

Resisting the Tyranny of the Barline: Teaching Metric Stress and “Meter” in Renaissance Polyphony

STEPHEN KINGSBURY



Stephen Kingsbury is professor and director of choral activities at Southwest Minnesota State University. Stephen.Kingsbury@smsu.edu

Renaissance polyphony presents teachers with a wealth of literature for the high school choral classroom. And yet, anecdotal evidence suggests that high school performance of Renaissance polyphony is rare and, when it is performed, limited to a few marquee-level works such as Palestrina’s *Sicut Cervus* and Victoria’s *O Magnum Mysterium*. This begs an important question: Why isn’t polyphony performed more?

Discussion with secondary-level teachers suggests that it is because Renaissance music seems overwhelming and beyond the technical and artistic reach of many high school ensembles. Issues range from singing in a foreign language to the complexity and overall independence of each voice part. Additionally, in the repertory’s purest form, there is a fundamental lack of performance indications, which can lead to issues of interpretation, such as dynamics, phrasing, tempo (both initial tempo and alterations of tempo within a work due to changes of time signature), and even pitch (due to issues of *musica facta*).

More fundamental is that modern interpreters must grapple with music that differs from much of the music performed by school-age ensembles because it is based on different “harmonic” and rhythmic models. Such models

not only require effort to understand, but to some ears (especially when not fully understood or handled properly), can leave the music sounding flat and uninteresting. It is important to recognize that our comprehension of these issues has a profound impact on our interpretation of this repertory. A thorough awareness will greatly influence the soundscape of a given piece. Unfortunately, these problems are made even more difficult by the plethora of editions of early music that pervade the market but vary widely in terms of quality. While addressing all these issues is beyond the scope of one article, this essay attempts to begin demystifying the repertory by explaining the complexity of Renaissance rhythmic practice. It also suggests an efficient and effective means of teaching these rhythmic structures that will not only enlighten, but also enliven, our performances of this compelling music.

Framing the Problem(s): A Case Study

Our discussion will center around a single piece: the “Kyrie” from the *Missa Pange Lingua* by Josquin des Prez (ca. 1450–1521). Often credited with uniting the cerebral style of the Low Countries with the more emotionally driven Italian style, des Prez was a legendary figure in his lifetime, and his music continues to enjoy wide circulation today. The *Missa Pange Lingua* was composed c. 1515, making it a



relatively late work. Structurally, the work is a paraphrase mass, as the composer embedded a pre-extant melody, in this case the *Pange Lingua Gloriosi* plainchant (Figure 1), in each of the voices of the newly created polyphonic work.

Figure 2 illustrates the first page of the *Pange Lingua*'s "Kyrie."¹ This edition, prepared by the author, is not dis-

Hymne
3.
P Ange língua glo-ri-ó-si Córpo-ris mysté-ri-um,

Figure 1. The *Pange Lingua Gloriosi* plainchant

Figure 2. Josquin des Prez, *Missa Pange Lingua*, "Kyrie I," mm. 1-16.
A well-meaning, but problematic edition

similar from many editions of early music on the market today. And yet, this edition is problematic in many ways. Figure 3 illustrates what the work looks like in manuscript. There are many differences between this manuscript and the edition provided in Figure 2, perhaps the most obvious of which is that the manuscript source does not utilize the layout of a modern score where all musical lines are presented simultaneously. Instead, each part is presented independently, so the simple act of utilizing score format is a modern imposition on the music.

Beyond this obvious disparity, there are other, more subtle differences, many of which are due to editorial decisions made to make the work easier to perform. These include changing the meter/rhythmic level of the notation, altering the key to ensure the ranges lie within appropriate ranges for modern SATB choirs, adding barlines to make the score simpler to follow, and altering the rhythmic notation to reflect modern beat structure more clearly. In sum,

all of these changes were made in good faith to make the work easier to perform.

