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Johann Joseph Fux's *Gradus ad Parnassum* and the Traditions of Seventeenth-Century Contrapuntal Pedagogy

by

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Abstract

Johann Joseph Fux's *Gradus ad Parnassum* and the Traditions of Seventeenth-Century Contrapuntal Pedagogy

by William P. Clemmons Jr.

Advisor, Dr. Barbara Hanning

Fux's *Gradus ad Parnassum* (1725) has set the standard for contrapuntal pedagogy for over two centuries. In his preface, Fux claimed that he developed the system over a number of years as a method for training his young students. Until the twentieth century, Fux's claims were undisputed, and *Gradus* was seen as embodying an attempt to codify the musical style of Palestrina. Knud Jeppesen, Claude Palisca, and Joel Lester have shown that *Gradus* only loosely resembles Palestrina's actual practice, that many of the key ideas in Fux's methodology predate *Gradus*, and examples in *Gradus* appear to have been copied from uncited sources. This dissertation provides a detailed comparison of *Gradus's* two-voice counterpoint section with a number of sixteenth- and seventeenth-century treatises which predate it, for the purpose of locating the appearance of unique ideas from other treatises and identifying its sources. On the basis of this comparison it appears that Fux was acquainted with, and borrowed ideas from, Zarlino, Diruta, Chiodino, Banchieri, Zacconi, Mersenne, Kircher, Herbst, Bernhard, Bononcini, and Berardi, in addition to ideas best attributed to the oral tradition. *Gradus* is resituated as a conscious blending of what had been, prior to its publication, disparate strands of contrapuntal pedagogy from both Italian and German traditions. Fux is reassessed, not as an innovator, but as a widely read and well-studied music theorist whose greatest achievement was his transforming of the species approach from a curious and relatively minor strand of sixteenth- and seventeenth-century Italian contrapuntal pedagogy into the *de facto* standard, replacing the centuries-old pedagogy of counterpoint associated with Zarlino and the teaching of the *passaggi*.

for my parents,
Bill and Bettie Clemmons

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Thank you to Jane Heumann for sending me a copy of *lo Zingarelli* from Rome and to Penny Hawkins for her help with Kircher's awkward Latin.

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CHAPTER ONE

Gradus and Italian Contrapuntal Theory

Thesis

During the first half of the eighteenth century, Johann Joseph Fux (1660-1741) was one of the best-known, most influential musicians in Vienna. Having risen from obscurity during the final decade of the seventeenth century, Fux came to the attention of the Emperor, Leopold I, for the beauty of his compositions. To the dismay of the largely Italian-dominated musical court, Emperor Leopold appointed Fux as court composer. Fux eventually rose to the rank of *Kapellmeister*, and to the end of his life held similar posts under the next two emperors, Joseph I (reigned 1705-11), and Charles VI (reigned 1713-1740). Fux died the year after the death of Charles VI, just before the turbulent reign of Maria Theresa and Francis I began. Fux's works, as popular as they were during his lifetime, gradually fell into obscurity. At the time of Ludwig Ritter von Köchel's investigations and subsequent biography of Fux in 1872, the author stated that "when one cannot find either the name or the works of the famous author of the *Gradus ad Parnassum* in any work on the history of music, one must conclude that history lacks an exact accounting of Fux's birth, life, and rise to

prominence."[1] Today, as in 1872, Fux's fame rests on a single work for which he rather humbly claimed credit, and which, despite its obvious popularity during his own lifetime, he never had republished—the theoretical treatise *Gradus ad Parnassum*.[2]

Gradus was published in Vienna in 1725 at imperial expense. Unlike the vast majority of treatises which appeared at about the same time, *Gradus* made no attempt to be comprehensive in its theoretical discussions. Its section on speculative theory—the standard first part of any Medieval or Renaissance theory text—is reduced to the merest discussion of intervals and proportions. There is no discussion of solmization, note values, clefs, meter, etc., items necessary for any beginning musician to learn to read music. *Gradus* did not provide a course on the rudiments of music. There is also no discussion of either figured bass or triadic harmonic theory, extremely important issues in the early eighteenth century. *Gradus* made no attempt to be in the forefront of the theoretical issues of its day. Instead, Fux concentrated on one item only: providing a simple method for learning how to compose, albeit from a student's perspective, and proceeding in a clearly organized fashion from the simplest texture in two voices to fuller settings in imitative style.

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[1] Ludwig Ritter von Köchel, *Johann Josef Fux* (Vienna: Alfred Hölder, 1872; repr., Hildesheim: Georg Olms, 1988), v. "Wenn auch kein Werk über Geschichte der Musik den Namen und das Wirken des berühmten Verfassers des *Gradus ad Parnassum* übergehen kann, so schliessen doch alle mit dem Refrain, dass die Geschichte jeder genaueren Nachricht über seine Lebensverhältnisse, seine Geburt, sein Aufkommen entbehre."

[2] Johann Joseph Fux, *Gradus ad Parnassum* (Vienna: Van Ghelen, 1725; facs., New York: Broude Bros, 1966); also *Fux Sämtliche Werke* 7, no. 1, with preface and critical notes by Alfred Mann (Kassel: Bärenreiter, 1967). All English translations taken from Alfred Mann, *The Study of Counterpoint* (New York: W.W. Norton, 1965).

Gradus organized counterpoint instruction into the five species familiar to all modern students of counterpoint: note-against-note, two-notes-against-one, four-against-one, two-to-one suspensions, and finally a fifth species which combines all of the previously taught material. Beginning with two voices, Fux progressed to counterpoint in four voices before turning to imitative writing. Free imitation, fugue, canon, and double counterpoint are all treated in the same manner as the section on counterpoint: simple ideas are taught first, then these ideas are gradually incorporated into increasingly more complex textures up to four voices. *Gradus* ends with a discussion of the church modes, of style and taste, and of more modern devices like recitative.

Throughout the work the instruction is presented in the form of a dialogue between Aloysius, who represents the all-knowing teacher Palestrina, and Josephus, an eager and capable student portrayed as Fux himself. Josephus asks questions and consistently makes the kinds of mistakes that students make, so that Aloysius instructs him as much through the correction of his exercises as through the discussions of counterpoint topics.

These key elements of *Gradus*—its logical organization into the five species, its progression from simple to gradually more complex material, its pattern of starting with two voices and adding more voices later, and its consistent usage of the student's viewpoint—have made it the standard approach for contrapuntal instruction to the present day. From the date of its publication, the species approach to counterpoint as presented by Fux has been so compelling that, as noted by Dalhaus, "other systems can claim any *raison d'être* only by virtue of their departure from his system in certain essential features."[3]

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[3] Carl Dalhaus, "Counterpoint," *The New Grove Dictionary*, ed. Stanley Sadie, 20 vols. (New York: Macmillan, 1980), 4: 845.

How Fux came across this pedagogical model is unclear. Fux claimed that he owed "everything I know of this art" to Palestrina.[4] This statement and Fux's use of Palestrina as the mouthpiece for the instruction in *Gradus* were understood by some scholars to imply that he had undertaken a study of Palestrina.[5] Helmut Federhofer suggests that "we can only speculate who Fux's teachers may have been: most likely he was largely self-taught."[6] Fux implied that self-study was a key component of his methodology when he stated that he had known "many who have fine talents and are most anxious to study; however, lacking means and a teacher, they cannot realize their ambition."[7] Alfred Mann echoes this sentiment, and points out that in the generation after Fux, Haydn worked through *Gradus* in intense self study, passing on his reverence for the work to both Mozart and Beethoven.[8]

Gradus's full title reads: "Steps to Parnassus: a manual of musical composition, in a new manner, never before so clearly and conclusively presented."[9] If Fux was self-taught, then it would give special significance to the fact that this "new manner" was a text for self instruction for those who, "lacking means and a teacher, cannot realize their ambition, but remain, as it were, forever desperately athirst." In response to this need, Fux "began, therefore, many years ago, to work out a method similar to that by which children learn first letters, then

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[4] Fux, *Gradus*, unnumbered folio 4r; Mann, *Counterpoint*, 18.

[5] Friedrich Riedel, "Johann Joseph Fux und die römische Palestrina-Tradition," *Die Musikforschung* 14, no. 1 (Jan-Mar 1961): 14-22.

[6] Helmut Federhofer, "Johann Joseph Fux," *The New Grove Dictionary*, ed. Stanley Sadie, 20 vols. (New York: Macmillan, 1980), 7: 43.

[7] Fux, *Gradus*, unnumbered folio 3v; Mann, *Counterpoint*, 17.

[8] Alfred Mann, "Preface to This Edition," *Fux Sämtliche Werke* 7, no. 1 (Kassel: Bärenreiter, 1967), xiv. See also Alfred Mann, *The Great Composer as Teacher and Student* (New York: W.W. Norton, 1987; repr., New York: Dover, 1992), 41.

[9] Mann, "Preface," xv.

syllables, then combinations of syllables, and finally how to read and write," and that the publication of *Gradus* was "a service to the art . . . for the benefit of young students."[10] Fux was not writing to help other choirmasters who needed a new way to instruct the choristers or novices; rather, he was writing to the beginners themselves.

Four things are implied in Fux's statements: (1) Fux was largely self-taught; (2) his self study was accomplished through an investigation of the works of Palestrina; (3) as a result of this study and his effort over the years, he developed a method to teach composition akin to the simple steps a child takes in the process of learning language; and (4) he published his compositional method for the benefit of beginners who also want to undertake a course of self study. Although Fux was always modest in his remarks, he clearly claimed in his introduction to *Gradus* that his methodology was the result of many years of thinking, studying, and teaching. No outside influence other than Palestrina is cited.

Until the twentieth century, *Gradus* was accepted in the manner that Fux intended, namely that it was, in some perhaps distant way, allied to Palestrina and Renaissance composition, although its system originated with Fux. Indeed, Fux's system was so successful and his authority so revered that all prior approaches faded into oblivion. The contrapuntal ideas of theorists such as Artusi, Diruta, Berardi, and Bononcini would not re-emerge from the shadow of Fux and *Gradus* until the twentieth century. Even as authoritative a treatise as Zarlino's *Istitutioni* (1558) was only a distant memory. Köchel accepted Fux's use of Palestrina's voice without question, and Fux was even labeled the "Austrian Palestrina."[11]

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[10] Fux, *Gradus*, unnumbered folio 3v; Mann, *Counterpoint*, 17.

[11] Carl Schnabl, "J.J. Fux, der österreichische Palestrina," *Jahrbuch der Leo-Gesellschaft*

Fux's authority was never questioned, but his original Latin text was quickly forgotten. Access to the work became problematic within a few years of its publication. The twenty-year-old Giambattista Martini wrote to Fux in 1734 praising Fux's achievement, but also complaining that it had become nearly impossible to find a copy of *Gradus*.[12] By the end of the eighteenth century, *Gradus* had been translated into the four major European languages, making access to the original Latin unnecessary. A profusion of species counterpoint textbooks appeared in the nineteenth century, coinciding with the establishment and growth of the Paris Conservatoire. These nineteenth-century counterpoint textbooks quickly replaced the eighteenth-century translations of *Gradus* upon which they were based, causing Fux's text to recede even further into the background. By mid-nineteenth century, Fux assumed the status of a revered, ancient, but rather obscure master.

A resurgence of interest in both Fux and *Gradus* has taken place in the twentieth century. Fux biographers have established most of the major events in Fux's life, and accurate, modern translations of the counterpoint section of *Gradus* into both English and German by Alfred Mann have made it possible once again to study and teach directly from Fux's text. In addition to the translations of the counterpoint section, both the section on imitative writing and the concluding portions of *Gradus* on the modes, style, and taste are also available in translation.[13] These translations make almost the entirety of *Gradus*

(Vienna: St. Norbertus, 1895).

[12] Martini's letter is quoted in its entirety in Mann, "Preface," xviii.

[13] The section on imitation and fugue is translated in Alfred Mann, *The Study of Fugue* (New York: W.W. Norton, 1965; repr., New York: Dover Publications, 1987). The sections on modes, style, and taste, as well as some portions not translated by Mann are available in Joel Lester, *Between Modes and Keys* (Stuyvesant NY: Pendragon Press, 1989). The only section unavailable in translation is the opening book concerning

accessible in English, and lift Fux's original text out of the tangle of adaptations. Alongside current English translations of Fux's text are modern facsimiles of the vast counterpoint literature which preceded *Gradus*. With the renewed availability of these counterpoint treatises, and the subsequent research that has been carried out on them, some questions have arisen regarding Fux, *Gradus*, and the development of species counterpoint.

Three writers in the twentieth century have pointed out difficulties with Fux's statements about how *Gradus* was developed. In 1927 Knud Jeppesen first pointed out that *Gradus's* contrapuntal pedagogy did not accurately reflect the style embodied in Palestrina's music.[14] Jeppesen made Palestrina's music and style his life's work by systematically tabulating the appearance of melodic figures, simultaneities, and dissonances in Palestrina's works and developing detailed statistics about their usage. His counterpoint textbook, *Counterpoint: The Polyphonic Vocal Style of the Sixteenth Century* (1939), constructed a pedagogical model for teaching counterpoint based on the statistical norms of the Palestrina style.[15] Jeppesen noted that species counterpoint predated Fux by at least a hundred years, having appeared in Adriano Banchieri's *Cartella musicale* (1614) and Angelo Berardi's *Miscellanea musicale* (1689).[16] In 1959 Claude Palisca contributed the further insight that even some of the key elements of Fux's

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speculativa.

[14] Knud Jeppesen, *The Style of Palestrina and the Dissonance*, trans. by Margaret Hamerik (London: Oxford Univ Press, 1927; rev. ed., 1946; repr., New York: Dover Publications, 1970).

[15] Knud Jeppesen, *Counterpoint: The Polyphonic Vocal Style of the Sixteenth Century*, trans. by Glen Haydon (New York: Prentice-Hall, 1939; repr., New York: Dover Pub., 1992).

[16] Adriano Banchieri, *Cartella musicale* (Venice: Giacomo Vincenti, 1614; facs., Bologna: Forni, 1968); Angelo Berardi, *Miscellanea musicale* (Bologna: Giacomo Monti, 1689; facs., Bologna: Forni, 1970).

approach—such as the three types of motion (similar, contrary, and oblique) and the four rules based on them—were not original to *Gradus* either, and that a large portion of *Gradus's* methodology is attributable to a reworking of pre-existing material.[17] Palisca states that "Fux has in reality assembled no new rules, and has produced no new method, concerning himself only with collecting and assembling the readily available and well-known manuals for counterpoint over a cantus firmus, into the five forms that he called species, in his easily understood Latin."[18] More recently, Joel Lester has shown that some examples in *Gradus* are remarkably similar to ones found in prior treatises, treatises that Fux neither quotes nor cites in the body of *Gradus*.[19] Lester's examples suggest that *Gradus's* sources may need to be extended to include material from uncited treatises.

From these three scholars, then, four points emerge:

1. Although *Gradus* invoked the historical figure of Palestrina to personify the ideal teacher of counterpoint, the compositional style embodied in *Gradus* only loosely resembles Palestrina's actual practice, bringing into question what role the figure of Palestrina plays in *Gradus*. (Jeppesen 1927 and 1939)
2. The species system at the very core of *Gradus* is not original to Fux, but appeared in numerous sixteenth- through early eighteenth-century Italian

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[17] Claude Palisca, "Kontrapunkt," *Die Musik in Geschichte und Gegenwart*, ed. Friedrich Blume, 17 vols. (Kassel: Bärenreiter, 1949-1986), 7: col. 1541.

[18] Palisca, "Kontrapunkt," col. 1542. "Fux hat im Gegensatz zu der gelegentlich vertretenen Ansicht keine neuen Regeln aufgestellt und keine neue Methode geschaffen. Er zeichnet sich lediglich dadurch aus, daß er die bereits verhandenen und anerkannten Verschriften für den Kontrapunkt über einem c.f. in den fünf bestehenden und von ihm 'species' bennaten 'Arten' in leichtverständlichem Latein zusammengefaßt hat."

[19] Joel Lester, *Compositional Theory in the Eighteenth Century* (Cambridge: Harvard Univ. Press, 1992), 40.

treatises. Fux himself cited two of these texts, Bononcini's *Musico prattico* (1673) and Berardi's *Miscellanea musicale* (1689). (Jeppesen 1939, pp. 40-42; Palisca, col. 1535; Lester, pp. 26-28)

3. *Gradus* is intimately linked both in spirit and in practice to the centuries-long traditions of Italian contrapuntal pedagogy. Although Fux never directly stated that he intended to treat this body of music theory, his text appears to be simply a well-ordered reworking of it. (Palisca, col. 1542; Lester, p. 48)
4. Fux may have borrowed from treatises other than the four he cited, as evidenced by the striking similarity of examples in *Gradus* to those contained in earlier, uncited works. (Palisca, col. 1541; Lester, pp. 27, 31, and 40)

Clearly, Fux's statements regarding the originality of his system and its relationship to the world of seventeenth-century contrapuntal pedagogy are in direct conflict with the research cited above. Although Fux's approach to counterpoint became so readily accepted that it quickly made other approaches obsolete, it appears that his only contribution may have been to assemble pre-existing components in a convincing manner, not at all what he claims in his prefatory statements.

The aim of this dissertation is to examine those sources whose contrapuntal instruction shares similar features with *Gradus* for the purpose of identifying ideas, terminology, or examples borrowed from treatises that predate it. On the basis of examining these sources, this dissertation will show that (1) *Gradus* does indeed contain an overwhelming number of items that can be reliably traced to prior treatises; (2) Fux's "new method" must be reassessed in light of this borrowing; (3) *Gradus* was a conscientious attempt to blend what had been, up to the time of its publication, disparate methodologies and approaches to teaching counterpoint; and 4) Fux's main contribution to contrapuntal theory may not be the creation of a new method, but that he replaced the accepted, centuries-long

method for teaching counterpoint with a relatively minor strand of Italian contrapuntal theory which offered a useful abstraction of compositional procedure.

Sources and Evidence

When dealing with source material concerning Fux, one is immediately confronted by the complete disappearance of Fux's personal effects after his death, one of the great frustrations of Fux research. Copies of *Gradus* in the possession of Haydn, Mozart, Martini, and Brahms, as well as the annotated glosses of *Gradus* prepared by Haydn and Beethoven, attest to the high value that these influential musicians attributed to Fux and his ideas. Sadly, in contrast to this valuable source material dating from the generation after the death of Fux, we have no surviving copy of *Gradus* from Fux himself, notes from which he worked, or any idea of what books may have been in his possession that could help in illuminating his sources and manner of work.[20]

Fux researchers have identified only one manuscript that appears to have a link with Fux. Federhofer points out that the manuscript known by its incipit of "Exempla dissonantiarum" (Minorite convent of Vienna, Signatur I, B10) contains examples of two-voice counterpoint with an attribution to Fux.[21] Although the examples are quite dissimilar from the style and methodology of *Gradus*, and are not in Fux's hand, the examples in this manuscript are the only contrapuntal material outside of *Gradus* connected to Fux and dating from his

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[20] A conjecture of what was contained in Fux's personal library, based on the contents of the library of Alexander Giesel, a Fux student, is contained in Julius Riedel, "Johann Joseph Fux und die römische Palestrina-Tradition," *Die Musikforschung* 14, no. 1 (1961), 14-15.

[21] Helmuth Federhofer, "Drei handschriftliche Quellen zur Musiktheorie in Österreich um 1700," *Musa-Mens-Musici: Im Gedenken an Walther Vetter*, ed. Heinz Wegener (Leipzig: Deutscher Verlag für Musik, 1969).

lifetime. In light of this limited source material, this dissertation—as with most research dealing with Fux—concentrates on the internal evidence available in *Gradus* itself.

Gradus provides few overt clues to its sources. The counterpoint and fugue sections comprising the bulk of *Gradus* contain no citations of any other treatise. The reader is left to believe, even as Fux implied in his foreword, that the system was largely developed by Fux over time, with little outside influence. Mann notes a broad set of influences in other portions of *Gradus*, but "in his presentation of the species of counterpoint, Fux's writing is entirely based on Italian tradition."[22]

That Fux drew from Italian contrapuntal theory is not surprising given the close relationship between Austria and Italy during Fux's lifetime. A steady flow of ideas between the two countries provided a ready supply of Italian music, musicians, and musical sources in eighteenth-century Vienna. Fux's reliance on Italian contrapuntal sources is also influenced by the tremendous number of contrapuntal treatises written by Italian theorists in the seventeenth and eighteenth centuries. Palisca notes that the seventeenth and eighteenth centuries witnessed an explosion of Italian music theory sources devoted wholly or in part to teaching counterpoint.[23] In contrast, counterpoint instruction formed only a minor part of English-, French-, and German-language music theory sources. More specifically, species counterpoint—Fux's preferred pedagogical model—was a peculiarity of Italian music theory. Species counterpoint was never mentioned in a printed English or French treatise, and in Northern Europe only appeared in print in the German translations of Giovanni Chiodino's *Arte pratica*

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[22] Mann, "Preface," xv.

[23] Palisca, "Kontrapunkt," col. 1540.

(1610) and Giovanni Bononcini's *Musico prattico* (1673).[24]

While Fux's reliance on Italian sources may have been typical of an eighteenth-century Austrian music theory treatise, his lack of acknowledgment of other theorists was not typical of seventeenth- and eighteenth-century music theory treatises. Renate Groth notes that the majority of seventeenth-century Italian music theory treatises consistently quoted the *autori*, or "authorities," as evidence of the veracity of their statements.[25] In addition to citing the *autori* in the body of the treatise, Italian music theory treatises also included a list either at the very beginning or end of all the relevant sources which the theorist considered important. At least a few of these Italian treatises included quite complete lists. For example, Fux's access to the list of *autori* in Bononcini's *Musico prattico* alone would have opened up a world of theorists and music theory treatises. One work in particular—Berardi's *Ragionamenti musicali* (1681)—is singular in its thorough account of Italian music theory sources and must be considered one of the most complete lists available prior to the twentieth century.[26] Even the fifteenth-century Johannes Tinctoris, a theorist whose name and works almost completely disappeared until the nineteenth century, is known to Berardi.

In spite of Fux's reticence to identify his sources in the bulk of his treatise,

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[24] Giovanni Chiodino, *Arte pratica* (Venezia: Ricciardo Amadino, 1610), and idem, German trans. by Andreas Herbst (Frankfurt am Main: Anton Humm, 1653); Giovanni Bononcini, *Musico prattico* (Bologna: Giacomo Monti, 1673), and idem *Musicus practicus* (Stuttgart: Paul Treu, 1701).

[25] Renate Groth, "Italienische Musiktheorie im 17. Jahrhundert," *Italienische Musiktheorie im 16. und 17. Jahrhundert*, Vol. 7 of *Geschichte der Musiktheorie*, ed. Frieder Zaminer, 10 vols. (Darmstadt: Wissenschaftliche Buchgesellschaft, 1989), 318.

[26] Angelo Berardi, *Ragionamenti musicali* (Bologna: Giacomo Monti, 1681); see pp. 177-182.

passing mention is made to four theorists in the opening and closing sections of *Gradus*. In the opening section dealing with speculative theory Fux cited Marin Mersenne's *Harmonie universelle* (1636).[27] Later in *Gradus*, three more sources—Zarlino's *Istitutioni* (1558), Bononcini's *Musico prattico* (1673), and Berardi's *Miscellanea musicale* (1689)—are cited in connection with modal theory.[28] These three treatises were indeed influential and widely circulated works concerning modal theory. They were, however, also considered authoritative statements on counterpoint. It is impossible to believe that Fux could have been familiar enough with these works to cite them, declare that the theorists were "not easily understood," and yet fail to have discovered the lengthy sections in each treatise devoted to teaching counterpoint. Indeed, a comparison of *Gradus* with these three Italian sources reveals numerous similarities.

Palisca's statement that *Gradus* was simply a reworking of "well-known manuals on counterpoint" has already been cited. Certainly Zarlino's, Bononcini's, and Berardi's treatises qualify as some of the most widely read and circulated works on counterpoint of the sixteenth and seventeenth centuries. Palisca, however, goes one step further in stating that "Berardi can undoubtedly be seen as an unmistakable influence on Fux," expressing the opinion that Berardi is the source of much of the raw material concerning contrapuntal pedagogy.[29] Of the four treatises mentioned above, Bononcini's and Berardi's

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[27] Marin Mersenne, *Harmonie universelle*, 3 vols., (Paris: Sébastien Cramoisy, 1636-7; facs., Paris: Centre national de la recherche scientifique, 1963).

[28] Gioseffo Zarlino, *Le Istitutioni harmoniche* (Venice: n.p., 1558; facs., New York: Broude Bros., 1965); English trans. of the counterpoint section (Part III) in Guy Marco and Claude Palisca, *The Art of Counterpoint* (New Haven: Yale Univ. Press, 1968); Angelo Berardi, *Miscellanea musicale* (Bologna: Giacomo Monti, 1689; facs., Bologna: Forni, 1970).

[29] Palisca, "Kontrapunkt," col. 1542.

certainly show the most obvious connection to *Gradus*, since both contain examples of the species-type exercises that form an integral part of Fux's approach. Since Fux did not cite them, the similarities between contrapuntal ideas in *Gradus* and those in Zarlino's, Bononcini's, and Berardi's treatises provide the first indication regarding Fux's manner of working. It was Fux's habit to borrow material from sources at his disposal and incorporate it without citation.

The four above-mentioned treatises by Zarlino, Mersenne, Bononcini, and Berardi, form the inner core from which *Gradus* was fashioned. There are, however, many dissimilarities between *Gradus* and these four. None of them were assembled in *Gradus's* logical, progressive manner. There are enormous differences in scope, content, and layout among all of these treatises. *Gradus* utilizes a dialogue format, whereas the other four use a narrative style. All four theorists wrote in their native tongues, whereas Fux wrote in Latin. Even the specific counterpoint species presented by Bononcini and Berardi differ both from Fux and each other. Zarlino and Mersenne (the latter's counterpoint section is completely lifted from Zarlino's treatise) teach counterpoint in a manner completely different from Fux. If Fux was "collecting and assembling the readily available and well-known manuals for counterpoint" as Palisca has surmised, then Fux's list of sources stretches beyond these four treatises to include other works of which current research is unaware.

Procedure

This dissertation will compare *Gradus* with a large number of sources which offer a methodology for teaching counterpoint, noting the similarities and differences, with the goal of identifying the works from which Fux may have borrowed. All of the previously cited studies deal with the similarities between

Gradus and a host of earlier contrapuntal treatises. These studies point out that numerous general features in *Gradus* are not original to Fux, but are common to a variety of other sources. However, a systematic comparison of *Gradus* with the contrapuntal literature that preceded it has never been attempted. This dissertation provides such a systematic comparison, accomplished in three steps:

1. Establish the essential features and elements of contrapuntal pedagogy prior to *Gradus* through an examination of the sixteenth- and seventeenth-century sources which share unique ideas, terminology, or examples with *Gradus*.
2. Examine Fux's individual species in two-voice counterpoint and, in order to facilitate a comparison of the ideas at the heart of *Gradus's* method with other treatises, reduce its prose to underlying principles.
3. Correlate the fundamental ideas in each of the individual species with their counterparts in the literature that precedes *Gradus*.

The first step above is accomplished in Chapters Two and Three. Chapter Two serves as an introduction to, and a brief overview of, sources which, like *Gradus*, utilize a species approach to counterpoint. Chapter Three examines sources which do not utilize a species approach, but which nevertheless form an integral part of *Gradus's* sources. As mentioned above, the majority of the sources listed in Chapters Two and Three are Italian. Those few sources that are not Italian in origin are heavily dependent on Italian theory, and can therefore be considered within the confines of Italian-influenced theory. Italian theory in general, and Italian contrapuntal theory in particular, is extremely repetitive. Certain Italian sources consist of little more than a complete restatement of a previous theorist's work. In spite of this repetitiveness, the slight changes in wording, examples, and context become useful as a theorist's readily identifiable characteristics. Therefore, Fux's repetition of an idiosyncratic phrase, or of an approach to a common body of knowledge, becomes a ready tool for identifying

his use of a specific source. Chapters Two and Three portray Fux as an accomplished scholar, well-versed in the music theory of his day. Not all of the works cited in these chapters were "well-known" or "readily available." Some were relatively obscure works that did not circulate widely. Other sources were not necessarily used by Fux, but illustrate how aspects of *Gradus* may have been transmitted orally rather than through printed sources. Contrary to his statement that the theorists "have said very little," Fux appears to have found quite a bit of information which he readily assimilated.

The second step outlined above—reducing Fux's methodology to a series of underlying concepts—is accomplished in Chapters Four through Seven, which examine each of Fux's five species. This step is necessary in order to facilitate a comparison of the key concepts in *Gradus's* methodology to that of other treatises. No other treatise taught counterpoint in a dialogue format exactly matching that of *Gradus*. By the early eighteenth century, music theorists had abandoned the dialogue in favor of a narrative format. Through an examination of the information contained in the dialogue, as distinct from the dialogue itself, the similarities between *Gradus* and its predecessors becomes more readily apparent.

Fux's clear and well-organized treatise readily reduces to a set of basic ideas. In fact, *Gradus* is so clear and well-organized that the first English translation—the Preston paraphrase edition (c. 1791)—adopted this very approach.[30] The Preston edition completely stripped *Gradus* of its dialogue format and simply presented Fux's material as a set of rules. While a great deal of *Gradus's* effectiveness is lost—and at times essential information as well—presenting

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[30] Johann Joseph Fux, *Practical Rules for Learning Composition* (London: Preston, n.d. [c. 1791]).

counterpoint instruction as a set of rules was a well-established teaching method throughout the seventeenth and eighteenth centuries. Numerous treatises—Camillo Angleria's *La regola del contraponto* (1622), Lorenzo Penna's *Li primi albori* (1672), and Angelo Berardi's *Miscellanea musicale* (1689), to name only three—were organized around little more than the exposition of rules. Many of these treatises were specifically entitled "Rules of Music," "Rules of Counterpoint," or "Rules of Composition." In light of this long historical tradition, it is therefore no surprise that a core of such rules underlies *Gradus's* carefully constructed dialogue.

The final step outlined above—correlating the fundamental ideas in each of the individual species with their counterparts in the literature that precedes *Gradus*—is also accomplished in Chapters Four through Seven. By reducing Fux's dialogue to a series of underlying concepts, *Gradus's* counterpoint instruction can be systematically compared to prior treatises for correlations between wording, examples, and idiosyncratic presentations of ideas.

The final chapter, Chapter Eight, briefly reviews the accumulated data. As becomes readily apparent, very little in Fux's two-voice counterpoint section is directly attributable to him but appears to have been borrowed from uncited sources. As surmised in the literature, most of these sources were printed Italian music theory treatises. As will be shown, however, the prevailing view of *Gradus* as predominantly transmitting Italian theory must be adjusted to include the critical role played by Christoph Bernhard's treatises. All of these sources are broadly based and widely divergent in their presentation of contrapuntal pedagogy. No one tradition can account for the entirety of *Gradus's* pedagogy. Its effectiveness and longevity then, is attributable not only to its clear organization but also to its skillful blend of what had been, prior to its publication, disparate pedagogical traditions.

CHAPTER TWO

Seventeenth-Century Italian Counterpoint: The Species Tradition

> There have certainly been many authors famous for their teaching and competence, who have left an abundance of works on the theory of music; but on the practice of writing music they have said very little, and this little is not easily understood. Generally, they have been content to give a few examples, and never have they felt the need of inventing a simple method by which the novice can progress gradually.[1]

This quote from Fux's foreword makes three points: (1) in Fux's opinion, information on how to teach counterpoint was confusing and unhelpful; (2) what little information did exist consisted of examples accompanied by little or no explanation; and (3) no theorist had ever developed "a simple method by which the novice can progress gradually." *Gradus* stands in sharp contrast to the seeming disarray described by Fux. It is highly organized, progressing gradually from the most basic to more complex material; it contains numerous examples, accompanied by detailed descriptions, proceeding in a step-by-step

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[1] Fux, *Gradus*, unnumbered folio 3r; Mann, *Counterpoint*, 17.

manner; and finally, it never loses sight of its key objective: the instruction of beginners in an easily understood manner.

Chapters Two and Three introduce the seventeenth-century Italian music theory sources Fux used in constructing *Gradus* and show how Fux borrowed key elements of *Gradus's* methodology from the tangled presentations of contrapuntal pedagogy he seemingly dismisses. Chapter Three examines the sources whose methodologies differ from *Gradus*. This chapter deals with those sources which, like *Gradus*, outline a pedagogy of counterpoint utilizing a species approach. It also shows that Fux assimilated three key concepts from these species sources:

1. Like many seventeenth-century counterpoint treatises, *Gradus's* approach to contrapuntal pedagogy is a blend of methodologies. Unlike other authors however, Fux integrated these methods rather than presenting them in parallel blocks. Fux's models for this approach cannot be proven, but are remarkably similar to Andrés Lorente's *El porqué* (1672) and Angelo Berardi's *Miscellanea* (1689).
2. Fux's approach to species counterpoint was out of step with the bulk of the theorists in the species tradition, but corresponds to unique examples from Lodovico Zacconi's *Prattica di musica* (1622). Fux's designation of "species" for his exercises was not taken from any printed treatise but agrees with examples in the oral tradition.
3. Fux's claim to have introduced a new way to teach his "novices" obscures the fact that species counterpoint was a centuries-old tradition consistently cited as the system for training beginners in the rudiments of music.

The Species System Prior to *Gradus*

Table 2.1, below, is a listing of treatises and manuscripts that contain unique examples, ideas, or phraseology which also appear in *Gradus*. These sources present the raw material Fux accessed in constructing *Gradus*. In spite of Fux's claim that he could find no methodology in these works, all of the sources in this table presented a species approach to contrapuntal pedagogy.

Table 2.1—Sources which utilize a species approach

Author	Title	Date and Place of Origin
Girolamo Diruta	*Il transilvano*	Venice (1609)
Gio. Battista Chiodino	*Arte pratica*	Venice (1610)
Adriano Banchieri	*Cartella musicale*	Venice (1614)
Lodovico Zacconi	*Della prattica di musica, Pt. 2*	Venice (1622)
Johann Herbst	*Arte prattica*	Frankfurt (1653)
Andrés Lorente	*El porqué de la musica*	Alcalá de Henares (1672)
Gio. Maria Bononcini	*Musico prattico*	Bologna (1673)
Angelo Berardi	*Miscellanea musicale*	Bologna (1689)
Pablo Nassarre	*Fragmentos musicos*	Madrid (1700)
Giacomo Carissimi (MS)	*Regulae compositionis*	(c.1700)

The greatest difference between *Gradus* and any of the sixteenth- and seventeenth-century music theory sources listed in Table 2.1 is organizational structure. *Gradus* is highly organized, a fact which alone may account for *Gradus's* continued success when numerous other treatises quickly fell out of use. *Gradus* presented a single approach to counterpoint and subsumed all other information into it. In contrast to Fux's focused approach to contrapuntal pedagogy, previous theorists tolerated a high degree of disorganization in

their presentations of counterpoint. It was this disorganization that prompted Fux's comment about how prior theorists apparently utilized no methodology for teaching novices. One major factor contributing to the unhelpful organization in these Italian music theory sources was the accepted practice of quoting past authorities, or *autori*.

Renate Groth states that "seventeenth-century [Italian] music theorists felt bound to a long and significant tradition as clearly demonstrated by the large number of 'authorities' they cite and often extensively quote."[2] The names Gaffori, Zarlino, and Artusi provided the seventeenth-century Italian theorists with a touchstone to a glorious past and verified the authority of their ideas. An unfortunate side-effect of this reverence for the *autori* is an inability, or unwillingness, to part with any of the historical data present in these revered sources. As a result, in the process of relating their mastery of the *autori*, the seventeenth-century Italian theorists also felt bound to report the multiple approaches to teaching counterpoint found in these revered sources, in parallel but disconnected blocks. The section on simple counterpoint from Bononcini's *Musico prattico* (1672) is a good example of the problematic organization of seventeenth-century treatises.[3]

Giovanni Maria Bononcini (c.1642-1678) was perhaps the most successful Italian music theorist of the late seventeenth and early eighteenth centuries to

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[2] Renate Groth, "Italienische Musiktheorie," *Italienische Musiktheorie im 16. und 17. Jahrhundert*, vol. 7 of *Geschichte der Musiktheorie*, ed. Frieder Zaminer (Darmstadt: Wissenschaftliche Buchgesellschaft), 318. "Daß die Musiktheoretiker des 17. Jahrhunderts sich einer langen und bedeutenden Tradition verpflichtet fühlten, wird durch die große Zahl von 'Autoritäten,' auf die sie sich berufen und die sie oft extensiv zitieren, anschaulich belegt."

[3] Giovanni Maria Bononcini, *Musico prattico* (Bologna: Giacomo Monti, 1673; facs. ed. New York: Broude Bros., 1969).

deal with practical theory. *Musico prattico* appeared in numerous editions in both Italian and German translation. Bononcini follows the standard layout for teaching counterpoint, moving—like *Gradus* and most other Italian treatises—from a description of how intervals are constructed, through simple counterpoint, to arrive eventually at imitative counterpoint in multiple voices. A standard feature of Italian treatises such as Bononcini's are chapters entitled "General Rules," or even "Other Observations," such as Bononcini gives on p. 55 of his treatise. On this page are contained a variety of statements regarding how to move from one consonance to another. This set of general rules is followed by numerous pages of examples depicting how consonances and dissonances should resolve, succeeded by still more pages of general observations concerning imitative counterpoint in more than two voices. These pages, then, are a mixture of simple counterpoint in two voices and more complex ideas involving imitative textures in more than two voices.

Having arrived at p. 69 of Bononcini's treatise, one would assume that the student has been introduced to the entirety of Bononcini's method for teaching counterpoint. The fifteen pages from p. 55 to p. 69 have introduced counterpoint from note-against-note counterpoint to diminished and imitative counterpoint in multiple voices. However, on pp. 73-77, the entire process starts over again with simple counterpoint in consonances presented through a species approach. This presentation of the species approach proceeds to another set of general rules for suspensions and imitative counterpoint, only to begin a discussion of imitation in earnest on p. 81.

Bononcini's organizational difficulties stemmed from his decision to present three different contrapuntal methods, gleaned from three different *autori*. First, on pp. 55-59, Bononcini taught note-against-note counterpoint through a set of eight, simple voice-leading rules, probably acquired from

Stefano Bernardi's *Porta musicale* (1615).[4] Next, on pp. 59-72, Bononcini taught counterpoint through the *passaggi*—a system for teaching counterpoint through interval combinations—probably acquired from Zarlino's *Istitutioni* (1558).[5] Finally, a species approach to counterpoint, gleaned from Adriano Banchieri's *Cartella musicale* (1614), appears on pp. 73-80.[6] No attempt to integrate the three approaches is ever made. The closest Bononcini comes to integration is a statement at the top of p. 73, in which he advised the student to "study and understand" all of the preceding information.

It is not difficult to understand why Fux found the contrapuntal pedagogy presented in these Italian music theory treatises difficult to follow. The lack of integration gives these treatises a random, unplanned quality. The theorists do not explain how the student is supposed to combine the information of one system into the other, or even which system should be tackled first. The information is simply presented to the reader in parallel blocks. The organizational difficulties present in Bononcini are typical of most of the seventeenth-century treatises listed in Table 2.1 above. Rarely is there a clearly defined progression from topic to topic, with a discernible thread linking each new idea. Seventeenth-century Italian theorists are quite comfortable with wandering from topic to topic, finally summarizing any remaining ideas in chapters labeled "Other General Ideas."

Fux addressed the organizational problems present in the seventeenth-century Italian music theory treatises with two improvements. First, *Gradus*

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[4] Stefano Bernardi, *Porta musicale* (Verona: Angelo Tamo, 1615; facs. ed. with notes by Elena Salvi, Verona: AMIS, 1987).

[5] Gioseffo Zarlino, *Istitutioni harmoniche* (Venice: n.p., 1558; other eds, 1562, 1573, 1589; facs. of the 1558 ed., New York: Broude Bros., 1965).

[6] Adriano Banchieri, *Cartella musicale* (Venice: Giacomo Vincenti, 1614; facs. ed. with critical notes by Giuseppe Vecchi, Bologna: Forni, 1968).

gained immediate organizational clarity by avoiding the seventeenth-century Italian music theorists' tendency to report multiple approaches and conflicting viewpoints. *Gradus* never cites the *autori* as a means of gaining credibility. Unlike his Italian counterparts, Fux was concerned with presenting the student's viewpoint, not impressing his readers with the historical veracity of his ideas. Fux was not unconcerned with the weight of history, but addressed the historical importance of his subject in ways other than quoting ancient music theorists. Fux freely dismissed a great deal of data, and concentrated on one, and only one system. The one system that Fux developed was, of course, the species system. All other information was subsumed within his five species.

The second item that contributed to *Gradus's* successful organization was the detailed explanations which fleshed out the species exercises. This approach resembles two treatises, Andrés Lorente's *El porqué* (1672) and Angelo Berardi's *Miscellanea musicale* (1689), which likewise avoided multiple methodologies.[7] Fux shared with Lorente and Berardi a format which utilized the species approach as the central methodology under which all other information was hierarchically arranged, fleshed out with helpful detail and descriptions of each species. Lorente's and Berardi's treatises were the first to provide any kind of helpful commentary to accompany their examples and thereby aid the reader in interpreting the mechanics of species counterpoint.

Fux complained that, in his estimation, theorists had "been content to give a few examples" and not much else. With this statement Fux accurately described the vast majority of Italian contrapuntal treatises and their depiction

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[7] Andrés Lorente, *El porqué de la musica* (Alcalá de Henares: Nicolás de Xamares, 1672); Angelo Berardi, *Miscellanea musicale* (Bologna: Gicaomo Monti, 1689; facs. ed., Bologna: Forni, 1970).

of species counterpoint. Of the manuscripts and published treatises listed in Table 2.1 as featuring a species approach to counterpoint, those by Diruta, Chiodino, Banchieri, and Zacconi contain no explanation of the system whatsoever. The reader was expected to infer all information strictly from the examples and perhaps a sentence or two. Bononcini's *Musico prattico* (1673) contained a brief, single page describing the system.

In contrast, numerous pages of Andrés Lorente's *El porqué* (1672) are devoted to prose explanations of each species in addition to the multitude of examples illustrating how the information is to be put into practice. Lorente gave various cantus firmi illustrating each of the species types, at times using a single cantus firmus and writing the differing species above it, at others using a variety of cantus firmi, as well as providing hexachordal patterns with simple counterpoint illustrated above them. The level of detail presented by Lorente's examples is unprecedented. Lorente devoted fifty pages to the species examples alone. If the instruction on note-against-note counterpoint is included, the section runs to over eighty pages. No theorist prior to Lorente had conceived of a similar format.

Angelo Berardi's *Miscellanea musicale* (1689), one of the four treatises that Fux cited, gave his information concerning the species as a terse set of numbered rules rather than in prose. Berardi's rules presented relatively less detail than either Lorente or Fux, but like those two, Berardi placed the species system at the core with no parallel treatment of other systems. Berardi devoted fifty-one pages of instruction to his two-voice species exercises, less than either Fux or Lorente. But as with those two, Berardi's presentation stands in stark contrast to all other seventeenth-century presentations of species counterpoint.

The Five "Species" of Counterpoint

Yet, in spite of Fux's indebtedness to these two theorists for *Gradus's* workable format, the mechanics of Fux's five species, and their organization as the "species" of counterpoint, were not gleaned from either Lorente or Berardi. Fux's five species differ from Lorente, Berardi, and virtually all other sixteenth-, seventeenth-, and early eighteenth-century sources that mention species counterpoint. These sources which predated *Gradus* featured a type of species counterpoint that utilized only consonances in some or all of the species exercises. If dissonance was taught at all, it was taught only in conjunction with the faster note values associated with black notes. Lodovico Zacconi's *Prattica di musica* (1622) was the only exception and specifically stated that it would avoid the consonant species. Another key aspect of *Gradus's* organization was the helpful designation of the various counterpoint exercises as the "species" of counterpoint. Seventeenth-century Italian counterpoint treatises presented a variety of methods for classifying counterpoint, but *Gradus's* specific designation appeared in no other printed source prior to its publication. It does, however, appear in manuscript sources such as the (c. 1700) attributed to Giacomo Carissimi.

A major difference between *Gradus's* methodology and that presented in virtually all other Italian music theory treatises which utilized a species approach to counterpoint was how and when to introduce dissonance. Fux introduced dissonance in two steps. Passing dissonance was introduced in second species, and suspension dissonance in fourth species. Neighbor dissonance was never presented. Prior to *Gradus*, the vast majority of appearances of the species system in print—and all appearances of the species system in manuscript—utilized a set of species that featured mostly

consonances. In both half-note counterpoint and syncopated half-note counterpoint, all intervals between the counterpoint and cantus firmus were to be consonances. This method was aptly described by Lanfranco, one of the first theorists to write about species counterpoint.

> The method that I use to teach counterpoint to our students is this: first, I teach them note against note so that they learn to land on the consonances. Then in minims with some semibreves in syncopated [parallel] motion with the cantus firmus, mixing consonances and dissonances if possible, avoiding and sometimes descending to the perfect cadences at the octave, fifteenth [double octave], and unison. Finally, I teach them diminished [counterpoint], syncopated in such a way that no complete beat ever falls on the semibreve or dotted minim. But when the counterpoint is in three or four voices I don't hold them to these restrictions.[8]

No examples accompany Lanfranco's text, but twenty years later, Vicente Lusitano's *Introduttione* (1553) provided an illustration of this system, given below as Exs. 2.1a-d.[9] As a foil to Lanfranco's example-less description, no prose description accompanied Lusitano's examples.

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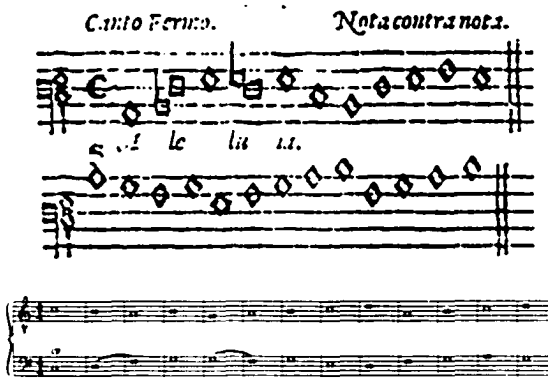
[8] Giovanni Maria Lanfranco, *Scintille di musica* (Brescia: Lodovico Britannico, 1553; facs., Bologna: Forni, 1988), 119. "Il modo: ch'io tengo di insegnare il Contrapunto a gli scholari nostri: e questo: Perche primieramente glielo insegno a nota contra nota: accio che imparino a cadere su le Consonanze: poscia a Minima con alcune Semibrevi sincopate in fuga col canto Fermo: sel si puo, meschiando le Dissonanze con le Consonanze. Fuggendo: Et alcuna volta discendendo alle Cadenze perfette: che sono di Ottava: di Quintadecima: o pur di Unisoni. Ultimamente diminuito glie lo insegno: ma talmente sincopato: che niuna misura intera: & piena non casca mai su la Semibreve: ne su la Minima col punto. Ma quando il Contrapunto fusse a tre: o pur a quatro: a simile stretezza non gli pongo."

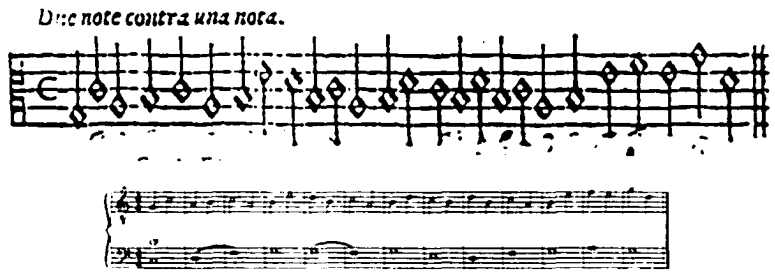
[9] Vicente Lusitano, *Introduttione* (Rome: Antonio Blado, 1553, other eds., 1558, 1561; facs. of the 1553 ed. with notes by Giuliana Gialdroni, Lucca: Libreria musicale italiana editrice, 1988).

Exs. 2.1a-d—Species examples from Lusitano's *Introduttione* (1553), fols. 12r-13r

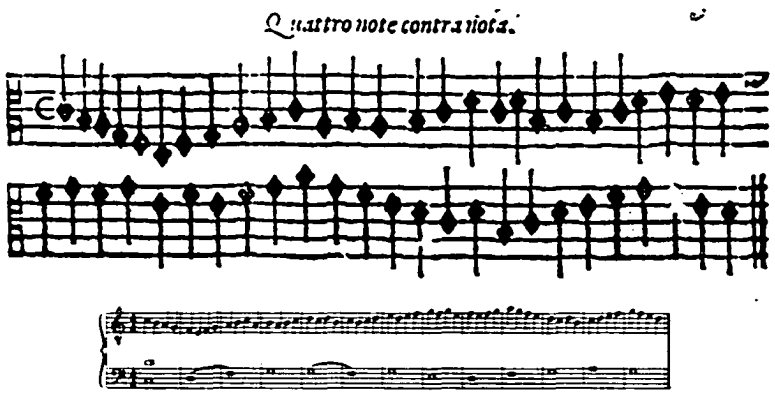
a)



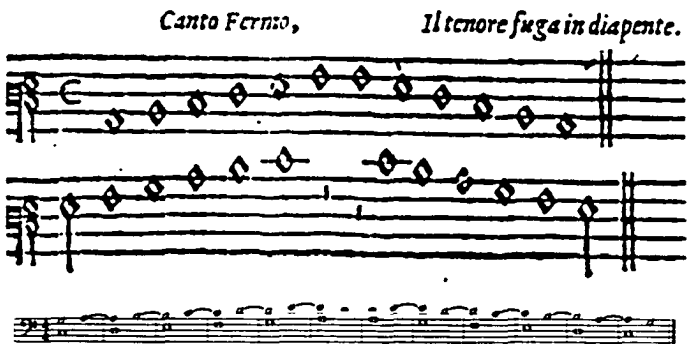
b)



c)



d)



Lanfranco's description aligns with Fux's first, second, fourth, and fifth species. Third species, four notes in the counterpoint against one note of the cantus firmus, is missing. Lusitano, on the other hand, gave examples of four of Fux's species, but Lusitano's examples differ in substance from Fux's. As shown above in Exs. 2.1a-d, one-to-one, two-to-one, and two-to-one suspended counterpoint all consist entirely of consonances, whereas Fux introduced dissonance in two-to-one and four-to-one counterpoint. Lusitano's examples also clarify the meaning of Lanfranco's phrase *in fuga*: a means of syncopating the counterpoint line so that the two lines form parallel consonances, such as the continuous 5-6 motions shown. Lanfranco's indication that dissonances are added "if possible" arises from the fact that the simple formula of following the cantus firmus in parallel syncopated motion has to be abandoned in favor of a more sophisticated and more complex treatment if dissonant suspensions were to be added.

Species counterpoint as described by Lanfranco and Lusitano was not by any means an archaic sixteenth-century phenomenon, but the accepted form of the species system throughout the sixteenth, seventeenth, and early eighteenth centuries. Even manuscripts dating from Fux's lifetime, such as *Regulae compositionis* attributed to Carissimi (c. 1700), still depicted this approach. Some treatises, such as Bononcini's *Musico prattico* (1673), attempted to improve the system by showing examples of both dissonant and consonant suspensions. But Bononcini's examples still include only consonances in two-to-one and three-to-one counterpoint, in the traditional manner. Only Zacconi's *Prattica di musica* (1622) went against this general trend with a unique approach that appears to have been ignored by subsequent theorists.[10]

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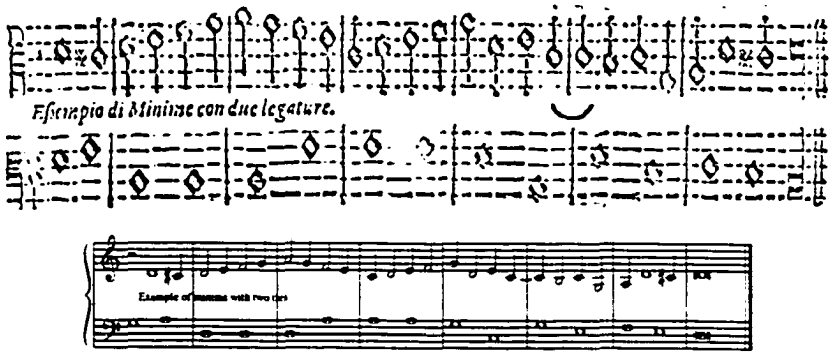
[10] Lodovico Zacconi, *Prattica di musica seconda parte* (Venice: Alessandro Vincenti, 1622;

Two theorists—Girolamo Diruta and Lodovico Zacconi—inspired by the theories of Zarlino, attempted to blend his ideas with the species approach. In his *Istitutioni*, Zarlino stated that both minims above a semibreve should be consonant, but relented in a subsequent paragraph and conceded a possible dissonance on the second minim. Zarlino's concession tacitly acknowledged the conventions of the older approach to species counterpoint.[11] Diruta, as a seventeenth-century Italian theorist who revered the *autori*, gave examples of both consonance-only counterpoint and examples that mixed consonance and dissonance. As a result, Diruta's species resembled Fux's somewhat, in that both show examples of dissonance in half-note and syncopated species. But, in doing so, Diruta ended up with more than Fux's five species.

