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Contents

Volume 34

<i>FROM THE EDITOR</i>		1
<i>ARTICLES</i>		
Graduate Instructor Peer Observation in Music Theory Pedagogy	ALYSSA BARNA AND SAM REENAN	3
AP Music Theory and College: Coordinating the Curriculum	JENNIFER BEAVERS AND STACEY DAVIS	33
“Notehead Shorthand”: A Rhythmic Shorthand Method for Melodic Dictation Exercises	JENINE L. BROWN	73
Mamlock on Day One: Strategies for Incorporating Recent Music Into the Early Undergraduate Music Theory Curriculum	NEAL P. ENDICOTT	109
<i>The Rest is Noise</i> : A Historically Integrated Approach to Post-Tonal Pedagogy	AMY FLEMING AND AARON GRANT	147
Post-Tonal Postcards: Communicating Analysis and Reflection Through Prose Writing	ANGELA RIPLEY	199
<i>RESOURCES</i>		
G. P. Telemann’s Exercises in Singing, Keyboard-Playing, and Thoroughbass	DEREK REMEŠ	
Syllabus for Online Version of Graduate Level Music Theory Pedagogy	JENNIFER SNODGRASS	
A-R Editions’s Online Music Anthology	JAMES ZYCHOWICZ	
<i>REVIEWS</i>		
Review of <i>Basic Post-Tonal Theory and Analysis</i> , by Philip Lambert, and <i>Introduction to Post-Tonal Theory</i> by Joseph N. Straus	OWEN BELCHER	227
Review of <i>The Musical Language of Rock</i> by David Temperley	CHRISTINE BOONE	243
Review of <i>Tonal Analysis: A Schenkerian Perspective</i> by David Damschroder, and <i>Music Analysis: An Introduction to Schenkerian Theory and Practice</i> by Eric Wen	JOHN S. REEF	255
<i>CONTRIBUTORS</i>		285

From the Editor

We are pleased to offer six articles, three substantial reviews, and three posted resources in Volume 34 of *Journal of Music Theory Pedagogy*. Ranging from written to aural theory, traditional repertoire and methodology to canon expansion, pre-collegiate AP study to graduate seminars, practical individual lesson plans to broader course-planning and curricular considerations, there is material here for instructors across the spectrum of curricular and topical interest in the expanding field of music theory.

We welcome David Thurmaier (University of Missouri Kansas City) and Rebecca Jemian (University of Louisville) as incoming editors of the Journal. My sincere thanks go to our Production Manager Christopher Winders for his design and layout expertise, to Jennifer Snodgrass, David Thurmaier, and Melissa Hoag for their editorial assistance with this volume, Steve Laitz and Jennifer Snodgrass for their expert work on behalf of the Stwolinski Center, and to David Marvel for management of the website. It has been a great pleasure over the last four years working both with these wonderful professionals, and with the authors of the articles, reviews, and resources published during my tenure as editor.

The new editorial team is currently accepting material for Volume 35 (2021); instructions for contributors can be found at our website, <http://jmt.pappstate.edu>. Finally, I draw your attention to the upcoming Third Pedagogy into Practice Conference, to be held at Michigan State University, June 2-4, 2022. A call for papers and other information will be forthcoming at <https://jmt.pappstate.edu/conference>.

— William Marvin, EDITOR (Eastman School of Music)

Graduate Instructor Peer Observation in Music Theory Pedagogy

ALYSSA BARNA and SAM REENAN

Peer observation involves instructors attending each other's classes for the primary purposes of reflection and growth. Among faculty, observation is often limited to the context of tenure and promotion. The experience of observation is even more rare between graduate instructors, who very often do not engage with their peers in a community-focused manner. This article presents a three-phase study that gathers both quantitative and qualitative data on peer observation in the field of music theory. We collected data from both faculty and graduate instructors, and a peer observation system for graduate instructors was implemented concurrently. The article concludes with results and suggestions for development and implementation of a peer observation program at your institution, highlighting the reciprocal benefits of the observational experience for music theory instructors.



In many colleges and universities, graduate students provide essential services to the school through instruction and teaching assistance. In the field of music theory, the task of undergraduate (and less frequently, graduate) instruction can depend significantly on the work of graduate instructors. With this responsibility in mind, we sought to examine the dynamics of classrooms taught by graduate instructors. In particular, we wanted to explore several questions: How are graduate instructors being trained for the task? Is the training sufficient, and do new teachers leave their programs with ample confidence in the classroom? How often do graduate instructors or teaching assistants observe their peers teaching in the classroom? For that matter, how often do faculty observe their colleagues? And more generally, what should teacher training look like in twenty-first-century music theory programs? This article provides a first scholarly account of graduate-instructor peer observation in music-theory pedagogy. Before this study, any evidence of peer observation in the field of music theory has been anecdotal at best. Here, we study peer observation through surveys and interviews across the field of music theory as well as our own experience, and we suggest some steps towards developing best practices in teaching, especially amongst graduate instructors in music theory.

We are grateful for the feedback provided from the *JMTP* editorial team and the three anonymous reviewers of this article. We also thank Elizabeth West Marvin and Matt Bribitzer-Stull for their helpful suggestions on earlier drafts of this work. The cornerstone of this article is the wealth of information gleaned from discussions with our faculty and graduate instructor interviewees; we deeply appreciate their time and effort.

We define “peer observation” as *an established, voluntary procedure in which graduate instructors or faculty attend each other’s classes for the primary purposes of reflection and growth*. In the context of our study, this reciprocal definition of observation is essential—other forms of pedagogical development (such as mandated observation in a pedagogy course, faculty supervision, or mentoring in the context of promotion cases) create power dynamics that allow for certain types of discussions to flourish while impeding others. While we acknowledge the crucial role of mentoring in teacher training, we view peer observation as a vital component in its own right, because it creates a space for discussion free from the possibility of evaluation. Peer observation, by definition, takes place only among members of the same rank: graduate instructors observing other graduate instructors, or faculty members observing other faculty members. We advocate for peer observation at every level, from undergraduate tutors to senior faculty, as an invaluable tool for continuous pedagogical growth. Here, we provide a three-pronged approach to exploring graduate instructor peer observation in music theory. First, we collected data from across the field of music theory through a ten-question survey disseminated throughout the field. Second, we engaged individuals in semi-structured interviews to learn more about peer observation programs in their various forms. Concurrently, we piloted a graduate instructor peer-observation program at the Eastman School of Music (where we were graduate instructors at the time) to explore firsthand the potential benefits and challenges associated with peer observation.

Our study was motivated by several research questions. First, we asked how pedagogy training and observation were currently operating at our institution and other peer institutions, in order to see for ourselves the benefits of reciprocal observations. Second, we sought to define and develop a culture of professional development surrounding classroom teaching. To the end, this project centered around the main goal of fostering collegiality and self-reflective pedagogy. The results of our survey, interviews, and our own collective experiences were clear: peer observation enriches the teacher training experience, promotes teaching as a community endeavor, uncovers creative solutions in day-to-day instruction, and builds confidence in the classroom.

I. Review of the Literature

In order to design a peer-observation program at our institution, we explored the role of observation across multiple disciplines. In seeking literature that covers this topic, however, we were surprised by the lack of attention given to observation of any kind across American scholarship, be it faculty or graduate instructor observation. In the limited publications we did encounter, several themes emerged regarding the role and benefits of observation. The first was concerned with the dynamic of the observer-observee relationship. In “Peer Observation in Higher Education—A Reflective Approach,” Jill Cosh (1998) argues for teachers to observe as a means of reflecting on their own pedagogy, instead of considering observation strictly as a means of assessment of others. Cosh contends that when teachers observe they become more self-aware about their own pedagogy and provide feedback to the observed. She recommends the use of an evaluative form, followed by a discussion between participants after the observation. Some previous scholarship (as well as our own experience) indicated that feedback might be a common cause of consternation among instructors. Sue Shortland addresses the mindset of both the observer and the instructor in relation to feedback and articulates the need for peer observation partners to act as “critical friends,” engaging each other from a position of trust, respect, and mutual gain (2010, 297).

A second common theme concerned the expected outcomes of observation. Deborah Peel’s work “explores the nature of [Peer Observation of Teaching,] which is simultaneously socially constructed as both a developmental tool and a performance measure” (2005, 490). Peel outlines a dichotomy between developmental and judgmental observation.¹ Judgmental observation is documented for performance reviews, annual reports, or tenure and promotion materials. It is from developmental peer observation, however, that a sense of mutual growth and community can arise. For peer observation to be truly developmental, participants must agree to reciprocal

1 David Gosling similarly distinguishes between types of peer observation, referring to what he terms a “management model,” a “development model” and a “peer review model” (2002, 4). For our study, the most pertinent element of this trichotomy concerns the “purpose” of each model. The “management model” is rooted in evaluation and the exercise of power, as its aims include “[i]dentify[ing] underperformance, confirm[ing] probation, appraisal, promotion, quality assurance, assessment.” The “development model” still depends on a notion of mentorship, as observers with “expertise” determine whether instructors “demonstrate competency [and] improve teaching competencies.” Finally, the “peer review” model strives for “engagement in discussion about teaching” as well as “self and mutual reflection” (5). Therefore, we do not adopt the term “development[al]” as defined by Gosling, but instead use Peel’s distinction.

observations; this ensures a sense of collaborative pedagogy and fosters collegiality and community. O’Keefe et al. similarly encourage reciprocity to ensure mutual benefits and an overall collegial atmosphere. Their study, which involved peer partnerships and a certificate program to incentivize participation, saw clear results. Participants “reported increased confidence in teaching, confirmation of good practice, exposure to new ideas, a feeling of institutional support and a greater sense of collegiality,” which led instructors to move beyond concerns about “being the subject of ‘evaluation’ and ‘criticism’ by emphasising existing strengths of collegiality and trust amongst peers” (2009, 1064). In *Making Teaching Community Property* (ed. Hutchings, 1996) several authors also emphasized the reciprocal nature of observation. This source compiles short reports and case studies from diverse institutions and includes ample approaches to pedagogy as a community endeavor, addressing co-teaching, team teaching, peer observation, and collaborative inquiry. Finally, while peer observation can seem disconcerting at first, several studies (Richardson 2000, Sullivan et al. 2012, Denton 2019) have shown that the process of normalizing such community approaches to pedagogy (e.g. through casual teaching observations, pedagogy meet-ups, or college observation weeks) helps to build strong bonds among teachers and confident individual instructors.

Despite the dearth of literature, we see many connections between the themes outlined above, the structure of our study, and the music classroom. Developmental and judgmental terminology, for example, gave us language to describe the feeling of competition that is often present between peers in music departments and conservatories. While competition can spur self-improvement, it can also provoke hostility. We therefore consider it essential to foster developmental observation in order to assuage feelings of criticism and evaluation. Teachers must model the collegial relationships we hope students will cultivate amongst themselves. Shortland’s term “critical friends” invokes a collaborative relationship that feels especially useful in performative situations: whether in a chamber music ensemble or amongst peers in an aural skills classroom, students must trust each other musically and pedagogically with regards to feedback.

The interactive measures that we encountered in our study of the literature ultimately became crucial to our approach to personal, pedagogical growth: the use of a form and a follow-up conversation are central elements of the observation process that we incorporated into Phase 3 of this study. We attempted to address possible apprehensions head on and hoped to begin laying the groundwork for a culture where peer observation would be normalized. With a focus on active self-development,

the observation relationship yields mutual benefits for all instructors involved.² Additionally, Peel's distinction between developmental and judgmental observation was a useful framework for our group discussions of observation among peers at our institution, as well as in semi-structured interviews. The reality is that music theory is a small field, and the strong bonds and community-building emphasized in the literature are essential to the growth of professional relationships amongst teachers of music theory at any level. While the sources discussed above come from much larger academic fields (such as medicine or education research), the sample sizes used in most studies was modest (in the range of 10 to 42), and most followed an approach similar to the three-pronged procedure we outline below.

II. The Study

The present study involved three phases.³ In late fall of 2018, we deployed a survey (Phase 1) for an initial account of the state of the field from the broadest perspective that we could ascertain. The survey was open for two weeks. After several weeks of reviewing the data, we launched Phase 2, a series of semi-structured interviews, in spring 2019. Throughout the 2018–19 academic year, we also developed and implemented a peer observation program at the Eastman School of Music (Phase 3), which we designed with help from the Center for Excellence in Teaching and Learning.

Phase 1 consisted of a ten-question survey shared with the smt-announce listserv and sent directly by email to music theory faculty at numerous institutions across North America. The survey is provided as Appendix 1. A limitation of the study concerns self-selection bias. Although the survey was shared widely, only the most proactive members of the community were likely to respond. By sharing the survey directly with faculty across North America, and asking them to disseminate within their department, we hoped to offset some of the self-selection bias, although we still acknowledge our influence on the population. We intended to reach out to faculty at every institution in North America where we were aware of a graduate program in music theory, although we cannot be sure that we accomplished complete coverage, nor can we be sure that the faculty we contacted shared the survey per our request.

2 Johnathan McCloud provides a summary and synthesis of observational models (including Cosh) in his dissertation "Understanding Peer Observation: A Review and Synthesis of Peer Observation Literature in Higher Education" (2015).

3 All survey and interview materials were approved by the University of Rochester's Research Subjects Review Board (RSRB).

Phase 2 of our study consisted of semi-structured interviews, either in person or over video conference, with faculty and graduate instructors at targeted institutions. Six institutions were selected. The choices were based on the responses to the survey from Phase 1 that indicated the possible presence of a robust system of peer observation at the institution. One faculty member and one graduate instructor from each school were interviewed (in one case each, two graduate instructors and two faculty from the same institution were interviewed).⁴ The interviews centered on a series of guiding questions, shown in Appendix 2, but the conversations were free-wheeling by design, and in many cases the guiding questions were simply a starting point, leading to variable topics of discussion.

Phase 3 of our study involved a concurrent, year-long peer-observation pilot program that we established at our institution. Eight graduate instructors (a focus group of six peers as well as ourselves, the two investigators; two more peers joined in the spring) engaged in reciprocal peer observations, completing observation forms that provided insights into the kinds of feedback peers might provide in a classroom setting. Two types of forms evolved through pilot testing: (i) a general peer observation record, that invites the observer to comment on a wide range of pedagogical focus areas, and (ii) a targeted observation sheet that provides a space for isolating a single area of interest. These forms are provided in Appendix 3 and 4 of this article. We met with the focus group of peer observers periodically to collect impressions on the process, ideas for refinement, and feedback on the program's impact on pedagogy. Crucially, peer observers were strongly encouraged to follow each observation with an informal, in-person conversation with their reciprocal partner.

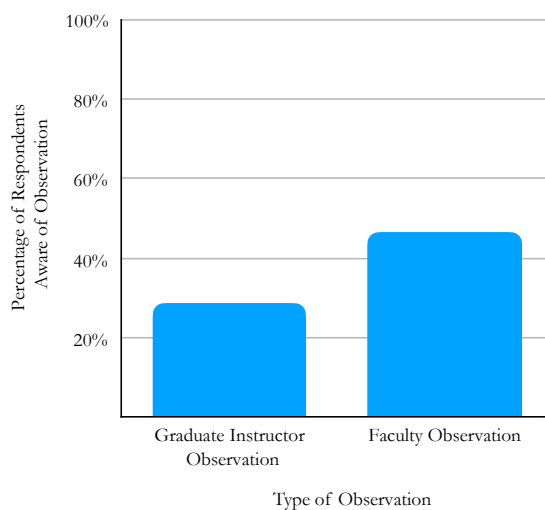
4 The selection process was fairly restrictive. We considered only schools that met at least one of the following criteria: (i) had evidence of a system of peer observation among graduate instructors, (ii) had responses from both graduate students and faculty, or (iii) described a peer-observation system in the open-ended response section.

IIa. Phase 1—Results from the Survey

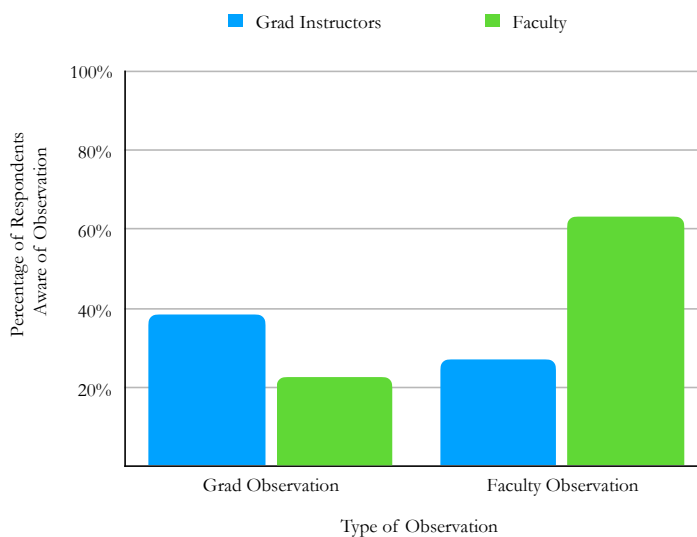
The ten-question survey was conducted via SurveyMonkey. Results are summarized in Example 1. A total of 57 individuals participated in the survey.⁵ In the case of graduate-instructor peer observation (that is, graduate instructors observing other graduate instructors), 16 of the 56 respondents (28.5%) stated that they were aware of a system at their institution. Graduate instructors were more likely to report awareness of such a system than were faculty—38.5% of graduate instructors (10/26) were aware of a system of graduate instructor peer observation, as opposed to 22.6% of faculty (7/31). A potential confound that could not be independently examined concerns the observation of graduate instructors by faculty. It is possible that some respondents claimed to be aware of graduate instructor peer observation at their institution, when in reality they were referring to a type of intergroup mentoring relationship between faculty and graduate instructors, which does not align with our definition of peer observation. As for faculty peer observation, 26 of the 56 respondents (46.4%) reported awareness of a system at their institution, and faculty were far more likely (63.3%, 19/30, as opposed to 26.9%, 7/26) to know of such a system. Programs of faculty peer observation tend to be understood as compulsory (61.8%, 21/34) rather than optional (39.2%, 13/34). A majority of responses (52%, 13/25) suggest that faculty peer observations serve a dual purpose, functioning in the advancement process and as a tool for professional development. Only 8% of respondents (2/25), however, associated faculty observation exclusively with professional development.

5 Some answers were left blank, so although there were 57 total respondents, some n values in the statistics below reflect the total number of respondents for a particular question. Throughout this study, the sample size for survey results as well as the interview pool reflect the fact that relatively few music theory departments include numerous graduate instructors able to directly observe each other. However, the concerns and suggestions of the present study extend to all music theory educators—focusing on graduate instructors reveals the specific fallout of those concerns at the early training stages of music theory pedagogy, a period at which best practices are most easily instilled. Additionally, it is worth noting that some comparable studies of faculty peer observation also employ low sample sizes (for example, O’Keefe *et al.* [2009] collected data from 23 participants).

a) Total responses (n=56) about awareness of graduate instructor and faculty peer observation.

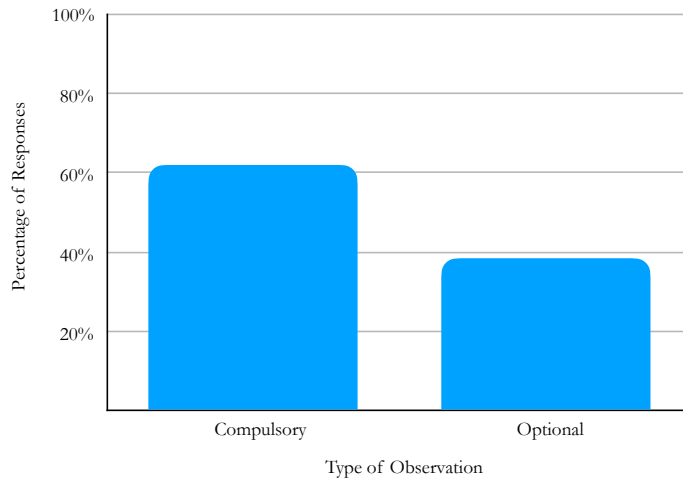


b) Responses about awareness of observation distinguished by rank as graduate instructors (n=26) and faculty (n=30 for responses about graduate observation, n=31 for responses about faculty observation).

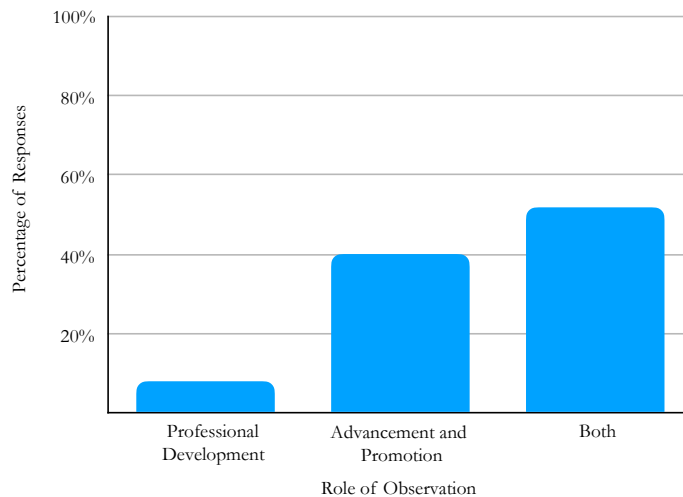


Example 1.
Graduate-instructor peer observation responses.

c) Percentages of observation programs that are compulsory or optional (n=34).

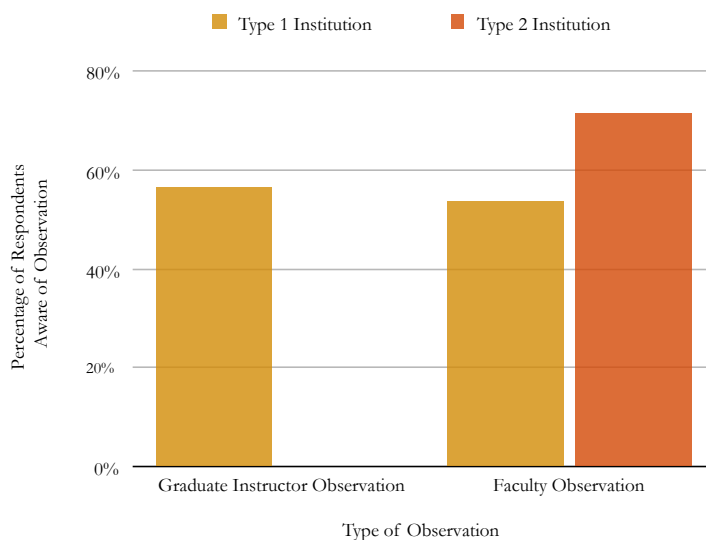


d) Percentages of observation programs that are intended for professional development, advancement and promotion, or both (n=25).



Example 1 (cont'd).
Graduate-instructor peer observation responses.

Graduate-instructor peer observation predominates in what we term “Type 1 institutions,” programs that offer the PhD degree in music theory or that have on average ten or more graduate students. “Type 2 institutions” have a smaller student population and do not offer a PhD. As shown in Example 2, of the 37 distinct institutional responses to the survey, 23 were considered Type 1, of which 13 reported some system of graduate instructor peer observation. No Type 2 program reported awareness of a peer observation program for graduate instructors.⁶ Faculty peer observation is no more prevalent in either type of program, although Type 2 programs skew towards a higher tendency for faculty observation programs (10 of these 14 programs reported some system of faculty peer observation). At only 2 institutions, faculty and graduate instructors were *both* aware of graduate instructor peer observation programs; on the other hand, remarkably, 8 institutions yielded a graduate instructor response indicative of a program of graduate instructor peer observation whereas the faculty response suggested no awareness of that same program.



Example 2.

Prevalence of peer observation at Type 1 (n=21) and Type 2 (n=13) institutions.

⁶ This data point may not be surprising—for many Type 2 programs, the small number of graduate students may preclude a full-blown observation program. Additionally, it is possible that non-PhD pursuing theory instructors may be less motivated to engage in extracurricular theory-pedagogy developmental exercises.

Responses to the open-ended questions on the survey—which allowed participants to describe the programs at their schools—yielded several takeaways. In order to analyze these responses from Questions 7 and 8 of the survey, we first discarded any that failed to accurately address the question at hand.⁷ Following that, we separately coded the qualitative responses for common themes and came to a consensus about those themes, which generally can be summarized in three broad questions:

1. How might one go about peer observation, and what kinds of benefits might result? I.e. Why might one participate in peer observation in the first place?
2. In what ways do power dynamics come into play, and how does peer observation interact with and eschew such issues?
3. What are we to make of contradictory responses within the same program? Is it suggestive of ineffective faculty engagement?

First, several respondents expressed a lack of understanding of how to observe a class or instructor. This included concerns about whether or not to use forms for feedback, whether to observe the class or the instructor, and the like. Further, the tangible benefits that one might accrue from peer observation were unclear to respondents. Second, the survey responses tended to use language that insinuates certain kinds of power dynamics: for example, senior graduate instructors were described as “managing” their junior peers, faculty mentorship programs were described (perhaps by design) as one-directional, and graduate instructor peer observations tended to be mandated by coursework. Such power dynamics often gave way to somewhat transactional language, as when instructors were described as “soliciting” feedback from observers, the former receiving all the benefits while the latter was bestowing wisdom. Third, there were some striking contradictions in the free responses—within the same institution—between graduate instructors and faculty, some presenting opposing views on the presence or role of peer observation. As mentioned above, there were several instances when a graduate instructor would indicate that peer observation was part of their teaching program, while faculty at the same institution would say that no such program exists. As we coded the data, we noticed a wide overlap between our initial inquiries and research questions and the responses from music theory colleagues, particularly in relation to the design of peer observation and its role in teacher training.

⁷ In a handful of cases, respondents misunderstood our definition of “peer observation” and described mentoring or supervisory situations, in which a faculty member would observe a graduate instructor.

IIb. Phase 2—Semi-structured interviews

Methodology

The second phase of our project involved collecting qualitative data through semi-structured interviews with a select population. We chose the population based on responses from the initial survey (criteria for these selections are described below), although we cannot be sure that those we interviewed had previously participated in the survey due to its anonymity. Many of the free responses on the initial survey concerned not only what was occurring at that institution, but also the broader concept of observation. In selecting interview candidates, we prioritized choosing both a faculty member and graduate instructor from a Type 1 institution whenever possible (as our primary interest centered on graduate-instructor peer observation), although we did not receive responses for all requests for interviews. We aimed in particular to learn more about institutions that described particularly innovative or challenging peer observation situations. The six institutions in question represented what might be regarded as the most well renowned music theory programs in the United States; most of the programs have several music theorists on faculty, and in almost all cases have graduate instructors (Ph.D. or Masters) who actively teach music theory (one school only has undergraduates). In total, we interviewed eight graduate instructors and seven faculty members.⁸ Interviews were performed via video conference and, in some circumstances, in person. Interview questions can be found in Appendix 2. The questions arose from responses found in the Phase 1 survey, as well as drawn from literature review. (For example, Kevin Casey and Barbara Stengel provide case studies at their home institutions of team and collaborative teaching, which made us wonder if any of our interviewees have ever had such an opportunity [Hutchings 1996, 64–67, 70–72].) By interviewing multiple people at the same institution, we were able to discover different perspectives on a single program—often from instructors at different stages in their careers (early-stage graduate students, late-stage graduate students, faculty)—and compare and contrast these experiences.

8 At some institutions, we interviewed two faculty and two graduate students. Initially, we ran into some difficulty securing responses to our interview requests. In order to address that, we sent multiple requests to some individuals at the same institution, and in two cases multiple individuals accepted our invitation. We acknowledge that fifteen individuals is a small cross section of the music theory community. However, our focus on the graduate instructor situation—and particularly, on the role of peer observation—necessarily limited the pool of possible interviewees.

Results from Phase 2

Throughout the interviews, faculty generally reported few opportunities for observation with their colleagues. When observation did occur, it overwhelmingly served a judgmental purpose for a tenure and promotion case. Two exceptions arose, however, that show the disparate nature of the culture of faculty observation. In one case, a faculty member reported that observation is not even required for their tenure and promotion cases, nor is it a regular developmental activity. In a different case, a faculty member discussed how observation was an integral aspect of faculty development, and there were several professors and administrators (including the dean) who would periodically visit their classroom.

Among the conclusions we drew from the interviews was that the use of observation documents or forms in developmental or judgmental observation is infrequent. Five of the fifteen interviewees reported using forms at some point, and in all but one case the observation was mandatory under the supervision of a faculty member and required while enrolled in a Music Theory Pedagogy course. The forms that were used varied widely, from one that requests micro-timing every minute of the class, to another that uses columns for “pros” and “cons.” Four of the eight graduate instructors interviewed reported taking a Music Theory Pedagogy course in which observation was required. It should be noted, however, that this type of observation—while useful and productive—does not fit our definition of *peer* observation. Once the faculty instructor of the Pedagogy course requests to see the forms, it disturbs the careful power balance that should be central to peer observation. Further, that faculty member may grade the students or might take action on observed instructors based on the observation project, which invokes judgment instead of creating a purely developmental experience.

We also asked graduate instructors and faculty about resources on campus that may facilitate teaching development, specifically with regards to observation.⁹ Of the eight interviewed, only two graduate instructors reported using the resources provided by centers on their respective campuses, although all but one graduate instructor reported knowledge of the existence of such a resource center. The types of resources most often used by the graduate instructors we interviewed appeared to be funded teaching fellowships that supplemented the typical teaching assistantship. The aforementioned two students were both teaching fellows at their universities, and

⁹ At the University of Rochester, graduate instructors can reach out to a Center for Excellence in Teaching and Learning, although representatives from that program do not offer observation surveys to instructors.

received extra funding to carry out teaching projects, observations, and mentoring of other graduate instructors. One fellow designed a peer mentorship program (similar in scope to our program discussed in Phase 3, but distinct in that more experienced teachers would mentor their less experienced colleagues), while the other fellow was able to observe a variety of peer instructors across the university, outside of their home department. Ultimately, both found it hard to fully establish the culture of observation and mentorship that they sought through their program. One of the most difficult aspects of observation programs appears to be successfully launching a program and building a culture that involves consistent, department-wide observation; this was an issue that we encountered in our own experience as well. The Center for Excellence in Teaching and Learning at the University of Rochester offered a program called “College Observation Week,” in which several faculty members across any disciplines on campus opened their classrooms to observers.¹⁰

Of particular interest to faculty (and sometimes cultivated by a center for teaching on campus) was the idea of team teaching or co-teaching a course. Only two faculty members noted that they had successfully co-taught a course, although all interviewed expressed interest. The biggest barrier for co-teaching is allocation of equitable teaching loads amongst the teachers. One successful co-teacher noted that their colleague taught “for free,” indicating that the course only counted in the load of one of the instructors. Another faculty member negotiated with their administrators to allow both co-teachers to receive credit towards their teaching loads, provided that they still permitted the combined enrollment of their normal courses (e.g., if both teachers typically taught solo courses capped at 20, their co-taught course would need to be capped at 40). One interviewee stated that they were excited about the idea of teaching interdisciplinary courses with colleagues outside of music, but once “the red tape hits,” the bureaucracy of the situation initiates a sharp decline in the potential and perseverance of the faculty to make the collaborative course run.

Returning to the notion of self-reflection and awareness, throughout the interviews we continually reflected on our own experiences with creating and sustaining the peer observation program at our institution. While our interest in each instructor and their program was genuine in all cases, we also sought out small details

10 As a music instructor, the experience of observing paleontology classes was a remarkable learning experience and proved first-hand that cross-disciplinary pedagogies engage with many of the same issues. One instructor, in discussing theories of evolution, asked questions that could easily be adapted for the music theory classroom: the tangled branches of an evolutionary chart reminded me [Alyssa] of the evolution of musical style and definitions of genre. Pedagogically, it was interesting to see similar strategies used in the science classroom to cultivate thoughtful and active discussion.

we could harvest and implement into our existing program. Therefore, not only were the processes of observation reflective (as described in Cosh 1998), the *discussions* of observation amongst instructors encouraged self-awareness and development. A primary hindrance in achieving reciprocity and self-awareness in observation is the presence of implicit power dynamics among peers. Despite all best efforts to mitigate judgmental feelings, many graduate instructors suffer from insecurities and often feel there is a hierarchy amongst their graduate-student colleagues. The same could be said for junior faculty and their mentors: although they are “peers” on paper, the mentorship role can take on latent undertones of judgment when tenure and promotion are on the line. Several graduate instructor interviewees mentioned specific cases of this discomfort: a recurring instance involved a peer (typically a graduate instructor in the later stages of their degree) serving as the course supervisor, with teaching assistants working under them. The power dynamics become explicit when a faculty member observes a graduate instructor, which can exacerbate the potential feelings of anxiety; one graduate instructor expressed this sentiment, stating that it became especially “difficult to be observed by [a] faculty member” when the observer was a leading expert in pedagogy.

Overall, the fifteen people that we interviewed generally expressed enthusiasm at the idea of developmental peer observation. While many have not attempted to implement such a system, those that had tried noted difficulty making significant changes in the culture of an existing academic program, whether as a graduate instructor or faculty member. For example, in academic research institutions that prioritize the rigor and quantity of music-theory research over pedagogy and teaching, the desire to implement an observation program may take a backseat to other research endeavors. Ph.D. programs incorporate mandatory coursework and maintain high expectations for research output, but many fail to offer structured pedagogy training or observation programs beyond a single first-year seminar. Likewise, tenure files may take into account student evaluations of teaching, and junior faculty are usually offered or required to engage in mentoring, but peer-to-peer observation and discussion would have no formal impact on, or tangible boost to, a tenure portfolio. Because graduate instructors look to their faculty for mentorship on writing and publishing, we recommend that faculty be leaders in observation as well, to foster new pedagogical experiences for their students. Faculty ought to establish a culture of pedagogical development amongst themselves, providing models of peer observation, pedagogical discourse, collaborative teaching, and collegiality.

IIc. Phase 3—Our new peer observation program

Methodology

Prior to Fall 2018, Eastman had no established program of voluntary graduate instructor peer observation. That is not to say that observation never occurred—rather, peer observation was a part of the graduate instructor experience under the aegis of two music theory pedagogy classes and a Masters in Music Theory Pedagogy degree program that included mandatory observations. Additionally, faculty supervising a core course in the theory curriculum would often observe graduate instructors of that course. In Fall 2018, we organized a graduate instructor peer observation group that included six graduate instructors; the program grew to eight in number by Spring 2019 and to twelve by Fall 2019. The original stated goal was rather modest: “to develop some sort of system where we can observe each other in the classroom.” Graduate instructors were invited by email and were welcomed to participate as little or as much as they would like. We designed the two forms in Appendices 3 and 4 of this article for organizing their thoughts, and they were only asked to follow two guidelines: first, try not to surprise an instructor (instead, ask permission ahead of time to attend a class); second, strive for reciprocity (“you attend my class, I’ll attend yours”).

We constructed the two feedback forms for distinct approaches to observation. The “Peer Observation Record” is a general, ideally comprehensive account of a classroom observation. This document went through several drafts, as we came to learn that peer observation is as much about absorbing the classroom experience as it is about documenting the effective and ineffective moments in the course of the class. We therefore made sure to leave ample space on the main note-taking sheet (page 2), with guiding focus areas for the observer to draw from on page 3. The record includes several components: (i) a place for the instructor to describe their intended outcomes and their responsibilities in the classroom; (ii) a general feedback box; (iii) ample space for considering focus areas within the realms of preparation, classroom management, and feedback and assessment; (iv) a timeline for recording the pacing of a class; (v) and a space for next steps.¹¹ We suggested that peers meet for an in-person

¹¹ This approach is based in part on the stages and cycles of observation suggested by Bell 2002 (cited in Sullivan et. al 2012): (a) Pre-Observation, (b) Observation, (c) Post-observation Feedback, (d) Reflection. Additionally, the Peer Observation Record form in Appendix 3 is inspired by the procedure outlined by the Leicester Learning Institute, at the University of Leicester, which can be found at the following link: <https://www2.le.ac.uk/offices/lli/developing-learning-and-teaching/enhance/peer-observation-of-teaching-1/peer-observation-of-teaching-process>.

conversation after an observation, where they could share their thoughts and develop any next steps to bring into the classroom. The Peer Observation Record is best used when a partnership is in the beginning stages—when the process of observation is new for either the observer or the instructor, or when the pair of individuals has never before observed each other. Our second document, the “Focused Observation” form, allows an instructor to request that an observer concentrate on a single element of teaching practice in the course of the classroom observation. We were motivated to create this document because, after a few reciprocal observations, we found that instructors often became more comfortable having guest peers in the classroom and would make specific requests (e.g., “Could you focus on whether I give clear and concise feedback to student questions?”). This form is best applied once the reciprocal peer observation relationship is well established and mutual trust and rapport exist.

Results

Analyzing the data collected in Phase 3 is necessarily a qualitative, *ad hoc* enterprise. At its peak, we had eight instructors participating in our program during the 2018–19 academic year study, and the data we collected came in two formats: (i) informal group conversations with the entire cohort; and (ii) anonymized peer observation forms voluntarily submitted to us by the cohort. Our approach to sifting through these qualitative data was primarily theme-based. We separately studied the notes from our group meetings and the documents, coding comments into various themes, and then compared the themes, questions, suggestions, and takeaways that we each drew from the notes from our cohort. The results below represent the most common shared results from that process.

In the course of the 2018–19 academic year, the cohort of graduate instructors logged over forty hours of observations and met as a large group three times for discussion of the observation program. Some important realizations came out of these group discussions. First, it rapidly became clear that—as useful as written feedback can be—far more could be gained from the short, informal, in-person conversations between observer and instructor. While the contents of such dialogues could not be collected or assessed in the present study, evidence from the focus-group discussions suggests that these peer conversations may have had the most immediate positive impact from the observation program at our institution. Second, although our institution has an established reputation for pedagogical training, group discussion often exposed a sense among instructors that more could be done to “teach oneself to teach,” so to speak. Peer observation was, then, a practical lesson in teaching—an

opportunity to learn from simply witnessing a peer manage their classroom. Finally, the issue of reciprocity was addressed, as some participants felt frustrated that they were unable to observe others teaching the same class at the same time. We contend that peer observation offers its best results when understood as a process valuable by its very nature. The specific class that one observes is not nearly as important as the critical, self-reflective, and collegial exercise that peer observation entails.

Observation forms yielded a wealth of information, ideas, and creative solutions to day-to-day classroom experiences. On them, instructors could voice common concerns that reflect broad issues in music theory pedagogy.¹² In order to assess the insights from these forms, we had our peers share their observation forms and then we read through the forms to identify common themes, concerns, and innovative solutions. The results can be summarized in the form of four themes with associated questions:

1. Student Engagement
 - a. Am I getting through to the students?
 - b. Are the students actively attentive?
2. Course Design
 - a. How much flexibility do I have when I have a supervisor providing lesson plans?
3. Classroom Management
 - a. How do I manage a classroom with heterogeneous proficiency levels?
4. Instructor Interactions with Students
 - a. Are my student interactions clear?
 - b. Am I directly addressing the core conceptual concerns of my students?

The most common instructor concern raised in our focus-group discussions relates to student engagement; instructors would often ask their observers to focus on questions like “Are the students listening and/or paying attention?” or “Am I getting through to my students?” Of course, student engagement can take many forms, and the observation program opened up a space for discussing the difference between students who are disengaged or inattentive and those who might be insecure, timid, or simply lacking in comprehension. Another shared concern among graduate instructors focused on course design, especially since this facet of teaching is often controlled by the supervising faculty member. In both written theory and aural musicianship, instructors questioned how well their courses struck a balance between exposition

¹² In fact, in pedagogy more broadly as well, as many of the concerns itemized below also appear in scholarship on, e.g., the medical profession (Siddiqui et al. 2007, Adshead et al. 2006), and in higher education more generally (see especially Richardson 2000).

of theoretical concepts and embodied, experiential learning. Classroom management was another common theme voiced by observers and instructors alike; in particular, observers wrote on several occasions about the challenges of heterogeneous classrooms and the consequences of teaching to a subset of the student body. The issue of managing students with a variety of skill levels appeared throughout many of the observations. While no definitive solutions could be determined, strategies were offered in abundance by our peers, including calling students into the classroom discourse by name, predetermining and providing roles within groups for group work, allowing for students to self or peer teach, and making space for less active students to speak up or submit feedback in non-verbal manners. Finally, instructors commonly wanted observers to provide feedback on their interactions with the students, inquiring whether the responses they offered students were clear, effectively aimed at the core of the problem, and efficiently conveyed. The in-class interactions between students and teachers were often the subject of much discussion, and they certainly reflect issues of student engagement and comprehension as well.

Much of the most fruitful observation-form feedback centered around perceived strengths and possible areas of improvement. Commonly, observers suggested or witnessed activities that invited students to move about the classroom, form and reform groups, use board space, and tackle several modalities at once. Some general course design ideas also cropped up—in particular, a tendency to view the musicianship classroom as an “interactive sandbox,” a space in which to support active learning and respond flexibly to students’ engagement with an exercise, rather than as a lecture, practice, and/or rehearsal model. By focusing on strategy and group singing, observers noted that the musicianship class was able to capitalize on the group dynamics of an instructor-guided environment and eschew an unnecessarily narrow focus on rote skills assessment. Inviting undergraduate students to control aspects of the classroom, from the mundane to the consequential, also appeared in several observation forms. When students were asked to self-assess and self-correct in aural skills—“What would you [the students] improve on or change next time?”—observers reported vibrant in-class conversations and feedback. Additionally, when instructors would welcome students to take part in the decision-making process, to take some command of their learning environment, observers found that students were more comfortable asking questions, raising concerns, and responding directly to instructor feedback. Lastly, a common suggestion from peer observers was to reconsider the space of the classroom, moving chairs into a logical placement and structuring the design of the classroom to facilitate group interaction and student activeness.

III. Conclusions and Recommendations

In the end, there is no “best” model for peer observation. In this study, we learned that most attempts at developmental peer observation enriched the teaching experience, even when they were not part of a larger program of observation and collaboration. Some combination of peer teaching development and mentorship certainly figures into the equation. One can gain much from a relationship based on mentorship, but the model on its own has some drawbacks. It is structured around a one-directional flow of advisorship, which is to say that any professional development on the part of the mentor can only be implicit. Peer observation, on the other hand, is fundamentally about reciprocity. Other models of peer observation that came up in our interviews and experiences include the idea of paired observation: rather than rotating through a larger group of people, two peers might pair off for a semester or a year, developing a longer-term relationship rooted in reciprocal observation, pedagogy discourse, respect, vulnerability, and trust. The point seems to be that spending more hours of our day thinking about, discussing, and watching teaching—no matter whether the class turns out to be a success or a train-wreck—results in confident, well-trained, and professional classroom teachers.

Throughout the three phases of the peer observation study, we hoped to devise a set of “best practices” that could be used by those seeking to implement such a program in their home departments. It became clear, however, that there are many paths to productive observational relationships. We have shared our own practices here and will conclude by offering themes and takeaways as suggestions. In the beginning stages of a peer observation program, we recommend two tenets for faculty members and administrators: spotlight resources and act as role models. Faculty members, whenever possible, should provide access to resources for observation; for example, provide forms for observation or set up a time for the Center for Excellence in Teaching (if available on your campus) to discuss their resources and programs for graduate instructors. Faculty should model the behavior of good observers by observing their faculty peers in a developmental setting, not just for measurement and assessment purposes. Faculty may occasionally encounter difficult discussions about pedagogy with colleagues across campus, typically in the form of committees focused on curriculum development and redesign or focused goals handed down from administrators. We recommend that peer observation be used as a tool to invite colleagues into the classroom to discover the student experience first-hand. One interviewee noted that, no matter the content of tough pedagogical conversations

in meetings, “when we’re teaching, we’re at our best.” We strongly feel that peer observation can aid curricular development and foster goodwill across disciplines.

For graduate instructors, the themes and advice from our study are similar. While faculty should set the stage and model reciprocal peer observation behavior, graduate instructors should likewise pass down information throughout the years. Students in the later stages of their graduate programs can hold a meeting at the beginning of the academic year, inviting new students to take part: “We have a model of peer observation at our school. Here are some of the benefits and resources, and we invite you to be a part of it.” This is also a fantastic way to include graduate instructors that are composers or performers who are not enrolled in theory degrees but are teaching theory, as they will provide a unique and valuable perspective.

Questions for further investigation still linger from this research study. Notably, both graduate instructors and faculty wondered if we are sufficiently training our graduate students. While some programs have wide coursework options in Music Theory Pedagogy, peer observation programs offer another opportunity for pedagogical growth with no grades or judgment at stake. As graduate instructors and faculty members, we believe we have a responsibility to our undergraduate students to provide the highest-quality instruction—instruction that is ideally steeped in self-awareness and critical reflection. Bridging the gap between pedagogy and research is an ongoing relationship, and one that varies between institutions. One faculty interviewee noted that we should strive to treat pedagogy and observation in the same manner that we treat peer review of our research: just as articles are sent out anonymously to colleagues for review, we should consider observation a form of peer review. Most scholars also solicit feedback from colleagues before sending off their work to journals and publishers—we can consider peer observation and the collegial development it promotes to be an opportunity for review and growth in the same manner.

While our study only included students enrolled in theory degrees and faculty who teach theory, it is important to note that theory and ear-training instruction at many institutions is taught by a variety of music scholars, performers, and/or contingent faculty. We see a peer observation program as a beneficial tool for instructors who might seek to refine their teaching skill set and strive for more efficient classroom techniques, while also pinpointing unintended habits that they might have developed. Further, your peers may also become your advocates: in the unfortunate circumstances of an increase in contingent instructors, many contingent faculty need to fight for their jobs. Having colleagues who have seen you teach and can

speak to your instruction can be invaluable. At the same time, it is important that any established peer observation program be sensitive to the unpaid labor completed by contingent faculty, and therefore the program should never be mandatory.

To increase the level of collaboration and reciprocity in observations, consider the usefulness and role of an outside neutral party. This third person would look at a collection of observation forms that have been anonymized by gender, race, and identity. Their goal would be to make notes on the presence of bias in any of the observations, such as the use of gendered language, even scanning for statements that reflect bias from the students in the classroom. While ample research has been released examining implicit bias, racism, and sexism in course evaluations,¹³ there is little evidence presently of similar studies on bias in observation. Given that the tasks of evaluation and observation are similar, however, employing a third party to examine observations could be a positive step in identifying bias.

While our record-keeping and data demonstrates the short-term effects of observation, especially within the program at our institution, it is our goal to continue to investigate the observation process in order to track its long-term effects. Keeping anonymous-but-thorough data on ongoing observations is an important facet in measuring long-term effects. Additionally, future studies might take into account data on teaching quality, such as student evaluations, graduate job placement, tenure, and promotion. It is our expectation that, over longer spans of time, a culture of reflective pedagogy should yield demonstrably better teaching. The ultimate goal of observational programs, such as peer observation amongst graduate instructors, is effecting a change in the culture of graduate programs. The culture fostered by observation is ideally more collegial, less cutthroat or competitive, and symbiotic. While it will be difficult to measure long-term changes in culture, we are hopeful that these positive qualities gained from observation programs can promote an inclusive culture throughout different aspects of music theory departments, such as within coursework or at academic conferences.

13 The evaluation process has for years across many schools been plagued with issues of bias. By way of just one among many examples, a study released by Innovative Higher Education suggested that similar teaching styles performed by male or female teachers yielded dramatically different student responses. By accounting for perceived vs. actual gender, the study found that “the male identity received significantly higher scores on professionalism, promptness, fairness, respectfulness, enthusiasm, giving praise,” and in overall ratings. Furthermore, this result did not depend on any individual instructor’s teaching: “the *same* instructor received different ratings depending solely on their perceived gender. In other words, when the actual male instructor was perceived to be female, he received significantly lower ratings than when he was perceived to be a male” (MacNell, Driscoll, and Hunt 2015, 298–300).

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Appendix 1

The ten-question, RSRB-approved survey

A SURVEY OF PEER OBSERVATION AMONG GRADUATE STUDENT INSTRUCTORS OF MUSIC THEORY

This form describes a research study that is being conducted by members of the Eastman School of Music's Music Theory department, at the University of Rochester.

The purpose of this study is to determine how prevalent peer observation is among graduate instructors of music theory at the collegiate level, and to gain information on the types of programs that include peer observation.

We define Peer Observation as: an established procedure in which Graduate Instructors or Faculty attend each other's classes for the purposes of reflection and growth. Peer observation exists when this observation occurs among members of the same position: Graduate students observing other graduate students, or faculty observing other faculty.

Graduate Instructors are any graduate students who teach theory in a classroom setting, whether as Teaching Assistant or Instructor of Record.

Your participation in this study is completely voluntary. You are free not to participate or to withdraw at any time, for whatever reason. Your participation is also anonymous. No matter what decision you make, there will be no penalty or loss of benefits to which you are otherwise entitled. Your participation of the survey will serve as evidence of your consent.

1. Institution _____
2. I am a... (Faculty | Graduate Student)
3. Approximate Number of Graduate Students in Music Theory _____
4. Number of Faculty in Music Theory _____
5. Number of Faculty who Supervise Graduate Instructors in Music Theory _____
6. Degrees Offered (MA/MM in Music Theory | MA/MM or Certificate Program in Music Theory Pedagogy | Ph.D. in Music Theory | None of the above)
7. Are you aware of a system of Peer Observations for Graduate Instructors? (Yes | No)
 - If you have participated in peer observation, did you find this to be a positive or negative experience? Please share any reflections you have on what you learned from the peer observation program (either as an observer or as a teacher being observed).
8. Are you aware of a system of Peer Observations for Faculty? (Yes | No)
 - If yes, please describe this program.
9. If there is a program for Peer Observation among Faculty, does it exist for:
(Professional Development | Advancement and Promotion | Both | N/A)
10. If a system of Peer Observation exists at any level, is it compulsory or optional?
(Compulsory | Optional | N/A)

Appendix 2

The RSRB-approved, semi-structured interview guiding questions

- Describe the peer observation system(s) (faculty and/or graduate instructor) at your school.
- What kinds of support and observation services are provided by the Teaching and Learning Center(s) at your school?
 - If yes, have you taken advantage of those services; if no, why not?
 - Do graduate students have access to these services?
 - Have you heard of College Observation Weeks?
- What do you believe to be the purposes and goals of peer observation?
 - Follow-up: development vs. advancement;
 - If developmental peer observation exists at your school, how do you manage power dynamics to avoid the perception of judgment?
 - What is your impression of systems of observation that serve as assessments for advancement?
- How (if at all) have you encouraged peer observation (at either level)? What kinds of successes have you had, and what issues have you faced in doing this?
- Is there a mentoring program for graduate students and faculty? How does it work? Is the program reciprocal or do mentors and mentees observe each other and collaborate on their teaching?
- Have you ever co-taught a class? Would you be willing to team-teach?

Appendix 3

PEER OBSERVATION RECORD

MUSIC THEORY AND AURAL SKILLS

Instructor _____	Course _____
Observer _____	Date & Time _____

I. TO BE COMPLETED BY THE INSTRUCTOR, PRIOR TO THE CLASS:

(i) What are the specific intended learning outcomes of this teaching session?

(ii) What is your perception of your role and responsibilities with respect to student learning for this session?

(iii) List any aspects you would like the observer to focus on:

II. TO BE COMPLETED BY THE OBSERVER, DURING THE CLASS:

Overall Impression of Teaching Session and Further Recommendations

*Select focus areas are provided on page 3!

*It is strongly recommended
that you print this page and
fill in by hand.*

FOCUS AREA	IDENTIFIED STRENGTHS	AREAS FOR IMPROVEMENT

USE THE SPACE BELOW TO DOCUMENT A TIMELINE OF CLASS ACTIVITIES

III. ACTION PLAN FOR THE INSTRUCTOR

An optional (but highly recommended) space to reflect upon the recommendations and feedback of your peer(s)

TEACHING AREAS TO CONSIDER

Preparation and planning

- Clarity and achievability of learning outcomes
- Demonstrated preparation (handouts, planning of activities, repertoire)
- Learning outcomes for session (explicit, achievable, achieved)
- Time management (allocation of time to activities, planned flexibility)

Classroom management

- Music-making within and throughout the class
- Implementation of a variety of teaching methods
- Delivery (clarity, pace, repetition, summary)
- Content accuracy
- Student participation, engagement, and attentiveness
- Strategies for diverse repertoire, inclusive teaching methods, teaching to all levels
- Instructor enthusiasm
- Use of technology

Feedback and assessment in the classroom:

- Questioning strategies (number /types of questions, wait time, cold-calling)
- Error detection and correction strategies
- Giving feedback to students (oral/written)
- Obtaining student feedback on teaching (oral/written)

THE BEST WAY TO ENSURE LONG-TERM EFFECTS ON THE WAY WE TEACH IS TO MEET TOGETHER AFTER OBSERVATION TO DISCUSS PLANNING, IMPLEMENTATION, AND NEXT STEPS. BOTH THE OBSERVER AND INSTRUCTOR SHOULD REFLECT ON WAYS TO ENACT NEW IDEAS AND IMPROVE PEDAGOGY AS A WHOLE. SCHEDULE 15 MINUTES TO CHAT AFTER YOUR CLASS!

Appendix 4

FOCUSED OBSERVATION MUSIC THEORY & AURAL SKILLS

Instructor _____	Course _____
Observer _____	Date & Time _____

INSTRUCTOR: Circle an area for your observer to focus on!

Pacing	Musicality	Student Engagement	Clarity	Instructor Feedback
Classroom Management	Organization of Time	Other _____		

WHY DID YOU SELECT THE FOCUS AREA ABOVE?

OBSERVER: Use the space below to offer detailed notes on the selected area above.

Timeline of the Class Period

AP Music Theory and College: Coordinating the Curriculum

JENNIFER BEAVERS and STACEY DAVIS

This paper reports on the results of two descriptive surveys that assess the degree of alignment between the AP Music Theory curriculum and introductory college-level music theory and aural skills courses throughout the United States. One survey was sent to current high school AP Music Theory teachers, who specified how much time they spend on each topic within the AP curriculum. College faculty responded to the same list of topics, indicating when each is introduced across their 2-year music theory and aural skills curriculum. Comparing these results revealed competing themes of fluency and exposure. Curricular alignment and possible skill fluency occur when high school teachers spend substantial time on topics that are likely to be introduced in the first two semesters of college. In contrast, many high school teachers briefly expose students to topics that are typically saved for later semesters in college (due to requirements of the AP curriculum or personal pedagogical choice). The implications of both approaches are discussed, with focus placed on the extent to which each approach corresponds with the stated goals and challenges of both high school and college survey respondents.



The Advanced Placement (AP) Music Theory program is designed to prepare high school students for college-level music studies and provide an opportunity to earn college credit. The aim of this study is to assess the degree to which the AP curriculum aligns with the college music theory and ear training curriculum across the United States. The extent of that alignment could affect high school students' development of musical skills and understanding, preparation for college music courses, and likelihood of receiving college course credit after earning a satisfactory AP exam score. Information about this curricular alignment was gathered through two descriptive surveys, one for high school AP Music Theory teachers and one for college music theory faculty, with survey content guided by the course framework and curricular requirements provided by the College Board.¹ While the results of both surveys reveal agreement about the most beneficial aspects of the AP Music Theory program, they also reveal competing themes of fluency and exposure when examining the relationship between time spent in high school and typical semester of introduction in college for various concepts and skills.

¹ <https://apcentral.collegeboard.org/pdf/ap-music-theory-course-and-exam-description.pdf?course=ap-music-theory>.

BACKGROUND LITERATURE

Previous research in both music theory and other fields has evaluated course content and trends, effective teaching strategies, and types of student assessments in high school and college. In STEM disciplines, scholars examine correlations between AP scoring and college admissions (Geiser and Santelices 2004, Camara and Michaelides 2005, Warne et al. 2015), equality and access (Solorzano and Ornelas 2002, Moore and Slate 2002, Sirin 2005, Hallett and Venegas 2011), and how the AP curriculum and exam affect or predict student success in college (Santoli 2002, Klopfenstein and Thomas 2009).² Studies specific to music theory less explicitly address the AP Music Theory program, but include discussion of exam scores in regard to college placement (Murphy and McConville 2017). Others assess specific types of teaching strategies, as in Paney and Buonviri's 2014 survey of approaches to teaching melodic dictation in the high school AP Music Theory classroom.³ Since the current study examines the degree to which the AP Music Theory curriculum and exam align with topics covered in typical first-year college courses, the following discussion summarizes previous studies that pertain to recent trends in music theory core curricula and assessment.

Richard Nelson conducted a survey for the College Music Society that examined topics and textbooks in the undergraduate core music theory curriculum, the use of placement exams, and the incidence of accelerated and/or rudimentary music theory courses (2002). Barbara Murphy and Brendan McConville recreated the survey and added questions about recent developments in pedagogy, including the integration of technology, writing, composition, improvisation, and performance in the curriculum and classroom (2017). Of interest are their findings on general undergraduate requirements, topics included in the curriculum, and placement exams. Based on their responses from 243 schools, 82.85% of 4-year institutions require a 2-year core curriculum that includes separate classes for written theory and aural skills (187). In addition, 67.90% of universities allow students to test out of written theory or aural skills classes, with the majority using an internal diagnostic exam for assessment.⁴

In a 2012 study, Elizabeth Marvin surveyed faculty from fourteen college and conservatory programs to assess the function of the theory core curriculum. Her survey elucidates how recent innovations within the field of music theory could impact both college and high school music theory classes. In particular, her results indicate

2 STEM refers to disciplines in science, technology, engineering, and math.

3 See also Lively (2007) and Buonviri (2018).

4 For additional surveys of the college music theory and ear training curriculum, see Livingston and Ackman (2003), Marvin (2012), Snodgrass (2016a), Snodgrass (2016b), Marvin (2018), and Palfry and Gilson (2018).

that music theorists are taking more responsibility for teaching the standard 2-year music theory and ear training core curriculum, which stands in contrast to the more “generalist” faculty of composers, performers, and teaching assistants (if an institution has a graduate program in music theory). This change modifies the curriculum from the more traditional model of the comprehensive musician to one that “prioritizes depth of knowledge over breadth of coverage” and is more centrally focused on tonal music and form (256).⁵ Likewise, developments in the field of music theory pedagogy have significantly impacted the creation of new textbooks and classroom approaches. Marvin notes that these developments can be generalized as a shift from traditional techniques to those that consider the “linear and contrapuntal underpinning of harmonic motion” and give “life and contexts to the harmonies under study” (2012, 257).

Another approach has been to study student aptitude in music theory upon entering college. Carol Livingston and James Ackman compared the results of a 1981 study at the University of Florida School of Music (N=58 students) with the results of a similar 2001 study at the same school (N=50 students) (2003). Both studies assessed the topics in which high school students felt most prepared upon entering the college music theory class, as well as how they ranked their training in those topics. When compared with the 1981 results, the 2001 survey showed notable increases in reported preparation for key signatures, triads, notation, melodic dictation, and part writing. In contrast, there was a decline in reported preparation in sight singing. Results from both 1981 and 2001 also indicate that private teachers have the most significant impact on students’ exposure to and understanding of music theory. In addition, the 2001 survey showed a sizable increase in the roles of high school band programs and music theory classes. Livingston and Ackman credit the National Standard for the Arts for positively affecting these changes, which has helped improve the scope and content of public-school music theory programs throughout the country.⁶

5 In a subsequent article, Marvin notes that “although more undergraduate core music theory courses are now taught by faculty trained as music theorists, the practice of assigning performers and composers to teach theory classes is still widespread (and may be a financial necessity in many institutions)” (2018, 60–61). She also notes that the CMS online Directory of Music Faculties (January 2018) listed 5,848 names that taught core areas of music theory, of which 54% were tenure-track, 15% full time non-tenure positions, and 31% part-time and emeritus faculty. She further sorted these by degree held and determined that “a little over 40% of the faculty teaching our undergraduate theory courses are primarily music theorists by training, with almost 60% of faculty coming from outside our discipline” (61).

6 Chin (2014) also assessed where incoming high school students receive the most music theory exposure. Like Livingston and Ackman (2003), her results indicate that high school band programs and private instruction are still the most important sources, but a significant increase is observed in choral programs and a significant decrease in high school music theory classes. For other studies of student preparation for music study in college, see Jones and Bergee (2008) and Vezza (2013).

METHOD

The current study expands on this previous research by more specifically examining the relationship between the AP Music Theory program and the 2-year college music theory and ear training curriculum. We designed two descriptive surveys using Qualtrics software and collected data between January and March of 2019. One survey was sent to current high school AP Music Theory teachers and the other to current college music theory faculty across the United States.⁷ Given that a satisfactory AP exam score could earn students credit for 1–2 semesters of college-level music theory and/or ear training, it is critical to understand what is typically covered within the first two semesters of most college curricula. For this reason, our survey focuses on when certain music theory and ear training topics are introduced across the four college semesters, rather than that they are simply included in general. We compare those semesters of introduction in college with the amount of time that high school teachers spend on the same topics. In addition, both surveys included questions about the AP Music Theory course and exam, time spent on general categories of topics, educational background and teaching experience, and other participant demographics. When selecting topics for the survey, we followed terminology and broad categories that are used within the AP Music Theory course and exam. Both surveys were conducted entirely online and all responses were anonymous, with participants taking approximately 20 minutes to complete all questions.

Participants

Current high school AP Music Theory teachers were sent an email invitation to participate in the survey (N=1543). Results are reported only for those who completed the entire survey (N=216, 14% response rate). Those 216 participants teach in 40 of the 50 states, have an average of 17 years of experience teaching music at the high school level, and an average of 9 years teaching AP Music Theory. College music theory faculty were also recruited with an email invitation, with email addresses collected from university websites and from the attendee list at the 2017 Pedagogy into Practice Conference. Of the 563 invited college participants, we will report the responses of the 90 who completed the entire survey (16% response rate). Those 90 participants teach in 32 of the 50 states, have an average of 10 years of experience teaching college

⁷ Prior to collecting this nation-wide data, we sent similar surveys to Texas AP Music Theory teachers and college music theory faculty in Texas. Results from that pilot study were presented at the 2018 convention of the Texas Music Educators Association.

music theory and ear training, and have taught courses in the 2-year sequence either currently or within the last five years. Example 1 presents additional demographic information about the high school and college survey participants.

		HIGH SCHOOL TEACHERS	COLLEGE FACULTY
Sex	Female	38.43%	27.78%
	Male	60.65%	65.56%
	Prefer not to say	0.93 %	6.67%
Ethnicity	White	89.55%	92.31%
	Hispanic or Latino	3.64%	1.10%
	Black or African American	1.36%	0%
	American Indian or Alaskan Native	0.91%	0%
	Asian	1.36%	2.20%
	Native Hawaiian or Pacific Islander	0.45%	0%
	Prefer not to say	2.73%	4.4%
Age	18-24 years	0.46 %	0%
	25-34 years	15.28%	13.33%
	35-44 years	29.63%	24.44%
	45-54 years	23.61%	26.67%
	55-64 years	25.93%	28.89%
	65 and older	3.24%	5.56%
	Prefer not to say	1.85 %	1.11%

Example 1.
Demographics of high school and college survey participants.

RESULTS

Purposes of the AP Music Theory Program

Both high school and college survey participants ranked a list of seven possible purposes of the AP Music Theory curriculum and exam from most beneficial (ranking of 1) to least beneficial (ranking of 7). That list was inspired by information in various College Board materials about the aims of the AP program in general; it also includes items specific to music theory and ear training.⁸ The objectives that

8 See <https://apcentral.collegeboard.org/start-grow-ap/discover-benefits> and <https://apstudent.collegeboard.org/exploreap/the-rewards>.

participants ranked were: aid students in the overall transition from high school to college (build general college skills), allow students to earn college credit and place out of introductory music theory and ear training courses, correspond with a typical first-semester music theory and/or ear training curriculum, expose students to a wide variety of musical concepts and skills, give students the opportunity to save on future college expenses, help students develop fluent fundamental musical skills, and help students stand out for college admissions. To eliminate the possibility of presentation order affecting the responses, each participant encountered this list of purposes in a different, random order.

