Lessons from the Past: Music Theory Pedagogy and the Future

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ABSTRACT: As we music theorists chart our course into the next century, we can learn many lessons from the past--lessons about teaching and learning music that can inform and inspire our work as pedagogues and help us deliver the very best our discipline has to offer to all students of music. This essay addresses six main pedagogical issues: counterpoint, figured bass, harmony and voice leading, aural skills, computer-assisted instruction, and curriculum design. Each issue is examined in its historical perspective leading up to the recent turn of the century, and suggestions are made for further research and teaching in the future.

[1] Introduction

[1.1] The pedagogy of music theory has undergone great changes during the past century. Significant forces, including the assimilation of important theoretical contributions, the rise of U.S. colleges and universities, and the advent of the professional academic music theorist, have reshaped much of how music theory is taught.

[1.2] Theory pedagogy has come into its own as a scholarly discipline, marked by the publication of several important books on the subject and the presence of the *Journal of Music Theory Pedagogy*. More and more graduate programs are including courses in theory pedagogy.

[1.3] As we chart our course into the next century, we can learn many lessons from the past—lessons about teaching and learning music that can inform and inspire our work as pedagogues and help us deliver the very best our discipline has to offer to all students of music.

[1.4] I will address six main pedagogical issues in this essay: counterpoint, figured bass, harmony and voice leading, aural skills, computer-assisted instruction, and curriculum design. There are other important issues (for example, form, Schenkerian analysis, and post-tonal theory), but I have chosen to stay close to the core aspects of most undergraduate curricula; those other issues are topics for other essays.

[2] Counterpoint

[2.1] Although strict training in contrapuntal writing originated in the Renaissance and continued as an essential part of most composers' studies throughout the common-practice period, the first three-quarters of the last century saw a *decrease* in the popularity of training in counterpoint. The conservatory model inherited from Europe in the nineteenth and early twentieth

centuries by many U.S. schools often incorporated the teaching of counterpoint as an upper-division course to be taken after certain other courses—most notably harmony—were successfully completed. Many such courses have either disappeared or (more commonly) been relegated to the status of electives or requirements for only composition and theory majors.

[2.2] But there are lessons from the past that instruct us still, lessons that speak to the power of counterpoint training to explain the dynamism of voice leading and dissonance treatment in so much common-practice-period and Renaissance music, and even in jazz and popular music. What we learn from Attwood's lessons with Mozart and Beethoven's lessons with Albrechtsberger, and from the widespread and deep influence of Fux's *Gradus* on subsequent generations of musicians is that training in species counterpoint leads not simply to the composition of motets, inventions, and fugues but to an understanding of how, in many diverse genres, voices relate to one another in pitch space, how they move from verticality to verticality, and how they prepare and resolve dissonances.

[2.3] It took the influence of another great pedagogue—Heinrich Schenker—to spur a resurgent interest in counterpoint training in this country. Schenker's students, and especially students of his students, have led the call for including the species as an integral part of the undergraduate curriculum, concurrent with and even before training in harmony. Some schools have heeded this call. But as a reader for the GRE music test I must tell you that—if that test can be construed as any indication of the success of undergraduate training—counterpoint lags dismally far behind other bodies of knowledge and skill among our students (at least among those applying to graduate school).

[2.4] What I would like to see is an integration of training in counterpoint into undergraduate core music curricula. This can take the form of stylistically-based training in 16th- or 18th- century techniques, and/or astylistic work with generic contrapuntal writing. But, most importantly, the principles of voice leading and dissonance treatment derived from the disciplined study of counterpoint should be connected and applied to the study of all Western music.