Why, then, are such changes a problem? On the most basic level, it is because we, as performers, are unable to determine from a simple examination of the score what information is original and what features are choices made by the editor. Ideally, the modern performing edition would be constructed to illustrate what is original and what has been changed by the editor. However, this comparison also illustrates a deeper problem: There is a conflict between Renaissance rhythmic structures and modern metric structures, an issue that this author refers to as the “tyranny of the barline.”

Modern meter arranges metric pulses into a repeating pattern wherein all the metric pulses are placed within a hierarchy of beats. When performers look at a modern score, we understand that the pulse at the beginning of a measure group is the most prominent, the most emphasized.



Figure 3. Josquin, *Missa Pange Lingua*- Manuscript

From the “Occo Codex,” MS IV.922 of the Bibliothèque royale de Belgique in Brussels



Although the exact nature of the pattern is going to differ from meter to meter, the remaining beats in a measure fall in a hierarchy of importance in which each beat is not only relational to the first beat, but to every other beat as well. Thus, when we look at modern four-four time, we understand that beat 1 is the strongest, with beat 3 being somewhat strong as well. Beat 2 is relatively weak, and it is usually the function of beat 4 to lead into the next 1.

Renaissance polyphony, with its absence of barlines, functions differently. It is crucial for modern performers to understand this difference and the ways in which it is made aurally manifest.² First and foremost, there are no barlines. The addition of barlines to this repertory is a modern conceit designed to aid in performance. This means that although there is a clear sense of pulse (called the *tactus*³) and a clear relationship between pitches at successive metric levels that is specified by the mensural signature, the music does not fit into a precise, recurring sense of hierarchy of these pulses. Rather, the primary organizing principle is that rhythm is constructed in groups of twos and threes that occur at multiple metric levels.

The main metric level at which these groupings occur is governed by the mensuration signature. However, secondary patterns also occur at other metric levels. Because Renaissance polyphony tends to contrast these rhythmic groupings, not only within a voice part but across voice parts, they often work against the metric stress that is implied by the addition of regular barlines in modern additions. Emphasizing these groupings results in a more angu-

lar and dynamic rhythmic presentation. This approach was argued for as far back as John B. Haberlen's excellent 1972 article, "Microrhythms: The Key to Vitalizing Renaissance Music,"⁴ and this is the approach that is advocated in this article.

Setting the Table: Selecting an Edition

How, then, do we arrive at this enlivened rhythmic presentation? The process must, necessarily, start with finding a good edition of the work to be performed. As I have argued, a good edition is one where the performer can easily determine what aspects of the score were decided by the composer and what aspects were decided by the editor. In the realm of rhythm and meter, one helpful tool is selecting a publication that utilizes *mensurstriche*⁵ instead of modern barlines (Figure 4). The use of *mensurstriche* represents a viable compromise between the need by modern performers for the visual reference points provided by barlines without the need to shoehorn rhythmic patterns into those barlines. As Chester L. Alwes explains:

The presence of barlines in modern editions of Renaissance music does indeed help the modern singer by aligning the parts vertically; unfortunately, the need for ties to divide the original note values so as to fit the measure, and the vertical sonority that results from such an alignment of all the



Figure 4. The Use of Mensurstriche in a Renaissance Score

parts, are inimical to the linear nature of sixteenth-century polyphony.⁶

Instead, using *mensurstriche*, the original rhythmic notation (which often utilizes note-values that would cross measure boundaries—see, for example, the altus part in Figure 6 as it moves between “measures” 14 and 15) can be preserved, allowing the performers to identify the true nature of the rhythmic structure more readily. Once these metrics have been divorced from the imposition of modern meter, singers are free to celebrate the implied metric stress of the metric groupings. Our task, then, as conductors and educators, is to recognize these patterns and teach them in a meaningful way. Once a good edition of the score has been selected, I recommend a three-stage series of instruction that involves preparation, basic instruction, and refinement.

A Process for Teaching Metric Groupings

Step 1. Score Marking

The preparatory phrase is the responsibility of the conductor alone. Here, the purpose is to determine the metric groupings in each melodic line. These groupings must then be marked before they are taught to the members of the ensemble. The actual act of determining the metric groupings is largely a subjective art—and this subjectivity is part of the perceived difficulty in performing music of this sort.