Example 2 shows the correlation between the mean college and high school rankings for these seven purposes of the AP Music Theory course and exam. The strong positive correlation ($r = .95$) indicates that the ranked order of the seven purposes is almost identical across both participant groups, thereby reflecting overall agreement about the likely benefits of the AP program. The development of fluent fundamental skills was ranked as most beneficial, closely followed by exposing students to a wide variety of concepts. Corresponding with a first-semester college course, earning college credit, and aiding in the general transition to college were ranked in the middle. Standing out for college admissions and saving on future college expenses were ranked as least beneficial.

In addition to being ranked as the two most beneficial aspects of the AP program, the themes of fluency and exposure emerged when both participant groups were given the opportunity to share their thoughts in a free-response question. Comments from high school teachers centered around the challenges of a curriculum that they feel has “extremely difficult” and “overwhelming” content and pacing. According to one high school teacher:

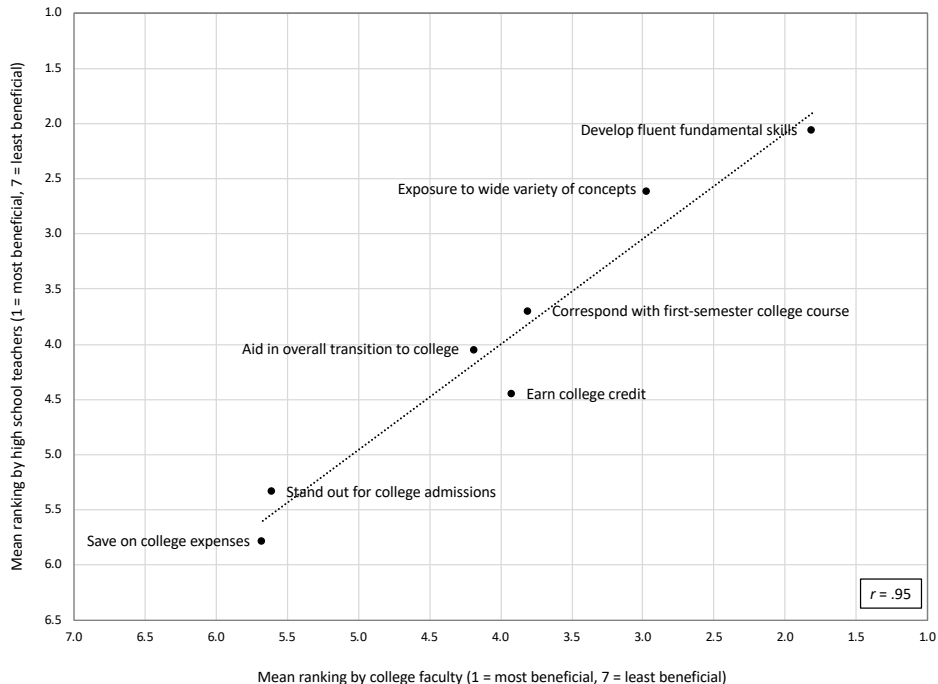
There is entirely too much material. The AP test covers what I did in Music Theory and Ear Training 1, 2, 3, and some form and analysis. This is nearly 20 hours of college credit. There is so much material that we don't have the opportunity to go deep on anything, we are stuck on the surface so we can get through all of the material in time. And we typically don't make it through all the material anyway. That is why some things aren't covered in my class. Not because I don't want to, but because I don't have time to cover it.

Although college faculty acknowledged that students who have taken AP Music Theory are generally better prepared for college than those who have not, they also commented on the “robust” nature of the AP program that often leaves students “woefully unprepared” for the college music theory and ear training curriculum. One college professor stated that “it seems the AP curriculum is too fast and tries to cover

too much material in a single year.” Two others provided more specific comments about the themes of exposure and mastery

In two decades of teaching theory and aural skills at the university level, I have not yet encountered a student who took AP theory and showed true mastery of the subject. The only advantage I have seen is that these students have exposure to the subject, which can help them during the first semester of study. Simply put, the AP class appears to lack the rigor associated with university level courses.

We have a significant number of students who have taken AP Theory and still place into Fundamentals. They have seen a lot of theory, but have very weak skills. They can tell me a little about secondary dominants, but can't tell me the notes in the G melodic minor scale. Most have no idea WHY things happen. They have learned some “rules” and can often crank out some part-writing, but they have very shallow understanding. . . [Students] need to have gained and retained transferable skills, not exposure.



Example 2.

Correlation between mean college and high school rankings for seven possible purposes of the AP Music Theory course and exam.

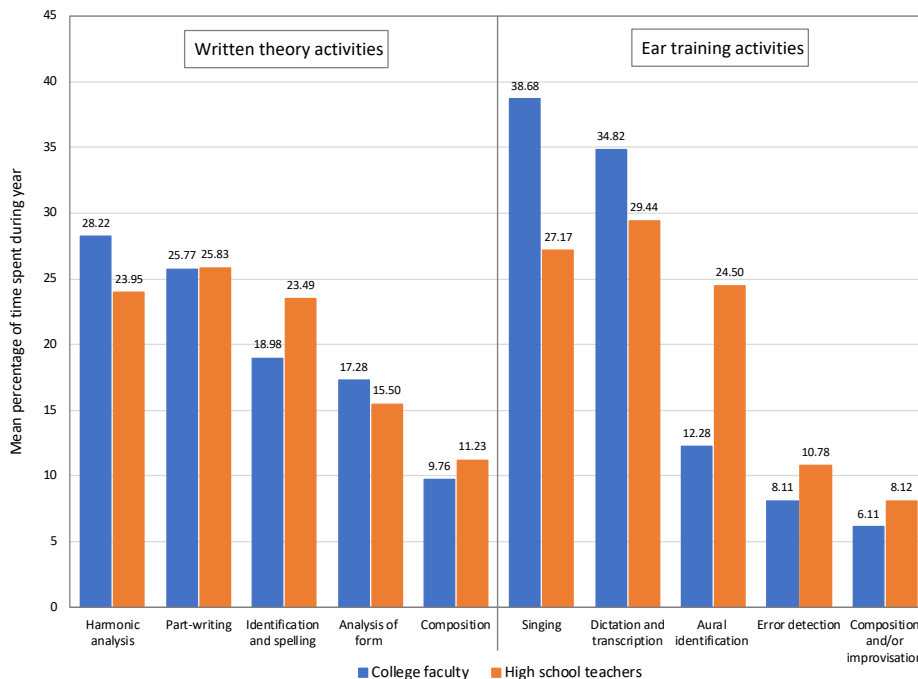
Comments like these provide one possible explanation for why only 46% of our college survey participants grant music theory or ear training credit to students who earn a minimum AP exam score of 3.⁹ In addition, of the college free-responses that mentioned a deficiency in the high school curriculum, 69% indicated that the lack of part-writing skills, a course objective included in most first-year college curricula, prevented students from placing out of one or two semesters.

Although both college and high school participants commented on the challenges of a broad curriculum, they still ranked exposure to a wide variety of topics as the second-most beneficial purpose of the AP curriculum. But a limited amount of instructional time and classes of diversely prepared students cause that outcome to conflict with the top-ranked benefit of acquiring fluent skills. Perhaps this philosophical contradiction begins to explain the overall content of the AP Music Theory curriculum, the degree of coordination between high school and college, and the decisions that individual institutions make about whether or not to accept AP credit and allow students to bypass a college music theory or ear training course. We will therefore focus on these two ideas of fluency and exposure as we present the survey results for specific aspects of the AP Music Theory and college curriculum.

General AP Music Theory Course and Exam Content

Prior to answering questions about specific concepts and skills, we invited participants to indicate the percentage of time they typically spend on five general categories of written theory activities and five general categories of ear training activities. College faculty estimated total time across their first- and second-year courses combined; high school teachers estimated across their full, one-year AP Music Theory course. As shown in Example 3, there is substantial agreement between college faculty and high school teachers on these activities. For written theory, both groups spend the most time (in relatively similar proportions) on harmonic analysis, part-writing, and identification/spelling. Analysis of form and composition tasks are then given less time. Similarly, both groups of teachers spend the most time on the ear training activities of singing and dictation/transcription, with tasks related to error detection and composition/improvisation receiving less attention.

9 Of the 165 written responses, Murphy and McConville (2017) reported that 56.36% accepted AP scores for theory or aural skills. It is also important to note that some states are required to give AP credit. For a list of state policies regarding AP credit, see <https://aphighered.collegeboard.org/setting-credit-placement-policy/state-credit-placement-policy>.



Example 3.

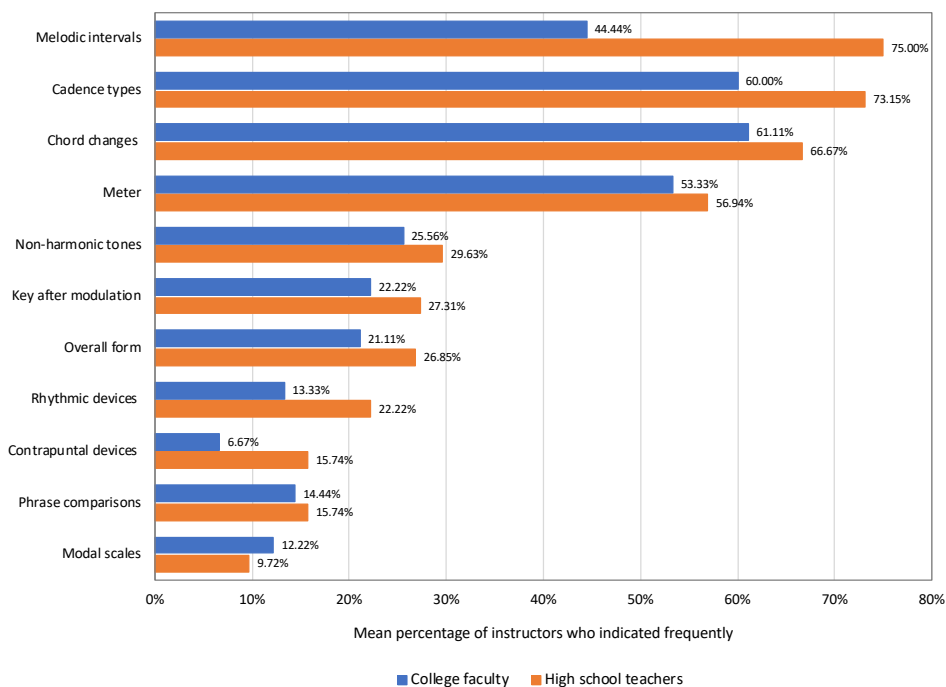
Time spent in college and high school on general categories of written theory and ear training activities.

The greatest disparity in the results for this question occurred for the activity of aural identification, where high school teachers spend significantly more time than college faculty. This is likely explained by the fact that the AP Music Theory exam contains many questions that require students to aurally identify various musical features in recorded examples.¹⁰ For instance, a question on the 2012 practice exam required that students recognize various components of a cello sonata by ear, including melodic intervals, chord changes, instrumental timbre, differences between phrases,

¹⁰ The exam format remains consistent year to year, although the content can change with the publication of a new Course and Exam Description (CED). Section IA is comprised of multiple-choice questions with an audio stimulus; Section IB is comprised of multiple-choice questions without an audio stimulus. Section II contains the Free Response (FR) questions, of which there are seven: FR 1–2 are melodic dictations, FR 3–4 are harmonic dictations, FR 5 realizes a figured bass, FR 6 is to provide 4-voice part-writing to a progression indicated by Roman numerals, and FR 7 requires completion of a bass line below a given melody.

cadence types, and harmonic/tonal function (sequence, tonic pedal, and extended or shortened phrase lengths).

Our awareness of this exam content led us to ask both groups of survey participants to indicate how often they have students listen to musical excerpts and identify various components by ear. The possible answers to this question were frequently, occasionally, or never. Example 4 displays the percentages of college faculty and high school teachers who selected frequently as their response. A significant finding is that a larger percentage of high school teachers responded frequently to all topics on this list, which again confirms that they spend more time on contextual listening activities than college faculty. Perhaps college faculty could integrate this activity into their aural skills classes in a more significant way in order to help students acquire a greater variety of ear training skills (beyond sight singing and dictation, which were reported to occupy 71.50% of time across the four semesters of ear training classes).



Example 4.

Percentages of college faculty and high school teachers who frequently have students listen to excerpts of music and identify components by ear.

Although high school teachers indicated that they engage students in these aural-identification activities more frequently than college faculty, they still responded never to some components that appear on the AP practice exam. For example, 15.28% of high school teachers reported that they never devote class time to listening for contrapuntal devices, which comprised 5.7% of the 2012 practice exam. Similarly, 10.65% never have students listen for rhythmic devices, which was even more significantly featured on the 2012 practice exam (at 17.1%). Finally, 9.72% never focus on listening for phrase comparisons, which represented 14.3% of 2012 practice exam questions.

A final question about time spent on general categories of activities was directed only to the high school teachers. Although most college faculty teach separate written theory and ear training classes, high school AP teachers must manage these different topics and skills within a single course. We therefore asked high school teachers to estimate the overall percentage of class time spent on written theory and ear training across the entire year. Results showed a mean of 61.85% for written theory activities and 38.15% for ear training activities. Not only is this an unequal balance of these activities, it is the inverse of the breakdown of questions on the AP exam, which is 33% written theory questions and 67% listening questions. Although this misalignment might be caused by teachers being unaware of this exam breakdown, some of our high school participants commented on the challenge of balancing time spent on different activities throughout the year. As one teacher described,

The program combines material that is often taught as two or even three separate courses in college, which means instructors are often forced to choose between placing greater emphasis on ear training and sight singing or written theory comprehension, as there is not enough time to make substantial growth in all areas if the incoming students are not relatively similar in their strengths coming in. As a result, I find that students almost always finish the course still lacking college-level proficiency in at least one area no matter how much effort they put into the class overall.

In addition, this result might be explained by the fact that it is difficult for teachers to create and assess all types of listening questions that are in the AP Course Framework and exam, thus supporting the need for more AP Music Theory-specific teaching resources that are geared toward high school ear training activities.¹¹

¹¹ The 2019 AP Music Theory Course and Exam Description (CED) includes more resources than previous years, such as descriptive unit guides, the AP Classroom, a sample question and exercise database, and an updated list of textbooks, materials, and websites. We include a more thorough discussion of this below.

Semester of Introduction in College vs. Time Spent in High School

After answering these general content questions, both groups of survey participants provided information about specific topics related to written theory and ear training. That list of topics was primarily generated from the 2012 AP Music Theory Course and Exam Description (CED), which was the current edition at the time of our survey creation and data collection.¹² The CED provides general information about the College Board and the AP Course Framework, as well as a detailed description of goals and topics within the curriculum, how the exams are created, and how to interpret scores and sub-scores. We also included a few additional topics that are likely to occur within the 2-year college curriculum. This allowed college faculty to populate all four semesters of their curriculum with different topics, while also providing information about times in which high school teachers might individually elect to expand the list of topics provided by the College Board.

In summer 2019, the College Board released a new CED, which provides a more detailed description of topics and includes an in-depth Unit Guide. Perhaps the most significant change is that the 2019 CED reorganizes the Course Framework into two essential components: course skills and course content. Within course skills, four essential tasks are identified within the “big ideas” of pitch, rhythm, form, and musical design: (1) analyze performed music, (2) analyze notated music, (3) convert between performed and notated music, and (4) complete music based on cues. These skills and big ideas are coded and weaved throughout the CED and Unit Guide, which estimates recommended amounts of time to devote to each unit alongside instructional strategies. As part of that reorganization, the list of topics in the 2019 CED is streamlined when compared with the 2012 CED, most notably in the exclusion of many small forms. Throughout the ensuing discussion of our survey results, we will comment on differences between the 2012 and 2019 CEDs when applicable.

On each of our surveys, the complete list of topics was divided into general groups of related ideas (rhythm, melody, harmony, form, etc.). College faculty indicated the course in which they first introduced and focused on each specific topic, meaning that they spend significant time on the concept in class and include it in a substantial way on assignments and exams. This provided information about the typical sequencing of topics across the 4-semester college curriculum, which is important when examining an AP curriculum that purports to give students the opportunity to test out of 1-2 semesters. In order to avoid any bias or suggestion of curriculum order, each

¹² [AP Music Theory 2012 CED](#) and [AP Music Theory 2012 Audio Prompts](#).

participant encountered the topics within each group in a different random order.

Since most are working within a single, full-year AP course, high school survey participants could not answer the same question about when topics are introduced across a 4-semester curriculum. Instead, these teachers indicated how many class sessions they typically spend on each concept from the same lists, with the order of topics again randomized for each participant. We acknowledge the challenge of this type of question since it is often hard to remember or estimate time spent on topics that could be naturally cumulative and likely appear in many different contexts across the academic year. High school classes also vary greatly between traditional daily meetings and various block schedules. Within these schedules, some classes are spread out over an academic year, while others are taught within a single semester.¹³ Despite these challenges, our survey results indicate clear differences in time spent on various topics, thereby offering interesting observations about the relationship between the attention they receive in the high school AP Music Theory class and when they are introduced within the college curriculum.

On the graphs below, colored bars show the percentage of high school teachers who spend different numbers of class sessions on each topic. In order to draw attention to the topics that were identified as occupying the most time, most graphs only show data for 6 or more class sessions (dark blue bars) and 3–5 class sessions (lighter blue bars). The missing portion of each stacked bar then represents the percentage of teachers who responded that they spend 1–2 class sessions, less than 1 class session, or no class sessions on that topic. If a majority of participants indicated those lesser amounts of time, those topics are shown in green bars on the graph (dark green for 1–2 classes and lighter green for less than 1 class). This highlights the topics in which high school students only receive a brief exposure.

The dots, lines, and boxed percentages on each graph (in gray and yellow) indicate how many college faculty first introduce and focus on the same topics in either their first-semester or second-semester course. For the purposes of our survey, Fundamentals was defined as a remedial course that students are only required to take if they did not achieve an adequate score on an internal diagnostic exam. Since only some schools offer and/or require such a course, we combined the results for Fundamentals and Theory 1 in order to reflect the topics that are likely placed in any

¹³ Within high school free-response comments, 18% were related to scheduling issues and the exam. For some, the block schedule is one semester. If they teach in the fall semester, they are finished in January, which leaves four months before the students test. For those that teach in the spring semester, they begin teaching in January and lose a full month of teaching due to the exam being scheduled in early May.

school's first-semester course. Since college faculty tended not to include ear training topics in the Fundamentals class, we report each of these topics as being introduced in Ear Training 1 or Ear Training 2. We focus on these first- and second-semester courses because the College Board indicates that a sufficient score on the AP Music Theory Exam could earn a student credit for either one or two semesters of the college curriculum.¹⁴ On each graph, topics are ordered from most to least likely to occur in the first-semester college class (displayed as a descending gray line).

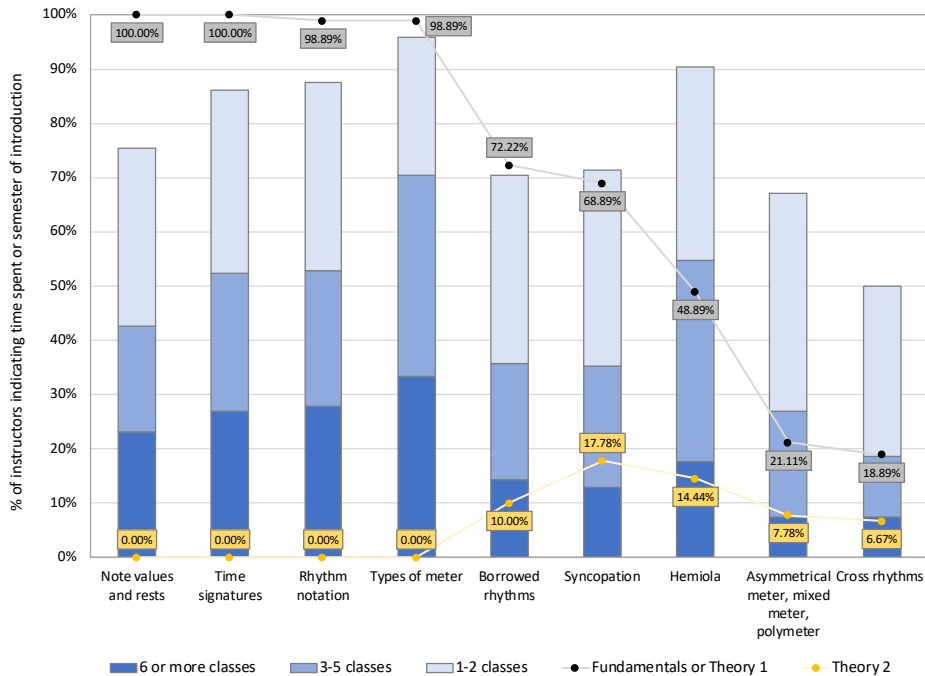
Rhythm and Meter

The first category contains topics related to rhythm and meter. As shown in Example 5, college faculty consistently place most of these topics in Fundamentals/Theory 1 (note values and rests, time signatures, rhythm notation, types of meter, borrowed rhythms, and syncopation). In contrast, hemiola is more often introduced in Theory 2. The only topics without at least 60% occurrence in either the first- or second-semester course are asymmetrical meter/mixed meter/polymeter and cross rhythms. The largest percentage of faculty instead introduce those topics in Theory 4 (46.67% and 33.33% respectively).

For most of these rhythm and meter topics, a relatively similar number of high school teachers indicated that they spend more than 6 classes, 3–5 classes, or 1–2 classes. For instance, some spend more than 10 classes on rudiments like note values and time signatures, while others spend less than one class. This is likely because some students enter the AP class already understanding these fundamentals and knowing how to read music. However, a majority of high school teachers indicated that their AP curriculum includes rhythm and meter topics that college faculty tend not to introduce in either Theory 1 or Theory 2, instead introducing it in Theory 4. For asymmetrical meter, mixed meter, and polymeter, 69.45% of high school teachers spend 1–2 class sessions or less than 1 class session on these topics. For cross rhythms, 69.91% spend similar amounts of time.

Participants responded in similar ways to a related list of rhythm and meter topics within ear training classes (see Example 6). At least 56.66% of college faculty put the first six topics in Ear Training 1, with borrowed rhythms and syncopation split between Ear Training 1 and Ear Training 2. As with the written theory topics, cross rhythms and asymmetrical meter/mixed meter/polymeter are placed outside the first year of the college ear training curriculum (with 53.33% and 46.67% placing them in Ear Training 4, respectively). The high school results for these ear training topics also

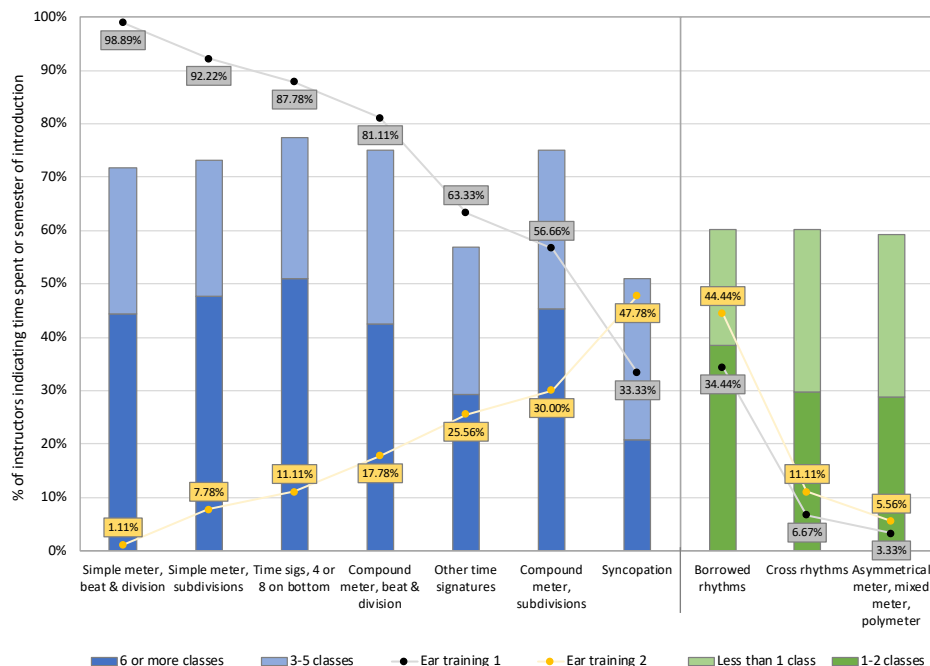
¹⁴ <https://aphighered.collegeboard.org/courses-exams/arts/music-theory>.



Example 5.

Rhythm and meter topics (written theory). Blue bars indicate time spent in high school; gray and yellow percentages indicate semester of introduction in college.

correspond with the related written theory ones. Varying amounts of time are spent on the fundamentals that are likely introduced in the first-semester course, perhaps reflecting the incoming skills of the students in each high school AP class. Teachers again bring an exposure-approach to the rhythm topics that are likely introduced in the fourth semester of college, with approximately 60% only spending 1-2 classes or less than one class on these more advanced skills, as indicated by green bars on Example 6.



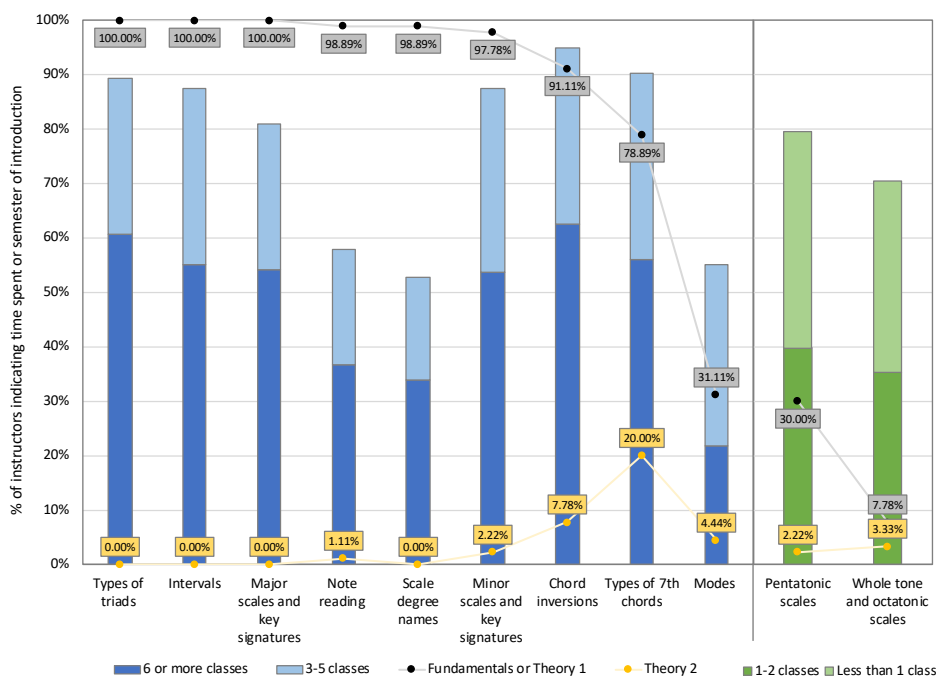
Example 6.

Rhythm and meter topics (ear training). Blue and green bars indicate time spent in high school; gray and yellow percentages indicate semester of introduction in college.

For both written theory and ear training topics, the time spent on these advanced rhythmic concepts provides one example of a disjunction between the college curriculum, the AP Course Framework, and the AP practice exam. Cross rhythms and asymmetrical meter/mixed meter/polymeter appear in the 2012 CED, thus explaining their incidence in the classroom. But since they do not appear on the AP practice exam, any time spent in class is disproportionate to its occurrence on the exam and to preparation for a first- or second-semester college course. In the 2019 CED, asymmetrical and mixed meters appear in skill 1 (analyzing performed music) and cross rhythms appear in skill 3 (dictation-like exercises); polymeter is excluded.

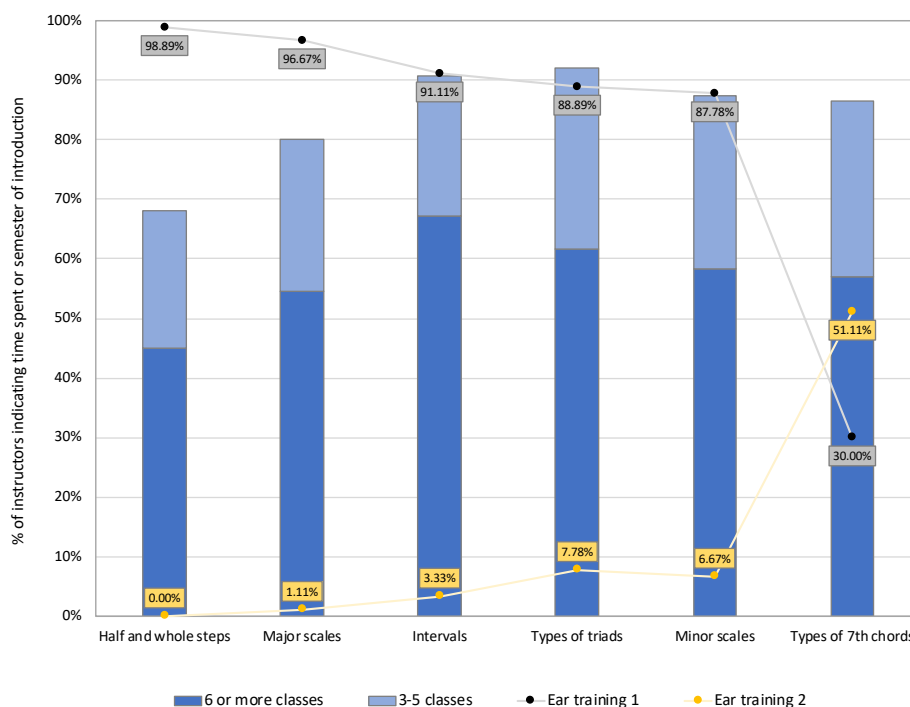
Pitch Fundamentals

Similar results emerged for the written theory and ear training topics that are related to pitch fundamentals. As shown in Example 7 and Example 8, 87–100% of college faculty place whole and half steps, scales, key signatures, intervals, triads, note reading, scale degree names, and chord inversions in Fundamentals/Theory 1 and Ear Training 1. A slightly lower percentage of faculty introduce types of seventh chords in the first semester (78.89% for written theory and 51.11% for ear training), but the fact that 20% and 30%, respectively, place seventh chords in the second semester means that the concept still occurs in the first year of the college music theory and ear training curriculum. Far fewer college faculty introduce modes, pentatonic scales, and whole tone/octatonic scales in either Theory 1 or Theory 2, with those topics more commonly included in Theory 4 (46.67%, 46.67% and 63.33%, respectively).



Example 7.

Pitch fundamentals topics (written theory). Blue and green bars indicate time spent in high school; gray and yellow percentages indicate semester of introduction in college.



Example 8.

Pitch fundamentals topics (ear training). Blue bars indicate time spent in high school; gray and yellow percentages indicate semester of introduction in college.

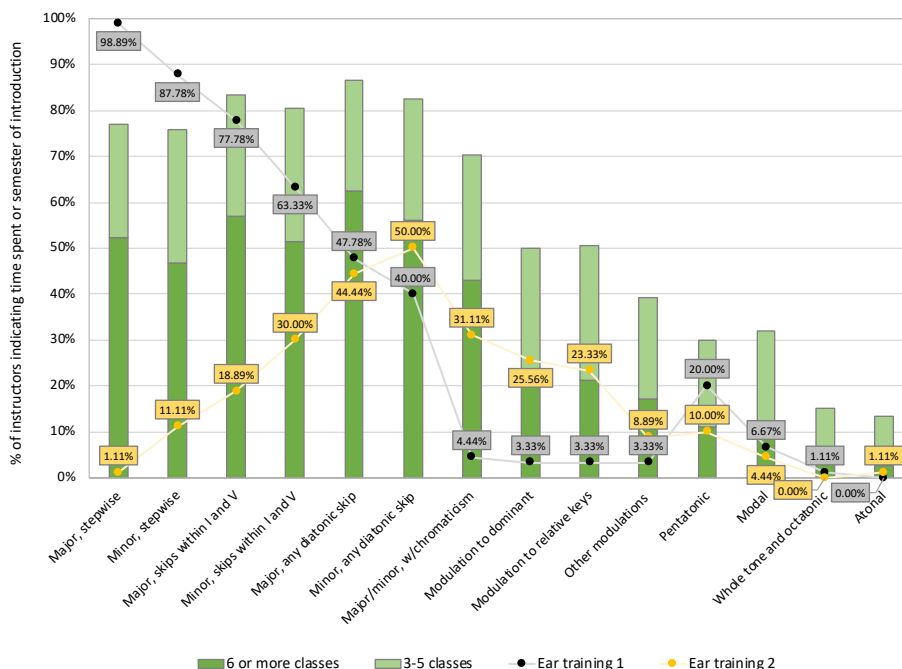
There is a strong alignment between semester of college introduction and high school time spent for most of these pitch fundamentals topics. At least 81% of high school teachers spend at least 3–5 class sessions on the written theory topics of major scales and key signatures, intervals, types of triads, minor scales and key signatures, chord inversions, and types of seventh chords. Similarly, at least 80% of high school teachers spend at least 3–5 classes sessions on the ear training topics of major scales, intervals, triads, minor scales, and seventh chords. Fewer teachers spend that much time on note reading and scale degree names (for written theory) and half/whole steps (for ear training), but that could be because students enter class already possessing those skills. A majority of high school teachers (55.09%) spend at least 3 class sessions on modes (even though it is typically not introduced until Theory 4), but an even larger majority spend limited amounts of time on the other Theory

4 topics of pentatonic scales and whole tone/octatonic scales (72.68% and 73.62% respectively). This is another example of how high school teachers sometimes provide a brief exposure to topics that college music majors are unlikely to encounter in the first-year music theory curriculum.

Melody

Example 9 reports the results for melodic ear training topics. In the college results, the gray and yellow lines cross when the melodies begin to include any type of diatonic skip. This suggests that first-semester college ear training is primarily centered on major and minor melodies that are stepwise or that only have skips from the tonic and dominant chords, while the second semester focuses on melodies that are increasingly disjunct and include skips from other diatonic chords. Although the highest incidence of 6 or more classes (dark blue bars) occurs for these early ear training topics, high school teachers also spend substantial time on topics that are more likely introduced in the second-year curriculum. For instance, only 31% of college faculty introduce melodic chromaticism in Ear Training 2 and an even smaller percentage include modulation to the dominant or relative key in that class (25.56% and 23.33% respectively). These topics are instead typically introduced in Ear Training 3, with modulation to other keys and atonal melodies saved for Ear Training 4 (if included in the college ear training curriculum at all). The AP curriculum is moderately aligned with these results. The 2012 CED primarily includes ear training melodies in major or minor keys with any diatonic skips and chromaticism. In the Free Response (FR) section, modulation is not included in sight-singing (FR1 and FR2) or in the melodic dictation parts of the exam (FR3 and FR4).

The results for melodies that are chromatic, modulating, pentatonic, modal, whole tone, and octatonic reflect pronounced dissimilarities between the college curriculum, the AP curriculum, and time spent in the high school AP class. For written theory, these topics are almost never introduced in Fundamentals/Theory 1 and only occasionally in Theory 2 (see Example 7). Instead, 46–63% of college faculty introduce modes, pentatonic scales, and whole tone/octatonic scales in Theory 4. Similarly, ear training activities that include these topics are rarely included in the first-year college curriculum. Chromatic and modulating melodies tend to occur in Ear Training 3 (51–58% of faculty) and melodies based on modal, pentatonic, whole tone, and octatonic pitch collections are most often introduced in Ear Training 4 (44–72%).



Example 9.

Melody topics (ear training). Blue and green bars indicate time spent in high school; gray and yellow percentages indicate semester of introduction in college.

In contrast to these college results, at least 70% (and often nearly 100%) of high school teachers include all of these more advanced ear training topics in their AP classes. The only exception is atonal melodies (48%), but there are still a substantial number of teachers devoting class time to that topic. And within that devoted class time, the majority of high school teachers spend 1–2 class sessions or less than 1 class session on ear training activities related to pentatonic, modal, whole tone, octatonic, and atonal melodies (see green bars on Example 9). All of this indicates an exposure-approach that is unlikely to lead to the development of reliable skills, as well as a large distribution of class time on topics that play an extraordinarily small part (if any) in the first-year college curriculum. Some of this time spent could be explained by the inclusion of modes and pentatonic scales in the 2012 CED and exam. Similarly, the 2019 CED includes pentatonic scales in analyzing performed and notated music (skills

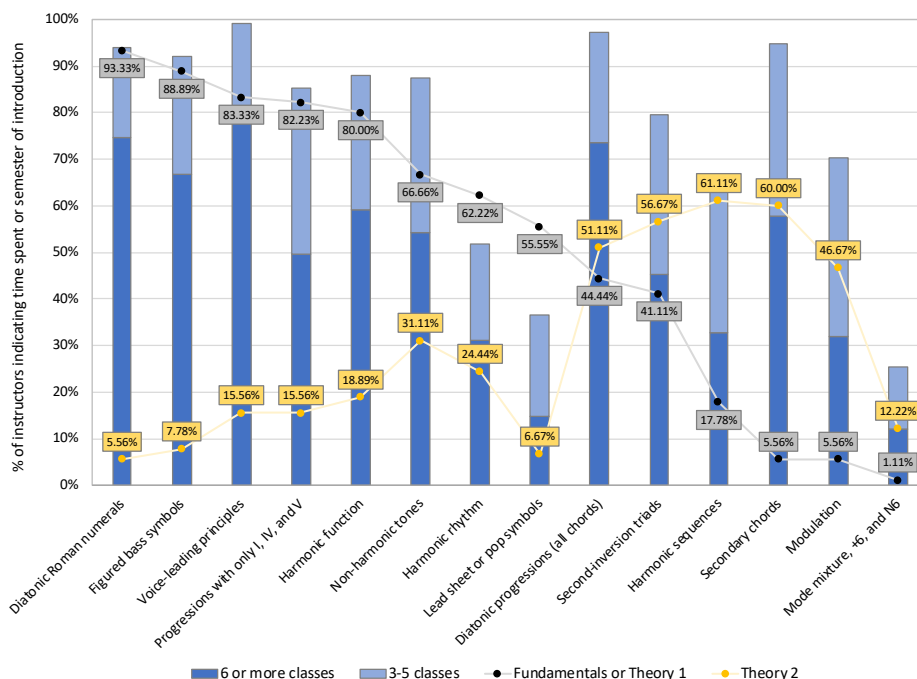
1 and 2), whole tone scales in performed music (skill 1), and modes in performed music and dictation exercises (skills 1 and 3). Octatonic scales and atonal melodies do not appear in either CED or on the currently available sections of the practice exam.

Harmony

Although the majority of topics related to rhythm/meter and pitch fundamentals were consistently placed in the first semester of the college curriculum, the list of harmony topics shows a clear division between the first and second semesters (indicated by the crossing gray and yellow lines on Examples 10 and 11). With the exception of harmonic sequences, at least 40% of college faculty place all of the diatonic written theory topics in Fundamentals/Theory 1. Within that context, progressions with all possible diatonic chords and second-inversion chords are split relatively evenly between Fundamentals/Theory 1 and Theory 2.¹⁵ Approximately 60% of college faculty introduce harmonic sequences and secondary chords in Theory 2 (with 17% and 34% placing those concepts in Theory 3, respectively), but the timing of these topics is likely dependent on whether or not an institution has a Fundamentals class. Those that do not offer that course show a higher incidence of secondary chords in Theory 3. A smaller number of college faculty introduce modulation in Theory 2 (46.67%), with the same percentage instead introducing that topic for Theory 3. Finally, it is very unlikely that mode mixture, augmented sixth chords, and Neapolitan chords are introduced during the first two semesters of the college curriculum. Instead, 78.89% of college faculty introduce those chromatic chords in Theory 3.

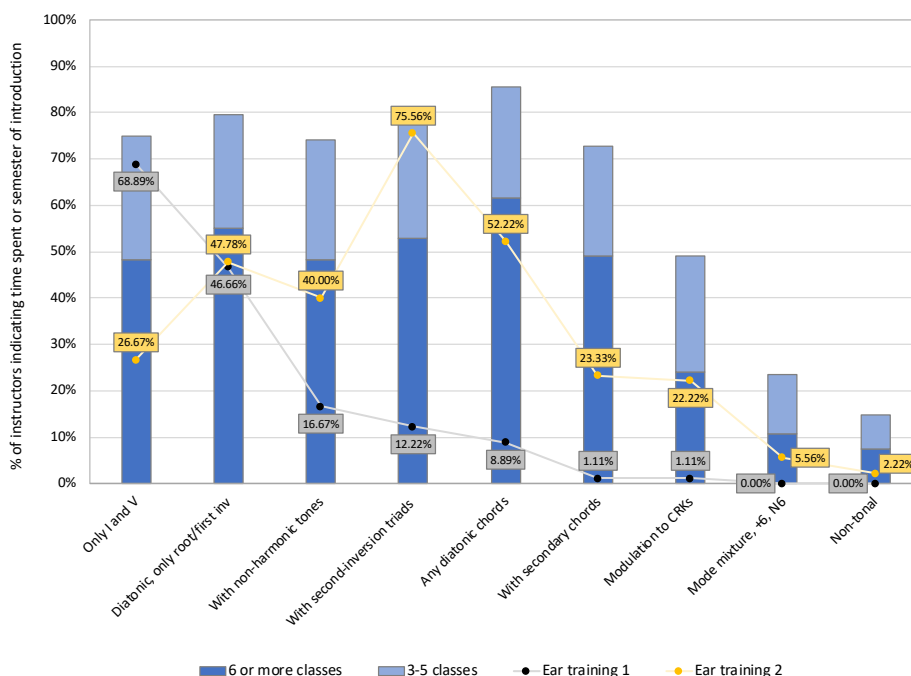
As shown with the blue bars in Example 10, high school teachers spend substantial amounts of time on the diatonic harmony topics that are likely to occur in the first-semester college music theory course. This points to a strong alignment between college and high school curricula. However, they also spend time on topics that are more commonly introduced in Theory 2 or Theory 3. Of particular interest are secondary chords and modulation, where developing proficiency can be involved and challenging. Nearly all of the high school survey participants (94.91%) indicated that they spend substantial time on secondary chords (either 3–5 classes or more than 6 classes). Similarly, 70% responded that they spend at least 3 classes on modulation.

¹⁵ Although some readers might prefer a more nuanced discussion of the functional meaning of “second-inversion triad,” we used this term because of its presence in the CED; the category and its place in the curriculum do not affect the results reported here.

**Example 10.**

Harmony topics (written theory). Blue bars indicate time spent in high school; gray and yellow percentages indicate semester of introduction in college.

Similar patterns emerged when participants indicated semester of introduction in college and high school time spent on harmony topics within the ear training curriculum (see Example 11). All diatonic topics are placed in the first or second semester by at least 50% of college faculty, with non-harmonic tones evenly split between the first two semesters and progressions with second-inversion triads and any chord/inversion more frequently introduced in Ear Training 2. Although the timing of these diatonic topics aligns well with the written theory results, chromatic topics that are often introduced in Theory 2 instead tend to be included in Ear Training 3 (at least 70% for progressions with secondary chords, modulation, other chromatic chords). This lag is partially explained by the increased difficulty of understanding, identifying, and notating these chords and modulations. In addition, listening skills needed for dictation and singing take longer to develop than identification skills, which requires that teachers address chromatic topics in



Example 11.

Harmony topics (ear training). Blue bars indicate time spent in high school; gray and yellow percentages indicate semester of introduction in college.

the second-year ear training curriculum.¹⁶

Based on these results, an AP curriculum that was aligned with the 2-year college curriculum would not include these chromatic ear training topics. However, secondary chords appear with some regularity in both the 2012 and 2019 CED and practice exam, most notably in multiple-choice questions without an aural stimulus and Free

¹⁶ The College Board recognizes the following in the 2019 CED: “Identifying instances of tonicization in performed music requires them to engage in many contextual listening opportunities to hear and distinguish a tonicized chord from other diatonic chords. Regarding notated music, identifying instances of tonicization requires them to distinguish pitches with accidentals from expected pitches within a given key. Once they can identify instances of tonicization, students must be able to describe the function of the tonicization (e.g., secondary dominant, and secondary leading tone), which requires them to have a deep understanding of key relationships and harmonic relationships of diatonic chords in a variety of keys” (2019, 149). On the 2019 CED, secondary chords and functions only occur in analyzing notated music and completing a composition exercise based on cues (skills 2 and 4), and FR 4, harmonic dictation. For additional insights about the lag between written theory and ear training, see Jones and Bergee (2008).

Response questions (FR4, FR6, and FR7). Given that inclusion, 72.69% of high school AP teachers devote at least 3 classes to ear training activities involving secondary chords (with that total divided fairly evening between 3–5 classes, 6–10 classes, and more than 10 classes). The 2019 Unit Guide restructures secondary chords and functions within the curriculum and recommends that teachers devote 10–12 class sessions to develop the ability to recognize tonicizations and practice part writing with secondary dominants and secondary leading tone chords. Compared to these new recommendations, our survey results indicate that only 24.54% of high school teachers are currently spending that much time on that topic, with another 70.37% spending 6–10 or 3–5 classes.

The time spent on modulation is also explained by its inclusion in the CED and AP practice exam. On the 2012 practice exam, modulation occurs in two multiple-choice questions (one with an aural stimulus and one without). Free Response 7 also features a solution in which a modulation is viable. Although modulation is omitted from ear training in 2019, it can appear in skill 4, completing a composition based on cues, such as that practiced for FR7. High school teachers respond to this inclusion in a variety of ways. Only 24.08% spend at least 6 classes on this challenging ear training topic, with another 64.35% spending 3–5, 1–2, or less than one session. Perhaps that limited time reflects a teacher's awareness that modulation has a minimal presence on the exam. Students might therefore be able to earn a satisfactory exam score without being proficient at this skill. However, its inclusion in the CED and the time spent in class reflects a misalignment with the college curriculum.

An even more pronounced misalignment occurs for ear training activities that involve harmonic progressions with mode mixture, augmented sixth chords, and the Neapolitan chord. The 2012 practice exam had one question related to mode mixture, but that only referred to a parallel key relationship between phrases and not to progressions with borrowed chords. Neither the 2012 or 2019 CED includes these topics. But 23.61% of our high school survey participants indicated that they spend at least 3 classes sessions on ear training activities with these chromatic chords, with another 31.95% briefly exposing students to these skills in either 1–2 classes or less than one class session. This is a significant amount of cumulative time spent on topics which are not introduced in the first-year college ear training classes or included on the AP exam. In addition, although briefly mentioning these topics exposes high school students to concepts and skills that they might eventually encounter as college music majors, it does not allow for full understanding or mastery. It instead borrows from time that could potentially be spent on developing fluency with a shorter list of

skills that better correspond with both the AP Music Theory curriculum and the first-year college curriculum.

Form and Counterpoint

Example 12 shows the survey results for written theory topics related to form and counterpoint. Of the topics on this list, only cadence types, species counterpoint, and phrase combinations are introduced in the first two semesters of written theory by a majority of college survey participants. All other topics, which mostly center are larger-scale forms, are rarely introduced in Fundamentals/Theory 1 and only occasionally in Theory 2. Instead, these topics are typically introduced in Theory 3, Theory 4, or an upper-level form class. Similarly, questions about large-scale form (ternary, rondo, theme and variation, sonata-allegro, etc.) tend not to appear on the AP exam.¹⁷ We therefore see a disconnect between the semester in which these topics are introduced in college and time spent in the AP class, with 57-71% of high school teachers indicating that they spend 1-2 classes or less than 1 class on each of these topics (see green bars on Example 12). This represents a brief exposure to a large number of topics that students are unlikely to encounter until their second year as a college music major.

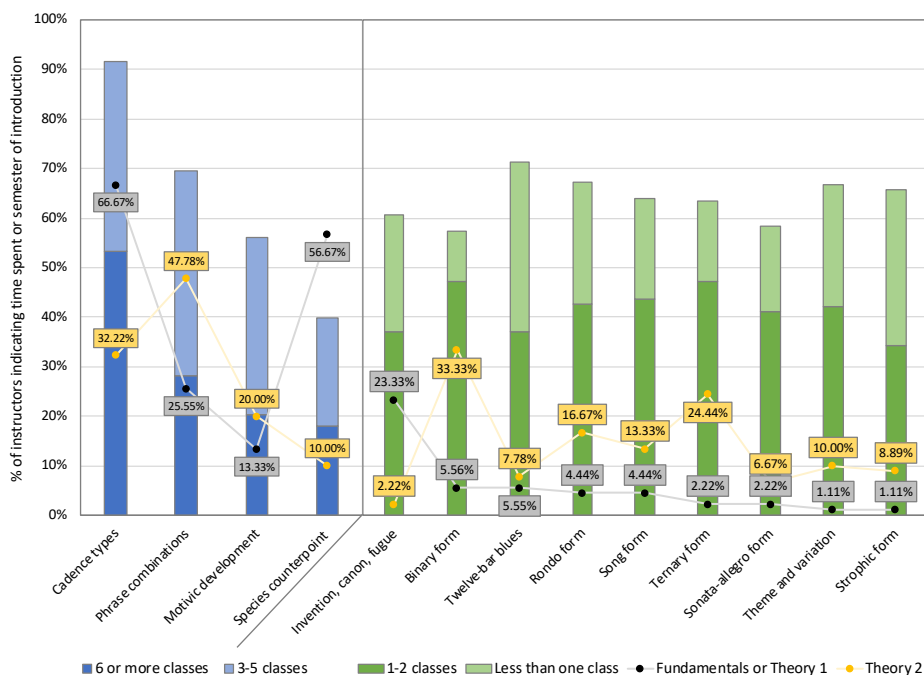
The results related to species counterpoint deserve particular attention here. Within the AP curriculum, mention of counterpoint generally refers to eighteenth-century conventions as applied to soprano-bass counterpoint. It is possible that the 39.82% of high school survey participants who indicated spending at least 3 classes sessions on species counterpoint responded based on that more general interpretation. Similarly, of the 54.44% of college faculty who responded that they introduce species counterpoint in their first-semester course, some could have been thinking specifically about species (or strict) counterpoint and others about counterpoint as it refers to soprano-bass voice leading (as in the AP CED). With either interpretation, our survey results support a shift in college curriculum that now incorporates counterpoint throughout the 2-year college curriculum, as opposed to a specialized upper-level class.¹⁸ Marvin (2012, 258) explains this transition as a product of a more

¹⁷ Binary form is mentioned in the 2012 CED (p. 12) and appears on one multiple-choice question without an aural stimulus (section IB) on the practice exam; binary form is omitted in the new 2019 CED. Ternary, sonata, and theme and variation form are mentioned in the 2012 CED (p. 12) but do not occur in the practice exam. The 2019 CED only includes 12-bar blues and theme and variation.

¹⁸ Murphy and McConville's results show that in 2017, 43.72% incorporated counterpoint within the core while only 21.89% had a separate class (2017, 206).

specialized approach to music theory pedagogy, noting that “nearly half of the schools surveyed reported a move toward engagement with music repertoire and somewhat less emphasis upon figured bass and part-writing. These writing skills, along with an introduction to species counterpoint, remain critical foundational elements for core theory training.” As evidenced in recent pedagogical approaches and textbooks, many college music theory faculty now approach harmonic motion from a more linear perspective. As follows, it is becoming more common to introduce two-voice part writing before SATB textures, thereby giving emphasis to either the general use of the term counterpoint or its more strict species approach (257).

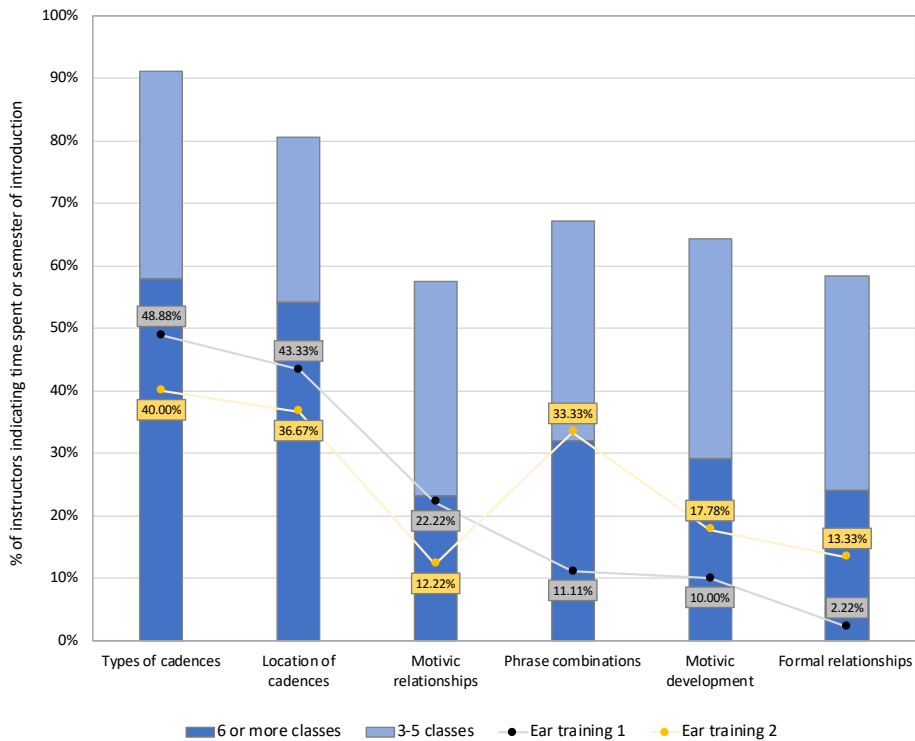
Rather than focusing on the analysis of small- and large-scale forms, the ear training topics related to form and counterpoint center on students’ ability to aurally identify cadences, motivic relationships, phrase combinations, motivic development, and overall formal relationships. With the exception of the types and locations of



Example 12.

Form and counterpoint topics (written theory). Blue and green bars indicate time spent in high school; gray and yellow percentages indicate semester of introduction in college.

cadences, none of these topics are introduced in Ear Training 1 or 2 by a majority of college faculty. This is likely explained by the fact that college faculty incorporate contextual listening tasks far less frequently than high school AP teachers (see discussion of Example 4). But even with an awareness of the frequency and difficulty of these questions on the AP exam, some high school teachers spend a limited amount of time working on these aural identification tasks (57–64% spend 3–5, 1–2, or less than 1 class session).



Example 13.

Form and counterpoint topics (ear training). Blue bars indicate time spent in high school; gray and yellow percentages indicate semester of introduction in college.

Summary of Results for Specific Topics

In order to summarize the detailed results outlined above, the specific theory and ear training topics were sorted into three categories based on time spent in high school: topics on which teachers tend the greatest amount of time (6 or more classes), topics on which teachers tend to spend the least amount of time (2 or fewer classes), and topics on which teachers are relatively evenly split between spending 6 or more, 3–5, and 2 or fewer classes. Within each of those categories, topics are grouped based on the semester in which they are introduced by the largest percentage of college faculty (most often greater than 50% for an individual class or greater than 30% each across two different classes). This organization provides an overall assessment of the degree of alignment between the AP Music Theory program (as indicated by time spent) and the college curriculum.

The first category includes the written theory and ear training topics that are given the most time by our high school survey participants, with at least 45% of high school teachers spending 6 or more class sessions on each topic (see Example 14). This amount of time aligns well with the college curriculum, where close to 100% of college survey participants reported that almost all of these topics are introduced in either their first- or second-semester course. The two exceptions are secondary dominants (for written theory) and progressions with any diatonic chords and inversions (for ear training). Although the introduction of these topics is split across the second and third semesters, high school teachers likely grant them significant time because of their difficulty and their presence in the AP CED and exam. But even with those exceptions, these results suggest that the list of topics in Example 14 could encompass a majority of the AP curriculum, thus allowing high school teachers to focus on developing fluent fundamental skills and preparing students for the concepts that they will certainly encounter in their first semester (or at least first year) of college-level music theory and ear training.

In contrast to the topics in Example 14, those in Example 15 represent the exposure- approach within the AP curriculum. These are the written topics in which high school teachers spend the least amount of time, with at least 50% spending two or fewer classes for the written theory topics and at least 30% spending the same limited amount of time for those on the ear training list.¹⁹ Very few of these topics tend to be introduced in the first- and second-semester college courses. Of those that

¹⁹ The percentage of teachers is lower for ear training topics because some teachers do not include a few of these topics in their curriculum at all (e.g., atonal melodies and non-tonal harmonic progressions). This results in a lower proportion of total teachers that report any time spent.

are introduced, the limited time spent on note values and rests is likely explained by the fact that many high school students enter the AP class already knowing how to read music. Teachers therefore do not need to devote multiple class periods to helping students develop that skill. However, all other skills in Example 15 represent a lack of alignment between time spent in high school and semester of introduction in college. Borrowed rhythms, syncopated rhythms, and lead sheet/pop symbols tend to be introduced in the first year, but are given little attention in high school. All other topics listed in Example 15 more frequently occur in the third and fourth semesters, in an upper-level theory class, or not in the two-year college curriculum at all.

	WRITTEN THEORY	EAR TRAINING
First semester	- Major scales and key signatures - Intervals - Types of triads - Minor scales and key signatures - Diatonic Roman numerals - Chord inversions - Figured bass symbols - Voice-leading principles - Progressions with only I, IV, and V - Harmonic function - Types of seventh chords	- Stepwise major melodies - Major scales - Intervals - Types of triads - Minor scales - Time signatures with 4 or 8 on bottom - Major melodies containing skips within I and V
First or second semester	- Cadence types - Non-harmonic tones - Harmonic progressions with any diatonic chords and inversions - Second-inversion triads	- Minor melodies containing skips within I and V - Types of cadences - Major melodies with any diatonic skips - Diatonic progressions with only root position and first-inversion chord - Location of cadences - Minor melodies with any diatonic skips - Types of seventh chords
Second semester	None	Harmonic progressions with second-inversion triads
Third semester	Secondary chords	Harmonic progressions with any diatonic chords and inversions

Example 14.

Written theory and ear training topics in which at least 45% of high school teachers spend 6 or more class sessions, sorted by most frequent semester of introduction in college.

	WRITTEN THEORY	EAR TRAINING
First semester	• Note value and rests • Borrowed rhythms • Syncopation • Lead sheet or pop symbols	• None
First or second semester	• None	• Borrowed rhythms • Syncopated rhythms
Second or third semester	• Binary form	• None
Third semester	• Rondo form • Song form • Ternary form • Sonata-allegro form • Theme and variation	• Melodies that modulate to the dominant • Melodies that modulate to the relative major or minor • Melodies that modulate to keys other than the dominant and relative minor • Harmonic progressions with modulation to closely-related keys • Harmonic progressions with mode mixture, +6, and N6
Fourth semester	• Pentatonic scales • Asymmetrical meter, mixed meter, and/or polymeter • Cross rhythms • Whole tone and octatonic scales	• Pentatonic melodies • Cross rhythms • Modal melodies • Asymmetrical meter, mixed meter, and/or polymeter • Whole tone and octatonic melodies • Non-tonal harmonic progressions • Atonal melodies
Fourth semester or upper-level course	• Invention, canon, and fugue	• None
None	• Twelve-bar blues • Strophic form	• Motivic relationships • Formal relationships

Example 15.

Written theory topics in which at least 50% of high school teachers spend 2 or fewer class sessions and ear training topics in which at least 30% spend 2 or fewer class sessions, sorted by most frequent semester of introduction in college.

High school teachers might include the topics in Example 15 in their AP Music Theory curriculum as a way of providing students with a general awareness of a wide variety of concepts. Their presence in the high school curriculum could also reflect the personal interests of individual teachers or be explained by their inclusion

in the college theory textbooks that high school teachers often adopt for their AP courses.²⁰ However, these topics tend not to occur on the AP Music Theory exam or in the first-year college curriculum. In addition, although a brief exposure of 2 or fewer classes on any single topic does not provide sufficient time for the development of deep understanding or fluent skills, the combined time spent on these brief exposures across an entire curriculum produces a substantial number of class sessions. It might therefore be more effective for high school teachers to omit these topics from their AP class, which would immediately grant them more time to teach the topics in Example 14 and prepare students for both the AP exam and the college-level courses. An increased availability of AP Music Theory-specific textbooks and pedagogical resources could also alleviate the temptation for high school teachers to expand an already full curriculum from the College Board.²¹

Our final category includes topics in which high school teachers spend varied amounts of time, with relatively similar percentages devoting 6 or more, 3–5, and 2 or fewer class sessions (see Example 16). We also see different semesters of introduction for these topics within the college curriculum. Those that are introduced in the first semester represent fundamental aspects of music reading, singing, and dictation. As mentioned previously, less time spent on some of these topics in high school could be a product of a student population that enters the AP class having already acquired these skills. However, some teachers might have limited time for these skills because they are balancing time spent on an expansive curriculum that includes the more advanced topics listed in Example 15. This requires them to move too quickly away from fundamentals in order to get to the more complex topics of chromaticism, modulation, and form. Eliminating time spent on the briefly mentioned topics in Example 15, as well as those from Example 16 that are introduced in the second year of college, might alleviate the concerns that many of our high school participants expressed about struggling to find sufficient time for ear training as compared to the written theory concepts. Instead, time spent on the first-semester topics in Example 16 would join those in Example 14 (where teachers spend at least 6 class sessions), thereby better preparing students for the first-semester college curriculum or allowing them to receive credit for that course based on a sufficient AP exam score.

20 For a list of recommended texts, see <https://apcentral.collegeboard.org/courses/ap-music-theory/course-audit>.

21 For instance, there is an “AP Edition” of *The Musician’s Guide to Theory and Analysis* (Clendinning and Marvin, 2016) and *The Musician’s Guide to Aural Skills* (Murphy, Phillips, Marvin, and Clendinning, 2016).

	WRITTEN THEORY	EAR TRAINING
First semester	• Time signatures • Clef reading • Scale degree names • Rhythm notation • Types of meter • Harmonic rhythm • Species counterpoint • Hemiola	• Simple meter, beat and division only • Half and whole steps • Simple meter, with beat subdivisions • Stepwise minor melodies • Compound meter, beat and division only • Harmonic progressions with only I and V chords • Time signatures with something other than 4 and 8 on bottom
First or second semester	• None	• Compound meter, with beat subdivisions
Second semester	• Phrase combinations (period, sentence, etc.) • Harmonic sequences	• Harmonic progressions with non-harmonic tones • Phrase combinations (period, sentence, etc.)
Second or third semester	• Modulation	• Major and minor melodies with chromaticism
Third semester	• Motivic development (inversion, augmentation, etc.) • Mode mixture, +6, and N⁶	• Harmonic progressions with secondary chords
Fourth semester	• Modes	• None
None	• None	• Motivic development

Example 16.

Written theory and ear training topics in a relatively similar percentage of high school teachers spend 6 or more, 3–5, and 2 or fewer class sessions, sorted by most frequent semester of introduction in college.

