The Rhetorical Pedagogy of Music: *Imitatio* Techniques for Music Theory Instruction and Composition Training

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Abstract

Music theory as we teach it in our undergraduate theory classrooms must encompass both musical perception/analysis and musical practice. A standard component of musical practice in the theory classroom is composition exercises, often voice-leading assignments in four-part chorale style, figured bass realization, or stylistic imitation compositions. Students generally write these by following to the best of their ability guidelines set forth by their teacher and textbook regarding appropriate harmonic, melodic, and contrapuntal motion, but these guidelines cannot adequately encompass subtleties of a variety of musical elements, including differences from style to style. As a result, the students fail to make a connection between their study of music theory and their musical lives in general.

I propose approaching the compositional element from the idea of Imitation. Classical pedagogy taught that skills are acquired by a combination of theory, imitation, and practice. I believe that much contemporary music theory pedagogy has lost sight of the importance of imitation, which has the dual effect of weakening the connection between theory and practice and limiting careful and personal interaction with actual music. By drawing on pedagogical *imitatio* techniques from classical rhetorical pedagogy—namely, Memorization, Copying, Paraphrase, and Translation—it is possible give the students the necessary interaction with music from the repertoire, provide a context for the connection between theory and practice, as well as guide them by very practical and manageable steps through the craft of composition.

Such techniques have been used by composers, teachers, and students throughout music history. A brief survey of some examples explores how various disciplines and exercises fit the paradigms of the classical *imitatio* techniques, with an especial focus on Bach, Handel, Mozart, and Beach. Finally, I suggest possible ways of incorporating these pedagogical techniques into contemporary music theory and composition pedagogy.

Genesis and Acknowledgements

Qui scribit, bis legit.

At one level, this entire project owes its existence to Elam Sprenkle, a member of the musicology faculty at the Peabody Conservatory. In the fall of 2008, I took a graduate musicology seminar focusing on the Bach Passions taught by Professor Sprenkle. He gave us a choice: either we could write a short paper on some aspect of the Saint John or Saint Matthew Passion, or we could copy 75 pages of the score of Saint Matthew Passion, an option he offered yearly and which had become somewhat famous within the Peabody graduate student community. As an explanation, he told us the story of an experience he had with Ernst Krenek, who was briefly on faculty at the Peabody Institute[1] at the time when Sprenkle was a student there.

In one class with Krenek, the students asked him what it was like studying composition in Vienna back in the early 20th century. Krenek answered that it was not like studying composition in the United States. Rather than individual lessons, they received group instruction, and a core element was a single large project which spanned the entire year. The first year, they were instructed to copy Bach's Well-Tempered Clavier. At this, the students gasped in disbelief. 'Yes,' Krenek said, 'and for the second year, we copied the Beethoven piano sonatas.' Horrified, the students asked why. Krenek responded, 'Well, after a while, you stop having to look at the next note to know what comes next.' What was assignment for the third year, the students asked, with some trembling. He smiled: 'There wasn't one; they figured, by that point, you knew what you were doing.'

Naturally, I chose the score-copying exercise, reasoning that I would barely need to think in order to produce a mere 10-page paper and that my only hope of learning something from the assignment was to attempt the score-copying. The very ambition of the task excited me, as did the thought of immersing myself in such a rigorous exercise that had seemed to have long ago fallen out of fashion. This was many times more

[1] Specifically, 1966–1967. (Ray Robinson, *The Peabody Conservatory: an American solution to a European musical philosophy* (Dissertation (Mus.Ed.D.)—Indiana University, 1969).)

demanding, exhausting, and time-consuming an undertaking than a single harmless paper, and many times I rued both my foolish decision and my baneful procrastination as the deadline was approaching and my hand, cramped from the hours spent copying, could no longer hold the pen without pain.

In retrospect, however, my transformation from the beginning of the project to the end was remarkable. At the beginning, I was continually fascinated by Bach's musical decisions and compositional techniques. After some 40 pages, I had noticed that my reaction had shifted from 'Oh, well, isn't that interesting!' to 'Why, yes, that makes sense.' By 60 pages, it had again shifted to that of 'I thought he might do that.' By the end, there were many places where I no longer needed to look at the next several beats to know exactly what I would find there. The assignment worked exactly what Krenek promised.

Oddly enough, I remember very little of the musical specifics of what I copied, but that was never the point. Instead, I gained from this intense and direct experience with Bach's music a strong and lasting sense of how he shaped his vocal and instrumental lines and how his thoroughbass-driven harmonies functioned in a way that owed nothing at all to Rameau or Fux. I can attest that my understanding of his music has considerably deepened because of this experience, as have my own harmonic, contrapuntal, and voice-leading sensibilities in general as a theorist, teacher, and composer. Since then, I have also copied works and excerpts from works by Palestrina, Bach, Bartók, Messiaen, Stockhausen, Vivier, and David Lang, and I intend on continuing this discipline for as long as I continue to write, teach, and seek to understand music.

In terms of this project specifically, I owe great thanks to three persons in particular: Firstly, David Smooke, my advisor for this thesis and also a classroom professor, composition teacher, and professional mentor. His help and distinctive humor have been most appreciated.

Vessela Valiavitcharska—assistant professor of English at the University of Maryland, specializing in medieval and renaissance language, writing, and rhetoric—was instrumental in expanding my thoughts from mere score-copying to a fuller embodiment of the principles behind it by pointing me to classical rhetorical pedagogy and its rich tradition of imitation exercises.

Also of great importance is Thomas Benjamin, recently retired from the Peabody Conservatory, who is by far the most masterful classroom teacher I have ever had the pleasure of studying under. His breadth of knowledge, masterful command of the material, palpable love of music, and ability to connect topics in a most practical manner models the type of musician and teacher I aspire to become. His guidance and advice for this project have also been highly insightful and helpful.

I also owe thanks to: Derek Bermel, a composition teacher of mine who encour-

aged his students to copy excerpts of scores so that we might learn how it 'felt' to write music well-crafted for specific instruments and ensembles, thus proving by his example that score-copying is not a dead exercise; Elam Sprenkle, whose extraordinarily-brutal Bach-copying assignment ignited my interest in the subject; Andrew Talle, musicologist on faculty at the Peabody Conservatory and an expert in all things Bach, for his help in my exploration of the Bach-Vivaldi transcriptions; Tracey Melhuish, archivist at the Peabody Archives, who assisted in some of my research for this project; Paul Mathews, Associate Dean of Academic Affairs of the Peabody Conservatory, who also provided both scholarly and professional advice and direction for both this project and beyond; Joseph Kraus, theorist on faculty at the Florida State University for his eye-opening teaching on the history of music theory.

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Chapter 1

The Theoretical Foundation

There lies a problem in modern undergraduate music theory training, and this problem is seen even in the very name of the subject: music theory. George Steiner was right when he wrote that

> the word 'theory' has lost its birthright. At the source, it draws on meanings and connotations both secular and ritual. It tells of concentrated insight, of an act of contemplation focused patiently on its object. But it pertains also to the deed of witness performed by legates sent, in solemn embassy, to observe the oracles spoken or the rites performed at the sacred Attic games. A 'theorist' or 'theoretician' is one who is disciplined in observance, a term itself charged with a twofold significance of intellectual-sensory perception and religion or ritual conduct.[1]

There is an intrinsic *subjectivity* to theory, Steiner argues—it is first a 'subjective impulse' and 'private conjecture' only later 'tested and proved by corresponding facts, by the mirroring evidence of empirical reality.'[2] Thus, at its core, *theoria* is primarily about observation and speculation. And indeed a place exists for this Theory of music in conservatories and university music departments across the country. But, as all theory professors recognize, music students, especially at the undergraduate level, are first and foremost *doers* of music, not theorists. As Thomas Benjamin points out, 'We might all agree that "theory" is an inaccurate term for what we teach, at least what we teach to undergraduates. ... Theories of music ... may implicitly underlie our teaching; but what we are really teaching is, as Sessions suggests, musical *practice*.'[3]

[1] Steiner [1989, 69]
[2] Steiner [1989, 70]
[3] Benjamin [1989, 190]

The question facing professors of music theory is how to best bridge the gap between the theory of music and the practice of music for the sake of their students. Theory, insofar as it is about observation and speculation, describes the processes of music—the relationships between contrapuntal voices, the harmonic meaning of the progression from one chord to another, the formal shape of the piece as it unfolds through time—but in students' minds, it often fails to connect in meaningful ways with actual and specific musical contexts. This is not theory's fault; it is not theory's job. Theory is necessarily concerned with abstracted principles which can be applied to various pieces, composers, styles, but practical musical realizations of theory demand a specific context, a context, in Benjamin's words, 'in which style, expression, and technique are fully integrated.'[4] This is the other face of theory: practice and religious or ritual conduct.

While pedagogical approaches stressing first the abstract principles of counterpoint, voice-leading, and harmony and then applying them to specific musical situations in a variety of styles are well-intentioned and theoretically elegant, all too often they fail at bridging the gap between theory and practice. Again, the problem is not theoretical—the theory is perfectly sound. The fault lies in the simple fact that the pedagogical approach begins with and focuses on abstract and disembodied concepts rather than actual engagement with music. Expressed in Steiner's terms, it cheats Observance in both senses of the word.

1.1 The Issue of Style

Let us consider the question of the role of musical style in music theory instruction as an entrance into our discussion. In celebration of Elliott Carter's hundredth birthday, interviewer Charlie Rose sat down with the legendary composer, along with Daniel Barenboim and James Levine, in a fascinating conversation that ranged from the composer's career to compositional processes to music-making in general. At one point, Barenboim asked Carter, 'What is the thing that irritated you most in your life?' Charlie Rose affirmed the question with an excited, 'Very good,' and there was a brief pause as Carter thought for a moment on how to answer a question he had not expected. A few seconds later, he answered:

> Oh, I can tell you one thing that I remember very distinctly is that when I was teaching at [the] Juilliard School, I had students who did not want to write in this what we call modern style but wanted to go back and do music like Mahler or Strauss, but they didn't know counterpoint, they didn't

[4] Benjamin [1989, 190]

> know harmony, and they didn't have the right voice leading, and that made me very angry, because if you're going to imitate that older music you have to know how to do it, and they didn't. They were just writing things that sounded something like Mahler. And that frightened me. Maybe that's novel. I don't know, but I didn't like it.[5]

This complaint might not mean quite so much were it not Elliott Carter, whose compositional technique is beyond reproach, and were he not speaking of students at Juilliard, and composers at that. If composition students at Juilliard can go through theory training but somehow not master the techniques of harmony, voice leading, and counterpoint that are critical to the style of those great late-romantics, it is only fair to wonder if anybody is actually learning these skills. The result is clear—rather than writing music clearly in the tradition of those great masters (or even simply borrowing from that tradition in a sort of 'post-modern' eclecticism), the best they could come up with was music that sounded something like Mahler. Note that he was not criticizing their aesthetic or the strength of their compositional ideas; rather, it was their lack of technique and lack of understanding of the style which was the object of his concern. I do not doubt that if given a score of late Mahler these students would have been able to construct a convincing analysis of the piece, at least insofar as analysis involves the accurate identification of harmonies, tonal areas, formal structure, motivic relationships, etc. I am also confident that, if asked, these composition students could easily write academically correct four-voice chorale style harmonizations. But in the end, where these concepts demanded enfleshment in an actual context, where technique and style meet and merge, these students, as Carter put it, demonstrated that they simply did not know how this music was put together. And is that not what the study of music theory is ultimately about?

This brings to the table the connection between technique and style. Both Bach and Wagner used French augmented-sixth chords 'properly' (technique), but no intelligent musician would say that they used them in the same way (style). To give a more personal example, in my study of renaissance counterpoint with Thomas Benjamin, he would sometimes look at the assignment I had written, smile, and then say something to the effect of 'Well, although you technically don't break any of the rules [technique], Palestrina wouldn't have done that [style]. Why don't you try this instead?' He would go on to suggest a few changes, usually subtle, always still technically correct, and invariably an improvement upon my original.

To understand the harmonic, melodic, contrapuntal, rhythmic, or formal techniques of music but not be able to see how they apply differently from composer to

[5] Rose et al. [2010]

composer or time-period to time-period is effectively useless for the practical musician. Yet many pedagogical approaches to music theory encourage exactly this sort of treatment. Undergirding this strategy are two pillars: first is the (accurate) observation that composers from the seventeenth through nineteenth centuries generally shared a 'common practice' of harmonic technique; second is the assumption that once students have studied the basic structure of this musical grammar they will find that they have acquired the necessary tools to 'grammatically' understand most any passage they will encounter and thus interpret it in a musically sound manner. The problem lies in the fact that while an understanding of the grammatical structure of harmony is extremely helpful, this does not entail an understanding of the musical content. When applied to the students' own composition exercises, there is little to prevent them from producing some musical equivalent of Noam Chomsky's famous line 'Colorless green ideas sleep furiously.' Their partwriting assignments may follow all the grammatical rules but be quite meaningless; their analyses may accurately identify all the chords and functions but fail to comprehend their musical significance.

We must remember that without specific realization—which can occur only in a specific stylistic context—these grammatical/theoretical constructs have no practical existence, and without these specific instances, we waste our time studying meaningless Platonic forms of harmony that are no more real than an ideal couch and are useful only insofar as we are able to force specific instances with greater or lesser elegance into a limited number of generalized patterns. These generalized patterns provide us with a basic vocabulary to use when speaking of the music, and certainly this vocabulary proves highly useful, which is why schools of music insist upon its mastery. However, we must keep in mind that harmonic concepts are subservient to musical practice and that whenever the concepts gain more importance than the music itself, both are rendered pointless.

We see this happen whenever a harmony textbook presents a concept and then provides various examples from the literature illustrating the principle in actual practice but the student, rather than reading the concept as a systematic description of a common musical pattern, misreads these examples as *illustrations of a concept*. This inversion can also lead to the disastrous consequence of the student failing to move beyond the abstract theoretical model into an exploration of how the music to be studied actually behaves. This is an inherent danger of textbooks that can only be counteracted by the teacher using them. Standard analytic techniques alone are not enough for most students to make this connection, especially at earlier stages where students tend to be more concerned with finding the 'right answer' (i.e., what chord is this?) than they are with understanding and engaging the music. The unfortunate end result is that stylistic characteristics are unintentionally downplayed, leaving only

an incompletely-understood theoretical construct which the students then struggle to relate to their musical lives. Some other means of engaging the music is necessary to complement the status quo.

When translated into compositional exercises, the result of this lack of direct exploration of style in conjunction with technique yields exercises that are stylistically amorphous at best and dreadfully unmusical at worst. Expressivity—an area which always lies within the realm of style—becomes a pleasant addition rather than an expectation. I am sure there is not a theory professor in the country who has not seen examples of student assignments that are technically 'correct' but musically dreadful. First- and second-year undergraduates may be young and lack the more fully-formed musical sensibilities of more experienced musicians, but they are unintelligent nor devoid of musical instinct. Although raw and unformed, these instincts can tell when a given sequence of notes embodies expressive musicality and when it does not, even if the students cannot articulate why. To place students in a position where the pedagogy unintentionally seems to encourage this sort of dry exercise is musically frustrating for them in the highest degree: it insidiously convinces them that they lack the necessary gifts to be a real composer on any level and drives a wedge in their minds between music theory and genuine musicianship.

But are these not two different areas of study, technique and style (expression)? To a degree, yes, but neither can they be completely separated from each other without losing sight of the whole. Besides, as any musician with even a sliver of performing experience can attest, the human mind is quite capable of focusing on multiple elements at once: both notes and text, the conductor and the principal, the instrument and the audience, and certainly both technique and expression. If we as professors of theory teach our students to compartmentalize theory from expression and technique from style, then we have failed as both teachers and musicians. We do our students no favors by generally ignoring the 'higher' domains of expression and musical meaning in order to focus solely on the detail of harmonic technique and related aspects of musical grammar. Some students may never recover from the bitter first encounter of an unmusical early theory training and be rendered unreceptive by the time the material gets interesting, thus perpetuating the unfortunate misconception that theory is useless for the practical musician. What better time is there for making music theory musical than at the beginning, lest, for lack of exposure to the 'higher' domains, the student never develop the sensibilities for them?[6]

[6] In his *Institutio Oratoria*, Quintilian comments on a similar situation in which boys were not sent to study rhetoric (the highest level of verbal study) until a much later age than reasonable: 'Thus we get the absurd result that a boy is not regarded as fit to go on to the schools of declamation till he knows how to declaim.' [Quintilian, 1920–22, II. i. §3]

When we consider the issue of style in music theory training, we see a number of things, but perhaps most important is the painful realization that much of what goes on in the undergraduate music theory classroom is neither practical nor musical. If music theory pedagogy is to escape this trap, it must be through an applied musical discipline sensitive to stylistic nuance and expressivity. The craft of composition is just such a discipline.

1.2 Teaching Theory through Composition / The Problem of Composition

To a degree, I am arguing for a return to unabashedly teaching theory through—and perhaps even to a degree *as*—composition as a method for connecting technique with style and theory with practice, that is, for making the theory classroom musical. For many years this was the model. Young musicians-in-training went through exercises in harmony and counterpoint with the expectation that at the end of their course of study they would not only have greater insight into the music they would perform and teach on a daily basis but also be able to write their own within the conventions of the day. Even at the beginning of the twentieth century, theory was presented as 'the material of musical composition',[7] and our current pedagogy still has vestiges of this—we expect our students to construct four-part chorales with proper voice leading and logical harmonic progressions or two-part inventions. Many teachers give assignments instructing students to write brief compositions modeled after Schubert Lieder, for example, or a Chopin waltz. No class on eighteenth century counterpoint is complete without at least an original fugue exposition or two.

A necessary corollary to this is that the students' education, if it is to achieve maximum effectiveness, should be one more of apprenticeship than lecture. Theory teachers rightly complain when class sizes become too large with the result that it becomes impossible to give students the individual attention and practice so necessary for their education—at some level, we still understand that ours is a craft which can only be truly learned while sitting at the feet of a master, not from a textbook, and this applies as equally to pure analysis as it does to part-writing and other compositionally oriented activities.[8] The best embodiment of this is found in the focal point of a student's mu-

[7] See, for example, Percy Goetschius, *The Material Used in Musical Composition*, which in addition to large quantities of figured bass realization with analysis and harmonizations given as exercise also instructed the students to construct 'a number of' and sometimes 'a *large* number of original phrases' (emphasis mine) [Goetschius, 1923].

[8] Heinrich Schenker's well-known opinions regarding analysis classes in schools of music demonstrate

sical training: the studio. Here, an aspiring young musician submits herself to the direction and guidance of an experienced master. Every week the student comes to her teacher and plays something, and the teacher then corrects, refines, shapes, and molds the student's work, demonstrates how to properly execute the passage or technique, explains the context and meaning behind it, etc. When done individually, this is called a lesson; when done in a group, a masterclass. The principle is the same, however, and if theorists continue to stubbornly insist that working knowledge of basic music theory is important to the applied musical lives of students, perhaps we would better connect with them were we to bring the pedagogical model of the theory classroom more in line with that of the studio. Of course, there are practical limits of implementation in our classes of twenty-some students, but having only four students per master is no prerequisite for adopting an apprenticeship mindset.

