1-1-2019

Counterpoint is a Piece of Cake: Renaissance Improvisation in a Modern University Course (In honorem Petri N. Sutoris)

Frauke Jürgensen

Follow this and additional works at: https://digitalcollections.lipscomb.edu/jmtp

Counterpoint is a Piece of Cake: Renaissance Improvisation in a Modern University Course
(In honorem Petri N. Sutoris)

FRAUKE JÜRGENSEN

Renaissance counterpoint was for a long time a mainstay of university and conservatoire music degrees, aimed primarily at the composer and musicologist: a time-intensive subject, it has recently has fallen out of favor in increasingly broad curricula with a more diverse student body. Traditionally, counterpoint was taught using rule-based methods that were developed long after the musical style itself. Peter Schubert's textbook *Modal Counterpoint, Renaissance Style* (2005) was seminal in returning to the theoretical and pedagogical sources of the period, although the underlying approach was still modern, species-based. More recent research (including Schubert) has revealed pedagogical approaches of the Renaissance, which were based in improvisation techniques that were taught to children. These techniques are also time-intensive, limiting their wholesale applicability in a short course in the context of a modern university. This article demonstrates how selected exercises based on historical improvisation techniques can be blended with a species-based approach to address a fundamental problem encountered in a time-constrained course: familiarity with the stylistic treatment of consonance and dissonance.

———■——————■———

Renaissance counterpoint is a skill originally taught to children and honed over years of daily exposure and practice. Today, taught in the context of a general undergraduate music program, it is frequently subject to the strict time limitations that are so often encountered in an increasingly broadened curriculum. At the University of Aberdeen, I incorporate recent research about historical improvisation practice to overcome this constraint: an understanding of such techniques helps students find short cuts in the mechanics of writing "correct" counterpoint, and allows them to focus more on larger-scale aspects of composing.

Peter Schubert's influence during my doctoral studies went far beyond his roles as supervisor and teacher of graduate seminars in the history of music theory. My formative years as a music lecturer were for the most part under his guidance, initially as a teaching assistant for the core theory curriculum at McGill University, and then, with increasing independence, as course instructor for upper-level courses in Renaissance and Baroque counterpoint. During this period, I served as beta-tester for his methodologically innovative counterpoint textbooks, which are infused with one of the most important lessons I learned from him: enormous respect for the

intellect and subtlety of the musicians of the past. "Always begin from the assumption that they knew what they were doing," was the take-away message, which I have tried to take to heart in my own approach to teaching. This article is written in his honor.

In 2009, I introduced a fourth-year elective course in Renaissance Counterpoint to the music curriculum at the University of Aberdeen. Aberdeen offers undergraduate music degrees in Single Honors (a general degree that allows students to chart their own path amid options in performance, composition, and musicology), Education (graduates qualify as secondary school music teachers) and Community Music. Over the past decade, our core music theory and history curriculum has become whittled down from four semesters to two, as a perceived need to build a broader skill base and cater for a greater variety of backgrounds is balanced against a limited number of available contact hours. From their second year, students have an increasing amount of choice, where one-semester elective courses tend to be created around the academic staff's areas of interest. The spread of electives is negotiated collectively: as long as there is a fairly broad range of choices, individual lecturers have considerable freedom in proposing new courses. When I first proposed the course, there was no particular idea that it would slot into a well-reasoned linear curriculum (the emphasis being on "options"): essentially, I wanted to teach counterpoint, and nobody stopped me.

Why teach Renaissance counterpoint today, and what is the point of revisiting 500-year-old techniques in order to do so? Counterpoint, in the larger sense of a systematization of the tensions between the horizontal and vertical, or melodic and harmonic aspects of music, is both fundamental and unique to the development of Western European music and its descendants. The problems faced by composers today are still largely the same: how to invent, develop, and structure material, how to create a hierarchy of relationships among different features and layers of the music, and how to be answerable to pre-compositional constraints. Counterpoint can teach awareness of these issues, and facilitates student experimentation through addressing them in a highly controlled environment. Beyond its relevance to composers, analysists, and musicologists, however, counterpoint is also an essential part of the picture for the historically informed performer of Renaissance music: recognizing it fundamentally as an improvised art allows her to understand the music differently and facilitates the process of adding or reconstructing voices.

