

From the Singer's Point of View: A Case Study in Hexachordal Solmization as a Guide to *Musica Recta* and *Musica Ficta* in Fifteenth-Century Vocal Music

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A treatise by the sixteenth-century Papal musician Ghiselin Danckerts preserves the details of an interesting controversy among some professional singers in Rome. Presuppositions concerning modal purity together with certain ambiguities of unspecified accidentals in a Lamentation setting by the Spanish composer Juan Escribano combined to provide these performers with some difficulties in the matter of the pitches to be sung. In his discussion of this episode, Lewis Lockwood observes that "many performers of the time must have found the problem as difficult as we do today."¹ Our difficulties in such questions of pitch, and in the concomitant consideration of editorial accidentals, derive from at least two considerations.

First, modern editors have not always made a consistent conceptual distinction between *musica ficta* and *musica recta*. The term *musica ficta* has frequently been used incorrectly to embrace all of the editorial accidentals added to modern scores of Renaissance music. In fact, many of these editorial accidentals, specifically many B^bs, may be explained and should be understood in terms of the standard system of *musica recta* as delineated in the gamut, the theoretical framework by which the fifteenth-century composer and singer defined musical space.² *Musica ficta*, on the other hand, refers only to pitches outside of the gamut. The distinction is crucial, for while the fifteenth-century singer, and, by implication, his modern counterpart, would normally avoid entering *ficta* hexachords unless necessary, there was simply no reason to avoid the B^bs of *musica recta*. Thus, all editorial accidentals are not equal, and it is critical that the modern editor make a conceptual distinction between editorial accidentals representing *musica ficta* pitches and those representing *musica recta* pitches.

Second, editors and performers too rarely approach these difficult problems of pitch from the point of view of the individual Renaissance singer. Margaret Bent has emphasized that it is we as twentieth-century musicians who add precise indications of accidentals when we prepare and perform

from scores, our means of representing visually an entire polyphonic complex.³ By contrast, singers of the Renaissance did not perform from scores nor did they rely on complete and explicit written indications of accidentals. Rather, they determined *musica recta* and *musica ficta* according to well-known conventions which they applied to the performance of their individual vocal lines. As these individual lines were combined in rehearsal and vertical problems of counterpoint exposed, singers would adjust their parts wherever necessary by semitone on the basis of an aural comprehension of the entire polyphonic texture. Thus, for modern editors and performers, a primary consideration must be the conventions applied by fifteenth-century singers as they rehearsed musical compositions. Given the standard training of singers as described by Renaissance theorists, we must identify the assumptions and procedures that they would have brought to the music and attempt thereby to recreate the perspective of the individual singer. Through a case study of the "Et resurrexit," from the Credo of Ockeghem's *Missa l'homme armé*, this paper focuses on hexachordal solmization—the cornerstone of the singer's training—as a valuable means for understanding how the Renaissance singer determined *musica recta* and *musica ficta* within an individual vocal line and within the overall polyphonic context.

Hexachordal solmization, originally conceived for monophonic chant, had to be extended from the twelfth century on in order to deal with the wider pitch demands of polyphony. The necessity for vertical intervals to be perfect led, for example, to the need for E^b , a pitch unavailable as *musica recta*, in vertical combination with the *recta* B^b . In recognizing these needs, theorists rationalized semitones other than B to C, E to F, and A to B^b by transposing hexachords to pitches other than G, C, and F. Such new hexachords may be referred to as *ficta* hexachords. The *musica ficta* pitch E^b , for example, became available as *fa* of a *ficta* hexachord on B^b .

Having rationalized needed pitches not available in the gamut, theorists were quick to point out, however, that *musica recta* was always preferred to *musica ficta*. Bent cites Prosdocimus and Ugolino among other theorists who articulate this preference:

Prosdocimus allows the use of *musica ficta* "provided the consonance could not be coloured in any other way than by *musica ficta*" and says that it is never used "except where the context requires." Ugolino tells us not to use *ficta* "except in places of cogent necessity." *Musica ficta*, according to the theorists, is a last resort.⁴

We may think of this principle as the first of two important guidelines applied by singers as they determine *musica recta* and *musica ficta* through solmization. The second guideline pertains to mutation, the process of moving

from one hexachord to another by way of a pitch common to both. Theorists from the thirteenth century, such as Johannes de Garlandia, through the sixteenth century state that mutation should be avoided as far as possible. For example, both Johannes Cochlaeus, in *Tetrachordum musices* of 1511,⁵ and Hermann Finck, in *Practica musica* of 1556,⁶ caution that mutation should not be made unless necessary. Of course, even on a common-sense basis, it is not difficult to understand that the fewer mutations involved, the easier the task of the singer. Thus, when a singer solmized, he matched his musical phrases with the closest hexachords, being certain to stay in one hexachord as long as possible before mutating, and always preferring *musica recta* to *musica ficta*.