There are, however, some key features that one can examine to gain insight into their potential structure. The first of these is text stress. As most vocal musicians are aware, language has a certain ebb and flow determined by the relative stress and unstress of syllables. In speech, these stresses can be recognized not only by the relative loudness of a syllable (dynamic accent), but by the length that the syllabus is sustained (quantitative accent: known in music theory as an agogic accent). Composers generally try to craft melody lines that are reflective of these textual stresses, placing emphasized pitches at moments of textual stress. Below is the text of the “Kryie” as shown in Ron Jeffers’s *Translations and Annotations of Choral Repertoire, Volume 1: Sacred Latin Texts*.⁷

Kýrie eléison,
Chríste eléison,
Kýrie eléison.

One of the many helpful features of Jeffers’s text is that he utilizes accent marks in order to indicate stressed syllables. Knowing where these stresses occur, and that they will often correlate to stressed pitches (which are often the beginning notes of rhythmic groups), can help us determine where these rhythmic groups begin. It should be noted that this can serve only as a vague guide, as text underlay in the original source material is often imprecise, leaving it to the editor to make more or less informed choices about the correlation between text and melody.

Fortunately, language is not the only guide that conductors have available when determining the location of metric groups. There are musical features that help as well. The first of these musical features is rhythmically accented pitches. In simplest terms, pitches of relatively longer note duration are likely going to indicate metric stress. Additionally, change in melodic direction can serve as an important guidepost. When melodies change direction, the pivot note of that change is going to receive melodic emphasis. Thus, notes after a leap, or just prior to a change in direction, can also serve as the beginning of a new metric group.

Once the groupings have been identified, they need to be marked. Any system clear to both the conductor and ensemble members will suffice, but Chester L. Alwes has advocated a system of marking these groupings that can be extremely useful. This system utilizes brackets to indicate grouping. Since the tacit assumption is that metric groups occur more frequently in groupings of two pulses than of three, Alwes’s system assumes groupings of two, unless marked. Markings for these three-pulse groups utilize a bracket that is preceded by a numeral three, as seen below.

3 ———

These brackets can then be placed so that they encompass all of the notes in each three-pulse grouping. Alwes explains his system in the editor’s note to his edition of the “Kyrie” from Palestrina’s *Missa Brevis*:

Numerous brackets appear over the individual vocal lines. These are not triplets; rather, they indicate note groupings... which arise either from the text accent or agogic stress... Notes under the sign 3 ——— should be performed as if they were a ternary measure with crusic accent on beat one, ana-crusic stress on three, and no stress on two.⁸



As mentioned above, even with this set of fairly specific guidelines, applying those guidelines to a specific musical context can be difficult. Ultimately, identifying the metric groups in context is a highly subjective activity, and so differences in interpretation will emerge. Figure 5 illustrates a brief excerpt from the mass, as well as one possible solution for the marking of the metric groups within the excerpt. As the marked meter symbol makes clear, our basic grouping consists of the half-note existing in groups of three, with each of those half notes being divided (as we would expect) into two quarter-notes. Thus, we are expecting a basic metric organization of groups of two quarter notes. This pattern works well for the first three half notes, as well as for the first whole note, but then falls apart immediately.

The placement of the text, the change of direction following the pitch, as well as the emphasis placed on the note through both the height of the pitch and its duration seem to indicate that the half note “c” over the syllable “lei” would receive the next stress. This leaves a grouping of three quarter notes between the whole-note “e” and that “c,” which is marked in the potential solution. These groupings of three persist for two more groups that are suggested by both duration and change of melodic direction. The final group of three starts with the only other half-note “c” in the excerpt. The remaining rhythms in the excerpt can be convincingly explained as groups of two.

Step 2. Modified Count-Singing

Once the score has been marked, we can begin devising a strategy for teaching the groupings to the ensemble. One teaching process that I have found effective involves the use of a modified system of count-singing. Made famous by

Robert Shaw, count-singing involves removing the text and replacing it with counting syllables. Generally, those counting syllables involve not only the metric counts on which any given pitch begins, but also the division (or potentially subdivision) of those pulses. Thus, a half-note in 4/4 time beginning on beat one would be sung as “one and two and.”