The course has always been popular, but its application to other areas of the students' studies had to be teased out over time. One semester is a very short time to teach counterpoint purely as historical compositional technique, let alone provide all the context that will allow students to recognize transferrable skills and concepts. I

will describe how my own search for effective ways to teach Renaissance counterpoint in this time-constrained environment has led me to incorporate improvisation techniques. Even though at first this might seem counter-intuitively time-consuming, this approach allows students with very different goals to emerge from my course with the tools to further their learning in whichever direction they desire—whether this is as a modern composer, a school music teacher wanting a deeper contextual understanding of how music has been taught in the past, or as a historically-informed performing musician aiming to reconstruct historical techniques. In this course, I integrate new and old approaches to teaching, where the "old" approaches are in fact the ones informed by modern scholarship.

Recent research, including that of Schubert and some of his students, has uncovered sixteenth-century improvisation techniques, and we are still re-evaluating both their role in Renaissance composition pedagogy and the relationship between improvisation and composition.[1] As Schubert argues, studying historical improvisation allows us to spot such techniques when they appear in notated repertoire, and understanding their scope leads us to re-evaluate our notion of "learnèd" (emphasis on the final syllable mine) counterpoint, a term sometimes used in later musical convention with a certain degree of contempt.[2] As an undergraduate, having learned that counterpoint improvisation was an essential skill in the past, I was enormously frustrated by what I perceived as a lack of systematic method for teaching this skill in the present. I thought that perhaps I was just incompetent, since I couldn't quite manage to get myself to improvise using the enormous tangle of counterpoint rules with which I had been presented. How could I get to the point where, as Schubert promised, I understood counterpoint well enough that the subtler details would be "a piece of cake"?[3]

Thomas Christensen, arguing for greater self-awareness on the part of historians of music theory, sets up a false dichotomy (which he acknowledges himself) of "presentist" and "historicist" approaches.[4] In a nutshell, he argues that the "presentist" approach of using contemporary tools and modes of classification for the music of the past is "myopic," because our present concerns as theorists and analysis are "parochial," that is, not really any more universal than those of any other

---

1   See, for example, Wegman (1996); Schubert (2002); Motuz (2017); Schubert (2014); and Wegman (2014).

2   Schubert (2014, 29).

3   Schubert (2014, 30).

4   Christensen (1993).

time or place.[5] The "historicist" approach, on the other hand, he calls "naïve," since the historicist ideal of telling history "as it really was" is unattainable.[6] Christensen suggests using hermeneutics to overcome this problem, creating a "dialogue with the past," and reconstructing the "cultural web" of the past while at the same time remembering that one is caught in one's own cultural web.[7] His exhortations that "historical understanding of theory requires present application" and that "empirical claims and the heuristic value of a theory" must be tested in practice are especially relevant here.[8] Schubert himself was entangled in a similar discussion with Margaret Bent, precipitated by his article, "Authentic Analysis."[9] He argues that theorists may use contemporary tools and methods rather than restrict themselves to the tools available to a theorist of a particular period. Modern techniques can also lead to valid insights, and the claim of authenticity in analysis is just as naïve as the claim of authenticity in performance (which term the Historically Informed Performance community has long since ceased to use).[10] Although this point of view would seem to align him more closely with Christensen's "presentists" (indeed how it appears to have been read by Bent), in fact, his counterpoint textbooks are really that happy "dialogue with the past," which Christensen encourages us to seek. It is a testament to Schubert's deeply thoughtful approach that the continuation of that dialogue allows us to adjust our ways of using his textbooks in response to our evolving understanding of historical pedagogy.[11]

Modal Counterpoint, Renaissance Style and *Baroque Counterpoint* (the latter co-authored with Christoph Neidhöfer) are still, well over a decade since their first publication, the most innovative English-language counterpoint textbooks on the market for general undergraduate teaching.[12] Both texts are grounded in theoretical treatises of their respective periods, translating them for a modern English-speaking

---

5   Ibid., 14.

6   Ibid., 22–23.

7   Ibid., 27–28.

8   Ibid., 32.

9   Schubert (1994). See also Bent (1998).

10   Schubert (1994, 17–18).

11   Wason (2018) offers a wide range of options for instructors who wish to integrate topics from the history of theory into undergraduate curricula.