Time Spent Practicing for the AP Music Theory Exam

It is accepted within the AP Music Theory community that test preparations require ample amounts of time and strategy. The College Board provides extensive on-line curricular resources and sample exams, which high school teachers use to familiarize themselves with exam content, exam format, course framework, and assessments. In addition, training provided by AP consultants (sponsored by the College Board and Educational Testing Service) helps teachers learn grading rubrics and practice sample lesson plans.²² A participant in a previously-published study shared an opinion about how knowledge of the AP grading rubric informed their approach to teaching melodic dictation:

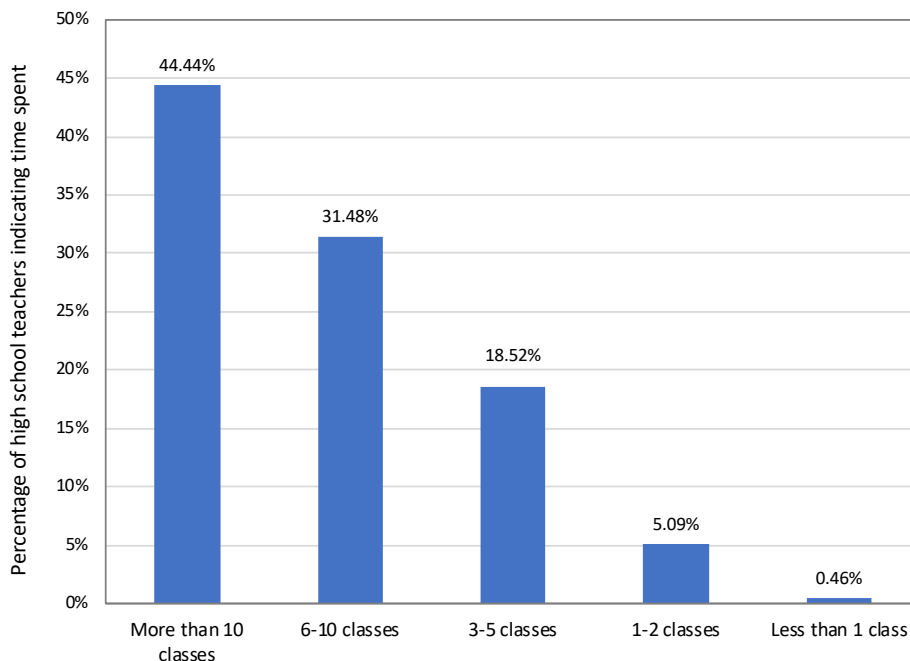
²² There are also many on-line AP teacher communities in which teachers from both high school and college share resources.

The primary method [for scoring] is that you get a point for every half measure of the dictation you get correct. We also know that every AP melodic dictation ends on tonic, and it's usually some sort of sustained pitch. So, get the last measure, get the first measure, and then you get your bonus point for anything else you might get right, and then you've got 5 out of the 9 points that are available to you on the exam... I tell especially my weaker students not to kill themselves on measures 2 and 3—get what you can from that—but you have to get all of measures 1 and 3 so really focus on that (Paney and Buonviri 2014, 407).

Based on our awareness of such strategies, as well as our knowledge that high school AP teachers feel responsible for teaching both concepts and standardized test preparation, we asked those survey participants to indicate how much time they typically spend practicing for the AP exam. As shown in Example 17, 75.92% of teachers spend 6 or more classes preparing for the exam, with close to 45% dedicating 10 or more. Preparing for the exam thus occupies a significant amount of class time within a rigorous overall course framework. For many, this length of time detracts from their teaching goals. One high school teacher described that “teaching this course requires, unfortunately, teachers to spend a significant portion of time ‘teaching to the test,’ which disallows adequate time for some of the higher order musical skills we’d like to provide students.” Another highlighted the tension between balancing curricular goals with training students to achieve a satisfactory AP exam score:

The AP Music Theory course is well organized by the College Board, and the rigor of the class is fair and appreciated. However, in the end, like other AP courses, we are teaching to the test. This presents an immense challenge to the teacher to simultaneously help the students be successful on the test and develop their lifelong love of learning music.

Results of studies from other disciplines acknowledge similar issues, with one commenting that “the fast pace of AP courses, due in large measure to the focus on test preparation, may not serve students as well as courses that progress at a more moderate pace, focusing on topics in greater depth and detail” (Sadler and Tai, 2007, 5).



Example 17.
Percentage of high school teachers indicating different amounts
of time spent practicing for the AP exam.

CONCLUSIONS

This study reveals the degree of alignment between the two-year core music theory/ear training curriculum and the AP Music Theory program. Possible benefits of this survey approach are: (1) increased awareness of both college and high school curricula; (2) examination of curricular priorities to determine prevalent teaching trends across college, high school, and AP program; (3) comparisons of pedagogical approaches across topics; and (4) consideration of how approaches based on fluency and/or exposure impact the preparation of college-bound music students.

Within the context of these benefits, our results indicate a strong consensus about when certain topics are introduced within the college music theory and ear training curriculum. Likewise, there is good alignment between most first-year topics and time

spent in high school. However, the 2012 and 2019 CEDs include topics that fall outside the first-year college curriculum. This has the potential to overload teachers with unnecessary material. In addition, despite the fact that teachers must have their AP syllabi approved through a Course Audit that is reviewed by a consultant recommended by the College Board and Educational Testing Service, high school teachers indicate that they still devote considerable amounts of time on more advanced topics that do not appear in either the first-year college courses or the AP CED. This suggests that, even while expressing concern about the magnitude of the program, AP Music Theory teachers tend toward exposing students to a breadth of concepts rather than providing depth with a more limited set of topics that are congruent with the AP CED and the first-year college curriculum.

Results also highlight differences in course scheduling between high school and college. Of greatest significance is the fact that most universities divide the 2-year core sequence into separate classes for written theory and aural skills. Overall, nearly 56% of the high school teachers who provided free-response comments alluded to feeling burdened with essentially preparing students for two classes within a one-year curriculum that extends beyond what most college faculty report as being first-semester (or even first-year) material. According to one high school participant:

I had ear training and written theory as two classes. I am expected to do both in one period. I hate that I can't spend more time on ear training. The written theory is so much to teach and I feel as though the aural theory isn't addressed enough.

A college participant also acknowledged this challenge:

As an AP Theory Reader, I have heard over and over from my high school counterparts that they feel overwhelmed trying to cover the AP curriculum as it stands (most of them must cover it in a single year). Refining the curriculum to basic diatonic harmony would go a long way to easing the burden of our already over-taxed high school colleagues.

Based on our survey results and comments such as these, a more streamlined approach to the AP Music Theory CED could be taken to avoid overwhelming high school teachers with topics that lie outside the first-year college curriculum or do not appear on the exam. This would allow more time to balance written theory and ear training activities, as well as help students develop fluent fundamental musical skills. In addition, results showed that high school teachers are spending small amounts of time on a variety of topics that are not included in the AP CED. As such, it would be to the high school teacher's advantage to closely observe the new 2019 CED Unit Guide that more clearly articulates the content of the AP curriculum and

provides suggestions for the amount of time to devote to particular topics. For college faculty, an increased awareness of the AP curriculum would also help them establish reciprocal relationships with high school teachers, whereby both can share strategies and resources to best serve and prepare students for college music study. The Music Theory Pedagogy Outreach Project that is sponsored by the Society for Music Theory's Committee on Diversity and Pedagogy Interest Group is an excellent resource for such efforts.²³

Finally, the themes that emerged from our results raise questions about the way AP Music Theory compares with AP courses in other disciplines. The current AP Music Theory curriculum is geared toward earning credit for 1–2 semesters of two sequenced courses (music theory and ear training) that exist within a music degree. This might work well for students who excel on the AP exam and are accepted into a college music program. The AP course also benefits those students by providing “a better understanding of what it is to be a music major,” which helps them choose to pursue a music degree “not just because they like band, or orchestra, or choir” (college survey participant). However, AP Music Theory classes sometimes include students without prior music experience who are taking the class to satisfy an arts elective requirement and do not intend to become music majors. One college survey participant addressed this issue by saying that “we offer university credit for a score of 3. We do not offer credit in the major, however. A student who studied AP Music Theory and scored a 3 and then went on to get a degree in political science would receive college credit for the score.” This strategy is more consistent with AP courses in other disciplines, which are typically stand-alone classes that are part of an institution's core curriculum and thereby exist outside a student's major. Additionally, a high school participant remarked that AP Music Theory “may be the only AP class that technically doesn't have a prerequisite which is offered in most schools.” If approached similarly to these other disciplines, an AP music class could be designed to coordinate with a single-semester fundamentals or music literature course that fulfills a non-music major's core curriculum fine arts requirement.

Our study is the first music theory-related work conducted outside the College Board to address the degree of alignment between college, the AP Music Theory curriculum, and the amount of time high school educators spend on topics. As college faculty, we tried to eliminate any biases that might favor college curricula over that of the AP. Bipartisan perspectives have been offered throughout to ensure a fair representation of our participant population. Critics and supporters alike share a

²³ See <https://musictheoryoutreach.com>.

concern for the scope and rigor of the content. Perhaps there was a presumption that the breadth of the AP Music Theory program is required due to dramatic variations in when college faculty introduce topics across their 4-semester curriculum, thereby ensuring that high school students are prepared for any college that they might attend. If so, our analysis disentangles this notion by confirming that substantial curricular consistency exists across different universities throughout the country. Instead, competing themes of exposure and fluency emerge within certain topics that undermine the most compelling contributions to the students that take the AP Music Theory course: the opportunity to “learn to recognize, understand and describe the basic materials and processes of music” that goes into the depth encountered in an equivalent “one- or two-semester introductory college course.”²⁴ This suggests that a less comprehensive curriculum could better enable students to master the fundamental musical skills that are most likely to occur in any school’s first-year music theory or ear training courses.

²⁴ <https://apstudents.collegeboard.org/courses/ap-music-theory>; <https://aphighered.collegeboard.org/courses-exams/arts/music-theory>.

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“Notehead Shorthand”: A Rhythmic Shorthand Method for Melodic Dictation Exercises

JENINE L. BROWN

Paney and Buonviri report that high school theory teachers struggle to get adequate results on the rhythmic aspect of melodic dictations, quoting one instructor who observes that students “don’t know how to space the notes rhythmically, and they get flustered, and it ends up causing them to mess up some of the pitch parts” (2014, 405). In response to their call for improved pedagogy for rhythm, I summarize previous research on melodic dictation strategies and then introduce a new rhythmic shorthand method (“Notehead Shorthand”). Notehead Shorthand builds upon Karpinski’s protonotation (2017) by asking students to mark note onsets (rather than durations), and it provides an improved way to notate subdivisions of the beat and syncopations. Moreover, compared to the well-known slash system of rhythmic shorthand, the proposed shorthand system looks more like actual notation, making it easier for inexperienced students to use and translate to the musical staff. The system provides a method for writing the rhythm of a melodic dictation in one hearing, minimizing cognitive load for students. While students of all ages and abilities can utilize this new method, it may be especially helpful to students within first-year aural skills courses and for those preparing for the melodic dictation tasks on the College Board’s Advanced Placement Music Theory exam. I then describe pros and cons of the technique after implementing the method with undergraduate music students over the years, and I also share some modifications to the method that can be made depending upon the student’s previous experience with dictation and the level of beat that the student is internally pulsing while taking dictation (i.e., the beat, the division, or the subdivision).



Introduction

Collegiate music students’ aural skills vary widely. Whereas aural skills seem to come naturally to some musicians, even the most virtuosic performer has been known to struggle with training their musical ear. Like many teachers of aural skills, I have had heart-wrenching conversations with students upset about their self-perceived lack of musical skills. Often, students have binary notions of aural skills acquisition; that is, my students often convey the feeling that they either have the gift of being able to take melodic dictation, or do not. Indeed, even instructors can bring this notion

I wish to thank William Marvin and the anonymous reviewers for their helpful comments and guidance in preparing this manuscript. I am also grateful to my students at the Peabody Conservatory of the Johns Hopkins University for their willingness to use Notehead Shorthand to develop their dictation skills over the years.

into the classroom if not careful. Conversations students have with their classmates who have absolute pitch certainly do not help, and weaker students often come to me confused as to why a peer just seems to be able to succeed in the aural skills classroom, whereas they themselves cannot. Some students are not aware of the countless hours that another student has put into learning their craft, acquired in the practice room and/or due to musical training at an early age.

Anecdotes about the savant-like skills of composers throughout the Western canon can also contribute to a student's frustration in developing their aural skills. For example, Maynard Solomon writes that W. A. Mozart transcribed the score of Allegri's "Miserere" after hearing it performed in the Sistine Chapel when he was just 14 years old.¹ Similarly, Robert Schumann wrote, "a perfect musician should be able to picture a piece, at first hearing...as though he had the score in front of him."² While stories and advice from these composers are certainly inspiring, they can also do students a disservice. This is especially true for younger students first starting to develop their craft, as they may believe they should be able to hear a melody and instantly notate it (as if the correct notation would simply appear in their head).

Students should instead learn that the skill of taking melodic dictation (and the development of aural training in general) takes years of cultivation. It requires regular practice, similar to that required for mastering a musical instrument. To this end, this essay proposes some strategies I share with my students at the Peabody Conservatory for how to develop melodic dictation skills. Specifically, I describe a shorthand system that asks students first to attune to the meter and rhythm of what they hear. My shorthand method bears similarities to Gary Karpinski's "protonotation" and other dictation strategies, although some marked differences are described below.

1 Solomon (1995, 5).

2 Schumann (1967, 413). Translation in Karpinski (2000, 3).

Previous research on melodic dictation strategies

Previous research has addressed whether it is best for students to first attune to pitch, rhythm, or both simultaneously when taking melodic dictation. Karpinski argues that it is easier to remember both pitches and rhythms together than to remember pitches alone.³ He also cites a series of empirical studies that suggest that notating rhythm first is most successful in melodic dictation exercises. For example, Christine Beckett finds that participants who tried to notate rhythms first (as opposed to the pitch alone) were more successful in a melodic dictation task.⁴ After implementing an experiment that observed participants throughout the process of taking melodic dictation, Gary Potter makes a similar conclusion, writing “those able to place notes easily in a metric framework, succeed in comparison with those who identify pitches quite easily but do not always know where to put them. One subject’s comment sums up the opinions of many: ‘I don’t like to write things down unless I know where they go.’”⁵ The following shorthand strategies aim to help students determine the metrical placement of the rhythms they hear.

One cannot discuss musical shorthand systems without discussing Karpinski’s “protonation,” a well-known technique used in taking melodic dictation.⁶ Karpinski would likely argue against calling it a shorthand, as he encourages students to listen while hearing the melody and only write after the melody has finished, thus increasing skills such as one’s memory capacity. Nevertheless, students using Karpinski’s protonotation do not write down notes; instead, they draw symbols to reflect what they hear, similar to a shorthand method. A brief summary of Karpinski’s protonotation method follows: students hearing the melody illustrated in Example 1a would first determine its meter and draw a metrical grid reflecting simple meter, with large vertical lines representing bar lines and smaller ones representing the individual beats within the measure (Example 1b). Students then draw horizontal dashes to reflect the rhythm of the melody (Example 1c), and then write in the solfège syllables above each rhythm (Example 1d).

3 Karpinski (2000, 71).

4 Beckett (1997, 621).

5 Potter (1990, 66).

6 See Karpinski (1990, 202–206).

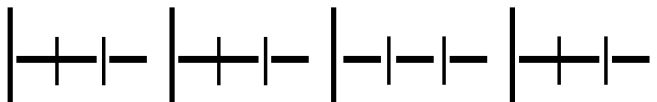
(A) The melody heard in the melodic dictation.



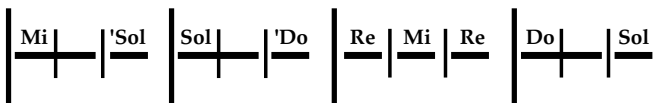
(B) The metrical grid of the melody in 1a, reflecting a 3/4 meter.



(C) The durations of the notes heard in Example 1a.



(D) Moveable-do solfège syllables are added above each rhythm.



Example 1.

The process of protonotation, as introduced by Karpinski (1990).

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Protonotation is a powerful method because it encourages students to understand that they can express rhythm within a metrical structure away from the musical staff. It helps students to indicate what they hear without needing to know the beat value and/or key signature, and provides students graduated steps for taking dictation. However, one critique of Karpinski's protonotation is that the horizontal dashes of the rhythmic events could run into one another if there were lots of sixteenth notes in this melody (e.g., Example 2 illustrates Karpinski's proposed shorthand for subdivisions of the beat).⁷ Another critique is that the metric grid does not explicitly reflect students' knowledge that the meter is simple (as opposed to compound), because the divisions of the beat are

⁷ Throughout, I use the term "division" to refer to a single division of the beat (i.e., eighth notes in 2/4 and 6/8 meter), whereas the term "subdivision" refers to double division of the beat (i.e., sixteenth notes in 2/4 and 6/8 meter).

Combining Parts of Quadruple Division

The four divisions of the beat may be combined in various groups of two and three to form six different patterns. The table below shows the patterns in protonotation, Takadimi, and rhythm notation for the three most common beat units. You must learn to auralize and recognize these six patterns as they appear in these different beat units.

Pattern	Beat unit		
			
Ta ka di mi - - - -			
Ta di mi - - -			
Ta ka di - - -			
Ta mi - - -			
Ta ka - - -			
Ta ka mi - - -			

Rests in Place of Dots

Sometimes, a rest will take the place of a dot, so that the rest occupies the same duration as the extension the dot would create. Replacing the dot in this way doesn't affect the rhythmic location of each note's point of articulation. For example, the two notes in both this rhythm  and this rhythm  begin at the same times.

Example 2.

The leftmost column illustrates Karpinski's shorthand for subdivision of the beat rhythms in simple meter (2017, 106).

Reprinted from *Manual for Ear Training and Sight Singing 2E* by Gary Karpinski.

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not drawn. Additionally, the horizontal dashes drawn on the beats could be misleading, because these dashes are drawn just to the right of the bar line, and this could be misinterpreted to mean that the note occurred just after the downbeat (rather than on it). Karpinski's notation also does not bear much similarity to actual rhythmic notation, and this may provide a significant challenge to some students when faced with the task of converting their shorthand into music notation. One final critique of the protonotation method is that by asking students to draw horizontal lines, they need to process both when a note occurs and also its duration at the same time, which may be too much for novice students. My shorthand method, described further below, seeks to alleviate some of these concerns.

Evan Jones, Matthew Shaftel, and Juan Chattah's text also provides advice on using a shorthand to notate rhythms.⁸ In Example 3, students are asked to notate the upper voice of a two-voice dictation and the instructions suggest that students "may want to mark each beat with a tick mark (we have done this for you, just above the staff). In your first or second hearing, simply circle any tick mark where you hear a musical attack (the start of a new pitch). Then it will be easy to fill in the rhythm during the break between playings [*sic*]."⁹ One critique is that this method does not give any advice for any more complicated rhythms involving subdivisions of the beat, and circling the attack points does not necessarily remind students as to what the rhythm will look like in actual notation.

Allegretto | | | | | | | | | | | | | | | |

Example 3.

Ticks added above the staff to aid a student in notating rhythms,
as suggested by Jones, Shaftel, and Chattah (2014, 51).

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8 Jones, Shaftel, and Chattah (2014).

9 Ibid., 51.

David Code calls his shorthand dictation method “Alphabet Dictation,” because prior to hearing a melody, students first write down all of the letters of the alphabet, where the succession of letters directly corresponds to the succession of notes in the melody.¹⁰ After hearing the melody, students then use a variety of shorthand symbols to reflect what they know of it. For example, the melody in Example 4a is drawn in Code’s shorthand in Example 4b. Vertical lines reflect bar lines, rhythmic lengths are indicated with “L” for long, “M” for medium, and “S” for short. A key to understanding some of the other symbols students could use is illustrated in Example 4c; strengths of the method include that students can quickly draw dots to refer to changes in pitch contour, triangles to indicate that the notes are member of the same triad, and slurs to mean that two notes are the same pitch. However, there are several drawbacks to this method. The learning curve is steep and could be prohibitive to students; the shorthand diverges from the look of actual music notation; and the shorthand in Example 4b does not translate directly from Example 4b to 4a (as there are many melodies that match the description in Example 4b). More recently, Code has developed a website in which students can type their shorthand directly into their web browser while taking dictation (for example, typing “ab/” produces an eighth note A-flat), and Code has designed the program so that the typed shorthand instantly creates a musical score. The shorthand can also be copied and shared with an instructor during dictation exams and there is a dictation interface that limits the number of playings.¹¹

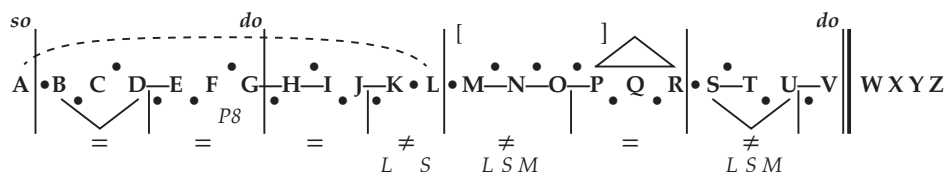
¹⁰ Code (1997).

¹¹ Code (2020).

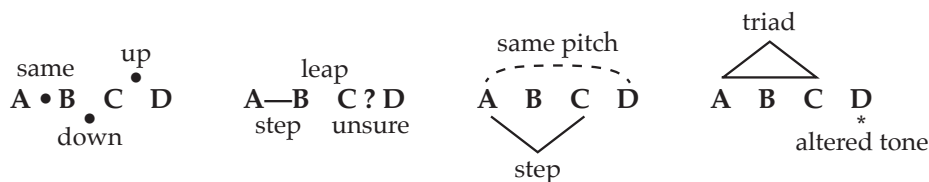
(A) The melody heard for the melodic dictation.



(B) Code's shorthand of the melody shown in Example 4a.



(C) A key that explains some of the shorthand symbols.



Example 4.
David Code's "Alphabet Dictation."
Reproduced by permission of the author.

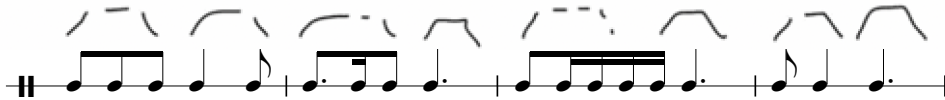
Susan Piagentini has also recently published a "graphic tracking method" for rhythms in simple meter (Example 5a) and compound meter (Example 5b).¹² Unlike the methods described thus far, her method does not require students to write anything prior to hearing the melody (such as a metric grid), which could be a strength for more advanced students but a disadvantage to those who need to be taught to internalize the meter while taking dictation. Major strengths of the method include its ability to accommodate subdivisions of the beat easily, and the method's visually-intuitive design: beats are grouped together with the rise and fall of the shorthand system. Possible drawbacks of the method are that the shorthand does not resemble actual rhythmic notation, and weaker students may somehow conflate the rise and fall of the rhythmic shorthand with pitch.

¹² Piagentini (2020, 454).

(A) Simple meter.



(B) Compound meter.



Example 5.

Piagentini's shorthand method for notating rhythms.
Reproduced by permission of the author.

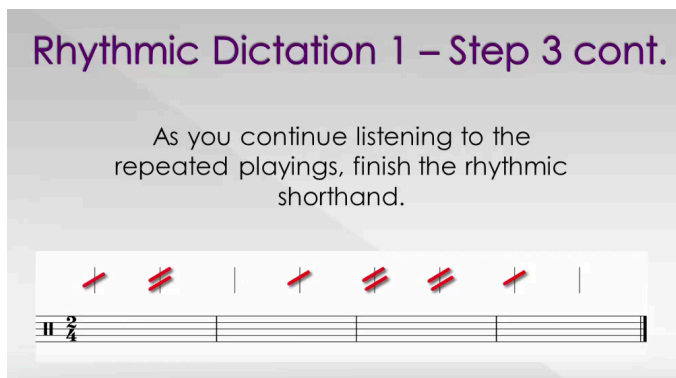
Rhythmic shorthand strategies can also be found relatively frequently online. Given the COVID-19 pandemic and the fact that students may be turning to online tools more than ever, I offer a summary and review of four representative approaches discovered through searching for melodic dictation strategies.

1. Deborah Smith's YouTube tutorial is one such example of a rhythmic shorthand method that can be found online.¹³ In the video, students are given the time signature of a dictation exercise and are instructed to draw vertical lines above the staff to reflect the number of beats in each measure prior to hearing the stimulus. When the rhythm is played, students then draw diagonal hash marks to indicate the number of notes within any one beat.¹⁴ Example 6 is a screenshot of the video tutorial; the hash marks are drawn in the color red. Subsequent hearings would be required to determine the exact rhythm within each of the beats. For example, two hash marks could be a variety of rhythms, such as two eighth notes, or a dotted eighth followed by a sixteenth, etc., and the shorthand does not provide for a way to differentiate these rhythms. Notating syncopations would also be a challenge with this method, even if additional vertical marks were drawn in to represent further divisions of the beat. Finally, this video does not address how this method would work in compound

¹³ Smith (2014).

¹⁴ A beat can both refer to a moment in time (corresponding to an ictus in a conducting pattern), or the span of time between two such successive points. In Smith's method, students first draw vertical lines that refer to the point in time that the beat occurs (the ictus), but then they draw the diagonal hash marks to represent how many events occur *within* any one beat; this conflates two different notions of "beat" and could be confusing to students.

meters; it would seem that drawing six vertical lines would be necessary in meters like 6/8 (each one representing an eighth note), rather than just drawing in two lines representing the beat, so as to best notate sixteenth notes.



Example 6.

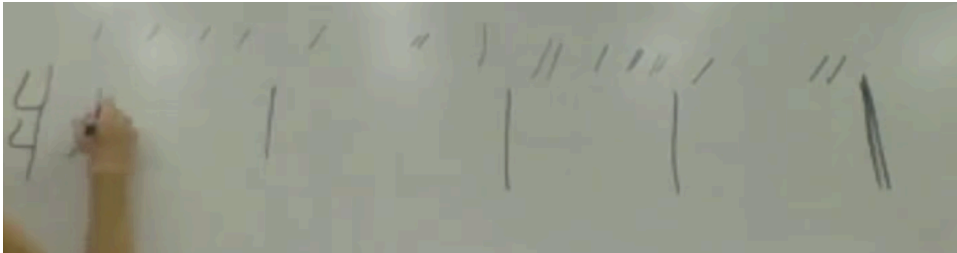
A screenshot of the rhythmic shorthand described in Smith (2014).

Used with permission from Deborah Smith Music: <https://dsmusic.com.au/> from the video: https://youtu.be/7WL6JA_4mIo.

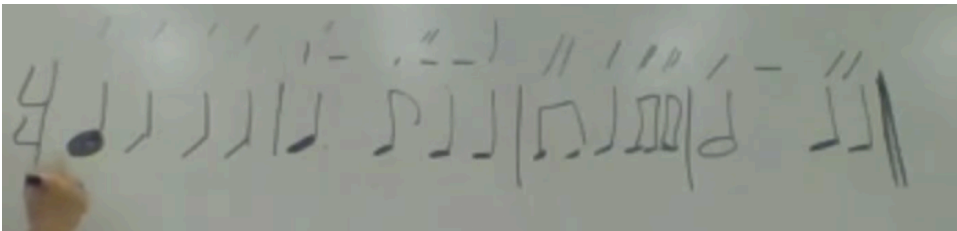
2. The tutorial presented by Melissa Holso on Josh Bartz's YouTube channel is another rhythmic shorthand tutorial that can be found online.¹⁵ In this video, students are also given the time signature, but are instructed to not write anything further before hearing the aural stimulus. As students listen to the rhythm, they draw diagonal hash marks above the staff, where each hash mark reflects one note. A major strength of the method is that it asks students to draw their hash marks above its proper metrical placement within the measure. Example 7a illustrates these hash marks, and Example 7b is the correct answer to the dictation. Because students are not asked to draw a metrical grid to indicate the beats, the hash marks may be difficult to translate into the correct rhythms. For example, one interpretation of the lines drawn in measure 2 is a half note followed by two eighth notes and a quarter note. Shown in Example 7b, the correct answer is instead a dotted quarter, an eighth note, and then two quarter notes. Finally, this method would need modification when rhythms become more complex, as numerous drawn lines would have no hierarchy among them.

¹⁵ Bartz (2016).

(A) Rhythmic shorthand showing the instructor’s hash marks for the rhythmic dictation.



(B) The correct answer to the rhythmic dictation.



Example 7.

Screenshots of rhythmic shorthand suggested by Bartz (2016).

3. Multiple online videos illustrate variants of the shorthand method described in Barbara Wallace’s aural skills texts.¹⁶ These videos advocate drawing diagonal slashes for notes occurring on a beat, dots after the slash when an eighth note occurs after a beat, and a slash followed by a horizontal dash when a note is held for longer than a beat.¹⁷ A screenshot from one such video can be found in Example 8a, where students are given the time signature and they initially write vertical dashes to represent the number of beats in each measure before hearing the dictation.¹⁸ When hearing the melody, the student would draw in diagonal/horizontal slashes and dots to represent the rhythms heard on top of the vertical lines, followed by solfège syllables beneath the staff. While this is an adequate method for rhythms in simple meter with one division of the beat, it does not provide for additional subdivisions of the beat, and these videos do not describe how the method would be applied to melodies in

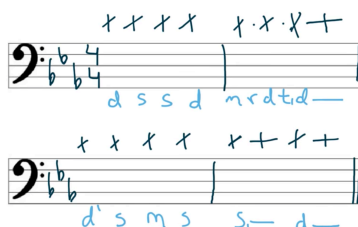
¹⁶ Wallace (2007).

¹⁷ Wallace’s method is described well in Kelly Rodriguez’s YouTube video (2015). Another example of the method can be viewed in Polkapaul (2012).

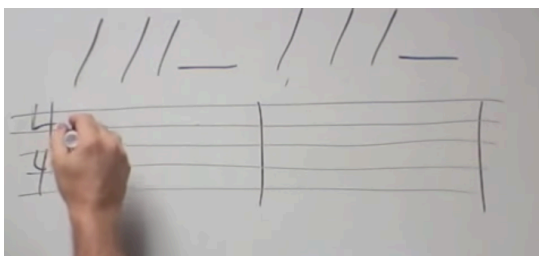
¹⁸ Rodriguez (2015).

compound meter. Depicted in Examples 8b and 8c, the screenshots from the video by Dan Cutchen illustrate a similar method, but the instructor does not describe writing in vertical lines to represent the beats prior to hearing the melody.¹⁹ This may make the interpretation of the shorthand symbols more difficult; for example, the horizontal dash in Example 8b refers to a half note whereas the dash in Example 8c refers to a dotted quarter.

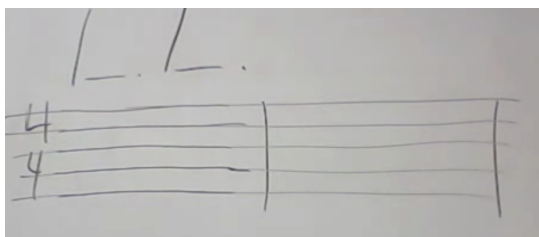
- (A) A clear illustration of this shorthand technique found in the video by Rodriguez (2015).



- (B) A screenshot from a video by Cutchen (2013) that teaches a similar technique. The shorthand in both measures translates to two quarter notes followed by a half note.



- (C) The shorthand in m. 1 translates to a dotted quarter followed by an eighth note, as described in Cutchen (2013).



Example 8.

In these screenshots from different YouTube tutorials, diagonal slashes refer to notes occurring on the beat, horizontal dashes for notes longer than a beat, and dots for eighth notes.

¹⁹ Cutchen (2013).

4. Finally, Lynn Olson and Martha Hilley’s method provides students with symbols to write for a note’s duration, but like some of the tutorials above, it does not require a student to consider its metrical placement.²⁰ Shown in Example 9, the authors used arrows to instruct students in drawing pulse strokes based on note duration; this helpful graphic encourages students to move their pencil along with the beat, reinforcing metric entrainment. However, the method does not accommodate meters where the quarter note is anything other than one beat, and does not provide suggestions for how one might notate rhythms with sixteenth notes or other divisions of the beat, nor any advice about compound meter. Finally, there is a high degree of similarity between the symbol proposed for the dotted half and the symbol for two eighth notes, which may be confusing to students.

Note	Shorthand	Drawn in pulse strokes	
			One stroke
			Two strokes
			Three stroke
			Four stroke
			Two quick strokes within one pulse

Example 9.

A rhythmic shorthand method proposed by Olson and Hilley (2012).

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“Notehead Shorthand”

Like the methods above, my own shorthand method asks students to initially focus their listening on rhythm and meter, rather than pitch, for best success. Indeed, Karpinski writes, “beginning listeners—particularly those new to the process of dictation—usually flounder when trying to draw on too many stimuli at once. They find little success at taking dictation and—most seriously—do not develop important skills such as focused and extractive listening and short-term musical memory.”²¹ Separating the tasks of notating both rhythm and pitch decreases the demands on working memory in a melodic dictation exercise.

20 Olson and Hilley (2012).

21 Karpinski (2000, 103).

My rhythmic shorthand method, called “Notehead Shorthand,” is inspired by and seeks to improve upon the methods described above. For example, one could argue that none of the methods described above adequately ask students to track the divisions of the beat, as most of the metric grids drawn above the staff ask students to draw in the beats, but rarely anything further. Notehead Shorthand explicitly requires students to know/feel the divisions of the beat, as I’ve found that students do better when they are thinking or moving to the division of the beat, rather than the beat itself. Another difference between my method and others is that I specifically ask students to attune to the onset of a note in relation to the meter, rather than its duration (that is, if a student does not know when a note begins within a measure, there is no real reason to consider its duration). Furthermore, some of the symbols in the methods above have ambiguous or multiple interpretations, which can be confusing to students. While it is true that this may not necessarily be a problem, I offer a rhythmic shorthand system that tries to capture all rhythmic details precisely.²² Similarly, Notehead Shorthand more closely resembles actual rhythmic notation, making it easier for students to convert their shorthand onto the staff. Notehead Shorthand can be easily applied to more complicated rhythms and meters, such as compound meters, subdivisions of the beat, and syncopations (whereas some shorthand methods described above are best for simple meters with single division of the beat at most). Finally, Notehead Shorthand is malleable, as it can be used both by instructors who supply students with the time signature prior to hearing the melody, and those who do not (as well as by instructors who allow their students to write during the first hearing, and those who do not).²³

22 Other shorthand methods that have symbols with multiple interpretations could be serving as a “first approximation,” after which other tools (such as subdividing) could help to refine the picture upon a second hearing of the melody. In contrast to these, “Notehead Shorthand” offers students a way to notate rhythms in just one hearing.

23 There are ongoing debates between aural skills pedagogues on the topic of how much information to give students prior to hearing a melody in a melodic dictation task. My intention herein is not to weigh in on these issues. Pedagogues on either side can apply the dictation shorthand method proposed here, demonstrating the generalizability and strength of the method. For example, Karpinski advocates giving little information to students about the starting key signature, time signature, and melody length. David Damschroder’s aural skills text, on the other hand, includes melodic dictation exercises that provide students with the key signature, time signature, starting note, and melody length, all before they ever hear the melody (1995, 406–7). Students taking the AP Music Theory exam are also provided with this full range of information. Pedagogues also differ on whether students should be allowed to write while hearing the aural stimulus. Karpinski, for example, warns against having students write while listening (1990, 199). Bruce Benward (1961) and Michael Rogers (2004) share similar pedagogical views. On the other side of the debate are Levin and Martin (1988), Paney

Notehead Shorthand helps students quickly notate the metric placement of notes, which most can do more easily than visualize rhythmic notation heard during dictation. Being able to count along with an aural stimulus, identify attack points of notes in relation to a meter, and visualize rhythmic notation are all related but different skills, and it may be pedagogically prudent for instructors to tease these apart; some of my incoming first-year students often do not have the ability to do one or more of these tasks. Notehead Shorthand therefore separates the task of dictation into smaller, more accessible steps: 1) the initial act of drawing in the metrical grid helps students consider how they will count along with the melody and how the meter will feel; 2) when hearing the melody, students initially need only attune to the note onsets (not duration), teaching them focused attention skills and divorcing the tasks of notating both onset and duration; 3) once determining a note’s onset within the measure, the student then can take time in between hearings to translate their shorthand to actual rhythmic notation, making dictation more accessible to those who cannot visualize rhythms in real time; and finally when the rhythm of a melody has been determined, 4) students can then solely focus upon pitch and deduce solfège syllables, a task that is easier after hearing a melody a few times. (Anecdotally, I have found that my students at Peabody have a better memory for pitch than for rhythm.) Broadly, Notehead Shorthand is an attempt to answer Andrew Paney and Nathan Buonviri’s call for better pedagogical methods for dictating rhythms.²⁴

I teach the method to all students at the start of their first year, emphasizing that students may think of it first as a “training-wheel” tool that serves as an important role at the beginning stages of their developmental path to learning the art of melodic dictation; eventually, it serves as an accessible “bottom-up” tool that is complemented with “top-down” skills (such as the ability to access visual representations of rhythmic patterns or chunks). Thus, a note of caution should be made to those who employ Notehead Shorthand (or any other dictation shorthand method), as shorthand methods should also be used *in conjunction with* a curriculum that also teaches identifying common rhythmic patterns which builds aural chunking skills (e.g., Laurdella Foulkes-Levy or Daniel Kazez) and one that increases musical memory and selective attention

(2007), Pembroke (1987), and Potter (1990), who encourage students to write while hearing the melody. Nancy Scroggin describes a similar debate among AP Music Theory teachers, as one of the melodic dictations on the AP exam is only repeated three times and students thus feel pressured by this restriction to begin notating right away (2014, 450).

24 Paney and Buonviri (2014).

skills (e.g., Karpinski).²⁵ Below, I present my rhythmic shorthand method, illustrating how it can be used to dictate rhythms in a variety of meters, beginning with single division of the beat in simple meter, then single division of the beat in compound meter, followed by subdivision of the beat in simple meter, and finally subdivision of the beat in compound meter.²⁶ I then provide suggestions for how the method can be used within a curriculum that teaches students to visualize rhythmic notation in real time while taking dictation, which is, after all, the ultimate goal. In particular, I share curricular strategies for combining the bottom-up approach of a shorthand method with top-down approaches such as aural chunking at the end of this essay.

A. Single division of the beat in simple meter

First-year students at the Peabody Conservatory initially learn to notate melodies in simple meter where the beat can only be divided into two parts at most. Once students determine that a melody is in simple meter (either because they are given the time signature or by listening), they write a “metrical grid” above the score (illustrated in Example 10a). They do this by determining the number of beats in each measure, and whether the beat is divided into two or three. This process encourages students to think how the meter feels, which is an important step in dictation. Because the melody in Example 10 is in 4/4, students draw stems and beams (*but not the noteheads*) for four sets of two eighth notes above each measure so as to indicate all of the possible attack points in simple meter with single division of the beat (Example 10a). Also shown in Example 10a, I also encourage students to extend bar lines above the staff, so as to break up the long line of eighth note “hurdles” they just wrote. Then, when students hear the melody, they simply draw noteheads onto their metrical grid, where each notehead corresponds to the onset of each note; Example 10b illustrates the noteheads that students would add to the metrical grid when hearing the melody from Example 10c. Students learn to interpret that one note on the downbeat of m. 4 of Example 10b, for example, must indicate a whole note.²⁷ At my institution, most first-year

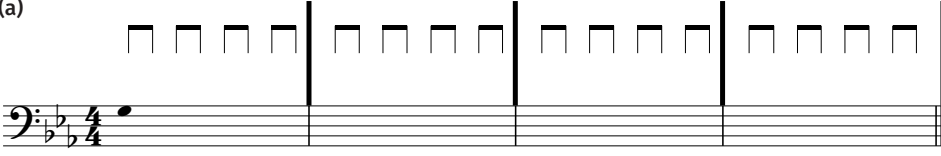
25 See Foulkes-Levy (1997), Kazez (1997), and Karpinski (1990).

26 This progression follows the curriculum in Rogers and Ottman (2019), as opposed to other texts such as Jones, Shaftel, and Chattah (2014), which asks students to notate sixteenth notes in 4/4 meter as early as Chapter 1.

27 Like many other methods, Notehead Shorthand does not distinguish between sustained notes and attacks followed by rests, although one could indicate rests by drawing an “x” in the metric grid. This distinction may be underplayed due to the ubiquity of piano prompts for melodic dictation, which

students in the first half of the fall semester are able to use Notehead Shorthand to determine the correct rhythms of all four measures of the melody in Example 10c in just one hearing.

(a)



(b)



(c)



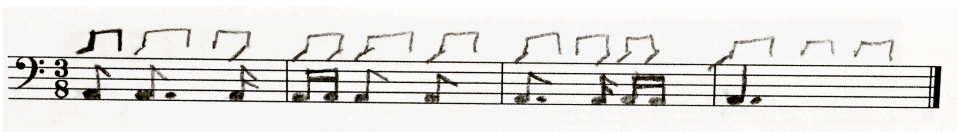
Example 10.

Using Notehead Shorthand to dictate melodies in simple meter with single division of the beat.

Notehead Shorthand is easily adaptable to simple meters where the beat is something other than a quarter note. Example 11 reproduces the work of a first-year student from the first quiz of the fall semester. It represents a rhythmic dictation where the eighth note receives the beat.²⁸ The student’s Notehead Shorthand suggests that they were feeling in 3/4 meter and then converted the note values to 3/8 when notating the actual rhythms on the musical staff. Alternatively, other students may instead draw sixteenth note “hurdles” in their metrical grid.

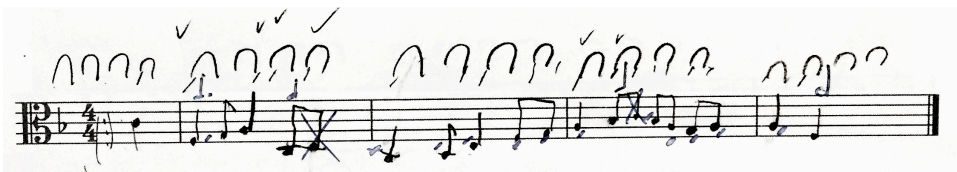
challenges our ability to distinguish between cutoffs and sustained notes.

²⁸ Student work seen in this example (and throughout this article) was obtained ethically and approved by the Homewood Institution Review Board at the Johns Hopkins University.

**Example 11.**

An illustration of Notehead Shorthand when notating rhythms in simple meter where rhythmic values other than the quarter note receive the beat.

Students should be encouraged to draw their metrical grid clearly, drawing stems and beams at 90-degree angles and noteheads on a diagonal so that they are legible. Whereas the noteheads drawn in Example 11 are purposeful and clear, drawn at a diagonal to contrast with the clear vertical stems and horizontal beams in the metrical grid, the noteheads drawn in Example 12 are not as crisp and are sometimes illegible. For example, the student in Example 12 was unable to read whether they put a notehead on the “and” of the 4th beat of m. 1, a byproduct of the fact that the stems and beams of their metrical grid are curved. This caused the student to write an extra incorrect note on the staff on the “and” of beat 4 in measure 1 that never occurred in the actual melody.

**Example 12.**

Sloppy Notehead Shorthand can contribute to a lower score.

Although somewhat beyond the main thrust of this article, I also encourage my students to write moveable-do solfège syllables above the noteheads that they draw on their metrical grid, as shown in Example 13. In this example, the student debated between Fa versus La in the second measure, and Mi versus Fa in the third measure; this student was correct in their final decisions. The student would have benefited from using some contour when drawing their syllables. That is, it would have been useful to write the “Sol” slightly higher than the “Ti” in the third measure so as to indicate that the C was higher than the E. Indeed, the student nearly made an error in the third measure, as they erased a C₃ and then correctly notated C₄ in beat 3 of measure 3—the erasure is slightly visible in Example 13. (See the discussion below regarding Example 17c for a student who successfully wrote solfège syllables with some contour.)



Example 13.

This student would have benefited from using some contour when drawing their syllables, so as to not make errors in register.

Students at the Peabody Conservatory at have modified Notehead Shorthand at the simple meter level to suit their own needs. Below are somewhat successful adaptations. Example 14 illustrates the work of two students who prefer to notate a note's duration in addition to its onset. The student in Example 14a demonstrates knowledge of all of the correct rhythms, and draws arrows for dotted quarter notes. The student in Example 14b develops this method even further, where they do not draw in noteheads at all; instead, they draw dashes to represent how long a note lasts in relation to the metric grid.

(A)



(B)

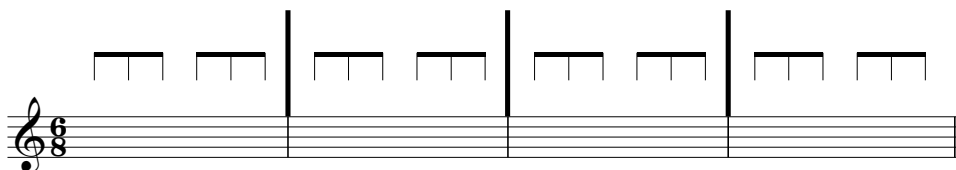


Example 14.

Modifications of the Notehead Shorthand method to include a note's duration.

B. Single division of the beat in compound meter

When notating a melody in compound meter, students draw a metric grid above the staff to reflect that the beat is divided into three parts. In single division of the beat in compound meter, the metric grid illustrates that the maximum number of notes in each measure is six eighth notes. Example 15 provides an example of that drawn for a melody in 6/8 meter.

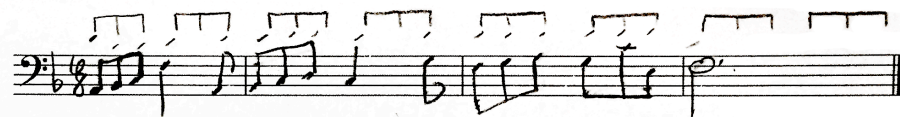


Example 15.

The metric grid students draw when hearing a melody in compound meter when using Notehead Shorthand.

Example 16 reproduces work by first-year students who performed relatively well on their first melodic dictation quiz in compound meter. The student in Example 16a dictated all notes and rhythms correctly. An analysis of the Notehead Shorthand in Example 16b indicates that the student identified all of the correct note onsets, but did not translate two notes into the proper rhythm, writing two notes as dotted eighths instead of quarter notes; these incorrect rhythms are circled in red. The student in Example 16c made a similar mistake, as their Notehead Shorthand reflects knowledge of how the rhythm sounds, but they notated half notes instead of quarter notes when translating onto the staff. This student also indicated that they knew the rhythmic value of some notes (drawing an “x” on the staff), but did not know their pitch.

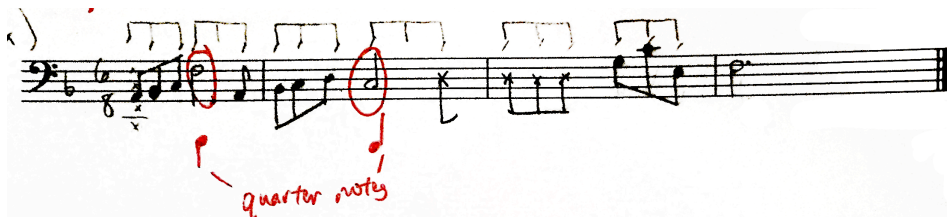
(a)



(b)



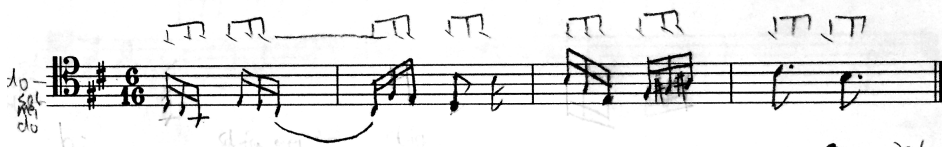
(c)

**Example 16.**

Three examples by first-year students who performed well on their first melodic dictation quiz in compound meter. Errors in rhythm are circled in red.

When students are asked to dictate melodies in compound meter where the lower number in the meter signature is something other than an eighth note, students vary in the way they utilize Notehead Shorthand. As illustrated in Example 17a, one student used the metric grid for 6/8 meter and then converted the rhythms to 6/16 when notating the melody. The students in Example 17b and 17c used a metric grid that reflects the 6/16 meter. The student in Example 17c even extended the bar lines into their metric grid so as to keep track of the downbeat. Note both students in Examples 17b and 17c wrote solfège syllables for what they were hearing and even added in some contour so that they knew where to place the notes. For example, the student in Example 17c notated “D” for Do higher than the “M” for Me, as there was a leap of a sixth from the notes D up to B in measure 2.

(A)



(B)



(C)

**Example 17.**

Students vary in their approach to using Notehead Shorthand for a melody in compound meter where the lower number in the time signature is something other than an eighth note.

Notehead Shorthand is easily adaptable for melodies in compound triple and compound quadruple meter. For example, Example 18 is an example of student work when notating in 9/8. The student drew three sets of three eighth notes above each measure, but they must have made a mistake when adding noteheads to their metric grid in measure two, as the student corrected their notation for two beats by writing the correct answer above their original shorthand. This might be a successful strategy to be shared with students, as I have found that students become confused if they try to erase noteheads already written.



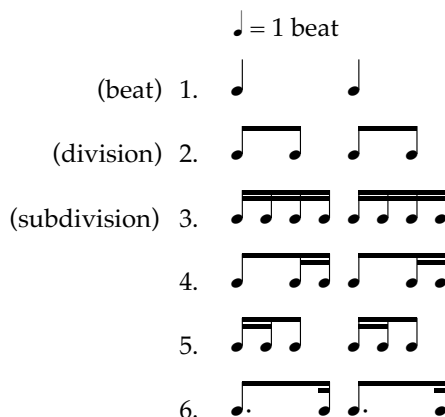
Example 18.

An example of the metric grid for compound triple meter.

C. Subdivision of the beat in simple meter

Once students demonstrate mastery of rhythms with single division of the beat in simple and compound meter, they then become familiar with the common rhythms containing subdivision of the beat in simple meter, such as those shown in Example 19. Before discussing how to adapt the shorthand learned with single division of the beat to these new rhythms, I recommend first exposing students to the new rhythms through sight-singing exercises and in-class rhythm games; I do this in an effort to developing students' visualization skills of rhythmic patterns common to the meter. During these in-class games, students are looking at a menu of the common rhythms with subdivision of the beat in simple meter (e.g., Example 19). One such game is “Bouncy Finger,” where I point to different rhythms and students “ta” the rhythms aloud, all according to a steady beat.²⁹ “Echoes” is the name of another game, where one student performs two different rhythms (choosing two of the rhythms in Example 19), then the rest of the class echoes these rhythms aloud and calls out which lines were performed; this game is replicated where students are not looking at the common rhythms and are instead visualizing the rhythmic patterns for both the call and response.

²⁹ The bouncy finger game is inspired by in-class games I observed in William Marvin's aural skills classes at the Eastman School of Music.

**Example 19.**

The common rhythms in simple meter with subdivision of the beat.

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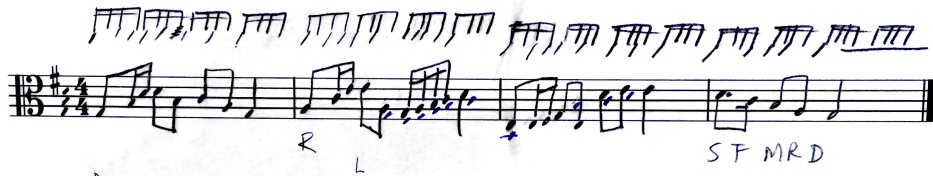
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After a series of the rhythmic activities described above, we subsequently commence with dictation activities with these new rhythms. My students have adapted Notehead Shorthand for simple meters with subdivision of the beat in a variety of ways. Example 20 illustrates the varied approaches that students bring to the task and the flexibility of the Notehead Shorthand method. Example 20a shows a student who uses the same metric grid as when there is only single division of the beat, who adds floating noteheads as necessary to reflect the additional onset of a sixteenth note. While the red pen marks on this student's exam indicate that there were some errors in pitch, the student made no errors in rhythm. The student in Example 20b drew a metric grid above the staff showing all of the possible rhythmic onsets that could occur in each measure; the student made no errors in rhythm. The student in Example 20c did the same thing, but after drawing noteheads on the metric grid, they translated their shorthand to actual rhythms above the grid. Examples 20d and 20e provide some slight variations of the metric grid. In Example 20d, the student drew three sets of vertical lines to represent all of the sixteenth notes that could occur in 3/4 meter. The student then drew noteheads to represent the onset of notes heard in the melody. In Example 20e, the student's metric grid consists of large circles to represent the beats in the measure and small circles to represent the subdivisions of the beat. When hearing the melody, the student then drew a dot inside the circle if something started at that moment, and also drew dashes when numerous onsets occurred back-to-back. I do not encourage this latter method, as the tiny dots inside of the circles could be difficult for the student to see. Still, this method worked for this particular student.

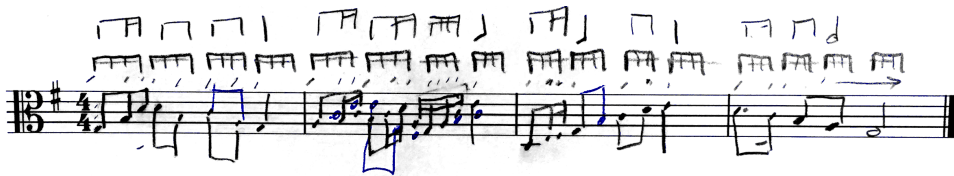
(A)



(B)



(C)



(D)



(E)



Example 20.

Examples of Notehead Shorthand (and some variations of the method) used by students when hearing melodies in simple meter with subdivision of the beat.

The adaptations of Notehead Shorthand illustrated in Example 20 (especially Examples 20b, 20c, and 20d) help students notate any rhythm, even syncopations, at the subdivision level of simple meter. The metric grid above the staff shows students all of the possible note onsets and provides them with a way to determine the metric

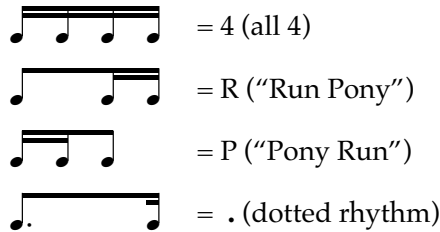
placement of the note within the measure. Notehead Shorthand provides an effective pedagogical method for students to notate heard rhythms quickly and accurately. Yet, one critique of the Notehead Shorthand applications illustrated in Example 20 is that they can be interpreted as a bottom-up approach to taking dictation, which by itself could be regarded as insufficient. While I have found that some students, especially those with less dictation experience prior to my course, excel when using the Notehead Shorthand approach, it may be too atomistic for others. Thus, it is important to *combine* the teaching of Notehead Shorthand with building the student's ability to quickly visualize the rhythm of entire beats in real time (i.e., employing aural chunking exercises for rhythms).

Therefore, some students may instead prefer to develop a shorthand method for entire beats. In this method, students write only one symbol to describe what occurs in an entire beat. Example 21 illustrates this method, which I call the "Run Pony Method," named for the common saying for an eighth note followed by two sixteenths often used by Suzuki teachers. In Example 21a, I teach students to write one symbol for each beat that contains that particular rhythm. If a beat were to contain all four sixteenth notes, a student would write a "4," to indicate that all four sixteenths occurred. Conversely, if a beat were to contain just one note on the beat, a student would write a "1." Examples 21b and 21c illustrate ways my students have incorporated this method, where the student in Example 21c combines Notehead Shorthand with the Run Pony Method. While the Run Pony Method does not lend itself to notating syncopated rhythms, it is sufficient for the most common subdivisions of the beat.

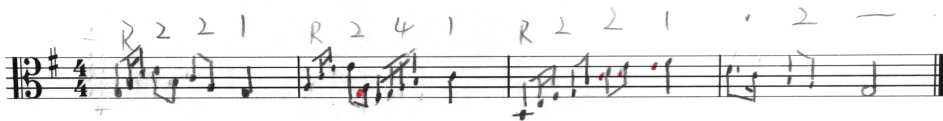
In my experience, the Run Pony Method is better suited for more advanced students who can already visualize rhythmic patterns, although it is important to encourage all students to develop their aural chunking skills. In-class games such as those described above can help students along this path. When introducing the Run Pony Method we play a game where I sing a melody and students call out (or write) the Run Pony symbol corresponding with the rhythm that they hear in real time (see Example 21a). In another, students improvise a short rhythmic phrase and a classmate repeats it directly afterwards and then adds to it, each student making the rhythm longer. These in-class games answer the recommendations of Laurdella Foulkes-Levy, who suggests that students should memorize common rhythmic (and melodic) patterns so that they will be able to instantly recognize them when they hear them in dictation tasks: "Teaching students to understand tonal hierarchy and the prevalence of common patterns can greatly facilitate the musicianship training of our talented students, whose abilities deserve to be developed to their highest

potential.”³⁰ Nancy Scroggin’s AP Music Theory test preparation text makes a similar recommendation, encouraging students to “plan ahead by thinking about and writing down what possible rhythms are going to be used. You can’t write down every possible combination, but you can certainly *anticipate* the most often-used rhythms. With the rhythm menu in place, much of the guesswork is gone.”³¹

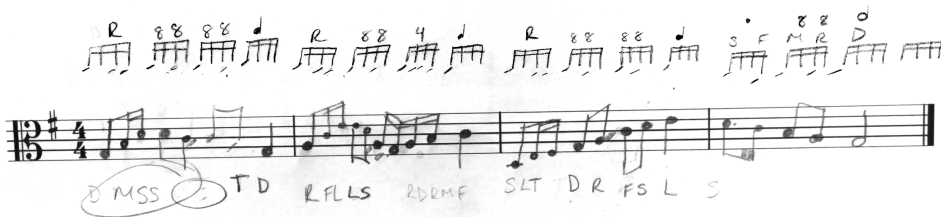
(A)



(B)



(C)



Example 21.

The “Run Pony Method” of aural chunking common subdivisions of the beat in simple meter.

I encourage students to use a rhythmic shorthand method that matches the level of the beat that they feel while hearing the aural stimulus. For example, more advanced students who feel/count the large beats and can easily visualize rhythmic patterns while hearing a melody should use the Run Pony Method. Students with less experience who prefer to count the sixteenth notes in 4/4 should use the Notehead

³⁰ Foulkes-Levy (1998, 24).

³¹ Scroggin (2014, 244).

Shorthand method. Students who feel the eighth notes in 4/4 should use a method similar to that in Example 20a or the Notehead Shorthand method. It may also be that students can change shorthand methods over time as their level of experience and skill increases. Similarly, students may choose one method over another depending on the tempo of the aural stimulus. I encourage my students to first determine the level of the beat they are internally pulsing when hearing the aural stimulus; this helps them determine both the meter and shorthand method.

D. Subdivision of the beat in compound meter

Similar to when students learn subdivisions of the beat in simple meter, my students are first familiarized with the common rhythms to subdivisions of the beat in compound meter (Example 22) through classroom games and sight singing, so as to build rhythmic chunking and visualization skills. When starting to notate these new rhythms, we then discuss possible shorthand symbols and strategies for notating subdivisions of the beat in compound meter, and students can select which strategy best suits how they were internalizing the rhythms when performing them. Example 23 illustrates some of the shorthand adaptations developed by my students at the Peabody Conservatory, where Examples 23a–23j run the gamut from bottom-up approaches to top-down strategies. Examples 23a–23c illustrate students who write all six possible subdivisions of the beat in their metric grid; they then add noteheads to indicate the onset of the notes (Examples 23a and 23b) or they circle the length of each note (Example 23c) after hearing the melody. The students in Examples 23d and 23e use the same metric grid as what is used when hearing single division of the beat and add in floating noteheads when notes occur in the other possible sixteenth positions. The students in Examples 23a–23e are usually pulsing/feeling/counting sixteenths or eighths in 6/8 meter.

The students in Examples 23f–23h are feeling the eighth-note level of 6/8 meter. In their shorthand method, they write in a metric grid used for compound meter above the staff, and then write in a “1” or a “2” to represent how many notes are present in the place of each eighth note in the meter. While these students vary in their ability to notate the pitches, they generally heard all of the rhythms correctly. However, whereas all of the adaptations developed in Examples 23a–23e can also reflect syncopations, those in Examples 23f–23h cannot, and thus this method is not as strong as Notehead Shorthand. These methods bear similarity to the method critiqued in Example 6, above.

The students in Examples 23i and 23j feel the beats, and did not initially write in a metric grid above the staff. They instead tried to develop a shorthand system with one (or two) symbols for an entire beat. For example, the student in Example 23j wrote a “6” on the downbeat of measure three to reflect that all sixteenth divisions occurred within beat one of that measure. This student made no errors in rhythm, but some in pitch.

♩. = 1 beat

(beat) 1. ♩. ♩.

(division) 2. ♩ ♩ ♩ ♩ ♩ ♩

(subdivision) 3. ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩

4. ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩

5. ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩

6. ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩

7. ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩

8. ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩

9. ♩ ♩ ♩ ♩ ♩ ♩

10. ♩. ♩ ♩ ♩. ♩ ♩

11. ♩. ♩ ♩ ♩ ♩. ♩ ♩ ♩

Example 22.

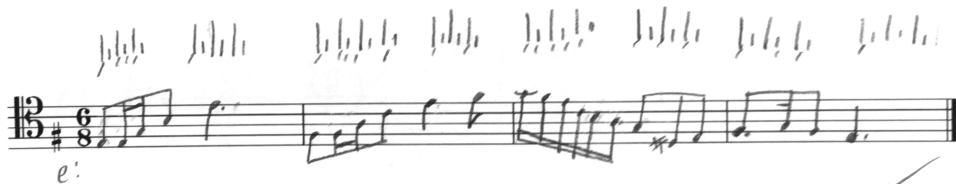
The common rhythms in compound meter with subdivision of the beat.

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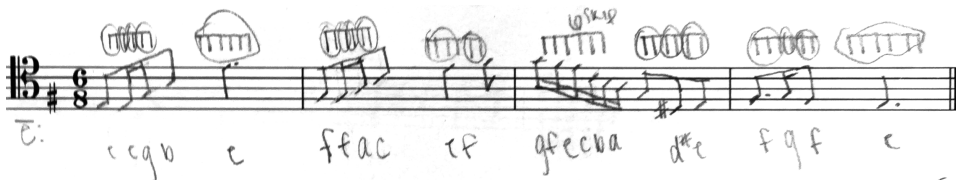
(a)



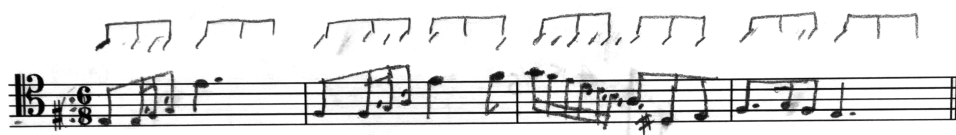
(b)



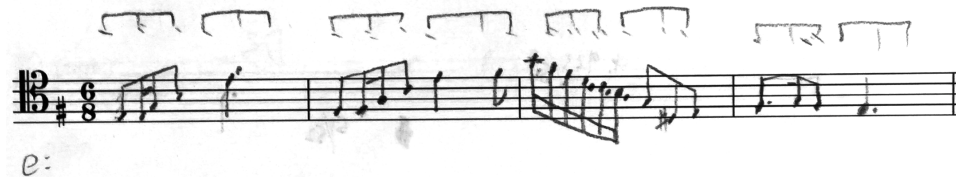
(c)



(d)



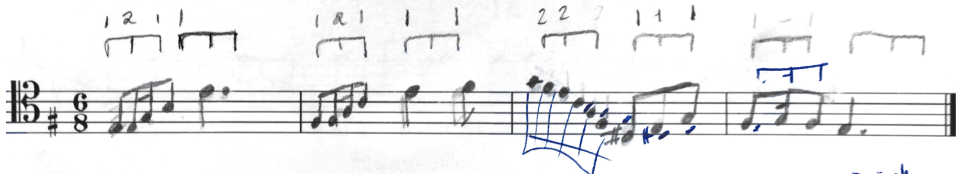
(e)



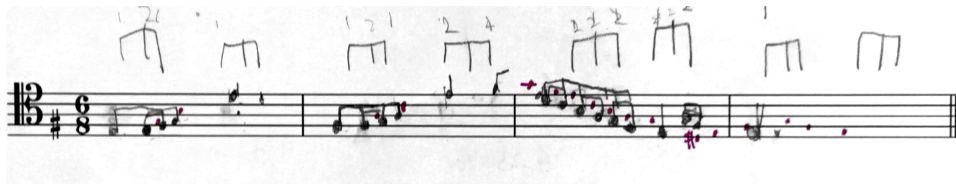
Example 23.

Examples of the rhythmic shorthand methods used by students when hearing melodies in compound meter with subdivision of the beat.