However, theory teachers, and especially those who are also composers, must keep in mind that this is not teaching composition *per se*. Rather, this is teaching music theory through composition. The distinction is subtle but important. Composition provides a practical context for the incubation of the musical sensibilities and analytic concepts found in theory and analysis. This sort of practical and inherently musical exploration of 'theory' can do much to counteract the misconception that analysis is a purely cerebral or mathematical activity and voice-leading exercises nothing more than a pseudo-musical game with its own complex set of 'rules' to be followed.

Teaching theory as composition is not without its own challenges. Composers, theorists, and performers all tend to think about music in slightly different ways, and the combination of the Romantic cult of genius with the ramblings of certain egomaniacal composers or misinformed commentators has created the fiction of the composer as a sort of musical analog to the Hebrew prophets of old—reclusive and awesome figures, in the world but not of it, dictating their compositions as if receiving them directly from a voice from the heavens. While most musicians recognize this as the myth that it is, the power of the myth is still felt, and the message, still clear: composition is something strange, wonderful, and quite beyond your grasp. Do not bother trying. Before any progress can be made, the teacher must first convince the students that this fiction is not myth but, rather, pure fantasy.

Second, the teacher must not ask too much too quickly of her students. While students must see that composition is a very attainable craft, they also cannot be allowed to fall into the delusion that it is easy. If this happens, the student will quickly take her struggles to write as a sign that she is unable to write, and at that point, she has fallen back into the lie of composition as some sort of mystic experience or a gift which one either has or has not. Begin small. One does not give a beginning piano student a

this perhaps better than anything else.

Mozart concerto; neither should one give first-semester theory students composition assignments which they have little hope of completing in a musically satisfying manner. Even completely diatonic four-part chorale style phrases demand tremendous skill to successfully compose. It should be a low-anxiety way of instruction.

There is a limit to the number of compositional decisions a young student can make at once before the quality begins to suffer. (By young, I mean inexperienced as much as I do physically young.) Initial forays into the world of composition must be carefully guided and extremely focused. The fewer variables the student has to work with, the easier it is to identify and correct problems and thus reach a well-crafted solution to the compositional problem. As Stravinsky put it in his *The Poetics of Music*, 'My freedom thus consists in my moving about within the narrow frame that I have assigned myself for each one of my undertakings,' or more succinctly, his famous and seemingly-paradoxical dictum: 'The more art is controlled, limited, worked over, the more it is free.'[9] Exercises must be constructed that will enable the students to explore the narrow frames of tonal harmony, melody, counterpoint, and form in such a way that the students become aware of the possibilities of choice within the framework and develop the necessary sensibilities to weigh the relative strengths of the different solutions. Like a master teaching an apprentice, the teacher must not only guide the students but also demonstrate for them the craft in practice, much as their private lesson teachers do, providing for them a model for emulation. Gradually, restraints can be lifted without fear of the students deviating from good taste, and eventually they will find themselves able to write their own compositions imitating the styles they must understand as practicing musicians.

Composition can provide the context for the practical, 'hands-on' type of learning necessary for musicians to develop their musical sensibilities in conjunction with an informed theoretical perspective. Besides reuniting technique with style, theory as composition offers the practical and music environment so often absent from theory classrooms. But would this succeed in connecting the 'religion or ritual conduct' face of Observance with the 'intellectual-sensory perception'? Or in conventional terms, could teaching theory as composition cheat analysis and interpretation to the detriment of the students, leaving them without the ability to make the analytic observations expected of them? This presents a very real danger, and if theory teachers are to chart a course for their charge between the Scylla of applied composition without theoretical command and the Charybdis of analytical prowess devoid of practical musicality, a brief exploration of the psychological dynamics of learning is in order.

[9] Stravinsky [1970, 65, 63]

1.3 Kolb's Experiential Learning Cycle

According to American educational theorist David Kolb's model of experiential learning, learning occurs in a cycle in which Concrete Experience (e.g., interaction with music) leads to Reflective Observation (theorizing/analysis), which then leads to Abstract Conceptualization (music theory), which in turn leads to Active Experimentation (composition, interpretation, etc.). Experimentation leads back to further Concrete Experience, closing and continuing the learning cycle.[10] Knowledge is acquired either by Experience or Conceptualization (apprehension) and processed through Observation or Experimentation (transformation) (see Figure 1.1).

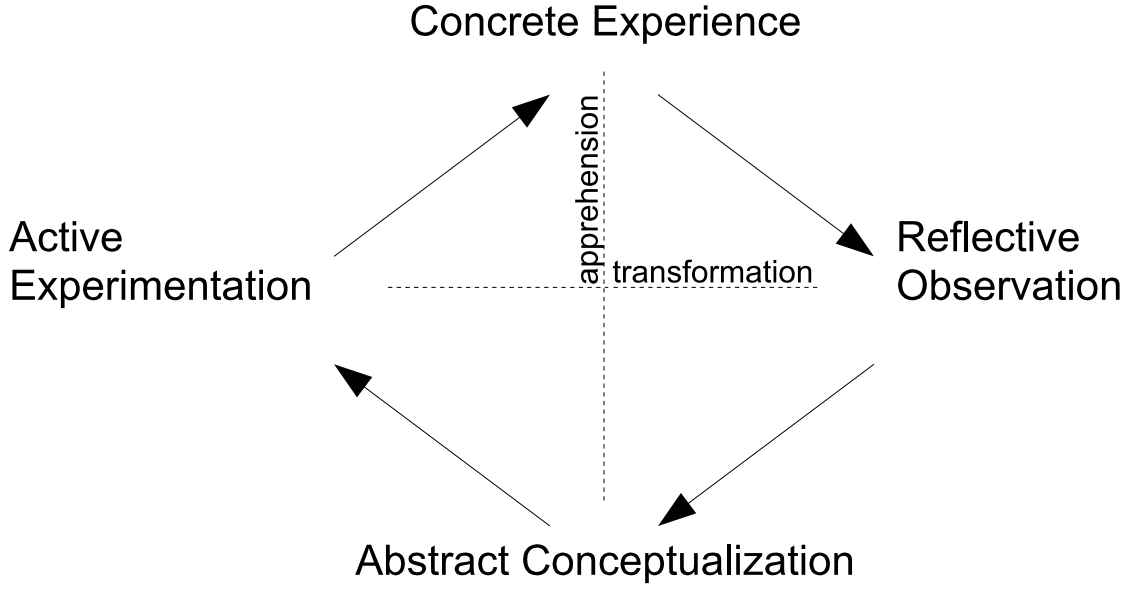

Figure 1.1: Kolb's learning cycle

A typical music theory curriculum may be mapped onto this diagram without much difficulty. The principles enshrined in harmony textbooks and bullet points of lectures fall under the Abstract Conceptualization category, including topics ranging from formal designs and processes, voice leading patterns, harmonic motion, patterns of nonharmonic tones, etc. Concrete Experience involves most any direct engagement with music itself, so long as that engagement is attentive and purposeful: in-class listening,

[10] Lively [2005, 80]

score study, performance, even individual practice when done intelligently represent various types of Concrete Experience which can play a role in the learning cycle. These are the two modes of apprehension whereby students acquire knowledge.

After the student engages with the music is some direct manner, this information is processed through various activities in the role of Reflective Observation, the most obvious of which (in a music theory context, at least) is analysis. This analysis may take a number of forms, ranging from a roman numeral harmonic analysis, a formal diagram, a basic Schenkerian reduction, or any number of analyses guided by specific questions given by the teacher. Less formal reflection might take the form of an identification of recurring harmonic patterns for memorization purposes, or a comparison of differing treatments of non-harmonic tones for different expressive effects, or any number of other reflective observations which a practicing musician might need to make in the course of her career or study. Active Experimentation occurs when the student takes the principles acquired from Abstract Conceptualization—whether the student arrives at these principles more from the principles themselves or the music via reflection—and applies them in some practical fashion. In a music theory curriculum, this will often be composition exercises, but it may just as well be represented by improvisation or various interpretive decisions in performance or critical contexts. The essential aspect is that the learner makes creative decisions based on a number of factors where the dominant paradigm is one of exploration and experimentation rather than 'right or wrong' answers.

However, once we map these music theory curriculum analogs onto Kolb's cycle, we see that the relationships between the different aspects are somewhat more nuanced than the original model suggests. For instance, the principles of music theory largely determine how analysis is done, and composition exercises or interpretive decisions generally draw upon the unfiltered (and somewhat ineffable) direct engagement with music itself as much as they do the abstract principles of music theory. We might posit that a more fluid rendering of Kolb's learning cycle in the context of music theory instruction is represented by Figure 1.2. In this, we also see the increased emphasis on the two modes of transformation—Active Experimentation (composition etc.) and Reflective Observation (analysis)—as both are informed by both modes of apprehension. At this point, we might recall our earlier assertion that undergraduate music theory students are more *doers* of music rather than theorists and the corollary that what we must teach them is not so much music *theory* as music *practice*. The modified model depicted in Figure 1.2 represents this dynamic more clearly.

This framework also allows us see more clearly the relationship of Steiner's concept of Theory with its twofold significance of the term Observance to the rest of our discussion. What Steiner calls Perception, Kolb labels Reflective Observation, and

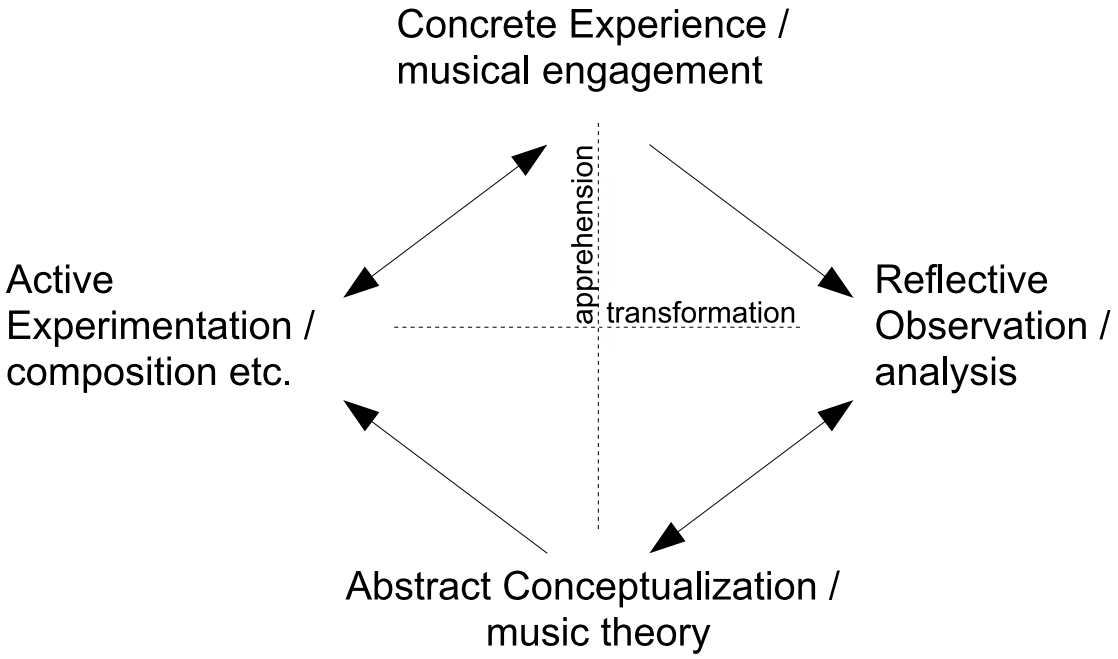

Figure 1.2: Kolb's Learning Cycle adapted for the music theory curriculum

what Steiner calls Conduct, Kolb identifies as Active Experimentation. These two faces of Theory meet at the axis of apprehension where the ritual is witnessed and principles formulated, but the subjective Observance which is at the heart of Theory occurs along the axis of transformation where the students *do* music (see Figure 1.3). Thus for Steiner, Theory itself, while centered on the axis of Concrete Experience and Abstract Conceptualization, properly encompasses the whole of Kolb's experiential learning cycle.

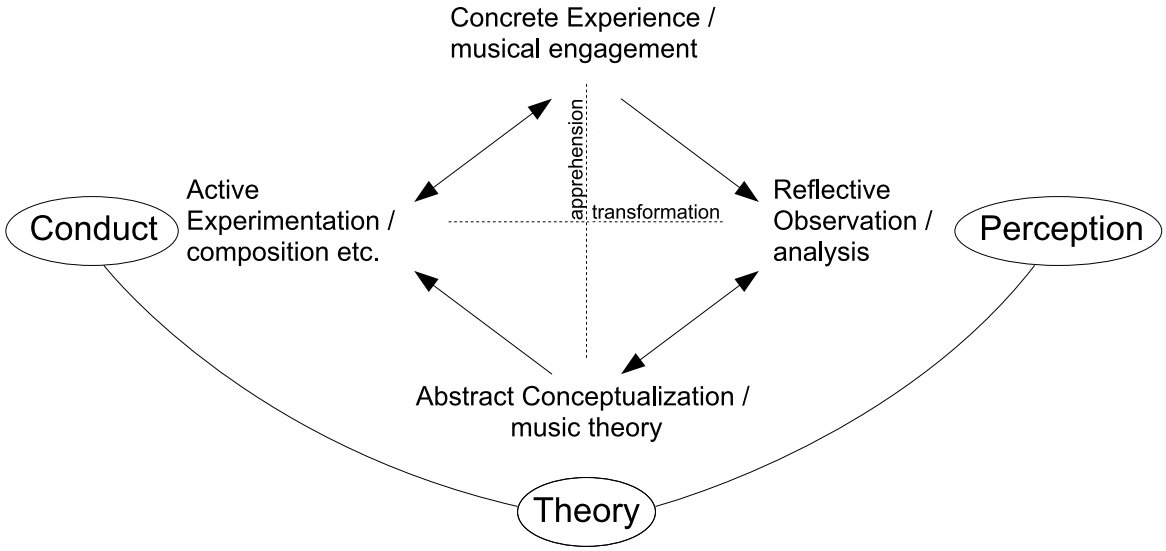

Figure 1.3: Steiner's and Kolb's models, superimposed

It naturally follows that a successful music theory curriculum will involve each of the four steps of the learning cycle, thereby embracing Theory in its completeness. And for the most part, theory curricula do. I feel that many are weighted too heavily towards the bottom of the cycle, emphasizing Abstract Conceptualization at the expense of each of the other steps, but can this imbalance alone be to blame for the ineffectiveness of a curriculum? If more attention were given to musical engagement in the theory classroom, would this fix our problem, and if so, what forms should this additional Concrete Experience take? To answer these questions, I would like to add one final model to that represented in Figure 1.3.

1.4 *Ars*, *Imitatio*, and *Exercitatio*

Having thus established the essential practical and experiential nature of music theory learning and having mapped its elements onto a model charting its psychological and theoretical dynamics, I would like now to propose a solution to our dilemma. An effective solution must achieve several things. First, it must be acutely aware of both technique and style (and therefore expression) as well as the relationships between them. Second, it must provide the framework in which the students may safely and confidently learn the craft of composition as an essential element of their practical and experiential theory education. Third, it must counterbalance the concept-heavy nature of music theory by providing copious direct musical engagement, thus rectifying the imbalance in the learning cycle. This solution, found in the model of *ars*, *imitatio*, and *exercitatio*, is drawn from classical rhetorical pedagogy and describes how skills are acquired and developed.

Classical rhetorical training exhibits many of the same dynamics found in music theory instruction. Grammatical correctness, stylistic appropriateness, and formal organization were all essential elements of rhetoric, and all were tied to the art of delivery, a fact which must not be lost on teachers of music theory. The connection between rhetoric and music (especially of the baroque and classical periods) is quite strong, and the parallels in training between the two fields are notable enough to demand our attention.

What was the means by which the classical student learned his craft? 'The ancient rhetoricians taught that oratorical skills are acquired by three means—theory, imitation, and practice.'[11] *Ars*, *imitatio*, and *exercitatio*. All skills are acquired by some combination of these three means; skills to be mastered require attention to all three.[12] These are defined in the beginning of the *Rhetorica ad Herennium*:

> By theory (*ars*) is meant a set of rules that provide a definite method and system of speaking. Imitation (*imitatio*) stimulates us to attain, in accordance with a studied method, the effectiveness of certain models in speaking. Practice (*exercitatio*) is assiduous exercises and experience (*usus* and

[11] Corbett [1971a, 243]

[12] Corbett gives us the example of learning your native tongue: the infant first imitates those around him, then practices as he forms his own thoughts and sentences, and later learns the structure and theory of the language. [Corbett, 1971a, 244] When viewed in terms of Kolb's learning cycle, this demonstrates a case of concrete experience moving directly to active experimentation without the intervening steps of reflection and abstract conceptualization, providing further support for the argument that a music theory curriculum which places more emphasis on concepts rather than skills and experience with music is less effective in forming lasting musical sensibilities and understandings than other approaches.

consuetudo) in speaking.[13]

For the music theory curriculum, *ars* is the 'theory' found in texts and lectures. In Kolb's terminology, it corresponds to Abstract Conceptualization, but it is also somewhat broader. The principles and concepts of music theory impact analysis as well as composition exercises; as Figure 1.3 above shows, the arrows from Abstract Conceptualization flow in both directions. Thus while centered on what we would call 'music theory', *ars* reaches out and impacts both analysis and practice, although it is perhaps weighted more heavily towards analysis.

Theory courses engage in *exercitatio* primarily with voice leading and composition exercises. The obvious analog here is with Active Experimentation. However, in addition to feeding back into the cycle by providing additional experiences, exercitatio also looks outside of Kolb's learning cycle proper, blurring the line between educational activities and professional or artistic ones as hinted at by the phrase 'exercises *and experience*'.

Ongoing squabbles, such as what to call the cadential 6–4 or how to handle the distinction between tonicization and modulation, aside, theorists and theory teachers have the basic theory of music theory pretty well under control. Similarly, most exercises are intelligently designed and purposeful. *Ars* and *exercitatio* are thus well represented in most theory curricula; it is *imitatio*, however, which the curricula severely want.

But what is imitation? The definition in the *Rhetorica ad Herennium* is slightly confusing but telling: certain models are held up on account of their effectiveness, are studied according to a given system, and serve as both models to be emulated and inspiration to the student to attain in his own work the level of effectiveness found in the models. The imitation can take several forms (we will discuss these in some detail in chapter 2), but at the core of them all is the centrality of the model. *Imitatio* thus functions primarily as a form of Concrete Experience, but much as *ars* stretches beyond Abstract Conceptualization, *imitatio* involves more than just engagement with the music. Because the model is studied in some way during the course of the *imitatio*, it involves Reflective Observation, and because the imitation exercises often involve the students making creative decisions of their own, it involves Active Experimentation. A visual representation of this is shown in Figure 1.4.