12   Schubert (2008); Schubert and Neidhöfer (2006).

undergraduate audience. They use musical examples from the treatises and from a wide range of composers, going well beyond traditional "Palestrina"- and "Bach"-heavy models. The pedagogical methods espoused and extensive exercises provided are based on historical examples, with adaptations for the modern curriculum. *Modal Counterpoint* begins with a species approach. For each chapter, the first set of exercises in the series is concerned with pairs of successive notes and a method for working out all the possibilities for composing a counterpoint against them, given a starting interval between the two voices (see Example 1).[13]

Example 1

To explain his "A"-series exercises, Schubert shows how to work out all possible counterpoints above a *cantus firmus* ascending by third, categorized by starting interval (here, a fifth and a sixth). Counterpoints which contravene a voice-leading rule are to be discarded: these are marked with "X."

This is, on the surface, similar to the catalogues of interval successions provided in period treatises, most famously in Tinctoris's *Liber de arte contrapuncti*, as we shall see later. Unlike *Modal Counterpoint*, however, Tinctoris presents these interval pairs with the intention that a student should practice them orally and build up an unconscious vocabulary: his goal is improvising against a *cantus firmus*.[14] In most modern music departments, it is not feasible for students to spend as much time

---

13   Excerpt from Schubert (2008, 29), Examples 3-1b and 3-1c.

14   This point is made by many including Schubert, but Motuz (2017) works out the implications of Tinctoris's method in light of modern insights into cognition (especially memory), and adapts the principles for modern practice, as discussed later in this article.

rigorously learning improvisation skills as did young boys in a choir school of the Renaissance. The modern way of teaching counterpoint relies heavily on the learning of rules, which students apply in a series of progressively more difficult written exercises. The historical approach is based more on the training of procedural memory through the accumulation of a vocabulary of stylistically correct musical gestures.[15] Schubert's approach, fitting into a modern curriculum with time-limited courses, remains modern, rule-based and systematic, but he acknowledges that this is not really historical. Rather, it is historically informed, giving students a window into what would be possible, given the time to devote to immersion.

When I first began teaching using Schubert's textbooks as a Ph.D. student at McGill University, I followed the prescribed method closely. At the time, music students at McGill took a mandatory semester of two-voice modal counterpoint in their first year, which took them to Chapter 12 ("The Imitative Duo") of *Modal Counterpoint*. In the third year, an elective course was offered, divided into two semesters. The first semester took students to the end of Chapter 16, which is the "Benedictus Project" in three-voice imitative counterpoint. The second semester built on this with more advanced techniques, culminating in composition of a Mass movement or motet for four or five voices. I took the emphasis on recognizing the importance of improvisation as inspiration to create additional exercises. For example, Chapter 8 introduces the idea of counterpoint with the repetition of a motive.[16] Banchieri's *Contrapunto bestiale alla mente* ("Improvised animal counterpoint") uses musically notated animal noises against a somewhat rude *cantus firmus* to demonstrate this principle. As an extension of the interval-pair exercises, I had the students determine which animal noises would work against each motion of the *cantus firmus*, and asked them to practice deploying these animal noises against a different *cantus firmus* (I will discuss this later in Example 4). Using one of Schubert's favorite tricks for demonstrating counterpoint improvisation techniques, the *soggetto cavato delle vocale*, we generated new *cantus firmi* from the vowels of Italian foods, chocolate bars, or lists of animal names (Example 2). On one memorable occasion, the third-year counterpoint class occupied the hallway outside Schubert's door in order to indulge in a spot of *cantare super librum*, using animal noises!

---

15   Busse Berger (2005) was the first to explore on a large scale the compatibility of Medieval and Renaissance techniques for memorization and improvisation, with modern insights from cognitive science into the workings of memory.

