alterations which could be considered. Example assignments for each project are included in the appendices.

Motivations

When I was presented with an opportunity to design a new curriculum for a Theory II course, inclusion of writing assignments was an element I set as a high priority. Two reasons fueled my initial desire to include regular writing assignments in the course: First, during my time as an undergraduate, I had become aware of my own minimal exposure to prose writing during my core theory curriculum, which made writing assignments in upper-level courses (particularly music history courses) much more daunting—simply because I had never attempted the task before. Second, while serving as a graduate teaching associate, I had been quite enthusiastic at the thought of conducting a writing assignment which was already included in the required curriculum for the class. But though I was keenly excited at the design of the project, in the end I was disappointed at the inconsistency of the results.¹

These two past experiences with prose writing in theory classrooms ultimately inspired two key design elements for my own writing assignments: First, quite simply, the act of including these assignments in the first place; daunting as the task may be for instructors *and* students, the only way to acquire communication skills about music is actually to practice communicating about it. In this case, the word “practice” is particularly key, and leads to the second design element: A one-and-done setup for an assignment simply cannot encourage development of skills in the same way that multiple assignments can, so any inclusion of writing assignments had to include assigning multiple assignments over the course of the semester.

If these practical idealisms were insufficient, larger-scale expectations from the college or university level may also support incorporating writing assignments

¹ This is neither a critique of the students in the course, nor of the design of this particular assignment, which in fact inspired much of my own first series of writing projects.

(though not necessarily making it a strict requirement, of course). Departmental-level and university-level learning goals/objectives often reference some form of writing and communication skills for their students, regardless of their major or program. Additionally, NASM standards,² which require that undergraduate students have “the ability to think, speak, and write clearly and effectively,” would also support the inclusion of prose writing assignments in a music theory classroom, though of course the music theory classroom cannot be the only place we teach our students these skills. Though my personal motivations were more than sufficient for my own decision to incorporate writing assignments, the broader sense of benefit to my students supported this decision and my own rationalization of the time that would consequently be removed from other potential curricular elements that I would also wish to include if both my students and I had unlimited time and resources.

However, these somewhat superficial administrative motivations and slightly deeper practical motivations played a lesser role than my own personal goals for my theory students. Too often, especially in first-year courses, I find that students can become focused on the best way to find the “right” answer and following all of the “rules” to get there. For many of my undergraduate students, “analysis” may mean simply labelling all of the cadences, circling non-chord tones, and figuring out Roman numerals. Theory itself is taken as a series of rules and regulations instead of as a way of seeking to better understand, question, and engage with music. Writing assignments offer one way to help students work on developing critical thinking skills and to encourage them to move past the tendency to limit themselves—and the study of music—to (somewhat) objective labels. The ability to write clear and coherent sentences, paragraphs, and papers that report on the “facts” of analysis is a skill that needs to be developed, certainly, but this is also not all that we really want our students to learn. Writing projects are an excellent tool to ask students to think deeper, past the labels and minutiae of detail, so that they can get at the heart of the music itself and engage with it at a much more personal level.

Prose writing in the classroom: Recent ideas and models

Although the literature on prose writing in music theory classrooms has expanded significantly in recent years, many articles focus primarily on a particular methodology

2 In section VIII.A.6.a, the 2021-2022 NASM handbook states that “Normally, students holding a professional undergraduate degree in music are expected to have:

(1) The ability to think, speak, and write clearly and effectively.”

[National Association of Schools of Music, Handbook 2021-2022, 100.](#)

or an innovative way to tackle prose writing assignments. As a result, most articles do not include detailed reviews of other literature, and this means that there currently exists no “one-stop shop” for an instructor who might wish to get a broad sense of the ideas that have been implemented to date. In order to attempt to fill this gap, the literature review presented here is intentionally detailed and, as a result, rather lengthy. If the reader prefers a brief summary of the articles discussed here and the types of projects contained in those articles, they may want to move ahead to the section entitled “Summary and contextualization,” which synthesizes this information into a table format and briefly explains how the projects presented in this paper fit in amongst other innovations and projects proposed in the literature.³

As the (formerly) quintessential prose writing assignment for music theory classes, the traditional analysis paper is a project that, if included in the undergraduate curriculum at all, tends to have a reputation as a source of frustration for both instructor and students.⁴ The students may not see the value of writing the paper and often do not have the tools they need in order to do so successfully. Instructors therefore either must sacrifice significant amounts of in-class and out-of-class time to the projects or be faced with large stacks of low-quality papers to grade. And if these papers are assigned at the end of the term, many students may never read through or otherwise utilize the instructor’s feedback—and thus the time invested by both students and instructor reaps little reward in the long run. Faced with this dilemma, many instructors have considered ways to make this process more successful for all involved. Alternatives that have been used to integrate prose writing in the classroom include revised approaches to high-stakes writing assignments (such as the traditional term paper) which address many of the issues discussed above, as well as other alternatives such as low-stakes writing assignments and metacognitive/reflective assignments.

3 Although the literature review presented here attempts to be fairly comprehensive on the topic of prose writing assignments in music theory curricula, it is not comprehensive with regard to more general “writing across the curriculum”-type literature or even music curriculum that is not strictly music theory. One project is included from the arena of music history pedagogy, for instance, but the representation is by no means comprehensive.

4 This reputation (from the instructor point of view, at least) is well documented in the music theory literature on this topic, and student difficulties (as reflected in their submitted assignments) are also frequently discussed (see, for example, Rogers (2018, 299), Rogers (2017, 93), and Inman (2017, 43); Inman also cites McGee (1993, 87) on this topic).

High(er)-stakes assignments

Approaches to high-stakes assignments vary, but generally suggest that instructors are keen to consider ways to increase student success and engagement with these analytical projects.⁵ For instance, Robin Attas has created a semester-long “miniconference” assignment as the culmination of the theory core. Although this assignment contains a written paper as part of the project, the paper itself is a conversion of a previous in-class presentation.⁶ Attas utilizes a scaffolded approach across the entire theory core to help students build writing skills, and also breaks down the high-stakes miniconference assignment as a series of lower-stakes assignments spread throughout the semester. These smaller assignments included guided analysis, peer discussion, individual meetings, creation of thesis statements and presentation outlines, and a draft of an abstract. In the musicology arena, Scott Strovas similarly substitutes other assignments for the traditional paper, such as a set of program notes and a letter to the editor of their textbook/anthology with a recommendation for a score that should be included.⁷ Anna Ferenc has created analogous projects for her sophomore-level theory course, with an emphasis on asking the students to act as “disciplinary practitioners” and thus giving the students the opportunity to engage with their theory courses in a sort of “real life” way, similar to the engagement that they have (somewhat more naturally) in their ensemble and studio courses.⁸

Other authors utilize a more “traditional” analysis paper but have engineered scaffolded approaches to increase student success. In an upper-level form course, Samantha Inman uses a short essay with a detailed prompt on a pre-selected piece to help students learn techniques of analytical writing before assigning a longer essay on a student-selected piece and with student-selected research questions.⁹ Inman further breaks down each of these essays into smaller sub-tasks. In the assignments that lead up to each essay, Inman guides her students through the process of laying an analytical foundation, considering or developing questions that will lead to strong analytical

5 For the purposes of this discussion, I use the terms “high-stakes” and “low-stakes” somewhat loosely. Only the instructor in each course can decide the level of high/low in terms of the weight of the assignment in a student’s grade, but it is reasonable to generally assume that any lengthy final product and/or multi-step process to achieve the final product will be weighted accordingly in the grading scheme, making these types of assignments “high-stakes.”

6 Attas (2016, 5–22).

7 Strovas (2014).

8 Ferenc (2015).

9 Inman (2017, 44).

interpretations, and working through drafts and revisions.¹⁰ Inman also advocates for providing students with good models of analytic writing¹¹ (something Attas does as well¹²) and she provides detailed feedback on the shorter essay. When students move on to the final longer paper, they will already have the process of the previous essay in their toolbox as well as the extensive feedback from their previous work.

Lynne Rogers utilizes a mix of low-stakes and high(er)-stakes writing through a series of assignments spread throughout the theory core, building from 1-2 sentences in second-semester courses to 1-3 pages in the second year.¹³ Similar to both Attas and Inman, Rogers advocates for making sure that students have a solid analytical foundation as a preparatory step before they begin writing, and utilizes in-class analysis activities to assist students in this endeavor for projects that are reasonable in scope.¹⁴ Rogers notes that the essays submitted after this type of in-class preparation typically feature far fewer analytical errors than an essay assigned without this type of preparation, but that student responses still vary as they wrestle with the questions in the given prompt.¹⁵ For larger-scale projects, Rogers also has a tested method to help students develop solid analytical foundations and ask good questions, which then serve as a launching point for an essay.¹⁶ This method is particularly appropriate for upper-level or master's-level courses.¹⁷ Similar to Inman, Rogers coaches her students on the finer points of analytic writing and also provides models; she also advocates for writing to a specific audience.¹⁸

Gordon Sly's approach to encouraging students to develop a particular point of view by contextualizing their analysis through a particular musical "agent" (defined as "the capacity of some musical element or idea to influence the course of events") was also partially developed as a method to help students "develop a 'way in' to a

10 Inman (2017, 45–51).

11 Inman (2017, 46–48).

12 Attas (2016, 13).

13 Rogers (2018, 302).

14 Rogers (2018, 302–3).

15 Rogers (2018, 303).

16 Rogers (2017, 94–112).

17 Since this article is not as directly focused on prose writing assignments, it is not included in the summary table.

18 Rogers (2018, 307–8).

piece that is both manageable and likely to provide a measure of success.”¹⁹ After establishing a specific musical agent—for example, the ambiguity of function of the F2-A5 dyad in Schumann’s “Walzer,” *Albumblätter*, Op. 124, No. 4—the remainder of the analysis then views this agent as the guiding force behind the music, and the student’s task is to focus on creating a convincing case for this analytical lens.²⁰ In order to balance helping students to choose a musical agent that will yield success without being overly prescriptive in this process, Sly utilizes class discussion in small groups to evaluate and refine ideas for possible musical agents, and then asks students to complete the rest of the assignment on their own. Students write a one-paragraph description of the piece that acts as an overall summary of the piece’s form and “characteristic features,” a 1-2 sentence summary describing their agent for their point of view, and complete the assignment with a full written analysis.²¹ Sly notes that the length of the actual assignments could vary significantly and explains that this allows this type of project to be scaled to classes of various sizes.²² He does not specify which courses he has used this method in, but the two examples given in the article suggest sophomore or upper-level courses.

Angela Ripley’s post-tonal postcard assignments also strike a middle ground between high-stakes and low-stakes writing, and they also highlight audience as an important part of the writing process.²³ Because the assignments are characterized as short, informal “letters” to a specific person, students must be both succinct and creative in their writing. These assignments employ elements of Self-Determination Theory to give students choice in completion of the assignments and also within the assignments themselves.²⁴ Ripley’s approach does not necessarily involve as much in-class preparation as do Attas, Inman, and Rogers, but the size (and complexity) of the project is similarly small in scale and is relative to the size of the essay that students are creating.

Though written primarily for students rather than for instructors, *Writing in Music: A Brief Guide* by Lynne Rogers, Karen Bottge, and Sara Haefeli is an invaluable resource with a wealth of information and advice for students who are approaching

¹⁹ Sly (2005, 52).

²⁰ Sly (2005, 61).

²¹ Sly (2005, 53).

²² Sly (2005, 63).

²³ Ripley (2020, 199–226).

²⁴ Ripley (2020, 201).

many different types of prose writing work.²⁵ Instructors will undoubtedly find this useful as a resource to recommend to their students, and may also find inspiration in it for ways to frame writing assignments for their students.²⁶

Low(er)-stakes assignments

High-stakes writing assignments have taken on a variety of different forms and have also been cast as a series of lower-stakes assignments which build to the larger assignment. However, true low-stakes writing assignments may serve another purpose entirely. Peter Elbow and Mary Deane Sorcinelli state that this type of assignment is intended to “increase how much students think about, understand, and learn what we teach.”²⁷ Elbow and Sorcinelli advocate for frequent use of low-stakes writing,²⁸ noting that it not only helps students to focus on course content and sort through finding “their own language,” but also helps prepare students for high-stakes writing, as well as assisting us in knowing how the students are grappling with the material—what they do or do not understand, and how they feel about what they are trying to understand.²⁹ Writing specifically about undergraduate music theory classes, Deron L. McGee discussed some similar motivations for use of writing in undergraduate theory courses, specifically links to cognitive development and development of critical thinking skills.³⁰ McGee also supports use of smaller-scale projects, listing a total of five different types of writing assignments and explaining how small-scale assignments can lead to larger-scale ones.

Jan Miyake’s approach to low-stakes writing focuses on writing regularly, with concomitant adjustments to assignment type and grading methods to make it manageable for both instructor and student. She utilizes a +/P/NP rubric, which allows better focus on the content and ideas rather than getting bogged down in grammar and mechanics. This method also opens up the possibility of re-dos and motivates students to opt to revise their work. Working in a cumulative Google doc (or

25 Rogers, Bottge, Haefeli (2020).

26 Since this book is written to students and therefore is not as directly focused on the writing assignments themselves, but rather how to approach an existing writing assignment as a student, it is not included in the summary table below.

27 Elbow and Sorcinelli (2006, 214).

28 Rogers (2018, 301) also references this suggestion, and it appears to be part of her motivation to use frequent but shorter essays.

29 Elbow and Sorcinelli (2006, 215).

30 McGee (1993, 85–104).

something similar) allows for an ongoing conversation between student and instructor throughout the semester. Miyake uses a variety of prompts, ranging from summaries of content to more open-ended questions, and she also suggests allowing students to ask and answer their own questions.³¹

Sara Bakker and Tim Chenette similarly suggest that instructors should carefully consider the purpose of the writing assignment and adjust the assignment accordingly. They suggest that effective communication, student engagement, and critical thinking are all separable goals/benefits of writing, and, because they are separable, we can tailor writing assignments to focus specifically on only one of these goals. Assignments can be scaled to occur in class or in nontraditional settings (such as Twitter), or can be conceived of as larger projects. Clear definition of the assignment goals allows students to focus their efforts and also encourages instructors to provide better and more efficient feedback, even with larger or more open-ended assignments.³²

Jennifer Salamone's approach to low-stakes writing utilizes focused freewriting to support classroom discourse. Students are asked to listen to specific pieces outside of class and write free responses to what they are hearing. This type of focused listening (sometimes with a prompt/question to address for part of the exercise) allows students to engage with the music in a more intuitive and visceral way. It gives students "agency over their classroom learning" in the class discussion which follows, and creates a more student-centered curriculum by drawing out more student voices.³³

Self-reflection and metacognition assignments

Clearly, the content and intention of writing assignments in the music theory classroom can serve a variety of purposes. Although some of the previous methods may be used for self-reflective purposes at times (especially some of the low-stakes approaches), there is also an argument to be made that regular use of self-reflection, or even metacognitive reflection, can be invaluable to a student's learning experience. For example, Davidson, Scripp, and Fletcher ask students in their entry-level aural skills course to read and respond to "articles on cognitive development, skill acquisition, and reading theory."³⁴ The students reflect on the assigned readings and also reflect on their own learning and how they are acquiring the new skills learned in the course.

³¹ Miyake (2014).

³² Bakker and Chenette (2014).

³³ Salamone (2018).

³⁴ Davidson, Scripp, and Fletcher (1995, 2).

In a recent article, Anna Ferenc's case for metacognition in the music theory classroom³⁵ argues that metacognition is the missing step that should be included in the theory curriculum in order to guide students from basic musicianship skills to the music theory that is truly meaningful (as identified by Rogers³⁶). She explains principles of metacognition and metacognitive reflection and provides sample prompts and example responses. Elsewhere Ferenc treats this topic in more detail, explaining that metacognition requires not only "knowledge of cognition" but also "monitoring and regulating such knowledge."³⁷ The element of "regulation" is one that is particularly key for classroom applications, since metacognition encourages self-regulatory behavior. This type of behavior has been shown to help with effective learning and with the all-important ability to transfer learned knowledge to other contexts; self-regulation has also been linked to intrinsic motivations.³⁸ Reflection and metacognition overlap in definition and sometimes in practice, but Ferenc clarifies that metacognition means "assessing what you know as well as how and why you know it."³⁹ Although reflection can take place in a number of different ways, reflective writing engages students more actively in the learning process and encourages them to connect new knowledge to previously learned contexts.⁴⁰ In short, "purposeful reflective writing has the potential to be a very useful tool for music theory instruction, because learners are required to continuously integrate new disciplinary information into previous knowledge that may not have been adequately retained if it did not initially undergo deep processing."⁴¹ The inclusion of *how/why* in reflective writing rather than simply *what* differentiates these two principles, and is a required element of metacognition. This transition from self-reflection to metacognition can be assisted by well-constructed instructor prompts.⁴²

35 Ferenc (2017).

36 Rogers (2004). Ferenc (2017) cites excerpts from p. 4 and p. 7 of Rogers (2004).

37 Ferenc (2016, 27).

38 Ferenc (2016, 30–31).

39 Ferenc (2016, 30).

40 Although not promoting reflective writing as the sole method by which connections are made, the chapters on "Connecting" in *Small Teaching* (James M. Lang) and "Making Connections" in *Small Teaching Online* (Flower Darby and James M. Lang) make an excellent case for why helping students to build these networks of connections is so crucial.

41 Ferenc (2016, 34).

42 Ferenc (2016, 35).

Summary and contextualization

The articles presented in the literature review to this point represent a wealth of ideas and motivations for inclusion of prose writing in the theory classroom. For the convenience of the reader (or for the reader who prefers a shorter summative format), all of the main articles discussed above are summarized in Table 1.⁴³ Articles are included in the original order in which they were presented, moving from larger, higher-stakes approaches to lower-stakes approaches and finally to self-reflective and metacognitive approaches.

As demonstrated by the wealth of articles and approaches to writing presented in this literature review, re-casting prose writing in the theory classroom in an attempt to make it more meaningful to our students, more reasonable for us as instructors, and more rewarding for everyone involved is a worthwhile endeavor. The benefits of inclusion of writing, and the flexibility with which we can approach writing assignments, makes it more plausible to be able to design prose writing assignments which would benefit any curriculum. The rest of this paper details two writing projects that I have used in second-semester theory courses; there are some similarities to the projects described in the writings referenced above, but the projects are not identical.⁴⁴ Both projects tend towards the low-stakes side of the spectrum, with the intention of keeping both instructor and student workload lighter. These two projects are included in the fourth section of the table and are analyzed with the same categories as the other projects in order to demonstrate both the similarities and differences to previous literature on the topic.

43 The categories in the table correspond to some of the more distinguishing features of the group of articles as a whole. The table is not intended to be fully descriptive of all content of these articles, but rather act as a large-scale summary, and one that can offer comparison/contrast to other articles. Blank columns indicate that the column was not directly addressed in the article or was less applicable to the article.

44 In my initial attempts to design both projects, the *Engaging Students* articles by Miyake and Bakker/Chenette were particularly helpful when considering prompts and grading systems.

Section 1: High(er)-stakes assignments									
Author	Project "Size"	Structure/content	Repertoire selected by...	Primarily in-class or out-of-class	Guided analysis	Specific/variable audience	Scaffolding	Other "aids" or unique design features	Special grading procedures
Atlas 2016	Large	"Mini-conference" presentation, abstract, paper	Instructor (4 pre-selected pieces)	Both	Yes		Yes (through the entire semester, and previous assignments within the core)	Peer and draft feedback, models of both presenting and writing	
Strovas 2014 (musicology)	Large	Program notes, letter to anthology editor	Student			Yes	Yes (series of "pre-writing assignments")	Feedback provided on at least some portions of the project(s)	
Ferenc 2015	Large	"simulated professional activity," e.g., essay (with examples) on a specific topic for inclusion in a textbook	Student (topic selected by instructor)	Out-of-class		Yes	Yes, through author-editor scenario (draft, feedback, discussion & collaboration)	Extensive peer review and collaboration (author/editor roles in pairs)	
Inman 2017	Large	Two essays: Short essay, detailed prompt provided; large essay, student-designed research question	Instructor (short essay), student (long essay)	Both	Yes		Yes; both assignments are scaffolded as a series of 5 steps.	Marvin 2005 used as an introduction, model writing, peer and draft feedback, individual consultations.	3 areas (analytic claims, mechanics/style, overall organization). Each area given different priority/methods of feedback.
Rogers 2018	Variable (expand in length later in the core)	Analytic essays (varying length/complexity) addressing specific questions/issues in a selected piece/excerpt	Instructor	Both	Yes	Yes	Yes (through in-class preparation and carefully designed prompts/questions)	Coaching on "essential elements" of an essay; provide examples or models	Grading rubric and advice for effective use of instructor comments
Sly 2005	Variable	Analytic essays describing music from the viewpoint of an agent	Instructor	Both			Yes; in-class discussions of agents	Encourages development of multiple viewpoints	
Ripley 2020	Medium	"Postcard": Short, informal essay in the form of a letter	Variable (usually instructor)	Out-of-class	Yes (specific analytical lens/question)	Yes		Student selection of assignments (3 out of 4)	Grading rubric (criteria provided to students in advance)

Table 1
Summary of literature review.

Section 2: Low(er)-stakes assignments									
Author	Project "size"	Structure/content	Repertoire selected by...	Primarily in-class or out-of-class	Guided analysis	Specific/variable audience	Scaffolding	Other "aids" or unique design features	Special grading procedures
McGee 1993	Variable	Wide variety of projects: freewriting/reflection, summary/abstract, compare/contrast excerpts, longer analytical paper, etc.	Variable	Out-of-class	Variable	Yes (varies)	Yes, particularly for larger projects; also across the course from smaller/well-defined projects & questions to larger and less defined	Writing models, prompts/questions	Use of peer review and limited feedback (mark specific types of errors), and use scaffolded parts to reduce final work
Miyake 2014	Small	Weekly journals (responding to prompts)	Instructor (primarily)	Out-of-class	Yes, (specific analytical lens/question, could be either instructor or student-designed)			Use of methods such as Google doc allow for dynamic discussion throughout the semester	+ /P/ NP rubric: focus on content over mechanics, and encourage revision
Bakker & Chenette 2014	Variable	Variable; authors advocate for consideration of varied assignment types	Variable	Either		Variable		Emphasize flexibility in format; focus on purpose of assignment, which can often be achieved in multiple formats	State goal of assignment in advance; self-review or peer-review; encourage creativity via completion grading, creative prompts, etc.
Salamone 2018	Small	Freewriting on a specific excerpt/example	Instructor	Out-of-class	Variable (may provide a more focused/specific prompt in addition to free reflection)				Freewriting used as pre-class homework; graded purely on completion.

Section 3: Self-reflection and metacognition assignments									
Author	Project "size"	Structure/content	Repertoire selected by...	Primarily in-class or out-of-class	Guided analysis	Specific/ variable audience	Scaffolding	Other "aids" or unique design features	Special grading procedures
Davidson, Scripp, Fletcher 1995	Variable	Variable: questionnaires, reflective journals, reading reflections	Readings selected by instructor (primarily)	Out-of-class (with in-class discussion)					
Ferenc 2017	Small	Metacognitive, reflective responses to prompts	Prompts provided by instructor	Out-of-class					
Ferenc 2016	Small	Reflective essays responding to provided prompts	Prompts provided by instructor	Out-of-class			Carefully structured prompts to place focus on learning experience rather than content.	Essay format ensures students present thoughts coherently.	Rubric streamlines grading and communicates value system
Section 4: Projects presented in this paper									
	Project "size"	Structure/content	Repertoire selected by...	Primarily in-class or out-of-class	Guided analysis	Specific/ variable audience	Scaffolding	Other "aids" or unique design features	Special grading procedures
Project 1	Medium	Analytical papers in response to prompts	Instructor	Both	Yes		In-class analysis (guided by instructor), prompts to guide writing, peer feedback and revisions		Rubric using standards-based grading; submission via Google docs
Project 2	Small	Journals (mixture of different content and approaches)	Instructor (multiple topics provided each week)	Out-of-class				Student selection of prompts and some choice of which journals to complete	P/NP, with opportunity for revision

Project #1: Short analytical papers

Overview

My first project, a series of short analytical papers, was designed to give second-semester students a relatively safe environment for their first attempts at analytical writing, and to particularly emphasize *practicing* this skill via multiple assignments. This structure situates this series of projects between the most typical low-stakes and high-stakes designs. Low-stakes designs (such as Miyake 2014) often feature use of multiple or frequent assignments, but are not always as focused on formal or analytical writing. High-stakes designs (such as Inman 2017 and Rogers 2018) are often focused on more formal writing, but are most often designed to scale towards a larger project (whether within a single semester or across several semesters). My project captures elements of both approaches by utilizing similar assignments multiple times within a single semester, allowing students to practice their analytical writing in an environment that grows increasingly familiar. This project also operates slightly earlier in the theory core than most analysis-focused projects.⁴⁵ The design of repeated practice would lead well to more advanced projects in upper-level courses.

Design

3–4 writing assignments are assigned across a typical semester. Each writing assignment is preceded by an “analysis day,” a single 50-minute class period devoted to guided analysis work. Students work individually and in groups to complete specified analysis tasks, which provide them with the necessary information to respond to writing prompts for a short paper (usually 2 pages), due the following week.⁴⁶ This scaffolded design allows students to gain experience writing about music in an environment that guides the content of their papers through carefully crafted prompts.⁴⁷ The prompts are specifically created to encourage critical thinking and engagement with issues of performance and musically informed decision-making (thinking back to the learning goals stated at the outset of this article). Thus, the act

⁴⁵ Rogers (2018) includes short 1-2 sentence responses in second-semester theory, and builds to 1-3 page essays in the third semester. Attas uses assignments throughout the core, but they culminate in the fourth semester, and Inman (2017) operates in an upper-level form class.

⁴⁶ Word-count requirements could easily be substituted for number-of-pages requirements.

⁴⁷ The prompts can be used to also shorten/lengthen the paper. I usually ask students to write a two-page (minimum) paper as a response to two prompts. However, students could be asked to only respond to one prompt (resulting in a one-page paper) on their first assignment. (And, of course, other options/lengths are possible.)

of writing becomes the primary task, since content is already learned.

This design allows me to adjust expectations relative to the material accomplished in class, or to provide altered prompts or additional materials. For instance, I have sometimes provided a “key” of sorts for some analysis components if I saw that some groups had struggled to finish all components of the analysis within the constraints of the class period. In spite of the fact that I want all groups to complete the analysis work independently, the design of the project requires that they have all of the “facts” at their fingertips when working on the writing portion. Once that initial preparatory class period is complete, it is more important that students work from “correct” analytical information so that their papers are not weighed down by weak analysis work.

Before beginning the first project, students study example papers and grade them using the rubric which is later used to grade their work. With their own papers, students receive peer feedback (discussed in more detail below) before their final submission.⁴⁸ They are invited to edit their papers after receiving a grade and feedback, which decreases concerns over assessment and encourages focus on the final product. Additionally, students work on writing in small but frequent assignments, allowing them the chance to learn from feedback and improve their skills for future papers.⁴⁹

Writing preparation and peer feedback

In addition to making sure students have all of the necessary “facts” at their fingertips by working the analysis together in class, I also use a set of preparatory materials to help students approach their first writing assignment with clear expectations. Students are provided with a rubric (Example 1) and a series of instructor-written mock papers (Appendix 1) to grade. This set of papers allows students to both see and evaluate models of prose analytical writing before attempting it themselves. Each mock paper was specifically designed to model particular types of errors that I had seen in previous student writing (such as the infamous “play-by-play” paper). Students found this activity quite engaging, and their criticisms of the weak points of the papers were excellent. It also provided an opportunity to criticize common weaknesses in each area of the rubric. Since the students knew that the papers were only mock papers, everyone was equally ready to criticize them openly and this allowed a deep discussion to evolve in a relatively short amount of class time.

48 Both the mock paper grading assignment and the peer review process were additions that I made after an initial year of using this project. Because they were not part of the original design, I was able to see how these two additions increased the students’ success with the project as a whole.

49 Although arrived at independently, this notion of a short-but-frequent instead of “eggs in one basket” approach is very similar to that advocated for in Rogers (2018).

	4	3	2	1
Mechanics and style	Paper “readability” is very high: Very few or no errors with respect to grammar, spelling, punctuation, syntax, etc. All guidelines are followed (margins, font, spacing, length, etc.).	Occasional errors with respect to syntax, grammar, spelling, etc. All guidelines are followed (margins, font, spacing, length, etc.).	Numerous errors with respect to syntax, grammar, spelling, etc. All guidelines are followed (margins, font, spacing, length, etc.).	Frequent errors in syntax, grammar, spelling, punctuation, etc. Paper is difficult to read due to run-on sentences, incomplete sentences and fragments, etc.
Accuracy of information	Information conveyed is complete, accurate, and forms a coherent picture of the work in question. Avoids a play-by-play explanation as much as possible. Refers to correct keys, measure numbers, and uses language and terms learned in class.	Minor errors which do not significantly detract from the overall value of the paper in conveying information about the piece. Minimal use of language and terms used in class.	Approximately 50% of information conveyed is accurate. Avoids or misuses language and terms used in class.	Significant errors and/or incorrect information. Avoids or misuses language and terms used in class.
Completeness/ thoroughness of response to prompts or questions	Writing provides a thorough, detailed, and comprehensive response to all elements of the provided prompts or questions, with creative thinking and innovative ways of approaching the question. Responses are thoughtful and detailed, considering all implications of the prompts or questions, and reflect critical thinking and the ability to clearly articulate information about music in a written form. Any “tangential” information that is included has been clearly related to the topic at hand.	Responses address prompts or questions completely but lack innovation in the approach to the question or response, and do not consider all implications in detail. Critical thinking is still evident, although to a slightly lesser extent.	Minor details are omitted from the responses, and additional implications are overlooked or omitted. Responses are not sufficiently detailed and do not articulate a clear response. “Tangential” information is included which is not then tied to the topic at hand.	Significant details are omitted from the responses, or the responses are incomplete or not quite coherent. A significant amount of “tangential” or irrelevant information is included.

Example 1

Grading rubric (used for mock papers and for students’ papers also).

In addition, students were provided with a page of “Writing Guidelines” which discussed “dos and don’ts” of very basic writing mechanics and a few guidelines specific to writing about music (such as correct ways to reference a specific measure). Although the mock paper assignment and writing guidelines certainly did not eliminate poor writing mechanics and other basic errors, the quality of the papers did improve noticeably on these points when I employed these preparatory steps, resulting in significantly decreased grading time.⁵⁰

Peer review also helps students strengthen their papers before their final submission. Students are required to submit their papers to their peers one week before they are due to the instructor. They then have a few days to give each other

50 For the two years that I used this project, I had approximately 55 students (total) in the course each year, which means that any noticeable decrease in grading time added up significantly across the course as a whole.

feedback (i.e., submit paper to peers on a Wednesday, peer review due by Saturday, final version due to me by the following Wednesday). I assign students into groups for each peer review period. These group assignments are more-or-less random for the first set of reviews, and then strategically structured to mix students of various strengths and weaknesses on the subsequent assignments. Students were given the guidelines shown in Example 2 to complete their peer reviews.

Peer Review Guidelines

The feedback that you give your peers will largely determine your Peer Review outcome for each unit. In general I will look for the following things:

1. 3-5 numbered suggestions for improvement: I do want you to praise your peers and give them positive feedback, but you need to additionally encourage and inspire them to produce even better work. As such, you should give them three to five suggestions on how they could improve their projects. "High fives," flattery, and also overly negative comments do not count as a suggestion for improvement; your peer review work should be constructive criticism.
2. Please do not go through and edit your peers' work in sentence-by-sentence detail. Such detailed editing should be done by the author before the original submission, and the "editing" time that this would require is beyond the scope of the peer review process. If you find that there are pervasive errors (especially with respect to grammar, structure, etc.), this can be a comment that you make, supported with 1-2 specific examples.
3. Specificity: Do not just discuss vague ideas in relation to your peers' work. Give them specific suggestions about specific moments of their compositions/writing (e.g. "you haven't fully addressed this question from the prompt", "the 2nd sentence in your 3rd paragraph is awkward to read-I think it's missing a word").
4. Appropriate vocabulary: We are developing ways to discuss musical phenomena in this course, and I would like to see you use those terms when applicable.
5. **The comments you give and receive through the Canvas Discussion forum should be the only aspect of the projects that you discuss among your peers or with anyone else.** If you have additional questions, please contact me. Since it is time-dependent, peer feedback will not be assessed if it is more than 24 hours late. **Similarly, if you do not submit drafts and comments to your group by the due dates you will receive a 0 on your Peer Review outcome for the unit.**

Example 2

Peer review guidelines provided to students.⁵¹

Although this process was not without its flaws (students turning in assignments for peer review late or not at all, submitting peer feedback late, etc.), the overall result was worthwhile. On an anonymous in-class survey, students reported that

⁵¹ These guidelines were developed from a model used by my colleague, Phil Duker.

they generally found the peer feedback useful when the process was completed by everyone.⁵² Students even commented that they felt less stressed when submitting their papers to me when it had already been read by other students, and that they benefited from reading their peers' works and being exposed to different perspectives. Not surprisingly (and not unreasonably), some students noted that they had not been given exceptionally good feedback by their peers, and thus were less positive about the process. But even in these cases, students were not opposed to the process itself, only to the feedback they received.

From an instructor standpoint, even though the implementation of peer feedback needed improvement, the results in the students' papers were worth the extra effort (when compared to previous projects which did not include peer feedback). Grading time was significantly reduced, especially since I could review what their peers had advised and see what changes had been made (using the Google doc history review). An additional benefit of using Google docs for this project is that the ability to review the history of the document helps alleviate at least some concerns about plagiarism, since the instructor can see what changes were made, by whom, and when. If using an LMS that permits grading by "groups," instructors can also easily grade papers in order of the peer review groups, which would help to highlight any marked similarities between papers that I knew were "shared" with their peers.⁵³ The quality of papers in general was better from the outset, especially with respect to basic writing mechanics (possibly because students wanted to produce good work for their peers to read), and when students took their peers' advice this usually improved their results as well. These improvements were also reflected in their grades, with peer-reviewed assignments tending to average 1/3 of a letter grade higher than those with no peer review requirement.⁵⁴

⁵² In order to garner as much information as I could about this process when it was first implemented, I asked the following question on an in-class evaluation: "Did you find the peer review process on writing assignments useful? Why or why not?"

⁵³ I have not experienced issues with plagiarism in these projects. Though I sincerely believe that my students tended to be invested in their learning experience enough to do their own work, I also think that the shared "facts" of the analysis that they already had at hand also helped to discourage feeling the need to copy from someone else. Additionally, since students selected from a variety of prompts, they rarely wrote about exactly the same content in their papers.

⁵⁴ Since I used four assignments when I taught the course without peer review and only three after I added the peer review, it is difficult to draw a fair comparison for all assignments. The letter grade improvement cited above is for those assignments that correlated most closely from one year to the next.

Student responses⁵⁵

Student feedback on this project indicates that although the assignments were difficult to do initially, they became easier with practice, and that they “were a great learning experience and put me out of my comfort zone, which [was] really appreciated.” In reference to analysis assignments/analysis days, students commented that although they were “longer and difficult, [they] also were beneficial in synthesizing many different topics we had covered into one thing” and that “the application to real life helped me understand the topics we were learning more.” The first time this project was taught, a few students indicated that edits such as a rough draft review or a workshop on writing an analytical paper would be helpful. Since these types of suggestions did not reappear the second time I used this project, the peer review structure and the mock paper assignment seem to have addressed these concerns.

Grading

Use of the rubric presented in Example 1 has been a powerful tool to decrease grading time while still providing good feedback to students. The three categories on the rubric serve to draw attention to three areas which are all necessary to create good analytic writing, and although I may place more intrinsic value on the completeness/thoroughness category—and the critical thinking which is inherent in my conception of this category, as evidenced by my internal descriptions within the rubric—the rubric places equal value on all three categories. Thus, students who are skilled at writing mechanics but are struggling to attain good levels of critical thinking are going to fare just as well as students who can think critically and creatively even if they struggle to follow conventions of good writing. And, more importantly, all students will see which categories they are doing well in, and which areas need improvement. Additionally, the “accuracy” category allows me to assess whether or not students actually synthesized the information from their in-class analysis work; even when students are assisted in finding the “answers” in advance, they are not always able to transform that information successfully in prose. In these cases, students usually learn to correct these types of mistakes quite quickly for future assignments.

As others have suggested, I prefer to use Google docs or something similar in order to facilitate feedback. This allows multiple types of feedback to be employed, depending on the content of the paper and the student’s skill level. For instance, if students are making significant errors with writing mechanics, I will likely comment on some of the

⁵⁵ These comments are freely made by students on end-of-term evaluations, without a specific prompt on an evaluation to ask about the analysis or writing assignments.

early errors and then simply highlight additional errors (or the sentences containing additional errors). This means that students will receive coaching on the initial errors but will have to find the remaining errors on their own. Comments can be made and specifically linked to a particular sentence or block of text; alternatively, an edit “suggestion” can be made in order to assist with wording or sentence structure on a local level. Comments on the Google docs can be particularly useful, as they can serve as a way to engage the student in a “conversation” if further clarification is needed.

Further revisions

In future, I would like to explore a model where students are required to revise one or more of their papers. Ideally, this would be in a setting where students have freedom to choose which paper to revise but are encouraged or incentivized to choose to revise their first paper.⁵⁶ I also plan to include a self-reflective statement discussing the revisions and grade the resubmission primarily on their own discussion of their writing. As will be discussed shortly with Project #2, I find the value in self-assessment and self-reflection to be significant and would like to incorporate that into these projects.

I also plan to explore ways to achieve better peer review. One possibility would be to keep students in the same groups throughout the semester and ask them to set their own standards for acceptable peer review content. This design would allow them to, in a sense, “review” each other’s peer review work once or twice per semester. Alternatively, implementing anonymous peer review through an online learning management system could help students to more objectively view their peers’ work and make suggestions accordingly. Coordination with the writing center on campus for tutoring and other resources could also be valuable.

Since the intention of the short-but-frequent design component was to help students engage with writing over the course of the semester, instead of in one or two large projects, I am also interested in exploring the idea of making assignments shorter (1 page) but having the assignments be more frequent (bi-weekly or even weekly). This would necessarily require revisions to the feedback and grading systems, but it would also help students develop more fluent and natural writing skills due to frequent practice. Additionally, if writing assignments were regularly scheduled into the course, students would be less likely to feel (correctly or incorrectly) that their

⁵⁶ Typically, only a few students take advantage of the option to revise and resubmit a paper. By requiring revision on at least one paper, I would be able to ensure that students read and understand feedback, which is likely to increase their success on future papers.

homework load significantly increased in the weeks when papers were due (since the schedule would be more predictable from the student perspective).

This short-but-frequent design would also allow greater flexibility in the content of the assignments. Students could be provided with “extra” assignments, allowing them to choose which assignments to complete based on their interest in the topic/piece being studied *or* based on the rhythms of their own schedule for the semester. For instance, out of twelve assignments for the semester, the student might only be required to complete any eight assignments of their choice. This model necessarily becomes slightly more complicated when it comes to peer review considerations, but use of a learning management system could help to mediate these difficulties.

Designing small-scale assignments that allow students to select any repertoire of their choice is another key goal for the future. In addition to increasing relevance (and, consequently, engagement) for students, this type of design would also encourage better diversity and inclusion of wider repertoire into the classroom, especially as the peer review process would allow students to learn from one another’s repertoire selections. One drawback, practically speaking, is that it necessarily becomes more complicated for assessment and even for the preparatory analysis stages assuming a moderate-to-large class size.⁵⁷ However, a blended approach could help to balance these two issues: Students might first work through a couple of papers on instructor-selected examples to learn the process and receive feedback on their writing, and then be asked to complete a final analysis and short paper on an individually selected piece. Alternatively, a curated list of pre-approved pieces could help to mediate between the two extremes of instructor-selected vs. student-selected repertoire while still prioritizing relevance and engagement—particularly if the curated list were to be drawn from current ensemble repertoire that the students were performing at the time, or a similar body of work that would allow students to be engaging with music that they were currently learning or performing.

Teaching materials

Six sample assignments (both the preparatory analysis lessons and the actual writing prompts) are included as Appendix 2, and the rubric used for assessment is available as Appendix 1.

⁵⁷ As noted above, I originally assigned these projects to classes with about 55 students in total, which made grading of multiple writing assignments throughout the semester somewhat challenging even when students were all analyzing and writing about the same pieces. Smaller class sizes will not exactly make the task easy, but would make it more practical to handle individualized assignments.

Project #2: Weekly journals

Overview

The design of my second project, a series of short weekly journals, was motivated by a desire to increase the “frequency” in the “frequent-but-short” design element, and to *also* include regular opportunities for students to engage in critical thinking, self-reflection, and metacognitive activities.⁵⁸ Placing this series of assignments in a second-semester theory course should help to target a time in their college career where students are tending to become more independent and self-regulated in their learning. Additionally, in traditional music theory curricula, the second semester is often the point where students who came in with some theory background will begin encountering more and more material that is new to them. The combination of these two elements provides an excellent motivation to include a project that features a “frequent-but-short” design and focuses on helping students to synthesize and reflect on their learning, building their networks of connected knowledge.

This project falls squarely on the low-stakes side of the writing spectrum, and also in the “small” size category. Similar to project #1, the journal project also takes somewhat of a middle ground in its components, relative to other prior designs. Reflective prompts are included alongside content-based questions, rather than operating primarily in one area or the other, as the “small” projects cited above tend to do. The writing style is informal (similar to Miyake 2014, and contrasting somewhat with Ferenc 2016), and students choose which writing prompt to respond to, providing a small element of choice and agency, which is also less common in typical “small” projects (though it is utilized in a slightly larger-scale project in Ripley 2020).

Design

2-3 topics or questions for journal entries were posted each week, and students could choose the topic/question that they preferred to engage with. Students also had some flexibility in deciding which journals to complete: The semester is divided into three units and students could skip one journal for each unit and still earn a perfect grade for their journal grade. If a student chose to complete all of the journals for a unit, they could earn a small amount of extra credit.

Journal topics ranged from “summaries” of recent content, which tended to

⁵⁸ In my current implementation of these projects, I removed analytical papers and substituted journals in their place in order to observe and evaluate the usage of the journals. In future (as discussed in the “Conclusions” section of the paper), a possible revision may integrate both types of writing.

necessarily be more fact-based and objective, to reflective exercises on in-class activities and larger projects, which tended to ask students to think more carefully about applications and their own approaches to the activities. The samples in Example 3, which represent the options given to students for a single week towards the end of the term, highlight both content-based and reflection-based questions. A full sampling of journal prompts is included as Appendix 3.

1. Define the basic concept of a sequence, including all requirements to be a “full” sequence. What identifying labels do we use to distinguish different sequences? What analytical strategies can you use to identify sequences and analyze them?
2. Discuss your understanding of the Vivaldi example from Wednesday’s class--how did it go for you when identifying the sequences by ear? Do you find the score helpful or harder to process than the aural material? What concepts were you able to solidify through working on this piece during class (and after class), and what do you still want to improve on?
3. Discuss your experience during the repertoire analysis project on Friday--what are you learning about the music, what are you learning about your own skills and inclinations, and what are you learning about your weaknesses? (NOTE: If you select this option, it should go beyond the reflection quiz questions that are due as a part of that project itself.)

Example 3
Sample journal prompts.

The directions given to the students (see Example 4) emphasize focusing on their own learning and discovery, rather than requiring a specific word count or length. A target range is provided only to avoid having students feel that the project is undefined. When grading these assignments, the “thoroughness” of the topic treatment was always the means of evaluating length, rather than checking for a specific word count.

Each week, 2-3 journal topics will be made available (usually by midnight on Tuesday). A short “journal” is due by Sunday at midnight, using the assignment posted on Canvas. These journals are intended to be relatively informal and thus will not require formal writing or formal style. However, they will represent a reflection on your learning and discovery throughout the week, and as such should be carefully written and should treat your selected topic thoroughly. No maximum or minimum lengths will be set, but in general 200-400 words will be a good target range.

Example 4
Journal directions.

Student responses

In response to a targeted question on an anonymous in-class survey,⁵⁹ students indicated primarily positive responses to the content journal project. Students were asked to indicate why they did/did not find the journal project useful, and through these responses, students revealed that positive aspects of the journal project included:

- Receiving feedback/confirmation and/or correction of their understanding
- Being required to summarize & synthesize information and make connections between concepts, and/or to review and solidify their knowledge
- Reflecting on their knowledge and having to put concepts into words
- Figuring out if they know what they are talking about and/or prove to themselves that they know what is going on
- Frequency [of several shorter projects] over a single large project

Naturally, not all feedback was positive. However, feedback that was less positive was typically tempered by more neutral or positive statements. For instance, one student remarked that “...sometimes they just seem tedious. But I understand their usefulness.” Another student commented that “it helps with thinking about what I am learning” but felt that the word count was more than necessary for simple topics, while another student stated that “I hate the journals but they are actually pretty helpful since I have to know the topic well enough to write about it.” A few students also commented that they felt that restating things that they knew was only redundant, and would prefer more direct application.

The content journals were also mentioned independently on another evaluation by one student;⁶⁰ however, this single comment suggests that the frequency component was fulfilling its desired end: “I actually really liked the weekly quizzes and content journals because it made me reflect on what we had learned before too much time had passed so that it wasn’t just in one ear, out the other.”

59 The responses summarized here were provided by students in response to the following question:

With the premise that the content journals are intended to a) help you think through what you are learning, b) personalize and internalize what you are learning and doing in this class, and c) give you practice articulating your thoughts in written form, without assigning formal writing assignments: Do you find the content journals useful? Why or why not?

This question is to some degree a leading question, for the purposes of a mid-semester reframing of the assignment in addition to collecting feedback. Given that students did provide a mixture of responses, I think the feedback is still a reasonably fair reflection of students’ responses to this project.

60 This mention of the journals was on an anonymous end-of-semester evaluation form, in response to the question: “What types of activities in class best contributed to your learning?”

Grading

Each journal was graded on a pass/not-yet-passed basis, with the following rubric provided to the students:

- P = all of the following are present: thorough treatment of topic, appropriate length, evidence of engagement, high readability, evidence of self-reflection and assessment
- N = any of the following are present: largely incorrect or incomplete information, low readability, surface-level treatment of topic, minimal engagement, minimal work towards self-reflection or assessment

Students were permitted (and encouraged) to revise any not-yet-passed journals to achieve a passing grade, and the final score for the journal grade for the unit was determined based on the number of passing grades and the number of on-time submissions (journals were accepted up to one week late).

Grading of these journals tended to be straightforward and quick. Since these were shorter assignments, I utilized a “quiz” within my LMS with an “essay” question so that students could type their answer directly in the quiz, and I could use the grading software built into the LMS. I found that, especially after the first couple weeks, many students would hit the proverbial nail on the head, requiring little to no commentary. This is likely due in part to the fact that students could choose which prompt they wished to respond to and therefore felt equal to the task of responding to their chosen prompt. This allowed me to spend more time responding to students who really needed help with their responses, and the Canvas format allowed for a “dialogue” of sorts between comments left on the assignment by myself and the students and the resubmissions made by the students. Additionally, working in the LMS means that all previous versions are readily available for viewing. Students can view previous submissions and copy/paste them in order to edit them, and I can view previous versions to compare to the revised version and quickly assess whether or not students have made the requested revisions.