Zacconi's *Prattica di musica* (1622), clearly influenced by Diruta, condensed Zarlino's ideas into the species examples and gave the counterpoints shown in Ex. 2.2. Zacconi's examples are remarkably similar to Fux's second through fifth species: passing dissonance was included in half-note counterpoint, the suspensions are both consonant and dissonant, and the final example is a mixture of the elements presented in the previous three.

Exs. 2.2a-d—Species examples from Zacconi's *Prattica di musica* (1622), pp. 75-6

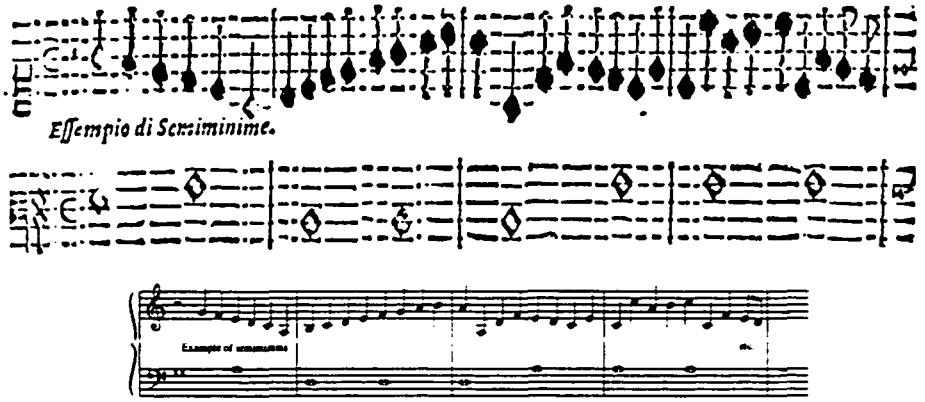
a)



facs., Bologna: Forni, 1983).

[11] Zarlino, *Istitutioni*, 195; Marco, *Counterpoint*, 93.

b)



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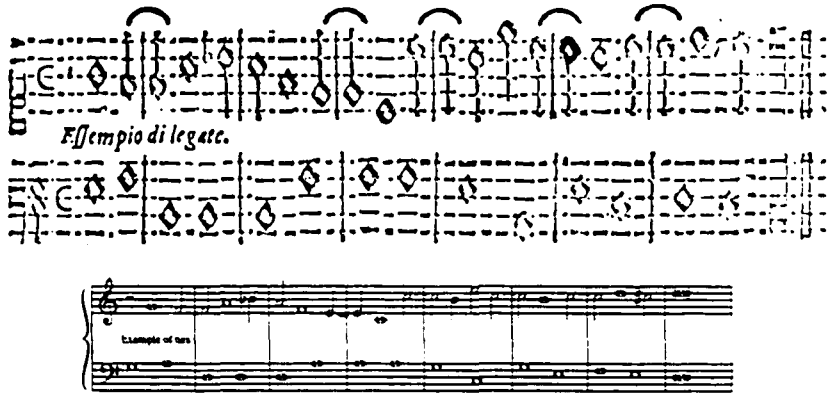
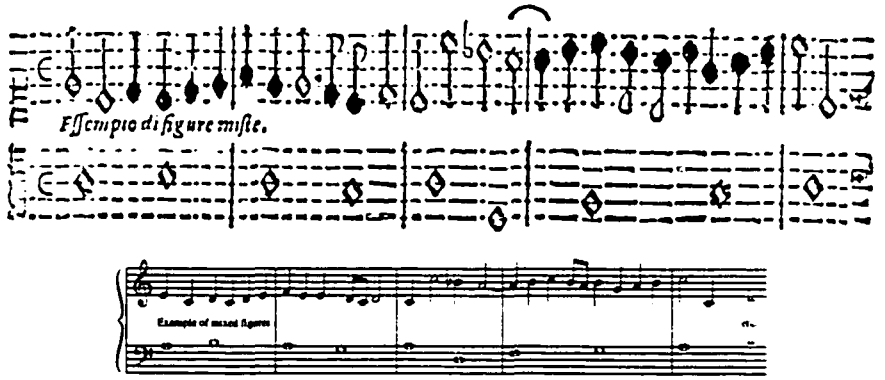


d)



However, Zacconi provided little helpful information about the examples themselves. As with a host of other theorists, Zacconi was (in Fux's words) "generally content to give a few examples and not much else." Towards the end of his chapter, Zacconi stated:

> There remain two more things to say in concluding this chapter. One is that I am well aware that it is my duty to demonstrate, on the one hand, how to make counterpoint entirely of consonant minims, and on the other,

> of mixed consonant and dissonant minims, along with counterpoint composed of ties and so forth. But what value would this be? I am sure that students have seen this in other texts, or have done the same for themselves in order to push themselves toward greater invention and wisdom.[12]

Zacconi, then, was fully aware of this tradition and made a conscious decision to avoid it, since, in his opinion, it would have been of no value. Zacconi's opinion was fully in accord with Fux's. Zacconi was not unaware of the consonant species, he simply dismissed it as unhelpful.

The fact that Fux's five species closely match those found in Zacconi is not coincidental. No subsequent theorist followed Zacconi's formulation. In the intervening century between Zacconi and Fux, not a single treatise or manuscript acknowledged Zacconi's approach or attempted to follow his ideas. The failure of other theorists to seize on Zacconi's ideas indicates that either the older species approach was extremely ingrained, or Zacconi's was a relatively obscure treatise unknown to most other theorists, or both. The use of the exact species as they appeared in Zacconi's treatise, a formulation that appeared nowhere else before or after, can be seen only as proof that Fux knew the source and, in spite of the fact that he never cited Zacconi, accessed it in constructing *Gradus*.

Classifying Counterpoint—The "Species" of Counterpoint

From the appearance of *Gradus*, Fux's term "species" has become inextricably attached to this group of exercises that teach counterpoint

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[12] "Due altre cose per conclusione di questo Capitolo mi restano à dire, l'una delle quali è; ch'io so bene esser debito mio di mostrar à parte, come fanno i Contrapunti tutte di Minime buone, e poi di buone e cattive miste insieme, con quelli di legature & altro; ma che giova? Io presupongo che li Scolari questo l'habino veduto in altri Auttori, ò lo faccino da se stesso per stimolo di accortezza e saviezza" (*Prattica*, 76).

progressively through the various note values. Mann states that "the division into species . . . did not originate with Fux as has been widely believed."[13] But to Fux's credit, no printed treatise prior to *Gradus* had ever referred to these exercises in this way. There is, however, a manuscript attributed to Giacomo Carissimi, and tentatively dated about the year 1700, which presented species counterpoint exercises specifically labeled as "species." This manuscript raises the issue of how much of the species system may have been transmitted orally rather than through the printed sources.

Mann notes that "Italian writers had dealt with a number of similar classifications interchanging the terms 'specie,' 'maniera,' and 'sorte' rather loosely."[14] Mann points out that numerous systems of classifying counterpoint were in existence and that often these classification systems varied from theorist to theorist. Some, like Zacconi, classified counterpoint according to whether there was a single voice or a group singing against the cantus firmus. Others, like Diruta, classified counterpoint as *osservato* or *commune*, according to whether voice leading and dissonance treatment were handled strictly or with a certain freedom. Groth sums up these various attempts at classifying counterpoint with the following chart:

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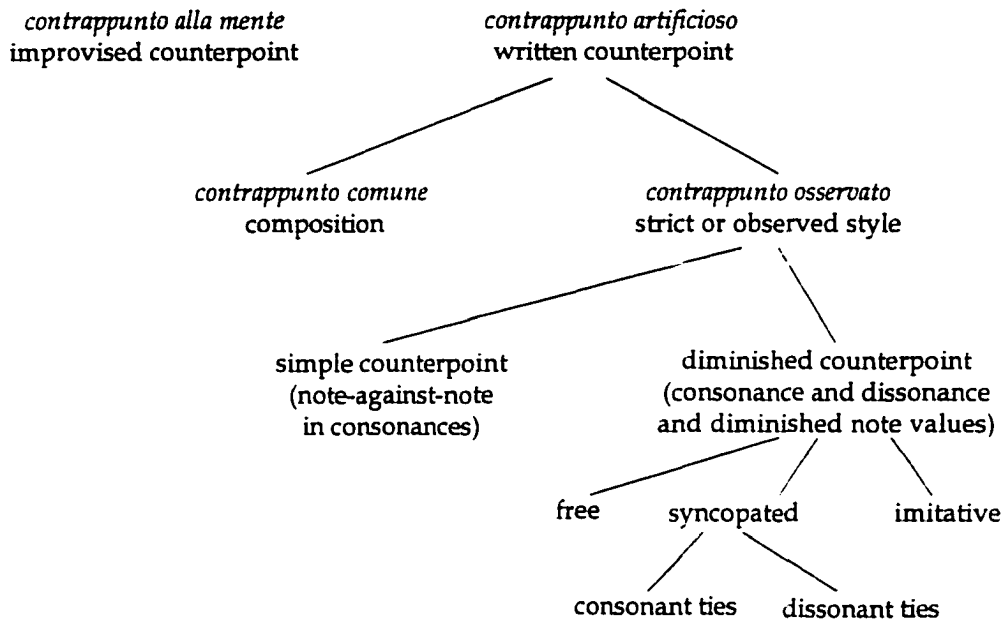
[13] Mann, *Preface*, xv.

[14] Mann, *Preface*, xv.

Chart 2.1—Counterpoint Classifications in Seventeenth-Century Italian Theory from Groth (1989), p. 331



But the most enduring classification stemmed from Zarlino, who divided counterpoint into three groups: simple, diminished, and florid. Simple counterpoint was note-against-note counterpoint in consonances only. Diminished counterpoint allowed dissonances in faster values against the longer values of the cantus firmus. Finally, florid was two (or conceivably more) lines, both moving in a mixture of consonances and dissonances in diminished note values. Zarlino's divisions of counterpoint were echoed by virtually all theorists who followed him. Although subsequent theorists often mixed up Zarlino's categories of florid and diminished counterpoint, his designation of two types of counterpoint—one consisting of consonances only and the other mixing consonance and dissonance—was inevitably cited by all theorists no matter what type of counterpoint system they were espousing.

In spite of their lasting influence, Zarlino's divisions did not easily account for species counterpoint. Zarlino specifically stated that simple counterpoint was both note-against-note and consonances only. Theorists who utilized a

species approach, including Fux, echoed the words "simple" and "diminished" but never stated how the species exercises fit within Zarlino's designation. If the theorists who gave examples of species writing labeled their examples at all—which they often did not—they were labeled "semi-breve counterpoint" for first species, "minim counterpoint" for second species, "semiminim counterpoint" for third species, "legato" for fourth, and "florid" for fifth. Since the species exercises were organized and taught by note values, it was only natural that the exercises should be named accordingly. No theorist prior to Fux attempted to justify the two sets of terminology.

Mann cites the eighteenth chapter of Zacconi's *Prattica,* entitled "Concerning the species of counterpoint," as evidence that attempts were being made by Italian theorists to place the species examples within a system of classification.[15] Zacconi's chapter deals with the division of counterpoint into improvised and written, with the latter being further subdivided into Zarlino's groups of simple and diminished. But Zacconi places all of his species examples under diminished counterpoint, completely sidestepping the placement of consonance and dissonance as prime issues in Zarlino's system. Thus, Zacconi's terminology is no closer to Fux's than any other seventeenth-century treatise.

Though Fux may not be the originator of a new system for classifying counterpoint, he must be credited with being the first theorist in print to connect these counterpoint exercises with the word "species." His source for this idea was not a printed treatise at all, but may stem from the Italian theory transmitted orally by the numerous Italian composers, players, and singers who made their living in the German-speaking North during Fux's lifetime.

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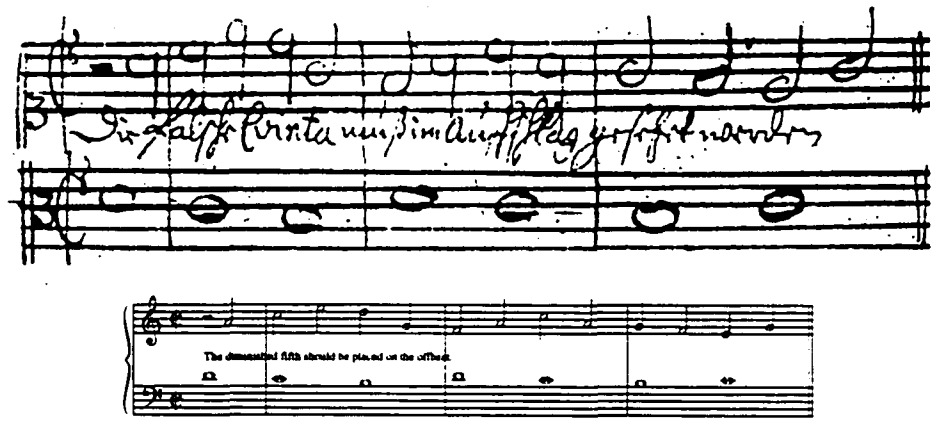
[15] Mann, *Preface,* xv.

The teachings of many of these Italian musicians are preserved in manuscript sources in Austria and Germany.

As noted earlier, one of these manuscripts, a page of which is given below as Ex. 2.3, bears an attribution to Giacomo Carissimi (1605-1674) and contains each of the various types of counterpoint clearly labeled "species."[16] All the examples in the Carissimi manuscript are of the older approach to species counterpoint—as clearly depicted in Carissimi's second species (shown below)—where second species consists entirely of consonances.

Ex. 2.3—Half-note counterpoint example from the Carissimi MS (c. 1700), p. 4



While it is impossible to trace the lineage of the manuscript, verify the attribution to Carissimi, or even whether the manuscript bears any relationship to Fux, it is possible to say that the contents of the manuscript predate *Gradus*. Given the fact that the manuscript contains consonant species and the fact that the consonant species disappear with the publication of *Gradus*, it is highly unlikely that the contents of the manuscript were transmitted post-*Gradus*. If the manuscript accurately reflects Carissimi's counterpoint teaching, then the information transmitted in the manuscript may substantially predate Fux or

[16] *Regulae compositionis autore Signore Charissimi*, MS in Deutsche Staatsbibliothek Berlin, Mus, ms. theor. 170.

Gradus. The manuscript raises the possibility that at least some aspects of the species system may have been transmitted orally rather than in print, especially outside of Italy.

Species as the Traditional System for Instructing Beginners

The musical life at the Viennese court was dominated by Italian musicians. Antonio Draghi (c. 1635-1700) and Antonio Pancotti were Kapellmeisters at the time Fux was appointed court composer. Giovanni Battista Bononcini (1670-1747) , son of Giovanni Maria the author of *Musico prattico* (1673), was also a court composer at the time of Fux's appointment. Antonio Caldara (c. 1670-1736) and Luca Antonio Predieri (1688-1767; friend of Padre Giambattista Martini, both Martini and Luca Antonio being students of Predieri's uncle, Angelo Predieri) served as Vice-Kapellmeisters under Fux. In addition, a veritable army of Italian singers, players, and composers served in the court during Fux's tenure under the reign of three emperors. These musicians left a legacy of manuscripts, currently found in Viennese archives, that attest to the central role of counterpoint instruction in any young musician's training.[17] Manuscripts attributed to Poglietti (organist at the Imperial court, retired thirteen years before Fux's appointment), Antonio Bertali (1605-1669; violinist and composer at the Imperial court about thirty years before Fux's appointment, and student of theorist Stefano Bernardi),[18] Giacomo Carissimi (along with Athanasius Kircher, a legend among the Viennese and teacher of

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[17] Information concerning court personnel during Fux's lifetime is taken from Köchel, *Fux*, 357-75.

[18] A number of manuscripts bearing attributions to Poglietti and Bertali survive, several of which are examined in Helmut Federhofer, "Zur handschriftlichen Überlieferung der Musiktheorie in Österreich in der zweiten Hälfte des 17. Jahrhunderts," *Die Musikforschung* 11 (1958): 264-79.

numerous German-speaking musicians at the *Collegio Germanico* in Rome), and Jan Sweelinck[19] all contain examples of species writing and attest to the fact that training in species counterpoint was neither forgotten nor rare in seventeenth- and early eighteenth-century Vienna.

This presence of a strong oral tradition contemporary with Fux, coupled with the demonstrated written record accessible to Fux, leaves Fux's statements about the newness of his system for beginners in question. Fux's assertion that the theorists had never "felt the need of inventing a simple method by which the novice can progress gradually" implies that *Gradus* was the first attempt at constructing a system specifically aimed at beginners. Fux bolstered this view later in his *Foreword* where he stated that he "began, therefore, many years ago, to work out a method similar to that which children learn" and that in using this method of teaching he "observed that the pupils made amazing progress within a short time."[20] Fux implied that as a result of being unable to find a method specifically aimed at teaching children or beginners, he was forced to work out a new system over a period of years. In contrast to his assessment of the limited usefulness of prior methods, Fux specifically stated that his "object is to help young persons who want to learn," and that *Gradus* was published "for the benefit of young students." *Gradus* was specifically aimed at being accessible to a beginner, for the purpose of self-study.

Given the long list of musicians trained in Italy but working in Vienna—musicians who were obviously familiar with species counterpoint and who left

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[19] Hermann Gehrmann, *Composition Regeln Herrn M. Johan Peterssen Sweling* (Leipzig: Breitkopf und Härtel, 1901). Gehrmann examined three manuscripts attributed to Sweelinck in Hamburg and Berlin. A fourth source exists in Vienna. Gehrmann felt the Hamburg sources to be of most value, but these have since been lost. Gehrmann's work is a conflation of the three sources with which he worked.

[20] Fux, *Gradus*, unnumbered folio 3v; Mann, *Counterpoint*, 18.

evidence of this familiarity in surviving manuscript sources—it is clear that species counterpoint was used to train Viennese music students in counterpoint prior to Fux's publication of *Gradus*. Species counterpoint may even have been used to train the choirboys at St. Stephen's prior to Fux's arrival—considering the numerous Italian Kapellmeisters, composers, players, and singers who preceded Fux at the Viennese court—albeit badly or in a disorganized fashion. These Italian musicians certainly would have been familiar with the species system. But since the consonant species overwhelmingly dominated Italian contrapuntal pedagogy, the system would have differed in many ways from Fux's.

The printed seventeenth-century Italian music theory sources strengthen the view that teaching children or beginners via species counterpoint was not by any means a novel idea. Contrary to Fux's statements, most of the sources listed in Table 2.1 not only detail species exercises in counterpoint, but specifically connect species counterpoint with instructing beginners. The instruction of beginners was by no means a universal constant in Italian music theory treatises. A number of major theorists such as Zarlino, Artusi, and Angleria, never mentioned beginners. Often, as was the case with Zarlino, the theorist addressed the musician or composer. At other times the information wasn't addressed to any person, but simply stated as a matter of fact. In contrast, the species examples were quite specific. Every printed seventeenth-century Italian music theory source featuring a species approach to counterpoint used terminology which referred to beginners or children: *principianti, novitii, studenti,* or *scholari.*

In the dialogue of Diruta's *Il transilvano* (1609), the teacher stated that he "scarcely slept thinking about how to instruct [his pupil] easily in the art of

counterpoint."[21] Giovanni Chiodino commented that the instruction in his treatise "was stated practically, briefly, and clearly, that this delightful art may be considered by all."[22] Lanfranco called his species exercises "Counterpoint for beginners,"[23] and Bononcini began his stark description of the species system with advice to the "beginner who wishes to avail himself of a good foundation in the art of counterpoint."[24] Even Zaccaria Tevo's *Il musico testore* (1706)—a treatise which gave no examples of species writing—momentarily digressed from its discussion of counterpoint to state that "the beginner who would like to be exercised in little counterpoints should place two, three, four, six, eight, and more notes against one . . . ."[25] In spite of the fact that Tevo never gave any examples to accompany this statement, his allusion to the species approach is clear.

Banchieri's *Cartella* (1614) was presented in the form of a dialogue which, like *Gradus*, was completely taken up with the instruction of a beginner by a wizened master. Unlike *Gradus*, however, the student never writes anything and the master never instructs the student about writing. Instead, the entire dialogue consists of a discussion of intervals and their motions—the *passaggi*—cadences, and the analysis of counterpoint examples which demonstrate the various techniques discussed. The student is never told how to begin, or even

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[21] "Et io ancora hò poco dormito, pensando qual modo dovesse tenere nell' informarvi facilmente dell' arte del Contrapunto . . ." (*Transilvano*, 1).

[22] "si che ho detto praticamente, brevemente, & chiaramente, acciò quest' arte dilettosa fusse nota à tutti. . ." (*Arte pratica*, 4).

[23] "Modo da far Contrapunto per lo Principiante" (*Scintille*, 119).

[24] "Volendo il principiante approfittarsi fondamente nell' Arte del Contrapunto. . ." (*Prattico*, 73).

[25] Zaccaria Tevo, *Il musico testore* (Venice: Antonio Bortoli, 1706; facs. ed., Bologna: Forni, 1969), 226. "Potrà il principiante da se stesso esercitarsi ne contrapuntini, ponendo due, tre, quattro, sei, otto, e più note contro una . . . ."

what the first steps are. However, appended to the counterpoint section is a single page entitled "Epilogue of counterpoint," which Banchieri used as a "catch-all" chapter. [26] On this page are numerous bits of advice about voice leading, when to use a dissonance, when to add a chromatic inflection, and other such issues. At the very end, Banchieri stated, "now, after having grasped these *Documenti*, one may begin to place on paper [to write] by selecting a line of chant, and above that make note-against-note [counterpoint] and then in various modes, as I demonstrate in this example."[27] Several pages of species exercises immediately follow this statement, exercises specifically included because they illustrated the method for beginners. These examples marked Banchieri's first mention of how to begin.

Fux's statements in his *Foreword*, therefore, simply cannot be understood as meaning that he had never encountered beginners being taught by the species approach. Given the consistency with which the theorists link species counterpoint specifically to the instruction of beginners, Fux would have readily seen this long-standing Italian tradition, even if he had only a limited knowledge of a few sources. However, Fux rightly criticized the theorists for making their treatises difficult, even unfathomable to a novice. Given their difficult organizational structure it is quite possible that they were never intended to be used directly by students. The Italian theorists probably assumed that the student was working with a teacher who used the ideas from their treatises, or possibly even guided the student through them. Such an

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[26] Banchieri's *Cartella* was originally issued in separate sections and in various editions between 1601 and 1623, which were eventually combined as a single volume. The Forni facsimile of the 1614 edition numbers the second section as pp. 63-110.

[27] "hora mentre haverete tali Documenti si potra dar principio a ponere in Cartella pilgiando un suggietto di Canto fermo, & sopra quello far nota contro nota, & poi in variati modi, come in questo esempio vi mostro" (*Cartella*, 105).

arrangement seems to be implied by Bononcini who stated:

> Don't believe that a perfect knowledge of composition can be arrived at through books only, and without the live voice of a well-grounded teacher, or you will be deceived. The leading of a teacher is most necessary to the student, for as many books as there are, they are only useful to those who understand them.[28]

Bononcini assumed that his treatise provided difficult reading at best for a student lacking the oversight of a teacher, an observation which holds true for all of the seventeenth-century treatises. They contained information about teaching beginners, but were not written to be read by beginners. In contrast to the difficult presentations in other music theory treatises, Fux specifically stated that his "object is to help young persons who want to learn," and that *Gradus* was published "for the benefit of young students." *Gradus* was specifically written to be accessible to a beginner, for the purpose of self study. To this end, *Gradus* must have been unusually successful, since it was indeed used in this fashion by Haydn in the generation after Fux.

Conclusions

Fux improved the presentation of contrapuntal pedagogy by following the lead of Lorente and Berardi and adopting a single system, the species approach to teaching counterpoint, and fleshing out that system with helpful commentary. *Gradus* borrowed from Zacconi's *Prattica di musica* (1622) the exact formulation for the five species themselves, since that formulation appears in no other source. The manuscript attributed to Carissimi (c. 1700) contains Fux's precise usage of the various exercises, calling them the "species" of

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[28] "Nè si creda alcuno d'arrivare alla perfetta intelligenza del comporre con li soli libri, senza la viva voce di ben fondato Maestro, poiché si troverà ingannato, essendo più necessaria allo Scolaro la guida del Mastro [sic], che quanti libri vi sono, utili solo à chi intende" (*Prattico*, unnumbered fol. 4r.).

counterpoint. Fux, however, is the first theorist *in print* to link the term "species" with the five counterpoint exercises organized by rhythmic values. Fux's comments sidestepped the fact that every mention of the species system since the early 1500's had specifically noted that it was the method of choice for teaching children and beginners. Finally, *Gradus* was not the first treatise to instruct beginners but was, quite likely, the first treatise accessible to beginners.

CHAPTER THREE

Seventeenth-Century Italian Counterpoint: Other Traditions

Fux acquired *Gradus's* basic format from a number of treatises that taught elementary counterpoint through the species. These treatises provided a framework, but little of the substance, from which *Gradus's* dialogue was constructed. This chapter introduces other treatises from which Fux filled in the substance of the species exercises. From these treatises Fux acquired a level of detail missing in the vast majority of treatises which presented species counterpoint.

1. Missing from any prior presentation of the species system was a detailed presentation of voice leading. Fux acquired most of his information from the treatises which presented the system of the *passaggi*: Gioseffo Zarlino's *Istitutioni* (1558), Giovanni Maria Artusi's *L'arte del contraponto* (1586), and Athanasius Kircher's *Musurgia universalis* (1650).
2. Fux taught note-against-note counterpoint through the reduced instruction set of the eight rules. Fux's use of this system cannot be attributed to any one source but is similar to Zarlino's *Istitutioni* (1558), Stefano Bernardi's *Porta*

musicale (1615), Bononcini's *Musico prattico* (1673), and the manuscript attributed to Giacomo Carissimi, *Regulae compositionis* (c. 1700).

3. Fux avoided quoting the *autori*, the most important connection to the tradition of Italian contrapuntal pedagogy, but tied *Gradus* to its heritage, in three ways:
   a. issuing *Gradus* in Latin, the traditional language employed by German-speaking music theorists, emulating Kircher's *Musurgia universalis* (1650);
   b. casting *Gradus* in the archaic form of a dialogue, whose hybrid construction echoed Adriano Banchieri's *Cartella musicale* (1614), Andrés Lorente's *El porqué* (1672), Angelo Berardi's *Arcani musicali* (1690) and *Il perchè* (1693), and Pablo Nassarre's *Fragmentos musicos* (1700);
   c. assuming the mouthpiece of Palestrina as the *autore* never quoted, even though *Gradus* never directly cites any of Palestrina's music.

The System of the *Passaggi*

The key item missing from species counterpoint sources prior to *Gradus* was a detailed description of voice leading integrated into the species exercises themselves. Sixteenth- and early seventeenth-century treatises, such as those by Lanfranco, Lusitano, and Zacconi, avoided getting embroiled in the intricacies of voice leading altogether. Other seventeenth-century sources, such as those by Banchieri or Bononcini, gave instruction in voice leading and species counterpoint examples in parallel but disconnected blocks. Fux improved the presentation of species counterpoint by compressing the details of voice leading into sets of simple rules. Fux acquired this methodology by combining the best aspects of several different treatises. The result was that Fux presented only enough detail "to begin with," the rest of the information being divulged "through the corrections."[1]

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[1] Fux, *Gradus*, 46; Mann, *Counterpoint*, 29.

Table 3.1 lists treatises that contain unique examples, ideas, or phraseology which also appear in *Gradus*. Unlike the sources listed in Chapter Two, none of the treatises in Table 3.1 mentioned the species approach to contrapuntal pedagogy. Instead, all of the treatises listed taught counterpoint through either the system of the *passaggi*, or the system of the eight rules.

Table 3.1—Sources which do not utilize a species approach

Author	Title	Date and Place of Publication or Origin
Gioseffo Zarlino	*Istitutioni harmoniche*	Venice (1558)
Gio. Maria Artusi	*L'arte del contraponto*	Venice (1586)
Marin Mersenne	*Harmonie universelle*	Paris (1636)
Athanasius Kircher	*Musurgia universalis*	Rome (1650)
Christoph Bernhard (MSS)	*Tractatus compositionis*	Dresden (c.1657)
	Ausführlicher Bericht	Hamburg (c. 1670)

The system of the *passaggi* taught counterpoint through lists of interval combinations. In its simplest form, as given in Pietro Pontio's *Ragionamento di musica* (1585), Valerio Bona's *Regole del contraponto* (1595), or Zaccaria Tevo's *Il musico testore* (1706), each consonance (from the unison to the octave) was listed in a separate chapter or section with its possible motions either numbered or hierarchically arranged.[2] Therefore, according to Tevo, the unison had four motions, the minor third had five, the major third had six, the fifth had seven motions, and so forth up to the octave. These motions literally constituted which interval or intervals were allowed as resolutions, and how each voice

[2] Pietro Pontio, *Ragionamento di musica* (Parma: Erasmo Viotto, 1588; facs., Kassel: Bärenreiter, 1959); Valerio Bona, *Regole del contraponto et compositione* (Casale: Bernardo Grasso, 1595; facs., Bologna: AMIS, 1971); Zaccaria Tevo, *Il Musico testore* (Venice: Antonio Bortoli, 1706; facs., Bologna: Forni, 1969).

should move. According to Tevo, for example, the major sixth was allowed four motions: (1) as a suspension resolving up to an octave; (2) contrary motion to an octave; (3) similar motion to an octave; and finally, (4) oblique motion to an octave.[3] Of interest is not so much the particular motions themselves—the question of where an interval could or could not go was often idiosyncratic to the theorist—but that an interval's possible motions were considered fully quantifiable. Tevo's decree that a major sixth can properly move to only one of four places is a uniquely different concept from modern pedagogy, which teaches voice leading according to basic principles.

No label was attached to serve as a simple descriptor for early appearances of the system. It first appeared in Johannes Tinctoris's *Liber de arte contrapuncti* (1477),[4] where virtually the entirety of the treatise was given over to an exposition of the motions. The system next appeared in Nicola Vicentino's *L'Antica musica* (1555) and Gioseffo Zarlino's *Istitutioni* (1558).[5] Towards the end of the sixteenth century, Pietro Pontio gleaned a great deal of material from Vicentino and Zarlino, including these suggested interval motions, and arranged it hierarchically in his *Ragionamento di musica* (1585). It is Pontio who first described these sets of motions as the "*passaggi*" of the intervals. Pontio's descriptor was subsequently picked up by Bona, Angleria, Bononcini, and Tevo. The term was used in the treatises immediately prior to *Gradus*, and would therefore have been a term familiar to Fux.

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[3] Tevo, *Testore*, 168-9.

[4] Johannes Tinctoris, *Liber de arte contrapuncti* (unpubl. MS, Naples, 1477); English trans., Albert Seay, *The Art of Counterpoint* (Rome: American Institute of Musicology, 1961).

[5] Nicola Vicentino, *L'Antica musica* (Rome: Antonio Barre, 1555; facs., Kassel: Bärenreiter, 1959); English trans., Maria Rika Maniates, *Ancient Music Adapted to Modern Practice* (New Haven: Yale Univ. Press, 1996).

At the core of the *passaggi* was a recognition that certain intervals, mainly the imperfect consonances, had an innate tendency to gravitate towards readily identifiable goals. These intervals—major and minor thirds and sixths—tended to move in contrary motion through a half-step in one voice to the nearest perfect consonance. Therefore, minor thirds tended to move in towards unisons, major thirds tended to move out towards fifths, and major sixths tended to move out towards octaves. The interval that proved to be the exception was the minor sixth which, if it followed the logic of the other intervals, would resolve to a fourth. Since the fourth was considered an unstable sound in two-voice counterpoint, the minor sixth was allowed to move either by oblique motion to a fifth or to a major third with one voice moving by leap. Sixths proved to be the exception to the system and their treatment was a continual issue in sixteenth- and seventeenth-century treatises.

Karol Berger, citing Marchetto in the fourteenth century, points out that these same tendencies had been observed by medieval theorists.[6] Berger goes on to note not only that these core motions were observed, but also that chromatic inflections were allowed in order to enhance an imperfect interval's tendency toward its destined perfect interval. The source of this tendency, a tendency that can be manufactured through the addition of chromatic alterations, is of course the presence of a half-step motion in one of the voices.

In the Italian contrapuntal literature, the reliance on creating half-step motions was a trademark of the theories of Zarlino, who insisted that following the core motions above was the only "natural" way.[7] Berger states that Zarlino's "argument from 'nature' allows us to suspect that Zarlino is

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[6] Karol Berger, *Musica Ficta* (Cambridge: Cambridge Univ. Press, 1987), 122.
[7] Zarlino, *Istitutioni*, 190; Marco, *Counterpoint*, 82.

writing here in a prescriptive mode, attempting to legislate for the musical practice rather than to describe it."[8]

Whether Zarlino was trying to dictate practice or simply dictate theory is debatable, but his impact on subsequent theorists is unquestionable. His recommendation to move by half step was echoed by theorist after theorist as an immutable part of the canon. Diruta included the requirement in his four rules of motion. Angleria made the required half-step motion the key criterion in his set of *passaggi*.[9] Joel Lester observes that even Zarlino's seemingly unrelated prohibition of parallel successive major or minor thirds and sixths is in part related to the fact that there was no half-step motion present between voices in these progressions, this prohibition appearing in German theory as late as the eighteenth century.[10]

The prescribed motions for perfect intervals relied neither on half-steps nor on contrary motion. Neither the fifth nor the octave had to "resolve" in the sense that a major sixth did. Whereas imperfect intervals were considered to be on the way to some destination—generally a perfect interval—perfect intervals were stable consonances which were not obligated to move in a prescribed fashion. The *passaggi* for perfect intervals, therefore, were not characterized so much by what they could do as much as by what they could not. Unisons and octaves were avoided in the middle of a contrapuntal phrase since their very stability hindered forward motion. Parallel motion between perfect intervals was strictly prohibited, and similar motion was debated. Since Gafurius' *Practica musicae* (1496) two successive perfect consonances were allowed, but

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[8] Berger, *Ficta*, 128.

[9] Camillo Angleria, *La regola del contraponto* (Milan: Giorgio Rolla, 1622; facs. ed., Bologna: Forni, 1983).

[10] Lester, *Compositional Theory*, 12-13.

discouraged by the rule that two or more imperfect consonances could be used in succession but an imperfect consonance should always appear between two perfect consonances; and numerous similar suggestions appeared.[11] Even if the theorists did not agree on a particular usage or voice leading, all agreed that perfect intervals had to be handled with care in order to avoid a coarse, amateurish sound.

These two sets of voice-leading principles—imperfect consonances moving by contrary motion to the nearest perfect interval, and the careful treatment of perfect intervals—form the common ground among all of the theorists who used the system of the *passaggi*. Outside of these two principles there was a tremendous amount of disagreement. Zarlino allowed direct, or similar, motion into a perfect interval as long as one of the voices moved by step, but his student Artusi disagreed with this allowance. Subsequent theorists were torn between the two opinions, Pontio and Bona following Zarlino but Angleria and Tevo following Artusi. Both Vicentino and Zarlino forbade motion in parallel sixths or thirds of the same quality, urging composers to alternate major and minor intervals. Sixteenth-century Italian music theory treatises offer a numbing array of these recommendations and prohibitions, whose practical application is often difficult to fathom. Nonetheless, from those theorists who used the system of the *passaggi* come most of those principles and ideas that we consider hallmarks of good counterpoint.

Artusi's tabular listing of all of the possible motions, a listing reduced a few years later by Diruta to the familiar three motions and the four rules based

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[11] Franchinus Gafurius, *Practica musicae* (Milan: n.p., 1496; facs. ed., New York: Broude Bros., 1979). English trans. in *Practica musicae*, trans. by Clement A Miller (Dallas: American Institute of Musicology, 1968), also in *The Practica musicae of Franchinus Gafurius*, trans. and ed. by Irwin Young (Madison: Univ. of Wisconsin Press, 1969).

on them, was a condensation of Zarlino's *passaggi*. Artusi's synthesis of the elements of suspension dissonance and the intricate descriptions of the effects of stepwise and leaping motions in melodic lines were also a direct result of his interest in the finer points of voice leading. Whereas all theorists prohibited parallel octaves and fifths, and most prohibited direct motion as well, those who taught the *passaggi* gave numerous examples demonstrating exceptions and contradictions to the rules. Theorists who dealt with the *passaggi* categorized every nuance of the melodic line and its interaction with other lines in an exhaustive inventory of the art of voice leading.

The theorists never explicitly stated how to use these lists of *passaggi*. They seem to assume that a student learned to make compositional choices based on the ability either to memorize or at least to consult a list containing the recommended motions. One hint regarding how students were expected to use them comes from the end of the note-against-note counterpoint section of Christoph Bernhard's *Tractatus compositionis* (c. 1657). Immediately following the *passaggi* for all of the consonances, Bernhard stated that "an industrious student of composition will not find it unprofitable to prepare a table of all of the above-mentioned forbidden successions and to have the same always at hand, both to avoid them more readily in composition, and to examine the works of others in this regard."[12] Whether Bernhard meant that a student should copy down just the examples of that chapter (Chapter Thirteen, "Forbidden Leaps") or all of the examples given to that point, is unclear. But the spirit behind Bernhard's statement clearly implies that students acquired the motions by copying them down from the teacher, and that a good student consulted tables of this sort in the course of learning proper usage.

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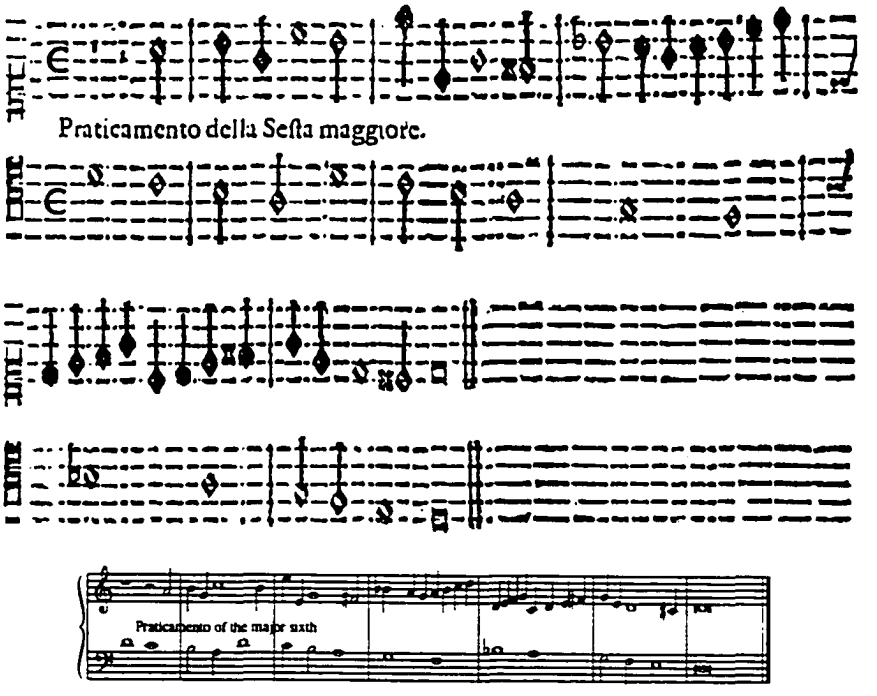
[12] Christoph Bernhard, *Tractatus compositionis augmentatus* (Unpubl. MS, c. 1657); Engl. trans., Walter Hilse, "The Treatises of Christoph Bernhard," *The Music Forum* 3, ed. William J. Mitchell (New York: Columbia Univ. Press, 1973), 1-196.

Bernhard implied that the *passaggi* were used as a guide and that students kept running lists of usages for future reference. Students then must have used the acquired lists to construct the exercises which abound in treatises using the *passaggi*, exercises that take a single interval and portray it in every conceivable role in two-voice counterpoint. Example 3.1 illustrates one of these exercises from Banchieri's *Cartella* (1614), intended to demonstrate usages of the major sixth. Banchieri called this example a *praticamento*, or exercise, of the sixth. Banchieri gave *praticamenti* for a number of intervals and supplied other techniques, such as dissonant suspensions and avoided cadences.

Ex. 3.1—*Praticamento* of the major sixth from Banchieri's *Cartella* (1614), p. 95



Banchieri's *praticamento* of the sixth packed eleven major sixths into the short exercise. Some usages, like the sixth between C and A in the first measure, followed the rule that a major sixth should move by contrary motion to an octave. Others, like the sixth between B and G on the second quarter of the second measure, did not. Such illustrations served as visual catalogues of rules, exceptions, and possibilities.

Fux must have been aware of the system of the *passaggi*. He would have come into contact with the approach in both Zarlino's and Mersenne's treatises. Furthermore, both Bononcini and Berardi used the system alongside their species examples, Bononcini clearly labeling his examples as *passaggi*. In addition to these sources, the one extant theoretical source outside of *Gradus* associated with Fux suggests that Fux employed the *passaggi* in the exact manner described above by Bernhard. That source is a manuscript in the archives of the convent of the Franciscan Minors in Vienna. The manuscript—Signatur I, B, 10—is devoted to items copied from two sources, Kircher and Fux. As described by Helmut Federhofer, the manuscript bears the inscription "in the possession of brother Venantii Sstanteyski," a Franciscan originally from Bohemia who came to Vienna to study and who eventually assumed musical duties at the Minorite convent where he died in 1729.[13] The manuscript contains examples of two-voice counterpoint arranged in two sections, both copied by the same hand. Federhofer states that although the name of Kircher never appears, the examples contained in the first part of the manuscript are literal copies of examples in Kircher's *Musurgia universalis* (1650) which demonstrate various uses of dissonant intervals.

The examples in the second part of the manuscript, one of which is given in Ex. 3.2, are very much in the vein of the Banchieri example above—two-part counterpoints illustrating various usages of dissonant intervals. But whereas no attribution appears in the first part, the examples in the second part are clearly attributed to J.J. Fux. Federhofer notes that the examples are not in the style of *Gradus* or Fux—that is, they are not counterpoints written against a cantus firmus—but nevertheless "betray the hand of a master."[14]

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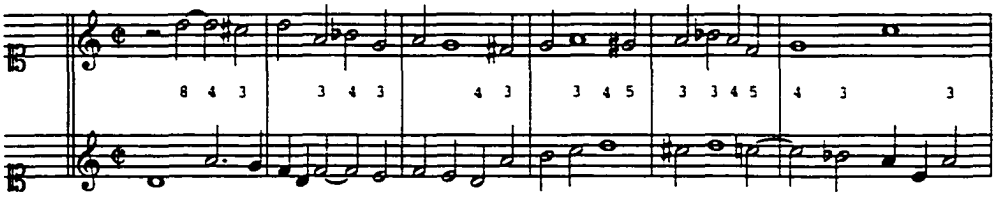
[13] Federhofer, "Handschriftliche Quelle," 147.
[14] Federhofer, "Handschrifliche Quellen," 150.

Ex. 3.2 — Minorite MS (c.1700), transcription from Federhofer (1969), p. 148



These examples are, in reality, not original to Fux but stem from the hand of another master, Giovanni Bononcini. All of the examples attributed to Fux in the second half of the Minorite manuscript are *praticamenti* for dissonant intervals copied from Bononcini's *Prattico* (1673). The entire manuscript then, is a series of *praticamenti* copied from two masters and intended for personal study, presumably by Sstanteyski, in the exact manner described by Bernhard. Since we know that Sstanteyski was in Vienna for the purpose of furthering his musical education, there is no reason to doubt that he believed the examples originated with Fux—the greatest teacher in Vienna—Bononcini's name not having been passed along with the examples. It is clear that Sstanteyski did not know who the original authors of the examples were, since the name of Kircher likewise did not appear with the examples in the first part of the manuscript. Important to the present discussion is the fact that all of the examples in the manuscript belong in the realm of the *passaggi*, copied into a manuscript by a student who did exactly what Bernhard described, and that this methodology is loosely allied with Fux.

Fux was fully aware of the system of the *passaggi*, and may have even kept notebooks containing examples in the manner described by Bernhard. But Fux's use of the *passaggi* differs drastically from that of any theorist who portrayed a pure version of the system. Fux repeated parts of the voice-leading prohibitions and allowances but made no attempt to preserve the extensive

lists of interval motions which characterized the system. Instead, he parceled out the information, giving the student only as much as is needed at any particular moment. Information on consonances was presented mostly in first species, dealing with note-against-note counterpoint. More complex issues were spread out across the other species as they arose. Information concerning dissonances was likewise handled across the various species rather than in bulk. Fux's approach most closely resembles Zarlino's *Istitutioni* (1558).

Zarlino's was perhaps the most successful presentation of the system of the *passaggi*, being cited as an influence on theorists as diverse as Sweelinck, Mersenne, and Morley.[15] Several theorists attempted to reduce Zarlino's lengthy, rambling prose into a more manageable format. Both Pontio and Bona reduced Zarlino's *passaggi* into numbered lists. Artusi avoided lists in favor of charts and diagrams illustrating Zarlino's recommended voice leading. Later theorists—Banchieri, Angleria, Bononcini, and Tevo—followed Pontio, Bona, or Artusi, and usually cited which set of recommendations they were adopting. However, all of these theorists overlooked Zarlino's practical contribution of distributing the information, rather than forcing the student to absorb it in blocks.

After Zarlino, all of the theorists who taught the *passaggi* faced the difficult issue of where to deliver the information to the student. Are the *passaggi* a prerequisite to simple counterpoint, do they follow some preliminary work, or are they simply corroborative information dealt with at various points? Bernhard gave exhaustive lists followed by simple rules. Bononcini presented the *passaggi* in a section preceding simple counterpoint. Berardi broke the

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[15] Claude Palisca, "Zarlino," *The New Grove's Dictionary*, ed. Stanley Sadie, 20 vols., (New York: Macmillan, 1980) 20: 646-49.

passaggi into sets of rules within his species, listing twenty rules for note-against-note counterpoint before giving up and simply listing a page of prohibited intervals.[16] Lorente completely avoided an exposition of the *passaggi*, prompting Pablo Nassarre's *Escuela musica* (1723) fifty years later, whose section on counterpoint was completely devoted to dealing with Lorente's oversight.[17] Penna dealt with the intervals in chapters, with the *passaggi* broken down into rules under each interval. Penna's rules for note-against-note counterpoint alone total twenty-one pages.

Unlike the theorists who emulated him, Zarlino's voice leading for consonances was spread across fifteen chapters—chapters twenty-six through forty-one. Each of these chapters dealt with issues rather than with single intervals. Titles such as "How to terminate a composition" or "How the parts may ascend or descend together," provided a logical framework that lists tended to obfuscate. Finally, at the end of the section, Zarlino tied up the entire discussion of note-against-note counterpoint with examples illustrating how to put the information into practice. In spite of the length of Zarlino's section covering note-against-note counterpoint, his arranging the *passaggi* into small groups is infinitely more logical than the host of treatises quoting him.

Fux was fully in accord with Zarlino's systematic presentation of counterpoint. His spokesman Aloysius stated patiently that ideas must be presented in sequence when one of Josephus's questions threatened to disrupt the order:

> Your eagerness, which still is praiseworthy, forces me to explain almost everything in the wrong order. However, I shall answer your question

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[16] Berardi, *Miscellanea*, 115-16.

[17] Pablo Nassarre, *Escuela musica* (Zaragoza: herederos de Manuel Román, 1723-4; facs., Zaragoza: Institución Fernando el Católico, 1980).

> though not yet discussing everything, so that you will not be confused by too many details at the beginning.[18]

Fux was aware of the organizational difficulties inherent in other treatises, and the pedagogical problems associated with allowing a barrage of information to dominate a beginner's first lessons. Dense blocks of information are detrimental to a student's rapid progress. Instead, Fux consistently gave only "enough to begin with."[19] In-depth information can be dealt with at later stages.

Delivering voice-leading information in small doses was one insight Fux gained from Zarlino. A second insight was the use of simple rules or principles to arrange this information into meaningful bites, avoiding lists of *passaggi* and pages of rules. Each of Zarlino's chapter headings in his section on note-against-note counterpoint conveyed a simple idea under which a variety of information is arranged. Ideas such as moving as often as possible by contrary motion, ending on a perfect consonance, or avoiding parallel motion between perfect consonances were not original to Zarlino, but were some of the oldest ideas on how to combine melodic lines. It is obvious that Zarlino's section on note-against-note counterpoint embodied some of the oldest material concerning counterpoint pedagogy. Less obvious is the fact that Zarlino's discussion of note-against-note counterpoint concealed the framework of a third system for teaching counterpoint, the system of the eight rules, a system also at the heart of Fux's first species.

The System of the Eight Rules

In contrast to the late-seventeenth-century treatises that developed either the species or the system of the *passaggi*, another group of treatises existed that

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[18] Fux, *Gradus*, 46; Mann, *Counterpoint*, 28.
[19] Fux, *Gradus*, 46; Mann, *Counterpoint*, 29.

taught counterpoint through a set of eight simple rules obviously meant to be memorized prior to commencing work in counterpoint. A set of eight rules first appeared in Tinctoris's *Liber de arte contrapuncti* (1477), where they were presented as a summary of Tinctoris's exhaustive presentation of the *passaggi*. The rules subsequently appeared in Gafurius' *Practica musicae* (1496)—obviously influenced by Gafurius' acquaintance with Tinctoris and his manuscript—where they were altered and limited in scope.[20] Due to the tremendous influence and popularity of Gafurius' treatise and the relative obscurity of Tinctoris' manuscript, subsequent theorists inevitably cited Gafurius as the source of these rules. Citations of Gafurius and his list of eight rules recurred throughout the sixteenth and seventeenth centuries, and the eight rules appeared as late as Bontempi's and Tevo's treatises.[21]

The system of the eight rules was not a comprehensive system for teaching elementary counterpoint, but rather a system devoted to teaching note-against-note counterpoint. Even Tevo, who attempted to be comprehensive in his coverage of contrapuntal methodology, after dozens of pages of preliminary information, began his instruction on note-against-note counterpoint with the eight rules. An unfortunate consistency in the treatises that used the eight rules was the rambling, disjointed observations that characterized instruction on diminished counterpoint, whose extreme disorganization stood in stark relief to the highly organized pedagogy of note-against-note counterpoint. As a result of the often disorganized presentation of diminished counterpoint, the

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[20] Franco Gafurius, *Practica musicae* (Milan: n.p., 1496; facs., New York: Broude Bros., 1979); Eng. trans., Clement A. Miller (Dallas: American Institute of Musicology, 1968).

[21] Giovanni Andrea Bontempi, *Historia musica* (Perugia: Costantini, 1695; facs., Bologna: Forni, 1971).

seventeenth-century theorists who attempted to stay faithful to the system of the eight rules without incorporating outside material—Cerreto, d'Avella, and Bontempi—were generally not very successful.

There were rules everywhere in seventeenth-century counterpoint treatises. Rules of voice leading, rules for adding a third voice to a two-voice composition, rules for ensuring the proper underlaying of the text, and rules for the proper conduct and attitude of the singer occurred with considerable density in all of the treatises of the sixteenth and seventeenth centuries. Late-seventeenth-century treatises, such as those by Penna, Bononcini, and Berardi, appear to be almost nothing but rules. However, the system of the eight rules was viewed by the sixteenth- and seventeenth-century theorists as being something on a different order from the general rules and observations that each theorist made during the course of their instruction. Scipione Cerreto stated:

> The learned writers on music declare that these eight rules of counterpoint and multi-voice composition are not only essential, but also that no composer can claim to disregard them, for they are like the law approved by the ancient and modern musicians.[22]

That the eight rules were a system is readily evident from Cerreto's quote. Unlike the observations that theorists made from treatise to treatise, the eight rules contained the "law" passed down from older sources. The information contained in them was indeed some of the oldest: prohibitions against parallel fifths and octaves, rules for cadences, how to begin and end, and rules concerning basic progressions. However, whereas the rules may have been

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[22] Scipione Cerreto, *Dialoghi Armonici* (unpub. MS in the Martini collection of the Civico Museo of Bologna, 1631), f. 20v. "Dichiarano gli Doti Scrittori di Musica, che quest' Otto Regole del Contraponto, e comporre à più vòci non solamente sono essentiali, mà nè anco nessuno Compositore può preterire di non osservanse, per essere come legge approvata dagli Antichi, et Moderni musici . . . ."

inviolable they were not quite immutable; the rules changed from treatise to treatise. Some of the rules were adequate for Tinctoris and Gafurius, the first theorists to specify sets of eight rules. But music and musical styles changed drastically between the late fifteenth century and the early eighteenth century, when the eight rules last appeared. Although some of the seventeenth-century theorists who used the system attempted to update the rules to cover issues that were of concern at the time, the system still contained only eight rules which were in most respects identical to the first formulations.