While it is not difficult to accept the theorist's testimony concerning the practice and techniques of solmization, it is impossible to demonstrate that experienced singers always solmized their way through a new composition in the initial stages of rehearsal, thereby determining *musica recta* and *musica ficta* in that composition. It is possible, however, to justify the premise that Renaissance singers would have thought in terms of hexachordal solmization. First, there is, of course, no shortage of theoretical treatises testifying to the fact that, from their earliest years of training, fifteenth-century singers were taught to define musical space through the hexachordal system. Thorough training in hexachordal solmization was simply part of the musical background that every singer brought to his work. Second, there is some pertinent evidence implying that singers thought in terms of hexachordal solmization even when they did not actually pronounce solmization syllables to each pitch. In his *Practica musicae* of 1496, Gaffurius states that

sounds represented by notes are generally articulated in three ways. The first way is by solmization, that is, by intoning the syllables and vocal names ut, re, mi, fa, sol, la. . . this method of articulation is indeed almost mandatory for the instruction of youth. The second way is by uttering only the sounds and pitches while omitting entirely letters, syllables, and words, a practice which a singer easily follows. . . The third method of singing is by articulating the text. . . .⁷

Gaffurius not only testifies here to the importance of solmization in the training of young singers, he also shows that a trained singer can bypass the actual articulation of syllables in favor of simply singing the pitches. The implication here from the text and from the musical illustration accompanying the second way of singing, a hard hexachord ascending and descending without solmization syllables, is that through his earlier training the singer would have made a mental connection between the pitches of the hexachord and the corresponding solmization syllables.

A premise, therefore, for the following discussion of the Ockeghem exam-

ples is that, regardless of whether they solmized in rehearsal, Renaissance singers would have understood their vocal lines as successive hexachordal segments interlocked through the process of mutation. Thus, they would have determined *musica recta* and *musica ficta* in their vocal lines by means of the principles, if not the actual techniques, of solmization.

It is this process that we must attempt to recreate when we produce modern scores of Renaissance vocal music. According to Bent, "if we approach the manuscript situation with the medieval singer's training in mind, we are more likely to reason in his terms and approach his solutions."⁸ Such a procedure will yield a more precise understanding of *musica recta* and *musica ficta* than relying solely upon the commonly enunciated guidelines originating in the counterpoint treatises of medieval and Renaissance theorists.⁹ These guidelines take a vertical approach and represent primarily the composer's point of view. The process of solmization, on the other hand, takes a horizontal, melodic approach and represents the singer's point of view. Ultimately both viewpoints are complementary, and both are necessary for the modern editor, the distinction being one of priority. The editor who determines editorial accidentals first on a horizontal basis in each voice, afterwards mediating these results on the basis of vertical considerations of counterpoint, reflects more closely the rehearsal circumstances of Renaissance vocal music than does the editor who proceeds through the newly transcribed score looking for necessary vertical adjustments according to the theorist's contrapuntal rules. Even with this combined linear and contrapuntal approach, our editorial results cannot be considered definitive, for it is impossible to know precisely the decisions that the Renaissance singer would have made with regard to solmization and mutation.¹⁰ But if our inquiry is necessarily tentative, it may also be considerably informative as it presents a new perspective on these complex problems of pitch.

A distinct advantage in using portions of an Ockeghem Mass for this case study is that two significantly different indications of editorial accidentals by a single editor, Dragan Plamenac, are available for comparison with the solutions to be presented here. Plamenac first published his Ockeghem edition in 1927, later issuing a "second, corrected" edition in 1959.¹¹ In his 1927 edition, Plamenac articulated the following guideline with respect to his application of editorial accidentals:

In adding accidentals great restraint has been observed. In doubtful cases the editor has tried to follow the adage "better too few than two many" in order not to vitiate the modal character of the old works.¹²

In his 1959 edition, where many of the 1927 editorial accidentals were withdrawn without any kind of written explanation, Plamenac exhibited an even

Figure 1. The contratenor part of the “Et resurrexit” from Ockeghem’s *Missa l’homme armé*. Biblioteca Apostolica Vaticana, ms. Chigi C.VIII.234. Used with permission.