[3] Figured Bass

[3.1] We know from the sheer number of figured bass manuals that training in this discipline was ubiquitous during the eighteenth century. Alas, this discipline also fell out of favor as a part of college-level training during the subsequent two centuries. A quick perusal of theory texts written during the latter half of the twentieth century will reveal an almost complete absence of figured bass in its construal as a means of representing upper parts and voice leading above a bass. (Notable exceptions—Allen Forte's *Tonal Harmony in Concept and Practice*[1] and Edward Aldwell and Carl Schachter's *Harmony and Voice Leading*[2]—have been few and far between.) For the most part, the figures have been almost entirely constrained to serve as inextricable handmaidens alongside Roman numerals to form what many students conceive of as "analysis symbols"— labels that represent merely the root and inversion of any given verticality and nothing more. For example, in their textbook *Tonal Harmony*, Stefan Kostka and Dorothy Payne devote less than two pages of text to figured bass, which they treat solely as a lead-in to what they call "the *inversion* symbols that we use today" [emphasis mine].[3]

[3.2] Ideally, training in realizing figured basses and in using figured bass symbols to analyze voice leading should take a place alongside (or even before) training in harmony. I hope that the coming decades see a resurgence in this discipline.

[4] Harmony & Voice Leading

[4.1] At the center of many undergraduate core curricula are studies in harmony. Considering the deep sophistication of Western harmony and its power to shape musical space and our reactions to it, it seems to me that this central role is well deserved. Unhappily, not a few texts and curricula elevate harmony to a role not so much central but *above* and *apart*, divorced from its relationships with voice leading, rhythm, meter, and phrase structure.

[4.2] It's been nearly a hundred years since Schenker excerpted a short chord progression from Richter's contemporary text *Lehrbuch der Harmonie* and demanded, "Let me ask: What is this supposed to mean?"[4] In part, he was criticizing Richter for confusing and blurring the distinctions between voice leading and harmony. The state of affairs is somewhat better nearly a hundred years later. Several harmony textbooks have made efforts to elevate the importance of voice leading to a level equal to that of harmony, some with much greater success than others. Nonetheless, it is disheartening that none of these books enjoys sales approaching those enjoyed by the most popular ones in the field, none of which integrates voice-leading techniques into the fabric of its approach.

[4.3] Schenker's criticism of Richter (and others) extended pointedly to the relationship between theory and literature. He continued, "What [the student] is yearning to see, the confirmation of theoretical propositions in examples from the works

of the great masters, he looks for in vain in this book."[5] Mercifully, most harmony texts now abound with excerpts from real music literature—a condition not nearly so prevalent at the turn of the last century. Crack the pages of just about any theory textbook newly published or revised in the last decade and you'll most likely find it brimming with excerpts from instrumental and vocal works in a variety of styles and genres, drawn from common-practice-period music, and even jazz and popular music.

[4.4] Nonetheless, it seems to me that more texts and more teaching could assay to make as many connections as possible between the various features of these works—including their voice leading, rhythm, meter, and phrase structure—and the harmony they seek to illuminate.

[5] Aural Skills

[5.1] Learning to hear and read music with understanding and facility is arguably the most important goal we set for our students. Aural training is a concern that spans at least as far back as the beginning of the last millennium, as evidenced by Guido's advocacy of teaching devices such as solmization. Over the centuries into the 1800s, aural training as a separate discipline grew to focus around two activities: sight singing and dictation.

[5.2] But the past century saw a rise in the popularity of what some call "atomistic" training: drill, practice, and testing of the identification and performance of small, acontextual musical elements. The second half of the twentieth century saw the development and dissemination of textbooks (especially programmed texts) and their inheritors (computer-assisted instruction software) that feature training in identifying and performing the size and quality of intervals and the quality and inversion of chords. Despite the overwhelming experimental and clinical evidence that there is little connection between the ability to identify intervals acontextually and the ability to do so in a tonal context, such teaching methods nevertheless persist in some textbooks and some classrooms.[6]

[5.3] Indeed, very little aural skills training has been informed by the explosion of research in music perception and cognition during the past quarter century. Important findings about perception and cognition—involving contextual versus acontextual listening, short-term musical memory, and eye movements during sight reading, for example—seem to have been unexamined or ignored by the authors of nearly every aural skills text in current use. As the pages of journals such as *Music Perception* and *Psychomusicology* and books such as David Butler's *Musician's Guide to Perception and Cognition* and Rudolf Radocy and David Boyle's *Psychological Foundations of Musical Behavior* bring us more insight into how the human mind processes music, all of us who teach and write about aural skills should pay heed and be certain that these advances inform our work.[7]