16   Schubert (2002, 511) refers to this type of counterpoint as *contraponto fugato*, pointing out that for Tinctoris, the term *fuga* referred to the repetition of an idea, and not specifically to the imitation of one voice by another in the modern sense.
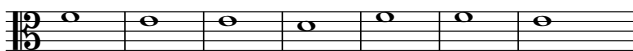
Example 2

The vowels in a list of chocolate bars yield solmization syllables.

For the counterpoint elective at Aberdeen, I still use *Modal Counterpoint* as the textbook, but the time constraints (20 lectures) mean that we cannot work through all the exercises as they are presented in the book. Instead, we gallop through the species at the rate of two each week, and the students receive a somewhat simplified summary of the "rules." They are encouraged to go to the textbook for more detailed reading and extra exercises, but they hand in only one written exercise each week, in which they write one line above and one line below a given *cantus firmus* (based on Schubert's "D" series). Later in the course, written exercises include writing a first-species canon, then elaborating it with divisions *à la* Montanos, and writing a canon against a *cantus firmus*.[17] The writing skills portion of the course is supported by the analysis of Renaissance compositions, where I draw on a wide range of composers. Each week, one piece is chosen to showcase a particular compositional technique or feature. For example, the Sanctus and Agnus Dei of Josquin's *Missa Hercules Dux Ferrarie* (the *soggetto cavato* composition *par excellence*) are analyzed with respect to motivic repetition and canon, and Palestrina's *Sicut cervus* (familiar to many of my students from their choir experience) is used to study the distribution of rhythm in a polyphonic context. I collect and correct weekly assignments, and we go over the most common mistakes during the next lecture. To prepare students for the final assignment of a motet composition, I offer individual tutorial sessions where students bring drafts of their work for discussion, and I identify egregious errors and help them find a path to solve them through guiding questions.

Thus far, the approach described is modern in essence. The speed at which we have to cover the material poses particular challenges, however: the students simply do not have enough time to become sufficiently immersed in Renaissance style to develop a reliable ear (i.e., familiarity) for acceptable and unacceptable sounds. From their own musical practice, they tend to accept a far greater range of intervals as consonant. They do not have an inner feel for the inevitable pull to a downward

---

17   The idea of elaborating a first-species canon to become a florid canon can be found in Montanos (1592), and is illustrated in Schubert (2002, 518).

resolution of a suspension, and arrival on unprepared dissonances does not tend to bother them overmuch. As a result, written exercises in previous years of this course were full of mistakes such as "backwards" suspensions (see Example 3). Accented dissonant passing notes and other unprepared dissonances also abounded, and I found myself having to loosen the marking criteria substantially, shifting the emphasis from evaluating 'hard' (contrapuntal) and 'soft' (stylistic) errors to other compositional parameters, such as sensitive text setting or effective use of structure.

Example 3
Two very common student errors in fourth-species counterpoint.

Elsewhere, I explore the possibility that it might not take as long as one might think to build students' familiarity with, and thus unconscious desire to conform to, a particular compositional style.[18] This familiarity can be built through passive exposure, much in the way that a person exposed to many movies with a certain type of neo-Romantic film score might be primed to respond similarly to such scores in other movies. In order to create this passive exposure to Renaissance music, I suggested that the students assemble playlists of ca. 30 minutes, to which they could listen while doing other things (for example, while walking to the university), but preferably shortly before working on a written counterpoint exercise. I also turned to historical-improvisation-based methods, encouraging students to sing and/or play. Both of these complementary methods offer the extra benefits of training procedural memory in addition to the conventional rules- and analysis-based training of declarative memory, the idea being that internalizing counterpoint to the point of unconscious competence would surely lead to fewer errors than laboriously working out solutions by trying to conform to rules.[19]

---

18   Jürgensen, Pearson, and Knopke (2014–2016).

19   Motuz (2017, 79-85) discusses the functions of procedural and declarative memory in relation to improvisation and composition, as well as the notion that learning by trial and error, e.g. "does this thing I have written conform to the rules I have been taught?", will lead to the practicing and embedding of errors.