The purpose of count singing is to not only unify rhythm across the ensemble through the internalization of a sense of inner pulse, but also to help reinforce the hierarchy of rhythmic stress inherent in each meter. However, since this process is very much tied to meter, with the counting pattern beginning again on one at the beginning of each new measure, the system must necessarily be modified slightly when teaching the metric groups in Renaissance polyphony.

This modification is rather straightforward. Regardless of the presence or absence of barlines and the relation of any given note to its placement within the meter suggested by that barline, in the modified system the members of the ensemble count only the metric groupings. Thus, any group of two is counted as “one, two” and any group of three is counted as “one, two, three”⁹ regardless of where it falls in relation to any editorial imposition of a modern meter. Utilizing this system, our example of the excerpt from Figure 5 would be counted as shown in Figure 6 on the next page.

Once the specifics of this system are understood by the singers, we can start teaching the metric stress of each line. Initially, it is beneficial to have ensemble members sing from a score that not only has the groupings marked, but also has the countings for those groupings marked. Thus, a version of the entire score with counts included as they are presented in Figure 6 is extremely helpful.

The teaching process is complex. It is important to cre-

Unmarked

Marked

Figure 5. The *Superius* entry in “Kyrie I”
Both Unmarked and Marked Metric Groupings

ate a sequence of instruction that is additive, but in a way that is not overwhelming and does not skip over steps that are necessary to internalize the intended musical outcome. To this end, it is beneficial to begin by introducing the pitches and rhythms on a neutral syllable. This can be done for each line, one at a time. Once the choir can perform the pitches and rhythms of each line successfully, with a degree of consistency, the ensemble can be acclimated to the count singing.

To provide a sense of reinforcement, it is beneficial to split the class into two groups. Initially, one group sings the already comfortable neutral syllable while the remaining half chants (not sings) the counts. The next step is to switch what each half of ensemble is doing. After this, half of the group can count-sing the line, while half sings on the neutral syllable. Again, this can be repeated, switching what each half of the ensemble is doing. Finally, the entire ensemble should be ready to count-sing the line. Obviously, at each stage in the process it is important to provide constructive feedback and to only move on from a given step when singers can successfully complete the step. This process should then be repeated for each line.

Throughout, it is important to foster the emerging independence of each line, and thus of each section. Once the choir is comfortable on each of the individual parts, they can start putting the parts together in various combinations of two, three, and eventually four or more (depending on the score). Because Renaissance polyphony is not dependent upon the regular patterning of modern meter, each line will manifest its own “metric” patterning that will contrast with the other parts around it. This “metric” independence can be seen clearly in Figure 7 on the next page. Although only two of the four voices are shown, even here the independence of each line is obvious. It does pose challenges for the independence of each section. This feature, however, is one of the most interesting aspects of

Renaissance music, and far from being minimized should be *celebrated*, as it not only highlights the rhythmic aspect of each line, but also brings out the independence of each line through emphasizing the contrast of simultaneous metric groupings.

It is worth noting that as the ensemble grows in their level of proficiency with the skills that are required in this process, not every step in the aforementioned process will be necessary. In addition, although this process works well for teaching the basic metrics of Renaissance note groupings, it is unlikely that any pedagogical process, including this one, is going to be successful upon its initial use. Repeated applications will, inevitably, yield improved results. However, repetition alone will not be sufficient. The reflective practitioner will be constantly looking for new ways to improve and refine student understanding.

One way to reinforce the metrics of the counting is to add movement to the count-singing. Research has shown that adding psychomotor activity of this kind can have lasting benefits.¹⁰ One such activity might involve adding a stepping motion on the first count of each grouping. Another might involve a sweep across the body with the arm, also on the first count of each grouping. In this way, the rhythmic emphasis of one is not only emphasized vocally, but reinforced physically.