Two features accompanied the system of the eight rules in its purest form: a list containing exactly eight rules and a specific citation of Gafurius, often retaining his exact language. What meaning the number eight had to the theorists is unclear. However, even when theorists liberally changed Gafurius' original set, there were still only eight rules in the set. The authority of Gafurius reigned even in the choice of phraseology. Phrases such as "this rule is not mandatory but rather optional," or "perfection in all things is ascribed to endings," became a part of the tradition and were repeated verbatim.

Listed below are Gafurius' eight rules, briefly stated:

1. Begin with a perfect consonance.
2. Avoid parallel motion between perfect consonances.
3. An imperfect consonance should be set between perfect consonances, but imperfect consonances can occur in succession.
4. Successive perfect intervals must move in oblique or contrary motion.
5. The same perfect interval can recur through the use of voice-exchange.
6. Parts should move in contrary motion to each other.
7. Move from an imperfect to the nearest perfect interval by contrary motion.
8. End on a perfect consonance.

The material covered in the rules can be reduced to three categories: how to begin and end, how to treat the problematic aspect of moving between perfect consonances, and basic voice leading between consonances. The rules covered neither dissonance nor diminished note values. A clear sign of the antiquity of the system appears in the redundancy of the rules. Gafurius' original set contained three different rules to deal with the problematic motions of perfect intervals. Rule two forbade parallel perfect intervals, rule four allowed contrary and oblique motion to and from perfect intervals, and rule five dealt with one special type of contrary motion, voice-exchange. All of the theorists who used the system of the eight rules dealt with the topic in atomistic fashion rather than through unifying concepts. The effective reduction associated with Diruta's rules of motion came as a result of Diruta's and Artusi's condensation of Zarlino, rather than from Zarlino himself. It is a curious fact that the seventeenth-century theorists who used the system of the eight rules—Cerreto, Bernardi, d'Avella, and Bontempi—faithfully adhered to Gafurius' redundant formulas, completely ignoring Diruta's contribution.

Gradus appears to share very little with the retrospective system of the eight rules. *Gradus* was much less repetitive, and the very nature of the species system brought a comprehensiveness to *Gradus* visibly lacking in treatises that used the eight rules. In addition, the note-against-note counterpoint section of *Gradus* lacked a specific listing of eight rules or a reference to Gafurius, the two most visible attributes of the system. What *Gradus* shared with this system was the organization of note-against-note counterpoint around a reduced set of simple, easy-to-remember rules for constructing a beginning exercise in counterpoint.

Gradus's rules and ideas are always short and to the point. In comparison to the unhelpful quality of many of the treatises that featured the species

system or the numbing density of treatises that taught the *passaggi*, *Gradus's* simplicity is more closely linked with the simple system of eight rules than any other. Fux did not borrow this idea from any one source. Instead, Fux adapted the best qualities of several treatises, removing the most visible attributes of the system while retaining the contents in a repackaged format. Fux borrowed this approach from Zarlino, Bononcini, Stefano Bernardi, and the oral tradition.

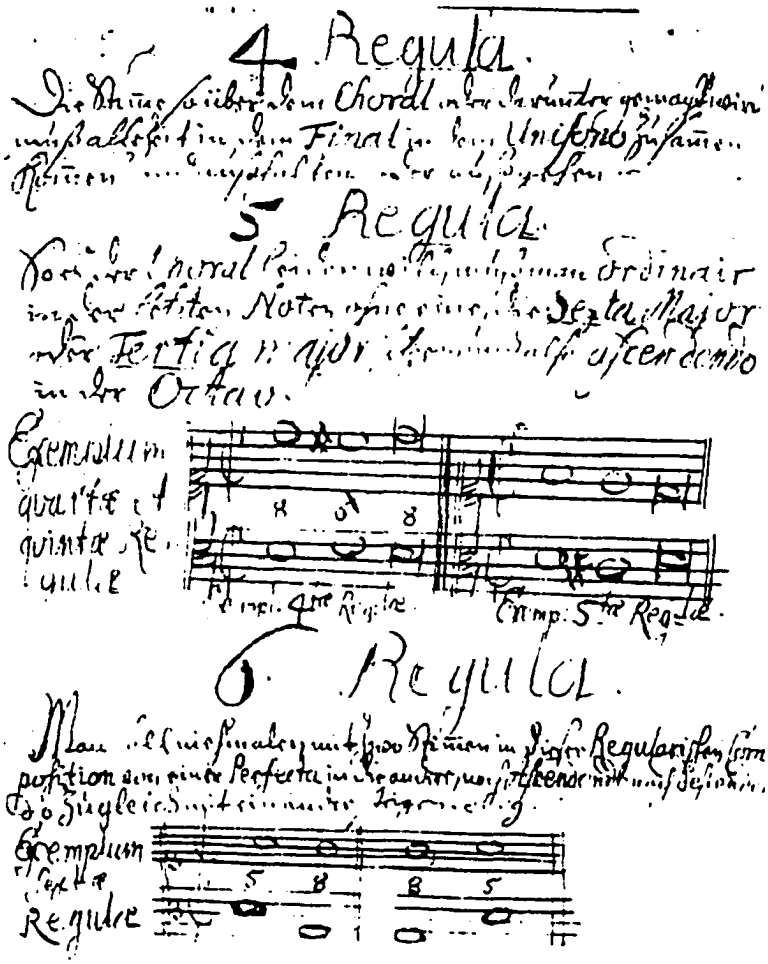
Gafurius' eight rules formed the basis for Zarlino's section on simple counterpoint. The eight rules, however, appeared as chapter headings instead of as a list, amplified in rambling prose discussions illustrated by *passaggi*. As noted, chapter twenty-six begins Zarlino's section on note-against-note counterpoint, coming directly after the exposition of the intervals which is the traditional first part of contrapuntal instruction. Chapter forty-two is the beginning of the section on diminished counterpoint and, therefore, ends simple counterpoint. Zarlino began with some preliminary items but quickly moved to chapter twenty-eight, "A composition must begin with a perfect consonance" (Gafurius rule number one). Chapter twenty-nine is Gafurius' rule number two: "Two consonances having the same ratio may not be placed one after the other." Chapters thirty-two through thirty-nine treat each of Gafurius' rules three through eight in turn. Although Zarlino used a different ordering, he treated each of Gafurius' rules in rambling fashion, with instructions for each rule divided into separate chapters. Zarlino even shared with Gafurius a curious tendency to mix aspects of diminished counterpoint into the discussion of note-against-note counterpoint. Zarlino's chapters twenty-seven, thirty, and thirty-one included aspects of diminished counterpoint which could have been moved or deleted without affecting the methodology. In similar fashion, Gafurius consistently illustrated his principles of simple counterpoint with examples of diminished counterpoint. Both theorists shared an understandable

desire to demonstrate how simple ideas had practical application even in more complex settings.

Bononcini's eight rules appear on pp. 55-59 of the *Prattico*. Bononcini first gave the prose version of each rule on pp. 55-56, then illustrated each rule with musical examples on the succeeding pages. As has been stated, Bononcini listed this information alongside a great many other items. No source was cited in the body of his text, but Bononcini clearly listed both Gafurius and Bernardi as sources in his list of *autori*.

The most difficult and troublesome of the treatises that resemble Fux's model is the manuscript attributed to Giacomo Carissimi, *Regulae compositionis* (c.1700). The Carissimi manuscript has already been mentioned in connection with the use of the word "species" to denote the various counterpoints arranged by note value. The Carissimi manuscript taught counterpoint through a species approach, following each species with some brief commentary and an example or two. Example 3.3 is a page from the Carissimi manuscript devoted to note-against-note counterpoint. As can be clearly seen, the manuscript organized the teaching of note-against-note counterpoint through a set of rules, rules four through six appearing in the example.

Ex. 3.3—The eight rules as used in the first species of *Regulae compositionis* (c.1700), f. 3r



The Carissimi manuscript lists seven rules under the heading of note-against-note counterpoint: (1) avoid parallel perfect consonances; (2) how to move from the major sixth; (3) begin on a perfect interval; (4) the cadence formula of a sixth to an octave; (5) the cadence formula of a third to a unison; (6) avoid similar motion between fifths and octaves; and (7) avoid similar motion from imperfect intervals to perfect intervals. In addition to these seven, motion into perfect intervals is covered in three examples listed under the main species heading. Thus, the Carissimi manuscript covered all eight rules, using them as the means of fleshing out first species, or note-against-note, counterpoint. The organizational structure used in the Carissimi manuscript is strikingly similar

to Fux's structure for *Gradus*, and once again raises the possibility that many of Fux's ideas were gleaned from the oral tradition. What is certain is that the Carissimi manuscript predates *Gradus*, and thus represented a set of ideas potentially available to Fux. It also illustrates that the antiquated system of the eight rules was a commonly accepted means of teaching note-against-note counterpoint prior to *Gradus*.

Fux and the Weight of Tradition

Gradus is a work steeped in tradition. The subject matter itself—composition in the manner of Renaissance vocal polyphony—was extremely retrospective by the eighteenth century, prompting Hugo Riemann's oft-quoted remark that *Gradus* was out of date by the time of its publication.[23] Joel Lester states that "Fux's reverence for past authorities, once again going back past Zarlino, is probably the root of Fux's choice to publish *Gradus* in Latin."[24] Everything about *Gradus's* physical features—the use of Latin, the appeal to Palestrina, the folio format, the use of dialogue—suggests that Fux was attempting by every means possible to tie his work to the great legacy of contrapuntal theory flowing from sixteenth- and seventeenth-century Italy.

Fux sidestepped the most important tie to the Italian contrapuntal tradition in avoiding the *autori*, relinquishing an appeal to the past masters for sound pedagogical reasons. Nevertheless, Fux was, like his Italian counterparts, interested in establishing a link with a glorious, historical past, and urging the remembrance of a nobler time. He admitted to being incapable of calling composers back from the "unrestrained insanity of their writing to

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[23] Hugo Riemann, *Geschichte der Musiktheorie im IX-XIX. Jahrhundert* (Leipzig: Max Hesse, 1898), 415; English trans., William Mickelson, *History of Music Theory* (Lincoln: Univ. of Nebraska Press, 1977).

[24] Lester, *Compositional Theory*, 46.

normal standards."[25] The composers Fux accused of "unrestrained insanity" were unnamed, but "normal standards" are understood to be those contained in *Gradus*, the music theory allied with Palestrina and his music. *Gradus* must be seen at least as a modest effort to "stem the course of a torrent rushing precipitously beyond its bounds," not by carefully defending its position through well-placed citations of authoritative treatises, but by re-creating the ethos of a nobler age.[26] Fux, therefore, tied *Gradus* to its Italian contrapuntal heritage by infusing it with a timeless quality achieved through the use of three elements forming a visceral part of his Catholic heritage: the Latin language, the dialogue format, and the wisdom of Palestrina, hero of the Counter-Reformation.[27]

Fux's decision to publish *Gradus* in Latin, at a time when virtually all European music theorists had long opted for their native tongues, has puzzled Fux scholars. Köchel felt that Latin ensured that *Gradus* would be read "not only in German-speaking lands, Latin being the language of diplomats and the learned, but in other places as well."[28] Mann follows Köchel, stating that "in choosing the Latin language, Fux insured a wide distribution for his work."[29] Both scholars imply, therefore, that Fux chose Latin simply as a device ensuring wide dissemination. However, Mann recognizes that there is a difficulty with this position, since translation of the treatise began during Fux's lifetime.

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[25] Fux, *Gradus*, unnumbered folio 3v; Mann, *Counterpoint*, 17.

[26] Ibid.

[27] Karl Braunschweig, "*Gradus ad Parnassum*: A Jesuit Music Treatise," *In Theory Only* 12, nos. 7-8 (1994): 35-58.

[28] "Fux hat in diesem Werke, das seiner Anlage nach nicht auf Deutschland allein beschränkt sein sollte, der lateinischen Sprache sich bedient, damals die Sprache der Diplomaten und Gelehrten, ausserdem zu jener Zeit in allen gebildeten Kreisen verständlich" (*Fux*, 154).

[29] Mann, *Counterpoint*, xiv.

Mann states that "at the same time, he [Fux] placed before student and teacher the task of translating the *Gradus* into modern languages."[30] If the choice of Latin suggests that *Gradus* would be widely read, then the rapid succession of translations implies that the Latin language must not have been the universal standard that both Köchel and Mann suggest. If it had been Fux's intention to produce a composition manual for self-study, readily accessible to beginners, then Fux's readership would be limited either to beginners trained in the Classics or simply those educated within the Church. Neither option aligns well with Fux's claim to help those "lacking means and a teacher."[31]

A more tenable explanation for Fux's decision to publish in Latin is that he quite simply may have had no other practical option. Seventeenth-century theorists chose Latin over their native language when there was a problem with communicating in the native tongue. Either the theorist was employed in a foreign country or was dealing with a subject not usually associated with the theorist's native tongue. As with his German-language predecessors—such as Kircher in 1650—Fux used Latin as an archaic but expedient tool which imparted an aura of antiquity while solving the immediate problem of communicating Italian theory outside of Italy.

No music theory treatise had been published in Latin in the half century prior to *Gradus's* appearance, and no subsequent theorist issued a treatise in Latin after *Gradus*. By 1725, Italian theorists had not published in Latin for two centuries. The last major music theory treatises written by Italians but published in Latin were Pietro Aron's *De istitutione harmonica* (1513) and Giovanni Paduano's *Institutiones* (1585), but both of these texts had been written

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[30] Ibid.

[31] Fux, *Gradus*, unnumbered f. 3v; Mann, *Counterpoint*, 17.

first in Italian and subsequently translated into Latin by a scribe hired for that purpose. [32] Werner Braun noted that German-speaking theorists published their works in Latin well into the seventeenth century, the last German-language treatise in Latin being Kircher's *Musurgia* in 1650.[33] Eighteenth-century German theorists opted for their native tongue, since by that time both French and German theory had come to the forefront as more progressive than their Italian counterparts. But the situation for seventeenth-century German-language theorists was more difficult.

Italy was the musical center of the sixteenth and seventeenth centuries and musicians flowed outward from there to all parts of Europe. Seventeenth-century Italy exported its musical heritage; it did not import it. As a result, Italian music theorists wrote in their native language unless presented with strong motivation to do otherwise. One strong motivation occurred when Italian musicians served in Northern courts and dedicated their treatises to patrons who likely did not use Italian as their native tongue. For instance, Bontempi dedicated his *Nova quattuor vocibus* (1660) to Schütz under whom he was serving at the court in Dresden. Bontempi issued this work, printed in Dresden, in Latin. [34] Thirty-five years later, after Bontempi retired and moved back to his native Perugia, his *Historia musica* (1695) was printed in Italian.[35]

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[32] Pietro Aron, *Libri tres de institutione harmonica* (Bologna: Benedicti Hectoris, 1516; facs., Bologna: Forni, 1970); Giovanni Paduano, *Institutiones* (Verona: Sebastianum and Ioannis à Donnis, 1578; facs., Verona: AMIS, 1988).

[33] Werner Braun, *Deutsche Musiktheorie des 15. bis 17. Jahrhunderts*, vol. 8 no. 2 of *Geschichte der Musiktheorie*, ed Frieder Zaminer (Darmstadt: Wissenschaftliche Buchgesellschaft, 1994), 3.

[34] Giovanni Andrea Bontempi, *Nova quattuor vocibus* (Dresen: Seyffert, 1660; facs., Bologna: AMIS, 1971).

[35] Giovanni Andrea Bontempi, *Historia musica* (Perugia: Costantini, 1695; facs., Bologna: Forni, 1971).

The short chapters in Chiodino's *Arte pratica* (1610) were printed in both Latin and Italian. Chiodino clearly recognized that Italian was the language of choice in the Italian dominated world, but Latin was expedient to reach Northern Europe. As a result of his decision, Chiodino's treatise was one of the few seventeenth-century Italian treatises translated into German.

Those seventeenth-century music theorists whose native language was not Italian faced a problem similar to that of the Italian expatriates. Athanasius Kircher, who taught at the Jesuit *Collegio Germanico* in Rome, issued his treatise in Latin. In spite of the fact that Kircher was teaching the Italian contrapuntal system of the *passaggi* in Rome, both the German and Italian languages presented insurmountable difficulties. Even as late as 1701, the Czech Tomáš Janovka published his music dictionary in Latin.[36] Clearly the Czech language would have limited the volume's accessibility to the rest of Europe. For all of the treatises cited above, the Latin tongue, though it may not have made any of them easier or more readily available, solved immediate language problems.

Gradus is a treatise devoted to Italian contrapuntal practice. Given Fux's desire to align his work with the body of Italian theory that formed the source for *Gradus*, it was only natural that he chose a language that made it accessible to those conversant in this theory. To have issued *Gradus* in German would have relegated the work to a Protestant-dominated world, hardly fertile ground for an Austrian Catholic presenting a fresh approach to Italian theory through the mouthpiece of the hero of the Counter-Reformation. French would have been pointless, although his citation of Mersenne indicates that he knew the language. Italian would have been difficult, as no non-Italian had ever

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[36] Tomáš Janovka, *Clavis ad thesaurum magnae artis* (Prague: Georg Labaun, 1701; facs., Amsterdam: Fritz Knuf, 1973).

attempted to write a treatise in Italian. In a world dominated by Italians, issuing *Gradus* in a language not his native tongue would have been awkward at best.

As with the Latin language, the dialogue format employed by Fux was, by the eighteenth century, an archaic form, but one chosen by Fux "for the sake of clarity."[37] Fux referred to the clarity that would be enjoyed by a beginner, not a seasoned theorist. The preferred format for centuries of Italian music theory texts had been a narrative format resembling a reference book. Angelo Berardi was the only Italian theorist to use the dialogue format in the hundred years preceding *Gradus*. There are two dialogue models that Fux utilized in constructing *Gradus's* unique dialogue: (1) the question-and-answer format used in Lorente's *El porqué* (1672), Nassarre's *Fragmentos* (1700), and Berardi's *Il perchè* (1693); and (2) the dialogue format used in Zarlino's *Dimostrationi harmoniche* (1571), Diruta's *Transilvano* (1609), Banchieri's *Cartella* (1614), and Berardi's *Arcani musicali* (1690).[38]

One form of dialogue was constructed of leading questions followed by short answers in the manner of a child's catechism. In a catechism, an omniscient voice asks carefully selected questions whose answers have been pre-determined. The child then has to memorize the answers and repeat them verbatim at the appropriate moment. The format is not representative of the kinds of errors that children make in a learning situation, but rather a formulaic method to check proper memorization. In the manner of a child's

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[37] Fux, *Gradus*, unnumbered f. 4r; Mann, *Counterpoint*, 18.

[38] Angelo Berardi, *Arcani musicali* (Bologna: Pier-Maria Monti, 1690), and idem *Il perche* (Bologna: Pier-Maria Monti, 1693); Gioseffo Zarlino, *Dimostrationi harmoniche* (Venice: Francesco de i Franceschi Senese, 1571; facs., New York: Broude Bros., 1965).

wonderings, questions in a catechism begin with "why," or "what is," in order to teach fundamentals and basic apologetics.

Two treatises utilized the question-and-answer format in a manner similar to Josephus's questions in *Gradus*. Lorente entitled his treatise *El porqué de la musica*, or "The 'Why' of Music." The entire treatise was arranged around questions which ask why musical concepts, or terms are used and what they mean. In 1700, Pablo Nassarre copied and reduced Lorente's lengthy text into the brief format of a catechism. Entitled *Fragmentos musicos*, the text is indeed only a fragment of Lorente's lengthy work, and is arranged as a series of short questions followed by brief answers. Like Fux, both Lorente and Nassarre used the species approach to contrapuntal pedagogy. The simple questions which are used as chapter headings in Lorente and as the basic material in Nassarre are remarkably similar to the format of Josephus's questions in *Gradus*. Table 3.2 compares some of Josephus's questions about first species with their analogues in Lorente's and Nassarre's treatises .

Table 3.2—A comparison of questions in *Gradus* (1725), *El porqué* (1672), and *Fragmentos* (1700)

Josephus's Questions	Lorente and Nassarre
What is counterpoint? (*Gradus*, p. 44; Mann, p. 27)	What is counterpoint? (Nassarre p. 65; Lorente p. 233)
What is the first species of counterpoint? (G., 45; M., 27)	How many types of counterpoint are there? What is semibreve counterpoint? (N., 72; L., 299)
How are perfect and imperfect consonances used differently? (G., 45; M., 28)	What is the difference between perfect and imperfect consonances? (L., 295)

Why should more imperfect be used than perfect? (G., 46; M., 28)	Why may two, three, or more imperfect consonances be used consecutively? (L., 253)
Why no direct motion into perfect consonances? (G., 49; M., 32)	Why can't perfect intervals receive direct motion? (lit. "be given the beat")[39] (L., 247)

What is different between the two formats—between *Gradus's* dialogue and the question-and-answer format of Lorente and Nassarre—is that *Gradus* did not teach solely via Josephus's questions. At times, Josephus simply asks Aloysius what his mistake was. The instruction was then delivered by Aloysius in correcting Josephus's exercises. To have relegated all insightful, leading questions to Josephus would have imparted an omniscience to the student that would have stretched belief. *Gradus's* dialogue then, allowed the student to ask questions that simply relayed the fact that the student was lost, or in need of further clarification. This type of question is much closer to how a young student would think and act.

Another important difference between *Gradus* and any of the treatises that preceded it was the use of student exercises—examples of counterpoint containing obvious errors that are pointed out, discussed, and corrected. The use of musical examples is of itself not unusual. Some treatises—Angleria's *La Regola del contraponto* (1622) for instance—consisted of nothing more than musical examples with commentary on each. Even the use of "negative" or

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[39] "Porqué las Especies perfectas no se han de dar de golpe?" (*El Porqué*, 247). "Why can't a perfect species be given the beat?" Lorente is literally utilizing the term which in Italian would be *battuta*, or perfect intervals that fall on strong beats. All of his examples, however, are of perfect intervals effected by similar motion.

purposefully erroneous examples has precedent in the literature. Zacconi's *Prattica* (1622) lists three examples on p. 77, labeled respectively "example which is broken and proceeds badly," "monotonous example," and "delightful counterpoint which proceeds well."[40] Zacconi clearly intended the reader to sing or play through the three examples and agree that the first two examples had problems which the third example addressed and corrected.

What is different between *Gradus* and either the Angleria or Zacconi examples is the process which takes place when mistakes are addressed and a corrected example is generated. No treatise had attempted to produce this type of format before *Gradus*. *Gradus's* musical examples take up fully half the treatise. In some places—such as fifth species in three voices—there is virtually no dialogue, but only the exercises with a line or two of commentary. Fux must be credited with being the first to develop this type of format.

The second type of dialogue involved a person, or persons, asking more sophisticated questions of a master who then answered the questions posed. This type of dialogue had no predecessor close to *Gradus*, but two early seventeenth-century treatises—Diruta's *Transilvano* (1609) and Banchieri's *Cartella* (1614)—used the format effectively.

Diruta's treatise took the form of a conversation between Diruta himself and a Transylvanian nobleman seeking to improve his musical skills. Diruta instructed the Transylvanian on keyboard technique, but in the process touched on a number of other topics, one of which is counterpoint. Throughout the dialogue Diruta instructed an adult who already had a fairly good grasp of music and musical issues. Therefore, the most basic ideas did not arise.

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[40] "Essempio di Contrapunto rozzo, e di mal procedere. Essempio di Contrapunto continuato. Essempio di Contrapunto dilettevole, e di buon procedere" (*Prattica*, 77).

Nevertheless, Diruta presented a compact discussion of strict counterpoint, into which the Transylvanian interjected occasional questions and amazement at Diruta's grasp of the subject.

In a similar manner, Banchieri's *Cartella*, which was reprinted and revised a number of times between 1601 and 1614, covered a broad range of musical topics from the proper attitude that a young student should display towards his teacher, to improvisation and composition. The *Cartella* was immensely popular, and its clarity and directness had an impact on all later theorists who taught counterpoint. Like *Gradus*, the *Cartella* is a dialogue between a master and a child who has come to the master to be instructed in the first lessons of composition. But Banchieri also wished to impart something of how young students should behave and the proper attitude they should display in their musical studies. At the very beginning of Fux's dialogue, Aloysius probed Josephus to ascertain his true motives for wishing to study music:

> *Aloys:* Perhaps the hope of future riches and possessions induces you to choose this life? If this is the case, believe me you must change your mind; not Plutus but Apollo rules Parnassus. Whoever wants riches must take another path.
>
> *Jos:* No, certainly not. Please be sure that I have no other object than to pursue my love of music, without any thought of gain. I remember also that my teacher often told me one should be content with a simple way of life and strive rather for proficiency and a good name than for wealth, for virtue is its own reward.[41]

In a similar manner, the Master in Banchieri's treatise probed his young disciple for his true intentions in pursuing musical studies, and offered the following advice:

> My son, if you wish to fulfill your sincere desire [to learn music] you must seek three things: First, steadfastly determine to seek the honor of God,

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[41] Fux, *Gradus*, 44; Mann, *Counterpoint*, 20.

> learning this and any other virtue to the glory of his divine Majesty. Second, [seek] the honor of your teacher, firmly applying your thought to all that is taught to you; and finally, [guard]your father's and your own reputations, for if you learn virtue you escape the corruption of idleness, the root of poor work.[42]

As with *Gradus*, the *Cartella* was not only about counterpoint, but also about the proper attitude that a student should show towards study. Banchieri put the advice in the mouth of the Master, Fux in the mouth of the student, but both theorists urged students to be attentive, industrious, and respectful in their chosen field of study.

The final dialogue format is closely associated with apologetics and offers a different light on Palestrina's role in *Gradus*. This form of the dialogue was traditionally used when answering criticisms or when a theorist refuted an attack on his ideas. Zarlino used this format in his *Dimostrationi* (1571) to answer the attacks on his *Istitutioni* (1558) by his former student Vincenzo Galilei. In the *Dimostrationi*, Zarlino used the voice of Adrian Willaert to refute all of the accusations against his theories. The interlocutors are Zarlino, a nobleman Francesco Viola, Zarlino pupil Claudio Merulo, Willaert, and *Desiderio*, who is the personification of the thirst for knowledge. Zarlino used the mouthpiece of Willaert and Merulo to show the wisdom of his theories, and agree that the attacks on these theories were unfounded.

In the same manner that Willaert answered for Zarlino in the *Dimostrationi*, so Palestrina became Fux's spokesman in decrying the "unrestrained insanity"

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[42] "Bisogna figliol mio volendo effettuare quest'onesto pensiero, vi si ricercano tre considerationi, Prima l'honor d'Iddio, cioè ferma deliberatione imparare questa, & ogni'altra virtù a gloria di sua divina Maesta; Seconda l'honore del vostro Maestro, applicando fisso il pansiero [sic] a quant'egli v'insegna; Ultima la reputatione di vostro Padre, & assieme vostra, accioche imparando la virtù scacciate il vitio dell'otio, radice d'ogni mala operatione . . ." (*Cartella*, 1).

of musical practice in Fux's day. Though *Gradus* was accepted for centuries as embodying a compositional method linked with writing in the style of Palestrina, none of Palestrina's works are cited, and no allusions are made to any historical data that would align *Gradus* with Palestrina. In this form of the dialogue, Palestrina's role is that of a revered authority. His name is invoked for the ethos that it imparts, and to conjure the Catholic hero as the proper role model for a young person. He was the mouthpiece for Apollo and the guide to Parnassus, home of the gods, rather than the Dionysius of "unrestrained insanity." Palestrina is the *autore* that Fux never cites. When *Gradus* is viewed as a statement in musical apologetics, it is not surprising that Fux should choose the hero of the Counter-Reformation to encourage a return to "normal standards."

Conclusions

Missing from any prior presentation of the species system was a detailed presentation of voice leading. Zarlino's *Istitutioni* (1588), Artusi's *L'arte del contraponto* (1586), and Kircher's *Musurgia universalis* (1650)—all of which feature the system of the *passaggi*—provided Fux with most of the information that he needed to fill in the species system. Fux taught note-against-note counterpoint through the reduced set of instructions contained in the system of the eight rules similar to that in Zarlino's *Istitutioni* (1558), Bernardi's *Porta musicale* (1615), Bononcini's *Musico prattico* (1673), and the Carissimi MS (c. 1700). Fux avoided quoting the *autori*, the most obvious connection to the tradition of Italian contrapuntal pedagogy, but tied *Gradus* to its Italian contrapuntal heritage through the Latin language, the archaic dialogue format, and by conjuring the image of Palestrina.

CHAPTER FOUR

Speculativa and Preliminaries to Counterpoint

Familiar to most modern students of counterpoint are the contents of *Gradus's* Book Two containing the instruction in counterpoint. Less familiar, however, are the contents of *Gradus's* Book One, the only section of *Gradus* currently unavailable in English translation, devoted to *musica speculativa*. As with its seventeenth-century Italian predecessors, *Gradus* does not begin directly with the study of counterpoint, but first presents preliminary material intended to serve as a foundation for contrapuntal theory.

Fux states from the outset that he minimized the study of *speculativa*, a word rendered in Mann's translation simply as "theory," in order to maximize the study of practice. True to his word, Fux allots only forty-two pages of the two-hundred-eighty page treatise to this subject, devoting the bulk of his treatise to the study of species and imitative counterpoint. Fux assigned less space to "theory and much more to practice, since (action being the test of excellence) this was the greater need."[1] He reduced the contents of Book One

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[1] Fux, *Gradus*, unnumbered folio 4r; Mann, *Counterpoint*, 18.

by redefining *musica pratica* and *speculativa* and narrowing the scope of each in three ways:

1. by defining counterpoint as the "rules of composition," as opposed to the Italian approach which distinguished between counterpoint and composition;
2. by redefining *speculativa* as anything that is not specifically composition, including the study of voice-leading;
3. by minimizing coverage of *speculativa* to a sparse exposition of the mathematics behind interval construction and omitting in-depth discussion of any topic not directly involving composition.

Defining *Pratica* and *Speculativa*

Fux established a clear dividing line between *speculativa* and *pratica*, stating:

> music is an extended genus containing many species such as celestial music, terrestrial, natural, artificial, historic, etc. For the sake of brevity and usefulness I restrict myself solely to artificial music. There are two types of artificial music: speculative and practical. In this first book I treat the first type, which is speculative music, briefly touching on those things I deem necessary for a full understanding of practice. In book two I treat practice in greater detail.[2]

This division was articulated with a break in design; Book One uses a narrative format, Book Two a dialogue.

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[2] "Musica nome genericum est, latissimè potens, speciesque contienens quamplurimas: ùt Musicam caelestem, terrestrem, naturalem, artificialem, historicam, &c. Ego brevitati, utilitatique potiùs, quàm curiositati inserviens, de artificiali tractare duntaxat propositum habeo. Ea duplex est: *speculativa* & *practica*: de prima, nempe *speculativa* hoc Libro nobis fermo erit, eaque solummodo, quae ad pleniorem Praxis adeptionem necessaria videbuntur, breviter attingam; secundam partem, nempe *practicam* diffusiùs tractandam ad Librum secundum remittam" (*Gradus*, 1).

Book One is as terse and well-organized as all other aspects of *Gradus*. Fux proceeds from a definition of his basic terms (rational numbers, proportions, and related terms; Ch. 3), to the five kinds of proportions (multiple, superparticular, superpartiens, multiple superparticular, multiple superpartiens; 4-8), to a definition of operations on proportions or ratios (harmonic and geometric division, multiplication, addition, and subtraction; 9-14), finally arriving at the mathematical construction of intervals (15-22). The material in the first twenty-two chapters all originated in Zarlino's *Istitutioni* (1558), but the presentation owed much more to Kircher's *Musurgia universalis* (1650) and Bononcini's *Musico prattico* (1673). Fux acquired from Bononcini the manner of dealing with the intervals through charts and simple descriptions and from Kircher the simpler layout of the mathematics, items that are buried by Zarlino's lengthy prose.

Fux generally concentrated on a single idea in each chapter. In Book One Fux first covers an idea traced to the Greek sources: the diatonic, chromatic, and enharmonic genera. These three ideas were understood by sixteenth-century music theorists to be the basis for chromatic usage in the experimental music of their time. Fux avoided the enharmonic genus, following Bononcini, who stated that it was of little value in modern music. His examples of both the diatonic and chromatic genera relate them to modern diatonic and chromatic scales.

Beginning on p. 36, Fux again illustrates all of the intervals, but this time using standard musical rather than mathematical terms: unison, major and minor seconds, etc. This terminology leads to three final topics that have become a standard part of counterpoint pedagogy to the present day: consonance and dissonance, the three motions, and the four rules of motion.

Italian theorists had incorporated preliminary information roughly corresponding to the items listed above from *Gradus's* first book: the mathematics of basic ratios, terminology, basic interval construction, and a description of consonance and dissonance. Unlike *Gradus,* however, seventeenth-century Italian music theory treatises presented no clear dividing line between *speculativa* and *pratica,* and often made little, if any, attempt to separate the two worlds of thought. What was presented in one treatise as *speculativa* appeared in another as *pratica.* Furthermore, numerous treatises were specifically entitled "Pratica di musica" by authors who claimed to avoid *speculativa* completely. Yet these authors treated the same material that *Gradus* labels *speculativa.* Clearly, a difference in viewpoint existed between Fux and his Italian counterparts.

Seventeenth-century Italian music theorists loosely defined *musica speculativa* as that branch of music theory dealing with the classification, aesthetics, philosophy, metaphysics, and mathematics of music. *Speculativa* was considered necessary in order to understand fully the philosophical basis for musical construction without which a person could not claim to be truly knowledgeable in the field of music. *Speculativa* was virtually synonymous with ancient Greek and Latin theory.

Musica pratica was defined as the branch of music theory that allowed one to be an active participant in music-making as singer, instrumentalist, or composer. The subjects contained in *pratica* were as varied as those contained in *speculativa* and included rhythm and meter, solmization, plainsong and measured music, basic interval construction and classification, modes, counterpoint, composition, basic instrumental technique, and similar items of a practical nature.

In between these two worlds were a number of items considered to be the traditional first steps in learning counterpoint, which the Italian theorists considered to be a mixture of *pratica* and *speculativa*. Zacconi, Bononcini, and Berardi specifically stated that they were writing practical treatises, Zacconi and Bononcini even using the word "*pratica*" in the titles of their treatises. Yet, all three theorists began their practical discussion of counterpoint with the mathematics of interval construction and classification.

Gradus followed the spirit of these in minimizing the preliminaries to maximize the teaching of *pratica*. In addition, Fux followed the pattern established by these seventeenth-century theorists by beginning counterpoint instruction with an exposition of the mathematics, construction, and classification of intervals. The contents of *Gradus's* Book One are the traditional first part of counterpoint instruction as established by the sixteenth- and seventeenth-century Italian music theorists.

But Fux made an important shift in his handling of this traditional material. Whereas his Italian counterparts consistently placed this material either firmly within the confines of *pratica*, or at least as a mixture of *pratica* and *speculativa*, Fux's clear division placed counterpoint's traditional preliminaries under *speculativa*. *Pratica* began in Book Two with writing. Fux's clear delineation of *speculativa* and *pratica* formed the first major break with the Italian tradition of contrapuntal pedagogy. In spite of his great reliance on Italian sources, Fux's reorganization of the material contained in these sources is at odds with his Italian counterparts. Fux's views on *speculativa* and *pratica* followed more closely a North European understanding which defined counterpoint as the "rules of composition," a definition with which Fux's Italian counterparts would not have wholly agreed.

Counterpoint and Composition

At the beginning of the dialogue in Book Two, Fux declared through the voice of Aloysius that the subject of *Gradus* is teaching composition via the beginning steps of counterpoint.

> *Jos:* I come to you, venerable master, in order to be introduced to the rules and principles of music.
>
> *Aloys*: You want, then, to learn the art of composition?
>
> *Jos:* Yes.

Fux clearly stated that *Gradus* contained a composition method taught through the first steps of counterpoint. In contrast to this view, Italian theorists viewed composition as vast and inexplicable. Those who composed, especially those who composed well, did so by divine gift. Counterpoint, however, was defined and approachable. This clear distinction was readily visible in the works of the Italian theorists who often entitled their works, as did Camillo Angleria, "The Rule of Counterpoint and Composition."[3] The distinction between the two terms, however, did not exist with Fux, or his North European counterparts, who presented contrapuntal instruction as the gateway to learning composition. Thus, when seventeenth-century North European musicians passed on contrapuntal pedagogy, even when these manuscripts bore clear attributions to Italian musicians, they did so in manuscripts entitled *Regulae compositionis* (Carissimi), *Tractatus compositionis* (Bernhard), or *Kompositionsregeln* (Sweelinck).[4] Bonnie Blackburn points out that sixteenth-

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[3] Camillo Angleria, *La regola del contraponto e della musical compositione* (Milan: Giorgio Rolla, 1622; facs., Bologna: Forni, 1983).

[4] Cristoph Bernhard, *Tractatus compositionis* (unpublished MS, ca. 1657), idem, modern edition with critical notes by Josef Maria Müller-Blattau, *Die Kompositionslehre Heinrich Schützens in der Fassung seines Schülers Christoph Bernhard* (Leipzig: Breitkopf & Härtel,

century Italian musicians "believed that only counterpoint could be taught; composition required a certain natural instinct," echoing a letter from Spataro to Aaron:[5]

> If you examine carefully the examples given by Ugolino or my teacher [Bartolomeo Ramos], you will discover that they have counterpoints of similar technique [starting or ending compositions on open fifths or octaves]. Indeed, they knew everything pertaining to two-part counterpoint there is to know. They gave instruction only in the rudiments. Knowing full well that the art and beauty of writing for more voices cannot be taught, for composers must be born just as poets are born. Therefore they taught two-part counterpoint, first note-against-note, then florid. Whoever wanted to proceed further needed the help of a teacher and above all the aid of divine grace and talent, bestowed only by heaven.[6]

The Spataro quote points out that in the 1520's the role of counterpoint instruction had already begun to change. Strict counterpoint instruction according to the rules handed down from earlier treatises was quite distinct from the compositional style in vogue at the time. Spataro made it clear that in his view counterpoint taught rudiments, not composition.

Seventeenth-century Italian music theorists, especially those in the latter half of the century—such as Bononcini, Berardi, Scorpione, and Tevo—offered

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1926; repr. ed., Kassel: Bärenreiter, 1963), idem, English translation by Walter Hilse, "The Treatises of Christoph Bernhard," *The Music Forum* 3, ed. by William Mitchell (New York: Columbia Univ. Press, 1973) : 1-196; Hermann Gehrmann, *Werken van Jan Pierterszn. Sweelinck* 10 (The Hague: Martinus Nijhoff; Leipzig: Breitkopf & Härtel, 1901; reprint, Farnborough, England: Gregg International, 1968). The Gehrmann edition is a conflation of three manuscripts attributed to Sweelinck, the most important of which—The Hamburg MS—has since been lost.

[5] Bonnie Blackburn, "On Compositional Process in the Fifteenth Century," *Journal of the American Muscological Society* 40 (Summer 1987): 275.

[6] Bonnie Blackburn, Edward Lowinsky, and Clement Miller, eds., *A Correspondence of Renaissance Musicians* (New York: Oxford Univ. Press, 1991), 298.

counterpoint exercises as a natural part of a beginner's instruction in music. Their exercises demonstrated practice in specific musical constructions for the unskilled. The exercises were a normal part of introducing the materials of music to the beginner, and the theorists often distinguished between rules presented for the purpose of the exercise and actual practice. In this respect, they were in agreement with the view offered by Spataro one-hundred-fifty years earlier.

In the first half of the seventeenth century, however, a number of conservative theorists—such as Cerreto, Diruta, Zacconi, Angleria, and d'Avella—mixed pedagogy and practice. For instance, they gave examples of how they would accompany the chant, either vocally or via the keyboard, as a means of passing on the actual church practice, alongside pedagogically useful exercises. These theorists did not always distinguish their pedagogical tools from their practical recommendations. However, contrapuntal instruction shifted during the seventeenth century from a method that reflected true practice at the beginning of the century to one that instructed by pedagogical models at the end of the century.

Knud Jeppesen first commented on this shift in the introduction to his textbook *Counterpoint* (1939), where he noted that seventeenth-century contrapuntal theory changed "from a discipline concerned with describing a style as best it can to one which emphasizes pedagogical ends."[7] Mann amplifies Jeppesen's idea by describing this shift as the rise of conventional theory, in distinction to teaching living practice. Although Jeppesen felt that the shift from practice to pedagogy was indicative of an ossification of the

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[7] Knud Jeppesen, *Counterpoint: The Polyphonic Vocal Style of the Sixteenth Century*, trans. by Glen Haydon (New York: Prentice-Hall, 1939; repr., New York: Dover, 1992), 37.

theory—implying, therefore, a loss of importance and validity—in reality the seventeenth-century Italian music theorists felt that their inherited pedagogy of counterpoint was still quite valid and useful. Counterpoint instruction was not exclusive to the training of composers, but an integral component of any musician's training.

Blackburn observes that in contrast to Italian theory German theory taught "musica poetica," a term synonymous with the later term "Kompositionslehre."[8] Fux's species are not composition *per se*, nor was Fux recommending composing in the style of the species exercises. Fux's own compositions certainly did not feature extended passages of species writing against a cantus firmus. Instead, the species presented a gateway to composition. Contained in the species exercises were the fundamentals necessary for learning composition. *Gradus* was not presented as a general tool for learning more about music, as it was in the Italian treatises, but rather as a set of first lessons for young composers. Fux's views concerning the role of counterpoint instruction, although gleaned from the Italian sources, were synthesized into a more North European viewpoint. As the above quote from *Gradus* demonstrates, the "rules and principles of music" were synonymous with the "art of composition."

For Fux, *pratica* was composition and nothing else; all other information, no matter how valid or practical, was *speculativa*. Fux did indeed follow the Italian contrapuntal models. He covered the same information they did, but his classification of this material imposed a systematic treatment lacking in the Italian theorists who preceded him. However, not all of Fux's material fit his

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[8] Blackburn et al., *Correspondence*, 275-6.

clear delineation, one example being the voice-leading of consonances traditionally taught through the vehicle of the three motions and four rules.

Voice Leading in Consonances: The Three Motions and Four Rules

Most modern-language editions of *Gradus* have avoided translating Fux's section on *speculativa*. Seventeenth-century theorists placed increasingly less value on *musica speculativa*, and eighteenth-century theorists, including the ones who translated *Gradus*, found no value in it at all. The exceptions were Mizler's German translation of 1742, and Manfredi's Italian translation of 1761; both contained the entirety of *Gradus*.[9] Those translators which excised Book One faced a dilemma upon commencing first species. Since Fux included the familiar material on consonance and dissonance, the three motions (similar, contrary, and oblique) and the four rules based on them in *speculativa*, he did not cover this material again in Book Two's dialogue. Aloysius simply asks Josephus if he "is completely familiar" with everything that has been said about the intervals, the difference between consonances and dissonances, about the different motions, and about the four rules in the preceding book."[10] This information was vital in understanding how to construct note-against-note counterpoint, since the first counterpoint exercise was constructed almost exclusively from the three concluding ideas in Book One.

All of the Italian theorists considered the study of motion to be one of the first lessons in note-against-note counterpoint. Even Fux considered this

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[9] Lorenz Christoph Mizler, trans., *Gradus ad parnassum* (Leipzig: Mizler, 1742; Leipzig: Johann Samuel Heinsius, 1797; repr. Hildesheim: Georg Olms, 1974); Alessandro Manfredi, trans., *Salita al parnasso* (Carpi: Carmignani, 1761; repr. Bologna: Forni, 1972).

[10] Fux, *Gradus*, 44; Mann, *Counterpoint*, 20.

information to be a cornerstone of his methodology, stating that "from the knowledge of these three motions hang (as it is said) the Law and the Prophets."[11] The French translation of 1773 by Pietro Denis excised the mathematics of intervals, but took the information concerning consonance, dissonance, and the motions, and wove them into a newly fashioned dialogue appended to Fux's. The first English-language translation by Preston in 1791 most closely follows the Italian models by giving the information as the first rules of note-against-note counterpoint. The widely available English translation by Alfred Mann solved this problem by inserting the final ideas of Book One as an aside in the beginning of the dialogue.

Clearly, both Fux and all of his translators considered this information to be highly practical and of key importance to the methodology of species counterpoint. It is curious, therefore, that Fux should place such practical ideas—ideas that are useful even today—outside of the realm of practical theory, relegating them instead to speculative theory. Fux's decision was based on his knowledge of Italian theory, specifically the teaching of the *passaggi*, and his visible disdain for this body of music theory. After describing the consonances and dissonances, Fux stated that:

> These are the elements which account for all harmony in music. The purpose of harmony is to give pleasure. Pleasure is awakened by variety of sounds. This variety is the result of progression from one interval to another, and progression, finally, is achieved by motion. Thus it remains to examine the nature of motion.[12]

The opening three sentences relating harmony, pleasure, and variety were hallmarks of Zarlino's theories. For Zarlino, harmony was an adjective that

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[11] "Ab hac triplicis motûs cognitione, usuque recto pendet, (ùt dicere solemus) Lex, & Propheta" (*Gradus*, 42). Fux alludes to a biblical passage: Matt. 22: 40.

[12] Fux, *Gradus*, 41; Mann, *Counterpoint*, 21.

denoted quality rather than a label for a system. Zarlino stated that this quality of harmony—which could be translated as "harmoniousness"—derived from variety:

> they [the ancient composers] realized that harmony results from things that are diverse, discordant, and contrary to each other rather than alike in every way. If harmony is born from this variety, it follows that in music not only must the parts be distant from one another with respect to pitch, but their movements should be different, and they should contain diverse consonances of various ratios. The more harmonious a composition seems to us, the more variety we will discover in it its parts, in its movements, and in its proportions.[13]

Variety, as a key to achieving the quality of "harmony," was a cornerstone upon which Zarlino erected his practical theory. But the fourth sentence in Fux's quote—that progression is achieved by motion, and that the study of motion is the logical outcome of the former ideas—was implied but never directly stated in Zarlino. Zarlino dealt with motion between consonances through the eight rules on a case-by-case basis rather than through general principles. The direct link between Zarlino's concepts of harmony and variety and its natural outcome in the study of motion was provided in Artusi's *L'arte del contraponto* (1586).[14]

Artusi took the information found in Zarlino's text and arranged it in a more direct fashion than his teacher's rambling prose. At times, Artusi clearly marked the places where he deviated from Zarlino by placing his name next to his own original annotations (pp. 5, 13, 21). At other times Artusi was not so consistent. Pages 18-21 of *L'arte* provide an exposition of the *passaggi* of the consonances. The information contained on these four pages was condensed

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[13] Zarlino, *Istitutioni*, 176; Marco, *Counterpoint*, 59.

[14] Giovanni Maria Artusi, *L'arte del contraponto* (Venice: Giacomo Vincenzi, 1586; facs., Bologna: Forni, 1980).

from Zarlino's section on simple counterpoint, Book Three, pp. 171-195. Since Zarlino's information was spread across twenty chapters devoted to note-against-note counterpoint, Artusi's tables presented a great deal of information in a compact space.

On p. 17 of *L'arte*, Artusi outlined Zarlino's general principles for a simple counterpoint, including the concepts of harmony and variety. Unlike Zarlino, Artusi moved directly from this material to a discussion of motions between consonances. Artusi stated:

> Since the notes are found in a single range or in several [close together or far apart], according to the needs or will of the composer, and since they leave from there to go elsewhere, it is necessary that they use movement in making this departure, because the voice may not make a motion from one place to another without a local motion. The figure below demonstrates the types of this motion of which musicians avail themselves and the four subsequent tables further demonstrate in what respects one moves from one place to another since there are four motions.[15]

Artusi described two important and related aspects of motion: a more local aspect as the individual notes of a line of music moved forward, and a broader aspect as the combined notes of two or more lines progressed. Unfortunately, Artusi created an etymological difficulty by describing these two aspects of motion with *motto* and *movimento*, terms that are virtually synonymous in modern parlance. He compounded this difficulty by using his terms indiscriminately in the quotation above.

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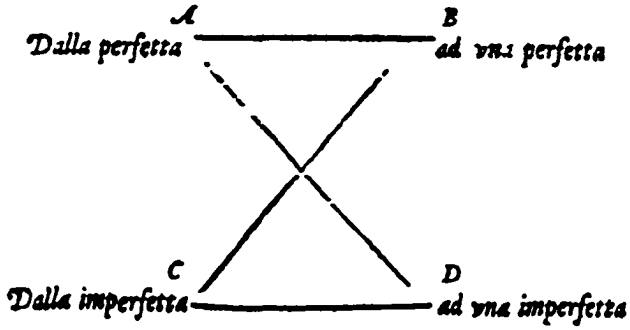
[15] "Mentre che I suoni si ritrovano in una sola estensione, overo in diverse secondo l'occasione e il comodo del compositore, e che di la si partono per andar altrove, e necessario che in cosi fatta partita, gli cada movimento, perche non può la voce far motto di un luoco, in un' altro senza il motto locale. Ma questo motto di quante sorti appresso il Musico si ritrovi, le dimostra la sottopsta [sic] figura, e con quali rispetti s'habbi d'andare da un luoco all'altro le seguenti Quatro Tavole per esser quatro motti ancora lo dimostrerano" (*L'arte*, 18).

Fortunately Artusi clarified these terms, whose English cognates are motion and movement, in the tables which follow the quoted passage. In these tables, he consistently applied the term *motto* to the three types of relative motion—direct (or similar), oblique, and contrary—and applied the term *movimento* to the four permutations of motion between the two types of consonance, perfect and imperfect.

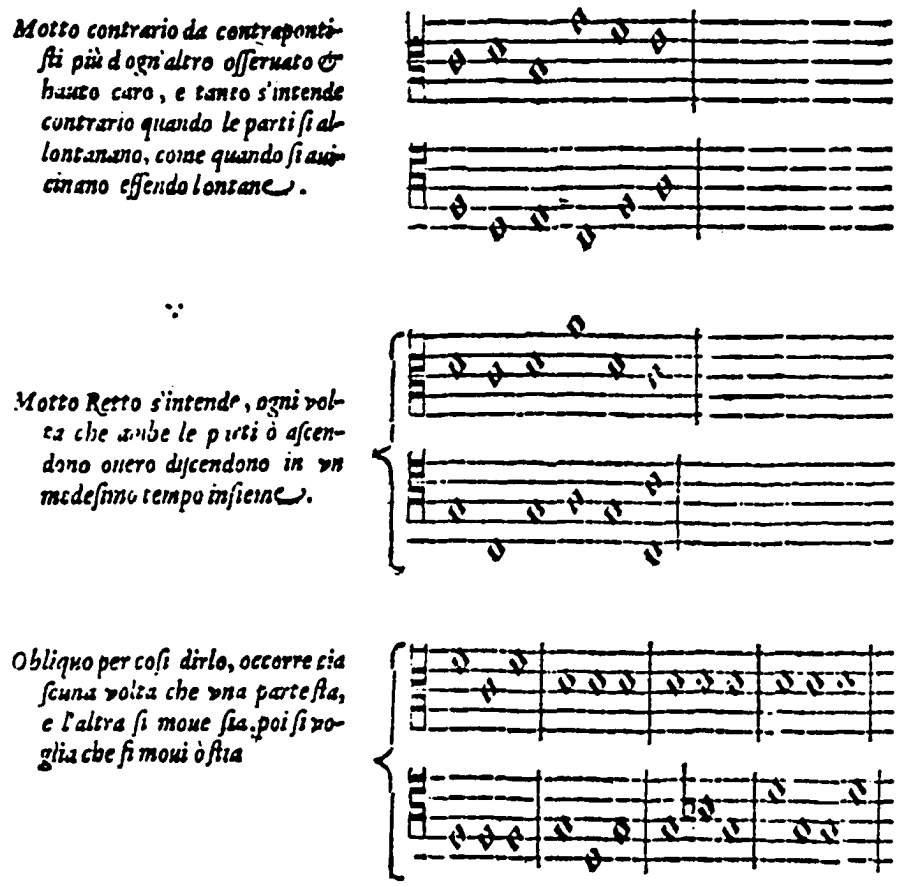
Artusi began his exposition of motion between consonances with the diagram in Ex. 4.1. In this table, the two types of consonances, perfect and imperfect, are arranged so that all of the permutations between them are clearly visible. These permutations are then identified by letters, and the motions for which they stand are represented by the combinations of letters.