It is my belief that *imitatio* is the great missing link between theory and practice (including both composition and analysis/interpretation) in the music theory classroom. The late 16th / early 17th century theorist and teacher Joachim Burmeister wrote that 'Imitation is the study and endeavor to pattern and model our musical compositions af-

[13] quoted in Corbett [1971a, 243]

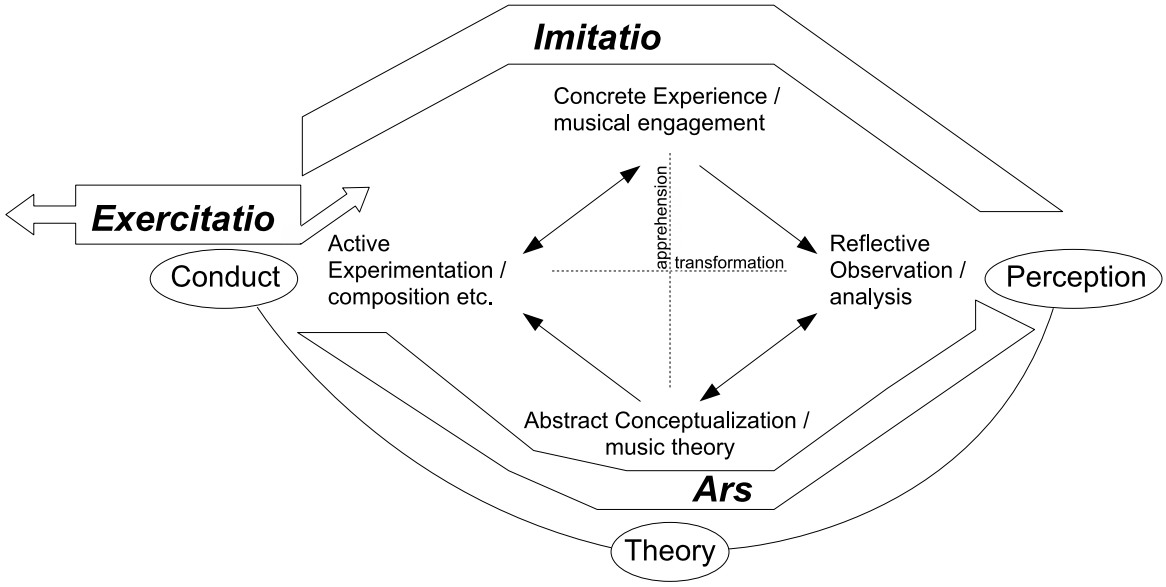

Figure 1.4: *Ars*, *Imitatio*, and *Exercitatio* in relation to Kolb's Learning Cycle

ter the works of master composers, *which are skillfully examined through analysis*.'[14] That is to say, he recognized that *imitatio* was the link between *ars* and *exercitatio*, and this is no less true for students struggling to connect music theory with music practice today than it was in the early 17th century. Returning pedagogical techniques of *imitatio* to music theory training would give increased weight towards what Kolb calls 'Concrete Experience', that is, it would cultivate what Benjamin describes as a classroom that is 'practical and musical', 'in which style, expression, and technique are fully integrated.'[15] It would provide sure footing for beginning study in composition, especially for students who might otherwise find themselves intimidated. It would allow Reflective Observation to find its rightful home in the classroom alongside Active Experimentation rather than being limited to a handful of large analytic projects late in the semester. To borrow Steiner's language, it would facilitate a reintegration of Perception with Conduct, the two faces of Observance as practiced by the theorist.

[14] Burmeister [1993, 207–09] (emphasis mine)
[15] Benjamin [1989, 190]

1.5 The Necessity of *Imitatio*

In much music theory instruction as found in most standard textbooks and classrooms wherein Abstract Conceptualization is emphasized as the primary means of acquiring knowledge, students are presented certain concepts, shown musical examples which demonstrate the concepts, and then given various exercises to reinforce and test their grasp of these concepts. (Indeed, some students may even mistake the conceptual framework as the central objective of their course of study.) While intellectually straightforward, this proves to be a psychologically ineffective method for cultivating the experiential and practical knowledge necessary for the students if they hope to take their knowledge of music theory beyond the classroom and into their musical lives. Illustrations (both visual and aural) of concepts taken from the literature provide a degree of concrete experience with music, but these are generally too few and too fleeting to provide the level of musical engagement necessary for them to function as an effective mode of apprehension. Opportunities for reflective observation and speculation are similarly limited by insufficient musical engagement and usually restricted by the parameters of the concepts which the students are first taught. Composition exercises provide good opportunities for experimentation, but this effort is undercut by the lack of support from musical experience and reflection. In short, the entire cycle of experiential learning is disrupted and effectively replaced by a different paradigm: Abstract Conceptualization reigns supreme as both source and object of Music Theory Knowledge, and this informs analysis and composition. The situation is exacerbated by the fact that both women and young adults (i.e., students under the age of 20) tend to respond better to Concrete Experience than to Abstract Conceptualization as a modality of learning;[16] thus the typical undergraduate music theory classroom finds itself unintentionally biased against the preferred learning style of the majority of the population which it is attempting to teach. This is a terribly unfortunate, unfair, and entirely unintentional situation, and it is little wonder that even intelligent and talented students so often find music theory classes extraordinarily frustrating.

Here we must consider composition exercises 'in the style of X' as assigned by many teachers. In many ways, such assignments aim for exactly the sort of practical engagement and integration of harmonic technique with stylistic traits and expressivity for which I am arguing. Why are these not enough? I see two main reasons why these fall short of their intended goals. The first is that the underlying problem of insufficient engagement with the music to be imitated (in Kolb's learning cycle, Concrete Experience) remains unaddressed. This is an issue both of quality as well as quantity: the few examples discussed in the limited amount of class time available can rarely

[16] Lively [2005, 93]

communicate the depth of a style necessary for the student to successfully imitate it, and the sort of engagement possible in a classroom (which is usually limited to some combination of aural and visual analysis) rarely approaches the level of intimacy and familiarity with the work, composer, or style which such exercises demand. General stylistic traits might be identified and analyzed, but they will not be internalized. Further and different engagement is necessary.

The second problem is that of composition, which has already been discussed (see Section 1.2 on page 12)—the ability to invent a germ of a piece in a particular style does not automatically bestow the craftsmanship necessary to develop this into a complete composition, no matter how brief. This is a separate—and remarkably practical—skill, one which must be taught, and one which can provide the students with great insight into the composer's thinking throughout their careers as performers and interpreters of music.

Imitatio stands unique among possible solutions to these problems in that not only does it provide a method of learning in which technique and style are examined side by side as inseparable parts of an organic whole, and not only does it force a close examination of musical works thus bringing balance to Kolb's learning cycle, but it also carefully guides the students through the compositional process itself, instructing them in this very practical craft, thus making the study of music theory a musically organic, expressive, and meaningful discipline. Only if compositional exercises are done in constant contact with and continually informed by actual music will the active experimentation of these imitative exercises achieve the highest degree of effectiveness and instill in the students the understanding of music and music theory which is the goal of the theory classroom. *Imitatio* ensures this contact. Only intense engagement with works from the literature—and the resultant reflection and analysis which go along with this—can provide the grist for the music theory mill so that these abstract principles can be translated back into real music via composition. *Imitatio* provides this. Kolb's learning cycle is completed, Perception is reunited with Conduct, and the theory classroom is again made practical and musical. While perhaps less formally elegant from some theorists' standpoint, such an approach should prove pedagogically far more effective, not to mention far more enjoyable.

The one remaining question is, 'What might such a classroom look like?' or perhaps more in the spirit of *imitatio*, 'Have we any models of such an approach?' Fortunately, we do.

Chapter 2

Imitation in Classical Rhetorical Pedagogy

In the preface to his textbook *Classical Rhetoric for the Modern Student*, Edward Corbett writes:

> The men from whom we inherited the classical system—Aristotle, Cicero, and Quintilian—firmly believed that some of the skills involved in the process of composition could be taught. Having studied the practice of successful speakers and writers, they brought together a set of precepts to aid their students in acquiring those skills, but they were sensible enough to recognize that one does not acquire a skill simply by studying rules; one must also submit to the discipline provided by imitation and practice.[1]

Were we to strike the names Aristotle, Cicero, and Quintilian from the passage and replace 'speakers and writers' with 'performers and composers', no-one would guess that this was not originally written about music. In fact, it neatly summarizes the task of the teacher of music theory (or music in general): study the practice of great composers and performers, extrapolate and codify precepts for the students to follow in developing their musicianship, present these to the students, and then provide the opportunities for them to practice these skills.

2.1 Grammar, Style, and Music Theory

Ultimately, this is about style. Quintilian and other classical teachers of rhetoric emphasized imitation of the great speakers and writers, and through such rigorous study

[1] Corbett [1971b, xi]

and discipline, the students learned how to present their own arguments in well-crafted and stylistically appropriate speeches. John Muckelbauer notes, 'In marked distinction from contemporary scholarship, the most common question about imitation in antiquity was not "Should we or should we not imitate?" but instead, "Whom should we imitate?"'[2] Great care was taken in the selection of what examples the students should be given to imitate. Different writers possessed different qualities, and exposure to a wide swath was absolutely necessary.

But how does this relate to the grammatical and structural elements of music which are the immediate focus of music theory instruction? As we have already seen, there is a strong link between the technical structural elements of music and the stylistic traits which distinguish one composer from another, much as there is a strong relationship between grammar and rhetoric in verbal language. If we place linguistic units on a continuum, ranging from the footnotesizeest verbal unit up to the whole composition, we have: phoneme, syllable, word, phrase, clause, paragraph, division, whole composition. (One possible set of corresponding musical units might be: sonority, progression (movement from one sonority to another), motive, phrase, period, subsection, section, entire movement or piece.) Grammar is concerned with the lower half of this continuum, namely, the phoneme through the clause, and rhetoric is concerned with the upper half, namely, the word through the whole composition (see Table 2.1).[3] However, there is an overlap between the two fields where both grammar and rhetoric concern themselves with the same units. In this middle ground which belongs to both fields, there are some questions which can be answered only by grammar, and some only by rhetoric; ignoring either has negative consequences for the end result.

As we can see in the Table 2.1, music theory properly encompasses the entirety of what is covered in both the study of grammar and rhetoric in verbal fields. Thus, to not address stylistic concerns directly as a central element in theory classes from the first year of undergraduate study gives the students an inaccurate impression of what music theory is and how it relates to their musical lives. Stylistic and structural/grammatical elements must be presented together if they are to have any significant meaning to the students.

[2] Muckelbauer [2003, 69]. See Quintilian's *Institutio Oratio* Book X for an example of this.

[3] Corbett [1971b, 417]. The musical analogs are, of course, not in the original.

Grammar	Rhetoric	Musical Analog
phoneme		sonority
syllable		progression
word	word	motive
phrase	phrase	phrase
clause	clause	period/phrase group
	paragraph	subsection
	division	section
	whole composition	entire movement or piece

Table 2.1: Overlap of grammar and rhetoric, with musical analogs

2.2 Creativity

One area of concern is that the imitation of 'canonical' works is little more than the imposed hegemonic system of the conservative order and serves only to stifle progress and individual expression. However, this is not the case. In antiquity, there was little concern that the rigors of imitation would quash the students' natural voices, and as music teachers, we see this borne out in our own experience. Teachers of music theory do not usually place much emphasis on having students develop their unique compositional 'voice' or personalized style. Nor should they. Those who go on to serious work in composition will eventually find that such a voice emerges or develops on its own, much as in the case of students of rhetoric in antiquity, and much as performers develop their own interpretations and style only after years of performing. This takes time, however, and this is not what the theory classroom is for. As Hindemith writes, 'In *Die Meistersinger* one reads, it is true, that the composer must make his own rules and then follow them. But this privilege is granted only to a master.'[4] Instead, the theory classroom is the place where initial musical sensibilities are formed, and teachers must take seriously their charge of forming good ones. Typically, we may safely assume that none of the students sitting in the theory classes are 'native speakers' of the musical language to be studied, especially when it comes to writing their own compositional exercises. As Tom Benjamin puts it, 'Besides, if all students had their instinctual musical capacities in working order, we'd hardly have to require several years of theory

[4]Hindemith [1942, 2]

study.'[5]

But neither did those assigning the imitation exercises believe that imitation was all that was necessary and that development, progress, innovation, and individuality were not possible. As Quintilian writes, 'The first point, then, that we must realise is that imitation alone is not sufficient,'[6] and as John Muckelbauer points out, variation always found its way into the system. The goal was never to grow an identical crop of writers and speakers who simply aped their models with greater or lesser degrees of success but rather to enable the students through their study to write and speak on their own.[7] In other words, the goal of imitation is fluency of expression—well-crafted, flexible, and in total command at every level of discourse. While modern music theory study has a different goal than classical rhetorical study (i.e., we study music theory to better understand, interpret, and perform music, whereas they studied writings primarily to be better writers and speakers), the means by which the classical student pursued his goal is remarkably well-suited for ours.

Further, a strong connection between music and rhetoric exists. Although rhetoric found its home in the *trivium* and music theory originally in the *quadrivium*, music, being primarily vocal for most of western history, was bound to rhetorical principles in ways obvious to the educated. The baroque period especially witnessed a flowering in the connection between rhetoric and composition. An early example is Joachim Burmeister's 1606 treatise *Musica Poetica*, a work littered with Greek terms borrowed from rhetoric, especially in relation to ornamentation. Interest in the subject in general went into decline after the baroque but experienced a degree of revival in the twentieth century. For a handful of relatively recent examples: Ursula Kirkendale has claimed that Bach structured his *Musical Offering* according to 'the successive sections of an oration' as described by Quintilian in his *Institutio Oratoria* and that he 'writes no fewer and no more than those described by Quintilian, and in the proper order';[8] Leonard Ratner in his book *Classic Music* actively seeks to link rhetoric and music, noting that 'many 18th-century theorists looked upon phrase structure, chord progression, rhythmic scansion, melodic construction, texture, and performance as the rhetoric of music';[9] and Dietrich Bartel[10] compiled an impressive study on musical-rhetorical figures drawing on host of German baroque theorists.[11]

This is a realm of study unto itself, and since the purpose of this present paper

[5]Benjamin [1989, 200]

[6]Quintilian [1920–22, X. ii. §3–7]

[7]Muckelbauer, 74-75.

[8]Kirkendale [1980, 96]

[9]Ratner [1980, 31] (emphasis in original). Part II of the book is under the heading 'Rhetoric'.

[10]Bartel [1997]

[11]For a further discussion and bibliography, see: Wilson.

is pedagogical rather than theoretical, let it suffice to say that these parallels exist and that they have been and continue to be the subject of discussion. We shall simply note that in addition to specific figures and rhetorical devices, the historic theorists/teachers also shared the ancients' opinion on the importance of imitation of the masters as the student learns his craft.

2.3 *Imitatio*: An Overview

In the classical educational tradition, imitation involved a series of different exercises encompassing Memorization, Copying, Paraphrase, and Translation.[12][13] While these may seem excessively laborious and impractical to our modern sensibilities (especially our American sensibilities conditioned—and let us be honest—by convenience and immediate gratification), previous generations have found them to be highly effective and worthy of passing on to the next. Let us consider each of these carefully to see what the students gained from these exercises and if these might be of use to us for our own purposes. While we will keep our focus primarily on the rhetorical tradition in the following several pages, the next chapter will discuss historical examples of these techniques in music.

2.3.1 Memorization

'Memorization was one of the five canons of classical rhetoric, along with invention, arrangement, style, and delivery.'[14] It was customary for students to commit to memory their own compositions and then declaim them in front of the class—a very practical task in an age where writing supplies were expensive, and one which brought the added benefit of training the students to perform and control their anxiety. But according to Quintilian, even more beneficial for the students was memorizing the works of others:

[12] Muckelbauer [2003, 71]. See also Corbett [1971a, 246].

[13] N.B. Here, and elsewhere, when these terms appear capitalized, they refer to the basic *imitatio* concept or original rhetorical discipline of Memorization, Copying, Paraphrase, or Translation, and musical analogs of these disciplines and concepts will not appear capitalized. For the most part, these relationships should be fairly obvious: score-copying refers to the specific musical discipline which falls into the basic *imitatio* category of Copying, variation is the musical manifestation of the idea of Paraphrase, and arrangement (and transcription) are musical the analogs of Translation. Only one possible point of confusion remains: the reader must infer the distinction between the musical act of memorization and the rhetorical discipline and fundamental concept of Memorization on the basic capitalization and context.

[14] Corbett [1971a, 246]

> Further they will form an intimate acquaintance with the best writings, will carry their models with them and unconsciously reproduce the style of the speech which has been impressed upon the memory. They will have a plentiful and choice vocabulary and a command of artistic structure and a supply of figures which will not have to be hunted for, but will offer themselves spontaneously from the treasure-house, if I may so call it, in which they are stored.[15]

We see in this above quotation a hint of the genius of such practices: words, structures, and figures will be carried *unconsciously* and offer themselves *spontaneously*. The mark of fluency in a language is being able to think and speak without hesitation, and this involves being able to call forth pre-constructed units without needing to laboriously build each phrase word by word. By memorizing the works of others, the students find the very patterns they use to speak become internalized in themselves, and they can then apply them at will and effortlessly.

Musicians are, of course, no strangers to memorization. While there is always an element of practicality to memorizing one's music (whether to allow the singer to act on stage, or the pianist to entertain friends at a casual gathering at a moment's notice, or just for the pure showmanship of a concerto), the deeper issue is one touched upon by Quintilian and other classical rhetoricians: Memorization internalizes and personalizes a work in a way that mere reading cannot. When musicians engage in memorization systematically and thoughtfully rather than by rote, it forces extended contact with and reflection on the work, things which are both necessary for the learning cycle but sometimes neglected in theory classes.

2.3.2 Copying

Copying involves just that—the literal copying of a text, word for word, occasionally even on massive scales:

> According to Lucian, in the course of Demosthenes' self-imposed training, the great ancient orator sat at a desk and copied verbatim Thucydides' massive history of the Peloponnesian war. Given Demosthenes' inclination toward somewhat unusual or extreme training practices, this event seems almost unsurprising—that is, until it is mentioned that he did not copy the history only once, but eight times.[16]

[15] Quintilian [1920–22, II. vii. §3–4]
[16] Muckelbauer [2003, 61]

More recently to our own age, Malcolm X acquired his own command of language by copying out the entire dictionary.[17] Such Herculean tasks are exceptional, however. More commonly, copied passages would have been smaller, carefully chosen to expose the students to a variety of styles, and often done in conjunction with Memorization.

Besides the tangential (although often ostensible) benefit of having one's own copy of the text, the primary value in copying a work lies in the simple fact that it forces the reader to pay painstaking attention to every single word and slows the speed of reading down to the far-more-deliberate pace of the hand. *Qui scribit, bis legit*, as the saying goes—he who writes, reads twice. Rather than noticing only the distinctive stylistic features of a text, the entire landscape which gives the peaks their prominence reveals itself. Transcribing a brief dictated passage is one variation on this technique, once a popular daily exercise in French schools.[18] In Kolbian terms, this technique ranks among the best in enabling the Concrete Experience necessary to the learning cycle.

The old practice of copying scores by hand is the obvious musical parallel. While once a fairly standard discipline with such famous precedents as J. S. Bach's secret copying of keyboard music by moonlight, this grew less common as scores became more readily available and far cheaper with the advance of both music publishing and music piracy. By the time photocopy machines had become commonplace, the majority of both students and teachers considered the practice somewhat quaint. However, it remains an effective discipline and still has its adherents. Again, we will return to this later.