Conclusion

Figure 8a and 8b on the next two pages illustrates two versions of the score for the opening “Kyrie” from the *Missa Pange Lingua*. The first version has the groupings marked, and has the counts for those groupings added in place of the text. The second version is a performance edition wherein the text has been added back in. As both of these versions make clear, there is a great deal of rhythmic interest within each voice part. Additionally, the rhythmic



Figure 6. Counting of the *Superius* entry in “Kyrie I”



structures of each line are independent from those of all of the other lines.

When emphasized, the resulting impact of these groupings is not only the creation of rhythmic vitality and phrase-shape within each individual line, but also the creation of a tapestry of ever-shifting rhythmic patterns from which individual patterns emerge and then recede from a listener's attention. This has the effect of moving the listener's attention back and forth across the ensemble. Thus, rather than a homogeneous sounding collection of indistinct lines, the heightened drama created by emphasizing these rhythmic groupings has a profound impact on the aesthetic impact of the piece.

Unfortunately, not only is the presence of shifting metric patterns within a single line alien to many of today's young choral musicians, but the independence of each line's pattern to those of the other lines presents some real problems for those wishing to teach these patterns, and the structures behind them, to their ensembles.

One effective method lies in the application of a counting approach that is altered to account for polyphony's lack of use of modern barlines and the recurring metric patterns that they imply. This pedagogical approach can then be reinforced through the addition of kinesthetic activity designed to emphasize the individuality of each grouping. Initially, this may seem like a lot of work that takes time away from the other aspects of preparing for performance. However, as is the case with teaching any aspect of music literacy, the time is well spent, for it will not only yield a sharper, more rhythmically well-defined performance in the present, but in the long term it will impact the way that our students understand and perform a wide range of musics. Ultimately, that creation of transferable skills should be the goal of any music instruction. As this article makes clear, the rhythmic skills that are developed and the independence that is required to articulate them, make polyphony a repertory deeply worthy of inclusion in our choral classrooms. **CT**

Figure 7. *Superius* and *Altus* in “Kyrie I”

The musical score consists of three systems of four staves each, labeled S (Soprano), A (Alto), T (Tenor), and B (Bass). The time signature is 3/4. The score includes various rhythmic notations, rests, and triplets. Fingerings (1, 2, 3) and breath marks (&) are indicated throughout. The key signature has one flat (B-flat).

System 1 (Measures 1-5):

- Soprano: Rests in measures 1-4, then 1 2 1 2 1 2 in measure 5.
- Alto: Rests in measures 1-4, then rests in measure 5.
- Tenor: 1 2 1 2 1 2 in measure 1; 1 2 1 2 1 2 in measure 2; 3 1 2 3 & 1 2 & 3 1 2 & 1 2 3 in measure 3; 1 2 1 2 1 2 in measure 4 and 5.
- Bass: Rests in measures 1-4, then 1 2 1 2 1 2 in measure 5.

System 2 (Measures 6-11):

- Soprano: 1 2 1 2 1 2 in measure 6; 3 1 2 3 & 1 2 & 3 1 2 & 1 2 3 in measure 7; 1 2 & 1 2 1 2 & 1 2 in measure 8; 1 2 1 2 1 2 in measure 9; 1 2 & 3 1 2 3 in measure 10; 1 2 1 2 1 2 in measure 11.
- Alto: 1 2 1 2 1 2 in measure 6; 1 2 1 2 1 2 & 1 2 1 2 1 2 in measure 7; 1 2 1 2 1 2 in measure 8; 1 2 1 2 1 2 in measure 9; 1 2 & 3 1 2 3 in measure 10; 1 1 2 & 3 1 2 in measure 11.
- Tenor: 1 2 1 2 1 2 in measure 6; Rests in measures 7-10; 1 2 1 2 1 2 in measure 11.
- Bass: 1 2 1 2 in measure 6; Rests in measures 7-10; 1 2 1 2 1 2 in measure 11.