The opportunity to earn some amount of extra credit points was taken advantage of by approximately 50% of students in the first two units of the semester, and about 20% in the final unit. Given that the final unit is shorter than the other two units and that there was a larger final project assigned in the last unit, the drop in extra credit participation was not too surprising. In general, students seemed to engage well with this project and to find it manageable to keep up with.

Future revisions

Although the project was deliberately designed to always provide students with choice in their selection of prompts to respond to, this setup necessarily means that students may not achieve the same benefits from the project, depending on their choice of prompts. For instance, a student could choose to respond to content summary prompts throughout the entire semester, and thus never really engage in self-reflection. (The opposite—spending the entire semester engaging in self-reflection—is *nearly* true, although self-reflection prompts weren’t as readily available in the first couple of content-heavy review weeks.) Obviously, both types of “journal” entries are valuable, but their values are different, and students may at times be prone to taking the easier path rather than the one that is most likely to be beneficial.

Since the concept of student choice is an integral part of the project, one way to balance the benefit of different types of writing with the value of student choice would be to deliberately alternate the types of prompts available (one week could be all content-based, and the next could be more reflection-based). This would still give students choice when selecting from the prompts for each week while simultaneously nudging them towards engaging in different types of writing. Students would still have the option to omit a journal from each unit as well.

A second solution would be to ask students to engage regularly in self-reflective writing and have a separate series of assignments where students create “cheat sheets” or other summary-type documents for the major topics that are covered. Obviously, this second solution represents a higher workload for the students and the instructor, so this solution should be weighed against the other work present in the class. A modification of this solution could involve having students work in small groups (perhaps under a time limit) to create these “cheat sheets” in class. Such an approach decreases the amount of grading required and allows additional peer-learning benefits to exist alongside the individual self-reflection benefits.

Conclusions

The two projects presented here contribute additional new approaches to the growing literature on this topic, and also present a study in contrasts. The analytical papers as presented here require formal writing and are steeped in musical analysis, though the prompts can be structured to have a more performance-focused or reflective quality. The papers are relatively short, but they also require a somewhat lengthy scaffolded process: in-class analysis (which may also be prepared with a homework

assignment or other in-class work), complete draft, peer feedback, revisions from peer feedback, final draft, instructor grading, and final (optional) revisions. Though this process helped to make the results successful and keep the total workload manageable for both instructors and students, it also meant that no more than 3-4 papers could be executed well within a standard semester. This design still fulfills, to an extent, the element of “practice” that I had intended with the short-but-frequent approach, but the length of time to execute each assignment made additional frequency prohibitive. Nonetheless, students’ ability to write coherently about analytical questions and practice written communication about music still improved with repeated practice across the semester.

In contrast, the journal project featured informal writing and did not tend to focus on music analysis *per se* (except as a reflection on the process of analysis and learning). With weekly assignments, the frequency component was increased significantly, such that students should be writing a short response nearly every week of the semester. At the same time, this project was much more internally focused, in that only I and the student ever read these responses, and the *purpose* of the writing shifted (even if subliminally) to be more internal as well. The primary goal in these journals was for students to be able to summarize and reflect on both their knowledge of the course content and on their process of acquiring it. Though the analytical papers did not have a specified audience, there was an implied external audience,⁶¹ but the journals took on a sense of an internal audience, where the students were writing for themselves and for their own benefit.

Having taught this specific course with both types of assignments,⁶² I have grown to slightly favor the journal project for second-semester theory, though I see benefits to each project. The journal project carries a more immediate tangible payoff for students, due to the reflective content and the internalized knowledge-network building that they engaged in during this project. In fact, based on comments on evaluations from both projects, students themselves found this project more immediately rewarding, though of course some of the benefits may also be more surface-level. Additionally, students found it much more approachable and were writing about music more regularly, even if they were not doing formal writing.

The journal project does not, however, tend to achieve the deeper engagement level and critical thinking of the analytical papers, and as such it does not, on its own,

61 And, of course, the papers were read by two external audiences: their peers, and myself as the instructor.

62 I have since assigned similar journal projects in several other courses.

necessarily fulfill the motivating goal of helping students to think more deeply about the music they are working with, beyond labels and “facts.” However, it does seem to be a better entry point for students into writing in their music courses and helping them to see some potential benefits of this skill. Journals thus may potentially serve as a different type of scaffolding to prepare students for writing more formal, careful, and thoughtful analytical papers.

Based on this, one possibility to integrate both approaches would be to utilize both types of writing in the same course: Students might be assigned journals for 2-3 out of every 5 weeks, and then write a 1-page analytical paper (using the same scaffolded process as outlined earlier in this article) in weeks 4 and 5. Though only 2-3 papers would be completed (and fewer journals as well), students would benefit from the metacognitive and knowledge networks of the journals while also getting their feet wet with the analytical writing, and both types of writing would still be “practiced.” In an ideal situation, this pursuit of writing skills would be gradually developed across the complete theory core. For instance, if working in a four-semester sequence, Theory I might require only weekly journals, and 1-page analytical papers would enter in Theory II (with a consequent decrease in journaling). In Theory III and IV, the analytical writing could gradually increase in length and complexity,⁶³ and journaling could decrease as a result.⁶⁴ This approach would allow students to practice formal analytical writing over an extended period of time, while also giving them strong knowledge networks and more confidence in their writing *and* their learning and mastery of the material itself.

Although the ideas and assignments proposed here certainly do not make writing about music—or teaching students how to write about music—an “easy” task, they do offer ways to help students begin to develop this challenging skill in a way that is practical and manageable for both the student and the instructor. Scaffolding steps such as grading mock papers, completing preparatory analyses in class, and utilizing peer review all help to build stronger papers and therefore increase student success and decrease instructor (and student) workload. Journal entries can serve a different purpose, providing students with a low-stakes opportunity to make their own network

63 Lynne Rogers (2018), Attas, and Inman all provide excellent models of building up to larger projects in more advanced classes.

64 In a truly idealized situation, I would hope that students would learn the benefits of the knowledge-network building and reflection in their first year of theory courses, and would begin to develop that habit on their own as a way of learning, without needing a weekly assignment to (somewhat) artificially prompt them to consider those ways of thinking and learning.

of content connections and/or to reflect on their own learning and mastery of the content and the ways that it relates to the rest of their musical training. Content of both types of assignments can be flexed to fit the needs of the curriculum, and the specific requirements of the assignments (paper length, frequency, etc.) can also be adjusted to fit the needs of the students and the instructor. Short-but-frequent design characteristics in both projects encourage students to write more, thus helping them to build fluency with writing simply by persistent practice, while keeping the projects “bite-size” and manageable.

Works Cited

- Attas, Robin. 2016. "Teaching What We Do and How We Do It: Using a Miniconference Assignment to Dig Deep into Musical Analysis." *Journal of Music Theory Pedagogy* 30: 5–22.
- Bakker, Sara, and Timothy Chenette. 2014. "Writing Across the Music Theory Curriculum." *Engaging Students: Essays in Music Theory Pedagogy* 2. <http://flipcamp.org/engagingstudents2/essays/bakkerchenette.html>.
- Darby, Flower, and James M. Lang. 2019. *Small Teaching Online: Applying Learning Science in Online Classes*. San Francisco: Jossey-Bass.
- Davidson, Lyle, Larry Scripp, and Alan Fletcher. 1995. "Enhancing Sight-Singing Skills Through Reflective Writing: A New Approach to the Undergraduate Theory Curriculum." *Journal of Music Theory Pedagogy* 9: 1–30.
- Elbow, Peter, and Mary Deane Sorcinelli. 2006. "Using High-Stakes and Low-Stakes Writing to Enhance Learning." In *McKeachie's Teaching Tips: Strategies, Research, and Theory for College and University Teachers*, edited by Wilbert James McKeachie, Marilla D Svinicki, and Barbara K Hofer, 213–31. 12th ed. Boston: Houghton Mifflin.
- Ferenc, Anna. 2015. "Engaging Students as Disciplinary Practitioners in an Introductory Theory Course." *Engaging Students: Essays in Music Pedagogy* 3. <http://flipcamp.org/engagingstudents3/essays/ferenc.html>.
- . 2016. "Promoting Metacognitive Reflection in Music Theory Instruction." *Journal of Music Theory Pedagogy* 30: 23–86.
- . 2017. "Metacognition: An Overlooked Skill in Music Theory Instruction." *Engaging Students: Essays in Music Pedagogy* 5. <http://flipcamp.org/engagingstudents5/essays/ferenc.html>.
- Inman, Samantha M. 2017. "Teaching Analytic Writing in the Form Classroom." *Journal of Music Theory Pedagogy* 31: 43–64.
- Lang, James M. 2016. *Small Teaching: Everyday Lessons from the Science of Learning*. San Francisco: Jossey-Bass.
- Marvin, William. 2005. "Introduction to Writing Analytical Essays." In *Engaging Music: Essays in Music Analysis*, edited by Deborah Stein, xi–xiv. Oxford: Oxford University Press.
- McGee, Deron L. 1993. "The Power of Prose: Writing in the Undergraduate Music Theory Curriculum." *Journal of Music Theory Pedagogy* 7: 85–104.
- Miyake, Jan. 2014. "Weekly (or more) Writing in the Music Theory Classroom." In *Engaging Students: Essays in Music Pedagogy* 2. <http://flipcamp.org/engagingstudents2/essays/miyake2.html>.
- National Association of Schools of Music. *Handbook 2021-2022*. Accessed September 19, 2022. <https://nasm.arts-accredit.org/wp-content/uploads/sites/2/2022/04/M-2021-22-Handbook-Final-04-08-2022.pdf>
- Ripley, Angela. 2020. "Post-Tonal Postcards: Communicating Analysis and Reflection through Prose Writing." *Journal of Music Theory Pedagogy* 34: 199–226.
- Rogers, Lynne. 2017. "Asking Good Questions: A Way Into Analysis and the Analytical Essay." *Journal of Music Theory Pedagogy* 31: 94–112.
- Rogers, Lynne. 2018. "Incorporating Writing into Music Theory Courses." In *The Norton Guide to Teaching Music Theory*, edited by Rachel Lumsden and Jeffrey Swinkin, 299–312. New York: W. W. Norton & Company.

- Rogers, Michael R. 2004. *Teaching Approaches in Music Theory: An overview of Pedagogical Philosophies*. 2nd ed. Carbondale, IL: Southern Illinois University Press.
- Salamone, Jennifer. 2018. "Making a Case for Freewriting in the Music Theory Classroom." In *Engaging Students: Essays in Music Pedagogy* 6. <http://flipcamp.org/engagingstudents6/essays/salamone.html>.
- Sly, Gordon. 2005. "Developing the Analytical Point of View: The Musical 'Agent.'" *Journal of Music Theory Pedagogy* 19: 51–63.
- Stevens, Daniel B. 2016. "Twenty Questions: An Introduction to Counterpoint, Linear Analysis, and Dissonance Treatment." *Journal of Music Theory Pedagogy* 30. <https://digitalcollections.lipscomb.edu/jmtp/vol30/iss1/13/>.
- Strovas, Scott M. 2014. "Making Writing Matter: Two Rhetorical Scenarios for the Music History Term Paper." In *Engaging Students: Essays in Music Pedagogy* 2. <http://flipcamp.org/engagingstudents2/essays/strovas.html>.

Rhythmic Theory Pedagogy, Ways of Knowing, and Experiential Learning

BY BEN DUINKER

This article proposes an approach to rhythmic theory pedagogy that foregrounds the intersection of performance, creation, and analysis. Daphne Leong's recent work on this intersection uses the German verbs *wissen* (knowing that), *können* (knowing how), and *kennen* (knowing of) to describe the different kinds of knowledge generated and utilized by theorists and performers. I use Leong's theory to identify a mismatch, or gap, between what undergraduate students learn about rhythm in the theory classroom and what their practical needs are as music majors—a plurality of whom specialize in performance. As a means of remedying this mismatch, I use David Kolb's framework of experiential learning spaces to situate strategies for integrating analysis and performance in undergraduate theory pedagogy. Focusing primarily on post-tonal and non-Eurocentric repertoires and traditions, I argue that mobilizing this framework in the classroom encourages rumination on the utility of analysis for performance, and on the informative role that performance issues can assume in theory pedagogy. This approach empowers students to identify means of applying their theory knowledge beyond the classroom.



In his 1995 essay on music performance and analysis, Joel Lester assertively made the point that musicians and their performances were “strikingly absent” (197) from the prevailing literature on this topic. Since then, the voices of musicians and the performance-related issues they experience have increasingly permeated music analytical scholarship.¹ In response to these encouraging developments, this article explores how performance-centric topics can be productively integrated into music theory/analysis pedagogy in undergraduate music curricula. While the modern American discipline of music theory grew out of an aspiration to subscribe to the intellectual rigor of the hard sciences, many of the largest theory programs in North America exist within music faculties that house large, vibrant, performance departments.² In many institutions, the appeal and potential for cross-disciplinary

1 In such discourse, I am referring not only to research that intersects analysis and performance, but especially research that consults performers firsthand. See Daphne Leong's 2019 monograph *Performing Knowledge*, for an example of how performance concerns—as experienced by performers themselves—can be woven into analytical discourse. My own exploration of interpretive difficulty (2022) also consults performers and treats their experience as a point of analytical departure.

2 This aspiration is especially evident in the work of Milton Babbitt and Allen Forte, at Princeton and Yale, respectively. See Rothstein (1990) for further insight on how the propagation of Heinrich Schenker's theories in North America had a role in the development of the modern theory discipline.

performance/analysis pedagogy is therefore palpable.³

Though analysis/performance pedagogy could arguably encompass any musical parameter, I have chosen here to focus on rhythm, a topic that has received far greater attention in theory research than it has in pedagogy. This topic still struggles to find its way toward meaningful and substantial representation in many undergraduate theory curricula, despite it being an essential part of most students' musical vocations. Rhythm's coverage in theory pedagogy—if it is covered at all—is often confined to certain repertoires and circumstances. This dearth of coverage may be a result of the theory discipline's lack of rallying around one, or even several, prevailing theories of rhythm, historical *or* modern. Many recent textbooks that purport a comprehensiveness in their agenda still do not afford rhythm the space and time of other musical parameters.⁴ Consequently, rhythm-focused content in theory courses could also be created individually by instructors, without the aid of texts or resources. Labor intensive, this approach risks compromising any sense of curricular continuity.

In this article, I propose an approach to rhythm theory pedagogy that foregrounds the intersection of performance, creation, and analysis, highlighting creative and performative issues that musicians face, and ideas developed to address these issues. Musical performance and rhythm are something of a marriage of convenience here: they are both traditionally underrepresented in theory curricula, and they offer a wealth of opportunities to wed theoretical and practical learning. I begin by unpacking Daphne Leong's theory of analytical and performative ways of knowing (2019). I use Leong's theory to identify a mismatch, or gap, between what undergraduate students learn in the theory classroom and what their practical needs are as music majors—the majority of whom specialize in performance or another practical vocation such as

3 I presently work at an institution that hosts both a large, research-oriented theory faculty and a conservatory-style performance program. Recent enrollment statistics (2021–2022) show that 68% of undergraduate music students majored in performance. My previous employer also housed a research-focused theory faculty and large performance program—there, in 2019–20, performance students comprised 60% of the undergraduate music student population.

4 In a 2008 review in *Music Theory Spectrum* Hali Fieldman writes that three then-new textbooks “present a large-scale rethinking of the project of undergraduate music theory, considering anew many of the most important issues involved in both *what we teach* and how we go about it” (366, *italics added*). Despite highlighting the issue of “what we teach,” Fieldman's review hardly discusses rhythm—or a lack thereof. One of Fieldman's reviewed texts, *The Complete Musician* by Steven Laitz, numbers 875 pages and can be used through an entire undergraduate theory sequence. Forty-four pages of the text involve rhythm and meter as their primary subject matter—almost exactly 5% of the book. Though perhaps unfair to single out Laitz, his book is like many other ostensibly comprehensive texts in its coverage of rhythm—unbalanced.

conducting, composition, or music education. I then propose a means of addressing this mismatch by invoking John Dewey's philosophy of education through experience, later refined by David Kolb in his theory of *experiential learning* (1984).

I then present five pedagogical case studies that have evolved from my own experience as a percussionist teaching rhythmic topics in core and elective theory courses.⁵ These case studies focus on contemporary post-tonal music, non-Western, and popular music genres, encouraging greater inclusion of these repertoires. Though the lesson ideas I propose here were originally designed for upper-level core and elective courses (i.e., junior or senior undergraduate level or higher), several are scalable and could also be used in introductory courses. Indeed, these case studies encourage engagement and reflection with repertoires and theories, rather than mastery and proficiency. Supported by these five case studies, I argue that using percussive-centric musical traditions from beyond the Western canon can facilitate experiential learning, simultaneously empowering students' rhythmic confidence and broadening the repertoire underpinning their theory education. The in-class exercises and take-home assignments outlined in these case studies can work to counter the general dearth of rhythm coverage in theory pedagogy.

As a professional and lifelong student active in both music analysis and performance, some of my most impactful learning experiences with rhythmic theory, and music theory more generally, have involved *learning by doing*. This doing can either be corporeal—the act of performing—or it can emerge through creative activities such as composition or transcription. To clarify, these activities extend beyond what is traditionally understood as pen-to-paper analysis. For example, creating a Schenker graph, analyzing a sonata, or identifying a row aggregate are analytical actions that can be considered creative forms of *doing* music theory. But if we accept that analysis is also something we do through creative, corporeal activities, productive ways to integrate theory pedagogy with the rest of the undergraduate music curriculum become evident.⁶ This integration can empower students' confidence in their own vocation and encourage them to see their music education as holistically contributing to their personal and artistic growth.⁷

5 Russell Hartenberger (2020) outlined the lack of coverage of rhythm and meter in undergraduate music theory curricula and proposed that the percussion community—in its close association with non-Western musical traditions—might be well positioned to address this lack of coverage.

6 Here I follow an argument made by Daniel Barolsky: the performers are, in their actions, essentially analysts (2007, 3).

7 In a sense, my argument here echoes the aims of the comprehensive musicianship movement,

Ways of Knowing and Experiential Learning

Leong's monograph *Performing Knowledge: Twentieth Century Music in Analysis and Performance* approaches contemporary music from the angles of analysis and performance. She explores—together with various collaborators—points of intersection and divergence in the types of knowledge produced or gained through these two activities. Drawing from her expertise as a theorist and performer, Leong proposes that analysis and performance may represent different ways of knowing music.⁸ She grounds these ways of knowing in the three German verbs that variously translate to the English verb *to know*. These are: *wissen* (knowing that), *können* (knowing how), and *kennen* (knowing of or about). The main thrust of Leong's epistemological framework is that, through analysis, theorists primarily utilize *wissen* knowledge, while through performance, musicians primarily utilize *können*, and in certain circumstances, *kennen* knowledge.

Before continuing, I must stress that Leong's conclusions are not meant to be universal. Neither theorists nor performers come to know music exclusively in one of these ways. Furthermore, many musicians—myself included—identify as both performers and theorists, and frequently integrate these ways of knowing in their practice, possibly without even being aware of it. But intersections between Leong's ways of knowing are nevertheless important to unpack. In the Anglo-American academy, knowledge transfer between theorists and performers has traditionally been unidirectional, beginning with analysis and terminating with performance.⁹ As Lester explains in his essay, this transfer risks forming a hierarchy wherein performance is thought to merely validate an analysis, and he proposes we “challenge the assumption that communication need take place solely when analysts give directions to performers”

which gained popularity in the 1960s. A. Cutler Silliman's assessment of this movement (1980, 125–9) reports that, in the author's experience, most university music curricula are not as integrated as comprehensive musicianship would propose. My own experience over the past two decades has been similar, thus demonstrating the need for continued reflection on how music theory pedagogy can be better integrated with other areas of music education.

8 For a full rendition of her coming to this realization through an experience performing chamber music, see Leong (2019, 14–17).

9 Edward Latham (2005) writes that “[Erwin] Stein [with his 1962 monograph] ushered in an era of prescriptive writing on the part of music theorists eager to diagnose and cure the performer's ‘malady.’” To some extent, that era persists: recent prescriptive writing by theorists intended (at least partially) for performers includes monographs by Swinkin (2016) and Ito (2020), where both authors develop theories whose goal, at least in part, is to instruct or guide performers.

and to “argue that more reciprocal discourse would enhance our understanding of music-theoretical issues as well as performance issues” (1995, 198). As Leong’s book demonstrates, the theory discipline has begun dismantling this hierarchy in its research agenda. Her research shows that a productive *bilateral* exchange between analytical (or *wissen*) knowledge and performance (*können/kennen*) knowledge is possible in music theory scholarship. My goal here is to encourage that same bilaterality in music theory pedagogy.

Theories of learning that mobilize *können* knowledge—learning by *learning how to*—have long been established in educational philosophy, famously championed a century ago by the American philosopher John Dewey.¹⁰ At the heart of Dewey’s educational philosophy lies experience. An experience-based education, or *experiential learning* in its modern term, orients itself to the learner, and not the curriculum.¹¹ Experiential learning is generally understood as a combination of learning through doing, and through reflecting on that doing.¹² David Kolb defines experiential learning as “the process whereby knowledge is created through the transformation of experience” (1984, 41). The “transformation of experience” of which Kolb writes involves the inseparable transformative processes of knowledge acquisition and mobilization. They are inseparable because in an experiential learning environment, knowledge is acquired *through* its mobilization—the processes are concurrent. In other words, rather than thinking about mobilization as something that occurs after acquisition, Dewey and Kolb invite us to conceive of these actions as dependent on one another. Through the case studies below, I propose that experiential learning of rhythm in the theory classroom provides fertile ground for knowledge acquisition and mobilization to occur in such a concurrent, mutually dependent context.

10 Dewey’s theories have come to form the basis of experience-based education in North America, and were espoused early on by John Andrew Rice, who in 1933 founded the arts-focused Black Mountain College in Asheville, North Carolina, notably hosting John Cage as a faculty member. Rice also attracted faculty like painter Robert Rauschenberg, pianist David Tudor, choreographer Merce Cunningham, and artists Josef and Anni Albers, the latter two being educated in another practice-oriented environment: the Bauhaus School of design.

11 Furthermore, it facilitates knowledge acquisition that will benefit the learner in real-world experiences, or as Dewey puts it, in the “actual conditions of life” (1938, 48).

12 Pappa et al. define experiential learning as “the process of making meaning from direct experience, namely learning through reflection on doing” (2011, 1003).

Case Studies

I now turn to five case studies that illustrate what those activities might look like, and how they engage with Leong's ways of knowing. Each case study illustrates the benefits of uniting knowledge acquisition and mobilization in the classroom, subscribing to Dewey's assertion that "when we experience something we act upon it, we do something with it; then we suffer or undergo the consequences" (1959, 38). The first case study involves studying the metric structure of polyphonic music created by the Aka Pygmies and applying it to an analysis and performance of Steve Reich's *Clapping Music* (1972). In the second case study I propose using South Indian *solkattu* to establish continuity in rhythmic topics throughout the theory curriculum. The third case study focuses on Ine Vanoeveren's writings about performing complex rhythms (2018) and applies them to a rhythmic analysis and excerpted performance of Brian Ferneyhough's *Bone Alphabet* (1992). The final two case studies involve hip hop music, a genre whose style features sampled drum breakbeats (sampled drum patterns from funk records) and rhythmized vocalizing known as flow. These case studies focus on beat and flow recomposition, respectively. Drawing on a recent co-teaching experience with forensic musicologist Claire McLeish, I propose a way that these two final case studies can be used to develop a group project where students argue—in mock legal fashion—for or against copyright claims drawn from real cases in the hip-hop industry.¹³ Producing and delivering such legal arguments is, in a sense, a way of performing an analysis, and is again an active application of passively attained knowledge.

In David and Alice Kolb's work on experiential learning, the authors write that "learning involves a taking in and processing of experience and a putting out or expression of what is learned" (2005, 208). Naturally, nearly any assessment- or metrics-based educational model involves an "expression of what is learned"—assignments, tests, or exams fit this description, for example. The difference between tests and exams and more creative, performative assignments, is that student creativity and agency are more readily foregrounded in the latter. This idea is not new. Peter Schubert's resuscitation of Renaissance-era pedagogical methods that foreground model composition and improvisation are testament to the broad applicability of the Kolbs' space for acting and reflecting. When Schubert teaches students how to improvise two-part counterpoint, mistakes are common, and reflection/discussion of

¹³ McLeish initially developed this group project, and together we adapted it for use in classrooms of music majors and non-majors alike.

these mistakes forms an important part of the learning process.¹⁴ In a similar sense, many of the assignments discussed below in the case studies involve an element of reflection, where students are invited to ruminate on their experience with the assignment—what were its challenges and how did they surmount them? The central goal here is that such reflection will support and feed into students’ retention of what they learned.

Before proceeding to the case studies, I must mention that the institutions where I designed and delivered these lessons may not mirror the demographic realities of other music schools. Liberal arts colleges with music-focused arts programs, or music programs with foci external to the classical conservatory model, for example, may not focus so heavily on performance. That said, each of the case studies I have discussed here can be scaled somewhat so that they are accessible for a variety of students—they do not require familiarity with any specific curriculum to excel in the learning experiences discussed here. As mentioned in the introduction, technical mastery of the performance and/or composition tasks described below are of secondary importance to critical reflection and engagement. In my own teaching, I have found that even the most advanced students of performance, theory, and analysis are on equal footing with their peers in completing these assignments. This observation likely owes to the diverse methods of assignment submission; many of the case studies involve submitted work that is not written—i.e., that is performed. This approach works toward creating a more inclusive environment in theory pedagogy, leveling the playing field for all to succeed.

Case Study 1: Performing Phasing

Popularized in Western music through the works of Steve Reich, phasing is a process that describes two or more isochronous (of identical length), cyclical processes whose beginning/end points migrate from alignment to non-alignment, or vice versa. A visual analogy of phasing involves a set of windshield wipers in disrepair that move at different speeds: little by little, the wipers migrate from moving in unison to moving in opposite directions.¹⁵ Reich is perhaps best known for his use of phasing

14 See Schubert (2013), where he highlights the importance of learning from mistakes: “[A] requirement for a shift [towards experiential learning] is teachers willing to ask students to sing, play, and make mistakes.”

15 Another analogy involves two different-sized church bells that are swung simultaneously. The larger, lower-pitched bell will swing in a longer span, meaning its clapper—the device swinging inside it and hitting its edge—will make contact at a slower rate, and the sounds of the bells will gradually and constantly drift out of and into synchronicity with one another.

in his works *Piano Phase* (1967) and *Drumming* (1971), but the underlying concept—the migration of two identical rhythmic patterns so their start/endpoints are not aligned—appears in many of his other early works and was developed as a technique he originally used in tape-based compositions including *It's Gonna Rain* (1965) and *Come Out* (1966). While Reich developed his phasing techniques through technological experimentation, some musical traces of phasing—the lack of a clear, unified downbeat and metric hierarchy—exist in certain non-Western musical practices.

The Aka Pygmies, a community indigenous to the jungles along the border between Central African Republic and Cameroon, have cultivated one such practice. Their musical traditions, documented extensively by Simha Arom (1985) and Susanne Fürniss (2006), revolve around vocal polyphony, involving simple sung lines whose endless variation and layering result in a remarkably complex texture. As Fürniss explains (175), songs in the Aka polyphonic tradition typically involve four parts, each with its own dense layering and variation structure. These part types include the *Mòtángòlè*—“the one who counts”—the principal voice; the *Ngúé wà lémbò*—“mother of the song”—a lower part like a bass part; the *Òsèsè*—a part quite static in rhythm and pitch; and the *Dìyèí*, a “yodel” sung above the other parts.

Beat:	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
<i>Dìyèí</i>																		
<i>Mòtángòlè</i>																		
<i>Òsèsè</i>																		
<i>Ngúé</i>																		

Example 1

Metric structure of *Dikòbò Dámù Dá Sòmbé* (Fürniss 2006). The shaded boxes indicate when during the 12-beat cycle each part is vocalizing. The beat numbers across the top indicate the beat in the 12-beat cycle. Note the circular repetition of the beat numbers.

Many Aka songs operate in a ternary-divided 12-beat cycle. Calling this cycle a *meter* invites scrutiny, because Western theories of meter quite often assume some form of metric hierarchy, a notion that is absent in Aka music. For example, Fürniss analyzes an Aka song called *Dikòbò Dámù Dá Sòmbé*, the basic temporal structure of which is reproduced in Example 1.¹⁶ No one of the 12 beats in *Dikòbò* is understood as

¹⁶ I create this schematic, based on Fürniss's transcription, with awareness of the ongoing debate in ethnomusicology regarding the utility and appropriateness of written transcriptions of musical practices that do not rely on Western notation. Bruno Nettl (2015, 72–88) discusses this ongoing debate in the field, specifically highlighting the degree to which a transcription can be understood as representative of a musical work or practice. In the present case study, I have students listen

structurally superior or felt as stronger. In addition to this lack of hierarchy, *Dikòbò* also lacks a unified downbeat among its part types. As shown here, the cycles of the four parts in *Dikòbò* begin on different beats: the *Mòtángòlè* on beat 1, the *Òsèsè* and *Diyèí* on beat 5, and the *Ngúé wà lémbò* on beat 6, and even though the parts become varied as the performance progresses, their respective starting beats remain constant and distinct from one another.

In *Dikòbò*, we thus observe a cyclical musical temporality void of metric hierarchy (in the way we understand it in a Western sense) and unified downbeat. Viewed more broadly, Aka Polyphony offers students an opportunity to learn about a metric phenomenon that is central to this music but might not carry the same centrality in students' own musical practices. Nevertheless, learning about non-hierarchical cyclicity in music encourages students to come to know musical temporality in a way that is possibly new to them. Transferring this knowledge into the *können* domain using Aka music is difficult, however, without expert guidance.¹⁷ One solution is to use Reich's *Clapping Music* (1972), which can introduce a *können*-style experience to students that explores similar rhythmic and metric phenomena found in Aka polyphony.¹⁸ *Clapping Music* involves a non-continuous type of phasing, where one part periodically migrates away from the other by shifting its looped pattern by one eighth note, as shown in Example 2a. When performing this piece without a score, musicians playing part 2 (the phasing, or moving part) must re-orient their sense of downbeat each time they move to a new pattern by dropping the ultimate eighth note beat from the 12-beat pattern. The downbeat migration in *Clapping Music* is so straightforward that teaching a *wissen*-style knowledge of it would only take a short lecture with several musical examples, but I argue that one only *really* understands phasing once they try performing it.¹⁹

to recordings of the piece and its parts (which Fürniss has collected and are available through the publisher's supplemental materials) before viewing any score-based notation.

17 Not to mention the problematic of Western groups "learning" a non-Western musical practice without guidance from an expert of that practice.

18 Instructors could simply leave out any discussion of Aka polyphony altogether. Though more expedient, this approach risks sidelining any discussion of the relationship between Reich's early compositions and his travels in West Africa. In my case, the course for which I developed this lesson plan centered on non-Western musical practices and what they can teach us about rhythmic and metric theory. Therefore, Aka Polyphony was the main topic of the lesson, while *Clapping Music* represented the take-home exercise for students. I have repositioned the relationship of these two topics here, to emphasize the *können* dimension of this lesson plan through a foregrounding of *Clapping Music*.

19 Russell Hartenberger's detailed account of the sensations of phasing can be found in Chapter 9 of

The image displays two musical staves, labeled 'part 1' and 'part 2', across two measures. Part 1 consists of a continuous eighth-note pattern. Part 2 also consists of an eighth-note pattern, but its downbeats are shifted backwards by one eighth note relative to part 1. This phase shift is indicated by brackets under the notes in both measures and a dashed diagonal line connecting the downbeats of the two parts. The notation uses eighth notes and rests to represent the rhythmic values.

Example 2a

Migrating metric displacement in *Clapping Music* (Reich, 1972).

Part 2 phases by displacing its downbeat backwards (as indicated by the brackets), effectively moving the pattern one eighth note “ahead” of Part 1.

Clapping Music may look simple in its notated form, but it is difficult to perform confidently and accurately. Introducing phasing to students can begin with a simple method that assigns lyrics to *Clapping Music*’s rhythms, as shown in Example 2b. Instead of clapping, students thus vocalize the rhythm by naming various fruits.²⁰ While in Reich’s version the moving part phases backward by eighth note, in this version the moving part phases forward by adding a quarter note. “Pineapple, apple, pear, orange” thus becomes “pineapple, apple, pear, orange, LIME” any time part 2 elects to phase (part 2 decides how long to remain on each pattern between phases in *Clapping Music*). Once students are comfortable with this task, Reich’s version of the piece can be attempted in class.

his monograph *Performance Practice in the Music of Steve Reich* (2016).

20 English-speaking students often bristle at pronouncing orange with the stress on the second syllable (i.e., *or-ANGE*), which typically happens in this context due to the word’s rhythmic placement.

The image displays two musical staves, labeled 'part 1' and 'part 2', with lyrics underneath. Part 1 has a steady rhythm of eighth notes. Part 2 has a similar rhythm but is phased forward by one quarter note, indicated by a dotted line and a box labeled 'lime!' at the start of the second measure. The lyrics for both parts are: 'pine - ap - ple ap - ple pear or - ange'.

Example 2b

“Fruits” version of *Clapping Music*, where the downbeat is phased forwards by one quarter note as shown with the dotted line.

Students tend to master the fruits version of the piece quickly. If no time in class remains to try Reich’s version, I have students perform part 2 (of Reich’s original version) against a pre-recorded part 1, and document themselves doing this on video in a way that ensures they are performing from memory.²¹ The rationale behind learning and performing this piece by rote / from memory, rather than reading it, is to foster knowledge transfer from *wissen* to *können*—students know *that* phasing in *Clapping Music* accords to a simple process of downbeat displacement, and their non-reading performance of the work forces them to learn how to effectuate this displacement. It is quite straightforward to simply read each resultant pattern that part 2 creates after each phase action, but this recontextualizes each resultant pattern against the notated downbeat, rather than preserving the pattern’s downbeat, which part 2 migrates through all 12 beats of the cycle. Finally, this mode of learning connects the topic back to Aka polyphony, a music that is learned through listening and emulating, and not by reading.

This *können*-style knowledge of downbeat migration produces a much more fulfilling experience and generates student satisfaction with their performance achievement. Returning quickly to the Kolbs, they write that “positive feelings of

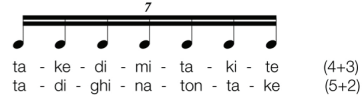
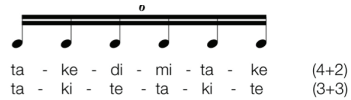
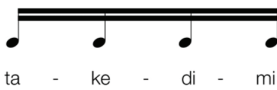
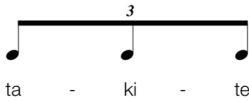
²¹ This strategy was used because I initially taught this assignment during a semester affected by the COVID-19 pandemic, and thus did not see students in person each week.

attraction and interest may be essential for learning” (2005, 208). In a general sense, we know this to be true. Students who are interested in a topic are more likely to be receptive to learning about it. But the converse also holds: disinterest in a topic creates barriers to learning motivation. I do not wish to suggest that music theory pedagogy should simply prioritize topics that students are interested in, but rather I invite rumination on how teaching theory topics can better encourage satisfaction from students at what they have learned. I have consistently witnessed such satisfaction from students who successfully completed this *Clapping Music* assignment.

Case Study 2: Performing Syncopation and Polyrhythm

The second case study focuses on rhythmic structure in south Indian Carnatic music, illustrating two short examples of rhythmic skill acquisition based on this musical tradition, and concluding with thoughts on how these skills can be incorporated into the analysis of repertoire in the theory classroom. Carnatic music is a tradition of astounding rhythmic complexity where a system of “rhythmic solfege” called *solkattu* can be applied to the simplest and most complex and demanding rhythms alike. Carnatic music features a drum called the *Mrdangam*. Students of the *Mrdangam* often spend years learning and reciting *solkattu*, a practice known as *konnakkol*, before ever touching a drum, meaning they can recite everything they play. Using *solkattu* in theory pedagogy thus presents two appealing features. First, no instruments are required—everything can be done with the voice. Second, using *solkattu* means that students learn by doing, enabling a potential integration of *wissen*- and *können*-style knowledge. *Solkattu* is also scalable, meaning its basic forms can be recited at different speeds. Example 3 shows some basic *solkattu* patterns ubiquitous in Carnatic music.²²

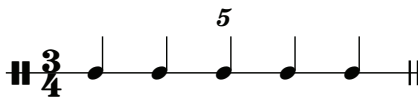
22 These are drawn from Adler (2016) but are widely used in *Konnakkol* practice.



Example 3

Basic solkattu sequences commonly used in Konnakkol (Adler, 2016).
(Reproduced with permission from the author)

This scalability of a small set of patterns characterizes Jacob Adler's textbook *Wheels within Wheels* (2016), which uses solkattu as a basis for rhythmic education. Adler uses just these eight patterns throughout the entire book. The utility of these basic patterns is wide ranging. Consider Example 4a, which shows a quintuplet distributed across a measure of 3/4. Many students would find this easy to grasp conceptually—in a *wissen* sense, but perhaps difficult to perform—in a *können* sense. That is, students can easily understand that this polyrhythm means that five attacks must occur isochronously over three beats but might not know how to perform this accurately.



Example 4a

Quintuplet in 3/4 time.

Beat	1					2					3				
step 1	ta	di	ghi	na	ton	ta	di	ghi	na	ton	ta	di	ghi	na	ton
step 2	ta	ki	te	ta	ki	te	ta	ki	te	ta	ki	te	ta	ki	te
step 3	ta			ta			ta			ta			ta		
step 4	ta			di			ghi			na			ton		

Example 4b

Solkattu-based learning sequence for a 5-against-3 polyrhythm.

As Example 4b details, the first step in deciphering this polyrhythm involves subdividing each of the measure's three tacti into five, using the solkattu sequence "ta-di-ghi-na-ton" (step 1). After gaining facility with reciting the measure according to this subdivision, step 2 involves switching to the three-pattern, "ta-ki-te." After this becomes comfortable, the non "ta" syllables are gradually dropped (step 3), and the five-pattern can be reintroduced on the initiating "ta" of each three-pattern (step 4). This process might take time with students unfamiliar with tuplets (beyond the triplet) or otherwise complex rhythms and polyrhythms. And while five-against-three polyrhythms may not be common in students' performance experience, the sense of accomplishment they receive when mastering this exercise sensitizes them to the rhythmic depth in the music they analyze—a depth that often goes unnoticed in wissen-style study of rhythm. Using exercises like this one offers a practical point of entry for studying the complex rhythms in contemporary music. For example, the near-constant polyrhythms in Elliott Carter's later string quartets could be discussed in the classroom in how they create textural stratification but working through these polyrhythms with in-class vocalization exercises enables students to embody such textural stratification, and to understand the tenuousness of the (rare) points of rhythmic synchronization in Carter's musical language. Analyzing complex rhythms in this way nearly always generates a deeper and more comprehensive understanding of them—one that engages multiple ways of knowing.

Solkattu patterns can also be used to model and practice rhythmic displacement or syncopation. In his book *The Art of Solkattu* (2010), Trichy Sankaran offers the exercise reproduced in Example 5a.²³ This exercise systematizes rhythmic displacement by superimposing five-divided patterns onto a 16-divided metric grid. While counting the *tala*—or underlying tactus—with their hands (using the clap-wave system common

²³ See Sankaran (2010, 12).

in Indian classical music), students recite the four-divided pattern “ta-ke-di-mi” in sequence, applying a five-divided pattern every fourth iteration (as bolded in the example). Each time a five-divided pattern appears, the grouping pattern of the recited solkattu is displaced by one subdivision against the tala. Gradually, students cease reciting the trailing syllables in the four-divided pattern (Example 5b), leaving only the five-divided pattern and a series of increasingly displaced “ta” syllables. Through this exercise, students learn how to syncopate (*können*), and how it feels to syncopate (*kennen*). This experience facilitates a more visceral understanding of syncopation in repertoire—be it through accent displacement in hip-hop vocals, extended tresillo patterns in EDM, or the complex rhythmic surface of funk music.²⁴ Using solkattu exercises when studying the rhythmic landscape of these genres thus gives students a chance to develop new ways of experiencing, understanding, and appreciating popular music, or to effectively articulate ways they already know this music through listening to it both live and via recordings.

1				2				3				4			
ta	ke	di	mi	ta	ke	di	mi	ta	ke	di	mi	ta	di	ghi	na
ton	ta	ke	di	mi	ta	ke	di	mi	ta	ke	di	mi	ta	di	ghi
na	ton	ta	ke	di	mi	ta	ke	di	mi	ta	ke	di	mi	ta	di
ghi	na	ton	ta	ke	di	mi	ta	ke	di	mi	ta	di	ghi	na	ton

Example 5a

Solkattu-based rhythmic displacement exercise (Sankaran, 2010).

The beats can be counted using a clap-wave system common in Carnatic music.

²⁴ Syncopations derive their affective or emotive power in how they play with our sense of time—Maria Witek’s (2016) work aptly displays this through her triangulated theory of groove involving rhythm, embodiment, and derived pleasure. Witek invites us to think of syncopation in the *kennen* domain—how it *feels* to experience syncopation on the dance floor. This notion complements the *können*-based exercises presented here.

1				2				3				4			
ta				ta				ta				ta	di	ghi	na
ton	ta				ta				ta				ta	di	ghi
na	ton	ta				ta				ta				ta	di
ghi	na	ton	ta				ta				ta	di	ghi	na	ton

Example 5b

Continuation of sequence with intervening syllables dropped (Sankaran, 2010).

Using solkattu as a learning tool in the theory classroom engenders feelings of satisfaction and accomplishment in students. There is a palpable joy in being able to master the above exercises. Furthermore, there is already evidence that application of solkattu has more wide-ranging potential in music theory education. Rafael Reina, Jos Zwaanenburg, Jonas Bisquert, and David de Marez Oyens at the Conservatorium van Amsterdam have developed a solkattu-based curriculum for advanced rhythm analysis in contemporary and other musics but it is, at present, not integrated into the Conservatorium's general theory curriculum.²⁵ And Richard Hoffman and his colleagues have championed the *takadimi* system for rhythm training, scalable for use anywhere from primary school to college theory or aural skills courses.²⁶ Whatever the source and method, introducing solkattu early in an undergraduate theory curriculum offers students a common language to analyze rhythms of any musical genre. Solkattu can be then applied at will throughout the course sequence, offering a practice-based experiential learning environment and empowering students to apply a learned skill in a variety of musical contexts.

Case Study 3: Performing Complex Rhythm

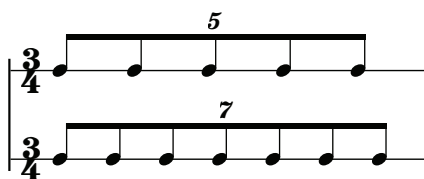
While the first two case studies focused on non-Western musical traditions and an application of their principles of practice to Western repertoire, the third case study involves contemporary Western art music. Rhythm has served as a primary frontier of exploration in 20th and 21st century composition; this is not to say that it is any

²⁵ See Reina (2015) for a complete overview of how the author applies solkattu to the analysis and performance of complex rhythms in post-tonal music.

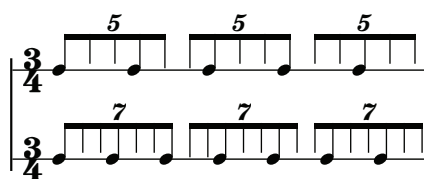
²⁶ See Hoffman, Pelto, and White (1996). The *takadimi* system extracts various syllabifications from both North- and South-Indian rhythmic traditions and “provides tools for unraveling and simplifying the complexities of the notation and promotes the execution of the rhythm in a highly accurate and musical fashion” (28). As such, this system is not strictly solkattu-based.

more important to composers of these centuries than it was in others but rather that its musical function has begun to supersede melody and harmony in importance. One such composer for whom this can be argued is Brian Ferneyhough. Known as a chief exponent of the so-called *new complexity* aesthetic, Ferneyhough's works are famous for their impenetrable rhythms and polyrhythms. But studying them, learning them, and attempting to perform them gives students a chance to better understand their nuance, and explore students' own rhythmic confidence.

In teaching complex rhythm to theory students, I use Ine Vanoeveren's presentation of "lollipop" and proportional notation described in her textbook *Tomorrow's Music Today* (2018). Lollipop and proportional notation are strategies for representing complex rhythms and polyrhythms so they are more clearly and accurately legible, and ultimately, more easily performable. Many of the examples Vanoeveren details could also be approached using principles of Solkattu as described above. I relay lollipop/proportional notation here as an alternative approach; one that prioritizes visual information usefully for situations of extreme rhythmic complexity. Example 6a shows a seven-against-five polyrhythm in 3/4 time. This notation is not particularly useful for performers wishing to execute the passage accurately. Lollipop notation is generated by representing each rhythm so it is easily legible in the subdivision structure of the 3/4 meter (Example 6b). True proportional notation would involve graphically representing this polyrhythm in a system that uses a common sub-tactus denominator for each rhythm (Example 6c). In this case, with a septuplet and quintuplet, the lowest common denominator would be 35 (not shown). By consequence, proportional notation would mean dividing each quarter note into 35 subdivisions, to represent each rhythm in the same system. Such precision is only useful as a practice waypoint—slowing down the excerpt and counting it in 35 is laborious but enables something of a precise embodiment of the rhythmic relationship between the two voices. Finally, the passage can be sped up and performed (with the understanding that a student's gestural embodiment of the rhythms will change as they are performed at progressively faster tempi) beginning with a rendering that preserves the graphic representation made possible by the 35-fold subdivision and arriving at the example notated again in 3/4 (Example 6d).



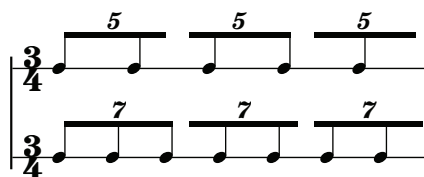
Example 6a
Seven-against-five polyrhythm in 3/4 time.



Example 6b
Lollipop notation of the polyrhythm.



Example 6c
Reduction of proportional notation (graphic approximation).



Example 6d
Re-notated in 3/4 time.

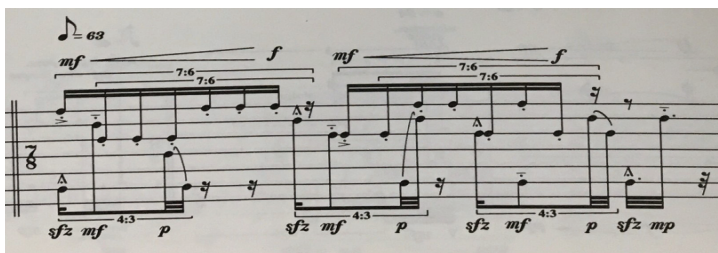
This procedure of rhythmic re-representation is especially helpful for the complex rhythms found in Ferneyhough's music. I have students draw, at random, a measure from the composer's 1992 work *Bone Alphabet*, a percussion solo composed for Steven Schick.²⁷ Students are tasked with rewriting this measure in lollipop and proportional

²⁷ I first performed this assignment as a student, albeit without explicit recourse to lollipop notation, in a seminar taught by Aiyun Huang, a former student of Schick's.

notation, learning it to the best of their ability, and submitting as a recording their attempt at performing it, along with a brief verbal reflection of their process. Example 7a details one such measure, followed by an excerpt of a student's rough work using proportional notation (Example 7b). The top part of the student's work illustrates their understanding of the nested 7:6 rhythms in the top voice of the notated measure. The student's first system (A) plots out where the beats of the 7:6 polyrhythm would fall, and below this (B) where the beats of the nested 7:6 polyrhythm would fall—these are the actual attacks played by the performer. (Note that the student's subdivisions in line (B) are seven in the space of six.) Ideally this work would be done with a ruler on graph paper to ensure accuracy, but this student is, in effect, using proportional notation to plot these rhythms. After also plotting the lower line's rhythms (C), the student rationalizes these at the bottom of the page (D), where the passage is re-plotted in a 7/8 measure. There are a few errors in the final plotting, but evidence of the student using proportional notation is abundant.