I experimented with various ways of incorporating improvisation for several years. I revisited the Banchieri animal counterpoint, and tried to get students to improvise canons according to the *stretto fuga* method described by John Milsom.[20] Another problem, however, soon surfaced: many students are very reluctant to sing in class, and especially to make mistakes in front of others. I asked Schubert how he addressed this in his attempts to incorporate a degree of improvisation into classes, and he advised that singing needs to be established as a habit from the very beginning of the course.[21] I now designate the first session of the course as an "improv session," and use three specific exercises in first-species, note-against-note counterpoint to start things off on a "good note."

First, we analyze Banchieri's animal counterpoint, and recognize several important features: each animal has a motive of only one or two notes, which is never transposed. Given the number of consonances available, each motive can only be deployed against a very limited number of *cantus firmus* notes, as shown in Example 4. The cat (as befits this particular species) breaks this pattern, adjusting its motive freely to fit with whatever the *cantus firmus* is doing: with an "If I fits, I sits" cat joke, I have introduced the topic of motivic variation in the first half hour of the course. We recognize the identity of the cat motive by the emphasis on specific features within a context (jagged meowing contour against an otherwise static background), which can lead to an aside about the question of similarity, approximate pattern matching, and edit distance, for those interested in music information retrieval. Veering away from wandering too far into the realm of machine learning, we try out the motives against the existing *cantus firmus*, looking for alternative placements to those used by Banchieri. Then, we apply them to new *cantus firmi* generated by the *soggetto cavato delle vocale* method. I encourage—by example—the students to make the animal sounds very silly, and after a few embarrassed minutes, this usually leads to enthusiastic

---

20   Milsom (2005). By *stretto fuga*, Milsom means a canon after one time unit. For such canons, a simple rule can be described such that if the leader keeps this one rule in mind, then the follower will be correct. In Example 6, we will see that for a canon at the unison, the leader may move by odd-numbered intervals up or down (unison, third, fifth). Schubert (2014, 14) mentions learning this technique from Milsom in an Indian restaurant in Montréal, and I learned it at the very same occasion (I probably ate *muttar paneer*). Milsom and Schubert have found the same technique described in several contemporaneous treatises.

21   Schubert has made video lessons for YouTube, in which he demonstrates various techniques with the help of a student. The first can be accessed at "Improvising a canon #1: at the 5th above, " YouTube Video, 4:22, 13.3.2012, https://www.youtube.com/watch?v=n01J393WpKk [accessed 6 December 2019].

participation (I reserve the technically more complex cat motive for myself, which generally causes amusement). Then, it is suddenly not a far stretch to make up new animals—a donkey is especially fun—and try to deploy these as well. If there is no strong bass voice in the group, it is easy enough to play the *cantus firmus* on the piano, while simultaneously meowing like a cat.

Example 4

Animal motives against all possible *cantus-firmus* notes. The dog has only four possibilities for barking. The owl also has four possibilities, but is willing to transpose its hoot from G to A, so can sing over any *cantus firmus* note: it just has to work out which of its two notes is correct. The cuckoo can sing over one note (three possibilities) or over two notes (four each): it requires more cognitive effort, but can still work it out in real time, even without having practiced the exercises described later. The cat...can do anything!

The second exercise is a type of *gymel* described by Guilielmus Monachus in the late fifteenth century.[22] I preface this by having the students sing a short *cantus firmus* segment in *fauxbourdon* (parallel $^6_3$ sonorities), which they find quite simple (see Example 5). Then, we take the same tenor, again in parallel 6ths with the soprano, add a bass that alternates thirds and fifths below the tenor, and finally add an alto that alternates thirds and fourths above the tenor. To make this exercise work for beginners, it is essential that the *cantus firmus* is quite short and works without any advanced adjustments in order to land on a cadence. It is also essential that the lecturer has practiced it well beforehand, to be able to support especially the bass and the alto as needed (I make sure I can play the bass while singing the alto before the

---

22   For a more detailed exposition of this method, from *De preceptis artis musicae*, see Motuz (2017, 78).

lecture). The object here is not to train students to be experts in *gymel* in the space of 20 minutes, but to lead them to the realization that, with only a few minutes' practice daily, they *could* be experts at it in a surprisingly short period of time—and later in the course, analysis of motets will show this technique deployed in many places.