[5.4] There have been some interesting but regrettably isolated expansions to the canon of what constitutes "ear-training" activities during the past several decades. In the mid 1970s, Gary Wittlich and Lee Humphries's *Ear Training: An Approach through Music Literature* formalized some innovative listening strategies alongside traditional types of dictation and brought them to bear on a variety of complete movements and works *in situ*.[8] This approach has been embedded in listening items on the revised GRE music test for the past decade.[9] In 1990, in their book *Aural Awareness*, George Pratt and his colleagues at the unit for Research into Applied Musical Perception proposed an entire rethinking of what constitutes good aural training for musicians.[10] For the most part, however, most aural training today adheres to atomistic skills such as identifying and singing intervals and chord qualities and inversions and the more contextual skills of dictation and sight singing.

[5.5] It still seems that a vast amount of aural skills training uses artificially constructed music. Entire books of melodies for sight-singing and materials for dictation have been composed by pedagogues purely for teaching purposes. Like Schenker, we might ask, "What does this mean?" If the musical figures we seek to teach exist in real literature, then we ought to use that literature for teaching; if such figures *don't* appear in literature, then we should question the value of teaching those figures at all. While there will always be a place for scales, sequentials, arpeggiations, and a few other instructor-created exercises, we should acknowledge that—since our goal is to teach students to hear and perform real music—we should use as much real music as possible in our teaching.

[6] Computer-Assisted Instruction

[6.1] The computer-assisted instruction revolution began over thirty years ago on monochrome terminals delivering multiple-choice drills from mainframe computers. It evolved through drill-and-practice programs on Apple II computers to the current crop of multimedia CD-ROMs and web-based applications. But, for the most part, this has been a revolution in the medium but not in the message. When we deliver the same old tired pseudo-pedagogy—for example, an interval tutor or chord spelling drill—using flashy new technology, we simply reinforce poor concepts and faulty learning strategies in more

seductive ways. We might as well add color and sound to Richter's *Lehrbuch*. My problem with computer-assisted instruction is not with the computer but with the instruction. Very little of the music-teaching software I have reviewed over the years makes use of the pedagogical powers of computing technology.

[6.2] There have indeed been some delightful exceptions to this sad state of affairs. For example, Dan Jacobsen and Tim Koozin's *Norton CD-ROM Masterworks* presents students with a variety of hypertextual multimedia experiences focused on each of a dozen works drawn from a millennium of music literature.[11] But such applications are unfortunately the rare exception in the sea of tedious drills that is computer-assisted instruction in music.

[6.3] As President of the Association for Technology in Music Instruction and as a visitor to various music schools around the country, my experience with computer-assisted instruction in music has been that instructors all too easily install several one-size-fits-all packages and either tell their students to "try them out," or assign levels to be mastered by certain dates. Neither of these approaches is pedagogically sound. It is incumbent on instructors to diagnose the precise knowledge and skills an individual student needs to develop before sending that student to specific parts of individual software packages that are designed to develop such knowledge and skills.

[7] Curriculum Design

[7.1] How to incorporate all these aspects of music theory training into a meaningful experience for the college-age musician has been a thorny issue for generations.

[7.2] The European conservatories bequeathed us a music curriculum made up of lots of little subjects to master, tasks to learn, exams to pass. During the first half of the last century, it was not uncommon to see curricula comprising separate courses in harmony, counterpoint, sight singing, dictation, keyboard, and music history.

[7.3] As a reaction to this situation, a movement developed at mid-century to incorporate all of these disciplines into a single course. Beginning with the Literature and Materials of Music program at the Juilliard School, and fanning out in various guises—usually under the general rubric of "Comprehensive Musicianship"—this movement influenced the design of many undergraduate curricula, especially during the 1960s and 70s.