2.3.3 Paraphrase

Like Copying, the exercise of paraphrasing forces a far-more careful attention to the original text than does mere reading and study. The student must examine each sentence, determine the underlying meaning, and then make a decision on how to recast the thought in a new manner. The primary distinction between this and free imitation is that in Paraphrase, the student does not invent new ideas but instead limits himself to reformulating preexisting ones. In antiquity, this often meant turning a poem into prose or some other translation across stylistic genres. For instance, the lofty expression of poetry could elevate the level of prose in the young orators who might otherwise tend towards dreadfully common language in that genre. The student might expand a concise statement, condense a verbose one, or simply find an equally compelling way of expressing the exact same content. Sometimes the new paraphrased version will be inferior for reasons that become quickly obvious, but in general, the student should

[17] Corbett [1971a, 247]
[18] Ibid.

strive for paraphrases which vie with or even surpass the original in quality.[19]

Necessarily, this involves a degree of interpretation on the part of the student. Good writers and speakers choose their words carefully in order to convey a specific message (or perhaps, an ambiguous multiplicity of possible messages, or even an enigmatic vacuousness), and altering the wording changes the implications. Just as an actor may find various ways of delivering a line, each conveying different but valid interpretations, so can a writer express the same fundamental concept with various connotations. Paraphrase thus forces not only careful analysis of and reflection on / interpretation of the original but also creative experimentation. Students ask themselves, 'What if the original had said this? What then?' Mature analysis always involves a healthy dose of ascertaining why a writer or composer chose to *not* do something. Experimentation by paraphrasing an idea into what could have been yet was not can yield valuable insights into the purposes of the original author. And always the student's own expressive capacities are exercised and expanded.

Erasmus in his *De Utraque Verborum ec Rerum Copia* provides pedagogical details in how Paraphrase exercises might take place. He specifies the different techniques whereby one may vary the sentence: *synonymia* (synonyms, that is, changing individual words, and he lists many different subtypes of doing this), archaisms, *enallage* / ετέρωσις (a small change in the same word, such as drinker to drunkard), *antonomasia* (that is, changing the name or substituting an epithet for the proper name), *periphrasis* (that is, adding more words), metaphor, allegory, *catachresis* (essentially a metaphor, but one used when a specific proper word does not exist), onomatopoeia (that is, coining a new name or word), *metalepsis* (to 'proceed by steps to that which we wish to express'[20]), metonymy (the substitution of a representative name for the thing itself), synecdoche (the part representing the whole, or vice versa), *aequipollentia* / ισοδυναμία (equivalence by use of negatives), comparatives (inverting the structure by use of contraries), relatives (the use of relative expressions to convey the same meaning from a different point of view), amplification (use of a stronger word for a weaker), hyperbole, *diminutio* / μείωσις (the opposite of amplification), *compositio* (a grammatical construction in which one word modifies several expressions), *constructio* / συνταξις (a slight variation in the syntax of the phrase), and by using a different figure of speech.

Having established the basic techniques for varying a sentence, Erasmus goes on to provide an example of how a student might go about a similar task. He begins with a simple sentence: Your letter has delighted me very much. 150 variations later, we have seen a direct and harmless sentence been transformed into paraphrases ranging from

[19] See Quintilian [1920–22, X. v. §4–11] for a brief discussion of the uses and benefits of Paraphrase exercises.

[20] Erasmus [1963, 31]

the ever-so-slightly ambiguous 'Not unpleasing to me was your letter,' to the poetic albeit somewhat overblown 'What clover is to bees, what willow boughs are to goats, what honey is to the bear, your letter is to me.'[21] He finally stops not for exhaustion of the subject but for having sufficiently proved his point.

We would do well to keep in mind that the ultimate point of the exercise is not to produce a monumental 'Variations on a Theme of Letter-Reception' but to create in the student: (1) an awareness how stylistic choices impact meaning, and (2) the ability to take an idea and express it in a number of different styles and with a broad range of expressive connotations. For students of music, this increased sensitivity to how variations on basic structures create different musical meanings is one of the chief goals of music theory instruction. Such awareness should prove a great aid in their interpretation of music. And for composers and all those engaged in composition assignments, the facility of expression encompassed by the second goal is crucial. The seemingly lost art of improvisation also depends on this. A renewed emphasis on this type of facility could help return improvisation back to the mainstream rather than keeping it isolated in a ghetto visited only by organists, jazz musicians, and a small handful of pianists.

Two more observations which might be of interest for our own pedagogical purposes: First, Erasmus encouraged competition between students in coming up with as many different variations as possible—they will learn as much from their mutual discoveries as they will from the unique results of their peers.[22] While we must be delicate in fostering competition in our classrooms, lest the viciousness found in some musical circles infect what should be a constructive environment, healthy competition carefully structured has vast potential to elevate the level of engagement in the class. Second, although some of these are exclusive to the realm of speech, we can find musical analogs for several of these techniques of varying a sentence, at least in spirit if not in one-to-one correspondence. But again, our purpose here is not to invent a new vocabulary for musical techniques (or perhaps more accurately, recover an old one), but simply to examine the pedagogical processes associated with them and appropriate these for our purposes as applicable.

The obvious musical parallel to the rhetorical pedagogical device of Paraphrase is that of variation. Indeed, in the words of the late 18th century German theorist Abbé Vogler, 'Variations are a type of musical rhetoric, where the given meaning appears in different guises, with the distinction that the boundary lines are much more rigorously determined in music than in oratory.'[23] Although variation tends to be treated

[21] Erasmus [1963, 40, 41]

[22] Erasmus [1963, 17]

[23] quoted in Sisman.

as a compositional device rather than a student exercise, this does not diminish its pedagogical value. Indeed, unless written for the express purpose of virtuosic showmanship, there is a certain 'academic' character inherent in the process itself, which perhaps explains why extended variation sets on the level of the Goldberg, the Diabelli, the Enigma, or those on a theme by Haydn are so rare.

Part of both the problem and charm of equating rhetoric and variation is the tension between *res* and *verba*, that is, the idea vs. the words. Substituting synonyms in 'Your letter has delighted be very much' can give us 'Your epistle has cheered me exceedingly' or some other identical expression, changing the words but leaving the idea untouched. The second half of Erasmus's book offers instructions on how to achieve copia of thought to complement that of words, but musically, this is problematic—in the absence of words, what exactly is the *res*, and how does it differ from *verba*? More so than in spoken language, in music, the meaning and notes used to communicate it are terribly intertwined. Perhaps some light can be shed on this by a brief exploration of the concept of *figures*.

According to the 3rd-century Greek grammarian Aelius Herodianus 'a figure [of speech] is a deviation of phrase from appropriate usage.'[24] When used tastefully and in moderation, figures were wonderful tools for adding variety to one's discourse. Quintilian called them 'the chief ornament of oratory.'[25] However, Vessela Valiavitcharska observes that the figures were assumed to have an important role in the arrangement and invention of argument as well as the diversification of discourse: 'the teaching of argument and form overlapped in a syncretic pedagogy,' and 'the figures taught the students how to come up with arguments, if their ideas were somewhat lacking.'[26] Thus in the Byzantine classroom, there was a strong interconnection between *res* and *verba* through the figures, and the figures and the variation they facilitated allowed the students to learn both. Book II of *De Copia* demonstrates a similar dynamic. Likewise, musical Paraphrase making liberal yet tasteful use of figures (not as ornamentation but as stock patterns characteristic of certain genres or composers) can also exhibit such a dynamic between musical content and musical style. The end result is an interrelated and synchronous exploration of structural grammar, musical style, and expressive content.

Perhaps Quintilian best sums up the value of Paraphrase in that it serves to shape the minds of the students:

> Further, the exercise is valuable in virtue of its difficulty; and again, there is no better way of acquiring a thorough understanding of the greatest au-

[24] quoted in Valiavitcharska [2011, 19]
[25] Quintilian [1920–22, X. v. §3]
[26] Valiavitcharska [2011, 38, 39]

> thors. For, instead of hurriedly running a careless eye over their writings, we handle each separate phrase and are forced to give it close examination, and we come to realise the greatness of their excellence from the very fact that we cannot imitate them.[27]

Paraphrase not only forces a close examination of the original exemplars, it also tests and exercises the students' own creative and technical abilities. As an exercise, it is thus uniquely positioned to engage two different but equally critical modes of learning while also honing a very specific and practical skill. And after considering its potential for energizing the classroom, it is no wonder this was such an important and effective element in rhetorical education. Musical adaptations of the principle offer the same thing to the theory classroom.

2.3.4 Translation

Translation is exactly what one might guess: taking a text from another language and translating it into the student's own. It is a relatively straight-forward exercise. In a way, translation is a combination of Copying and Paraphrase: like Copying, it involves a careful reading of the original and re-writing in the student's own hand, and like Paraphrase, it involves a re-expression of the original using different words. For Quintilian and his contemporaries, this would have meant translating a Greek work into Latin. He even implies that Cicero's translations of Xenophon and Plato were the result of this exercise rather than the goal itself. And in translation, the student is free to use the full resources of a language since, unlike in Paraphrase, all the best words of his language are still available to him. There student must also face the challenge of conveying what is an idiomatic figure in one language into an appropriate equivalent in the other. He thus learns the relationship between *res* and *verba*, content and style, thereby improving his facility in his own tongue.[28]

The musical equivalent of this is arrangement or transcription (e.g., a piano prelude arranged for string quartet, or a string quartet transcribed for piano).[29] While in one sense the musical 'language' is the same in such a translation as far as melody and harmonic structure are concerned, in another, they are quite different—composers do not use the same types of gestures for string quartet that they use when writing for piano. Simply transferring the 'tenor voice' of the piano into alto clef for a violist to play does not constitute arrangement and is actually a less effective strategy than

[27] Quintilian [1920–22, X. v. §8]

[28] Quintilian [1920–22, X. V. §1–3]

[29] I will treat 'transcription' as a particular type of arrangement in which the original music is for something other than piano and the destination instrumentation is piano.

basic score copying. When done correctly and thoughtfully, the student must make a careful study of the original text, chord by chord and phrase by phrase, determine the musically essential elements of the original, and then make a decision on how to best convey these in the new medium. Much as the student of rhetoric translating a speech from Greek into Latin must convey the content of certain idiomatic Greek figures with those appropriate to Latin, so must the music student learn to recognize the difference between ensemble-specific idioms and the essential musical gesture and make musical choices designed to preserve the musical content.

This necessarily involves a considerable amount of analysis and interpretation on the part of the student.[30] In order to create a comparable musical effect in musical translation, the student will often have to make decisions that overstep a literal transcription of notes, that is, in order to preserve the spirit of the composition, certain specific elements may need to be altered. Different students may find different answers to questions of voicing, orchestration, register, dynamics, phrasing, etc. When forced to defend their choices, students must articulate how their interpretation of the original informed their decisions in the arrangement, and this gets to the heart of analysis better than labeling chords ever can. At this point, the students are thinking as composers would, only without the burden of having to invent the ideas themselves. Making the students think along such lines early in their theory training will both yield more interesting insights in their own analysis and interpretation of other works as well as serve to demystify the composer's craft and make it more accessible to all musicians. In addition to embracing a fuller and more relevant understanding of music theory instruction, these exercises will create a more engaged and enjoyable classroom environment.

2.4 Summary

Both Paraphrase and Translation as musical exercises begin with Concrete Experience with music and have an element of both Reflective Observation and Active Experimentation, but whereas Paraphrase emphasizes the experimentation as the primary mode of processing, Translation emphasizes observation. The techniques complement each other admirably, and when coupled with the analytic techniques and theory available in most harmony textbooks and theory classrooms, they provide a complete engagement with all modalities of Kolb's learning cycle. Copying and Memorization provide the extra focus on the most critical yet most neglected part of the cycle and together

[30] For an excellent overview of this concept, see Nicholas Cook's aptly named article 'Arrangement as Analysis' [Cook, 1987].

contribute more than any other technique towards the internalization of the material to be learned.

With these specific beginning exercises in *imitatio* in combination with a solid grounding in the *ars* of music, theory students will be prepared to move to freer *imitatio* exercises and compositions and eventually unencumbered exercitatio in the form of composition, analysis, interpretation, and performance. In practice, all three—theory, imitation, and practice—will overlap and be presented at the same time but in different contexts and with different biases. Such is the nature of a school of music. However, a strong grounding in imitation in the theory classroom will provide the students with the ability to connect all three in meaningful ways. Then each can build on the other two without the usual fissions between classroom and studio. Such exercises can make the classroom both practical and musical.

Chapter 3

Precedents for Musical Analogs

To summarize our work thus far, I have argued that the most common pedagogical approaches used in music theory classrooms provide insufficient interaction with music itself, thus undermining the students' learning cycle and creating a divide between the theory classroom and the rest of the students' musical studies. One logical corollary to this is that style and musical meaning become separated from structural grammar, thus weakening theory's musical relevance for the students. Furthermore, students are not adequately prepared for compositionally-oriented assignments, which limits the educational value of such exercises as well as making them terribly unsatisfying for the students. The missing link between theory and practice can be found in the imitation exercises used in classical rhetorical pedagogy. These imitation exercises address several weaknesses in common theory pedagogy, including the lack of intense engagement with music, the disconnect between structure and style, and the absence of practical compositional training, to name some of the most glaring.

In the overview of how these imitation exercises were used in classical rhetorical pedagogy, I suggested musical analogs, but without much detail. Possible implementations of these techniques in our current situation will be discussed later, but first a brief survey of musical precedents is in order. I must stress the cursory nature of this, as a thorough investigation could be the subject of entire dissertations. Instead, I only wish to provide selected illustrations of how the principles embodied in the classical imitation exercises have found specific realization at various points in music history.

3.1 Bach

In the 1750 obituary written by J. S. Bach's son Carl Philipp Emanuel Bach and former pupil Johann Friedrich Agricola, we read that the master's eye troubles were in part the

result of his youthful zeal in which he would spend the night copying musical scores by moonlight. The story has a certain mythic character to it, but what is the truth behind this legend?

According to the obituary, when Bach was still young and living with his older brother Johann Christoph after the death of his parents, the precocious Johann Sebastian quickly learned all the pieces he had been given to learn. For some unknown reason, however, his brother refused Johann Sebastian access to a book of clavier pieces by a handful of the most famous composers of the day, including Froberger, Kerl, and Pachelbel. Johann Sebastian's solution was to sneak the book out at night through the grillwork of the locked cabinet where it was stored and copy it himself by moonlight. It took six months before his own manuscript of the forbidden book was complete, and as soon as the older brother discovered it, it was confiscated.[1]

Recent discoveries by researchers Michael Maul and Peter Wollny have unearthed tangible evidence that Bach engaged in this sort of score-copying exercise: a single page of Buxtehude's *Nun freit euch, lieben Christen g'mein* and Reincken's *An Wasserflüssen Babylon* in its entirety, both chorale fantasias in organ tablature.[2] Bach's inscription on the Reincken manuscript indicates that these were copied in the home of Georg Böhm in Lüneburg, 1700. Böhm was the organist in Lüneburg and Bach's teacher. Bach would travel to nearby Hamburg on occasion to hear Reincken play, but we now have evidence that this listening was complemented by hours of intense study of Reincken's music on his own. Maul and Wollny demonstrate that Bach even modeled his own handwriting on his teacher's—as David Yearsley comments, 'For the young Bach, emulation was apparently a kind of all-encompassing activity: the protean nature of his development, his capacity for self-transformation and growth, is to be seen even in the very shape and slant of the tablature letters.'[3] The pay-off for this dedication came in 1722 when it was Bach on the organ bench of St. Catherine's in Hamburg before an audience of local dignitaries. He improvised a lengthy fantasy on *An Wasserflüsser Babylon* in the presence of Reincken, prompting the aged master to comment, 'I thought that this art was dead, but I see that in you it still lives.'[4]

Neither was score-copying limited to Bach's youth. In his middle Weimar years, he made a 'scrupulously faithful copy' of Nicholas de Grigny's entire *Livre d'orgue* as well as some *stile antico* sacred words and Frescobaldi's *Fiori musicali*.[5] Even as he was approaching the age of 30, Bach's curiosity and unquenchable thirst for all styles of

[1] David et al. [1998, 299]
[2] Yearsley [2009]
[3] Yearsley [2009, 491]
[4] David et al. [1998, 302]
[5] Horn [1986, 257]

music brought him back to the same basic exercise he undertook by moonlight as a wee lad—if you are interested in a particular piece, copy it for yourself.

Besides the sheer dedication and insatiable desire to learn, we learn from this chapter of Bach's life one critical thing—the practice of score-copying was very much linked to the goal of having one's own copy of the score. Scores were expensive and somewhat hard to come by, and many pieces were published only in parts. Copying them was an extraordinarily practical task. Indeed, evidence of it being used purely as a pedagogical exercise is almost non-existent. However, our present exploration is not so much why as it is what was gained. In this case, Bach successfully internalized the essence and style of the works he copied, integrated it with his own predispositions and talents, and developed an indisputable command of his craft.

Bach apparently thought highly enough of the practice of copying scores to pass it along to his students. At least one compilation survives, by the hand of Johann Ludwig Dietel, copied in the mid 1730s. Another Bach student Neinrich Nicolaus Gerber copied out the materials he was to study over the course of two years, including: *Aufrichtige Anleitung* (all fifteen inventions and fifteen sinfonias), eight *French* and seven *English Suites* from a larger collection of suites with and without preludes, 21 movements from the partitas in the 1731 *Clavier-Übung* part I, *The Well-Tempered Clavier*, and the realization of the Albinoni figured bass.[6] Yet another student Johann Caspar Vogler made copies of two *livres d'orgue* of Jacques Boyvin during his studies with Bach sometime from 1710–1715.[7]

As a teacher, Bach was a remarkably practical artist for whom figured bass and chorale harmonization were central. C. P. E. Bach noted that his father, 'like myself or any true musician, was no lover of dry, mathematical stuff.' Instead,

> Since he himself had composed the most instructive pieces for the clavier, he brought up his pupils on them. In composition he started his pupils right in with what was practical, and omitted all the dry species of counterpoint that are given in Fux and others. His pupils had to begin their studies by learning pure four-part thoroughbass. From this he went to chorales; first he added the basses to them himself, and they had to invent the alto and tenor. Then he taught them to devise the basses themselves.[8]

This practice of studying harmony through figured bass and increasingly-independent stages of chorale harmonization is one which has elements of different aspects of

[6] Wolff [2000, 329–30]

[7] Horn [1986, 259]. Vogler was born in 1696, so at the time of his studies with Bach during which he made these copies, he would have been somewhere between 14 and 19 years old, that is, roughly comparable to the age of undergraduates today.

[8] David et al. [1998, 398, 399]

the classical imitation exercises yet does not fall cleanly into any single category. To the extent that these exercises were written, there was likely an element of Copying in them, although they may very well have been largely done on the spot or from memory. It exhibits parallels to Paraphrase in that a basic structure must be amplified with different possible solutions demonstrating varying degrees of effectiveness, but also to Translation in that the student was presented with a text in one genre (a chorale tune) and asked to realize (arrange) it in another (four-part harmonization). The unifying element however is that the student cannot escape either the figured bass or the chorale melody and is thus in constant contact with pre-existing music, putting these in the category of *imitatio*.