System 3 (Measures 12-18):

- Soprano: 1 2 1 2 1 2 in measure 12; 1 2 1 2 & 1 2 3 1 2 & 1 & 2 & 1 2 1 2 3 in measure 13; 2 1 2 1 2 3 in measure 14; 1 in measure 15.
- Alto: 3 1 2 & 3 1 2 & 1 2 & 3 1 2 1 2 1 2 & 1 2 1 2 1 2 & 3 & 1 2 1 2 in measure 12; 1 2 & 3 1 2 1 2 1 2 & 1 2 1 2 1 2 in measure 13; 2 1 & 2 & 1 2 1 2 & 3 & 1 2 1 2 in measure 14; 1 in measure 15.
- Tenor: 1 2 & 3 1 2 3 1 2 3 1 2 & 3 1 2 1 2 & 1 2 3 1 2 & 3 1 2 in measure 12; 1 2 3 1 2 & 3 1 2 1 2 & 1 2 3 1 2 & 3 1 2 in measure 13; 1 2 1 2 & 1 2 3 1 2 & 3 1 2 in measure 14; 1 in measure 15.
- Bass: 3 1 2 3 1 2 3 1 2 & 1 & 2 & 3 1 2 & 1 & 2 & 1 2 1 2 & 1 2 1 2 & 1 2 1 2 1 in measure 12; 3 1 2 & 1 & 2 & 3 1 2 & 1 & 2 & 1 2 1 2 & 1 2 1 2 1 in measure 13; 3 1 2 & 1 & 2 & 3 1 2 & 1 & 2 & 1 2 1 2 1 in measure 14; 1 in measure 15.

Figure 8a. Two versions of "Kyrie I"
Version 1



S
A
T
B

Ky - ri - e e - lei - - - Ky - ri -

6
S
A
T
B

e e - lei - - - son, ky - ri - e
Ky - ri - e e - lei - son, e - lei - son, ky - ri - e e -
- son, ky - ri - e e - lei - son,
son, ky - ri - e e - lei - son,

12
S
A
T
B

e - - - lei - - - son.
- lei - - - son.
- lei - - - son.
e - - - lei - - - son.

Figure 8b. Two versions of "Kyrie I"
Version 2

NOTES

- ¹ As this section is the first “Kyrie” section in a tripartite “Kyrie,” “Christe,” “Kyrie” structure, it will be referred to as “Kyrie I,” hereafter.
- ² An exhaustive examination of the nature of Renaissance rhythmic practice can be found in Ruth I Deford, *Tactus, Mensuration, and Rhythm in Renaissance Music* (Cambridge University Press, 2015).
- ³ For a discussion of the nature of tactus, refer to Kingsbury, Stephen, “Tempo and Mensural Proportion in the Music of the 16th Century,” *Choral Journal* (April 2002): 25-33.
- ⁴ John B. Haberman, “Microrhythms: The Key to Vitalizing Renaissance Music,” *Choral Journal*, vol. 13/3 (November, 1972), pp. 11-14.
- ⁵ Mensurstriche is a system of utilizing barlines drawn between staves rather than through them invented by Heinrich Bessler.
- ⁶ Chester L. Alwes, “Josquin’s ‘Ave Maria...virgo serena’, pt. 2: Rhythm and Accent,” *Choral Journal*, vol. 33/4 (November, 1992), 16.
- ⁷ Ron Jeffers, *Translations and Annotations of Choral Repertoire, Volume 1: Sacred Latin Texts* (Corvallis, Oregon: earthsongs, 1988).
- ⁸ Chester L. Alwes, editor. *G. P. da Palestrina: Missa Brevis—Kyrie (SATB)*. Hope Music (Carol Stream, IL), 1994.
- ⁹ The author, in keeping with Shaw’s practice, prefers to utilize the word “tee” in place of “three” due to the amount of time required to articulate the “thr” consonant cluster, which is long enough to often negatively impact the rhythmic accuracy the the third pulse.
- ¹⁰ A great article about this topic is Shehan, P. K. (1987). Movement: The Heart of Music. *Music Educators Journal*, 74(3), 24–30.