Ex. 4.1—The four *movimenti*, from Artusi's *L'arte del contraponto* (1586), p. 18



Artusi followed this diagram with three pages illustrating the diagram's four permutations: perfect to perfect (A-B), perfect to imperfect (A-D), imperfect to perfect (C-B), and finally, imperfect to imperfect (C-D). Each permutation was, in Artusi's terminology a *movimento*. He then provided a set of charts for each of these permutations, or *movimenti*, showing how each could use the three possible motions, or *motti*: direct, contrary, and oblique. Ex. 4.2 is the first of these four charts which presented the *movimento* from A to B, or from one perfect consonance to another. Under this are depicted the three *motti*, contrary, similar (or direct), and oblique.

Ex. 4.2—*Movimento* between perfect consonances and its three *motti* from Artusi's *L'arte* (1586), p. 19



All subsequent theorists who used this information—including the seventeenth-century theorists Diruta, Bononcini, and Berardi—adopted Artusi's unwieldy terminology. Fux's Latin, however, sidestepped Artusi's awkward terms. Mann's English translation of "variety is the result of progression from one interval to another, and progression, finally is achieved by motion," is in Fux's Latin "varietas transgrediendo de uno intervallorum ad aliud generatur. Transgressio motu perficitur."[16] Fux's use of *varietas*, and *motu*, for variety and motion are clearly understood. Fux's choice of the word *transgressio* is less obvious. Manfredi's 1761 Italian translation of *Gradus* clarified this meaning,

[16] Fux, *Gradus*, 41; Mann, *Counterpoint*, 21.

for here the literal translation reads "variety is generated by the passage of one interval to another, and the passage is made through motion."[17]

Manfredi translated Fux's Latin term *transgressio* with the modern Italian *passaggio*, a word that had a very specific meaning in Italian contrapuntal theory. Manfredi understood that Fux was describing the study of voice-leading, a study synonymous in Italian contrapuntal literature with the *passaggi*. Thus Artusi, in his four charts generated from the table given in Ex. 4.1, reduced his teacher's *passaggi*—those dozens of voice-leading patterns and examples—found in Zarlino's *Istitutioni* (1558). Fux's wording and Manfredi's subsequent translation made it clear that he understood the relationship of these simple rules to the Italian system of the *passaggi*. Fux's use of these rules stemmed from the changes enacted upon Artusi's ideas by Diruta, and the appearance of Diruta's new set of *movimenti* in Berardi's *Miscellanea* (1689).

Diruta's four *movimenti*, or *passaggi*, further reduced the information in Artusi's *L'arte*, a work with which Diruta was obviously familiar. However while Artusi, who followed in the steps and spirit of Zarlino, was being comprehensive in his discussion of the *passaggi*, Diruta was an improviser at the keyboard and required a simpler, more direct method of teaching counterpoint as an improvisational aid.

Diruta completely sidestepped a great deal of Artusi's detail. He neither dealt with each of the four permutations nor showed how all three of the possible motions could be used for them, opting instead for the simpler, generally preferred motion for each of the four permutations. The formulations are not original to Diruta. For instance, the fact that motion into

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[17] "La varietá si genera passando da uno degl' intervalli all' altro: il passaggio si fa col moto" (*Salita*, 42).

an imperfect consonance could be effected freely was probably an idea in common usage. It is given at the same time in a different but unclear format in Chiodino's *Arte pratica* (1610). It is also mentioned by Artusi at the bottom of p. 18 of *L'arte*, the page that contains the diagram given in Ex. 4.1. On this page, Artusi stated:

> It is according to some pedants who say that in two of these movements one may and should proceed without any convention [rule], which motions are these [from a perfect to an imperfect and from an imperfect to an imperfect]. Whether their opinion is reasonable I leave to the judgement of those who are consumed by such things.[18]

Chapter three of this dissertation stated that the system of the *passaggi* was a system of teaching counterpoint through an exhaustive inventory of intervals. Given this foundational viewpoint, it is easy to understand Artusi's withering injunction of the "pedants" who reduce all of the intricacies of voice leading to simple rules devoid of sophistication. Artusi does not identify the "pedants," but the rule allowing free motion toward an imperfect consonance was, more than likely, in common usage and of practical value since Diruta risks "pedantry" by quoting it as part of his four rules of motion in his 1609 treatise *Il transilvano.*

Diruta improved Artusi's charts by clearly labeling the three *moti*, thus avoiding some of the confusion surrounding the terminology. He then listed the four rules of motion, or *movimenti*, followed by six pages that give highlights of Zarlino's and Artusi's *passaggi*. Diruta repeats the prohibition against parallel major or minor intervals, the avoidance of harsh cross

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[18] "E parso ad alcuni troppo sacenti di dire che in dui di questi movimenti, si possa e si debba procedere senza rispetto alcuno, et motti sono questi. Quanto la loro opinione sia regionevole lo lascio iudicare á quelli che in cio sono consumati" (*L'arte*, 18).

relations, the avoidance of diagonal tritones, and numerous other details of voice-leading that form exceptions to the four *movimenti*.

Fux's source for the four rules was Berardi's *Miscellanea* (1689). Berardi followed Diruta in listing the three *moti*—similar, oblique, and contrary—and the four *movimenti* based on them. However, Berardi reduced all of his counterpoint instruction to numbered rules, the *movimenti* being listed as the first four rules of note-against-note counterpoint. It is from Berardi that Fux acquired the transformation of the four *movimenti* into the four rules of motion.

Berardi also dropped the requirement to move by half step in contrary motion from an imperfect consonance to a perfect consonance, an integral part of Diruta's rules and of Zarlino's and Artusi's *passaggi* from which they were codified. Berardi streamlined the rules in the manner adopted by Fux, and in the manner familiar to modern counterpoint texts.

Ex. 4.3—Berardi's four *movimenti* from *Miscellanea* (1689), p. 104

Prima Regola.

Il primo mouimento ſarà per moto contrario, cioè dalla conſo-nanza perfetta, ad vn' altra perfetta ſi và per moto contrario.

Seconda Regola.

Il ſecondo mouimento ſarà per moto contrario, cioè dalla con-ſonanza imperfetta, ad vna perfetta ſi và per moto contrario.

Terza Regola.

Il terzo mouimento ſarà come ſi vuole, cioè dalla conſonanza perfetta, ad vna imperfetta come ſi vuole.

Quarta Regola.

Il quarto mouimento ſarà come ſi vuole, cioè dalla conſonanza imperfetta, ad vn' altra imperfetta come ſi vuole.

Table 4.1 shows how the order of the rules changed from Artusi to Fux. Artusi's ordering emphasized the permutations, so he proceeded systematically from perfect to imperfect. It is unclear why Diruta changed Artusi's order, but his ordering stressed like intervals first (perfect to perfect and imperfect to imperfect), and unlike intervals next. Berardi's ordering stressed like motions.

Thus, the two contrary motions are placed as the first two rules, and the free motions are the next two.

Fux adopted Berardi's terminology of "rules" instead of motions, but his grouping by interval type echoes Artusi's original formulation. It is impossible to say with any certainty that Fux had access to Artusi's treatise. However, the departure from either Diruta's or Berardi's widely copied and influential orderings raises the possibility that Fux was familiar with the older tradition.

Table 4.1—The ordering of the four rules of motion in Artusi's *L'arte* (1586), Diruta's *Transilvano* (1609), Berardi's *Miscellanea* (1689), and Fux's *Gradus* (1725)

Type of motion	Artusi	Diruta	Berardi	Fux
perfect–perfect	Rule 1	Rule 1	Rule 1	Rule 1
perfect–imperfect	Rule 2	Rule 3	Rule 3	Rule 2
imperfect–perfect	Rule 3	Rule 4	Rule 2	Rule 3
imperfect–imperfect	Rule 4	Rule 2	Rule 4	Rule 4

Conclusions

This chapter has shown that Fux considered *musica pratica* to be composition; all other information was *speculativa*. For this reason, Fux moved the voice-leading rules for consonances into *Gradus's* Book One, separated from the main study of counterpoint. *Gradus* was conceived, therefore, as a composition manual in accord with German music theory, which taught counterpoint as the first lessons in composition, and in distinction to Italian music theory, which differentiated between counterpoint and composition. This aspect of *Gradus* marked its first break with Italian music theory. Finally, out of the numerous versions of the three types of motion and the four rules based on them, Fux's share similarities with those found in Artusi's *L'arte del contraponto* (1586) and Berardi's *Miscellanea* (1689).

CHAPTER FIVE

First Species

Note-against-note counterpoint traditionally formed both the longest and most rule-bound section of a counterpoint treatise. Whereas the other species offered alternatives to solving compositional problems, note-against-note counterpoint presented few options and numerous prohibitions and restrictions. The first-species section in two voices, comprising ten pages, is the longest section in *Gradus*, in comparison to seven for second species, six for third, seven for fourth, and five pages for fifth species. In addition, first species in two voices is almost wholly given to prose explanations. As *Gradus* progresses through the other species, increasingly greater space is given to presenting the exercises with little or no accompanying prose.

This chapter will show the following:

1. Fux's first five rules are generic and common to any treatise that used the system of the eight rules, but Fux reinforced these rules that ideas freely combined from Zarlino, Diruta, Kircher, Berardi, and Bononcini, as well as ideas best ascribed to the oral tradition.
2. Fux constructed the first exercise with only a minimal number of rules, a drastic reduction in comparison to any other treatise. The first exercise

and its accompanying analysis model prototypes in Diruta's *Transilvano* (1609) and Kircher's *Musurgia* (1650).

3. The sixth rule deals with modal theory, which Fux adapted in order to place more emphasis on the structural role of the bass. Fux reuses a cantus firmus in each of the six modes, an approach to modal theory that differs from sixteenth- and seventeenth-century counterpoint treatises.
4. The final rules discussed the effect of leaps and motion between perfect consonances. Fux's discussion of hidden fifths borrows from Diruta, and his discussion of the *ottava battuta* from Berardi and Bononcini.

Preliminary Rules for First Species Counterpoint

Gradus's dialogue begins with the age-old statement that counterpoint received its name from the "points or dots" once used to represent notes. The juxtaposition of notes, or points, yielded the term "counterpoint" to composition. Fux defined counterpoint as "a composition which is written strictly according to technical rules." Mann freely translates Fux's Latin, which literally reads "a composition diligently made according to the rules of [the] art."[1] Fux avoided fussy Italian definitions, deriving his from the fact that the cognate *Kontrapunkt* was used synonymously with the German term "reine Satz," or strict composition. Mann's free translation rightly acknowledges the North European orientation of Fux's definition.

Fux turned back to Italian models when he stated that counterpoint begins with a "given melody or cantus firmus, which we invent ourselves or select from a book of chorales."[2] Here he followed in Zarlino's footsteps, whose

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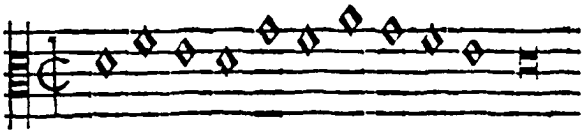
[1] ". . . nomine Contrapuncti Compositio intelligitur ad Artis Regulas elaborata" (*Gradus*, 45).

[2] Fux, *Gradus*, 44; Mann, *Counterpoint*, 27.

statement, "first the subject without which nothing can be made," became an immutable part of the canon.[3] Unlike Zarlino, who chose portions of chant as cantus firmi, Fux freely invented homogeneous cantus firmi which avoided all of the idiosyncrasies of actual chant. These cantus firmi always start on the first degree of the mode, end with the second degree of the mode descending to the first degree, never repeat notes, never feature intermediate cadences, and offer the simplest outlines of hexachords or octaves.

Ex. 5.1—Fux's D-mode cantus firmus, from *Gradus* (1725), p. 45



Having established the musical idea upon which he will work, Fux introduced his first rules of simple counterpoint:

1. Use only consonances picked according to the four rules.
2. Move as much as possible by contrary and oblique motion.
3. Use more imperfect than perfect consonances.
4. Begin and end on a perfect consonance.
5. End the exercise using
    a) a major sixth expanding to an octave if the cantus firmus is in the upper voice,
    b) or a minor third collapsing to a unison if the cantus firmus is in the lower voice.

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[3] Zarlino, *Istitutioni*, 171; Marco, *Counterpoint*, 51.

Rules One and Two—Using the Four Rules of Motion

Fux relegated virtually all choices among consonances to Diruta's four rules of motion, which stood in stark contrast to the redundant rules of motion contained in the system of the eight rules. By referring the student to those four rules Fux pared down the information he presented with first species. Nevertheless, Fux was not completely immune to redundant rules, one of which urged students to move as much as possible by contrary motion. Berardi echoed Diruta in linking contrary motion with *contrappunto osservato*, or counterpoint in the strict style, contrary motion being "most observed and valued by good composers."[4] In contrast, Diruta also mentioned *contrappunto commune*, or counterpoint in the "common" style, which did not follow the prescribed motions strictly, but only required that a composer not allow parallel fifths and octaves. Fux modified the preference for contrary motion by stating:

> contrary and oblique motion should be employed as often as possible, since by their use we can more easily avoid mistakes. Greater care is needed in moving from one note to another in direct motion.[5]

Fux included oblique motion as a useful expedient for cantus firmi that have no repeated notes, though he is not completely in line with the Italian theorists who discouraged repetition. Though the terms *osservato* and *commune* never appear in *Gradus*, the sixteenth- and seventeenth-century Italian theorists would have considered Fux's freer approach to have been closer in spirit to Diruta's *contrappunto commune*.

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[4] "Il moto contrario . . . e questo moto maggiormente viene osservato, e stimato da buoni Compositori" (*Miscellanea*, 103).

[5] Fux, *Gradus*, 45; Mann, *Counterpoint*, 27.

Rule Three—More Imperfect than Perfect Consonances

The next rule, that more imperfect than perfect consonances be used, leads to Fux's first extended discussion. Josephus questions the fact that although the counterpoint features more imperfect consonances, it must begin and end on a perfect consonance. The ensuing narrative highlights Fux's reliance on and free interpretation of the system of the eight rules.

> The imperfect consonances, then, are more harmonious than perfect ones; the reason will be given at another time. Therefore, if a composition of this species, having only two parts and being otherwise very simple too, should contain very many perfect consonances, it would necessarily be lacking in harmony. The rule concerning the beginning and the ends is to be explained in this way: the beginning should express perfection and the end relaxation. Since imperfect consonances specifically lack perfection, and cannot express relaxation, the beginning and end must be made up of perfect consonances.[6]

Fux's explanation of why counterpoint features more imperfect consonances than perfect consonances was a standard part of the system of the eight rules, involving two distinct but related ideas. The first was that imperfect consonances generated forward motion due to their greater harmoniousness and were, therefore, to be used more frequently. This idea antedated Zarlino, but the specific reference to "harmony" as a quality lacking in perfect consonances but present in imperfect consonances was a direct link to Zarlino and his terminology. Fux had already referred to Zarlino in the first book of *Gradus*, where his ideas of harmony, variety, and progression were connected with motion. The second idea, that the counterpoint should both begin and end on a perfect consonance, applied the familiar language of "perfection" to ending a compositional exercise. While Fux's use of the term perfection was clear, what he implied by the term was not.

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[6] Fux, *Gradus*, 46; Mann, *Counterpoint*, 28.

Rule Four—Begin and End on a Perfect Consonance

The statement that "the beginning should express perfection and the end relaxation" was an oft-quoted line from Gafurius's original set of eight rules. Fux's use of this line raises a difficulty stemming from the differing interpretations applied by sixteenth- and seventeenth-century theorists.

Sixteenth-century Italian theorists understood the phrase "expressing perfection" to mean that the final cadence of the counterpoint was on the final of the mode, and often quoted Gafurius's statement that "perfection is a characteristic of the end and not of the beginning of a thing." Zarlino, who also quoted this line, further explained that "one begins on the extreme or middle points of the modes on which the melody is founded," only to arrive at the final at the end of the counterpoint.[7] Zarlino acknowledged that chants often began away from the final, and that counterpoint written above this chant may very well feature intermediate cadences on other tones. Thus, to the sixteenth-century theorists, perfection simply meant that the mode had to be firmly established by the final cadence. Discrepancies could be tolerated at the beginning or during the course of a piece, but the ending had to define the final of the mode securely.

Seventeenth-century Italian theorists repeated Gaffori's statement about perfection, but meant something different from their sixteenth-century counterparts. The issue for the seventeenth-century theorists involved whether or not an imperfect interval was allowable as a beginning or ending, as in Bononcini's comments, below:

> The rule about beginning with a perfect consonance is not so absolute that in compositions (I'm not speaking about counterpoints) one cannot begin with a major or sometimes with a minor imperfect consonance. One ends

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[7] Zarlino, *Istitutioni*, 173; Marco, *Counterpoint*, 55.

> in a perfect consonance, because in the ending is the perfection of whatever thing. However, some have ended their pieces for two voices with a major third or tenth.[8]

Bononcini required that the first and last intervals be perfect, but wisely recognized that composers in the late seventeenth century did not compose this way. He therefore distinguished counterpoint from composition; counterpoint followed the strictest procedure of beginning and ending with perfect consonances, but composition was allowed the freer usage of thirds at the beginning and end.

Fux's use of the phrase "the beginning should express perfection" combined aspects of both sixteenth- and seventeenth-century meanings. Conforming to the understanding of the seventeenth-century Italian theorists, the counterpoint must start and end on a perfect interval. However, as will be demonstrated during the discussion of the sixth rule, Fux placed modal requirements on this interval as well. Both voices of a counterpoint exercise must be in the same mode, and both the starting and ending interval must clearly define the final. How Fux defines the mode, however, marked a departure from his sixteenth- and seventeenth-century sources.

Rule Five—Ending the Exercise

Fux's statement that the "ending should express relaxation" is the closest he came to defining a cadence. The term "cadence" is never used in the section on two-voice counterpoint, appearing only in passing midway through three-voice counterpoint, when Josephus expresses difficulty in ending his E mode

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[8] "La regola del principiare in consonanza perfetta non è così fatale, che nelle Composizioni (non dico ne' Contrapunti) non si possa dar principio in consonanza imperfetta maggiore, & alle volte minore. Si termini in consonanza perfetta, perche nel fine consiste la perfezione di qualunque cosa, se bene alcuni hanno terminati i loro Canti à due voci in terza, ò decima maggiore" (*Musico prattico*, 69).

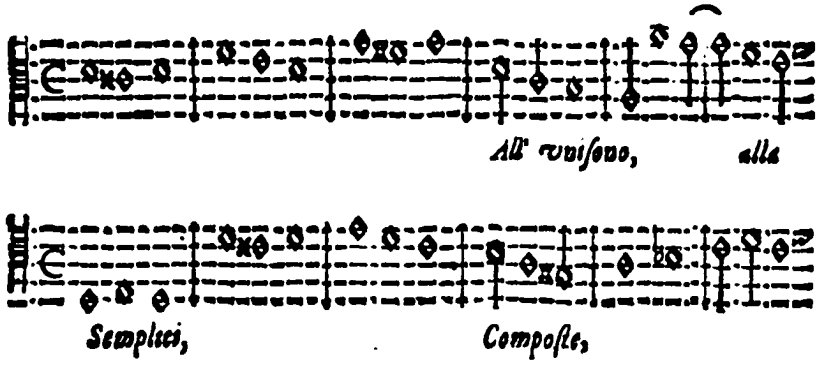
counterpoint. Fux's explanation is closely related to the standard definitions of cadence as denoting the "general relaxing of the *concento*," or explaining that "the [word] *cadence* is taken from [the word] falling, because it is the sign to descend and finish."[9] Instead, Fux replaces the term with a simple formula for ending the counterpoint exercises:

> Finally, it should be noticed that in the next to the last bar there must be a major sixth if the cantus firmus is in the lower part; and a minor third, if it is in the upper part.[10]

Fux's cadential formula is based upon which voice contains the cantus firmus. Since Fux's cantus firmi all end $\hat{2} - \hat{1}$, a single cadence formula sufficed for all of the species.

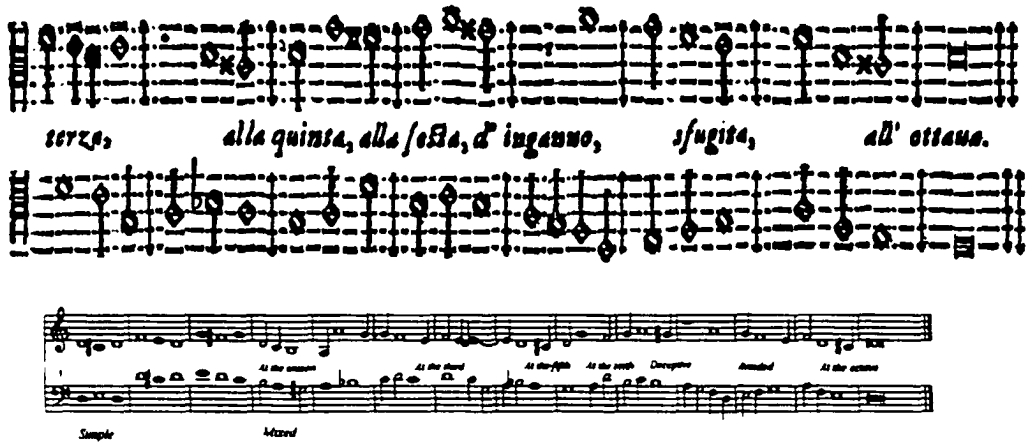
Sixteenth- and seventeenth-century Italian music theorists illustrated cadences through numerous examples from which the student could derive some idea of cadential construction. These examples often illustrated the cadential levels in the various modes as well. One of the most condensed of these set of illustrations was Bononcini's, given as Ex. 5.2.

Ex. 5.2—Bononcini's cadential examples, from *Musico prattico* (1673), pp. 80-1



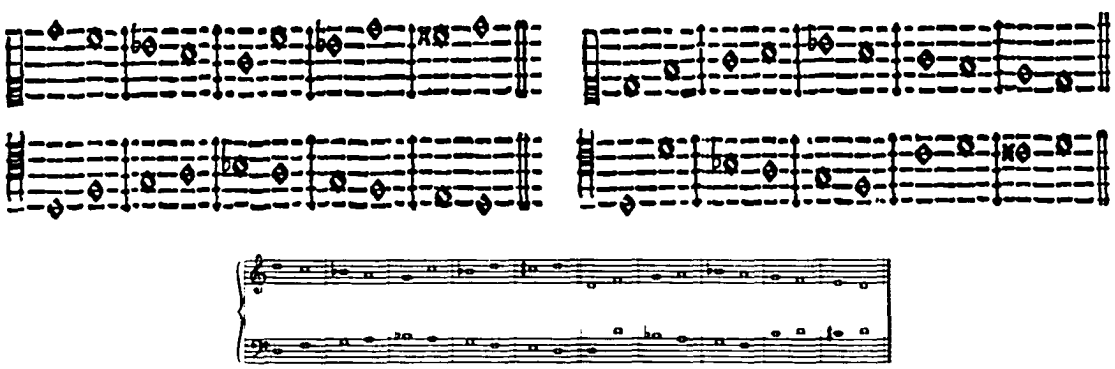
[9] "... denotano la quiete generale del concento ..." (*Musico prattico*, 70); "La cadenza è detta dal cadere, perche gli è segno di cadere & finire ..." (*Arte pratica*, 29).

[10] Fux, *Gradus*, 46; Mann, *Countepoint*, 28.



In comparison to either Zacconi or Berardi, Bononcini vastly reduced his cadential lists. Nevertheless, they presented too much information for a beginner. Bononcini's first two whole-note examples gave Fux's formula alongside the Medieval cadence of a major third moving to a perfect fifth, surely an oddity to eighteenth-century ears. However, Bononcini adopted a different approach for his elementary examples of species counterpoint. The cantus firmus in these examples, a rising and descending hexachord, always ended $\hat{2} - \hat{1}$ and the counterpoint with $\hat{7} - \hat{8}$.

Ex. 5.3—First species counterpoint, from Bononcini's *Musico prattico* (1673), p. 74



Like Fux's, all of Bononcini's species counterpoint examples ended with either a major sixth moving out to an octave, or a minor third moving in to a unison. Fifths were allowed for beginnings, but not endings. Bononcini's

source for this construction was the system of the eight rules, as described by Giovanni d'Avella:

> One needs to observe eight rules to make ordered counterpoint. First, always begin with a perfect consonance, a fifth or octave (this could also be a unison) in order to attract the ear. Second, one must likewise end on a perfect consonance (but not on a unison in order to give a fullness to the piece and impart a sense of completeness to the listeners). Third, all of the penultimate consonances should as much as possible be thirds or sixths (whether simple or compound), either major or minor, which, as it is said, give priority to, and suspend the hearing to desire the perfect consonances.[11]

The clearest example of how the cadential formulas of the eight rules were incorporated into a species approach comes from the manuscript attributed to Carissimi, *Regulae compositionis authore signore Charissimi* (c. 1700). In this manuscript, the cadential formulas appear as the fourth and fifth rules under first species. The rules show signs of being miscopied by a poor student, since the fifth rule's indication that a major third be used in the cadence does not agree with the minor third in the example. Nevertheless, the minimal cadential formula of a major sixth and a minor third is clearly depicted.

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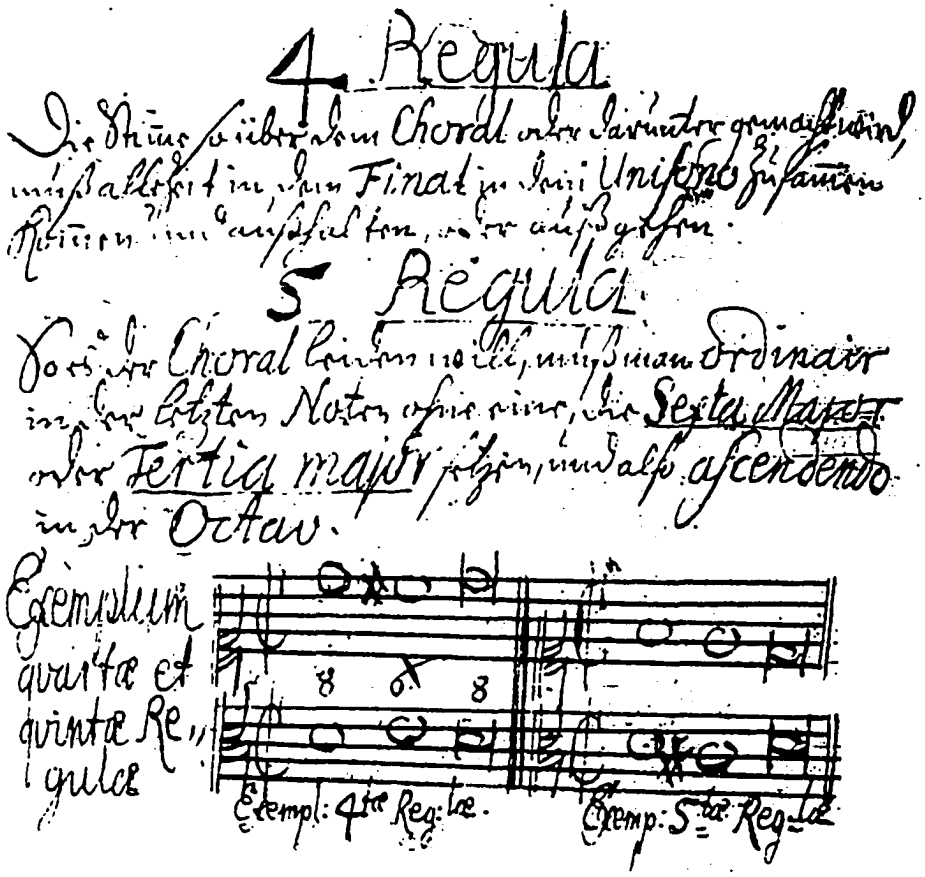
[11] Giovanni d'Avella, *Regole di musica* (Rome: Francesco Moneta, 1657), 145. "Otto Regole si devono osservar' in far' il contraponto ordinato. Prima, che sempre cominci da perfetta consonanza, quinta, ò ottava (può esser l'unisono) per allettar l'udito. secondo deve parimente finir' in consonanza perfetta (mà non unisono) per dar compimento al canto, e sodisfare à pieno agli astanti. terzo tutte le penultime consonanze siano al possibile, terze, ò seste (ò semplici, composte, ò ricomposte) ò maggiori, ò minori, queste, s'è detto, che danno priorito, e sospendono l'udito à desiderar perfetta consonanza."

Ex. 5.4—The cadential formulas, from the Carissimi MS (c. 1700), p. 3



Fourth Rule. The voices to be made either over or under the chorale must always come together in the final in a unison, where they may stay or move on.

Fifth Rule. One must ordinarily not end the chorale without using the major sixth or the major [minor?] third, and thus ascend to the octave [or descend to the unison].[12]

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[12] "4. Regula. Die Stimme so über dem Choral oder darunter gemacht wird, müß allezeit in dem Final in dem Unisono zusammen kommen und aushalten oder ausgehen. 5. Regula. Vor der Choral leiden will, müß man ordinair in den letzten Noten ohne eine die Sexta Major oder Tertia Major setzen, und also ascendendo in den Octav" (*Regulae*, 3).

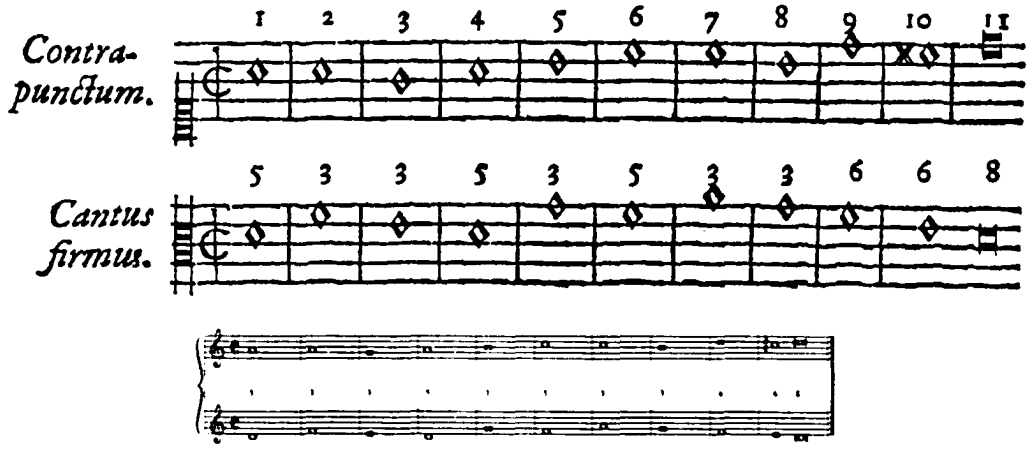
The First Exercise – Diruta and Kircher

Armed with five basic rules, Josephus begins his first counterpoint exercise. In comparison to any previous treatise, Fux accomplished an unprecedented reduction of information. Obviously aware of his feat, Fux has Josephus comment on it.

Jos: Is this all that is needed for this first species of counterpoint?

Aloys: It is not all, but it is enough to begin with; the rest will become clear by the correction.

Ex. 5.5—The first counterpoint exercise, from Fux's *Gradus* (1725), p. 47



Diruta's *Contrappunto Osservato*

Josephus then describes to Aloysius how he constructed his first counterpoint, demonstrating that his compositional choices were all derived from the three motions and four rules. This pedagogical method first appeared in Diruta's *Transilvano*, where, in identical fashion to *Gradus*, the Transylvanian described to Diruta how to choose consonances. Table 5.1 presents a portion of Josephus's analysis alongside that of the Transylvanian, highlighting Fux's reliance on Diruta's model.

Ex. 5.6—Diruta's *osservato* counterpoint, from *Il transilvano* (1609), p. 9

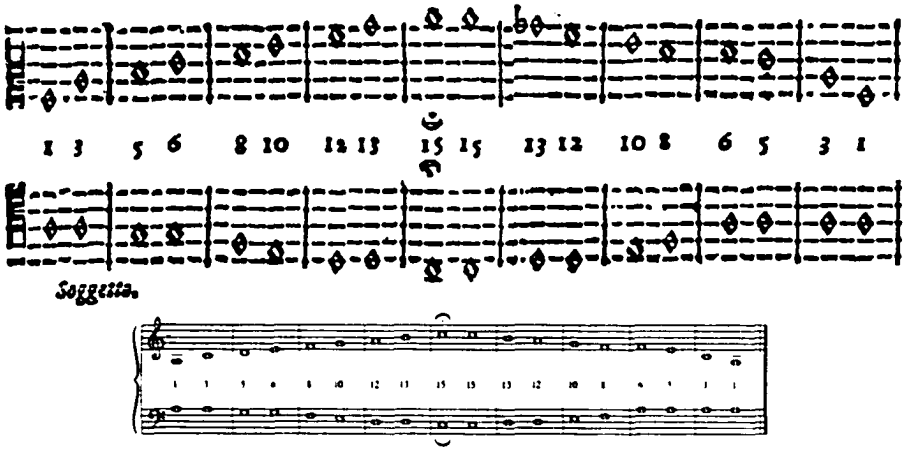


Table 5.1—A Comparison of the first exercises in Fux's *Gradus* (1725) and Diruta's *Il transilvano* (1609)

Gradus	*Il transilvano*
You told me the beginning should be a perfect consonance. I took one, choosing the fifth. . .	I feel I have well understood the way you have presented of moving from one consonance to the next closest one. Please stay and listen to me as I wish to examine it [the counterpoint] in your presence.
From the first bar to the second, that is from a fifth to a third or from a perfect consonance to an imperfect one, I went by oblique motion, which progression, however, would have been possible by any of the three motions.	The first consonance is the unison which seeks [to move to] the third. This is the third movement, which [says] one may proceed as one wishes, [right]?
From the second bar to the third, that is from a third to a third, or from an imperfect consonance to an imperfect consonance, I chose parallel motion, according to the rule: from one imperfect consonance to another imperfect consonance one may go by any of the three motions.	Then you go from the third to the fifth, [by] the fourth movement which is by contrary motion and half step [right]? In place of the half step the parts move by step, which in this case means moving from the third to the fifth without the half step as you have said [right]?

From the third bar to the fourth, or from a third, and imperfect consonance, to a fifth, a perfect one, I moved by contrary motion following the rule: from an imperfect consonance to a perfect consonance one must go in contrary motion.	You then move from the fifth to the sixth, [by the] third movement, [which states] move as you wish [right]?
From the fourth bar to the fifth, or from a perfect consonance to an imperfect one, I used similar motion as the rule allows.[13]	From the major sixth you move to the octave [by the] fourth movement which moves with contrary motion and half step, which appears in the soprano part.[14]

The two analyses are not identical since the counterpoints they describe are not identical. Nevertheless, both clearly depict the process whereby a student picked a starting consonance, chose the next consonance according to its governing rule of motion, and repeated the process to the final cadence. Berardi quoted Diruta with a clear citation when he printed Diruta's counterpoint and accompanying analysis in *Miscellanea* (1689). Berardi removed the requirement to move by half step and changed the order of Diruta's rules. However, whether Fux worked directly from Diruta's treatise or from the

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[13] Fux, *Gradus*, 47-48; Mann, *Counterpoint*, 29-30.

[14] "Mi pare d'haver inteso benissimo il modo, c'havete tenuto d'andare da una consonanza all'altra con la più vicina. Per cortesia statemi ad ascoltare, che lo voglio essaminare alla presenza vostra. La prima consonanza è unisono, qual va à trovare la Terza? Questo è il terzo movimento, che si và come si vuole? Andate poi dalla Terza alla Quinta, quarto movimento che si va con il moto contrario, & semituono? In luogo del semituono le parte vanno di grado, che in questo caso si può andare dalla Terza alla Quinta senza semituono, si come havete detto? Andate poi dalla Quinta alla Sesta, terzo movimento, come si vuole? Dalla Sesta andate all'Ottava, quarto movimento, che si và con il moto contrario & semituono, il qual lo fà la parte del Soprano" (*Transilvano*, 9).

citation in Berardi's, he would have been fully aware of Diruta's authorship and methodology.

Kircher's Counterpoint in the Church Style

Immediately prior to the analysis of his first counterpoint, Aloysius questions the numbers appearing above and below Josephus's exercise. Josephus responds that the numbers above the top staff are measure numbers which help him to locate his position effectively and thereby demonstrate the intentionality of his choices. The numbers between the staves correspond to the intervals and allow him to check the correctness of his motions.

> *Aloys*: You have done excellently; I am amazed at your intelligence and attention. But why did you put the numbers above the soprano and alto?
>
> *Jos*: By the numbers above the alto I wanted to show the consonances I used in order to run less risk—by having the movement from one consonance to another before me—of missing the right kind of progression. The numbers above the soprano 1, 2, 3, 4, 5, 6, 7, 8, etc., are only a numbering of the bars, so I can show you by them, revered master, that if I did correctly, it was not by accident but by design.[15]

The only source prior to *Gradus* which specifically instructed the student to number the intervals was Domenico Scorpione's *Riflessioni armoniche* (1701).[16] Scorpione had a dual purpose in mind in having the intervals numbered. It was both useful for knowing what the intervals were and for creating complete triads when adding more voices later. However, virtually every Italian treatise from the sixteenth and seventeenth centuries included an example of either numbered measures or intervals, mostly without comment. Kircher also numbered his measures and intervals but at one point used them to

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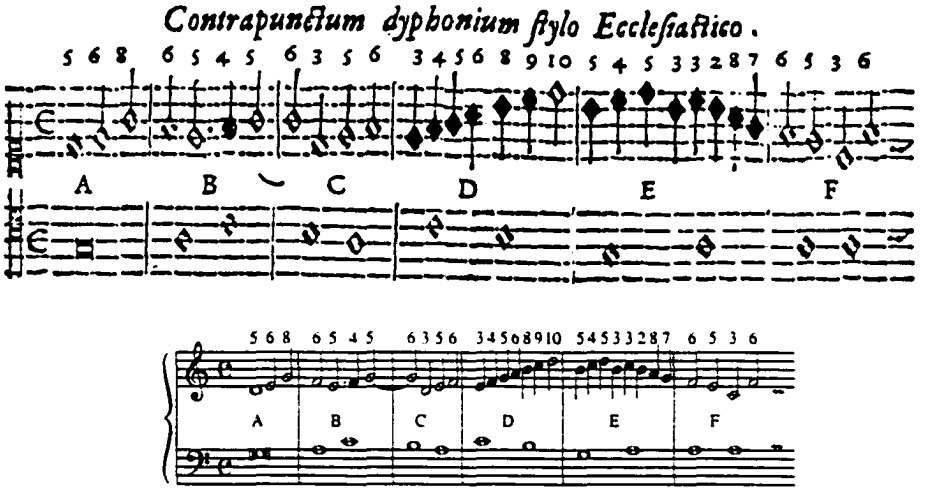
[15] Fux, *Gradus*, 46-7; Mann, *Counterpoint*, 28-9.

[16] Domenico Scorpione, *Riflessioni armoniche* (Naples: De Bonis, 1701) 124.

demonstrate how he constructed a counterpoint in the conservative church style. In a manner which recalls both Diruta's and Fux's analyses, Kircher repeatedly calls the reader's attention to how he generated his counterpoint by following the rules interval by interval and measure by measure. It is for this specific purpose that Kircher numbers all of his intervals and places letters in each measure in the same manner as Fux. A portion of Kircher's counterpoint in the church style and its accompanying analysis appears in Ex. 5.7.

Ex. 5.7—Counterpoint in the church style, from Kircher's *Musurgia* (1650), p. 309



And now, when the chant has been laid out and divided into single or double measures by means of lines, according to the first rule of the preceding chapter, let the cantus begin on a fifth, where the bass note consists of a breve, and let it proceed through a sixth to an octave by means of a semibreve and two minims, as measure A shows. Then, where there are semibreve bass notes in measure B, according to rule 5, let dotted minims respond in the cantus, as B shows. Thirdly, when the bass notes are semibreves, let the minim notes of the cantus respond according to the nearby intervals, as measure C shows. Fourthly, in the case of the bass notes in measure D, let the semiminims respond with a continuous ascent, according to rules 1, 2, and 3, and to the intervals, and thus finally let the characteristics of the cantus correspond to the remaining notes of the bass

(D through O), according to that motion which their ascent and descent shows, together with the consonances and dissonances ascribed to them.[17]

Fux recognized the usefulness of accurately being able to pinpoint measure and interval, and the logical pairing of Kircher's analysis with Diruta's careful description of selecting consonances according to the four rules of motion. Both Kircher's and Diruta's examples are unique in the contrapuntal literature. Fux could not have encountered them in any other source.

Rule Six—Modal Theory in Elementary Counterpoint

Fux taught only six authentic modes. Following Zarlino, he generated the modes from the seven octave species, which could be further divided either harmonically or arithmetically, yielding either a fifth or a fourth above the final of the mode. The seventh octave species (on B), however, yielded only tritones against the final and was, therefore, discarded as a model octave species for a mode. Fux further reduced the twelve remaining modes in a later section of *Gradus*. There, he dismissed the plagal modes, citing the frustrating inability of the authorities (Zarlino, Bononcini, and Berardi) to agree on what criteria distinguished a plagal from an authentic mode. Fux was left, therefore, with only the authentic modes on D, E, F, G, A, and C. Fux claimed that the resultant six modes gave rise to differing melodic lines; each mode had an individual character created by its uniquely placed half-steps.

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[17] "Posito itaquè Cantu Ecclesiastico A A. divisisquè singulis aut binis mensuris, per lineas, iuxta notam 1. præcedentis Capitis; Incipiat Cantus in 5. cum basi in brevi consistente per 6. in 8. tendat, per semibrevem, & duas minimas, ut spatium A ascendit; deinde notis basis semibrevibus in loculmento B. iuxta Regula 5. in Cantu syncopatæ minimæ respondeant, ut B demonstrat; Tertiò notis basis, semibrevibus respondeant cantus notae minimæ iuxta numeros harmonicos appositos, ut spacium C ostendit; Quartò bassis notis spacio D comprehensis, respondeant semiminimæ per continuum ascensum, iuxta Regulam" (*Musurgia*, 310).

All of the sixteenth- and seventeenth-century Italian theorists struggled with where in the course of contrapuntal instruction to teach the modes. Scorpione devoted ten pages to simple counterpoint, then inserted twenty pages of modal theory prior to teaching diminished counterpoint. Tevo taught the modes between diminished and imitative counterpoint and Berardi in the preliminaries immediately before simple counterpoint. Fux followed Bononcini and moved modal theory to the end of his treatise. However, he could not completely avoid modal theory during elementary counterpoint. As with his Italian counterparts, some basic ideas had to be dealt with earlier on.

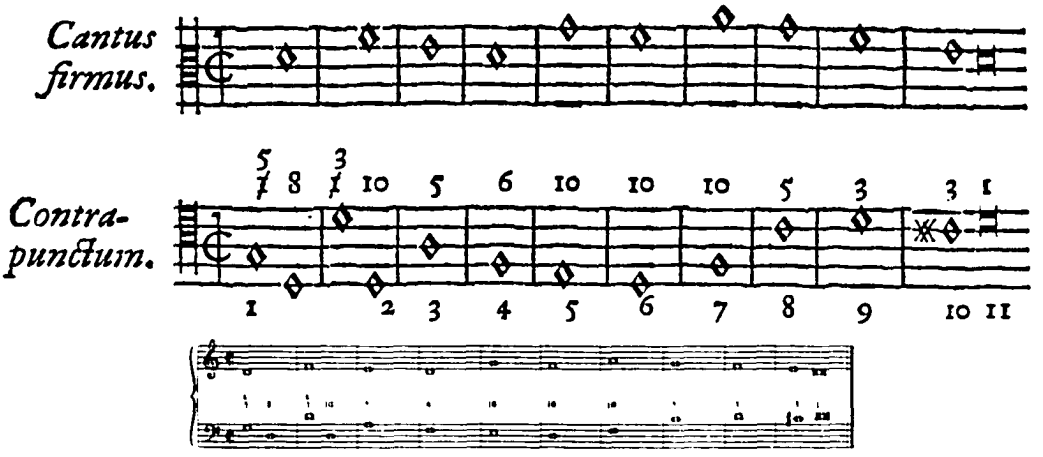
Fux offered a unique solution to this problem. Whereas virtually all of the Italian theorists taught counterpoint exclusively above the D mode, Fux's strategy integrated the six modes into the student exercises from the outset by constructing a different cantus firmus for each of the six modes C through A, then re-using them throughout the counterpoint instruction. In this manner, the idiosyncrasies of modal theory arose gradually rather than in a block so that preliminary instruction in the modes was accomplished "during the course of the instruction." Fux's solution was unique in the literature. No printed treatise offered such a procedure prior to *Gradus*.

Establishing the Mode

As has been stated, the term "perfection" had different meanings to sixteenth- and seventeenth-century theorists, meanings that combine in Fux's definition. In rule four, Fux implied that a piece of music had to begin and end on a perfect interval. When Josephus constructed his first counterpoint below the cantus firmus, Fux made it clear, through the voice of Aloysius, that modal issues had to be dealt with as well. Specifically, he prescribed that each voice of the counterpoint must be in the same mode and that this mode was established by the opening note of the lower voice.

The issue of how the mode of a composition was established arises when Josephus constructs his first counterpoint below a cantus firmus.

Ex. 5.8—Counterpoint below the cantus firmus in D, from *Gradus* (1725), p. 48



Jos: Why did you mark a mistake in the first and second bar, venerable master?

Aloys: The first mistake did not happen through any fault of yours, since you did not know the rule that the counterpoint must be in the same mode as the cantus firmus; I was just about to explain it to you. Since, in this example, the cantus firmus is in D (la, sol, re) as the beginning and conclusion show, and you started with G (sol, re, ut), you have obviously forced the beginning out of the mode. Because of this I have corrected the fifth to an octave, which establishes the mode as [that of] the cantus firmus.[18]

Since the beginning of the counterpoint did not need to "express perfection," sixteenth- and seventeenth-century Italian theorists allowed a lower counterpoint a certain freedom in how it started. Any momentary confusion created by the opening plagal relationship would be cleared up at the end of the piece. An example by Zarlino illustrates this point.[19]

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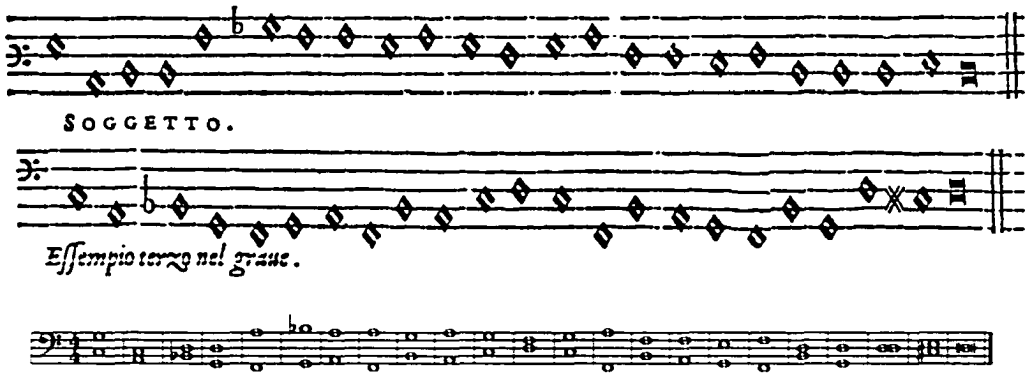
[18] Fux, *Gradus*, 48; Mann, *Counterpoint*, 31.

[19] The example shown, being one of several counterpoints above and below a single CF, has been forshortened in order to bring this counterpoint and its CF in proximity.

Ex. 5.9—Zarlino's counterpoint below a cantus firmus, from *Istitutioni* (1558), p. 193



Zarlino heard the subject of Ex. 5.9 as being in the D mode, this mode being firmly established by the final cadence. He was, therefore, no more troubled by the fact that his D-mode subject started on a G than he was about the counterpoint starting on the C below this opening G. Examples from Lorente, Nassarre, and Scorpione echo this same free approach to counterpoint below a cantus firmus.

Zarlino's holistic approach to determining mode considered the effect of various aspects on the whole while tolerating discrepancies in individual voices. Zarlino stated that "if the tenor occupies the notes of an authentic mode, the bass will contain the notes of the collateral, or plagal, mode. And vice versa, if the tenor occupies the notes of a plagal mode, the bass ought to contain the authentic mode."[20] Zarlino acknowledged that the various voices of a composition, though constructed from the same collection of pitches, could not occupy the same range. Further, "the mode in which a composition is written is established in the tenor," primarily, but one should also take into account "the form of the entire composition" and its ending "namely, by its

[20] Zarlino, *Istitutioni*, 337. English translation of Zarlino's *Istitutioni* Part Four from Vered Cohen, *On the Modes* (New Haven: Yale Univ. Press, 1983), 92.

final note."[21] According to Zarlino, then, the mode of a composition was established primarily by the tenor's range and the final cadence. Other factors, such as the opening interval, could affect our sense of mode but were considered secondary.

Fux required all voices to be in the same mode, but determined the mode of an upper and lower voice through differing criteria. The mode of an upper voice mode was not determined by its starting note but simply by its collection of pitches and final note. It could, therefore, start on a unison, fifth, or an octave above the final. The mode of the bass voice, however, was specifically established by its first note, indicating, therefore, that Fux has assigned a structural role to the bass voice—a role not acknowledged by Zarlino, Nassarre or Scorpione. By 1725 and the publication of *Gradus*, it was not the cantus firmus but the bass voice that determined the mode of the counterpoint, and it did so by always starting and ending on $\hat{1}$.

"Substantial" and "Accidental" Alterations

As a result of the discussion concerning the number and construction of the modes, Josephus raised a second issue: whether accidentals could be used to alter the fifth and a make the B mode usable. Aloysius answered that the alteration of the fifth would take the mode out of the diatonic system and into the realm of transposed modes; this advanced topic is taken up towards the end of *Gradus* in the section devoted to modal theory. Nevertheless, chromatic inflections are allowed which, presumably, did not contradict the diatonic system. Fux classified these two different types as either "accidental" or "substantial" inflections, or in Mann's terms, "nonessential" and "functional."

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[21] Zarlino, *Istitutioni*, 336; Cohen, *Modes*, 90.

The terms "substantial" and "accidental" were used twice in the section on two-voice counterpoint. They first appeared in third species when Aloysius questions Josephus's non-cadential use of B-flats. Josephus responded that "these B-flats would not be contrary to the diatonic system since, it seemed, they were introduced of necessity not substantially but accidentally."[22] Aloysius replied that "for the same reason sharps sometimes have to be used; when and where they are to be used, however, must be considered carefully."[23] The terms reappear at the beginning of fourth species to denote dissonance on weak beats through diminution (accidental) and strong-beat dissonance by suspension (substantial).

The terms "substantial" and "accidental" were standard terms from Aristotelian philosophy, where "substance" is the essence of a thing and "accidents" are simply outward manifestations of its essence, but not the thing itself. The two terms were, no doubt, familiar ones from Fux's early Jesuit instruction in Aristotelian grammar and rhetoric at the Jesuit University of Graz where he was admitted in 1680. The terms also have a specifically musical meaning.

Substantial Chromaticism. In his *Istitutioni* (1558), Zarlino discussed what chromatic inflections would be necessary to change a line of music from one mode to another, using the term "natural" to describe a chromatic note that changed the mode and the term "accidental" to describe a chromatic addition that did not cause a change in mode. Zarlino illustrated these concepts with a line of chant in the G mode (Ex. 5.10), stating that if the "B-natural were

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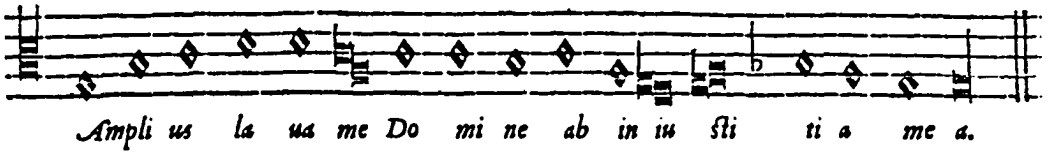
[22] "Ne obesse arbitror generi Diatonico cùm b. molliá illa non substantialiter, sed accidentaliter ex necessitate immixta esse constet" (*Gradus*, 69).