The image shows a handwritten musical score for a contratenor part. It consists of five staves. The first staff starts with a large 'C' time signature and a 'Cant' marking. The lyrics 'Et resurrexit tertia die' are written below the first two staves, and 'xxx prophetas' is written below the fourth staff. The notation includes various note values, rests, and accidentals.

greater sense of restraint. Nor is this kind of editorial policy limited to the work of Plamenac, for even in more recent editions of Renaissance music, an operative guideline has been to apply editorial accidentals only sparingly. This guideline, however, produces distorted musical results since it fails to consider that the Renaissance singer would have approached this music from the practical standpoint of solmization rather than the essentially theoretical standpoint of modal purity, a concept which itself must be questioned as an operative compositional precondition for fifteenth- and sixteenth-century music.¹³ It is worth emphasizing that the intent here in examining the editorial accidentals of both Plamenac editions is not to denigrate his landmark work but rather to indicate as clearly as possible the substantially different results occasioned by looking at this music from the singer’s point of view.

Ockeghem’s *Missa l’homme armé* is preserved in two Vatican manuscript sources: the so-called Chigi Codex, from which I have transcribed the present examples, and Cappella Sistina Codex 35.¹⁴ The Chigi Codex, the most important single source preserving the works of Ockeghem, is dated by Herbert Kellman at 1498–1503,¹⁵ while Llorens notes that Cappella Sistina 35 was copied during the reign of Pope Innocent VIII (1484–92), thus slightly earlier than the Chigi Codex.¹⁶ The “Et resurrexit” is a four-part setting with

the disposition of parts in my transcription (from highest to lowest) being: cantus, contratenor, bassus, and tenor. The tenor is devoted exclusively to a complete statement of the *L'homme armé* cantus firmus.

The first excerpt to be considered here, mm. 14–21 (example 1), demonstrates how the linear, melodic perspective of the individual singer results in more editorial accidentals than would the more exclusively vertical, contrapuntal approach. Apart from the *subsemitonium modi*, however, all of my editorial accidentals represent *recta* rather than *ficta* pitches. In the present examples, the upper line of editorial accidentals represents Plamenac's original 1927 edition, the middle line his "second, corrected" edition of 1959, and the lower line my solution. The cantus in mm. 14–15, with its range of G–E, would have been solmized in the hard hexachord. As the range moves upward in m. 16, the singer would have mutated briefly to the natural hexachord and then, given the G–D range of the cantus in mm. 16–19, either to the hard or soft hexachord. The singer might well have chosen the hard hexachord since a quick look ahead would have shown that the line does not descend below G.

Any ambivalence in choice of hexachord for these measures would have been clarified in the second half of m. 17, where there is a vertical tritone between the cantus and contratenor. If the singer of the cantus was operating in the hard hexachord with its B \natural , he would have sung *mi*, while the singer of the contratenor, operating in the natural hexachord, would have sung *fa*. Since the theorist's contrapuntal rules strictly forbade *mi* against *fa*,¹⁷ the cantus, upon perceiving this dissonance in rehearsal, would have adjusted by choosing the soft hexachord with its B \flat , thus perfecting this vertical interval. Even though we add an editorial accidental at this point, there is no *musica ficta* involved here since this B \flat is available as part of *musica recta*. A *ficta* solution would involve the contratenor in m. 17 singing an F \sharp against B \natural in the cantus. The F \sharp could be provided by means of a *ficta* hexachord on D, but a *recta* solution was always preferred to a *ficta* solution. In his 1927 edition Plamenac concurred with the *recta* solution, while in his 1959 edition he withdrew the B \flat and allowed the *mi* against *fa* to stand without adjustment, something the Renaissance singer would not have done.

Once the singer realized the necessity of the soft hexachord in order to avoid *mi* against *fa*, the actual mutation to the soft hexachord would have taken place in m. 16, the result being that the soft hexachord and its B \flat would have been operative throughout m. 17 in the cantus. Further, having chosen the soft hexachord for m. 17, the singer of the cantus would have remained in this hexachord until there was reason to mutate, hence the B \flat s in the cantus in mm. 18–19. One perceives the need for these editorial accidentals only from the singer's horizontal, melodic point of view. If one were to proceed through the score looking for points requiring vertical adjust-

Example 1.