Tenor: Christ lag in Todesbanden

Example 5

First, *fauxbourdon*, where the cadence offers an opportunity to speak about double leading tones in the 15th century (we add a D♯). Second, *gymel*, where this *cantus firmus* segment is constructed so that the bass arrives on a fifth below the tenor on the penultimate note, making a cadence easy to achieve.

The third exercise is John Milsom's *stretto fuga*. I begin with a first-species canon at the unison, where the rule is that the leader may move by melodic unison, third, or fifth (basically noodling around triads). This is again not very difficult for the students, since they, as a group, simply have to follow one note later (see Example 6). We then repeat the same canon (I keep it short, so that I can remember what I sang) with some simple divisions on a few of the notes. This effectively introduces the "species" concept (second and third species), and how species can be combined to yield florid counterpoint. Then, based on the vocal ranges available within the class, I introduce either a canon at the fifth above, or at the fifth below, and explain the rules for these.[23] The take-home assignment is for students to get together in pairs to try out the canon exercise (they are provided a chart of different intervals of imitation to try). We re-visit this assignment later in the course, at which point the students realize

23   Cumming (2013) provides a chart showing the rules for canons at various intervals; see her Table 1.

that it would have been useful to have practiced more. But this is the point: they now understand a little of what it might have been like to learn these skills as a child, and consequently, to lose a little of the awe of that "learnèd," "difficult" counterpoint. The step to "invertible canon at the twelfth" suddenly seems much smaller.

Stretto canon at the unison

Stretto canon at the unison with simple division

(x)

Example 6

A short stretto canon, without a cadence, and the same canon, elaborated. The (x) indicates a diminished 2–1 suspension, which is questionable in the strictest counterpoint rules framework, but which can be used to talk about the slightly greater license accorded to improvisations.

The course tends to enroll between ten and twenty students. Like many music programs, ours contains a wide spread of voices and student interests, from performance to composition to musicology. Thus there is no guarantee that any given cohort will contain a good number of confident singers, let alone tenors and basses. This challenge of accommodating a class that lacks confident singers has led to a few practical solutions. The first was already mentioned: silly animal sounds to help to lighten the mood, and to use Banchieri's animals, which are in useful ranges but may also be transposed with no ill effect (the treble owl can easily become a Great Horned Owl by going down an octave, and the tenor dog becomes a chihuahua by going up an octave). Second, the lecturer can prepare *cantus firmi* for the *gymel* exercise to work in a variety of ranges, through judicious transposition (and by being prepared to play/ sing). Third, a plant or two—a more experienced student or helpful staff member that has prepared the exercise but is willing to pretend that they have never seen it

before—is a useful addition to the first class.

After establishing the importance of improvisation in this first session, how do we then incorporate it into the rest of the course? Again, the lack of time is the principal difficulty: putting in "ten thousand hours" is not feasible in one semester!

At a workshop, Catherine Motuz (another student of Peter Schubert) introduced me to her exercises intended for the practice of interval successions such as those catalogued by Tinctoris.[24] In short, she devised *cantus firmi* such that pairs of "consonant intervals and the voice-leading pattern that connects them" could be practiced, pair by pair, gradually increasing the vocabulary of interval pairs to about 60.[25] Example 7 illustrates a *cantus-firmus* segment that I designed to drill one such pair (fifths and sixths), connected by one such voice-leading pattern (oblique motion by step). Motuz's method allows students to practice against *cantus firmi* much sooner than allowed by simply drilling interval pairs by repetition—the method implied by Tinctoris. Since the timeframe of workshops generally does not allow the introduction of Guidonian solmization as well, which would be a period-appropriate way to give extra feedback, Motuz has her students sing the numbers of the intervals instead, which she argues helps students to know when they have gone astray, especially when singing in a group.[26] I found this approach far less painful and far more intuitive than the traditional modern methods by which I was taught, and discovered to my delight that it was, indeed, a "piece of cake." Motuz uses her exercises in the context of extra-curricular workshops and summer courses, rather than as part of a regular undergraduate course. She had found the historical approach of training procedural memory through repetition of improvisation exercises to be more time-consuming than modern degree programs allow: rather than the single course generally allotted to the subject, she thought that it would take about two years of regular practice to reach the same level of skill in written counterpoint (although the traditional modern approach yields no improvisatory skill at all).[27]

The oft-mentioned time constraints thus prevented me from whole-sale implementation of these methods. The students do not emerge from my course as accomplished historical improvisers (although they will be fairly good at first species).