[23] Fux, *Gradus*, 69; Mann, *Counterpoint*, 54.

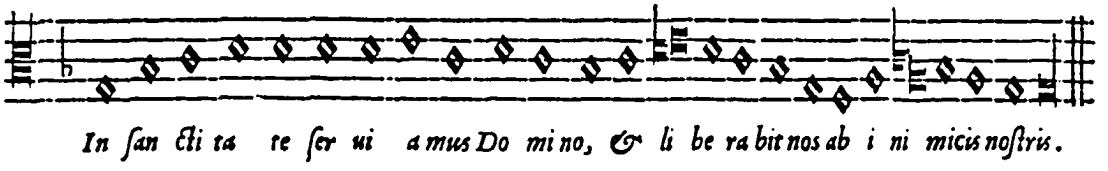
changed into B-flat only once or twice, it would not cause this mode to be transformed" but that the B-flat, "being accidental, does not change the form of the mode to the extent that it would not be recognized as the seventh."[24]

Ex. 5.10—Zarlino's example of "accidental chromaticism," from *Istitutioni* (1558), p. 318



Next, Zarlino offered a line of chant but with the flat added to the signature (Ex. 5.11), stating that this time "the note B-flat is natural and not accidental, and that it has the power to change the seventh mode into the first mode."[25]

Ex. 5.11—Zarlino's example of "natural" chromaticism, from Istitutioni (1558), p. 318



Subsequent editions of the *Istitutioni* in 1573 and 1589 retained the terms "natural" and "accidental," but Zarlino's final work, the *Sopplimenti musicali* (1588), amplified his earlier ideas.[26] In this work, Zarlino assumed a more philosophical stance, attempting to build a carefully constructed music theory upon Aristotelian logic. Zarlino stated:

> the form of artificial things are pure accidents, and those of the natural are genres of substance. The operation of art is founded on the operation of nature, and this (as Saint Thomas [Aquinas] instructs) is founded on the Creation.[27]

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[24] Zarlino, *Istitutioni*, 318; Cohen, *Modes*, 51.

[25] Zarlino, *Istitutioni*, 318; Cohen, *Modes*, 51.

[26] Gioseffo Zarlino, *Sopplimenti musicali* (Venice: Francesco de' Franceschi Senese, 1588; facs., New York: Broude Bros., 1966.).

[27] "Ma le forme delle cose Arteficiali sono puri accidenti, & quelle delle naturali sono Generi della Sostantia, & la operatione dell' Arte è fondata sopra l'operatione della

Having established the foundational thought that Nature is the substance and Art the accident, Zarlino substituted "substantial" for "natural" in the rest of the treatise, demonstrating that the best art imitated the "natural" or the world of nature which is the true "substance." Zarlino then moved systematically through the basic materials of music, discussing them as substance or accident. Arriving at the modes in Book Six, Zarlino stated:

> and just as everything in the world can be reduced to ten divisions, which are called categories, and each of these reduced to one of two other categories, one of which is substance and the other accident, so too each musical composition is comprised under one of twelve ideas or forms, or we could say categories, as I have demonstrated in the fourth part of the *Istitutioni*. Now their substantial forms are those parts of which they are composed, such as the fifth and the fourth; but their accidental [forms] are many, about which material, however, I have said enough.[28]

Zarlino's quote makes it clear that the "substance" of the twelve "forms," or modes, is the fifth and the fourth. The six usable octave species, divided either harmonically or arithmetically, created either a fifth with a fourth above, or a fourth with a fifth above. These, in turn, were the basis for the twelve authentic and plagal modes. Zarlino then proceeded through the remainder of the *Sopplimenti* to discuss the "accidents," or the outward manifestations of the modes and how they were used and manipulated. The use of these terms and

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Natura, & questa (come ne insegna S. Thomaso) è fondata sopra la Creatione . . ." (*Sopplimenti*, 20).

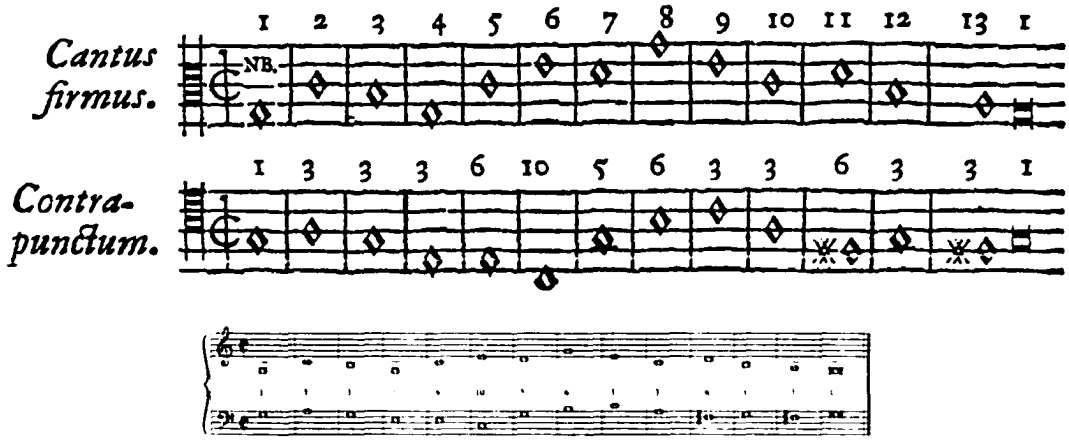
[28] "Et si come tutte le cose, che sono nel mondo si riducono à Dieci capi, che chiamamo [sic] Predicamenti, & ciascun di essi si riduce sotto l'uno di due altri capi, l'un de quali è la Sostanza & l'altro Accidente; cosi ogni Cantilena Musicale è compresa sotto l'una de Dodici Idee ò Forme, ò vogliamo dir Capi; come hò dimostrato nella Quarta parte delle Istitutioni. Hora le Forme sostantiali loro sono quelle parti, di che si compongono, come sono la Diapente, & la Diatessaron; ma le accidentali sono molte; la onde havendo ragionato di queste à sufficientia della loro materia" (*Sopplimenti*, 240).

their application to the modes were unique to Zarlino and the *Sopplimenti.* No subsequent theorist, other than Fux, adopted their somewhat obscure meanings.

Fux's use of Zarlino's quasi-Aristotelian terminology implies that, on the one hand, "substantial" chromaticism had some lasting, structural impact on the mode; it affected either the fifth against the final, the unique position of the half-steps in the octave species, or both. Either change resulted in a transposed mode removed from the diatonic system. On the other hand, "accidental" chromaticism affected neither of these, but arose "as needed," or in Mann's terminology, "non-structurally."

Accidental Chromaticism. Fux supplied three examples of "accidental" chromaticism. The first appeared as a result of the cadential formula that required either a major sixth or minor third as the penultimate interval. In the D, G, and A modes this major sixth can only be constructed with the addition of a sharp. This added sharp is assumed; neither Josephus nor Aloysius ever comment on its presence. The next two occur when Josephus adds a sharp to a note outside of the cadential formula. Through Josephus, Fux explained that chromaticism can also be used to create rising or descending half-step motion, represented by the solmization syllables "mi" and "fa" respectively. Finally, chromaticism can also used to help avoid "harsh relations" as in the counterpoint below, where the F in m. 11 has been chromatically altered to an F# in order to avoid a clash with the cadential F# in m. 13.

Ex. 5.12—Counterpoint below the cantus firmus in G, from Fux's *Gradus* (1725), p. 53



Aloys: But why did you put a sharp in the eleventh bar? This is generally not used in the diatonic system.

Jos: I wanted to write a sixth here. But when I studied singing, I learned that fa leads down and mi leads up. Since the progression moves upward from the sixth into a third, I have used a sharp in order to emphasize the tendency to ascend. Besides, the F in the eleventh bar would result in a harsh relation with the F# in the thirteenth bar.[29]

Joel Lester points out that "the relaxed manner in which Fux introduces and modifies his rules" is both a strength and weakness of *Gradus*, since it "yields numerous passages where the lack of systematization and formal rules leads to confusion over the criteria involved."[30] Lester discusses the same exercise and accompanying dialogue of Ex. 5.12 and notes that other counterpoint exercises in *Gradus* introduced chromatically altered notes which were neither instances of "harsh cross relations" nor chromatically inflected "mi's" or "fa's," but were introduced for reasons which balance more complex modal and contrapuntal issues.[31] As is often the case in *Gradus*, Fux supplied

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[29] Fux, *Gradus*, 55; Mann, *Counterpoint*, 39.

[30] Lester, *Compositional Theory*, 33.

[31] Ibid.

only the information the student needed at a particular juncture. More complex issues would arise as the student gained experience.

Unfortunately, Fux never broached Zarlino's key issue—the chromatic change of every instance of a particular pitch throughout a composition. In most of Fux's F mode examples, for instance, the note B never appears diatonically, but only as a B-flat. In spite of the fact that the note is consistently changed throughout the composition, Fux still maintained that the compositions were in the F mode. Thus, the line between substance and accident was never clearly defined.

Rule Seven—Perfect Consonances in Simple Counterpoint

As has been stated, the system of the eight rules featured redundant rules for motions between perfect consonances. Fux has already dealt with one of these in altered form: the preference for moving in and out of perfect consonances by contrary motion. But, the treatises that taught the *passaggi* gave numerous exceptions to this rule. Unisons and octaves, for instance, were discouraged on downbeats, except at cadences, and the repetition of a perfect interval through voice exchange was considered amateurish and therefore discouraged. Fux discussed two rules that Italian theorists consistently cited as problematic for students: hidden or direct fifths, and the difficulty surrounding unisons and octaves in simple counterpoint.

Hidden Fifths

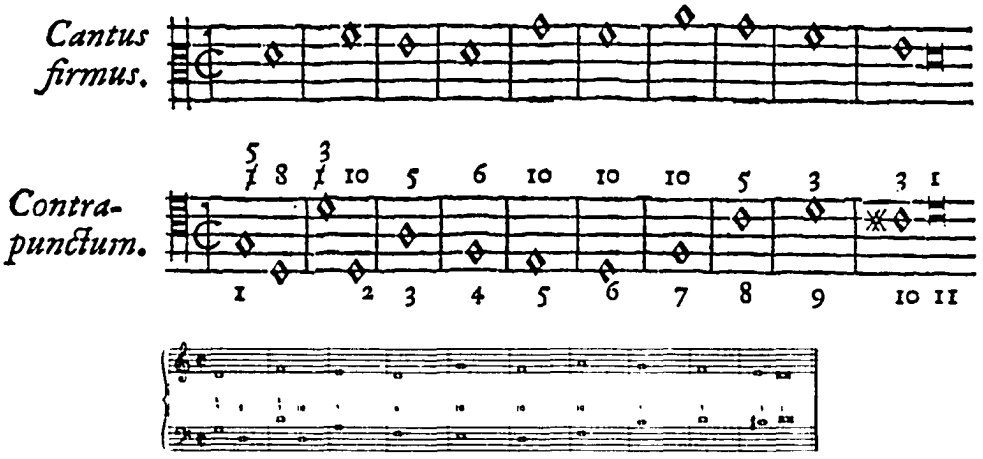
Aloysius commented on two errors immediately after Josephus's first attempt at counterpoint below a cantus firmus. The first error concerned starting the counterpoint "out of the mode," mentioned above. Josephus made little comment on Aloysius's observation that a starting bass note other than the first scale degree forces the piece out of the mode. The second mistake,

concerning similar motion into fifths, prompts a request for a more detailed explanation.

Jos: What kind of mistake have I made in the second bar?

Aloys: The mistake does not occur in the progression from the first to the second bar but in that from the second to the third. You moved from the third to the fifth in direct motion against the rule: from an imperfect consonance to a perfect consonance one must go in contrary motion.[32]

Ex. 5.13—Counterpoint below the cantus firmus in D, from Fux's *Gradus* (1725), p. 48



The first part of a novice musician's training in the seventeenth century would have always been in singing. This was true even up to the time of Haydn, who was trained as a singer in St. Stephen's, towards the end of Fux's life.[33] It is interesting, however, that very few of the seventeenth-century treatises took advantage of this background in singing to construct simple explanations to the practical problems encountered in counterpoint. Most theorists offered explanations involving ratios, dissimilarity between intervals, or other items pulled from *speculativa*. Fux, in his desire to be as accessible as possible, consistently provided examples which would have been familiar to a student accustomed to the conventions of singing.

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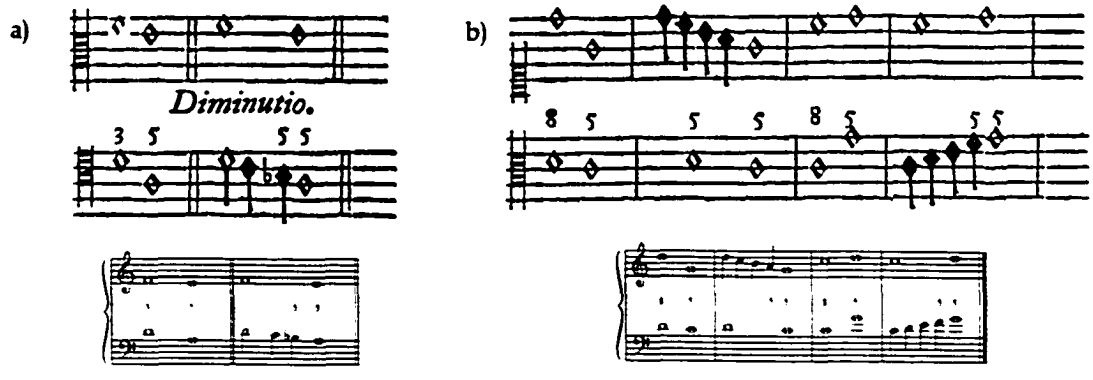
[32] Fux, *Gradus*, 49; Mann, *Counterpoint*, 31.

[33] Lester, *Compositional Theory*, 46.

In the case of direct fifths, Fux called on the student's familiarity with diminution, or filling in larger leaps with stepwise motion. A novice student at St. Stephen's probably worked through a manual like Fux's *Singfundament,* which taught students to sing melodies constructed around decorated rising and descending hexachords. The *Singfundament* features passages where a student first has to sing an interval as a leap, then repeat it filled in with various patterns of stepwise motion. Fux's comment that one would not fill in a particular interval "especially in singing solo," implied that there was also a separate practice of diminutions used in ensemble work; this is the closest that Fux comes to acknowledging the tradition of improvised counterpoint.

> In this instance . . . two fifths follow each other immediately, of which one is apparent or open, the other, however, concealed or hidden, and would stand out by the diminution of the interval, as I shall show you now in the example [5.14a]. This diminution a good singer would not make, especially in singing solo. The same thing holds for the progression from the octave into the fifth in direct motion where two fifths would immediately follow each other, as is shown by the following example [5.14b]. You see, then, how by the diminution of the skip of the fifth, two fifths, one of which was concealed before, become apparent.[34]

Exs. 5.14 a and b—How hidden fifths imply parallel fifths, from Fux's *Gradus* (1725), p. 49

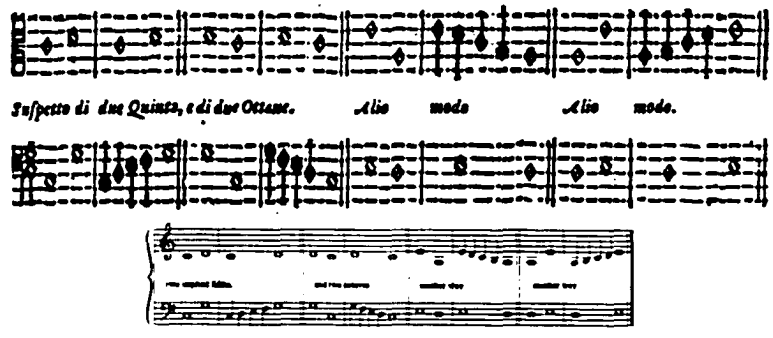


[34] Fux, *Gradus,* 49; Mann, *Counterpoint,* 32.

Virtually all of the seventeenth-century Italian music theory treatises featured a rule or section addressing hidden fifths. Thus, Chiodino, in his chapter "How to avoid errors," noted that hidden fifths "are not recognized by young people and beginners in this art."[35] However, the closest link to Fux's use of the terms "hidden or concealed," and certainly to the look of his examples, is Diruta's *Transilvano* (1609).

> *Transylvanian*: I would like to know why one cannot move from one perfect consonance to another without contrary motion.
>
> *Diruta*: According to some, it can be done, and they show examples to support this, saying that in some cases it must be used. I say that in the observed style of counterpoint it should never be used. In the common style it can be used, but only rarely, because from the leap of a fifth is born the implication of two fifths, and of two octaves. Would you like to see it clearly? Here is an example of notes moving by step, and black notes moving from C to G and G to C, from which are born two fifths and two octaves.[36]

Ex. 5.15—Diruta's example of how diminution highlights hidden fifths, from *Transilvano* (1609), p. 3



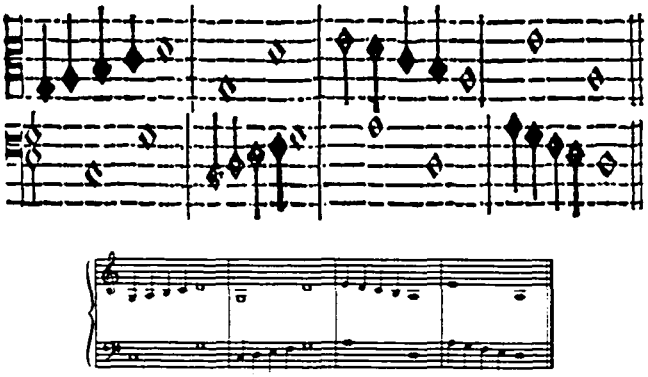
[35] "Alle volte s'erra, perche si fanno due quinte implicitamente, che non sono conosciute dalli giovani, è novitii in quest' arte, essempio" (*Arte pratica*, 35).

[36] "T: Desidero sapere, perche causa non si può andare dalla perfetta all' altra senza moto contrario? D: Vogliono alcuni, che se gli possa andare, & gli dimandano movimenti sopportabili; & dicono che se debbaiano usare rare volte: io dico, che nel Contrapunto osservato niun modo li dovete usare. Nel Contrapunto commune potrete si, ma di rado. La ragione è questa, che in quel salto di Quinta nasce il suspetto di due Quinte, & di due Ottave. Voletelo veder chiaro? Eccovi l'essempio dell' intervallo di grado, di note negre dal ut, al sol & dal sol al ut; nelli quali nascono due Quinte, & due Ottave" (*Transilvano*, 3).

Diruta's example was taken almost note for note from Tigrini's *Compendio* (1588), where it was used to illustrate leaps prohibited by the eight rules.[37] It was Tigrini to whom Diruta refers when he stated that "according to some, it can be done, and they show examples to support this, saying that in some cases it must be used." Tigrini followed his illustration of hidden fifths (Ex. 5.16) with two pages filled with exceptions to the rule. Diruta, however, incorporated Tigrini's example into his *passaggi* of perfect intervals which served as illustrations of his four rules of motion.

> It is also considered poor form [lit. un-praiseworthy] to have both voices in a composition move together either up or down by fifths, one moving by four semiminims, and the other by semibreves without any diminution as in this example.[38]

Ex. 5.16—How diminution highlights parallel fifths, from Tigrini's *Compendio* (1588), p. 47



Octaves and Unisons; the *Ottava Battuta*

A second example of how the redundant rules of motion were incorporated into *Gradus* involved the difficulty of using unisons and octaves in

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[37] Oratio Tigrini, *Il compendio della musica* (Venice: Ricciardo Amadino, 1588; facs., New York: Broude Bros., 1966).

[38] "Serà ancora poco lodevole il fare che in una Compositione l'una, & l'altra parte ascendano, ò discendano insieme per movimenti di Quinta, procendendo l'una con quattro semiminime, & l'altra per Semibreve senza diminutione alcuna, come in questo essempio" (*Compendio*, 47).

note-against-note counterpoint. Fux discussed these intervals in connection with the *ottava battuta*, which Mann translates as "beaten octaves," but which could be more clearly rendered as "downbeat octaves." The Italian theorists felt that downbeat octaves impoverished the harmony, creating an empty sound they found annoying. The forty-first chapter of Zarlino's *Istitutioni* (1558), "The unison and octave should be avoided as much as possible in counterpoint," clearly stated the issue that a counterpoint filled with perfect intervals was like bad poetry that assaulted the ear. Artusi followed this observation with his own, that one should "not allow octaves or unisons on the downbeat, but only on the second part or upbeat."[39] Finally, Bononcini summarized the issue, saying:

> as much as possible one should avoid unisons between the parts, and empty octaves against the soprano, because they are devoid of harmony. Some think that these two intervals are used identically, but the octave is better than the unison. If you use the octave it should fall on the second part of the semibreve, and it works better by step than by leap.[40]

Fux was puzzled that the theorists bothered to mention the *ottava battuta* at all. Fux pointed out the offending octave, in Ex. 5.17, attempted to describe the issue, then dismissed the entire subject as unimportant. Aloysius's commentary on this error follows the example.

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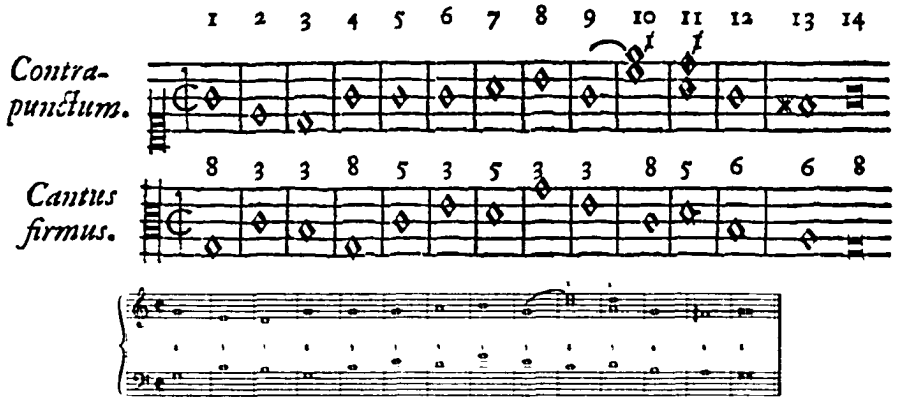
[39] "Non battera sopra la prima parte in unisono, ò in ottava, ma con la seconda nel levare" (*L'arte*, 23).

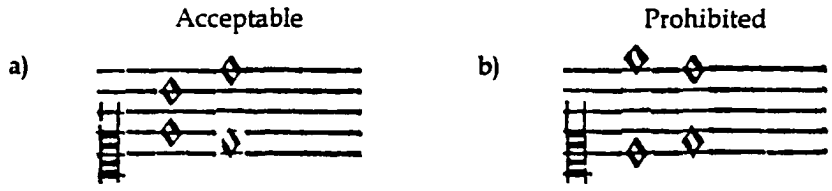
[40] "Più che sia possibile si schivino gli Unisoni frà le parti, e le ottave vuote con il soprano, perche quelli non rendono armonia, e queste (secondo alcuni) hanno somiglianza con quelli, è meglio però l'ottava, che l'Unisono, il quale facendosi deve essere nella seconda parte della Semibreve, e sarà miglior effetto di grado, che di salto" (*Musico prattico*, 71).

Ex. 5.17—Counterpoint in G with the *ottava battuta* marked as an error, from *Gradus* (1725), p. 53



From the tenth bar to the eleventh, you have brought together both voices from a tenth into an octave, leading them stepwise, the upper part down and the lower up. This octave, which is called *battuta* by the Italians and *thesis* by the Greeks—because it occurs at the beginning of the measure—is prohibited. I have long searched for the reason, but have found neither the nature of the mistake nor the difference that makes the octave in this example [Ex. 5.18a] acceptable, [but] in the following one [Ex. 5.18b] not acceptable, since in both figures it is approached by contrary motion.[41]

Exs. 5.18a and b—Acceptable and prohibited *passaggi* for the octave, from *Gradus* (1725), p. 53



For the Italian theorists, two issues surrounded the use of octaves on downbeats: (1) sixteenth-century Italian theorists viewed even note-against-note counterpoint against a duple background of two semibreves to the bar, in which octaves were allowed only on the second, or upbeat, semibreve; and, (2) these octaves had to be approached by the preferred *passaggi*.

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[41] Fux, *Gradus*, 49; Mann, *Counterpoint*, 32. In his notes, Mann states that he emended the fifth in this example to a sixth, E–C, based on "marginal notes in Latin . . . added by an anonymous reader apparently soon after the publication of the work [*Gradus*]" with which he worked. The change has a slight affect on Fux's argument and since Fux's *Errata* does not list the change the example has been left as printed.

Few seventeenth-century theorists recalled the fact that sixteenth-century theorists often specified two semibreves to the bar. For the seventeenth-century theorists, the issue was simply the one-to-one relationship of the notes, and, as Fux has stated, the note value was irrelevant. Scorpione was one theorist who did remember, and he attempted to draw a distinction between counterpoint written above a subject with two semibreves to the bar and one with a single semibreve to the bar.

> The student should begin then, by taking a subject entirely of semibreves, and compose two minims above each of the semibreves, with this consideration, that both the downbeat and the upbeat are consonant. For both of these parts of the beat are readily perceived. However, if the composition has one semibreve to the measure as shown by the semicircle, under which the minims are considered binary, then they must both be consonant. But if there are two semibreves to the measure as shown by the cut semicircle, in which there are four minims to the bar, the second and the fourth, which are placed above two semibreves, may be dissonant when the motion is by step above a single semibreve.[42]

Despite Scorpione's rather stuffy, archaic tone, his point that counterpoint could be written with two semibreves to the bar is clear. To Fux and the seventeenth-century Italian theorists who set counterpoint with one breve to the bar (transcribed as a whole note), all breves occurred on downbeats. Thus,

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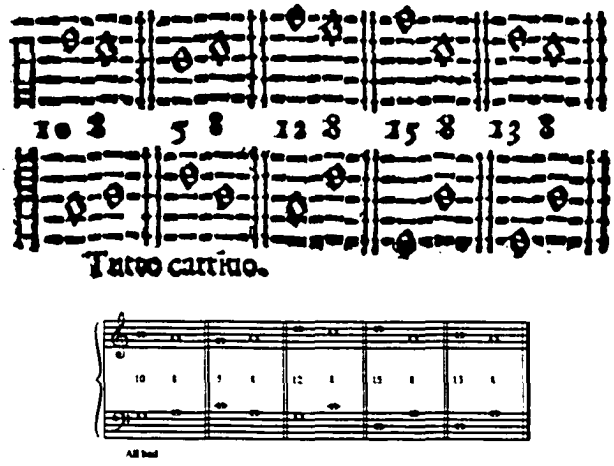
[42] "Potrà, dunque fu'l principio prendere un Soggetto, tutto di Semibrevi, e sopra ciascuna di esse farà, che la parte, che componerà, dia due Minime, e con questa consideratione, che il principio della positione, e dell' elevatione sia sempre consonante, per essere, che queste due parti della battuta, sono principalmente comprese dal senso, che però, se la compositione sarà sotto del Tempo detto alla Semibreve, dimostrato dal Semicircolo, sotto del quale le Minime sono considerate binarie, doveranno ambedue essere consonanti; ma se sarà sotto del Tempo detto alla Breve, dimostrato dal Semicircolo inciso, sotto del quale si considera il numero quaternario delle Minime, la seconda, e la quarta, che si metteranno sopra due Semibrevi, potranno essere dissonanti, quante volte si procederà di grado, e che le due Minime vadino sopra di una Semibreve" (*Riflessioni*, 136).

"downbeat octaves" were an impossibility in note-against-note counterpoint since there were no "upbeat" octaves from which to distinguish them.

The second of the above issues, that octaves had to be approached by the preferred *passaggi*, is illustrated in Exs. 5.18a and b. Fux's negative example, of a prohibited tenth moving to an octave, follows the the eighth rule of note-against-note counterpoint in Berardi's *Miscellanea* (1689). Berardi said of these octaves in Ex. 5.19 that "one must not give the octave the beginning of the measure, the cantus firmus descending by step and the counterpoint ascending by step."[43] As Fux's noted, Berardi specifically described these examples according to their stepwise motion.

Ex. 5.19—Berardi's prohibited *passaggi* to an octave, from *Miscellanea* (1689), p. 106



Berardi implied that the sole criterion for determining whether an octave could be used on the downbeat of the measure was an individual voice's direction of motion. In fact, Berardi's prohibition arose not as a result of direction but because both voices moved by step, violating the prescribed *passaggi* that required one voice to move by half step. The first interval, a major tenth,

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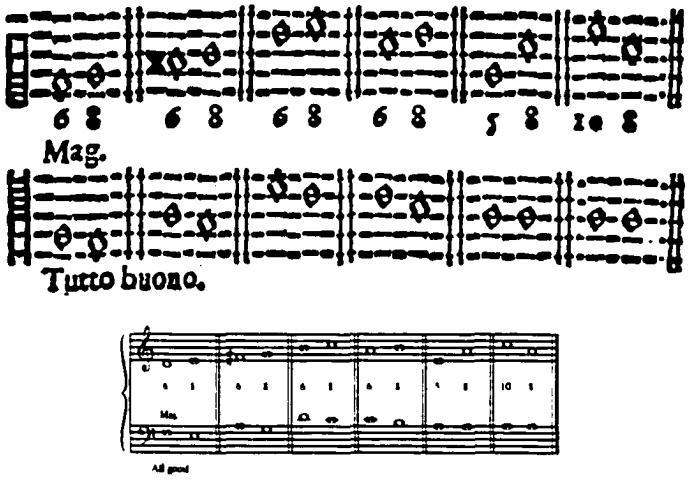
[43] "Non si deve dare l'ottava in principio di battuta, il canto fermo descende di grado, & il contrapunto ascende di grado" (*Miscellanea*, 106).

should have moved out to a twelfth, the three middle perfect intervals should not have moved to another perfect interval, and the last example (major thirteenth) should have moved out to a fifteenth.

Berardi then described how to use the octave at the beginning of a measure, accompanied by Ex. 5.20:

> But, if you want to give the octave the beginning of the measure, you may proceed with the major sixth when the cantus firmus descends, and the counterpoint ascends by step. One does this with contrary and oblique motion. In this one sees the fourth motion.[44]

Ex. 5.20—Berardi's allowed *passaggi* into the octave, from *Miscellanea* (1689), p. 107



Once again, Berardi did not clearly state what issue separated these examples as being better than their counterparts in Ex. 5.19. As Fux noted, both featured octaves approached by contrary motion. But the octaves in Ex. 5.20 were approached by the preferred half-step motion of a major sixth, or by oblique motion. In each instance, the requirements of the *passaggi* were preserved.

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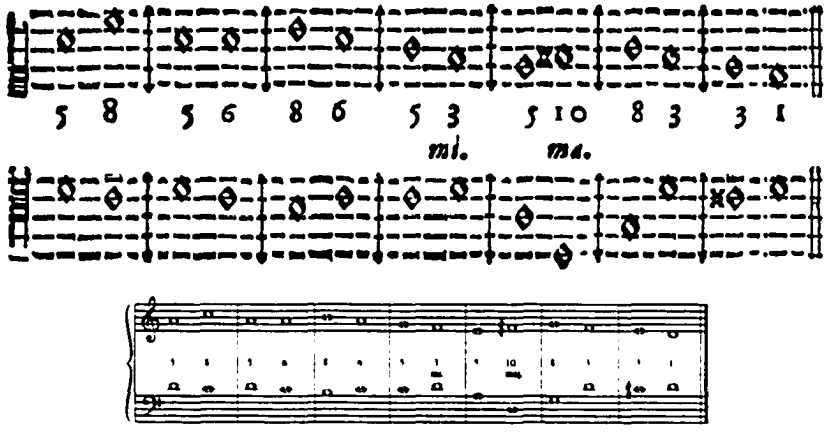
[44] Mà volendo dar l'ottava in principio di battuta, si può procedere con la sesta maggiore quando il canto fermo descende, & il contrapunto ascende di grado, e si fà con il moto contrario, & obliquo, e quì si scorge il quarto movimento" (*Miscellanea*, 106-107).

The permissible fifth moving to an octave from Fux's example (Ex. 5.18) illustrates Fux's key point, that since both parts move in contrary motion the only difference between them is that one moves by step and one by leap. Fux's example of a permissible fifth is similar to Bononcini's illustration of contrary motion into perfect consonances, given as Ex. 5.21.

Ex. 5.21—Perfect consonances by contrary motion, from Bononcini's *Musico prattico* (1673), p. 56



In these examples, Bononcini's sole point was that as much as feasibly possible the student should strive to move in and out of perfect intervals by contrary motion. Neither metrical placement nor preferred *passaggi* were criteria for determining octave usage for Bononcini.

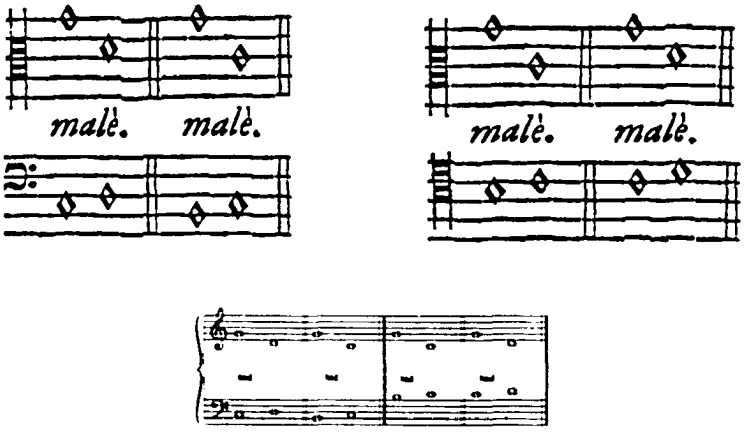
Fux raised the issue of the *ottava battuta* in order to address the impact of leaps in a melodic line, an issue that was of paramount importance to him. Fux was puzzled that Berardi prohibited stepwise motion into an octave, while Bononcini allowed the same motion by skip. Fux explained that what was truly important was not the quality of the interval that preceded the octave or whether it moved up or down, but whether it was approached by step or by leap.

Fux summarized his ideas concerning unisons and octaves at the end of the section on the *ottava battuta:* unisons should be used only at the beginning and

end of note-against-note counterpoint, and neither the unison nor the octave should be approached or left by a skip larger than a third:

> In this case [of a unison] the voices, as they stand in the relation of absolute equality, would not be heard clearly enough and would seem to be null and void. On account of this the unison should nowhere be employed in this species of counterpoint, except at the beginning and the end. However, to return to the above-mentioned octave, the *battuta*, I shall leave to your discretion the use or avoidance of it; it is of little importance. But the approach from a more remote consonance into an octave by a skip is in my opinion not to be tolerated even in composition for more than two voices. The same holds true above all for the unison.[45]

Ex. 5.22—Prohibited approaches to the octave and unison, from Fux's *Gradus* (1725), p. 54



Fux stressed the prohibition against leaps in and out of unisons in the next counterpoint when Josephus starts at the unison against a cantus firmus that leaps away from the first note.

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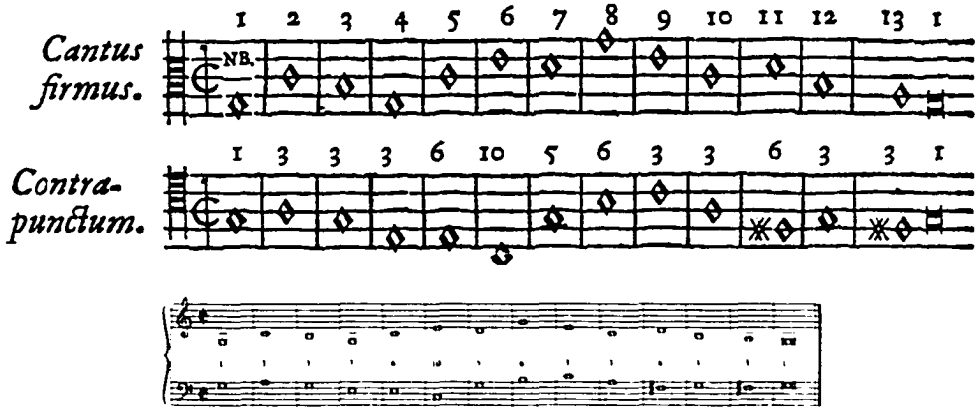
[45] Fux, *Gradus*, 54; Mann, *Counterpoint*, 38.

Ex. 5.23—Counterpoint below the cantus firmus in G, from Fux's *Gradus* (1725), p. 54



> The progression from the unison into another consonance by a skip is bad in itself, just as the progression into a unison is bad in itself, as I explained shortly before. Since this skip, however, appears in the part of the cantus firmus which is not to be changed, it may be tolerated here. It would be different if you were not confined to the cantus firmus, and the invention were left to your own choice.[46]

For Fux, using octaves and unisons in note-against-note counterpoint was determined solely by the attention drawn to the interval by the melodic stress of a leap. Fux assigned a special emphasis to leaps in all of the species types, an emphasis that can either draw attention toward or away from voice-leading problems. In contrast, the Italian theorists placed much more emphasis on the sound of the interval itself, though they were aware that disjunct motion highlighted voice-leading problems. Fux was not simply pointing out his puzzlement at the *ottava battuta* itself, but at the Italian theorists' apparent insensitivity to the differing affects that result, in his perception, from steps and leaps. For Fux, if anything, the examples by Bononcini and Berardi should have been reversed. Bononcini's example of a skip into the octave should have been called into question whereas Berardi's example of stepwise motion should have been allowed. Fux was unconcerned about the vertical sound of the octave, and

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[46] Fux, *Gradus*, 54; Mann, *Counterpoint*, 39.

indeed octaves were used without restrictions in his examples of note-against-note counterpoint. Although Fux was not the only theorist who objected to leaping into and out of the perfect intervals, in *Gradus*—where there generally are very few rules stated—this rule took on special importance. Fux placed greater emphasis on the horizontal or melodic construction of counterpoint than his Italian counterparts, who placed greater emphasis on the vertical quality.

Rule Eight—Dissonant Leaps in Simple Counterpoint

Fux's final rule likewise treated leaps in simple counterpoint, this time "mi contra fa," or the tritone, as well as the major sixth. But whereas Italian theorists would have dealt with both of these as vertical intervals, Fux regarded them melodically. Seventeenth-century Italian theorists struggled with fitting sixths into the carefully erected framework of the *passaggi*. Major sixths were considered quasi dissonant, and their *passaggi* contained some of the longest lists of retractions, exceptions, and emendations. Minor sixths simply did not fit into the neatly delineated prescriptions for contrary motion. The rules regarding these intervals inevitably dealt with them as vertical sonorities. However, as with his discussion of octaves and unisons, Fux is unconcerned about the vertical sound that the Italian theorists found annoying, but views both the tritone and the major sixth as difficulties associated with constructing the melodic line.

Specifically, the major sixth was avoided because in note-against-note counterpoint "everything should be as singable as possible."[47] The major sixth was considered, in Bononcini's words, "difficult to pick out with the voice."[48]

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[47] Fux, *Gradus*, 53; Mann, *Counterpoint*, 37.

[48] ". . . difficili da pigliarsi con la voce . . ." (*Musico prattico*, 59).

In second species, Fux will allow the leap of a minor sixth along with the leap of an octave as a means of correcting lines that have moved too close together.

Conclusions

Fux's rules for note-against-note counterpoint can be summarized as follows:

1. Pick a single consonance for each note of the cantus firmus according to the four rules of motion.
2. Use contrary and oblique motion as much as possible.
3. Use more imperfect than perfect intervals.
4. Begin and end on a perfect interval.
5. End the counterpoint with the following cadential formulas:
   major sixth to an octave if the cantus firmus is in the lower voice,
   or minor third to a unison if the cantus firmus is in the upper voice.
6. Stay in the mode—the bass voice must always start and end on $\hat{1}$.
7. Handle perfect intervals carefully by:
   avoiding the unison except at the beginning and end,
   avoiding similar motion into perfect intervals,
   and avoiding a skip greater than a third into or out of octaves.
8. Avoid dissonant leaps, including the major sixth and tritone.

The generic quality of the first five rules prevents tracing them to any one source. Any treatise using the eight rules of counterpoint would have contained a variant of them. Fux's discussions of these rules, however, indicate his reliance on Zarlino, Diruta, Kircher, Bononcini, Berardi, and the oral tradition. Interspersed with these rules is a level of practical advice that sets *Gradus* completely apart from any prior treatise.

CHAPTER SIX

Second and Third Species

Fux recognized only two types of dissonance, which, borrowing from his discussion of chromatic alterations applied to the modes, he called "substantial" and "accidental." Substantial dissonances are suspensions which occur "functionally and on the downbeat," and were alleged by Fux to have a structural effect.[1] Though never defined, accidental dissonances are passing tones, presumably because they neither occur on the beat nor have a structural effect. Conspicuously absent is a discussion of neighboring dissonance, a standard component of any modern counterpoint text.

Second through fourth species form the transition from simple to florid counterpoint, introducing the student to diminished note values, the two types of dissonance allowed against the cantus firmus, and further devices for creating effective melodic lines. The sections on second and third species present, respectively, half and quarter notes against the cantus firmus, but both deal solely with passing dissonance though viewed from differing perspectives.

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[1] Fux, *Gradus*, 69; Mann, *Counterpoint*, 54.

This chapter will demonstrate the following:

1. Seventeenth-century Italian music theory inherited two disparate pedagogies of half-note counterpoint which Fux combined into a unified approach by:
   a) using the North European explanation of the passing tone as a *transitus*, or diminution, in second species,
   b) linking it with the Italian explanation of the passing tone as "one good, one bad" in third species.
2. Several items in second species—such as, starting with a half rest, using leaps to avoid crossing voices, and the natural relationship between three-to-one counterpoint and second species—were common to numerous treatises, but the discussion of "how to save the parallel motions" was unique to Italian treatises with specific language adapted from Zarlino's *Istitutioni* (1558).
3. Fux's third species follows the order of ideas established by Bononcini, but its explanation of the *cambiata* originates in Giovanni Chiodino's *Arte pratica* (1610).

The Pedagogy of the Passing Dissonance

Seventeenth-century Italian music theory struggled to reconcile two traditions presenting conflicting views of half-note counterpoint. The species tradition taught half-note counterpoint all in consonances. In the fifteenth- and sixteenth-century treatises by DeLeno, Lanfranco, and Lusitano, this approach was closely associated with improvised counterpoint, or *contrappunto alla mente*. In Lanfranco's words, this method no doubt taught the students to "land on the onsonances."[2]

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[2] Lanfranco, *Scintille*, 119.

A by-product of consonant half-note counterpoint was the resulting high number of leaps. Unless the motion consisted solely of a series of 5—6 interval motions—the only ones where two consonances lie a step apart above a single note—consonant half-note counterpoint must admit a minimum of one leap per bar. The theorists who taught species counterpoint probably considered this high concentration of leaps to be an inevitable part of the exercise. Fux's second species examples share this trait with the seventeenth-century theorists who taught species counterpoint. In fact, several of his second-species counterpoints (such as the counterpoint below the cantus firmus in C, where fourteen of the twenty-two notes are approached by leap) consist primarily of leaps.

In contrast to the theorists who taught species counterpoint, those who taught the *passaggi* and advocated the strict procedures of *contrappunto osservato* stressed the importance of writing and strongly discouraged melodic lines that leap about. In this tradition, theorists offered the possibility of a passing dissonance on the second half note since, after all, the usage abounded in sixteenth- and seventeenth-century composition. This pedagogical problem—the two systems of counterpoint and their conflicting approaches to teaching half-note counterpoint—remained unresolved throughout the seventeenth century, the theorists preferring simply to present the two views side by side.

Fux never hinted at the existence of a dual approach to second species. Other than the fact that his second-species counterpoints are highly disjunct, in a manner typical of consonant half-note counterpoint, there is no indication that the student had any option besides passing dissonance against the cantus firmus. Fux blended the two approaches into a single working model. From the species approach he acquired the pedagogy of writing two notes against the cantus firmus, and from the *passaggi* he admitted the passing dissonance on the

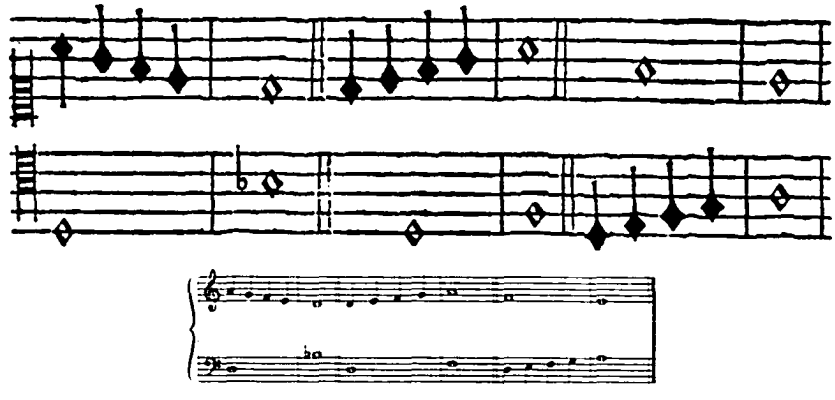
second beat. He accomplished this unique blend by incorporating the Italian explanation for passing dissonance with the North European.

"One Good, One Bad" and the *Transitus*—Two Views of Passing Dissonance

Seventeenth-century species counterpoint taught passing dissonance in third species, where it was explained as "one good, one bad." That is, the note on the strong beat of the measure should be a "good" or consonant note, followed by a "bad" or dissonant note on the weak beat. Third species was considered a part of "black note" counterpoint, or counterpoint composed of the faster note values of quarters and eighths. This traditional Italian explanation of passing dissonance also appeared in *Gradus*, in its appropriate place in third species.

> By the third species of counterpoint is meant a composition having four quarters against a whole note. Here, in the first place, one must observe that if five quarters follow each other either ascending or descending, the first one has to be consonant, the second may be dissonant, and the third must again be consonant. The fourth one may be dissonant if the fifth is consonant as is shown in the examples:[3]

Ex. 6.1—Third species passing dissonance, from Fux's *Gradus* (1725), p. 64



[3]Fux, *Gradus*, 63; Mann, *Counterpoint*, 50.

As mentioned previously, Italian music theory described voice leading vertically, a preference that is evident here as well. In contrast to this Italian view, German music theory, originating with Burmeister's *Musica poetica,* attempted to explain musical construction through rhetorical figures.[4] In the seventeenth century, Christoph Bernhard expanded this tradition to include the advanced practices of the *seconda prattica.*[5] Bernhard noted that the more advanced musical style associated with the theater, the *stylus theatralis,* offered wider possibilities for dissonance treatment than the conservative church style. One of these more conservative usages is the *transitus,* which, he explained,

> can also be called diminution, [and] takes place when, between two notes on odd-numbered beats, both consonant with respect to the subject, a dissonant note slips by, as it were, on the even-numbered beat, on the tone immediately above or below.[6]

Bernhard's observation that the transitus "could adorn . . . the leap of a third" was by nature more horizontal than vertical. For this portion of Bernhard's definition, the student must visualize two notes at the distance of a third and the possibility of a dissonant note between them. Fux adopted a similar explanation in second species, stating:

> the second species results when two half notes are set against a whole note. The first of them comes on the downbeat and must always be consonant; the second comes on the upbeat, and may be dissonant if it moves from the preceding note and to the following note stepwise. However, if it moves by a skip, it must be consonant. In this species a

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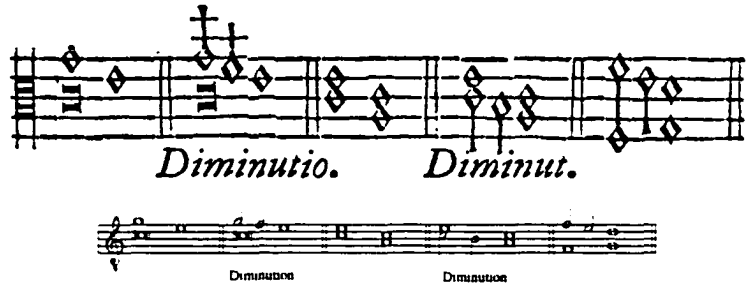
[4] Joachim Burmeister, *Musica poetica* (Rostock: Stephan Myliander, 1606); English translation in *Musical poetics,* translated with introduction and notes by Benito V. Rivera (New Haven: Yale University Press, 1993).

[5] Cristoph Bernhard, *Tractatus compositionis augmentatus* (Dresden: unpublished manuscript, c. 1657). All english translations from Walter Hilse, "The Treatises of Christoph Bernhard," *The Music Forum 3,* ed. by William Mitchell and Felix Salzer (New York: Columbia Univ. Press, 1973), 1-195.

[6] Hilse, *Bernhard,* 78.

dissonance may not occur, except by diminution, i.e., by filling out the space between two notes that are a third distant from each other. It makes no difference whether the note which results from the diminution is consonant or dissonant; it is satisfactory if the space between the two notes, a third distant from each other, is filled out.[7]

Ex. 6.2—Examples of passing dissonance, from Fux's *Gradus* (1725), p. 56



The word *diminutio,* or "diminution," was an integral part of both Bernhard's and Fux's definitions and establishes a relationship between the two theorists' works. Strengthening this relationship is Bernhard's statement that the *transitus* was specifically "designed to adorn the unison or leap of a third." Though Fux avoided the issue of the neighboring note, Bernhard's "adorn the unison," Fux's definition of passing motion closely resembles Bernhard's.[8] A series of examples followed Bernhard's statement illustrating the *transitus* both as neighboring dissonance (adorn the unison) and as passing dissonance (adorn the leap of a third). One of these appears in Ex. 6.3, where the third motions are indicated by brackets. The reader was expected to see that the dissonances, labeled either above or below the bracket, fell between two consonances a third apart.

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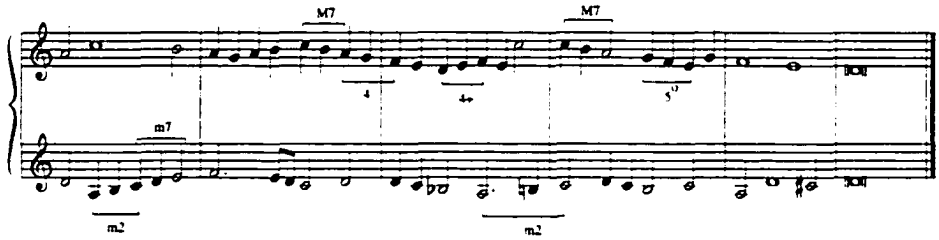
[7] Fux, *Gradus,* 56; Mann, *Counterpoint,* 41.

[8] Ibid., 79.

Ex. 6.3—Bernhard's *transitus*, from *Tractatus* (c. 1657), after Hilse's *Bernhard* (1973), p. 79



The similarity of Fux's and Bernhard's definitions of passing dissonance—specifically, diminution filling in the space of a third—and the absence of this kind of explanation in Italian theory strongly indicates that Fux may have had access to a copy of Bernhard's works. Mann appears to concur when he notes that *Gradus's* section on style also parallels Bernhard's ideas.[9] Furthermore, Helmut Federhofer discovered that copies of Bernhard's treatises do indeed survive in Viennese archives, but wrongfully attributed to Alessandro Poglietti.[10] Thus, not only may Fux have been familiar with one or more of Bernhard's treatises, but he also may have mistakenly thought they represented Italian contrapuntal pedagogy. Such a view would be consistent with Fux's obvious preference for Italian sources and contrapuntal theory in general.

The Neighbor Dissonance

Bernhard stated that the *transitus* could decorate a third or a unison. The *transitus* decorating the third has been explained above as the passing tone. The *transitus* decorating the unison is familiar as the neighbor tone, and is visible in m.2 of Ex. 6.3, above, on the first two quarter notes of the upper voice. Although clearly described and illustrated in Bernhard's treatises, a discussion

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[9] Mann, *Preface*, xv.

[10] Helmut Federhofer, "Zur handschriftlichen Überlieferung der Musiktheorie in Österreich in der zweiten Hälfte des 17. Jahrhunderts," *Die Musikforschung 11* (1958): 265.

of neighbor dissonance is conspicuously missing from *Gradus*. Following the lead of the most conservative seventeenth-century Italian theorists, Fux never mentioned whether or not the neighbor figure may be used in quarter notes. Schenker noted that the figure did appear on one occasion, in the third species D mode example in four voices (Mann, p. 123, fig 182).[11] Fux also regularly used the figure as an eighth-note decoration for a suspension. This eighth-note figure appears throughout *Gradus* and will be considered in chapter seven's discussion of fourth species.