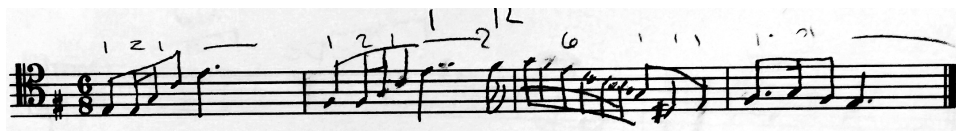
(f)



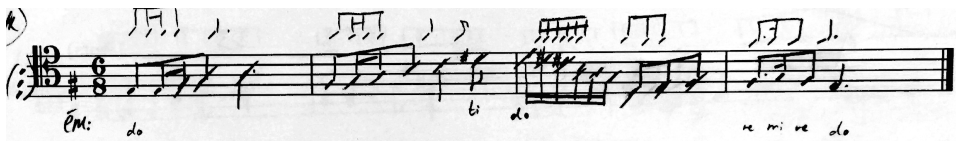
(g)



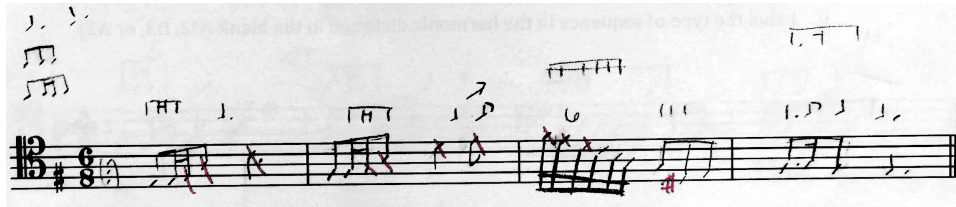
(h)



(i)



(j)



Example 23 (cont'd).

Examples of the rhythmic shorthand methods used by students when hearing melodies in compound meter with subdivision of the beat.

Situating Notehead Shorthand within the Aural Skills Curriculum

Many musical shorthands were shared in this article. No matter which shorthand method is used by students in the classroom, it is essential to use the method within an aural skills curriculum that also focuses on developing a student's ability to visualize rhythms/pitch notation while taking dictation, build contextual listening skills, develop musical expectation, etc. Aural skills texts by Jones, Shaftel, and Chattah (2014), Murphy, Phillips, Marvin, and Clendinning (2016), and Karpinski (2017) are just some of the many excellent texts one can use to develop these important skills in students. Instructors should discourage students from simply becoming "musical shorthand-takers, perhaps adept at getting the right thing on paper but lacking in skills such as focused attention, selective memory, and increased memory capacity."³² I, too, have worried that use of a shorthand method has delayed some of my students in developing crucial rhythmic visualization skills. Furthermore, the metric grid does take time to set up (~15 seconds for a four-measure melody), which could be prohibitive to some students under a time constraint (such as those taking the AP Music Theory Exam, although test takers could write down their metrical grid while listening to directions.

Thus, it is important that aural skills instructors maintain a pedagogical model that combines the bottom-up approach of using a shorthand method with lessons that develop students' pattern recognition and mental visualization skills, and to oscillate between these approaches when any new concept is learned (and throughout the curriculum). While I proceed with this as my overall pedagogical strategy, I also believe that mastery of bottom-up skills is required to tackle top-down skills, and thus the first semester of students' collegiate ear-training curriculum at the Peabody Conservatory mostly emphasizes bottom-up Notehead Shorthand exercises (in this semester, we cover single division of the beat), whereas the second semester focuses upon rhythmic chunking skills (when I am teaching subdivision of the beat). While I always encourage students to advance beyond the bottom-up approach to taking dictation (e.g., to hear rhythmic chunks and visualize actual rhythmic notation), this path will be short for some and may require months of work for another. The developmental path for one student may be very different from the path of another student, and Notehead Shorthand offers flexibility to accommodate these variations.

Although there are possible shortcomings of using such an approach, I argue that

32 Karpinski (1990, 199).

a shorthand system *is* needed by students with limited musical experience, especially those who have difficulty visualizing rhythms while hearing melodies and/or those who have difficulty establishing metric entrainment while hearing melodies; I always have a few of these students in my classes each fall. My shorthand method separates the task of melodic dictation into multiple small, accessible steps. The method can also be used by more advanced students when tackling a new skills, such as notating syncopated rhythms. Indeed, I have found that my strongest students choose to use the Notehead Shorthand method at multiple times throughout the curriculum, which helps to destigmatize the method from being applicable only to the weakest students (i.e., no student would elect to use the method if they thought it categorized them as a student with weak aural skills, especially at the start of their first year when social relationships at college seem paramount). The method provides students of all levels with a path to succeed taking dictation, promoting inclusivity in the classroom. Thus, I offer Notehead Shorthand as a method that all students can add to their tool belt; one that students can use when they needs it. I recommend that my method be used similarly to Karpinski’s protonotation, who writes, “readers will find that protonotation serves very well when addressing new skills and concepts, and when isolating notation from other stages in the listening process.”³³

Conclusion

Notehead Shorthand asks students to notate rhythm before pitch.³⁴ Paney and Buonviri, though, found that high school AP music theory teachers struggle to get adequate results on the rhythmic aspect of melodic dictations, quoting one instructor who observes that students “don’t know how to space the notes rhythmically, and they get flustered, and it ends up causing them to mess up some of the pitch parts.”³⁵ Notehead Shorthand provides a solution to this problem. It serves to improve other rhythmic shorthand strategies because it 1) explicitly requires students to know/feel the divisions of the beat, 2) more closely resembles actual rhythmic notation, making it easier for students to convert their shorthand onto the staff, 3) uses symbols with only one rhythmic interpretation, 4) can be easily applied to more complicated rhythms and meters (whereas other shorthand methods are best suited for simple

33 Karpinski (2017, xix).

34 See Beckett (1997), Karpinski (1990 and 2000), Potter (1990), Paney and Buonviri (2014).

35 Paney and Buonviri (2014, 405).

meters with one division of the beat), 5) teases apart the multiple steps required in a dictation task, and 6) helps students understand how notes are spaced in relation to the measure.

Notehead Shorthand is workable for any age/level, and may be especially useful for students preparing for the AP Music Theory students and college aural skills. In my own classrooms, both weak and strong students choose to use the method, as it is malleable and students can tailor it to what works best for them. Moreover, students should choose a metric grid that captures the level of the beat that they are internally counting when taking dictation; Notehead Shorthand can accommodate whether a student is pulsing the beats, divisions, or subdivisions of the beat. Notehead Shorthand can be used both by instructors who provide students with the time signature prior to hearing the melody (e.g., Damschroder; Jones, Shaftel, and Chattah) and those that do not (e.g., Karpinski).³⁶ In the latter situation, students not provided with the meter would spend their first hearing of the melody determining the meter (and perhaps mode) and then they would write down their metrical grid prior to the second hearing. Notehead Shorthand can also be used by teachers who do not allow their students to notate anything upon first hearing of the melody (as advocated in Karpinski and Rogers), as well as by those who allow students to begin notating right away (on the AP Music Theory Exam the melody for one melodic dictation is only repeated three times).³⁷ Notehead Shorthand can also be applied to old-fashioned melodic dictations, as well as in other contexts. For example, my students have used it when hearing two-voice dictations as well as when notating the vocal part of a *Lied*.

The strategy of writing the rhythm in one hearing and then focusing on pitch for the other hearings of a melodic dictation exercise minimizes cognitive load for students, which has important ramifications. Overall, my hope is that Notehead Shorthand provides students with a reliable tool to hone their skills in dictation, empowering them to attend a concert and, like Mozart, notate what they hear.

36 See Damschroder (1995, 406), Jones, Shaftel, and Chattah (2014, 173), and Karpinski (2017, 110).

37 Karpinski (2000); Rogers (2004).

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Mamlok on Day One: Strategies for Incorporating Recent Music Into the Early Undergraduate Music Theory Curriculum

NEAL P. ENDICOTT

This research offers concrete solutions to two challenges that face music theory instructors seeking better coverage of post-tonal music in their undergraduate music theory curricula. The first of these challenges is the lack of curricular time dedicated to music composed since 1900, particularly given the typical course structure in which such topics are left for last. The second of the two challenges is the attitudes frequently held by students towards this music, which they may prejudge to be difficult, unfamiliar, aesthetically unappealing, or entirely divorced from previous topics. Instructors can at least partially overcome both of these challenges by frequently incorporating examples of art music from the post-tonal era into the early semesters of the undergraduate music theory curriculum (focusing in this paper primarily on demonstrating the applicability of this concept to topics generally covered in units on fundamentals).



I: Introduction

A cursory survey of literature on the teaching of post-tonal and contemporary music theory quickly reveals two recurring sentiments. The first is the tendency of instructors to bemoan the abbreviated treatment given to the music of the last century-and-a-half by the course structure of most university music programs, in which post-tonal theory is relegated (in the best-case scenario) to the final semester of required theory, a devastatingly short unit tacked onto a later semester of tonal theory, or, worst of all, to exclusively elective courses. Some theorists, such as Michael Buchler, put this rather elegantly:

We aren't generally accorded much time to introduce twentieth- and twenty-first-century music to our undergraduates. So when we arrive at the unit (or, if we're fortunate, the semester) on "new" music, we need to be efficient with our time and should keep our eyes and ears on the ultimate prize: leaving students so enamored with at least part of the atonal repertoire that they want to perform it and study it further.¹

Kulma and Naxer make a similar point, noting that while music—and by necessity the theoretical tools we need to understand it—is constantly evolving, “the breadth of tools and repertoire introduced to undergraduates has not changed alongside it,” and that “to prepare our twenty-first-century students for their future as well-

¹ Buchler (2017).

rounded musicians, we need to give them more musical tools and expose them to more repertoire.”²

Sam Richards concurs, writing that “we should strive to offer students a more complete musical perspective. Few of our graduating professional musicians operate within spheres where such a narrow focus on music of the Western classical tradition is warranted . . . it teaches too much about too little.”³ Essentially, in our often myopic focus on ensuring the fluency of our students in the details and nuance of common practice tonality, we lose sight of the fact that many topics are applicable to musics outside of that sphere, and should be taught as such.

These observations lead to the second recurring sentiment in the literature surrounding the teaching of post-tonal music, which is the seeming consensus that undergraduate students approach post-tonal music with a lack of interest, apprehension, fear, pre-programed distaste, disdain, or a combination of all of the above. Many a pedagogical article begins with a nod to this very notion:

For the most part, these students will have been minimally exposed to post-tonal music . . . the little they know about it, often through hearsay, is they don’t, or won’t like it, that it’s different (translate as weird), incomprehensible, and not exactly pretty. In other words, we face a clear disconnect between post-tonal music and our present-day core students.⁴

Put another way:

Undergraduate music students often demonstrate limited interest in contemporary art music. Many have communicated the perception that contemporary music is esoteric and inaccessible, dominated by levels of virtuosity they have yet to develop, extended techniques they cannot imagine mastering, and tendencies toward cacophonous dissonance they find off putting.⁵

I propose, in agreement with the above, that these attitudes are caused, at least in part, by a lack of exposure⁶ to post-common-practice repertoire, especially in an

2 Kulma Naxer (2014).

3 Richards (2015).

4 Roig-Francolí (2017, 36).

5 Dean (2015).

6 Though certain students—classical saxophonists, percussionists, and some brass musicians, especially—may actually be *more familiar* with this music on day one than they are with that of “the canon,” and my suggestions can help make music theory feel more relevant to their studies. This is the same as the supremely valid argument for including more examples of jazz (and other vernacular and Non-Western genres) into the curriculum: everyone should feel that what is being studied can apply to *their* music.

academic setting, and by an otherization of post-tonal and non-tonal music brought about by separating it entirely from tonal repertoire in the music theory classroom. I posit that music theory instructors can ameliorate these attitudes somewhat –and give themselves more time to teach post-tonal repertoire—by consciously integrating art music examples from the 20th and 21st centuries throughout the early semesters of music theory.

This achieves several goals. First, by using classroom examples drawn from the post-tonal era, we can make it clear that many of the topics and analytical techniques that we teach in the undergraduate theory classroom are applicable to more than just the repertoire of one era or style (for instance, the broad applicability of counterpoint and contrapuntal techniques to 20th Century and vernacular musics). Second, rather than implying a 4:1 (or similarly imbalanced) weighting of importance between the study of tonal and post-tonal musics, we place post-tonal music on the same (or marginally more even) level of academic importance that we assign to tonal music. Third, we can engender an earlier appreciation for music of the post-tonal era by giving students the means to interact with contemporary repertoire immediately in their collegiate studies. Last, but certainly not least, we give ourselves more opportunities to include repertoire from a truly diverse body of composers, and to do so in a way that embraces true diversity, rather than simply finding “diverse” examples that continue to prop up the Euro-centric model currently employed at many universities.

As a note: for the purposes of this paper, I will focus solely on instances where pieces drawn from the *art music* tradition of the 20th and 21st centuries may be used to aid in the instruction of undergraduate music theory. While I strongly believe that the use of examples from the repertoires of jazz, pop, rock, hip-hop, theater music, folk music, and world music can achieve many of my stated goals, in service of keeping my research focused and of an achievable scope, I have decided to limit my explicitly outlined examples to those from the art music tradition.⁷

II. Text Survey and Methodology

The music theory curriculum that I, and many reading this, experienced was, and is, one that relies overwhelmingly, if not exclusively, on the music of dead European males who wrote in a specific and narrow range of styles over the course of a little over 100 years. In her chapter of the *Norton Guide to Teaching Music Theory*, Ellie

⁷ Ideally, *every* example outlined in the following pages (and most, if not all, other topics) would be accompanied by examples from world and vernacular musical styles.

Hisama recounts that her first exposure to the work of a female composer in the theory classroom came during an upper-level elective course in the form of Ruth Crawford's *String Quartet 1931*. Hisama notes that after being introduced to Crawford's music, she became aware that she had never encountered music by a non-white composer in a classroom setting either; an absence mirrored on concert programs.⁸

When she elected to write her dissertation on works by Ruth Crawford and Marion Bauer, Ellie Hisama did so to upset the canon deliberately, "whether or not [her] work was of interest to potential employers."⁹ As it did for Hisama, and many others, the catalogue of examples commonly utilized in the music theory classroom has the potential to leave students with the impression that this—the music of the white males of "the canon"—is the only music worthy of serious academic scrutiny. Recent (and often not-so-recent) scholarship has magnified the need to diversify the music we use to teach music theory, including music by women composers, composers of color, LGBTQIA+ identifying composers, composers of non-European or American descent, living composers, and examples and topics from outside the sphere of art music as it is traditionally defined.

Cara Stroud, in discussing the challenges of expanding the examples used in teaching to include those by female composers, writes that "I want all of my students, especially those who are members of under-represented groups, to feel welcome . . . and I feel it is valuable for all of my students to see and hear music from a diverse range of composers." She makes special note of "the vital importance of presenting work by women composers for all students" in order to "provide role models for women students [and to] encourage all students to expand their concepts of femininity and masculinity."¹⁰

Stroud's essay begins with an acknowledgement that despite her best intentions to present "repertoire from multiple genres, genders, and ethnicities"¹¹ her own teaching, like that of many if not most theory professors, falls short. For many topics in music theory, examples by female composers are not readily available and faculty often lack the time to effectively incorporate them into their curricula, though, as Stroud notes, the website "Music Theory Examples by Women"¹² and other

8 Hisama (2018, 253).

9 Ibid., 254.

10 Stroud (2018).

11 Ibid.

12 <https://musictheoryexamplesbywomen.com/>

resources have made a tremendous impact on this front. To make up for the lack of time to prepare, and other issues surrounding the diversification of classroom examples, Stroud suggests a number of strategies to confront the imbalance. Though her article focuses on diversification by gender, three issues—canonical thinking, accessibility, and tokenism—and her solutions,¹³ are easily applied to other spectra of diversification, including my efforts to bring the music of the 20th and 21st centuries into the classroom during the early semesters of music theory.

Canonical thinking, Stroud writes, is the “tendency to go back to the same limited set of classic teaching examples from year to year.”¹⁴ While this saves time, it also leads to stagnation, and stands firmly in the way of diversification. Stroud suggests incorporating at least two works by women composers per semester. Like my efforts, this is easier to achieve with some topics than others, as illustrated by Stroud’s difficulty in finding a “pedagogically useful sonata example.”¹⁵ To overcome this, she suggests identifying from the outset which topics are specific to a certain time-period, making finding an example by a woman less likely. This solution—identifying topics that are present across a broader spectrum of time¹⁶—is the same one that I propose to use in introducing more contemporary examples into the undergraduate theory classroom. These two efforts—and efforts to diversify by race and ethnicity, such as those proposed by Hisama—will often, and deliberately, overlap.

In his “Ten Tips for Teaching Post Tonal Theory,” Joseph Straus begins with the pronouncement to teach “less theory, more music.”¹⁷ In the context of his “Ten Tips,” Straus means that the instructor of a post-tonal theory course should spend less time on the minutiae of individual theoretical constructs and more on introducing repertoire and discussing individual concepts in that context. This is a rule that I feel is broadly applicable to the teaching of music theory in general. The topics introduced in the first semesters of the undergraduate curriculum are often ones treated with abstraction, not repertoire. The concept of pitch, for instance, is often taught through the use of keyboard diagrams and discrete “name the pitch” exercises. As I will address later, this is a prime opportunity to teach what is often the very first topic of music theory

¹³ Stroud (2018).

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Straus (2018, 79).

with examples of contemporary music. Straus also recommends “diving straight”¹⁸ into post-tonal repertoire when students reach that specific course/unit. Introducing some of that material/repertoire early on serves to offer students the chance to “dip their toes in the water”¹⁹ at a more appropriate time.

For the purposes of this study, I will draw on insights from the previously referenced research in order to craft sample lessons and exercises that demonstrate the applicability of my central premise. Additionally, I will use textbook Tables of Contents to identify topics common to the early semesters of music theory, operating under the assumption that programs tend to roughly follow the progression of their chosen text. The five texts that I used for this survey are: Laitz’s *The Complete Musician*, Kostka, Payne and Almén’s *Tonal Harmony*, Burstein and Straus’s *Concise Introduction to Tonal Harmony*, Clendinning and Marvin’s *Musician’s Guide to Theory and Analysis*, and Aldwell, Schachter and Cadwallader’s *Harmony and Voice Leading*. While not the only texts used in the teaching of undergraduate theory, they are frequently utilized in crafting course design and as resources from which to draw pre-fabricated examples.

These texts show considerable similarity in their introductory material, beginning with facets of pitch and rhythmic notation, intervals, meter, major and minor keys, and triads and seventh chords. Following this, there is some variation in detail and the ordering of topics, with modes being introduced early on in the Clendinning/Marvin, and Kostka/Payne/Almén moving quickly into triads and inversions while the other texts begin with two-voice counterpoint. Regardless of subtle differences, these texts all cover a similar breadth of topics in their chapters on tonal music and topics. An additional similarity is that, with the exception of Clendinning and Marvin’s *Musician’s Guide*, no example of 20th century/post-tonal art music is introduced prior to units dedicated to that subject, though all of the texts manage to use at least a few examples from jazz, rock, pop, musical theater, etc. to illustrate various ideas.

With each of these common topics—compound melody, for instance—I will ask several questions. First: is the topic exclusively relevant to common practice/functionally tonal music? If so, I will, for the time being, relegate that topic to future research. Next: are there pieces from the 20th or 21st centuries that spring quickly to mind for the teaching of that topic?²⁰ Are any of those pieces by female, non-white,

¹⁸ Ibid., 86.

¹⁹ Ibid., 86.

²⁰ This question is designed to show that it is possible for the instructor to mitigate the time requirement of finding their own new classroom examples, though I encourage the use of those that I outline, since that saves even more time.

or LGBTQIA+ identifying composers?²¹ Are any of these pieces for under-represented ensembles, instruments, or media (such as saxophone, euphonium, percussion, guitar, wind band, electroacoustic music, improvisatory music etc.)? These questions serve to guide both the choice of topics and the choice of repertoire within each topic.

III. Application

The following topics, while by no means exhaustive even of those covered in fundamentals units, are designed to demonstrate the benefits and ease of applying this research. The topics of compound melody and invertible counterpoint are included to show that these concepts can be applied outside of fundamentals units as well, as these are topics generally covered in later semesters (often the second or third) of music theory or even in non-core/elective courses such as tonal counterpoint.

It is worth noting here that this research is intended as a first step, not only in that this paper primarily covers fundamentals topics and is intended to be followed by additional research addressing topics of harmony and form, but also in the sense that this research is meant as an interim step towards true curricular redesign. Choosing new classroom examples is an action that instructors can take regardless of their authority to change the broad structuring of the music theory curriculum (junior faculty and graduate assistants for instance) and is one that can be taken quickly and with relative ease.

That the standard curricular structure is one rooted in systemic white/male supremacy has been well established.²² This has been a matter of considerable recent discussion, and is likely to remain so for some time. The prevailing four/five semester theory sequence is one with considerable institutional inertia behind it, and reshaping this curriculum is going to be time-consuming and difficult, though several institutions have already begun this work, including Harvard²³ and the University of Dayton.²⁴ Courses will need to be re-designed from the ground up; new classroom

21 In these cases it is important to make discussion of the composer's identity part of the instructional process. This can be as simple as a brief introduction of the composer that emphasizes their identity ("This piece is by Ursula Mamlok. She was a German composer who came to America to flee the Nazis. Her music was heavily inspired by the composers of the Second Viennese School.") or can become a more intensive part of the discussion (as I suggest in the case of Barber's sexuality as a topic in his *Despite and Still*).

22 See especially Ewell (2020).

23 Robin (2017).

24 Acavedo and Rush (2020).

examples, homework assignments, and exams will be developed; and new textbooks will need to be written. Efforts like Molly Murdock's Music Theory Examples by Women project, that of the Composers of Color Resource Project,²⁵ and, in its own small way, my research, can serve as stepping stones to a truly diverse, antiracist, and anti-sexist curriculum, and, as long as the examples chosen do not simply continue to reinforce the artificial supremacy of "the canon," can continue to be useful in that new curriculum.

1. *Pitch*

The very first topic taught in most, if not all, undergraduate music theory courses is the concept of pitch. This topic is almost always covered via the use of keyboard diagrams, artificially-constructed examples, or with simple musical examples drawn from Western folk traditions and the repertoire of canonical composers. Given that one of the primary goals of collegiate music theory instructors is (or should be) to teach the subject with an expanded (or destroyed) canon, this choice is an obvious mis-step. Since our goal is to introduce students to the basic concepts of pitch and pitch-class, there is no end to the possible pieces we might use to teach them. A logical choice would be to use a piece of 12-tone music, a spectralist piece, or even a texturally-driven piece of contemporary repertoire, since these pieces are more likely to contain all twelve chromatic pitches in a relatively short excerpt.

The palindromic theme to Ursula Mamlok's *Variations for Solo Flute* (see Example 1), can be quite easily understood by students at the very beginning of their theoretical studies. More than being an example that is "just as good" as one from the tonal repertoire, the Mamlok offers unique advantages and sends a powerful Day One Message to students: that the music theory classroom is one that values the music of women composers, intends to engage with diversified repertoire, and intends to challenge its students in ways that apply even the most basic concepts to complete pieces and requires them to demonstrate and utilize critical thinking skills.

²⁵ <https://composersofcolor.hcommons.org/>

Adagio ♩ = 58

Flute

The musical score for Flute, measures 1-14, is presented in three systems. The first system (measures 1-5) shows a melodic line starting with a half note G4 (F#4 in key signature), followed by quarter notes A4, B4, and C5, then a half note B4. Dynamics are marked *pp*, *mp*, *p*, *f*, and *mp*. A slur covers measures 1-5. The second system (measures 6-9) contains three triplet eighth notes: G4, F#4, E4 in measure 6; D4, C4, B3 in measure 7; and A3, G3, F3 in measure 8. Measure 9 has a quarter note G3. Dynamics are marked *pp*. The third system (measures 10-14) continues the melodic line with quarter notes F#3, E3, D3, C3, and B2. Dynamics are marked *pp*, *p*, *f*, and *mp*. A vertical dotted line is placed between measures 9 and 10. Arrows indicate a backward design approach, pointing from measure 14 back to measure 1.

Example 1.

Ursula Mamlok, *Variations for Solo Flute*, mm. 1–14, with annotations showing point of inflection.

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Considering a backward design approach to using this piece as a classroom example, we must first clarify our objectives. Since our primary aim here is to create fluency in the identification of pitch, our first objective might be stated like this:

Objective 1: Students will correctly identify all pitches in the theme to Mamlok's *Variations for Solo Flute*.

This objective is simple enough, though it is no different than the same objective as directed towards any piece from the tonal repertoire. The beauty of using Mamlok's *Variations* on day one (or day two, depending on how long syllabus discussion takes) is that it demonstrates *why* we study music theory by allowing students to discover something important about the piece using the most basic of theoretical concepts. Therefore, our secondary objective would be stated as:

Objective 2: Students will diagram or articulate the form of the theme to Mamlok's *Variations for Solo Flute* based on the palindromic pattern of pitch presentation.

Next, we ask how we know whether or not we have achieved our objectives. The assessment of our first objective is simple enough: students will write pitch names beneath each note of the theme on a provided copy of the score (Example 1). Students will compare their solution to that of their neighbors in class and to the instructor's solution.

For our second objective, the assessment is similarly low-stakes and matches the objective word for word, though this assessment may be more detailed (i.e., “Students will draw an inflection point on the score and write a sentence describing the form of the theme”) if desired. The classroom activity to achieve this objective is likely to be more in-depth than that of the first objective. I would propose a “Think - Ink - Pair - Share” activity. Students will take between 30 seconds and one minute (while a recording plays) to consider the form of the piece (Think) and will then write a sentence or two to organize their thoughts (Ink). Next, for one to two minutes, students will confer with their neighbors (Pair). During both of these phases, the instructor should walk around the room and question/prod students/pairs in the direction of completion, paying particular attention to students who show signs of concern, confusion, or inattention.

Following pair discussion, the instructor can call on any given student or pair to share their thoughts, inviting alternate interpretations or additional observations as may be pertinent. Students can even be called to the front of the room to share their diagrams or to add an inflection point to the instructor’s copy of the score (as is shown in Example 1). At this point the instructor may ask students to discuss how understanding the palindromic structure of the theme might influence how they would play it, and whether or not this answer is different from how they might sight-read the piece.

Following discussion, a final listen-through of the piece, with newly oriented ears, will help students cement their understanding of the piece. As students progress through their semesters of theory, they will eventually grasp the importance of individual lessons on their own, but for such an early lesson the instructor should point out that students have accomplished something special: using nothing but an understanding of pitch, they have made important analytical observations about a piece of contemporary literature.

Mamluk’s *Variations* is an ideal piece for many reasons, and can be revisited when discussing the inversion of intervals, theme and variations, and several other topics. While any number of pieces from the 20th and 21st centuries can be used to illustrate pitch, pieces *driven* by pitch/motive, especially those for a single instrument (or an extracted part from a chamber piece), are ideal, since they remove the confusion of multiple lines. Several other potential pieces are listed below in Example 2.

Composer	Title	Additional Topics/Diversity
Crawford, Ruth	<i>Diaphonic Suite, no. 1</i>	Female composer, historical significance
Hindemith, Paul	<i>Viola Sonata</i>	Alto clef reading
Ligeti, György	<i>Sonata for Solo Cello</i>	Alternating treble, bass, tenor clefs
Noda, Ryo	Numerous solo saxophone works	Under-represented instrument, Asian composer
Riley, Terry	<i>In C</i>	Minimalist, historical significance, pitch driven
Tower, Joan	<i>Wild Purple</i>	Alto clef reading, female composer
Varese, Edgard	<i>Density 21.5</i>	Historical significance, motive driven

Example 2.

Suggested Repertoire for the introduction and assessment of pitch identification.

2. Keys and Scales

Keys, key signatures, and scales are often grouped together as topics in the first semester of music theory, which is why I have grouped them together here. Keys and key signatures, however, are topics that fail the test presented by my first methodological question: they are exclusively tonal phenomena (or at least exclusively tonal in a functional sense). There are certainly examples from the 20th century that could be used to teach these concepts—compositions by Arnold Bax, Harry Burleigh, Samuel Coleridge-Taylor, William Grant Still, Gustav Holst, Maurice Ravel, Germaine Tailleferre, etc. come immediately to mind—but would be used in the same manner as examples from the common practice era, and so do not merit detailed illustration here as did the example for the teaching of pitch. The primary consideration for using 20th century pieces *here* is that there needs to be an easily recognizable tonic center, since we often accompany the teaching of these pieces with a “sing tonic” exercise. If students can’t quickly recognize tonic in the selected piece it is either not truly tonal, or is too complex for inclusion in a first semester course. Example 3 presents a selection of pieces that could be used to teach key signatures. Since these are tonal pieces, an instructor would be well served to pick a piece that can be utilized later in the first or second semester to teach additional topics (some potential possibilities are also listed in Example 3). Many of the pieces used to teach key signatures can also be used to teach major and minor scales, though even pieces with a quickly identifiable tonic from the 20th century are often highly chromaticized, somewhat limiting their usefulness in that respect.

Composer	Title	Additional Topics/Diversity
Bax, Arnold.	<i>In a Vodka Shop</i>	Asymmetric meter
Beach, Amy	<i>Symphony in E minor</i>	Female composer, orchestral texture, Cadential 6/4, various formal topics
Burleigh, Harry	<i>From the Southland</i>	Black composer, numerous harmonic and formal topics
Holst, Gustav	<i>First Suite in E- Flat</i>	Chaconne (1st movement), Ternary form (2nd movement), wind band literature
Milhaud, Darius	<i>La Creation du Monde</i>	Dorian mode, jazz influence, syncopation, motivic development
Price, Florence	Symphony no. 1	Black female composer, orchestral texture, numerous harmonic and formal topics
Still, William Grant	<i>Afro-American Symphony</i>	Black composer, jazz influence, orchestral texture
Tailleferre, Germaine	<i>Berceuse</i>	Female composer, cadences, modulation, specific harmonies

Example 3.

Suggested repertoire for key signature identification.

While my ultimate goal is not to immediately upset the *status quo* insofar as it pertains to the actual topics included in beginning theory courses, when it comes to the teaching of scales, I have to make an exception. Once we introduce the major scale and the patterns of half/whole steps that comprise it, it makes logical sense to ask, “what other patterns can we use? Why not all whole steps?” Introducing the chromatic, pentatonic, whole tone, and octatonic scales alongside the major and minor scales and church modes makes sense, as long as we do so in a limited fashion. Since these scales serve as crucial elements of much of the contemporary music that students may encounter relatively early in their performance studies (Ives, Debussy, Stravinsky, Bartók), early exposure to them encourages deeper engagement with this repertoire over time.

Clendinning and Marvin’s *Musician’s Guide* introduces the church modes alongside major and minor scales. Doing so not only removes the privilege enjoyed by tonal music created by giving exclusive treatment to major and minor scales, but also opens the door to engaging with a wider variety of repertoire in discussing melodic and motivic design (an important first step into “real music” following the first batch of fundamentals). Clendinning and Marvin offer two examples from the 20th century: Bartók’s “In Lydian Mode” from *Mikrokosmos* and Holst’s “Fantasia on the Dargason” from the *Second Suite in F* for Military Band. These are excellent pieces, and certainly worthy of inclusion in discussion of church modes. Other pieces abound, particularly in jazz, folk, and world musics (which are outside of the purview of this essay).

A sensible approach to briefly introducing the whole tone and octatonic scales to first-semester undergraduates would be to discuss these scales in relation to the pattern of half- and whole-steps in the major scale. As I mention above, the question of “why not all whole steps?” is a logical follow-up to the major scale. An example, such as the perennial Ives favorite “The Cage” can be utilized not only to demonstrate the structure of the whole tone scale and its ability (in this context at least) to avoid the creation of a pitch center, but also, with a discussion of text setting, can demonstrate why a composer might choose to utilize this scale. “The Cage” is so frequently used in post-tonal theory classes because it is such a clear and straightforward example, and it is for precisely that reason that it lends itself to being used in an earlier undergraduate course, freeing the instructor of the exclusively post-tonal course to engage sooner with more complex examples.²⁶ As with the Mamlok, this lesson is designed with multiple (in this case, three) objectives:

Objective 1: students will build the whole tone scale by extracting it from “The Cage.”

Objective 2: students will, using their knowledge of enharmonic equivalence, articulate an understanding of the limited potential transpositions of the whole tone scale.

Objective 3: students will discuss the implications of the text and formulate hypotheses as to why Ives chose the whole tone scale.

I would conceive of this activity as coinciding with a discussion of church modes. Once students have confidence in identifying/constructing modal scales, and can find the patterning of whole- and half-steps in them, the instructor will tell students that it’s time to learn another scale.

The lesson begins aurally. After listening to a recording of the piece, the instructor will ask students to sing its tonic. They will at this point, of course, fail, or at least sing a variety of viable “tonics.” Why, the instructor will then ask, can the students not identify tonic? The score will then be presented and students will be asked to build the scale by extracting it from the piece and to write in the types of steps included. Again utilizing the “Think – Ink – Pair – Share” strategy, the instructor will initiate a discussion on the structure of the scale.

²⁶ This also saves time down the road, removing the need for the instructor of a Post-Tonal Theory course to engage with the concept of the whole tone scale or with this piece. This is the sort of “toe-dipping” that Joseph Straus stresses there isn’t time for in a dedicated Post-Tonal unit/semester. There is time for it in Theory 1.

Next, students will attempt to make as many transpositions of the scale as possible. This is, once again, an invitation to failure, as there are only two possibilities. This step can be fairly cursory, as a discussion of even and odd collections, while not beyond the scope of an introductory course is potentially overly time-consuming; nonetheless it is important that students realize the limited transposition possibilities of the scale.

The critical thinking portion of this activity comes next, again, seeking to bring the students to a deeper understanding of a post-tonal work with fairly basic analytical tools. The instructor will present the text in isolation and ask for a volunteer to read:

A leopard went around his cage
from one side back to the other side;
he stopped only when the keeper came around with meat;
A boy who had been there three hours
began to wonder, "Is life anything like that?"

Students will then take part in an open discussion of the mood implied by the poem, with the instructor nudging students towards ideas of futility, repetition, etc. as necessary. The students will quickly realize at this point that a scale that never really settles down is perfect for this text.

3. *Intervals*

With pitch and scales under our belts, we turn now to intervals. As with pitch, we can use almost any piece for this purpose, making it once again an opportune moment to introduce some diversity into our curriculum. The opening sections of Sofia Gubaidulina's *Toccata-Troncata*, the beginning of *Valeria* by Toru Takemitsu, or any of the innumerable other pieces from the last century characterized by large leaps would be excellent choices. Example worksheet exercises for the Gubaidulina and Takemitsu are shown below in Examples 4a and 4b.

(a) Sample Interval Worksheet Problem 1: *TOCCATA–TRONCATA* By Sofia Gubaidulina

1. In the space below, identify each paired set of intervals in Sofia Gubaidulina's *Tocatta-Troncata* with direction and quality. Pay attention to clefs.

a. _____ b. _____ c. _____ d. _____ e. _____ f. _____ g. _____

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(b) Sample Interval Worksheet Problem 2: *VALERIA* by Toru Takemitsu

2. Identify the specified intervals in the following excerpt from Toru Takemitsu's *Valeria*.

h. _____ i. _____ j. _____ k. _____

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Example 4 .

Sample Interval Worksheet Problems.

For a longer lesson example, we again look for a piece where the understanding of a single concept—in this case, that of intervals—can lend insight to the understanding of an entire piece. For this topic my mind instantly gravitates to the “Prologue” from Lutosławski’s *Muzyka Żałobna* (Funeral Music). The limited horizontal interval content will allow for quick pattern recognition which can be extended to recognition of pitch and rhythmic patterns as well. Using this piece also allows the instructor to introduce another monumentally important composer to students several semesters early, once again building a base of repertoire awareness that would otherwise be lacking.

As with the other pieces, there is a limit to the expectations an instructor can have for their students in approaching a piece like this in their first semester of study, but we can still realize a number of objectives:

Objective 1: Students will identify the pattern of horizontal intervals used in the first and second cello parts of Lutosławski’s *Muzyka Żałobna*.

Objective 2: Students will discuss any additional pattern they may observe in *Muzyka Żałobna*.

While the first of these two objectives is critical, the second is included to leave the door open to student observations regarding pitch (“all 12 chromatic pitches are used before any are repeated”) or rhythm (“there’s a pattern to the rhythm, but it doesn’t start where the pattern of pitches starts”) in order to demonstrate applicability of the topic. The 12-tone implications of the opening and the isorhythmic canon employed by Lutosławski are both beyond the scope of the usual Theory I curriculum, but, if they are observed regardless of that fact, the instructor can offer clarification and insight (or optional reading material) as they see fit.

Example 5 shows a model worksheet that could be used to achieve the first two objectives. The assignment would work well as either an in-class exercise or as a homework assignment with in-class discussion as a follow up. If used as an in-class exercise, this piece offers a good opportunity for students to sing difficult intervals. Assuming observations are made regarding the canon, the instructor can even divide students into multiple groups and sing a large portion of the prologue.

Instructions: analyze the melodic/horizontal intervals in mm. 1–10 of the first cello part of Witold Lutosławski's *Muzyka Żałobna* (*Funeral Music*). Compare these intervals to those in the other instrumental parts. Discuss your findings below.

WITOLD LUTOSLAWSKI (1958)

The image displays a musical score for Example 5, which is the first 10 measures of the first cello part from Witold Lutosławski's *Muzyka Żałobna* (1958). The score is presented in three systems. The first system covers measures 1 and 2, featuring a 5/2 time signature and a tempo marking of 88. The second system covers measures 3 and 5, with a 5/4 time signature. The third system also covers measures 3 and 5, with a 5/4 time signature. The score includes parts for Violoncello I and II, Viola I and II, and Violoncello I and II. Dynamics include *p*, *mp*, and *mf*. The score is marked with 'solo' and 'sola' for the first cello and viola parts. The score is divided into three systems by double bar lines. The first system shows the first two measures, with a 5/2 time signature and a tempo marking of 88. The second system shows measures 3 and 5, with a 5/4 time signature. The third system shows measures 3 and 5, with a 5/4 time signature. The score includes parts for Violoncello I and II, Viola I and II, and Violoncello I and II. Dynamics include *p*, *mp*, and *mf*. The score is marked with 'solo' and 'sola' for the first cello and viola parts.

Example 5.

Musique Funèbre By Witold Lutoslawski.

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4. Rhythm and Meter

As a facet of music that can be divorced from tonality, the various aspects of rhythm and meter are obvious places to include musical examples from outside of the tonal canon. For any of the various subsets of rhythm and meter one can find classical (common practice) examples by women composers (Clara Schumann’s *Piano Sonata* for syncopation) and black composers (many works by Samuel Coleridge-Taylor, for instance, exhibit frequent and pervasive syncopation as well), jazz artists (the entire Dave Brubeck album *Time Out* for complex meters), living composers, hip-hop artists, and from world music (Eastern European folk music, Latin American music, African drumming, Hindustani classical music, and Gamelan all contain useful and engaging metric components). Similarly, any number of pieces from the art music repertoire of the 20th and 21st centuries can be used to teach topics of rhythm and meter. These topics are myriad, but three are particularly amenable to illustration via 20th and 21st century examples: syncopation, hemiola/polyrhythm, and asymmetric meter.

4.1. Syncopation.

As with many of the subtopics that can be grouped together under the umbrella of rhythm and meter, any number of pieces from the 20th and 21st Centuries exhibit prominent syncopation. As with pitch, this is a ripe opportunity to use music by a composer from any of the underrepresented groups that we, as instructors, should endeavor to feature more prominently in our teaching. Example 6 suggests some possibilities for this topic; the list could be continued at great length.

Composer	Title
Andriessen, Louis	<i>De Stijl</i>
Dun, Tan	<i>Crouching Tiger Concerto</i>
Mackey, John	<i>Strange Humors</i>
Marquez, Arturo	<i>Danzon no. 2</i>
Mazzoli, Missy	<i>Holy Roller</i>
Milhaud, Darius	<i>La Creation du Monde</i>
Thomas, Omar	<i>Come Sunday</i>
Vila-Lobos, Heitor	String Quartet no. 4
Wolfe, Julia	<i>Believing</i>

Example 6.
Repertoire for introducing syncopation.

The learning objectives and process for any of these examples can follow the same template, which will look nearly, if not entirely, identical to the template to teach syncopation via canonical repertoire. Since syncopation is such a pervasive element of music, the door is opened with this topic to even the most recent music, particularly the beat-driven music of the minimalist and post-minimalist movements, and the music influenced by those movements (not to mention the jazz-influenced music of the early 20th century and the Third Stream). Judd Greenstein's *Four on the Floor* is an excellent example, as it bridges the worlds of classical and popular music, infusing vernacular sensibilities into a piece for string quartet and introduces students to a relatively young living composer at the forefront of the “Indie-Classical” movement.

Syncopation is a topic that is likely at least passingly familiar to most, if not all, students, regardless of background. Its pervasiveness in popular styles as well as in art music make it a topic that is both simple to teach, and easy to over-simplify. Syncopation is best understood as a rhythmic disruption of the regular metric pattern of a piece or section of a piece by means of displaced accents, which is not the same as defining syncopation as “accenting offbeats” as many students are inclined to do. Once we clarify terminology, our objectives are:

Objective 1: Prior to being given a score, students will articulate their classification of the metric nature (simple duple) of the chosen passage of Greenstein's *Four on the Floor* and how syncopation is employed.

Objective 2: Students will aurally identify instances of syncopation in the opening of Judd Greenstein's *Four on the Floor*.

Objective 3: Students will annotate a score to show where they heard syncopation occurring and discuss any instances of syncopation they may have identified in the score that are not aurally apparent (or *vice versa*).

Objective 4: Students will discuss the effect of Greenstein's application of syncopation.

As should all lessons pertaining to metric topics (and most related to pitch as well), this lesson begins aurally, with students listening to a passage of Greenstein's piece from mm.1-14 (seen below in Example 7). After listening, students will be asked to classify the piece's meter, which is, in this case, simple duple (4/4). Having classified the meter, students will articulate in the manner of their choice where prominent syncopations are located; students could, for instance, sing the first measure of the viola part or articulate their thoughts verbally (“most of the syncopations are on

the and-of-two or the and-of-four”). On a second listen through, either to reinforce previously articulated thoughts or to spur some more focused initial thoughts, students can show their understanding by physically gesturing (i.e. raising their hands) every time they experience syncopation.

Steady, and always feeling the metric pulse
♩ = 76-80

Violin I

Violin II

Viola

Violoncello

Vln. 1

Vln. 2

Vla.

Vc.

9

12

Example 7.

Judd Greenstein, *Four on the Floor*, mm. 1–14, with annotations showing significant (though not all) occurrences of syncopation.

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For the third objective, students will be given a physical score and asked to highlight, circle, or otherwise annotate occurrences of syncopation. Students should be instructed to look for instances of syncopation beyond the ones that they identified solely by ear. Students will likely identify notes tied from the ‘ands’ of two and four to downbeats as syncopation, but may not immediately identify accented notes on beats two, four, and their offbeats as additional occurrences of syncopation. Finally, a discussion should be initiated regarding the affect created by Greenstein’s use of syncopation. Students may key in on the name of the piece as a reference to a drum pattern found in popular music as a starting point for this discussion.

4.2. Hemiola/Polyrhythm

Hemiola, like syncopation, is one of the metric topics almost always explored by common texts. Examples of hemiola in the art music of the 20th and 21st centuries are numerous. Two particularly good examples, with which I will illustrate a sample lesson, are Samuel Barber’s “Solitary Hotel” (from his song cycle *Despite and Still*), and “Flowers” from Julia Wolfe’s Pulitzer Prize-winning composition *Anthracite Fields*. The example from *Despite and Still* will be introduced aurally, while Wolfe’s piece will be paired with the score when introduced. The objectives for the lesson are:

Objective 1: Students will sing the pervasive hemiola present in Barber’s “Solitary Hotel” based on their listening.

Objective 2: Students will transcribe the rhythms of Barber’s hemiola.

Objective 3: Students will discuss the effect of hemiola in “Solitary Hotel” and its relation to the text of the song.

Objective 4: Students will identify the hemiola of “Solitary Hotel” on the score.

Objective 5: Students will highlight instances of hemiola in Julia Wolfe’s “Flowers.”

Objective 6: Students will discuss the effect of hemiola in “Flowers” and its relation to the text.

Predictably, this lesson begins with listening. After introducing the concept of hemiola in the abstract, and having students sing or clap patterns of 2:3 or 4:3, they will listen to a recording of “Solitary Hotel” with the instruction to listen for a similar

pattern. The contrast of triplets against a *habañera* bass (see Example 8) is pervasive and should not present great difficulty to identify. After several times through, the instructor will divide the class in half and ask the students to sing the two rhythms while conducting in four. If necessary, students can sing along to the recording. Once this is done, they should be able to transcribe the rhythms that comprise the hemiola. That done, they then can be provided with the score and instructed to circle/highlight all instances of hemiola. An optional step at this point would be to have students discuss the affect of the hemiola and its relationship to the text, which in this case highlights the disconnect that the narrator feels to the revelry of the rest of the hotel's occupants. Discussion of the entirety of the text, and the possible reading of it in terms of Barber's homosexuality, is also a worthwhile endeavor at this point.

Example 8.

Samuel Barber, "Solitary Hotel" from *Despite and Still*, mm. 4–7 with annotations showing occurrences of hemiola: 3 (in the right hand) against 2 (in the left hand).

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The second example, Julia Wolfe's "Flowers," exhibits near constant hemiola in the accompaniment, though it is considerably less singable than the Barber. Students will be given the score (almost any portion of this movement will work) and asked to follow along with a recording, circling or otherwise marking occurrences of hemiola. Students can then discuss how the metric destabilization of the hemiola amplifies the perpetual motion of the singers listing all of the flowers grown by the miners. Potential observations might include how the churning rhythms represent the constant work required by mining communities and the monotony thereof, how gardening offers escape from that same labor, or how the hemiola, like the listing of flowers, induces

a somewhat trance-like state. That *Anthracite Fields* is a Pulitzer Prize-winning composition by a female composer should not go without mention.

Time permitting, the instructor can offer an addendum to discussion of hemiola by introducing the broader concept of cross-rhythm/polyrhythm. Students will eventually encounter non-hemiola polyrhythm in their aural skills work, and, if they have encountered it before, are more likely to grasp the necessity of the topic, despite its difficulty. Here, we must offer a shorter lesson, which serves more as a sneak-peak than a fully-fledged topic. Like the early introduction of synthetic scales, the subject of polyrhythm is likely to arise through student questioning (“if we can do 2:3, why not other ratios?”). Having an example at the ready will allow for a brief introduction to the topic. The third movement of György Ligeti’s *Chamber Concerto* offers numerous instances (see Example 9) of polyrhythm. Our objective here is simple: to introduce students to the sound and appearance of a variety of polyrhythms. Performance of the polyrhythms is not necessary, but listening and visual identification can be beneficial. Again, like the brief foray into synthetic scales, a cursory introduction to polyrhythm can serve to ignite curiosity. A simple “listen and identify” activity is enough.

Example 9.

György Ligeti, *Chamber Concerto*, mvt. III, mm. 37–38

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4.3. Asymmetric Meter

The topic of asymmetric meter fits naturally into the curriculum of a first semester theory course alongside discussion of simple and compound meters, though it is often omitted from both courses and texts, despite its usefulness given the increasing prevalence of such meters in contemporary repertoire, jazz, and popular musics (not to mention in world musics). As with other topics related to meter, much of our initial approach will be aural and the overall lesson can be designed around any

of a great number of pieces. In this case, the best examples will be those in which the meter is functional—that is, the meter signature accurately reflects the beat/accent structure of the measure rather than being chosen for the purpose of fitting in the correct number of notes—and pervasive—that is, the meter is used for a long enough period of time to be predictable.

For this topic a logical first step would be to introduce asymmetric meter with either a piece of world music (any number of examples from the Eastern European folk tradition²⁷) or jazz (Dave Brubeck's *Blue Rondo à la Turk* being an ideal choice) before moving on to art music examples. Like other metric topics, the lesson plan and objectives for teaching asymmetric meter will look much the same from piece to piece, and will be illustrated below with Silvestre Revueltas' *Sensemaya* and the fugue from Heitor Villa-Lobos' *Bachianas Brasileiras No. 9*.

This lesson begins with *Sensemaya*, which is in a strong and regular 7/8 (2+2+3). Our objectives are:

Objective 1: Students will aurally discover the meter of *Sensemaya*.

Objective 2: Students will diagram the beat pattern of *Sensemaya*.

The instructor will begin this lesson similarly to the syncopation activity (and many others related to meter), with students being told to try to conduct along with a recording. Instruct students to focus their aural attention on the percussion and bass instruments and conduct along once they think they've found the beat pattern. The instructor should offer the hint that the meter is unchanging. The first 10 measures or so should be enough to ascertain the meter. An appropriate excerpt is shown in Example 10.

After listening, particularly if students fail to find a meter that they can conduct, the instructor can ask leading questions such as "Is this piece in a simple meter? Compound?" If students have not already identified the 7/8 meter, this sort of question will push them to the realization that this piece is neither of the previously encountered metric varieties. At this point, several students will have hopefully grasped the asymmetry of the meter and are able to articulate their observations. If not, displaying a portion of the score absent time signatures may be necessary for the discovery process. Once asymmetry has been observed and diagramed (a possible diagraming solution is shown in Example 11), a broader discussion of asymmetric meter can begin. The entire lesson is much briefer if jazz or folk examples are used first to illustrate the topic.

27 Again, it is beyond the purview of this paper, but I highly recommend incorporating actual dance into this lesson. Tutorials are readily available online.

SENSEMAYÁ

Silvestre Revueltas

Silvestre Revueltas

1

2

3

Example 10.

Silvestre Revueltas, *Sensemayá*, mm. 1–15, with 2+2+3 beat pattern diagrammed.

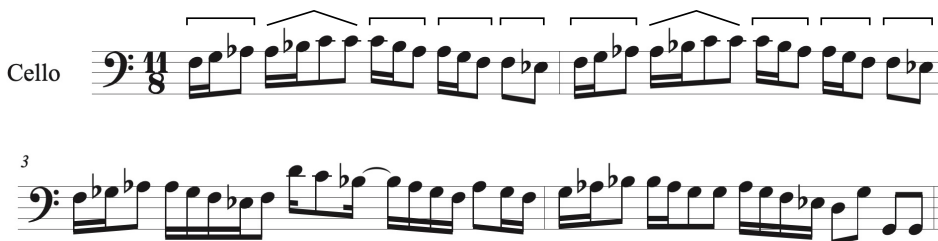
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Heitor Villa-Lobos' *Bachianas Brasileiras No. 9* might be taught in a slightly different manner. While the lesson can still begin aurally, it is likely too much to ask for students to discover the meter entirely on their own. Instead our objectives are:

Objective 1: Students will diagram the beat pattern of the meter utilized in the fugue of Heitor Villa-Lobos' *Bachianas Brasileiras No. 9*.

Objective 2: Students will sing beat patterns and conduct along with the recording of *Bachianas Brasileiras No. 9*.

Both objectives in this case are in service of students understanding the 11/8 meter of the piece. Students will be given the score and asked to follow along. After listening, they will be asked to diagram, in any way that makes sense to them (a possible version is shown in Example 11), the beat pattern of the meter, which is 2+3+2+2+2. Once diagramed, students will sing subdivisions and conduct along with the recording.



Example 11.

Heitor Villa-Lobos, *Bachianas Brasileiras No. 9*, "Fugue," with beat groupings diagramed.

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BACHIANAS BRASILEIRAS NO 9. Musique : Heitor Villa Lobos © 1962 Eschig Max Soc.

5. Texture

Texture is another topic that is especially well suited to being taught with examples from the 20th and 21st centuries, since texture and timbre are major motivators of formal design or perception thereof in more contemporary music.²⁸ It is important that our coverage of texture encompass more than homophonic, heterophonic, polyphonic, and monophonic textures. Textural elements such as the presence of a soloist, the use of electronic voices (should an electronic voice be used in conjunction with acoustic instruments be considered a drone, an accompaniment, or a contrapuntal equal? How do we define the number and type of voices in a work of pure

²⁸ Lochhead (2005, 254).

fixed media?), spoken elements, non-instrumental sounds made by instrumentalists, etc. are important components of this topic, and are distinctions that can prompt significant and enlightening discussion. None of these distinctions take much time to make, and allow for a broader repertoire in general (jazz, world music, electroacoustic music, etc.) to be used in teaching the topic, particularly in the types of rapid-fire exercises often used to teach texture.

Composer	Title	Texture Type
Berio, Luciano	<i>Sequenza VII/VIIb</i>	Biphonic/debatable
Eastman, Julius	<i>Stay on It</i>	Numerous/debatable
Ligeti, György	"Kyrie" from <i>Mass</i>	Polyphonic
Messiaen, Olivier	<i>Quartet for the End of Time</i>	Homorhythmic/Heterophonic
Rzewski, Frederic	<i>Les Moutons de Panurge</i>	Homorhythmic/Homophonic
Saariaho, Kaija	<i>Sept Papillons</i>	Monophonic
Scaletti, Carla	<i>SunSurge Automata</i>	Monophonic/debatable
Temple, Alex	<i>The Man Who Hated Everything</i>	Many; excellent for extended analysis
TV, Jacob	<i>The Garden of Love</i>	Debatable
Washington, Shelley	<i>Big Talk</i>	Alternating homophonic/polyphonic
Z, Pamela	<i>Feral</i>	Polyphonic/debatable

Example 12.

Representative examples for introducing textural categories.

Examples of fixed media and examples featuring electronic voices have been categorized as "debatable" as per the parenthetical in the previous paragraph.

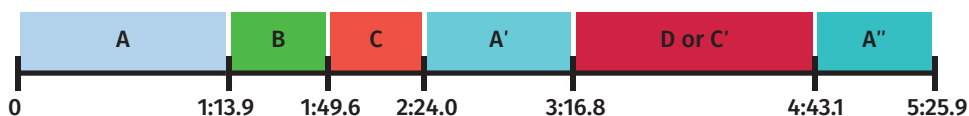
In addition to incorporating contemporary examples into the usual rapid-fire "what's the texture?" exercises (suitable examples for which are listed in Example 12) more extended exercises in which texture plays a major role in dictating form can be used. Pieces that have formal markers dictated by clearly demarcated textural shifts are ideal, and once again allow students to formulate an understanding (or at least a partial understanding) of a piece using basic theoretical concepts. Examples by Ligeti, Penderecki, Takemitsu, Saariaho, Adams, and Ustvolskaya could all make suitable lessons but I will be illustrating a texture-driven form lesson using "Turangalîla 1" from Messiaen's *Turangalîla Symphony*. This lesson is actually an ideal introduction to texture as a general principle: even without knowing the term or any of the types thereof (monophonic, homophonic, polyphonic, etc.) students will grasp that it is—or can be seen as—a driving force behind the piece's structure.

Objective 1: Students will aurally identify formal sections of Messiaen's "Turangalîla 1" based on textural/timbral shifts.

Objective 2: Students will qualify the textural/timbral areas in "Turangalîla 1"

This lesson is an excellent opportunity to involve various classroom technologies. There is no need to reference the score at all in teaching this lesson, so students will identify formal markers by timestamp. Various free technologies enable students to share their ideas in real time without needing to shout out their answers. Padlet,²⁹ Poll Everywhere,³⁰ or Google Forms³¹ all offer a free interface where students can share thoughts in an anonymous manner. Poll Everywhere and Google Forms offer more control than Padlet, which offers a real time unmoderated chat format. A poll/form that allows for short written response answers can quickly gather responses to questions along the lines of "where do you hear the first major section change: [Student Answer]," "Where do you hear the next major section change: [Student Answer]," etc.

After listening, the instructor can display the results and use this to guide the construction of a form diagram. This can be done by hand, or, better yet, using a program such as Variations Audio Timeliner. There are a number of advantages to using the program. First, and foremost, it allows for effective and proportional visualization of the piece's form. It also introduces students to an exceptionally useful tool that they are likely to encounter in later semesters in their study of tonal forms. A form diagram of "Turangalîla 1" constructed in Variations Audio Timeliner is shown in Example 13. Students should discuss how they distinguish between sections, with conclusions that will inevitably point to texture and instrumental timbre.



Example 13.
Variations Audio Timeliner diagram showing a possible formal analysis
of "Turangalîla 1" from a textural perspective.

²⁹ www.padlet.com

³⁰ www.polllev.com

³¹ docs.google.com/forms

Once a diagram is constructed, students will listen to the piece again, this time section-by-section, and once again use a poll/survey/chat feature to share their thoughts on adjectives that can describe each section. These terms will be used later on to define our standard types of musical texture. The first section, might be described as “sparse,” “ethereal,” “thin,” or “eerie,” or might be described in terms of its instrumentation (solo clarinet with sparse accompaniment). Once students have come to an agreement about the general nature of the section, we can give it the label “monophonic.” The same process can be used on the remaining sections of the piece, which can varyingly be described as homophonic and polyphonic.

6. Melody.

6.1. Melodic Design.

Like the subtopics pertaining to rhythm, any number of the subtopics associated with melody can be effectively illustrated using art music³² from the 20th and 21st centuries. In illustrating melodic design (i.e. stepwise melodic construction), art song is an especially useful genre on which to draw. As in almost every instance there are far too many pieces that could effectively illustrate the topic to list here. I will illustrate a portion of a lesson on melodic design using Missy Mazzoli’s *Vespers for a New Dark Age*.

Our lesson here is extremely straightforward, and similar to the rapid-fire exercises used for topics like meter and texture. Once students are familiar with general principles of stepwise melodic design, be it through inquiry-based learning or a lecture, the instructor will present scores and audio and ask students to critique the melodic construction. *Vespers* offers instances that strictly adhere to these concepts (see Example 14a) and many that do not, or do so to a lesser extent (see Example 14b). Students can, as in the case of Wolfe’s “Flowers,” or Ives’s “The Cage,” discuss the emotional/affectual implications of these different melodic shapes and hypothesize as to why Mazzoli might have made the choices that she did given the text.

³² Once again, this is an excellent opportunity for the incorporation of vernacular forms into the classroom as well.

(a) mm. 118–122, demonstrating precise melodic design.

Sop. 2

Try_ to make me for - get Try_ to make me for-get you

(b) mm. 18–22, demonstrating non-stepwise stepwise melodic design.

B

Sleep - ing in a ba - by car - riage

Example 14.

Missy Mazzoli, “Wayward Free Radical Dreams,” from *Vespers for a New Dark Age*.”

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6.2. Compound Melody.

All of the topics illustrated thus far in this paper have been ones that fall into the category of music theory fundamentals. While it is of great benefit to front load the curriculum with contemporary music to help dispel student misconceptions, it is also necessary to continue to include more modern music wherever possible in later semesters. One occasion for this is the topic of compound melody. Though the topic is often illustrated via the Bach Cello Suites (and other pieces of that era), there is a rich tradition of compound melody in more contemporary music as well. Numerous excellent examples of this can be found in the flute and saxophone music of Sigfrid Karg-Elert. Many of Karg-Elert’s *Thirty Caprices for Solo Flute* demonstrate often deliberate similarities to Bach’s compound melodic writing, and while the caprices are not all entirely atonal, they exhibit substantial progression in that direction. *Caprice No. 13* is an especially nice example which allows students not only to create a reduction of the acting compound melody, but also to observe important patterns governing how the piece functions.

Like the Bach Cello Suites, *Caprice No. 13* includes aurally identifiable multiple voices with the added challenge of being written “quasi two flutes,” each of which has two voices. Our objectives in utilizing this piece are:

Objective 1: Students will identify the multiple voices present in a recording of Karg-Elert's *Caprice No. 13* (mm. 1-5)

Objective 2: Students will create a two-staff reduction of the first 5 measures of the caprice showing the discrete paths taken by each voice.

Objective 3: Students will discuss any patterns they see in their reductions and theorize as to any performance implications thereof.

The piece can be experienced aurally first, or with the score alongside immediately, and, after listening to the opening at least once, students will discuss in small groups how many voices are present, which in this case is an interesting discussion for them to have, as Karg-Elert includes the performance instruction “quasi two flutes,” and splits beams to separate the two *parts*, but students need to identify that there are two voices per part (four overall voices).

Once they have identified the number of voices, they can construct a reduction of the opening five measures. A score excerpt and sample reduction are shown in Example 15. With their reductions complete students will be able to discuss the construction of the piece's opening, with both of the descending chromatic lines and pedals readily apparent. The final step is to discuss performance implications of their discoveries. The instructor can guide them to the conclusion that the chromatic line should be emphasized, despite not being the highest voice, which is where younger or less experienced students will often tend to look for the primary melodic line.

Leggerissimo e grazioso. (Leichtlin, anmutig.)

13.

quasi 2 Flauti
(wie 2 Flöten)

Example 15.

Sigfried Karg-Elert, “Leggerissimo e Grazioso,” from *Thirty Caprices for Solo Flute*, mm. 1–5, with accompanying four-voice reduction.

7. Counterpoint.

If we teach music analysis as a linear or horizontal endeavor—and we should, since music is an art form that unfolds *linearly* in time—we need to spend considerable class time on the topic of counterpoint, that is: how do two or more voices relate to each other over time. This is, once again, a topic that is very often approached exclusively through the art music of the common practice era, despite a tradition of contrapuntal writing both pre- and postdating this era (not to mention the counterpoint present in vernacular forms). With this in mind, bringing the art music of the 20th and 21st centuries (as well as other genres of music) into the discussion of various contrapuntal topics is a relatively straightforward task. Many topics under the umbrella of counterpoint—identification of contrapuntal interval, imitation, canon, etc.—occur relatively early in the theory sequence. One topic that traditionally falls somewhere between these early topics and study of atonal counterpoint, and one that is often rather light on substance, is that of invertible counterpoint.

After some exercises in writing counterpoint against a *cantus firmus* and experimenting with flipping the voices and seeing how it affects the quality of the counterpoint, lessons in invertible counterpoint often become “word search”³³

33 Credit to Dr. Bruce Taggart of Michigan State University for this analogy.

activities. Rather than re-designing the wheel at this point, I would advocate simply varying the type/variety of repertoire used in this activity. A good piece to end this activity on is Thea Musgrave's *Take Two Oboes* (annotated score shown in Example 16). Not only is it a 21st-Century piece by a living female composer, but also a piece that may resemble the type of repertoire first- or second-year theory students might encounter in their applied lessons. This opens up opportunity to discuss how an observation of invertible counterpoint could impact performance. Our objectives are:

Objective 1: Students will identify instances of invertible counterpoint in Thea Musgrave's *Take Two Oboes* (mm.1-31)

Objective 2: Students will discuss performance implications of the invertible counterpoint they identified as part of objective 1.

The activity should begin with the score alone, with students instructed to identify instances of invertible counterpoint by circling/highlighting them on the score (this annotation is shown in Example 16 on the following page). The instances of invertible counterpoint beginning in m. 21 are the most obvious (and best) examples of the technique, but students will likely also identify the inexact use of the technique earlier in the piece, which can prompt a discussion of ways in which specific concepts (particularly tonal concepts) can be used in a more metaphorical sense to guide analysis of post-common-practice compositions.

Next, students will be placed in the hypothetical position of needing to perform the piece. How might the observation of invertible counterpoint influence that performance? Students will likely realize that the inversion of the line indicates that the relative roles of the voices are being reversed, reducing (in the latter examples) the importance of the sixteenth note line in favor of the melodic line. Our final step will be to listen to a recording of the piece and discuss whether or not the performers made the same decisions that we predicted they would make.

TAKE TWO OBOES

I

Thea Musgrave

Pompous (♩ = 108)

Oboe 1

Oboe 2

ff

mf

ff

cresc.

f

ff

mf

mf

pochiss. rit.

a tempo

f

pp

pp

p

pp

pp

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Example 16.

Thea Musgrave, *Take Two Oboes*, mm. 1-31, with annotations
showing instances of invertible counterpoint.

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IV. Future Research

As stated previously, this paper is only the first phase of my research. My intent is to continue making my way through the topics common to many music theory sequences. In particular, I will be giving attention to elements of harmony, voice leading, form (sentences, periods, basic formal structures, etc.), further exploration of counterpoint, and other topics such as text-music relationships, symmetry, quotation, and advanced metric topics. In doing so, I will draw on examples that deliberately represent a more diverse body of composers, styles, and instrumentations than would likely be seen otherwise, and continue to show how topics can be applied to music beyond that of the Common Practice Era.