The musical score for Example 1 consists of four vocal parts: Cantus, Contratenor, Bassus, and Tenor. The score is divided into three systems of measures.

System 1 (Measures 14-16):

- Measure 14:** Cantus (IH), Contratenor (IN), Bassus (IN), Tenor (rest).
- Measure 15:** Cantus (IN), Contratenor (IN), Bassus (IN), Tenor (rest).
- Measure 16:** Cantus (IN IS), Contratenor (IN), Bassus (IN), Tenor (IN).

System 2 (Measures 17-19):

- Measure 17:** Cantus (IN), Contratenor (IN), Bassus (IN), Tenor (IN).
- Measure 18:** Cantus (IN), Contratenor (IN), Bassus (IN), Tenor (IN).
- Measure 19:** Cantus (IN), Contratenor (IN), Bassus (IN), Tenor (IN).

System 3 (Measures 20-22):

- Measure 20:** Cantus (IH), Contratenor (IN), Bassus (IN), Tenor (IN).
- Measure 21:** Cantus (IN), Contratenor (IN), Bassus (IN), Tenor (IN).
- Measure 22:** Cantus (IN), Contratenor (IN), Bassus (IN), Tenor (IN).

ment, the B \flat s in mm. 18–19 of the cantus would be missed completely, as they were in Plamenac's editions. The fifteenth-century singer, however, would not have regarded these B \flat s as anything out of the ordinary, for they were simply part of *musica recta*. Nor was there any need for the inflections in mm. 18–19 to be indicated in the manuscript; once the singer realized that the soft hexachord was necessary to correct the *mi* against *fa* in m. 17, the B \flat s in mm. 18–19 were a logical corollary.

A similar situation arises in the bassus, mm. 18–21. Beginning in the second half of m. 18, the singer of the bassus, given the range of his melody, would have entered the soft hexachord. Since there would have been no need to mutate until the C in m. 22, the Bs in the bassus, mm. 19–21, would all have been sung B \flat . In m. 20, the B \flat manuscript accidental in the Chigi Codex is actually superfluous, but its presence corroborates my reading of the passage in the soft hexachord. The potential linear tritone in m. 21 is avoided without further mutation because the singer is operating in the soft hexachord.

A more difficult question concerns the first note of the cantus in m. 21. Would this singer sing B \flat –A in response to the B \flat –A just heard in the bassus? In other words, is an imitative consistency between the bassus and cantus desirable at this point? This was Plamenac's solution. For the cantus to sing B \flat at the beginning of m. 21 would involve perfectly logical mutations: from the soft to the natural hexachord in m. 19, then back to the soft hexachord in m. 20, thus providing a B \flat in m. 21. If, however, the last B in m. 21 of the cantus is to be a B \natural in preparation for the cadence on C in m. 22, the singer would have to think in terms of a shift from the soft to the hard hexachord in m. 21, a mutation discouraged by theorists.¹⁸ It is therefore preferable for the singer of the cantus to mutate to the hard hexachord in m. 20, thus singing B \natural at the beginning of m. 21. This solution provides the necessary B \natural at the end of m. 21 for the cadence on C without further mutation. Further, the range of the cantus in m. 21, down to G not F, fits the hard hexachord more closely than the soft. The loss of "imitative consistency" is not disturbing since it is not required by any contrapuntal necessity.

The second excerpt to be considered here is the cantus-bassus duet in mm. 22–24 (example 2). The range of both voices is predominantly F–D from the end of m. 22 into m. 23. Both would therefore be solmizing in the soft hexachord by the end of m. 22, where the suspended vertical tritone does not emerge as a problem since the cantus would sing B \flat against the bassus F. In his 1927 edition Plamenac suggested the same solution. In his 1959 edition he suggested that the suspended tritone be perfected instead through an F \sharp in the bassus. The singers, however, both of whom would have been operating in the soft hexachord, would have avoided the vertical tritone by means of a *recta* rather than a *facta* solution.

Example 2.

The image shows a musical score for two parts: Cantus and Bassus. The Cantus part is written on a treble clef staff, and the Bassus part is on a bass clef staff. The score covers measures 22 through 25. Measure numbers are placed above the Cantus staff. Solmization symbols (N, S, fa, la) are placed below the notes. Accidentals (flats and sharps) are placed above the notes. The Bassus part has a measure number 8 below the first measure.