Seventeenth-century theorists offered little useful information concerning the neighbor note. Jeppesen noted that "for the most part they are not mentioned at all; when any theorist does mention them, he usually merely forbids them."[12] There were, however, some notable exceptions. In addition to Bernhard's treatises, Zacconi's *Pratica di musica* (1622) and Chiodino's *Arte pratica* (1610) featured numerous instances of the neighbor dissonance. Chiodino's chapter entitled "Concerning black notes" even gave detailed formulas for the figure and how it was to be used.[13] If Fux was familiar with any of these treatises, he would have been aware that at least some seventeenth-century theorists considered it part of the tradition. However, the virtual absence of the figure in *Gradus* and Fux's silence on the matter would lead one to believe that Fux, like many of his contemporaries, prohibited its use. In spite of Schenker's comments, its solitary appearance in four-voice counterpoint appears to have been more of an oversight than a license.

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[11] Heinrich Schenker, *Kontrapunkt*, 2 vols. (Vienna: Universal Edition, 1910 and 1922); English translation in *Counterpoint*, trans. by John Rothgeb and Jürgen Thym (New York: Schirmer Books, 1987).

[12] Jeppesen, *Counterpoint*, 31.

[13] "De notis nigris" (*Arte pratica*, 14-18).

Specific Devices in Second Species—*"Come si puo salvare"*

The sections in *Gradus* on second and third species are a great deal more compact than that on first species, mainly because Fux devoted less space to devices specific to each species. Only four are offered in second species: (1) starting with a rest; (2) the use of skips to improve voice leading; (3) how to salvage lines embroiled in parallel fifths or octaves; and (4) the natural relationship between two-to-one and three-to-one counterpoint.

A device common to virtually all sixteenth- and seventeenth-century counterpoint treatises was starting the contrapuntal line with a rest. In similar fashion, through the voice of Aloysius, Fux stated that he would:

> point out some devices which it will be very useful for you to know. First, one may use a half rest in place of the first note.[14]

It is impossible to attribute Fux's statement to a knowledge of any one source. The device is found in the counterpoint examples of virtually all of the sixteenth- and seventeenth-century theorists, whether they specifically discussed it or not. One theorist who did was Pablo Nassarre (c. 1654-1730).

> Q: What particular rules must one observe in this counterpoint [of minims]?
>
> A: Only to enter at the beginning with a minim rest. This rule is not only for this counterpoint, but also for all those that consist of smaller note values as will be seen.[15]

Another device avoided voice-leading problems through a skip of either a minor sixth or an octave. Fux stated:

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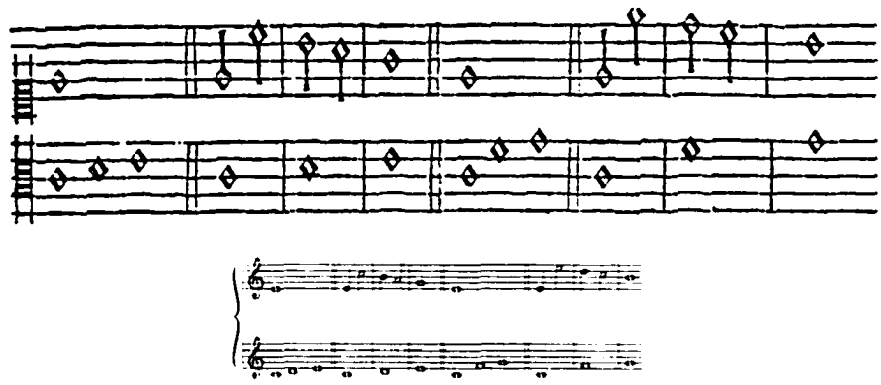
[14]Fux, *Gradus*, 59-60; Mann, *Counterpoint*, 45.

[15] "P: Què reglas particulares se han de observar en este Contrapunto? R: Solamente entrar al principio con Pausa de Minima; y esta regla no solo es para este Contrapunto, si tambien para todos aquellos que constan de figuras menores en forma que se irà viendo" (*Fragmentos*, 74).

if the two parts have been led so close together that one does not know where to take them; and if there is no possibility of using contrary motion, this motion can be brought about by using the skip of a minor sixth (which is permissible) or an octave, as in the following examples:

Ex. 6.4—How skips of sixths and octaves avoid voice crossing, from Fux's *Gradus* (1725), p. 60



Fux had prohibited the leap of a major sixth in first species, following the lead of the most conservative seventeenth-century theorists, who consistently classified the major sixth along with "certain leaps difficult to pick out with the voice, which they call irregular."[16]

Another consistent feature in seventeenth-century Italian treatises was the use of simple devices to salvage passages embroiled in parallel fifths or octaves. The devices were extremely varied and ranged from introducing rests in one of the parts, changing direction or register, to employing leaps or diminished note values. As per chapter thirty-three of Berardi's *Miscellanea* (1689), they were generally given in a chapter entitled "*Come si possono salvare i movimenti proibiti*," or, "How to salvage the prohibited motions."[17]

Fux also discussed how to avoid parallels, but the relationship to his Italian predecessors is obscured by Mann's free translation. In his original

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[16] ". . . certi salti difficili da pigliarsi con la voce, che si chiamano irregolari" (*Musico prattico*, 59).

[17] Berardi, *Miscellanea*, 146.

Latin, Fux stated that "quòd saltus Tertiæ neque duas Quintas, neque duas Octavas salvare possit," which Mann translates as "the skip of a third cannot prevent a succession of either two fifths or two octaves."[18] A more literal translation would be: "the leap of a third cannot save either two fifths or two octaves," a translation borne out by Manfredi's 1763 Italian version of *Gradus*.[19] It is the word *salvare* that clarifies Fux's intent, and establishes the direct link to the Italian theorists.

Fux offered two devices which have "the ability to save and change" the essential character of parallel fifths and octaves. The first is leaps greater than a third, which Fux feels cause "the ear to forget" a succession of fifths or octaves. The second device is suspensions, which will be discussed in chapter seven of this dissertation.

The subject of "saving the perfect consonances" arises immediately after the first second species exercise, given in Ex. 6.5. In this counterpoint, Fux objected to the fifths on the downbeats of bars eight, nine, and ten because their strong metrical position implied parallel fifths against the cantus firmus. Since Fux viewed the second note of a bar as often arising through diminution, he naturally placed less emphasis on it, stating that the offbeat is "of such short duration" that it cannot in and of itself offset downbeat fifths. In his subsequent examples, Fux eliminated this second note in order to show the impact of the downbeats.

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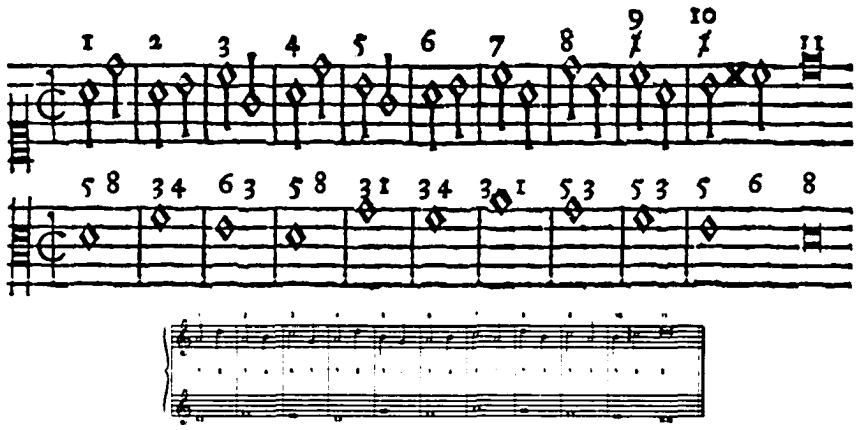
[18] Fux, *Gradus*, 57; Mann, *Counterpoint*, 43.

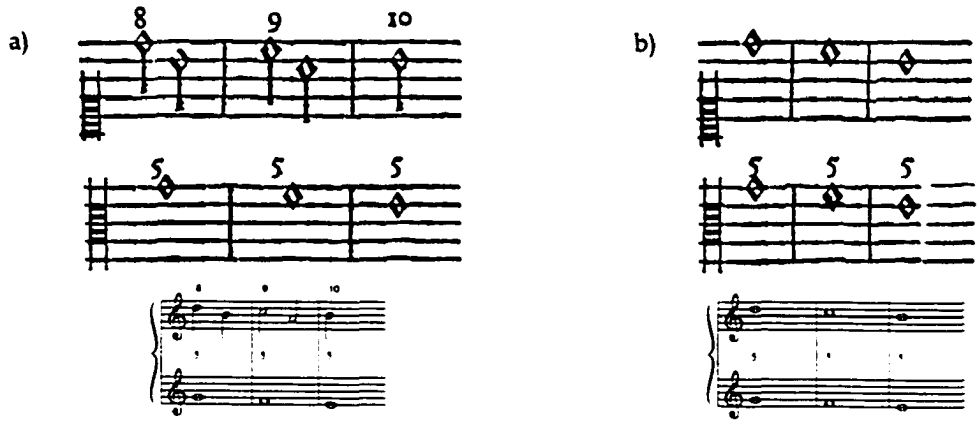
[19] ". . . il salto di terza non può salvare nè le due quinte nè le due ottave" (*Salita*, 59).

Ex. 6.5—Counterpoint above the cantus firmus in D, from Fux's *Gradus* (1725), p. 57



It should be said that the skip of a third cannot prevent a succession of either two fifths or two octaves. The intervening note on the upbeat is regarded as hardly existing, since owing to its short duration and the small distance between the tones it cannot compensate to such an extent that the ear will not notice the two succeeding fifths or octaves. Let us consider the example again, beginning from the eighth bar [Ex. 6.6a]. If we disregard the intervening note which occurs on the upbeat, those measures would appear thus [Ex. 6.6b]:

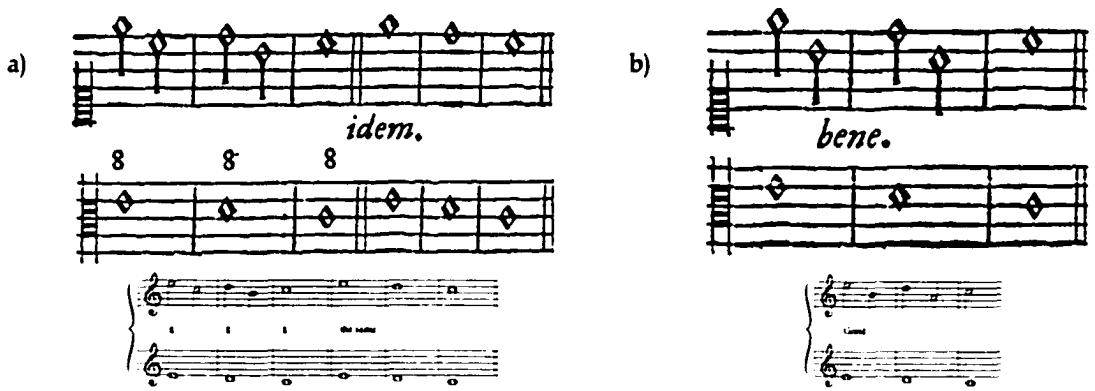
Exs. 6.6a and b—A leap of a third cannot prevent successive fifths, from Fux's *Gradus* (1725), p. 58



The same holds for octaves [Ex. 6.7a]. It is different if the skip is of a greater interval; e.g., a fourth, fifth, or sixth. In such a case the distance between the two tones causes the ear to forget, as it were, the first note on the downbeat until the next note on the downbeat. Let us look once at the

last example with the intervening skip of a fourth invalidating the succession of octaves [Ex. 6.7b].[20]

Exs. 6.7a and b—A skip larger than a third "saves" octaves, from Fux's *Gradus* (1725), p. 58



Fux centered on two ideas: (1) as a result of its fleeting quality, the upbeat of a measure cannot by itself distract the ear from downbeat events; (2) the upbeat competes with the downbeat in strength only when it skips by an interval larger than a third. The first idea was taken from the forty-second chapter of Zarlino's *Istitutioni* (1558), entitled "A dissonance or minim rest between two perfect consonances of the same species ascending or descending together does not cancel the effect of consecutive consonances."[21] In this chapter, Zarlino outlined most of the devices with which the seventeenth-century theorists would deal, and in similar fashion to Fux stated that on an offbeat "the rapid change to the sixth or tenth between the octaves is barely noticed . . . thus the octaves are very audible."[22] Zarlino covered most of the devices picked up by subsequent theorists, such as rests, diminished values, or changes in register. Unlike most of the subsequent theorists, however, Zarlino rejected all of these as having no power to break up the impression of parallel

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[20] Fux, *Gradus*, 57-8; Mann, *Counterpoint*, 43.

[21] Zarlino, *Istitutioni*, 195; Marco, *Counterpoint*, 92.

[22] Ibid, 196; 95.

fifths or octaves. In a manner similar to Fux, Zarlino also rejected the leap of a third as useful in breaking up parallel motion.

Fux's language concerning how the ear was affected by parallel motion was borrowed from Zarlino, but his specific rule—that a leap larger than a third breaks up the impression of parallel octaves and fifths—cannot be attributed to any one theorist. There was very little agreement among the Italian theorists as to which of the devices actually did break up the impression of parallels, their discussions consisting more of strongly worded opinion than substantive argument. In fact, the very example that Fux forbade—the skip of a third into an imperfect consonance followed by stepwise motion into a downbeat perfect consonance—can be readily found in the counterpoint examples of any treatise that teaches consonant two-to-one counterpoint. Two examples, from Zaccaria Tevo (1651-c.1710) and Domenico Scorpione (c.1650-1703), illustrate the divergence of opinions.

In a manner that appears to accord with Fux, Tevo pointed out that a wide leap can be used to break up parallel fifths. In Ex. 6.8a, Tevo illustrated how direct unisons could be broken up by leaping up a fifth before descending to the second unison. However, Ex. 6.8b, which appeared on the very next page of Tevo's treatise, accomplished the same effect with Fux's prohibited leap of a third.

> One may also save the two [parallel] consonances with a half, quarter, eighth, and even, incidentally, with a sixteenth splitting the first note which forms the two perfect consonance as in the examples:[23]

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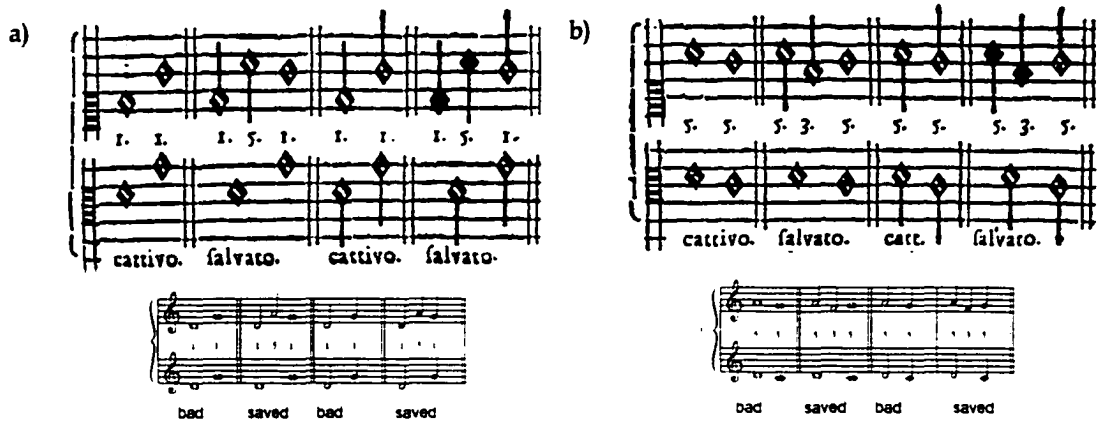
[23] "Si possono salvare anche le due consonanze con una minima, semiminima, croma, & anche per accidente con una semicroma spezzandosi la prima nota, che forma le due consonanze perfette, come dagli esempii" (*Testore*, 147).

Exs. 6.8a and b—How leaps "save" parallel fifths and octaves, from Tevo's *Testore* (1706), pp. 147-8

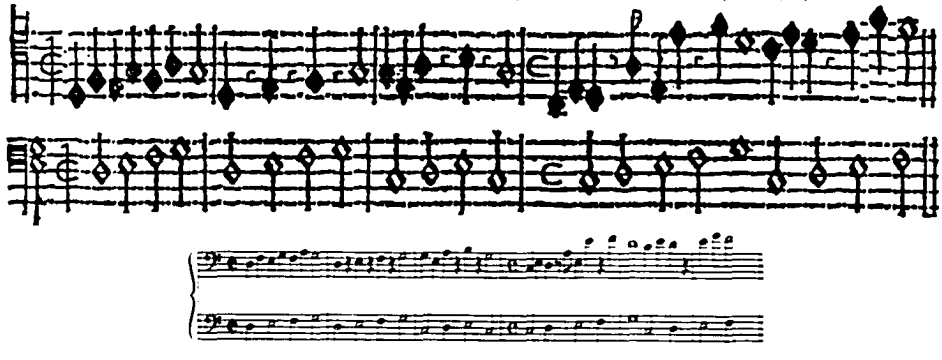


Tevo's emphasis was on the effect of the leap, any leap, and not its size. The leap caused a change of direction in the melodic line and it was this change of direction which broke up the impression of parallels.

Scorpione also pointed out that the leap of a third did not break up the impression of parallel motion, but his emphasis was on how repeated fifths could be saved. Any pattern which repeatedly stressed downbeat unisons, fifths, or octaves would have been objectionable not only to Scorpione but to all of the Italian theorists. Therefore, Scorpione forbade all of the passages in Ex. 6.9, regardless of the size of the intervening leaps.

> In the prohibited passages shown [below] the parallel perfect consonances are not saved by a quarter, eighth, or the rests placed between them.[24]

Ex. 6.9—Forbidden passages, from Scorpione's *Riflessioni* (1701), p. 120

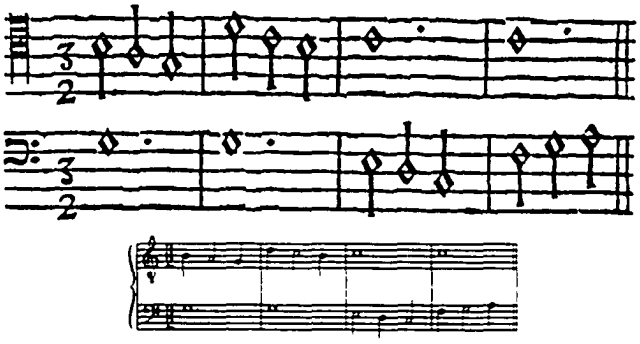


[24] "Li dimostrati passaggi prohibiti non si salvano per una Semiminima, per una Chroma, ò loro pause, che si fra ponessero, come quì" (*Riflessioni*, 120).

According to Scorpione's criteria, or for any of the sixteenth- and seventeenth-century Italian theorists who raised the issue of salvaging parallels, Fux's downbeat octaves in Ex. 6.7a were irredeemable regardless of what interval followed. By the third iteration the passage could not be salvaged, and should be re-written. It is even more curious that Fux offered a "corrected" version which replaced parallel octaves with both parallel octaves and fifths.

As a postscript to second species, Fux mentioned the possibility of three-to-one counterpoint.

Ex. 6.10—Three-to-one counterpoint, from Fux's *Gradus* (1725), p. 63



> Here the middle note may be dissonant because all three of them move stepwise. It would be different if one note or the other moved by skip, in which case all three notes would have to be consonant, as should be apparent from what I have already said.[25]

Three-to-one counterpoint appeared in treatises by Lusitano, Bernhard, Bononcini, Lorente, Nassarre, and Scorpione. The majority of Italian theorists ignored it, but the two Spanish theorists, Lorente and Nassarre, provided such a considerable discussion that it must be considered one of their species. Lusitano, Lorente, and Nassarre all agreed with Bononcini, who stated that "in counterpoint of one note and three-notes-against-one all notes must be

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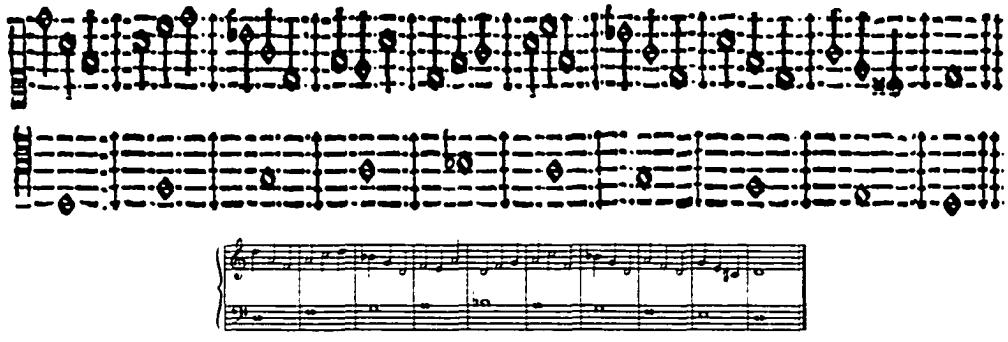
[25] Fux, *Gradus*, 63; Mann, Counterpoint, 49.

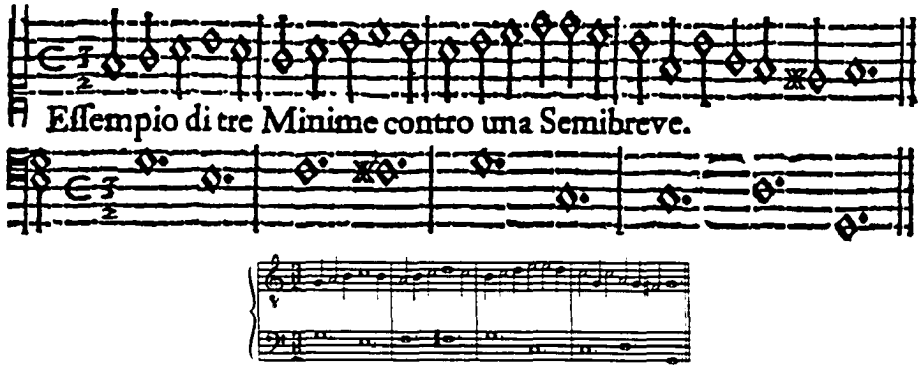
consonant."[26] To these theorists, three-to-one counterpoint was still "white note" counterpoint, and, must conform to the standards for two-to-one counterpoint.

Ex. 6.11—Three-to-one counterpoint, from Bononcini's *Musico prattico* (1673), p. 75



Bernhard and Scorpione were the exceptions to the domination of consonance-only counterpoint in triple meter. Bernhard did not give examples, but during his discussion of the *transitus* stated that "in *tripla*, the first beat must be good, following which the second or third (not both) may be dissonant."[27] Scorpione did give an example which in essence agreed with Bernhard, and which is given below as Ex. 6.12.[28]

Ex. 6.12—Three-to-one counterpoint, from Scorpione's *Riflessioni* (1701), p. 137



[26] "Nel Contrapunto d'una nota, e di trè contro un' altra tutte devono essere consonanti" (*Musico prattico*, 73).

[27] Hilse, *Bernhard*, 78.

[28] Scorpione placed the upper line in soprano clef but must have intended an alto clef, as provided in the transcription.

Given the relationship established earlier between Bernhard's and Fux's treatises, it seems most likely that Fux was once again echoing Bernhard. However, Bernhard's comment was made in passing; it formed an insignificant part of his discussion. Fux's motivation for including this discussion may have come from the strong presence of this type of counterpoint in Bononcini's treatise, or his awareness of the prominent position given to triple-meter counterpoint in the Spanish sources.

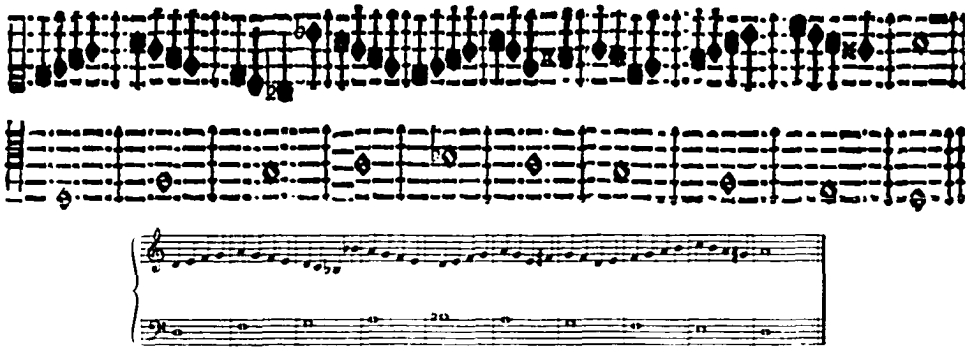
Third Species—Exceptions to the Rule of "One Good, One Bad"

Two devices are discussed in third species, both exceptions to the rule of "one good, one bad." These two exceptions seemingly run counter to the two requirements Fux placed on passing motion in quarter notes, namely that the dissonance arise through stepwise motion, and appear on the weak beats of the measure. This sequence of ideas, the explanation of the rule "one good, one bad" followed by two exceptions to the rule, was taken from Bononcini's *Musico prattico* (1673), where, in similar fashion to Fux, Bononcini first offered the familiar formula for quarters against the whole note of the cantus firmus, then describeed two deviations from the rule.

> In the counterpoint of four semiminims against a semibreve, one ordinarily observes this rule, that the first and the third must be consonant and the second and the fourth dissonant if the notes move by step. However, if the notes move by leap then they must all be consonant, as was said of the minims [in two-to-one counterpoint]. According to some a semiminim cannot save parallel perfect consonances. At other times composers vary the assigned order [of consonance and dissonance] making the second [note] a dissonance even though it leaps, because the two notes which follow are both consonant. Or, they make the first, second, and fourth [notes] consonant, and the third dissonant, as can be seen in [the music of] many good practitioners, particularly in Jhan Gero

in his first book of Madrigals for two voices, as can be understood from the examples:[29]

Ex. 6.13—Third species counterpoint, from Bononcini's *Musico prattico* (1673), p. 76



In both Bononcini's and Fux's treatises, the first exception occurred when a dissonant passing tone, which should occur on the even beats according to the rule of "one good, one bad," fell on the third beat of the measure. Bononcini did not attempt to give an explanation which would tie the exceptions into the larger context of his species examples. Fux, however, consistent with his explanation of the passing tone in other instances, used diminution to explain this new instance:

> This does not hold if, firstly, the second and fourth notes are consonant, in which case the third note may be dissonant, as in the following examples:

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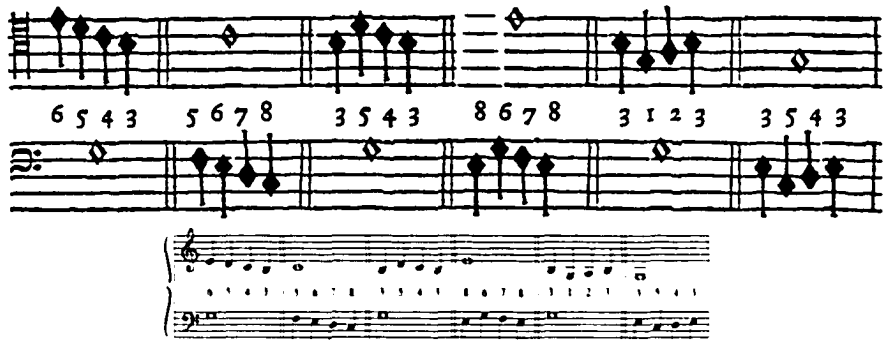
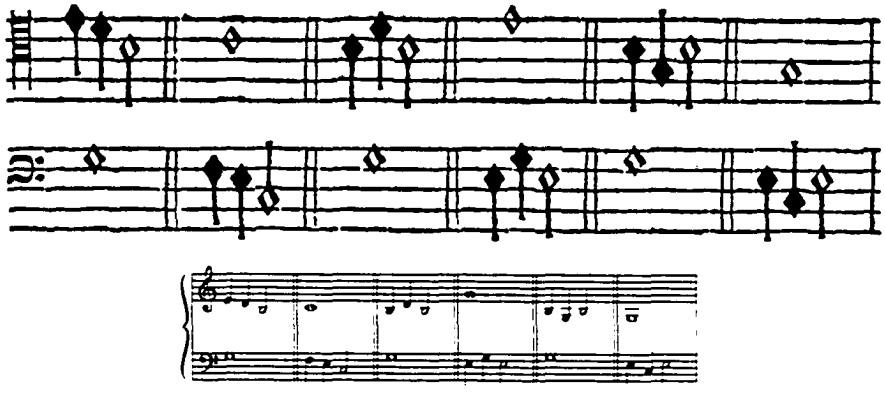
[29] "Nel Contrapunto di quattro Semiminime contro una Semibreve s'osserva ordinariamente questa regola, che la prima, e terza siano consonanti, e la seconda, e quarta dissonanti, mentre però vadino di grado, che se andassero di salto, tutte devono essere consonanti, come s'è detto delle Minime, e vogliono alcuni, che in questi Contrapunti una Semiminima non salvi due consonanze perfette. Alle volte I Compositori variano l'ordine assegnato, facendo dissonante la seconda, benche sia di salto, purche l'altre due, che seguono siano consonanti, overo fanno la prima, e quarta consonanti, e la seconda, e terza dissonanti, ò la prima, seconda, e quarta consonanti, e la terza dissonante, come si può vedere in molti buoni Prattici, e particolarmente in Ihian Gero nel primo libro de suoi Madrigali à due voci, e si comprenderà ne gli esempi" (*Musico prattico*, 73).

Ex. 6.14—The first exception to "one good, one bad," from Fux's *Gradus* (1725), p. 64



Here the third note is always dissonant, and may be described as a diminution or a filling out of the skip of the third. In order to show this process more clearly we should change these examples back to their original forms. From this one may see that the third note, the dissonance, in the previous examples is nothing but a diminution of the skip of a third. It fills in the space from the second note to the third, which space can always be filled in by a diminution, i.e., by supplying the intervening note.[30]

Ex. 6.15—Passing dissonance on the third beat, from Fux's *Gradus* (1725), p. 64



The second exception to the rule of "one good, one bad" was the *cambiata*, a figure which steps from a first-beat consonance into a second-beat dissonance, but then breaks the rule by leaping into a third-beat consonance. Jeppesen noted that the *cambiata* was a common figure in sixteenth-century polyphony, but also that "the idiom with the skip of a third is especially designated as

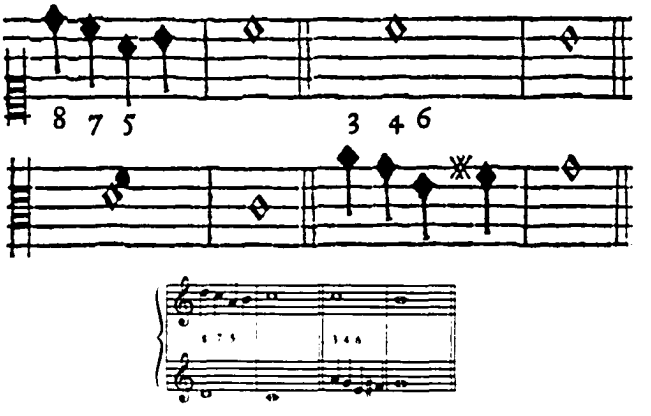
[30] Fux, *Gradus*, 64; Mann, *Counterpoint*, 50-1.

cambiata for the first time" in *Gradus*.[31] Mann goes further to state that Fux's description of the figure is "the first mention ever made in musical literature of the *nota cambiata*."[32] However, three seventeenth-century theorists did describe the figure—Chiodino, Bernhard, and Bononcini—even though, as noted by Jeppesen, they did not label it *cambiata*.

Fux stated of this figure that:

> the second instance in which one departs from the general rules is that of the changing note, which is called *cambiata* by the Italians. It occurs if one goes from the second note—when dissonant—to a consonant note by skip, as is to be seen by the following examples:[33]

Ex. 6.16—The *cambiata*, from Fux's *Gradus* (1725), p. 64



Fux points out that the *cambiata* departs from the rule that consonances should appear on strong beats and dissonances on weak beats. Once again using the concept of diminution, Fux explains that the skip of a third, which seemingly occurs counter to the rule that all dissonances should proceed by step, stands in the place of a stepwise motion filled in with passing tones.

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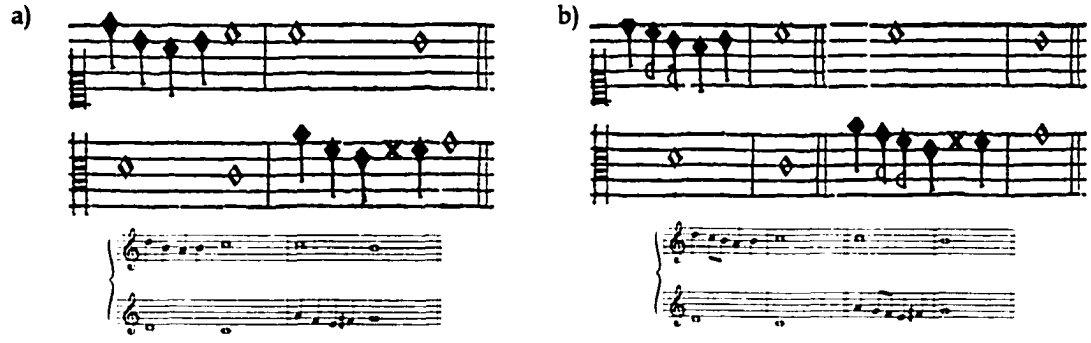
[31] Jeppesen, *Counterpoint*, 32.

[32] Mann, *Counterpoint*, 51.

[33] Fux, *Gradus*, 65; Mann, *Counterpoint*, 51.

Strictly speaking, the skip of a third from the second note to the third note should occur from the first to the second note; in this case the second note would form a consonant sixth [Ex. 6.17a]. If we fill in the skip from the first to the second note, the following line results [Ex. 6.17b]. Since in this species, however, eighth notes are not yet to be employed, the old masters have approved the first example [Ex. 6.16] where the second note forms a seventh—possibly because it is easier to sing.[34]

Exs. 6.17a and b—The *cambiata's* origin in diminution, from Fux's *Gradus* (1725), p. 65



One of the seventeenth-century theorists who mentioned the *cambiata* was Bernhard, who included the it as one of his types of "*quasi-transitus*," or strong-beat passing motion. Bernhard did not give the formula for the *cambiata*, but he did state that the "*quasi-transitus* is also sometimes employed elliptically." In the notes to his translation, Walter Hilse explains this as meaning "with one of the passing tones omitted."[35] Bernhard's subsequent illustration clarified his intentions, the *cambiata* being clearly visible in the second measure of the upper voice (marked by the bracket).

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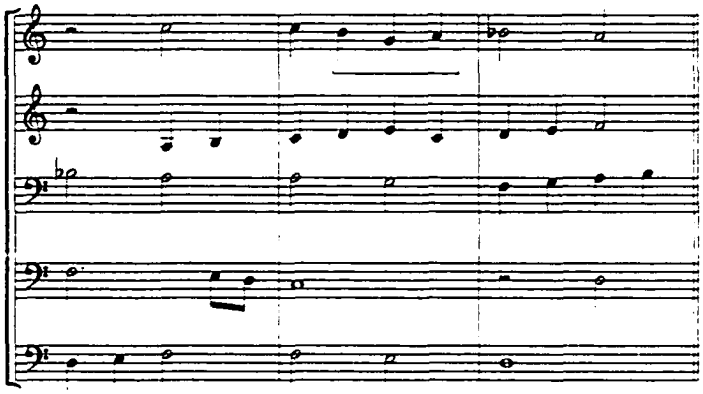
[34] Fux, *Gradus*, 65; Mann, *Counterpoint*, 52.

[35] Hilse, *Bernhard*, 83.

Ex. 6.18—Bernhard's *quasi-transitus*, from *Tractatus* (c. 1657), after Hilse's *Bernhard* (1973), p. 83



As mentioned earlier, Bononcini's *Musico Prattico* (1673) also gave the formula for the *cambiata*, Bononcini stating that composers "make the second note a dissonance even though it leaps, because the other two which follow are consonances," and then illustrated the formula with an example of third-species counterpoint. In Ex. 6.13, above, the *cambiata* appears in the sixth and seventh measures.[36]

The third, and earliest theorist to present the *cambiata* was Giovanni Chiodino, whose *Arte prattica* (1610) appears to be the source for Fux's formula. Chiodino's work, originally published with its alternating Italian and Latin text, was translated into German by Andreas Herbst in 1653. Herbst's texts were very popular in German-speaking lands since they made Italian ideas readily available in the vernacular of North Central Europe. If Fux took his example from Chiodino, then it is more likely that Fux worked from Herbst's popular translation rather than from Chiodino's rather rare original.

In a manner similar to Fux, Chiodino discussed first the original formula and then the passage filled in with diminution. Chiodino stated of the *cambiata*:

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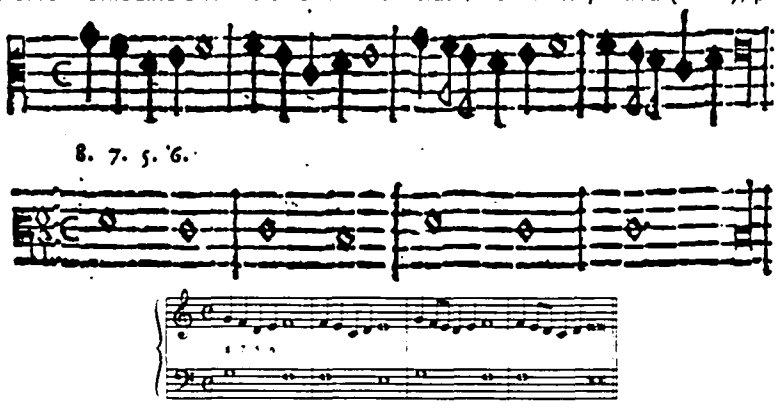
[36] ". . . facendo dissonante la seconda, benche sia di salto, purche l'altre due, che seguono siano consonanti . . ." (*Musico prattico*, 73).

the experts often leap with descending black notes, making with the first note an octave, the second note a seventh, the third note a fifth, and the fourth a sixth. It is very pleasing, as in the example:[37]

Ex. 6.19—Chiodino's formula for the *cambiata*, from *Arte pratica* (1610), p. 18



In his translation, Herbst substituted the German phrase *"berühmten Componisten,"* or "famous composers" for Chiodino's "experts." Nevertheless, the relationship between Chiodino's and Herbst's appeal to these authoritative voices and Fux's appeal to the "masters" is evident in the quotes above.

Chiodino's treatise was devoted to teaching singers how to improvise counterpoint, or *contrappunto alla mente*, by consistently using a singer's viewpoint. Chiodino's *cambiata*, showing its relationship to the figure filled in by passing tones, was ideally suited to Fux's needs since it illustrated the *cambiata's* origin in passing motion. It is unfortunate that over the centuries Chiodino and his text have descended into oblivion without being recognized for this simple yet useful idea. Fux deserves credit for providing Chiodino's illustration with a fuller prose explanation. Over two centuries of counterpoint texts have proven the usefulness of Fux's explanation of Chiodino's example. However, Chiodino's text must be redeemed from obscurity and acknowledged

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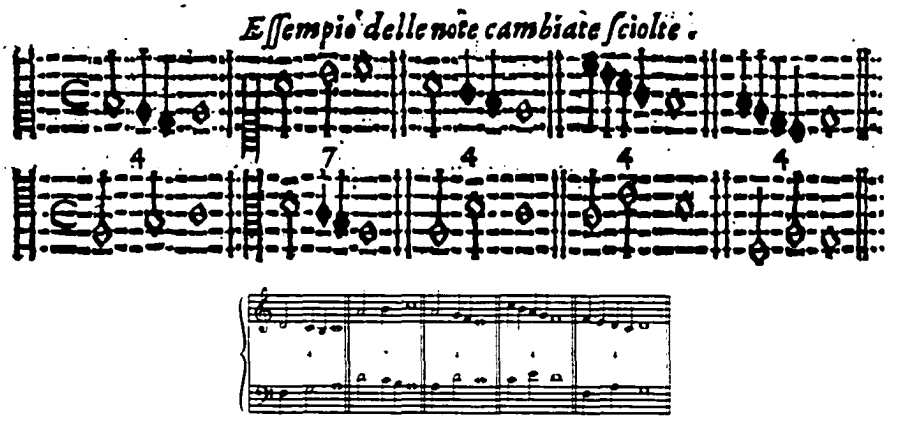
[37] "Sogliono I Periti molte volte saltare per le negre descendendo, & fanno, che la prima sia ottava, la seconda settima, la terza sia quinta, & la quarta parte sia sesta, è modo gratioso, essempio" (*Arte*, 18).

for providing Fux with the mechanics of the *cambiata's* construction.

Although both Chiodino and, sixty years later, Bononcini identified the formula for the *cambiata*, neither used the term itself, which was borrowed from Berardi's *Miscellanea* (1689). As Claude Palisca observed, Berardi's *cambiatas* included a host of decorated resolutions, involving two lines composed of diminished note values and moving in such a way that the positions of consonances and dissonances are exchanged, the dissonance now occupying the strong beat and the consonance the weak beat, as in Ex. 6.20.[38]

Ex. 6.20—Berardi's "exchanged" notes, or *note cambiate* from *Miscellanea* (1689), p. 143



Berardi's and Fux's examples differed in that Fux's involved the decorated resolution of a dissonance above a single note of the cantus firmus, whereas Berardi's examples were specifically created by two moving lines. As Dahlhaus noted, the term *cambiata* was an equivocal one used by these two theorists to describe related but differing figures.[39] Fux's *cambiata* belongs in the realm of simple counterpoint, Berardi's in florid counterpoint. In *Gradus's* later section on style, Fux touched on Berardi's issue in his discussion of two advanced ideas, variation and anticipation. [40] Fux noted that "variation departs from the

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[38] Palisca, "Kontrapunkt," pars. 1541-2.

[39] Carl Dahlhaus, "Die 'Nota Cambiata,'" *Kirchenmusikalisches Jahrbuch* 47 (1963): 115-121.

[40] English translation in Joel Lester, *Between Modes and Keys* (Stuyvesant NY: Pendragon Press, 1989) 183-209.

common rules of counterpoint in that it proceeds by skips from a consonance into a dissonance, and then from a dissonance into another dissonance."[41] Fux was aware that advanced practice affects voice leading and rightly moved the discussion out of simple counterpoint and into advanced composition.

Fux borrowed Berardi's term because none other was commonly available to describe the figure he found in Chiodino's, Bernhard's, and Bononcini's treatises. Although all three theorists gave the formula for the *cambiata*, none provided a ready means of identifying it. As with the five "species" of counterpoint, which had been in use without a label for centuries before Fux codified them, he borrowed a common term and used it to achieve a clear pedagogical aim.

Conclusions

This chapter has shown how Fux combined ideas from several theorists in forming *Gradus's* second and third species. Fux acquired from Zarlino's *Istitutioni* (1558) the discussion for "how to save" passages embroiled in parallel perfect consonances. From Bernhard's *Tractatus* (c. 1657) Fux acquired the idea of the *transitus*, or the passing tone as a diminution filling in the leap of a third, the core concept underlying second species. The third-species explanation of the passing tone, "one good one bad," is common to all of the Italian music theory sources. The formula for the *cambiata* came from Chiodino's *Arte pratica* (1610), but the term *cambiata* from Berardi's *Miscellanea* (1691). Bononcini's *Musico prattico* (1673) provided the progression of ideas in third species: the explanation of "one good, one bad" followed by the two exceptions to this rule. Finally, several items are so generic that they are untraceable and must be considered part of the oral tradition, for example, how to start a second species exercise, and the relationship of three-to-one counterpoint to second species.

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[41] Fux, *Gradus*, 218; Lester, *Modes*, 186.

CHAPTER SEVEN

Fourth and Fifth Species

Fourth species introduces the student to the second dissonance type, the suspension, or "substantial" dissonance. Unlike the passing dissonance, suspensions directly affect the consonant framework and can, therefore, directly affect voice leading. Fux described the suspension as a *retardatio* or delay of the following consonance. The suspension's down-beat dissonance stalls the arrival of a consonance and momentarily disrupts the composition's underlying consonant framework. Fux stated that this retardation is "bound with fetters [*vincolis*]" and must proceed "as if brought from servitude to freedom" down and by step to the next consonance.[1] In a similar fashion, Berardi had stated that "the word ligatures, as I have said in my *Documenti*, in my judgment means nothing other than a fetter [*vincolo*], which binds the hearing in such a manner that nothing remains to be desired more [than resolution]."[2]

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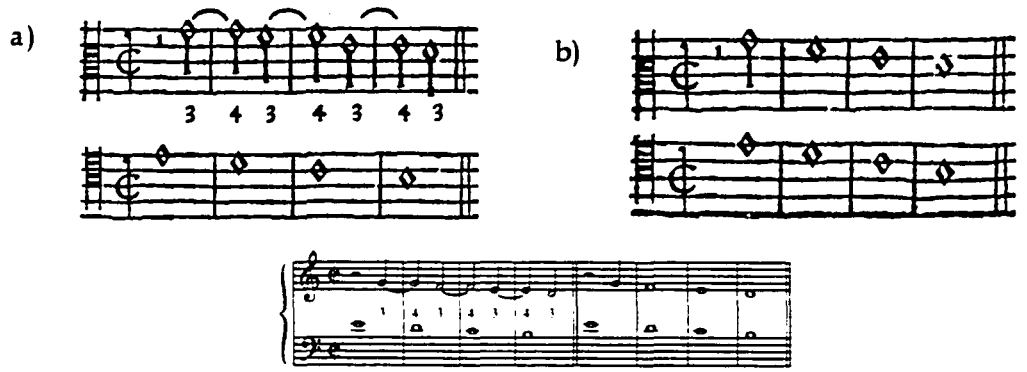
[1] Fux, *Gradus*, 70; Mann, *Counterpoint*, 56.

[2] "Il nome di legature, come hò detto nè miei Documenti Armonici, à mio guiditio altro non significa, che vincolo, che lega l'udito in maniera tale, che più non li resta da desiderare" (*Miscellanea*, 126).

That dissonances were incidental within an overall consonant framework is usually associated with Zarlino's statement that "every composition, counterpoint, or harmony is composed principally of consonance . . . dissonances are used, incidentally [*per accidente*] and secondarily."[3] However, Fux used this simple idea in a manner which surpassed the Italian treatises and explained all aspects of the suspension. Thus, Fux showed how the suspensions in Ex. 7.1a are, in reality, decorated versions of the consonances in Ex. 7.1b.

Exs 7.1a and b—The retardation, from Fux's *Gradus* (1725), p. 70



In comparison to other seventeenth-century treatises Fux's suspension theory is simple, direct, and proceeds naturally from general principle to specific application. He developed this approach by combining ideas from both Italian and North European treatises. This chapter explains how Fux took the seventeenth century's loose assortment of related thoughts and transformed them into a simple and cohesive approach by demonstrating the following:

1. Seventeenth-century Italian music theory invariably described the syncopation as a *transportatione*, or displacement, placed all emphasis on the cantus firmus, and only allowed suspensions to resolve down and by step.
2. Fux expanded this Italian pedagogy by borrowing from Bernhard's more progressive discussions of the *retardatio* and *anticipatio*.

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[3] Zarlino, *Istitutioni*, 172; Marco, *Counterpoint*, 53.

3. Following the lead of Zarlino, Bononcini, and Berardi, Fux demonstrated that "substantial" dissonances have the power to alter voice leading, and to make passages involving implied parallels usable.
4. Fux borrowed from Berardi the clear distinction between upper and lower suspensions.
5. Although the instruction in fifth species was limited, Fux did treat eighth notes, which, as in Berardi's *Miscellanea* (1689), could include neighbor-note motion.
6. Fux's impact on subsequent theorists was most prominently visible in C.P.E Bach's *Versuch* (1762). However, portions of Fux's theory were superseded by later ideas, mainly transmitted through Padre Martini's *Esemplare* (1774).

Seventeenth-Century Italian Suspension Theory

Seventeenth-century Italian music theorists inherited their suspension theory from Gafurius, who described the technique as a longer note whose value was split by the interposition of other long notes (eg: 𝅗𝅥 𝅗𝅥 𝅗𝅥 𝅗𝅥). Gafurius introduced the terms *reductio* and *transportatio* (reduction and displacement) to indicate that syncopation was characterized by the notational signature of a change in duration and shifted note values.[4] In his *Istitutioni* (1558) Zarlino amplified Gafurius's discussion and filled out his terms with literary references:

> Syncopation does not mean to the musician what it means to the grammarian, who considers it a figure of speech made by shortening a word by deleting a median syllable or letter. The musician thinks of it rather as a displacement [*trasportatione*] or reduction [*riduttione*] of the

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[4] Franchinus Gafurius, *Practica musice* (Milan: Guillaume Signerre Rothomagensis, 1496; facs. ed., New York: Broude Bros., 1979). English trans. in Irwin Young, *The Practica musicae of Franchinus Gafurius* (Univ. of Wisconsin Press: Madison WI, 1969); see footnote 40, p. 119.

> value of a note in a series of similar short notes through one or more longer notes . . . .[5]

Zarlino further expanded this allusion to language and rhetoric by adopting the two linguistic terms *agente* and *patiente* to describe the construction of a suspension. In language, the *agente* is the agent of action and *patiente* the object which receives it. Zarlino described how, in general, it was the shorter note values which displaced or altered the duration of longer notes. Thus, the shorter note values are the *agente* or "agents" and the longer values the *patiente* or "objects" of this action of alteration.[6] In his *Seconda parte dell' arte del contraponto* (1589) Artusi recast Zarlino's terms to differentiate between the suspended voice and cantus firmus.[7] In their new roles the *agente* became the cantus firmus which "strikes" the syncopated voice, thereby causing the dissonance, and the *patiente* became the syncopated voice since it is simply holding still and "suffers" the cantus firmus to move and "strike" it. Artusi's influence is visible in Bononcini's *Musico prattico* (1673):

> to order the dissonances in compositions it is necessary that one part be free and the other tied. The free, or non-syncopated part is called the agent [*agente*] and is that [part] which, moving in free or non-syncopated notes, hits, pushes, and strikes the tied or syncopated part which, however, is called the object [*patiente*]. This [syncopated voice] must always descend a step after the strike, and it would be best if the agent would hold still after having struck the object, as will be seen in the example.[8]

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[5] Zarlino, *Istitutioni*, 208; Marco, *Counterpoint*, 120.

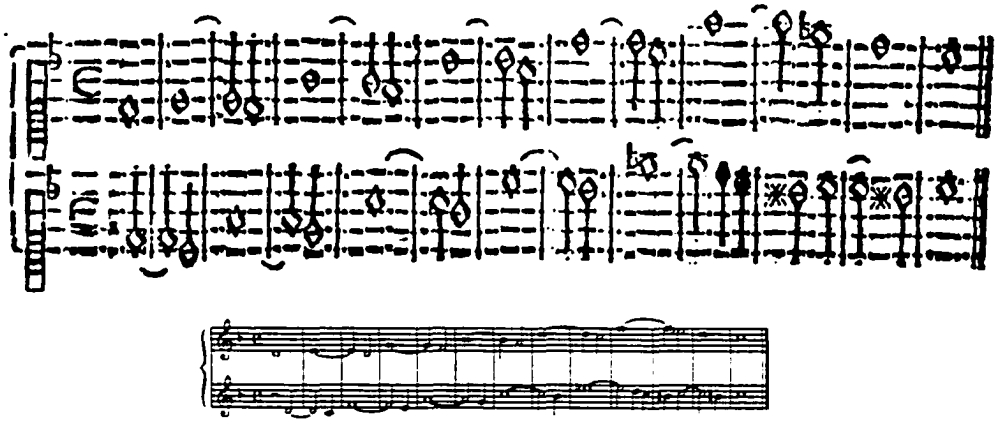
[6] Zarlino, *Istitutioni*, 273; Marco, *Counterpoint*, 254.

[7] Giovanni Maria Artusi, *Seconda parte dell' arte del contraponto* (Venice: Giacomo Vincenti, 1589), 27.

[8] ". . . per ordinare nelle Composizioni le Dissonanze è necessario, che una parte sia sciolta, e l'altra legata. La parte sciolta, ò non sincopata si chiama agente, & è quella, la quale movendosi con figure sciolte, ò non sincopate, batte, urta, e percote la parte legata, ò sincopata, che perciò si chiama paziente: questa dopo la percossa deve sempre descendere un grado, e se la parte agente dopo haver percossa la paziente si fermerà, sarà meglio, come si vedrà nell' Esempio" (*Musico prattico*, 62-3).