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THE REST IS NOISE: A HISTORICALLY INTEGRATED APPROACH TO POST-TONAL PEDAGOGY

AMY FLEMING and AARON GRANT

While making connections to pre-existing knowledge is crucial to student learning, fostering such connections in a post-tonal theory classroom can be difficult. This article proposes a curricular approach to post-tonal undergraduate theory in which historical context provides an already familiar framework around which students can learn new information and skills. We present an example of such a curricular approach, framing an undergraduate post-tonal theory course around Alex Ross's *The Rest is Noise*. We demonstrate how instructors can use Ross's chapters as a backdrop for a variety of adaptable activities that intertwine music, its history, and the tools we use to understand it. Rather than prescribing one specific curriculum, the purpose of our article is to empower instructors to create their own historically-driven post-tonal curricula. In doing so, we demonstrate the importance of context for student learning and provide flexible materials that instructors can adapt for use when developing their own courses.



INTRODUCTION¹

Connecting new information to prior knowledge constitutes a key part of the learning process.² When students build these connections, they create what Susan A. Ambrose calls “rich, meaningful knowledge structures,” while failing to make them produces “sparse, superficial knowledge structures.”³ The former provide a robust foundation for subsequent learning and retrieval, while the latter restrict students to regurgitating facts only in very specific contexts.⁴ James Lang makes an even more pressing case for building connections, noting that without strong knowledge structures, “[students] have knowledge, in the sense that they can produce individual pieces of information in specific contexts; [but] what they lack is understanding or comprehension.”⁵

¹ The authors are listed alphabetically; both contributed equally to the content and composition of the article.

² Lang (2016, 91–112) and Ambrose et al. (2010, 40–65).

³ Ambrose et al. (2010, 45).

⁴ Ibid.

⁵ Lang (2016, 93).

While it is clear that making connections to pre-existing knowledge is crucial to student learning, fostering such connections in a post-tonal theory classroom can be difficult for two reasons. First, few students enter the classroom with prior knowledge about twentieth and twenty-first century music or its history. Additionally, while teachers can link some post-tonal analytical techniques to a student's previous theoretical studies (e.g., modes and scales), many of the tools we expect our students to master lack explicit parallels to tonal theory.

One way to address these challenges is to organize a post-tonal class around information with which students are already familiar, such as the broader history and events of the twentieth and twenty-first centuries.⁶ This article, therefore, advocates for an undergraduate post-tonal theory curriculum focused on the intertwining of post-tonal music, its history, and the tools we use to understand it. With our approach, students constantly link newly learned analytical concepts to their pre-existing historical knowledge, thereby fostering the “rich, meaningful knowledge structures” Ambrose describes. But pedagogical research suggests that the advantages of including historical context in a theory curriculum go beyond building such structures. Approaching problems from multiple perspectives supports a wealth of beneficial learning outcomes including helping students learn to solve problems more quickly,⁷ remember information longer,⁸ and develop a more complex understanding of the class's topic.⁹

We present an example of such a curricular approach, framing an undergraduate post-tonal theory course around Alex Ross's *The Rest is Noise*. Ross's engaging account of the history of twentieth-century music suits our approach in the way it blends music history, analysis, and the larger cultural, political, and historical context. The book also has several other benefits. First, Ross's fifteen chapters conveniently align

6 We know that most students will not enter the classroom as experts on twentieth-century history. Yet most will have been exposed to the broader events of the twentieth century through courses in American and/or world history in their pre-college education. Even if students enter the classroom having forgotten some (or most) of this information, research by Ambrose et. al (2010, 114–115) suggests that you can fill in these gaps and that students still reap the same benefits.

7 Ellis and Fouts (2001, 24).

8 Ibid.

9 Lattuca (2001, 145). This argument about the advantages of incorporating historical context into the theory curriculum also extends to the history of the theories we use to understand music. Roger Mathew Grant (2012, 21), for instance, makes a compelling argument that instructors should explain “where music theoretical knowledge comes from, what its histories are, who makes it, and why we believe in it.”

with a typical fifteen-week semester. Second, the roughly chronological layout not only places the context of historical events and compositional styles at the fore, but also provides a familiar organizing principle around which students can assemble their newly developing knowledge. Finally, *The Rest is Noise* includes many analytical insights that can serve as a starting point for more detailed analyses.¹⁰

This article shows how instructors can use Ross's chapters as a backdrop for a variety of adaptable activities that intertwine music and history, yet still cultivate sophisticated analytical insights. Such activities set our approach apart. While many authors have written about the pedagogy of post-tonal theory and analysis,¹¹ few sources have included historical context as such an integral part of a theory curriculum.¹² Yet emphasizing context is important.¹³ Not only does it enable students to make connections to their prior knowledge about history—allowing them to build a richer knowledge base—but it also helps them understand when and why to apply various analytical tools.¹⁴ Furthermore, it allows teachers to connect theoretical and

10 Though we advocate for using Ross's book for the reasons stated above, there is no reason this approach would not work with other books, articles, or supplementary handouts as the backdrop. One could, for instance, assign an article that addresses a certain time period and geographical location each week rather than drawing from a single book. Or if time were even more of an issue, instructors could simply assign excerpts of Ross's book or other articles. Any of these options could accomplish our goal of including historical context in the post-tonal theory curriculum. We have chosen *The Rest is Noise*, however, because we appreciate the way in which Ross skillfully situates contrasting compositional approaches and movements that occurred simultaneously in different locations, all within the confines of one highly engaging book.

11 The last decade of *JMTP* alone, for example, has seen articles by Geary and Komaniecki (2017), Ripley (2016), Sly (2011), Root (2010), Kleppinger (2010), Harter (2009), and Santa (2009).

12 Some theory textbooks do mention historical context, but this is most typically relegated to an introductory paragraph or two at the beginning of selected chapters, and not a factor within the rest of the chapter or consistently integrated into analytical assignments. Take, for example, Roig-Francolí's *Understanding Post-Tonal Music*: while later chapters, in particular, present the historical context of the new styles being introduced, the book does not consistently reinforce this context within the example analyses or homework assignments.

13 While context is crucial to our curricular approach, we want to reassure the reader that what we are describing is a theory—not a musicology—course. We do not suggest that the instructor spend all their time and energy teaching content that would normally be presented in music history courses. Rather, Ross's book (or some other source(s)) does the work of situating the student into the context of the music being studied. Instructors then build upon that context with historically-centered theoretical and analytical activities. As a result, the focus of the course still centers on traditional analytical and theoretical topics, but students' engagement with these concepts is enriched by the historical context.

14 Indeed, Ambrose et al. (2010, 96) have shown understanding when and why to apply various knowledge to be a necessary step towards mastery of material.

compositional topics to broader issues such as race, gender, religion, politics, and sexuality—topics that can be difficult to incorporate into a theory classroom.

Rather than prescribing one specific post-tonal theory curriculum, the purpose of our article is to empower instructors to create their own historically-driven post-tonal curricula. To do so, we will both demonstrate the importance of context for student learning and provide flexible materials that instructors can adapt for use when developing their own courses. The article unfolds in two parts. The first half details how to structure a post-tonal theory curriculum around Ross's fifteen chapters, and suggests a host of corresponding theoretical topics and activities that instructors can choose from to fill in that framework depending on their course objectives. The article then offers a day-by-day overview of one possible iteration of the curriculum. This section not only exemplifies one possible distillation of the activities from the previous section into a fully-formed, fifteen-week course, but it also provides an opportunity to discuss how these activities could be tailored to fit different instructional preferences. Having a complete course mapped out also allows us to demonstrate one additional benefit of our approach: the way in which the chronological nature of the curriculum naturally leads to an interleaved curriculum.

OVERVIEW OF THE APPROACH

The fifteen chapters of *The Rest is Noise* conform neatly to a typical fifteen-week semester, with each week corresponding to one chapter of Ross's book. Students can familiarize themselves with each week's material in one of several ways depending on time constraints and the preferences of the instructor: 1) each student could read every chapter; 2) one or more students could read the chapter, then prepare and distribute a brief summary of it prior to class; or 3) the instructor could choose key excerpts for students to read prior to class. In each case, instructors could post these summaries or discussion questions based on the excerpts to the discussion board section of the course's learning management system (LMS), where they could foster engagement with the material by requiring students to respond both to the chapter and to their classmates' comments on it.¹⁵

While all three options represent viable ways to promote students' engagement with the music's historical context, we have found that the second option promotes deeper engagement without overwhelming students with additional work. Each

¹⁵ Most major LMS platforms, including Canvas, Blackboard, and Moodle have discussion features that work well for these purposes.

student still has the opportunity to interact with Ross’s compelling account, yet is only responsible for preparing one or two summaries per semester. Moreover, because students can be assigned the chapter(s) at the beginning of the semester, they can plan their work well in advance.

Ross’s chapters are not merely supplementary material, but instead inform the content and activities of each week. To this end, Example 1 provides relevant theoretical topics for each chapter and a wealth of corresponding activities designed to help lead students towards mastery of various analytical, performative, and listening skills—all while constantly reinforcing the music’s cultural and historical context.¹⁶ Within Example 1, we present five categories of activities: analysis, aural skills, listening, writing, and model composition. We recommend first choosing one or more theoretical topics for each week from the given options displayed at the top of each chapter’s grouping, then finding accompanying activities that support the development of corresponding skills. Indeed, we envision Example 1 as a sort of choose-your-own-adventure approach to curriculum design that allows for numerous possible pathways depending on course goals, institutional circumstances, and learning objectives: if there is no aural skills component connected with the course, one can omit the activities listed in that category entirely; if an instructor favors developing writing or composition skills, they can choose to include more of those activities.¹⁷

Conversely, instructors should not feel limited by Example 1. In fact, we encourage instructors to intermix our suggested assignments with others of their choosing wherever needed. If one wants to include a capstone analytical project, for example, one can. Simply adjust the workload towards the end of the semester to accommodate a larger project and strategically incorporate tasks from the writing and analysis category of Example 1 throughout the semester to help students develop the requisite skills. Similarly, instructors should also feel free to use textbooks and their accompanying workbooks alongside our suggested activities. We have, for instance, had success augmenting analytical assignments from textbooks with a historical frame. For instance, Chapter 9’s activity on Dallapiccola’s “Die Sonne Kommt”—in which students analyze the piece then consider how his style of serialism differs from

¹⁶ All Examples in this article are presented as Appendices.

¹⁷ While we intend the example to provide a plethora of possible activities, suitable for a variety of different instructional styles, philosophies, and objectives, we are certainly not recommending that instructors attempt to include every activity or theoretical topic in one semester or try to complete every suggested topic or activity within each week. Chapter 3, for example, contains eight suggested theoretical topics and twenty-one activities. To cover all of these in a single week would be impossible. Rather, it is up to the instructor to choose activities that work best for their pedagogical goals.

Schoenberg's—was inspired by and draws from an analytical prompt from Jane Piper Clendinning and Elizabeth West Marvin's *The Musician's Guide*.¹⁸

The key to our approach—as exemplified by the Dallapiccola analysis—is that analytical assignments are an opportunity to encourage students to probe into the historical context of the music. Consider another example, drawn from Example 1. One analysis activity for Chapter 10 begins by inviting students to complete a guided analysis of excerpts from serial compositions by Schoenberg and his student, Webern. Rather than stopping there, however, the assignment then asks students to briefly compare the two approaches, thinking in particular about how Webern adapted his teacher's twelve-tone technique and made it his own. This task gives students the opportunity to practice analyzing serial music and reveals Schoenberg and Webern's unique approaches to twelve-tone writing—both goals of traditional post-tonal theory assignments. But by situating the analysis within a historical context, the task also encourages students to explore connections between their analytical findings and the music's historical context.¹⁹

Couching analyses in this way also helps to establish connections that foster learning and retention. In fact, pedagogical research has shown that incorporating assignments that ask students to examine problems from multiple disciplinary perspectives cultivates a wide range of positive educational outcomes. And although music history and music theory both belong to the same discipline in that both pertain to the study of music, the connections between intellectual domains that integrated analyses foster provide students with similar benefits. Such assignments teach students: 1) to solve broad, complex problems from several perspectives, 2) to critically evaluate sources, 3) to think about the larger context when assessing problems and their solutions, 4) to develop arguments, 5) to empathize and appreciate perspectives other than their own, and 6) to embrace ambiguity.²⁰

While our emphasis on historical context might raise concerns about sacrificing mastery of specific analytical techniques, assignments that look at problems from multiple perspectives have actually been shown to help students develop a more

18 Marvin and Clendinning (2016, 800).

19 Instructors might also consider adding a third composer to the discussion, inviting students to consider the possibility that Webern's style was shaped not just by his teacher, Schoenberg, but also by the subject of his dissertation, Renaissance composer Heinrich Isaac. See Shaftel (2004, xiii) for more information. Schreffler (1994) also offers a host of other insights into Webern's style, particularly his fascination with religious texts—a trait he shared with Schoenberg.

20 DeZure (2010, 372–373). See also Klein (1990), Haynes (2002), and Boix Mansilla (2005).

sophisticated understanding of the object of study.²¹ Indeed, by incorporating historical context alongside more traditional analytical assignments in such an intentional way, we are not diminishing the rigor of the theoretical and analytical content covered in our course, but rather enriching our students' experiences by helping them understand the complex relationships between post-tonal music, the historical context in which it was composed, and the tools we use to understand it.

Given the benefits outlined above, a number of assignments in Example 1 draw from research on interdisciplinary pedagogy. For example, in a popular type of interdisciplinary assignment called a "jigsaw," students first divide into two groups, each assigned to study a problem from a different disciplinary perspective. Then, the groups intermix, and the recombined groups work towards an integrated solution to the problem.²² The activities for Chapter 11 include such a task: first, groups of students consider excerpts from John Cage's *Two* from either a historical or an analytical perspective, then students from different groups collaborate to fuse those perspectives into a more comprehensive understanding of the work.

We use a similar task described by Haynes (2004) in the assignments for Chapter 4.²³ In this activity, each student writes three brief reactions—one historical, one analytical, and one integrated that synthesizes the previous two—to Edgard Varèse's *Octandre*. The integration at the end of the task enables students to consider what each perspective brings to the table and to determine when and how to use each.²⁴ Subsequent class discussions then allow students to deepen their understanding of the strengths, limitations, assumptions, and frameworks of each perspective.²⁵ As a result, students develop a richer understanding of both the music and the analytical technologies we teach them.²⁶

21 Lattuca (2001, 145).

22 DeZure (2010, 377). See also Barkley et al. (2014, 156–162).

23 Haynes (2004).

24 The task as a whole also reveals to the students just how difficult it is to completely strip out either history or theory from one's analyses, and how integrated the task of music analysis already inherently is.

25 DeZure (2010, 379).

26 Instructors may also modify these assignments so that students work on their own to look at a piece from one of several analytic perspectives then come together to integrate them. Doing so resonates with Grant's (2012) call to ensure that students know *when and why* a certain tool is most appropriate in a given circumstance.

Although integrated activities have many benefits, we firmly believe that these activities best work in a post-tonal theory curriculum when instructors consistently distribute them into the course schedule alongside other types of tasks that focus solely on building analytical, listening, and score reading skills. We find, for instance, that in certain cases (particularly when students are first learning a concept), drill-based practice activities are invaluable.²⁷ It is crucial, however, to connect even those assignments back to the historical framework for the week.

Consider, for example, modes and symmetrical scales. When learning this topic, students should spend time both writing modes and scales and identifying them in compositions. But this activity takes on a new significance when connected back to a historical frame. With our approach, students might, for instance, first read Ross's description of the two *avant gardes* that formed in France and Germany at the turn of the century as exemplified by Schoenberg and Debussy. After listening to and comparing the two compositional approaches, identifying scales and whole-tone collections in excerpts from Debussy's music can feel like diving deeper into that story. Students not only see *how* Debussy used modes and scales, but in connecting those scales back to his experience attending the 1889 Paris Universal Exposition, they also begin to consider *why*.

No matter the task, though, framing class activities so that analytical tools and history go hand-in-hand only enhances our ability to teach the usual theoretical material. In addition to boosting students' retention by connecting it to their pre-existing and newly developing knowledge of twentieth- and twenty-first-century history, our approach also infuses the drills of a traditional theory class with a sense of "self-transcendent purpose,"²⁸ which James Lang has indicated helps generate intrinsic motivation.²⁹ Indeed, this is one of the most crucial learning benefits of our approach. In linking analytical insights with historical facts, even the repetition of drill-based activities can be made interesting because it all feeds into the larger course-spanning narrative—the intertwining of music, theory, and history. As such, our approach takes a cue from Ken Bain who suggests that students take the most ownership for their learning when engaged with questions or narratives that they find personally "important, intriguing, or just beautiful."³⁰

27 Many textbooks include useful drill-based activities that suit this purpose well, which is another reason using a textbook alongside Ross's book might be beneficial.

28 Lang (2016, 174).

29 Ibid.

30 Bain (2011, 197).

IMPLEMENTING THE APPROACH

One of the principal challenges of translating Example 1 into a usable curriculum is choosing which activities to use and which to omit. A key part of that is deciding how to balance breadth and depth. To use Brian Alegant’s terminology: should one “snorkel” or “scuba dive”?³¹ In this section, we will help instructors navigate that quandary by providing a sample daily course schedule for one possible iteration of a context-driven post-tonal theory course. This schedule serves several purposes. First, it offers a useful starting point for instructors designing their own courses. Second, it allows us to consider the decision-making processes involved in adapting Example 1 into a complete curriculum. Finally, the schedule provides an avenue for us to further explore the flexible nature of our approach by modeling its adaptability.

A Sample Course Schedule

Example 2 provides one possible implementation of Example 1 into a typical 15-week undergraduate post-tonal theory curriculum. Each week centers around a historical frame and corresponding theoretical topics, both of which are displayed in the left column of the example. Class activities and homework for each day populate the remaining columns, and grey boxes indicate exam dates.³²

In developing this sample course schedule, we have made a number of decisions, all of which draw from our own experiences. One must, for example, choose not just which theory topics to cover and which to omit for each week, but also how to order and pace those topics. Like many post tonal courses, we begin with material that links back to topics from previous semesters (e.g., extended tonality, modes, and scales), then gradually introduce new concepts (e.g., serialism, pitch-class set analysis, and timbre/texture in post-tonal music). We have also interspersed weeks that spotlight different composers or genres of music, but do not introduce new analytical techniques. For example, Week 7 focuses on analytical approaches to the music of Shostakovich and Prokofiev, while Week 9 addresses the analysis of texted music. Such weeks not only provide a break from the introduction of new concepts or analytical techniques, but they also offer an engaging way to review and synthesize previous material.

Furthermore, while the overall course is structured chronologically, with every week focusing on a new chapter of *The Rest is Noise*, we did make one minor adjustment

³¹ Alegant (2014).

³² We have chosen to place exams in Weeks 5, 10, and 15, but instructors can easily adjust the number and scheduling of exams depending on their preferences.

to that overall design in service of a progression of theoretical topics we believe is more pedagogically sound. Week 8 now focuses on Chapter 9, while Week 9 covers Chapter 8. These chapters offer one of several places in the book where reordering chapters does not affect the chronology of the course, since these chapters address the same period (1933–1945)—just with a focus on different geographical areas.³³ In switching Chapters 8 and 9, we allow students to spend two days reviewing and strengthening their understanding of basic serial techniques in the music of Dallapiccola in Week 8 before encountering rotational serialism in the music of Crawford Seeger at the end of Week 9.

In choosing to maintain the chronology of *The Rest is Noise*, the order in which we present theoretical topics within our example curriculum is naturally interleaved rather than blocked.³⁴ While most traditional courses present topics in discrete units, an interleaved course briefly introduces all topics at the start of the semester then circles back to those topics throughout the rest of the course. A blocked course that had to cover three topics in a typical fifteen-week semester might be divided into three five-week units, each addressing one of the three topics. An interleaved approach to the course, on the other hand, might introduce all three topics briefly in the first few weeks, then return to each one in more depth throughout the rest of the semester.³⁵ Though interleaving can take many forms,³⁶ circling back to previously learned material and “encountering it in multiple contexts so that [students] can continuously develop and refine their knowledge and skills” constitutes the crux of our approach.³⁷ Each topic still receives the same amount of time and depth, it is just no longer contained in its own discrete unit.

In surveying the layout of topics in Example 2, it becomes clear that, while not every topic is interleaved throughout the semester, broader topics are. Notice, for example, the appearance of serial music in Weeks 6–10 of our example course schedule. Rather than put serialism in its own self-contained unit, we have distributed

33 Chapter 7 also covers the same time period and could be interchanged with either Chapter 8 or 9 while keeping the chronology of the course intact.

34 Interleaving in the tonal music theory core has been explored in depth in Callahan (2017 and 2019).

35 Lang (2016, 68).

36 A traditional interleaved class that covered topics A, B, and C typically presents topics like so: ABCABCABCABC. But the class might also go ABABABCBCBABC. What matters most is that topics are constantly circled back to rather than chunked in units like AAAA–BBBB–CCCC.

37 Ibid., 82.

six classes on the subject across five weeks—alongside other topics relevant to contemporaneous music, such as triadic post-tonality, text and music, and set theory. We introduce serialism over two days in Week 6, then dedicate one day to the topic for several subsequent weeks.

The pedagogical benefits of an interleaved curriculum over a blocked one have been well documented.³⁸ We therefore consider the way our chronological approach naturally leads to an interleaved curriculum a distinct advantage. But in addition to its general learning benefits, the resulting interleaved schedule also supports one of the key goals of our approach: helping students better comprehend how music, its history, and the tools we use to understand it intertwine. Constantly re-encountering previously introduced theoretical topics in new compositional and historical contexts not only helps students improve long-term knowledge retention, but it also allows them to see how particular compositional approaches evolved over time, often in response to historical events—all while honing their analytical skills. Furthermore, juxtaposing disparate, but historically contemporaneous, compositional approaches helps students understand more clearly the way music history unfolded and that the tools we introduce early in the semester remain useful for music throughout the twentieth and twenty-first centuries. Indeed, this approach ensures, for example, that students never get the unintended impression that the advent of atonality resulted in the universal abandonment of centrality or that the birth of serialism was the death knell of triadic music.

³⁸ Investigations into the educational benefits of interleaving topics have shown several distinct advantages of interleaved courses over their blocked counterparts. First of all, an interleaved course takes advantage of two well-known methods for encouraging long-term retention of material: 1) spacing out learning over time; and 2) mixing up the types of activities one uses to develop skills (Lang 2016, 65). Furthermore, studies have shown that while students who learn topics in discrete blocks demonstrate more early performance gains, those who learn in an interleaved fashion dramatically outperform the blocked learners over time, particularly after the learning period has concluded (Lang 2016, 70 and Rohrer and Taylor 2007 & 2010). In short, while blocked learning may result in better initial test scores, interleaved learning produces both better long-term knowledge retention and improved mastery of skills in a variety of contexts. A key aspect of the interleaving approach, though, is that mastery is neither expected nor desired the first time one encounters a subject. Students may feel some anxiety moving on before they feel fully comfortable with the material. However, in repeatedly returning to topics, they grow increasingly knowledgeable and confident in a topic or set of skills with each new encounter. Indeed, as seen in research such as Callahan (2019), the initial sacrifices necessitated by an interleaved curriculum are more than compensated for by the long-term benefits.

Adjusting the Course Schedule

While Example 2 presents one way to introduce topics, it displays only one of many possible course schedules. Our hope is that the schedule and the earlier discussion about our ordering of topics give instructors a less daunting starting point for implementing our approach than the abundance of activities found in Example 1. While we feel our sample schedule strikes a healthy balance between introducing a wide breadth of theoretical topics and diving deeply into them, we also recognize that other instructors may have different styles or opinions. As such, instructors should feel free to realize our course schedule in full or to make adjustments. This section will give some guidance about making those adjustments depending on how one wants to balance breadth and depth, both in terms of the overall course structure and daily activities and assignments.

At the level of the semester, for instance, there are several places in our course schedule where one might choose to scuba dive deeper into prior topics rather than introduce new ones. Weeks 9 and 13 offer two particularly good places for this. For instance, our proposed Week 9 revolves around strengthening our students' skills with serialism and triadic post-tonality using texted music. However, instructors might instead choose to focus on just one of those theoretical tools, or even to substitute other concepts for which their students need additional practice. Similarly, in Week 13, rather than introducing the nuances of Messiaen's unique musical language (e.g., his use of birdsongs, invented chords, Indian *deçi-tâlas*, etc.), instructors could instead delve further into already familiar topics that are applicable to Messiaen's repertoire (e.g., modes, sets, triadic post-tonality, and serialism). Alternatively, one could revisit those topics using the music of other 1960s *avant-garde* composers that Ross discusses, such as Babbitt, Ligeti, Stockhausen, and Xenakis.

In creating their own version of this curriculum, though, instructors must consider how to balance breadth and depth not only on the large scale, but also on a weekly and daily basis. Our approach offers great flexibility at this level as well. Take, for example, Week 2. On Monday, we explore modes and scales in the context of Debussy's music. On Wednesday, we introduce the basic concepts behind sets (i.e., integer notation, cardinality, etc.) while examining some of Schoenberg's works. Finally, on Friday, we use guided analyses of excerpts from both composers' works to not only strengthen students' grasps of both modes/scales and basic set-theoretical concepts, but also to encourage them to explore how Debussy and Schoenberg represent the two *avant gardes* that Ross discusses in Chapter 2. In contextualizing both composers' music, students gain an appreciation for how these disparate compositional approaches

both developed in reaction to the same impetus: the instability of the early twentieth century.

The version of Week 2 we have presented in our schedule follows along with the two-pronged focus of Ross’s narrative from Chapter 2: the first two classes of Week 2 introduce two distinct theoretical topics, one related to Debussy and one to Schoenberg, and the third class allows students to delve deeper into both.³⁹ There are other ways to structure Week 2, though, that might suit the preferences of other instructors better. For example, one could cover the same theoretical topics but start Week 2 by addressing broader topics, narrowing the focus as the week progresses. Students could spend Monday’s class engaged in active, analytical listening, using pieces by several of the composers Ross mentions in Chapter 2, such as Debussy, Schoenberg, Ives, and Scriabin. This activity would utilize a “discovery learning”⁴⁰ or “inquiry-based learning”⁴¹ approach, asking students to think critically—and analytically—about the music they hear, focusing on what aspects of the music make these pieces sound similar or different. Wednesday and Friday’s classes could then focus on introducing the week’s theoretical topics and exploring the music of Debussy and Schoenberg in more depth.

Alternatively, if splitting the week’s focus between two theoretical topics seems overwhelming, the instructor could instead choose to spotlight either Debussy or Schoenberg and their associated theoretical topic and use the other composer merely as a foil, leaving the corresponding theoretical topic for another week. For example, one might decide to spend all of Week 2 focused on modes and scales in the music of Debussy. In-class and assigned analytical work could explore his music in greater detail, while the introduction of integer notation and sets could be postponed until Week 3. In this case, though, one should still take advantage of the richness of Ross’s contextual account of these two composers by incorporating short listening assignments and brief discussions that introduce students to Schoenberg’s *avant garde* and ask them to compare it to Debussy’s. This alternate schedule still preserves the interleaved nature of our approach at the level of the semester—instructors introduce extended tonality, modes/scales, and sets in Weeks 1–3 then revisit these topics in various contexts in later weeks—but does so at a pace that some instructors might prefer.

39 In this way, this week also interleaves topics at the weekly level.

40 Discovery learning was first introduced in Jerome Bruner’s *The Process of Education* and has since been explored in countless books and articles. Bruner (1960).

41 Shaffer (2013).

Each option represents a viable alternative to our proposed course schedule, demonstrating the ease of adjusting the suggestions in Example 2 to accommodate different balances of breadth and depth. Any curriculum will naturally ebb and flow between the two. Regardless of one's preferences, though, it is crucial to keep in mind that our interleaved structure means mastery is not required the first time a topic is introduced. Students will circle back to each topic introduced at the start of the course as they progress through the semester, so it is not a problem—and is, in fact, actually a benefit—that their initial forays into a topic are shallower dives. The introduction that students get in those initial dives will both give them basic training in a theoretical topic and spark curiosity so that with each subsequent interaction with a topic, they can plunge a little deeper.

CONCLUSION

This article has proposed a flexible approach to teaching undergraduate post-tonal theory in which connections between post-tonal music, its history, and the tools we use to understand it drive the course. As we have shown, structuring the curriculum around the chronology of the twentieth and twenty-first centuries has several benefits. First, it takes advantage of the fact that humans learn and retain information best when they can link material to prior knowledge. Students are encouraged, through carefully curated activities, to connect music and analysis to the events and trends of the twentieth and twenty-first centuries that many of our students will have prior experience learning. Indeed, framing the course around a chronological historical narrative such as the one presented in Alex Ross's *The Rest is Noise* gives students an already familiar mental framework within which they can master new concepts and analytical tools. Second, that chronological framework has the added benefit of naturally leading to an interleaved curriculum, which studies have shown also increases student understanding and retention of materials in comparison with a blocked presentation. Finally, by contextualizing the music and analytic technologies that we teach, we help our students to understand when and why to apply various analytical tools.

While we have provided numerous activities and one possible course schedule, we have only scratched the surface of the various ways to hone analytical skills within a contextualized framework. As such, our suggestions are just a starting point, and our hope is that instructors will take our approach and tailor it to fit their own teaching style, course requirements, and pedagogical goals. Whether an instructor takes the

entirety of our proposed course schedule or just one activity, whether they have their students read the entirety of *The Rest is Noise* or simply choose to add more stories from music history to their curriculum, what is most important is that instructors seek to add context to the work that is done in the undergraduate post-tonal theory classroom.

By restructuring the undergraduate post-tonal theory class, we empower students to relate the theoretical tools, analytical skills, and musical repertoire they learn throughout the semester to a larger narrative. Beyond the benefits described above, though, connecting theoretical material to such a narrative provides one final advantage to our approach: we can teach theory through stories. The pedagogical benefits of teaching this way are well documented,⁴² but Daniel Willingham perhaps put it best when he stated that “the human mind seems exquisitely tuned to understand and remember stories—so much so that psychologists sometimes refer to stories as ‘psychologically privileged,’ meaning that they are treated differently in memory than other types of material.”⁴³ In other words, by organizing the curriculum around historical context, we strengthen students’ investment in the theoretical concepts and analytical skills we teach by bringing the development of music history, its composers, and the repertoire we study to life.

42 Lang (2016, 182–184) and Cavanagh (2016, 14).

43 Willingham (2009, 66–67).

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APPENDIX

Example 1.

Set of Possible Topics and Activities for Each Chapter of *The Rest is Noise*.

Chapter 1 The Golden Age: Strauss, Mahler, and the Fin de Siècle	Possible Theory Topics	- Extended tonality - Pitch vs. pitch-class - Introduction to integer notation
	Aural Skills	- <u>Perform excerpts from <i>Salome</i></u>: sing and play various characters' music, particularly ones with more chordal accompaniments such as the opening Narraboth material and much of Jochanaan's music. Note, in particular, the differences between more tonal (e.g., Jochanaan) and more dissonant music (e.g., Salome).
	Analysis	- Much of <i>Salome</i> relies on "opposites." Identify and discuss the Strauss's use of contrasting materials, and analyze how those opposites are used for dramatic effect. - In <i>Salome</i>, identify, discuss, and compare and contrast motives associated with each character. How might Strauss's settings of these motives have riled up the censors who were worried about biblical characters performing "unspeakable acts?" - Ross notes that the premiere of <i>Salome</i> evidenced a shift to modernism, "illuminat[ing] a musical world on the verge of traumatic change" (10). As Ross says: the C-sharp minor of <i>Salome</i> is a "different sort of C-sharp minor from Bach's or Beethoven's" (7). Choose a passage from the opera and describe how Strauss's use of dissonance differs from that of his predecessors. Then, describe how that exemplifies the shift to modernism. - In the fifth lecture in the series "The Unanswered Question," Leonard Bernstein discusses Mahler's Ninth Symphony as a set of four farewells. Start going over the fourth movement in class together. Then, for homework, listen to Bernstein's lecture and finish a guided analysis of the movement.
	Writing	- Discuss how operas like <i>Parsifal</i> were the progenitors of social movements. - Write about the onset of modernism and how Strauss and Mahler exemplify this movement using several musical examples to support your claim.
	Listening	- Compare and contrast Strauss's tone poems and Mahler's symphonies.
	Model Composition	N/A
Chapter 2 Doctor Faust: Schoenberg, Debussy, and Atonality	Possible Theory Topics	- Modes and non-diatonic scales - Early atonality (introduction to pitch-class set theory) - Triadic Post-Tonality
	Aural Skills	- <u>Debussy</u>: a) Sing whole tone and pentatonic melodies from "Voiles," mixolydian melodies from "La cathédrale engloutie"; b) Sing excerpts from "La fille aux cheveux de lin" and "La flûte de Pan"; c) Sing <i>Syrinx</i>; d) Play and sing excerpts from the beginning of "Des pas sur la neige." - <u>Early atonality</u>: a) Sing atonal melodies from <i>Das Buch der hängenden Gärten</i>; b) Sing leitmotifs from Berg's <i>Wozzeck</i>.

Analysis	- <u>Debussy</u>: a) Analyze <i>Syrinx</i> using multiple analytical perspectives (Nattiez's motivic approach is one example); b) Analyze "La cathédrale engloutie" and some of Debussy's other piano preludes for his use of modes and other non-diatonic scales; c) Analyze Debussy's <i>Etude #3</i>, "Pour les quartes," tracing Debussy's use of new and old musical elements. - <u>Schoenberg</u>: a) Analyze "Angst und Hoffen" and other songs from <i>Das Buch der hängenden Gärten</i>; b) Analyze <i>Sechs kleine Klavierstücke</i>, op. 19; c) Analyze <i>Fünf Orchesterstücke</i>, op. 16 ("Farben" is an excellent example of <i>Klangfarbenmelodie</i>). - <u>Webern</u>: Analyze <i>Sechs Stücke für grosses Orchester</i>, op. 6, which Ross describes as "an incomparably disturbing work in which the rawness of atonality is refracted through the utmost orchestral finesse" (67) and "arguably the supreme atonal work" (68). - <u>Berg</u>: a) Trace old and new elements in <i>Drei Orchesterstücke</i>, op. 6; b) Explore the use of traditional and new elements in <i>Wozzeck</i>, tracing how each connects to specific characters or emotions (definitely study where the leitmotifs sung for aural skills are found); c) Examine the use of traditional forms in <i>Wozzeck</i>.
Writing	- Ross mentions several composers who pushed the boundaries of tonality, including Schoenberg, Liszt, Scriabin, and Ives. On page 63, he writes: "The teleological historian might describe all this activity as the collective movement of a vanguard, one that was bent on sweeping aside the established order. Yet each of these composers was following his or her own course, and in each case the destination was unique. Out of all of them, only Schoenberg really adopted atonality. What set him apart was that he not only introduced new chords but eliminated, for the time being, the old ones." Listen to some of the works he mentions by each of these composers, and write a response to this quote, thinking about the ways in which each composer independently pushed the boundaries and describing similarities and differences between their individual paths. - Ross describes two <i>avant gardes</i> that emerged simultaneously in two different locales: "The Parisians were moving into the brightly lit world of daily life," and "The Viennese went in the opposite direction, illuminating the terrible depths with their holy torches" (49). Choose a work by Debussy and a work by Schoenberg that were written in the same year and write a reaction to the idea of there being two distinct <i>avant gardes</i>. Discuss specific musical elements to compare and contrast these two approaches. In addition, consider how the cultural and political climates of Paris and Vienna may have contributed to the differences between these <i>avant gardes</i>.
Listening	- Ross claims that Webern's stripping away of Schoenbergian expressionism in his early forays into atonality actually make his music easier to listen to and track along with. Listen to Webern's <i>Fünf Stücke für Orchester</i>, op. 10, and also to any of the Schoenberg works Ross mentions. Come to class ready to discuss your thoughts on Ross's claim about the accessibility of these two composers' approaches to atonality. - Listen to Berg's <i>Wozzeck</i>. Trace old and new elements, and how the traditional and the new interact in Berg's music.
Model Composition	- Write a short piece that pushes beyond the limits of tonality in the style of Schoenberg's <i>Sechs kleine Klavierstücke</i>, op. 19. - Write a short piano piece in the style of Debussy's <i>Préludes</i> that incorporates some aspects typical of Debussy's style, such as the use of modes, whole-tone or pentatonic scales, planing, etc.

Chapter 3 Dance of the Earth: The Rite, the Folk, <i>le Jazz</i>	Possible Theory Topics	- Pitch vs. Pitch-class - Introduction to integer notation - Pitch-class set theory - Symmetry and inversion - Triadic Post-Tonality - Modes, scales, and octatonicism - Post-tonal rhythm and meter
	Aural Skills	- Conduct and perform the rhythms of “The Augurs of Spring” from Stravinsky’s <i>The Rite of Spring</i> (can also perform on piano). - Sing the original versions of folk tunes used in the music of Bartók, Stravinsky, and Janáček. Next, perform excerpts on your instrument that illustrate how these composers transformed folk tunes in their music. - Play and sing two-line pieces by Bartók (e.g., “Song of the Harvest” from <i>44 Duos for Two Violins</i>). - Be able to sing whole-tone, pentatonic, and octatonic scales, as well as any of the church modes. - Improvise melodies on scales and modes.
	Analysis	- In Class: Discuss the use/adaptation of folk songs in Janáček and Bartók from various standpoints including rhythm, mode, and affectation. For Homework: Analyze the use of folk songs in several passages from Stravinsky’s <i>The Rite of Spring</i> (see Taruskin (1996) and (1980) for details), and write a short paper comparing Stravinsky’s use/adaptation of folk songs in <i>The Rite</i> to that of Janáček and Bartók. - Explore the intermixing of styles in Milhaud’s <i>La création du monde</i>, particularly what Ross describes as “its elegant intermingling of Bach and jazz,” the latter of which reflects his time exploring jazz clubs in New York City. - In Class: Analyze the first movement of Milhaud’s Chamber Symphony No. 2, exploring, in particular, his use of polyscalarity, tonal centers, motives, and form. For Homework: Analyze of Bartók’s “Song of the Harvest” in a similar manner. - Analyze Ravel’s “Le Gibet,” addressing form, tonality, and the function of the ostinato. - Analyze the first movement of Tailleferre’s String Quartet, paying close attention to issues of motive and form. - Discuss Neoclassical elements in Ravel’s <i>Le Tombeau de Couperin</i>.

Writing	- Discuss how the intermixing of styles in early twentieth-century music is a reflection of the times. Include specific musical examples. - Discuss the different reflections of what Ross calls “the real” (i.e., the non-cosmopolitan scene) in the music of Ravel, Bartók, and Janáček. - Discuss the stylistic shifts that occurred in the music of Stravinsky, Bartók, and Ravel based on pieces mentioned by Ross. Speculate on the role that various historical and biographical developments may have had in those shifts. - The use of elements from other cultures in music has long caused controversy. Ross’s account suggests this can be done respectfully (e.g., Milhaud’s <i>La création du monde</i>) or problematically (e.g., Poulenc’s <i>Rapsodie nègre</i>). The appropriation of the music of other cultures has remained an issue in more recent music. For example, critics have noted how artists like Pat Boone and Elvis benefitted from performing black music in the early days of Rock and Roll. More recently, Caroline Shaw has drawn criticism for incorporating Inuit techniques into her Pulitzer-winning “Partita for 8 Voices” without acknowledging Inuit influences or crediting the Inuit vocal coaches who worked with Roomful of Teeth when premiering the work. Even Miley Cyrus has been critiqued for using hip-hop elements in her music and for comments she has made about hip-hop music. Choose a musician who has been accused of appropriation (either one of the examples listed above or another one you’re interested in) and write an essay about the circumstances of that accusation. Discuss both the critique and (if applicable) any response by the artist. After researching it, give your take on the situation, being sure to back up your argument by citing specific musical examples from pieces or songs written by that artist.
Listening	- Compare and contrast music by each of the members of <i>Les Six</i>. - Listen to a few different Neoclassical pieces by composers like Stravinsky, Satie, and Ravel. Discuss similarities and differences in their approaches. - Choose a piece based on a folk tune(s), then see if you can find and listen to ethnographic recordings of the original version(s) of the tune(s). Compare the two and identify which features are retained and which are altered in the composer’s adaptation. (Hint: Grainger’s recordings of English folksongs are widely available.) - In Chapter 2, Ross described how Debussy was first introduced to world music through the Paris Universal Exposition in 1889. In Chapter 3, we learn that many other composers in the late-nineteenth and early-twentieth century encountered world and popular music through similar events, through touring bands (including military bands), through imported sheet music, or through their experiences traveling to or living in other countries. The following pieces include elements that are borrowed from or imitate these world musics: 1) Poulenc’s <i>Rapsodie nègre</i> (African), 2) Debussy’s “Golliwog’s Cakewalk” (American ragtime) 3) Milhaud’s <i>Saudades do Brasil</i> (Brazilian), and 4) Stravinsky’s “Marche Chinoise” from <i>Le Chant Du Rossignol</i> (Chinese). Choose two to listen to, then come to class prepared to describe the musical elements in each piece that seem to be attempts to evoke so-called “exotic” cultures. How successful do you feel these attempts are at imitating these cultures (feel free to search for some authentic examples of the music of these cultures on your own for reference)? In addition, consider the effects of these references: Ross mentions that some artists (including Cocteau and Poulenc) were “condescending towards [their] African-American sources.” Having listened to a few pieces that draw from or imitate the music of cultures to which the composer did not belong, be prepared to discuss how you think the composer treats these other cultures in each of the pieces you listened to.

Chapter 4 Invisible Men: American Composers from Ives to Ellington	Possible Theory Topics	- Pitch-class set theory - Motivic integration and “composing out” - Intervallic analysis - Triadic Post-Tonality - Musical borrowing - Cumulative form - Jazz harmony
	Aural Skills	- Ta and conduct the opening rhythms of Varèse's <i>Density 21.5</i>. - Sing the opening of Varèse's <i>Density 21.5</i> and <i>Octandre</i>. - Play and sing two lines from the opening of Varèse's <i>Octandre</i>.
	Analysis	- Analyze the third movement of Ives's <i>Concord Sonata</i>, “The Alcotts.” Consider the use of tonal and atonal elements, borrowed tunes, and Ives's own remarks about the sonata. - Analyze the use of intervals, form, motives, sound clusters, and aggregates in Varèse's <i>Octandre</i>. - Write a brief paper analyzing <i>Octandre</i> from two diverging perspectives: a historical one considering its representation of Varese as “ultra-modernist” and a purely musical one. Then, write a second paper in which you integrate those perspectives into a comprehensive analysis. (To cut down on workload, this second paper can easily become a class discussion.) - Analyze Varèse's <i>Density 21.5</i> using motives, intervals, and aggregates. - Analyze selections from William Grant Still's <i>Levee Land</i>, focusing on the following elements that Ross mentions: “the singer delivers vocal lines in classic blues style, the orchestra surrounds her with a seething, discordant harmonic field, including polytonal chords similar to those that Ives used in <i>Three Places in New England</i>” (151). - Analyze the “cumulative form” of Ives's Second Symphony. - Practice identifying and analyzing pitch and pitch-class intervals using examples from the literature. In each case, first identify all intervals, then answer guided questions about recurring intervals, patterns, and motives to see how intervals can be used in musically interesting ways. - Analyze selections from Duke Ellington's <i>Black, Brown, and Beige</i>. Recommendation: choose one or more selections for this week, then circle back to the work later in the semester with an analysis of “Come Sunday” (see Week 13 activities).
	Writing	- Discuss how attitudes towards race affected various compositional practices (such as classical music's appropriation of jazz, Transcendentalism, and “ultra-modernism”) in the 1920s. Respond, in particular, to Ross's characterization of black composers as “invisible men” (133). - Compare the compositional approaches of Gershwin, Varèse, and Ives and how they reflect the 1920s. - Write about how various composers responded to public attention in the 1920s. - Discuss the ways in which European compositional practices affected American composers in the 1920s. Consider the following composers: Varèse, Thomson, Gershwin, and Ives. - On page 130, Ross writes that Carl Van Vechten, writing in 1917, “predicted that Irving Berlin and other Tin Pan Alley songwriters would be considered ‘the true grandfathers of the Great American Composer of the year 2001.’ Now that we are on the other side of 2001, spend some time reflecting and researching on this prediction. Who <i>was</i> the “Great American Composer of the year 2001”? Do you see the influence of Berlin and other Tin Pan Alley songwriters on his or her music? Be sure to consider specific musical elements, as well as cultural/ societal elements as they contribute to your decision/argument. (This would make for a great in-class discussion after they had spent some time working on this.)

	Listening	- Compare and contrast the music of Gershwin and Varèse. - Listen to the borrowed tunes Ives used in his Second Symphony, then listen to the symphony itself. Be prepared to discuss how knowing the tunes in advance shaped your hearing of the symphony. - On page 153–4, Ross writes that some African-American composers felt that their music was copied or appropriated by white composers. He specifically mentions Scott Joplin thinking Irving Berlin's "Alexander's Ragtime Band" stole from <i>Treemonisha</i> and William Grant Still's suspicion that Gershwin had plagiarized from him. Appropriation, borrowing, and sampling continue to be hot topics in the popular music world today, with pop artists such as Robin Thicke, Ariana Grande, Miley Cyrus, drawing criticism (and in some cases, even facing lawsuits). Assign various instances of these copyright/appropriation controversies to groups of students and have each group listen to the relevant works, then come to class to debate these case studies—being sure to draw upon specific musical elements as evidence. This works particularly well if students are assigned to be either the prosecution or the defense, and given the opportunity to argue the case in class. (This assignment overlaps a great deal with one in Chapter 3. Feel free to leave out or adjust slightly if you did this there.)
	Model Composition	- Compose a short piece that "composes out" a motive (provided by the instructor). - Compose a piece that uses aggregates as a musical unit.
	Possible Theory Topics	- Nationalism - Set-class analysis - New approaches to form (e.g., rotational form) - Modes, scales, and octatonicism - Triadic post-tonality - Symmetry and inversion
Chapter 5 Apparition from the Woods: The Loneliness of Jean Sibelius	Aural Skills	- Play and sing some early Bartók compositions (e.g., Rhapsody, Sz.26), then sing melodies from some of his later works (e.g., String Quartet No. 4) to compare. - Sing octatonic melodies from Bartók's String Quartet No. 4 (e.g., m. 15 or m. 55). - Identify the mode(s) and pitch center of the opening themes (mm. 1–18) from Florence Price's <i>Symphony #1</i> in E Minor. Consider, in particular, if the piece stays in one mode the entire time or not. - Play and sing excerpts from Szymanowski's <i>Mythes</i>, mvt. 1 (e.g., the outer voices of mm. 1–8 or mm. 78–86), which juxtaposes diatonic and chromatic intervals against pentatonic intervals. - Working in pairs, sing the outer voices of Szymanowski's <i>Metopes</i>, mvt. 1, m. 60 (white keys vs. black keys). For an added challenge, practice singing all voices together.
	Analysis	- Analyze Florence Price's <i>Symphony #1</i> in E Minor from the standpoint of form, mode, and motive. - Analyze Sibelius's <i>Symphony No. 7</i>, paying close attention to issues of form. - Analyze Bartók's String Quartet No. 4, mvt. 1. Identify and explore Bartók's use of whole-tone, chromatic, and octatonic collections, as well as the role of inversion and symmetry. Additionally, examine how this seemingly atonal work contains elements of older traditions in compositional techniques like cadences, tonal centers, large-scale form, and rhythms (note, especially the use of Hungarian folk rhythms). - Analyze Kaija Saariaho's use of scalar collections in <i>L'Amour de loin</i> (particularly Act IV, scene i) and <i>Sept papillons</i> (mvt. 3)

	Writing	- Ross notes how Nationalism surged in the first half of the 20th century, notably in the music of composers such as Bartók, Szymanowski, Grieg, Elgar, Vaughan Williams, Nielsen, and Sibelius. However, Ross fails to mention any Black composers in Chapter 5, despite a significant trend towards nationalism among Black composers in the early 20th Century. Southern (1997, 267–282) details the history and traits of several early 20th Century Black nationalists. Read the aforementioned excerpts from Southern's book, choose one of these composers, listen to their music (with a score, if possible), and describe their specific Nationalist tendencies and how they manifest themselves in the work you listened to. Cite specific musical examples to support your claims. - Discuss how the 19th-century understanding of the “genius” composer placed pressures on post-war musicians. - Choose three to four Finnish composers from Sibelius to Saariaho. Listen to their music and denote several characteristic compositional techniques. What, if any, Nationalist through-lines do you find? (Variant: Choose one Sibelius work analyzed by Ross and compare that to one by Saariaho and one by Bjork using the SHMRG categories we discussed previously—two other Nordic composers. What, if any, similarities do you find?)
	Listening	- Listen to pieces by several black, American nationalists (e.g., Florence Price, Harry T. Burleigh, Will Marion Cook, J. Rosamond Johnson, Clarence Cameron White, and R. Nathaniel Dett) to hear how their styles differ. - Read the dismal tale of <i>The Kalevala</i> (the compendium of the national legends of Finland) and listen to Sibelius' setting of it in <i>Kullervo</i>. Be prepared to discuss how Sibelius told the stories with music. - Listen to and compare music by three of the following Nationalistic composers from various countries: Florence Price (America), Grieg (Norway), Szymanowski (Poland), Vaughan Williams (Britain), Nielsen (Denmark), Sibelius (Finland), Rachmaninov (Russia), and Bartók (Hungary).
	Model Composition	- Write a piece in which symmetry and inversion play an important role. - Write a short atonal work that incorporates some of the features of tonality seen in Bartók's Fourth String Quartet. - Write a piece that features polyscalarity in a way similar to Szymanowski's <i>Mythes and Métopes</i>.
Chapter 6 City of Nets: Berlin in the Twenties	Possible Theory Topics	- Serialism - Triadic post-tonality - Hindemith's theories (see also Dan Harrison's 2016 book, <i>Pieces of Tradition: An Analysis of Contemporary Tonal Music</i>)
	Aural Skills	- Sing excerpts from Schoenberg's Fourth String Quartet, mvt 3 (e.g., mm. 614–18). - Sing mm. 1–6 of the vocal line to Schoenberg's <i>Drei Lieder</i>, op. 48/i. - Play and sing mm. 1–5 of the first movement of Schoenberg's Fourth String Quartet. - Play and sing the outer voices of the opening phrase of Hindemith's “Interlude” in F from <i>Ludus Tonalis</i>. For an added challenge, play the entire left hand.

	Analysis	- Analyze Hindemith's Interludes in G and F from <i>Ludus Tonalis</i>, focusing on its formal organization, approach to dissonance, and links to tonality. Connect this to material we saw in weeks 1–5 by situating Hindemith's compositional style as another 20th-century approach to tonality. - Analyze serial aspects in the trio of the fifth movement of Schoenberg's <i>Suite für Klavier</i>, op. 25, as well as his Fourth String Quartet. - Analyze Ursula Mamlok's use of inversionally related rows in the opening of <i>Panta Rhei</i> (mvt. 3). - Analyze Elisabeth Lutyen's use of serial techniques in her Bagatelles, Op. 48, No. 1. - Complete a guided analysis of serial aspects in Berg's <i>Violin Concerto</i> (this activity relates well to another one in Chapter 15 regarding Gubaidulina's <i>Offertorium</i>). - Analyze serial aspects in the first movement of Schoenberg's <i>Drei Lieder</i>, op. 48, and consider how the serial structure reflects the text.
	Writing	- Discuss how the music of the 1920s reflected the political conflicts happening in Berlin at the time. - Choose one of these conflicts that came to the fore in the 1920s to explore in more detail: a) Hindemith's "music for use" vs. Schoenberg's serialism, or b) Composers like Weill who embraced the public vs. composers like Schoenberg who rejected the public. In the process, discuss why Berlin in the 20s was the perfect time for these conflicts to come to the fore.
	Listening	- Listen to and be prepared to discuss how the music in <i>Lulu</i>, <i>Wozzeck</i>, or <i>Moses und Aron</i> is used for dramatic effect. - Listen to and consider why much of Hindemith's music can be described as "music for use." - Listen to Schoenberg's <i>Serenade</i>, Krenek's <i>Jonny spielt auf</i>, and Weill's <i>Street Scene</i> and describe the ways in which jazz and popular elements appear in each.
	Model Composition	- Compose a piece that imitates Hindemith's approach to tonality and his "music for use" concept. - Compose a miniature serial work with a binary form similar to the trio from Schoenberg's <i>Suite für Klavier</i>, op. 25.
Chapter 7 The Art of Fear: Music in Stalin's Russia	Possible Theory Topics	- Review and reinforce previous topics as applicable to the music of Stalinist Russia.
	Aural Skills	- Sing themes from Shostakovich's Leningrad Symphony. - Sing excerpts from Prokofiev's <i>Zdravitsa</i> and Shostakovich's <i>Anti-formalist Rayok</i> (sing individually and put parts together in class).
	Analysis	- Analyze some or all of the following Stalin-era works by Shostakovich, considering them in the context of their reception by the government and the public: <i>The Limpid Stream</i> (criticized for being too simple), Fourth Symphony (withdrawn by Shostakovich out of fear), Fifth Symphony (an apology for the Fourth Symphony and <i>Lady Macbeth of the Mtsensk District</i>), and the Leningrad Symphony (Seventh Symphony). - Do a guided analysis that compares two cantatas that were composed with vastly different aims: Prokofiev's <i>Zdravitsa</i> (a propaganda piece in praise of Stalin) and Shostakovich's <i>Anti-formalist Rayok</i> (a satirical cantata making fun of the anti-formalist Zhdanov decree). - Examine Shostakovich's use of twelve-tone melodies using excerpts from some of his later works. Then compare and contrast his treatment of the aggregate to that of serial composers discussed in Week 6. Discuss the analytical implications of the differing approaches.

	Writing	- Choose a lesser-known Soviet composer writing during Stalin's time and learn more about them and their music, their reception, and their relationship with Stalin, the government, and anti-formalism. In addition, listen to one or two pieces by this composer. In a short paper, discuss the composer, their relationship with the Soviet government, and the music to which you listened. - Read one or more documents related to anti-formalism in Soviet Russia and write a response (some possible readings include: http://soviethistory.msu.edu/1947-2/zhdanov/zhdanov-texts/against-formalistic-tendencies-in-soviet-music and http://soviethistory.msu.edu/1936-2/upheaval-in-the-opera/upheaval-in-the-opera-text/chaos-instead-of-music). - After analyzing them in class, write a response that compares Prokofiev's <i>Zdravitsa</i> and Shostakovich's <i>Anti-formalist Rayok</i> cantatas. - Write a few pages comparing and contrasting government-controlled music and patronage.
	Listening	- Listen to Shostakovich and Prokofiev's Fifth Symphonies and be prepared to discuss the differences in their styles. - Listen to Shostakovich's <i>Lady Macbeth of the Mtsensk District</i> and consider it in light of the strongly negative reception it received in Stalinist Russia. - Listen to one work Ross describes as being well received by the Soviets and one that was not well received and reflect upon why each may have been received as it was.
	Model Composition	N/A
Chapter 8 Music for All: Music in FDR's America	Possible Theory Topics	- Quartal and quintal harmonies - Octatonicism, pentatonicism, modes, etc. - Text and music - Triadic Post-Tonality - Rotational serialism - Interval cycles - Transformational Theory - Serialism
	Aural Skills	- Play and sing Copland's harmonizations of "Simple Gifts" (if necessary, have the students write a reduction to fit the keyboard skills level expected in the course), sing the melody against piano chords. - Sing excerpts from Barber's <i>Dover Beach</i>. - Sing quartal and quintal melodies found in Copland's music (e.g., Fanfare from the Third Symphony, etc.). - Play and sing mm. 1–13 of Copland's "Why do they shut me out of Heaven?," which uses many 4- and 5-cycles. - Continue with Bartók play-and-sings and duet singing using selections drawn from <i>Mikrokosmos</i> and the <i>44 Duos for Two Violins</i>.

Analysis	- Examine the third movement of Crawford Seeger's <i>String Quartet 1931</i> from the perspectives of harmony, motive, and transformational theory. Pay attention to how she creates momentum even through non-traditional means such as <i>Klangfarbenmelodie</i> and sound masses. - Analyze the fourth movement of Crawford Seeger's <i>String Quartet 1931</i>. Consider this movement from a contrapuntal/motivic perspective. Also, trace how the 10-note series introduced in Voice 2 is transformed over time using rotational transformations. - Analyze selections from Copland's jazz-influenced <i>Piano Concerto</i> (1926), modern/dissonant <i>Piano Variations</i> (1930), quartal/quintal <i>Fanfare for the Common Man</i> (1942), and idealized portrayal of America in <i>Appalachian Spring</i> (1944). Consider the stylistic diversity of Copland's music, react to the idealistic depiction of American that his music has become known for, and reflect upon his knowledge and use of jazz elements. - Examine the interaction of text and music in Barber's <i>Dover Beach</i>. - Analyze the role of form, counterpoint, motive, and cadence in Crawford Seeger's ninth <i>Piano Prelude</i>. Consider the outer parts separately, and also together. Don't forget to consider specific intervals between voices that might be more prominent than others. - Analyze Copland's "Why Do They Shut Me Out of Heaven?" Ruminant on how Copland uses form, tonality, register, and intervals to express the meaning of the text.
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Writing	- Watch <i>Citizen Kane</i>, then write about the role of music in the film (could leave this open or guide them to a few specific moments in which music plays a significant role). - “At its peak the FMP [Federal Music Project] supported sixteen thousand musicians and operated 125 orchestras, 135 bands, and 32 choral and opera units” (303). One of the challenges with government support of the arts is how it chooses which artists to fund and promote. This continues to be an issue today. Research how the United States and one other country of your choice fund the arts, thinking about these questions: What amount of the budget is allocated to supporting the arts (and how much of that goes to music)? What are the criteria for choosing who to fund? Are there detractors who dislike and speak out against the government’s involvement or its choices of who to support? To what extent do arts programs support arts education vs. new music vs. canonical repertoires? Write a paper that discusses your findings and expresses your thoughts about these issues and the complex cultural and political ramifications of the government being involved in the arts (particularly in lieu of Chapters 7 and 8’s depiction of the role of the government in Stalin’s Russia and FDR’s America). - Ross notes that “three major technological advances altered the musical landscape from the twenties onward” (286): electrical recording, radio, and movies with sound. Choose one of these advances and discuss what sorts of changes occurred because of that advance. Consider, in particular, the types of music that were popularized, what composers or performers grew in fame (and who was conspicuously left out), and how those changes affected the trajectory of classical music in the 1920s. - Ross specifically places Barber, Sessions, and Weill into three categories of American composers—traditionalists, elitists, and populists respectively—based on a 1938 Virgil Thomson article. First, listen to: 1) Barber’s <i>Dover Beach</i>, 2) Roger Session’s “On the Beach at Fontana,” and 3) selections from Kurt Weill’s <i>Eternal Road</i>. Then, list musical features that differ between each piece, citing specific moments in the score. Finally, write a couple paragraphs responding to the following questions: 1) Do you think that these categories are perfectly distinct from one another from a musical perspective? Why or why not?; 2) Do you feel these categories are still at play today? Choose a favorite piece for your instrument written in the last 20 years and decide what category—if any—that piece falls into. - The Rest is Noise was published in 2007. In 2009, a large body of work by the composer Florence Price was discovered in Illinois. Read Alex Ross’s 2018 article, “The Rediscovery of Florence Price,” then contextualize Price’s music within the political framework described in Chapter 8, specifically, pages 302–315. Put another way, how do you think Ross might have written this section if Price’s music had been discovered earlier?
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	Listening	- Listen to Bartók's <i>Concerto for Orchestra</i>, keeping in mind that Ross notes it as an example of pluralism. Come to class ready to discuss pluralism in this piece. Ross specifically mentions folk melodies, Debussyian impressionism, Schoenbergian expressionism, North African rhythms, Gypsy dances, quotes of Shostakovich, etc. Do you hear these? If so, where? - Copland became known as the "Dean of American Composers" and one of the most quintessentially "American"-sounding composers. Listen to 2–3 of the Copland works Ross mentions in this chapter and think about whether they sound "American," and, if so, how. Be prepared to defend your views in class. - Listen to and compare Copland's setting of Emily Dickinson's poem, "Why Do They Shut Me Out of Heaven?," to a setting of the same text by another composer. Without looking at the score to the non-Copland version, see how much you can discern just from listening. Consider how each composer treats Dickinson's text. - Listen to three different composers' settings of folk tunes and consider how they treat the original and how they add their own voice. Some possible composers you might consider listening to include Ives, Crawford Seeger, Bartók, and Crumb. (Note: a great source for folk tunes is the Archive of American Folk Song at the Library of Congress, which includes folk songs compiled by Ruth Crawford Seeger and John and Alan Lomax; see https://www.loc.gov/folklife/lomax/ for more information.)
	Model Composition	- Using some of Bartók's <i>Mikrokosmos</i> and <i>44 Duos for Two Violins</i> as a model, write a short piano piece (or instrumental duet) that focuses on either: a) octatonicism, b) pentatonicism, c) quartal/quintal sonorities, or d) modes. - Write a short piece that you think is in some way "American." Attach a paragraph explaining how you chose to express some aspect of the American nation musically.
Chapter 9 Death Fugue: Music in Hitler's Germany	Possible Theory Topics	- Serialism - Triadic Post-Tonality - Form in post-tonal music - Quartal harmony
	Aural Skills	- Sing excerpts from Hindemith's <i>Mathis der Maler</i> (explore musical representations of different characters, etc.). The symphonic adaptation also includes melodies that can be used for singing practice, such as the flute melody from mm. 39–54. Lightly scored sections like this one could also be used to practice ensemble singing. - Sing the tone rows used in any serial music analyzed this week (such as Dallapiccola's <i>Canti di prigionia</i>). Sing various combinations of row forms used throughout <i>Canti di prigionia</i> (e.g., P followed by I, I following by RI, etc.) - Sing the vocal line from the fourth of Strauss's <i>Vier letzte Lieder</i>, "Im Abendrot."
	Analysis	- Analyze selections from lesser-known serial works such as Zillig's opera <i>Das Opfer</i> and Klenau's opera <i>Michael Kohlhaas</i>. - Analyze selections from Hindemith's <i>Mathis der Maler</i>, focusing especially on how various characters and groups of characters are characterized musically in Act II. - Analyze the second movement of Hindemith's <i>Mathis der Maler</i> Symphony ("Grablegung") or any movement of his <i>6 Chansons</i>, focusing on Hindemith's approach to harmony, tonality, and form in the movement. - Analyze Strauss's <i>Vier letzte Lieder</i>, focusing especially on text painting and the uses of tonality. - Analyze shorter serial works by Dallapiccola such as "Die Sonne Kommt," and consider how his style differs significantly from Schoenberg's approach. - Analyze a number from Dallapiccola's <i>Canti di prigionia</i>. In particular, trace how it uses the "Dies Irae." Then, consider the piece's role as a protest; be ready to discuss this in class.