[7.4] But Comprehensive Musicianship introduced its own serious problems. One of these is that it is difficult—if not downright irresponsible—to assign a single grade to a student's performance in so many different subjects. This is like trying to come up with a single number to describe my shoe size, sleeve length, chest measurement, and hat size. And, in practice, what does one do with the student who has earned "A"s in harmony, counterpoint, sight singing, and history, but an "F" in dictation? Another problem is the difficulty in finding qualified instructors. Who among us is qualified to teach all of these subjects with equal effectiveness? And who wouldn't schedule, say, *dictation* only on Fridays for the last ten minutes of class?

[7.5] It's been a long road, but the past couple of decades have seen these problems worked out in what I consider to be an elegant solution: the integrated curriculum. In an integrated curriculum, separate courses are taught (sometimes by separate instructors), but care is taken to coordinate the subjects and materials among these courses. Such an approach even requires that colleagues teaching theory, keyboard, and history *meet* with one another and plan their learning sequences so as to maximize this coordination. Not all schools have adopted such a plan, but many have. And each school's faculty can decide just how much weight (in credits and contact hours) to give each subject, just how much separation to place between subdisciplines ("Shall we have separate courses in dictation and sight singing or a single course in aural skills?"), and where and how to establish prerequisites and corequisites among the various courses.

[8] Conclusion

[8.1] Finally, as we forge ahead let us always stay focused on the essential goals of teaching music theory, for surely we will conceive of new courses to teach, new approaches and methods, new curriculum designs, new literature to include, and new technologies for teaching, but none of this will matter very much at all if we have nothing of real value to impart.

Allen Forte's response

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Footnotes

1. Allen Forte, *Tonal Harmony in Concept and Practice*, 3rd ed. (New York: Holt, Rinehart and Winston, 1979).
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2. Edward Aldwell and Carl Schachter, *Harmony and Voice Leading*, 2d ed. (Fort Worth, TX: Harcourt Brace Jovanovich, 1989).
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3. Stefan Kostka and Dorothy Payne, *Tonal Harmony with an Introduction to Twentieth-Century Music*, 4th ed. (Boston: McGraw-Hill, 2000), 52.
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4. Heinrich Schenker, *Harmony*, ed. Oswald Jonas, trans. Elisabeth Mann Borgese (Chicago: University of Chicago Press, 1954), 175.
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5. Schenker, *Harmony*, 176.
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6. Merton Shatzkin, "Interval and Pitch Recognition in and out of Immediate Context," *Journal of Research in Music Education* 29 (1981): 111–123, after surveying a dozen experimental studies of contextual and intervallic perception, noted "significant context effects," and remarked that "it is surprising that both research and ear training methods still concentrate on interval perception outside, rather than inside, a context" (pp. 111–12). Joel Wapnick, Gary Bourassa, and Joanne Sampson, "The Perception of Tonal Intervals in Isolation and in Melodic Context," *Psychomusicology* 2 (1982): 21–37, found that musicians were significantly more accurate at discriminating among and labeling intervals in a melodic context than in isolation.
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7. David Butler, *The Musician's Guide to Perception and Cognition* (New York: Schirmer Books, 1992); Rudolf E. Radocy and J. David Boyle, *Psychological Foundations of Musical Behavior* (Springfield, IL: Charles C. Thomas, 1997).
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8. Gary E. Wittlich and Lee Humphries, *Ear Training: An Approach Through Music Literature* (New York: Harcourt Brace Jovanovich, 1974).
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9. See Educational Testing Service, *Practicing to Take the GRE Music Test*, 2nd ed. (Princeton, NJ: Educational Testing Service, 1993) for representative test items of this type.
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10. George Pratt, *Aural Awareness: Principles and Practice*, rev. ed. (Oxford: Oxford University Press, 1998).
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11. Daniel Jacobson and Timothy Koozin, *The Norton CD-ROM Masterworks*, vol. 1. (New York: W. W. Norton, 1996).
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