Bononcini's paragraph makes it clear that the suspension's required resolution was down and by step. Along with the most conservative seventeenth-century theorists, Bononcini restricted the suspended voice to this required resolution even when offering examples of more complex suspensions, such as those appearing in Ex. 7.3. It is in this spirit that Berardi offered the counterpoint in Ex. 7.2 in a "modern, more studied manner," to illustrate that even when suspensions gave the impression of resolving upward they did, in fact, resolve correctly down and by step.

Ex. 7.2—"Upward" resolving suspensions, from Berardi's *Documenti* (1687), p.143

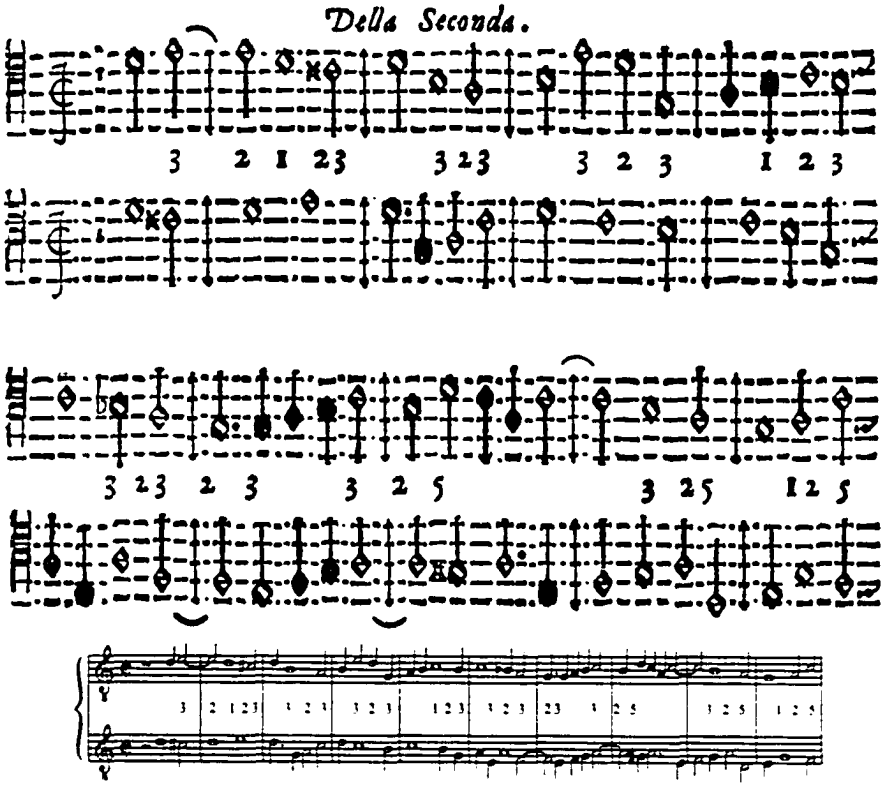


All of the seventeenth-century Italian theorists were fairly liberal about what suspensions could and could not be used. Most agreed that the 7-8 suspension, if used at all in two voices, was rarely used. All other dissonant intervals, however, were allowed as suspensions even in two voices. In contrast to this tolerant approach, modern music theory identifies as problematic those suspensions which resolve into perfect intervals, at least in two voices. In Jeppesen's words "one wants to hear after a dissonance a really full and harmonious effect; therefore one resolves to a third, sixth, tenth, and the like, but not so well to 'empty' fifths and octaves."[9] Jeppesen believed that

[9] Knud Jeppesen, *Counterpoint: The Polyphonic Style of the Sixteenth Century* (original Danish ed., Copenhagen: Hansen, 1930; German ed., Leipzig: Breitkopf & Härtel,

Palestrina's works exhibited a marked tendency away from suspensions into perfect intervals, especially in two voices, and towards suspensions into thirds and sixths. With this observation in mind Jeppesen constructed his pedagogical model by forbidding resolutions into "empty" perfect intervals. This model stands in contrast to Bononcini's *praticamento* for the suspended second in Ex. 7.3, where that interval regularly moves into the unison, or his examples involving other intervals which regularly feature resolutions into both fifths and octaves.

Ex. 7.3—*Praticamento* of the second, from Bononcini's *Musico prattico* (1673), p. 64



Example 7.3 also illustrates the difficulty faced by seventeenth-century theorists in describing and classifying suspensions above a more rhythmically animated counterpoint. When setting suspensions against a moving line, as

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1935; English ed., Englewood Cliffs: Prentice-Hall, 1939; repr. with a foreword by Alfred Mann, New York: Dover, 1992), 131.

opposed to a cantus firmus composed of long note values, the number of potential intervals formed by the resolution becomes much greater than merely the next larger or smaller interval. Therefore, the rule that a fourth should resolve into a third when the suspension was in the upper voice was corrrect only as long as the cantus firmus stayed put. If it moved, any number of intervals could potentially be created. In spite of this difficulty the theorists simply listed the decorated suspensions along with the simple suspensions, categorizing all of them by the size of the dissonant interval, a practice that runs back to Zarlino and Artusi.

These Italian systems offered no comprehensive approach for teaching students usage, and the key idea around which they were organized, the notational shift embodied by the term *trasportatione*, was an outdated concept which no longer accurately conveyed the suspension's construction. It comes as no surprise, therefore, that Fux never offered the term *trasportatione*, and sidestepped most of the other Italian issues. In fourth species, all action is invested in the syncopated line, no mention is made of the cantus firmus "striking" the syncopated voice, and no allusions to language or rhetoric are given.

However, Fux gleaned two crucial ideas from this entrenched body of Italian music theory—that music is constructed upon a consonant fabric and that suspensions are ripples in this fabric whose very instability must be handled in strict fashion. Into this basic Italian framework Fux adapted the more progressive North European music theory which placed advanced and conservative practice on an equal footing. The following discussion traces how Fux merged Italian and North European music theory and the critical role played by Bernhard's theories. In the process it also suggests that, whereas Fux

may have believed that he was improving upon the Italian system, he may also have thought that he was corrrecting Bernhard.

Bernhard's Influence

Syncopation was one of two possible dissonances in Bernhard's conservative church style, the other being the *transitus* discussed in Chapter Six of this dissertation. Bernhard labled the cantus firmus the *freye Stimme* (free voice) and the syncopated counterpoint the *rückende Stimme* (driving or displaced voice), stating in part:

1. Syncopation, called *ligatura* by some, takes place when a driving note stands against a consonance and a dissonance.
2. A driving note should have a consonance occurring against its first part, a dissonance against its second part.
7. When the driving note is in the upper voice, the lower voice should stand still, when it comes across the dissonance, until the latter has been followed by a consonance. When the lower voice is driving, the upper one should climb a second after the dissonance.
9. The free voice should stand still against the driving note and its fall, rarely fall or rise a third [or] better climb a fourth or fall a fifth.[10]

Bernhard's discussion accurately captured seventeenth-century Italian suspension theory. The term *freye Stimme* indicates that one voice of a suspension is not bound by any constraints of motion but can move freely against the syncopated voice. His term *rückende Stimme*, however, defies exact translation. Walter Hilse chose "driving voice" in his 1973 translation of Bernhard's works because of its frequent use in British music theory from Morley's *A Plaine and Easy Introduction* (1597) to Arnold's *Art of Accompanying*

[10] Hilse, *Bernhard*, 85-87.

from a Thoroughbass (1931).[11] However, the appearance of the term *Rückung* in C.P.E. Bach's *Essay on the True Art of Playing Keyboard Instruments* (1753) suggests the more useful translation "displaced."[12] "Displacement" also more precisely contextualizes Bernhard's relationship to Italian contrapuntal theory.

Bernhard returned to the suspension in later sections of both the *Tractatus* (c. 1657) and the *Bericht* (c. 1670) where, through the vehicle of the *Figurenlehre,* he discussed the more advanced practices of the expressive and theatrical styles. In *Tractatus* Bernhard introduced the rhetorical figure *mora,* or delay, as a suspension that did not resolve down and by step. In *Bericht,* however, he renamed the *mora* as *retardatio.* The *retardatio* is visible in mm. 2 and 5 of Ex. 7.4, where in both cases a suspended note moves upwards instead of directly downwards. Bernhard stated:

> 1. *Retardatio* is a lingering, when a note should climb a second but waits too long before climbing.
> 2. It was invented, however, in imitation of syncopation, with this difference: that whereas syncopation resolves itself downwards, *retardatio* does this upwards.[13]

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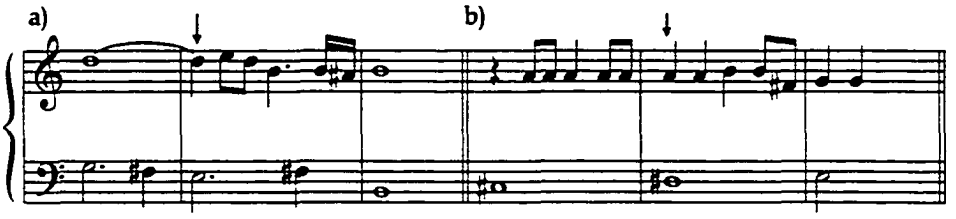
[11] Thomas Morley, *A Plaine and Easy Introduction to Practicall Musicke* (London: Peter Short, 1597; facs., Edmund Fellowes, ed., London: Oxford Univ. Press, 1937; New York: Da Capo Press, 1969; Farnborough: Gregg International, 1971); Franck Thomas Arnold, *The Art of Accompaniment from a Throrough-Bass* (London: Oxford Univ. Press, 1931; reprint, London: Holland Press, 1961; New York: Dover Pub., 1965).

[12] Carl Philipp Emanuel Bach, *Versuch über die wahre Art das Clavier zu spielen,* 2 vols (vol. 1, Berlin: the author, 1753; vol. 2, Berlin: the author, 1762; facs. in one vol., Lothar Hoffmann-Erbrecht, ed., Leipzig: Breitkopf & Härtel, 1957; 2nd ed., 1969), 219; English trans. by William Mitchell in *Essay on the True Art of Playing Keyboard Instruments* (New York: W.W. Norton, 1949; London: Eulenburg Books, 1974), 348.

[13] Hilse, *Bernhard,* 114.

Exs. 7.4a and b—The *retardatio*, from Bernhard's *Tractatus* (c.1657), after Hilse (1973), p. 114



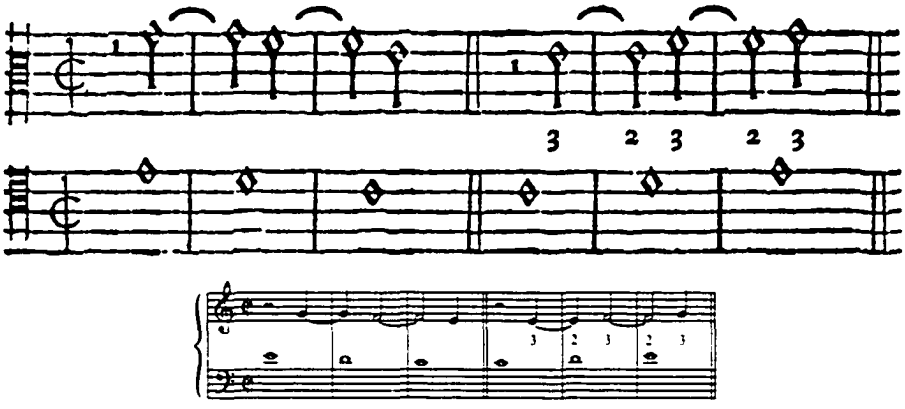
Bernhard's description makes it clear that, unlike the syncopation, the *retardatio* resolves up. His examples, however, are less than clear. In Ex. 7.4a, the suspended D on the downbeat of the second bar does not appear to have any direct resolution. The suspended A on the downbeat of the second bar of Ex. 7.4b could easily be seen resolving down and by step to the G in the third bar. However, Bernhard intended these examples to show "that whereas syncopation resolves itself downwards, *retardatio* does this upwards."

Like Bernhard, Fux used the term *retardatio* to describe the suspension. Given its uniqueness to Bernhard's *Tractatus* (c. 1657) Fux's use of the term, once again, strongly suggests an acquaintance with Bernhard's writings. However, unlike Fux's example, Bernhard intended the *retardatio* to be an uncharacteristic suspension that moved up, an issue that never appeared in seventeenth-century Italian treatises. For the Italian theorists, if a suspension resolved other than down and by step it was not a suspension at all; rather, it was either a sign of ignorance or a more advanced, decorated dissonance.

In a manner that further supports a dependence on Bernhard, Fux broke with Italian music theory by adding a discussion of an upward resolving suspension. His discussion also indicates that he may have felt Bernhard's treatise to be in error and in need of correction.

Jos: . . . may I ask, if you don't mind, whether the retardation or ligature into the dissonance is also to be used in ascending? It seems to me that a like matter is dealt with in the following examples:

Ex. 7.5—Rising suspensions, from Fux's *Gradus* (1725), p. 73



Aloys: You raise a problem which is harder to untangle than the Gordian knot. I shall deal with it later because, being still at the threshold of the art, you would not now wholly understand it. Although it may seem to be a matter of indifference whether a series of thirds ascends or descends, if you remove the retardation, yet there remains a certain distinction. This, as I said, will be explained sometime separately. For the time being, as your teacher I advise you to resolve all dissonances down to the next consonance.[14]

At this early stage Fux encouraged the student simply to accept that suspensions should resolve down and by step, promising to treat the subject more fully at a later point. The elementary teaching of two-voice counterpoint precluded more advanced possibilities.

Fux never managed to return to the exact issue of a downbeat dissonance resolved in an upward direction, but did raise a related issue towards the end of *Gradus* where he introduced the technique of *anticipatio*, or a consonant note shifted to occur before the beat. At this point Fux abandoned his preferred definition of a shifted consonance in favor of the standard Italian description of durational shift.

Aloys: *Anticipation* occurs when half the duration of a preceding note is taken away and added to the following note.

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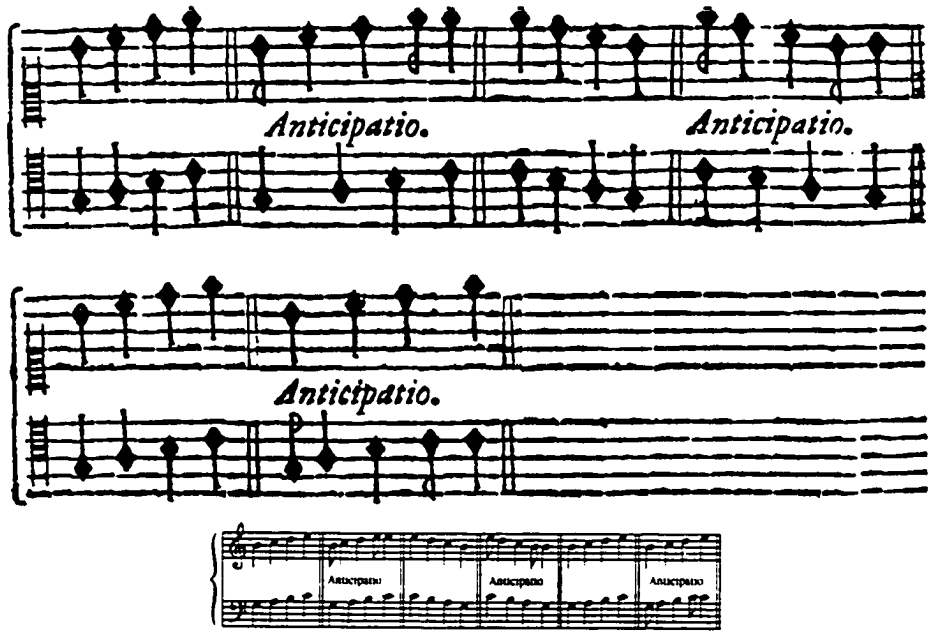
[14] Fux, *Gradus*, 73; Mann, *Counterpoint*, 59.

Jos: From what cause do these variations and departures from the rules of counterpoint have their origin?

Aloys: From what was just said it is clear that singers were the originators; they were so little content with regular diminutions, and so fond of showing off the flexibility of their voice, that they devised such variations.[15]

Ex. 7.6—Anticipations from Fux's *Gradus* (1725), p. 219



Fux's departure from his established definition suggests, once again, a reliance on the *Tractatus* (c. 1657), where Bernhard stated:

1. *Anticipatio notae* occurs when a voice, moving a step up or down, begins the next note earlier than the natural setting would actually allow.

2. To this end, part of the value of the antecedent note is taken away and placed before the consequent.

3. *Anticipatio notae* occurs more often when the preceding note is a consonance than when it is a dissonance, more in descending transitus than in ascending.

4. This figure also was ushered in through the practice of singers and instrumentalists.

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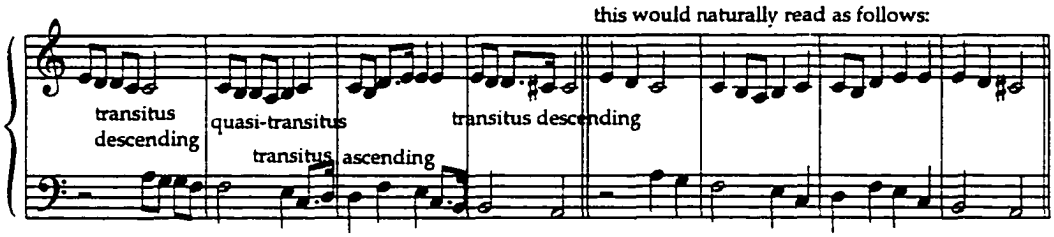
[15] Fux, *Gradus*, 219-20; Lester, *Modes*, 187-8.

Ex. 7.7—The *anticipatio*, from Bernhard's *Tractatus* (c. 1657), after Hilse (1973), p. 93



The likelihood that Fux knew Bernhard's treatises has been strengthened by his apparent borrowing of the *anticipatio*, as seen in the allusion to durational shift and the influence of singers. But a deeper issue arises in that Fux may have intended this discussion to serve as his return to the topic of upward resolving suspensions. If this is the case, then Fux has shifted into a prescriptive mode, implying that upward motion is achieved through the use of anticipations and not by downbeat dissonances resolved upwards. As Fux never explicitly states that this section is his promised return to the issue of upward resolutions, it is impossible to determine his position definitively. However, such a shift in position would have beeen in keeping with his calling composers back from the "unrestrained insanity of their writing to normal standards."[16] If this was indeed the case, then Fux was, in essence, correcting Bernhard's permissive views of voice leading and imposing a more conservative standard.

In contrast to Bernhard's more liberal treatment, Fux and the Italian theorists restricted the resolutions for decorated suspensions as well. These new possibilities were treated at the end of the counterpoint section, just before his discussion of imitation and fugue. This natural location was chosen because in free counterpoint "both voices move at the resolution" which cannot "occur where oblique motion is necessary."[17] Fux noted the key issue, namely that the

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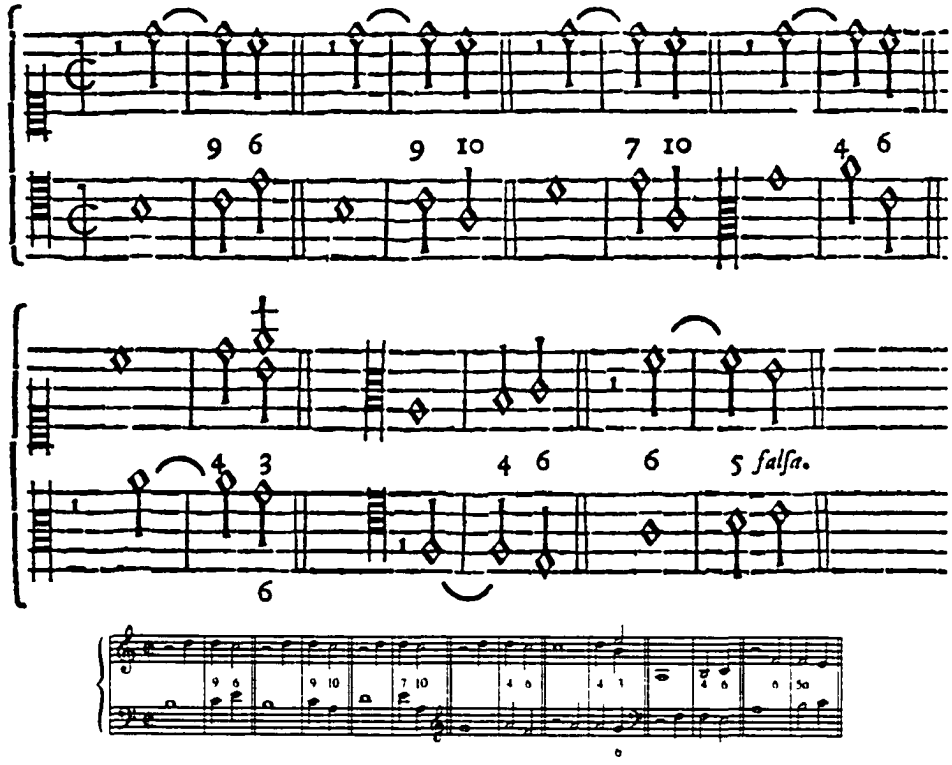
[16] Fux, *Gradus*, folio 3v; Mann, *Counterpoint*, 17.

[17] Fux, *Gradus*, 139; Lester, *Modes*, 185.

interval of resolution is altered by the motion of the cantus firmus. Fux followed the general trend of showing other possibilities for how a suspension could be handled by offering four examples of decorated suspensions for the ninth, seventh, fourth, and diminished fifth.

Ex. 7.8—Decorated suspensions, from Fux's *Gradus*, p. 140



In each of the above examples the cantus firmus has been replaced by a moving line as would be typical of free composition. Fux's brief treatment is unique in that he appears to be the only theorist able to articulate that the interval of resolution changes in the absence of oblique motion. In spite of the more complex nature of these examples, Fux's suspensions still resolve down and by step.

Berardi's Influence

Berardi's single greatest influence on Fux's understanding of fourth species was the clear separation of upper from lower suspensions. Fux described these according to the position of the cantus firmus:

> if the cantus firmus is in the lower voice, the interval of the second must be resolved to the unison, that of the fourth to the third, that of the seventh to the sixth, and that of the ninth to the octave.[18]
>
> if the cantus firmus occurs in the upper voice . . . one may use the second resolving to the third, the fourth resolving to the fifth and the ninth resolving to the tenth . . . .[19]

Having provided charts in both *Documenti* (1687) and *Miscellanea* (1689), Berardi was the first theorist to list systematically the difference between upper and lower suspensions (see Ex. 7.9). Berardi qualified his choices in *Documenti* somewhat by stating that "one may not use all of the suspensions in two-voice compositions, but can in those of three and four voices."[20] Berardi's accompanying examples, however, included all the possibilities in his list, indicating that in spite of some difficulties all were usable. In *Miscellanea* Berardi changed his list and removed the 7-8 suspension (see Ex. 7.9). In similar fashion Bernhard included an example of the 7-8 suspension in his earlier *Tractatus* (c. 1657) but in his later *Bericht* (c. 1670) stated that "the seventh can be tied only in the upper voice."

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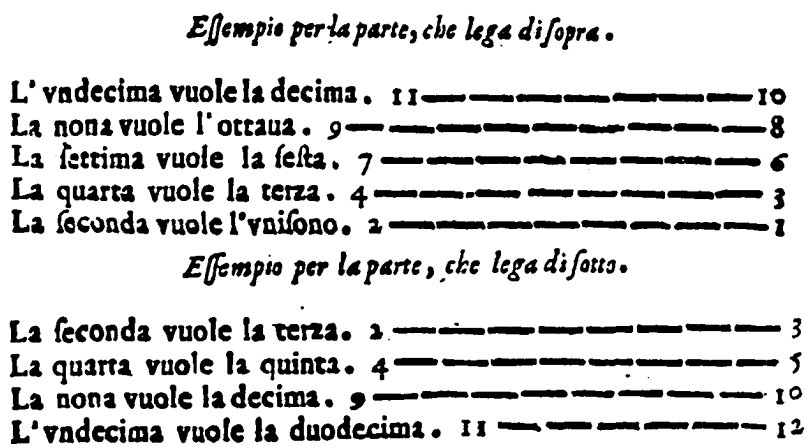
[18] Fux, *Gradus*, 71-2; Mann, *Counterpoint*, 56-7.

[19] Ibid.

[20] "Non si possono usare tutte le legature nelle cantilene a 2 voice, ma ben si in quella a 3 4 e più voci" (*Documenti*, 136).

Ex. 7.9—The suspension lists, from Berardi's *Miscellanea* (1689), pp. 120-21



Fux also omits the 7-8 suspension, a seeming oversight which Josephus points out:

Jos: Why do you omit the seventh? Is it not possible to use it if the cantus firmus is in the upper voice?

Aloys: I have intentionally omitted the seventh. One might say, perhaps, that this resolution of the seventh is not good because it moves into a perfect consonance, the octave, from which it gets too little euphony. But . . . one frequently finds the second, the inversion of the seventh, resolved to the unison, from which . . . a dissonance may gain much less euphony. It seems to me that here one should follow the practice of the great masters.[21]

The great masters to whom Fux refers would be, presumably, Palestrina and composers of that era. Jeppesen seems to concur with Fux, noting that "the seventh in the lower voice and its consequent resolution into the octave is never encountered in Palestrina's two-part compositions" but is occasionally found "when the composition has more than 2 parts."[22] Fux offers no similar concession as 7-8 suspensions never appear even in counterpoint for more than

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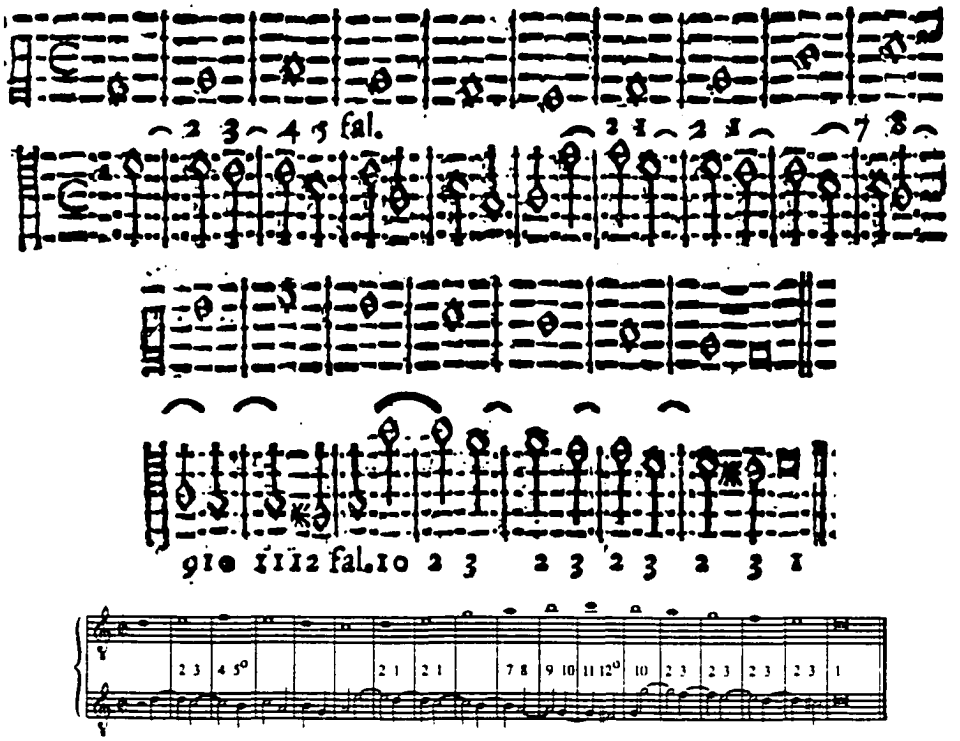
[21] Fux, *Gradus*, 72; Mann, *Counterpoint*, 59.

[22] Knud Jeppesen, *The Style of Palestrina and the Dissonance* (original Danish ed., Copenhagen: Levin & Munksgaard, 1923; German ed., Leipzig: Breitkopf & Härtel, 1925; English ed., trans. by Margaret Hamerik, London: Oxford Univ. Press, 1927; rev. ed., 1946; reprint ed., New York: Dover Pub., 1970), 245.

two voices. In contrast to Jeppesen's practical observations the seventeenth-century theorists offered no consensus. Some, like Artusi, Chiodino, and Penna agreed with Fux that the 7-8 suspension was to be avoided. However, Bernhard, Bononcini, and Berardi all used it in their examples, though all considered it rare. Berardi offered the counterpoint in Ex. 7.10, where the 7-8 suspension occurs as a by-product of contrary motion.

Ex. 7.10—Counterpoint below a cantus firmus, from Berardi's *Miscellanea* (1689), pp. 127-8



In spite of the fact that Fux avoided 7-8 suspensions all others were used freely. The 2-1 suspension is especially useful to effect voice crossing, a frequently used technique. Another common suspension is the 4-5 suspension in the lower voice which often appears with two fifths (5-4-5), a suspension that would have been patently avoided by the Italian theorists. Finally, a number of Italian theorists would have allowed a fourth to "resolve" into a diminished fifth, as long as the latter interval continued in contrary motion to a third on the following downbeat, as is visible in mm. 3 and 12 of Ex. 7.10. Fux does not

cover this possibility, but does offer a similar suspension in his section towards the end of *Gradus* on decorated resolutions (see the last two measures of Ex. 7.8). However, at this point, Fux offers the diminshed fifth suspension on the downbeat followed by a third on the upbeat, in distinction to the Italians who allowed the diminshed fifth as a "resolution" of the fourth.

Substantial dissonance; *Come si puo salvare* revisited

Come si puo salvare, or "how to save" passages in parallel fifths and octaves first surfaced in third species, where Fux stated that a leap greater than a third could distract the ear from a poor progression's implied octaves or fifths. In fourth species Fux offers the same possibility through suspensions. However, unlike leaps, which can avoid both parallel octaves and fifths, suspensions rectify only fifths.

Fux first raises this point when Aloysius prohibits the progressions 8-9-8 and 1-2-1. Since counterpoint hangs on a consonant framework these progressions are simply decorated parallel octaves and unisons.

> . . . it is not permissible to proceed either from the unison to the second or from the octave to the ninth when using ligatures . . . for if the retardations are removed an immediate succession of two unisons would result in the first instance, and an immediate succession of two octaves in the second instance.[23]

Fux returned to this point in three-voice fourth-species counterpoint where Josephus commented on the seeming inconsistency of allowing strings of fifths but forbidding strings of octaves. In his notes on this section Mann points out that Fux forbids strings of octaves but "in the case of fifths, however, the retardation can mitigate the effect of parallel motion. Successions of fifths may,

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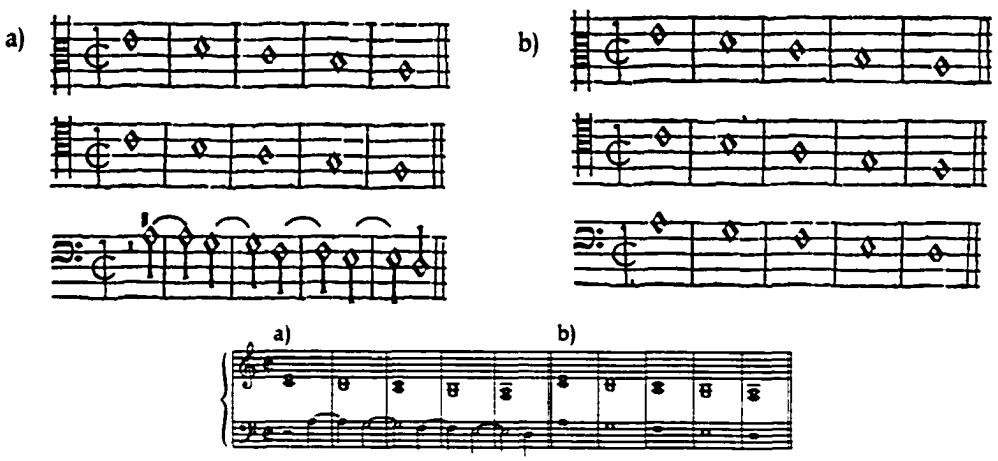
[23] Fux, *Gradus,* 71; Mann, *Counterpoint,* 57.

therefore, be used with syncopations."[24] In spite of its length, the protracted exchange between Aloysius and Josephus is quoted below in order to point out the progression of Fux's ideas.

Aloys: If the ligatures were removed for the sake of the harmonic triad—which, however, would be impossible because of another consideration, the immediate succession of several fifths—these measures would appear as follows [Ex. 7.11]. I am giving you this faulty example, my dear Josephus, in order to show you by it that the nature of consonances is not changed by the ligatures; it remains exactly the same.

Ex. 7.11—The suspension's underlying consonances, from Fux's *Gradus* (1725), p. 104



Jos: If as you said the ligatures do not change anything, both the first [Ex. 7.11a] . . . and the second [Ex. 7.11b] must be equally wrong. For, if in the second example, without the ligatures, an immediate succession of several fifths results, the first example . . . is for the same reason faulty . . . .

Aloys: I am very pleased by your clever argument . . . but aside from the fact that one has to respect the authority of the famous masters skilled in the art . . . you must know that my statement, "ligatures do not change anything," has reference only to the essential nature of consonances, identical in both examples. Who could deny that in other respects there is a great power in ligatures—the ability to

[24] Mann, *Counterpoint*, 57.

avoid or improve [*salvandi et immutandi*; lit., "save and change"] incorrect passages?

Jos: . . . my argument would be dismissed if it were not for the example [of an 8-9-8 suspension] . . . that you rejected as incorrect, because there the ligature could not make a succession of two octaves acceptable. Just as in this example the ligature cannot make the bad succession of two octaves less noticeable, so it will not be able to amend that of the two fifths . . . .

Aloys: In order to dispose of this rather important objection one must realize that much is prohibited in the upper register—being there more perceptible and more obvious to the ear—that may be tolerated in the lower register, because there it becomes somewhat blurred on account of the lowness and does not strike the ear so sharply. For highness accentuates and lowness subdues. However, in order to bring to bear a more fundamental reason, I should like to remind you of what has previously been said about the different perfections of the intervals: the fifth is a perfect consonance, the octave a more perfect one, and the unison the most perfect of all; and the more perfect a consonance, the less harmony it has. In addition, we know that the dissonances in themselves are altogether lacking the grace and charm of harmony; and that whatever pleasantness and beauty they may give the ear have to be attributed to the beauty of the succeeding consonances to which they resolve. From this it is clear that a dissonance which resolves to a fifth will be more acceptable than one which resolves to an octave. Hence it is not surprising that the great masters consider the first example wrong, the second, however, as conforming to the rules of counterpoint. Finally, a resolution will be regarded more indulgently the closer the perfect consonance to which a dissonance moves is to the nature of an imperfect consonance.[25]

Fux's argument contains four intertwined ideas:

1. Suspensions don't change the essential nature of consonances, which must still function properly, but they do have "great power" including the ability to "save and change" our perception of parallel fifths.

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[25] Fux, *Gradus*, 105-6; Mann, *Counterpoint*, 96-7.

2. The great masters approved of some progressions but disapproved of others; we must be aware of and sensitive to their practice, which allowed suspension chains of fifths but not octaves.
3. License is allowed the lower voice that is not extended to the upper because of the greater attention which the latter draws to itself.
4. A dissonance that resolves into a fifth is more acceptable than an octave because the former is closer in nature to an imperfect consonance.

Aloysius's first point appeals to Josephus's ear to note the difference between bare parallels and those broken up by suspensions. Suspensions have "great power," not only to bring beauty to the music, but also to change voice leading. Fux is alluding to the fact that suspensions, unlike passing dissonances, are "substantial" dissonances which directly affect the strong beat of the measure. In spite of the fact that the consonances must still move correctly, the suspensions, by virtue of their placement, directly affect the nature of voice leading and transform previously unusable progressions of fifths.

It seems to be no accident that Fux raised this issue in three-voice counterpoint rather than in two voices and in the context of suspension chains. Berardi discussed this idea when he stated that "one may not use all the suspensions in two-voice compositions but in three or more voices, one can."[26] Indeed all of Fux's contemporaries pointed out that some progressions were available in three or more voices that were not usable in two voices. Jeppesen noted that such was the case in Palestrina's practice as well.[27]

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[26] "Dimostrationi, & esempii delle regole date di sopra, si deve però avertire, che non si possono usare tutte le legature nelle cantilene à 2. voci, mà ben sì in quella à 3. 4 e più voci" (*Documenti*, 135).

[27] Jeppesen, *Palestrina*, 253.

Fux followed up this appeal to the ear with his second point: not only does our ear register a difference between bare fifths and those that occur as a by-product of suspension chains but this difference is also evidenced in the works of the "great masters." Jeppesen only partially agreed with Fux on this point, stating that fourths "are hardly ever employed in two-part composition in the lower voice (resolving into the fifth)." However, "with more parts Palestrina resolves the fourth into the fifth quite often."[28] Fux considered strings of 5-4 suspensions to imply fifths, but not the appearance of a single 5-4-5. It is unclear how Fux arrived at this practice, as the Italian theorists followed the rule that a single dissonance did not break up parallels, or *la cattiva non salva.*

Fux's contemporaries were divided on the issue. Bononcini, for instance, objected to these same progressions involving fifths but not for Fux's stated reason. It is noteworthy, in the passage below, that Bononcini never mentioned the implied parallel but was troubled only by the lack of variety.

> A fifth to fourth and fourth to fifth many times in succession doesn't work in two voices, nor in the outer voices of more than two because there is no variety of the *concento* which delights the ear. If you use this movement it will be better descending than ascending for the adopted reason [stated above]. Repeated fifth to sixth and sixth to fifth has a harshness in two voices from continuing the sixth too long unmixed with other sounds.[29]

For Bononcini, repeated 5-4 progressions were monotonous, even in three voices, and the repeated 5-6 motions were somewhat harsh as a result of the sixths, not the fifths. In both instances, in spite of his objections, Bononcini

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[28] Jeppesen, *Counterpoint,* 246 and 248.

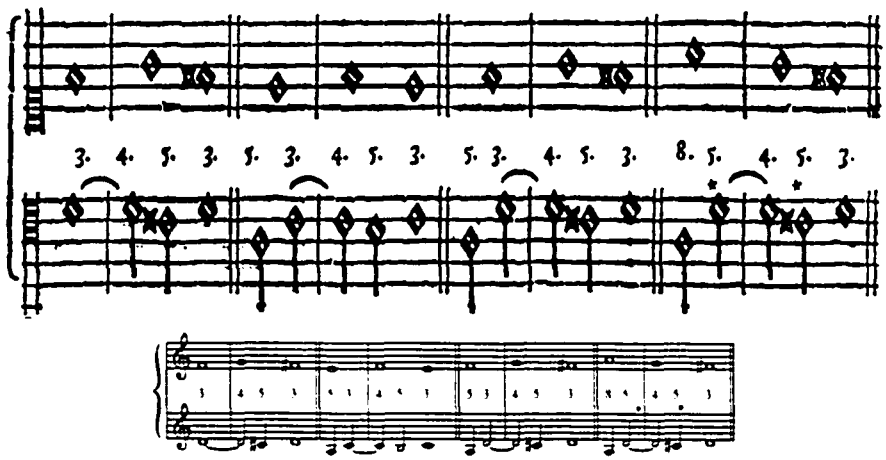
[29] "Di quinta in quarta, e di quarta in quinta più volte seguite non vi si vadi à due voci, nè meno à più di due le parti estreme, perche non v'è varietà di concento, che diletti l'orecchio, e facendosi tal movimento, sarà meglio descendente, che ascendente per la regione addotta. Di quinta in sesta, e di sesta in quinta più volte seguite à due voci hà dell' aspro, per la sesta troppo continuata, e non tremezata da altri suoni" (*Musico prattico,* 70).

appears to support Fux's asssertion: neither set of suspensions, even when used in chains, implied parallels.

Both Tevo and Berardi, however, disagreed with Bononcini and Fux in that they specifically prohibited suspensions involving reiterated fifths:

> The suspension of the fourth with the lower part is to be done with the third; it will be resolved [first] to the diminished fifth, [then] move on to the third. The last example is not good because it is similar to two fifths, although of different species.[30]

Ex. 7.12—Suspensions which imply hidden fifths, from Tevo's *Testore* (1701), p. 205



Thus, unlike Fux, Tevo allowed a suspension into a fifth as long as it did not involve the iteration of two fifths, or a 5-4-5 suspensions. Tevo followed the general rule, stated above, that *la cattiva non salva*, or a dissonance (lit. the "bad" note) cannot save parallels. Not all theorists were as strict as Tevo, and many would have considered his example involving a diminished fifth, a 5-4-5° suspension, to be the exception to the rule.

Fux's third point appears to be a clear reference to Bononcini. Fux felt that much was forgiven in the lower register, or the motion of the lower voices,

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[30]Zaccaria Tevo, *Il musico testore* (Venice: Antonio Bortoli, 1706), 205; "La Legatura della quarta con la parte di sotto si farà con la terza, e si risolverà con la quinta falsa, e si passerà alla terza; l'ultimo essempio non è buono per esser simile a due quinte, abbenche di specie diversa."

where it "becomes somewhat blurred on account of the lowness and does not strike the ear so sharply."[31] In a parallel passage Bononcini stated:

> if you use many sixths in sequence they are better descending than ascending because the more one moves towards the high the more one offends the hearing, which does not happen in the opposite [direction]; because highness exposes harshness and lowness conceals it, to which experience has given certainty.[32]

Bononcini is not the only theorist to voice this sentiment. Although Zarlino never stated it explicitly, he implied similar ideas at numerous points. In a similar manner, Angleria regularly allowed voice-leading license to the lower voice that he did not extend to the upper voice. The generation after Fux, however, is difficult to pin down on this issue. Martini echoed Fux and showed how all of the suspensions could be used in the form of *praticamenti*. Cherubini, on the other hand, who clearly borrowed from Martini, specifically forbade 4-5, 7-8, and 9-8 suspensions. His accompanying examples, however, prominently feature strings of 5-6 suspensions.[33]

Fux's final point—that a dissonance resolving to a fifth is closer in nature to that of an imperfect interval—echoed Zarlino, who stated that "fifths, which are not so simple as octaves, are not so easily comprehended by the ear."[34] Zarlino noted that progressions involving direct fifths were not as serious a voice-leading error as direct octaves or unisons and, though still objectionable, were to be treated with a bit more leeway than octaves and unisons. Zarlino,

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[31] Fux, *Gradus*, 106; Mann, *Counterpoint*, 97.

[32] ". . . facendo più seste seguite sono megliori nel descendere, che nell' ascendere, perche quanto più si và verso l'acuto, tanto maggiormente s'offende l'udito, il che non avviene per il contrario, poiche l'acuto scopre la durezza, & il grave la copre, come l'esperienza ne dà certezza" (*Musico prattico*, 69).

[33] Martini, *Esemplare*, xxv-xxviii ; Cherubini, *Counterpoint*, 18.

[34] Zarlino, *Istitutioni*, 207; Marco, *Counterpoint*, 116.

however, took this freedom to a level that even Fux was not willing to entertain, allowing license to certain progressions involving direct fifths.

Fifth Species and the Neighbor Dissonance

Fux began fifth species by stating that "this species is nothing but recapitulation and combination of all the preceding ones."[35] In truth, very little instruction accompanies fifth species since its basic ideas have been spread out across the other species. Immediately after teaching the species the seventeenth-century Italian theorists would have taught *contrapunto sciolto* or "free counterpoint." This type was considered a prelude to *contrapunto obbligato,* or counterpoint upon which certain restraints had been placed. The aim of *sciolto* was specifically to encourage variety and melodic invention. In Scorpione's words:

> . . . and here the new composer is not obliged to give a beginning [to the counterpoint] either with the subject, or with a part [of it], or of providing imitation between them, but only needs to attend to diminishing that part which makes the counterpoint.[36]

In a similar manner, Fux stated:

> This species is called florid counterpoint, so called because in every type of ornament, in grace of singing, with flexible ease of the motions, and suitable variety of notes, it should be like a garden filled with flowers.[37]

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[35] Fux, *Gradus,* 77; Mann, *Counterpoint,* 64.

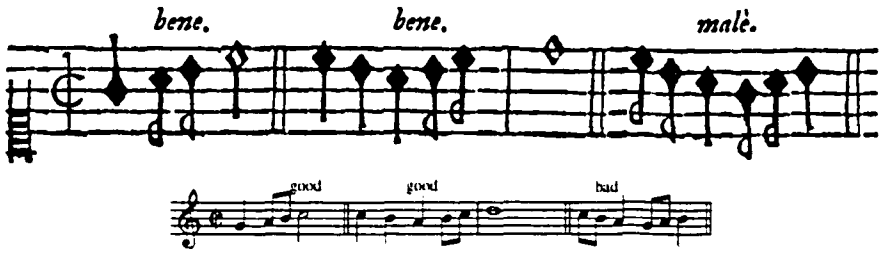
[36] ". . . e qui non è obligato il novello Compositore a dare principio, ò col soggetto, ò con la parte, ò a procurare l'imitatione di esse, ma solo deve attendere a diminuire la parte, che fà il Contrapunto" (*Riflessioni,* 143).

[37] "Species ista Contrapunctum floridum appellatur, sic dictum, quia omnis generis ornatu, canendi gratiâ, flexibili motuum facilitate, concinnâ, figurarum varietate, ùt hortus flosculis florere debet" (*Gradus,* 76).

Fux raised only two related issues in this species, both dealing with eighth-note decorations and both discussed briefly at the end of fourth species. Fux stated:

> two eighths may occcasionally be used in the next species; that is, on the second and fourth beats of the measure—but never on the first and third.[38]

Ex. 7.13—Eighth-note decorations in fifth species, from Fux's *Gradus* (1725), p. 76



Since these two eighth notes often used passing dissonance the Italian theorists would have included them in third species, or black-note counterpoint. Fux offered no information other than his brief statement above, but his examples clearly showed that: 1) they were always diminutions; 2) they always appeared in pairs; 3) they were used only on the second and fourth beats of the bar; 4) they only appeared as a single pair per bar, and; 5) they always moved by step.

The more substantial issue in this species is his inclusion of the neighbor dissonance as a decoration for the suspension.

> Concerning the next species I should like to say beforehand that the ligatures discussed so far may also be used in another way, where the original form is hardly changed, but nevertheless an enlivening movement results [Ex. 7.14]. From this one can see clearly that the first and third examples represent the original form; the ones respectively following where *idem* is added are variants used in the interest of the melodic line or the movement.[39]

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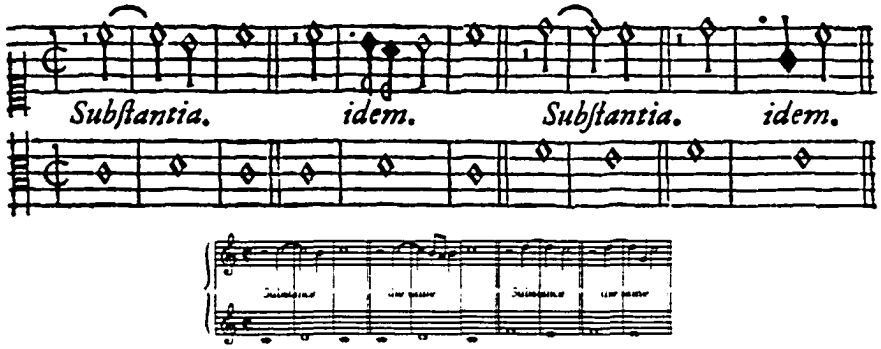
[38]Fux, *Gradus*, 76; Mann, *Counterpoint*, 63.
[39]Fux, *Gradus*, 76; Mann, *Counterpoint*, 62.

Ex. 7.14—Decorated resolutions of the suspension, from Fux's *Gradus* (1725), p. 76



Ex. 7.14 shows fourth-species counterpoint decorated by the appearance of either a single minim (transcribed as a quarter note) or a pair of semi-minims (eighth notes) on the metrically weak portion of the suspension's dissonance. Since the resolution of the suspension still fell in its designated spot the added notes functioned to "enliven" the texture without changing its structure.

As stated in Chapter Six of this dissertation, Fux appears to have forbidden the use of neighboring dissonance in quarter notes but, as shown above, did offer the figure as a decoration for a suspension. Fux's source for this information appears to be Berardi's *girandoletta* (little turn) contained in his discussion of *fioretti*, meaning florets or little flowers, from *Miscellanea* (1689).

The *girandoletta*, which Berardi also called *gioco* (play or game), occurs during his discussion of florid counterpoint. For Berardi, the adjective "florid" implied a quality, not a type of counterpoint; it indicated a playfulness distinguished by quick note values which Berardi called *fioretti*. For him, these "signify florid singing, almost playful, sometimes by leap, sometimes by step, ascending as much as descending."[40]

These *fioretti* were a variety of eighth-note figures, one of which included the neighbor figure. Berardi called this particular type of *fioretto* a *girandoletta*,

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[40] "Fioretti significa un cantar fioreggando, quasi scherzando hora di salto, hora di grado, tanto ascendente, quanto descendente" (*Miscellanea*, 145).

or "little turn." Jeppesen considered the *girandoletta* during his discussion of the neighbor. Jeppesen identified the lower neighbor figure as more common than the upper in the Palestrina style, and posited that "apparently the identity of the first and third quarters in the figure with the upper auxiliary [neighbor] was felt to be too inexpressive."[41] Jeppesen stated:

> Berardi expresses this in the viewpoint of the seventeenth century, which is more chord-concious, as follows: "Moreover the figure called *girandoletta* or *gioco* is forbidden, particularly where the cantus firmus remains over the same chord." Berardi is, therefore, of the opinion that such auxiliary figures should be strictly forbidden, especially where the position of the other part produces the return not only to the same tone but above all to the same chord.[42]

Jeppesen's literal translation of *corda* as "chord" in the modern sense attributed a curiously misplaced harmonic awareness to Berardi. Berardi routinely used this word during his instruction in two-voice counterpoint, in a manner more accurately rendered "note," as in his sixth rule of consonant half-note counterpoint;

> It is given as an infallible rule, that the two minims in the same chord [above the same note] or space must be different species of consonances. For if it is otherwise it is only note-against-note [counterpoint] without a single variation of the harmony.[43]

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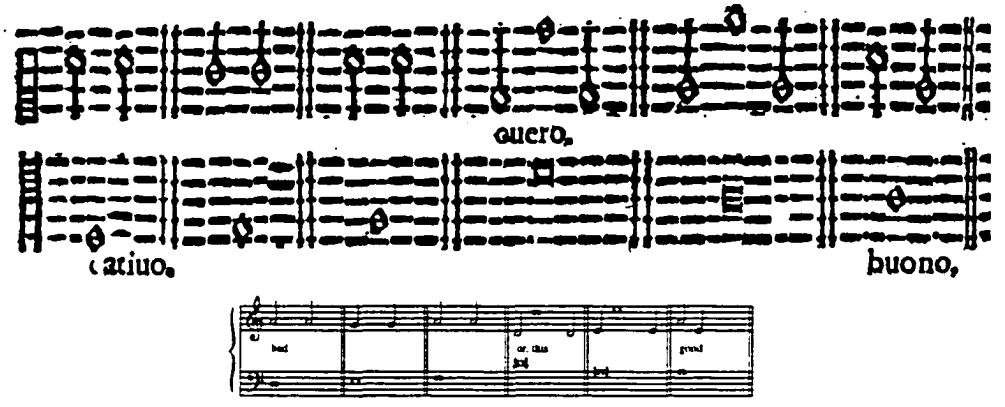
[41] Jeppesen, *Counterpoint*, 91.

[42] Jeppesen, *Counterpoint*, 91-2. Jeppesen cites Berardi, *Miscellanea*, 136.

[43] "Si da per regola infallibile, che le due minime in una medema corda, ò casella devono essere due consonanze di diverse specie, poiche facendosi altrimenti, oltre l'essere nota contro nota non ci è variatione alcuna d'armonia" (*Miscellanea*, 118-119).

Ex. 7.15—The *corda* or *casella*, from Berardi's *Miscellanea* (1689), pp. 118-9



Berardi restated the word *corda* as *casella*, a word translatable as spot, space, or location. Berardi appeared to have struggled for a way to describe the repeated notes of a counterpoint that occur both in the same measure and above a single note of the cantus firmus. Chords and harmonies in the modern, and Jeppesen's, sense are distinctly foreign to Berardi's discussion of two-voice counterpoint.