Chapter 10 Zero Hour: The US Army and German Music, 1945–1949	Writing	- Consider the tune “Deutschland über alles” and the different ways in which it has been used. Think about its composition, its eventual adoption as a national anthem, its use in Schulhoff’s <i>Symphonia germanica</i> and Ullmann’s <i>Der Kaiser von Atlantis</i>, and the controversy that follows it even now given the recent mistaken use of the first verse by the United States Tennis Association. - Ross claims that Dallapiccola’s style in <i>Canti di prigionia</i> is a synthesis of Stravinsky’s neoclassicism and Schoenberg’s dissonant language. Listen to it, then write a response that answers the following questions: Do you agree with Ross’s claim? Why or why not? Where do you find elements of Stravinsky and Schoenberg in <i>Canti</i>? - Research and write about the inconsistencies in the Nazi government’s treatment of music. As Ross describes, there is some music that one would not expect them to support that they did, and some that one would expect them to support that they did not. Choose one or two examples, listen to them, and write about their reception in Nazi Germany.
	Listening	- Ross writes about the Nazi’s 1938 public exhibition of so-called “degenerate music” in Düsseldorf. This “degenerate music” included a wide variety of composers and styles. Decca has released a series of recordings of “degenerate music” that was suppressed in Nazi Germany. Choose one of these recordings and listen to it; come to class ready to briefly describe what you listened to and why it was suppressed.
	Model Composition	- Write a short serial piece modeled after Dallapiccola’s “Die Sonne kommt!” (roughly 15–20 measures) based on a protest text. Write a short reflection on how your piece expresses the text and what aspects of “Die Sonne kommt!” you drew inspiration from.
	Possible Theory Topics	- Serialism - Triadic Post-Tonality
	Aural Skills	- Sing selections from Britten’s <i>The Holy Sonnets of John Donne</i> (e.g., “Batter my heart” and “Death be not proud”). - Sing rows and their permutations from any serial pieces analyzed this week. - Sing selections from Schoenberg’s “Dance Around the Golden Calf” from <i>Moses und Aron</i>.
	Analysis	- Explore derived rows through Webern’s <i>Concerto for Nine Instruments</i>, op. 24, mvt. 2. - Address the differences between Webern and Schoenberg’s approaches to serialism through an analysis of a work (or excerpts of a work) by both composers. Think, in particular, about how Webern adapted his teacher’s twelve-tone technique and made it his own. Webern pieces for analysis could include: <i>Variationen für Klavier</i>, op. 27; “Wie bin ich froh!,” op. 25/1; and <i>Concerto for Nine Instruments</i>, op. 24, mvt. 2. - Analyze selections from Britten’s <i>The Holy Sonnets of John Donne</i>. - Analyze excerpts (such as the first ten measures) from Schoenberg’s <i>Moses und Aron</i>. In addition, examine how Schoenberg represents different characters musically. - Analyze a song from <i>Book of the Hanging Gardens</i>. - Complete a guided analysis assignment focusing on Variation 4 from Webern’s String Quartet, op. 28, mvt. 1, and the opening of Webern’s Quartet, op. 22, mvt. 1.

	Writing	- Read excerpts from or a summary of “Music Control Instruction No. 1.” In light of this and Ross’s Chapter 10, write about what the aims of the U.S. occupying forces seemed to be when it came to music, how they tried to accomplish those aims, and to what extent they succeeded or failed. Also consider the ramifications—both positive and negative—that resulted from music being once again in the hands of the government. - Ross describes a clash between an <i>avant-garde</i> establishment and the classical establishment. Choose one piece from each of these schools, listen to them, and write a brief description of which school they belong to, how they exemplify those styles, and their reception.
	Listening	- John Donne’s poem “Batter my heart, three person’d God” was significant both to Benjamin Britten and to Robert Oppenheimer. John Adams’s 2005 opera, <i>Doctor Atomic</i>, which depicts Oppenheimer’s inner turmoil while working on the Manhattan Project, includes a striking setting of “Batter my heart.” Listen to both Britten’s and Adams’s settings of “Batter my heart” and think about how each expresses the text’s meaning. - Ross describes a concert that took place in the summer of 1949 that was sponsored by OMGUS. The program featured Riegger’s First String Quartet, Schoenberg’s String Trio, op. 45, and Ives’s Second String Quartet. Listen to these pieces and reflect upon their use in an OMGUS-sponsored concert.
	Model Composition	N/A
Chapter 11 Brave New World: The Cold War and the Avant-Garde of the Fifties	Possible Theory Topics	- Serialism - Aleatoric music - Timeline, graphic, and text notation - Rhythm and meter in music after 1945
	Aural Skills	- Sing rows and permutations of rows from any totally serial pieces analyzed in class (focus not just on pitches, but on other serialized elements like rhythm, etc.). - In-class performances of graphic notation works (Brown’s <i>December 1952</i>, Cardew’s <i>Treatise</i>, etc.). - Sing Schoenberg’s <i>Drei Satiren</i> (learn individual parts, put together in class). - Perform excerpts that illustrate Carter’s use of rhythm and metric modulations.

Analysis	- Explore various composers' approaches to serialism: a) Boulez, <i>Structures 1a and selections from Le Marteau sans maître</i>; b) Messiaen, <i>Mode de valeurs et d'intensités</i>; c) Babbitt, <i>Composition for Four Instruments, Composition for Twelve Instruments, Semi-Simple Variations</i>; d) Stockhausen, <i>Kreuzspiel</i>; e) Copland, <i>Piano Quartet, Piano Fantasy, Connotations, Inscape</i>; f) Stravinsky, <i>Canticum Sacrum</i>, mvts. 2 and 4, <i>Requiem Canticles, In Memoriam Dylan Thomas, Agon, Threni, A Sermon, a Narrative, and a Prayer, The Flood</i>; g) Lutyens, <i>Motet, Op. 27</i>; h) Mamlök, <i>Panta Rhei</i> (mvt. 3). - Explore, specifically, the use of total serialism in: a) Boulez, <i>Structures 1a</i> and selections from <i>Le Marteau sans maître</i>; b) Messiaen, <i>Mode de valeurs et d'intensités</i>; c) Babbitt, <i>Composition for Four Instruments, Composition for Twelve Instruments, Semi-Simple Variations</i>; d) Stockhausen, <i>Kreuzspiel</i>. Discuss why composers of that time might be drawn to that kind of compositional approach. - Analyze pp. 10–11 of Cathy Berberian's "Stripsody" - Complete a guided analysis of selections from Elisabeth Lutyens's <i>Motet, Op. 27</i>. - Analysis activity with John Cage's <i>Two</i>: Divide the class into two groups. Group 1 analyzes the piece from a historical standpoint: What style of music is this? What trends does it exemplify? Why did those trends come about? Group 2, then, considers the piece from a purely musical perspective from the standpoint of form, phrasing, and harmony. After some time, the two groups swap half their members. The new groups then create a cohesive analysis of this piece that integrates the two perspectives, noting in particular the elements of the piece that are traditional vs. innovative and the effect of those choices.
Writing	- Ross writes: "The irony of the broken Cage-Boulez friendship was that certain of Cage's chance pieces ended up sounding oddly similar to Boulez's total-serialist pieces. The young Hungarian composer György Ligeti pointed out the resemblance in two penetrating analytical articles of 1958 and 1960, concluding that Boulez and other serialist composers were not fully responsible for the outcome of their works. Their method obeyed a 'compulsion neurosis' that effectively randomized their musical material" (403). Having analyzed and listened to representative works of chance and of serialism, write about the similarities and differences between these musical approaches in terms of philosophy, culture, the role of the composer, and the resulting musical piece. - Read excerpts from Babbitt's "Who Cares if You Listen" and McClary's response, "Terminal Prestige." Write a short response paper that summarizes your thoughts on the issues, having read both Babbitt and McClary's perspectives. Come to class ready to discuss your ideas. - Listen to and research works that involve some amount of indeterminacy either in their composition or their performance. Write about the various kinds of indeterminacy that composers have employed, including: chance in the compositional process that results in a fixed score (e.g., Cage's <i>Music of Changes</i>), graphic notation that amplifies the role of the performer in creating the work and results in indeterminacy in each performance (e.g., Cardew's <i>Treatise</i>, Brown's <i>December 1952</i>), and a vast spectrum of possibilities in between these two (e.g., Stockhausen's <i>Klavierstück XI</i>, Rzewski's <i>Le Mouton des panurge</i>, Riley's <i>In C</i>, etc.) Ask yourself the question: what is indeterminate in each of these works? (One could ask the class to read selections from Umberto Eco's <i>The Open Work</i> as a gateway into this topic.) - Listen to excerpts from William Grant Still's Symphony No. 1, "Afro-American" and Aaron Copland's <i>Appalachian Spring</i>. Both of these pieces have explicit references to America in their titles. Write a brief reaction to the pieces, discussing similarities and differences between the two works and any elements in the music that seem to evoke some sort of "Americana." Make sure to cite specific musical excerpts to reinforce your points.

	Listening	- Listen to two chance compositions while reading the score and consider how the performer interpreted that score. Would this be how you performed this? Some possibilities include: Cage's <i>Music of Changes</i>, <i>Imaginary Landscape No. 4</i>, <i>Atlas eclipticalis</i>, or <i>Variations</i>; Earle Brown's <i>December 1952</i>; or Cornelius Cardew's <i>Treatise</i>. - Ross compares Elliot Carter's juxtaposition of independent layers to the rhythmic layering of the left and right hands in Art Tatum's jazz piano playing. Listen to one piece by Elliot Carter and one by Art Tatum. Come to class prepared to discuss what you listened to and the use of layering in each. - In this chapter, Ross mentions several composers who were influenced by world music: 1) Messiaen's use of Hindustani Indian rhythms as exemplified by <i>Quartet for the End of Time</i> (391); 2) Stockhausen's interest in jazz melodies as exemplified by <i>Kreuzspiel</i> and <i>Cross Play</i> (429); 3) Boulez's inclusion of elements of Balinese, African, and Japanese music in <i>Le Marteau sans maître</i> (433–4); and 4) Bernstein's use of bebop melodies and Latin rhythms in <i>West Side Story</i> (444). Choose two of these options, look up information about the world music that influenced these composers, and listen to the pieces Ross mentions. As you're listening, be sure to reflect upon how these influences manifest themselves in specific musical ways. Come to class prepared to discuss what you learned.
	Model Composition	- Write something using chance procedures (coins, dice, etc.), then write a reflection on composing with this procedure. - Compose a totally serial work, then write a reflection on composing with this procedure.
Chapter 12 "Grimes! Grimes!": The Passion of Benjamin Britten	Possible Theory Topics	- Triadic Post-Tonality - Neoclassicism
	Aural Skills	- Sing the vocal line from mm. 1–16 of Britten's "A Poison Tree." - Use mm. 26–39 of Britten's String Quartet No. 3, mvt. 5 for score-reading practice, try to perform this on the piano or sing as an ensemble. - Play and sing the opening of Shostakovich's Fugue in E-flat major from Op. 87.
	Analysis	- Analyze the final movement of Britten's Third String Quartet and compare it to <i>Death in Venice</i>, the opera on which it was based. - Analyze Britten's "A Poison Tree" from the standpoint of form, tonality, motive, and text painting. - Analyze the first movement of Shostakovich's String Quartet No. 8. Consider the quartet from a motivic standpoint, tracing Shostakovich's use of the DSCH motive. The second movement is also ripe for analysis. See Graybill (2005). - Ross notes that Shostakovich's late song cycles reflect the composer's life. Analyze one of the songs, considering, in particular, what about the music or text reflects his life. - Analyze the E-flat major fugue from Shostakovich's <i>24 Preludes and Fugues</i>, op. 87. Consider, in particular, the role of tonality in the fugue.
	Writing	- Discuss how and why Britten wrote music for "today" rather than for posterity. Where does this sentiment find its roots earlier in the century? How is his music similar or different to that earlier practice? - Discuss how Britten and Shostakovich each dealt with their own struggles both internally and politically; cite specific examples of how those struggles manifested in their music. - Consider how attitudes towards sexuality affected composers such as Britten and Szymanowski in post-war Europe, citing specific works that reflect their sexuality or internal struggle.

	Listening	- Listen to and reflect upon how Britten's <i>Death in Venice</i>, <i>Serenade</i>, and <i>Turn of the Screw</i> each deal with Britten's internal struggles. - Listen to Shostakovich's song cycles and consider whether they might express his inner conflict regarding his tenuous position within Stalinist Russia. - Listen to Britten's <i>War Requiem</i> and be prepared to discuss how it expresses antiwar sentiments and "folds the personal into the political, the secular into the sacred" (473). - Listen to Britten's <i>A Midsummer Night's Dream</i> and Shostakovich's 14th Symphony and contemplate the similarities and differences between these two composers' music.
	Model Composition	N/A
Chapter 13 Zion Park: Messiaen, Ligeti, and the Avant-Garde of the Sixties	Possible Theory Topics	- Messiaen's musical language - Avant-garde approaches of the 1960s - Serialism
	Aural Skills	- Be able to sing any of Messiaen's modes of limited transposition. - Extract 5–6 birdsongs from <i>Oiseaux exotiques</i> and sing them accurately (pitch and rhythm). - Aurally identify Messiaen's modes of limited transposition and invented chords. - Write a short piano piece that includes both a rhythmic and a harmonic cycle in the style of Messiaen, in which each cycle contains a different number of elements. Notate your piece and be able to play it on the piano.
	Analysis	- Have students read excerpts from Messiaen's <i>Technique de mon langage musical</i>, then analyze his music using what they learn. Analyze excerpts from some of the following pieces that exemplify different elements in Messiaen's music. Be sure to discuss how some of his compositions and musical devices might be seen as a reflection of Messiaen's faith (beyond just their topics/texts): - Messiaen's harmonic language: <i>Le Banquet céleste</i>, "Liturgie de cristal" and "Louange à l'Éternité de Jésus" from <i>Quatuor pour la fin du Temps</i>, "Cloches d'angoisse et larmes d'adieu" from <i>Huit Préludes</i>, "Le Verbe" from <i>La Nativité du Seigneur</i>, "Amen de la Création" from <i>Visions de l'Amen</i>, "Mode de valeurs et d'intensités" from <i>Quatre études de rythme</i>, etc. - Messiaen's use of birdsong: <i>Réveil des oiseaux</i>, <i>Oiseaux exotiques</i>, <i>Catalogue d'oiseaux</i>. - Messiaen and rhythm: - a) Use of Indian <i>ḍeci-tālas</i>, added values, non-retrogradable rhythms, rhythmic cycles, etc. - b) Use of rhythmic and harmonic cycles to communicate his beliefs about time, etc. (examples include "Liturgie de cristal" from <i>Quatuor pour la fin du Temps</i>, "Le Mystère de la Sainte Trinité" from <i>Les Corps Glorieux</i>, and "Perfecte conscius illius perfectae generationis" from <i>La Transfiguration de Notre-Seigneur Jésus-Christ</i>. - c) Other rhythmic procedures as seen in <i>Quatre études de rythme</i>. - Analyze Duke Ellington's "Come Sunday," considering, in particular, how this piece (as Ross mentions on page 485) exemplifies a tradition of musical works that "rejects or transcends" the horrors of the 20th century. - Having read selections from Susan McClary's "Terminal Prestige" alongside Chapter 11, explore feminist issues surrounding the <i>Philomel</i> myth. Begin with Babbitt's setting, and compare this with Rebecca Clarke's 1914 choral setting of Sir Philip Sydney's poem <i>Philomela</i>. Sydney's problematic text exemplifies what we now know as rape culture. Should this work still be performed? Does the fact that the piece was composed by a woman—who herself experienced childhood trauma at the hands of her father—impact your answer? If you think it should be performed, how might you write the program notes? (This can be split into several parts that take place over two homework assignments and a class period or two.)

	Writing	- Messiaen's faith was of the utmost importance to him. Choose one of the following pieces and write about how he used his music to express his theology, considering not just the topic (or text), but also melody, harmony, rhythm, timbre, etc.: <i>Quatuor pour la fin du Temps</i>, <i>Le Banquet Céleste</i>, <i>Méditations sur le Mystère de la Saint-Trinité</i>, or <i>Trois petites Liturgies de la Présence Divine</i>. You may research existing analyses and books/articles about these pieces, but be sure to cite them. - The following pieces all premiered in 1956: Cage, <i>Radio Music</i>; Dallapiccola, <i>Cinque canti per baritone e alcuni strumenti</i>; Messiaen, <i>Oiseaux exotiques</i>; Nono, <i>Il canto sospeso</i>; Shostakovich, String Quartet No. 6, and Stockhausen, <i>Gesang der Jünglinge</i>. Choose three, listen to them, then write a response about the different styles and approaches you heard.
	Listening	- The third movement of Berio's <i>Sinfonia</i> quotes more than 100 composers; as you listen, keep track what styles and composers you hear and ask how that affects your hearing. Ask why he might have chosen some of those styles or composers. - Listen to Penderecki's <i>Threnody to the Victims of Hiroshima</i>. Consider your initial response to the work. Would your response be different if the piece maintained its original title, <i>8'37"</i>? Now watch clips from various films that utilize excerpts from <i>Threnody</i>. Be prepared to discuss your reactions. - Listen for the periodicity and patterns that emerge from the chaos in Ligeti's <i>Poème Symphonique for 100 Metronomes</i>. Discuss your reactions. - Listen to the micropolyphony and sound masses of Ligeti's <i>Atmosphères</i>. Compare this to some of the sound masses you heard earlier in the course.
	Model Composition	- Write a short piece that uses at least one of Messiaen's rhythmic techniques (non-retrogradable rhythms, rhythmic cycles, Indian <i>deci-tâlas</i>, added values, etc.) and at least one of his pitch techniques (modes of limited transposition, birdsong, invented chords, harmonic cycles, etc.).
Chapter 14 Beethoven Was Wrong: Bop, Rock, and the Minimalists	Possible Theory Topics	- Pitch-class set theory - Segmentation in post-tonal music - Process music - Complex rhythms - Chance music - Jazz
	Aural Skills	- Ta and conduct the left hand of the first page of Feldman's <i>Triadic Memories</i>. - Learn both parts of Reich's <i>Clapping Music</i> and perform with a partner. - Sing the opening vocalise from Crumb's <i>Ancient Voices of Children</i>. - Work with a partner to perform the phasing effects used in Reich's <i>Piano Phase</i>. - Transcribe solos from Miles Davis's "So What."
	Analysis	- Consider Lucier's <i>I am sitting in a room</i>. Reflect upon how you might approach such a piece from an analytical perspective. Within your reflection, include a discussion of how this composition fits within the historical trends of the 60s and 70s. Does that help inform your analysis? - Provide an analysis of two Glass compositions, <i>Music in Fifths</i> and <i>Music in Contrary Motion</i>, that includes—but goes beyond—simple pitch-based perspectives. - Use Feldman's <i>Palais de Mari</i> to think about issues of segmentation. Use pitch-class sets to analyze the first three pages and consider how various motives/sets return throughout the work. For example, explore how echoes of the first measure can be traced throughout the piece from the standpoint of: pitch-class set analysis, register, motive, intervals, ordered and unordered sets, etc. How does tracing motivic transformations influence your hearing of the piece? Do any larger formal units arise? - Analyze "So What" by Miles Davis.

Writing	- Consider the influence of the Darmstadt school on the late 1960s and early 1970s. Trace how composers reacted to this school and discuss the styles of music that arose as a result of those reactions. - Compare music by a few minimalist and a few <i>avant-garde</i> composers of the late 1960s and early 1970s. Consider, specifically, how these different approaches affected their music in various ways. - Trace the origins of minimalism back to Charles Seeger, considering how and why the movement evolved the way it did in the music of Steve Reich and Philip Glass. - Ross discusses Charles Seeger's role in bringing music into the American university system. How did the establishment of compositional study in the academy affect subsequent compositional movements and ideas? - Discuss some post-war reactions to the Second Viennese School that flourished in the 1960s and 1970s. Consider why these reactions arose. - Ross claims that "Public Enemy's 'Welcome to the Terrordome' is the <i>Rite of Spring</i> of black America" (556). Listen to several scenes from the <i>Rite</i> (which we looked at in Chapter 3) and "Welcome to the Terrordome," then write a response in which you explain what you think Ross's claim means and whether you agree or disagree. Be sure to cite specific musical and historical elements about both pieces in your arguments.
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Listening	- Listen to and compare music by the “New Romantics” (including David Del Tredici, Lukas Foss, George Crumb, and William Bolcom) in the 1970s. - Choose pieces by “New Romantic” composers (Del Tredici, Foss, Crumb, and Bolcom) and “downtown” <i>avant-garde</i> composers (James Tenney, John Cage, Morton Feldman, Jackson Low, Al Hansen, George Brecht, and Dick Higgins) from the 1970s. Compare and contrast pieces from these two schools. - Listen to and be prepared to discuss similarities and differences between the music of West Coast minimalists (La Monte Young and Terry Riley) and New York minimalists (Steve Reich and Philip Glass). - Listen to a piece by three of the bebop composer-performers Ross mentions on page 518 (Dizzy Gillespie, Charlie Parker, Thelonious Monk, Miles Davis, John Coltrane, and Charles Mingus). As you’re listening, think about the SHMRG categories and take notes on what you’re hearing. Come to class prepared to discuss the pieces you chose to listen to and your analytical observations. - On page 516, Ross writes: “The wall separating classical music from neighboring genres appeared ready to crumble, as it had momentarily in the twenties and thirties, when Copland, Gershwin, and Ellington crossed paths at Carnegie Hall.” Some specific links between classical music/musicians and popular ones that Ross mentions in this chapter are listed below. Divide up these influences among the class. Have each student choose 1–3 of them to pursue. Students should do some more research into their assigned topics, listening to relevant pieces and learning more about the chains of influence, and then report back to the class in more detail. – Paul McCartney listening to Stockhausen, and using that influence in <i>Sgt. Pepper</i> – Ligeti listening to the Beatles’ <i>Sgt. Pepper</i> album – The Beatles’ “Revolution 9” including chords from Sibelius’s Seventh Symphony – Members of the Grateful Dead and Jefferson Airplane attending lectures that Stockhausen gave in 1966 and 1967 – Frank Zappa’s affinity for the music of Varèse – Reich et al borrowing elements of bebop and jazz – The Velvet Underground incorporating minimalist ideas (including drones adapted from Young) – David Bowie and Brian Eno going to concerts by Reich and Glass – Charlie Parker quoting <i>The Rite of Spring</i> in “Salt Peanuts” – Coltrane’s interest in the use of chords of fourths in Bartók’s Concerto for Orchestra – Reich listening to Bach, Stravinsky, Charlie Parker, Miles Davis, and Kenny Clarke as he was growing up – Phil Lesh (of the Grateful Dead) having a mind-altering experience listening to Mahler’s Sixth Symphony while on LSD – Brian Eno’s interest in the music of Cage and Young, which influenced his role in Roxy Music, his development of ambient music, and more – David Bowie’s adoption of “semi-minimalist forms” in the mid-1970s – Glass writing his Symphony No. 1, “Low,” in response to David Bowie’s <i>Low</i> album – The Who adapting techniques from Terry Riley (and referencing him in the title “Baba O’Riley”) – Sonic Youth’s minimalist influences (Reich and Glass)
Model Composition	- Compose a “mini-minimalist” piece that incorporates some sort of process. - Write a process piece in the style of Steve Reich. - Write a process piece in the style of Terry Riley. - Choose one “new romantic” composer and write a short character piece in the style of that composer.

Chapter 15 Sunken Cathedrals: Music at Century's End	Possible Theory Topics - Minimalism - Pärt's tintinnabuli technique - Triadic Post-Tonality - Postmodernism - Interval cycles - Transformational theory - Set theory - Spectralism - Integration of post-tonal techniques into popular music
	Aural Skills - Using a reduction of "This is Prophetic" from Adams's <i>Nixon in China</i>, learn to a) sing the voice part both on solfège and on text, and b) play the reduced piano part. For advanced students, play and sing together. - Sing the bass oboe melody from mm. 11–18 of the second movement of Adès's <i>Asyla</i>. This melody is comprised of three registers of semitone pairs that make chromatic, octatonic, and hexatonic collections (see Roeder 2006 for more on this). Be able to sing each register individually and the whole melody together. Also take note of Adès's use of interval cycles in this excerpt. - Play and sing Pärt's <i>Für Alina</i>, which uses his tintinnabuli technique. Play the bass octaves and one of the upper parts while singing the other upper part (be able to switch). - If you're looking for a fun challenge for an in-class activity, engage with the New Complexity movement by choosing a short excerpt from Ferneyhough's <i>Études Transcendentales</i> and trying to work out the quarter tones and complex rhythms as a class.
	Analysis - Analyze selected arias from <i>Nixon in China</i>, such as "News has a kind of mystery" (Richard Nixon), "We no longer need Confucius" (Mao), "This is Prophetic" (Pat Nixon), "Oh! what a day" or "I have my brief" (Kissinger), "I am the wife of Mao" (Madame Mao), and "I am old and cannot sleep" (Chou). How are each of these six people characterized in these arias, particularly in light of the political themes of the opera? How do various musical elements contribute to this? How does Adams' minimalism compare/contrast with the music of earlier minimalists? (Timothy Johnson's book <i>John Adams's "Nixon in China": Musical Analysis, Historical and Political Perspectives</i> is a useful reference). - Learn about Pärt's compositional approach by analyzing <i>Sieben Magnificat Antiphonen</i>, which features straightforward but varied approaches to his tintinnabuli style. These pieces are also excellent for group singing in class. - Compare Gubaidulina's <i>Offertorium</i> with Berg's <i>Violin Concerto</i>. How does each composer use serialism to deconstruct (and ultimately reconstruct) themes by Bach? (See p. 577 of <i>The Rest is Noise</i> for context.) - Analyze the use of quotation and allusion in Joan Tower's <i>Petrouskates</i>. Focus on Tower's allusions to and quotations of the Stravinsky ballet Tower's work references. - Do a guided analysis of excerpts from Chen Yi's <i>Northern Scenes</i>. (This works particularly well from a set-theoretical perspective.) - Analyze one movement from Tan Dun's <i>8 Colors for String Quartet</i>. Consider, in particular, Ross's comment about Chinese "New Wave" composers, that their "ignorance of tradition turned out to be a sort of bliss: they could start with a blank slate" (565). Indeed, Ross notes the way that Tan juxtaposes Romantic orchestration with 20th-century techniques and folk melodies he grew up hearing. Which elements of this music sound familiar and which seem unfamiliar? Relatedly, what analytical techniques we have learned seem to be helpful for this music, and what aspects of the music do they not account for? - Use Adès's <i>Asyla</i> as a means for discussing polystylism and juxtapositions of different collections (see Travers 2005). - Use "Auf den Wasser zu singen," the third movement of Adès's <i>Arcadiana</i>, to discuss interval cycles, octatonicism, transformational theory, and other non-pitch-class set approaches to analysis (see Roeder 2009).

Writing	- John Adams has frequently tackled contemporary and political topics in his music. Listen to one of the following works and write about its engagement with contemporary or political issues, its reception, and your reaction to it: <i>Nixon in China</i>, <i>The Death of Klinghoffer</i>, <i>Doctor Atomic</i>, and <i>On the Transmigration of Souls</i>. Consider, in particular, how and why Adams's compositional style might be particularly apt for this type of social commentary. - Ross notes that new classical music coalitions such as Kayhan Kalhor's performances at Lincoln Center and Yo-Yo Ma's Silk Road Project "[renew] the old folkish projects of Bartók, Janáček, the young Stravinsky, and Falla" (566). Watch Kayhan Kalhor discuss his composition "Silent City" before a Silk Road Ensemble performance (https://youtu.be/OWX3VLnoH_s), as well as the performance itself (https://youtu.be/s804M9uGiAM). Then, write a response that discusses how this performance does or does not resemble "the search for the real" Ross describes in Chapter 3. - John Adams won the 2003 Pulitzer Prize for Music for his composition <i>On the Transmigration of Souls</i>, which was written as a "memory space" commemorating the victims of September 11, 2001, terrorist attacks on America. Other classical pieces written in response to 9/11 include John Corigliano's <i>One Sweet Morning</i>, Michael Gordon's <i>The Sad Park</i>, Steve Reich's <i>WTC 9/11</i>, and Joan Tower's <i>In Memory</i>. Listen to two of these works and write about how these composers used their music to respond to the tragic events. Include specific musical aspects of the works in your reflection. - Controversy has surrounded John Adams's <i>The Death of Klinghoffer</i> since its premiere. Write a three-page response that engages with the music, its topic, and the surrounding controversy: the first page should argue that the opera is anti-Semitic and should not be performed; the second that the opera is not anti-Semitic and should be performed; and the third should express your actual opinions of the opera, the protests and surrounding controversy, and whether you think it should be performed.
Listening	- Ross states that current classical music is marked by a newfound globalism. He mentions six composers that should be included on a "comprehensive list of significant voices in contemporary music" (562–3): Franghiz Ali-Zadeh of Azerbaijan, Chen Yi of China, Unsuk Chin of South Korea, Sofia Gubaidulina of Russia, Kaija Saariaho of Finland, and Pauline Oliveros of the United States. Choose two of these composers, listen to two or three of their compositions, and write a short response that summarizes your impressions of their style. Do you hear any similarities between these works and other music we have studied this semester? - If you didn't do the "Batter my heart" comparison in Chapter 10, you could do it here. - From the following list of pieces briefly mentioned in the chapter, listen to two or three: David Lang, <i>the so-called laws of nature</i>; Brian Ferneyhough, Second String Quartet; György Ligeti, Trio for Violin, Horn, and Piano; Toru Takemitsu, <i>November Steps</i>; Alfred Schnittke, First Symphony; Gérard Grisey, <i>Les Espaces acoustiques</i>. Come to class prepared to discuss what distinguishes each composer's style, how the music you listened to engages with or reacts to earlier compositional trends, and so on.
Model Composition	- Write a choral piece in the tintinnabuli style of Arvo Pärt's <i>Sieben Magnificat Antiphonen</i>: invent a rule-based system for your piece, then choose or write a text, and let the rules produce the music.

Example 2.
One Potential Course Schedule.

Week & Topic	Day	Class Activities	Homework
<u>Week 1</u> <u>Theory Topic</u> Extended Tonicity in Early 20th-Century Music <u>Historical Frame</u> Mahler and Strauss as bridges to modernism	M	- Introduction to the class, particularly the interleaving component. - Discovery learning activity: listening to 20th-century music.	- Comment at least two times on the summary of <i>The Rest is Noise (TRiN)</i> Chapter 1 that is posted to the learning management system (LMS); one of those must be a response to another student comment. (Instructors should post this summary prior to class.)
	W	- Review Ross chapter, and introduce historical frame for the week: Mahler and Strauss as bridges to modernism. - Analyze excerpts of Mahler's Ninth Symphony, mvt. 4, showing how the piece exemplifies modernism, paying close attention to his use of harmony and dissonance. - Start guided analysis HW based on Bernstein's characterization of the movement as a "farewell."	- Finish guided analysis HW of excerpts from Mahler's Ninth Symphony, mvt. 4. - Listen to Bernstein lecture on the movement (optional).
	F	- <i>Salome Day</i>: 1) In-class group analysis of characters from <i>Salome</i>: have each group identify and analyze music associated with a character in the opera. 2) Have a class discussion comparing and contrasting each character's music. Along the way, discuss about how Strauss's settings might have riled up the censors who were worried about biblical characters performing "unspeakable acts."	- Have one student or a group of students read and create a summary of Chapter 2 from <i>TRiN</i> then post it to the LMS by noon on Saturday. - Every student must comment at least twice on the summary; one of those must be a response to another student comment.
<u>Week 2</u> <u>Theory Topic</u> Modes & Scales (Part 1); Atonality (Part 1) <u>Historical Frame</u> The French and German <i>avant gardes</i> of the early 20th century	M	- Review of Chapter 2 of <i>TRiN</i>, particularly emphasizing Ross's two <i>avant gardes</i>—Debussy in France and Schoenberg in Germany—as a frame for the week. - Introduction to modes and scales through examples from Debussy.	- Practice writing modes and scales; identify modes and scales from excerpts from the literature.
	W	- Introduction to pitch vs. pitch-class, integer notation, and sets. - In-class analytical practice reinforcing the above concepts using excerpts from Debussy and the Second Viennese School	- Listen to (but don't look at the scores for) a work by Debussy and a work by Schoenberg that were written in the same year. In a short written response, react to these two pieces as possible representatives of two distinct <i>avant gardes</i>. Discuss specific musical elements that you hear (even if you are not quite sure how to describe or talk about them yet) that connect or distinguish these two pieces and their composers. Because this is without a score, use timestamps when describing specific moments in the pieces; be sure to cite your recordings!

	F	- Discuss the findings from the previous night's homework—completed without a score. - Then, continue exploring the two <i>avant gardes</i>—this time with scores—through a guided analytical assignment with Debussy and Second Viennese School. One group (or groups) analyzes the opening of Schoenberg's "Nacht," and another group analyzes excerpts from Debussy's "Des pas sur la neige." Note, in particular, Schoenberg's use of recurring interval patterns and chromatic motives in contrast with Debussy's use of modes and pitch centers. - Conclude class by discussing the differences between these approaches.	- Have one student or a group of students read and create a summary of Chapter 3 from <i>TRiN</i> then post it to the LMS by noon on Saturday. - Every student must comment at least twice on the summary (one of those must be a response to another student comment).
<u>Week 3</u> <u>Theory Topic</u> Modes & Scales (Part 2) <u>Historical Frame</u> Folk music in the early 20th century	M	- Brief review of modes and scales. - Class discussion about Chapter 3 of <i>TRiN</i>, particularly emphasizing the first half which focuses on Janáček, Ravel, Bartók, and Stravinsky's use of folk songs as a way to cast off the refinements of city life in their music and create new compositional styles. - Group analysis practice: Discuss the use/adaptation of folk songs in Janáček and Bartók from various standpoints including rhythm, mode, and affectation.	- Armed with a list of folk-song sources from Taruskin (1980) and Taruskin (1996), choose three folk songs that were set in <i>The Rite</i> and write a few paragraphs comparing Stravinsky's settings to the examples from Janáček and Bartók.
	W	- Introduction to polyscalarity using <i>Firebird</i>. - Practice analyzing several polyscalar passages from the literature.	- Listen to the first movement of Milhaud's Chamber Symphony No. 2 several times with a score. Come to class ready to discuss the form, tonality, and use of scalar materials.
	F	- Analyze the first movement of Milhaud's Chamber Symphony No. 2 as a group. Each group will explore the piece from a different angle including Milhaud's use of 1) polyscalarity, 2) pitch centers, 3) motives, & 4) form. Have each group present their analyses to the class, then conclude class by synthesizing the four approaches into a cohesive analysis.	- Every student: Create a form chart and complete a guided analytical assignment of Bartók's "Song of the Harvest" exploring Bartók's use of scalar materials, rhythm, and motives. - Have one student or a group of students read and create a summary of Chapter 4 from <i>TRiN</i> then post it to the LMS by noon on Saturday. - Every student must comment at least twice on the summary; one of those must be a response to another student comment.

<u>Week 4</u> <u>Theory Topic</u> Atonality (Part 2); Analysis with Sets (Part 1) <u>Historical Frame</u> Race, politics, and the “ultra- modernism” of the 1920s.	M	- Class discussion about Chapter 4 of <i>TRiN</i>, focusing, in particular, on the various ways composers reacted to the political and racial climate of the 1920s. - Introduction to and practice analyzing pieces with pitch vs. pitch class intervals through an analysis of the opening section of Varèse's <i>Octandre</i> (this week will focus on this piece).	- Practice identifying and analyzing pitch and pitch-class intervals in real music using examples from the literature including: 1) The opening of Gubaidulina's “Ten Preludes for Solo Cello, No. 1”; 2) The opening of Crawford Seeger's “Diaphonic Suite No. 1”; and 3) the opening vocal line from Babbitt's “The Widow's Lament in Springtime.” In each of these short excerpts, first identify all intervals, then answer guided questions about recurring intervals, patterns, and motives to see how intervals can be used in musically interesting ways.
	W	- Introduction to normal form and transposition. - In-class analytical worksheet with normal form and transposition using excerpts from <i>Octandre</i>, Gershwin, Ives, and Still. Be sure to mention that normal form and transposition can help to illuminate different things than the tonal analytical language of previous semesters, and that there is a time and place for both styles of analysis. - Finish class by comparing these examples, and relating the differences to Ross's discussion of how composers reacted to racial and political changes in the 20s. Discuss, in particular, Ross's characterization of Still and other black composers as “invisible men.”	- Practice with normal form and transposition using examples from the literature.
	F	- Introduction to inverting of sets - Practice transposing and inverting sets in the abstract and by tracing motives throughout the rest of <i>Octandre</i>.	- Write three brief analytical reactions (250–400 words each). Reaction 1 will analyze at <i>Octandre</i> from a purely musical perspective. Reaction 2 will discuss <i>Octandre</i> from a historical perspective. How does it exemplify Varèse's status as an “ultra-modernist”? (Reactions 1 and 2 will be summaries of the week's class discussion.) Reaction 3, then, combines those perspectives into a cohesive analysis that blends theory and history. - Have one student or a group of students read and create a summary of Chapter 5 from <i>TRiN</i> then post it to the LMS by noon on Saturday. - Every student must comment at least twice on the summary (one of those must be a response to another student comment).

	F	- Walk through the first movement of Schoenberg's "Drei Lieder," op. 48, putting into practice the twelve-tone operations learned on Wednesday. Build a matrix, label the first few row forms (give them the rest), look at relationships, and answer questions about row deployment and choices of rows, etc. In addition, consider how the serial structure reflects the text.	- Construct a matrix and label row forms in the trio of the fifth movement of Schoenberg's Suite für Klavier, op. 25. - Have one student or a group of students read and create a summary of Chapter 7 from <i>TRiN</i> then post it to the LMS by noon on Saturday. - Every student must comment at least twice on the summary (one of those must be a response to another student comment).
<u>Week 7</u> <u>Theory Topic</u> Analytic Approaches to Shostakovich and Prokofiev (No new theory topics; use this time to reinforce material covered in weeks 1–6) <u>Historical Frame</u> Music in Stalin's Russia	M	- Introduce Shostakovich and Prokofiev's context and stylistic approaches. - Then divide the class into two groups and have one look at excerpts from Prokofiev's <i>Zdravitsa</i> (a propaganda piece in praise of Stalin) and the other look at excerpts from Shostakovich's anti-formalist <i>Rayok</i> (a satirical cantata making fun of the anti-formalist Zhdanov decree). Give each group a list of questions to guide their analyses.	- Continue analysis begun in class.
	W	- Continue examination of Prokofiev and Shostakovich pieces from last class and homework, having students from each group meet with students from the other group in order to compare and contrast the two approaches, both from a historical perspective and a compositional one. Then discuss as a class.	- Write a response that compares Prokofiev's <i>Zdravitsa</i> and Shostakovich's <i>Rayok</i> cantatas, based on the analyses and discussions from class. Ensure that you include discussion of both the music itself and the historical frame for the pieces.
	F	- Discuss Shostakovich's use of twelve-tone melodies using excerpts from some of his later works. - Have students compare and contrast Shostakovich's treatment of aggregates to that of serial composers we discussed in Week 6. Discuss the analytical implications of the differing approaches.	- Have one student or a group of students read and create a summary of Chapter 9 from <i>TRiN</i> then post it to the LMS by noon on Saturday. - Every student must comment at least twice on the summary (one of those must be a response to another student comment).
<u>Week 8</u> <u>Theory Topic</u> Serialism (Part 2); Triadic Post-Tonality (Part 2)	M	- Class discussion about Chapter 9 of <i>TRiN</i>, particularly focusing on the historical frame for the week: the effect of the oppressive compositional environments within Hitler's Germany and Mussolini's Italy - Discussion of row properties and practice with analyzing twelve-note series - Guided analysis of selections from Dallapiccola's <i>Il Prigioniero</i> as a review of serialism and an example of a protest piece against totalitarian oppression.	- Complete a worksheet on row properties and label row forms in Dallapiccola's "Die Sonne kommt" In addition, come to class ready to discuss Dallapiccola's choices of rows and how the serial structure of the piece reflects the text's meaning and syntax.

<u>Historical Frame</u> Music in the Totalitarian Government s of the 1930s and 1940s	W	- Class discussion of HW (“Die Sonne kommt”). Consider, in particular, the structure of the row, the setting of the text, the use of invariances, and the differences between Dallapiccola’s and Schoenberg’s approaches to serialism. - Begin work on composition HW assignment.	- Write a short serial piece modeled after Dallapiccola’s “Die Sonne Kommt” (roughly 15–20 measures) based on a protest text. Write a short reflection on how your piece expresses the text and what aspects of “Die Sonne kommt” you drew inspiration from.
	F	- Analyze excerpts from the second movement of Hindemith’s <i>Mathis der Maler</i> Symphony (“Grablegung”), focusing on Hindemith’s approach to harmony, tonality, and form in the movement. - Conclude class with a discussion about the differences between Hindemith’s and Dallapiccola’s approaches to protest music.	- Complete a guided analytical assignment on Hindemith’s 6 <i>Chansons</i>, Mvt. 3, focusing on Hindemith’s use of harmony, tonality, and form. - Have one student or a group of students read and create a summary of <i>Chapter 8</i> from <i>TRiN</i> then post it to the LMS by noon on Saturday. - Every student must comment at least twice on the summary; one of those must be a response to another student comment.
<u>Week 9</u> <u>Theory Topic</u> Text & Music; Serialism (Part 3) <u>Historical Frame</u> American Music in the Middle of the Century	M	- Introduction to the analysis of texted music through an analysis activity focusing on Barber’s <i>Dover Beach</i>. - Consider, in particular, Barber’s setting: is it effective? What does the original text on its own mean? Does that meaning change when the text is paired with Barber’s music? What about when it is part of Barber’s setting? Does he amplify the original meaning, inject a new meaning, undermine it, etc.? If you were setting this text, what would you do? In all cases, be sure to address instrumentation, melody, harmony, rhythm, meter, etc.)	- First, listen to <i>Dover Beach</i> again, then listen to: 1) Roger Sessions’s “On the Beach at Fontana” and 2) selections from Kurt Weill’s <i>Eternal Road</i>. - Next, list musical features that differ between each piece, citing specific moments in the score. - Finally, write a couple paragraphs responding to the following questions: 1) Ross specifically places Barber, Sessions, and Weill into three categories of American composers—traditionalists, elitists, and populists respectively—based on a 1938 Virgil Thomson article. Do you think that these categories are perfectly distinct from one another from a musical perspective? Why or why not?; 2) Do you feel these categories are still at play today? Choose a favorite piece for your instrument written in the last 20 years and decide what category—if any—that piece falls into.

	W	- Analyze Copland's "Why Do They Shut Me Out of Heaven?" Ruminates on how Copland uses form, tonality, register, and intervals to express the meaning of the text.	- Listen to and compare Copland's setting of Emily Dickinson's poem, "Why Do They Shut Me Out of Heaven?" to a setting of the same text by another composer. Without looking at the score to the non-Copland version, see how much you can discern from just listening. Then, write two short responses. In the first, discuss any similarities or differences you hear between the two versions you listen to (citing specific moments in the recording). In the second, compare each composer's treatment of Dickinson's text.
	F	- "Serial" Day: Review principles of serialism discussed in previous weeks, then introduce another approach to serialism: rotational serialism. Use the fourth movement of Crawford Seeger's <i>String Quartet 1931</i>. Consider this movement from a contrapuntal/motivic perspective, but also trace how the 10-note series introduced in Voice 2 is changed over time through rotational transformations.	- Have one student or a group of students read and create a summary of Chapter 10 from <i>TRiN</i> then post it to the LMS by noon on Saturday. - Every student must comment at least twice on the summary (one of those must be a response to another student comment). - In preparation for the exam next week, every student should complete a homework worksheet on serialism and pitch-class set analysis that focuses on finding prime forms, identifying row properties, performing serial operations on rows, etc.
<u>Week 10</u> <u>Theory Topic</u> Review of Serialism and Set Theory <u>Historical Frame</u> Music in Germany after WWII	M	- Class discussion about Chapter 10 of <i>TRiN</i>, focusing, in particular, on the Darmstadt school, its emergence, and their reverence for the Second Viennese School. - Introduction to Webern, his music, and his rise in popularity after his accidental death in 1945. - Exploration of derived rows through Webern's <i>Concerto for Nine Instruments</i>, op. 24, mvt. 2. Be sure to use this piece to discuss how Webern's use of serialism differs from other composers we have discussed, particularly Webern's teacher, Schoenberg.	- Guided analysis assignment focusing on Variation 4 from Webern's <i>String Quartet</i>, op. 28, mvt. 1 and the opening of Webern's <i>Quartet</i>, op. 22, mvt. 1
	W	- Complete a guided analysis assignment on "Angst und Hoffen" from <i>Das Buch der hängenden Gärten</i> as a way of reviewing set theory for the exam. - Discuss how and why Schoenberg was so popular in Darmstadt.	- Review for the exam.

	F	- Exam #2 on serialism, pitch-class set analysis, and text/music analysis.	- Comment at least two times on the summary of <i>TRiN</i> Chapter 11 that is posted to the LMS; one of those must be a response to another student comment. (Instructors should post this summary prior to noon on Saturday.)
<u>Week 11</u> <u>Theory Topic</u> Timeline, Graphic, & Text Notation; Rhythm and Meter after 1945 <u>Historical Frame</u> <i>Avant-garde</i> music in the 1950s and the Cold War	M	- Class discussion about Chapter 11 of <i>TRiN</i>, focusing on how the Cold War affected compositional trends. - Introduce and discuss timeline, graphic, and text notation - During class time, listen to and compare performances of several chance pieces including: the opening of Berio's <i>Sequenza III</i>, Earle Brown's <i>December 1952</i>, and Cornelius Cardew's <i>Treatise</i>. Have students create their own performances of these pieces (<i>December 1952</i> works quite well for this).	- Guided analysis of Cathy Berberian's "Stripsody," pages 10–11.
	W	- Introduce and discuss aleatoric music - Analysis activity with John Cage's <i>Two</i>: Divide the class into two groups. Group 1 analyzes the piece from a historical standpoint: What style of music is this? What trends does it exemplify? Why did those trends come about? Group 2, then, considers the piece from a purely musical perspective from the standpoint of form, phrasing, and harmony. After some time, the two groups swap half their members. The new groups then create a cohesive analysis of this piece that integrates the two perspectives, noting in particular the elements of the piece that are traditional vs. innovative and the effect of those choices.	- Read excerpts from Babbitt's "Who Cares if You Listen" and McClary's response, "Terminal Prestige." Write a short response paper that summarizes your thoughts on the issues, having read both Babbitt and McClary's perspectives. Come to class ready to discuss your ideas.
	F	- Spend half the class discussing Babbitt and McClary's articles. - In the second half of class, briefly introduce three metric devices used in music after 1945: 1) metric modulation, 2) ametric music, and 3) polymeter.	- Complete an analytical worksheet on rhythm and meter after 1945. - Have one student or a group of students read and create a summary of Chapter 12 from <i>TRiN</i> then post it to the LMS by noon on Saturday. - Every student must comment at least twice on the summary (one of those must be a response to another student comment).
<u>Week 12</u> <u>Theory Topic</u> Triadic Post-Tonality (Part 3)	M	- Class discussion about Chapter 12 of <i>TRiN</i>, focusing on how sexuality and politics affected many composers after the war in ways that were reflected in their music. - Lecture/discussion of selections from Billy Budd: note, in particular, the themes of sexuality and Britten's use of tonality, particularly the bitonality in the opening.	- Analytical assignment on Britten's "A Poison Tree."

<u>Historical Frame</u> Politics and Sexuality in Post-War Music	W	- Class analysis discussion: use the homework on “A Poison Tree” to scuba dive into the piece and create a cohesive analysis, showing how Britten used musical form, tonality, motives, and text painting to illustrate the text.	- Listen to the second movement of Shostakovich’s 8th String Quartet with a score, then read Roger Graybill’s analysis of the movement. Come to class ready to discuss Graybill’s analysis.
	F	- Begin class with a brief discussion about Shostakovich’s life and relationship to Britten. - Scuba dive into the 2nd movement of Shostakovich’s 8th String Quartet. Note, in particular, the tonality, form, and motivic design of the movement.	- Analysis assignment focusing on tonality and form in Shostakovich’s E-flat major prelude from his <i>24 Preludes and Fugues</i>, op. 87. - Have one student or a group of students read and create a summary of Chapter 13 from <i>TRiN</i> then post it to the LMS by noon on Saturday. - Every student must comment at least twice on the summary; one of those must be a response to another student comment.
<u>Week 13</u> <u>Theory Topic</u> Messiaen <u>Historical Frame</u> The <i>avant-garde</i> of the 1960s	M	- Introduction to some elements of birdsong, rhythmic procedures (e.g., non-retrogradable rhythms, rhythmic cycles), harmonic language (modes of limited transposition, new types of chords, etc.). Spend the day looking at excerpts that exemplify these traits.	- Have students complete a worksheet that has them practicing identifying and writing some of the same types of stylistic elements discussed in class, including modes of limited transpositions, non-retrogradable rhythms, and new types of chords.
	W	- Guided group in-class analyses of excerpts from the following works that ask students to identify the elements of Messiaen’s style discussed on Monday: <i>Quatuor pour la fin du Temps</i>, <i>Le Banquet Céleste</i>, <i>Méditations sur le Mystère de la Saint-Trinité</i>, and <i>Trois petites Liturgies de la Présence Divine</i>. - Discuss how these pieces and compositional devices might be seen as a reflection of Messiaen’s faith (beyond just their topics/texts).	- Do a guided analysis of <i>Quatuor pour la fin du Temps</i>, mvt. 5

	F	- Spend the first half of class discussing the homework as a class. - Spend the second half of class considering Messiaen's approach to serialism through a lecture on <i>Mode de valeurs et d'intensités</i>.	- The following pieces all premiered in 1956: Cage's <i>Radio Music</i>; Dallapiccola's <i>Cinque canti per baritone e alcuni strumenti</i>; Messiaen's <i>Oiseaux exotiques</i>; Nono's <i>Il canto sospeso</i>; Shostakovich's <i>String Quartet No. 6</i>; and Stockhausen's <i>Gesang der Jünglinge</i>. Choose three, listen to them, then write a response about the different styles and approaches you heard, citing specific moments within each piece. - Have one student or a group of students read and create a summary of Chapter 14 from <i>TRiN</i> then post it to the LMS by noon on Saturday. - Every student must comment at least twice on the summary (one of those must be a response to another student comment).
<u>Week 14</u> <u>Theory Topic</u> Timbre and Texture in Post-Tonal Music; Process Music/ Minimalism <u>Historical Frame</u> Uptown vs. Downtown Music in the 1960s and 1970s	M	- Model analytical approaches to Crumb's music by walking students through the role of timbre, texture, theatricality, and harmony in "Music of Shadows (for Aeolian Harp)" from <i>Makrokosmos</i>, Volume I. - Begin analytical homework assignment: Divide the class into groups, and have each group analyze a short movement by Crumb (e.g., his <i>Madrigals</i>, shorter movements from the first two volumes of <i>Makrokosmos</i>, or songs from his <i>American Songbook</i> series) from four different perspectives: 1) timbre, 2) texture, 3) theatricality, 4) harmony.	- Summarize your analytical findings from class in a brief paper. First, compile your group's findings on the role of timbre, texture, theatricality, and harmony in your group's Crumb piece. Then, discuss which analytical approaches you found most helpful for understanding Crumb's music and why. Be sure to cite specific examples from the score when making your argument.
	W	- Introduction to minimalism and process music.	- Consider the differences between the music of West Coast minimalists (La Monte Young and Terry Riley) and New York minimalists (Steve Reich and Philip Glass). Choose a piece by two of these composers and respond to the following prompt: What about these works makes them minimalist? Consider what they have in common and what differs.
	F	- Spend 10–15 minutes discussing the homework. - Consider, as a class, Miles Davis's "So What," which Ross describes as a "proto-minimalist piece, defined by the dreamlike slowness of the harmonic rhythm" (519).	- Write your own mini-minimalist piece that uses some sort of process. - Have one student or a group of students read and create a summary of Chapter 15 from <i>TRiN</i> then post it to the LMS by noon on Saturday. - Every student must comment at least twice on the summary (one of those must be a response to another student comment).

<u>Week 15</u> <u>Theory Topic</u> Quotation and Allusion; New Approaches to Minimalism <u>Historical Frame</u> Postmoderni sm and music written at the end of the century	M	- Class discussion about Chapter 15 of <i>TRiN</i>, focusing on postmodernism, polystylism, and Adam's music. - As a class, analyze two arias from <i>Nixon in China</i>, such as "News has a kind of mystery" (Richard Nixon), "We no longer need Confucius" (Mao), "This is Prophetic" (Pat Nixon), "Oh! what a day" or "I have my brief" (Kissinger), "I am the wife of Mao" (Madame Mao), and "I am old and cannot sleep" (Chou). In the discussion, compare how the two chosen characters are characterized in these arias, particularly in light of the political themes of the opera. How do various musical elements contribute to this?	- Write a short paper considering how Adams's minimalism compares/contrasts with the music of earlier minimalists. Be sure to include musical examples to support your claim. (Timothy Johnson's book <i>John Adams's "Nixon in China": Musical Analysis, Historical and Political Perspectives</i> is a useful reference).
	W	- Use Tower's <i>Petrouskates</i> as a frame for discussing intertextuality, quotation, and allusion. - Begin work on HW: An analysis of Corigliano's "Come now, my darling" from an intertextual perspective.	- Complete a formal analysis of Corigliano's "Come now, my darling," then analyze it from an intertextual perspective: where does the music draw from Mozart and where does it clearly diverge in style?
	F	- Discuss ways in which popular music of the 20th- and 21st-centuries has incorporated techniques from composers discussed throughout this class, and how this fusion links to historical trends of the 21st century. Two particularly good songs include "A Day in the Life" by The Beatles and "An Echo, A Stain" by Björk. - Review for the exam	- Review for Final Exam
Final Exam			

Post-Tonal Postcards: Communicating Analysis and Reflection through Prose Writing

ANGELA RIPLEY

Postcard assignments provide a concise alternative to the traditional analysis paper. In this article, I outline a series of four postcard assignments developed for an undergraduate post-tonal theory course, discuss connections to the Scholarship of Teaching and Learning (particularly to Self-Determination Theory), and examine student responses and pedagogical benefits. Synthesizing analysis and reflection, each postcard includes a 300- to 500-word essay as its message and a single page of annotated musical examples as its picture. Students analyze complete compositions through the lenses of specific themes; for example, students discuss pentatonic collections and pitch centrality in Debussy's "La fille aux cheveux de lin" (*Préludes*, Book 1, No. 8). By addressing each postcard to a different recipient (peer, novice, expert, and future self), students learn to communicate effectively in diverse rhetorical contexts. Additional pedagogical benefits include greater independence in music analysis and increased confidence in writing about music.



My freshman-English professor taught me to read all my essays aloud. "Even if you are on your way to my office to turn in your paper," she told our class, "stop in the stairwell and read your paper out loud. You can make any necessary corrections in pen." While this editing tip has proved useful for subsequent writing endeavors, it also opened my eyes to connections between written words and verbal communication. By keeping in mind the sound of written words, I became more aware that the essays I wrote were meant to communicate with my readers.

When they graduate, undergraduate music students should be able to write effectively about music for a range of audiences. As professional musicians, they may write program notes, concert reviews, grants, letters to parents and booster organizations, blogs, conference papers, and job applications, among other forms of written communication. The importance of effective communication for educated musicians is reflected in the competencies described by the National Association of Schools of Music (NASM), which state that undergraduate students should possess the ability to "think, speak, and write clearly and effectively." Furthermore, music students with liberal arts degrees should "communicate with precision, cogency, and rhetorical force," and music students with professional degrees ought to be able to "communicate musical ideas, concepts, and requirements to professionals and

laypersons related to the practice of the major field.”¹

As a field in which precise language joins argumentation in support of music-analytical interpretations, music theory provides fertile ground for students to practice writing about music. However, the process of writing and grading essays in music analysis can be arduous and time-consuming for both students and instructors. Additionally, students may consider these papers limited in relevance to their future communications as professional musicians. In this article, I propose the “postcard” assignment as an alternative to the traditional analysis paper. After outlining the structure of a postcard assignment and exploring connections to the Scholarship of Teaching and Learning, I present a series of four postcard assignments developed for an undergraduate course in post-tonal music theory. I conclude by discussing student responses and pedagogical benefits. The responses included in this article (shared with students’ permission) come from the juniors and seniors enrolled in my course during two consecutive fall semesters with ten students enrolled in the course each semester.

Each postcard includes a 300- to 500-word essay as its message and a single page of annotated musical examples as its picture. Students address every postcard to a different recipient. Calling these essays “postcards” emphasizes communication—addressing music-analytical observations to specific recipients—and encourages students to prioritize their most important material, since space constraints prevent them from including all aspects of their analyses. The bookstore at my institution has a postcard that features the music building, so I hand out copies to my students on the first day of class. After we discuss the information and priorities conveyed by this postcard—the picture shows the front exterior of the building, not the rear parking lot—I introduce the postcard assignments as souvenirs of our learning throughout the course.

In their postcards, students analyze complete compositions through the lenses of specific themes. For example, students in my post-tonal theory course explain how imitation and z-cells provide unity and contrast in a selection from Bartók’s *Mikrokosmos*. Because one of my goals for these assignments is for students to work independently within a specified framework, we do not discuss the pieces in advance. I assign four postcards per semester and require students to complete at least three of the four assignments. While all four postcards synthesize analysis and reflection, the

¹ See, respectively, sections VII.D.1.a.(1) and VIII.A.6.a.(1); VII.D.1.a.(1); and VIII.C.2 of the NASM *Handbook 2019–20*, <https://nasm.arts-accredit.org/accreditation/standards-guidelines/handbook/> (accessed November 18, 2020).

final postcard assignment emphasizes reflection by inviting students to choose their own repertoire to illustrate the concepts they found most important in the course.

By addressing each postcard to a different recipient, students learn to communicate effectively in a variety of rhetorical contexts. As noted by John Bean, students who write with an awareness of their rhetorical context—the purpose, audience, and genre of what they write—become better writers and more effective communicators.² The recipients I specify for the postcard assignments include a student at an earlier stage of music theory study, a friend or loved one who knows very little about music, a music theory professor considering the student’s application for admission to a graduate program in music, and the student’s future self. In broader terms, students address their respective postcards to peers, novices, experts, and their future selves.³ Students explain musical terms as needed and connect their analyses to recipients’ experience and interests—thus building rapport and promoting deep learning by linking new information to recipients’ previous knowledge.⁴

The underlying theoretical framework for the postcard assignments comes from Self-Determination Theory (SDT), as discussed by Christopher Niemiec and Richard Ryan.⁵ SDT encompasses both intrinsic and extrinsic motivation as well as humans’ basic psychological needs for autonomy, competence, and relatedness. When people are intrinsically motivated, they do something because they find it inherently interesting and enjoyable. On the other hand, people who are extrinsically motivated do something to achieve an outcome that can be separated from the activity itself. Actions are autonomous when people freely choose to engage in behavior that is congruent with their sense of self, and the need for competence is met when people experience their actions as effective. Finally, relatedness refers to a sense of belonging

2 Bean (2011, 39–51). Sources from the music theory literature also highlight the importance of considering one’s audience when writing about music. For example, Bourne’s students contribute to Wikipedia articles on composers and pieces they study (2017), and Jenkins’s students write program notes for concerts they plan to perform, conduct, or compose (2017). Assignments that emphasize rhetorical contexts within the field of music history appear in Strovas (2014).

3 McGee (1993) also incorporates peer, expert, and novice audiences into his music theory writing assignments.

4 For a brief discussion of the impact that connections between old and new knowledge have on students’ learning, see Lang (2016, 93–100). Drawing on research from the fields of brain biology and psychology, Lang explains that building comprehension in students “consists of helping them forge rich, interconnected networks of knowledge—ones that enable each existing piece of information in our content area to connect with lots of other information, concepts, and ideas” (2016, 96).

5 Niemiec and Ryan (2009). For an application of SDT to research in music education, see Evans (2015).

that encourages shared behaviors and values.⁶

Student autonomy plays an important role in the postcard assignments. According to Niemiec and Ryan, instructional approaches that support student autonomy facilitate both intrinsic motivation and effectively internalized extrinsic motivation among students.⁷ Requiring students to complete only three out of four postcard assignments provides flexibility for students' schedules and enables students to choose the assignments they find most interesting. Other elements of choice appear within the postcard assignments themselves. For example, students choose between two themes for Postcard 1, explain which pitch-class set they consider most influential in the piece they analyze for Postcard 3, and select their own repertoire for Postcard 4 to illustrate the course concepts they deem most important.

Having examined the structure and theoretical underpinnings of postcard assignments, I will now share, by way of illustration, a series of four postcard assignments developed for an upper-level undergraduate course in post-tonal theory.⁸ Interspersed with my description of these assignments are samples of students' work. To help students approach post-tonal repertoire—which differs aesthetically from music they have previously studied and requires new analytical tools—with curiosity and open minds, I frame the course as a virtual study-abroad experience. On the first day of class, I introduce the study-abroad metaphor for the course and encourage students to consider potential benefits of exploring different countries and cultures, and, by extension, different styles of music.⁹ I also invoke our study-abroad metaphor during the course to encourage students to consider compositions on their own merits without comparing them to compositions in other styles, much as we might adopt an adventurous approach to sampling different styles of cuisine

6 Niemiec and Ryan (2009, 134–39).

7 Niemiec and Ryan (2009, 136–39) discuss four types of extrinsic motivation (external regulation, introjected regulation, identified regulation, and integrated regulation) that reflect increasing degrees of autonomy; the greater the degree of autonomy, the more students tend to internalize their extrinsic motivation. Extrinsic motivation is internalized when students perceive an internal, rather than external, reason for their actions.

8 I use the term “post-tonal” to refer to twentieth- and twenty-first-century compositions that are organized according to principles other than functional tonality. Guidelines for all four postcard assignments appear in the Appendices.

9 Ripley (2016, 27–28) discusses parallels between learning a new language and learning to analyze twentieth-century atonal music. Connections between exploring post-tonal music and learning a new language are also integral to the framing study-abroad metaphor for my course. Students hear the new “language” during listening exercises, speak it through sight-singing activities, read it in analysis assignments, and write (about) it through compositions and post-tonal postcards.

when visiting other countries.¹⁰ Students embrace the notion of a virtual study-abroad experience, and several students reflected this in their postcards by referring to their imagined locations, such as France or Russia, when writing about music by Debussy or Stravinsky.

For the first postcard assignment, students focus their analysis of Claude Debussy's "La fille aux cheveux de lin" (*Préludes*, Book 1, No. 8) on either of two themes: 1) pentatonic collections in melodic and harmonic contexts, or 2) pitch centricity, including the establishment of pitch centers, tonal ambiguity, and tonally functional and non-functional harmonic progressions. (The guidelines for Postcard 1 appear in Example 1; excerpts from the score appear in Example 2.) While students receive clean copies of the score, I include several of my own analytical observations in Example 2 to highlight facets of the piece that reflect the themes for this postcard.¹¹

Color-coding in Example 2 reflects the following categories: green = pentatonic collections, purple = tonally functional progressions, red = tonally non-functional progressions. The example further highlights the following: a) Pentatonic collection (missing one note) in a melodic context; b) Tonally functional IV–I progression in G-flat major; c) E-flat major established as local tonic by V–I progression; d) Alternation of G^b⁷/F^b and A^b⁷/G^b suspends functional tonality; e) Pentatonic collection (missing one note) in a harmonic context; f) Tonally non-functional V–IV progression in G-flat major; and g) Confirmation of G-flat major as overall tonic of the piece.

¹⁰ While the study-abroad metaphor provides a positive frame for students' perceptions of post-tonal music as "strange" or "foreign," instructors may also wish to emphasize connections between tonal and post-tonal music. For example, Arthurs (2004) discusses similarities between sonata form and the form of Schoenberg's twelve-tone *Klavierstück* Op. 33a, and Harter (2009) proposes a taxonomy of early-twentieth-century cadences that links examples from Prokofiev's piano sonatas to common-practice-period counterparts such as authentic and deceptive cadences.

¹¹ Alegant and Sly (2004, 25-36) offer a pitch-collection-driven approach to teaching this prelude and have students create "road maps" as visual representations of their analytical findings.

Postcard Assignment 1*(At least three out of four postcard assignments must be completed.)***Postmark (due) date:** Wednesday, September 12, at 11:00 a.m.**Recipient:** Address your message to an imaginary music student who has studied tonal music theory but has not yet encountered any post-tonal music.**Picture:** One or more excerpts from the score of Debussy's "La fille aux cheveux de lin" (*Préludes*, Book 1, No. 8). The total length of these excerpts must be at least one-half page, but no more than one page, long (8.5 x 11 inches). Analytical annotations should be marked on the score.**Caption:** Write a brief caption (at the top of your message, like a title) that communicates the theme of your postcard in a concise and creative way. Note: the caption is included in the word count for your message.**Message:** Keep your message brief (300–500 words). Your entire message, with caption, must fit on a single page (8.5 x 11 inches), with a 12-point font and margins of at least 0.8 inches. Include your word count at the bottom of the page.