The Kolbs (2005) suggest that learning models should be organized to facilitate knowledge transfer and application to other contexts. This case study demonstrates such knowledge transfer and resolves any apprehension about assigning repertoire / rhythmic content that might seem beyond students' ability, or worse, irrelevant to their education. The goal is not necessarily for students to appreciate the complexity of Ferneyhough's music, nor is it for them to master the demanding rhythms therein. In my experience, having also completed a version of this assignment as a student, students rarely perform their measures accurately (if memory serves, I also did not), and never at tempo, but the important thing here is the process—students are thinking deeply about the *how*, not only the *that*, and they are reflecting on what they tried to do in their reflection.²⁸ They know *that* it is difficult, just as much as they know *that* in this excerpt, septuplets across six eighth notes interact with three groups of four-against-three polyrhythms. But thinking about the *how* engages them with a learning strategy that can be applied to other repertoire, giving them a transferrable skill, and encouraging them to understand rhythm as a broad phenomenon across repertoires, rather than one particular to a specific work or style. Furthermore, mandating a post-performance reflection from students on this process provides further insight into their process, and in my experience, reveals a diligence and attention to detail that some students might not be compelled—or capable—to pursue in written-only work.

28 If, however, one wishes to run a similar assignment to this one where mastering the excerpt is the desired goal, easier excerpts—not necessarily from pieces by Ferneyhough—could be used.



Example 7a
Excerpt of *Bone Alphabet* (Ferneyhough, 1992)

Top line:

A $\boxed{7:6}$
= 7 16th notes in the time of 6 16th notes

B $\boxed{7:6}$
= 7 16th notes in the time of 6 16th notes

Bottom line:

C $\boxed{4:3}$
= 4 16th notes in the time of 3 16th notes.

whole Excerpt (7 time subdivided into 14 16th notes):

D Top line: 7
Bottom line: 8

1 2 3 4 5 6 7 8 9 10 11 12 13 14

16th note in 7/8 time signature.
1st set of 7:6
2nd set of 7:6 within 1st set of 7:6.

Example 7b
Student's rough work (used with permission)

Case Study 4: Rhythm and Hip-Hop Beat Creation

The final two case studies focus on hip-hop music. In hip-hop terminology, the beat commonly refers to the instrumental, sampled, or synthesized elements that together support the main vocalizing (rapping, singing, chanting, and ad-libbing), commonly known as the *flow*. Though hip-hop music originated, and is largely practiced, without any formal use of music notation, technological and performative evolutions in the genre inform the way musical time is conceptualized. Early hip-hop beats were created with turntables, where producers (then known as DJs) looped breakbeats—drums-only sections of 1960s and 1970s soul and funk songs—to create a constant, cyclical rhythmic base. By the 1980s, however, producers had the technological means to sample single drum hits and build their own beats using sequencers—digital tools that organize and playback sounds in a looped arrangement. These earliest sequencers, such as the Akai MPC60, displayed limited visual information. But as technology improved, sequencers were introduced as computer software applications.

Nowadays, powerful sequencers are accessible, online, and quite often free; this makes them potent tools for creative assignments involving rhythm. One such application is the online software *Patterns sketch*, a versatile, free, and accessible beat creation tool that also allows users to save their work (ideal for student assignments). Like musical scores, today's drum sequencers represent time horizontally and orchestration vertically, but unlike musical notation, sequencers use a grid-like sequence of "steps" (sub-tactus pulses) to plot rhythmic patterns. As shown in Example 8a, *Patterns sketch*'s interface is oriented like many other sequencers: time is measured from left to right, and the available sound options are organized vertically. Users can change the drum kit, adjust tempo, step quantity (up to four measures of 16 steps), and shuffle ratio (the degree of swing the beat expresses). The interface, in short, is easy to learn and quite versatile considering its cost-free accessibility.

While the previous case studies have foregrounded how students can intersect theoretical, *wissen* knowledge with performance-based, *können*, knowledge, hip-hop music presents a different angle to this intersection. Undergraduate music students studying a Western art music curriculum are unlikely to have the ability, confidence, or interest to perform hip-hop music in class (this also risks being culturally problematic), but *können* knowledge here can assume an equally creative form—recomposition—and can lead to non-musical performative learning outputs as described below. Students can cultivate skills in transcription and use software like *Patterns sketch* to, as Kolb puts it, "put out an expression of what is learned" (208) through recomposition or recreation of drumbeats lifted from real songs in the hip-hop repertoire. It should be

noted that analyzing popular music in the music theory discipline often requires some familiarity with transcription, and this case study assumes some familiarity with drum notation, basic components of the drum kit, and general facility with transcriptions of rhythmic patterns. Resources for drumkit instrumentation and notation are widely available online.²⁹

After introducing Patterns sketch to students, an assignment plan can proceed as follows. Students are assigned a hip-hop song—a list of songs with relatively straightforward drumbeats has been included in Example 8b. They identify the mensural length of the looped drumbeat in their song, which they transcribe by plotting it as a step grid (like Patterns sketch’s interface) on graph paper. The beat for the song “Shook Ones, Part II” (Mobb Deep, 1995) has been recreated in Example 8a. Students can then orchestrate this beat on Patterns sketch, with the goal of having it sound as close to the original as possible. This may involve selecting the most appropriate drum kit from the ones available, or slightly adjusting the mix levels, or the shuffle function. In so doing, students are not only approaching this topic from a theoretical angle—they learn about rhythm, meter, and timbre—but they also gain valuable transcription skills and explore their creativity in reorchestrating the beat on Patterns sketch. Students are thus again intersecting *wissen* and *können* knowledge. Most importantly, they are approaching the analysis of hip-hop music by considering its creation, or manifestation in practice.



Example 8a

Screenshot of Patterns sketch, a free, online drum sequencer, showing a rudimentary transcription and orchestration of the drumbeat from “Shook Ones, Part II” (Mobb Deep, 1995).

29 See for example Thompson (undated), Brown and Ley (2014–2023), and Audio Graffiti (undated).

The attacks on the “hi bongo” are included as an attempt to match the timbre of the snare drum in the original song, as the available snare drum on this drumkit setting is substantially lower pitched.

“South Bronx” (Boogie Down Productions, 1987)
 “The Bridge” (MC Shan, 1986)
 “Paper Thin” (MC Lyte, 1988)
 “Can I Kick It?” (A Tribe Called Quest, 1990)
 “The Choice is Yours” (Black Sheep, 1991)
 “U.N.I.T.Y.” (Queen Latifah, 1993)
 “Slow Down” (Brand Nubian, 1990)
 “It Ain’t Hard to Tell” (Nas, 1994)
 “OPP” (Naughty By Nature, 1991)
 “Juicy” (The Notorious B.I.G., 1994)
 “Shoop” (Salt-n-Pepa, 1991)
 “Rock The Bells” (LL Cool J, 1985)
 “Ego Trippin” (Ultramagnetic MCs, 1988)

Example 8b

Songs with relatively straightforward drumbeats that
 can be used for the beat mockup assignment.

Case Study 5: Segmentation, Phrasing, and Hip-Hop Flow

The final case study concerns hip-hop flow. Flow is also occasionally conceived by its creators in grid formation; the MC Rakim, for example, uses a bespoke system of dots and lines to plan out his flow rhythms, and many others graphically position rhymes in a grid-like manner when composing their verses.³⁰ A formalized version of this grid-like system is often used in transcriptions by journalists and researchers and can be a powerful visual tool in pedagogy.³¹ Example 9 shows how grid notation can incorporate both beat and flow, again using “Shook Ones, Part II.” The count and sixteenth-note subdivision for a basic 4/4 measure is displayed across the top of the grid with a common short-hand notation: *1-e-and-a*, etc. Since hip-hop songs normally involve a constant, cyclical metric structure (see above), successive “measures” of flow can be notated below one another as done here.³² The drumbeat, which might

30 See Marrow and Baybutt (2012). In Rakim’s interview in this film, he describes and shows his flow notation system.

31 Adams (2008) illustrates an early example of using grid notation to notate flow rhythms, based on the pioneering work done by Adam Krims (2000).

32 MCs often discuss formal organization of their flow in terms of “bars.” See especially Edwards (2009).

1	e	+	a	2	e	+	a	3	e	+	a	4	e	+	a
Flow															
													I	got	you
stuck	off		the	real-		ness			we	be	the	in-	fa-	mous	you
heard	of	us			of-	fi-	cial	Queens-		bridge		mur-	der-	ers	the
Mobb		comes	e-	quipped		for	war		fare		be-	ware		of	my
crime		fa-	mi-	ly	who	got	'nough		shots		to	share			
Beat															
HH		HH		HH		HH		HH		HH		HH		HH	
				SD								SD			
Kick		Kick					Kick	Kick							Kick

Example 9

Lyrics (as printed on genius.com) and grid-notated transcription
of an excerpt of “Shook Ones” (Mobb Deep, 1995).

loop in one or two measure iterations, can be shown once below the flow.³³ Here I have shown only the patterning of the kick, snare, and hi-hats.

In cultivating flow styles unique to them, MCs (rappers) use rhyme, rhetoric, syntax, rhythm, meter, articulation, pitch, and breathing to organize their rapped lyrics. Mitchell Ohriner (2016) and I (Duinker, 2021) have noted that rhyme, syntax, and breathing are usually the most prevalent markers of such organization, with Ohriner suggesting that each of these markers on their own would generate different segmentations of the same passage of flow (158) and my own work applying segmentation analysis to matters of phrasing in flow.³⁴ “Shook Ones, Part II” presents a clear example of how segmentation and phrasing analysis can be used in the classroom.

Students are given the lyrics shown in Example 10a, which open the first verse of the song, rapped by Mobb Deep member Prodigy (b. Albert Johnson, 1974–2017). The lyrics here are formatted as they appear on the open-source lyric annotation website genius.com, which loosely, though by no means rigidly, organizes lyrics according to the measure (in this context the looped 4/4 drumbeat) in which they are rapped. Students’ first task involves identifying all the rhyming syllables and syntactic breaks in the verse. As Examples 10a and b suggest, we can see right away that these lines

33 If the drumbeat forms a two-measure loop, two grid rows may be used to represent it.

34 I have proposed that MCs’ organization of flow into phrases can be understood in five contexts: rhyme type (end v. internal), rhyme quantity (couplet v. chain), syntax, breathing, and rhythmic disruptions and groupings (Duinker, 2021).

are punctuated (and thus segmented) by end rhyme, while some joined by syntax. For example, lines 3 & 4 can be read as a complete two-part sentence: “The Mobb comes equipped for warfare/beware of my crime family who got ‘nough shots to share.” But here the rhyme suggests a different segmentation than the syntax: the line breaks after “beware,” while the internal syntactic break arrives after “warfare”—this indeed reflects how it is performed in the song. The first two lines project even more nuance. First, the rhymed syllables are all embedded in the second line only: on “heard of us” and “murderers.” Second, the syntax is also complex. The “you heard of us” might be read as a syntactic interruption: “We be the infamous (you heard of us) official Queensbridge murderers.”

1. “I got you stuck off the realness, we be the infamous
2. You **heard of us**, official Queensbridge **murderers**
3. The Mobb comes equipped for **warfare**, **beware**
4. Of my crime family who got ‘nough shots to **share**”

Example 10a

Lyrics (per genius.com) excerpted first verse of “Shook Ones, Part II.” Rhymes are bolded.

1. “I got you stuck off the realness, we be the infamous (you heard of us) official Queensbridge murderers
2. The Mobb comes equipped for warfare; beware of my crime family who got ‘nough shots to share”

Example 10b

Same lyrics, organized by syntactic structure.

Students are tasked with evaluating the rhyme and syntactical structure of the lyrics by rewriting them according to syntactic structure, which might look as shown in Example 10b. Using grid notation, they then transcribe the lyrics as Mobb Deep performs them, shown in Example 11.³⁵ This work step may take some time, especially if students are unfamiliar with transcription, but introducing this activity/assignment after having built the beat for “Shook Ones, Part II” in Patterns sketch might help, because then students have familiarized themselves with the metric structure of this song. Once the transcription is complete, students annotate rhymes, syntactic breaks, and breath points (if audible) right on their notation, using any sort of consistent

³⁵ Students could also be instructed to situate the lyrics graphically according to their performance in time, following the work of John J. Mattessich (2019, specifically Example 3).

1	e	+	a	2	e	+	a	3	e	+	a	4	e	+	a
													I	got	you
stuck	off		the	real-		ness			we	be	the	in-	fa-	mous	you
heard	of	us			of-	fi-	cial	Queens-		bridge		mur-	der-	ers	the
Mobb		comes	e-	quipped		for	war		fare		be-	ware		of	my
crime		fa-	mi-	ly	who	got	'nough		shots		to	share			

Example 11

Lyrics (as organized on [genius.com](https://www.genius.com)) and grid-notated transcription of an excerpt of “Shook Ones” (Mobb Deep, 1995).

annotation system. In the annotations used here, the shaded boxes indicate related rhymes and the vertical lines indicate syntactic breaks.

So far, this case study has resided primarily in the *wissen* domain and could easily remain there and still constitute an effective and engaging approach to rhythmic analysis in hip-hop music.³⁶ But several intersections with *können* knowledge are possible. I find the most effective means to ensure transcription accuracy is to try privately performing the transcription as notated to see if it a) matches what we hear, and b) matches what we feel, when we listen to the recording. The hearing element here is self-evident; if one vocalizes or taps their transcription along with Prodigy as he raps, they will hear whether they made any mistakes. But the feeling is more nuanced and highly personal. For me, syncopated passages like ‘*nough shots to share* have a specific feel to them if I vocalize along with the recording; that feeling does not transfer when I vocalize the rhythms incorrectly (this sensation is much more pronounced in passages with more complex rhythmic and syncopation structure).³⁷ Students could also try recomposing this passage, using their understanding of syntax, rhyme, and meter to propose alternate flow rhythms. Simple recomposition exercises like these give students an embodied sense of rhythm and its connection to speech and music; they understand on a deeper level what feels “right” and “wrong” in flow, and

³⁶ For example, students could use their multi-parameter analysis of the flow surface to develop a phrasal analysis of the excerpt. What constitutes a musical phrase in hip hop? Surely some element of initiation, continuation, and conclusion, and the way these phenomena play with listener expectation, would figure here. Any discussion of phrases might also involve consideration of the song’s beat, and the Patterns sketch assignment could be combined with this flow analytical work.

³⁷ With these suggestions I do not mean to imply that students perform recomposed raps in class, or even for assessment. Any vocalizing students do is done privately as a personal engagement with one’s own analytical work. Reflections on vocalizing, however, are a valuable part of this process, and students can be prompted to reflect on their experiments performing their transcriptions and recompositions.

why it feels that way. This knowledge is difficult to acquire without doing.

A more substantial performative extension of both the Patterns sketch and flow-grid case studies involves students applying their knowledge—at this point a blend of *wissen*, *kennen*, and *können*—in a group project that mimics copyright lawsuit proceedings. Musical borrowing has been an important stylistic feature of hip-hop music since its nascency, and numerous copyright lawsuits have plagued many of the genre’s top MCs, record companies, and producers. These lawsuits often involve the plaintiff accusing the defendant of replicating a riff, timbre, sample, or rhythm without permission. Forensic musicologists are often called as expert witnesses in these suits, and as such, sharp critical listening and analytical skills often influence the legal outcome. A mock legal proceeding in the classroom allows students to “lawyer up,” serving in small groups (legal teams) that argue real-life copyright cases as plaintiffs or defendants. Students are required to analyze the song(s) in question, assess their purported similarity in the eye of copyright law, and argue their assigned position (plaintiff or defendant). The concept for this group project was designed by Claire McLeish, and together we administered its first iteration in the classroom in 2019. In a class filled with students who were not music majors, we were stunned at their ability to cogently argue complex analyses within an imposed time limit—many of them knew very little about music theory at the beginning of the semester.³⁸ These students had mobilized their analytical, *wissen* knowledge of rhythm into a performative, rhetorical, *können* domain. They were putting out an expression of what was learned. Taken as a whole, the complex rhythmic surface of hip hop beats and flow performances provides rich fodder for close readings of rhythm in the music theory classroom and their application beyond *wissen*-gaining analysis.

Conclusion

Using performance and analysis together—more specifically, the dialogue between *wissen* and *können* knowledge—as a common plane for experiential learning of rhythm provides a path around any issues of continuity in rhythm pedagogy. Students know *that* rhythmic durations mean something in a certain tempo and metric structure, and *that* these durations interact with one another in an ostensibly systematic way (allowing, of course, for performance-based timing idiosyncrasies). But thinking about

³⁸ I thank Claire McLeish for developing this assignment and administering it with me in our co-taught course at McGill University. A full version of this assignment, and the syllabus for the course for which it was designed, is available at <https://societymusictheory.org/grants/dcd/syllabi>.

how these meanings and interactions sound, and about how performers bring them into sound, and about how slippery this task can be in its organicity and flexibility, invites students to form a deeper connection with rhythm.

I have summarized five pedagogical case studies that encourage experiential learning of rhythm and engage Leong's three ways of knowing: *wissen*, *kennen*, and *können*. This approach contrasts with the largely *wissen*-based knowledge acquisition that commonly occurs in the theory classroom. The repertoire in these case studies is all traditionally peripheral to undergraduate theory course sequences: contemporary art music, non-Western music, and hip-hop music. As I have endeavored to argue here, rhythm, experiential learning, and non-canonical musical repertoires can intersect in compelling ways in the theory classroom, creating meaningful learning experiences for students. To give just a bit of tangible evidence of this: when I first worked with students on downbeat migration in Reich's *Clapping Music*, very few could make it through a memorized performance of the piece, even in a group performance setting where I helped them along. The experience witnessing their initial struggles made the smiling looks of satisfaction on their faces upon completing a solo, memorized performance for graded assessment, even more meaningful. Some students reported having practiced the piece 30 times before feeling confident enough to record and submit it for grading. This type of repetitive, experiential skill acquisition is the common thread uniting the musical cultures I have discussed here, whether they stem from Africa, India, or North America.

I began this article by identifying a gap between the content of undergraduate theory curricula and undergraduate students' professed vocations, supported by statistics from two institutions where I presently or have recently taught. In conclusion, I wish to address one potential criticism of this rationale: that there is simply less need for integrating theory and practice in undergraduate music education than I argue for here. The presence of such publications as *Engaging Students* suggests an appeal for developing pedagogical practices that increase student engagement and maximize their retention of material.³⁹ I argue here that one way of achieving these goals is by orienting theory pedagogy to serve students' practical pursuits. By doing so, I do not believe that this should be the *only* goal of students' education. But in an environment where students actively question the utility of their theory education, in its relevance both to their performance practice and in a world increasingly aware of issues of marginalization, the appeal of incorporating experiential learning and non-canonical repertoire is perhaps greater now than ever before. I hope to have

39 See www.flipcamp.org and <https://engagingstudentsmusic.org/>.

highlighted that appeal through these case studies, proposing ways for performance issues, rhythm, and music traditions exterior to the Western art music canon to permeate undergraduate theory pedagogy, empowering students and broadening their appreciation for diverse ways of learning, and ultimately, knowing.

Works Cited

- Adams, Kyle. 2008. "On the Metrical Techniques of Flow in Rap Music." *Music Theory Online* 15 (5). <https://mtosmt.org/issues/mto.08.14.2/mto.08.14.2.adams.html>.
- Adler, Jacob. 2016. *Wheels within Wheels: A Study of Rhythm*. Self-published.
- Anonymous. Undated. *Engaging Students: An Unconference and Journal on Classroom Music Pedagogy*. Accessed Feb 2, 2023. www.flipcamp.org (vols 1–6) and www.engagingstudentsmusic.org (vols 7–).
- Arom, Simha. 1985/1991. *African Polyphony and Polyrhythm*. Translated by Martin Thom, Barbara Tuckett, and Raymond Boyd. Cambridge: Cambridge University Press.
- Audio Graffiti. Undated. "Guide to Drum & Percussion Notation." *Audio Graffiti*. Accessed September 15, 2023. <https://web.mit.edu/merolish/Public/drums.pdf>.
- Barolsky, Daniel G. 2007. "The Performer as Analyst." *Music Theory Online* 13, no. 1. <https://mtosmt.org/issues/mto.07.13.1/mto.07.13.1.barolsky.html>.
- Brown, Nate, and Steve Ley. 2014–2023. "Drum Notation Guide – Drum Key." *Online Drummer*. Accessed Sep. 15, 2023. <https://www.onlinedrummer.com/pages/drum-key>.
- Dewey, John. 1938. *Experience and Education*. London: Collier-MacMillan.
- . 1959. *Dictionary of Education*. Westport CT: Greenwood Press.
- Duinker, Ben. 2021. "Segmentation, Phrasing, and Meter in Hip-Hop Music." *Music Theory Spectrum* 43, no. 2: 221–45.
- . 2022. "Interpretive Difficulty and Emergent Structure in Contemporary Music." *Journal of Music Theory* 66, no. 2: 223–52.
- Edwards, Paul. 2009. *How to Rap: The Art and Science of the Hip-Hop MC*. Chicago: Chicago Review Press.
- Fieldman, Hali. 2008. "Reviews: 'Harmony in Context,' by Miguel Roig-Francoli; 'The Complete Musician: An Integrated Approach to Tonal Theory, Analysis, and Listening,' by Steven G. Laitz; 'The Musician's Guide to Theory and Analysis,' by Jane Piper Clendinning and Elizabeth West Marvin." *Music Theory Spectrum* 30, no. 2: 366–82.
- Fürniss, Susanne. 2006. "Aka Polyphony." In *Analytical Studies in World Music*, edited by Michael Tenzer, 163–204. Oxford: Oxford University Press.
- Hartenberger, Russell. 2016. *Performance Practice in the Music of Steve Reich*. Cambridge: Cambridge University Press.
- . 2020. "The 5% Quandary: Rhythm in Music Theory." Online lecture. <https://youtu.be/vGBIZy6qP3c>.
- Hoffman, Richard, William Peltó, and John W. White. 1996. "Takadimi: A Beat-Oriented System of Rhythm Pedagogy." *Journal of Music Theory Pedagogy* 10: 7–30.
- Ito, John Paul. 2020. *Focal Impulse Theory: Musical Expression, Meter, and the Body*. Bloomington: Indiana University Press.
- Kolb, David A. 1984. *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs: Prentice-Hall.
- Kolb, Alice Y., and David A. Kolb. 2005. "Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education." *Academy of Management Learning and Education* 4, no. 2: 193–212.

- Krims, Adam. 2000. *Rap Music and the Poetics of Identity*. Cambridge: Cambridge University Press.
- Laitz, Steven G. 2016. *The Complete Musician: An Integrated Approach to Theory, Analysis, and Listening*. New York: Oxford University Press.
- Latham, Edward. 2005. "Analysis and Performance Studies: A Summary of Current Research." *Zeitschrift der Gesellschaft für Musiktheorie* 2, nos. 2–3. <https://www.gmth.de/zeitschrift/artikel/521.aspx>.
- Leong, Daphne. 2019. *Performing Knowledge: Twentieth Century Music in Analysis and Performance*. New York: Oxford University Press.
- Lester, Joel. 1995. "Performance and Analysis: Interaction and Interpretation." In *The Practice of Performance: Studies in Musical Interpretation*, edited by John Rink, 197–216. Cambridge: Cambridge University Press.
- Marrow, Tracey Lauren (Ice-T), and Andy Baybutt. 2012. *Something from Nothing: The Art of Rap*. JollyGood Films.
- Mattessich, John J. 2019. "This Flow Ain't Free: Generative Elements in Kendrick Lamar's To Pimp a Butterfly." *Music Theory Online* 25, no. 1. <https://mtosmt.org/issues/mto.19.25.1/mto.19.25.1.mattessich.html>.
- Nettl, Bruno. 2015. *The Study of Ethnomusicology: Thirty-Three Discussions*. Urbana: University of Illinois Press.
- Ohriner, Mitchell. 2016. "Metric Ambiguity and Flow in Rap Music: A Corpus-Assisted Study of OutKast's 'Mainstream' (1996)." *Empirical Musicology Review* 11, no. 2: 153–179.
- Pappa, Dimitra, et al. 2011. "Game-Based Learning for Knowledge Sharing and Transfer: The e-VITA Approach for Intergenerational Learning." In *Handbook of Research on Improving Learning and Motivation through Educational Games: Multidisciplinary Approaches*, edited by Patrick Felicia, 974–1003: IGI Global.
- Reina, Rafael. 2015. *Applying Karnatic Rhythmical Techniques to Western Music*. London: Routledge.
- Rothstein, William. 1990. "The Americanization of Heinrich Schenker." In *Schenker Studies*, edited by Hedi Siegel, 193–203. Cambridge: Cambridge University Press.
- Sankaran, Trichy. 2010. *The Art of Konnakol (Solkattu): Spoken Rhythms of South Indian Music*. Toronto: Lalith Publishers.
- Schubert, Peter. 2013. "My Undergraduate Skills-Intensive Counterpoint Learning Environment (MUISICLE)." *Engaging Students; Essays in Music Pedagogy* 1.
- Silliman, A. Cutler. 1980. "Comprehensive Musicianship: Some Cautionary Words." *College Music Symposium* 20, no. 2: 125–9.
- Stein, Erwin. 1962. *Form and Performance*. New York: Alfred A. Knopf.
- Swinkin, Jeffrey. 2016. *Performative Analysis: Reimagining Music Theory for Performance*. Rochester: University of Rochester Press.
- Thompson, Nick. Undated. "Drumkit Notation Key." *Philip Tagg*. Accessed Sep. 15, 2023. <https://tagg.org/xpdfs/DrumkitkeyNT09.pdf>.
- Vanoeveren, Ine. 2018. *Tomorrow's Music in Practice Today*. Antwerp: University Press Antwerp.
- Witek, Maria. 2017. "Filling In: Syncopation, Pleasure and Distributed Embodiment in Groove." *Music Analysis* 36, no. 1: 138–60.

Reining in Pitch and Pitch-Class Motives: Rules for Improving Analytic Outcomes in the Tonal Theory Classroom

BRENT AUERBACH

Pitch-based motives proliferate in many styles of music and are routinely covered in undergraduate instruction. The treatment motives receive, however, is usually cursory. Tonal theory instructors have many reasons for skimming the motivic analysis unit, among them time pressures, underestimating the topic's complexity, and the influence of textbook design. This standard rushed approach yields poor outcomes in which students are unable to reliably identify recurrences of a small set of motives over any musical span. They are as likely to apply brackets and labels indiscriminately to too many (trivial) events as they are to under-analyze large stretches of motivically-significant events.

This article offers a detailed methodology to combat such results, which manifests at its core as a set of graduated, restrictive guidelines for both students and teachers. The rules are cast in negative valence—e.g., “endeavor to not do this or that”—to counter the outcomes that result from classes being afforded too many freedoms in technique too early in their development. Such unrestricted analyses—which highlight phenomenally-dubious shapes, over- or under-analyze long stretches of music, and inconsistently relate ideas to each other—often fail to communicate a clear view of pieces. The utility of the method is supported by critiques of fabricated student analysis and teacher assignments centering on pieces by Fanny Hensel, Wolfgang Amadeus Mozart, and Edvard Grieg.



I. Introduction: Issues of Teaching Motivic Analysis

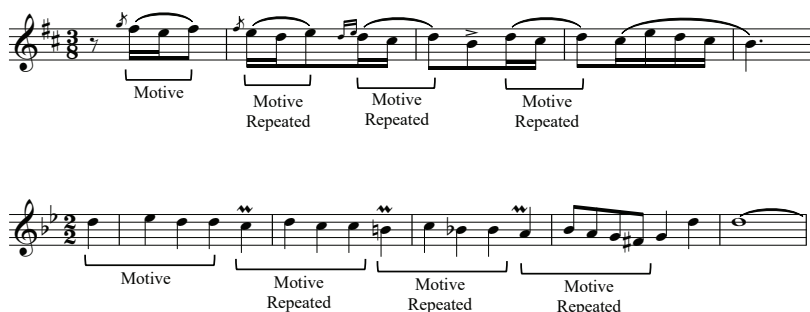
Pitch-based motives are routinely covered in undergraduate music theory instruction, frequently early in the curriculum and only briefly.¹ Textbooks published over the last twenty-five years typically devote little room for the discussion of motives, ranging from one or two paragraphs to several pages at most.² In these contexts,

1 While many theories regard motives as primarily rhythmic, with pitch content contributing to a shape's identity in some but not all cases (Zbikowski 2002, 26), this article—following Straus 1990 (24), Beach 2012 (xvii) and Forte 1983—concentrates on pitch and pitch-class motives. My decision to concentrate on pitch and pitch-class motives should not be viewed as an implicit argument against the central importance of rhythm-based shapes; indeed, many of the principles and guidelines detailed below can be adapted to rhythmic motive analysis.

2 With respect to textbooks that include sections on motive, see Kostka, Payne, and Almén (2018, 150) and Roig-Francolí (2011, 274) for briefer treatments of motive. See Clendinning and Marvin (2016, 362–68); Benjamin, Horvit and Nelson (2014, 234–39); Gauldin (1997, 149–53 & 338–39); and

the motive topic primarily serves to illustrate basic aspects of melody construction.³ A working definition for motive is provided. Then, the texts present the standard pitch transformations of inversion, augmentation, fragmentation, etc. to show how composers achieve novelty through variation while promoting continuity and coherence through economy of material (see Example 1). This approach to introducing motives presents no pedagogical complications in terms of content or the bracketing/labeling practices modeled, because communicating the concept, vocabulary, and basic usage of motives, in the theoretic sense at least, is fairly straightforward.

a. Two examples from Benward and Saker (2009, 120) from the section on pitch motives.



Example 1

Textbook illustrations of pitch motives

This article, in contrast, treats the issue of motives returning later in the curriculum as a means for carrying out *analysis*—a more complicated enterprise that has long occupied a tenuous position in the standard four- or five-semester undergraduate theory curriculum. Instructors who build a motivic analysis unit into their class plans have many reasons for doing so. Motives appear in most styles and genres of music; moreover, these shapes have been recognized by composers and

Benward and Saker (2009, 119–21) for somewhat lengthier explications.

3 Two exceptions to this generalization should be noted. One is Caplin (2013), which invokes motive frequently throughout to reinforce the connection between motive and melody. While Caplin provides many astute insights into motivic relationships, they are too isolated to constitute a workable, standalone approach to analysis. The other is Laitz's *Complete Musician* in its second and fifth editions (2008; 2023, with Callahan), which dedicates a full chapter to introducing pitch, rhythm, and texture motives, culminating in three demonstrations of advanced techniques (e.g., multi-movement motivic correspondence).

- b. Examples from Gauldin (1997, 151–52). The graphic in line B identifies a linear 3rd motive, “x,” in m. 5 that returns in inversion in m. 9.

B. CHOPIN: *GRANDE VALSE BRILLANTE*, OP. 18



D. BEETHOVEN: *SYMPHONY NO. 6* (“PASTORAL”), I



- c. Workbook example from Clendinning and Marvin (2005, 211).

II. Motivic transformations

Excerpts from two Bach fugues are given below. Play through each example, or listen to a recording from your library. Name the motivic transformation that each passage illustrates.

A. Johann Sebastian Bach, Fugue in A minor, from *The Well-Tempered Clavier*, Book 1, mm. 1–4, 67–70

Bach's fugue subject appears in the first three measures. How is the subject transformed in measures 67–70? _____



Example 1 (cont'd)

Textbook illustrations of pitch motives.

theorists for centuries and are routinely used by musicians in their daily lives. A third reason for including motives is in keeping with musicians' early, informal experiences with them, perhaps sitting next to a studio teacher who pointed them out in scores. Lastly, motive is regarded by many, for better or worse, as a relatively easy theory topic to grasp, further recommending it as a potentially gentle, non-technical first foray into analysis.

Beyond this, motivic analysis offers other advantages that align more specifically with goals of theory pedagogy as practiced in music academic settings. Jane

Clendinning and Elizabeth West Marvin, the authors of *The Musician's Guide* series, assess the value of motivic analysis as follows:

Motivic analysis, a topic that has long fascinated music analysts and composers, can reveal remarkable economy and unity, generating complete and satisfying larger forms from a handful of motives. Identifying the primary motives and their transformations can also help you memorize a piece as well as shape a musical and satisfying performance (2016, 365).

The quote's second sentence lists two benefits that appeal to applied musicians: namely, that studying motives will save them time in the practice room and raise the effectiveness of their performances. The first sentence refers to rewards that are less immediately tangible. It argues that some aesthetic satisfaction derives from the "economy and unity" built into certain pieces, and that these aspects are discoverable by examining motives. To the extent that one would like students to express their knowledge about how classical music is structured and for what expressive purposes, it follows that a worthy skill to foster in them is medium-to-large-scale motivic analysis.

Despite the many benefits of motivic analysis, such a unit never appears in many curricula. One reason for this is the perennial problem of time pressures—with simply too many topics to cover in roughly two years. Another reason stems from the content and organization of the class textbook, which often provides the blueprint for an instructor's curriculum. In the rare instances where textbooks broach motivic analysis, the coverage is often brief and/or couched as an enrichment activity.

A third reason for not teaching motivic analysis is the general lack of established procedures for carrying it out. Within speculative theory, motives have long resisted systematization in nearly all respects, including their format (size and scope), nomenclature, and transformational behaviors. The literature, moreover, offers surprisingly little direction on how to organize and structure a full motivic analysis. My recent book, *Musical Motives* (2021), represents an exception in this regard; however, its scope precludes incorporation into a one- or two-week course block.

With the pedagogy of motives having long been disunified, it has fallen to instructors of each generation to determine anew their own views of what motives look like and how they act with respect to repetition and variation, as well as what constitutes a proper analytic claim. While few textbooks offer concrete guidance for carrying out motivic analysis, one or two at least endeavor to offer some advice. Examples include Turek's fine suggestion to "match an initial melodic idea with harmonies that fit it" (2007, 195) and the following recommendation from Clendinning and Marvin: "In

analysis, first identify motives by their shape and repetition, then look for possible transformations in rhythm, contour, or intervals that help to unify the passage. Above all, use your ears!” (2016, 364).

The fourth and last reason for omitting coverage of motivic analysis, this one also entangled with methodology, is that motives and motivic analysis are both more complicated than most think. The issue, put more directly, is that motives are inherently multi-dimensional. We may treat them as if they were purely pitch and rhythm entities; however, the fact that they may occur anywhere in a piece’s fabric speaks to them being intrinsically bound to all musical domains, including harmony, contour, articulation, and texture.

Theorists and educators who regularly work with motives are generally better able to sense how the melodic lines in tonal music coordinate with harmony. As a result, these seasoned analysts tend to parse motives more musically. Students who lack this training, on the other hand, too often seek out and draw circles around motives as they would targets in a word search task (Rosen 1994, 95). Growing out of that habit means pondering the larger contexts in which a motive’s constituent notes appear. At the same time that students develop that skill, they must also learn to navigate the “is-it-or-isn’t it?” ambiguities associated with the phenomenon of a shape returning with an altered surface rhythm and/or pitch profile.

These plural aspects of the topic are far too complex to be addressed by any “crash course” introduction to the topic. A day or two of lecture and demonstration followed by one or two assignments can result in a wide array of problems. One student’s paper may be festooned with brackets, boxes, and lettered labels (x, y, z, etc.), many or all inconsistently applied. Another’s may show vast stretches of un(der)-analyzed music, in which hardly any markings appear at all. It is not uncommon for both extremes to manifest in a single analysis!

A condition in which students cannot identify recurrences of a small set of motives over a span of music is pedagogically untenable. In response, this article prescribes a detailed pedagogy that will help students analyze motives consistently and with confidence. It begins in Section II by detailing three model behaviors associated with a convincing motivic analysis: panoramic vision, synthetic thinking, and consistency. The article’s core pedagogical offering is then presented as a method in the form of graduated, restrictive rules for identifying and associating motive forms and for organizing findings. The student rules are supported by a set of complementary guidelines for teachers. In Section III, the rules and guidelines are demonstrated by being applied to fabricated multi-stage analyses of works by Wolfgang Mozart,

Fanny Hensel, and Edvard Grieg. The article's conclusion offers additional thoughts on the method, specifically with regard to curriculum design, that culminates in a final assessment of the rules in terms of their utility and—somewhat surprisingly—their flexibility.

II. Pedagogy of Motivic Analysis

This section outlines a novel path towards competency in motivic analysis in three main parts. The first part establishes three model (i.e., “good practice”) behaviors deemed essential in analysis. The second part introduces the restrictive rules pertaining specifically to motivic analysis. The third part lays out a full process of analysis, from instructor planning, through student work and multiple revision, all the way to the complete and improved analytical product.

A. Model Analytic Behaviors

To provide context for the rules to follow, I begin by introducing three model analytic behaviors. While all three naturally associate with effective analysis in general, conscious awareness of them is particularly critical when carrying out motivic analysis. The first behavior involves adopting what I call a “panoramic vision” approach to analysis. This term is intended to signal the opposite of a tunnel vision approach, where emphasis is given to findings obtained from too narrow a viewpoint (e.g., developing a Roman numeral analysis in the hope of definitively analyzing a piece.⁴) To promote panoramic vision, the rules have been crafted to expand the traditional classroom view of motives as pitch and rhythm events to include texture and harmony. With regard to texture, the method directs students to examine not just the melody, but all voices. Regarding harmony, it instructs them to determine the content and boundaries of motives not by intuition, but by calling on their knowledge of chord tones versus non-chord tones and on the technique of melodic reduction. This multi-domain concept of motive⁵ broadens the scope of analysis, encouraging students to hear and see shapes both at the surface and under reduction, and, equally

4 Here it is, of course, mistaken to think that a Roman numeral analysis can convey a comprehensive account of even a single one of a piece's aspects, including harmony!

5 Critically, this approach can be extended beyond an introductory unit, eventually encouraging analysts to view motives themselves more broadly as “complex” configurations of rhythm, pitch, articulation, dynamics, gesture, etc. This view, codified early in Schoenberg's (2006) definitions and demonstrations of motive, has been amplified in writings by Carpenter (1988), Epstein (1979), Zbikowski (2002), and Auerbach (2021).

importantly, to observe them interacting with each other.⁶

The second behavior is synthetic thinking, which means making analytic connections not merely on the basis of immediate, surface findings, but on discovered findings as well. This concept invokes the distinction between observation and interpretation, two activities both integral to analysis which are separable in conception if not fully in practice.⁷ Observation entails gathering up musical facts—e.g., pitch and rhythm configurations or textural and articulative gestures—as one reads a score or attends to a performance. Interpretation entails arranging those facts to form new conclusions about musical (and, in many cases, compositional) processes.

The last model behavior is consistency. Consider that musicians, when carrying out analysis, usually rely on extant theories such as set theory and contour theory. These frameworks provide scripts for carrying out research and serve as a *lingua franca* helping to ensure that others will follow their arguments (Kuhn 2012). As noted earlier, the fact that motivic analysis largely lacks such trappings of an established discipline is one of the main reasons it is difficult to teach: there is too little consistency and communication among practitioners. Students seeking a return of a target shape in a span of music should not freely make up reasons to explain how each new event relates to it, but rather should argue by appealing systematically to a single set of criteria. They should, moreover, be comfortable applying the same principles of motivic identification to every piece they examine. By extension, the virtue of consistency also applies to larger groups of students in a classroom (or analysts in a society) as a standard analysis method is practiced and findings are communicated.

B. Rules and Guidelines for Reining in Motives

The method presented in this part of the article manifests as a set of graduated, restrictive rules.⁸ The rules are cast in negative valence—e.g., “endeavor to not do this or that”—in a similar manner and for a similar reason that the foundational rules of species counterpoint are. It is to counter the outcomes that result from students being afforded too many freedoms in technique too early in their development. Such freewheeling, unrestricted analyses, which highlight phenomenally-dubious shapes,

6 Much more will be said below on melodic reduction. Indeed, an important part of making motivic analysis more intuitive and consistent, as readers will see, will involve simplifying this complicated technique.

7 I credit Scott Murphy (University of Kansas) for first bringing this distinction to my awareness.

8 As we progress through the discussion, discerning how a given rule stems from the aspirational analytic behaviors—panoramic vision, synthetic thinking, and consistency—will often be a straightforward matter; nevertheless, I will pause on occasion to point out these connections.

over-or under-analyze long stretches of music, and inconsistently relate ideas to each other, often fail to communicate a clear view of pieces.

The philosophy of teaching via restrictive rules has garnered skepticism in modern pedagogy for many reasons, among them that it can discourage creative thought.⁹ I here reaffirm that instructors should remain cognizant of the potentially negative impacts of any proscriptive approach. In certain situations, however, such as at the very beginning of a unit, the “Endeavor to not” approach does have merits. The main one is that it allows for the installation of guardrails that can center practices, as opposed to admitting too many from the start.¹⁰ A corollary benefit is efficiency. In providing a means for streamlining classroom debates about which shapes are viable and which are not, this approach affords students more time to discuss the substantive content of the analyses at hand.

The “Endeavor to not” rules address a host of analytic concerns, ranging from microscopic issues of motive formation to macro-scale issues of structuring and presenting effective analyses. To further support the pedagogy, the main set of rules are supplemented by five guidelines for instructors that are meant to help them design class activities and homeworks.

To ground the following discussion and to prepare readers for the symbology used in the examples, this primer begins with some foundational definitions and conventions. The working definition for motive is a *memorable musical event comprised of approximately two to seven notes*. (Note, an important corollary to the stipulation about memorability is that any motive established early in an analysis must recur at least once.) The lower boundary requirement of two notes is firm, while the upper one is flexible.¹¹ As noted earlier, all motives to be discussed will be regarded primarily as pitch and pitch-class entities. Although there are no prohibitions against harmonic,

9 Increasingly, teachers have come to prefer rules that correlate actions with outcomes, such as “Incorporating parallel fifths into your part writing can result in this [drone/power chord]-like sonic effect.” This more neutral instructional stance is more edifying in that it tends to foster—as opposed to shutting down—student discussion and exploration. For more on the distinction between proscriptive and prescriptive rules and their role in theory instruction, see Dubiel (1990).

10 Readers should note that a significant portion of this article’s conclusion addresses when such guardrails may be removed.

11 Rationalizing motive as inherently melodic and embodying motion, Heinrich Schenker explicitly discounts the possibility of one-note pitch motives (1921 [2004], 27). Arnold Schoenberg, in contrast, very occasionally identifies single-attack events—notably, chord strikes—as motivic, even though his theory does not specifically treat the phenomenon. For more on chordal motives, see Anson-Cartwright (1996).

textural, contour-based, and even gestural motives, I recommend refraining from exploring these types in the earliest stages of instruction.

A brief set of examples centering mostly around Sousa’s *Washington Post* march will illustrate this article’s formatting and labeling conventions, as adapted from Auerbach 2021 (105–28); see Example 2.¹² In the pitch/pitch-class domain, motives are most often named according to their bounding diatonic interval, such as “2nd” or “6th.” The specific quality (minor, major, perfect) of such intervals will be disregarded in tonal contexts to avoid the need for renaming motives that are diatonically transposed; for example, both C-D-E and D-E-F will be regarded as equivalent, “3rd” shapes. For motives taking the form of commonplace figures, it is possible to apply a descriptive label, such as “neighbor,” “arpeggio,” or “arch.” A motive’s basic label can, moreover, reflect its general direction and disposition. One may specify with a prose or arrow qualifier that a given motive form ascends or descends as so: ↑6th and ↓Arp for an upward sixth leap and downward arpeggiation. (Such designations, being optional, will not appear in all cases below.) Additional qualifiers can be called on to indicate, say, that a fourth motive is “linear” or “gapped” or that it features “chromatic motion” (e.g., “Chr. 4th”).

In the pitch and pitch-class domain, a motive may always manifest as a fully contiguous stretch of notes in one voice, otherwise known as a *surface motive*. Three motives of two different types are shown in Example 2a, where a descending fourth (↓4th) shape is followed by two chromatic arch (**Chr. Arch**) shapes. Readers may observe in this and all subsequent examples that analytic brackets, beams, and circles are used indiscriminately, on the basis of notational convenience, to maximize readability.

Pitch motives may also manifest under melodic reduction.¹³ To democratize and more quickly inculcate a technique that can take years to master, I advocate for a “mechanical” style of reduction that prioritizes notes that appear at regular durations,

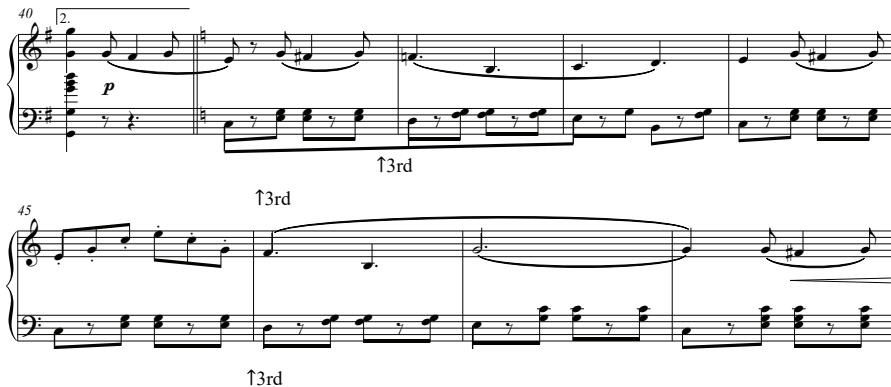
12 When describing strings of melodic pitches, the first note will be given a register designation in accordance with Acoustical Society of America standards. All subsequent notes will be assumed to lie in the same octave unless a new one is specified. For example, the pitch segment E₄-C-D-B₃-A-E₄ starts above middle C, crosses below it for two notes, and then ends on the E above.

13 Reduction, which simplifies a music’s surface to lay bare its underlying structure, is a primary concern in many styles of analysis; see Forte and Gilbert (1982, 7–17) and Morris (1993). Much of the skepticism that theorists harbor with regard to motivic analysis is rooted in its long tradition of favoring intuitive reductive approaches—exhibited most famously in Rudolph R  ti’s *Thematic Process in Music* ([1951] 1978)—over more systematic methods. In response, a few theorists, such as Epstein (1979) and Boss (1999), have sought to inject more rigor into motivic analysis by incorporating reductive techniques found in other methods, most often tonal analysis.

- a. linear fourth (4th) and “chromatic arch” (CA) motives in Sousa’s *Washington Post*, mm. 12–15.



- b. Three linear third (3rd) motives appearing at the dotted-half note level (Sousa, *Washington Post*, mm. 40–48). The motives in the bass are surface motives; the soprano 3rd is discovered under melodic reduction.



- c. Composite motive nomenclature. The same figure accommodates two labels, $N+\uparrow 3rd$ at left and $N\oplus\uparrow 4th$ at right (Sousa, *Washington Post*, mm. 53–54).