---

[24]   Motuz (2017, 87ff).

[25]   Ibid., 87–88.

[26]   Ibid., 96. Smith, Keller, and Haun (2019) investigate the notion of using solmization syllables to receive physical feedback when learning to sing semitones of various sizes.

[27]   Motuz (2017, 89ff.)

Example 7
A *cantus-firmus* segment designed so that one voice moves by step, whereas the other is stationary (oblique motion). Fifths and sixths are the only consonant interval pair that allow oblique motion by step.

However, they will have been sign-posted to the resources they can access to increase their theoretical and analytical knowledge, and if students wish to continue to learn to improvise in this style, they have the tools to do it by themselves. Instead, these methods are used selectively and effectively to address the key problem discussed earlier, of familiarity (in the psychological sense) with the Renaissance idea of consonance and dissonance. Based on Motuz's models, I devised a series of *cantus firmi* for the practice of consonant interval pairs, allowing the students to focus on the idea of "consonance" for about ten minutes of every lecture, just by singing these simple exercises. Example 7 shows a snippet of the first, in which students practice alternating between fifths and sixths using oblique motion. This has had an immediate effect on the formative written assignments which I collect every week: compared to every previous group, the past two cohorts of students have struggled far less in writing grammatically correct sounds. This in turn allowed me to focus the rest of my lecture time on much more interesting stylistic and analytical points, since I need far less time to go over basic errors from the written exercises. The end-of term "Counterpoint Clinics" were spent less on basic technical aspects, and more on talking about how to create a good compositional structure.[28]

Thus far, the teaching of counterpoint improvisation tends to be limited to conservatoires and departments with a strong historical performance division. However, counterpoint in the modern curriculum can serve as a means to many ends.

---

28   This is another field where Schubert is at the forefront: period treatises tend to focus more on moment-by-moment writing of good counterpoint, with few clues on what makes an effective piece, in the sense of structure and form. Schubert (often with Julie Cumming) has published a series of analytical works that address structure, and his early findings on the types of points of imitation that are found at various points in Renaissance compositions ("presentation types") are already incorporated into *Modal Counterpoint*. See Schubert (1995, 2010); Cumming (2013); and Cumming and Schubert (2015).

A traditional rule-based approach, leading realistically perhaps to the meticulous filing of an imitative duo by the end of one term, is limited in this respect. Simplifying the mechanics through improvisation techniques allows students to see the bigger picture, to concentrate on aspects of structuring and layering that are just as relevant to an electroacoustic composer or a sound engineer as they are to someone composing within a conventional tonal idiom. The theoretical framework underlying the techniques can be used to introduce basic concepts in music cognition and fundamental problems in computational musicology. The exercises shown above do not require much in the way of pre-existing knowledge or skill: essentially, a basic knowledge of the staff and of note names and clefs suffices. They serve to reinforce fundamental concepts of consonance and dissonance through ear training. Thus, these techniques can be taught even in a very introductory-level course. In addition, their playful nature (which reflects Schubert's own style in *Modal Counterpoint*—and his tendency to quote the particularly playful theorist Morley) helps engage students' interest, and helps to demystify the "learned" art of counterpoint: students can see that it really is just "a piece of cake."

Works Cited

Bent, Margaret. 1998. "The Grammar of Early Music: Preconditions for analysis." In *Tonal Structures in Early Music*, ed. Cristle Collins Judd. New York and London: Garland Publishing Inc., 15–59.

Busse Berger, Anna Maria. 2005. *Medieval Music and the Art of Memory*. Berkeley: University of California Press.