Focus on one of the following themes, using the musical excerpt(s) to illustrate your discussion (refer to specific measure numbers).

1. Pentatonic collections throughout the piece (in both melodic and harmonic contexts)
2. Pitch centrality throughout the piece: establishment of pitch centers (locally and for the piece as a whole), tonal ambiguity, and tonally functional vs. non-functional harmonic progressions

Remembering your intended recipient, provide brief explanations of new terminology (e.g., pentatonic scale) as needed and, when possible, connect your message to the recipient's previous experience with music theory.

Include an element of personal reflection in your message (e.g., something in the music that you found surprising, or comments on the aural experience of hearing this piece).

Grading: Your postcard will be graded on the basis of these criteria: following assignment guidelines, accuracy and quality of analysis, clarity and organization of writing, neatness and effectiveness of annotated score excerpts, creativity and conciseness of caption, and appropriate tone for the intended recipient.**Example 1.****Guidelines for Postcard 1.**

a
Gb-[Ab]-Bb-Db-Eb, outlines Ebm7

b
Gb: IV I

c
Eb: V I

d
Gb7/Fb Ab7/Gb Gb7/Fb Ab7/Gb

e
Gb-[Ab]-Bb-Db-Eb

f
Gb: V IV

g
Gb: I (V) I

Example 2.

Author's analyzed score for Debussy, "La fille aux cheveux de lin"
(*Préludes*, Book 1, No. 8), mm. 1–9, 23–31, 35–39.

In their second postcard, students discuss compositional unity and contrast in Béla Bartók's "Chromatic Invention 1" (*Mikrokosmos*, Book 3, No. 91), focusing on the z-cell (prime form [0167]) and points of imitation.¹² My analyzed copy of the score appears in Example 3. The opening four notes present Bartók's z-cell, and each point of imitation begins with a new statement of this cell. As shown by brackets on the score, the piece is composed almost entirely of imitative material. The only break from imitation appears in mm. 10–12, after which all remaining points of imitation are inverted. Intervals of imitation are partially symmetrical around this break: the points of imitation immediately preceding and following the break appear at the octave, while the next point of imitation in either direction follows at the major ninth (or sixteenth). Points of imitation are marked with brackets whose colors represent the respective intervals at which the lower voice imitates the upper voice. Z-cells are circled in purple, and rhythmic or melodic aspects of the upper voice that are modified or omitted by the lower voice are highlighted in yellow.

Two students were especially effective in communicating their Postcard 2 analyses to musical novices. Here is how the first student described imitation to a friend:

Imitation in music is almost exactly the same as the way I imitate you sometimes. Obviously, you say something, and then I repeat what you said, and I can say it in a bunch of different ways. I can repeat it in a higher or lower pitch, faster or slower, or perhaps while doing an impression of Donald Duck. In a piece of music, you can take a melody or group of notes and do the same thing to them. First the melody or group of notes is played, and then I can take that same melody or group and repeat them in different ways, higher or lower, faster or slower, etc.

The second student addressed Postcard 2 to his uncle at a salsa dance retreat in Miami and introduced Bartók's x-, y-, and z-cells with this explanation:

When notes move around pitchwise in a piece of music, it feels like they are dancing, and cells are essentially dance moves, with different cells having different step movement patterns.

In both cases, the students connected their use of terminology to recipients' prior experience, enabling them to follow the music-analytical discussion without the barrier of unexplained musical jargon.

¹² Roig-Francolí (2008, 41–47) explains Bartók's symmetrical motivic cells (including the z-cell) and provides a useful summary of imitative procedures. For a discussion of form and contextual transformations in this piece, see Lambert (2000, 56–60). Pervasive imitation, contrapuntal texture, and the title "Invention" invite comparisons between this piece and the two-part inventions of J. S. Bach.

91 *p, espr.*

*p*¹ Imitation at P8

Imitation at M6

mp

mf

mp Imitation at M9 (M2)

mf

Imitation at P8

dim.

più p

*p*⁵ Imitation at P8, inverted

pp

rallentando

smorzando

Imitation at M16 (M2), inverted

pp Imitation at P18 (P4), inverted

[5 sec.]

Example 3.

Author's analyzed score for Bartók, "Chromatic Invention 1" (*Mikrokosmos*, Book 3, No. 91).

"Mikrokosmos" by Béla Bartók

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The third postcard explores pitch-class sets and their relationships and influence throughout Anton Webern's *Four Pieces for Violin and Piano*, Op. 7, No. 3. I mark segmentation on the score to enable students who are new to set-theoretical analysis to engage with this piece.¹³ My analyzed copy of the score appears in Example 4, and a similar analysis by one of my students appears in Example 5. Matching colors in Example 4 denote shared prime form among sets, and the prime form of each set is marked on the score. Arrows show transformations between sets with the same prime form. Some students may also identify T₂I or T₈I relationships between sets with prime form (0167).

For this assignment, students find the prime form of each marked set, discuss transposition (T_n) and inversion (T_nI) relationships among sets that share the same prime form, and argue for which set they believe is the most influential in the piece. Because the first and last sets marked on the score share the prime form (012), students frequently cite the framing function of this set as evidence that it is the most influential in the piece; other students identify (0167) as the most influential set because of its frequent appearance and timbral emphasis in mm. 6–9 of the violin part.¹⁴

13 My segmentation for this assignment focuses on trichords and tetrachords. An analysis including larger sets appears in Forte (1977, 126–31). For comments on the uniaggregational nature of the piece, see Alpern (1996).

14 As an alternative to the question of which set is most influential, students could choose one set and trace its history, or outline a narrative, throughout the piece. For pedagogical examples of narrative analysis, see BaileyShea (2011) and Alegant and Sly (2004).

[illegible]

Example 4.

Author's analyzed score for Webern, *Four Pieces for Violin and Piano*, Op. 7, No. 3.

Four Pieces for Violin and Piano

Op. 7, No. 3

Composed by Anton Webern

III.

Sehr langsam (♩ = ca 30)
mit Dämpfer

Violin

Piano

T₈I

(012) (0156) 5 (016)

ppp ohne cresc.

ppp

äußerst kurz

ppp

6 (0167) col legno T₃ → (0167) T₉ → (0167) T₃ → (0167) (015) (0167)

Vln.

Pno.

ppp subito

(0125) (013) (014)

9 10 kaum hörbar am Steg

Vln.

Pno.

T₈I

(012) kaum hörbar

kaum hörbar

ppp

kaum hörbar - "scarcely audible"
am Steg - "on top of the bridge"
mit Dämpfer - "with mute"
äußerst kurz - "extremely short"

Example 5.

Sample student analysis for Postcard 3.

The final postcard assignment emphasizes the relevance of music theory to students' own specializations within the field of music. Students address Postcard 4 to their future selves and link their messages to the professional work they hope to do in five years. I have students write to their future selves not only to remind themselves of concepts they once knew but also to encourage them to think more broadly about their future goals and to consider ways in which the knowledge and skills they acquire during their undergraduate studies can contribute to their long-term success. For example, a music therapy student developed a plan for a musical intervention focused on pattern recognition and voice leading in Debussy's "La Cathédrale engloutie" (*Préludes*, Book 1, No. 10). That student later commented that she really enjoyed writing to her future self because this made her consider music theory in relation to her chosen field of music therapy. In her thoughtfully written postcard, the student concluded, "Atonal music may not be a common client request; however, with the effectiveness of client-preferred music, it is imperative to be able to adapt this genre of music." Two music education students respectively encouraged their future selves to challenge their students with pieces that employ frequently changing meters and to acquaint their students with twelve-tone compositions in order to demonstrate the expressive power of atonal music. Finally, a student with a double major in literature and music drew parallels between set theory and literature, concluding that both literature and set theory "involve taking the most basic form of a motif and seeing how it develops artfully to represent art in new ways."

For this final postcard, students choose their own pieces of twentieth- or twenty-first-century art music to illustrate the course concepts they consider most important. When introducing the assignment, I suggest two possible avenues for selecting appropriate repertoire and topics. Students can either decide on a topic they consider important and look for a piece that demonstrates it, or they can begin by choosing an interesting piece from which they draw an appropriate course-related topic. I stipulate that the piece must be a work of twentieth- or twenty-first-century art music and, because one of the objectives of the assignment is learning to create effective musical examples, I require students to analyze pieces for which scores are available. The repertoire selected by my students includes works by composers such as Britten, Poulenc, Stravinsky, Thomas, and Webern. Some of the topics my students explored include diatonic modes and octatonic scales, asymmetrical and changing meters, transformational relationships among pitch-class sets, and twelve-tone rows. Example 6 lists the repertoire and topics chosen by my students, and Example 7 summarizes all four postcard assignments.

Depending on class size, the individually selected repertoire may pose challenges for grading. For small classes, the topical focus of this postcard assignment and its one-page limit for musical examples keep the grading load manageable, even if students choose repertoire with which the instructor is less familiar—I find that the grading time required for this assignment is comparable to the time I spend grading one of the other postcard assignments. Instructors of large classes may prefer to have students choose from a list of approved repertoire; alternatively, instructors could require students who play the same instrument to analyze the same repertoire (e.g., all clarinetists choose the same piece).

Composer	Repertoire	Topic
Bartók	<i>Forty-Four Duos for Two Violins</i> , Sz. 98, No. 33, “Harvest Song”	Diatonic modes, octatonic scales, transposition
Bartók	<i>Mikrokosmos</i> , Book 6, No. 141, “Subject and Reflection”	Pitch-class set theory (prime form)
Britten	<i>Rejoice in the Lamb</i> , I, “Rejoice in God, O ye Tongues”	Asymmetrical meters, changing meters
Copland, Ives	“At the River” Comparison of the composers’ respective settings: Copland, <i>Old American Songs</i> , Set II, No. 4 Ives, <i>114 Songs</i> , No. 45	Consonance and dissonance, metric modulation [The concept of metric modulation was mistakenly applied here.]
Debussy	<i>Préludes</i> , Book 1, No. 10, “La Cathédrale engloutie”	Patterns and repetition (sets and voice-leading)
Debussy	<i>Rêverie</i>	Tonal ambiguity, motivic repetition
Debussy	<i>Estampes</i> , I, “Pagodes”	Pentatonic scales
Ives	<i>114 Songs</i> , No. 43, “The Things Our Fathers Loved”	Musical borrowing
Lockwood	<i>Piano Burning, Piano Garden, Piano Drowning, Southern Exposure</i>	Aleatory music
Poulenc	<i>Sonata for Oboe and Piano</i> , I, “Élégie”	Pitch-class set theory (prime form, subsets and supersets)
Ravel	<i>Ma mère l’Oye</i> , III, “Laideronnette, Impératrice des Pagodes”	Pentatonic scales, world music
Schoenberg	<i>Drei Klavierstücke</i> , Op. 11, No. 1, “Mässig”	Pitch-class set theory (prime form, motives)
Schoenberg	<i>Suite for Piano</i> , Op. 25, No. 1, “Prelude”	Twelve-tone rows
Schoenberg	<i>Concerto for Piano and Orchestra</i> , Op. 42, No. 1	Twelve-tone rows

Example 6.

Student-selected repertoire and topics for Postcard 4.

Composer	Repertoire	Topic
Stravinsky	<i>Rite of Spring</i> (various excerpts)	Changing meters, metric displacement, polyrhythms
Thomas	<i>Spring Song</i>	Pitch-class set theory (prime form, motives)
Webern	<i>Five Movements for String Quartet</i> , Op. 5, No. 3	Pitch-class set theory (prime form, transformational relationships among sets, subsets)
Webern	<i>Drei Lieder nach Gedichten von Hildegard Jone</i> , Op. 25, No. 1, “Wie bin ich froh!”	Twelve-tone rows, musical narrative

Example 6 (cont’d).

Student-selected repertoire and topics for Postcard 4.

I announce the due dates for all four postcard assignments at the beginning of the semester. The repertoire and themes for each assignment, which I announce one week in advance of their respective due dates, reflect current course topics. Choosing brief compositions keeps the analytical process manageable for students and enables students to show substantial portions of each piece within the one-page limit for musical examples. I require students to complete only three out of four postcard assignments, so each student can skip one assignment. If students choose to complete all four assignments, the postcard component of their course grades reflects all four grades, thus providing a way to minimize the impact of a low grade.¹⁵ The three-out-of-four policy and concise format of the postcard assignments help streamline the grading process. If time permits, students can revise their postcards in response to comments from the instructor. A copy of the rubric I use to evaluate Postcard 1 appears in Example 8, and I use a similar rubric to grade the other postcard assignments. The range of criteria included in the rubric provides opportunities for students to shine in their areas of strength while also receiving targeted feedback for growth. For example, one student who struggled with analytical accuracy excelled at creating pithy captions. I calculate percentage grades based on a total of 24 points by assigning the following numeric values to each column of the rubric: excellent = 4, competent = 3, not yet competent = 1. Therefore, a postcard assignment that earns a grade of “excellent” for four criteria and “competent” for two criteria would receive an overall grade of 22/24, or 92%. Instructors may also choose to emphasize certain criteria by weighting them more heavily than others.

¹⁵ Postcard assignments contribute 20% to students’ course grades. Other assessments for the course include exams, quizzes, analysis assignments, and a composition project.

Repertoire		Theme	Recipient
Postcard 1	Debussy, "La fille aux cheveux de lin" (<i>Préludes</i> , Book 1, No. 8)	Choose one: - Pentatonic collections throughout the piece (in both melodic and harmonic contexts) - Pitch centrality throughout the piece: establishment of pitch centers (locally and for the piece as a whole), tonal ambiguity, and tonally functional vs. non-functional harmonic progressions	<i>Peer:</i> Music student who has studied tonal music theory but has not yet encountered post-tonal concepts
Postcard 2	Bartók, "Chromatic Invention 1" (<i>Mikrokosmos</i> , Book 3, No. 91)	Compositional unity and contrast, with a focus on Bartók's z-cell and points of imitation (be specific about type[s] of imitation and pitch and time intervals)	<i>Novice:</i> Friend or loved one who cares about you but knows very little about music
Postcard 3	Webern, Four Pieces for Violin and Piano, Op. 7, No. 3	Identity of pitch-class sets, relationships among sets, and the influence of sets throughout the piece - Find the prime form of each set that is marked on the score and label sets with their respective prime forms. (Remember to put the sets in normal form before calculating their prime forms.) - Discuss the relationships between any sets that have the same prime form (e.g., related by T_{12}, related by $T_{12}D$), and consider their similarities or differences in instrumentation, register, and voicing. - Explain which pitch-class set you consider the most influential in this piece, and why.	<i>Expert:</i> Music theory professor considering your application for admission to a graduate program in music (postcard serves as sample of music-analytical writing)
Postcard 4	Choose one: - A piece we have studied this semester (see examples in the textbook, etc.) - Another piece of 20th- or 21st-century art music that demonstrates one or more of the concepts we have studied this semester	One of the most important concepts you learned this semester (explain the concept and why you consider it important)	<i>Self:</i> Your future self, five years from now

Example 7.

Summary of post-tonal postcard assignments.

	Excellent	Competent	Not Yet Competent
Following assignment guidelines			
Accuracy and quality of analysis			
Clarity and organization of writing			
Neatness and effectiveness of annotated score excerpts			
Creativity and conciseness of caption			
Appropriate tone for the intended recipient			

Example 8.

Rubric for Postcard 1.

While the preceding sample assignments focus on post-tonal repertoire and topics, postcard assignments can also be used effectively in other music theory courses. For example, Theory III students can explain common-chord modulation to a student enrolled in Theory I (peer audience), and Theory II students can explain the difference between half cadences and authentic cadences to a neighbor who knows very little about music (novice audience). To help students adapt their tone and musical vocabulary to a range of audiences, I recommend incorporating a series of postcards addressed to a variety of recipients (such as peer, novice, expert, and self). If time constraints preclude assigning multiple postcards in the same course, the students enrolled in the course can address their postcards to different recipients (e.g., some students write to expert audiences, some write to novice audiences, etc.) while engaging with the same topic and repertoire. By reading and discussing each other's completed postcards, students can grapple with the changes necessary to communicate effectively with different audiences.

According to student comments, the brief format of the assignments provides an accessible way to practice music-analytical writing while simultaneously challenging students to communicate their analytical findings concisely. One student explained,

The postcard assignment was a non-intimidating way to start writing about music. In the past we [were] asked to dive in to 4- [to] 5-page papers of analyzing music. I never felt fully prepared for that. This short writing style was helpful and having a specific recipient gave me direction.

Postcard assignments, with their brevity and strict word-count requirements, can prepare students both to write more extensively about music analysis and to write

persuasive prose within the concise parameters of genres such as program notes, academic conference proposals, and newspaper letters to the editor. By addressing their postcards to specific recipients, students learn to communicate clearly in different rhetorical contexts while simultaneously satisfying their own need for relatedness. If desired, the postcard assignments can become even more interactive: students can send one or more postcards to real recipients who provide feedback on the effectiveness of students' communication. Postcard 1, for example, can become a pen-pal exchange between students in a post-tonal theory course and students enrolled in a tonal theory course. Similarly, students can share Postcard 2 with their friends or loved ones and discuss its effectiveness via a phone or video call.

Students commented positively on the creative-writing aspect of the postcard assignments and enjoyed sharing their analyses with different imagined audiences. In their course evaluations, several students mentioned creative activities and assessments as the aspects of the course which they most liked, and one student specifically mentioned the postcard assignments when praising the creative course design. Students demonstrated their engagement with the postcard assignments by developing clever titles as captions and sometimes formatting their assignments to look like real postcards, complete with recipients' addresses, return addresses, and hand-drawn postage stamps. A student-designed postage stamp appears in Example 9, and another student's creatively formatted postcard assignment appears in Example 10. Examples of creative student captions include the following:

- "DebuSee These Pentatonics?" (Postcard 1)
- "It's Easy as X, Y, Z!" (Postcard 2)
- "Webern in His Prime" (Postcard 3)
- "The 'Right' Rhythms of Spring" (Postcard 4)



Example 9.
Student-designed postage stamp.

FROM: [Student Name]
[Residence Hall Room]
Residential Quad [College Name]
[City, State, ZIP]

December 3, 2018

INSERT
STAMP

Transforming Scales and Transforming How We Think About Music

Dear [Student Name],

Congratulations on passing the board exam and landing your first full time music therapy position; you're living the dream just like I knew you would! Remember your first semester of senior year, and how stressed you were? Remember how daunting Theory V seemed? Well now it's all a memory, but here's some analysis to remind you of the good old days of Dr. Ripley's class. We are going to analyze Bartók's *Harvest Song (Ara lakor)* Violin Duo # 33, in regard to the composer's use of diatonic modes and octatonic scales.

In measures 1-5, Bartók creates an octatonic scale beginning on D# and including the pitch classes: D#, E#, F#, G#, A#, B, C#, D. The scale is almost complete except for the A# which should be an A. Bartók relates measures 10-15 to 1-5 by transposing the octatonic scale using the T., resulting in the following scale: G#, A#, B, C, D, E, F, G. Re-visiting the concept of octatonic scales after learning set-theory and transposition operations, makes the analysis of music more nuanced. It allows the listener to take seemingly unrelated passages and understand a connection. This connection is heard upon listening to the piece. The listener can hear stark tempo and mood contrasts between the A and the B section, but the overall tone stays the same. The second half of the piece creates uses the same methods, but transposes, as noted by the teal brackets in the image.

At the end of the piece, Bartók begins to repeat material from section A, however instead of forming an octatonic scale, Bartók creates the Ab Dorian scale. This is seen in measures 30-34. In these measures, Bartók returns to the original tempo

and uses the same material from m. 1-5, transposed down a perfect 5°, and enharmonically spelled. Again, this gives the piece a sense of unity.

I felt that this piece was an important one to analyze because it took a concept from the beginning of the semester, octatonic scales, and applied through the use of a concept we learned during Set Theory Survivor: transposition. This analysis shows the progression of the course and my learning. It also demonstrates my new appreciation for post-tonal music. I hope that you look back on undergrad fondly and continue to embrace life with the same vigor you did five years ago.

TO: [Student Name], MT BC
[Address]
[City, State]

Remember to have fun,
[Student Name] (of the past)

WORD COUNT: 402

Example 10. Student creative format for Postcard 4. Despite several errors in analysis and grammar, this student's assignment exhibits a good tone for the intended recipient (future self) and demonstrates high engagement with the assignment through creative formatting to look like a real postcard.

Students also demonstrated creative engagement with the assignments through their choice of recipients. For example, the recipients for Postcard 1, which was addressed to a music student who had not yet encountered post-tonal music theory, included historical characters such as Ludwig van Beethoven and Clara Schumann. Recipients for Postcard 3, addressed to a music theory professor evaluating the student's graduate-school application, included students' current and former professors as well as the imaginary Professor Prime and Dr. Form, Professor Smartypants, and Dr. Music-Theory-Professor-Who-Holds-My-Future-In-Their-Hands. (The last of these imaginary professors teaches at the University of Hard Music Stuff.)

When asked to share their suggestions for future versions of these assignments, students advocated for maintaining the policy of completing three out of four postcards and suggested expanding the element of choice to include additional options of repertoire and theme for each assignment. After the first iteration of the course, students suggested having a sample postcard to demonstrate the desired scope of the postcard assignments; during the second iteration of the course, in response to this feedback, I prepared guidelines for a practice postcard exploring the topics of form and text-music interactions in Poldowski's song "Effet de Neige," which we worked through together in class one week before the first postcard assignment was due.¹⁶ When reflecting on the second iteration of the course, several students expressed a desire for additional guidance for the self-selected repertoire of Postcard 4; one student-suggested approach is to supply a list of composers whose music frequently employs specific techniques discussed during the course. Finally, a student also proposed addressing a postcard to a former mentor, such as a high-school theory teacher or band director.

Several students mentioned the thrill of discovery as one of the most enjoyable aspects of the postcard assignments. One student described this as the "opportunity to 'discover' trends in the music for myself." Another student explained, "Sort of getting thrown out into the deep end with a piece (of music) and trying to determine what is going on is intimidating at first, but I really enjoyed the feeling of figuring things out for myself when the assignments were complete." Other students enjoyed "applying concepts to real-world examples" and observed, "It's nice to sit down and do a more in-depth analysis of a single piece rather than skimming through brief examples."

Students credited the communication aspect of postcard assignments with

¹⁶ Poldowski was the professional pseudonym of Régine Wieniawski (1879–1932). The score for this piece is available at <https://musictheoryexamplesbywomen.com/examples/effet-de-neige-poldowski/> (accessed November 18, 2020).

promoting deep learning; one student remarked, “I feel I learned the concepts from the postcards better because I was forced to comprehend them well enough to explain them to another person,” and another student concluded, “It’s difficult to build a strong enough foundation of a concept to explain it well to another person. It takes time & work, and that’s good.” Students’ perception of the postcard assignments as challenging, yet attainable, indicates that this series of assignments is effective in meeting students’ need for competence. Students hone their critical-thinking skills as they learn to construct analytical arguments and write coherently about music-theoretical topics for different audiences. In so doing, students learn to understand music analysis as a form of communication. With insightful analytical comments and language tailored to their intended recipients, the postcards become souvenirs of learning from students’ exploration of music theory.

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Appendices: Guidelines for Post-Tonal Postcard Assignments

Postcard Assignment 1 <i>(At least three out of four postcard assignments must be completed.)</i>	
Postmark (due) date:	Wednesday, September 12, at 11:00 a.m.
Recipient:	Address your message to an imaginary music student who has studied tonal music theory but has not yet encountered any post-tonal music.
Picture:	One or more excerpts from the score of Debussy's "La fille aux cheveux de lin" (<i>Préludes</i> , Book 1, No. 8). The total length of these excerpts must be at least one-half page, but no more than one page, long (8.5 x 11 inches). Analytical annotations should be marked on the score.
Caption:	Write a brief caption (at the top of your message, like a title) that communicates the theme of your postcard in a concise and creative way. Note: the caption is included in the word count for your message.
Message:	Keep your message brief (300–500 words). Your entire message, with caption, must fit on a single page (8.5 x 11 inches), with a 12-point font and margins of at least 0.8 inches. Include your word count at the bottom of the page. Focus on one of the following themes, using the musical excerpt(s) to illustrate your discussion (refer to specific measure numbers). 1. Pentatonic collections throughout the piece (in both melodic and harmonic contexts) 2. Pitch centrality throughout the piece: establishment of pitch centers (locally and for the piece as a whole), tonal ambiguity, and tonally functional vs. non-functional harmonic progressions Remembering your intended recipient, provide brief explanations of new terminology (e.g., pentatonic scale) as needed and, when possible, connect your message to the recipient's previous experience with music theory. Include an element of personal reflection in your message (e.g., something in the music that you found surprising, or comments on the aural experience of hearing this piece).
Grading:	Your postcard will be graded on the basis of these criteria: following assignment guidelines, accuracy and quality of analysis, clarity and organization of writing, neatness and effectiveness of annotated score excerpts, creativity and conciseness of caption, and appropriate tone for the intended recipient.

Appendix 1. Guidelines for Postcard 1.

Postcard Assignment 2

(At least three out of four postcard assignments must be completed.)

Postmark (due) date:	Monday, October 15, at 11:00 a.m.
Recipient:	Address your message to a friend or loved one who cares about you but knows very little about music.
Picture:	The entire (one-page) score of Bartók's "Chromatic Invention 1" (<i>Mikrokosmos</i> , Book 3, No. 91) Analytical annotations should be marked on the score.
Caption:	Write a brief caption (at the top of your message, like a title) that communicates the theme of your postcard in a concise and creative way. Note: the caption is included in the word count for your message.
Message:	Keep your message brief (300–500 words). Your entire message, with caption, must fit on a single page (8.5 x 11 inches), with a 12-point font and margins of at least 0.8 inches. Include your word count at the bottom of the page. Focus on the following theme, using the score to illustrate your discussion (refer to specific measure numbers). Theme: Compositional unity and contrast, with a focus on Bartók's z-cell and points of imitation (be specific about type[s] of imitation and pitch and time intervals); to review these topics, see pp. 41–47 of Roig-Francolí's <i>Understanding Post-Tonal Music</i>. Remembering your intended recipient, provide brief explanations of new terminology (e.g., z-cell, imitation) and use analogies that connect your message to the recipient's experience outside the field of music. Include an element of personal reflection in your message (e.g., how your experience of listening to the piece changed once you analyzed the piece).
Grading:	Your postcard will be graded on the basis of these criteria: following assignment guidelines, accuracy and quality of analysis, clarity and organization of writing, neatness and effectiveness of annotated score, creativity and conciseness of caption, and appropriate tone for the intended recipient.

Appendix 2.

Guidelines for Postcard 2.

Postcard Assignment 3*(At least three out of four postcard assignments must be completed.)*

Postmark (due) date:	Monday, November 5, at 11:00 a.m.
Recipient:	Address your message to a music theory professor at a university where you are applying for admission to a graduate program in music. Imagine that this postcard will be included in your application as a brief writing sample and demonstration of your music-analytical abilities.
Picture:	The entire (one-page) score of Webern's <i>Four Pieces for Violin and Piano</i> , Op. 7, No. 3. Analytical annotations should be marked on the score.
Caption:	Write a brief caption (at the top of your message, like a title) that communicates the theme of your postcard in a concise and creative way. Note: the caption is included in the word count for your message.
Message:	Keep your message brief (300–500 words). Your entire message, with caption, must fit on a single page (8.5 x 11 inches), with a 12-point font and margins of at least 0.8 inches. Include your word count at the bottom of the page. Focus on the following theme, using the score to illustrate your discussion (refer to specific measure numbers). Theme: Identity of pitch-class sets, relationships among sets, and the influence of sets throughout the piece • Find the prime form of each set that is marked on the score and label sets with their respective prime forms. (Remember to put the sets in normal form before calculating their prime forms.) • Discuss the relationships between any sets that have the same prime form (e.g., related by T_n, related by T_nI), and consider their similarities or differences in instrumentation, register, and voicing. • Explain which pitch-class set you think is the most influential in this piece, and why. Because you are writing for an expert audience, you will not need to provide explanations of terminology such as “prime form.” Your challenge, however, will be to make insightful observations about the piece and convey these observations clearly.
Grading:	Your postcard will be graded on the basis of these criteria: following assignment guidelines, accuracy and quality of analysis, clarity and organization of writing, neatness and effectiveness of annotated score, creativity and conciseness of caption, and appropriate tone for the intended recipient.

Appendix 3.

Guidelines for Postcard 3.

Postcard Assignment 4

(At least three out of four postcard assignments must be completed.)

Postmark (due) date:	Monday, December 3, at 11:00 a.m.
Recipient:	Address your message to your future self, five years from now.
Picture:	One or more excerpts from the score of a piece you choose, which may be either 1. A piece we have studied this semester (see examples in the textbook, etc.), or 2. Another piece of 20th- or 21st-century art music that demonstrates one or more of the concepts we have studied this semester The total length of these excerpts must be at least one-half page, but no more than one page, long (8.5 x 11 inches). Analytical annotations should be marked on the score.
Caption:	Write a brief caption (at the top of your message, like a title) that communicates the theme of your postcard in a concise and creative way. Note: the caption is included in the word count for your message.
Message:	Keep your message brief (300–500 words). Your entire message, with caption, must fit on a single page (8.5 x 11 inches), with a 12-point font and margins of at least 0.8 inches. Include your word count at the bottom of the page. Focus on the following theme, using the musical excerpt(s) to illustrate your discussion (refer to specific measure numbers). Theme: One of the most important concepts you learned this semester (explain the concept and why you consider it important) Remembering your intended recipient, briefly review terminology as needed and connect your message to the recipient’s professional work (in other words, think about the work you hope to be doing in five years). Include a significant element of personal reflection in your message that will help your future self understand why you want to remember this concept.
Grading:	Your postcard will be graded on the basis of these criteria: following assignment guidelines, accuracy and quality of analysis, depth and thoughtfulness of reflection, clarity and organization of writing, neatness and effectiveness of annotated score excerpts, creativity and conciseness of caption, and appropriate tone for the intended recipient.

Appendix 4.

Guidelines for Postcard 4.

Basic Post-Tonal Theory and Analysis

by Philip Lambert

New York: Oxford University Press, 2019. 356 pages + ix.

Introduction to Post-Tonal Theory

by Joseph N. Straus

Fourth edition. New York: W.W. Norton & Company Inc., 2016. 396 pages + xiv.

Reviewed by OWEN BELCHER



In middle school, I remember a math teacher telling our class at the end of the year not to worry if we did not like algebra, because students who did not like algebra usually did well in geometry and trigonometry—the courses which followed. I remember overhearing a similarly hopeful (and ultimately incorrect) pronouncement from my undergraduate cohort regarding music theory. “Do not worry,” was the mantra, “twentieth-century analysis does not have anything to do with tonal analysis.” With hindsight, I am not exactly sure why one would take comfort in the idea that two years of training were now meaningless for the road ahead. Of course, many instructors strive every day to help their students draw connections between tonal and post-tonal analysis. Yet ideas such as those anecdotally expressed above come not just from the mouths of students. Due to philosophical, curricular, and budgetary constraints, many institutions view that pesky fourth or fifth semester of post-tonal theory as an expendable elective, to be sacrificed when the need arises. Such perspectives reinforce the idea of a tonal “core,” with other theory classes constituting nonessential extras.

Perhaps a new work by Philip Lambert and a revision of Joseph N. Straus’ well-known text will finally dispel the tired conventional thinking regarding post-tonal theory’s curricular expendability, or at least its analytical isolation. My review divides into two parts. Part 1 overviews Lambert’s text (published in 2019), concentrating on how he relates post-tonal theory and analysis to tonal concepts and analysis, the text’s general accessibility in terms of breadth and depth of content, and the range of the text’s musical examples. Since Straus’ text is well-known in the field, in Part 2 of the review, I eschew traditional chapter-by-chapter commentary, and instead compare the third and fourth editions of the book, highlighting various improvements in the fourth edition as regards to repertoire inclusivity, breadth of content, and general accessibility.

I

As noted in his preface, Lambert organizes *Basic Post-Tonal Theory and Analysis* so that “the first four chapters offer a step-by-step introduction to the methodology of post-tonal theory,” while chapters six through ten are devoted to various extensions and systems based on the introduction (ix). Thus, with certain caveats, the instructor can skip around after completing the first four chapters. Below, I overview each chapter and explore possible paths through the text in more detail.

One of the most successful features of Lambert’s text is the way he relates post-tonal analytical techniques to more familiar tonal concepts. Chapter 1 epitomizes this idea, contrasting musical units in Mozart (String Quartet in E-flat major, K. 171, Minuet) with musical units in Webern (the first of the Six Bagatelles, Op. 9). The analytical reduction underneath Mozart’s score divides the minuet into its component parts—namely, melodies dominated by stepwise motion and thirds, and a triadic accompaniment. The exercise offers two benefits. First, the student learns the analytical shorthand as applied to a well-known idiom, so that when they tackle the Webern Bagatelle they are not grappling with both a new musical language and a new analytical method. Second, the emphasis on intervallic recursion as a primary determinant for musical units has the effect of defamiliarizing the Mozart passage with the result that the Webern Bagatelle, one of whose primary units is the chromatic cluster, does not seem so novel. Chapter 1 immediately establishes strong links between students’ knowledge of tonal procedures and the analytical perspectives that will be important in the study of post-tonal idioms. My undergraduate cohort would have become immediately suspicious of their received “wisdom.”

Before introducing the traditional distinction between pitch and pitch class space, Chapter 2, titled Musical Spaces, theorizes the relationship between the analytical shorthand in Chapter 1 and the musical score. We learn that such analytical reductions exist in “note space,” an environment whereby “musical groupings are viewed in a neutralized state, without regard for their original rhythmic settings, durations, dynamic markings, modes of articulation, and spellings” (19–20). “Musical space,” on the other hand, is “any specifically defined perspective on a musical idea,” which includes the actual music (20). Thus, pitch space and pitch-class space exist in note space. The bulk of Chapter 2 is devoted to the basic mechanics of note space, introducing the various types of intervals, pc numbers, mod-12 arithmetic, and two musical transformations: ordered pitch-space transposition, which preserves the pitch interval and ordered pitch-space inversion, which projects identical intervals in opposite directions.

Just as the musical observations in Chapter 1 prepare the student for the formal technology in Chapter 2, Chapter 3—on trichords and trichord classes—provides an accessible introduction to the larger set class universe explored in Chapter 4. One of Chapter 3's strongest rhetorical moves is the way the machinery of set classes, normal order, and prime form—topics which, if poorly broached, can appear to be mere exercises in theoretical esoterica—develop explicitly from a musical concern. Having introduced Schoenberg's "Nacht" along with its characteristic +3/-4 motivic segment in Chapter 2, Lambert demonstrates how reinterpreting the segment ("a meaningful musical grouping with a specific ordering" (41)) as a set ("a musically meaningful collection of notes in any possible ordering" (41)) connects the original motive to several audibly-related variants through a process of "transposition plus reordering" (42-43). From there, Lambert fleshes out the 24 members of the Nacht trichord's set class, introduces transposition and inversion in pc-space, normal form (a universal "ordering standard that will apply in any piece or context" (47)) and prime form ("one member of the set-class [designated] as its identifier and representative" (49)). The chapter concludes with a discussion of symmetrical trichords, total interval-class content (Lambert does not use the term interval vector), and a list of the 12 trichord classes.

The trichord training wheels come off in Chapter 4—the last of the essential introductory chapters—which covers normal form and prime form for larger sets, the Z-relation between tetrachords (0146) and (0137), set complementation, the Forte catalog, and subsets. Chapter 4 revisits Webern's Bagatelle extensively in order to introduce new concepts in the context of now-familiar repertoire. Despite this admirable pedagogic decision, I find that the theoretical concepts in Chapter 4 develop less naturally from some of the musical examples than in previous chapters. The most serious offenders in this regard are the examples illustrating literal and abstract complementation (Exx. 4.8 and 4.9), where the guidance concerning musical units in Webern from Chapter 1 is ignored in order to segment various aggregates.

If Chapters 1-4 establish the essential mechanics of pitch class set theory, then Chapters 5-6 introduce increasingly sophisticated methods of harmonic organization, beginning with centricity and source sets (diatonic, diatonic modes, octatonic, whole-tone, and hexatonic) and leading to interval cycles, combination cycles, intervallic wedges, and more general inversional symmetry. Lambert devotes much of Chapter 6 ("Structural Models") to various types of wedge formations. These wedge models are first grouped according to whether they have an even or odd index number, and then categorized further by their pitch class sums. Thus, a 10-wedge is a wedge model

with an even index whose corresponding pitch classes all sum to $10 \bmod 12$. In my opinion, the extended discussion of interval cycles and wedges are one of the book's best features. Analytically, these chapters execute a shift in perspective from local set classes of various cardinalities to longer-range linear analysis—a perspective that, in my experience, is often lost in the midst of students' attempts to isolate and calculate every relevant trichord and tetrachord.

Two especially interesting analyses in this regard are the cyclic analysis of the opening of Ives's "On the Antipodes" (138–141), and the wedge analysis of the end of Schoenberg's "Angst und Hoffen" (148–49). Lambert, an Ives specialist, analyses the large chords in mm. 1–3 of "On the Antipodes" as a progression of increasingly smaller interval cycles (Chord 1 is based on a 7-cycle, Chord 2 on a 7–6 cycle, Chord 3 as a 6–5 cycle, etc.). The decreasing size of the interval cycles is reflected registrally in pitch space. Beginning in measure 3, the interval cycles reverse direction, increasing in size until Chord 21 in measure 4, which is constructed from an 11-cycle.¹

Other analyses of "Angst und Hoffen" concentrate on the transformations and symmetries generated from the opening Angst und Hoffen trichords.² Lambert demonstrates, however, that the end of the song projects a 0 -wedge which collapses from C_4 and C_5 to $G\flat_4$ at the final "Angst" trichord. The brief example is especially appealing precisely because the piano part so strongly suggests a trichordal set-theoretic approach. Lambert's linear perspective serves as a healthy reminder to students that post-tonal music—like all music—responds to multiple analytical perspectives, and that questions of melodic and contrapuntal motion are just as relevant in many post-tonal idioms.

Where Chapters 5–6 are concerned with the inner forms of post-tonal works, Chapter 7, "Instrumental Forms," establishes connections between the outer forms of post-tonal compositions and their more familiar tonal precursors. This chapter is so helpful that I wonder if it might have been better placed after Chapter 1, since consideration of the large-scale form is often an accessible starting point for any unfamiliar piece. Lambert begins the chapter by establishing three formal functions: thematic, connective (including introductions, transitions, and closings), and developmental, which may involve one of three constructive techniques: repetition, variation, and contrast. Importantly, according to Lambert's framework, constructive

1 Lambert's conception of interval cycles differs somewhat from George Perle's understanding, in that Perle labels interval cycles based on interval classes whereas Lambert uses pitch-class intervals. Thus, Perle would not distinguish between a 1-cycle and an 11-cycle, but Lambert does.

2 See, for example, Lewin 2006.

techniques do not correspond 1-to-1 with the formal functions. For example, “a section with a thematic function—with stable phrasing and cadences—might repeat a section previously heard, or present a variation on earlier material, or introduce a contrasting, entirely new melody” (174). Thus, the constructive techniques are a non-exhaustive list of tools from which composers can fashion passages exhibiting one of the three formal functions.

Having introduced local formal functions and common methods of construction, Lambert provides a survey of several familiar genres and formal procedures: simple sectional forms (by which Lambert means ABA structures), sonata forms, fugue, and theme and variations. The chapter concludes with a brief mention of collage techniques, moment form as defined by Karlheinz Stockhausen, aleatoricism, indeterminacy, and open form. Particularly noteworthy is Lambert’s discussion of sonata forms after 1900. He divides such works into three categories: 1) music by composers who follow “standard practices quite closely, even while avoiding traditional principles of melodic construction and harmonic organization,” 2) “works that preserve some essential features of the traditional sonata form while radically reconceptualizing others,” and 3) “radical reconceptions,” which “challenge the definition of the form itself, raising questions about what elements are necessary in order for a sonata form to be recognized” (178).

Lambert cites the first movement of Prokofiev’s Fifth Symphony as an example of the first type. The movement projects the traditional exposition-development-recapitulation structure of a Type 3 sonata, the exposition contains two contrasting theme groups related by fifth, and the recapitulation presents those same theme groups “now mostly in the tonic key” (178). The opening movement of Bartók’s Piano Sonata exemplifies the second category. Like Prokofiev, Bartók presents a traditional exposition-development-recapitulation organization, where the material of the exposition repeats in the recapitulation. Unlike Prokofiev’s symphonic movement, however, the exposition’s two theme areas are not related by fifth. Instead, Bartók transforms the first theme group by T_5 , and the second by T_7 . “When these ideas return in the recapitulation and coda, we hear no sense of resolution of an earlier disparity, but instead a more extensive continuation of the previous transposition patterns” (178).

To illustrate the most radical type of 20th-century sonata form, category 3, Lambert chooses Act 2 scene 1 of Berg’s *Wozzeck*, which Lambert notes was “conceived [. . .] as a sonata form, including contrasting themes and developments” (178). Yet, “the sense of ‘sonata form’ survives mainly as an intriguing aspect of the composer’s

creative process, not as a perceptual reality for most listeners” (178).³

Chapter 7’s detailed discussion of instrumental forms is so helpful that one wishes there was an analogous chapter on vocal forms. While the book contains many examples of vocal music—especially songs—comparatively little attention is devoted to the relationship of music and text.⁴ Such relationships seem like an intuitive, accessible starting point for analyzing music in an unfamiliar idiom, and a chapter devoted to a comparison of late-Romantic and expressionist lied would be well-placed either before or after Chapter 7. As it stands, the instructor might consider supplementing Chapter 7 with a short unit comparing the *lieder* of Wolf and Schoenberg, for instance.

Chapter 7 is not particularly technical, and accentuates so many important connections to students’ experience of common practice musical forms that it might have been better placed after Chapter 1. After comparing and contrasting local musical units in Mozart and Webern, the move to formal functions, constructive techniques, and larger forms might provide the most logical transition to the musical spaces in Chapter 2. So too, Chapter 8 on “Modern Approaches to Meter and Rhythm” seems rather rudimentary after the technical thorniness of Chapters 3 and 4. In addition to the section on metric modulation, most of Chapter 8 is concerned with defining various basic metrical terminology such as asymmetrical meter, polyrhythm, cross-rhythm, etc. Chapter 8 might be supplemented with a discussion of beat-class sets, so that the student is able to apply some of the theoretical apparatus from earlier in the book to the domain of rhythm and meter. As it stands, the text is heavily weighted—in terms of amount of material and the theoretical sophistication of that material—towards pitch and harmonic concerns.

The final two chapters are devoted to the twelve-tone method and various twelve-tone techniques. Lambert’s organization here recalls his approach in Chapters 3 and 4, where the student was introduced to the world of set theory via trichords before exploring sets of larger cardinalities and more advanced set-theoretic techniques.⁵ Chapter 9 is concerned with the four basic row types, finding row forms, and building the 12x12 matrix. Chapter 10 concludes with more advanced applications and analysis, exploring invariance, combinatoriality, arrays, and total serialism.

The paperback text functions as both textbook and workbook, with large, easy

3 As anecdotal evidence, this listener grudgingly admits that despite his efforts Lambert’s evaluation is accurate.

4 Though there are exceptions. See, for instance, Analysis exercise H in Chapter 4, which asks students to relate the musical phrase divisions to the poem’s meaning and metrical structure.

5 Straus (2005b) follows a similar structure for the twelve-tone material in Chapters 5 and 6.

to read musical examples, a glossary, lists of important vocabulary, and blank spaces to complete technical exercises. Answers to all exercises are listed at the end of the book. The main text is accompanied by a robust set of supplementary materials including exercises for sight-singing and dictation, chapter-by-chapter PowerPoints for instructors which explain some of the text's musical examples and important key terms, additional exercises with solutions, and recordings for musical examples. Of these, the PowerPoints and extra assignments seem to be the most useful, especially for instructors teaching any of the subject matter for the first time. Writing this review in the age of COVID-19, I can attest to the utility of premade PowerPoints that track a course text. Instructors could also frame Lambert's materials with their own examples and resources. Such framing would be essential if the instructor intended to make substantial use of the sight-singing and dictation exercises which consist mainly of abstract melodic and rhythmic patterns, though some of these are keyed to particular musical examples in the text.

As the music theory community looks for ways to bolster inclusivity in the classroom and highlight previously-marginalized voices, one important component of any textbook review is a survey of the repertoire presented in the text's musical examples. Figure 1 tabulates Lambert's examples by composer and number of unique compositions as listed in the index. The diagram is incomplete in that it does not account for Lambert's aforementioned penchant of returning to the same pieces in an effort to deepen students' analytical perspective over time. For example, Webern's Six Bagatelles Op. 9, No. 1 and Schoenberg's "Nacht" from *Pierrot Lunaire* are explored extensively in the first few chapters.

Composer (Last, First)	Number of Mentions in Index of Unique Compositions (references to different movements of a multi-movement work are counted as distinct compositions)
Babbitt, Milton	1
Bach, Johann Sebastian	3
Bartók, Béla	22
Beethoven, Ludwig van	2
Berg, Alban	17
Berio, Luciano	3
Bernstein, Leonard	1
Bloch, Ernst	1
Boulez, Pierre	2
Brahms, Johannes	1
Cage, John	2
Carter, Elliott	1
Casella, Alfredo	2
Copland, Aaron	1
Cowell, Henry	1
Dallapiccola, Luigi	4
Debussy, Claude	3
Dukas, Paul	1
Ferneyhough, Bryan	1
Foss, Lukas	1
Gershwin, George	1
Ginastera, Alberto	1
Griffes, Charles T.	1
Gubaidulina, Sofia	3
Harbison, John	1
Hindemith, Paul	4
Ives, Charles	15
Kay, Ulysses	1

Figure 1.
Composers and number of unique compositions in Lambert 2019 as cited in the index.

Composer (Last, First)	Number of Mentions in Index of Unique Compositions (references to different movements of a multi-movement work are counted as distinct compositions)
Ligeti, György	4
Lutoslawski, Witold	1
Lutyens, Elizabeth	1
Mahler, Gustave	2
Messiaen, Olivier	9
Milhaud, Darius	2
Mozart, Wolfgang Amadeus	3
Pärt, Arvo	1
Persichetti, Vincent	1
Prokofiev, Sergei	3
Puccini, Giacomo	1
Ravel, Maurice	1
Riegger, Wallingford	2
Rochberg, George	1
Rzewski, Frederic	1
Satie, Erik	1
Schnittke, Alfred	2
Schoenberg, Arnold	20
Shostakovich, Dmitri	5
Smith, Hale	1
Stockhausen, Karlheinz	4
Stravinsky, Igor	16
Toch, Ernst	1
Tower, Joan	1
Webern, Anton	18
Wuorinen, Charles	1
Zimmermann, Bernd Alois	1

Figure 1 (cont'd).

Composers and number of unique compositions in Lambert 2019 as cited in the index.

From Figure 1 one sees that, while Lambert's examples exhibit a significant degree of stylistic diversity and music by American composers, the bulk of the repertoire—at least in terms of number of examples—is drawn from the music of Bartók, Berg, Ives, Schoenberg, Stravinsky, and Webern. These are the familiar figures from many post-tonal texts, and for good reason, since many of the theoretical ideas were first developed in response to the music of these composers. However, as the discipline broadens its methodological horizons, perhaps future editions of text could provide more balance in terms of repertoire.

Overall, Lambert's text provides an admirable, accessible, and musical introduction to post-tonal theory and analysis. I echo Inessa Bazayev's quote cited on the back cover where she writes, "Undergraduates are often put off by non-tonal music because of their failure to see any continuity or similarity with the music from the common-practice era. Lambert does a great job in bridging that gap" (back cover). Indeed, this book seems excellently-suited for an upper level undergraduate course or for younger graduate students attempting to bridge the gap between the musical idioms of the 18th and 19th centuries, and those of the 20th and 21st.

II

In his preface, Lambert acknowledges what he calls "six foundational studies," which establish the theoretical underpinnings of his work (x). One of these foundational studies is the fourth edition of Joseph Straus's *Introduction to Post-Tonal Theory*, first published in 1990 by Prentice-Hall. The 2016 fourth edition is published by Norton. While traditionally the preserve of graduate courses, the fourth edition is much more accessible and able to be used in advanced undergraduate courses. In what follows, I detail what I believe to be the most important changes between the third (2005) and fourth editions of the book, focusing on issues of accessibility, audience, and repertoire.

The physical appearance of the fourth edition is much more inviting. The third edition's 9x6-inch format is light and portable, but results in many musical examples that are fairly small. Example 4-13b on page 149, for instance, seems positively impressionistic in its legibility. Other examples, such as 3-23 on page 108 are less extreme but still convoluted. Norton's fourth edition, in contrast, is a 10x8-inch text with correspondingly more room for musical examples and student note-taking. If the third edition presents itself as a theoretical handbook which prioritizes brevity, the fourth edition presents itself as a true textbook in terms of physical layout,

internal format, and content.⁶ Both editions contain six chapters, but the fourth edition condenses the two twelve-tone chapters of the third edition (Chapters 5 and 6) into a single chapter (Chapter 6). Chapter 4 of the third edition is expanded into two chapters in the fourth. The expansion allows for a more thorough discussion of interval cycles and triadic post-tonality, as well as two topics new to the fourth edition drawn from Straus's research: fuzzy transposition and inversion and voice-leading in set-class space.⁷

The inclusion of these topics broadens the scope of the text considerably, and could be further supplemented by the instructor with outside resources, perhaps taken from Lambert's textbook. If "Post-Tonal Theory" in the third edition is largely a by-word for set theory and twelve-tone theory, the fourth edition presents a more well-rounded introduction to various methods of post-tonal analysis beyond prime forms and hexachordal combinatoriality.

There is some room to cavil at the margins: it is hard to call John Adams's Nixon in China post-tonal in any meaningful sense, for example. The Adams discussion, however, corresponds to one of the most interesting changes in the fourth edition. Whereas the third edition discusses triadic transformations primarily in the context of PLR cycles, the fourth edition employs a more robust—and useful—system of six triadic transformations. In addition to the traditional PLR operations, Straus includes P' (equivalent to SLIDE) which has the effect of transforming a major or minor triad to another triad of the same quality that shares the same third (e.g., $P'(F+) = F\#-$). Also included are L' and R'. L' transforms the root of a major triad to the fifth a minor triad (e.g., $L'(F+) = B\flat-$), while R' transforms the fifth of a major triad to the root of a minor triad (e.g., $R'(F+) = C-$). All three operations are reversible, like the familiar PLR transforms. In my experience, students always enjoy learning and applying a way of conceptualizing consonant triads besides the Roman numeral/figured bass approach, and the inclusion of this material has the added benefit of widening the available repertoire to include contemporary composers working in a variety of neo-tonal idioms.⁸

6 I find the decorative, nonsensical transformational graph on the cover of the fourth edition an aesthetically-pleasing bit of cover art. Furthermore, it provides a potential teaching tool later on. Having introduced node and arrow systems in Chapter 2, the instructor could use the cover art as a foil, having students articulate why, in fact, the graph's construction is faulty.

7 Straus (2003) and (2005) establish the theoretical framework for these topics.

8 In this regard, it is interesting to note just how far removed the technology of "triadic transformations" has become from its methodological origins in the work of Hauptmann, von

I have used the fourth edition to teach both undergraduate and graduate music students, and from these experiences I believe that one of the strongest features new to this addition are the many guided analyses that follow each chapter. Straus's model analyses, present in the third edition, are excellent, pedagogical demonstrations of how to go about an analysis in an unfamiliar musical idiom. But they are just that: demonstrations. In the fourth edition, each chapter is followed by several analytical assignments based on short, digestible excerpts. The assignments ask focused, leading questions that help the student apply the concepts of the chapter, but also help train students more generally to recognize the types of musical elements to focus on when conducting an analysis.

In my own classes, I often assign the guided analyses for homework. Two that my students have found particularly interesting are 1.10, on the first fourteen measures of Ursula Mamlok's *Variations for Solo Flute*, and 4.1, on the opening of Act III, Scene 5 of Thomas Adès's *The Tempest*. *The Tempest* excerpt is isorhythmic in that it presents a combination cycle and, separately, a pattern of durations. A related process occurs in a later guided analysis, of Witold Lutosławski's *Funeral Music*, first movement, mm. 1–22. Together, the two analyses provide a framework for a class discussion and homework assignment, or for small group analysis sessions. The Mamlok passage is actually twelve-tone, but that feature does not come into play in the guided questions. Instead, Straus asks the student to discover the symmetrical structure of the melody, durations, and dynamics based on leading questions about intervallic patterns. While some of my vocal students were familiar with Adès's opera, none of my class had heard the Mamlok work, and it was rewarding to watch them engage with new repertoire, and to watch their astonishment as they realized just how many musical domains Mamlok marshals in order to project the symmetry of the passage.

Despite the many positive features of the fourth edition, the text still presents some pedagogical challenges, especially if the *Introduction* of the title is taken seriously. Rather than starting with a complete piece or larger excerpt, Chapter 1 dives right in to the various equivalences necessary to construct pitch-class space. The discussion of the several types of intervals which immediately follows is especially cumbersome. The different abbreviations—pi, opi, upi, pci, opci, upci—are not particularly helpful in my experience using the text. I confess that I am also uncertain about the analytical utility of the unordered pitch interval. Does the presence or absence of the + or – really necessitate another bolded term and abbreviation? Is the distinction between

Oettingen, and Riemann. Those theorists might have been perplexed to learn that the means by which they understood tonality had been co-opted (transformed?) into labels for pitch-class voice-leading.

an unordered pitch-class interval and interval class necessary?

To my mind, a similar issue arises in the discussion of contour relations in Chapter 3. The brief overview of contour segments (CSEGs) as applied to melodic contour, dynamics, and duration provide an important tool for exploring musical domains that are often ignored in the headlong rush to calculate pc sets and row relations. However, given the number of different concepts introduced in Chapter 3, is the concept of CSEG-*classes*—a tool I admit to having never seen deployed—essential for an introductory text? These are quibbles, but given the amount of new jargon crucial to navigating the set theory universe, I look to reduce nonessential terminology whenever possible.

A more substantial issue with the interval discussion in particular and with Chapter 1 in general is that the text provides little explicit rationale for *why* a student might want to conceptualize four different types of intervals or calculate an interval-class vector in the first place. Students might be forgiven for wondering if the various tools in Chapter 1 are merely intended to relate mathematically two musical objects that seem, in the end, unrelated. The question of providing students with a rationale—something immediately musically relevant—is something I have struggled with when I teach these introductory topics in particular, and I think the fourth edition misses an opportunity here.

The fourth edition presents a marked improvement compared to the third edition in terms of the inclusivity of musical examples: examples by Ruth Crawford Seeger now outnumber examples by Alban Berg, for instance. Figure 2 diagrams the composers included in the fourth edition based on mentions in the index. For the purposes of Figure 2, references to different movements of a multi-movement work count as unique compositions. Like Lambert, there is a clear privileging of the traditional big names, but there is also a notable attempt to include both a diversity of musical styles and a number of women composers—an attempt that was noticed and positively received by a number of my students.

The fourth edition of Straus's *Introduction to Post-Tonal Theory* offers multiple, significant improvements on a well-established text that has helped to educate generations of musicians and music theorists in the standard approaches to post-tonal theory. The fourth edition will no doubt continue to play a central role in post-tonal theory education.

Composer (Last, First)	Number of Mentions in Index of Unique Compositions (references to different movements of a multi-movement work are counted as distinct compositions)
Adams, John	2
Adès, Thomas	1
Babbitt, Milton	5
Bartók, Béla	15
Berg, Alban	3
Berio, Luciano	1
Boulez, Pierre	1
Britten, Benjamin	1
Cage, John	1
Carter, Elliott	4
Cowell, Henry	1
Crawford Seeger, Ruth	6
Crumb, George	4
Dallapiccola, Luigi	2
Debussy, Claude	1
Feldman, Morton	2
Finney, Ross Lee	1
Glass, Philip	1
Gubaidulina, Sofia	1
Ives, Charles	1
Ligeti, György	2
Lutoslawski, Witold	1
Mamluk, Ursula	2
Maxwell Davies, Peter	1
Messiaen, Olivier	2
Musgrave, Thea	1

Figure 2.

Composers and number of unique compositions in Straus 2016 as cited in the index.

Composer (Last, First)	Number of Mentions in Index of Unique Compositions (references to different movements of a multi-movement work are counted as distinct compositions)
Reich, Steve	1
Rimsky-Korsakov, Nikolai	1
Ruggles, Carl	1
Saariaho, Kaija	1
Schnittke, Alfred	1
Schoenberg, Arnold	16
Sessions, Roger	1
Shostakovich, Dmitri	2
Stockhausen, Karlheinz	1
Stravinsky, Igor	23
Tower, Joan	1
Varése, Edgard	3
Webern, Anton	18
Wolpe, Stefan	1
Wuorinen, Charles	2
Zwilich, Ellen Taaffe	2

Figure 2 (cont'd).

Composers and number of unique compositions in Straus 2016 as cited in the index.

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The Musical Language of Rock

by David Temperley

New York: Oxford University Press, 2018. 292 pages + xv.

Reviewed by CHRISTINE BOONE



In *The Musical Language of Rock* (Oxford University Press, 2018), David Temperley bites off a lot, and manages to chew most of it. This book is well-organized, has a wealth of musical examples, and lets musical content guide analysis. Temperley states in the preface that he hopes to appeal to “an audience beyond professional music theorists” (xi), and maintains that any reader with some experience reading musical notation and basic music theoretical concepts could understand the book. While this may be technically true, I cannot imagine that it would keep the interest of anyone other than a music theorist or theorist-in-training. There are certainly exceptions, but I think it is fair to say that examples like Temperley’s Example 11.3 (reproduced here as Example 1), which plots the ratio of natural scale degree six to flat scale degree six for songs in the minor mode by year, would be of interest to only the most dedicated musical amateur. However, I think the book is of interest to, and will be used widely by, those of us who teach graduate and upper-level undergraduate courses on the analysis of popular music.



Example 1.

The submediant ration in minor melodies in the *Rolling Stone* corpus.

(Reproduced by permission of Oxford University Press, from Temperley 2018, 252).

The book is divided into eleven chapters, including an introduction, six chapters each on a broad range of musical facets (scales and key, harmony, rhythm and meter, melody, timbre and instrumentation, and form), one unusual chapter on emotion and tension, two chapters intended to guide the reader toward doing her own analyses on rock music, and a final chapter that attempts to place this music in a broader historical and stylistic context. Each chapter is divided into subsections, which will make note-taking and extracting key points easier for students. The text is also filled with examples. Some are statistical, like the one shown above, but many are musical examples designed to illustrate a specific point about a song's construction. See, for instance, Example 2, showing raised scale degree 5 and raised scale degree six in Prince's "Little Red Corvette." Temperley uses both Roman numerals and lead sheet chord labels for all harmonies, ensuring that musicians from a variety of backgrounds can read them, but also perhaps making it easier to perform these examples in the classroom. The companion website features all of the musical examples in audio format, performed by the original artists. Even today, when you can easily find all of these tracks on YouTube or other streaming services, it is nice to have them collated in a single location, and cued up to the timing of each example. In addition to references, Temperley also helpfully provides an index of subjects and authors, as well as an index of musical artists and songs.

Prince, "Little Red Corvette"

I guess I should've known by the way you parked your car side-ways that it would-n't last

Example 2.

Raised $\hat{5}$ and raised $\hat{6}$ in "Little Red Corvette."

(Reproduced by permission of Oxford University Press, from Temperley 2018, 26).

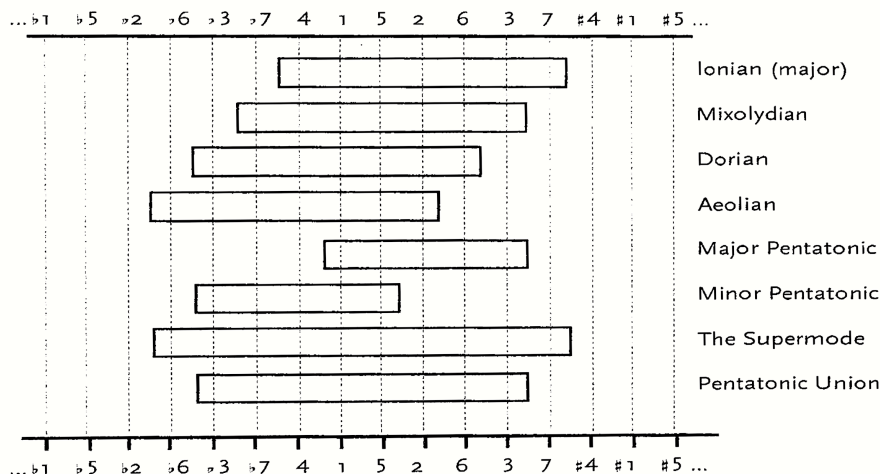
Questions at the end of each chapter, including the introduction, are intended for either classroom discussion or homework. Within each chapter, they go from more specific and factual to more open-ended and analytical. For example, the first question at the end of Chapter 3 asks the reader to analyze harmonic progressions and identify linear patterns, while the last question asks them to comment on the concept of dominant function with the absence of a leading tone. When I use this book with a seminar class, I can already tell that these questions are going to come in quite handy. They are the kind of questions that we, as instructors, could come up with on our own, but will doubtless prove to be a time-saving device.

Temperley explains his methodology in Chapter 1 (“Introduction”). His goal in *The Musical Language of Rock* is to focus on the “purely musical” dimensions of rock music, although he acknowledges that rock songs have both lyrics and a socio-historical context. I would argue that none of these aspects are quite so easily separable, but he doubles down on his commitment to the purely musical: “I believe that, ultimately, the explanation for the enjoyment of rock lies largely in its purely musical aspects. It is here, I submit, that we will find answers to the really big questions: why some songs are pleasing and effective while others are not, and why the rock style ‘works’ as a whole and is capable of yielding so much pleasure and satisfaction” (11-12). This separation of music and context is what allows Temperley to pack so much material into a single book, but in my opinion, considering only “purely musical” factors can never create a complete analysis. (To be fair, his sample analyses at the end of the book do include these extramusical facets.) Temperley uses both traditional methods of music theory, in addition to statistical analysis gathered from a corpus study that he undertook with Trevor de Clercq in 2011. The corpus includes the top twenty songs from each decade of *Rolling Stone’s* “500 Greatest Songs of All Time” (“all time” meaning 1954-1999, in this case). To Temperley’s credit, he is well aware of the limitations of the methodology and of the collection of songs included in the corpus study. Also in this introduction, he defines what he means by “rock”: songs with a relatively common musical language, from the second half of the twentieth century. Refreshingly, he addresses the potential controversies around using concepts borrowed from common-practice music, divorcing music from its socio-historical context, and some potentially subjective moments in analysis in a straightforward manner, making it clear that his analyses are focused on description, not prescription, and on appreciating the special moments of rock music in the context of stylistic norms.

Chapters 2–8: Musical Characteristics of Rock

Chapter 2, “Scales and Key,” is perhaps the most useful and novel contribution in the entire book. Temperley begins with a brief survey of the existing literature on scale collections in rock (e.g., Biamonte 2010, Moore 1992 and 2001, and Everett 2010), and then presents his own theory, which is summarized in a diagram that he calls the “line of fifths,” shown in Example 3. The line of fifths is essentially a line of scale degrees that ascend by fifth from left to right—an unrolled circle of fifths, but with scale degrees instead of keys. He presents the circle in a linear fashion, likely because we are used to seeing scales in this way. The circle of fifths implies that

sharps and flats are enharmonic, as we see at the bottom when C-sharp and D-flat major are shown in the same location; the line of fifths does not do this— $\sharp 5$ is not the same as $\flat 6$. All of the pitch collections that Temperley (and others) find in rock music can be laid out on this diagram in a compact manner; i.e., there are no gaps between fifth-related pitches in these scalar collections. As the book progresses, Temperley references this line and comments on certain pitch collections being more toward the sharp side or the flat side of the line. Interestingly, he reports that based on data from the *Rolling Stone* corpus, there does not tend to be a clear-cut division between songs in major and songs in minor; rather, there is more of a continuum between these two poles. There is a lot of detail in this chapter, and some of the statistical examples are difficult to interpret, but the overall conclusion seems to be that “scale structures in rock are highly complex [compared to those in classical music] and cannot be reduced to two or even a few simple categories” (33). Certainly, the line of fifths does a great job of combining scales used in rock music into a single, unified theory.