- d. Demonstration of prefix and suffix tones decorating a core linear 6th shape spanning D3–B₄ (Excerpt is newly composed, not from the literature.)

The entries at left show approach to the core shape by step above and below; those at right show exit by step down or up. The dotted bracket below the / 6th motive indicates a potential for an alternate label, 7th, that does not rely on a prefix.



Example 2

Demonstration of pitch and pitch-class motives, formatting and nomenclature.

for example at “every dotted half note.” (Here I would point out the sharp divergence from Schenkerian-style reduction, which places far less emphasis on surface rhythms and requires expert knowledge of counterpoint and harmony.)¹⁴ In Example 2b, mm. 41–43, a **3rd** motive is beamed in the bass. Importantly, this does not constitute reduction, because all the tones in that voice are contiguous. The place where melodic reduction does occur is in mm. 45–47 in the melody: the extraction of tones at every one of three successive downbeats reveals another 3rd shape on E_4 -F-G. The beams in the score excerpt illustrate that, in this case, the 3rd runs in parallel in the outer voices. (This insight, it should be noted, is the first that qualifies as an example of “synthetic thinking” behavior.)

Composite motives are recognized in this method as well. A standard plus sign, +, is used to indicate a discrete joining of smaller motives, as shown at left in Example 2c. A circled plus sign, $\oplus$, indicates an elided joining with one-note overlap, as shown at right. In allowing both composite motive labels, $N+\uparrow 3rd$ and $N\oplus\uparrow 4th$, to stand as correct and viable, this nomenclature convention expressly accommodates ambiguity. This flexibility precipitates two remarkable corollary conditions that should always be kept in mind. The first, more generally, is that ambiguity in labeling is inevitable when working with motives at this level of detail. The second is that ambiguity can and should be embraced and productively harnessed. An analyst encountering the raw melodic stuff of Example 2c, for instance, is free to decide between the 3rd- or 4th-based readings; they should make their choice so as to maximize resonance with 3rds or 4ths identified elsewhere.¹⁵

The last preliminary labeling convention allows analysts to view core motives as potentially being decorated by *prefix* and *suffix tones*.¹⁶ Stepwise approaches into a motive from above or below can be shown by placing a slash, \ or /, before the intervallic span designation, as in Example 2d, at left. Suffix motions exiting the core

14 The precedent for my “equal duration” reduction is David Epstein’s *Beyond Orpheus*. His Rule 2 for “ascertaining structurally significant pitches in thematic shapes” holds that “significant notes more often than not lie upon rhythmic and/or metric strong points” (1979, 37). It is true that Epstein’s book reflects the influence of Heinrich Schenker, perhaps most tellingly in the emphasis it places on multi-level (hierarchical) analysis. Despite this, *Beyond Orpheus* remains primarily a Schoenbergian treatise (1979, 7).

15 I prefer a fourth-based reading of this piece on the basis of the many salient fourths expressed throughout; examples in the melody can be found in mm. 8–11 (D_5 -G), mm. 11–12 (G_5 -D) and mm. 22–23 (A_5 - D_6).

16 Cadwallader (1988) similarly distinguishes the main body of a pitch-based motive from tones on its fringes that appear to change the spanning interval.

motive are illustrated at right. As was the case for composite motives, ambiguity comes into play with prefix and suffix notation. This can be observed in the bottom-left portion of the graphic, where the same $C\sharp_3-B\flat$ motive may be labeled as a 6th with prefix or a 7th without one.

Once a class has established its conventions for conceiving and labeling motives by relying on the above recommendations or its own procedures, it is appropriate to institute the rules list given in Example 3a. (Although the supplemental guidelines for instructors will not be treated until later in discussion, they are printed here in Example 3b to facilitate quick reference.)

As soon as the preview of the motive unit concludes, each member of the class should be given a copy of the rule sheet. The students should then proceed to a table reading of Rules i and ii and 1–6. Many, no doubt, will want clarification about certain words, such as “figuration,” “distortion,” and “style.” They may wish to voice early opinions about the rules, too, which should be encouraged. It is important during this activity that the instructor point out the varying scope of the rules. Some rules apply to very local phenomena such as individual pitch shapes, while others guide analysis in general by indicating where (not) to begin and how (not) to organize and present findings. The tone of discussion, overall, should be constructive. Even in the act of presenting the restrictive rules, teachers should couch the process in open and inquisitive terms, stressing that many of the restrictions will eventually be negotiable.

Rules i and ii, the “Initially, do not...” rules, put tighter restrictions on motive formatting; these rules may be relaxed near the end of the one- to two-week motive unit. Rule i discourages beginning or ending a motive on a tone of figuration such as a passing tone, neighbor tone, suspension, or anticipation. It is meant to prevent instances of students parsing a shape without pausing to consider where its natural boundaries are.¹⁷ Rule i offers a further boon in that it requires students to consider a passage’s harmonic content before delving into its motivic content, as in the vast majority of cases a tone of figuration will manifest as a non-chord tone. (Note: a rare exception to this, to be treated later in Example 12, may occur when seventh or ninth chords are present.) Consider the excerpt of Hortense de Beauharnais’s song, “L’aveu” shown in Example 4. A first attempt at analysis in part a of the example yields a set of problematic motives. The red circles indicate improper boundary tones. The first two bracketed **3rd** shapes begin on neighbor tones; the third and fifth bracketed **3rds** end on passing tones.

¹⁷ This rule is inspired by the common part-writing error of leaping away from non-chord tones, which can result in awkward-sounding, uncontrolled dissonances.

Initially, do not. . .

- i. begin/end a motive's core content on a tone of figuration such as a neighbor tone, passing tone, suspension, anticipation, etc.
- ii. allow motives to cross voices.

Generally, endeavor to not. . .

- | | | |
|---------------------------------|---|--|
| while
seeking
motives | { | <ol style="list-style-type: none"> 1. distort a motive in terms of <i>length</i> (how many notes) nor in terms of <i>interval content</i> (no compression or widening of intervals, except in “leap” and “ARP” motives) 2. begin by analyzing motives, even if the desired result is a motivic analysis! (instead, start by analyzing form, harmony, and developing a sense of the piece) 3. analyze the melodic voice only. 4. seek out small motives inside tightly patterned figuration. (instead, trace the activity of each voice in the figuration across repetitions) |
| while
organizing
findings | { | <ol style="list-style-type: none"> 5. produce analyses that have stretches of motivic “overgrowth” and/or “deserts.” 6. produce a purely observational analysis. Include at least one non-obvious/non-surface event, such as . . . <ul style="list-style-type: none"> - motives under rhythmic alteration/inversion/reduction/transformation - motives migrating through textural space - motives interacting with each other in novel ways |

Example 3a

“Endeavor to not” Rules for improving analytic outcomes for students working with pitch and pitch-class motives

Endeavor to not. . .

- A. cause students to violate their motivic analysis protocol.
- B. posit motives fewer than four or more than nine notes in length.
Exception: shorter motives may function as sub-elements of composite motives.
- C. create an analytic “bank” of motives that is too sparse or too full.
Corollary: no “one-off” motives
- D. treat expository themes or fugue subjects as motives.
- E. neglect to prompt students to examine locations in the score where key motivic events occur.

Example 3b.

Supplemental “Endeavor to not” Guidelines for instructors designing analytical tasks

- a. First attempt to identify 3rd-based motives in Hortense de Beauharnais's "L'aveu."
Violations of Rule i flagged in red.

Andantino

Toi dont les yeux me font la

loi, Toi qu' amour en - vi - rou - ne, Dans la ca - bane où je suis roi,

Violations of Rule i are marked with red circles and 'X 3rd' labels. A diagonal dashed arrow in m. 5 indicates the transfer of line within register from piano to the voice.

- b. Second attempt at analysis of "L'aveu", with all motives now conforming to Rule i.
The diagonal dashed arrow in m. 5 indicates the transfer of line within register from piano to the voice, indicating that the two parts share the melody.

Andantino

Toi dont les yeux me font la

loi, Toi qu' amour en - vi - rou - ne, Dans la ca - bane où je suis roi,

All motives now conform to Rule i. A diagonal dashed arrow in m. 5 indicates the transfer of line within register from piano to the voice, indicating that the two parts share the melody.

Example 4
Analytic issues associated with Rule i.

c. Reading the final theme gesture of Beethoven's Piano Concerto no. 3 in C minor, op. 37, movement III as a core fourth with prefix pickup.

141

p

/ 4th(pc)

simile

sf

4th

C: V9

145

4th

4th

4th

4th

sf

3

fp

3

fp

Example 4 (cont'd)
Analytic issues associated with Rule i.

A second attempt at analysis is shown in part b of the example; note the retention of the 3rd motive in mm. 8–9, the one unproblematic shape identified in part a. The vocal line in mm. 7–10 now features two linear **4th** motives from B $\flat_4$ to F that conform to the local I and V⁷ harmonies. The new reading makes two further improvements, one being the addition of a new, larger **N** motive in the melody, mm. 1–3 (repeated in 5–7) that emerges under melodic reduction. The other is the broadened scope of the analysis, which now also tracks motivic events in the right hand of the piano.

Example 4c is offered to facilitate a closer reading of Rule i, specifically the clause concerning a potential motive's "core" content. The final theme from Beethoven's Piano Concerto no. 3, op. 37, movement III, begins in m. 411 on G $\sharp_5$, a non-chord tone with respect to the dominant harmony supporting it. It is possible for students to include this note as part of a motive as shown, provided that it is understood as a prefix. The core shape indicated by the bracket is the linear **4th** pitch-class motive from A to D. This same motive is further explored in mm. 415–19 in multiple descending forms composed in invertible counterpoint (see crossed arrows).¹⁸

18 The presence of fourths in Example 4c's second system can be defended on two bases. One may argue first that equal duration reduction applies, with each stemmed note appearing on the second sixteenth pulse of each beat. A less literal reading, which is stronger in my opinion, turns on recognition

Rule ii treats the issue of compound melody. It discourages students from assembling a motive from tones appearing in separate voices, where “voice” is understood as a localized range of contiguous activity.¹⁹ As a practical guideline, I tell students that compound melody typically applies in cases where a line exhibits leaps of a fifth or greater *and* repeatedly reverses direction. These together are telltale signs of a melody being instrumentally (as opposed to vocally) conceived. Example 5a illustrates a case in which three large-gapped motives labeled in Camille Saint-Saëns’s melody could absolutely stand as motives. The rule, however, encourages students to view the melody as straddling two voices. In part b, analytical stems are added in mm. 7–9 to clarify this interpretation. The lower, alto voice, demarcated by the downward stems, can now be seen expressing a surface, lower-neighbor motion. The upper voice expresses a descending linear fourth (F₅-C), or a fifth if continuing to B₄ at the half cadence in m. 10. The advantage of the former interpretation is that it allows one to hear the smaller A₅-E fourth bracketed in m. 5 as transforming via enlargement into the F₅-C fourth appearing in mm. 7–9.

It should be kept in mind that Rule ii does not apply in all cases that a melody contains large leaps. Example 5c illustrates a passage from Clara Schumann’s *Romance*, op. 21. Despite the presence of some larger leaps, this melody is smoother and more linear (read: less zig-zag-like) than the one by Saint-Saëns. The motive that appears in mm. 35–36 is apprehended in a single voice as the pitch-class motive, A₄-A-G[#]-A-F₅-F. The analysis labels the motive as composite, assembled from an A-G[#]-A neighbor eliding with a leaping element.

In contrast to the first two rules that will lapse more quickly, Rules 1–6 stand as the central, more longstanding instructions on analytic technique. Example 3a organizes the rules into two groups: Rules 1–4 apply during the seek and find portion (or what I will later call the “execution phase”) of analysis, and Rules 5 and 6 apply when findings are assembled and presented in the latter stages of analysis.

The emphasis in beginner instruction will naturally concern identifying literal returns of material, which may be said to occur whenever a target motive is restated either as a surface motive or under reduction with its pitch interval profile

that the figuration in each hand is structured in three voices, with the outer voices descending linearly as surface motives.

19 This characterization of voice distinguishes it from a “part” in a musical texture, which itself may project a sense of multiple voices by means of compound melody (see Huron 2016). Remarkably, where Rule ii disallows motives from spanning voices, it does allow a motive to span multiple *parts* if they assemble into a single voice, as occurs in Violins 1 and 2 in Tchaikovsky’s Sixth Symphony, op. 74, movement IV, mm. 1–4 (Deutsch 2019, 35).

- a. First attempt to identify leaping motives in Saint-Saëns, Introduction and Rondo Capriccioso, mm. 3–10. Violations of Rule ii flagged in red

- b. Second, improved attempt at analysis of the Saint-Saëns. Compound melody in mm. 7–10 is indicated by upward and downward stems, with the motives remaining inside each voice

- c. Melody from C. Schumann's Romance, op. 21, mm. 35–38, illustrating that large leaps do not in this case imply compound melody

Example 5
Analytic issues associated with Rule ii.

maintained.²⁰ This emphasis on exact repetition is, again, intentionally pragmatic: it is meant to firmly inscribe the identities of all motives. There is, of course, a long tradition in motivic analysis in which transformations such as fragmentation and interval adjustment are musically and responsibly handled.²¹ However, invoking these operations too early in instruction—which is to say: admitting that any two shapes with the same number of notes could be conceived as variants of one another—threatens the viability of the motivic association enterprise. For this reason, it is best to concentrate on objectively determined relationships first and to hold developing variation in abeyance as a topic for future study.

Rule 1 reflects the philosophy of privileging literal repetition and thus plays a central role in this pedagogy. It concerns motives in terms of their essential core material as expressed as an intervallic span. This rule may apply silently in classrooms that adopt the motivic labeling system described earlier: if one specifically denotes a shape a 4th, then one will generally be unable to equate it to some other 5th or 3rd motive. On the other hand, for classrooms that continue to rely on traditional letter labels, it will be necessary to emphasize Rule 1 early and frequently in instruction.

Example 6, which treats the beginning of the March from Tchaikovsky's *Nutcracker*, will illustrate this point. Measure 5 furnishes the target motive, a linear gesture that traverses a fifth in its first instance. It has been given the traditional label **S**, for “scale.” Three more forms of **S** are proposed by the analyst in mm. 6–10. The more literal returns of the **S** shape appear in the melody in m. 6 and m. 8. The rule violation occurs in mm. 9–10, where the main theme restarts. The ascending 3rd spanning D₅-E-F[♯] is not related to the scalar gestures that appear in mm. 5–6; to make the argument that this third is somehow another version of **S** is to dilute the target motive's identity. The March's first theme gesture in mm. 1–2 is better understood as a wholly distinct entity, a more graceful **arch** shape spanning four half-note attacks on D₅-E-F[♯]-E, that may pursue its own developmental destiny by connecting to other

20 See Heneghan (2019, 36–42) for detailed discussion of Schoenberg's views on various types of repetitions. The present method centers mostly on what Schoenberg considered to be “exact” repetitions, in which a musical motive is restated with all its features—interval content, rhythm, contour, etc.—preserved. (Note that this category includes transpositions of a motive to other scale degrees.) It also invokes to a limited extent his notion of “modified” repetition, in which the most important features of a motive are retained.

21 See Carpenter and Neff (2006, 15–43) for an authoritative overview of Schoenberg's analytic method and his aesthetic philosophy, which are both largely based on the principle of developing variation. Frisch (1984) and Boss (2015) provide further influential accounts of Schoenbergian-style analysis.

Tempo di marcia viva

5

S (“scale”) S

ii V I IV cresc.

8

S S? X

p subito *ten.*

ii V

Example 6

Proper and improper Scale motives (S) in Tchaikovsky’s *Nutcracker*.
One violation of Rule 1 involving a return of the “scale” (S) motive is flagged in red.

“arch” shapes in the piece.²²

Rules 2, 3, and 4, as noted earlier, offer guidance on where (not) to focus attention while executing an analysis. Rule 2 reminds students that one should not leap blindly into a work, seeking out its motives before becoming acquainted with its formal, harmonic, and overall content. The open-ended wording signals that such awareness is attainable in many ways, meaning that students need not craft in-depth, technical analyses and/or response papers in advance of analyzing a piece’s motives. They

²² Readers will note that many other potential S gestures occur in mm. 5–8 that seem to span fourths, fifths and sixths, often in contrary motion. These have been left unbracketed so as not to obscure the main point of the example.

may alternatively demonstrate their understanding of form by parsing the phrases at the small-scale level and labeling themes, reprises, and formal areas at higher levels. Students may track the harmony by documenting the presence of cadences, tonicizations, and sequences. They may wish to employ lead-sheet symbols—labels such as E^7/B and Dm^7/F , indicating root notes, qualities, and inversions—which are well suited to contexts in which the key is unstable or absent. Last, students may express their views in many ways, such as by discussing their points live or recording a video response, as opposed to writing up findings.

Rule 3 dictates that one's survey of motives should not begin and end with a study of the melody line, whichever voice it appears in. It is necessary, rather, to scan the full texture for melodic shapes. Doing so promotes a healthy dialogue with the piece, allowing one to hear how all the voices interact. Furthermore, it fosters cross-modal awareness of how music's motivic and harmonic content frequently fuse, as when a melodic idea in the bass line grounds and projects a functional progression. Example 7 prints two excerpts from the sixteen-measure theme of Joseph Haydn's Piano Sonata in A major, Hob. XVI:36, movement II. At the outset, the theme presents a $\uparrow 3^{rd} \oplus \downarrow 5^{th}$ pitch-class motive.²³ This $C\sharp-D-E-A$ shape returns in mm. 14–16 to round out and unify this small section at its close. Specifically, the bass voice augments the motive's rhythm and recontextualizes it as the backbone of the common cadential formula, $I^6-IV-V-I$. The beam here, although visually striking, once again denotes a surface motive. This means that the graphic makes no claim or implication about any so-called "motivic parallelism," in which motive forms nest hierarchically in smaller and larger versions of themselves.²⁴

Rule 4 works in conjunction with Rule 3 to promote consistent and responsible handling of patterned figuration. Such figuration, often taking the form of arpeggiation-based accompaniment, typically presents fewer difficulties for string players and pianists. That said, all students stand to benefit from sensitivity to this rule. Rule 4 loosely evokes the concept of "noise" from information studies (Garfinkle and Rawls 2015, 183), which here refers to the motivic clutter that results from over-bracketing ubiquitous shapes, as opposed to seeking out rarer, more meaningful "signal" shapes.

23 Though, strictly speaking, pitch-class intervals have no upward or downward direction, it is still possible to rely on our intuitive sense of "up" and "down" when we describe motions in pitch-class space. Regarding the move from pitch-class B to C as an ascending second is, as Dmitri Tymoczko puts it, a "convenient abstraction of the sort composers regularly deploy" (2008, 5).

24 Where motivic parallelism is often privileged in Schenkerian analysis (Burkhart 1978), in the present method it represents just one of many discoverable relationships that qualify as synthetic.

Such clutter often results when students working on a waltz or march declare an early motoric, “oom-pah” figure as central and then work to document all of its recurrences.

To clarify, the prohibition is on extracting microscopic shapes from “tightly patterned” figuration. Rule 4 does not advocate that students *ignore* figuration entirely (an act counter-indicated by Rule 3) but that they treat the voices inside that figuration sensitively. The texture of Felix Mendelssohn’s *Song without Words* op. 19, no. 1 in E major features steady arpeggiation; observe the analysis begun in mm. 1–3 of Example 8a. Continuing the analysis in the same manner through m. 6 would yield twenty-four identified instances of this shape; this would amount to stating twenty-four superficial facts about the **Arp** motive’s presence with no further probing of its path, development, or significance. The preferred reading of mm. 1–6 is shown in Example 8b, where more distinct motives are identified on the basis of each individual voice’s content.

The last two rules listed in Example 3a pertain to the organization and communication of findings. The first, Rule 5, encourages students to self-monitor their motivic distribution, their hit rates, as it were. Motivic analysis, like all analytic systems applied to artwork, naturally resists firm rules about what constitutes too many or too few shapes in a reading. When introducing this rule to a class, it may help to appeal to their sense of musicality. To that end, I recommend that teachers draw an analogy between written analysis and live performance. On the “doing too much” side, bracketing every single two-note interval when analyzing a piece can be likened to over-playing a dense set of down-up articulations printed in a score. On the “doing too little” side, failing to recognize a prominent return of a motive in an analysis is an error of the same order as neglecting to foreground a refrain’s return when performing a rondo.

To drive home this point, instructors can provide students with pre-made, multiple readings of an excerpt, as in Example 9. Through discussion, students should come to see why both parts of the example are suboptimal. The reading in part a is too cluttered; upon encountering this overgrowth of brackets and symbols, readers will be unable to determine which motive events are primary and whether the analysis has a main point. The reading in part b is too sparse: large, desert-like spans of music are left blank, even in places where a quick glance confirms the presence of target 4th motives. A reader responding to this graphic will likely conclude that the analyst was unwilling or unable to complete their study of the excerpt.²⁵ Even if neither assumption applies,

²⁵ The analytic scenarios modeled in the present article concern pieces of modest scope, of approximately 100 measures or fewer. When applying motivic analysis to larger-scale works, Rule 5

↑3rd ⊕ ↓5th(pc)

p

stacc.

12

↑3rd ⊕ ↓5th(pc)

p

f

tr

3

↑3rd ⊕ ↓5th(pc)

A: I⁶ IV V⁶ $\frac{5}{4}$ I

Example 7

Two excerpts from the theme presentation area of Haydn's Piano Sonata in A, Hob. XVI: 36 (II).

the end result in both cases is that very little information is communicated to readers.

The method's last rule is the one that reminds students to strive for synthetic thinking. Rule 6 translates this requirement into practical terms, expressly delineating a synthetic analysis as one that lays bare at least one relationship that is not purely observational. There are many ways to satisfy this requirement. One is by identifying any real transformation, such as a motive appearing in a strikingly new rhythm or under mirror inversion in pitch. The last, stretched-out $\uparrow 3^{\text{rd}} \oplus \downarrow 5^{\text{th}}$ motive shown beamed at the close of Example 7 would count in this regard. Another is to highlight a novel compositional treatment of a motive, for example, recognizing a target shape which appears first in isolation returning later either in rapid self-replication ("chaining") or in multiple voices in counterpoint with itself. Just about the only claims that would not qualify are those pointing out a target motive returning with the same character and rhythm as before or under basic transposition.

A last point to be made about the restrictive rules for students will serve to transition the discussion towards instructors' analytic behaviors. The rule set given in Example 3a actually applies fairly late in the analytic process. More specifically, it applies to the *execution phase* of motivic analysis, during which one seeks out shapes

will likely require adjustment to accommodate cases where a long contrasting section or episode (e.g., the **B** section of a ternary form piece) results in a central motive disappearing for a long duration.

- a. First reading, with too many arpeggiation (Arp) motives (violation of Rule 3).

- b. Second attempt, with motives determined on the basis of individual voice activity within the accompaniment

Example 8

Two readings of Mendelssohn's *Song Without Words*, op. 19, no. 1, mm. 1–6.

that were pre-determined as being central. As for that pre-determination, it occurs in the (somewhat distinct) *design phase* of analysis, the much earlier stage in which one surveys a piece and develops the “bank” of shapes that will be sought out.

The preliminary design phase is more complex and fluid than the execution phase: it requires analysts to propose shapes and to brief provisional analyses with them to see how convincing the outcomes are. In order to support instructors as they design class exercises, this method supplements the main set of restrictive rules with the five guidelines printed in Example 3b. These guidelines, too, are couched in “Endeavor to not” terms.

The first guideline, A, applies globally, cautioning instructors to avoid supplying target motives that would cause students to violate their protocol. In essence, it serves as a reminder to teachers that the “Do Not” rules always apply to them as well. The remaining guidelines are more technically focused. Guideline B, for instance, pertains to the scope of motives that students should work with; the suggested length is between four and nine pitches/pitch-classes. The upper boundary is more intuitive, as shapes that are too convoluted are less likely to return in their entirety. The lower boundary requires a bit more explanation. Starting with one-note motives, those are disallowed because they are undefined in terms of note span; in fact, they do not technically constitute a shape at all.²⁶ Two-note motives, though permissible, are problematic in that it is always possible to assert a relation between any paired two-note events: at the very least, they will both be classifiable as some motion up, down, by leap, or by step. In my experience, this is too much variability to admit early in instruction. I have experimented with assigning two-note targets more tightly delimited by specific quality (e.g., “minor 3rd”); however, even with that limitation, students still tend to overdo the bracketing in their scores.

Guideline B is in place to address a related issue involving very short motives, which is that they tend to constrain the analytic viewpoint. Example 10a, taken from the opening passage of Johannes Brahms’s Second Rhapsody, shows how an analyst has parsed the melody into a four-note, step-into-arpeggio idea (/Arp) that contains a two-note, step idea (2nd).

Each 2nd motive that is circled is correct; however, in assuming that 2nds are the only full and complete targets worth finding, the analyst is choosing not to consider whether that two-note gesture functions as part of a larger shape. Guideline B encourages one to always look beyond such blinkered assumptions. Despite the fact that even distinctive *three*-note motives can yield fruitful results in analysis, Guideline B goes one step beyond that, directing instructors from the outset to view motives as larger shapes composed of at least four notes. Following from this, Example 10b illustrates a more compelling reading of the Rhapsody excerpt that starts with recognition of a composite pitch-class motive built of two seconds: it has been given the label **Chr. 3 = 2nd+2nd**. This chromatic, four-note pitch-class motive, shown beamed in mm. 1–2 and inverted in mm. 3–4 (F–E–E♭–D), has the advantage of resonating with later chromatic events in mm. 12–13 (top melodic line) mm. 33–44

26 This rationale for the categorical exclusion of one-note pitch motives has a strong analog in rhythmic-metric theory, in which one-beat events are seen logically to lack duration. See Lerdahl and Jackendoff (1983, 18; 43).

- a. Too many motives bracketed/labeled produces motivic overgrowth.

The musical score for 'The Rose Tree' is presented in three systems. The first system, starting at measure 9, features a treble and bass staff. The treble staff has a key signature of two flats and a common time signature. The bass staff has a key signature of two flats and a common time signature. The melody in the treble staff is marked with '4th' and 'DN' (down). The bass staff has a '3rd' marking. The second system, starting at measure 11, continues the melody with '4th' and '3rd' markings. The bass staff has a '3rd' marking. The third system, starting at measure 16, continues the melody with '2nd', 'DN', '3rd', '2nd', 'DN', '3rd', '4th', and 'N' (natural) markings. The bass staff has a 'Chr. 2nd' marking. The score is written for a single melodic line with a bass accompaniment.

- b. Too few motives bracketed/labeled produces motivic deserts.

The image displays a musical score for the song "The Rose Tree". It is written for a piano and voice. The score is in 3/4 time and features a key signature of three flats (B-flat, E-flat, and A-flat). The music is divided into three systems. The first system begins with a treble clef and a key signature change to three flats. The second system starts at measure 11 and includes a 4th finger fingering. The third system starts at measure 16 and includes a 2nd finger fingering. The score concludes with a double bar line and a repeat sign.

Example 9

Multiple readings of Chopin's Nocturne in F minor, op. 55, no. 1 illustrate the impact the density of motives has on an analysis's effectiveness.

(bass line).²⁷

Guideline C addresses the issue of how many motive forms an instructor should establish as the basis for execution. Optimal ranges are piece-specific and cannot be given in terms of absolute numbers. In general, though, I recommend an upper limit of five targets and a lower limit of two. Any more than that may cause the analysis to become too unfocused, while any fewer elevates the risk of overlooking motive forms present in the supporting voices. The corollary to Guideline C warns against establishing as a target any motive that occurs only once in a piece (a “one-off” motive). This condition is specified to avoid a situation in which students are sent on a futile hunt for shapes that will never materialize.

Guideline D further delimits criteria for optimal shapes, suggesting that instructors refrain from establishing entire expository themes as potential targets. It may seem that this guideline overlaps with Guideline A because themes often take up more than nine notes, but that is not, strictly speaking, the case. The guideline draws a distinction between *themes* as signal/symbolic entities and smaller *shapes* that function more properly as motives. To explain, when an expository theme or sizable portion of it returns, it usually does so literally. Full theme recurrences coincide with (and help listeners comprehend) a piece’s form; thus, the mere act of theme recognition, while important, qualifies as more of an observation than an interpretation. Motivic recurrences, in contrast, may occur at any time, in any voice, and under transformation. As such, investigating the smaller motivic recurrences inside, between, and across themes is more likely to inspire interpretive findings.

The last Guideline, E, is included in the list to patch a conspicuous gap left by the other guidelines. Consider that while keeping Rules i–ii and 1–6 in mind will strengthen students’ local motivic claims, doing so will do nothing to prevent them from wholly overlooking events in the music that the teacher regards as central. This express reminder to provide specific prompts serves to consolidate class results by focusing students’ attention as they work.

The restrictive rules for students and restrictive guidelines for teachers are robust and highly detailed; however, they are not difficult to implement in a classroom setting. Doing so, in essence, requires students to remain cognizant of eight rules and for teachers to model broad, cogent, and consistent analytic technique.

27 This claim expands a point made by Charles Rosen (1990) concerning this Rhapsody’s unconventional use of half cadences to establish key areas. The “reversed” I–V syntax in m. 13 in D minor includes a mixture element—the F# in the melody—which can be understood as resulting in part from motivic activity, specifically the melody’s chromatic descent from G₄ to E.

a. Correct, but less than ideal two note motives, mm. 1–4 (counter-indicated by Guideline B).

b. Improved reading of mm. 1–4.

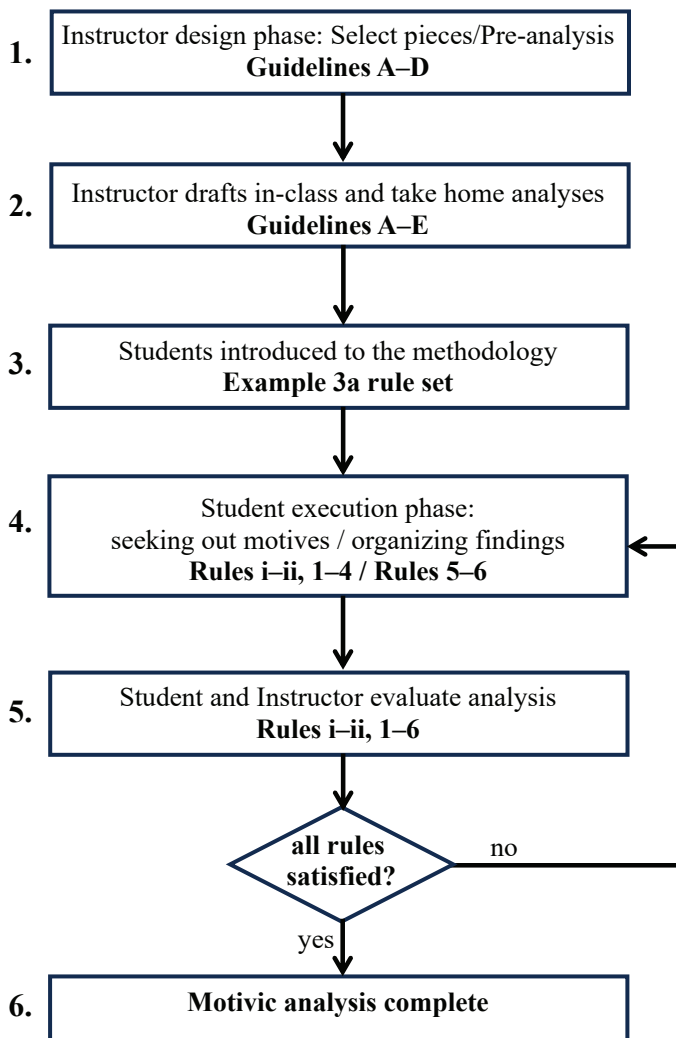
Example 10

Illustration of a design guideline impacting pre-analysis
in Brahms's Second Rhapsody, op. 79, no. 2.

C. Teaching Motivic Analysis

Sections A and B, above, served to advance and describe all the individual aspects of the method for improving classroom motivic analysis. To prioritize the student experience, the account of the system began *in media res*, with consideration of the central student rule set (Example 3a). By way of clarification and summary, the full pedagogical process is summarized in flowchart form in Example 11.

The process is initiated at the topmost node with the instructor's design phase, in which they select pieces to examine and begin pre-analysis according to Guidelines A–D. The instructor then develops their task or assignment by producing a motive bank and instructions that are consistent with all guidelines, now including Guideline E. Next at stage 3, the students are introduced to motivic analysis and their rules set and discuss both at length. In the fourth node, students enter the execution phase as they are given a piece, a motive bank, and instructions with detailed prompts. In stage 5, the students and instructor evaluate the results of their analysis, flagging rule violations on the way to producing the next revision. The decision junction below the fifth node in the graphic loops back to the fourth, allowing for this process to be repeated as many times as desired. When all the rules are satisfied, the analysis may be confidently concluded (node 6). Thus, by means of the full iterative process, students deepen their understanding of the restrictive rules, motivic analysis, and the piece they are analyzing.



Example 11
Summary flowchart for pedagogy of motivic analysis.

III. The Restrictive Rules in Action: Critiquing Classroom Analysis

Section III fleshes out and reinforces the pedagogical method by concentrating on the revision stage of analysis (Node 5 in Example 11). Here, the function of the restrictive rules shifts, as they transform from analytic guardrails into a powerful tool for self-diagnosis, meaning error detection. The first set of fabricated analyses, centering on a Mozart excerpt, concentrates on student work; the second set, centering on a Hensel piece, critiques an instructor's work as they design an analytic task. In the third scenario, a larger string piece by Grieg serves as the basis for comparing two assignments crafted independently by two hypothetical teachers and attempted by their students.

The music shown in Example 12 is from the opening of Wolfgang Mozart's Sonata for Piano and Violin, K. 378, movement I. We may assume the teacher has assigned the score for study in advance and has delineated two motivic targets, the **3rd** and the **4th**. As no specifications have been made about the format of these motives, they may be linear or leaping, diatonic or chromatic, and may appear at the surface or under reduction.

The annotations in black ink in Example 12a represent the first student attempt at analysis. We first register the motives that fully adhere to the rules: these include the first ascending third in m. 1 and the linear fourth in the piano's right hand in mm. 5–6. The annotations in red indicate infractions involving voicing, figuration, and reduction. The beamed 4th spanning mm. 1–2 is flagged for violating Rule ii: it links tones from the upper and lower voices of the violin. All of the surface 4ths bracketed in mm. 2–4 are flagged for beginning or ending on tones of figuration, a violation of Rule i. It is clear that the circled D₅ in m. 3 is a passing tone with respect to the measure's F⁷ harmony. Remarkably, the F₅s circled in mm. 2 and 3 are chord tones; nevertheless they remain tones of figuration, neighbors that decorate the E_b. As such, each F makes for an awkward, almost unhearable starting point of a linear motive.

The next infraction occurs in the piano's left hand in m. 5. The **4th** shape shown boxed is a product of tightly patterned figuration, so should be disregarded in accordance with Rule 4. The last problem occurs in the piano melody, mm. 7–8. Although it is possible to hear the F₅-B_b₄ descent as a 5th composed of two 3rds, the current parsing results in the non-chord tone, D₅ improperly serving as a boundary point for two shapes.

Example 12b depicts a first attempt by an alternate student or group to identify 3rd- and 4th-based shapes in the excerpt. In contrast to the first reading, this one de-

-
- Motive bank:**
- 3rd
 - 4th
- Allegro moderato**
- ii: voices** X
- ii: N tones**
- i: P tone**
- 4: figuration**
- V⁶ — 5 I
- B♭: I V⁷

- b. Alternate attempt, with part a errors corrected. Example as a whole violates Rule 3 (piano melody only) and Rule 6 (surface motives only).

Rule 6 X

Allegro moderato

Motive bank:
3rd
4th

Rule 3 {
X

The musical score is written for a single melodic line in 3/4 time. It begins with a key signature of one flat (B-flat) and a tempo marking of 'Allegro moderato'. A 'Motive bank' box defines the intervals used: 3rd and 4th. The score is divided into measures by vertical bar lines. The first measure contains a half note G4 and a quarter note A4. The second measure contains a half note Bb4 and a quarter note C5. The third measure contains a half note D5 and a quarter note E5. The fourth measure contains a half note F5 and a quarter note G5. The fifth measure contains a half note A5 and a quarter note Bb5. The sixth measure contains a half note C6 and a quarter note D6. The seventh measure contains a half note E6 and a quarter note F6. The eighth measure contains a half note G6 and a quarter note A6. The ninth measure contains a half note Bb6 and a quarter note C7. The tenth measure contains a half note D7 and a quarter note E7. The eleventh measure contains a half note F7 and a quarter note G7. The twelfth measure contains a half note A7 and a quarter note Bb7. The thirteenth measure contains a half note C8 and a quarter note D8. The fourteenth measure contains a half note E8 and a quarter note F8. The fifteenth measure contains a half note G8 and a quarter note A8. The sixteenth measure contains a half note Bb8 and a quarter note C9. The seventeenth measure contains a half note D9 and a quarter note E9. The eighteenth measure contains a half note F9 and a quarter note G9. The nineteenth measure contains a half note A9 and a quarter note Bb9. The twentieth measure contains a half note C10 and a quarter note D10. The twenty-first measure contains a half note E10 and a quarter note F10. The twenty-second measure contains a half note G10 and a quarter note A10. The twenty-third measure contains a half note Bb10 and a quarter note C11. The twenty-fourth measure contains a half note D11 and a quarter note E11. The twenty-fifth measure contains a half note F11 and a quarter note G11. The twenty-sixth measure contains a half note A11 and a quarter note Bb11. The twenty-seventh measure contains a half note C12 and a quarter note D12. The twenty-eighth measure contains a half note E12 and a quarter note F12. The twenty-ninth measure contains a half note G12 and a quarter note A12. The thirtieth measure contains a half note Bb12 and a quarter note C13. The thirty-first measure contains a half note D13 and a quarter note E13. The thirty-second measure contains a half note F13 and a quarter note G13. The thirty-third measure contains a half note A13 and a quarter note Bb13. The thirty-fourth measure contains a half note C14 and a quarter note D14. The thirty-fifth measure contains a half note E14 and a quarter note F14. The thirty-sixth measure contains a half note G14 and a quarter note A14. The thirty-seventh measure contains a half note Bb14 and a quarter note C15. The thirty-eighth measure contains a half note D15 and a quarter note E15. The thirty-ninth measure contains a half note F15 and a quarter note G15. The fortieth measure contains a half note A15 and a quarter note Bb15. The forty-first measure contains a half note C16 and a quarter note D16. The forty-second measure contains a half note E16 and a quarter note F16. The forty-third measure contains a half note G16 and a quarter note A16. The forty-fourth measure contains a half note Bb16 and a quarter note C17. The forty-fifth measure contains a half note D17 and a quarter note E17. The forty-sixth measure contains a half note F17 and a quarter note G17. The forty-seventh measure contains a half note A17 and a quarter note Bb17. The forty-eighth measure contains a half note C18 and a quarter note D18. The forty-ninth measure contains a half note E18 and a quarter note F18. The fiftieth measure contains a half note G18 and a quarter note A18. The fifty-first measure contains a half note Bb18 and a quarter note C19. The fifty-second measure contains a half note D19 and a quarter note E19. The fifty-third measure contains a half note F19 and a quarter note G19. The fifty-fourth measure contains a half note A19 and a quarter note Bb19. The fifty-fifth measure contains a half note C20 and a quarter note D20. The fifty-sixth measure contains a half note E20 and a quarter note F20. The fifty-seventh measure contains a half note G20 and a quarter note A20. The fifty-eighth measure contains a half note Bb20 and a quarter note C21. The fifty-ninth measure contains a half note D21 and a quarter note E21. The sixtieth measure contains a half note F21 and a quarter note G21. The sixty-first measure contains a half note A21 and a quarter note Bb21. The sixty-second measure contains a half note C22 and a quarter note D22. The sixty-third measure contains a half note E22 and a quarter note F22. The sixty-fourth measure contains a half note G22 and a quarter note A22. The sixty-fifth measure contains a half note Bb22 and a quarter note C23. The sixty-sixth measure contains a half note D23 and a quarter note E23. The sixty-seventh measure contains a half note F23 and a quarter note G23. The sixty-eighth measure contains a half note A23 and a quarter note Bb23. The sixty-ninth measure contains a half note C24 and a quarter note D24. The seventieth measure contains a half note E24 and a quarter note F24. The seventy-first measure contains a half note G24 and a quarter note A24. The seventy-second measure contains a half note Bb24 and a quarter note C25. The seventy-third measure contains a half note D25 and a quarter note E25. The seventy-fourth measure contains a half note F25 and a quarter note G25. The seventy-fifth measure contains a half note A25 and a quarter note Bb25. The seventy-sixth measure contains a half note C26 and a quarter note D26. The seventy-seventh measure contains a half note E26 and a quarter note F26. The seventy-eighth measure contains a half note G26 and a quarter note A26. The seventy-ninth measure contains a half note Bb26 and a quarter note C27. The eightieth measure contains a half note D27 and a quarter note E27. The eighty-first measure contains a half note F27 and a quarter note G27. The eighty-second measure contains a half note A27 and a quarter note Bb27. The eighty-third measure contains a half note C28 and a quarter note D28. The eighty-fourth measure contains a half note E28 and a quarter note F28. The eighty-fifth measure contains a half note G28 and a quarter note A28. The eighty-sixth measure contains a half note Bb28 and a quarter note C29. The eighty-seventh measure contains a half note D29 and a quarter note E29. The eighty-eighth measure contains a half note F29 and a quarter note G29. The eighty-ninth measure contains a half note A29 and a quarter note Bb29. The ninetieth measure contains a half note C30 and a quarter note D30. The ninety-first measure contains a half note E30 and a quarter note F30. The ninety-second measure contains a half note G30 and a quarter note A30. The ninety-third measure contains a half note Bb30 and a quarter note C31. The ninety-fourth measure contains a half note D31 and a quarter note E31. The ninety-fifth measure contains a half note F31 and a quarter note G31. The ninety-sixth measure contains a half note A31 and a quarter note Bb31. The ninety-seventh measure contains a half note C32 and a quarter note D32. The ninety-eighth measure contains a half note E32 and a quarter note F32. The ninety-ninth measure contains a half note G32 and a quarter note A32. The hundredth measure contains a half note Bb32 and a quarter note C33. The hundred-first measure contains a half note D33 and a quarter note E33. The hundred-second measure contains a half note F33 and a quarter note G33. The hundred-third measure contains a half note A33 and a quarter note Bb33. The hundred-fourth measure contains a half note C34 and a quarter note D34. The hundred-fifth measure contains a half note E34 and a quarter note F34. The hundred-sixth measure contains a half note G34 and a quarter note A34. The hundred-seventh measure contains a half note Bb34 and a quarter note C35. The hundred-eighth measure contains a half note D35 and a quarter note E35. The hundred-ninth measure contains a half note F35 and a quarter note G35. The hundred-tieth measure contains a half note A35 and a quarter note Bb35. The hundred-first measure contains a half note C36 and a quarter note D36. The hundred-second measure contains a half note E36 and a quarter note F36. The hundred-third measure contains a half note G36 and a quarter note A36. The hundred-fourth measure contains a half note Bb36 and a quarter note C37. The hundred-fifth measure contains a half note D37 and a quarter note E37. The hundred-sixth measure contains a half note F37 and a quarter note G37. The hundred-seventh measure contains a half note A37 and a quarter note Bb37. The hundred-eighth measure contains a half note C38 and a quarter note D38. The hundred-ninth measure contains a half note E38 and a quarter note F38. The hundred-tieth measure contains a half note G38 and a quarter note A38. The hundred-first measure contains a half note Bb38 and a quarter note C39. The hundred-second measure contains a half note D39 and a quarter note E39. The hundred-third measure contains a half note F39 and a quarter note G39. The hundred-fourth measure contains a half note A39 and a quarter note Bb39. The hundred-fifth measure contains a half note C40 and a quarter note D40. The hundred-sixth measure contains a half note E40 and a quarter note F40. The hundred-seventh measure contains a half note G40 and a quarter note A40. The hundred-eighth measure contains a half note Bb40 and a quarter note C41. The hundred-ninth measure contains a half note D41 and a quarter note E41. The hundred-tieth measure contains a half note F41 and a quarter note G41. The hundred-first measure contains a half note A41 and a quarter note Bb41. The hundred-second measure contains a half note C42 and a quarter note D42. The hundred-third measure contains a half note E42 and a quarter note F42. The hundred-fourth measure contains a half note G42 and a quarter note A42. The hundred-fifth measure contains a half note Bb42 and a quarter note C43. The hundred-sixth measure contains a half note D43 and a quarter note E43. The hundred-seventh measure contains a half note F43 and a quarter note G43. The hundred-eighth measure contains a half note A43 and a quarter note Bb43. The hundred-ninth measure contains a half note C44 and a quarter note D44. The hundred-tieth measure contains a half note E44 and a quarter note F44. The hundred-first measure contains a half note G44 and a quarter note A44. The hundred-second measure contains a half note Bb44 and a quarter note C45. The hundred-third measure contains a half note D45 and a quarter note E45. The hundred-fourth measure contains a half note F45 and a quarter note G45. The hundred-fifth measure contains a half note A45 and a quarter note Bb45. The hundred-sixth measure contains a half note C46 and a quarter note D46. The hundred-seventh measure contains a half note E46 and a quarter note F46. The hundred-eighth measure contains a half note G46 and a quarter note A46. The hundred-ninth measure contains a half note Bb46 and a quarter note C47. The hundred-tieth measure contains a half note D47 and a quarter note E47. The hundred-first measure contains a half note F47 and a quarter note G47. The hundred-second measure contains a half note A47 and a quarter note Bb47. The hundred-third measure contains a half note C48 and a quarter note D48. The hundred-fourth measure contains a half note E48 and a quarter note F48. The hundred-fifth measure contains a half note G48 and a quarter note A48. The hundred-sixth measure contains a half note Bb48 and a quarter note C49. The hundred-seventh measure contains a half note D49 and a quarter note E49. The hundred-eighth measure contains a half note F49 and a quarter note G49. The hundred-ninth measure contains a half note A49 and a quarter note Bb49. The hundred-tieth measure contains a half note C50 and a quarter note D50. The hundred-first measure contains a half note E50 and a quarter note F50. The hundred-second measure contains a half note G50 and a quarter note A50. The hundred-third measure contains a half note Bb50 and a quarter note C51. The hundred-fourth measure contains a half note D51 and a quarter note E51. The hundred-fifth measure contains a half note F51 and a quarter note G51. The hundred-sixth measure contains a half note A51 and a quarter note Bb51. The hundred-seventh measure contains a half note C52 and a quarter note D52. The hundred-eighth measure contains a half note E52 and a quarter note F52. The hundred-ninth measure contains a half note G52 and a quarter note A52. The hundred-tieth measure contains a half note Bb52 and a quarter note C53. The hundred-first measure contains a half note D53 and a quarter note E53. The hundred-second measure contains a half note F53 and a quarter note G53. The hundred-third measure contains a half note A53 and a quarter note Bb53. The hundred-fourth measure contains a half note C54 and a quarter note D54. The hundred-fifth measure contains a half note E54 and a quarter note F54. The hundred-sixth measure contains a half note G54 and a quarter note A54. The hundred-seventh measure contains a half note Bb54 and a quarter note C55. The hundred-eighth measure contains a half note D55 and a quarter note E55. The hundred-ninth measure contains a half note F55 and a quarter note G55. The hundred-tieth measure contains a half note A55 and a quarter note Bb55. The hundred-first measure contains a half note C56 and a quarter note D56. The hundred-second measure contains a half note E56 and a quarter note F56. The hundred-third measure contains a half note G56 and a quarter note A56. The hundred-fourth measure contains a half note Bb56 and a quarter note C57. The hundred-fifth measure contains a half note D57 and a quarter note E57. The hundred-sixth measure contains a half note F57 and a quarter note G57. The hundred-seventh measure contains a half note A57 and a quarter note Bb57. The hundred-eighth measure contains a half note C58 and a quarter note D58. The hundred-ninth measure contains a half note E58 and a quarter note F58. The hundred-tieth measure contains a half note G58 and a quarter note A58. The hundred-first measure contains a half note Bb58 and a quarter note C59. The hundred-second measure contains a half note D59 and a quarter note E59. The hundred-third measure contains a half note F59 and a quarter note G59. The hundred-fourth measure contains a half note A59 and a quarter note Bb59. The hundred-fifth measure contains a half note C60 and a quarter note D60. The hundred-sixth measure contains a half note E60 and a quarter note F60. The hundred-seventh measure contains a half note G60 and a quarter note A60. The hundred

Example 12

Fabricated student analysis of Wolfgang Mozart's
Sonata for Piano and Violin, K. 378, I. mm. 1–8.