The bassus in m. 23 exceeds the upper range of the soft hexachord by one step. The oft-quoted guideline “una nota super la semper est canendum fa” (one note above *la* is always sung *fa*) is applicable here. According to this guideline, the E above D, the upper limit of the hexachord, should be sung as *fa* or E \flat . Andrew Hughes has pointed out that the practice of singing *fā* above *la* was illustrated by the fifteenth-century theorist Johannes Legrense (ca. 1415–73), a contemporary of Ockeghem.¹⁹ Thus, the application of “una nota super la” in this context seems entirely appropriate. The practical result of this shortcut in solmization is the avoidance of a linear tritone outline, in this case E–C–B \flat . This solmization is confirmed by the fact (noted by Plamenac) that the E in the bassus of m. 23 was at some point lowered through a manuscript accidental in the Chigi Codex, the flat later being erased.²⁰

The more difficult question is whether the singer of the cantus, in order to avoid a cross-relation, would have lowered his E in m. 23 in response to what he had just heard in the bassus. In terms of solmization, this would force the cantus into a B \flat *ficta* hexachord for parts of mm. 23–24 instead of the expected mutation to the natural hexachord. While such a *ficta* hexachord is surely possible in this context, one must question whether the singers, whose training led them to prefer *recta* to *ficta* solutions, would have felt compelled to adjust this cross-relation through application of *musica ficta*. While the answer to this question is not readily apparent, the contemporary editor may have some evidence to replace intuitive judgments. In a study of chromatic cross-relations in six Mass settings by Obrecht, Thomas Noblitt examined those accidentals “occurring in the sources themselves” that produced cross-relations.²¹ Noblitt found that by far the majority of the accidentals producing cross-relations were clearly related to “generally accepted principles of *musica ficta* or of hexachord theory.” He goes on to state that “seventy-six percent of the accidentals are related to avoidance of the tritone. Included in that figure are not only those which eliminate direct melodic and harmonic tritones but also those which prevent outlining the interval of the augmented

fourth melodically. . . .²² Thus, at least in Obrecht's music, when an accidental is used to avoid a linear tritone outline, as in an "una nota super la" situation, the result may well be a chromatic cross-relation which "should not be edited out."²³ While a study equivalent to Noblitt's has not been done for Ockeghem's Mass settings, it does not seem unreasonable to regard the cross-relation in m. 23 as the perfectly acceptable result of a necessary application of "una nota super la" to avoid a linear tritone outline in the bassus.

While the first excerpt discussed above presents no particular problems from the singer's point of view and the second excerpt only the uncertainty of the cross relation, the third excerpt to be discussed here, mm. 27–33, is more difficult. It is clear that the Bs in m. 27 of the contratenor and the bassus must be lowered, given the F sounding simultaneously in the tenor (example 3). Cappella Sistina 35 shows a manuscript accidental B \flat in the contratenor, while the Chigi Codex does not.²⁴ In the Chigi Codex, however, there is a B \flat signature for the third staff of the contratenor part (figure 1). Of the four parts of the "Et resurrexit," this is the only staff bearing a signature. For the Renaissance singer such a signature provided solmization information. The signature flat, indicating that B was to be solmized as *fa*, warned the singer that he would need to enter the soft hexachord at some point. There is, however, not a single B on the third staff of the contratenor part. The first B following this signature is early in the fourth staff of the contratenor. Perhaps by placing the signature at the beginning of the third staff, the scribe's intent was to make certain that the singer was warned well in advance of the eventual need for mutation to the soft hexachord. It is more likely, however, that the scribe simply erred by one staff in his placement of the B \flat signature. In

Example 3.

Example 3 is a musical score for four voices: Cantus, Contratenor, Bassus, and Tenor, covering measures 27 and 28. The Cantus part is in a soprano clef. The Contratenor part is in a soprano clef with a 6/8 time signature. The Bassus part is in a soprano clef with a 6/8 time signature. The Tenor part is in a bass clef. In measure 27, the Contratenor and Bassus parts have flats above notes. In measure 28, the Contratenor part has a flat above a note, and the Tenor part has a flat below a note.

either case, while the signature is useless for the third staff, it is meaningful for the fourth staff, affecting the contratenor part from m. 27 on.