Another striking example of Bach's self-imposed training is his habit of experimenting with works and thematic material of other composers. In his study of fugal writing, he would often turn a given model into 'a new work, not by arranging it but by appropriating the thematic material, subjects, and countersubjects and rewriting the score to create a different piece—a new solution to what he took to be a musical question. And in the process of recomposing, he discovered new thematic connections or contrapuntal combinations as well as new harmonic, melodic, and rhythmic features.'[9] In such Paraphrase exercises, Bach forced himself to find unexplored possibilities in material already used by another composer, in essence drawing twice as much music from the material as the first composer had intended. With such training, it is no wonder that Bach seems so adept at doing so much with so little. Other Paraphrase-style experimentations revealed a curiosity as to whether or not other works could be improved, such as including two violin parts to Caldara's *Suscepit Israel* for four voices and continuo using material drawn from the pre-existing substance (BWV 1082), or adding a new viola part to Pergolesi's *Stabat Mater* in certain sections in counterpoint with Pergolesi's music (BWV 1083).[10] In his Passacaglia in C minor, BWV 582, he used part of a bass melody from a chaconne by French composer André Raison as the basis for his own work, demonstrating an interest in a wide variety of styles.[11] This Paraphrase activity reached its zenith in his *Musikalisches Opfer* of 1747 (BWV 1079).

The middle Weimar years of 1713–1714 marked a turning point in Bach's creative life: in one of the greatest examples of Translation as pedagogical exercise in music history, he transcribed several Italian violin concerti for clavier. The 16 concerto

[9] Wolff [2000, 93–94]. These works include the BWV 954, 965/2, and 966/2 harpsichord fugues based on Reinken, the BWV 572b organ fugue after Legrenzi and BWV 579 after Corelli, and the BWV 946, 950, and 951 harpsichord fugues after Albinoni. Precise dating of these works is difficult, but c. 1705–1712 appears to be a likely range.

[10] Wolff [2000, 388]

[11] Horn [1986, 259]

transcriptions in question—BWV 972–987—are based on works by a number of composers, including six of Vivaldi, three of Johann Ernst, Prince of Sachsen-Weimar, one each by Benedetto Marcello, Alessandro Marcello, Giuseppe Torelli, and Georg Philipp Telemann, and three from unknown sources. Bach also arranged five organ concertos during this the same time period—BWV 592–596—based on three works by Vivaldi and two by Ernst.[12] The early Bach biographer Johann Forkel describes it thus, placing it in the context of the largely self-taught composer desiring greater order and connection between his musical ideas:

> He soon began to feel ... that there must be order, connection, and proportion in the thoughts; and that, to attain such objects, some kind of guide was necessary. Vivaldi's Concertos for the violin, which were then just published, served him for such a guide. He so often heard them praised as admirable compositions that he conceived the happy idea of arranging them all for his clavier. He studied the chain of the ideas, their relation to each other, the variations of the modulations, and many other particulars. The changes necessary to be made in the ideas and passages composed for the violin, but not suitable to the clavier, taught him to think musically; so that after his labor was completed, he no longer needed to expect his ideas from his fingers [that is, to chance upon musical ideas while improvising at the keyboard], but could derive them from his own fancy.[13]

Forkel drew largely upon Bach's sons for his biography, so it is reasonable to assume that his conclusion that it was Vivaldi that taught Bach to 'think musically' is one that Bach himself passed onto his family and students.

We should also note that Forkel's account says nothing of this new musical thinking being tied in particular to the concerto as a genre. Instead, as Christoff Wolff points out, 'concerto composition provided an ideal vehicle for exploring and developing ways of "musical thinking," and those ways quickly penetrated other instrumental and vocal genres."[14] The genre itself was incidental to the musical education Bach was giving himself by transcribing them. Vivaldi's innovation was the idea of crafting his musical ideas with a certain simplicity which could then be elaborated upon—a radically different compositional approach to either chorale harmonization or designing a fu-

[12] Hans-Joachim Schulze believes these were arranged for practical purposes on commission rather than for personal study [Schulze, 1972]. For our purposes, however, this is irrelevant. Regardless of the immediate motivation, the result is clear, and the effectiveness of an exercise is often only tangentially related to why it was undertaken.

[13] David et al. [1998, 441–42]

[14] Wolff [2000, 171]

gal exposition. This would ultimately provide the 'order, connection, and proportion' which Bach perceived as missing in his earlier work.

A careful examination of Vivaldi's concerti with Bach's treatment thereof reveals that the changes Bach makes to Vivaldi's music tend to lessen the contrast between solo and tutti passages, and they also tend to increase in inventiveness and development as the music progresses, thus supporting Wolff's observation. More generally, Bach's transcriptions demonstrate a degree of 'Bach-ification' of Vivaldi's music. These range from minor characteristics such as his treatment of chord 7ths, harmonic alternations representing a more functionally sophisticated approach to harmonic direction or certain melodic formulae at cadences, and naturally, added contrapuntal lines elaborating the basic structure. The dynamic we see in this is not a mere representation by Bach of pre-existing concerti for different forces, but an example of Bach penetrating into the essence of Vivaldi's art and bringing his own artistic sensibilities to bear upon it. This Translation enabled Bach to make a thorough exploration of Vivaldi's compositional techniques while at the same time experimenting with its potentials himself.

It would be inaccurate to say that after his exposure to and experimentation with the Italian concerto style Bach deliberately set out to imitate Vivaldi. The *imitatio* occurred in the act of transcription itself. Bach's practice after these exercises is instead the result of having realized and internalized more musical possibilities than he would have discovered on his own. He was not imitating the Italian style, but through his self-imposed exercises, he had expanded his own musical vocabulary to encompass what they offered him.

3.2 Handel

While further examples may seem superfluous and quite unnecessary following the illustrations of how many of Bach's activities fall into the patterns of classical rhetorical pedagogy, a few more examples taken from the lives of other composers can offer us a few more insights into the use of these practices. Let us begin with Bach's contemporary Handel.

Like Bach, Handel demonstrated early potential for a musical career, but, unlike Bach, he had access to more formal study from his youth. Under the guidance of Friedrich Wilhelm Zachow of Halle, Handel was introduced to both the art of playing keyboard instruments as well as composition. Zachow had a rich collection of German and Italian music, and like Bach, the young George Frederic copied music into his own notebook. Although it has since been lost, his notebook from 1698 contained works by his own teacher, Froberger, Kerll, Briefer, and other established keyboard composers

of the day. Zachow's reasoning was simple: 'he made him copy rare things so that he would not only play them, but also learn how to compose in a similar manner.'[15]

This is one of the few open acknowledgments of the pedagogical value assigned to score copying. Generally, the mundane practicality of the task makes the practice seem unworthy of even mentioning, leaving only scattered references to what was likely a commonly-held assumption. Christoff Wolff writes:

> One of the principal Baroque methods of teaching students the fundamentals of languages as well as of music consisted in memorizing and emulating so-called *exempla classica*, models by eminent masters. In that sense, performance and composition were closely interrelated, and by copying down exemplary works of different kinds, Handel, Bach, and their contemporaries learned the principles of harmony and counterpoint, melody and voice leading, meter and rhythm.[16]

More than anything, this illustrates that Bach's example is neither isolated nor incidental. It also gives us a wonderful picture of how performance training and theoretical training were connected, that is, of a theory environment which is practical and musical.

Another fascinating instance can be found in Handel's own pedagogical methods.[17] From 1724–1734, Handel gave composition lessons to Princess Anne, daughter of George II, including a study of fugal techniques. He began his student with figured bass, beginning with simple bass lines and figures before moving to more intricate examples requiring greater care with the voice leading. Not until figured bass was mastered would he move the student on to more advanced fugal technique. In the subsequent fugue exercises, Handel would give the fugue subject, the harmonies via a figured bass for the entire fugue, and indicate later entrances for the other voices, specifying both which voice was to enter and on what starting pitch. The combination of the given subject with figures to control the harmony with the entrances specified ensured a degree of success for the student, so long as she correctly followed proper voice-leading convention. In addition to these, he wrote three model fugues on different subjects completed by the teacher himself to be paired with the exercises. In this manner, Princess Anne was able to see the various fugal techniques necessary for the completion of her own assignments clearly demonstrated.

[15] Mainwaring [1760, 35], quoted in Wolff [2000, 47–48].

[16] Wolff [2000, 48]

[17] Poulin [2008]. See also http://music.oc.edu/publications/jmtp/vol22/Handel.pdf for skeletons to Handel's fugue exercises and models, which are suitable for use in the study of baroque counterpoint for students today.

Not only do these exercises demonstrate the importance of the student having an *exempla classica* on which to model her work, as Handel saw, but its intersection with the various types of imitatio exercises. While the realization Poulin provides (see note 17) writes out a great deal of the material in keyboard score leaving empty spaces for the student to fill in the missing material, Handel's shorthand required the student to write all this material herself. There was thus a substantial degree of Copying built into the format of the assignment, but Copying combined directly with a guided working-out of the compositional problems. The process embodies a unique fusion of concrete experience with active experimentation, similar to how Paraphrase engages both modalities of learning. Indeed, the fugal process itself is an exercise in variation and experimentation, making this sort of assignment extremely well-suited toward developing in the student the necessary sensibilities to understand and write fugues.

3.3 Mozart

Before he wrote any original piano concerti, the young prodigy Mozart transcribed and arranged works from other composers as piano concerti. These 'pasticcio' concerti were written in two sets: one in 1767, and one in 1772, at the ages of 11 and 16, respectively. The first set—K. 37, 39, 40, and 41—was based on works by composers Mozart encountered in Paris in 1764-65: Johann Schobert, Leontzi Honauer, Johann Gottfried Eckard, and Hermann Friedrich Raupach. The second set—X. 107/i–iii—was based on Johann Christian Bach's keyboard sonatas op. 5 nos. 2, 3, and 4.[18]

Mozart's treatment of these is interesting in two aspects. The first is that rather than transcribing any given sonata intact as a model for a single concerto, he would use a first movement from one sonata, a second movement from another, and then a third from yet another. Perhaps two movements would come from the same work, but never all three. Second, Mozart created ritornello schemes appropriate for his concerto model by inserting sections of the original work between orchestral tuttis also derived from the sonatas. Thus Mozart employed a considerable degree of artistic license on a formal level with these transcriptions in an interesting blend of the Translation and Paraphrase schemata.

There is considerable ambiguity as to why Mozart made these transcriptions. Wyzewa and Saint-Foix see these as acts of homage to the 'Parisian keyboard masters' who were 'directly responsible for unlocking the boy's prodigious talent.'[19] It is also possi-

[18] Irving [2003, 17]
[19] Irving [2003, 18]

ble that Mozart's father intended to pass these off as the young boy's original concerti to impress Viennese audiences with his compositional skills as well as his prodigious abilities at the piano. This is certainly plausible—while the second set was recognized as an adaptation rather than an original work by at least 1800, it was considerably later before scholars realized this about the first as well. Another possibility (and one also compatible with either of the first two) is that these were a sort of pedagogical exercise. Both Wolfgang's and Leopold's handwriting appears in the manuscripts with Leopold's often correcting errors in his son's notation, harmony, or orchestration, and in the case of K. 107, the handwriting is somewhat layered. Together with the manuscripts to the first set, these suggest to Wolfgang Plath 'a combined effort of father and son and not simply a transcription and correction by Leopold of Mozart's completed work.'[20] Understood in this light, these are a sort of record of Wolfgang's composition lessons with his father, which evidently involved a degree of Translation in addition to whatever other training in harmony or counterpoint the young student would have received.

A later transcription project is K. 405—a string-quartet arrangement of five four-voice fugues from J. S. Bach's *Well-Tempered Clavier* book II: C minor, D, E♭, D♯ minor (transcribed in D minor), and E. Mozart encountered these at the house of the Baron Gottfried Van Swieten in 1782 in Hausmusik gatherings which he mentioned to his father in a letter dated 10 April 1782: 'I go to the house of Baron Van Swieten every Sunday at 12 o'clock—and nothing is played there but Handel and Bach. I am making a collection of Bach's fugues, those of Sebastian as well as Emanuel and Friedemann.'[21] Apparently Mozart also wrote slow introductions to many of his fugue arrangements completely unrelated to Bach's preludes, but our attention is upon how he handles Bach's material.

The first fugue in K. 405 is on the C minor fugue from WTC II, BWV 871.[22] Besides a handful of altered rhythms and notes (mostly concerning accidentals) which may be the result of the manuscript Mozart was using for his transcriptions, differences between Bach's text and Mozart's treatment thereof are fascinating, so let us take a glance at them. The most interesting element is how Mozart deals with the fact that the fourth voice in the fugue does not enter until over two-thirds of the way through the fugue. Rather than having a single instrument count 19 bars of rest before entering, he creatively trades voices between the instruments. For example, in bar 6–7 where the

[20] Irving [2003, 19]

[21] Quoted in Kirkendale [1964, 44].

[22] Although not available in the NMA, this has been published by Edition Eulenburg, ed. Franz Beyer (1972) and Möseler Verlag, ed. Adolf Hoffmann (1981). The observations given here are based on the latter edition.

alto picks up immediately where the tenor leaves off, Mozart gives this whole passage to the viola in a seamless line. However, he brings the viola to rest on a G quarter note in bar 8 and returns the line to the second violin by adding an eighth-note anacrusis tied to the D on the downbeat. Even though the passage is effectively for three voices only, Mozart distributes the material in such a way to both accommodate instrument ranges and create the illusion of four voices well before the last actually appears. However, he also gives the cello five bars of rest before the proper bass entry in bar 19 so that the event still caries its intended impact.

Another interesting liberty taken by Mozart is in bar 23, where he doubles the A♮ sixteenth-note in the alto voice with the viola (here carrying the tenor voice) and connects this via descending scale to the E on beat 3. The result is a melodic continuity in the viola part that would not have been possible had he literally transcribed Bach's notes. Rather than the line sounding broken and somewhat abrupt, Mozart discovered a solution that Bach likely would have done himself, had he originally crafted this fugue for string quartet rather than harpsichord. Similarly, he takes advantage of the strings' ability to sustain by having the cello hold a C pedal in bars 24–25 rather than playing two isolated eighth-notes. Bach obviously meant this to be heard as a pedal point, but because of the nature of the harpsichord's inability to sustain notes like an organ or cello, he instead chose to punctuate the pedal point by two eighth-notes four beats apart. Mozart, realizing Bach's intention and essential musical idea, and also realizing that these two eighth-notes would have sounded dreadfully awkward played verbatim on the cello, connects these two notes, thus successfully translating Bach's pedal point from a harpsichord idiom to a string quartet. Mozart also adds bowings and articulations to the score, giving valuable insight into how he felt the fugue should be phrased and interpreted, especially in the context of a string quartet.

3.4 Beach

Following three stories of renowned German males who died in the eighteenth century by one of a relatively neglected American female who died in the twentieth may seem strange. However, it bears a special relevance to our topic, as Amy Beach's autodidactic methods provide a brilliant illustration of the power of *imitatio* techniques to provide students with a degree of individual guidance even when other opportunities are denied to them.

The story of Amy Beach is at once tragic and triumphant—tragic because she had the great misfortune of being born into a time and culture when women were all but denied the opportunity realize their full potential, and triumphant because of her remarkable achievements in spite of her circumstances. She was born in 1867 in New

Hampshire, and her mother, Clara Cheney, following the standard cultural practices of her day, placed very little emphasis on Amy's musical development, preferring to keep the piano just out of reach to cultivate discipline in the children—the 'top bureau-drawer principle'.[23] However, this could only prevent young Amy's musical development in some dimensions—by the age of one year, Amy could hum forty tunes by memory, a very young example of Memorization. Eventually Clara relented, allowing Amy to begin learning piano, but she still limited how much her daughter could practice, both attempting to cultivate in her daughter the traditional gender rolls of 19th century New England and protecting her from the frequently harmful effects of being labeled and marketed as a 'prodigy'.

As it turned out, Amy was gifted with both perfect pitch and a remarkable memory, which she would use to her advantage throughout her career. According to one report, she once played a Beethoven piano sonata after hearing another student play the work, never having seen the music herself.[24] Her inherent genius became apparent very early on:

> At last, I was allowed to touch the piano. My mother was still opposed, but I can remember my aunt coming to the house, and putting me at the piano. I played at once the melodies I had been collecting, playing in my head, adding full harmonies to the simple, treble melodies. Then my aunt played a new air for me, and I reached up and picked out a harmonized bass accompaniment, as I had heard my mother do.[25]

As she began to study piano more seriously, Amy Beach also began to take a deeper interest in composition. Her early works reveal deft musical instincts, but they also reveal her to be a careful student of the masters: Adrienne Block reports that in an 1878 exercise, 'Amy added a vocal line to Chopin's *Trois nouvelles études*, no. 3, in A♭,' a striking example of Paraphrase in a very similar spirit to J. S. Bach's experiments with Caldara, Pergolesi, Raison, and others.[26] She took a similar approach in her first published work, *The Rainy Day*, a setting of Longfellow's poem: the opening phrase of the F minor song borrows both the melody and accompaniment from the last movement of Beethoven's Sonata *Pathétique*, op. 13, essentially using Beethoven's material as a springboard for her own.

Despite her obvious talent, never received any formal composition training except one year of music theory study with an organist, Junius Hill. When Amy and her family

[23] Block [1998, 5]
[24] Block [1998, 34]
[25] Block [1998, 7]
[26] Block [1998, 35]. See page 40 above for Bach's Paraphrase activities.

sought the advice of Wilhelm Gericke, the Viennese conductor who came to Boston to lead the Boston Symphony, Gericke advised Beach that she teach herself composition by studying the great masters rather than recommending her to a formal composition teacher. It seems likely that prejudice against women and their intellectual abilities informed his rather dismissive response that she simply study the masters rather than bothering a trained composer for instruction, but in any case, Beach took the advice, even if for no other reason than the unfortunate fact that she had no better option.

Beach's self-study covered the usual topics in which one would receive instruction with composition courses: theory, harmony, counterpoint, fugue, and orchestration. Her marriage to respected Boston surgeon Henry Harris Aubrey Beach largely cut her off from the professional music world in Boston, but it also allowed her the freedom to pursue composition with an impressive degree of focus. It also allowed her to accumulate a fairly impressive library of scores and music books to study. And study she did—Block describes her methods thus:

> Considerable insight into her working habits may be gained from study of the manuscript workbook that she kept from 1887 to 1894. In it she entered musical terms and technical details about rhythmic and pitch notation and copied important quotations from her various texts, arranging the entries alphabetically. In addition, for each step of the way, Beach used musical works as authoritative tutors: "I memorized [Bach] fugues and similar works, until I could write them down from memory, writing each 'voice,' or part, on its own separate staff," she said.[27]

Although Beach's unusual memory provided her with an decidedly unfair advantage when it came to memorizing music, this by no means invalidates the claim that the basic *imitatio* technique of Memorization as a means for studying and internalizing musical technique and style was still at play in this discipline.