- c. Final attempt_i, in which the melody of mm. 1–2 is viewed as a composite motive. Purple arrows indicate the migration of the opening 4th motive component, B₁–E₁, to the tonally-balancing F–B₁.

Motive bank:

3rd

4th

Example 12 (cont'd)
 Fabricated student analysis of Wolfgang Mozart's
 Sonata for Piano and Violin, K. 378, I. mm. 1–8.

emphasizes the non-chord tones sounding at the crests of the melodic arcs in measures 2 and 3. In viewing the right-hand piano melody in mm. 1–4 as a more orderly succession of leaping and linear 3rds, this analysis commits no outright errors of motivic parsing. This is not to say that this new analysis is wholly unproblematic; it is more that the rules infringed on in this attempt are of a more global nature. One concern is that the analysis only treats the right hand of the piano, meaning it disregards Rule 3. Another is that the analysis only highlights surface motives (Rule 6); it does not expose any hidden content or make any claims about motivic progression. The most notable missed opportunity for interpretation involves the proliferation of third motives foregrounded in the example. To capitalize on this, the analysis, by means of prose and/or graphic annotations, could advance a claim about the gradual ascent of the third shapes in pitch space (and thus: energy) from $B\flat_4$ - D_5 in m. 1 to C_5 - $E\flat$ and D - F in mm. 2–4.

Example 12c shows a last analysis drawn up in response to the previous two attempts. As before, the emphasis is on the activity of 3rd- and 4th-based motives; however, this time the student has joined the two motive forms together in mm. 1–2. The result is a new composite, “rise” motive, which is named after the slow-climb sensation projected by the motion traced from its first to its last note.²⁸ Establishing this motive has led the student to notice a novel repetition, which occurs as the **4th**⊕**3rd** “rise” shape in mm. 1–2 returns in mm. 3–4. Example 12c is further remarkable in demonstrating how easy it is for even a short analysis to fulfill the requirements of the full rule set. The fact that a single violin motive is identified in m. 8 is sufficient to satisfy Rule 3. “But what,” readers may wonder, “about the rule most likely to worry students, the one about whether their analyses ‘say enough’?” Rule 6, the one-minimum-insight rule, is easily satisfied in a number of ways. One possibility is to mention the metric shift of **4th**⊕**3rd** in mm. 1–4 from beat 1 to beat 3 (again, see boxes). Another is to point out the small journey of the separable 4th shape, which migrates from scale degrees 1–4 (tonic to subdominant) at the beginning to the tonally balancing scale degrees 5–1 (dominant to tonic) in mm. 5–6 and mm. 7–8 (see purple arrows).

We next examine the pre-analytic work of an instructor designing a classroom exercise based on an excerpt from Fanny Hensel’s *Mélodie*, op. 4, no. 5; see Example 13. This beautiful, challenging piece incorporates applied-dominant harmonies and mixture chords, overlaying them with a complex melody rife with both accented and unaccented non-chord tones. For the purposes of this demonstration, the fabricated

²⁸ It is also possible to view and label this composite motive in terms of two staggered, “broken” thirds ($3rd+3rd = B\flat_4$ - $D_5 + E\flat$ - C). However, doing so, as will be seen, means forgoing connections between the first and second halves of the excerpt.

- a. First attempt, with infractions of Guidelines A and C (Rule 7) noted.

Proposed motive bank

y	=	leap
arch	=	contour

Example 13

Instructor's preliminary analysis of Hensel's *Mélodie*, op. 4, no. 5, mm. 1–6.

- b. Second, improved attempt at analysis.

Proposed motive bank

3rd
N (neighbor)
DN (double neighbor)

The musical score consists of two systems. The first system is marked "Lento appassionato" and the second system is marked "B: I". The score is written for piano, with treble and bass staves. The key signature is three sharps (F#, C#, G#) and the time signature is 8/8. The first system includes a measure with a "4" below it, indicating a fourth note or a specific measure number. The score includes various musical notations such as treble and bass staves, key signatures, time signatures, dynamics (p), and articulation marks. Annotations include "3rd", "N", "DN", and "3rd (chr)" with blue lines indicating motive occurrences. Roman numerals (V, VI, VII, I, II) are used to denote harmonic structure. The second system includes a measure with a "4" below it, indicating a fourth note or a specific measure number.

Example 13 (cont'd)

Instructor's preliminary analysis of Hensel's *Mélodie*, op. 4, no. 5, mm. 1–6.

analyses of *Mélodie* will be understood as occurring early in a second-year theory class, meaning that the “Initially do not rules” will apply.²⁹

The teacher in this case has listed two motive targets. The label **arch** indicates a five-note, pitch contour motive (see gable shapes in the bank), and the traditionally formatted label **y** indicates a two-note leap of any type. Recall that the present method does not prohibit traditional motive labels; however, it does discourage them to help avoid analytic inconsistencies frequently associated with generic label usage.

The score of Example 13a, including its brackets, beams, and labels in black, serves as the instructor’s answer key for the analysis. The annotations in red critique the key, noting the guidelines (and, where relevant, which associated rules) the teacher has neglected to observe. Guideline E is excluded from consideration, because the graphic represents only the instructor’s preliminary work and not the full drafted assignment. Two other guidelines, however, are breached. The first infraction involves the **arch** shape. The fact that it appears only once, in m. 1, will likely confound students seeking multiple returns of it. Advancing it as a target thus violates Guideline C’s corollary condition. More significant is the teacher’s disregard of Guideline A: “do not cause students to violate their analysis protocol.” Looking again at the **arch** motive, we see a red circle drawn around its first note. To identify this shape, students would have to initiate the motive on A $\sharp_4$, a non-chord tone appoggiatura to the tonic B-major triad sounding, thus violating their Rule i.

The teacher’s impulse to propose a leaping gesture, in this case designated **y** in the motive bank, substantiates once more the concern about the risks of proposing gestural motives as opposed to more precise, span-named motives. The motive leaps down a sixth in its initial, “model” presentation. In all the instances of **y** that follow, the motive’s interval is altered, either contracting to fourths, fifths, and thirds, or expanding to an octave. If a teacher were to share this graphic as a model analysis, it would encourage students to violate the first rule of the method’s main set, Rule 1.

The most common cause of any of the guidelines to be violated is a rushed approach to analysis. Regarding Example 13a, the teacher-analyst presumably sought motivic inspiration from the melody in m.1 without taking enough time to entertain the possibility of other shapes. In response to that first attempt, Example 13b offers a second reading that proposes its targets in light of later developments. The revised reading fosters a hearing in which three primary shapes, linear/leaping **3rd**, **Neighbor (N)**, and **Double Neighbor (DN)** migrate and echo throughout the excerpt, influencing the melody and harmony alike.

29 For more on the issue of situating the motive unit in a curriculum’s later semesters, see Part V.

The first motive proposed is the 3rd, which appears prominently in the melody in mm. 1–2. At the moment the $D\sharp_5$ - B_4 3rd is completed on beat 4 of m. 1, the idea is handed off to the tenor, which states a chromaticized third descent starting on B_3 (see blue box). The tenor eventually goes on to state two more 3rds. The one in m. 4 serves to echo the B_3 - $G\sharp$ span from m.2. (The continuation to $F\sharp_3$ is viewed as a suffix event.) The one in m. 6 “caps” the excerpt with a last, drawn out surface 3rd motive that moves from $F\sharp_3$ down to $D\sharp$. The remaining third noted in the example is the longer descent shown in the melody in mm. 5–6. The equal duration reduction of the member tones, E_4 - D - C , is signaled both by the beaming and by the dotted-line ties that reflect how the lower voice within the soprano is actually heard.

The second shape listed as a target is the double neighbor (**DN**). This pitch-class motive first enters in m. 3, where the melody extends the sound of E over three beats (by means of a downward arpeggio) and then connects to the $D\sharp$. The sequential repetition of m. 3 up a step in m. 4 completes the shape on $F\sharp$ and E . The **DN** returns in mm. 5–6 at the surface of the bass voice; in so doing, it supports dominant expansion in the harmony.

The last newly proposed motive is the neighbor (**N**). If suitably prompted, students will have little trouble finding at least one **N** in m. 1. Pressing them to find more such shapes can help them to see how a work’s chords and chord progressions often resonate with its motives; this is a powerful notion that can be revelatory to those just beginning their formal study of music. The three **N** motives that appear concurrently in m. 1 create a momentary vii^{o7} chord on beat 3 that both extends tonic and injects chromatic color into B major by means of the $G\flat$. The **N** in the tenor in mm. 5–6 similarly works to expand a harmony—although it is V this time—helping to create expressive, modally-mixed $\downarrow VI$ and $\downarrow II$ chords.³⁰

The third set of sample analyses, which will encompass both teacher and student efforts, treat Grieg’s “Anitra’s Dance.” A preliminary excerpt of this piece appears in Example 14a. We begin by imagining two instructors, Dr. Trad and Dr. Mod, separately preparing an analysis assignment for their classes. The teachers both apprehend two motives of importance in the melody. One is the ascending fifth, which first appears as A_4 - E_5 in mm. 7–8; the other is the linear 3rd, which appears in several descending forms in mm. 8–14. Both instructors note the potential for linear thirds to join to form a composite fifth, as bracketed in mm. 8–9.

30 Chromatic seconds, often over $G\sharp$ - $G\flat$ - $F\sharp$, appear throughout the excerpt as well. The last one in the tenor, mm.4–5 ($G\sharp_3$ - $G\flat$ - $F\sharp$), extends the B_3 - $G\sharp$ linear 3rd descent in m. 4 by being elided to it.

Motive bank:

3rd

5th = 3rd $\oplus$ 3rd

Example 14a

Instructor pre-analysis for a motivic analysis task on
Grieg's "Anitra's Dance" from *Peer Gynt* (first theme, mm. 7–14).

We next imagine Dr. Trad providing students with Example 14a and a clean score of the movement, and then asking them to “find more instances of motivic thirds and fifths and to write up a brief commentary about the roles they play in the music.” The class, which has fully internalized the method’s eight-rule set, returns with the reading shown in Example 14b. Their sensitivity to Rule 2 in particular is evidenced by their pre-motivic score annotations that track details of harmony and form.

Even though they have worked hard, the analysis they have submitted ends up disappointing the instructor. Specifically, he is dismayed to see that virtually all the shape recurrences they have identified match the contexts of the original targets. In other words, all the 5ths marked past m. 15 are thematic events that essentially restate mm. 7–8. In drafting their commentary, the students find themselves hard pressed to say much more than the following:

The 5th motive first presented in the melody in the key of A minor in mm. 7–8 goes on a tonal journey. It moves to E minor in mm. 19–20, back to A minor in mm. 23–24, and to E minor again in mm. 35–36. In the second half of the piece, the motive transposes more rapidly through D major, D minor, F major, and A minor.

intro

12

a: $\dot{V}$

a

7

5th = $3rd \oplus 3rd$

3rd

5th

13

3rd

5th

bII^6

$\dot{V}$

VI^6

$v: bII^6$

$vii^{04/3}$

18

5th

5th

5th

$\dot{V}$

i

mm. 23-38 omitted (written-out repeat of mm. 7-22)

Example 14b

Fabricated student analysis generated in response to Dr. Trad's prompt from Example 14a.

The musical score for Example 14b (cont'd) consists of five systems of piano and treble staves. The score includes various annotations such as dynamics (*p*, *fp*, *mf*, *pp*), articulation (*b*, *3rd*, *3rds*, *5th*), and interval markings (*E⁹*, *A⁹*, *IV*). The score is written in a key signature of one flat and a 2/4 time signature. The piano part features complex chordal textures and rhythmic patterns, while the treble part features melodic lines with various intervals and articulation marks. The score is divided into measures by bar lines, with measure numbers 39, 44, 50, 55, and 61 indicated at the beginning of their respective systems.

Example 14b (cont'd)

Fabricated student analysis generated in response to Dr. Trad's prompt from Example 14a.

The problem that Dr. Trad senses is that, while all of the above observations are true, the analytic plot fashioned for them actually has little to do with motive. The account frames the tonal journey as the primary musical concern, with the unaltered motives readily slotting into each area. Worse yet, the student gloss comes off to Dr. Trad as flat and uninteresting; for example, it says nothing about the highly charged motivic events that occur in mm. 69–84.

But of course, the source of the problem is Dr. Trad's instructions, which fail to honor Guideline E. Although he has supplied the class with a list of viable motives to work with, he has not adequately prompted students on where to find them, nor guidance about transformations and behaviors to watch for. With regard to the class's supposed disinterest in the climax of the piece, this may simply be the result of miscommunication. It is unlikely that Dr. Trad's students failed to register the rising excitement in this span of music brought about through the *sforzando* and *crescendo* dynamics and the heightened chromaticism (E♭s and A♯s). They simply did not know where to look to discover more deeply embedded motives.

Wary of this possible outcome, Dr. Mod, in contrast, has developed the more detailed set of instructions shown in Example 15a. These directions yield the improved analytic outcome shown in Example 15b. In response to Dr. Mod's Prompt #1, the annotations in mm. 15–18 reveal the presence of a chromaticized, descending 5th\ motive that links this catchy, pre-cadential material back to the main theme stated in mm. 7–10.³¹ In response to Prompt #2, Dr. Mod's students notice not only that the melody of the **b** begins with surface thirds in mm. 39–40, but continues to segments of composite fifth motives built of thirds (cf. the music in mm. 43–45 to the melody in mm. 8–11 and 9–14). Prompted by Point #3, their analysis highlights the imitative treatment of the theme that appears in mm. 70–76 (see arrows). This new wrinkle, which elevates the piece's contrapuntal complexity, is notably retained all the way through the formal rounding and into the quasi-canonic, final **a'** section in mm. 85ff.

The last prompt in Dr. Mod's list, an admitted "reach" in terms of difficulty, directs student attention to a remarkable motivic event occurring at the piece's climax in mm. 69–80. The tension here emerges in large part from the unusual harmonies, which are analyzed in lead-sheet terminology as F⁷/E♭, F^{♯07}, and B⁹. (The first of these is more

31 The melody in the treble staff can be conceived in three voices; the top two exhibit a uniform, zig-zag motion on eighth-note pulses 1, 2, 4, and 5 in every measure. The jagged surface contour indicates the presence of compound line involving a soprano B₄ pedal voice and a contiguous alto moving chromatically downward from B₄ to D♯. Similar to the stretched-out ↑3rd bassline in Example 7, this shape is a surface motive that masquerades as a reduction; therefore, the contiguous note pattern condition applies and not the equal-duration condition.

Motive Bank:

MOTIVE	FIRST OCCURRENCE
linear fifth (5th)	mm. 7-9
linear 3rd (3rd)	mm. 11-12, melody
composite fifth (5th = 3rd $\oplus$ 3rd)	mm. 8-10
chromatic 3rd (Chr. 3rd) (top voice of accompaniment)	mm. 11-12, alto

First, study the full piece, observing the form and making note of unusual harmonies. Next, in the accompanying score, identify recurrences of the four target motives given above. Last, write up a short analysis of 1-2 pages that discusses the most notable recurrences of these motives. Your answer should directly respond to at least two, but preferably three, of the following prompts:

1. What motive serves as the backbone of the material first heard in mm. 15–18?
2. How are *both* continuity and contrast created, motivically, in the first phase of the **b** section, mm. 39–54. Which motive type, 5th or 3rd, seems to dominate the surface of the music? Having decided on one, can you find any traces of the other?
3. Where does the excitement level of the music ratchet up in **b**? Explain how this tension is created, in terms of dynamics, harmony, and motivic activity.
4. Where in the piece do our classroom models of tonal progression (Roman numerals/chord functions) seem to fail? mm. ____ to ____

There is a potential motivic explanation for the organization of this passage: **what is it?** (Hint: Examine the offbeat accompaniment! Analyze its harmonies with lead-sheet symbols, and carefully trace the notes of *its* slower-moving, topmost voice.)

Example 15a

Second approach towards developing a motivic analysis task
on Grieg's "Anitra's Dance" from *Peer Gynt*.

intro

a

5th = 3rd + 3rd

5th = 3rd + 3rd

5th

3rds

5th \

5th

pp

p

mm. 23-38 omitted (written-out repeat of mm. 7-22)

Example 15b

Fabricated student analysis generated in response to Dr. Mod's prompt from Example 15a.

b 3rd 3rd

39 *p* 5th = 3rd $\oplus$ 3rd *fp*

44 *Simile (motives!)* *fp* 5th

50 *fp* *fp*

55 5th *mf*

61 5th *pp*

The musical score consists of five systems of piano and forte dynamics. The first system (measures 39-43) features a piano (*p*) section with a 3rd interval marked above the treble staff and a 5th interval marked as the sum of two 3rds (5th = 3rd $\oplus$ 3rd). The second system (measures 44-48) includes a *Simile (motives!)* instruction and a forte-piano (*fp*) section with a 5th interval marked. The third system (measures 50-54) shows two *fp* sections. The fourth system (measures 55-59) features a mezzo-forte (*mf*) section with a 5th interval marked. The fifth system (measures 61-65) includes a pianissimo (*pp*) section with a 5th interval marked. Fingering numbers (1-5) are provided for many notes, and asterisks (*) are placed below certain notes in measures 39, 44, 50, and 55.

Example 15b (cont'd)

Fabricated student analysis generated in response to Dr. Mod's prompt from Example 15a.

The image displays a musical score for a piano piece, consisting of five systems of music. Each system includes a right-hand (RH) and left-hand (LH) part. The score is annotated with various musical notations and student analysis markings.

- System 1 (Measures 67-71):** The RH part features a melodic line with a blue arrow pointing to a note labeled "5th". The LH part has a circled note labeled "F" and a chord symbol "F⁷/E_b (o3)".
- System 2 (Measures 72-76):** The LH part has a circled note labeled "E" and a chord symbol "F[#]07". A "cresc." marking is present. The RH part has a blue arrow pointing to a note labeled "5th".
- System 3 (Measures 77-81):** The LH part has a circled note labeled "D[#]" and a chord symbol "B⁹". The RH part has a blue arrow pointing to a note labeled "5th". A "dim." marking is present.
- System 4 (Measures 82-86):** The LH part has a "ritard." marking. The RH part has a blue arrow pointing to a note labeled "5th". A "p" marking is present.
- System 5 (Measures 87-91):** The LH part has a "p" marking. The RH part has a blue arrow pointing to a note labeled "5th". A "mf" marking is present.

Other markings include "a tempo" and "i" in the fourth system, and various fingering numbers (1, 2, 3, 4, 5) throughout the score.

Example 15b (cont'd)

Fabricated student analysis generated in response to Dr. Mod's prompt from Example 15a.

likely a diminished third chord in A minor, spelled enharmonically.) Where students might be hard pressed to offer a harmonic explanation for why the $F^7/E\flat(o3)$ chord in mm. 69–72 proceeds to $F\sharp^{o7}$, a motivic explanation can be found lurking in the alto. As the orange circles and letter names indicate, the accompaniment unspools a twelve-measure F_4 -E-D $\sharp$ line, with all notes occupying the same register and reducing to appear on beat 3 of every measure. This is the same linear, chromatic third heard twice in invertible counterpoint in mm. 11–14. Or, to summarize in classic hermeneutic fashion of the kind championed by Marvin and Clendinning (2016, 365), a quirky, chromatic gesture that passes by quickly in an early moment returns later, boosting the aesthetic impact of the work’s high point as an early motivic promise is fulfilled.

IV. Further Thoughts on the Rules for Reining in Motives

This closing section will round out discussion of the method by returning to an issue that has largely been overlooked, that being the question of when the method should be implemented, both as a whole and in its sub-aspects. The responses on offer will first serve the practical purpose of conveying advice to instructors on matters of classroom and curricular planning. As discussion proceeds, these same answers will serve a secondary, philosophical purpose, which is to provide a basis for re-assessing how restrictive the “do not” methodology really is.

The first question with regard to timing asks when this introductory unit should appear in the written theory curriculum. Generally speaking, it can be situated in any semester after the first as larger spans of music are subjected to study. The main thing to keep in mind is whether classes have attained the skills and knowledge required by the method. To understand and follow the “Endeavor to not” rules, students must be fluent in recognizing triads and seventh chords and non-chord tones (Rules i and 2), must understand the concept of compound melody (Rules ii and 4), and must be able to analyze the forms of the pieces they are studying (Rule 2).

If students have not yet mastered these skills by the end of the second semester, then teaching motivic analysis via this methodology should be postponed. I would add that, even if they have, waiting until the third or fourth semester of undergraduate study still may offer the advantages of giving students more time to improve their analytic technique and broadening the scope of pieces that may be treated. For example, it would be appropriate for first-year theory classes to tackle short and mostly- diatonic pieces such as the Mozart excerpt or select phrases from Grieg’s “Anitra’s Dance.” It is likely that second-year classes that have facility with applied chord syntax,

melodic/harmonic modal borrowing, and larger formal structures would be readily able to apply this method to more chromatic works such as the Hensel excerpt and the full Grieg piece. Continuing further, this method is fully suitable for graduate-level instruction. It is adaptable to any proseminar with a focus on technical analysis, such as an analytic survey course of the type where each multi-week unit introduces and drills a different technique.

Additional questions of timing are intimated by the format and details of the method itself. For example, the first two restrictive rules begin with the words “*Initially, do not . . .*” This raises the question of when should they lapse. To take another example, Rule 1’s emphasis on literal shape repetition (“Do not distort motives in terms of . . . interval content”) excludes findings obtained through awareness of developing variation procedure. For readers who are well versed in motivic analysis and find that rule overly restrictive, it is similarly natural to wonder how long it must be before this rule is lifted.

In answering, it is important to remember, first, that Rule 1 need never be lifted, as it will always be possible to craft highly flexible analyses with it in place. That said, if an instructor insists on abandoning it, the answer as to when to do so cannot be absolute. If the introductory unit on motivic analysis is slated to occupy the typical span of one to two weeks, it will likely not be practical to lift many, or possibly, any of the rules. The situation is different if the unit is scheduled for a longer stretch of time or if the plan is to revisit it in a future semester. Teachers in these situations should feel free to lift any of the “do not” guardrails they wish. They should decide this matter in the same way they do any other case of granting increased autonomy to classes: by tracking student progress and adjusting their pedagogy accordingly.

With respect to the three model analytic behaviors, the instructor needs to review student work to ensure 1) that it treats broad swaths of music, 2) that it is demonstrably interpretive (synthetic), and 3) that it displays consistency. The last of these three requirements is perhaps the easiest to monitor. A teacher may gently initiate the process of lifting rules by announcing a minor exception to one of them. I suggest starting with a more circumspect restriction, perhaps Rule i, ii, 3, or 4, and establishing a single, anomaly case. One can weaken Rule i by picking a single target shape from the motive bank and allowing students to highlight instances of it in the score that begin or end on a non-chord tone.

Teachers should then gauge student responses to determine whether these new freedoms are infusing their developing practice or upending it. Instructors should be watchful for the erosion of classroom consensus and/or their students abandoning

analytic restraint (e.g., increasingly rampant over-bracketing of scores). Both of these conditions signal that the communicative aspects of analysis are breaking down. If, on the other hand, no such fracturing is observed, that is a positive sign of a class's maturity in handling motives.

Encouraged by such progress with the more limited-scope rules, teachers may explore the possibility of relinquishing even Rule 1, the most far-reaching of the method's restrictions. Readers will recall that this rule was strictly enforced in discussion of an instructor's initial attempt to analyze Hensel's *Mélodie*. In that analysis (Example 13a) now reprinted as Example 16a, it was the flexibility afforded to motive **y** that proved problematic. Although each individual **y** shape may be readily apprehended, the overabundance of these generic leaps undermines the idea that a uniquely meaningful **y** shape even exists. In the case where essentially any two-note gesture can be **y**, it is difficult to articulate what new understanding a listener gains from attending to the particular succession of motives shown in Example 16a.³²

Example 16b provides a contrasting reading of the Hensel in which Rule 1 is fully lifted. There, balance between motivic fluidity (developing variation) and analytic rigor (restraint) is struck by recasting **y** as a three note, "hook" motive. Specifically, **Hook (H)** is formatted gesturally (meaning: not as a pitch motive) as a downward leap that rebounds to a step upward; the center note may or may not be accented as in the manner of an appoggiatura. **Hook** first appears as the gesture that opens the piece, with two more such shapes following at the melody's surface in m. 2. In m. 3, the first camouflaged form of the motive appears. Hook's migration to the bass voice promotes contrast and continuity. Even as it imparts sonic variety to the music by appearing in a new register ($F\sharp_3$ - $F\sharp_2$ - $F\times$), it supplies the missing puzzle piece needed to complete the every-beat saturation of mm. 2–3 with this shape. Four more close instances of the **H** motive are indicated in mm. 4–6. The highlighting there is given in an understated gray to contrast these smaller, more surface instances with the culminating form of the motive that appears in reduction across beats 2–4 in m. 6.

A last, important consequence of interrogating restrictive rules bears consideration. To think of them as impermanent, as necessarily expiring at some point, is to intimate a deeper truth about this methodology, which is that in practice it is far more flexible than it initially appears. I invite readers here at the end to

³² Even if **y** were formatted more strictly with a rhythmic requirement of two dotted-quarter notes, a great many additional **y** shapes could be posited indiscriminately. Examples include m.1, beats 2–3, the bass's motion from B_3 - $A\sharp$; m.3, beats 1–2, the soprano's motion from E_5 to $G\sharp_4$; and m. 6, beats 3–4, the melody's last motion from $A\sharp_3$ to B .

- b. Analysis undertaken following the suspension of Rule 1 in which developing variation technique (melodic interval alteration) is permitted. The new gestural motive traced is Hook (H) = $\downarrow$ leap $\oplus$ $\uparrow$ step. Blue arrows track motive migration and growth over time.

The image displays a musical score for a piano piece, identified as Example 16 (cont'd). The score is written for piano (p) and features a tempo marking of "Lento appassionato". The key signature is D major (two sharps). The score is divided into two systems. The first system shows a melodic line in the right hand and a supporting line in the left hand. A blue arrow traces a motive from the right hand to the left hand, indicating migration. The second system continues the melodic line, with a blue dashed arrow showing the motive's growth over time. The score includes various musical notations such as notes, rests, and dynamic markings.

Example 16 (cont'd)
Instructor plan for analysis of Hensel's *Mélodie*, op. 4, no. 5.

reconsider the negatively couched Rules and Guidelines of Example 3 to see how they can in fact be seen to instantiate a “*how to*” method. Reading the rules “between the lines,” we see them directing analysts when to begin looking for motives, where to look for them (in all voices, across a full work), and how to communicate findings so as to privilege discovery and synthesis over mere event reporting.

This type of guidance, no matter whether it is articulated in positive or negative terms, is meant to fill in the many gaps that too often attend to classroom motivic analysis. I am referring here to the gaps that in most cases yawn between one cliff edge where tasks are circumscribed and straightforward and a distant edge where they are more open-ended and ambiguous. I noted that it is one thing for students to follow along as a teacher shows how a target motive in one measure is inverted in the next, but quite another for them to seek out that target themselves. Likewise, it is one thing for students to highlight motive recurrences in a full piece or constituent section, but quite another to be asked to assemble those findings into an analysis that comments and sheds new light on it.

This method is of course no panacea, meaning that it cannot obviate all the difficulties inherent in teaching this highly complex topic. However, during the time that the motive unit remains open, instituting Rules i–ii and 1–6 will help students gain a clearer sense of what pitch-based motives are and what value they hold for analysis. For teachers, steady work with the rules and guidelines will aid them in generating tasks and assignments that are more efficient and intentional. Taken together, these mutually reinforcing spheres of activity will yield vastly improved analytic outcomes.

It is hoped that further benefits of inculcating students in this manner will accumulate long after the motive unit concludes. If enough musicians gain exposure to this or similarly carefully designed materials, then for them perhaps a last, longstanding gap may be filled, the one separating the promised results of this mode of analysis, which are typically grand, from the actual ones, which are typically less than inspired. This development may ultimately impact curricular design, such that motivic analysis in the future might again come to be viewed less as an enrichment-style novelty and more as a foundational practice that is ideal for interrogating music and communicating one’s insights and feelings about it.

Works Cited:

- Anson-Cartwright, Mark. 1996. "Chord as Motive: The Augmented-Triad Matrix in Wagner's 'Siegfried Idyll.'" *Music Analysis* 15, no. 1: 57–71.
- Auerbach, Brent. 2021. *Musical Motives: A Theory and Method for Analyzing Shape in Music*. Oxford University Press.
- Beach, David. 2012. *Advanced Schenkerian Analysis: Perspectives of Phrase Rhythm, Motive and Form*. Routledge.
- Benward, Bruce and Marilyn Saker. 2009. *Music in Theory & Practice*, 8th ed. McGraw-Hill.
- Benjamin, Thomas, Michael Horvit, Timothy Koozin, and Robert Nelson. 2014. *Techniques and Materials of Tonal Music*, 7th ed. Oxford University Press.
- Boss, Jack. 1999. "'Schenkerian-Schoenbergian Analysis' and Hidden Repetition in the Opening Movement of Beethoven's Piano Sonata op. 10, no. 1." *Music Theory Online* 5, no.1.
- . 2015. "'Away with Motivic Working?': Not So Fast: Motivic Processes in Schoenberg's op. 11, no. 3." *Music Theory Online* 21, no. 3.
- Burkhart, Charles. 1978. "Schenker's 'Motivic Parallelisms.'" *Journal of Music Theory* 22: 145–75.
- Cadwallader, Allen. 1988. "Prolegomena to a General Description of Motivic Relationships in Tonal Music." *Intégral* 2: 1–36.
- Caplin, William. 2013. *Analyzing Classical Form: An Approach for the Classroom*. Oxford University Press.
- Carpenter, Patricia. 1988. "A Problem in Organic Form: Schoenberg's Tonal Body." *Theory and Practice* 13: 31–64.
- Carpenter, Patricia and Severine Neff. 2006. *Introduction to Arnold Schoenberg's The Musical Idea and the Logic, Technique, and Art of its Presentation*. Columbia University Press.
- Clendinning, Jane and Elizabeth West Marvin. 2005. Workbook to accompany *The Musician's Guide to Theory and Analysis*. W.W. Norton..
- Deutsch, Diana. 2019. *Musical Illusions and Phantom Words: How Music and Speech Unlock Mysteries of the Brain*. Oxford University Press.
- Dubiel, Joseph. 1990. "'When You are a Beethoven:': Kinds of Rules in Schenker's Counterpoint." *The Journal of Music Theory* 34, no. 2: 291–340.
- Epstein, David. 1979. *Beyond Orpheus: Studies in Musical Structure*. MIT Press.
- Forte, Allen and Steven Gilbert. 1982. *Introduction to Schenkerian Analysis*. W.W. Norton..
- Forte, Allen. 1983. "Motivic Design and Structural Level in the First Movement of Brahms's String Quartet in C Minor." *Musical Quarterly* 69: 471–502.
- Frisch, Walter. 1984. *Brahms and the Principle of Developing Variation*. University of California Press.
- Garfinkle, Harold and Anne Rawls. 2015. *Toward a Sociological Theory of Information*. Routledge.
- Gauldin, Robert. 1997. *Harmonic Practice in Tonal Music*. W.W. Norton and Co.
- Heneghan, Áine. 2019. "Rethinking Repetition: Interrogating Schoenberg's Writings." *Perspectives of New Music* 57, no. 1–2: 25–74.
- Huron, David. 2016. *Voice Leading: The Science Behind a Musical Art*. MIT Press.

- Kuhn, Thomas. 2012. *The Structure of Scientific Revolutions*, 4th ed. University of Chicago Press.
- Kostka, Stefan, Dorothy Payne, and Byron Almén. 2018. *Tonal Harmony, with an Introduction to Post-Tonal Music*, 8th ed. McGraw-Hill.
- Laitz, Steven. 2008. *The Musician's Guide to Theory and Analysis*, 2nd ed. W.W. Norton..
- Laitz, Steven and Michael Callahan. 2023. *The Musician's Guide to Theory and Analysis*, 5th ed. W.W. Norton.
- Lerdahl, Fred and Ray Jackendoff. 1983. *A Generative Theory of Tonal Music*. MIT Press.
- Morris, Robert. 1993. "New Directions in the Theory and Analysis of Musical Contour." *Music Theory Spectrum* 15, no. 2: 205–228.
- Réti, Rudolph. [1951] 1978. *The Thematic Process in Music*. Greenwood Press.
- Roig-Francolí, Miguel. 2011. *Harmony in Context*, 3rd ed. McGraw-Hill.
- Rosen, Charles. 1990. "Brahms the Subversive." In *Brahms Studies: Analytical and Historical Perspectives* (Papers Delivered at the International Brahms Conference, Washington, DC, 5–8 May 1983), ed. G. S. Bozarth, 105–22. Clarendon Press.
- . 1994. *The Frontiers of Meaning: Three Informal Lectures on Music*. Hill and Wang.
- Schenker, Heinrich. 1921 [2004]. *Der Tonwille: Pamphlets in Witness of the Immutable Laws of Music*, Vol. 1: Issues 1–5, ed. by William Drabkin. Oxford University Press.
- Schoenberg, Arnold. 2006. *The Musical Idea and the Logic, Technique, and Art of Its Presentation*. Ed. and tr. by Patricia Carpenter and Severine Neff. Columbia University Press.
- Straus, Joseph. 1990. *Remaking the Past: Musical Modernism and the Influence of the Tonal Tradition*. Harvard University Press.
- Turek, Ralph. 2007. *Theory for Today's Musician*. McGraw-Hill.
- Tymoczko, Dmitri. 2008. "Scale Theory, Serial Theory, and Voice Leading." *Music Analysis* 27, no. 1: 1–49.
- Zbikowski, Lawrence. 2002. *Conceptualizing Music*. Oxford University Press.

Applications of Information Literacy to Teaching Independent Music Analysis

BY KATRINA ROUSH

Undergraduate and graduate music students learn many tools beneficial for music analysis, and they practice applying these tools to music in their music theory classes. However, they often struggle to perform useful analysis on their own without the guidance of an instructor. They can have trouble understanding that analysis should communicate their personal interpretation of a work, and they may not realize that independent analysis usually requires some preparatory work (analytical research), such as discovering if others have analyzed the work and learning new analytical methods. This article shows that there is a strong connection between various steps in the music-analytical process and information literacy, as presented in the Association of College & Research Libraries' *Framework for Information Literacy for Higher Education* ("*Framework*"). It takes several tenets from information literacy and demonstrates how they map onto analysis and analytical research, using the *Framework* to structure this discussion. Eight short, practical mini- lesson plans are included, along with brief discussions of their purposes and student feedback regarding their effectiveness.



Introduction

Undergraduate students in a typical music program learn many tools necessary for music analysis, and they practice applying those tools to musical examples. However, they often graduate without knowing how to approach analysis beyond the controlled environment of their music theory classroom. Graduate music students tend to receive more opportunities to engage in independent analysis; but if they have rarely encountered this in the past, sudden expectations to produce convincing analyses without much assistance can feel overwhelming to them.

In my experience as a faculty member, I have found that both undergraduate and graduate students frequently feel at a loss as to what a full analytical endeavor actually entails—that is, they have some analytical tools, but they do not know how to approach analysis, how to access published analyses (or that these even exist), how to learn and apply new analytical tools outside of a classroom setting, and how to deal with conflicting ideas about the same piece of music. They often do not understand that music analysis is an expression of their own ideas about how a piece of music works; they do not understand that analysis is interpretive and personal. As an undergraduate student myself, I learned the typical analytical tools for Western classical music, and I even remembered how to use them when I graduated. But the first time I was asked to write an analytical paper in graduate school, I had no idea where to start. Beginning

an analysis without assistance was never addressed in my undergraduate curriculum. Though my personal experiences as a professor and a student are anecdotal and are certainly not universal, they are not unique.

So, what can instructors do to prepare students to perform analysis independently? First, they can present analysis as a richer experience than simply finding answers about a piece of music by applying analytical tools. Analysis is creative, interpretive, and personal.¹ Students should understand that analysis parallels performance in some ways: it is their communication of a specific interpretation of a piece of music, informed by other interpretations but nuanced in a way that only they can express. Second, it is important to acknowledge that the act of analyzing a piece of music cannot be done without some amount of preparatory work, which this article indicates with the term “analytical research.” Analytical research involves steps similar to those that music theorists take when preparing an analysis for publication. Each person’s process looks a little different but often includes similar actions. The analyst identifies interesting facets of a piece through listening and studying the score. Then, they may look for other analyses of the work, to ensure their ideas have not been explored before and to spark more creativity, building on the work of others. Before deeply analyzing the piece, the analyst needs to choose methods that they will use. The most useful methods may be ones they are not yet familiar with, and they may need to find them and learn about them. With all this existing research—or perhaps lack of existing research—in mind, the analyst often creates an analysis in such a way as to fill a gap in the collective knowledge of the field. If the analysis is to be published or presented, the analyst cites the research they consulted in footnotes and a bibliography. Each step described here necessitates certain research skills, from locating scores and recordings, to finding and applying new analytical methods, to citing others appropriately. Even if the analyst is not preparing a publication and is analyzing music for themselves (which is where most music students will eventually be), understanding the current landscape of similar analyses and learning new modes of analysis will strengthen the usefulness of their analytical work.

A number of music programs are working to address this problem in creative ways. For example, some professors are implementing innovative methods to teach students how to write analytical essays that move beyond blow-by-blow descriptions, such as Samantha Inman² and Lynne Rogers.³ The University of Texas San Antonio

1 See, for example, the analyses in Hatten (2016, 237–52).

2 Inman (2017, 43–64).

3 Rogers (2017, 93–112).

formed a Theory Club where any students who are interested in diving deeper into music theory research can meet outside of class to discuss creative analytical ideas.⁴ Butler University has an annual day-long Theory Exhibition where students in advanced undergraduate music theory courses present posters, all of which include citations,⁵ based on their semester projects analyzing form. These initiatives and others like them certainly make a difference. Still, this problem seems to run deep. Many undergraduate and graduate students struggle to approach music analysis on their own, even though they may be expert musicians in the areas of performance, conducting, composition, and education.

This article proposes a new approach to teaching students how to *think* about music analysis and analytical research based on the Association of College & Research Libraries' (ACRL) *Framework for Information Literacy for Higher Education* ("Framework").⁶ Although many non-music disciplines and some areas of music study have been applying concepts from the *Framework* to their pedagogy for years, a formal application to music theory and music analysis has not yet been developed. This article takes several tenets from information literacy, as defined by ACRL, and shows how they map onto analysis and analytical research, using the *Framework* to structure this discussion. The goal is for these ideas to be practical and nearly immediately applicable for theory instructors. To this end, eight mini-lesson plans are included in the Appendix, which are intended to take up part of a typical class period. They can be taught as is, adapted to suit various curricular needs, or considered as a starting point for new pedagogical ideas. This examination of various applications of the *Framework* to teaching music analysis is organized around how these mini-lessons have worked for my students and their potential to work for others.

The Framework for Information Literacy for Higher Education

ACRL defines information literacy as "the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning."⁷ In practice, information literacy

4 Beavers (2023).

5 Jeffrey Gillespie, email message to author, January 26, 2023.

6 Association of College & Research Libraries, *Framework for Information Literacy for Higher Education* (2015).

7 *Framework*, 26.

reflects skills that most academics deem essential for higher levels of research, learning, and contribution to their fields. These skills include critical thinking, the location and use of quality resources, appropriate citation use, information assimilation, knowledge creation, metacognition, and metaliteracy. Individuals who exhibit a proficiency in information literacy know that quality of information is more important than how much they find or how quickly they find it. They understand not just how to locate sources, but how to handle them in “effective and responsible”⁸ ways. For example, instead of choosing the first few articles from a database search, they look through many articles to find the most applicable ones, refining their future searching strategies based on the results they see. They understand not just how to manage citations but why this is a crucial aspect of research. Instead of looking for research to back up their conclusions, they search for a variety of perspectives and draw conclusions based on evidence and the expertise of others. They know how to conduct research independently, how to learn without an instructor, and how to reflect on their own abilities, goals, and growth.

In 2016, ACRL published the *Framework for Information Literacy for Higher Education* with the goal of promoting information literacy among college students, equipping them to “recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information.”⁹ To this end, the *Framework* highlights six core concepts, or “frames,” to foster information literacy in students (Example 1).

- **Authority is Constructed and Contextual**
- **Scholarship as Conversation**
- **Research as Inquiry**
- **Searching as Strategic Exploration**
- **Information Creation as a Process**
- **Information Has Value**

Example 1

The six frames of the *Framework*.

The *Framework* was born out of an earlier document from ACRL, the *Information Literacy Competency Standards for Higher Education* (“*Standards*”). Published in 2000 to address the need for more standardized information literacy education in colleges and universities, the purpose of the *Standards* was to “pinpoint specific indicators that

8 Snyder, Sampsel, and Farmer (2018, 5).

9 ACRL, *Presidential Committee on Information Literacy: Final Report* (1989).

identify a student as information literate.”¹⁰ When most people think about library instruction, this skills-based approach is usually what they picture: librarians visit classes and attempt to teach students research-related skills, such as “[accessing] needed information”¹¹ and “[using] information effectively to accomplish a specific purpose.”¹² Eventually, ACRL reworked their approach to include a broader application and more flexible structure, replacing the *Standards* with the *Framework*.¹³ Unlike the *Standards*, the *Framework* does not prescribe learning outcomes or claim to be able to determine when a student has become “information literate.” Rather, it was purposefully built to be highly adaptable in response to a quickly-changing academic landscape, and its organization around concepts rather than specific skills facilitates this well. The structure and intention of the *Framework* allow “flexible options for implementation,” applying to both goals of different institutions and needs of different disciplines.¹⁴

In fact, a variety of disciplines have already adapted the *Framework* successfully, and more and more publications have arisen to address practical application of the *Framework* to college-level instruction. A number of these publications are companion documents created by ACRL to help some disciplines incorporate the *Framework* for their specific pedagogical needs.

Some companion documents tie the *Framework* to similar standards in individual fields. Sociology’s companion connects ACRL’s *Framework* to the five essential concepts of the Sociological Literacy Framework, with a goal of helping bridge the gap between librarians and sociologists.¹⁵ Similarly, the companion for politics, policy, and international relations seeks links between competency guidelines from their professional societies and those indicated by the *Framework*.¹⁶ The companion for social work discusses each frame in the context of how it relates to the field’s

10 *Competency Standards*, 5.

11 *Competency Standards*, 9.

12 *Competency Standards*, 13.

13 When the *Framework* was published in 2016, ACRL officially rescinded the *Standards*. For a more detailed explanation of the shift from the *Standards* to the *Framework*, see Snyder, Sampsel, and Farmer, in Abromeit (2018, 3–5).

14 *Framework*, 7–8.

15 “Companion Document to the ACRL Framework for Information Literacy for Higher Education: Sociology.”

16 “Companion Document to the ACRL Framework for Information Literacy for Higher Education: Politics, Policy, and International Relations.”

existing documents outlining appropriate professional standards, values, practices, and education for social workers.¹⁷

The flexibility of the *Framework* is essential not only between disciplines but sometimes within them. For example, the companion for women's and gender studies explains that the field encompasses so many issues that it "does not share a common set of disciplinary standards or learning outcomes."¹⁸ It lists "Actions and Attitudes" desired of students for each of the six frames that allow for a flexible application of concepts. In addition, STEM fields have their own companion, with the goal of expanding the *Framework* to centralize learner-centered pedagogy in its specific disciplines.¹⁹ Authors such as Melissa Mallon have applied the *Framework* to the education of business students through case studies.²⁰ Lijuan Xu and Nestor Gil explore how information literacy can impact studio art pedagogy.²¹

Music analysis and analytical research, as defined in the introduction, are perhaps most closely linked to the discipline of writing and literature, as exhibited in its *Framework* companion from ACRL. The *Framework* helps contextualize analysis of texts as knowledge creation within a larger scholarly conversation. Quite a bit of this maps onto music analysis:

"As with many disciplines, literary research involves a conversation between one person (e.g. an author, scholar, student, etc.) and a host of other people (e.g. publications, scholars, peers, etc.) across time and space about a 'text' or ideas relating to that text.... In order for these conversations to take place, scholars need to have an understanding of the breadth and depth of research necessary before, during, and after this conversation. Part of this research is thinking through the approach to the text that a scholar will be taking because different approaches to theory and interpretation will require different tools and methods, and/or modes of reading and writing....Those embarking on this research—whether as a novice in an introduction to composition class, an intermediate in a creative writing course, or an expert in an upper-level seminar—have the potential to create new knowledge not only through their own original ideas, but also by engaging with tools and resources available in a growing number of hosts, platforms, formats, and even disciplines."²²

17 "Companion Document to the ACRL Framework for Information Literacy for Higher Education: Social Work."

18 "Companion Document to the ACRL Framework for Information Literacy for Higher Education: Women's and Gender Studies."

19 "Companion Document to the ACRL Framework for Information Literacy for Higher Education: Science, Technology, Engineering, and Mathematics."

20 Mallon (2015, 127–29).

21 Their approach and subsequent reflection could be valuable to a discussion of how librarian integration can benefit even non-research-focused fine arts courses by emphasizing concepts from ACRL's *Framework*. Xu and Gil (2017, 122–36).

22 "Companion Document to the ACRL Framework for Information Literacy for Higher Education:

In music, as in most other disciplines, the current conversation about the *Framework* is taking place mainly among specialist librarians. Committed to advancing information literacy among music students, the Music Library Association is currently in the process of writing its own companion to the *Framework*, though it has not been approved and disseminated yet.²³ However, a number of books and articles have been published to this effect, aimed mainly at music librarians with tips for how to use the *Framework* to enhance their instruction in music classes.²⁴ For the most part, music librarians tend to assist with music history and research methods courses, as this is where the majority of students conduct music research that requires library use. Questions about how to find information, how to evaluate sources, and how to responsibly create new knowledge fit well into these more traditional music librarian instructional roles.