The presence or absence of editorial accidentals from m. 28 to the end of the "Et resurrexit" will be determined largely by how the editor treats a single pitch, the B in m. 28 of the contratenor. If it is a B \sharp , then the result will be as in Plamenac's editions. If it is a B \flat , then a very different sequence of events is set into motion (example 4). Of course, the real question is not how the editor treats this pitch but how the fifteenth-century singer would have treated it.

Given the necessity for B \flat in m. 27 of the contratenor, the singer would clearly be operating in the soft hexachord in m. 27 and, according to the theorist's common injunction to avoid mutation unless necessary, the singer would normally continue in this hexachord until there was good reason to change. In this way, all of the Bs in the contratenor part mm. 27–30 would be sung B \flat , for this entire phrase falls within the range of the soft hexachord. The difficult question is whether another factor might contravene the common guideline against mutation. Specifically, does the cadence on C by the contratenor and tenor in m. 28, a sixth expanding to an octave, call for a B \sharp in the contratenor in spite of evidence to the contrary from both the normal practice of solmization and the presence of a manuscript signature? The editor who posits this solution could point to the fact that this cadence coincides with the end of a cantus firmus phrase and deserves, therefore, to be treated as a prominent cadence.

The editor who provides a B \flat in m. 28 of the contratenor could make three arguments. First, the flat signature indicated at the third line of the contratenor constitutes significant evidence that this B would have been solmized as *fa* in the soft hexachord. In discussing the sixth mode in his *De natura et proprietate tonorum*, Tinctoris devotes some attention to B \flat and maintains that when the flat sign "is placed at the beginning of the line, it defines that the whole will be sung with a soft b. If it is placed in any other place, the song will be sung with a soft b as long as the section will last in which it is prefaced."²⁵ Thus, it is possible that the singer of the contratenor would have taken the flat sign at the beginning of the third staff to indicate that all subsequent Bs should be solmized as *fa* in the soft hexachord. Second, this cadence is, in the terminology of Putnam Aldrich, an imperfect cadence, since the cantus E produces an imperfect interval with the final pitch of the cadence between the contratenor and tenor.²⁶ In this view, the cadence, as an imperfect one, would not be sufficiently strong to require the B \sharp as a raised leading tone. (We may assume that the nature of the cadence—i.e. "prominent" or "imperfect"—would have been apparent after the first reading of this section, and that necessary adjustments would have been made in rehearsal.) Finally, from the point of view of hexachordal solmization, B \flat is

preferred since $B\sharp$ would present the singer with an awkward change from the soft to the natural hexachord.

If, in fact, the contratenor in mm. 27–30 is solmized in the soft hexachord, then the solmization of the rest of example 4 is affected. In m. 30, the $B\flat$ in the contratenor would necessitate an $E\flat$ in the cantus to perfect this vertical interval. Because the singer of the cantus would be operating in the soft hexachord at this point, the $E\flat$ would be provided by means of “una nota super la.” The contratenor in m. 30 needs to leave the soft hexachord for the last pitch, the low D, which cannot be accommodated by the range of the soft hexachord. When, in m. 31, the contratenor jumps back to the upper range, the singer again would have preferred the soft hexachord over the hard hexachord because of the $B\flat$ signature of the contratenor part. Thus, in m. 31 the B in the contratenor would be sung as $B\flat$, forcing the B in the cantus to be sung as $B\flat$ and the following E as $E\flat$ to avoid the linear tritone. This in turn forces the B of the bassus to be sung as $B\flat$ to accord with the cantus. While such a chain reaction causes us to insert editorial accidentals, there are no *musica ficta* hexachords involved here. All three voices would be solmizing in the soft hexachord with its $B\flat$, and the $E\flat$ in m. 31 of the cantus would be realized by the previously mentioned guideline “una nota super la.” My editorial accidentals in this final section are all determined by considerations of solmization and supported by the $B\flat$ signature in the contratenor part of the Chigi Codex. I believe that these editorial accidentals, which significantly change the sound of this final section compared to Plamenac’s 1959 edition, constitute a reasonable solution from the singer’s point of view, which proceeds first from linear melodic principles of solmization.