Beach also relied heavily on score-copying as part of her regimen: 'I copied and memorized whole scores of symphonies until I absolutely knew just how they were made. It was like a medical student's dissection.'[28] Unfortunately, much of Beach's impressive library has since been disbanded and/or lost, and research on the specific contents of her notebooks does not appear to be widely disseminated, so it is difficult to tell exactly what she copied and what their effects were without archival research. Adrienne Block suggests that Beach may have used Cherubini's *Deuxième messe solemnelle* in D minor as a model for her own Mass in E♭ major,[29], and her 'Gaelic' Symphony

[27]Block [1998, 54]
[28]Block [1998, 55]
[29]Block [1998, 64–67]

displays the influence of Brahms, but stronger claims than these would require further research than this present project demands. But in any case, her statement is a powerful testament to her belief in the efficacy of score-copying as a pedagogical technique.

In a short piece printed in the *Los Angeles Examiner*, 28 June 1915 entitled 'Music's Ten Commandments as Given for Young Composers', reprinted a week later in the *Musical Courier* as 'How Mrs. Beach Does It', Mrs. H. H. A. Beach, who by that time was recognized as a quite accomplished composer and musician, set forth ten pieces of advice for young composers that sheds considerable light on her thoughts about her autodidactic techniques, many of which, as we have seen, fit quite nicely within the framework of *imitatio* techniques of classical rhetorical pedagogy. I reproduce it in its entirety below.

> Spare neither time nor strength in the perfecting of the technic of composition, beginning with the simplest rudiments. Your musical material must be perfectly under control as is language in the case of a writer of literature. One must never be compelled to pause in the development of an idea through lack of knowledge of spelling or grammar.
>
> Begin with small things—ideas that can be expressed in small forms.
>
> Study how best to develop all the possibilities of a small form. A small gem may be just as brilliantly cut as one weighing many carats.
>
> Learn to employ as much variety in form as possible. Above all things, avoid becoming stereotyped in the expression of melodic, harmonic or rhythmic ideas.
>
> Subject yourself to endless labor in the analysis of works by the old masters, especially using, as illustrations for the form upon which you are now engaged, a master's work in the same form. There is no better way to learn how to write a fugue than by dissecting one by Bach, preferably one from "The Well-Tempered Clavichord."
>
> Begin early to study the scores of stringed [*sic*] quartet music by Haydn and Mozart and the early Beethoven. It is well to select one work and subject it to the most careful analysis, studying it until it is learned by heart.
>
> Use every possible opportunity to hear a good stringed quartet, if possible at rehearsals, as well as at concerts. Take a score of the composition and study it while it is being played.
>
> Hear as much choral music as possible. The study of voice writing, as illustrating in the master works, is of the greatest importance.
>
> The crowning glory of music study is familiarity with the master works in symphony, played by a fine, modern symphony orchestra. Carry into the

> study of symphonic compositions the same thoroughness with which you have analyzed works for the piano, stringed quartet and chorus, beginning with the simpler and earlier composers.
>
> Remember that technic is valuable only as a means to an end. You must first have something to say—something which demands expression from the depths of your soul. If you feel deeply and know how to express what you feel, you make others feel.[30]

Although Beach stops just short of explaining *how* the aspiring student should analyze the works, her use of the word 'dissecting' when speaking of analyzing a Bach fugue mirrors her description of copying and memorizing symphonic scores,[31] suggesting that she had the same sort of process in mind. She reinforces this in the next paragraph where she encourages the study of a work until it is 'learned by heart'. I therefore feel comfortable in taking this as advice perfectly in line with the *imitatio* techniques of Memorization and Copying. The advice in her third and fourth 'commandments' to learn how to develop the possibilities of small forms and to cultivate variety have a strong parallel with Paraphrase techniques such as those advocated by Erasmus and as described by Valiavitcharska as occurring in Byzantine classrooms.[32] Finally, she mentions the importance of studying the works of the masters, the *exempla classica*, mentioning specifically Bach, Haydn, Mozart, and Beethoven, and 'masters' and 'master works' in general.

The number of points where Amy Beach's autodidactic methods, compositional career, and pedagogical advice intersect with *imitatio* techniques of rhetorical pedagogy is, to say the least, remarkable, but perhaps it should not be surprising. Had her society been more supportive of those of her sex, perhaps she would have been able to take full advantage of formal courses and training as a composer, but the tragedy of her story was that she was denied these things. So instead, she fell back on the only resources she had: the encouragement and support of her husband, her impressive determination, her unquestioned genius, and the most elemental forms of learning she could find—imitation and experience. That she created so much having been given so little else places her story as one of the great triumphs of music.

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[30] as reprinted in Block [1998, 310]

[31] See page 48 above.

[32] See section 2.3.3, pages 31ff. and 33 above.

3.5 Other composers

Between the examples provided by Bach, Handel, Mozart, and Beach, I think sufficient illustration has been made. However, *imitatio* was not limited to only the towering figures of the eighteenth century or other isolated prodigies.

While some musicians considered figured bass a basically practical discipline necessary for performers, others considered it an important aid in composition pedagogy, J. S. Bach and Georg Philipp Telemann among them. The seventeenth / early eighteenth century theorist Friderich Erhard Niedt in his 1706 thoroughbass manual demonstrates this perhaps better than any writer of the period. At the core of his approach is adding elaborations to a simple figured bass realization, a process known as *diminution*. For example, he would take a single figured bass and show multiple possible realizations with different possible permutations of meter, topic, and elaboration. This represents a common pedagogical approach in the baroque period, and an early instance of writing variations as a compositional exercise, a classic example of Paraphrase activities.[33]

Johann Georg Albrechtsberger, Viennese theorist and composer, is an especially interesting case for our purposes. He possessed a particular interest in polyphonic music, ranging from Palestrina to Mozart, as evidenced by excerpts included in his own theoretical texts as well as personal copies and arrangements, including copies of much of Bach's WTC. However, these exercises did not seem to greatly inform his own composition; the fruits of his study were restricted to his theoretical writings and teachings, thus demonstrating that much can be learned from score-copying from a theorist's perspective even if one does not intend to make compositional use of it.[34] Albrechtsberger passed this onto his most famous student: Beethoven, who in addition to copying Bach fugues also made arrangements of some for study purposes, evidenced by the fact that one is left incomplete and neither were ever copied as parts.[35]

In his treatise *School of Practical Composition*, Carl Czerny, a student of Beethoven, encouraged composition from models in an interesting manner which he attributes to Haydn: the student begins with sonatinas and models his work directly on that of an established composer. Thus the formal structure of the student's work will be identical on to the model, but the thematic material will be new. This follows a solid grounding in basic harmonic technique and voice-leading and should be paired with critical analy-

[33] Lester [1992, 27, 65–68]

[34] Freeman. Kirkendale also mentions an autograph held by the Osterreichische Nationalbibliothek of the fugues (without preludes) of WTC book I nos. 1–14.

[35] Kirkendale [1964, 58–59]

sis of the model. It is a unique take on the Paraphrase principle, only with the retained element being the formal and harmonic structure rather than melodic or harmonic elements as one usually finds in variations. Such an approach undoubtedly instilled in the students a keen understanding of classical formal structure from a practical, compositional standpoint that would be difficult to achieve by analysis alone. Czerny describes the method thus:

> Now arises the question, in which way can the beginner soonest and most conformably arrive at the practical application of all these rules? The best method is, undoubtedly, that which Joseph Haydn recommended to his pupils:— Let the beginner, in the first place, exercise himself in little Sonatas, which he must so composing *according to the models chosen*, that the same key, time, form of the periods, number of bars, and even each modulation, shall be strictly followed,; but, be it well observed, *he must take pains to invent ideas, melodies, and passages, as different as possible from each of the models chosen.*— The short Sonatas of Haydn, Mozart, Clementi, Dussek and others, will be of the greatest service in this respect. ... From little Sonatas we gradually proceed in this manner to the greater, progressively continuing to select more important and finished patterns, until at last we find ourselves sufficiently exercised to be able to write, *without a model*, with facility and regularity of form.[36]

Robert Schumann also understood the value of imitation for the development of compositional ideas and technique. In April of 1830, he heard virtuoso violinist Niccolò Paganini and described it as 'a most powerful stimulus for hard work.'[37] This 'hard work' took the form of both practice at the piano and composition. The compositional exercises included his opus 3 piano transcriptions of the Paganini caprices, an unfinished set of piano variations on the *Campanella* theme from Paganini's Second Violin Concerto, and his WoO 31 *Studies in the Form of Free Variations on a Theme by Beethoven*, also from 1831–32. He also made unfinished reductions of two other Beethoven movements: the first 24 bars of the 'Adagio' from the Fourth Symphony and bars 1–377 of the third *Leonore* overture. These sketches are found in the Wiede Sketchbook IV, which represents an important record of Schumann's studies under Heinrich Dorn.[38] In February and March of 1837 as he was emerging from a period of deep depression, Schumann copied out the whole of Bach's *Kunst der Fuge* and carefully studied the organ

[36]Czerny [1848, 36]. Emphases in original.
[37]Daverio [1997, 63]
[38]Daverio [1997, 97–98]

chorale preludes. Proof of the effectiveness of his diligent study of Bach's craft came in 1845. John Daverio notes this with great insight and is worth quoting at length:

> That Schumann had penetrated to the essence of Bach's art is borne out by more than one spot in the Opus 72 and Opus 60 fugues. For Bach, fugal technique amounts to more than the superficial concept of one thematic entrance chasing after another. As Schoenberg was fond of pointing out, Bach's fugues have far more to do with the vertical combination of distinct motives than with the horizontal unfolding of a single motivic idea. This is not to say that Bach merely had a penchant for countersubjects, but rather that he was apt to make flexible and subtle use of his countermaterial. ... Much the same could be said of the *Vier Fugen*, where the notion of a strict countersubject is actually displaced by an array of flexible counterfigures, each associated with a different portion of the subject.[39]

Schumann seems to have passed on this sense of beginning with one's inheritance in the spirit of *imitatio* to his most famous protégé, Johannes Brahms, who urged his only composition student (Gustav Jenner) to begin his study of composition with variation.[40] Brahms advocated traditional model composition exercises, 'encouraging Jenner to study movements by Mozart and Beethoven, analysing them in minute detail, and to recompose them, following their proportions and modulations while inventing new themes.'[41] This is, of course, exactly the sort of activity described by Czerny in his *School of Practical Composition*.

Brahms used these techniques for his own musical purposes as well as in his teaching. His 1852 arrangement of the finale of Carl Maria von Weber's Sonata no. 1, op. 24 is one of several early arrangements for piano of various by a number of composers while Brahms was still very much a student, including works by Schumann, Henry Litolff, and Joseph Joachim. More interesting however is his 1862 transcription of Chopin's Étude in F minor, op. 25 no. 2, to which he added parallel thirds and sixths to the melody, turning the étude into a virtuosic showpiece. However, he did not stop at merely adding notes—he added 18 bars to Chopin's work, turning a what initially appears to simply be a technically demanding étude into a compositional study in phrase expansion, fundamentally re-thinking the piece, or in the terms of rhetorical pedagogy, an example of the idea of Paraphrase.[42] This sort of exploration of Chopin's music may have helped contribute to the remarkable similarities between Chopin's *Berceuse*, op. 57

[39] Daverio [1997, 310–11]
[40] Sisman
[41] Korsyn [1991, 28]
[42] Korsyn [1991, 17–18]

and the middle section of Brahms's *Romanze*, op. 118, no. 5, a relationship noticed by a number of commentators and explored in depth by Kevin Korsyn who, following literary critic Harold Bloom, reads Brahms's work as a 'misrepresentation' of Chopin's—a way for Brahms to assert his own originality against his predecessor.[43] That such a dynamic of misreading and a clearing of creative space is so inherent in the whole process of imitatio should be sufficient to dispel concerns that *imitatio* necessarily crushes creativity and the potential for individual expression.

While these composers have all represented a certain 'classical' tradition within the musical tradition, these sorts of exercises have found a place outside the conservative German tradition as well. Franz Liszt is one example, whose copious piano transcriptions made throughout his life blur the line between Translation and Paraphrase. While his treatments of various songs, symphonies, and opera excerpts were undoubtedly made with his own performance opportunities in mind, they demonstrate a profound exploration and interpretation of the works in question, which is, after all, the whole point of music theory study for undergraduates.

The practice of arranging works of other composers did not fade away with the nineteenth century. To give a handful of examples, Benjamin Britten made arrangements of Mahler and Schubert among others in the early 1940s. Arnold Schoenberg's and Anton Webern's arrangements of Bach are well-known, but Bach was not the only composer to attract their attention: Brahms, Johann Strauss, and Schenker were among those arranged by Schoenberg, and Webern's list of arrangements includes works of Liszt, Schubert, Schoenberg, and Heinrich Isaac. Maurice Ravel made several arrangements of other works, most famously his orchestration of Mussorgsky's *Pictures at an Exhibition*, but other orchestrations (or re-orchestrations) include works by Rimsky-Korsakov, Schumann, and Debussy. Working in the opposite direction, Bartók transcribed Straus's *Ein Heldenleben* for piano while he was under the spell of the German romantics.[44] Igor Stravinsky, perhaps the most masterful thief of musical ideas of the 20th century, also arranged works by such diverse composers as Gesualdo, Bach, Chopin, Tchaikovsky, Mussorgsky, and Sibelius across the course of his career.

The score-copying tradition extends into the twentieth century as well. I have encountered three second hand accounts of such activities, not as part of a systematic research related to this project, but rather chance anecdotes regarding the practice. The first is that of Ernst Krenek and his fellow pupils studying in Vienna, as I mentioned in the introduction. In this case, this was a massive and systematic course of study grounded in Bach and Beethoven. Second, in the mid-1950s in Krakow, Krzysztof Penderecki and other composition students set about copying works by various avant-

[43]Korsyn [1991, 18–30]

[44]Ross [2007, 82]

garde composers that were brought by visiting composer Luigi Nono. These works were otherwise unavailable to the students trapped behind the Iron Curtain, and copying the scores provided both a means of exploration of the works as well as producing a manuscript for later study.[45] Third, American composer George Rochberg copied scores as a means of studying them and also wrote pieces incorporating thematic material of other composers, especially following the death of his son in 1964, which caused him to begin moving away from serial techniques: his *Contra mortem et tempus* quotes from a handful of 20th century composers (namely, Boulez, Berio, Varèse, and Ives), *Nach Bach* has similar pastiche elements, his Third String Quartet quotes Beethoven and Mahler, and his Sixth String Quartet includes a variation set on Pachebel's Canon in D.[46]

In our own time, Derek Bermel has undertaken score-copying and transcription exercises and encourages students to do the same. While it mostly stemmed from lack of resources to make photocopies of scores during his study of orchestration with André Hajdu in Israel, he realized that copying even just a few pages of an orchestral score ranging from Haydn, Brahms, Debussy, Prokofiev, or Stravinsky gave him valuable insight into the works and the 'feel' of the particular composer's orchestrational style. Most importantly, these were insights he arrived at on his own rather than relying on a textbook or teacher to point out to him.[47]

3.6 A valuable and living tradition

Although it has been somewhat relegated to the fringe in recent years, score copying, variation exercises, transcriptions, and other examples of musical *imitatio* have a long and established tradition in the music world, and yet surprisingly, this is almost as much anecdotal as it is documented. For instance, I have heard accounts of Bartók copying parts as one element of his orchestration training and of Nadia Boulanger instructing her students to start coping the score of Wagner's *Tristan und Isolde* when they found themselves running thin on musical inspiration, but I have not encountered any explicit verification of these. A proper examination of the topic from a historical perspective would be an intense musicological study far beyond our purposes here. This is only meant to give a brief cross-section of examples of these sorts of exercises as they have been applied in the past, as well as testimony and proof of their effectiveness. I

[45] As per personal conversation and correspondence with Derek Bermel who at one point in his studies at the University of Michigan had the opportunity to act as chauffeur to Penderecki.

[46] As per personal conversation with Michael Hersch, for whom late Rochberg was both a mentor and good friend. See also: Clarkson and Johnson.

[47] As per personal conversation and correspondence with the composer.

find it surprising that traditional pedagogical techniques of such demonstrable effectiveness have been largely discarded in contemporary music theory instruction, and I hope now to explore possible ways of incorporating these exercises into the modern classroom, drawing both on the insights of the classical rhetorical teachers as they relate to music and the practice and advice of musicians of the past three hundred-plus years.

Chapter 4

Possible Applications in the Theory Classroom

Having thus established the nature of the problem and what the solution must accomplish, explored the pedagogy of classical rhetoric as an effective approach to this problem, and examined a few specific case studies of these principles applied in a musical context, we now come to the question of how one might apply these in the undergraduate music theory curriculum. In what manner should teachers assign projects, of what scope, and designed for what specific purposes? Ought we cancel the entire semester of Theory I and replace it with the task of copying the Bach 371 Chorales instead?

I do not suggest that we discard traditional music theory and standard pedagogical practice *in toto*. These have many strengths, most notably, its efficiency, focus, and ability to work with a wide range of students. Concepts are presented in clearly isolated forms and assignments are designed to hone very specific analytical skills or reinforce specific concepts. Topics and assignments typically build logically upon the previous, mapping onto already-established patterns, thus constructing the entire edifice of tonal harmonic structure brick by brick, steadily and cleanly. It would be a shame to sacrifice this clarity, and I see no reason why it cannot be retained with the introduction of *imitatio* into the curriculum. Thus my goal here will be to suggest ways in which these musical versions of Copying, Memorization, Paraphrase, and Translation can be incorporated into the curriculum without implying a complete jettison of theory textbooks and syllabi.

However, *imitatio* techniques do require certain settings in order to achieve maximum effectiveness. Foremost among these stands the fact that students will need to possess comparable—and relatively high—levels of musicianship going into the pro-

cess. Moderately small class sizes and a teacher who is able to give individual attention to her students is also necessary. The greater the range of the students' ability, the greater the need for personalized attention from the teacher for each student. If ear training is neglected, the effectiveness of the exercises will be greatly reduced. Of course, this is no different than in standard pedagogical practice, but the impact will be greater in settings emphasizing imitatio as a means of theory instruction than those utilizing other techniques. Teachers will have to weigh these considerations carefully along with the rest of the faculty and administration before determining to what extent *imitatio* can be successfully incorporated in the curriculum.

However, these exercises seek not to replace standard instruction and analysis but to complement it, providing the students the necessary skills and exploration which approaches without such exercises often fail to communicate. Thus in less than ideal educational situations, the teacher may find that even limited use of certain *imitatio* exercises can be effective. An overly large class can still benefit from score copying, and the same carefully controlled variation exercise can be effective to students at a range of different abilities, each to her level. While a sustained and concerted course of study is undoubtedly best, small amounts of these exercises intelligently given are better than none at all.