But music librarianship has been pushing recently to incorporate information literacy into other music courses. The flexibility of the *Framework* has been useful in beginning to take those steps. Courses that might not need to use the library heavily can still benefit from information literacy, and the *Framework* provides a useful starting place for those conversations between librarians and faculty. For example, a number of publications suggest ways to integrate information literacy into music therapy courses, teaching students to find resources for clinical use, write annotated bibliographies, and apply their findings to case studies.²⁵ Others have designed ways to create engaging modules focused on information literacy in online music instruction.²⁶ One especially noteworthy essay even outlines a number of insightful applications of the *Framework* for performance and composition.²⁷

Despite these recent advancements, almost no research has been published about how librarians and music theory instructors could use the *Framework* to collaborate most effectively.²⁸ With the current focus on information literacy as flexible concepts

Research Competencies in Writing and Literature.”

23 Charles Roush, email message to author, August 24, 2023.

24 See, for example, Conor, (2017, 346–54); Abromeit, ed., (2018); and Christensen, Conor, and Ritter, eds., (2018).

25 For example, see Fiore and Roth, in Christensen, Conor, and Ritter (2018, 172–74); Geist and Williams, in Christensen, Conor, and Ritter (2018, 169–71); and Masko, Thormodson, and Borysewicz (2020, 143–49).

26 Scott (2018, 287–305).

27 Snyder, Sampsel, and Farmer, in Abromeit (2018, 3–13).

28 In my research for this article, I found only two sources that mentioned integrating information

rather than as specific skills, this collaboration is long overdue. Applying the *Framework* to music theory pedagogy beginning in the first semester of college, and continuing throughout the music theory sequence and into graduate school, can help students build the information literacy skills they need for successful independent analysis. With this focus of instruction, students can learn to approach analysis and analytical research with confidence, curiosity, and open-mindedness. Eventually, they can gain the ability to evaluate their own conclusions without the assistance of an instructor. For music theory faculty, it can feel as though they are always fighting the clock (or the calendar), with so many concepts to teach in so little time. The flexibility of the *Framework* makes the frames easy to incorporate into existing curricula without sacrificing much preparation or class time, while making a significant impact on the success of students' future analytical endeavors.

Methodology

- Authority is Constructed and Contextual
- Analysis as Conversation (Scholarship as Conversation)
- Analysis as Inquiry (Research as Inquiry)
- Searching as Strategic Exploration

[Frames not used: Information Creation as a Process; Information Has Value]

Example 2

The four frames addressed in this article and how they are renamed, when applicable.

This article proposes innovative ways to approach four of the six frames of the *Framework* from the perspective of music theory pedagogy. I specifically chose these four as the focus, because they seem to apply best to music analysis and analytical research. As indicated in Example 2, I renamed two of the frames to more pointedly suit discussions about analysis, though the principles in those mini-lessons are strongly connected to the original frames.

The following sections provide ACRL's definition of these four frames and explain each as it is laid out in the *Framework*, followed by some ways in which the frame can be applied to analysis and analytical research. Then two mini-lesson plans for each frame are presented, accompanied by a brief discussion of each. Additionally, I taught each of the eight mini-lessons in one of the following music theory courses at literacy into music theory pedagogy: Gades (2019); and C. Roush, K. Roush, and Dibrell (forthcoming).

the University of Texas Rio Grande Valley in the Spring 2023 semester: Music Theory I (beginning undergraduate), Musical Form and Analysis (upper-level undergraduate), and a graduate tonal analysis course (non-theory master's students). To gauge the effectiveness of these lesson plans and gather ideas for future implementation, I solicited feedback from students with a survey directly after teaching the lesson. The survey asked students to write about something they learned from the mini-lesson, something they found especially helpful, anything they still had questions about, and any suggestions for improvement.²⁹ The discussion of each mini-lesson concludes with selected student feedback.

The lessons are appropriately called “mini-lessons,” intentionally created to take up less than a full class period. Ranging in suggested length from fifteen to forty-five minutes, the mini-lessons can be integrated into a longer lesson plan or attached as a supplement or add-on to any class period. The lesson plans are practical and flexible while covering a broad range of information literacy topics. It should be noted that they are not built for instructors to teach them all in a single course. Even though they do not take up an entire class period, eight new lessons are next to impossible to add to most existing courses. Instead, they can be used intermittently as suits the instructor, class, and curriculum best. Instructors can integrate them into their current curriculum throughout several semesters, teach one whenever extra class time is available, or present them outside of class time (such as during a colloquium, professional development series, or other designated student meeting time). The hope is that as more instructors become aware of the usefulness of the *Framework* in teaching music analysis and analytical research, the more ways they will find to weave the frames organically into their pedagogy.

The *Framework* does not specify an order that the frames should be discussed or implemented. As evidenced in the following sections, in my own use of these lesson plans as supplemental mini-lessons, I do not teach the frames in any particular order, either. Instructors should feel free to integrate the frames in whatever order and in whichever classes work best for their students. This article orders the four frames to facilitate a logical discussion of their various applications. This specific ordering of the frames also highlights some connections between them, as each frame is not completely discrete from the others, as may first appear to be the case. In fact, I have found this to be a benefit of how the frames function. They tie seamlessly into each other without my having to do much extra work to make these connections apparent to students.

29 All post-lesson feedback that is included in this article is done so anonymously with each student's express permission.

Frame: “Authority Is Constructed and Contextual”

“Information resources reflect their creators’ expertise and credibility, and are evaluated based on the information need and the context in which the information will be used. Authority is constructed in that various communities may recognize different types of authority. It is contextual in that the information need may help to determine the level of authority required.”³⁰

The frame “Authority Is Constructed and Contextual” encourages students to consider how to evaluate sources of information and to ask questions about what makes a source good in a particular situation. Students should investigate authors and creators of various resources to determine if they are authorities (experts) in the topic of the resource. Authority should be considered differently depending on the type and scope of what students need to know. Students are constantly navigating a barrage of information. This frame helps them figure out what is valuable for them, what is not, and how to tell the difference.

The concept of bias plays into an evaluation of authority. Students should understand that bias does not have to prompt a value judgement—everyone has bias—but it is important when considering an authority to acknowledge what biases that authority has. When students know where someone is coming from, they can make more informed decisions about their level of authority on a topic. Similarly, students can examine their own biases, asking if these biases started with people they have considered authorities in their life. Since students are budding authorities in their own right, understanding their own biases and where they may have originated helps them become more responsible authorities themselves.

In addition, this frame provides an exceptional starting point for a discussion of systemic bias. Students can begin to address why they believe certain people have more authority in certain areas than others. It is crucial for students to question how decisions about authority are made at higher levels, who tends to be excluded, and why this is the case.

“Authority Is Constructed and Contextual” is useful for analysis and analytical research in a number of ways. Instructors can discuss issues of the Western canon with students, examining where it comes from and who has historically had the power to make decisions about what music is “valuable” to perform, study, and analyze (and why). Instructors can use ideas from this frame to point out the contextual usefulness of different resources and different types of scores or recordings. When reading about

30 Framework, 12.

music or finding scores, it is important to think about where the information comes from (i.e., to learn about the author, publisher, editor, organization, institution, database, website, etc.). If the origin of the information is difficult or impossible to determine, students should see this as a red flag. This frame helps students acknowledge their biases and the biases of others, including certain views and assumptions of different schools of thought. Bias can impact what musicians choose to analyze, what methods they choose, and the conclusions they draw.³¹ Examining aspects of authority in authors necessitates the differentiation among facts, theories, and opinions; instructors can similarly caution students against asserting analytical ideas that lack sound reasoning and examples. As they grow as musicians, students will learn to function as responsible authorities in their fields.

LESSON PLAN #1: Bias and Authority

The goal of this mini-lesson is for students to express their opinions about different pieces of music and then to examine where these ideas originated. What authorities in their life have influenced how they think about music? Students should also recognize that other people likely think of them as music authorities and that they should take this responsibility seriously.

I taught this lesson near the beginning of the semester in Music Theory I to plant the seeds of these ideas early in music students' college journeys. One trend among post-lesson student comments was that it caused them to think about how Western classical music was not the only music worth studying. A few students expressed how useful it was to ponder who they looked up to as authorities in music, realizing where their biases come from and how they could impact their own future students.³²

This mini-lesson caught at least one student's attention more significantly than even I had expected. A few days after attending this class, they expressed a desire to continue this conversation further one-on-one with me. They asked why we primarily teach classical music in music school and whether this is still useful for today's musicians. This opened the door for a fruitful discussion of the benefits and limitations of the way formal music instruction has worked historically in the United States. We discussed

³¹ For example, Philip Ewell discusses at length the racial bias implicit in analyzing music outside the Western classical tradition using Western classical music theory. For one instance of this, see Ewell (2023b).

³² Because the class was mostly full of music education majors, I was able to personally connect to them by addressing the effect they could have on their future students. During the discussion in the lesson, several students mentioned past or current teachers as being authorities who influenced their biases, opening the door for the realization that they have an opportunity to become responsible authorities as teachers.

steps that music educators are making toward necessary change, the reality that systemic change is usually slow, and the actions we can take now to value more musical traditions. Similarly, there was a trend in the post-lesson feedback that this lesson brought up questions from a number of students about why music school in general is classically based, whether this is good, and if it can be changed. I could imagine this lesson providing a useful starting point for deeper discussions about canon, including who has historically made decisions about what kind of (and whose) music is valuable and how we might expand the canon to decenter whiteness and maleness.

LESSON PLAN #2: Evaluating Sources

The goal of this mini-lesson is to encourage students to consider the source of musical information they find. Does it come from an authority? How can they determine the level of authority someone has on a specific aspect of music? Students are encouraged to think about specializations within fields; “musician” or even “music scholar” is a broad term.

I taught this lesson in Music Theory I, and students especially enjoyed the analogies. Though many scenarios exist in which someone could be an authority on both car repair and cooking, most students in my class found it humorous to imagine asking the specific car authority they chose about recipes. However, the class became more somber as students earnestly considered what they would do if faced with a serious medical concern. Because they connected emotionally to the non-music examples, they remained attentive and engaged while we discussed the application of these concepts to music research.

Student participation in the brainstorming activity was the most exciting part of this mini-lesson. My students came up with ideas for determining musical authority that I had not considered, such as evaluating someone’s performance ability. One student mentioned that they knew a music teacher who thought the guitar was overrated. This launched a discussion of when it might or might not be useful to approach that specific music authority with questions. Other ideas included determining someone’s educational background, finding and evaluating their publications, and asking trusted authorities for advice about other possible authorities.

Frame: “Analysis as Conversation”

“Communities of scholars, researchers, or professionals engage in sustained discourse with new insights and discoveries occurring over time as a result of varied perspectives and interpretations.”³³

This frame, originally named “Scholarship as Conversation” in the *Framework*, emphasizes situating new research within existing research. Though this concept is not new, shifting its focus so that students think of themselves as members of a larger conversation provides a nuanced view that communicates more clearly how research is advanced over time.³⁴ In this frame, students’ voices and other historically marginalized voices, often due to issues surrounding race, gender, and class, are elevated. Finding sources that disagree with each other is welcome rather than daunting, and building upon existing research does not necessitate full agreement with that research. To this effect, the frame encourages students to clearly indicate the ideas they engage with through proper citations, to think critically about the information they encounter, and to acknowledge why different perspectives are essential and in which contexts they are most useful.

Rachel Elizabeth Scott adapted the name of this frame to fit her pedagogical application of it in her article “Performance as Conversation.”³⁵ I am using a similar tactic here by renaming the frame “Analysis as Conversation.” The purpose of this renaming is to claim that the principles from this frame clearly apply to analytical situations. Just as conversations are personal, so are analytical perspectives. Students sometimes struggle with asserting their ideas in analysis, especially if they see disagreements in other sources. “Analysis as Conversation” encourages students to consider those disagreements carefully³⁶ but not to shy away from their own unique contributions if they add to the conversation. In fact, as long as students use analytical tools appropriately and back up their claims, “contradictions” in analysis are particularly valuable because they highlight different interpretations of musical works and broaden our understanding of them.

Expert analysts learn to live and thrive in the “discomfort” of contradicting ideas and gray areas. This can be a difficult concept for students, as many of them incorrectly

33 *Framework*, 20.

34 One author agrees that the concept of a conversation works well to get students to understand how scholarship grows. See Scott (2017, 249).

35 Scott (2017, 239–50).

36 This frame overlaps with some ideas from “Authority is Constructed and Contextual.”

but understandably think that music theory is a black-and-white, right-or-wrong subject. This can be an unfortunate byproduct of early and even intermediate stages of music theory instruction, where instructors traditionally impress upon students the importance of correctly writing scales and key signatures, following part-writing rules, resolving tendency tones, and labeling chords. Integrating lessons about information literacy in general, and “Analysis as Conversation” more specifically, throughout the undergraduate theory curriculum can help alleviate students’ discomfort with nuanced interpretations and ambiguous passages of music. It can encourage students to engage with the conversation of analysis, even if it is uncomfortable for them at first. The conversation lives in the gray areas. Music students need to know how to build on others’ analytical conclusions, question them, take them in different directions, bring in other voices, and back up their own ideas.

LESSON PLAN #3: Situating Your Perspective

The goal of this mini-lesson is to guide students through a critical evaluation of two articles on the same artistic work. Students should see how the sources differ in authority, scope, and intended audience. From this, they can decide how to engage with the articles as if they were going to analyze this work themselves. The lesson can focus on any two sources on the same artistic work, as long as they approach the work from different perspectives. The artistic work could be a piece of music, but it could also be another type of work that students interact with in their daily lives, such as a book or movie. Though selecting sources that are just opinions or value judgements about the work could facilitate this lesson, it is probably best to find articles or reviews that address whether the work in question is important—or whether analysis of it is necessary—and why the author believes this.

I taught this mini-lesson to a group of upper-level music majors in their last few weeks of their last music theory course, Musical Form and Analysis. The article excerpts I gave them³⁷ did not necessarily disagree, but they approached an album from widely different perspectives. Additionally, the articles were of two significantly different types. One was peer-reviewed and the other was not; one was written by a music theorist and the other was not. Both excerpts had some analytical thoughts about the music and the larger ramifications of the album to the intended audience of the articles.³⁸

37 Ewell (2019); Singleton (2015).

38 It should be noted that searching for different articles that fit well into the lesson could significantly increase the preparation time for this lesson plan.

While some students seemed unsure that the less “scholarly” article was worthwhile, one student spoke up about a hypothetical music education scenario in which both articles would be valuable. This caused the other students to reconsider their earlier dismissal of the article. In their survey feedback after this lesson, students indicated that they felt more confident in critiquing a source to determine whether to use it and how to do so appropriately. One student said that the lesson taught them to “categorize information for research and see what information is useful.” Another said that the most helpful part of the lesson was “finding out the credentials of authors and what audience they are writing for.”

LESSON PLAN #4: Conversations with Sources

The goal of this mini-lesson is for students to understand that they do not need to agree with everything an author says. To achieve this, students practice engaging with a source about music with points that may not align with their opinions. Then, they decide if they do, in fact, agree with all or part of the article’s points. This mini-lesson emphasizes that students do not have to—and should not—take everything they read at face value, even if it is “scholarly.” An important part of this lesson is having students articulate in writing what they think and why they think it, backing up their ideas, a crucial skill for performing analysis effectively. It also reinforces that their thoughts and ideas about analysis are valuable and can contribute to a larger body of scholarship. They should take from this lesson an understanding that a conversation with sources includes asking themselves if they agree or not, and why. In addition to directly engaging the frame of “Analysis as Conversation,” the frame “Authority is Constructed and Contextual” should play into students’ decisions about whether they agree with a source.

I taught this lesson the last week of the semester in the graduate tonal analysis course, because I wanted to try it with advanced students with well-developed critical thinking skills. I specifically chose an article with a philosophical bent to encourage various responses from students.³⁹ Directing them to work in pairs allowed them to work through some ideas verbally before committing to them in writing. Many post-lesson comments showed that students engaged with a number of specific skills during the activity. They mentioned “focusing on the purpose of the article,” “researching the author,” “[articulating] the strengths and weaknesses of an article,” and “understanding bias . . . and how that can color an argument.” Pointing directly to

³⁹ The article I chose was Yob (2010, 145–51). It should be noted that searching for a different article that fits well into the lesson could significantly increase the preparation time for this lesson plan.

the goal of this lesson, one student wrote, “I learned that I don’t have to [agree] with everything I read.”

Frame: “Analysis as Inquiry”

“Research is iterative and depends upon asking increasingly complex or new questions whose answers in turn develop additional questions or lines of inquiry in any field.”⁴⁰

This frame, originally named “Research as Inquiry” in the *Framework*, helps students see the big picture of research. It encourages students to determine an appropriate scope of investigation and choose various research methods based on their goals. Students learn to formulate questions based on gaps in research and to break down complex questions into simple ones. Emphasis is placed on organizing information in meaningful ways and synthesizing meaning from multiple sources. Through this process, students need persistence and flexibility, embracing intellectual humility and asking for help when needed.

I have renamed this frame “Analysis as Inquiry” to indicate that many of its concepts regarding research can seamlessly map onto musical analysis. Students need to be able to fit analytical inquiry into manageable projects. They should learn to ask questions about musical works, understanding how each concept presented in class has direct implications for answering questions about music. When presented with multiple analytical tools, they need to be able to choose appropriate tools to answer different analytical questions about different types of music. In addition, they should realize that ambiguity in analysis is an opportunity, not a problem. As students pursue analytical work from these perspectives, their discoveries will produce even more questions, sometimes requiring them to change course or rethink their ideas. Analytical projects that students complete can also point to future project ideas, curiosities, and investigations.

LESSON PLAN #5: Let Music Guide Analysis

The goal of this mini-lesson is to demonstrate that not all analytical methods work for all pieces of music. Students should learn that they need to choose methods based on the goals of the analysis and on the problem or question in front of them. The piece should help guide the analysis; in other words, students should start their analytical process with the piece, not with the desired method. This realization will help them choose appropriate analytical approaches to music when they do not have an instructor to tell them which ones are appropriate.

⁴⁰ *Framework*, 18.

In this mini-lesson, students experience the “problem” of Roman numerals not working for a piece. Students do not actually analyze the piece in this lesson, but they come up with ideas that would help them do so. This lesson plan works well when placed right after learning Roman numerals but before moving on to other specific analytical methods. In my experience as an instructor, I have found that students tend to default to Roman numerals when asked to analyze a piece. This lesson specifically helps students realize in their first semester of music study that there are many ways to analyze music and that Roman numerals are not a useful tool in every scenario. They should not have the impression that analysis must be harmonically based or that all pieces worth analyzing have a Western tonal foundation.⁴¹

I taught this lesson in Music Theory I the week after we covered how to use Roman numerals. Students enthusiastically participated in this lesson. Somewhat to my surprise, they understood right away that Roman numerals would not work for the piece, and they quickly came up with a variety of other musical features that sparked their curiosity in this example. Some ideas included accents, phrasing, timbre, and patterns. Students commented in post-lesson feedback that they learned that “there are different ways to analyze music,” “not every form of analysis is applicable to every type of music,” and “music should be analyzed how it’s written.”

LESSON PLAN #6: Narrowing the Scope

The goal of this mini-lesson is to teach students to structure an analytical topic to fit different sizes and types of projects. To limit analytical inquiry to make it manageable, students need to examine their goals and their intended audience and then break complex ideas into smaller, simpler ones that they can more easily explore. First, students should decide what they want to say. Then, they can decide how to limit their analysis. What ideas do they have, and which ones should they examine further? Practicing narrowing the scope of analysis to various lengths in this lesson demonstrates that the same process can be applied to different types of projects.

I taught this mini-lesson in the graduate tonal analysis course because one of the major aspects of the course was analytical writing. Since it was early in the semester, the students had very little to no prior experience with analytical writing, but their first assignment was due soon. Post-lesson student feedback showed that the mini-lesson did indeed help them feel more confident for their upcoming essay assignment. A high percentage of students identified discussion with peers as helpful in formulating their ideas. Another comment that came up numerous times was that the activity helped

⁴¹ Interestingly, one graduate student referenced this tendency in a comment for Lesson Plan #6.

them think about how to focus on a specific topic. Students mentioned that the lesson made them realize “how little music you need to look at to write 500 words” and “even [a] small segment, passage, or phrase has a lot to say.” Addressing a different way to narrow a topic, one student said they wanted to learn “to take a more expanded view of a musical excerpt. I am really vicious with going in to harmony deeper than it should be done.”

Frame: “Searching as Strategic Exploration”

“Searching for information is often nonlinear and iterative, requiring the evaluation of a range of information sources and the mental flexibility to pursue alternate avenues as new understanding develops.”⁴²

If “Analysis as Inquiry” looks at the big picture, then “Searching as Strategic Exploration” directly addresses the steps needed to get there. This frame explores how to search for information and adapt searching strategies along the way. As students improve their searching strategies, they are able to find even more valuable information. Usually, a single search, such as in a library catalog or database, does not immediately reveal all necessary or useful resources. This frame teaches students patience with the process. They might have to refine their searching strategies, and this should be expected and appreciated. Research is rarely about finding the “right” answer to a question. Instead, quality research relies on the researcher to compare and evaluate sources. Students’ research processes should account for the complexity of different perspectives, overlapping with ideas in “Analysis as Conversation.”

Although research papers in music programs are traditionally considered the domain of music history courses, research is also applicable to music analysis. For students to be in conversation with other analysis, they must be able to find articles, books, recordings, scores, and other music resources. Analysis, like research, is rarely about finding the “right” answer. Students should value the analytical interpretations of others and find worth in comparing and evaluating various ideas about music. As budding analytical authorities, students can find and use more complex tools the more they explore existing analytical research.

LESSON PLAN #7: Creating a Research Log

The goal of this mini-lesson is to teach students to keep track of how they search for sources to avoid redundant searching and to develop new searching strategies.

⁴² *Framework*, 22.

When students intentionally focus on where they search, specific keywords they use, how they limit searches, and what they find, they can refine their searching abilities both for the present analytical research and for future projects. Ultimately, this mini-lesson's focus is centered not on what students find, but rather on how they search. The research log should document their exploration by recording thought processes and actions taken. It should show clearly what was successful and what was not.⁴³

I taught this lesson in the graduate analysis course to begin a new unit on popular music analysis. We had not yet read any sources on the topic, but we had begun discussing how to join analytical conversations as part of the frame "Analysis as Conversation." Post-lesson student feedback indicated that they found the activity useful and illuminating. One student commented, "When looking for sources you need to spend time finding what works best for your project." Another simply stated, "This lesson helped me become more organized with my research."

LESSON PLAN #8: Information Need

The goal of this mini-lesson is to prompt students to determine their information "need." In other words, they will ask themselves what they need to know to answer their questions and where they need to go to find that information.⁴⁴ In analytical research, information need helps determine how much research must be done, what types of sources should be consulted, and how many layers of information must be uncovered. Sometimes, information need indicates that various perspectives are necessary to provide context to students' analytical questions and claims, overlapping with "Analysis as Conversation." The concept of information need as it relates to analytical research is especially practical for music students' futures. What would they need to know to analyze a piece before introducing it to their middle school band? What would they need to know to analyze a piece in order to enhance their performance of it? What would they need to know to write an analytical paper to present at a conference? What would they need to know to write an analytical article for a peer-reviewed journal? Where would they find these different types and scopes of information?

I taught this lesson in Musical Form and Analysis. Post-lesson student feedback was positive overall and exhibited deep engagement with the lesson. The most

⁴³ If this mini-lesson seems overwhelming to students, one suggestion is to give them a research log that has already been started and ask them to add to it, instead of asking them to create one from scratch.

⁴⁴ Mallon (2015, 129).

common comment was that students enjoyed the analogies, which helped them connect with the concept of information need for analytical research. Other comments indicated that the mini-lesson caused students to think more deeply about planning their research and how much time different types of research could take. One student mentioned, “I learned how to structure my research better when it comes to finding information and what information will be best for my research,” and a second student commented that “even though you have a lot of research, you will not use everything.” Another added, “We shouldn’t just choose the first link we see and expect it to be great for our research.”

Conclusion

This article has demonstrated that using ACRL’s *Framework for Information Literacy for Higher Education* to structure lessons applying information literacy to music theory pedagogy helps students develop the skills necessary for independent music analysis. The specific mini-lessons included ask students to examine bias in themselves and others and scrutinize others’ level of authority for particular concepts, which affects analytical assumptions and conclusions. They teach students how to evaluate analytical ideas and how to fit their own ideas into the larger conversation surrounding analysis. Students learn from the mini-lessons how to choose appropriate tools for their analysis, how to limit the length and depth of certain analytical projects as necessary, how to search for existing analytical perspectives most effectively, and how to determine what information they need for their analysis and how to find it.

Personally, as I taught these mini-lessons in the Spring 2023 semester, I observed several unintended effects beyond the scopes of the lessons themselves. Although I waited until the end of the semester to teach Lesson Plan #4, “Conversations with Sources,” its principles were easy to work into class discussion for weeks beforehand. The language of this frame, specifically the concept of conversation, helped me consistently communicate to students the importance of contextualizing their own analytical ideas. In Lesson Plan #5, “Let Music Guide Analysis,” beginner students immediately took to the concept that Roman numerals are not always appropriate analytical tools. However, some graduate students were simultaneously struggling to escape that mindset. This reinforced that this lesson is important to teach early in the music theory sequence, before students construct the idea that, because music theory courses tend to spend so much time teaching principles of harmony, it must be the most important thing to consider in analysis. One of the extra advantages of Lesson Plan

#7, “Creating a Research Log,” is that it provides an opportunity to introduce students to library resources they may not know. Instead of teaching students about searching strategies and then asking them to apply them, this lesson allows an instructor to demonstrate those same skills in service to the practical task in front of students—to address their information need.⁴⁵

Overall, students’ response to the mini-lessons was positive. In post-lesson feedback, they reported learning the concepts intended by the lessons, thinking more deeply about new ways to approach analysis, and making connections between information literacy concepts and analytical research. As more instructors implement information literacy into the music theory curriculum more fully, the hope is that the attitudes and approaches that students internalize about how to conduct independent analysis will transfer naturally to future undergraduate courses and to graduate school. Lessons centered on music theory information literacy will help students become better analysts and scholars, responsible members of the music community who think critically, research ethically, and engage with diverse voices as part of the conversation about music.⁴⁶

Currently, many music theory faculty are significantly rethinking their pedagogy, especially the traditional focus on limited types of music and concepts. Essential components of this consideration encompass inclusivity, diversity, and de-centering whiteness,⁴⁷ all values strongly supported by the *Framework* and already heavily emphasized by some fields. For example, music theory instructors may find useful many of the “Actions and Attitudes” highlighted in the *Framework* companion for women’s and gender studies, including “creates new meaning by engaging across multiple perspectives,” “seeks marginalized voices in respectful ways,” and “questions traditional forms of authority.”⁴⁸ As the field of music theory continues to engage in productive conversations about diversity and equity in the discipline, the time is ripe

45 This is a similar pedagogical approach to Mallon’s lesson plan for business students. She presents realistic case studies that lead students to seek resources; this provides an opening for her to teach students about relevant resources in a meaningful context. Mallon, (2015, 127–29).

46 The ideas presented in this article would benefit from a longer study in the future, tracing students’ progress over the course of several semesters to verify the long-term benefits of incorporating information literacy into teaching music analysis.

47 Philip Ewell is most notably at the forefront of these important discussions. See, for example, Ewell (2020) and Ewell (2023a). See also Robin Attas’s work, including Attas (2022) and Attas (2019). Especially noteworthy in taking practical steps to diversifying music theory pedagogy is Hoag, ed. (2023).

48 “Companion Document: Women’s and Gender Studies,” ACRL.

to integrate concepts from the *Framework* throughout various levels of music theory instruction.

Additionally, the *Framework* provides ample opportunities for music theory faculty to collaborate with music librarians or other instructional librarians. Many librarians are familiar with the *Framework*, and the field of library science often focuses on implementation of it in its conferences and publications. According to Laura Snyder, Laurie Sampsel, and Lesley Farmer, “information literacy is on the forefront of most music librarians’ minds and is a topic revisited with regularity.”⁴⁹ Most sources regarding music information literacy are written primarily by and for librarians. Though faculty can certainly benefit from the ideas presented, more thorough investigations into the practical application of information literacy for faculty are needed. Collaboration between faculty and librarians, in both practical instruction and formal research, will only strengthen the positive impact of information literacy on music theory pedagogy. With the core concepts of the *Framework* as a backdrop, librarians and music theory instructors can head in the same direction for the betterment of students.

The goal of this project was to implement ACRL’s *Framework* into music analysis pedagogy to better equip music students to perform analysis on their own. But the process revealed that information literacy provides even more benefits to students beyond their musical lives. The flexible and broadly applicable concepts in the *Framework* help build transferrable skills in students. Attitudes and abilities emphasized by the *Framework* such as critical thinking, writing skills, intellectual humility, open-mindedness, identification of misinformation, and understanding a broader picture of research will benefit students in every area of their lives and in any jobs they wish to pursue. The inclusion of information literacy in the music theory curriculum can help highlight the importance of music theory pedagogy for the twenty-first-century musician. Additionally, the flexibility of the *Framework* will allow for the continued integration of information literacy in the future, its implementation easily adjustable as students’ needs change.

The *Framework* also has the potential to afford instructors a valuable mindset shift. Even if they do not explicitly implement information literacy lessons such as the ones in this article, they can incorporate the concepts into their everyday teaching in small yet significant ways. They can talk about authority frequently to students, discuss how research is in conversation with other research, and encourage students to examine many methods of analysis—and perhaps search for new ones—before

49 Snyder, Sampsel, and Farmer, in Abromeit (2018, 3).

analyzing a specific piece. It is possible to communicate the information literacy concepts central to the *Framework* to students in all kinds of ways in every music theory course, even without special lesson plans.

The longer I teach music theory, the more I rely on the *Framework* because I recognize the value of its organization around concepts, its flexibility of implementation, and its goal of discipline-specific application. This article has shown that there is a strong connection between information literacy and music analysis. If instructors allow the principles of the *Framework* to shift their approach to music theory pedagogy, they can access increased creativity and clarity while teaching concepts of information literacy. In turn, music students will acquire the ability to conduct independent music analysis with greater confidence, critical thinking, and focus. Learning to analyze music in increasingly valuable ways is a lifelong endeavor. Information literacy can help equip students to continue this journey on their own after graduation, when they are no longer guided by an instructor.

Bibliography

- Abromeit, Kathleen A., ed. 2018. *Ideas, Strategies, and Scenarios in Music Information Literacy*. Middleton, WI: Music Library Association; Middleton, WI: A-R Editions.
- Association of College & Research Libraries. "ACRL Framework for Information Literacy Sandbox." Accessed May 23, 2023. <https://sandbox.acrl.org/>.
- Association of College & Research Libraries. "Companion Document to the ACRL Framework for Information Literacy for Higher Education: Politics, Policy, and International Relations." Accessed May 17, 2023. https://www.ala.org/acrl/sites/ala.org/acrl/files/content/standards/Framework_Companion_PPIR.pdf.
- Association of College & Research Libraries. "Companion Document to the ACRL Framework for Information Literacy for Higher Education: Research Competencies in Writing and Literature." Accessed May 17, 2023. https://www.ala.org/acrl/sites/ala.org/acrl/files/content/standards/framework_companion_LES.pdf.
- Association of College & Research Libraries. "Companion Document to the ACRL Framework for Information Literacy for Higher Education: Science, Technology, Engineering, and Mathematics." Accessed May 17, 2023. https://www.ala.org/acrl/sites/ala.org/acrl/files/content/standards/Framework_Companion_STEM.pdf.
- Association of College & Research Libraries. "Companion Document to the ACRL Framework for Information Literacy for Higher Education: Social Work." Accessed May 17, 2023. https://www.ala.org/acrl/sites/ala.org/acrl/files/content/standards/Framework_Companion_SocialWork.pdf.
- Association of College & Research Libraries. "Companion Document to the ACRL Framework for Information Literacy for Higher Education: Sociology." Accessed May 17, 2023. https://www.ala.org/acrl/sites/ala.org/acrl/files/content/standards/framework_companion_sociology.pdf.
- Association of College & Research Libraries. "Companion Document to the ACRL Framework for Information Literacy for Higher Education: Women's and Gender Studies." Accessed May 17, 2023. https://www.ala.org/acrl/sites/ala.org/acrl/files/content/standards/Framework_Companion_WGS.pdf.
- Association of College & Research Libraries. 2000. *Information Literacy Competency Standards for Higher Education*. Chicago: ACRL.
- Association of College & Research Libraries. 2015. *Framework for Information Literacy for Higher Education*. Chicago: ACRL.
- Association of College & Research Libraries. 1989. *Presidential Committee on Information Literacy: Final Report*. Accessed June 1, 2022. <http://www.ala.org/acrl/publications/whitepapers/presidential>.
- Attas, Robin. 2019. "Music Theory as Social Justice: Pedagogical Applications of Kendrick Lamar's *To Pimp a Butterfly*." *Music Theory Online* 25, no. 1.
- . 2022. "The Many Paths of Decolonization: Exploring Colonizing and Decolonizing Analyses of a Tribe Called Red's 'How I Feel.'" *Music Theory Online* 28, no. 2.
- Beavers, Jennifer. 2023. "Undergraduate Research." Paper presented at the Texas Society for Music Theory Conference, Pedagogy Session, Kingsville, TX.
- Christensen, Beth, Erin Connor, and Marian Ritter, eds. 2018. *Information Literacy in Music: An Instructor's Companion*. Middleton, WI: Music Library Association; Middleton, WI: A-R Editions.
- Connor, Erin. 2017. "Reframing the Framework: Situated Information Literacy in the Music Classroom." *Fontes Artis Musicae* 54, no. 4: 346–54.

- Ewell, Philip A. 2019. "Introduction to the Symposium on Kendrick Lamar's *To Pimp a Butterfly*." *Music Theory Online* 25, no. 1.
- . 2020. "Music Theory and the White Racial Frame." *Music Theory Online* 26, no. 2.
- . 2023a. *On Music Theory: And Making Music More Welcoming for Everyone*. Ann Arbor: University of Michigan Press.
- . 2023b. "Theorizing African American Music: Beginnings (1)." *SMT-Pod* 2.7. Podcast audio.
- Gades, Andrew. 2019. "Desequencing the Music Theory Core: A Liberal Arts Model." *Engaging Students: Essays in Music Pedagogy* 7. <https://doi.org/10.18061/es.v7io.7360>.
- Hatten, Robert S. 2016. "Reconceiving Analysis." *International Journal of Musicology* 2: 237–52.
- Hoag, Melissa, ed. 2023. *Expanding the Canon: Black Composers in the Music Theory Classroom*. New York: Routledge, 2023.
- Hoover, Steven. 2015. "Establishing and Applying Evaluation Criteria." In *Teaching Information Literacy Threshold Concepts: Lesson Plans for Librarians*, edited by Hazel McClure, Patricia Bravender, and Gayle Schaub, 74–78. Chicago: ACRL.
- Inman, Samantha M. 2017. "Teaching Analytic Writing in the Form Classroom." *Journal of Music Theory Pedagogy* 31: 43–64.
- Mallon, Melissa. 2015. "Approaching Problems Like a Professional." In *Teaching Information Literacy Threshold Concepts: Lesson Plans for Librarians*, edited by Hazel McClure, Patricia Bravender, and Gayle Schaub, 127–9. Chicago: ACRL.
- Masko, Meganne K., Kelly Thormodson, and Kristen Borysewicz. 2020. "Using Case-Based Learning to Teach Information Literacy and Critical Thinking Skills in Undergraduate Music Therapy Education: A Cohort Study." *Music Therapy Perspectives* 38, no. 2: 143–9.
- Rogers, Lynne. 2017. "Asking Good Questions: A Way Into Analysis and the Analytical Essay." *Journal of Music Theory Pedagogy* 31: 93–112.
- Roush, Charles, Katrina Roush, and Norma Denae Dibrell. "Education Equity: Music Theory Information Literacy at a Hispanic-Serving Institution (HSI)." In *Music Information Literacy: Inclusion and Advocacy*, edited by Kathleen A. Abromeit and Dyani A. Sabin. Sacramento, CA: Library Juice Press, forthcoming.
- Scott, Rachel Elizabeth. 2018. "Meta-Literacy in the Online Music Classroom: Opportunities for Instructor and Librarian Collaboration." In *Pedagogy Development for Teaching Online Music*, edited by Carol Johnson and Virginia Christy Lamothe, 287–305. Hershey, PA: IGI Global.
- . 2017. "Performance as Conversation: Dialogic Aspects of Music Performance and Study." In *Disciplinary Applications of Information Literacy Threshold Concepts*, edited by Samantha Godbey, Susan Beth Wainscott, and Xan Goodman, 239–50. Chicago: ACRL.
- Singleton, Micah. 2015. "To Pimp a Butterfly: Kendrick Lamar's New Album Is Perfect." Review of album *To Pimp a Butterfly*, by Kendrick Lamar. *The Verge*, <https://www.theverge.com/2015/3/19/8257319/kendrick-lamar-album-review-to-pimp-a-butterfly>.
- Xu, Lijuan, and Nestor Gil. 2017. "Librarians as Co-Teachers and Curators: Integrating Information Literacy in a Studio Art Course at a Liberal Arts College." *Art Documentation* 36: 122–36.
- Yob, Iris M. 2010. "Why Is Music a Language of Spirituality?" *Philosophy of Music Education Review* 18, no. 2: 145–51.

Lesson Plan #1: Bias and Authority

Frame: “Authority is Constructed and Contextual”

Suggested length: 30–40 minutes

Level of Class:

This works well with beginner students who are already familiar with the concepts of authority and bias.

Lesson Objectives:

1. Students will identify some of their own biases and learn to recognize bias in themselves as budding authorities in their fields.
2. Students will identify whose authority they trust about musical styles, genres, composers, artists, etc.

Introduction:

- Review the concepts of authority and bias.
 - Authority: A person’s level of expertise on a topic, or an expert in that topic. An authority in one area is not always an authority in other areas.
 - Bias: A personal perspective that contextualizes each person’s work. Bias is always present but is not always negative. However, it should be acknowledged.

Activity:

- Ask each student to provide one musical style, genre, composer, artist, piece, etc., that they think fits into each prompt you provide. Some suggestions for prompts:
 - Scholarly music, music essential for musicians to know, music they do not expect to study in music school, serious music, fun music, boring music, culturally significant music, nostalgic music.
 - Choose the number of prompts based on class size and desired lesson length.
- Collect students’ answers and make lists to show them the various answers for each category. Are they similar or contradictory? Why did/might different people give conflicting/contrasting answers?

Discussion:

- Ask students to reflect on their own answers to the activity. What kind of biases do their answers reveal about them? They are becoming authorities on musical topics, and soon (if not already), their students, peers, and non-musician family and friends may look to them as authorities. This comes with a certain level of responsibility to acknowledge their own biases.
- Where do their ideas and opinions come from? This question is especially important for prompts regarding “scholarly,” “serious,” or “significant” music. Whose authority do we trust to make these decisions? What kind of biases might they have?
- Discuss how all music can be worthy of examination, since all music has value in some way.

Lesson Plan #2: Evaluating Sources*

Frame: “Authority Is Constructed and Contextual”

Suggested length: 15–30 minutes

Level of Class:

This works well with beginner students.

Lesson Objectives:

1. Students will decide if a source of information is reputable.
2. Students will choose authorities to provide information based on the context.
3. Students will apply these skills to searching for information about music.

Activity – Examples of Authority:

- Ask students to think of someone they would go to for help in the following scenarios:
 - You’re having car problems.
 - You’re making dinner and have questions about how to follow the recipe.
- How did students know who was an authority on these issues? Did they choose the same person for both problems? Discuss how authority is based on the context.
- Now think about a more serious scenario:
 - Your doctor tells you that you need surgery, but you want a second opinion. Where do you go or who do you ask?
- Discuss how a more serious question requires more careful scrutiny of authority.

Discussion – Application to Music Research:

- Discuss applications of these same principles to music research.
- One possible example: music professors may have expertise in one area but not another, even if both areas are related to music.

Brainstorming Activity:

- On the board, write down some ways students think they could determine the level and type of someone’s authority in music. Possible answers could include educational background, peer-reviewed research, performance ability, work experience, endorsement from other trusted authorities, etc.

* Ideas in this lesson plan were sparked by Steven Hoover, “Establishing and Applying Evaluation Criteria,” in *Teaching Information Literacy Threshold Concepts: Lesson Plans for Librarians*, ed. Hazel McClure, Patricia Bravender, and Gayle Schaub (Chicago: ACRL, 2015), 74–78.

Lesson Plan #3: Situating Your Perspective

Frame: “Analysis as Conversation”

Suggested length: 20–40 minutes

Level of Class:

This is best with intermediate students. Beginner students could also benefit if the writing samples are easy enough for them to understand.

Lesson Objectives:

1. Students will explain the value of situating their analytical perspectives in existing scholarship.
2. Students will critically engage with scholarship based on their evaluation of its authorship (authority), publication details, and intended audience.

Suggested Writing Samples (others can be used instead):

- Give students these excerpts to read either in advance or during the lesson.
 - Ewell, Philip A. “Introduction to the Symposium on Kendrick Lamar’s *To Pimp a Butterfly*.” Music Theory Online 25, no. 1 (March 2019): Paragraphs 1–2. <https://mtosmt.org/issues/mto.19.25.1/mto.19.25.1.ewell.html>
 - Singleton, Micah. “To Pimp a Butterfly: Kendrick Lamar’s New Album Is Perfect.” Review of album *To Pimp a Butterfly*, by Kendrick Lamar. The Verge, March 19, 2015: Paragraphs 4–5. <https://www.theverge.com/2015/3/19/8257319/kendrick-lamar-album-review-to-pimp-a-butterfly>

Introduction:

- Emphasize that differing perspectives and even disagreements are valuable in analysis.

Activity/Discussion:

- Students should write down their thoughts about each excerpt, asking/considering:
 - Who is the author? Do they have authority (expertise) in this area?
 - What is the publication name and/or site?
 - Is the publication peer reviewed?
 - What seems to be the goal of the publication?
 - Who seems to be the intended audience?
 - In what situation might this information be useful?
 - How do the articles differ? Do they complement each other in any way?
- When students are done reading, ask them to share their thoughts with the class.
- Discuss how each article contributes to the conversation about the artistic work, even though they are different. Their perspectives relate to the goals and audiences of the publications. Ask students if they would consider using each article, and in what contexts.

If Time Allows:

- Show students how to find some of the details invoked by the questions above.

Lesson Plan #4: Conversations with Sources

Frame: “Analysis as Conversation”

Suggested length: 30–45 minutes

Level of class:

This is best with advanced students, such as a low-level graduate course.

Lesson Objectives:

1. Students will critically engage with a text to decide if they agree.
2. Students will articulate why they agree or disagree with a given text.
3. Students will understand that they do not have to agree with everything they read, even if it is scholarly and/or peer reviewed.

Suggested Writing Sample (others can be used instead):

- Yob, Iris M. “Why Is Music a Language of Spirituality?” *Philosophy of Music Education Review* 18, no. 2 (Fall 2010): 145–51.
- Assign this to be read in advance of the class.

Introduction:

- Discuss how situating analytical research within an existing body of knowledge is an engagement in a larger conversation. Engaging in this conversation sometimes means challenging others’ ideas. Disagreement among scholars, when done respectfully and responsibly, is crucial in furthering knowledge.
- Some questions to ask to critically evaluate sources:
 - Is the author an authority on this topic? What biases do they have?
 - How does the author situate their own work within the existing conversation?
 - How does the author build their argument and back up their claims?
 - Do other sources agree/disagree?

Activity:

- Divide students into pairs for this activity. Each pair should write a 1–2 paragraph response to the reading, imagining that this is a full response article. They should consider:
 - Where did the article come from?
 - Do you want to bring anyone else into the conversation?
 - Do you support or refute the author’s points?
 - Use good examples/arguments to back up WHY you agree or disagree.
- At the end, ask each pair to share their thoughts with the class.

Lesson Plan #5: Let Music Guide Analysis

Frame: “Analysis as Inquiry”

Suggested length: 15–20 minutes

Level of Class:

This works best right after students learn how to use Roman numerals.

Lesson Objectives:

1. Students will recognize when harmonic analysis would not be effective in explaining how a particular piece works.
2. Students will identify appropriate modes of analysis based on the musical, historical, and/or stylistic context of a piece.

Musical Example (others can be used instead):

- Steve Reich’s *Clapping Music*.
- The chosen example must be difficult or impossible to make sense of with Roman numerals.
- Listen to the piece as a class while following the score.

Discussion Questions:

- Would applying Roman numerals to this piece be an effective way to begin to analyze it? Why or why not?
- What other musical features stand out that aren’t harmonic in nature?
- How might we discuss the recording/score using these more prominent musical features?

Activity:

- As a class, compile a list of musical aspects of the piece that could be examined further to analyze it.
- Compile a second list of reasons that Roman numerals and harmony are not helpful methods of analysis in this case. Discuss why not every analytical tool is useful for every piece.
- You do not need to actually do any further analysis; just identify ways you could.

Follow-up (optional):

- At the end of the semester or in a future semester, return to the bullet points created today and ask students to complete a more in-depth analysis of the piece, appropriate to the piece and style, using the more advanced tools they have acquired.

Lesson Plan #6: Narrowing the Scope

Frame: “Analysis as Inquiry”

Suggested length: 30–45 minutes

Level of Class:

This works well in a class where analytical writing is assigned, before students begin their first major writing assignment.

Lesson Objectives:

1. Students will break complex analytical ideas into smaller, simpler ones.
2. Students will appropriately limit the scope of their analytical inquiry to fit various paper lengths.
3. Students will appreciate the necessity of intellectual humility and getting help when needed.

Musical Example (others can be used instead):

- Arcangelo Corelli’s *Christmas Concerto*.
- The chosen example should be somewhat complex with many analytical possibilities.
- Give everyone a score, and listen to the example several times throughout the lesson.

Activity:

- Divide students into groups of 3–4 students each.
- While students are working, walk around the room to see if they have questions. Encourage them to practice intellectual humility and ask for the help they need.
- Assign students a broad analytical topic to work with, such as “rhythm and meter.”
 - Make clear to students that they are not going to actually analyze the piece in this lesson. They should make a plan as to how they would approach an analysis of the piece using this topic.
 - If desired, design this lesson as an early step of an analytical writing project focused on this piece.
- First, students should decide in general what they want to examine. Then, they need to decide how to limit their scope based on the length of paper.
 - Students should find several main points they could make about the piece that fit within the given topic.
 - Then, they must break these points down into analytical questions/ideas that would work well for specific lengths of paper.
- Ask students to limit their analytical inquiry to ideas that would fit into a typical 20-minute conference paper.
- Next, ask students to limit their inquiry even further to ideas that would fit into a 500-word essay.
- To conclude, students should share with the class how they decided to limit their topics to the different lengths. If anyone had trouble fitting their ideas into the scope of the project, ask other students to suggest ways to help.

Lesson Plan #7: Creating a Research Log

Frame: “Searching as Strategic Exploration”

Suggested length: 30–45 minutes

Level of Class:

This works best with advanced students who know how to search for analytical articles.

Lesson Objectives:

1. Students will create a research log when searching for sources.
2. Students will understand the value of a research log.
3. Students will adjust and adapt their search strategies as they go.

Musical Example (others can be used instead):

- “Strut Your Stuff” by Stone City Band.
- The chosen example is most effective if it does not fit well into analytical methods they already know.

Activity:

- Divide students into groups of 3–4 students each. Make sure each group has access to a computer or other device that will allow them to search for sources online.
- Play the musical example.
- Ask groups to come up with one question or curiosity about the work. They will search for sources that address their question/curiosity in some way.
- Each group must build a research log.
 - The research log should document where they’re searching, how, and when. What did they find? Where did they find it? Was it useful? This should be as detailed as possible.
 - The research log becomes a record of what they’ve thought about and what actions they’ve taken so that they could pick up the project later and build on it.
- As they work, encourage students to reflect on what methods are working best and to adjust their future searching strategies accordingly.