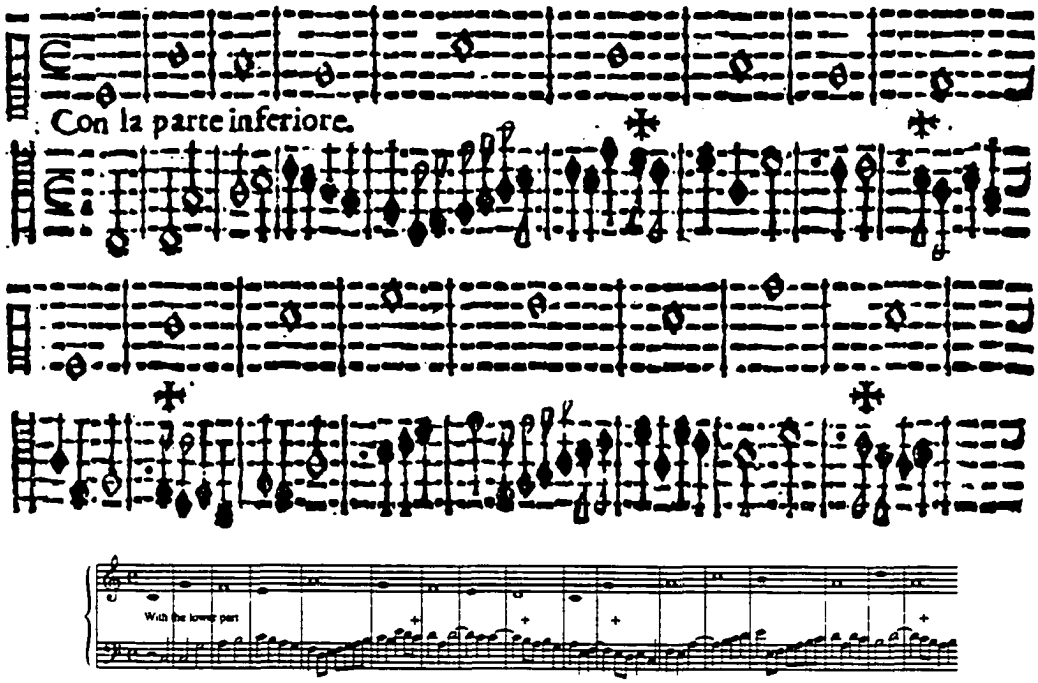
To return to the passage cited by Jeppesen, Berardi objected to the neighbor note because of the empty sound created by the mixture of dissonances and reiterated octaves and fifths. Thus, for Berardi, the *girandoletta* comes under the same heading as the *ottava battuta* since both figures involve the iteration of a perfect interval on a strong beat. It is this issue that Berardi raised when he prohibited the *girandoletta*, referring the reader to his forthcoming (and final) publication *Il perche musicale* (1693), which contained the passage cited by Jeppesen. Therefore, Berardi prohibited the figure in long notes because the perfect interval will land on both of the strong beats of the measure rather than on the off beats, as is the case with eighth notes.

Contrary to Jeppesen's observation, Berardi did explain how to use neighbor dissonance, adapting his views from Artusi's *L'arte del contraponto* (1585) and accompanying his discussion with a set of illustrations. In the

example below, Berardi demonstrated how to use two cromas, transcribed here as eighth notes, two of which (mm. 9 and 11) used neighbor dissonance. Berardi stated:

> Nearby where the crosses are indicated are some of the ways of using the two cromas, which may be used in [still] more ways. Be careful in using the dotted minim that the second of the two cromas does not restrike the octave, unison, or fifth.[44]

Ex. 7.16—Examples of neighbor dissonance, from Berardi's *Miscellanea* (1689), pp. 144-45



Berardi relegated neighbor dissonance to the subsidiary role of an eighth-note decoration for longer values. Although he was not explicit, his examples clarified his objection to the neighbor dissonance in longer values such as quarter notes. For Berardi, this type of counterpoint was extremely decorative and more correctly belonged in florid rather than simple counterpoint.

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[44] "Dove sono segnate le Croci si mostra appresso à poco il modo di adoprare le due crome potendosi fare in più modi. Averta che essendo la minima puntata la seconda delle due crome non ribatta in ottava, unisono, ò quinta" (*Miscellanea*, 145).

Fux's Influence on Subsequent Theorists

In the second volume of his *Versuch* Carl Philipp Emanuel Bach adapted Fux's ideas in stating that "chordal tones are either anticipated (*vorausgenommen*) or retarded (*aufgehalten*) by syncopations."[45] Bach avoided the Latin terms *anticipatio* and *retardatio,* but used the German equivalents used in Mizler's translation of *Gradus* and in Bernhard's *Bericht.*[46] Bach's statement also illustrates the progression of ideas that took place during Fux's lifetime, from a melodic or rhythmic "displacement" in the early seventeenth century, to a displaced consonance in Fux's theory, to a displaced chordal tone in C.P.E. Bach's theory. It is interesting to note, however, that the term "retardation," at least in English-language texts, has reverted to Bernhard's originally intended meaning as an upward resolving suspension. It is unclear at what point the term crept back into contrapuntal pedagogy. The term did not appear in Cherubini's widely copied counterpoint text, but was probably incoporated into nineteenth-century British textbooks on counterpoint and fugue, as it was already in use in Arnold's influential *Art of Accompaniment* (1931).[47]

In spite of the longevity of many of Fux's ideas, his explanation of the suspension was superseded in the late eighteenth century. Modern music theory uses the three terms preparation, suspension, and resolution to explain suspensions. These terms represent the consonance which precedes the dissonance, the dissonance itself, and the note which follows and resolves the

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[45] Bach, *Versuch,* 219; Mitchell, *Essay,* 348.

[46] Lorenz Christoph Mizler, *Gradus ad Parnassum* (Leipzig: the author, 1742; facs., Hildesheim: Georg Olms, 1984), 80; Joseph Müller-Blattau, *Die Kompositionslehre Heinrich Schützens in der Fassung seines Schülers Christoph Bernhard* (Kassel: Bärenreiter, 1963), 151.

[47] "The term retardation is convenient inasmuch as it applies equally to an upward and to a downward progression" (*Art of Accompaniment,* 692, footnote 1).

dissonance, respectively. This familiar explanation did not stem from Fux and *Gradus* but first appeared in print in Andrés Lorente's *El porqué* (1672) and moved into Italian music theory through Padre Martini's *Esemplare* (1774).[48] Martini substituted the Italian terms *preparazione, percussione,* and *risoluzione* for the Spaniard's *prevencion, ligar,* and *desligar,* terms later picked up by Cherubini in his influential *Cours de contrepoint* (1835). Martini's vast library, currently contained in Bologna's *Civico Museo,* contained virtually every contrapuntal source available, including Lorente's treatise, and is still the greatest single repository of Italian contrapuntal sources. Martini no doubt recognized the clarity and usefulness of the Spanish approach, one that has proven itself to the present day.

Conclusions

This chapter has shown how Fux assembled his ideas for fourth and fifth species. Bernhard's influence is more visible in fourth species than in any other portion of *Gradus.* All action resided in the suspended counterpoint rather than in the cantus firmus, the suspension itself was characterized as a "displaced" consonance, and the retardation and anticipation were distinct processes applied to consonances. Fux drew upon Italian theory for many of the details of his discussions. As with other portions of *Gradus,* Zarlino was always in the background, in fourth species contributing ideas about how suspensions into fifths were tolerated more than those into octaves. The language and discussion of how suspensions can alter voice leading came from Bononcini. From Berardi Fux took the distinction between upper and lower suspensions

[48] Martini, *Esemplare,* xxvii.

and the teaching of *fioretti*, or neighbor-note motions, as decorations to suspensions.

Finally, Fux must be credited with offering a unique perspective of suspension theory that combined Italian and North European ideas. In spite of the fact that the bits and pieces of his theory were assembled from the treatises around him, his final formulation resembled no other. No prior theorist managed to give such a concise account of how suspensions were understood and put into practice.

CHAPTER EIGHT

Conclusions

This study of *Gradus* began with an exposition of the conflict between Fux's assertions and the findings of modern scholars. In his Preface to *Gradus*, Fux stated: 1) he was largely self taught; 2) his self study was accomplished through a study of the works of Palestrina; 3) as a result of this study and his effort over the years, he developed a method to teach composition akin to the simple steps a child takes in the process of learning language; and 4) he published *Gradus* for the benefit of beginners who also want to undertake a course of self study. However, three scholars—Knud Jeppesen, Claude Palisca, and Joel Lester—have examined *Gradus* and have brought to light that 1) the compositional style embodied in *Gradus* only loosely resembles Palestrina's actual practice; 2) species counterpoint wasn't original to Fux; 3) *Gradus* is intimately linked both in spirit and in practice to the centuries-long traditions of Italian contrapuntal pedagogy and appears to be only a careful reorganization of that material; and 4) many of *Gradus's* examples appear in prior treatises, indicating that Fux may have borrowed from uncited and previously undisclosed works.

This dissertation has addressed the conflict between Fux's assertions and the findings of modern scholars by examining those contrapuntal sources which

preceded *Gradus* for the purpose of identifying similarities and literal quotations. Through this examination Fux's unique contributions to contrapuntal pedagogy have been distinguished from those items borrowed from previous theorists. Chapter One stated that this examination would reveal 1) that *Gradus* does indeed contain an overwhelming number of items which can be reliably traced to prior treatises; 2) that Fux's "new method" must be reassessed in the light of this borrowing; 3) that this reassessment would reveal that *Gradus* is a synthesis of what had been, up to the time of its publication, disparate methodologies; and 4) that Fux's most important contribution lay not in the creation of a new approach to counterpoint, but in his ability to transform species counterpoint from an idiosyncratic Italian approach to the accepted standard for teaching counterpoint in eighteenth-century Europe.

Fux's Sources

The first part of this chapter supports the first point by reassembling the accumulated data from Chapters Two through Seven. However, whereas those chapters organized their information by concept and by species, this chapter reorganizes that data by theorist and treatise. In this way, the contributions of each theorist can be separated from Fux's own. The second part of this chapter provides a reassessment of Fux in the light of *Gradus's* role in the development of contrapuntal pedagogy and offers a view of Fux as a learned theorist who borrowed from both the Italian and German traditions.

Gioseffo Zarlino's *Istitutioni* (1558), *Dimostrationi* (1589), and *Sopplimenti* (1589)

Of all the theorists that Fux accessed in constructing *Gradus*, none was so consistently represented in all stages of the work as Zarlino. Some items, such as the fact that variety is a key quality to be achieved in counterpoint and that music is constructed upon a consonant framework within which dissonances

form incidental occurrences, were frequently cited by all of the seventeenth-century theorists as being Zarlino's ideas. At other times Fux cited a specific phrase or term that was idiosyncratic to one of Zarlino's treatises.

Fux cited Zarlino on pp. 226 and 227 of *Gradus* concerning his seeming inability to differentiate the plagal from authentic modes and was one of the few theorists to follow Zarlino's idiosyncratic labeling of the C mode as Dorian, or first mode.[1] Fux also appears to have followed Zarlino's thought in calling chromatic changes to a mode "substantial" alterations, and an occasional chromatic inflection "accidental." Zarlino adopted these terms from Aristotelian logic in his *Sopplimenti* (1589). Fux subsequently applied the same terms to suspensions and passing dissonance.

Chapter Two drew attention to the similarity between Fux's and Zarlino's dialogue formats. Zarlino's *Dimostrationi* (1589) was devoted to defending his theories from Vincenzo Galileo's attacks, using the mouthpieces of Willaert and Merulo. Its dialogue format assumed the form of an exercise in musical apologetics, by conjuring the image of a great hero who righted wrong and restored order. Fux placed Palestrina in this exact role as he described the "unrestrained insanity" of latter-day composers and the need for a return to "normal standards."

Chapter Three explained how Zarlino's *Istitutioni* used Gaffori's eight rules as the basis for his section on simple, or note-against-note counterpoint. In spite of this logical method, no other theorist picked up on this simple way of organizing note-against-note counterpoint. Zarlino provided an extended discussion of why similar motion into fifths is tolerated at times. Fux was unwilling to grant the license which Zarlino extended to motion into fifths, but

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[1] Lester, *Modes*, 67; idem, *Compositional Theory*, 46.

did borrow from Zarlino's discussion on two occasions. Chapter Five pointed out that Zarlino originated the familiar illustration of how similar fifths imply parallel fifths when filled in by diminutions, an example that found its way into treatises by Tigrini and Diruta, and from there into a host of other seventeenth-century music theory treatises. Fux returned to this discussion in fourth species, three voices, where he borrowed Zarlino's idea that fifths are more complex than octaves, and therefore to be tolerated in chains of 5-6 motions, or even suspensions resolving into fifths such as chains of 5-4-5 suspensions. Both Zarlino and Fux stated that the upbeat of a measure, however, is of such fleeting quality that it cannot distract the ear from downbeat octaves.

Giovanni Maria Artusi's *L'arte del contraponto* (1586)

Chapter Four credited the three motions and the four rules based on them to Artusi. This group of ideas appeared in *Gradus's* Book One, where Fux discussed motion between consonances. At this point Fux stated that motion is an outgrowth of variety, a direct parallel that only appeared in Artusi's treatise. Fux then described the three motions and four rules, but avoided Artusi's unwieldy terminology of *motto* and *movimento*. Instead, Fux called Artusi's three motions, or *motti, transgressi,* which the Italian theorists understood to mean *passaggi*. In a direct link to Berardi, Fux termed the four *movimenti* "rules" but reverted to Artusi's original ordering.

Girolamo Diruta's *Seconda parte del Transilvano* (1609)

The strongest link between *Transilvano* (1609) and *Gradus* is Diruta's description of how a student sets note-against-note counterpoint with the four rules of motion and a similar example in *Gradus*. This unique example appeared in reduced format in Berardi's *Miscellanea* (1609), suggesting that Fux worked from Berardi's treatise rather than Diruta's. However, Berardi clearly labeled his

example as "*Diruta's contrappunto osservato.*" Even if he did not work directly from Diruta's treatise, Fux would have been aware of Diruta's authorship. A second link between *Gradus* and *Transilvano* is the similar dialogue format employed by both treatises. Chapter Three described the various dialogue formats found in sixteenth- and seventeenth-century treatises. By the time of *Gradus's* publication, the dialogue was, at best, an archaic format for a theoretical treatise. Both *Transilvano* and *Gradus* are dialogues between teacher and pupil. Finally, Fux would have found in several treatises the example that direct motion into a fifth or octave implied parallel motion. However, his specific language of "hidden" or "concealed" strongly implies reliance on Diruta's treatise.

Giovanni Chiodino's *Arte prattica* (1610); Andreas Herbst's *Arte prattica* (1653)

Long believed to be one of Fux's unique contributions to contrapuntal theory, the formula for the *cambiata* was established in Chapter Six to be original to Giovanni Chiodino's *Arte prattica* (1610). This dissertation is the first to recognize Chiodino's pioneering description of the *cambiata* and its link to Fux's formula. Fux probably borrowed the idea from Andreas Herbst's 1653 translation of Chiodino's text, which was widely available in Northern Europe, rather than directly from Chiodino's treatise. Nevertheless, Herbst clearly cited Chiodino and Fux would have been aware of the fact that Herbst was simply repeating Chiodino's text in German.

Adriano Banchieri's *Cartella* (1614)

Banchieri's *Cartella* (1614) is often cited as being one of *Gradus's* clear precursors. Chapter Two demonstrated that the relationship between the two treatises is difficult to establish. In spite of the fact that both feature examples of species writing, species counterpoint is at the core of *Gradus* and appeared as an afterthought in *Cartella*. The strongest link between the two is the use of a

dialogue between a wizened teacher and a novice coming to learn music. Banchieri's treatise was one of a number which used this format at the end of the sixteenth and beginning of the seventeenth century.

Lodovico Zacconi's *Prattica di musica seconda parte* (1621)

Zacconi's and Fux's treatises are linked by the formula for the five species. Chapter Two described the fact that species counterpoint in the sixteenth and seventeenth centuries taught only consonances in white note values, dissonance in black notes. In species counterpoint, therefore, both second and fourth species consisted entirely of consonances. Zacconi eliminated this approach in his treatise, stating that it offered nothing useful. The uniqueness of Zacconi's idea is apparent in that no subsequent theorist seized on Zacconi's approach until it appeared in *Gradus*. Since Zacconi spent most of his working life in Austria it is only natural to assume that copies of his text would have survived in that country to Fux's lifetime.

Marin Mersenne's *Harmonie universelle* (1636)

Fux cited Mersenne on p. 1 of *Gradus's* Book One. However, other than this citation there appear to be few, if any, relationships to Mersenne's treatise. The reason, no doubt, rests in the fact that Mersenne's section on counterpoint relied heavily on Zarlino's *Istitutioni* (1558), which he cited extensively. Unlike the portions of *Harmonie universelle* dealing with *speculativa*, where Mersenne's own ideas are put forth, Mersenne appears to have been relatively uninterested in *pratica* and often only provided a brief gloss before moving on to other ideas.

Athanasius Kircher's *Musurgia universalis* (1650)

Chapter Three described how the only theoretical source associated with Fux outside of *Gradus*, the manuscript attributed to the Franciscan Minor Venantii Sstanteyski, suggests a relationship between Kircher and Fux. This

manuscript contains *praticamenti* from Kircher and Bononcini, those by Bononcini being labeled as Fux's work. Though the attribution is incorrect, the manuscript contains the kind of exercise that would have been kept by musicians who were studying counterpoint, in the manner described by Bernhard's *Tractatus* (c. 1657). Kircher's section on counterpoint provided a unique analysis which numbered both measures and intervals. His example used this simple system to describe how a counterpoint was constructed according to simple rules. Fux adopted both of these analytical strategies in a manner similar to Kircher.

Christoph Bernhard's *Tractatus* (c.1657), and *Bericht* (c.1670)

Nowhere is *Gradus's* blend of traditions more evident than in the incorporation of Bernhard's ideas into a predominantly Italian view of counterpoint. Whereas Zarlino's and Berardi's treatises may have provided the greatest number of ideas, Bernhard's treatises provided the most crucial ones: the theories of passing and suspension dissonance that were grafted into Italian contrapuntal pedagogy. Chapter Six discussed the impact of Bernhard's *transitus*, or passing tone, as a diminution filling in the leap of a third. This key concept stands in contrast to the Italian description of passing dissonance as "one good, one bad," which Fux used in third species. In fourth species, Fux was directly influenced by Bernhard's *Rückung*, or displacement, which Fux termed a "displaced consonance." Fux called the suspension a *retardatio*, a term also unique to Bernhard's suspension theory. Fux also followed Bernhard's definition of the *anticipatio*, paraphrasing it for his discussion towards the end of *Gradus*.

Andrés Lorente's *El porqué* (1672) and Pablo Nassarre's *Fragmentos* (1700)

As is the case with Artusi's and Diruta's treatises, the relationship to the two Spanish theorists is based on striking similarities rather than direct quotation. Lorente's treatise was the only one prior to *Gradus* to guide the reader

through the species approach with helpful commentary illustrated with a multitude of musical examples. Though Lorente was not the only theorist to seize on the species approach as the core of his pedagogy, no theorist prior to *Gradus* treated it with the comprehensiveness of *El porqué*.

Pablo Nassarre published two treatises, the relatively short *Fragmentos* (1700), which taught counterpoint from a species approach, and the lengthy, two-volume *Escuela* (1721) which used the system of the *passaggi*. The resemblance between *Gradus* and *Fragmentos* lies in the similarity of their dialogue formats. Chapter Two compared Nassarre's treatise, where simple questions addressed basic ideas about music and musical construction, to a child's catechism. The questions assume a level of knowledge that a child would not necessarily possess, a quality of omniscience shared by Josephus's questions in *Gradus*. Nassarre's question-and-answer format is remarkably similar to that found in *Gradus*.

Fux's knowledge of Spanish theory would have resulted from Charles III ascending the throne in 1711 (crowned as Charles VI) after his brother Joseph I died childless. Charles was the last of the Hapsburg line and was, at the time of his coronation, King of Spain and residing in Barcelona. Charles was a true lover of music and a man of learning. He was reported to be fluent in German, French, Spanish, and Catalan. He brought to Vienna his Spanish musicians, his favorite composer Antonio Caldara, who had served him Spain and whom he eventually named as vice-Kapellmeister, and upon ascending the throne even named one of his Spanish subjects to the honorary post of Musical Director.[2] Fux must have immediately found favor with Charles. In spite of the presence of both Spanish and Italian musicians in Charles's court, Fux was promoted to Kapellmeister

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[2] Köchel, *Fux*, 363.

within a few years of Charles's coronation above all other applicants. It is not difficult to imagine that these Spanish musicians, who served under a true music lover who had made every effort to immerse himself in their Spanish culture, also brought with them Spanish treatises and that these treatises were available to Fux, the Emperor's Kapellmeister.

Giovanni Maria Bononcini's *Musico prattico* (1673)

Another of the four treatises cited by Fux, Bononcini's *Musico prattico* (1673) was one of the most widely circulated seventeenth-century treatises and one of the few seventeenth-century Italian music theory treatises to appear in German translation. Fux cited Bononcini on p. 228, during his discussion of the modes, as an example of the theorists' inability to agree on what separated authentic from plagal modes. As with his citations of Zarlino and Berardi, Fux casts Bononcini in a negative light rather than as a trustworthy source. Chapter Five described Fux's borrowing in first species of an example from Bononcini during the discussion of the *ottava battuta*. Fux compared an example of a tenth moving into an octave, which Berardi prohibited, with a progression of a fifth leaping out to an octave, which Bononcini allowed. Fux would have prohibited the leap into an octave and considered the logic of the Italian theorists to have been flawed

Fux also followed Bononcini's progression of ideas, that the rule of "one good, one bad" was followed by two exceptions, the *cambiata* and a relatively accented dissonance falling on beat three of the bar. In spite of the fact that he never gave the formula, Bononcini did describe the *cambiata* and gave examples of it on p. 76 of *Musico prattico*. Chapter Seven discussed the fact that suspensions, in Fux's view, could "save," or alter voice leading. During this discussion Fux quoted Bononcini's observation that the upper voice highlighted voice-leading problems whereas lower voices hid them. As a result, a

suspension chain involving fifths in the bass was to be tolerated. In spite of the fact that Fux quoted Bononcini at this point, Bononcini specifically disagreed that chains of fifths were to be allowed.

Finally, Chapter Two discussed the Minorite manuscript containing *praticamenti* copied from Kircher and Bononcini. In this manuscript, attributed to Venantii Sstanteyski, Bononcini's examples are attributed to Fux. The presence of examples from Bononcini, copied by a student who thought that they originated with Fux, strongly suggests that Fux liberally copied portions of treatises at his disposal and assembled useful portions of them at a later date in a manner typical of the pedagogical system of the *passaggi*.

Angelo Berardi's *Miscellanea musicale* (1689)

Chapter Two stated that Lorente's and Berardi's treatises were unique in that they were the only two that placed the species system at the core of their pedagogy and relegated all other ideas to a subservient role. These two theorists were the only ones who fleshed out the species system with helpful commentary. Although Berardi's explanations were not as extensive as Lorente's, his approach was substantially clearer than that found in any other Italian treatise.

Chapter Three pointed out that Berardi was the last Italian theorist to employ the dialogue format. In a manner similar to Lorente's *El porqué* (1672), Berardi's last treatise, *Il perché* (1693), answered questions posed by friends and fellow musicians. Outside of the treatises by the two Spanish theorists, *Il perché* was the only dialogue in proximity to *Gradus*. Chapter Four stated that on p. 104 of *Miscellanea* (1689) Berardi renamed Artusi's four *movimenti* as the four rules of motion, a unique change which links Fux's and Berardi's treatises.

Chapter Five showed that a portion of the discussion surrounding the *ottava battuta* came from Berardi's *Miscellanea* (1689), p. 106. Chapter Six stated that Fux also borrowed the term *cambiata* from *Miscellanea* p. 143, even though

what the two theorists meant by the term differed. Fux applied the term to Chiodino's formula which leaped out of a passing tone into two stepwise consonances, whereas Berardi applied the term to a variety of figures caused by two moving lines where a dissonance occurs on a strong beat.

Chapter Seven pointed out that Berardi was the first theorist to separate suspensions in the upper voice from those in a lower voice, his list appearing on pp. 120-21 of *Miscellanea*. Fux used this sensible idea to show how the note of resolution differs after a dissonance depending on whether it occurs in the upper or lower voice. Finally, Chapter Seven stated that Fux never discussed neighbor dissonance, but followed the conservative Italian tendency which forbade its use in note values longer than an eighth note. Following Berardi, Fux allowed the neighbor dissonance only as a decoration for suspensions. Berardi considered this type of decoration on pp. 144-5 of *Miscellanea* (1689), where he called it a *fioretto*.

Giacomo Carissimi's *Regulae compositionis* (c.1700) and the Oral Tradition

At several points in this dissertation it has been stated that certain items are so common that they cannot be reliably traced to any one theorist or source. Items such as starting the counterpoint with a rest in second and third species, the cadential formulas, the extremely common idea of "one good, one bad" as the formula for passing dissonance, and the relationship between two-to-one and three-to-one counterpoint are common ground for a host of treatises. These ideas must be considered part of the oral tradition, the pedagogy of counterpoint carried on by the numerous teachers and performers who migrated between Italy and Austria in the sixteenth and seventeenth centuries.

The example which has been used in this dissertation to represent the oral tradition is the *Regulae compositionis* (c.1700) attributed to Giacomo Carissimi.

The manuscript contains many similarities to *Gradus*. It teaches counterpoint via the species approach, although of the older type where both second and fourth species consist entirely of consonances. It arranges its instruction as a set of rules under each species, with the note-against-note counterpoint rules covering the material of the system of the eight rules. Finally, each counterpoint exercise is clearly labeled as "species," a straightforward classification which never appears in print prior to *Gradus*, but which appears in several manuscript sources. The similarity of these ideas and their presence in manuscripts that predate the publication of *Gradus* suggests that Fux may have gotten some of his ideas from other-than-printed sources and may have been exposed to the teaching of species counterpoint before writing *Gradus*.

Fux's Contributions

Fux's chief innovation was his superior organization of the material. Along with this logical organization he offered simple explanations accompanied by clear examples, practical advice, and corrected exercises which illustrated problems and solutions. Unique to his treatise was the fact that, unlike his Italian counterparts, Fux clearly shifted counterpoint away from the vertical interaction of intervals to the primacy of the melodic line. His six cantus firmi forced the student to deal with the inherent difficulties of each mode at an early stage rather than in a section at the end of the text.

Perhaps Fux's most original contribution was the extension of the species approach to three and four voices. Chapters Two and Three of this dissertation drew attention to the disorganized presentations of counterpoint in more than two voices in the treatises preceding *Gradus*, a difficulty often solved by completely avoiding the subject. It seems inconceivable that the species approach to counterpoint, which had been in existence for at least two-and-a-half

centuries prior to *Gradus's* publication, was never applied to exercises in more than two voices. However, this logical, even obvious procedure was never advanced in sixteenth- or seventeenth-century publications. If it was used prior to *Gradus's* publication, the evidence still remains to be unearthed in the archives of Italian libraries, churches, and monasteries.

As has been shown, the overwhelming majority of Fux's ideas are directly linked to those mostly Italian sixteenth- and seventeenth-century treatises that preceded *Gradus*. From the basic idea of using the species approach to teach children, to the specifics of how it was taught and implemented, Fux's system represents material heavily worked by numerous theorists over the course of at least two-and-a-half centuries. Some of Fux's most critical ideas—such as the *cambiata*, the four rules of motion, and his explanations for passing and suspension dissonance—have been shown to be remarkably similar to ideas found in uncited treatises. In many ways, *Gradus* can be viewed as an extended set of excerpts assembled over a period of time into a comprehensive model for instructing young students in the art of composition.

Thus, Fux's contribution to music theory was not the presentation of a new set of ideas, but his ability to turn these ideas into a workable pedagogy assembled from a variety of sources. Fux viewed this achievement as being so remarkable that he felt it was a "new method never before so clearly and conclusively presented." In fact, *Gradus* was accepted as a remarkably fresh view on contrapuntal pedagogy at the time of its publication in Fux's stated manner. It is an inescapable fact that *Gradus* quickly became the ultimate expression of contrapuntal pedagogy from the time of its publication to the present day.

Though Fux may have only minimally contributed new ideas to music theory, his contributions to the pedagogy of theory have been both important and long lasting. The following section reassesses *Gradus* from this standpoint—

not as a new set of ideas, but as a new voice in pedagogy whose uniqueness is evident in three ways: 1) it was the first treatise to elevate pedagogy to an equal level with the theory itself; 2) it was a blend of what had been, prior to its publication, disparate traditions in pedagogy and compositional theory; and 3) most importantly, it supplanted the accepted, centuries-old system of the *passaggi* traditionally associated with Zarlino as the *de facto* standard in contrapuntal pedagogy.

Fux and the Pedagogy of Music Theory

All of the research on *Gradus* has stressed the importance of its clarity and readability. Joel Lester notes that readers "could easily imagine themselves, as the young Haydn probably did, studying along with a colleague under the guidance of a master . . . ."[3] Unlike his sources, Fux was concerned not only for the quality of his ideas but for the quality of their presentation as well. *Gradus* was structured more like a modern counterpoint textbook, as opposed to a treatise on counterpoint, and sacrificed comprehensiveness for accessibility. In a certain sense, Fux was the first in a long line of theorists stretching to the present day to concern themselves not only with music theory but with the pedagogy of music theory as well.

Fux's emphasis on pedagogy directly influenced the teaching of counterpoint at the major nineteenth-century European conservatories. Niccola Piccini, in his prefatory letter for the Italian edition of *Gradus*, states that *Gradus* was already firmly installed at the Naples Conservatory by the late 1770's.[4] Padre Martini's pupil Giuseppe Sarti (1729-1802) passed on his teaching to Luigi Cherubini (1760-1842), who studied with Sarti as a youth in Milan. In 1822

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[3] Lester, *Compositional Theory*, 32.

[4] Fux, *Salita*, unnumbered fol. 4v.

Cherubini was appointed director of the Paris Conservatoire, where his *Cours de Contrepoint* (1835) became a standard text, providing a living link to Martini's teaching.

A second link to the tradition came via Johann Georg Albrechtsberger's *Gründliche Anweisung zur Composition* (1790).[5] Albechtsberger (1736-1809) was, like Fux, Kapellmeister at St. Stephen's Cathedral in Vienna and respected as both a composer and teacher, most notably of Beethoven. Albrechtsberger's manuals on counterpoint, harmony, and the lessons that he gave Beethoven were collected by one of his pupils, Ignaz Ritter von Seyfried, and appeared in German, French, and English translation.[6]

While there are differences between Fux's, Martini's, Albrechtsberger's, and Cherubini's treatises, each stressed a reverence not only for counterpoint as a compositional procedure but also as rigorous foundational training. Each was written by a composer-pedagogue with an established reputation for teaching composers via Fux's method. In spite of the fact that these treatises often disagreed on various finer points, it is through them and their influence that counterpoint and fugue assumed the status of an academic discipline that they have kept, for better or worse, to the present day.

Gradus as a Blend of Traditions and Methodologies

The second point that emerges from *Gradus's* sources is that it needs to be

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[5] Johann Georg Albrechtsberger, *Gründliche Anweisung zur Composition* (Leipzig: Johann Gottlob Immanuel Beitkopf, 1790; various translations and editions 1814-44; English trans. in *J.G. Albrechtsberger's Collected Writings on Throrough-Bass, Harmony, and Composition*, trans. by Sabilla Novello from a French trans. of a German ed. by Ignaz Ritter von Seyfried, London: Novello, 1855).

[6] Seyfried's editorial liberties have long been a source of speculation. See also Gustav Nottebohm, *Beethoven's Studien I* (Leipzig and Winterthur: J. Rieter-Biedermann, 1873; facs. ed., Niederwalluf (bei Wiesbaden): Martin Sändig, 1971).

reassessed not only as the final statement of the *prima prattica*, but as a blend of what had been, prior to its publication, disparate Italian and German pedagogical traditions. Helmut Federhofer was one of the first scholars to suggest that portions of *Gradus* reflected Bernhard's influence. Federhofer noted that Bernhard's manuscripts may have been viewed as the work of Italian theorists, since copies of Bernhard's *Tractatus* (c. 1657) are preserved in Viennese archives wrongfully attributed to Alessandro Poglietti. However, given Fux's interest in music theory, his wide reading on the subject, and familiarity with the differing approaches, it is quite possible that Fux readily perceived the difference between Bernhard's uniquely German approach and the traditional Italian one. The addition of Bernhard's ideas may have been a conscious attempt to infuse new life into a stagnant Italian tradition through the addition of some practical German ideas.

Fux was openly critical of Italian theory, an aspect of *Gradus* that would have been readily apparent to a reader conversant with the Italian treatises. Fux characterized Italian compositional theory as confusing and unhelpful, a charge specifically aimed at the system of the *passaggi*, which dominated contrapuntal theory in the sixteenth and seventeenth centuries. The three Italian theorists that he cited—Zarlino, Bononcini, and Berardi—were all mentioned in a negative context for their inability to clearly differentiate authentic from plagal modes. His allusions to the issues raised by the Italian theorists are couched in negative terms as well. He completely sidestepped the *autori* in a major break with tradition which reduced the importance of these revered figures. The *passaggi* are relegated in their entirety to *speculativa*. Finally, he censured the Italian theorists for their inability to see that the whole purpose of counterpoint was to lay a firm foundation for teaching composition.

This revisionist approach to Italian counterpoint must have appeared fresh and innovative to those eighteenth-century theorists familiar with the traditions of contrapuntal pedagogy. The explanations of passing and suspension dissonance alone would have been viewed as remarkably simple and creative in comparison to the stodgy Italian treatises. Not only did *Gradus* appear at a surprisingly late date (1725), but it came from the hands of an Austrian writing in Latin about a subject considered the sole province of Italian theorists. In his Preface to Manfredi's translation of *Gradus,* Piccini registers some of this amazement in saying "because [Fux] has discussed the science of harmony with such accuracy, one can well say [here is] a German filled with Italian sense."[7] Unlike the majority of the Italian treatises, *Gradus* presented a set of steps, in logically organized fashion, describing how to go from the barest essentials of musical construction to relatively complex, multi-voice compositions in an imitative texture.

Another outgrowth of this blended approach is that *Gradus* mixes viewpoints as much as it mixes pedagogies. Chapter Four stated that Italian musicians viewed counterpoint differently from their German-language counterparts—the Italians as basic instruction in the "rules of music," German-language theorists as compositional theory, or *Kompositionsregeln.* In a very real sense, these two views, one addressing the practical needs of composition and the other the more abstract concept of the construction of music, have shadowed counterpoint instruction to the present day. Carl Dahlhaus noted this dual nature in his 1980 article "Counterpoint" where he stated:

> As a didactic discipline, counterpoint has been justified both speculatively and pragmatically. Fux and Padre Martini were convinced that the norms

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[7] "Perciocchè à ragionato della Scienza armonica con tale accuratezza, che ben può dirsi un Tedesco pieno di senso Italiano." (*Salita,* unnumbered folio 4v).

> of strict counterpoint were founded in the very nature of music, which, though it might be transformed by changing styles and fashions, was not to be destroyed (free style was understood as a permitted departure from strict style rather than as a suspension of it).
>
> Since the break with tradition that occurred around 1910, the custom of continuing to teach counterpoint in the Fuxian manner is justified by arguing that it is pedagogically necessary to discipline musical thought by means of exercises in 'dead material.'[8]

Gradus borrowed liberally from both composition manuals and treatises devoted to an exposition of the "rules of music." The seemingly opposing viewpoints poured into its construction have made it difficult to separate their influences. In light of the diversity of Fux's sources, and the traditions they represent, *Gradus's* compositional method is inextricably bound to its presentation of the "rules of music." Fux's system must be viewed as a fusion of *Kompositionsregeln* and *Regole di musica.*

In the nineteenth century counterpoint was viewed in approximately the same manner as Fux intended in the eighteenth. In Prout's words, counterpoint "is the preliminary technical work for actual composition, just as Herz's or Plaidy's are the preliminary technical exercises for pianoforte playing."[9] Counterpoint itself was not composition, but a series of preparatory exercises which would help develop compositional skill. From Cherubini's treatise in the early part of the century to the many similar treatises published up to the beginning of the twentieth, counterpoint was still considered foundational to training in composition in the manner set down by Fux.

In the twentieth century, however, species counterpoint has come to be valued more for its ability to involve a student in an exercise which carefully

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[8] Carl Dahlhaus, "Counterpoint," *The New Grove Dictionary*, ed. Stanley Sadie, 20 vols., 4: 844.

[9] Ebenezer Prout, *Counterpoint: Strict and Free* (London: Augener Ltd., 1890; numerous editions; facs. ed., New York: AMS Press, n.d. [1971]), iii.

distinguishes strict treatment of dissonance from the more liberal type found in free composition. This type of exercise is valuable not only for the instruction it provides, but also for its ability to serve as a gateway for understanding compositional framework and analysis. The origin of this approach is found in the works of Heinrich Schenker (1868-1935).

Schenker considered counterpoint to be the rules purely of voice leading in distinction to "free composition," which is voice leading within harmony (the *Stufen*). His two-volume treatise *Counterpoint* (1910 and 1922) regularly upbraided theorists from J.G. Albrechtsberger to Hugo Riemann (1849-1919) for their inability to distinguish the liberties of free composition from strict voice leading. Joel Lester points out that in spite of the fact that "*Gradus* offers no hint that the species method is to be used for anything other than learning written composition," Fux has increasingly been studied for "the central role that it plays in Schenkerian perspectives on tonal music."[10] In distinction to how it was originally conceived, the twentieth century has considered *Gradus* more of a text devoted to music theory than a composition method.

As noted, Dahlhaus viewed *Gradus* as a mixture of both theory and compositional method. Certainly as a well-read music theorist, Fux openly offered his advice and opinions about musical ideas: there is both good and bad music, there are good and bad composers, and good and bad music theory. Though Fux made every attempt to adhere to his stated purpose of teaching composition, he did not hesitate to make value judgements when necessary. It was at this point that Fux left the North European model of *Kompositionslehre* and entered the Italian world of the *Regole di musica*. Only by being well grounded in the "correct" construction of music could a student advance to more difficult assignments.

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[10] Lester, *Compositional Theory*, 31 and 35.

Fux outlined his views on music theory in the Preface to *Gradus*, where he noted that music had "become almost arbitrary and composers refuse to be bound by any rules and principles, detesting the very name of school and law like death itself." Fux recapitulates this view in greater detail towards the end of *Gradus*, after the student has progressed through counterpoint, imitation and fugue, where he states:

> if a man of middle age were to appear today dressed in the style of fifty or sixty years ago, certainly he would expose himself to ridicule. Music, too, must be suited to the times. But never have I found a tailor familiar with the new fashions, nor have I heard tell of one, who attached shirt sleeves to the thigh or to the knee; nor of any architect who was so foolish as to put the foundation of a building on top of the roof. Yet we see and hear such things everywhere in music, not without bringing disappointment to those of taste, and shame to art when the fundamental precepts of nature and art are deliberately inverted from their proper place by rules turned upside down, and the foundation is put above while the other parts are put below without regard for the proper foundation. Indeed, Joseph, no matter how much you strive for novelty and invention by exerting all the powers of your times, nothing can overturn, much less destroy, the rules of art which imitate nature and which achieve the ends of nature.[11]

Fux's music theory is based on the view that art is the imitator of nature and that the foundational rules of music are as immutable and unshakable as the natural world itself. Though compositional styles may change, the foundational principles of music itself, upon which composition is based, cannot be changed. Such a viewpoint is not only a guiding principle for composition, but a guiding principle for erecting a music theory as well.

In keeping with this position, Fux realigned both Italian and German theory as he perceived it. In the case of German theory, at least as presented in Bernhard's treatises, it was too progressive, and bordered on becoming arbitrary. In the case of Italian theory, it was so entrenched in tradition that it had become

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[11] Fux, *Gradus*, 279; Lester, *Modes*, 209.

unhelpful and confusing. These and similar ideas steadily moved *Gradus* away from a description of style of the style of the *prima prattica* to a prescription for "correct" music. The resulting tension between prescriptive "normal standards" and the compositional style on which they were allegedly based is what originally prompted Jeppesen's research into the music of Palestrina in the early part of the twentieth century.

Fux's statements are rooted in Zarlino's theories, stated at numerous times in this study, that nature is the true "substance" and art the expression, outgrowth, or "accident" of this natural law.[12] True and valid art imitates Nature. Though Fux was willing to borrow from Zarlino's theories, he relegated most of it to the realm of unhelpful, speculative theory. In spite of the fact that Zarlino formed such a central component of Fux's views of music and music theory, *Gradus* was specifically constructed to replace the pedagogy of counterpoint that for centuries had been associated with Zarlino and his *Istitutioni*.

Zarlino, Fux and the Shift in Pedagogy

The popularity of the species approach to contrapuntal pedagogy has obscured the presence of competing pedagogies prior to its arrival. The presence of these competing pedagogies in Fux's sources offers a new perspective on *Gradus's* impact on the counterpoint pedagogy of the early eighteenth century. Chapters Two and Three painted species counterpoint as a relatively minor strand of contrapuntal pedagogy in the shadow of the *passaggi*, especially as represented in the works of Zarlino and Artusi. *Gradus's* most important impact on music theory was that it shifted the accepted, centuries-old pedagogy of counterpoint away from the *passaggi* to the species approach, creating a

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[12] Zarlino, *Sopplimenti*, 20.

resurgence of interest in a discipline that had lost its relevance to eighteenth-century musicians.

In his 1959 article "Kontrapunkt" for *Die Musik in Geschichte und Gegenwart*, Claude Palisca summarized *Gradus's* role in the development of seventeenth-century counterpoint. Palisca states:

> Fux is historically significant through the fact that he erected anew a pedagogical system that in Italy, its place of origin, was already extinct, and because numerous generations of German and Austrian composers were trained through this system. In doing so, Fux has established an art that, otherwise, would have probably fallen into oblivion. [C.P.E.?] Bach, Mozart, Haydn, and Beethoven all grew up with Fux's textbook. Through Martini's *Esemplare* this art was also awakened to life in Italy, and through the editions by Fétis and others this book became the foundation for counterpoint instruction in France and England.[13]

Palisca adopts the position that by the early eighteenth century instruction in counterpoint had fallen by the wayside, outstripped by more important developments in both music and music theory. Certainly by the early eighteenth century counterpoint in general, and species counterpoint specifically, were some of the least exciting aspects of European music theory. Rameau had published his ground-breaking theory of harmony only three years prior to the appearance of *Gradus*, precipitating a flurry of activity in all parts of Europe. The publication of numerous figured-bass treatises in Italy, France, England, and Germany indicate the great interest generated by this body of thought. In

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[13] "Fux ist historische wichtig durch die Tatsache, dass er ein pädagogisches System wieder aufrichtete, das in seinem Ursprungsland Italien bereits im Aussterben war, und dass er dieses System mehreren Generationen deutscher und österreischer Komp. weiterreichte. Damit hat Fux eine Kunst bewahrtet die sonst vielleicht in Vergessenheit geraten wäre. Bach, Mozart, Haydn, und Beethoven sind alle mit Fuxens Lehrbuch aufgewachsen. Diese Kunst wurde durch Martinis *Esemplare* auch in Italien wieder zum Leben erweckt, und durch die Ausgabe von Fétis u.a. wurde dieses Buch die Grundlage der Kp.-Lehre in Frankreich und England (*Kontrapunkt*, par. 1542).

addition, Renate Groth has pointed out that even in Italy counterpoint instruction may have begun to lose its position as an element of *pratica*, citing Lorenzo Penna's placement of counterpoint in the section devoted to *speculativa*, its traditional role in *pratica* being replaced by figured bass theory.[14]

However, counterpoint treatises continued to be published into the early eighteenth century and within only a few years of *Gradus's* publication in both Italy and Spain. Bononcini's *Musico prattico* (1673) was considered important enough that a German translation appeared in 1701. A variety of manuscript sources in Austria from the late seventeenth or early eighteenth century attest to the continued interest in counterpoint in that country as well. The abundance of these late seventeenth- and early eighteenth-century counterpoint sources argues against a view of counterpoint as either forgotten or on the verge of extinction in every part of Europe. These sources show that the species approach was, even in the early eighteenth century, not the accepted approach to counterpoint.

By far the most widely available pedagogy of counterpoint was the tradition of the *passaggi*, as represented in Zarlino's *Istitutioni* (1558) and Artusi's *L'arte del contraponto* (1588), two of the most widely copied treatises in Europe. The system found its way into treatises as diverse as Morley's *A Plaine and Easie Introduction* (1597), Mersenne's *Harmonie universelle* (1636), Bernhard's *Tractatus* (c. 1657), and Nassarre's *Escuela* (1723). It was available in virtually every major language in the seventeenth century in printed treatise or manuscript source, with either a direct citation to Zarlino or a gloss of his treatises. In conjunction with Zarlino, it became the method of choice in the sixteenth and seventeenth centuries and must be considered as ubiquitous in those centuries as species counterpoint is in the nineteenth and twentieth centuries.

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[14] Groth, "Italienische Musiktheorie," 325.

In contrast to the wide availability and recognition afforded Zarlino's *passaggi*, the species approach to counterpoint was an Italian phenomenon and confined to those places which maintained strong cultural ties with Italy. It appears to have been completely unknown in France and England, and would have been known in Northern Europe only from sources directly connected to the Italian tradition. In each case, species counterpoint would have been almost imperceptible as a pedagogical system, and completely unrecognizable as a compositional method due to the scarcity of sources or the confused presentation in the available sources.

Gradus's impact on early eighteenth-century pedagogy must be gauged by its successful replacement of the system of the *passaggi* as the premier method of instruction. Rather than refocusing interest on a forgotten tradition, it shifted pedagogy away from a system that had outlived its usefulness towards one that combined the fruits of centuries of thought into a model offering a useful abstraction of musical construction. In the process, Fux reduced Zarlino's approach to *speculativa*, or music theory (as opposed to compositional theory). Though it contained interesting information, it was seen as being of limited value.

The Resistance to Change

Though Fux's ideas were widely accepted there were detractors. One often cited opinion appears to stem from J.S. Bach himself. Carl Phillip Emanuel Bach was quoted as saying that his father "started his pupils right in with what was practical, and omitted all the dry species of counterpoint that are given in Fux and others."[15] Another detractor in the German-speaking world was Johann

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[15] Mann (*The Great Composer*, 1) cites Friedrich Wilhelm Marpurg, in a letter to Johann Mattheson, *Kritische Briefe über die Tonkunst*, weekly publication 1759-63, collected ed.

Mattheson (1681-1754), whose *Der vollkommene Capellmeister* (1739) returned to the tradition of the *passaggi* outlined in Bernhard's treatises.[16] Throughout his life Mattheson engaged in acerbic debates about anything that he percieved as emanating from Italy, or "castrato land" as he derisively termed it. More than once Mattheson's punishing wit and disdain for all things Italian were pointed at Fux, whose Catholic faith and Imperial service targeted him as Italianate. In an attempt to discredit Fux's ideas, Mattheson's presentation of counterpoint completely sidestepped the species approach in favor of Bernhard's presentation of the *passaggi*. In an ironic twist, Mattheson's return to a "German" view of counterpoint embraced a most thoroughly Italian contrapuntal system.[17]

There may have been some resistance to change in Italy as well. Mann has printed a copy of a letter from Padre Martini to Fux in which the young musician fairly gushes with enthusiasm and praise for the elder's achievements.[18] This letter and a quote which Abbé Vogler attributed to Martini that "we have no other system but that of Fux" are usually given as proof that Martini was one of the main champions in Italy of the contrapuntal tradition in general and of *Gradus* in particular.[19] From these accounts scholars have often concluded that Martini regularly instructed through *Gradus*, and passed on his reverence for the

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in 3 vols. (Berlin: Friedrich Wilhelm Birnstiel, 1760-64; facs. ed. in 2 vols., Hildesheim: Georg Olms, 1974); Eng. trans. of this letter from *The Bach Reader*, Hans T. David and Arthur Mendel, eds. (New York: W.W. Norton, 1945, 1966).

[16] Johann Mattheson, *Der vollkommene Capellmesiter* (Hamburg: Christian Herold, 1739; facs. ed. by Margarete Reimann, Kassel: Bärenreiter, 1954; repr. eds., 1969 and 1980).

[17] Lester, *Compositional Theory*, 169. Fux and Mattheson's bitter exchange of letters is detailed in Joel Lester, "The Fux-Mattheson Correspondence: An Annotated Translation," *Current Musicology* 24: 37-62.

[18] Mann, *Preface*, xviii.

[19] Mann (*Counterpoint*, xii) cites Abbé (Georg Joseph) Vogler, *Choral-System* (Copenhagen: in Kommission in der Haly'schen Musikhandlung (Niels Christensen), 1800), 6.

work to his students. However, his only counterpoint treatise seems to imply a change of mind.

Towards the end of his life Martini collected a great deal of his thinking about the world of counterpoint in his two-volume *Esemplare* (1774 and 1775). Alfred Mann characterized *Esemplare* as "a 'graduate course,' intended for the student who has completed his apprenticeship in counterpoint and fugue," noting that "although his writing precedes that of Albrechtsberger, Martini's work guides the student's view far beyond the teaching of the Viennese master."[20] Mann draws attention to the fact that the *Esemplare's* two volumes follow the general plan of *Gradus*. The first volume is devoted to contrapuntal pieces drawn from masters of the late Renaissance and early Baroque written over lines of chant, and the second volume to fugal pieces written without the constraints of the chant. However, the similarities end there, since the writing style is a great deal more complex than that given in *Gradus*. *Esemplare's* pedagogical style is also simply a different contrapuntal pedagogy from that contained in *Gradus*, fully in keeping with the tradition of the *passaggi*.

Esemplare (1774) never mentions species counterpoint, Fux's name appears only as a footnote in the second volume, and it is Zarlino who is cited as the authority for virtually everything. In place of species counterpoint, Martini gives twelve rules which summarize the basics, accompanied by footnotes that give examples from and citations to Zarlino's *Istitutioni* (1558). These twelve rules change numerous aspects of Fux's formulation. Neighbor dissonance is allowed in quarter notes, passing dissonance is no longer a diminution filling in a third but reverts back to the traditional explanation of "one good, one bad," and Bernhard's suspension theory is discarded in favor of the three-part Spanish approach. Whereas Fux discarded the plagal modes, urging students to

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[20] Mann, *Fugue*, 263.

concentrate only on the six authentic modes, Martini openly grouped *Esemplare's* compositions according to the twelve modes. Thus, in addition to its greater scope, *Esemplare* also presented a return to the spirit and practice that flowed from Zarlino. Species counterpoint was acceptable for the instruction of children, but the true art of counterpoint was to be learned by analyzing, copying, and maintaining lists of examples from which to work, in the exact manner described by Bernhard in the 1650's.

What changed between the early letter of 1734 and the publication of Martini's treatise in 1774 was that Martini had become a renowned scholar of the history and study of counterpoint, possessed of a breadth of knowledge far exceeding what he knew at the age of twenty-three. These intervening years of study apparently opened up to him the origins of Italian contrapuntal theory and the tradition that stemmed from Zarlino. Martini realized that this traditional system required years of careful study of the masterworks written in the polyphonic style of the sixteenth century, and that this repertory had become increasingly difficult to locate by the mid-eighteenth century.

In addition, Martini's treatise may have also been a gentle response to Fux's criticisms of Italian theory. Though Martini appears not to have had access to a copy of any of Bernhard's treatises, he would have immediately noticed that Fux's explanations of dissonance treatment did not align with the traditional Italian definitions.[21] Wisely, he did not attempt to make a case for a return to the *passaggi* as Mattheson did, but he did return to the traditional system of collecting ideas from masterworks as the most valid means of learning composition. In this sense Martini was the last in the line of great Italian pedagogues from Zarlino, and the end of the system of the *passaggi* in Italy.

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[21] Gaspari, *Catalogo*, 1890, does not list any of Bernhard's treatises.

In sum, the disappearance of the contrapuntal pedagogies which preceded Fux's approach have obscured his remarkable impact on the pedagogy of the early eighteenth century. *Gradus's* greatest contribution was not a new set of ideas about counterpoint, or even a new approach to teaching counterpoint, but the transformation of the species approach from a curious and relatively minor strand of sixteenth- and seventeenth-century Italian contrapuntal theory into the most widely accepted approach to teaching counterpoint by the end of the eighteenth century. In the process, it replaced the system of the *passaggi*, the accepted, centuries-old approach to teaching counterpoint associated with Zarlino's *Istitutioni* (1558), and replaced Zarlino as the authority on counterpoint. *Gradus* is significant not for the originality of its ideas but for its ability to convince eighteenth-century musicians of the value of the contrapuntal model for musical construction through the species' useful abstraction of composition. *Gradus* transformed counterpoint from an idiosyncratic aspect of Italian music theory into a rigorous academic discipline adopted as a central component of the major nineteenth-century European conservatories, a trend which has continued to the present day.

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The Preparation of this Manuscript

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