One further note of clarification: because the effectiveness of *imitatio* exercises is grounded in the fact that it provides direct interaction with actual music, it defeats the purpose entirely to construct artificial examples for pedagogical purposes. (I can think of only one exception: copying for practice with fundamentals, which I will discuss shortly.) As tempting as it may be for the teacher to write short passages or phrases for the students to work with, especially with variation exercises,[1] the teacher must recognize the simple fact that the object of study moves from the music itself to a theoretical image of the music. A degree of humility on our part is in order: the composers of the eighteenth and nineteenth centuries whose work forms the core of common practice theory immersed themselves in this musical language. They went through years of study far more rigorous than what we receive in that style and dedicated their artistic lives *solely* to a single, focused manner of writing in a way that simply is not possible for us, given the varied musical landscape we inhabit. Even on the part of a highly-competent teacher, perfect imitation is, by definition, essentially impossible. Because the idea is rather for the students to explore the music through imitation, let them explore the music. If we as teachers think we can construct our own examples in the baroque, classical, or romantic styles that will be just as good or better than the real thing, we deceive ourselves, flood our minds with hubris, and do

[1] While the variation techniques will eventually find their way into the students' own composition exercises, they must always begin with *exempla classica*.

our students no favors.

4.1 Score-Copying

While Ernst Krenek and those with him were assigned Beethoven's piano sonatas to copy, except in rare cases of extreme self-motivation (e.g. Demosthenes), such large-scale undertakings are extremely unwise, especially for beginners. Far more beneficial for the student are shorter, focused passages from a variety of sources. And just as Quintilian wrote at length on what writers should be imitated and for what purposes, passages and works to be copied—the *exempla classica*—should be selected carefully and deliberately.

The students must observe a few simple guidelines in order to achieve maximum benefit from these exercises.[2]

1. First, the average student should spend no more than 15–20 minutes at a time copying passages. More than this, and his mind may wander. Many will initially find even 15 minutes of sustained concentration terribly difficult, especially as our culture and technology continue to cultivate short attention spans and superficiality in general. Thus, the student must do this in a setting conducive to absolute attention. While there may be some who are capable of paying full attention to the music while watching a baseball game, these are far fewer than those who think they are. If at any point the student finds that he is merely copying notes without paying attention to what he has been doing, he should identify what caused his attention to slip, eliminate it, and start over. Simply transferring dots and lines from one paper to another is a pointless exercise. The self-discipline necessary for this is an invaluable lesson in and of itself.

2. It should go without saying that this copying must be done by hand. Besides the obvious temptation towards dishonestly presented by notation software, even students familiar with the interface may pay more attention to the program than the music. Copying by hand also forces the student to duplicate proper notational practices rather than relying on a computer. While I personally write only in pen, it is probably wise to encourage the use of pencils for beginners. The handwriting should be as neat as possible and mistakes cleanly corrected. All standard notation practices should be carefully observed, including stem-direction and length, beaming, note spacing, proper placement of accidentals,

[2] See also Corbett [1971b, 510–11] for how these apply in rhetorical training. These present guidelines are partly indebted to his formulation.

etc. Barlines should be drawn with a straight-edge. Psychologically, all these things subconsciously communicate values of neatness, deliberateness, and care; practically, they slow the pace of the copying to allow greater time for the material copied to sink in. Besides, clear musical penmanship is an extremely practical skill for any practicing musician. The students will find that with practice, their writing will improve in both legibility and speed. Because of this, copying exercises at the beginning should be generally be a shorter and less notationally-complex than later exercises.

3. The student must be able to hear the passage to be copied, at first literally, but eventually, the student must reach the point where she can can silently audiate the passage. At this point, those with perfect pitch or who are competent keyboardists will be at a distinct advantage, but there is no good way around this, and all students—including the pianists—must work towards being able to look at an unfamiliar score and 'hear' the work. This is nothing more than ear training applied, and the theory teacher would do well to encourage its development regardless of whether it is an 'integrated' curriculum or not. It may be helpful to play the passage to be copied in class or make a recording available to the students, or perhaps even better to select pieces with which they are already familiar. Again, the teacher must take care to not place the students in a situation where mindlessly copying notes emerges as the sensible thing to do.

4. Analysis of some kind must always accompany the copying. If we remember Kolb's learning cycle, copying is the Concrete Experience that leads to the Reflective Observation of analysis. This analysis need not—and usually should not—consist of the usual task labeling chords that most first- and second-year students mistake for analysis, and often this analysis can be purely mental without any tangible product necessary. The teacher should draw their attention to particular voice-leading patterns, melodic and motivic figures, soprano-bass counterpoint, linear intervallic patterns, how the bass line drives the harmonic progression, how the rhythms interact, how cadences are prepared, how harmonic motion contributes to the metric structure, and so forth. These are details that harmony textbooks are generally not capable of capturing in codified statements but essential elements of music theory, and the student must learn to be attentive to such details and seek to understand how they fit into the overall theoretical structure (Abstract Conceptualization) taught in the classroom and textbook. An approach drawing more heavily on linear Schenkerian thought than a verticalized chord-by-chord roman numeral analysis will be helpful at this stage, but the goal should not be to build an analytic vocabulary separate

from the one the students will use in more formal harmonic analysis, but instead to draw their attention to elements that might otherwise be overlooked. The teacher might assign a short paragraph commenting on these issue to be written after the score has been copied, thus forcing and directing the student's observation while she is copying the passage. Such analysis can also take place in class, either before or after a passage is copied. Discussion before the copying will necessarily consist of the teacher drawing the class's attention to various elements which they will later experience as they copy the passage, but discussion after a copying exercise can also enable a healthy degree of student interaction as they share their observations. Both are extremely valuable.

5. Lastly, the students must have a diversity of material to copy. There should be stylistic unity, especially at the beginning, so that the students are not confused by multiple musical languages at once, but within a style they should explore multiple composers, genres, and expressive contents. The point of music theory is not to teach the students only Bach chorale harmonizations or only Haydn minuets but to give them the necessary tools and sensibilities to understand a range of different styles and genres.

While we will discuss what to look for in appropriate *exempla classica* below, there is one issue we must address now: as alluded to above, one problem regarding score-copying especially prevalent in the beginning stages of theory training is finding examples that fit within the student's harmonic vocabulary. Even most Bach chorales—supposedly the model of voice-leading clarity and harmonic convention—possess enough chromaticism, harmonic inventiveness, and liberal use of non-harmonic tones to place them at the fringe of the first-year student's comprehension and often beyond the grasp of their harmonic vocabulary. There are two possible solutions to this, and these should be used in combination.

The first is to copy only excerpts of works that fit within the theoretical framework the student has built. Of course, excerpts must not become too small, lest all context be destroyed and the entire point of *imitatio* be lost. That said, however, carefully-chosen excerpts can provide marvelous benefits. For example, copying part of a minuet from a classical symphony (either in reduction or full score) can be most edifying for a first-year theory student, but it is probably unwise to attack the development from a sonata-form first movement.

The second solution is to simply downplay the importance of the student being able to fit every detail into a theoretical model. In fact, examining a passage with harmonies quite beyond the students' grasp can force them to consider other elements of music besides the vertical—voice-leading, counterpoint, melodic expressivity, etc.

This not only opens up more quickly a wider range of music to the theory classroom, including most of the repertoire the students experience on a daily basis thus making theory more relevant to their performing lives, but it also weakens the terrible notion that music theory and analysis is all about labeling chords. Let the students first become familiar with the music, how it lives, and breathes, and then we can learn how to describe it using technical vocabulary. We all know that theory follows practice, but not frequently enough do we allow this to inform our teaching.

For more advanced students studying composition or orchestration, copying a few pages of a full orchestral score presents an invaluable experience. Even just a few pages will give the student tremendous insights into the orchestrational style of a particular composer or work. Simply by necessitating careful attention to every single line of every instrument, copying draws greater attention to the intricate details of an orchestral work than score-study alone can accomplish.

More extended score-copying projects are also helpful, perhaps once a semester or so. These should consist of a single movement in its entirety, perhaps 4–6 printed pages of music, and the teacher should make these specific to the individual student. That is, pianists should copy piano scores, singers, songs, violists, string quartets, etc. It should also be a composer and piece which interests the student and is well-suited towards his natural disposition, as Quintilian would say. The student may even choose the work herself, with approval from the teacher, of course. Ideally this will be a piece the student is studying in her private lessons or rehearsing with a chamber ensemble so that the assignment has real and immediate relevance to her performing life. This may also reveal to the student exciting discoveries about the other parts in her ensemble, especially for those singers and instrumentalists examining their accompaniment for the first time. A short analysis to go along with the assignment may be helpful, but for such extended projects, this is probably unnecessary.

4.1.1 Interlude: Copying for Fundamentals

Copying as a principle can also be applied to more fundamental areas of theory training as well, especially where other means fail. I can imagine no other intelligent exception besides this to the axiom that *imitatio* must always be grounded in actual music and never constructed examples. For example, one former first-year student of mine—an intelligent and hard-working cellist with perfect pitch but no theory background—found herself struggling with intervals. After several approaches failed to yield satisfactory results, I gave her a sheet of paper on which I had constructed every possible interval above C accompanied by its inversion, first ascending by spelling (i.e., beginning with the perfect unison followed by the augmented unison, then the diminished

second, minor second, major second, augmented second, diminished third, and so on through to the perfect octave), and then ascending by interval size (i.e., beginning with the perfect unison, then the diminished second, the augmented unison, minor second, major second, diminished third, augmented second, and so on). Her assignment was simple: copy this, interval by interval, and label each. Once complete, copy this again, but constructing all the intervals from D, and then again from E, and so on, through B. After that, she was to repeat the entire exercise twice more, first using the C♯ major scale for the interval 'roots' and then the C♭ major scale. At 15–20 minutes per set, this would take a week or two to complete, but if completed in its entirety, she would have written every possible interval with every possible spelling multiple times—the patterns of the intervals, their spellings, and relationship within the scale would be completely entrained and internalized.

My goal with the exercise was to teach her *intervals*, not how to *calculate* intervals. As we all know, information which must be calculated from scratch every time it is called upon borders on useless. The last thing this young cellist needed was another trick for identifying intervals. She needed *practice*, and not practice in quiz or worksheet format that had already proved terribly ineffective with her, but the type of practice that a performer would use to practice scales—systematic, predictable, and rigorous. As it were, she found that her troubles had vanished by the time she had completed the set built on F and left it at that. I only wish we had begun this earlier and saved her a great deal of frustration.

Teachers can devise similar exercises for other rudimentary elements of music theory, such as scales, triads and seventh-chords (in specific keys, of course), and inversions thereof. The exercises must be developed in such a way that the patterns and relationships between different elements of theory can be clearly seen and internalized. For instance, the students can construct corresponding triads and seventh chords for each scale degree, as shown in Figure 4.1. If Roman numerals have been introduced at this point, these can be included.

Another possibility may be to have the students construct these inversions from a common bass note rather than chord root, as shown in Figure 4.2. This can further the students' fluency with the figured bass symbols.

The teacher will naturally want to design such exercises to reinforce whatever theoretical approach is undergirding the pedagogy, but this technique is applicable to a wide range of such approaches. It can also be used for a wide variety of topics, ranging from fundamentals through basic diatonic part-writing and prolongational patterns, chromatic part-writing, and even 20th-century topics including exotic scales, pitch-class set theory, and serial techniques, all of which, properly speaking, constitute fundamentals that must be mastered before the true work of theory and analysis can com-

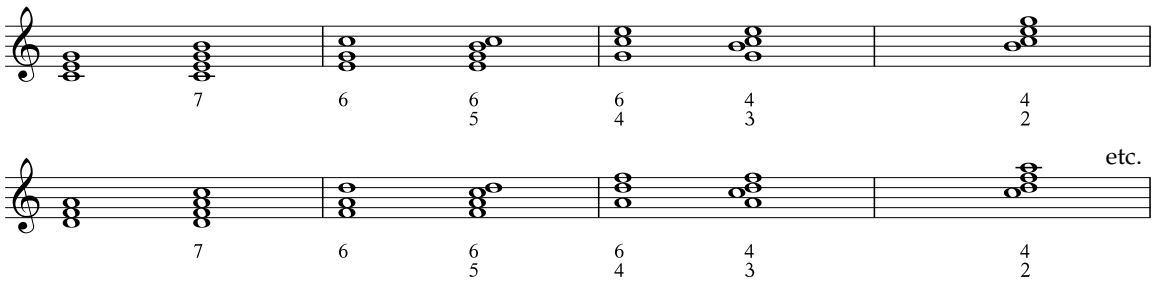

Figure 4.1: triads and seventh chords in different inversions

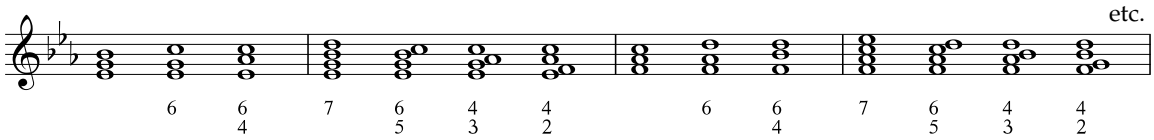

Figure 4.2: multiple figures over a common bass note

mence.

As an example, when teaching a class of sophomores about an enharmonic reinterpretation of a dominant seventh as a German augmented sixth, I realized that my in-class explanations were simply failing to communicate the concept—the only students who demonstrated any grasp of the concept were those who did not need a teacher to help them to begin with. I then instructed my students to write and resolve a dominant seventh in one key and then to respell and resolve the dominant seventh as an augmented sixth chord in a new key. Once completed, they were to repeat this exercise, with the exact same voicing, a semitone higher, and to repeat this until all were keys were completed (see Figure 4.3). A number of students reported to me that this simple exercise helped clarify the issue with wonderful results and helped them practice this skill far more effectively than the worksheets taken from the companion workbook of a respected undergraduate theory textbook.

In this, just as with constructing the various types of intervallic structures above a bass note or exploring all the possible inversions of a single chord, the central idea is to create an easy assignment where the student does not need to think about the 'answer' but is instead freed to think about what the 'answer' means and—most importantly—given the opportunity to practice in a manner where she will not be distracted by unhelpful notions of 'right answers'. Far from being superfluous, it is the repetitive

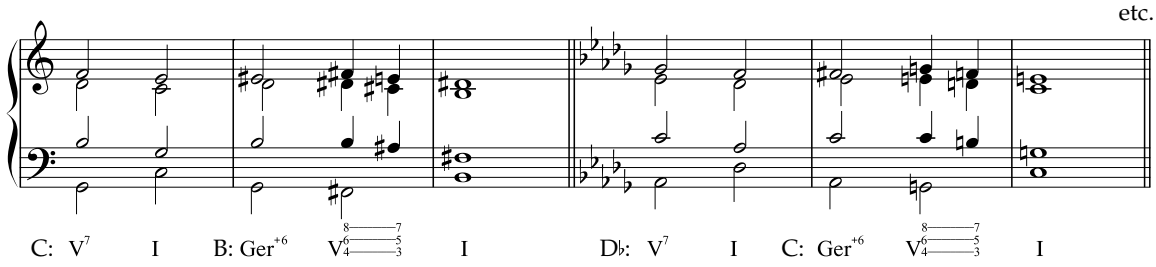

Figure 4.3: enharmonic reinterpretation of a dominant seventh as a German augmented sixth in all 12 keys

and systematic nature of the exercise that gives it its efficacy.

Like proper score copying, these should be done in small increments—not more than 15 minutes at a time, or perhaps less because of the more repetitive nature of such assignments. This will mean assignments will need to be short and focused in order for the students to gain the most from the task. Later assignments should be patterned on previous ones in order to forge connections, and the teacher must take care to emphasize to the students that the point of such assignments is to practice and forge connections lest they think them nothing more than mindless rote learning devices. While there is an element of rote learning inherent in such techniques, and while even exercises completed half-attentively are better than no practice at all, it is incumbent upon the teacher to teach the students not only the material needed to complete these exercises but also how they should treat the exercises in order to reap the most benefit.

The teacher might ask at this point, is it not enough to simply explain to the students the concepts, show them these patterns, and then give them quiz-format assignments to practice? From my experience and reflection, usually not. As the semester wears on, the students receive more trial-and-error practice in these basic skills as later topics are covered, and eventually, they solidify, but at the beginning, even the students who seem to catch on quickly rely primarily on conceptual command and computational power rather than ingrained understanding and fluency; even for these, true understanding only comes later after hours of incidental practice. However, I believe quicker and more painless process can be made by more direct practice at the outset. As the adage goes, I hear and I forget; I see and I remember; I do and I understand.

4.2 Memorization

Because pianists and singers commonly memorize their repertoire (as do many orchestral players for solo pieces), Memorization as an *imitatio* exercise for music theory study should add another dimension to the task. The most obvious way would be to couple Memorization with an analysis. One logistically challenging but extremely rewarding activity would be to set aside several days at the end of the semester for student presentations of a brief (2–3 minute) commentary on how the analysis informs the interpretation and performance, culminating in a memorized performance of the piece. During the semester, the students select (with the instructor's approval so that it is appropriate to the course), analyze, and memorize a relatively short piece or movement. While it may be a piece which the student is already preparing or has in her repertoire, it should not be previously memorized, as the idea is that the analysis helps inform the memorization and that through the memorization the student learns and internalizes a great deal more about music and music theory than one would by simply memorizing the piece by brute force. The musical memorization must involve more than just muscle memory and rote recall, and it should also enable the student to reproduce at least part of the score from memory. This last test especially forces a different kind of memorization than most students will be used to and can be a marvelous tool for strengthening their musical-intellectual faculties.

Another possibility is to have students reproduce an excerpt of a score *by memory* as an in-class quiz. I have heard from one colleague of an experience in his own undergraduate experience where a professor required students to memorize a Bach two-part invention of their choosing and then reproduce the score in its entirety in class. As the former student commented, the class quickly realized that memorizing the score note by note was not a good solution. Instead, they discovered that they had to think—and memorize—*analytically*: what are the intervals of imitation, what are the harmonic progressions, what are the sequential patterns, and so on. By memorizing the structural underpinnings from an analytical perspective, they were able to reproduce—or perhaps as in Borges's story where Pierre Menard re-creates *Don Quixote*, to re-compose—the invention.