Considerations for the Instructor:

- This lesson is a great place to introduce various resources, how to access them, and how to use them.
 - This lesson also provides an opportunity to invite a librarian into your class.
- Focus not on what the students are finding, but rather how they’re finding it.
- Emphasize to students that they may not find what they’re looking for right away. It’s important to be able to adjust your strategies.
- Make sure students are considering authority when choosing sources.
- If desired, assign the activity as a homework assignment that leads to class discussion.

Follow-up (optional):

- If students end up finding quality sources that especially interest them, you can incorporate them into future lessons or assign them as readings.

LESSON PLAN #8: Information Need

Frame: “Searching as Strategic Exploration”

Suggested length: 20–30 minutes

Level of Class:

Any level of student could benefit from this lesson.

Lesson Objectives:

1. Students will determine what they need to know when working on a music-based project.
2. Students will decide where to begin looking for the information they need when working on a music-based project.

Guiding Questions:*

- “What do you need to know?”
- “Where can you locate the information you need?”

Activity #1:

- Divide the board into 3 segments that correspond to the following scenarios:
 - You are planning a lunch for you and a friend.
 - You are planning a holiday meal for 10 family members.
 - You are planning a wedding.
- Ask students to brainstorm what they would need to do to plan these events. What do they need to decide? Where do they need to go? What do they need to prepare? Write their ideas in the corresponding segments on the board.
- This should show that different sizes and scopes of projects have different needs, and different needs require different processes (sometimes more complex).
 - Emphasize that not only do different events require a different amount of work, but the most planning-intensive and expensive event (the wedding) necessitates a comparison of different options; no options work best for all weddings.

Activity #2:

- Now do the same activity with these 3 new scenarios, focusing on the guiding questions:
 - You need to find how many operas Puccini wrote.
 - You are writing a final analysis paper on an aria from Turandot.
 - You are writing a dissertation about phrase structure in Puccini’s operas.
- Students should identify the different types and amount of information they will need for the different projects. Write their ideas in the corresponding segments on the board. Discuss some of the places they can go to find this information.
 - Emphasize that the type and scope of the information need determines the type and scope of the research required. The dissertation necessitates a much more complex type of research, whereas the number of Puccini’s operas can be found with a quick internet search.
- Lead students in a brief discussion about weighing options and comparing sources. Analytical research is not about finding the “right” answer, but about deciding what is useful.

* *Framework-based questions taken from Melissa Mallon, “Approaching Problems Like a Professional,” in Teaching Information Literacy Threshold Concepts: Lesson Plans for Librarians, ed. Hazel McClure, Patricia Bravender, and Gayle Schaub (Chicago: ACRL, 2015), 129.*

Open Music Theory *Version 2*

by Mark Gotham; Kyle Gullings; Chelsey Hamm; Bryn Hughes;
Brian Jarvis; Megan Lavengood; and John Peterson

Licensed under a Creative Commons Attribution-ShareAlike 4.0 International License, 2021
Ebook, XML, PDF, and MS Word versions available: <https://open.library.okstate.edu/musictheory/>

Reviewed by VICTORIA MALAWAY



In its description, [*Open Music Theory Version 2*](#) purports to “serve as the primary text and workbook for undergraduate music theory curricula,” and in addition to presenting standard tonal harmony and post-tonal theory topics, it includes fundamentals, form, jazz, pop, and orchestration, using a wide range of musical examples. As an open educational resource, the book is free to access and available to anyone with an internet connection. It contains all necessary ancillary materials in its native online format, in contrast to standard print textbooks, which are costly and may require additional supplementary materials more cumbersome to access. Special features include multimedia material, comprising video, audio, and interactive H5P content, along with an anthology and an extensive collection of downloadable worksheets in a variety of formats. An additional benefit is the instructor community the authors set up on Humanities Commons, which provides access to source syllabi, answer keys, supplemental assignments, sample exams, and a discussion board.

As of July 15, 2023,¹ *Open Music Theory Version 2* features eleven large parts: (I) Fundamentals, (II) Counterpoint and Galant Schemas, (III) Form, (IV) Diatonic Harmony, Tonicization, and Modulation, (V) Chromaticism, (VI) Jazz, (VII) Popular Music, (VIII) 20th- and 21st-Century Techniques, (IX) Twelve-Tone Music, (X) Orchestration, and (XI) Rhythm and Meter.

Part I, “Fundamentals,” provides more thorough treatment of rudimentary concepts than many standard theory textbooks designed for undergraduate music theory curricula. This part alone would serve well as a primary textbook for most

¹ While the authors do not edit the content during the standard academic year so instructors can craft their syllabi trusting the content will not be altered while in session, *Open Music Theory Version 2* is an ongoing work-in-progress, with new chapters under development every summer. This review reflects the content available as of July 15, 2023.

fundamentals classes. Unexpected highlights include a chapter titled “The Basics of Sight-Singing and Dictation,”² which explains what ear-training activities entail and introduces relevant concepts like protonotation (and provides links to external resources for practicing these skills). Another chapter, titled “Other Aspects of Notation,” includes information on dynamics, articulations, tempo, structural symbols, and stylistic periods.

Part II, “Counterpoint and Galant Schemas,” presents central concepts related to counterpoint (consonance, dissonance), practical instruction on species counterpoint, and chapters on fugue, ground bass, and Galant schemata. The assignments at the end of the fugue chapter and chapters on Galant schemata depart from the downloadable formats provided in the previous chapters and instead appear as text within the chapters. The assignment content seems equally pedagogically effective, but instructors expecting to have all assignments available in a variety of formats may be disappointed. Still, instructors may easily copy and paste the online text of these assignments if they wish to create their own .pdfs or content in other formats.

The chapters in Part III, “Form,” begin with small-scale formal concepts related to European baroque, classical, and romantic music, and later build to form at the level of the piece, with individual chapters on binary, ternary, sonata, and rondo form. Some chapters in this part, such as “Foundational Concepts for Phrase-Level Forms” and “Formal Sections in General,” do not provide assignments, departing from the precedent previous chapters set. Users wishing to engage form in genres outside of the European classical tradition will have to skip ahead to Part VII, “Popular Music.” There may have been a missed opportunity here to integrate AABA form, strophic form, and verse-chorus forms into Part III, especially since AABA and strophic forms appear in European classical and romantic music, but the topics do receive coverage later in the textbook.

Part IV presents diatonic harmony concepts, applied chords, and modulation to closely related keys, with a strong emphasis on four-voice part writing related to European classical practice. Assignments at the end of each chapter require students to complete four-voice part writing and harmonic analysis of score examples. Users wishing to learn about diatonic harmonic systems, secondary dominants, and modulation in music other than European classical and romantic traditions will have to skip ahead to separate parts on jazz and popular music (Parts VI and VII). While this organization is optimal for curricula focused on European classical music practices,

2 Although *Open Music Theory Version 2* does not include dictation materials, two chapters on sight-counting and sight-singing examples are currently in development.

instructors working with curricula that engage a wider set of harmonic practices and genres in their diatonic harmony courses will have to consider sequencing alternatives, as content from Parts IV and Parts VI and VII would need to be combined or studied simultaneously.

Part V, “Chromaticism,” introduces chromatic harmony topics covered in most theory textbooks, beginning with mode mixture and concluding with altered and extended tertian chords, with an additional chapter on Neo-Riemannian triadic progressions. Of all the content in *Open Music Theory Version 2* in its current form, Part V is the least complete. Instructors wishing to adopt this text for chromatic harmony classes will need to supplement with additional materials. Assignments in Part V emphasize four-voice part writing, including figured bass realization, some chord spelling, and musical analysis. Most examples come from European classical and romantic traditions. Some chapters in Part V do not have assignments posted yet. Instructors wishing to assign exercises related to this content will have to create their own worksheets or borrow from other sources. Content for other chapters in Part V, such as “Reinterpreting Diminished Seventh Chords” and “Parallel Chromatic Sequences,” has not yet been created.

Part VI, “Jazz,” introduces a host of concepts central to jazz and other popular genres, including swing rhythm, chord voicing and voice leading, chord-scale theory, and harmonic topics, such as ii – V – I progressions, embellishing chords, chord substitution, and blues harmony. Most chapters within this section are eloquently and succinctly written, with compelling examples, sources for further reading, and worksheets. Only one chapter, titled “Chord-Scale Theory,” within Part VI does not yet have any assignments. Although there may not be quite enough depth here to satisfy a separate jazz theory sequence specifically geared for a jazz curriculum, standard music theory instructors, especially those teaching students who do not play jazz, wishing to introduce concepts central to jazz music will find Part VI useful.

Part VII, “Popular Music,” engages topics relevant to studying popular genres, including chapters on rhythm and meter, melody, and form, as well as eight chapters dedicated to harmonic schemata used in a variety of popular genres. Some content in Part VII appears to be incomplete or in progress, but overall, most of the prose and examples in this section are grounded in the latest scholarship in pop music theory, effectively curated for an undergraduate audience. Additional references for further reading could be incorporated into the chapter titled “Introduction to Form in Popular Music,” namely Covach 2005 (an excellent basic primer for undergraduates), as well

as Nobile 2020 (a more thorough, yet still accessible resource).³

Focused on solely on pitch aspects, Part VIII, “20th- and 21st-Century Techniques” contains chapters on pitch and pitch classes, integer notation, interval classes, set classes, interval class vectors, diatonic modes, and pitch collections. It also features two chapters specifically engaging analysis, titled respectively “Analyzing with Set Theory (or Not!)” and “Analyzing with Modes, Scales, and Collections.” Similarly, Part IX, “Twelve-Tone Music” focuses on pitch-related serialism, with a brief mention of total serialism in its final chapter. The assignments in Part IX appear only as prose within the chapter and are not downloadable in multiple formats. Instructors wishing to engage parameters outside of pitch, as they relate to 20th- and 21st-century music, will have to supplement Parts VIII and IX with outside sources.

Part X, “Orchestration,” offers three chapters engaging some core aspects of orchestration, including strategies for successive orchestration choices and the effectiveness of simultaneous combinations of instrument groups, along with a chapter titled “Transcription from Piano” that demonstrates how to orchestrate a piano score. Instructors will need to supplement this section with a primer on instrumentation, assuming that most students will not know instrument ranges nor how transposing instruments work.

There are just a few drawbacks to adopting *Open Music Theory Version 2* as a primary textbook. Some embedded audio examples created with MIDI lack musicality associated with human performance. As the textbook has seven co-authors, the style of writing and musical engraving varies from chapter to chapter depending on who wrote the content. But what the book lacks in consistency of voice and style, it makes up for in its wide-reaching breadth of content. Where the lack of consistency feels most problematic is in terms of the unavailability of some assignments in multiple downloadable formats, or where some chapters are yet incomplete. These inconsistencies will cause a bit more work for instructors wishing to adopt *Open Music Theory Version 2* as their primary textbook in its current form. The authors revise the text every summer so we can look forward to additional content in future academic years. In fact, while writing this book review, the content of *Open Music Theory Version 2* expanded, and I imagine that much of the missing content will be added, making the criticisms here no longer relevant.

Additionally, the placement of Parts VI and VII, on jazz and popular music

³ See Covach, “Form in Rock Music: A Primer,” in *Engaging Music: Essays in Music Analysis* (2005, 65–76) and chapters 5–8 of Nobile (2020).

respectively, following sections engaging traditional music theory content (with generic names, like “Form” and “Chromaticism”), may give an unintended message that these topics are separate, perhaps even marginal or ancillary, in contrast to the topics in Parts I–V that center European baroque, classical, and romantic music. Some opportunities for integration include introducing chord symbols (currently the second chapter of Part VI, “Jazz”) much earlier, in Part I, “Fundamentals,” after the chapters on triads and seventh chords, as many students find chord symbols more intuitive than figured bass and Roman numeral systems, which are already introduced in Part I. Similarly, content on rhythm and meter within Part VII, “Popular Music,” is appropriate for Part I, and chapters on AABA form, strophic form, and verse-chorus form, would work well earlier in the book, in Part III, “Form.” That said, as of its July 2023 revision, *Open Music Theory 2* offers a new feature (Part XI, “Rhythm and Meter”) that cross-lists rhythm and meter chapters from among the various parts of the book, helping to bring together these related concepts. Although no one system of organization will please everyone, and sequencing adaptations are often necessary for any curriculum adopting any textbook, we must realize that the order in which we present material and how we name the content reveals implicit value systems we hold, whether intentionally or unintentionally.

In the introduction of the book, the authors write that they have “carefully selected music examples to represent people of diverse races and genders.” They do not explicitly specify aims to diversify musical examples with regard to other intersectional aspects of identity, such as considering class, disability, socio-economic status, nationality, or sexual orientation. While not all parts of *Open Music Theory Version 2* are able to represent composers of “diverse races and genders,”⁴ taking Part I, “Fundamentals,” as a representative sample, we find its chapters feature a total of 21 musical examples, with the greatest racial and gender diversity represented in terms of performers and less diversity represented in terms of composers/songwriters. Of the performers included in this sample of examples, three are female, 12 are male, three are multi-artist collaborations with mixed genders, three are rendered in MIDI, and six of the performers are likely persons of color.⁵ In terms of composers or songwriters represented in this sample of examples, only one is female (Louise Reichardt), 19 are

⁴ For example, the examples in Part II, “Counterpoint and Galant Schemas” are stylistically limited to European 16th- and 18th-century music and thus do not offer diverse representation of different identities.

⁵ I have used biographies and other publicly available evidence to determine to aspects of individuals’ identities, as they relate to gender and race, reported here.

male, and one represents a collaborative songwriting team of mixed genders. Four composers of color (all male) are featured among Part I's 21 examples. Laudably, the examples in Part I span an impressively wide range of styles—with three examples each representing classical music and neoclassical music respectively, two examples each representing pop, baroque, and romantic music respectively, and one example representing each of the following styles: band music, pop/rap, rock, American folk, Turkish classical, traditional Irish, English folk, jazz, and Broadway. So, while there is still room for greater inclusivity particularly in terms of composers' identities represented, this sample of examples shows healthy diversity in terms of styles represented, as well as some diversity in terms of performer identities represented.

In my view, the advantages of *Open Music Theory Version 2* outweigh its shortcomings. First and foremost, it is available at no cost to students. Second, created natively as an online resource, it is fully accessible on multiple platforms, including mobile phones, tablets, and computers. In addition to the online platform, users may download its content in a host of additional formats, including .epub, digital and print .pdfs, .html, .xhtml, .xml, .imsc, and .odt. Licensed under a Creative Commons Attribution-ShareAlike 4.0 license, instructors may easily and freely incorporate the materials from *Open Music Theory Version 2* in their classes, either as a supplement to preexisting materials already in use, or as the primary textbook. Third, for instructors wishing to adapt some content without necessarily using it as a primary text, this resource provides a treasure trove of high-quality material, authored by an impressive collective of experienced pedagogues and informed by the latest relevant scholarship. With native online content that may be copied and pasted without hassle, along with ancillary materials available in multiple file formats, instructors will find the content easy to adapt to their institutions' online learning management system or to incorporate into their own customized documents.

Expanding the Canon: Black Composers in the Music Theory Classroom

Edited by Melissa Hoag
New York: Routledge, 2023. 286 pages.
ISBN 978-1-032-06827-5

Reviewed by RACHEL E. MANN



Introduction and Overview

In 2019, Philip Ewell's plenary address to the Society for Music Theory and subsequent 2020 article, "Music Theory and the White Racial Frame," in *Music Theory Online* challenged many in our music theory community to renew efforts to take a hard look at our own curriculums, educational materials, repertoire choices, and learning outcomes. Who or what we teach to our students speaks volumes, and it is well beyond the time to assess what we are really saying in our classrooms. The goal of *Expanding the Canon: Black Composers in the Music Theory Classroom* is to address the lack of representation of Black voices in the core music theory curriculum, and it seeks to correct this failing by offering concrete solutions. The book demonstrates why the expansion and diversification of a canon consisting almost solely of works by European, White, male composers is necessary and provides practical, ready-made lesson plans and teaching materials that incorporate a wide array of repertoire by Black composers. It also encourages readers to expand the canon even further to include popular Black music such as ragtime, jazz, blues, rap, and R&B, and even suggests new approaches to teaching such genres.

Like many collected essays on music theory pedagogy, the book's foreword is written by a senior scholar—here, none other than Philip Ewell—who, along with Teresa L. Reed in her opening chapter contextualizing her lived experience as an African American woman in the field of music theory, remind us why such a book as this is necessary. In "Our Field at Its Best," (chapter 1) Reed describes how she walled off or hid her "native" or "born" musical roots—those developed in the oral tradition of the Black Pentecostal church, "where nothing was notated and everything was improvised"—from her life in the credentialed world of "White, European-focused schools of music, where almost nothing was improvised and everything was notated" (2-3). Her essay reminds us that we do best by our students and colleagues when we

tear down such walls and treat differences in backgrounds and cultures with curiosity and openness.

The following twenty chapters fit into five broad units based loosely on the traditional music theory core curriculum. These include: 1) fundamentals and diatonic harmony, 2) chromaticism and other advanced topics, 3) form, 4) popular music, and 5) twentieth-century music, which will be discussed in turn below.¹ These chapters vary greatly in style, but the common thread among them is the focus on music by Black composers. Some White, European male composers are mentioned throughout, yet virtually no space is given to their works. Instead, each chapter in *Expanding the Canon* drives home the message that every concept we teach in our music theory curriculums can be illustrated using excellent examples composed by Black musicians.

While some of the book's chapters are topical and offer numerous examples by Black composers to introduce a single concept, others focus primarily on a single piece in an effort to teach a given topic. The range and scope of the selected repertoire is quite broad, representing Classical-era composers such as Joseph Bologne (1745–99) and Francis Johnson (1792–1844), Romantic and early twentieth-century composers such as Scott Joplin (1868–1917), William Grant Still (1895–1978), Samuel Coleridge-Taylor (1875–1912), and George Walker (1922–2018), as well as pop musicians like Stevie Wonder (1950–) and The Weeknd (1990–). Black women composers are also represented with space given to works by Florence Price (1887–1953), Margaret Bonds (1913–72), Julia Perry (1924–79), and Janelle Monáe (1985–), among others. Some composers even receive numerous mentions throughout. For example, works by Joseph Bologne, Francis Johnson, Janelle Monáe, Florence Price, and Samuel Coleridge-Taylor appear across several chapters. Beyond musicians, this book celebrates the work of Black poets, Langston Hughes (1901–67) and Maya Angelou (1928–2014).

Expanding the Canon includes supplemental online instructor resources, accessed through the Routledge website, at this [link](#). Once signed in to the Instructor Resources Download Hub, teachers may download a file containing folders of materials designed for 16 of the 21 chapters.² These resources range from notated musical excerpts and copies of full scores; lesson plans with more detail; student worksheets, both with and without accompanying answer keys; surveys and writing prompts; as well as links to recordings, and charts and lists of additional musical examples beyond what is cited in the text and other supplemental materials.

1 In the book's introduction, Hoag also notes where lessons in some units may potentially overlap with topics in others.

2 The materials appear as PDF and DOC files, though not always in both formats for each file.

Each of the chapters of *Expanding the Canon* is relatively short, averaging about twelve pages in length, and, coupled with the online resources, is meant to be accessible for specialists and non-specialists alike. Many of the text's lessons may be taught wholly as presented in the book or can be easily tailored to fit one's classroom needs. Each chapter ends with a list of works cited, which serves as a much-needed bibliographic resource across the entire book, especially considering how little published research exists on much of this repertoire.

The book's lessons and supplementary online materials are appropriate for teaching the undergraduate music theory core, but many of its lessons would also work well in high school music theory classrooms.

I. Fundamentals and Diatonic Harmony

The four chapters of this unit cover concepts ranging from pitch, texture and meter, intervals and cadences, major and minor mode, embellishments and non-chord tones, to small forms and basic T-PD-D-T harmonic syntax. In "Rethinking Music Fundamentals: Centering the Contributions of Black Musicians" (chapter 2), Uzee Brown Jr. focuses on the experience of teaching at a Historically Black College. From the perspective of a veteran teacher of forty years, Brown offers tips and best practices for teaching music fundamentals. Using a "sound first" approach, Brown emphasizes the importance of explaining the "what" and "why" of fundamentals with questions posed to students such as: What is music? What are music fundamentals? What needs to be learned and why? Brown also advocates getting to know students' musical roots—to learn about them in much the same way we learned about Teresa L. Reed in chapter 1.

In chapter 3, Robin Attas offers flexible solutions to making lasting changes in our music theory curriculums, starting with fundamentals. There is a middle ground between incorporating examples of Black composers here and there, and completely overhauling an entire curriculum to enact antiracist pedagogies. The plug-and-play option of diversifying the repertoire by adding new pieces by Black composers in an existing framework is a start in the right direction, but this chapter also makes suggestions for rethinking how we teach pitch, rhythm, and meter, and makes a case for incorporating concepts such as texture. Jan Miyake (chapter 4) introduces fundamentals and diatonic concepts with two pieces by Black composers that present "contrasting soundscapes and windows into two moments of time in Black histories" (29). Miyake draws from works by Rhiannon Giddens and Francis Johnson to introduce

intervals, non-chord tones, closure and cadence, and form. Each individual piece also provides a springboard for discussions about harmony and calls for a closer reading of pitch collections, melismata, and range.

Much like the other authors in this unit, Kristina L. Knowles and Nicholas J. Shea (chapter 5) advocate using a “sound-first” approach by focusing on aural skills and using protonotation. This approach releases instructors from the need for access to scores and disrupts the “overt focus on notation and harmony typical of theory curricula” which is “foundational to classical music pedagogy” but not necessarily appropriate in other styles such as pop (42). By incorporating their proposed strategy of protonotation, the reliance on musical scores becomes less necessary and can actually broaden repertoire faster while also “developing the aural skills necessary to support an increasingly diverse range of musical careers” (42). They first teach students to hear and notate contrapuntal reductions and cadences loosely following Tymockzo’s seven parameters for pitch stability and then use this to teach closure and small forms such as periods, sentences, and SRDC (statement, restatement/response-departure, closure) models.

II. Chromaticism and Other Advanced Topics

The three chapters in this unit focus on modal mixture, syncopation, modulation, and elementary and advanced aural skills topics. Mitchell Ohriner’s chapter on modal mixture (chapter 6) opens with how the topic is introduced in many of the popular core theory textbooks. In pointing out how these introductions are “laden with NEEM [notated, Enlightenment-era European music]-era ideological preferences for the chromatic over the diatonic, the structural over the surface, and the major/minor dichotomy over a more nuanced categorization” (69), Ohriner attempts to dismantle this thinking using works by Black composers following in the NEEM-tradition, including compositions by Betty Jackson King, Samuel Coleridge-Taylor, and L. Viola Kinney. Ohriner ends this chapter with examples of mixture in popular music by Beyoncé and Stevie Wonder.

In “‘Elite Syncopations’ and ‘Euphonic Sounds’: Scott Joplin in the Aural Skills Classroom” (chapter 7), Amy Fleming approaches the teaching of various elementary and advanced concepts within the aural skills curriculum using the music of Scott Joplin. Drawing from his well-known ragtime music and lesser-known songs, this chapter includes suggestions for singing, rhythm, dictation and transcription, contextual listening, improvisation, and error detection. In the final chapter of this

unit, Alan Reese uses readily accessible music by Black composers to teach diatonic and chromatic modulation. Of particular note is the author's inclusion of a supplemental list in the online materials of about 250 additional modulation examples by Black composers freely available on IMSLP (<https://imslp.org/>), the Composers of Color Resource Project (<https://composersofcolor.hcommons.org/>), and Music By Women (formerly Music Theory Examples by Women; <https://www.musicbywomen.org/>).

III. Form

This unit presents four chapters on jazz schemes, binary and ternary forms (plus a discussion of chromatic harmonies and modulations), strophic form, rondo, and sonata form. In “A Jazz-Specific Lens: Methodological Diversity in the Music Theory Core” (chapter 9), Ben Geyer “critiques the teaching of jazz using an established pedagogical lens, advocating that one should use alternative analytical methods while studying and teaching this music” (3). This chapter focuses on how a jazz-specific mindset and set of tools can be used in the theory classroom and provides a roadmap for teaching an entire unit on jazz.

Horace J. Maxile, Jr., in chapter 10, proposes teaching binary and ternary forms via works by Francis Johnson and Harry Burleigh; this choice of repertoire is significant, as Johnson is considered the first published Black American composer and Burleigh is credited as the first to promote Black nationalistic tenets through music. In chapter 11, Melissa Hoag addresses musical form and extramusical meaning in three song settings of poems by Langston Hughes, composed by Margaret Bonds, Florence Price, and Howard Swanson. In “Teaching Sonatas Beyond ‘Mostly Mozart’” (chapter 12), Aaron Grant and Catrina Kim urge instructors to draw from repertoire by Joseph Bologne, Samuel Coleridge-Taylor, and Florence Price in order to teach sonata form from a wider chronological span and greater range of composers than Haydn, Mozart, and Beethoven, arguing that little is gained from teaching formal “norms” drawn from such a limited repertoire.

IV. Popular Music

The unit on popular music has five chapters that offer challenging new approaches to pedagogy and analysis. Zachary Zinser, in “Expanding the Scope of Analysis in the Popular Music Classroom” (chapter 13) advocates for student-chosen repertoire to promote learning that is empowered and engaged because it applies to music which

has already caught their attention and uses techniques that reveal new features of that music. With their instructors learning alongside them, students learn to apply new concepts and frameworks to what can potentially become a very diverse repertoire.

In chapter 14, Cora Palfy artfully explores formal structures and narrative design in two songs by Janelle Monáe. Contributions by David Geary and Trevor de Clercq (chapters 15 and 16, respectively) offer suggestions for lessons that focus on how rhythm in popular music can be used to express meter, musical form, and phrase organization—welcome topics given most theory textbooks’ and curriculums’ overemphasis on pitch and harmony, often at the expense of rhythm and meter. These latter chapters can be used to teach aural skills, hypermeter, and more.

The chapter by Rosa Abrahams on the music of Ester Rada (chapter 17) explores structural shifts—including distinct modal, metrical, timbral, and textural changes between sections—and lyrical variation as aspects of musical narrative. This chapter additionally introduces concepts such as key relationships, metric shifts, Afro Diasporic sound and identity, close listening, embodied experience, and transcription.

V. Twentieth-Century Music

The final unit of the book focuses on twentieth-century music and features chapters by four scholars. In “Inclusivity and the ‘Perfect Teaching Piece’ in the Undergraduate Post-Tonal Classroom” (chapter 18), Cara Stroud offers four new pieces by Black composers for teaching a wide variety of twentieth- and twenty-first-century techniques and concepts. Stroud additionally addresses strategies for dealing with the discomfort of moving beyond teaching (and learning) from the “perfect teaching piece,” arguing that such pieces often “unnecessarily limit classroom teaching and further narratives of White supremacy” (217).

Leigh VanHandel provides a close reading of a song by Florence Price that “illustrates a synthesis of western tonal harmony with the vernacular of jazz, popular song, and African American traditions” (236–37). VanHandel’s chapter explores such concepts as advanced chromatic techniques, centric collections, mediant relationships and common tones, and neo- Riemannian analysis techniques. In chapter 20, Owen Belcher presents one-to-three weeks’ worth of material on twentieth-century music. Belcher examines the music of George Walker through a variety of analytical lenses, teaching students that one analytical approach rarely yields all the answers they may be looking for. Belcher provides lesson plans, written assignments and aural skills activities. The final chapter by Kendra Preston Leonard examines the serial minimalist

piece, *Homunculus C. F.* by Julia Perry, a composer whose minimalist pieces predated the work of Philip Glass, Steve Reich, Terry Riley, and La Monte Young.

General Comments and Concluding Thoughts

Several overarching themes appear throughout this book. First, multiple authors argue that only substituting new and diverse repertoire is insufficient in the quest for truly antiracist pedagogy, but likewise admit that this remains a necessary step in the process. One cannot merely include pieces by Black musicians without also considering the diversity of analytical methods required to examine such music. Many in our field recognize the need to teach from a wider repertoire that includes Black voices and to embrace new theories and constructs that can better explain the many rich styles and genres that have too long been excluded. The chapters on jazz and other popular musics in *Expanding the Canon*, for example, go far to alleviate these concerns, offering numerous suggestions and analytical methods for approaching this repertoire.

Another repeated theme is the concern whether we should only be experts in the classroom. In her chapter on three song settings of texts by Langston Hughes, Melissa Hoag argues that “it is incumbent upon me to fill in the gaps in my training instead of allowing my training to limit what I teach” (126–7). Cara Stroud convincingly explains how in continuing to only teach from the same pieces by European, White male composers that we all learned in college, we potentially communicate unspoken value judgements and false conclusions, something Cora S. Palfy and Eric Gilson describe as the “hidden curriculum in music theory” (Palfy and Gilson, 2018). Stroud acknowledges the discomfort that arises from working with unfamiliar pieces, but also emphasizes that this perfectionist tendency “defeats the larger goal of inclusivity, since there is no way each of us could be experts on pieces about which there is little published work” (224). If we limit ourselves to only teach what we know best, we will never be able to expand the canon to include the diversity of repertoire, materials, genres, and styles that our students—and, frankly, we—deserve to know. Finally, it is also worth questioning our level of “expertise” if we are only comfortable illustrating forms and concepts from a very limited repertoire, using only traditional analytical methods. As Aaron Grant and Catrina Kim point out in their chapter on teaching sonata form beyond “mostly Mozart”:

This consistency comes at a cost. Poundie Burstein (2020), for one, notes that focusing on too few composers distorts one's understanding of history and style. In other words, teaching sonata forms by only three composers gives our students a skewed view of what a "normal" sonata is and the impression that the music of all non-canonical composers is somehow "odd." Furthermore, only studying the works of cisgender, White men continues to reify what Philip Ewell (2020) calls music theory's "White racial frame." Students' perception of this value system can marginalize students, the majority of whom are not White *and* male. To tie both points together, whose norms are we teaching and why? (129)

Of course, while this book is a sorely needed resource, a few minor criticisms are worth addressing. *Expanding the Canon* is composed of short autonomous chapters promoted as lesson plans, and the differences in scope, breadth, contextualization, and more among these chapters are extremely broad. In one respect, this is a good thing: just as no two music theorists are the same, it is to be expected that our teaching approaches and plans would differ. For example, some chapters may be read from beginning to end without needing to consult the accompanying online materials, making the latter clearly supplemental in nature. For other chapters, however, access to the online materials is essential to follow the text. Moreover, some of the online materials offer complete lesson plans—outlines of concepts, skills, student worksheets, and prompts, as well as answer keys for all exercises—providing instructors everything needed for the class. Other chapters are more philosophical in nature and suggest ideas and repertoire choices, while leaving the preparatory work up to instructors. This book is not meant to be read cover-to-cover, and readers will likely pull from chapters based on their curricular wants and needs at any given time.

Additionally, because several authors include supplemental lists or appendices of examples by Black composers featuring the topics, techniques, or styles discussed within a given chapter, this book would benefit from a single appendix (or set of appendices) listing all pieces and topics referenced throughout, rather than distributing this information in the pages of the text and in the numerous folders and files of the supplemental materials. Compositions, then, could be cross-listed so that teachers could quickly find repertoire illustrating multiple concepts. Such appendices could be arranged by topic or composer. Because many specialist and non-specialist educators will potentially use this book as a resource for finding quality repertoire, facilitating this process with an easily-searchable list would be most welcome.

It should also be mentioned that, though this book loosely follows the standard multi-semester music theory core curriculum, only minimal emphasis is given to aural skills, excepting the chapters by Knowles and Shea (chapter 5), Amy Fleming (chapter

7), and certain authors of the unit on popular music. While many authors mention aural skills throughout, even more specific suggestions and plans would definitely be a welcome addition.

Finally, while some element of repetition is inevitable in a book that focuses on repertoire of which very little source material has been published, critical excerpts from Florence Price's letter to Serge Koussevitzky in 1943 appear three times throughout the text (125, 138, and 226), and the second of these is quoted in full, accompanied by external analytical commentary. While this is only a minor editorial quibble, it may actually be worth repeating Price's concern numerous times that—even after 80 years—it is still difficult for composers who are both Black *and* female to be heard. This is why a book such as this is needed.

Expanding the Canon ticks all the right boxes: it provides quality, engaging pedagogy, clear ideas and concrete solutions to a pressing problem, and wonderfully diverse repertoire that deserves more representation in our classrooms. The practicality of this book and its accompanying online supplemental materials enables it to fill the needs of both specialists and non-specialists who teach music theory courses. Additionally, it could be used as a supplement for a graduate music theory pedagogy course and as an important bibliographic resource and body of analytical research on this underrepresented body of music.

Most scholars in our field recognize that exposing and dismantling music theory's White racial frame can only positively impact our discipline. A book such as this, which seeks to expand our canon by introducing more music by Black composers and questioning what topics we choose to teach, is both necessary and long overdue. In conclusion, *Expanding the Canon: Black Composers in the Music Theory Classroom* serves as a significant contribution to the field of music theory pedagogy. By advocating for a more inclusive and diverse representation of composers and musical works, this book challenges readers to reconsider the White racial framework of our music theory curriculums and its potential impact on our students' musical and cultural awareness. This book should be required reading for anyone involved in music theory pedagogy: it inspires crucial conversations about the power and importance of diversity, representation, and inclusion and it calls for reflection on the responsibilities of educators shaping the minds of the next generation.

Note: To avoid any conflict of interest, Rebecca Jemian served as Reviews Editor for Rachel Mann's review of the book edited by *JMTP*'s Reviews Editor Melissa Hoag.

Bibliography

- Burstein, Poundie L. 2020. *Journeys Through Galant Expositions*. Oxford: Oxford University Press.
- Ewell, Philip. 2020. "Music Theory and the White Racial Frame," *Music Theory Online* 26(2). <http://doi.org/10.30535/mt0.26.2.4>.
- . 2019. "Music Theory's White Racial Frame." Paper presented at the Annual Meeting of the Society for Music Theory, Columbus Ohio.
- Palfy, Cora S., and Eric Gilson. 2018. "The Hidden Curriculum in the Music Theory Classroom." *Journal of Music Theory Pedagogy* 32: 79–110.
- Tymoczko, Dmitri. 2011. *A Geometry of Music: Harmony and Counterpoint in the Extended Common Practice*. Oxford: Oxford University Press.

Foundations of Aural Skills

By Timothy Chenette, with contributions by Daniel Stevens
Licensed under a Creative Commons Attribution-ShareAlike 4.0 International License, 2022
Online, PDF, and EPUB versions available: <https://uen.pressbooks.pub/auralskills/>

Reviewed by JENNIFER SHAFER ENGLAND



Vision and overview

The values and goals of Timothy Chenette’s *Foundations of Aural Skills* (hereafter, *Foundations*) represent a marked departure from much traditional aural training.¹ As such, this text consolidates a wide range of aural skills research spanning the last several decades, and presents a welcome source of inspiration for instructors who desire to make their aural training more inclusive, accessible, diverse, and relevant.² The text is an Open Educational Resource (OER), freely available at <https://uen.pressbooks.pub/auralskills/>.

The introductory “What Are Aural Skills?” page provides a short but crucial philosophical underpinning for *Foundations*. As many familiar with Chenette’s other work will already be aware, the question of what (and how) we should teach in aural courses is a question to which he has devoted much thought and research.³

Here, he defines aural skills as “the core skills used by all people involved in music,” and places these skills into two categories:

- Developing “internalized knowledge and physical structures”
- Developing “habits, and especially habits of attention”

The use of the word “developing” here is perhaps as indicative of the text as the categories themselves: Emphasis is consistently placed on process and internal knowledge structures, and self-reflection/self-awareness of these processes and structures. Answering the query “Why This Book?” the authors discuss the core values of *Foundations*: empowerment, creativity, developmental inclusivity, musical

1 Timothy Chenette is the primary author of the text. Daniel Stevens is listed as a collaborator and has several pages specifically attributed to him in the text, and “we” is typically used as the authorial point of view.

2 Sources/inspirations for the book are cited here: <https://uen.pressbooks.pub/auralskills/back-matter/aural-skills-pedagogy-research/>

3 Most recently Chenette (2021).

inclusivity, and holistic assessment. The “Note to Instructors” explains some of the practical aspects of these goals, contrasting them with traditional approaches where appropriate. These goals include components such as:

- accessibility (highlighting elements such as staff notation, brain-voice connection, and others)
- aural fundamentals (skills we often assume students already have or that they will naturally build)
- connections outside of the classroom
- use of instruments
- valuing learning over (perhaps easier) “objective” judgment

Chapters 1–7 explore “aural fundamentals.” These chapters feature minimal use of notation, attempt to avoid assumptions about what students know, and carefully prepare them for the more practical applications presented in Chapters 8–15. These latter chapters include skills such as improvisation, transcription, sight reading, and ensemble work. The chapters do not need to be used in order, and internal links to earlier chapters are provided where concepts build on previous content. Various suggestions are given for implementation, ranging from full adoption to inspiration for new warm-ups, or activities within a pre-existing curriculum.

Foundations is (currently) limited to introductory-level material, appropriate to most typical first-semester aural courses at the university level, though the authors have plans for expansion.⁴

The book is most easily accessible online, though it can be downloaded in EPUB or PDF formats. These formats do not interact as easily with the various embedded playlists and other links, so the online version is the most comprehensive and is the version examined for this review. Additionally, noting that this text is an online text and therefore can be updated more readily than a traditional text, this review refers to the version available in June 2023.

Chapter design

All chapters begin with an overview of the skill(s) addressed in that chapter, with a focus on “real life” applications. The tone is conversational, speaking directly to the

⁴ There are several more advanced topics present, including introductions to concepts such as hypermeter and modulation. Given the structure of the book, an instructor could easily omit these topics, use them as time allows, or use them as extra materials for students who are curious to explore further.

student. A series of Learning Objectives are listed for each chapter, which are then closely correlated to the various activities throughout the chapter. Learning Objectives for Chapter 2 (on meter) are duplicated below.

Students will be able to:

- Identify whether there is a recurring temporal pattern in a piece of music
- Entrain to a beat in sounding music (equal or unequal)
- Identify a beat cycle (measure) in sounding music, including identifying where that cycle begins
- Entrain to a simple or compound division of a beat
- Given a tempo, conduct a beat pattern
- Internally generate a metrical framework (beat, division, cycle)
- Map felt patterns to appropriate meter signs
- Use conventional stylistic markers to identify conventional meters (popular music backbeat, waltz, etc.)
- Entrain to a hypermetric pattern using simple gestures

Embedded (and extensive!) Spotify playlists and other examples are featured throughout each chapter. Within the chapter, each page typically focuses on a single topic or skill (e.g., “Finding the Beat” or “Measures” as page titles). Most pages also feature one or more activity boxes with an associated learning goal. These activities have a wide range of designs; some examples and discussion will be provided after a content summary.

Content summary:

Aural fundamentals (Chapters 1–7)

Within the fundamentals chapters, Chapters 1 and 4 are the most non-traditional topics. Chapters 3, 5, and 6 lay the groundwork for elements of sight reading and transcription/dictation skills, and Chapters 2 and 7 focus on rhythm and meter.

In Chapter 1 (“Attention”), students practice attentional control when listening, including shifting focus to different parts of complex textures, and with special attention given to bass lines. Chapter 4 (“Music’s Materiality: Timbre, Envelope, Dynamics, Register, and Texture”) is fast-paced, devoting one page to each of the five titular subtopics. Discussion of these topics (particularly timbre and envelope) deliberately avoids technical language and visualizations and instead encourages use of metaphorical or descriptive language.

Chapter 3 (“Tonic/Collection and Solfège”) addresses internal key maps, including discussion of pitch collections and hearing tonic, and introducing solfège as a related tool. Chapter 5 (“Musical Memory”) uses cognitive and memory science research to explain both the how and the why of musical memory development. Discussions of chunking are connected to Chapters 3 and 6. Chapter 6 (“Internal Hearing and Intonation”) continues developing internal imagery, now focusing on “internal auditory imagery.” Specific skills include pitch matching, tuning of specific intervals, subvocalization, and developing “instrument-based kinesthetic imagery.”⁵

Chapters 2 and 7 focus on rhythm and meter. Chapter 2 (“Moving to Music [Meter]”) scaffolds an introduction to meter, beginning with moving to music and working up to aurally identifying meter. A few more advanced concepts (anacruses, swing, time signatures, basic hypermeter) are included. Chapter 7 (“Rhythm Skills”) is more notation-heavy and focuses on rhythmic cells, reinforcing chunking from previous chapters.

Content summary: Applications (Chapters 8–15)

The second half of the book centers on application, with spiral learning to earlier chapters built in. Though the earlier introductions focus somewhat more on mindset and concepts, the later chapters contextualize reasons for the practical usage—or developmental value—of the specific skill or topic. For instance, the introduction to Chapter 8 (“Improvisation”) acknowledges that “not all musicians will improvise in public performances,” but that, at the same time, creativity is a “fundamental right and a responsibility,” that improvisation is “one of the best ways to enrich your knowledge structures and then demonstrate mastery of them,” *and* that it is fun. Similar carefully nuanced motivations (or critiques—see Chapter 13, “Dictation”) precede each chapter.

Chapters 8, 11, and 12 focus on more performance-oriented topics, and consistently encourage a mind-ear-body connection. Chapter 8 (“Improvisation”) carefully scaffolds entry into improvisation by encouraging students to jump in and try things (without necessarily worrying about it sounding “good”), and then gradually increases the level of structure and planning that a student could utilize, concluding with a series of more structured activities. The introduction to Chapter 11 (“Sight Reading Skills”) addresses both internal hearing and practical applications

5 Students whose primary instrument is voice are encouraged in this chapter (and in some others) to use a secondary instrument to help build kinesthetic imagery.

as reasons to learn sight reading, and emphasizes that sight reading is a skill that can be learned and developed. This chapter particularly foregrounds the mind-ear-body connection and discusses strategies for both sight singing and instrumental sight reading. Chapter 12 (“Ensemble Skills”) is a fairly dense chapter, including topics such as ensemble leadership, group communication, ensemble tuning, and error detection and correction.

Chapters 9 (“Playback”), 10 (“Transcription”), and 13 (“Dictation”) bring together elements of pitch, rhythm, and memory. Chapter 9 focuses on applying these skills *without* use of notation, and uses external instruments to enhance kinesthetic auditory imagery. Chapter 10 (“Transcription”) essentially adds notation to playback capabilities. Consistent emphasis is placed on hearing, thinking, and analyzing *before* writing down or using an instrument to check work. Use of protonotation is strongly encouraged.⁶

Chapter 13 (“Dictation”) first defines dictation as “a more limited kind of transcription, most commonly done in a classroom, with a limited number of plays and a limited amount of time, and usually [focusing] only on rhythm, melody, or harmony.” The authors critique the traditional emphasis on dictation, examining not only the musical skills that dictation claims to teach/assess and the mental factors that can influence our students’ abilities to perform this type of assessment, but also the issues that tend to pervade grading of dictation. For students, *Foundations* presents strategies for developing dictation-specific skills, primarily focusing on “attention/focus and memory,” since other necessary skills (“analysis/understanding and notation”) were addressed previously.

Chapter 14 (“Closure, Repetition, and Contrast”) introduces form, focusing on three elements viewed as “relatively style-neutral: closure, repetition, and contrast.” Metaphorical and/or descriptive language is encouraged over style-specific language, with timelines as the primary tool for recording information. The topic of cadences is somewhat skimmed over when discussing closure, but students also only listen for “closed” cadences (ending on tonic) or “open” cadences (ending elsewhere) when discussing closure.⁷

6 Gary Karpinski’s methods of protonotation are used throughout most of *Foundations*; Jenine Brown’s notehead shorthand is introduced in Chapter 10. See Karpinski (2000) and Brown (2020).

7 The authors ultimately state that “If something feels like it has some level of conclusiveness, we’ll call it a cadence.” Though the authors do an admirable job of limiting the discussion to content appropriate for an introductory-level and aurally focused standpoint, the definition of cadence is something that would likely need to be addressed by an instructor.

Chapter 15 (“Listening for Chords”) approaches harmonic listening from the mindset of “what can we do with our listening?” and focuses on hearing in real time, primarily utilizing the Do/Ti test.⁸ Students are encouraged to use these methods as a way to creatively participate in the music, rather than focusing on atomistic identification tasks. Emphasis is placed on bass-line listening and on the frequently used chords of I, IV, and V (and their minor key counterparts).

Learning Activities

Much of the book’s power is centered in the broadly designed “Learning Activities.” However, as the authors note, the Learning Activities “have been designed primarily to support learning, not to make assessment easy.”⁹ For instance, in Chapter 6 (“Internal Hearing and Intonation”), many activities focus on different forms of audiation, often followed up by playing the melody after audiating it. These activities would not be straightforward to assess, but would certainly be beneficial to students. Improvisation, also perhaps less straightforward to assess, is normalized as a standard activity throughout *Foundations*, and especially in the fundamentals chapters. These fundamentals activities include:

- Rhythmic improvisation to convey a pre-determined meter to an external listener (Chapter 2)
- Pitched improvisation to convey tonic and mode to an external listener (Chapter 3)
- “Chunk” improvisation using predetermined melodic and/or rhythmic chunks (Chapter 5)
- Improvisation using rhythmic cells and identification of improvised cells (Chapter 7)

Less traditional topics feature some of the most interesting and musically engaging activities. In Chapter 1 (“Attention”), students identify eleven different layers or aural events that occur within the first 90 seconds of “drivers license” by Olivia Rodrigo, and then apply the same approach to their own recreational listening. In Chapter 5 (“Memory”), students build their “chunk library” for a specific genre or

8 Rahn and McKay (1988).

9 The authors also provide a thought-provoking segment on grading in general in the “Note to Instructors” page (<https://uen.pressbooks.pub/auralskills/front-matter/advice-to-instructors/>), and an additional discussion on grading of dictation (<https://uen.pressbooks.pub/auralskills/chapter/assessment-of-dictation/>).

style by listening extensively within the genre and applying various techniques to help them learn common patterns and improve predictive listening skills. And in Chapter 4 (“Music’s Materiality”), students download sound samples from an open-access sound library and sort them based on timbre.

Many more traditional activities are included as well, such as pitch matching, sight singing, determining whether a cadence is open or closed, identifying chord qualities, etc. Not all of these activities are wholly contained within the book itself, as many of the traditional activities require use of materials such as a sight-singing anthology or similar resource.¹⁰ But even in a more traditional activity, the mindset and goals often differ from the strictly performance-oriented or identification-oriented approach that is often the default in college-level aural skills curricula. Students are frequently encouraged to be self-reflective and assess how things sounded, how their ear was engaged, and how their brain-body connection was working (or not).

Discussion

Foundations is both deep and thorough, focusing on techniques and mindsets that are truly vital to practicing musicians. These approaches will not only help students develop skills that transfer outside of the aural classroom, but also encourage them to both understand and practice these transfers. Given that students often do not naturally develop such mindsets in our classrooms—and particularly if they enter our classroom without prior experience in traditional aural training—these approaches will help students to lay a solid foundation for their development of aural skills. For an instructor considering implementing some or all of this book in their classes, the following sections will offer some pragmatic considerations to keep in mind.