This case study of short excerpts from Ockeghem’s *Missa l’homme armé* has, of necessity, required a very close examination of small details of pitch. But it is precisely this process which enables the editor to pose the questions that would have confronted the Renaissance singer and to suggest solutions appropriate to the singer’s point of view. The editor who, on the basis of solmization, works from the singer’s linear, melodic approach, will arrive at far different results than the editor who works only from the theorist’s vertical, contrapuntal point of view, the approach that has been used frequently in modern editions of Renaissance music. The singer’s point of view results in what Bent has termed “a more liberal approach to *musica ficta* than is currently considered respectable,” an approach that “cuts through the presumption that additions should be kept to a minimum.”²⁷ Beyond considerations of *musica ficta*, one could state that the singer’s point of view, as recreated through hexachordal solmization and coupled with a clear understanding of *musica recta*, results in a more liberal approach to editorial accidentals in general. In this case study all such accidentals, with the exception of *subsemitonium modi*, may be justified by reference to the hexachords of *musica recta* and

Example 4.

The musical score for Example 4 consists of two systems of four vocal parts: Cantus, Contratenor, Bassus, and Tenor. The first system covers measures 27-29, and the second system covers measures 30-33. The Cantus part has lyrics "fa la" in measures 30-31. The score includes various musical notations such as clefs, notes, rests, and accidentals (flats and naturals).

their upper semitone extensions through “una nota super la.” Thus, while this excerpt may well require more numerous accidentals than in either of Plamenac’s editions, such editorial accidentals have nothing to do with *musica ficta*.

As these concepts are tested further by applying them to the editing and performance of other compositions by various fifteenth- and sixteenth-century composers, we might well remember what Dragan Plamenac wrote in his “Postscript to Volume II of the Collected Works of Johannes Ockeghem”:

"The steady progress of musicological research necessitates revising and improving upon statements and findings even in publications of recent date."²⁸ While he may or may not have agreed with the specific revisions suggested here, he would no doubt concur with the necessity of constantly reexamining previously held conclusions concerning the music of our past.

NOTES

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¹ Lewis Lockwood, "A Dispute on Accidentals in Sixteenth-Century Rome," *Analecta musicologica* 2 (1965): 24.

² Extending from the second G below middle C to the second E above middle C, the gamut was defined by seven overlapping hexachords on G, C, and F which, taken together, provided the white notes of our diatonic scale together with the B's immediately below and above middle C.

³ Margaret Bent, "Diatonic Ficta," *Early Music History* 4 (1984): 20, hereafter referred to as: Bent 1984.

⁴ Margaret Bent, "*Musica Recta and Musica Ficta*," *Musica disciplina* 26 (1972): 84, hereafter referred to as: Bent 1972. While acknowledging that Prosdocius "comes out in favor of *recta* preference," Karol Berger nonetheless questions the validity of this principle. See his *Musica Ficta: Theories of Accidental Inflections in Vocal Polyphony from Marchetto da Padova to Gioseffo Zarlino* (Cambridge: Cambridge University Press, 1987), 63-65 and 83-84.

⁵ Johannes Cochlaeus, *Tetrachordum musices*, trans. Clement A. Miller, *Musicological Studies and Documents*, 23 (Rome: American Institute of Musicology, 1970), 42.

⁶ Gaston G. Allaire, *The Theory of Hexachords, Solmization and the Modal System*, *Musicological Studies and Documents*, 24 (Rome: American Institute of Musicology, 1972), 52.

⁷ Franchinus Gafurius, *Practica musicae*, trans. Irwin Young (Madison: University of Wisconsin Press, 1969), 21-22.

⁸ Bent 1972, 83.

⁹ For a classic statement of these guidelines, see Edward Lowinsky's introduction to *Musica nova*, ed. H. Colin Slim, *Monuments of Renaissance Music*, vol. 1 (Chicago: University of Chicago Press, 1964), viii-xxi.

¹⁰ Lewis Lockwood has furnished evidence from the first half of the sixteenth century attesting to the difficulties routinely encountered by the Renaissance singer. In correspondence dating from the 1520s between the Italian theorists Giovanni Spataro and Pietro Aron, Spataro writes the following: "Now we inquire whether the singer, performing a composition he has never seen before, is obliged to or truly can immediately understand the intention and hidden purpose of the composer; and we answer that he cannot. . . . Thus, the musician or composer is obliged to indicate his intention, in order that the singer may not chance to do something that was never intended by the composer." Clearly, with respect to pitch, and, by implication, solmization and mutation as determinants of pitch, the Renaissance singer would have encountered uncertainties similar to those which confront the modern editor. Lockwood's translation of the larger passage from which the above excerpts are taken is found in "A Sample Problem of *Musica Ficta*: Willaert's *Pater Noster*," in *Studies in Music History: Essays for Oliver Strunk*, ed. Harold Powers (1968; reprint, Westport Conn.: Greenwood Press, 1980), 166-67.