Scales represented on the line of fifths

Example 3.

Scales represented on Temperley's "line of fifths."

(Reproduced by permission of Oxford University Press from Temperley 2018, 23).

Chapter 3, "Harmony," begins by consulting the *Rolling Stone* corpus to reveal that rock music is constructed mainly with triads, major being more common than minor; and that augmented and diminished triads are rare. Additionally, most chords are in root position, seventh chords sometimes occur and are usually dominant in

quality, and there are sometimes open fifths (“power chords”). Temperley arranges the triads found in the corpus on a frequency table (44). The table might be difficult for students to read, as it uses proportions, but it reveals that I, IV, and V are the most commonly-used chords in rock music. He then uses the line of fifths again, to show us that not only are I, IV, and V adjacent on it, but if we expand our view and look at the twelve most commonly-used harmonies in rock music and the pitches they are constructed from, they too are adjacent on the line of fifths. Temperley calls this collection of chords the “supermode.” Regarding harmonic progression, he again turns to statistical analysis and maps how often each chord goes to each of the other chords in the corpus. The result is a complicated, but very revealing, table (47). The table shows that harmonic motion in rock is quite different from that in classical music, demonstrating symmetrical, rather than progressive, movement between chords (for example, in rock music V moves to IV just as often as IV moves to V). The chapter also offers detailed information about common harmonic schemata, linear motions that result in harmonies, and cadences.

Chapter 4, “Rhythm and Meter,” uses Lerdahl and Jackendoff’s metrical hierarchy grids¹ to illustrate meter and hypermeter in rock. Using this analytical model reveals that rock music does not behave like the common practice music the model was designed for: Temperley’s overall conclusion is that metrical ambiguity is fairly rare in rock. He devotes the majority of the chapter to syncopation and cross-rhythm, the most common of which is the “anticipatory syncopation.” This is shown clearly with corpus data, where he plots phenomenal accents that occur on each eighth note of a 4/4 meter. He theorizes that, unlike with classical music, listeners do not hear these anticipatory syncopations as destabilizing the underlying meter. Two sections from Michael Jackson’s “Billie Jean” are transcribed in his Example 4.6, along with recomposed “de-syncopated” versions (74). Temperley provides the recomposed examples to suggest that perhaps listeners are “unconsciously inferring something like” this, where the stressed syllables come directly on the strong beats, rather than immediately before them (75). I am wary of recomposed examples, and I cannot say that I agree with Temperley here, although I do agree with the first part of his sentence: “I would suggest that we hear the metrically weak stressed syllables in ‘Billie Jean’ as ‘belonging’ on the following strong beats—perhaps unconsciously inferring something like the ‘de-syncopated’ rhythm shown on the second staff; in this way, the syncopated events are understood as being quite compatible with the underlying meter” (75). We somehow understand that the stressed syllables “belong” on the following strong

1 Lerdahl and Jackendoff (1983, 12–25).

beats, but I am not sure that we (even unconsciously) infer the recomposed, squarer version of the rhythm.

Chapter 5, “Melody,” uses Lerdahl and Jackendoff’s hierarchical grouping,² but initially only on a small scale, as large-scale grouping falls under form. As in the classical music that the theory was designed to treat, melodic groups do not necessarily correspond neatly with hypermetrical groups. Temperley makes a useful distinction between beginning- and end-accented motives, and identifies common melodic/rhyme structures in rock. He succinctly explains the concept of the melodic-harmonic divorce³ and gives several examples before delving into mediant mixture. $\hat{3}$ and $\flat\hat{3}$ are often used in the same song—either both in the melody, or in the melody and harmony at the same time. The most interesting example is a cross-relation in “Birthday” by the Beatles: $\hat{3}$ and $\flat\hat{3}$ are heard in different voices, and Temperley analyzes this as the simultaneous use of two different pentatonic scales. This chapter seems slightly less well-organized than the previous ones, and seems to devote a lot of space to concepts that do not apply to a large group of songs, or revealed that there was not a consistent melodic pattern in rock. For instance, after spending a significant amount of time talking about “blue notes” and searching for them, it is revealed that true blue notes in rock are, in fact, fairly rare.

Chapter 6, “Timbre and Instrumentation,” paints with very broad strokes. Temperley acknowledges at the beginning of the chapter that timbre can be difficult to discuss, and that instrumentation is a quite complicated topic, but then proceeds to give a lot of information very quickly, and without a lot of detail: a basic introduction to acoustics and overtones, a comparison of isolated snare drum sounds described with different adjectives, and a quick touch on the ecological theory of perception.⁴ Regarding instrumentation, Temperley goes through the most typical rock instruments (guitar, voice, drums, bass, and keyboard) and briefly describes the most common ways that they are employed in rock songs; for example, the bass line (usually played by a bass guitar) typically plays the roots of chords, and many rhythmic patterns can be used, either supporting or complementing other rhythmic patterns in the texture. The most useful information in this chapter is perhaps the introduction to drum notation (123–25). While this is something that percussionists are already familiar with, other students will find it a helpful primer. One of the questions at the end of

2 Ibid., 36–40.

3 Moore (1995).

4 See, for example, Gibson (1966) and Clarke (2005).

the chapter instructs students to “do a timbral analysis” of a song of their choosing; it is not clear what exactly this would look like, however. The main takeaway regarding timbre is that because of electronics and studio wizardry, rock music offers almost unlimited timbral possibilities.

Chapter 7, “Emotion and Tension,” is the strangest and shortest chapter in the book. In the introduction, Temperley makes a specific point to say that this book is concerned with the “purely musical,” which he can account for as measurable data. This does not seem to allow room for emotional content. The inclusion of this chapter, given this declaration, is surprising. He uses the “circumplex model” of affect, a two-dimensional map that comes from the field of psychology,⁵ to map the energy and valence (positivity/negativity) of songs on two axes. Locating songs on this conceptual map, however, especially with regard to emotional valence, seems to me an incredibly subjective task that would be difficult to theorize in this way. Temperley’s hypothesis is that songs whose pitch collections are farther toward the flat side of the line of fifths are more negative in valence, while those that lean toward the sharp side are more positive. His first example compares “She Loves You” by the Beatles to “Satisfaction” by the Rolling Stones. He claims that the purely musical content (not including lyrics) of “She Loves You” is “thoroughly positive, while ‘Satisfaction’ projects a darker feeling” (139); this is allegedly because of their location on the line of fifths. But it is not clear to me that “She Loves You” is more musically positive than “Satisfaction.” Positive valence is not a measurable quality in the same way that pitch content is. It seems that emotion in music proves to be so important that it is impossible to ignore, even by someone beholden to quantization. I will say that Temperley does a good job describing the facets that can lead to the perception of higher and lower energy in a song; for instance, he finds that virtually the only difference between “hard rock” and “soft rock” is energy level. That is, even with the same instrumentation as a soft rock song, hard rock “tends to be louder, higher in [vocal] melodic register. . . faster in tempo, and brighter in timbre,” all characteristics that contribute to a rise in energy level, and therefore, a different genre of rock (141).

Chapter 8, “Form,” returns to the purely musical. Temperley offers a historical look at form in rock, discusses melodic structure and form of songs that use the 12-bar blues pattern, and then examines the musical features (based on de Clercq 2012) that allow listeners to distinguish between formal sections of rock songs. Temperley notes that after a few seconds of listening to an unfamiliar rock song, we can usually tell whether we are listening to a verse or a chorus; this chapter does an excellent job

5 See Russell (1980).

of distilling exactly what musical cues provide this information. He notes that there are exceptions, especially songs that have ambiguous choruses. I have a single bone to pick, and that is with his analysis of Green Day's "Longview," where he reads the chorus of the song as a pre-chorus (169). Temperley is trying to show that calling a section a prechorus requires a certain degree of "completeness" closing off the section immediately before it. He convinces me that a section I might have called a prechorus in Madonna's "Like a Virgin" is, in fact, an extension of the verse that precedes it. The verse in "Longview" is, indeed, more complete, but the separate section that follows it ("Bite my lips and lose my eyes/take me away to paradise") has all the characteristics of a chorus. Despite that misreading, this chapter does a particularly good job of synthesizing the work of other theorists around form in popular music, which makes it a potentially efficient resource for busy seminar students.

Chapters 9–10: Analysis of Rock

Chapter 9, "Strategies" gives examples of certain structural patterns in rock music that involve multiple musical factors. For example, nearly every rock song begins with two iterations of a "verse chorus unit," but what happens after those iterations can be different. Temperley also uses this chapter to discuss patterns of tension and shape over the course of entire songs. "Tensional curves" show changes of tension and density in a song, and there are a few types of curves common to rock. He finds that energy often increases throughout songs, which intersects nicely with Brad Osborn's terminally-climactic form (Osborn 2013). Scalar and tonal shifts (modulation) are also discussed in this chapter. Temperley returns to the idea of pitch collection reflecting emotional valence here, but it is more convincing in this context than it was in Chapter 7. Shifts toward a "sharper" pitch collection "tend to have more positive implications" (208). I find this claim to hold more water here for two reasons: first, listeners are comparing two sets of pitch collections in the same song, and listening to the progression from one to the other; and second, Temperley talks about lyrics for the first time in this chapter, using them to reinforce analytical conclusions about emotional valence. For example, in Bon Jovi's "Livin' on a Prayer," "the E Aeolian verse details the struggles of blue-collar life. . . while the G Ionian chorus reflects hope for a better future."

In Chapter 10, "Analyses," Temperley analyzes six songs, in an attempt to synthesize information from earlier chapters to show what is normative and what is unusual in each song. Each analysis does this effectively, and he allows the songs themselves to shape the analysis. Rather than trying to fit them into preconceived

molds, he takes each song as it is, explains its salient features, and admits when he is not sure what to make of something (like the lyrics of “Philadelphia Freedom” by Elton John). The questions at the end of the chapter present six more songs for analysis, guiding students toward particular musical features to focus on.

Chapter 11 and Final Thoughts

Temperley begins Chapter 11, “Rock in Broader Context,” by comparing the musical features of rock music to those of its immediate predecessors (common practice, Tin Pan Alley, the blues, classic jazz, and gospel). It is revealed that rock music was not a result of a single one of these styles evolving, but rather, shares certain features with each of these other genres. He then discusses historical changes in rock, including two major slowings of tempo, increased complexity of harmony, a change from swung to straight eighth notes, a move from $\hat{6}$ to $\flat\hat{6}$ in minor melodies, and an explosion of styles of rock in the 1960s. A few genres within rock are also categorized by their different features, but Temperley is sure to point out the musical characteristics that pervade all of these subcategories, making them all fit under the umbrella of “rock.” He also mentions other popular genres that are not considered rock, the most interesting of which is country music, which has always existed alongside (and sometimes overlapping with) rock. Temperley observes that most of the defining musical features of country music are similar to those of rock: “So why do I not consider country part of rock music? My answer is simple and unsatisfying: because nobody else does” (256). He is correct: genre is largely based on social use, not musical content. He then quickly discusses changes that have occurred in rock music since the year 2000 (where the *Rolling Stone* corpus data ends) using a much smaller set of songs. There are some differences (e.g., the fadeout has become less popular), but for the most part, post-2000 rock seems to be quite similar to that of earlier decades.

Temperley concludes by saying that rock has been such a lasting and popular genre because its musical features lend themselves to great expressivity. “[M]uch of the greatness in individual rock songs,” he says, “lies not in the revolutionary smashing of rules or pushing of frontiers, but in the subtle, incremental, skillful manipulation of conventions” (264).

This is a valuable book for use in a graduate or upper-level undergraduate seminar on rock or other popular musics. It does a thorough job of compiling and summarizing the existing literature on popular and rock music, laying out the standard musical features of the genre, and although it overuses analytical concepts in earlier chapters to

make rhetorical points, Temperley uses the later chapters to demonstrate his sensitive musical ear, and that good musical analysis is not a one-size-fits-all procedure. Notably, this book could also be useful in the undergraduate core curriculum. An instructor could include examples from Chapter 2 (Scale and Key), for instance while covering the diatonic modes. She could use some of the questions at the end of the chapter as fodder for in-class discussion and activities, or even as homework assignments. I can easily imagine my classroom of undergraduate ear training students doing an aural analysis of “Evil Ways” by Santana, and trying to determine its tonic and mode. Chapters 3 (Harmony), 4 (Rhythm and Meter), 5 (Melody), and 8 (Form) could all work well as supplemental resources for the undergraduate core music theory and aural skills classes.

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Tonal Analysis: A Schenkerian Perspective

by David Damschroder.

New York: W.W. Norton, 2018. 274 pages + xi.

Graphic Music Analysis: An Introduction to Schenkerian Theory and Practice

by Eric Wen.

Lanham, MD: Rowman and Littlefield, 2020. 369 pages + xiv.

Reviewed by JOHN S. REEF



The question of what qualities make for an estimable textbook certainly admits of more than one answer. Whereas pedagogical utility—as evinced in clear language, deliberate pacing, and accessible presentation—is of obvious importance, a different, less determinate value inheres in a textbook’s potential to remain useful beyond its immediate pedagogical application—as a source that students can continue to refer to and learn from, even when they are no longer “students” in the traditional sense. A pair of recent textbooks on Schenkerian analysis make plain this distinction. David Damschroder’s *Tonal Analysis: A Schenkerian Perspective*—fairly concise, systematic, and easy to understand—may prove to be one of today’s most user-friendly options; less wieldy and more abstruse, Eric Wen’s *Graphic Music Analysis: An Introduction to Schenkerian Theory and Practice* offers a level of depth unusual for an introductory textbook and presents analyses that will be stimulating to anyone involved in Schenkerian studies. Recognizing that the two texts shine in such different ways (a situation not wholly disconnected from their intended uses), I decline to recommend one over the other, preferring simply to develop their distinct “characters” along the lines of the considerations stated above: after overviewing their contents and discussing their strengths—as I see them—and occasional shortcomings, I will detail a couple of opportunities that they offer for comparative study alongside analyses by other theorists.

I would like to acknowledge Levi Walls, the editor of the *Journal of Schenkerian Studies*, for the original solicitation of this review.

Scope and Style

Both texts are aimed at advanced undergraduates and graduate students, but *Graphic Music Analysis* (hereinafter, *GMA*) is meant for a two-semester sequence, whereas *Tonal Analysis* (*TA*) is intended for a single semester's use. Wen means for his text to be unusually comprehensive (xii); Damschroder sees his as a bridge between core theory studies and a more advanced Schenkerian program (viii). Different purposes are reflected not only in the texts' respective lengths, but also in their scope and depth, with *GMA* covering more material, generally in more detail.

Nevertheless, the two textbooks order their contents similarly. *GMA*'s twenty-seven chapters fall into four larger sections: "Graphic Music Analysis," "*Semper idem, sed non eodem modo*," "Techniques of Elaborating the *Ursatz*," and "Tonal Structure and Musical Form." The twelve chapters (numbered 0–11) of *TA* are not sectionalized but exhibit a similar topical progression. The first section of *GMA* consists of six chapters that (1) acquaint students with some basic graphical techniques (slurs to connect notes on a graph; stems of various lengths to reflect tones' significance); (2) account for various embellishing tones and their relationships to strict counterpoint (with an engaging demonstration of how themes from the first movement of Beethoven's Sonata Op. 26 and Schubert's Impromptu D. 935, No. 2, both in A $\flat$ major, elaborate the same underlying structure); introduce (3) linear progressions (standing alone and in combination), (4) 5–6 voice leading, and (5) structural levels; and (6) draw these preliminaries together in an analysis of the Introduction to Mozart's "Dissonance" Quartet, K. 465.

These early chapters, like the rest of *GMA*, consist primarily of analytical demonstrations with commentary—sometimes lengthy, often dense. In a style of illustration characteristic of his work in general, Wen typically lines up numerous small graphs adjacent to one another to show the gradual elaboration of a simpler configuration into an excerpt's foreground harmony and voice leading. In Example 1, for instance, Wen traces the development of a basic IV–V progression, beneath $\hat{6}$ – $\hat{5}$, into a distinct half-cadential gesture from Mozart's *Requiem*, K. 626. He explicates the example's levels (except for the first two, which perhaps he regards as self-explanatory) with alacrity:

Example [1] shows the elaboration of . . . IV, which ultimately leads to the V that ends the phrase in bar 6. As shown in level **c**, through the addition of a seventh and the chromatic inflection of B $\flat$ 3 to C4 in the bass, IV is transformed into a $\sharp$ IV⁷ before the half-cadence on V. Level **d** shows a redistribution of the upper voices above the $\sharp$ IV⁷, and the resultant danger of parallel fifths in the direct motion to V. In order to avoid

these fifths, level e shows how the D4 in the tenor voice of the $\sharp IV^7$ leaps down a fifth to G3 in the V chord. In level f, the skip down a fourth from D5 to A4 above the chordal succession from IV to $\sharp IV^7$ is filled in with parallel thirds in the upper two voices. Level g incorporates the bass that appears in the actual music. The new bass-line support of the descending thirds temporarily alters the IV chord into a II harmony before the appearance of the $\sharp IV^7$ that leads to V. (66–67)

(The placement of subsidiary Roman numerals between staves in the final level of Example 1 is standard in *GMA*.) Wen gives enough information here to navigate from level to level, but commentary like this really demands not to be simply read but to be “worked through” at the piano, to ensure that level-to-level developments are heard, felt, and understood; for instance, playing through levels e and f consecutively can reinforce, kinesthetically, a student’s visualization of contrapuntal thirds overlaid on a chordal framework. Proficiency with tenor clef is assumed. Clearly, even in its earliest chapters *GMA* demands a lot from students, and the intensity of Wen’s analyses may overwhelm some of them. Painstaking unpacking of these analyses by instructors will be essential. But the rigor of Wen’s demonstrations is remarkable, and students will benefit by returning to already-read sections of *GMA* after some time has passed, and periodically.

Example 1 consists of seven levels (a-g) of musical notation, each showing a different stage of the elaboration of a basic IV-V progression. The notation is in F major, with a tenor clef for the bass staff. Level a shows F: IV V. Level b shows F: IV^{8 7} V. Level c shows F: IV $\sharp IV^7$ V. Level d shows F: IV $\sharp IV^7$ V. Level e shows F: IV $\sharp IV^7$ V. Level f shows F: IV $\sharp IV^7$ V. Level g shows F: IV $\sharp IV^7$ V, with a new bass line that temporarily alters the IV chord into a II harmony before the appearance of the $\sharp IV^7$ that leads to V.

Example 1.

Successive small graphs, characteristic of *GMA*’s presentation, showing the elaboration of a basic IV–V progression into a distinct half-cadential gesture in Mozart, *Requiem*, K. 626, “Recordare,” mm. 6–7 (based on *GMA*, Example 4.37).

Chapter o of *TA*, “On Species Counterpoint, Figured Bass, and Harmony,” covers similar ground to *GMA*’s first section, albeit in much briefer fashion, by way of four short analyses with commentary that focuses on “Embellishment/Connection”

(preliminary matters concerning prolongation and the relationships between harmony and counterpoint), “5–6 Shift,” and “Evolution.” The latter term, also rendered as “chordal evolution,” encompasses various processes by which “chromatic adjustment(s) and added dissonance(s)” (5) energize an initially stable harmony; by one such process, which Damschroder calls “surge,” a stable harmony acquires the tendencies of a subsequent harmony’s dominant—such as a tonic C minor becoming C⁷ on the way to IV. Damschroder acknowledges that “chordal evolution” and “surge” are terminological extensions of standard Schenkerian practice (viii), but he does not intend with them to depart from the spirit of Schenkerian orthodoxy.

The second, shortest, section of *GMA* consists of three chapters that (7) define the *Ursatz* and (8–9) demonstrate (transferred) *Urfinie* descents from $\hat{3}$ and from $\hat{5}$, generally within single phrases; possibilities for both one and two bass arpeggiations beneath $\hat{5}$ -lines are illustrated. Chapters 1–5 of *TA* roughly correspond but cover some topics that *GMA* defers until later: (1) $\hat{3}$ -lines (at phrase or subphrase levels); (2) incomplete upper neighbors to $\hat{3}$; (3) $\hat{5}$ -lines; (4) *Urfinie* descents to $\hat{2}$ or $\hat{3}$ (resulting in half or imperfect authentic cadences); and (5) interruption (mostly in the context of periods but with a glance at larger forms).

A systematic, “schematic” approach, which gains in importance throughout *TA*, emerges from its first chapters. Damschroder methodically models the types of structures that students should expect to find in the music they analyze, so that (at least up to a point) their analytical options are specified, and circumscribed, as they develop their skills. Example 2a gives Damschroder’s three models for an incomplete upper neighbor to *Kopft*on $\hat{3}$, which appear at the beginning of Chapter 2. The author explains them clearly and succinctly:

Model 1 in [Example 2a] shows the most basic formulation for an incomplete neighbor (IN) embellishing $\hat{3}$ – $\hat{2}$ – $\hat{1}$. Though the overall melodic contour is downward, an upward step precedes the descent to $\hat{2}$. A more flowing melody results when the descending third from the incomplete neighbor is filled in by a passing note, as shown in Model 2. Finally, the passing note may be postponed until the moment when the dominant root arrives on the following downbeat, converting it into an accented passing note (AP), as in Model 3. (38)

After introducing these models, Damschroder turns to the passage in Example 2b, from the third movement of Beethoven’s A $\flat$ -major Sonata Op. 110, which reveals (among other noted details) a complex but not incomprehensible elaboration of Model 3. (The annotated score does not appear in *TA*; a separate graph [*TA*, Example 2.4, not reproduced here] appears instead.) As he discusses this passage, he reinforces and reviews material from *TA*’s previous two chapters, explains the tonic prolongation

across mm. 21–22 with reference to additional models, and relates the evolution of the excerpt's initial I into a dominant-seventh harmony (m. 22, beat 4) to earlier examples. A manifestly systematic approach may risk oversimplification and theoretical misordering (e.g., a chapter on incomplete neighbors to $\hat{3}$ preceding a chapter on $\hat{5}$ -lines), yet it seems an effective way to lead beginners to good results, and Damschroder is careful to balance his references to models with piece-specific considerations.

The third section of *GMA* comprehensively lays out techniques of *Ursatz* elaboration, with chapters covering (10) substitution (e.g., $\hat{6}$ in place of $\hat{4}$, VI supporting $\hat{3}$ in place of I), (11) delaying a *Kopfton* (through an initial ascent, an initial arpeggiation, or even a $\hat{5}$ - $\hat{4}$ - $\hat{3}$ descent); (12) boundary play and obligatory register; (13) sequences; (14) nonstructural harmonies (to give consonant support to passing sevenths); (15) implied tones; (16) mixture; (17) relocating *Urlinie* degrees to an inner voice or to the bass; (18) Phrygian $\hat{2}$; (19) auxiliary cadences; and (20) nontonic expansions. Most of the examples in this section are of small formal units (e.g., phrases) and do not involve interruption, a topic not engaged until Section 4. Wen's conception of auxiliary cadences may be broader than some theorists', equally embracing configurations prolonging their first chord and configurations prolonging their last. Example 3 (one from a series of small graphs laid out like Example 1, from the fourth section of the text) illustrates. A six-measure phrase from Mendelssohn's *Song without Words* in D Major Op. 85, No. 4, is shown to modulate from tonic to dominant by I-II $\sharp$ -V, or IV-V-I in the dominant key; inside this phrase an F $\sharp$ -minor harmony is tonicized by the subordinate progression F $\sharp$ m: IV-II $\flat_5$ -V[$\sharp$]-I. Wen identifies both of these progressions as auxiliary cadences (301), but some theorists might accept only the final-harmony-prolonging latter one.¹

1 Compare Burstein (2005), in which the modulation from D major to A major in Example 3 (I-II $\sharp$ -V, prolonging a middleground I) would probably not count as an auxiliary cadence.

a. Three models in 7A (Based on 7A, Example 2.1).

Model 1

3̂ IN 2̂ 1̂

G Major: I II V I

or IV

Model 2

3̂ IN P 2̂ 1̂

Model 3

3̂ IN AP 2̂ 1̂

b. Beethoven, Piano Sonata No. 31 in A♭ Major, Op. 110, III, mm. 21–26.

21

Ab Major: I:

23

IV V I

dim. pp

Red. *

Example 2.
Incomplete upper neighbors to *Kopft* 3̂.

D: I II# V
A: IV V I

Example 3.

Wen's reading of Mendelssohn, *Song without Words* in D Major Op. 85, No. 4, mm. 6–11 (based on *GMA*, Example 25.21f), showing superordinate (DM: I–II#–V / AM: IV–V–I) and subordinate (F#m: IV–II#–V[II#]–I) auxiliary cadences. (D-major Roman numerals do not appear in Wen's original example. "CS" indicates a chord that provides "consonant support" for C#5 within the inner-voice passing motion D5–C#5–B4.)

Chapters 6–9 of *TA* also focus on aspects of elaboration, covering, in turn, (6) registral shifts (octave displacements of *Urlinie* degrees); (7) initial ascents and reaching-over; (8) chromaticism (involving mixture; $\flat$ II; and upper-third chords, such as subtonic VII as upper third of V); and (9) "Parallel, Circular, and Sequential Progressions." The three categories named in the last of these chapters intersect with conventional understandings of "sequences," respectively encompassing $\frac{6}{3}$ chords in parallel motion, chords with root motion by descending fifth/ascending fourth or ascending fifth/descending fourth (whether or not melodic/motivic sequencing is present), and ascending or descending 5–6 progressions. A broader formal purview is evident in these chapters than in the third section of *GMA*: examples range from single-phrase themes to short compositions.

Each text deals last with form. The seven chapters in the final section of *GMA* focus on (21) parallel periods (including IAC–PAC, HC–PAC, and models with $\hat{5}$ retained across the antecedent); (22) "variant" forms of parallel periods; (23) three-part ABA forms (in which the first section closes on tonic); (24) ABA' forms (in which the first section closes off tonic; many of these are treated as parallel periods whose phrases are separated by intervening material); (25) compound ABA' forms (with modulating periods for A sections); (26) sonata form in major keys; and (27) sonata form in minor keys. Interruption is introduced in connection with parallel periods. The last two chapters mostly focus on primary themes and transitions in sonata expositions, but each concludes with a detailed analysis of an entire movement: the second

movement of Mozart's "Jupiter" Symphony, K. 551, as a major-key example, and the first movement of Beethoven's "Appassionata" Sonata, Op. 57, in minor.

TA's final two chapters address three-part forms with A_1 (as Damschroder labels the first section) cadencing either (10) on or (11) off tonic. (Periods are treated earlier, in Chapter 5.) Following the approach of earlier chapters (see Example 2), these two model a number of tonal structures that students might find in three-part forms. Examples 4a and 4b reproduce some $\hat{5}$ -line options for movements with modulating A_1 sections, which, although not the only possibilities (as Damschroder acknowledges), make a good starting point for students' explorations of formally related pieces (see the Schubert Ländler discussion below).

- a. Major-key models with modulations to V, with and without interruption
(based on TA, Example 11.4).

Model 1

C Major: I — V — I —
A₁ B A₂

Model 2

C Major: I — IV⁸⁻⁷ — V⁷ — I —
(=I V⁸ — 7 — 4 — 3 — I)
A₁ B A₂

- b. Minor-key models, with modulations to III and (minor) V
(based on TA, Example 11.5).

Model 1

C Minor: I — III — V⁷ — I —
(=I IV V⁶ — 4 — I)
A₁ B A₂

Model 2

C Minor: I — III — V^b — I —
(=I IV V⁶ — 4 — I)
A₁ B A₂

Example 4.

TA's $\hat{5}$ -line models for three-part forms with modulating A_1 sections.

Instructors using either textbook should give some thought to how its formal categories diverge from what is familiar to their students and take steps to obviate confusion when necessary. Both authors avoid the term “rounded binary” (*TA*, 191; *GMA*, 290n2): their chapters on three-part forms contain examples that would likely be identified as rounded binary within core curricula as well as examples that would qualify as ternary. And *GMA*’s “period” category includes certain eight-measure units that others might regard as a sentence’s basic idea and its repetition (241).

TA is the more self-contained of the two textbooks. Its pages reproduce all necessary score excerpts, so that students will not need to look elsewhere; each chapter includes a couple of practice exercises (paired to solutions at the end of the book) as well as several scores for students to analyze as assignments (with hints to get them started); a few graphs from *Der freie Satz*, along with Damschroder’s explications, appear at the end of each chapter, facilitating the incorporation of Heinrich Schenker’s own analyses into a course; and at the back of *TA* is a sheet of Schenker-friendly staff paper—one side portrait and one side landscape—that students can slice out and photocopy. Online supplementary content includes recordings of examples (performed by Eastman’s students and faculty) and an Instructor’s Manual PDF, which offers suggestions for syllabus design and gives—instead of Damschroder’s solutions—samples of students’ solutions to analysis assignments, some more correct than others, with the author’s commentary (a feature that may help to reassure instructors that the assignments are manageable.)

The pages of *GMA*, in contrast, contain only instructional text and analytical demonstrations. To follow the analyses, reference to separate scores is necessary: most are available as PDFs on the publisher’s website. The website also provides links to recordings on YouTube and analysis assignments, in PDF format, to accompany twenty-one of the textbook’s chapters. Most of these assignments present students with graph “templates”—staves with uninterpreted noteheads—on which they must add stems and slurs, and annotate as directed. A separate set of PDFs for instructors offers additional guidance for these assignments, and solutions.

Schenker’s twelve-strong coterie furnishes each text’s core repertoire, with *GMA* omitting Scarlatti, Handel, and C. P. E. Bach, and *TA* omitting only Brahms. Nevertheless, each text does look beyond this small canonical group—*GMA* more so, with examples by Saint-Saëns, Tchaikovsky, Korngold, and Kreisler. Whereas *TA*’s examples mostly comprise piano music, art songs, and chamber music, *GMA* is generically (and texturally) more wide-ranging: students must regularly work from orchestral scores and meet all of their additional challenges (such as transposing notation).

Assets And Shortcomings

At the outset of this review I remarked on the clarity and accessibility of *TA*. A large part of what accounts for those qualities is the consistency with which *TA* lays out its simple models (as in Examples 2 and 4) and guides students in negotiating between them and actual musical objects. Instructors should have no trouble finding additional examples to align with the textbook's plan, either as further confirmation of its models' ubiquity in tonal music or as demonstration of more substantial model transformations. *TA* culminates in an analysis of Schubert's unusual Ländler in B Minor D. 790 (225–28) that involves a fair amount of abstraction from the surface of the music but should be clear to students in light of the text's careful foundation-building. Example 5a gives the score of this three-part-form dance, in which A₁ establishes $\hat{5}$ as a likely *Kopft*on and modulates from (minor) I to (major) III, B prolongs V within the first branch of an interrupted structure, and A₂ realizes the second branch (in the parallel major). With these tonal dimensions, the piece might be conceived structurally along the lines of Model 1 in Example 4b—that model, at least, can serve as a guide. But between $\hat{5}$, at the beginning of the piece, and $\hat{3}$, over III in m. 7, the *Urlinie* is unclear: there is no upper-voice articulation of $\hat{4}$. To solve this problem, Damschroder invites students to imagine some hypothetical connections: a passing motion from an incomplete neighbor ($\hat{6}$) in m. 5 to $\hat{4}$ on the downbeat of m. 6 (see my annotations above the score); or a similar passing motion entirely in m. 6, set either as three quarter notes or as half–eighth–eighth.² Some students will recognize that, because $\hat{5}-\hat{4}-\hat{3}$ is $\hat{3}-\hat{2}-\hat{1}$ in the mediant key, these hypotheses resemble (with some degree of transformation) the models in Example 2: Damschroder does not make this resemblance explicit, but even so, students will probably find the hypotheses entirely natural. According to Damschroder, the first option is the simplest, and he illustrates it with the “reconstruction” of the Ländler's norms shown in Example 5b. To interpret section B of the Ländler, Damschroder refers to Model 2 of Example 4a, which—even though as a whole it is unrelated to the Ländler's tonal structure—suggests a way to understand the inverted augmented sixth chord in m. 14: as “a $\frac{6}{4}$ passing chord . . . fortified by additional dissonances” (227).

2 Two other structural normalizations suggested themselves to me as I studied this Ländler: locating $\hat{4}$ in measure 5, where it is delayed by an implied 9–8 suspension and covered by $\hat{6}$; or understanding $\hat{5}$ (with complete upper neighbor $\hat{6}$) to extend across section A₁. However, neither of these possibilities permits a parallel reading in A₂, and, therefore, they should probably be rejected.

a. Score.

Diagram illustrating the musical score for Schubert's *Ländler in B Minor* (D. 790), showing three sections (A₁, B, and A₂) with their respective tonal and structural annotations.

Section A₁: The score begins with a treble clef, key signature of two sharps (F# and C#), and a 3/4 time signature. The bass line starts with a whole note chord of B minor (B2, D3, F#3). The treble line features a series of chords and melodic fragments. Above the staff, a diagram shows three staves (1., 2., 3.) with notes and fingerings (6, 5, 4) indicating a specific melodic line. Below the staff, the text "B Minor: I ————— () III" indicates the tonal structure.

Section B: The score continues with a treble clef, key signature of two sharps, and a 3/4 time signature. The bass line features a series of chords and melodic fragments. Above the staff, a diagram shows a single staff with notes and fingerings (2, 5) indicating a specific melodic line. Below the staff, the text "V#" indicates the tonal structure.

Section A₂: The score concludes with a treble clef, key signature of two sharps, and a 3/4 time signature. The bass line features a series of chords and melodic fragments. Above the staff, a diagram shows a single staff with notes and fingerings (4, 1) indicating a specific melodic line. Below the staff, the text "I# II⁷ V# I#" indicates the tonal structure.

Example 5.
Schubert, *Ländler* in B Minor D. 790.

b. Damschroder's "reconstruction" (based on *TA*, Example 11.7).

B E A D

B Minor: I () III V⁸₇⁹ I#

A₁ B A₂ (=B Major: I II⁷ V I)

Example 5 (cont'd).Schubert, *Ländler in B Minor* D. 790.

From the reconstruction, a "Schenker graph" (*TA*, Example 11.7, not reproduced) is an easy next step.³ Damschroder makes it clear that the sort of imaginative reconstruction undertaken here, which negotiates between the particular and the paradigmatic, is intended not as a "correction" of a composer's work—a distinction that has sometimes been troubling to my own students—but as a proposition "that both Schubert and the more astute among those who appreciate his music would sense this conventional underlying structure even if the music diverges quite far from that foundational conception" (227).

Consonant with Damschroder's thoroughgoing use of models are his emphasis on a standard set of graphical conventions, effort to augment Schenkerian analytical vocabulary with new terms, and generally logical application of Roman numerals to certain chromatic chords. Students are advised to be meticulous about figuring to the right of Roman numerals to indicate intervals above chord roots and figuring above Roman numerals to indicate intervals from the bass, separating consecutive bass arpeggiations (beneath a $\S$ -line) with a prong, and beaming V from the first branch of an interrupted structure to the final I of the second branch, among other guidelines. It is implicit that the early development of good, consistent graphical habits will pay off later in clear analytical thought; instructors using *TA* should take extra care to adopt all of its conventions.⁴ I have already mentioned "surge" as one of Damschroder's

3 Damschroder presents his final graph of the *Ländler* on a single staff, somewhat abandoning his usual graphical rigor as "a nod to [the] freer practice" sometimes reflected in Schenker's own graphs (227).

4 Instructors using *GMA* should take note of its conventions as well, even though that text is less

terminological extensions: there is also “supersurge,” which refers to situations in which stable harmonies evolve to include an augmented-sixth or diminished-third interval; “collision,” which designates situations in which two *Stufen* appear to overlap; and “assertion,” which is how certain vertical configurations of notes qualify as *Stufen* (that is, they “assert” their roots *qua* steps of a progression). Damschroder takes a “positive stance” toward ninth chords—recognizing some theorists’ uncertainty about them (50)—and, related to that stance, tends to regard leading-tone seventh chords, as well as German and Italian augmented sixth chords, as incomplete ninth chords rooted a third lower:⁵ #IV⁷, as it is more typically labeled, is marked $\text{II}_{\frac{9}{5}\frac{7}{3}}^{\frac{9}{5}\frac{7}{3}}$ (if figured in C minor)—the dot indicates the absent root.

More often than not, the status of diminished-seventh and augmented-sixth chords is not analytically crucial in *TA*, and a more equivocal view of their rootedness would not lead to substantially different graphs. However, one analysis assignment in *TA* (Chapter 8, “Scores for Analysis,” #5) did lead me to wonder whether the “supertonic” #IV⁷ can be taken too far. The assignment concerns mm. 45–54 of Mozart’s Fantasy in D Minor K. 397; Example 6a reproduces the excerpt’s final measures, in which a Neapolitan harmony (m. 52) leads to a cadential $\frac{6}{4}$ by way of a diminished-seventh chord on #4. Damschroder advises:

Usually the chromatic $\flat\hat{2}$ within $\flat\text{II}$ would revert to # during the following V#. In this excerpt, however, the content of measure 53 implies an $\text{E}\flat\text{--E}\natural$ shift. (That is, the root of $\text{G}\sharp\text{--B}\flat\text{--D--F}$ during [m. 53, beats 3–4] is $\text{E}\natural$.)

Also:

Make sure that your graph shows a connection between the melody’s $\text{E}\flat$ during $\flat\text{II}$ [at m. 52, beat 3] and the $\text{C}\sharp$ during $\text{V}\sharp$ Which pitch class among the four that are arpeggiated during the second half of measure 53 links those two perimeter pitches? (159)

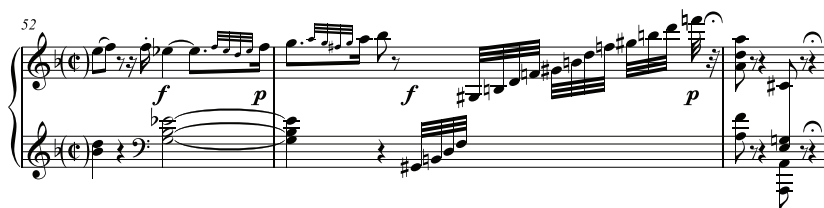
In my graph in Example 6b I try to follow these pieces of advice—provided they are as clear as they seem to be—showing $\text{E}\flat_5\text{--E}\natural_5$ in m. 53 (with $\text{E}\natural_5$ in parentheses) above the descending third-progression $\text{E}\flat_5\text{--D}_5\text{--C}\sharp_5$ (ending in m. 54). I believe that the chromatic half step in m. 53 reflects Damschroder’s intentions: it appears in a few of the students’ solutions in *TA*’s Instructor’s Manual, without reproof in the commentary. But I question whether $\text{E}\flat_5\text{--E}\natural_5$ really is a meaningful connection here, or whether it overconstrues the events of m. 53. While I acknowledge that the $\text{G}\sharp^{o7}$ chord in m.

emphatic about graphical precision: Wen uses flags regularly to mark $\hat{7}$ as a substitute for $\hat{2}$ but not to mark tones prolonging a bass arpeggiation; he never connects I to V with a “swan slur.”

5 Compare Schenker ([1906] 1954, 190–200).

53 projects contrapuntal dissonances upon a supertonic *Stufe* first represented by the Neapolitan, I hesitate to regard any trace of $E\flat$ in this measure (which I am not sure I even detect) as anything more than a superficial (anticipatory) chromatic adjustment of the Phrygian $\hat{2}$, before its real reversion to $\sharp\hat{2}$ above $V\sharp$ a measure later. I prefer the simpler representation in Example 6c, based on Edward Laufer's graph of the same music (1988, 104), in which $G\sharp^{o7}$ serves specifically to dissonate D_5 in m. 53 in anticipation of the same pitch as a passing tone in m. 54, and not to impinge on the *Urlinie*.

a. Measures 52–54.



b. Analysis based on Damschroder's suggestions (159).



c. Analysis following Laufer (1988, 104).



Example 6.
Mozart, Fantasy in D Minor K. 397.

The star quality of *GMA* is without a doubt the rare analytical discernment Wen demonstrates, which, if not always perfectly reflected in his prose, should be evident to anyone who explores his graphs deeply. A paragon is, likewise, the textbook's final analysis, in its epilogue, of the B-minor Fugue subject from Book I of J. S. Bach's *Well-Tempered Clavier*, BWV 869. Brief discussion of Schenker's acquaintance with and eventual antagonism to Arnold Schoenberg precedes Wen's reading of the chromatically saturated subject cited in Example 7a—a remarkable “preserial ‘twelve-tone’ passage,” as Wen notes (355).⁶ Through sedulous derivation, layer by layer in the manner of Example 1 (*GMA*, Examples E.3 and E.6, not reproduced), Wen adduces the structure in Example 7b. One of the challenges in analyzing this subject is determining how its modulation from B minor to F# minor works. (William Renwick reads the modulation quite differently in *Analyzing Fugue* [1995, 63].) Wen shows the initial B-minor tonic joined to II# / F#m by a chromatic voice exchange; II# then leads to V# and I in the new key. The voice exchange embraces a nonstructural F#-minor triad at the end of m. 2, labeled “CS” for its “consonant support” of the passing tone C#₅. (Example E.6 in *GMA* places an inferential C#₄ beneath that F#-minor triad to show its derivation from a passing $\frac{6}{4}$ configuration.)

a. Subject.

(Wen) Bm: I / F#m: IV ————— CS $\begin{smallmatrix} \textcircled{3} \\ \textcircled{4} \\ \textcircled{3} \end{smallmatrix}$ $\text{II}_3^\#$ V# — I

(rejected) Bm: I / F#m: IV(₅ ————— 8 ————— 1 — 7 — 6 — 8 V# — I

b. Wen's graph (based on *GMA*, Example E.7).

b: I / f#m: IV ————— CS $\begin{smallmatrix} \textcircled{3} \\ \textcircled{4} \\ \textcircled{3} \end{smallmatrix}$ $\text{II}_3^\#$ V# — I

Example 7.

J. S. Bach, Fugue in B Minor, *WTC* I.

⁶ That is to say, Bach got his *dux* in a row.

What struck me first about Wen's analysis was the metrical position of $V\#/F\#m$, as it appears unusually on the second eighth note of m. 3, where it is expanded by $\frac{5}{3}-\frac{6}{4}-\frac{5}{3}$ voice leading for the remainder of the measure before resolving on the next downbeat. Because of this placement, I was initially skeptical of Wen's reading: I instinctually favored a modulation by the less askew progression shown at the bottom of Example 7a, whereby the subject's initial B-minor tonic prolongation extends through the third beat of m. 3, "evolving" (*nach* Damschroder) through chromatic 5–6 voice leading before progressing to the dominant of $F\#$ minor on beat 4. Yet upon further contemplation, and in comparing my initial impressions with Wen's reading, I grew dissatisfied by the way I undervalued $B\#_4-C\#_5$ at the beginning of m. 3; after the tortuous ascent to (local) *Kopft*on D_5 , this half step must be structurally more decisive. My hearing began to incline in Wen's (less obvious) direction, in which the placement of $V\#/F\#m$, on that second eighth, seems remarkably "delicate" after an intense ascent, but (paradoxically?) more potent for that very reason. (Wen's graph indicates that $B\#_4$ is associated enharmonically with C_5 in m. 2—throughout *GMA* he excels at pointing out connections like this.) Should a two-semester course successfully make it to this final analysis in *GMA* (a tall order, perhaps), questions about this passage's metrics could prompt discussion: Should the dominant of $F\#$ minor be understood as displaced from a more normative metrical position? And if so, how?

Covering more content than *TA*, *GMA* bears greater risk in maintaining a clear presentation from beginning to end, and at times its meanings and assumptions get lost. It is difficult to ascertain, for instance, which measure Wen takes as the beginning of the recapitulation in the first movement of Beethoven's "Pastoral" Symphony, Op. 68 (166); Wen states in his chapter on implied tones that "[t]he differences between an implied tone, elision, and substitution are subtle" (175), but the subsequent discussion makes the differences nearly opaque; and I am not certain that Wen consistently follows his own advice (111) to apply Roman numerals only to harmonies that count as *Stufen*. Some unclarity is attributable to poor editing and proofreading: typographical errors and garbled sentences (or entire paragraphs) abound in most chapters.⁷ *GMA*'s examples are generally cleaner than its text, but they are not devoid of mistakes, either.⁸ As long as instructors scan for errors ahead of time and alert their students accordingly, there should not be too many problems—Wen's miscaptioned Example

7 See, e.g., the paragraph beginning with "Although" on page 65, which appears to be caught halfway through a process of revision.

8 See, e.g., *GMA*, Example 21.24, which gives incorrect scale-degree labels.

17.7 (not reproduced), which appears to contain quite a significant wrong note, is exceptional. (Better editing is evident throughout *TA*, although its use of “female” as a noun—in reference to a poetic text—might appear gauche to some readers [94].⁹)

Had these issues been cleared up prior to publication (as they should have been), I would have only one appreciable reservation about *GMA*: I think that some of Wen’s analytical decisions lack sufficient explanation in his commentary. (See also the next paragraph.) Students could rightly wonder, for instance, why Wen’s graph of the Introduction to Brahms’s Symphony No. 1, Op. 68, replicated in Example 8, does not fully account for a C₂ pedal that persists from the opening measure through all of m. 8 (i.e., beneath IV and a diminished-third chord over #⁴). And no real explanation is given for why the graph in Example 9, of the eight-measure theme from the beginning of Saint-Saëns’s Piano Concerto No. 4, Op. 44, subordinates an imperfectly cadential $\hat{3}$ to a perfect $\hat{1}$: mm. 7–8 certainly sound like an IAC!

Example 8.

Wen’s reading of Brahms, Symphony No. 1 in C Minor, Op. 68, I, mm. 1–9
(based on *GMA*, Example 5.39).

Example 9.

Wen’s reading of Saint-Saëns, Piano Concerto No. 4 in C Minor, Op. 44, I, mm. 1–8
(based on *GMA*, Example 18.3).

9 See, e.g., Brown (2015).

Neither textbook focuses much on rhythm and meter, bypassing at times both their immediate significance in temporal organization and their deeper manifestations as phrase rhythm—although *GMA* does discuss hypermeter in the second movement of Beethoven’s Sonata *quasi una fantasia* Op. 27, No. 1 (265 ff.).¹⁰ Both Damschroder and Wen sometimes exclude from consideration—or leave underinterpreted in their graphs—certain evaded cadences that extend a phrase by delaying its closure (as in the “Moonlight” analysis discussed below).¹¹ And both authors—especially Wen—sometimes interpret passages (as Schenkerians will do) in ways that appear to contravene their rhythmic and metrical organization: this is not necessarily a problem, but students (and instructors) may be unclear as to the rationales for such interpretations. In his chapter on ABA’ form, Wen analyzes “the charming G-major theme in the central section of the rondo movement that ends Schubert’s D-major Sonata, D. 850” (263), the first phrase of which is quoted in Example 10a. As his graphs in Examples 10b and 10c indicate, he hears an overall progression of $I-II_7^{\sharp}-V$ ($IV-V-I$ in the key of the dominant) across the phrase, regarding a metrically accented D-major triad between I and $II_7^{\sharp}$ as a nonstructural harmony that gives consonant support to a passing seventh above the original tonic. While I do not disagree with Wen, I suspect that many students would produce a graph more like Example 10d, with two measures of I and two measures of V marked off in parallel fashion to conform with the passage’s apparent metrical and motivic divisions. Some musical justification for a structure that runs athwart these divisions, with such a metrically strong passing seventh, would be warranted. ($I-II_7^{\sharp}-V$ is a stronger progression, uniting an entire phrase in a trajectory toward a single tonal goal; $I-V$ is more of a juxtaposition, portraying the phrase as unnecessarily static.)

¹⁰ See also Schachter ([1987] 1999, 83–86.)

¹¹ My thoughts about this matter echo those of David Carson Berry in his review of David Beach’s *Advanced Schenkerian Analysis* (2012, 170–71). Rather than go into detail here, I will simply note that Berry’s points broadly apply to the present texts.

- a. Measures 104, beat 3–108.

Un poco più lento.

- b. Wen's derivation of a nonstructural D-major triad from a passing-seventh configuration (based on *GMA*, Example 24.5; the G-major line of Roman numerals does not appear in Wen's original example).

G: I II#
D: IV V

G: I CS II#
D: IV V

- c. Wen's reading of this passage (based on *GMA*, Example 24.6).

G: I CS II# V
D: IV CS V I

- d. Hypothetical alternative analysis.

G: I V

Example 10.

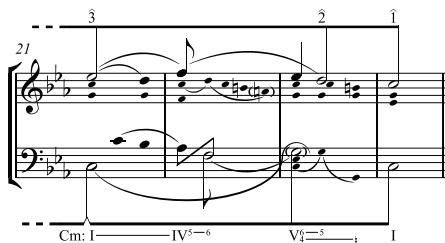
Schubert, Piano Sonata in D Major D. 850, IV.

Occasionally it may be reasonable to disagree with either author, or at least to consider some analytical alternatives, on rhythmic or metrical grounds. Example 11a reproduces the final phrase of the second Minuet from J. S. Bach's C-minor French Suite BWV 813, a movement that students are assigned to graph in *TA's* chapter on chromaticism (Chapter 8, "Scores for Analysis," #6).¹² Damschroder suggests interpreting the downbeat of m. 23 as an inverted cadential $\frac{6}{4}$, and I have graphed it this way in Example 11b. This is plausible, but to me, the inference of V on the downbeat of m. 23 feels a bit harsh. I wonder if—contra the given slurring—mm. 22–23 subtly imply a cadential hemiola: if so, then these measures might take on a more mobile character than Damschroder's "one-to-the-bar" harmonic inference captures—something more like the reading proposed in Example 11c.

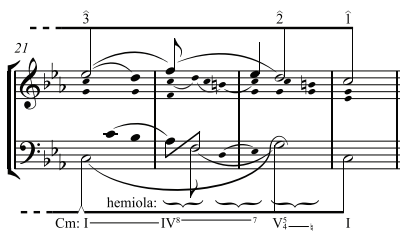
a. Measures 21–24.



b. Analysis based on Damschroder's suggestions.



c. Possible alternative.



Example 11.

J. S. Bach, French Suite No. 2 in C Minor, BWV 813, Minuet II.

¹² The chromaticism in this piece centers on pitch classes $A\flat$ and $A\sharp$, although it is not evident in the passage quoted in Example 11.

Learning by Comparing

Comparing different individuals' analyses of the same pieces can be enlightening, both as a classroom activity and as an exercise for individual study: observing their differences can draw focus on the types of decisions analysts face and inspire reflection on the factors that might ultimately hold sway. Well suited for this purpose is Damschroder's analysis, from his chapter on initial ascents, of Menuet II from J. S. Bach's B $\flat$ -major Partita BWV 825 (132–34), which can be compared profitably with David Beach's analysis of the same movement from his article on the entire partita (2008, 27–30). (Beach's article also includes transcriptions of Schenker's analytical sketches of the B $\flat$ -major Partita, but those for Menuet II are not extensive.) Both Damschroder and Beach comment on some of the challenges that this minuet presents for analysis.

Examples 12a and 12b arrange the details of Damschroder's and Beach's analyses measure by measure to facilitate comparison. (Some but not all of their graphical conventions are replicated.) A divergence is obvious in their interpretations of the B $\flat$ M triad on the last beat of m. 3 (marked with an asterisk, *)—a chord whose understanding is crucial to a perspective on the entire piece. In his commentary, Beach identifies three possible ways to interpret this triad: as an expression of the Menuet's initial tonic *Stufe*, as a passing harmony between IV (m. 3, beat 1) and V (m. 4, beat 1), or as a passing harmony within V. With the first option, the asterisked B $\flat$ M could support $\hat{3}$ as *Kopfton*: this is Damschroder's interpretation (and, seemingly, Schenker's as well). Beach prefers the third option, whereby the Menuet begins not with the quick establishment of *Kopfton* $\hat{3}$ but with the step $\hat{1}$ – $\hat{2}$, which Beach hears as part of an interrupted initial ascent, $\hat{1}$ – $\hat{2}$ || $\hat{1}$ – $\hat{2}$ – $\hat{3}$ (an interpretation he characterizes as “perhaps . . . radical” [29]). Comparing these two interpretations of a single triad, and their far-reaching implications, could make for valuable discussion. I prefer Damschroder's reading; Beach is nearly forced by his interpretation of the Menuet's opening measures to take D $_5$ in m. 10 as *Kopfton*, and the B $\flat$ M triad supporting it as I, although I think that these are more plausibly heard within a prolongation of V—as illustrated in Example 12c, which records my impressions of the music in light of Damschroder and Beach.

a. Analysis by Damschroder.

[illegible]

b. Analysis by Beach.

Anstieg: $\hat{1}$

2 1 2 3 2 1

f 5th

BbM: I V I V I VI IV V3= I

c. My analysis, in light of a. and b.

Example 12.

J. S. Bach, Partita No. 1 in B $\flat$ Major, BWV 825, Menuet II.

* and † indicate analytically crucial B_bM triads.

Taking B♭M in m. 3 as tonic, Damschroder uncovers what he believes to be a significant motivic idea in mm. 1–3: F₄–G₄–A₄–B♭₄ in an inner voice, with F₄ elaborated by the third F₄–G₄–A♭₄. For Damschroder, this motivic fourth-with-elaborating-third illuminates a pathway through the rest of the piece, for a concealed repetition of the same shape can be located across a larger stretch. “The concealed repetition is a potent factor in coming to terms with how the work is structured,” he writes (134). “Listeners who focus only on the chord-to-chord successions might overlook its presence.” Damschroder observes that there are, indeed, a number of reasonable ways to grasp the structure of the entire movement; he chooses as best the one represented

in Example 12a, in which the motivic fourth $F_4-G_4-A_4-B\flat_4$ is enlarged to connect the movement's initial tonic to $B\flat M_3^6$ at the end of m. 14 (marked with a dagger, †), and an enlarged $F_4-G_4-A\flat_4$ third leads from the same opening tonic to the $B\flat_4^4$ chord on beat 3 of m. 13. The enlargements coordinate with a lower-order I-IV-V-I progression, before the minuet's structural V-I cadence.

In favor of the enlarged $F_4-G_4-A_4-B\flat_4$ tetrachord, Damschroder disallows the possibility of interpreting mm. 14–15 as IV–V, in which case $B\flat M_3^6$ on beat 3 of m. 14 (†) would count as a nonstructural “apparent tonic.” Yet this is what Beach shows; $B\flat M_3^6$ (†) thus marks another significant analytical disparity. Whether or not an appeal to concealed repetition is necessary to make the point, however, it seems reasonable to interpret this $B\flat M_3^6$ triad (†) as analogous to the $B\flat M$ triad in m. 3 (*)—a situation that obtains in Damschroder's analysis, but not in Beach's. I retain the analogy in Example 12c. Damschroder also suggests that some analysts might hear (like Beach) a bass that descends by thirds from $B\flat$ (m. 1), through G (m. 12), to $E\flat$ (m. 14); or that they might understand IV to “emerge” in m. 13, not in m. 14, where he places it (134). Either of these possibilities, I think, admits the voice exchange that Beach shows across mm. 13–14. My graph locates IV in m. 13, keeping the concealed repetition of $F_4-G_4-A_4-B\flat_4$, but not of $F_4-G_4-A\flat_4$, which cedes structural ground to the voice exchange—to me, a more salient feature, although I can hear mm. 13–14 Damschroder's way, too.

Damschroder's commentary is laudable for mentioning factors that go into analytical decision making, and those factors stand out more in comparison with Beach. Forming one's own interpretation through the evaluation of conflicting analyses can be a beneficial learning experience. Comparison can also provoke thought—and discussion—about the purpose of Schenkerian analysis: whether it is about uncovering the exact way a composition comes to life from its *Ursatz*; forming a “conjecture regarding what was going on in [the composer's] mind,” as Damschroder suggests (134); or rather, constructing an interpretation that is musically satisfying and that reflects an “ideal” performance—for which persuasiveness is at least as worthy an analytical goal as “correctness.”

GMA contains several analyses that differ from readings given by Schenker himself, any of which can also prove valuable for comparative study. Wen's analysis of the second theme from the last movement of Beethoven's “Moonlight” Sonata, Op. 27, No. 2, is a good choice.¹³ Examples 13a and 13b, respectively, replicate Wen's and

13 I found some of Wen's alternatives less convincing than Schenker's originals, including those pertaining to portions of the first movements of Brahms's Symphony No. 4, Op. 98 (Examples 20.1–20.6; compare Schenker [{1935} 1979, 2:81,2]), and Beethoven's *Eroica*, Op. 55 (Examples 16.8–

Schenker's graphs, both of which pass over a deceptive cadence and internal repetition in mm. 37–42. (Damschroder also gives this theme as an analytical assignment in *TA* [Chapter 9, "Scores for Analysis," #4]; his commentary in his *Instructor's Manual* [252–55] suggests that he interprets it more or less the way Schenker does.)

Both Wen and Schenker show a transferred $\hat{5}$ -*Urlinie*, in G# minor, structuring this theme, but the locations of scale degrees $\hat{4}$, $\hat{3}$, and $\hat{2}$ are at issue, as is, concomitantly, the tonal meaning of the sequence in mm. 29–32. Schenker shows a single tonic *Stufe* extending $\hat{5}$ above a subsidiary stepwise descent to $\hat{1}$ during the sequence. The *Urlinie* proceeds after the sequence, with the Neapolitan harmony in m. 33 supporting $\hat{4}$, and $\hat{3}$ – $\hat{2}$ – $\hat{1}$ transpiring over $V_4^6 \text{---}^5 \text{---} I$ (notwithstanding the deceptive move to VI in mm. 36–37). (Schenker uses this example to demonstrate "[t]he substitution of the lower third for the $\hat{3}$ of the descending fifth-progression" [1:84; note his parentheses].)

This is a clear, simple reading that neatly disposes an *Urlinie* from $\hat{5}$ over a single cadential progression. But Wen differs: he locates $\hat{2}$ —with Phrygian inflection—over the $\natural II$ harmony that for Schenker supports $\hat{4}$, and he indicates a reversion to diatonic $\hat{2}$ above the cadential dominant. This placement of $\hat{2}$ necessitates relocating $\hat{4}$ and $\hat{3}$, and Wen associates those degrees with the sequence, placing $\hat{4}$ in m. 29 and showing it to be transferred to the bass in m. 32, where it leads to $\hat{3}$. As support for $\hat{5}$ – $\hat{4}$ – $\hat{3}$ in the *Urlinie*, Wen finds in the sequence the complete *Stufengang* I–IV– $V^\#$ –I (with the first I inflected as $V^\#/IV$; see the Roman numerals between the staves): Wen's *Urlinie* thus covers two progressions, to Schenker's one.

A $\natural$ does seem a more natural upper-voice inference than C# above the Neapolitan harmony in m. 33; for this reason, I am inclined to agree with Wen. Yet considering his analysis in light of Schenker's points up some key analytical and theoretical questions. With widening scope: Does the salience of A $\natural$ above $\natural II$ justify Wen's more complicated *Urlinie* reading? Does the sequence in mm. 27–32 describe a progression of *Stufen* or is its meaning entirely contrapuntal—and to what extent does that distinction have to do with the determination of *Urlinie* degrees? And what general principles relating harmony and counterpoint do these divergent analyses hint at? In addition to considering these questions for discussion, instructors might challenge students to account for the deceptive cadence and repetition that extend this theme from m. 37 to m. 43: Example 10c suggests one possibility.

16.14; compare Schenker [{1930} 2014, 83–84]); such discrepancies might complicate matters for instructors inclined to accept Schenker's readings. Wen's reading of the first movement's exposition in Beethoven's Sonata in G Major Op. 14, No. 2 (Examples 26.2–26.3), resembles the reading Laufer gives in his review of *Der freie Satz* (1981, Example 26) and represents an improvement of Schenker's ([1935] 1979, 2:Fig. 42,2), for the reasons given by Laufer (173).

a. Wen's analysis (based on *GMA*, Example 18.12).

Wen's analysis of the first system of the piano sonata, showing two systems of music with Schenkerian annotations. The first system (measures 21-28) is in G# minor, starting with a 5-measure phrase and ending with a 4-measure phrase. The second system (measures 29-36) continues the analysis with various chordal and intervallic notations.

b. Schenker's graph (based on [1935] 1979, 2:Fig. 104,3).

Schenker's graph for the first system, showing a melodic line with notes numbered 1 to 5, and a corresponding harmonic structure below it. The harmonic structure includes chords labeled V⁴³, I, and V, with a 6-measure phrase indicated.

c. Proposed analysis of the deceptive cadence and repetition in mm. 37–42.

Proposed analysis of the deceptive cadence and repetition in measures 37-42. The analysis shows a melodic line with notes numbered 1 to 5, and a corresponding harmonic structure below it. The harmonic structure includes chords labeled VI, II⁶, and V, with a 7-measure phrase indicated.

Example 13.

Beethoven, Piano Sonata No. 14 in C# Minor, Op. 27, No. 2 "Moonlight," mm. 21–43.



I have done my best to characterize *TA* and *GMA* as fundamentally different kinds of textbooks, with individual attitudes toward the question I did not quite pose at the top of this review. Yet whether more direct or more intricate, each equally makes clear its author's love of tonal music of the common practice and belief in the superlative explanatory powers of Schenkerian analysis, achieving a comparable degree of loftiness in its respective epilogue. If *TA* and *GMA* are the latest arrivals among a small group of Schenkerian textbooks in general use, it is more their online supplements than their treatments of the topics at hand that mark them as products of the here and now (although Wen, to be sure, does engage briefly with recent work of Hepokoski and Darcy [309–10]). If today's discourse about (Anglo-American) music theory and the status of its various subfields—a good deal of which unfolds informally, on social media—magnifies various misgivings that have attached to Schenkerian theory since its initial ascent in American institutions and raises new challenges to its unsupported premises and institutional overreach, neither text takes much account—a conspicuous absence in 2020, especially in light of Philip Ewell's recent inquiries into Schenker's racist ideologies, their relationships to theory formation, and their repercussions within the disciplinary mainstream (2019, 2020). One may justifiably ask whether any of the following might have been addressed: the role of Schenkerian theory and practice in perpetuating canonical fictions; specious appeals to nature; exclusive dead white male representation; reification fallacies; whether the *Ursatz* is a foregone conclusion; incompatibilities between structural hearing and music's sensuous qualities and/or formally salient moments; Schenker's politics; whether Schenker gave rhythm its due; whether Schenkerian analysis is adequate to characterize style; whether "organicism" (Schenkerian or otherwise) is too disconnected from how composers actually work to have theoretical value; whether Schenkerian analysis makes a mess out of things that can be more readily explained by other means, such as by reference to schemata.¹⁴ But for a single *caveat lector* in *TA* (241) and a concession in *GMA* that "no analytical system can truly penetrate to the heart of a piece of music" (2) there is no engagement with these issues, whether by animadversion, tergiversation, or sustained critical reflection. (I grant that it is quite unclear to me how a textbook truly accounting for the above would work.) As someone committed to the study of common-practice tonal music, and who finds Schenkerian analysis a valuable tool for understanding it, I am

14 On some of these issues see (as a sample of sources) Brody (forthcoming), Clark (2019), Cook (2007, esp. Ch. 3), Dreyfus (1996, Ch. 6), McClary (2000), Muns (2008), Narmour (1977), Pellegrin (2019), Rothstein (1981), and Schachter (2001).

interested in the future of Schenkerian studies as part of an ever-more-pluralist music theory and as a paradigm of tonal analysis,¹⁵ and I do wonder if, in these regards, *TA* and *GMA* are not so much the “latest arrivals” as “latecomers.” But disciplinary distress is not the answer: music theory will continue to change and develop, and it will grow more vibrant as it does.

¹⁵ In the latter connection see Segall (2019).

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