Christensen, Thomas. 1993. "Music Theory and its Histories." In *Music Theory and the Exploration of the Past*, ed. Christopher Hatch and David W. Bernstein. Chicago: University of Chicago Press, 9–39.

Cumming, Julie E. 2013. "Renaissance Improvisation and Musicology." *Music Theory Online* 19 (2).

——. 2015. "From Two-Part Framework to Moveable Module." In *Medieval Music in Practice: Essays in Honor of Richard Crocker*, ed. Judith Peraino. Middleton: A-R Editions, 177–218.

Cumming, Julie E., and Peter N. Schubert. 2015. "The Origins of Pervasive Imitation." In *The Cambridge History of Fifteenth-Century Music*, ed. Anna Maria Busse Berger and Jesse Rodin. Cambridge: Cambridge University Press, 200–228.

Jürgensen, Frauke, David Pearson, and Ian Knopke. 2014–2016. "Building an Authentic Listener: Applying a passive exposure-based learning paradigm to detecting differences among compositional styles." *Journal of Interdisciplinary Music Studies* 8 (1–2): 141–155.

Milsom, John. 2005. "'Imitatio', 'Intertextuality' and Early Music." In *Citation and Authority in Medieval and Renaissance Musical Culture: Learning from the Learned*, ed. Susannah Clark and Elizabeth Leach. Woodbridge: Boydell and Brewer, 141–151.

Montanos, Francisco de. 1592. *Arte de musica theorica y pratica*. Valladolid: Impresso en casa de d. Fernandez de Cordova.

Motuz, Catherine. 2017. "Orality and Composition Alla Mente." *Composition and Improvisation in Fifteenth-Century Music*. Special issue of *Rivista di Analisi e Teoria Musicale* 17 (2): 77–104.

Schubert, Peter N. 1994. "Authentic Analysis." *Journal of Musicology* 12 (1): 3–18.

——. 1995. "A Lesson from Lassus: Form in the duos of 1577." *Music Theory Spectrum* 17 (1): 1–26.

——. 2002. "Counterpoint Pedagogy in the Renaissance." In *The Cambridge History of Western Music Theory*, ed. Thomas Christensen. Cambridge: Cambridge University Press, 503–533.

——. 2008. *Modal Counterpoint, Renaissance Style*. Second ed. New York: Oxford University Press.

——. 2010. "Musical Commonplaces in the Renaissance." In *Music Education in the Middle Ages and Renaissance*, edited by Susan Froscher Weiss, Russell E. Murray Jr., and Cynthia J. Cyrus. Bloomington: Indiana University Press.

——. 2012. "Improvising a canon #1: at the 5th above." YouTube Video, 4:22. https://www.youtube.com/watch?v=no1J393WpKk [accessed 24 November 2019].

——. 2014. "From Improvisation to Composition: three sixteenth-century case studies." In *Improvising Early Music*. Eleventh publication of the *Collected Writings of the Orpheus Instituut*, edited by Rob C. Wegman, Johannes Mencke, and Peter N. Schubert. Leuven: Leuven University Press, 93–130.

Schubert, Peter N., and Christoph Neidhöfer. 2006. *Baroque Counterpoint*. Upper Saddle River, NJ: Prentice Hall.

Smith, Anne, Johannes Keller, and Ivo Haun. 2019. "Why did Nicola Vicentino choose to introduce his enharmonic system through solmization?" Paper presented at the 47th Medieval and Renaissance Music Conference, Basel, 3–6 July.

Wason, Robert. 2018. "The History of Music Theory in the Undergraduate Curriculum." *Journal of Music Theory Pedagogy* 32: 131–174.

Wegman, Rob C. 1996. "From Maker to Composer: Improvisation and Musical Authorship in the Low Countries, 1450–1500." *Journal of the American Musicological Society* 49 (3): 409–479.

——. 2014. "What is Counterpoint?" In *Improvising Early Music*. Eleventh publication of the *Collected Writings of the Orpheus Instituut*, ed. Rob C. Wegman, Johannes Mencke, and Peter N. Schubert. Leuven: Leuven University Press, 9-68.