4.3 Variation

First, variation must begin with pre-existing material well-suited for the particular pedagogical purpose at hand. The teacher must also realize that variation here as the musical equivalent of the rhetorical imitatio exercise of Paraphrase must encompass more than the usual tricks employed in classical theme and variation sets. These can

certainly be employed, but for pedagogical purposes, it would be better to begin with simply with an in-class experiment: given a single phrase, with or without accompaniment, what changes can be made, and with what effect? Several of the methods recommended by Erasmus can be applied in a musical context. Technical differences between the rhetorically distinct methods will necessarily be blurred when translated into musical analogs, with some musical techniques potentially mapping onto several rhetorical ones, and there is little if any value in belaboring students with perhaps only tangentially-applicable technical terms from a different discipline. However, the concepts behind the terms should be explored thoroughly nonetheless. A list of the more applicable techniques follows:

1. *Synonymia.* The obvious musical parallel is the substitution of chords of the same function, such as ii6 for IV, or vii°for V, or first inversion triads for root position (if taking a strongly figured-bass approach), etc. The essential element is that the structure and flow of the phrase remains unchanged. Just as synonyms give different inflections to an unchanged essential thought, so can these substitutions or alterations vary a phrase or progression but without impacting its integrity. The students should pay just as much attention to notes in the melody as the harmonic structure. Sometimes a change in harmony will necessitate an altered note in the melody, but the melodic impact of having the third of the chord in the melody rather than the root (for example) can have extremely important ramifications for interpretation, phrasing, or structure. This is a subtle but important distinction which the students may never realize without experimentation and will almost certainly miss entirely if the sole focus of the study is on harmonic content. *Synonymia* is closely related to:

2. *Enallage* / Ετέρωσις. In rhetoric, this is a slight change within the same word, substituting one grammatical form for another, such as 'drinker' to 'drunkard'.[3] Musical parallels include such techniques as different inversions of triads (if taking a more verticalized, functional harmonic approach; cf. *synonymia*), modal mixture (♭VI for vi, etc.), applied dominants (V/V for ii, etc.), or the addition or subtraction of sevenths. The manner for exploring these variations should essentially follow that for *synonymia*. This is also extraordinarily similar to:

3. Synecdoche, in which a part of something represents the whole. Incomplete triads are the obvious harmonic parallel, and a fuller understanding of this concept obtained by experimenting with this from the composer's standpoint can

[3]Erasmus [1963, 25]

greatly contribute to the student's grasp of the harmonic implications of an unaccompanied melody or of certain sparse textures where the composer does not bother with unnecessary thirds, fifths, or even roots. The concept is critical for understanding the harmonic structure of two-voice counterpoint and the nature of soprano-bass counterpoint within fuller textures. The idea of synecdoche can be expanded in more advanced study to make sense of certain ambiguous formal constructs in sonata form that refuse to conform to the 'textbook' schemata or in fugal or other imitative contrapuntal textures.

4. *Periphrasis.* Instead of adding more words to extend and expand a sentence, instruct the students to add an extra two bars to a four-bar phrase, or extend a chorale harmonization by delaying the cadence by a few beats. Have them sequence material or explore concepts of dominant prolongation. This can prove useful when learning concepts of linear diminished seventh chords and other staples of romantic chromaticism.

5. Comparatives. Rhetoricians may use contraries to invert the structure for a slightly different emphasis or simply for variety (e.g. 'he puts fame before money' vs. 'he puts money after fame'). It is common to speak of inversion and retrograde in fugal contexts where the processes are systematic and obvious, but the concepts appear in plenty of others as well. Just as in speech, inverting a melodic interval or short motive serves to create variety within a motivically and melodically unified whole. This is one of the most powerful and versatile tools of melodic invention available, and the students may find it invaluable as they develop their own compositional and improvisational faculties. The harmonic equivalent of this is:

6. Relatives. In rhetoric, this essentially functions as a subset of comparatives, expressing the same thought from a different point of view or from a different relational structure. It seems logical to associate this with a change of modality, which is a standard device in theme and variation sets. Having students recast a passage in a different tonality can make them aware of subtle expressive differences between modes and their musical effect, especially regarding certain melodic gestures and tones. A discussion of Schubert in light of this would be most appropriate.

7. Amplification. Essentially a specific type of *synonymia*, amplification substitutes a stronger word for a weaker or more neutral one. This alteration will have greater impact on the chord's function than with *synonymia*. Chromatic variants (especially of predominant function), extended tertian harmonies, and various

types of ornamentation can fall under this general category. The exact opposite of this is:

8. *Diminutio* / μείωσις, which can serve as a wonderful introduction to concepts of reductive analysis as well as provide further means of musical invention. Ornamentation, melodic figurations, and non-harmonic tones are smoothed over, structurally insignificant passing chords removed, and chromatic variants reduced to their basic predominant / dominant / tonic functions.

9. Varying by changing the figure. In the context of musical variation, the analog here is in changing the pattern of the accompaniment, the metric structure, or melodic/motivic figuration.[4] For instance, what would be the effect of converting an Alberti bass into a more flowing romantic arpeggiation, or imposing a simple-duple meter onto a phrase first written in compound-duple, or introducing a dotted-eighth/sixteenth rhythmic motive into a melody? The possibilities presented by changing these 'figures' encompass a host of devices used in variation sets. Experimenting with such variations should cultivate a sensitivity towards how specific figurations give different musical meanings to structurally identical passages. This emphasizes the relationship between technique and style and therefore musical meaning, allowing the students to clearly connect their study of music theory with their practical lives as performers and interpreters of music.

These Paraphrase techniques can allow for a number of musical games. The teacher can instruct students to harmonize a Bach chorale melody in three distinct ways (as Bach often did), or write three different melodies over a figured bass. They can be challenged to invent as many different closing gestures to a phrase as they are able,[5] or to come up with as many variations on a short given theme as possible (with the caveat that the variations must be sensible, tasteful, and recognizable).

When these variation techniques are taken together, the student will find that she has a wealth of techniques for exploring musical possibilities within given material, for developing material of her own invention, and most importantly for the purposes of undergraduate theory education, for understanding how materials within a composition relate to each other, thereby giving her the ability to comprehend the inherent

[4]This is only tangentially related to the the Baroque use of musical 'figures' in the context of the musical-rhetorical connection as found in theorists such as Burmeister and should not be confused as being the same concept (see Section 2.2, page 27).

[5]Heinrich Koch gives a delightful example of this is action in volume 3 chapter 3 of his *Introductory Essay on Composition* [Koch, 1973, 148–54]

structure and growth within the piece and intelligently interpret it in performance. Musical Paraphrase offers the students a fun, interactive, and challenging alternative for engaging the music in an analytical manner in contrast to the dry identification of harmonies and tonal regions which too often passes for analysis in their minds. And no one can deny the intense practicality of such skills for composition and improvisation. In sum, teachers should consider variation an indispensable element in music theory pedagogy.

4.3.1 Interlude: Completion of Works

A variation on the idea of variation itself—having a student finish a work left partially incomplete—can yield immense benefits. Because this usually involves a great deal of invention of material, it straddles the border of *exercitatio* and *imitatio*, but because it will usually involve reusing and reworking material already introduced (what musicians would typically call 'development'), we can consider it a type of Paraphrase.

This is a traditional compositional exercise itself: Handel's fugue exercises for the Princess Anne followed this pattern in that he supplied the framework and expectations but left the completion of the exercise up to the student,[6] and Thomas Attwood underwent such exercises in his studies with Mozart.[7] Doubtless there are others running the gamut of styles, levels, and regions.

The unfinished work to be completed by the student should possess sufficient clarity and craft so that subsequent parts of the composition follow logically and predictably from what has already been written. At least at first, works following a standard formal procedure (such as short classical minuets) will be easiest, but any relatively clear piece following a consistent path can be used, even if there is more flexibility with the form. Baroque preludes or chorales, German Lieder, romantic piano miniatures, or even fugues and serial string quartets can all work just fine depending on the style to be studied.

Generally, such exercises should be moderately short; if the student is required to compose much more than a limited amount, the exercise will be both too time-consuming and present the student with too much freedom in an exercise in which the student should predict as closely as possible what the composer would have or could have done. It would be best for the student to begin by copying the given score and then continuing from the point at which the original ends as if the student were composing the entire work herself. To remove temptations toward dishonesty, the

[6] See Section 3.2, page 42 above.

[7] See Cook [1996, 66 ff.] for a commentary on this related specifically to our purposes. The Attwood notebook is published in the *Neue Mozart Ausgabe* (x/30/1).

teacher may select works left unfinished by the original composers themselves for such exercises, or perhaps simply remove any indication of composer or opus number from the first part of the score given to the students. The teacher should also avoid works the students may likely already know.

These can present wonderful opportunities for in-class music-making. For instance, the teacher, or even better, the students, can perform the student works (or perhaps more practically, a select handful of student works) and then lead a discussion on the merits or stylistic consistency of each. If in-class readings of string quartets, solo pieces, songs, or—most democratically—chorales are possible, so much the better. The teacher could also make a game out of it by including the actual composer's solution in the anonymous mix of student solutions and having the class critique it as well and then guess which one is the original. In any case, one should always examine the original completion to the composition (so long as one exists) so that students can compare their own solutions to that of the composer—what harmonic progressions did the composer use, and why? What harmonic rhythm? What melodic contour, and how did it complement the bass and harmony? And perhaps most importantly for the purpose of this particular type of assignment, what is the relationship between the part of the composition the students had to begin with that the part hidden from them?

By exploring possibilities of what *could have been* in a composition, the students will find new light shed on what the composer chose. The hope is that such explorations will open up in the students an awareness of how compositional decisions are made and thus how they ought to understand and interpret the music as both performers and listeners. In short, through such exercises and discussions, music theory can be made clearly *relevant*.

4.4 Arrangement

In keeping with the classical spirit of Translation, arrangement as a pedagogical exercise should consist of more than just moving music from one staff to another. Whereas score-copying directs the copyist's attention exclusively to the given music in order to cultivate the intense concrete experience and careful examination necessary to understand the music, arrangement demands interpretation and analysis. Further, it is a different sort of analysis than that encouraged by usual harmonic analysis. As Nicholas Cook states,

> using Roman numerals forces you to decide on either the one interpretation or the other. It does not allow you to say the important thing about

> the music ... without at the same time saying something spurious about it. By contrast, the arrangement allows you to say what you want to say about the music, and no more.[8]

What are these interpretations arrangement is designed to cultivate? For instance, orchestrational decisions (including issues of dynamics and register as well as instrumentation) can force students to decide: where and how phrases begin and end; which voices are important and at what times and for how long; where important structural divisions occur within the architecture of the piece; where musically important 'events' fall, and how these are organized within the hierarchy of the piece. Adjustments will have to be made, translating idiomatic figures from the first ensemble into those appropriate to the second. This forces an analysis into the musically-essential structure of the piece beneath the surface realization. For example, an arpeggiated left hand of a piano solo would sound wildly comical if transcribed verbatim for a brass quintet. The student must first decide upon the essential analytical image of the original and arrange *that*.

One must be careful in selecting appropriate pieces to arrange, however. The teacher must find a balance between works that are so idiomatic that any translation from one ensemble to another would destroy the work and those in which no interpretive decisions are necessary. For example, in Mozart's K. 405 arrangement of the Bach fugues, nos. 2 and 3 are so well-suited to string quartet to begin with that Mozart makes virtually no alterations in his transcription.[9] Such works would be better treated by copying the score, unless (as in Mozart's case) there were an immanently practical motivation behind the transcription.

The teacher should strive to make this assignment as practical as possible for individual students: pianists should transcribe string quartets into piano solos, while cellists, the opposite; singers may arrange a woodwind quintet into a concert vocalise with piano accompaniment, and ambitious composers or conductors within the group may want to orchestrate a piece for a small orchestra. In-class performances of some of these works along with discussion as to the effect of various choices made by the arranger will be of tremendous value not only for the feedback it provides the students but also in simply adding variety and live music to the theory classroom.

At this point, both teacher and students must demonstrate a certain willingness towards experimentation and musical flexibility regarding the treatment of the original work. In other words, here is not the place for advocates of 'historically informed performance' to raise questions about the appropriateness of such activities. While

[8] Cook [1987, 82]

[9] See Section 3.3, page 45 above.

there will always be a place for performing a work exactly as the composer 'intended it', the students—and teacher—must accept such treatments for what they are: complete reworkings (sometimes radical) of the original piece, not an 'interpretation' pretending to represent the original. The finished product should 'belong' as much to the new arranger as it does to the original composer. Schoenberg's, Stokowski's, Busoni's, Mozart's, Webern's, and Carlos's versions of Bach's work all stand or fall on their own merit and not on their degree of fidelity to Bach's own original conception. Thus we refer to these as the Bach-Busoni piano works, or the Bach-Stokowski transcriptions. The student attempting to be as strictly faithful as possible to the composer's original notes will likely miss the point of the assignment. In order to impress this point upon the students, the teacher should introduce the concept by comparing an original work with a successful arrangement, drawing their attention to differences between the versions and discussing the reason behind and effect of these choices. The class should also consider how a more literal translation would have proved ineffective in the new instrumentation.

Like all such exercises, it is best to begin with simple textures and structures. Nicholas Cook begins his own book[10] by suggesting an exercise in which he has students add two violins and a cello to a Haydn keyboard minuet. The assignment involves a simple harmonic analysis and is modeled on three other pieces with the same forces and texture. The goal is to create in the students an awareness of how the lines interact, how to shape both melodic lines, inner voices, and the bass, as well as provide an environment for practicing voice-leading where it will be relatively easy to spot and avoid errors.

As the students gain competence and experience with the beginning stages, they can quickly move from adding parts to a simple texture to translating the piece from one texture to another. Arranging a piano minuet for string or wind trio could be a wise next move—the textures will still be thin and clear, and the use of only three voices without keyboard accompaniment will force the students to pay careful attention to the chord voicing and voice leading. Assignments may increase in intricacy, and within a few months, students will be prepared for the sort of individual arrangement projects described above.

4.4.1 Interlude: Figured Bass

Realizing a figured bass is itself a type of arrangement as well as one of the most effective methods ever devised for communicating and teaching classical harmony. The figures give the student all the information necessary create a fleshed-out version of

[10] Cook [1996, 15–19]

existent but unidiomatic musical information (i.e., a solitary bass line on a keyboard instrument). It provides the student the essential analytical image of the music which the student must then 'realize' or enflesh. Like other arrangement exercises, these should begin simply, perhaps with a string trio with the second violin removed and then reconstructed based on figures under the cello line. The texture should eventually expand to encompass four voices—both string quartet and keyboard-style accompaniment should be explored at some point, and four-part chorale-style harmonizations should not be neglected either. Variations on this should including writing a melody over a figured bass and harmonizing a given melody without extra information.

The teacher should avoid over-reliance on teaching from figured bass, however. *Imitatio* as a pedagogical technique depends on *exempla classica*, and without specific complete models explored through the various imitation techniques described above or individual instruction from a master teacher, the student has nothing but codified rules on which to rely. We will find ourselves exactly where we began. Above all, the teacher must not let music theory become a dry, mathematical thing, and realizing a figured bass, especially if done only in a four-part chorale texture in a piano score, has the potential to become exactly that.

4.5 *Exempla Classica*

The critical question remaining is what works should serve as the *exempla classica* to be imitated? As mentioned above, the question in classical discourse regarding imitation was not 'should we' but '*whom* should we'. Large sections of Quintilian's *Institutio Oratoria* are dedicated to discussing the various merits and weaknesses of a host of writers so the students may find the best traits from a wide range of writers to learn and imitate.

Initial exploration of the basic forms and styles must focus on genre-defining works. They should be by composers of the highest caliber and most representative of the style being studied. 'Textbook' examples of certain forms, styles, or harmonic language must always come before anomalies. For undergraduate theory study, begin with works from the classical period with clear forms, textures, and harmonic content: C. P. E. Bach, Haydn, and Mozart can form the core. From that foundation, the teacher can expand the repertoire forward to late classical / early romantic figures (Beethoven and Schubert can anchor this style) and backwards into the baroque (including J. S. Bach, naturally, but also Couperin, Vivaldi, Handel, and a host of others).

Once the norms regarding form and harmonic technique have been established, the teacher must expose her students to the exceptions to the rules. In music just as in spoken or written word, the overall impact of a composition is often better served by

bending the rules than by following them. This is a central point of effective rhetoric, musical or verbal, and much of the repertoire students will encounter outside the theory classroom depends on this play between expectation and violation for its effect. If students are not exposed to these sorts of works in their theory classes, they will find themselves unable to satisfactorily apply their theoretical knowledge to those works at hand, reinforcing the false division between theory and practice. This is one of the strongest advantages an *imitatio*-oriented pedagogy has over a textbook-oriented pedagogy: *imitatio* gives the students the tools necessary to understand not only the handful of genre-defining works central to a style but also those that expressively play against these precedents. While this requires a much greater commitment of time and effort than teaching only the ideal 'forms' and those select pieces which match them, the benefits of the complete exposure to expression is well worth the investment. This will truly render the theory classroom both practical and musical.

Chapter 5

Conclusions

As we have discussed, the basic problem is that music theory—that is, music theory as it is too commonly taught—fails to connect in meaningful ways to the musical lives of students. The inherent tension within the term 'theory' itself, embracing as it does both speculation and and practice, can never be negotiated without intense engagement with the object itself. Just as the twofold Observance engages both Perception and Conduct without losing sight of the the object of theory, so must music theory exist in such a way that it is always turning its gaze towards music, both in the perception and analysis as well as in the interpretation and doing.

The classical rhetorical *imitatio* exercises I have described herein accomplish exactly this. They enable the connection between the *ars* of the concepts governing actual music and the *exercitatio* expected of the students as practicing musicians. They provide practical and accessible means for the students to develop compositional skills which in turn contribute to their interpretive sensibilities and analytical faculties. They engage the students in a way congruous to their primary studio and ensemble training rather than tangential to it, foster an enjoyable, competitive, and supportive educational environment, and offer the intense and personal concrete experience with music necessary for a complete and balanced learning cycle. The long and established tradition of these exercises both in rhetoric and music means that contemporary teachers have an incredible wealth of resources and collective experience upon which to draw. The students have the satisfaction of knowing that they are learning music theory using the same types of exercises that Bach used as he learned to think musically, that taught Mozart the basics of harmony and orchestration and later counterpoint, and that brought Schumann his deep insights into Bach's contrapuntal technique. Although the extra time, effort, and energy required by these various imitation exercises may appear to be a daunting commitment, the benefits of truly

complete musicianship is a harvest more than worthy of the investment.

What, then, is left for the teacher to do? The first task is to be competent in a high degree as a musician himself. Only a fool seeks to apprentice himself to an incompetent 'master', and no honest human being should teach to others what he does not know himself. But just as necessary for a teacher of younger students is enthusiasm for the material. Love covers a multitude of pedagogical wants, and if students can feel their teacher's enthusiasm for the subject, learning will happen.

Thus the teacher must take it upon herself to inspire her students to learn, and the best means of this is to be herself an object of imitation, unwilling to compromise her musicianship or to let her students compromise theirs. The great exemplar of such a teacher is the late Nadia Boulanger. She sought always to unlock the fantasy of her students, but to do so through the most rigorous and disciplined technique. Her students knew her as a tyrant, but a tyrant who loved them. Such a combination of rigor with passion is one to which all teachers should aspire. Readings of her life ought to be required of all who teach music.

Concerning the *imitatio* techniques discussed here—score-copying, memorization, variation, and arrangement—the teacher must never let them become mindless or pedantic exercises. They must always have vitality, relevance, and seek to instill in the students not only musical concepts but also the values of discipline, thoroughness, and of the importance of exempla for more than just musical compositions. The teacher must never be dry but must instead be a fount of knowledge and serve as both disciplinarian and muse. This will provide them the foundation upon which to build their musical sensibilities and their careers and lives in general. As Quintilian writes:

> We must, therefore, take especial care, above all where boys are concerned, to avoid a dry teacher, even as we avoid a dry and arid soil for plants that are still young and tender. For with such a teacher their growth is stunted and their eyes are turned earthwards, and they are afraid to rise above the level of daily speech. Their leanness is regarded as a sign of health and their weakness as a sign of sound judgment, and while they are content that their work should be devoid of faults they fall into the fault of being devoid of merit. So let not the ripeness of vintage come too soon nor the must turn harsh while yet in the vat; thus it will last for years and mellow with age.[1]

[1] Quintilian [1920–22, II. iv. §8]

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