¹¹ Plamenac's 1927 edition is Johannes Ockeghem, *Sämtliche Werke*, Publikationen älterer Musik, I, 2 (1927; reprint, Hildesheim: Olms, 1968), hereafter referred to as: Plamenac 1927. His 1959 edition is Johannes Ockeghem, *Collected Works*, 2nd, corrected ed., *Studies and Documents*, 3 (Philadelphia: American Musicological Society, 1959), vol. 1, hereafter referred to as: Plamenac 1959.

¹² Quoted here is Plamenac's 1959 English translation (p. xi) of his introduction originally published in 1927.

¹³ On this topic, see Harold S. Powers, "Tonal Types and Modal Categories in Renaissance Polyphony," *Journal of the American Musicological Society* 34 (1981): 428–70.

¹⁴ A complete facsimile of the Chigi Codex is available as part of the series Renaissance Music in Facsimile, vol. 22 (New York: Garland, 1987). For an inventory, see Herbert Kellman, "The Origins of the Chigi Codex: the Date, Provenance, and Original Ownership of Rome, Biblioteca Vaticana, Chigiana, C.VIII.234," *Journal of the American Musicological Society* 11 (1958): 7. For a full inventory of Cappella Sistina 35, see Joseph M. Llorens, *Capellae Sixtinae Codices*, Studi e Testi, 202 (Vatican: Biblioteca Apostolica Vaticana, 1960), 69–72.

¹⁵ Kellman, 17.

¹⁶ Llorens, 72.

¹⁷ Ugolino, for example, wrote that ". . . *fa* and *mi* are wholly and utterly rejected as simultaneous extremes for the same consonance: thus *mi* is never solmized against *fa* on a perfect consonance. . . ." See Andrew Hughes, *Manuscript Accidentals: Ficta in Focus, 1350–1450*, Musicological Studies and Documents, 27 (Rome: American Institute of Musicology, 1972), 30.

¹⁸ Allaire, p. 47, provides a translation of the following guideline from Maximilian Guillaud's *Rudiments de musique pratique* (Paris, 1554): "It is never proper to the nature of the hexachords molle and durum to be interlocked; rather, the interlocking must be made between the hexachords molle and naturale, and between the hexachords naturale and durum."

¹⁹ Andrew Hughes, "Solmization," *New Grove Dictionary of Music and Musicians*, 1980: vol. 17, p. 460. The example to which Hughes refers is found in E. Coussemaker, *Scriptorum de musica medii aevi* (1876; reprint, Hildesheim: Olms, 1963), 4:380, Legrense's treatise "Libelli musicalis de ritu canendi vetustissimo et novo."

²⁰ Plamenac 1959, xxxix.

²¹ Thomas Noblitt, "Chromatic Cross-Relations and Editorial *Musica Ficta* in Masses of Obrecht," *Tijdschrift van de vereniging voor nederlandse muziekgeschiedenis* 32 (1982): 30.

²² Noblitt, 31.

²³ Noblitt, 42.

²⁴ With respect to the bassus, Plamenac (1959, p. xxxix) notes that the Chigi Codex shows the erasure of a flat before the B of m. 27. A look at a facsimile of this folio, in Renaissance Music in Facsimile, vol. 22, fol. 40, or in Plamenac's 1959 Ockeghem edition, plate IX, easily confirms this erasure. That a facsimile of the same folio in Willi Apel, *The Notation of Polyphonic Music, 900–1600*, 5th ed., Mediaeval Academy of America Publication, no. 38 (Cambridge, Mass.: The Mediaeval Academy of America, 1953), 139, shows this flat sign in the bassus can only be explained as Apel's intention to restore a known manuscript accidental, perhaps for pedagogical reasons.

²⁵ Johannes Tinctoris, *Concerning the Nature and Propriety of Tones* (De natura et proprietate tonorum), trans. Albert Seay, 2nd ed., Colorado College Music Press Translations, no. 2 (Colorado Springs: Colorado College Music Press, 1976), 11.

²⁶ Putnam Aldrich, "An Approach to the Analysis of Renaissance Music," *Music Review* 30 (1969): 7–9.

²⁷ Bent 1984, 47–48.

²⁸ Dragan Plamenac, "Postscript to Volume II of the Collected Works of Johannes Ockeghem," *Journal of the American Musicological Society* 3 (1950): 33.