Repertoire & playlists

In addition to the wealth of Learning Activities made available in *Foundations*, the repertoire in the Spotify playlists is another treasure trove for aural skills pedagogues who wish to broaden the repertoire of their classrooms. The playlists feature a wide mixture of styles, artists, and genres, and spiral learning is a frequent feature. Playlists do vary in length and sometimes in breadth (the “Listening for Modulation” playlist, for instance, has a heavier percentage of “art music” than some of the other lists), but the lists as a whole nonetheless offer an incredible resource to instructors.¹¹ It

10 Wherever possible, the authors link to or recommend other OER aural skills resources.

11 There are a number of songs on various playlists labelled “explicit” by Spotify. Depending on the

is also worth noting that the songs on the playlists can vary somewhat in difficulty—particularly in some of the transcription and dictation work, some examples are much more difficult than others, both in terms of length and complexity.

Technical aspects

The book is cleanly laid out and easy to navigate. A drop-down menu at the top of each page accesses the table of contents, with the option to expand any single chapter to show individual pages. Text is cleanly centered, with ample white space surrounding it. Activities and examples are typically set off in colored boxes, making the text visually easy to read. As mentioned above, the EPUB and PDF versions do not as readily interact with the embedded audio examples, so the online version of the text is the easiest to work with.

(Potential) Drawbacks

Though the writing style is consistently friendly and approachable, I still found myself reflecting somewhat often that undergraduate students would likely need additional explanation and/or demonstration from an instructor. Though obviously not an inherent flaw, it will necessarily influence instructor preparation and (potentially) supplementary materials. For example, in “Improvising a Bass Line” (Chapter 8), knowledge of consonance/dissonance and dissonance resolution in a quasi-contrapuntal context are expected, but these concepts have not been discussed in any detail. Similarly, treatment of the supertonic chord and the “Te” guide tone in Chapter 15 are fairly surface-level. Based on my own experience using similar methods with undergraduate students, I would also expect students to need assistance with the arpeggiations and Do/Ti test extensions in the same chapter. I should note here that most of the text presents concepts intuitively and with exceptionally well-designed scaffolding, so examples such as those noted above stand out more than they might in a less well-crafted text.

These examples also intersect with another issue in *Foundations*, which is that the requisite background or simultaneous theory knowledge is at times unclear. For example, “Setting Up an Internal Map of Key” (Chapter 3) presents major and minor scales in staff notation with half and whole steps, but without much explanation. Scale degrees and solfège syllables are also used on this page, but are not discussed in detail until a few pages later. Similarly, Roman numerals appear several times throughout

sensitivities of both instructors and students, these songs could simply be omitted from use in the classroom and/or assignments.

the text but are not explained in any detail. Other instances of this type of issue appear elsewhere, but so long as the instructor knows what theory concepts their students can be expected to know, these can be easily mediated.

Neither of these issues significantly weakens the text. And, in some ways, these two potential issues leave the instructor with *more* freedom for the level of depth that they wish to embark upon in some of the more complex concepts (particularly helpful if using a limited implementation of *Foundations*), as well as providing a measure of flexibility in terms of how theory and aural classes may intersect (or not).

From a more practical standpoint: A small number of typos are spread throughout the text, though these are generally minor. For instance, the first of the key mapping patterns in “Setting Up an Internal Map of Key” shows “1–5–1” as scale degrees, but “do–ti–do” as solfège. Similarly, scale degree “3/mi” is referenced in a minor key context.¹² There are also a handful of broken links throughout the book; these are usually internal links, so it is fairly easy to find the correct page. Some playlists are also missing (or appear to be empty when clicked), though it is unclear whether this is a technical issue, or whether the playlist has just not been populated yet. There are also occasional references made to examples that are not present.¹³ Additionally, though the authors provide a link to a master set of playlists on the “Spotify Integration” page, not all playlists are available there at this time.

Finally, there are places where a notated example would be helpful, but none is provided; this is perhaps the biggest drawback of the book in its current form. For example, mixed meter, triplets, duplets, syncopation, and hemiola are all discussed without notation. Although these topics occur within the notation-minimized fundamentals section, I would suggest that each of these topics would benefit from a simple notated example, particularly with an eye towards later sections on transcription and dictation. In another case, when discussing chunking in the context of sight reading (Chapter 11), the authors discuss common melodic chunks and encourage students to practice visually chunking melodies, but no example is given. Of course, in any of these cases, an instructor could provide examples from their own anthology or other materials relevant to their students.

¹² Unfortunately, these mistakes recur later in the text when these same key-mapping patterns are duplicated.

¹³ For instance, “Improvising a Bass Line” in Chapter 8 states that two melodies are given below, one containing several different example bass lines, and the other to be used by the student. No melodies are present.

Practical notes (looking toward implementation)

A few practical notes for instructors considering implementing this text:

- A paid Spotify account will be of *significant* benefit when using this text, since virtually all heard examples are linked via Spotify.¹⁴ The authors explain that a free account will work, but will have ad interruptions.
- The solfège systems used throughout are movable-*do* and *do*-based minor, though other solfège systems are acknowledged in Chapter 3. Throughout most of the text, solfège is presented simultaneously with scale-degree numbers (i.e., “5/*sol*”, “1/*do*”, “5-1/*sol-do*”, etc.). There are places where this slash system is a little visually awkward, but the intended meanings are sufficiently clear.
- There are multiple rhythmic solmization systems presented in Chapter 7, though a preference is not expressed for a particular system. Rhythmic protonotation is strongly encouraged throughout.
- Where Roman numerals are used, they are usually paired with a “written” label (“one-chord,” “four-chord,” etc.). As with the double system for scale degrees and solfège, this can be a bit awkward to read at times.
- As far as I could glean, “answer keys” are not available for the various playlist exercises that are presented. Of course, many of the activities are sufficiently open-ended that an answer key could not be reasonably created, but others (such as meter identification, transcription, or tonic identification) will require the instructor to create their own keys or master lists, which will be a significant time investment.
- Finally, the text itself can be modified and adapted, pursuant to the limitations of the Creative Commons Attribution-ShareAlike licensing that the authors have utilized.¹⁵ All playlists also feature an invitation to submit a song for inclusion via a link to a simple Google form, leaving great potential for further development and expansion through the music theory community. Other OER options for aural skills are integrated throughout the text where appropriate, and a list is provided in the “Note to Instructors” page.

¹⁴ The primary exceptions are links to other OERs for dictation-style exercises.

¹⁵ Details on this type of licensing are available here: <https://creativecommons.org/licenses/by-sa/4.0/>

Conclusions and future developments

Foundations of Aural Skills represents an exciting and progressive resource for aural skills pedagogues, from the expansive playlists and creative and intentional Learning Activities to the careful coaching of mindsets and habits for the student—all grounded in current research and scholarship. Though its scope is limited at this time, the authors make clear that *Foundations* is only the beginning to a work that they intend to further expand and develop, and that they are eager to work with additional collaborators in order to do so. The “Note to Instructors” solicits feedback and lists several possible plans for future directions (expansion of repertoire, inclusion of more advanced content, and development of additional [and auto-graded] assessments), all of which promise additional valuable resources for instructors and students in the future.

Works Cited

- Brown, Jenine L. 2020. "‘Notehead Shorthand’: A Rhythmic Shorthand Method for Melodic Dictation Exercises." *Journal of Music Theory Pedagogy*: 34. <https://digitalcollections.lipscomb.edu/jmtp/vol34/iss1/5>.
- Chenette, Timothy. 2021. "What are the Truly Aural Skills?" *Music Theory Online* 27, no. 2. <https://doi.org/10.30535/mto.27.2.2>.
- Karpinski, Gary S. 2000. *Aural Skills Acquisition: The Development of Listening, Reading, and Performing Skills in College-Level Musicians*. Oxford: Oxford University Press.
- Rahn, Jay, and James R. McKay. 1988. "The Guide-Tone Method: An Approach to Harmonic Dictation." *Journal of Music Theory Pedagogy*: 2. <https://digitalcollections.lipscomb.edu/jmtp/vol2/iss1/4>.

***Hearing Form: Musical Analysis
with and without the Score***

***Anthology for Hearing Form:
Musical Analysis with and without the Score***

Third Edition, Routledge, 2023

by Matthew Santa

ISBN 9780367703806, 268 Pages (paperback textbook)

ISBN 9780367703882 474 Pages (paperback anthology)

Reviewed by JOEL PHILLIPS



Components

Hearing Form comprises three components: a textbook/workbook, an anthology, and online instructor resources.

1. *Hearing Form: Musical Analysis with and without the Score* (henceforth HF) consists of eight chapters, four appendices, and an integrated workbook. Of the 249-page total, the workbook occupies the final 100 pages.
2. A separate 466-page companion volume, *Anthology for Hearing Form: Musical Analysis with and without the Score* (henceforth AFHF), includes the scores of more than sixty compositions.
3. Upon registration with the publisher, teachers gain access to instructor resources, which include an instructor manual, a test bank, and audio streaming and downloads.

Both volumes are US letter size (8.5 x 11 inches/22 x 28 cm) and feature attractive plasticized covers that ought to hold up well during the likely period of student use. HF is perfect bound and can be opened with ease. The volume responds well to the creasing required to keep it open. The page design is a simple, clean grayscale. Graphics, including diagrams and notation, are cleanly displayed, and are interspersed throughout the text. Chapters and other forms of hierarchical segmentation are clearly delineated and highlight important items such as listening strategies, in-depth expansion, assignments, and the like. Many pages are text-dense, which can seem daunting to learners, particularly those for whom English is a second language. But portions likely to encompass a single assignment are usually quite manageable.

Workbook pages cannot be easily removed when turning in an assignment. Of course, students could photograph their work and upload a PDF to a course dropbox. The book would remain intact, a plus, but would contain no record of teacher comments, a minus. Few students would take steps to reconcile this discrepancy. If workbook pages were perforated and the book three-hole punched, assignments with teacher comments could be easily reassembled. Working with paper copies, however old-fashioned, would also ensure students had purchased the book, and not simply downloaded blank PDFs from illicit internet sources.

AFHF is bound using a plastic-coated spiral. It opens easily and lays flat on both a desk or a music stand, which maximizes its utility as a practical resource. Most compositions appear crisp and easy to read, but the printing of some works was blurry, probably due to the porous quality of the paper. For example, the Trio from Joplin's "Maple Leaf Rag," Vivaldi's "Summer," and Schubert's "Heidenröslein" were challenging to read. In addition to musical scores, AFHF includes relevant poetic texts and their translations, which is a helpful convenience.

AFHF contains more than sixty works. One third of these works belong to the "Three Bs": Bach, Beethoven, and Brahms. Adding eight works by Mozart completes half the volume. In terms of historically underrepresented composers, there are two songs by Josephine Lang, two by Fanny Hensel, Joplin's "Maple Leaf Rag," and one song by Samuel Coleridge-Taylor. A fourth edition would surely feature a more diverse representation. It is significant to note that HF contains many examples that do not appear in the anthology and they represent a more diverse body of literature.

Cost

Considering the wealth of resources provided, the price of these materials is quite reasonable by present standards. As of August 2023, if purchased directly from the publisher, the two-volume pair costs \$100. (HF lists for \$55 with a 20% back-to-school discount for a total of \$44. AFHF lists for \$70 and with the 20% back-to-school discount, the price is \$56.) The materials may also be purchased as a package from online retailers, such as Amazon, which lists a two-volume package for \$105.¹

1 A word of caution regarding textbook rentals: Retailers permit rental at a lower cost to students. However, renting these volumes would be problematic because one hundred pages of HF are a workbook, as is potentially every page of AFHF. Students fortunate enough to obtain a pristine rental copy will either write on these pages and create a problem for the next renter, or worse, simply photocopy pages and turn in the copies. Besides violating copyright law, this denies both author and publisher their rightful earnings. Unlucky renters who receive a defaced volume can ask for an exchange, but the wait for a replacement can result in days or weeks of missed work.

Scope, Audience, Limitations, and Curricular Possibilities

Clearly stated on the opening page and in the chapter contents, the essential focus of HF is eighteenth- and nineteenth-century European art music for an audience of undergraduate music majors. The materials do include limited excursions into other music, such as the blues, for example, which appears in the chapter on variations. Thus, for some, its scope will be too narrow and dated, particularly in situations where the topic of form may occupy only a tragically small corner of one's curriculum. To be sure, there is much to be learned from what is here. But almost certainly there will be both the desire and the need for something more—especially works of all kinds from the last century or so, and especially more of those of women and people of color, as well as popular and folk examples from around the world. For many potential adopters, this deficit may prove insurmountable.

There are several ways in which HF might be deployed in one's curriculum. The most obvious is its stated purpose—as the materials for a one-term form class that focuses on common-practice European art music. If one's musicianship text does not include adequate materials for teaching form, HF could also be distributed into a three- or four-semester undergraduate curriculum, matching, for example, the initial chapters on phrase and phrase structure with a first semester course, and so on. The materials would be useful as part of a graduate review class or as individual-study preparation for graduate-school placement or qualifying examinations. For those teachers who cannot offer a class in form, the materials are friendly enough they could be used for independent study by students who meet the qualifications typical of those required for such an enrollment. AFHF can serve as a stand-alone anthology of common-practice works.

Authorial Voice

An outstanding feature of the book is its authorial voice. Every page speaks with a care and kindness that is tempered by the experience of a seasoned professional. There is never an instance where the reader feels cowed into thinking “this and only this is the way it must be done.” Rather, the author acknowledges differences in the points of view among fellow professionals and explains them in a welcoming manner, such as in the discussions surrounding cadences in Chapter 1. In fact, the author leans into William Caplin's gestural approach. In many ways this may be viewed as

advantageous, but many teachers will no doubt insist on more rigor and desire clearer guidance as to how one determines the bounds of a musical phrase.

Organization

The contents of Chapters 1–8 are Phrases and Cadences; Phrase Organization; One Part, Binary, and Ternary Forms; Sonata Forms; Variation Forms; Imitative Forms; Concerto Forms; and Rondo Forms, respectively. Appendices I–IV are Formal Models; Making a Phrase Diagram; Reading a Transposition Score; and Answers to Self-Tests, respectively. In order to provide a general sense of how chapters are organized, I will examine Chapter 6, Imitative Forms, in some detail.

Each chapter begins with an introduction. Here the introduction immediately confronts the assertion in the chapter title that canons, inventions, and fugues are forms, noting that some musicians consider these to be procedural. The paragraph concludes by stating that “if one considers musical form a way of understanding large-scale repetition, variation, and development in a work, then the term ‘form’ still seems appropriate.” There is a brief discussion of canon. It begins with the simple children’s rounds “Row, Row, Row Your Boat” and “Frère Jacques” before assuring students that this type of work can also be sublime, as realized in Bach’s *Goldberg Variations*. A brief overview of Bach’s Invention No. 1 illustrates important terms and techniques. As is typical in each chapter, the work appears in AFHF and on a recording. A highlighted in-class activity directs students to listen to the work and bracket every instance of the motive’s head and tail before comparing their work with classmates.

Before homework is assigned, Santa provides five tips for analyzing harmonic progressions in polyphonic music. Some suggestions guide students to examine the rhythm, which epitomizes the practicality of the advice. The combination of the in-class activity and the tips will help students complete Homework 1, the analysis of Bach’s Invention No. 13.

The next chapter segment deals with fugue and follows a structure similar to that for invention. After a brief explanation of exposition and episode there is discussion of the nature of subject and answer as well as the potential for a countersubject. The author provides listening strategies (“Hearing Fugues”) that ask musicians to shift their focus to foreground the subject and brief suggestions for how one might rehearse fugues. The in-class activity for fugue mirrors that for invention, and students are directed to AFHF for Bach’s Fugue in F major? from the *Well-Tempered Clavier, Book I*. The homework assignment asks students to label the score with the relevant terms.

A brief discussion of the difficulties in analyzing fugue precedes a mix of other related topics (e.g., fugato and non-episodic fugues) interspersed among nine additional homework assignments. The first six are based on the overture to Handel's *Messiah*, Hindemith's B-flat Fugue from *Ludus Tonalis*, Pachelbel's *Canon in D*, Bach's Fugue in G minor from the *WTC, Book I*, and the fugato from Beethoven's Symphony No. 7, respectively. Assignments 9–10 implore students to “choose your own” fugue from common-practice literature. Assignment 11 is a 1–2-page creative essay that invites the comparison of fugue structure to that of a dialog from a film or play.

The chapter concludes with a self-test, the answers for which appear in Appendix IV. There is a chapter review, which consists of a 12-point summary of important concepts. Conscientious students will likely keep copies of these chapter reviews together as a study guide for a final examination or to help prepare for graduate examinations. The chapter structure is logical and thoughtful and again, the authorial voice is inviting. Experienced teachers will likely view each chapter as the outline for a series of lesson plans. As is customary, students must rely on a teacher's experience and guidance in addition to what the book provides. It is possible to use what is here with great success. That said, there are opportunities to build on the book's strengths that could make the approach more interactive. Permit me to illustrate the idea by way of analogy.

To this day, much music pedagogy remains analogous to discussing photographs: This is a car. These are its wheels, doors, and windows. A concealed engine powers it. Cars are controlled by a person who sits inside, steers it with a wheel, and uses their feet to make it stop and go. Teachers might play a video of a moving car or even offer learners a ride in the back seat. But is this approach enough to satisfy the curiosity—or more important—the desire of a teenager? Wouldn't most teens prefer the view from behind the steering wheel in order to drive it and their friends wherever they wish to go? As an in-class activity, couldn't students test drive a round by performing it, then look under the hood of its intervallic and harmonic structure to understand what makes it go? For homework, couldn't they build their own little go-carts, imitating imitation, as it were? During the next class period, couldn't they take these for a spin, drive them “a-round” so to speak?

With a form textbook in hand, won't students wonder whether canon, invention, and fugue are alive and well today? Won't they wonder whether works like these appear in the music of their lifetime? Would they know that Ingrid Michaelson's 2008 hit, “The Chain,” features lovely canonic imitation that is easily discernible by ear? And, of course, teachers can help make such connections. But what can our textbooks

do in this regard? Given HF's stated pedagogical scope, these may not be fair questions. However, it is useful to remind ourselves that what we frame can matter as much as how we frame it.

Report on the 2023 Workshops in Music Theory Pedagogy at the University of British Columbia

By JASON YIN HEI LEE (*McGill University*)
and KAYLEE THERIEAU (*University of British Columbia*)



Introduction

The sixth meeting of the Workshops in Music Theory Pedagogy convened from Monday, June 26 through Friday, June 30, 2023, at the University of British Columbia, Vancouver. This occasion marked the first venue change for the workshops, which had been hosted by Gary Karpinski at the University of Massachusetts Amherst since the inaugural meeting in 2007.

This year, almost fifty participants from North America and beyond joined together at the workshops, the first meeting since 2019. As noted in the opening remarks by Gary Karpinski and Leigh VanHandel, the Co-Directors of the workshops, this year's meeting drew a diverse pool of attendees, continuing the trend set by the previous meetings. The meeting gathered graduate students at both master's and doctoral levels, faculties from a wide variety of university programs, and music instructors outside the higher education system. Not all attendees were music theorists by profession; many were music educators trained primarily in other sub-disciplines such as composition and performance. Nonetheless, they shared an interest in the latest research and techniques in music theory pedagogy and the goal of teaching music theory and aural skills more effectively. This make-up of participants at the workshops highlights the need for music theory pedagogy scholarship to invite input and collaboration from outside the music theory profession.

Over the five days of the workshops, Michael Callahan (Michigan State University), Nancy Rogers (Florida State University), Jena Root (Brown University), and Jennifer Snodgrass (Lipscomb University) joined the co-directors to deliver five sessions per day on a wide range of topics related to music theory pedagogy. In addition to the six speakers, Dylan Robinson (University of British Columbia) participated as a discussant in a Q & A session on the topics of inclusion, diversity, and decolonization. Topics of the twenty-five sessions surround four general themes: (1) reconsidering music-theoretical frameworks, (2) teaching and learning activities for the classroom and beyond, (3) pedagogical principles, and (4) curriculum reform and rebranding.

Reconsidering music-theoretical frameworks

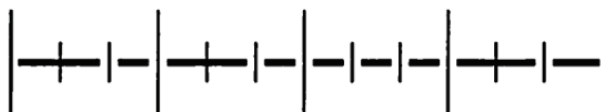
As Root remarked at the beginning of her presentation on the first day, the themes of the workshops show that the field of music theory pedagogy is shifting its emphasis from writing- or notation-based theory to aural skills. With this focus in mind, the speakers offered suggestions on how to reconsider music-theoretical frameworks to facilitate the shift toward listening-based music theory and its pedagogy.

In the first presentation of the workshops, titled “What is Truly Fundamental Aural-Skills Training?”, Karpinski discussed the application of protonotation for both rhythm and pitch training. Designed by Karpinski himself (1990), protonotation is a system of graphic representation that allows users to directly translate their listening experience into written form, while visually preserving the temporal relation between durations (Example 1a). Since protonotation is experience-based rather than notation-based, the graphic representation of music can be flexibly adapted to teach a wide range of rhythm-related topics. For example, as Karpinski suggested, protonotation is useful for teaching the concepts of simple vs. compound meters, as well as more advanced concepts such as hemiola, asymmetrical meters, and hypermeter. The use of protonotation can also extend to pitch elements in aural skills training, as solfège syllables can be added to protonotation to represent the tonal context of the pitches (Example 1b). Most importantly, Karpinski remarked that protonotation should serve as a tool—instead of a goal—for aural skills training. To illustrate this distinction, Karpinski offered an analogy between protonotation and the multiplication table: although students need to spend extra time to familiarize themselves with these tools, this effort is still worthwhile because these tools lay the foundation for further stages of learning. In other words, protonotation is not only useful as an introductory concept, but also as a tool that complements the music theory curriculum through different topics.

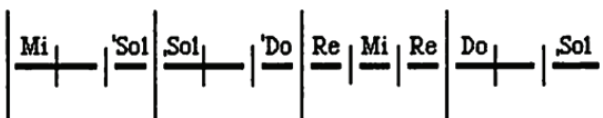
Melody provided for dictation:



(a) Protonotation for rhythm



(b) Protonotation for rhythm plus solfège annotations



Example 1

Examples of protonotation (adapted from Karpinski [1990, Figures 6 & 7])

On the issue of pitch solmization frameworks, Root introduced the concept of pitch-mapping—that is, the mental construction of a tonal network with both absolute and relative solmization systems. Absolute solmization systems are those that remain invariant according to tonal context, such as fixed-do solfège and letter names. On the other hand, relative solmization are key-dependent systems that offer information about the tonal hierarchy, such as movable-do solfège and scale degree numbers.¹ Root argued that such a tonal network would help students situate themselves in a key from any given note, by integrating the absolute and relative solmization systems. As a result, students would be able to understand the abstract relationship of pitches within a tonal context. In addition, they could also acquire a holistic “conceptual knowledge” that would be applicable to a wide range of tasks (VanHandel 2012), ranging from simpler ones such as spelling scales and generating the circle of fifths, to more advanced ones such as sight singing, dictation, and analysis.

In addition to chord notation systems commonly used in today’s music theory classroom, such as Roman Numerals and jazz chord symbols, Snodgrass advocated

¹ Root referred to Karpinski (2021a) for a more detailed discussion of the rationale behind the choice of solmization systems. Root preferred the combination of the use of letter names and movable-do solfège.

for the use of the Nashville Number System (NNS) as a viable alternative for chord notation. The NNS is a notation system developed by commercial musicians in Nashville, TN in which chords are represented by numbers corresponding to each step of the major scale—i.e., the tonic chord is given the number 1, the supertonic is 2, and so on.² As Snodgrass demonstrated, the NNS can be a valuable addition to the music theory classroom as it concisely shows multiple elements of musical structure, including key, form, harmonic rhythm, and meter. It can also be a guide for improvisation activities (to be further discussed below) as it allows room for students to improvise on a given musical blueprint. More importantly, by introducing this notation system originating from Music Row, instructors can tear down the walls between classical and commercial musicians in their classrooms and facilitate a more inclusive environment that allows both types of students to thrive.

Teaching and learning activities for the classroom and beyond

To supplement their recommendations about music-theoretical concepts, speakers at the workshops offered concrete suggestions regarding teaching and learning activities that can be implemented both in and outside the music theory classroom and illustrated the effectiveness of the activities through demonstrating them with the participants. A pedagogical principle that underlies many of the suggested activities is the idea of scaffolding, whereby teaching and learning activities build towards more challenging skills through more easily reachable ones, with careful consideration regarding the scope and difficulty involved. In addition, a recurring reminder from the speakers was that learning goals for all activities should be explicitly identified and made known to the students. Accordingly, the activities should be kept succinct, with all tasks and instructions directed toward their scaffolded goals.

Teaching and learning activities proposed by the speakers cover both rhythm- and pitch-based aural skills training. Callahan described a series of activities for rhythm training, in which the tasks are scaffolded from the concrete to the abstract: In the elementary activities, the pulse and/or its subdivisions are always sounded, either in the musical example or by the student (e.g., by clapping). As students progress, the pulses are no longer sounded, albeit still explicit through embodiment (e.g., with students conducting by hand or finger-tapping silently). The next level of scaffolding would render the pulse totally implicit, and students would internalize and audiate

2 McMakin and Snodgrass (2021) gives the background of the NNS and discusses its importance in both the commercial and the academic world, whereas de Clercq (2019) offers a more comprehensive account of notations used in the NNS.

the pulse and its subdivisions while performing complex rhythms. This scaffolding trajectory from the concrete to the abstract trains students to reduce their reliance on a sounded pulse and contextualize complex rhythms within an abstract and internalized metric grid, thus building up their rhythmic proficiency.

Moving onto the pitch-based realm for aural skills training, Callahan offered ideas for teaching and learning activities both in and outside the classroom. These activities require students' active participation through performance (singing and/or playing). In the classroom, a basic exercise comprises singing a melody over a tonic drone. By drawing students' attention to harmonic intervals between the moving melody and the tonic drone, this exercise can help students establish the sense of tonality and prepare them for more complex sight singing tasks.³ After students are able to sight-sing with a sounding tonal referent, Callahan's scaffolding strategy would require students to sight-sing in conditions where the sense of tonic has to be internalized and audiated. For example, students would sight-sing while playing a bass line on a pitched instrument or tapping a different rhythm. Through these more complicated tasks, students can learn to handle an independent melodic contour and rhythm in sight singing. Additionally, for institutions with a piano lab, Callahan described various activities that allow students to explore various concepts, such as intervals, scales, and chord progressions, at the piano. By incorporating a performance element in teaching music theory, instructors can encourage students to engage with the materials through listening, which constitutes an essential part of understanding the music.

Beyond the classroom, Callahan argued that music theory and aural skills assignments should also involve a performance component, which students fulfill outside the classroom. As suggested by Callahan, one common reason why students struggle in music theory courses is that they do not engage with the music through listening. To rectify this issue, Callahan requires that when his students submit written assignments, they should also submit a recording of them playing their music on an instrument. This strategy not only encourages students to proofread their work aurally but also trains their musicianship with respect to both sound and notation. For multi-part music, Callahan encouraged students—especially those with limited keyboard skills—to use free online software (such as those used for creating virtual choirs: <https://easyvirtualchoir.com/>) to overdub individual voices in the texture

3 Callahan drew a parallel between this “sing with a drone” exercise with other sight singing methods that foreground the importance of a tonal context, such as the Dalcroze approach (Ristow, Thomsen, and Urista 2014) and the Jersild approach (Rogers 1996).

after recording themselves playing each voice separately. The practice of overdubbing offers the additional advantage of cultivating a voice-based—instead of chordal or “vertical”—understanding of polyphonic texture. Nonetheless, as Callahan admitted, technology could pose obstacles to including a recording component in assignments. Consequently, in such assignments, the quality of the recording should not be evaluated; only its completion should be required, and instructors should provide sufficient technical guidelines beforehand.

Both Rogers and Root introduced improvisation and composition exercises as an accessible and effective option for class activities. These exercises are versatile as the amount of prerequisite knowledge required can be minimal. To Rogers, students can start improvising in the early stage of learning for various goals, such as familiarizing themselves with a (pitch or rhythm) solmization system. In simple improvisation exercises, for example, students can work in pairs to construct four-bar phrases by taking turns improvising a one-measure pitch or rhythmic pattern with a solmization system. In addition to practicing their solfège, this task can also generate a large amount of material for meta-analysis. That is, students can learn about stylistic elements observed in their improvisations, such as repetition, imitation, cadence, or even more advanced concepts like sentence and period constructions. Similarly, Root suggested that improvisation exercises can be integrated into classroom activities almost any time. As long as students at least have some grasp of rhythm, they can start improvising and composing, without having to include pitch elements. To prevent the idea of unstructured improvisation from intimidating students, Root suggested that students could base their compositions on a given template while trying out different possibilities. For example, students can take any familiar tune (e.g., the carol “Silent Night” as in her presentation) as a starting point, from which they could alter certain elements (e.g., pitches) while keeping some others (e.g., rhythm) invariant. The product of this guided recomposition exercise could then be used for various analytic demonstrations, such as comparing the intervals and motifs in the original and recomposed versions. Alternatively, the instructor could also set specific prompts regarding intervallic and motivic contents in the recomposition and use this exercise for interval training. In sum, while having minimal prerequisites, improvisation and composition activities can be used to achieve a wide range of learning goals and build students’ competence in multiple areas.

Harmonic and melodic dictation is another teaching and learning activity that was discussed by speakers at the workshops. Acknowledging the difficulty of harmonic dictation for some students, Rogers proposed several “on-ramp” exercises through

which students can gradually build their ability to perform the task. To Rogers, the key to successful harmonic dictation boils down to the ability to aurally extract one voice from a thicker texture. Accordingly, she suggested that instructors could start by giving students a two-voice polyphony and asking them to dictate each part's rhythm (but not the pitches). This introductory two-voice rhythmic dictation exercise could train students' ability to separate multiple voices and compartmentalize the musical information, without the cognitive burden of pitch-finding. Moreover, Rogers offered solutions to the common problem that, in harmonic dictations, students simply guess the chords from the outer voices instead of actually recognizing the harmonies (Stevens 2016). She advocated a play-and-pause approach, with which she would pause on a certain chord in the progression and ask students to answer contextual questions about the chord, depending on the students' level and the inventory of concepts already introduced. For example, at a more introductory level, students should be able to tell the harmonic function of the chord in question. For more advanced students, the identification could relate to chromaticism and tonicization. By breaking down the task of harmonic dictation into mini tasks related to specific concepts in addition to Roman Numerals per se, this approach could help students listen in a more holistic way and maximize the effectiveness of harmonic dictation.

As important as the content and approach to dictation is how instructors should grade students' work and provide feedback. Noting that only one-fifth of schools have a standard grading system for dictations, Karpinski guided participants through his grading process first by identifying different kinds of errors that can happen in dictation: pitch errors, rhythm errors, notational issues (e.g., issues with stems and beams), and what Karpinski called "global errors" that affect the entire dictation, such as wrong key signatures and clefs. By weighting the points allocated to each of the four kinds of errors, instructors can create a clear grading rubric and provide it to the students for their reference. (For instance, there should be a certain number of points assigned to pitch and rhythm respectively, with a certain amount of possible deductions for notational and global errors.) While points can be simply deducted for each pitch error, Karpinski suggested that rhythm errors should be evaluated with respect to the type of conceptual error. For example, if a student consistently mixes up quarter and eighth notes, that should amount to one conceptual error in the rhythmic aspect. The evaluation of notational details can vary according to the class's level (e.g., more important for elementary courses, but less so for more advanced ones). Given the far-reaching effect of global errors on a dictation, instructors should only take points away once for each of those errors and grade the student's work within the

context of the error, such that the rest of the dictation can be evaluated more fairly and meaningfully.

In addition to addressing the assessment and evaluation of students' dictation, Karpinski argued that it is also important for instructors to diagnose the source of students' errors in dictation, such that solutions for improvement can be offered. Expanding on his discussion in *The Routledge Companion to Aural Skills Pedagogy* (2021b), Karpinski reminded participants at the workshops that students' unsatisfactory performance in dictation might not be due to a lack of musical abilities. On the contrary, deficiency in attention could be a reason for unsuccessful dictation. Therefore, before doubting students' musical understanding and proficiency in musical notation, instructors should make sure students can complete the dictation work in an environment that is free of distraction. In addition to focused attention, short-term memory is another non-music-specific skill that is essential for successful dictation. Quoting George Miller's (1956) seminal study on mental information processing, Karpinski suggested that dictation errors are often caused by misremembering, which is unsurprising given the limited capacity of short-term memory. Therefore, instructors should be mindful of the length of musical examples given for dictation or break a longer phrase into sections to allow time for students to process the information without being overloaded. Of course, dictation errors can also come from issues with musical understanding or proficiency with notation. In sum, dictation errors can be a result of issues in different phases of the cognitive process. As tempting as it may be, providing more dictation exercises or repeating the dictation materials does not necessarily help. Instead, to find solutions for improving students' dictation performance, instructors need to review students' dictations, observe how they work, and identify the source of the problems.

Extending Karpinski's suggestions of assessing dictation, Snodgrass offered ways to improve the effectiveness of assessment more generally. Commonly used assessment styles such as essays and multiple-choice exams do not necessarily showcase students' strengths and tend to disadvantage students who struggle with the rigidity of traditional testing. Snodgrass outlined many non-traditional options for assessment that still gather necessary information from students. For quick and informal assessments, instructors could create online quizzes and games with the many new and exciting online platforms available. These interactive and real-time assessments allow for formative assessment while being engaging and educational. In addition, there are also online whiteboard programs that allow students to answer discussion questions anonymously, thus encouraging greater participation than open-

ended discussions. Another valuable suggestion for assessments from Snodgrass is what she has dubbed as a “Thury,” or a “Theory Jury.” A “Thury” is essentially an oral alternative to writing an essay or short answers: students schedule one-on-one meetings with the instructor to discuss a certain topic, and the instructor could give immediate feedback and understand students’ misconceptions more easily. In this form of assessment, students are more likely to be thorough in answering questions. Although time-consuming, this method allows for direct feedback, gives students immediate grades, and accommodates students who may not be able to show their understanding in a traditional test or essay format.

Pedagogical principles

Speakers at the workshops devoted much attention to how music theory instructors can improve their teaching by incorporating principles derived from the latest research in the Scholarship of Teaching and Learning (SoTL). In one of her sessions, Rogers addressed the intimidation that students feel in music theory courses with a demonstration of how to harness students’ unconscious knowledge, thus showing that music theory is more accessible than some may believe. Rogers’s demonstration started by having “students”—i.e., the workshop’s participants—sing the cadential bassline of a chord progression up to the predominant. Rogers played the progression in two slightly altered versions to show how students would unconsciously add an additional dominant chord when the predominant chord falls on a metrically weak beat (Example 2). Rogers attributed this addition to the general preference that cadences should fall on strong beats of a measure. By repeating this exercise and adding the soprano line and inner voices using common voice-leading patterns, students are guided effortlessly to arrive at the cadential 6/4 chord, which can be a tricky concept to introduce to students. Through this demonstration, Rogers showed that it is important to let students approach music theory through listening, instead of fixating on notation. Consequently, seemingly intimidating concepts could be more lucid than students once believed.

Pre-dominant on strong beat

I V⁶ I I⁶ IV V I

Pre-dominant on weak beat

I V⁴ I⁶ IV V⁴⁻⁸ 3 I

Example 2

Rogers's examples of chord progressions for harnessing students' unconscious knowledge and introducing the cadential 6/4.

Building on her discussion in the abovementioned session, Rogers outlined the importance of teaching musical ideas in context. For example, out-of-context interval drills are not nearly as effective as drills in the context of tonal music. Similarly, rhythmic dictation can be much more effective when presented with pitch, as the presence of a melodic contour facilitates students' intuitive listening. Musical context is also important in helping students make the right creative choices. For example, when students are tasked with harmonizing a melody, they often think about every possible chord rather than what is most likely, even though this approach is ineffective and does not help develop their sense of functional harmony. In this case, since students should already have some knowledge of common progressions and cadences, Rogers suggested that the instructor could present questions to guide students to consider the likely harmonies. These questions can prompt students to think about the type of cadence that occurs in the melody and the typical progressions that lead to that type of cadence. Overall, Rogers consolidated previous ideas on how the instructor could harness students' unconscious knowledge and offer musical context to improve the effectiveness of teaching.

VanHandel presented an overview of music and memory based on a study of cognition and mathematics pedagogy. Through this session, VanHandel concluded that an excessive cognitive load could impede students' memory and obstruct their learning. In order to reduce cognitive load on students, instructors should reduce the

amount of intrinsic and extraneous load—that is, the difficulty of the task and the uncontrollable elements that conflict with the task respectively. To reduce intrinsic load, it is important to highlight important information, which can be achieved through proper formatting and presentation of teaching materials, such that students do not have to weed through bulky writing to get to the necessary concepts. Removing extraneous load could be as easy as removing irrelevant information from task instructions, reducing the noise level in the room, and refraining from talking or playing music while students are working. Overall, for instructors, it is important to understand that *how* information is taught is equally as important as *what* is taught.

Echoing VanHandel's discussion on reducing cognitive load for students, Rogers highlighted the importance of using clear language and the danger of using confusing yet similar terminologies in the classroom. The nature of music theory requires students to remember terminologies related to different musical elements. Rogers stressed the importance of correctly remembering, differentiating, and applying these terms for music students. However, as experts of the subject, music theory instructors often forget how similar, and therefore confusing, much of the music theory language can be. For example, while the "root" and the "bass" of a chord could be the same in some contexts, their theoretical identities should not be mistaken. Similarly, the word "seven" can refer to different things, even at the same time, such as the seventh scale degree, the chord built on that scale degree, and the added seventh of a chord. As a result, verbal constructions for concepts like the applied chord vii^{o7}/VII ("seven diminished seventh of seven") can cause students extreme confusion. To avoid this, Rogers suggested instructors remain aware of students' progress in the music theory sequence and avoid introducing new terms before they are properly explained. Repeating new terms with synonyms can also help students place the vocabulary in their minds. Finally, it is important to correct students' misuse of vocabulary, especially in early courses in the sequence, to prevent further misconception.

In the last two days of the workshops, Callahan discussed the application of the Scholarship of Teaching and Learning (SoTL) on music theory pedagogy. Callahan presented various teaching approaches derived from SoTL that help students succeed, including the method of interleaving (Kornell and Bjork 2008; Taylor and Rohrer 2010; Rohrer, Dedrick, and Burgess 2014). Interleaving refers to the practice of presenting related concepts at the same time while alternating between them. Interleaving information has proven to be more helpful for knowledge retention than blocking—that is, introducing concepts one at a time and expecting students to master each concept before moving on to the next one. By learning in an interleaved manner,

students understand the similarities and differences between topics and therefore differentiate between them with increased success. In the music theory classroom, this could look like rotating through composition, harmonization, analysis, listening, and improvisation in the same course, instead of separating them into different courses and levels. However, this method does come with its downsides. Because multiple topics are being introduced at the same time, mastery of all these topics takes longer to achieve. In order to monitor students' progress while being fair with the grading at the same time, in the early part of the term, instructors should give students low-stakes assessments, i.e., informal assessments that are graded mostly by completion. Consequently, at the end of the term, students will have a heavy workload from summative assessments that account for a large portion of the final grade. Nevertheless, as Callahan summarized at the end of his presentation, the takeaway from his experience with SoTL is that music theory pedagogy can, and should, learn from pedagogical findings from other disciplines.

Curriculum reform and rebranding

Responding to the diverse needs of students in today's music theory classroom, speakers at the workshops proposed ways to reform the undergraduate curriculum and rebrand the field. Based on their experience of reforming the curricula at Appalachian State University (App State) and Michigan State University (MSU) respectively, Snodgrass and Callahan described the background and the outcome of the curricular reforms at their institutions. Snodgrass stated the importance of considering the "why" behind the reforms, instead of the "what" and the "how": Why are you teaching this concept? Why are you using that example?—and more controversially—Why do students need to study music theory? For the latter, the answer will depend on the context of the institution and student body. At her former institution of App State, Snodgrass noted that most students are enrolled in the Music Education program, and a survey of alumni found that they felt unprepared for certain aspects of their jobs after graduation. From this, Snodgrass and her colleagues were able to add more relevant courses such as additional choral and band literature classes and remove those that proved to be irrelevant.

After Snodgrass' session on the "why" behind curricular changes at App State, Callahan discussed the "why" of their curricular reform at MSU. The goals at MSU were to represent classical music with a broader set of composer identities, engage meaningfully with music outside of the Eurocentric tradition, allow greater student

participation in class content design, and prioritize creative musicianship over abstract writing. Successfully achieving these aims, the updated curriculum still begins with a core theory sequence, followed by a substantial list of elective theory topics. By narrowing down the core theory sequence and adding more upper-level music theory courses, students can enroll in courses that will be more applicable to their futures as musicians.

Aligning with her overall theme of rebranding music theory and connecting it to the practice of commercial music, Snodgrass illustrated how music theory is applicable beyond academia and used every day in the Nashville commercial music scene. Snodgrass reported the personal experiences of Nashville musicians with music theory and shared their suggestions of knowledge and skills that students need for a career in the industry. In addition to an understanding of harmony and form using the Nashville Number System, these skills include more general musicianship skills, such as a trained ear with the ability to pick up melodies or harmonies spontaneously and the ability to improvise to a given musical framework. These suggestions from commercial musicians indicate that aural skills training in the university classroom—such as the curricular content and learning activities suggested by speakers at the workshops—is not only applicable in an academic setting, but also helpful in preparing students for a career in commercial music. These insights into how music theory is used by practicing commercial musicians offer a new way with which instructors can rebrand music theory to demonstrate its relevance to students' aspirations.

During an interactive Q & A session at the workshops, Dylan Robinson shared his thoughts about how issues of representation and decolonization can change the way music theory is taught in today's classroom. One of the recurring themes in Robinson's work is positionality, which refers to how a person's unique identity and experiences shape their understanding of the world, including musical knowledge (Tetreault 2012). Most workshop participants acknowledged they were unfamiliar with the concept of positionality despite the growing importance of decolonial pedagogy in the field of music theory.⁴ Robinson argued that the generalized listener does not exist; instead, given the diverse composition of students, multiple listening perspectives exist for any piece of music. As a result, in the music theory classroom, it is important to have conversations about each one's different listening experience. Robinson suggested that this exchange of musical perspectives constitutes a novel type of ear-training, through which both students and teachers acquire new ways of listening to music.

⁴ A recent article in the *JMTP* addresses this issue and suggests strategies to decolonize undergraduate music theory curricula (Reid 2022).

As one participant mentioned during the Q & A session with Robinson, while the process of decolonizing the music theory classroom often involves teaching music beyond the Western classical canon (VanHandel 2020; Reid 2022), there is also the fear of misrepresentation as instructors introduce repertoires which they are unfamiliar with. Robinson responded to this concern by making three suggestions. First, before teaching the materials, instructors should situate their knowledge of the repertoire. By reflecting on the partiality of their knowledge, they could then understand how their teaching could consequently be affected. Second, it is important to privilege those who have a holistic knowledge about the musical culture. This can be done by consulting and crediting research conducted by expert practitioners and scholars and studying the broader history, culture, and aesthetics that surround the music. Last, Robinson emphasized the importance of spending substantial time to build a relationship with the community in question and to understand their musical culture.

Conclusion

Overall, this year's workshop has gone above and beyond the call to action by addressing the source of issues in the realm of music theory pedagogy and providing new and updated suggestions moving forward. After many presentations with invaluable practical pedagogical suggestions and advice, one of the last sessions at the workshops addressed a more personal issue that concerns the participants, including students and faculty. Snodgrass shared her reflection on her career path, which might be shared by most music theory instructors: completing graduate studies, succeeding in the academic job market, and eventually landing a tenure-track professorship. But for those who are not sure about the academic career path, what should they do? Snodgrass led the room through a series of self-directed questions for participants to uncover their purposes and missions: Why did I start to do music theory and a teaching-and-research career? What do I want to be known for? What does living well mean for me as a graduate student/faculty member/etc.? While Snodgrass helped participants develop a purpose and mission statement with these questions, our readers could possibly also benefit from reflecting on them. In addition to reconsidering music-theoretical frameworks, designing effective teaching and learning activities, understanding pedagogical principles, and developing a successful curriculum, what matters as much to today's music theory instructors is perhaps finding their purposes and missions, which is probably one of the most important motivations and empowerment for them to become better teachers.

Works Cited

- de Clercq, Trevor. 2019. "The Nashville Number System: A Framework for Teaching Harmony in Popular Music." *Journal of Music Theory Pedagogy* 33: 3–28.
- Karpinski, Gary S. 1990. "A Model for Music Perception and Its Implication in Melodic Dictation." *Journal of Music Theory Pedagogy* 4: 191–229.
- . 2021a. "A Cognitive Basis for Choosing a Solmization System." *Music Theory Online* 27(2). <https://mtosmt.org/issues/mto.21.27.2/mto.21.27.2.karpinski.html>.
- . 2021b. "The Seeing Ear: Toward a Rationale for Dictation." In *The Routledge Companion to Aural Skills Pedagogy*, edited by Kent Cleland and Paul Fleet, 37–46. New York: Routledge.
- Kornell, Nate, and Robert A. Bjork. (2008). "Learning Concepts and Categories: Is Spacing the 'Enemy of Induction'?" *Psychological Science* 19, no. 6: 585–92.
- McMakin, Patrick, and Jennifer Snodgrass. 2021. "A = 440: Musicianship on Music Row." In *The Oxford Handbook of Public Music Theory*, edited by J. Daniel Jenkins. Oxford University Press <https://doi.org/10.1093/oxfordhb/9780197551554.013.13>.
- Miller, George A. 1956. "The Magical Number Seven, Plus or Minus Two: Some Limits on our Capacity for Processing Information." *Psychological Review* 63, no. 2: 81–97.
- Reid, Molly. 2022. "Nonwestern Music and Decolonial Pedagogy in the Music Theory Classroom." *Journal of Music Theory Pedagogy* 36: 103–19.
- Ristow, Gregory, Kathy Thomsen, and Diane Urista. 2014. "Dalcroze's Approach to Solfège and Ear Training for the Undergraduate Aural Skills Curriculum." *Journal of Music Theory Pedagogy* 28: 121–40.
- Rogers, Michael. 1996. "The Jersild Approach: A Sightsinging Method from Denmark." *College Music Symposium* 36: 149–61.
- Rohrer, Doug, Robert F. Dedrick, and Kaleena Burgess. 2014. "The Benefit of Interleaved Mathematics Practice is Not Limited to Superficially Similar Kinds of Problems." *Psychonomic Bulletin & Review* 21: 1323–30.
- Stevens, Daniel. 2016. "Symphonic Hearing: Mastering Harmonic Dictation Using the Do/Ti Test." *Journal of Music Theory Pedagogy* 30: 111–76.
- Taylor, Kelli, and Doug Rohrer. 2010. "The Effects of Interleaved Practice." *Applied Cognitive Psychology* 24, no. 6: 837–48.
- Tetreault, Mary K. Thompson. 2012. "Positionality and Knowledge Construction." In *Encyclopedia of Diversity in Education*, edited by James A. Banks. Thousand Oaks: SAGE Publications.
- VanHandel, Leigh. 2012. "What can Music Theory Pedagogy Learn from Mathematics Pedagogy?" *Journal of Music Theory Pedagogy* 26: 191–213.
- . 2020. Preface to *The Routledge Companion to Music Theory Pedagogy*, xii–xiii. Edited by Leigh VanHandel. New York and Oxon: Routledge.

