The Phrased Notation System: a new beginning for Renaissance polyphony?

Kevin O'Carroll
University of Limerick.

Abstract

Conventional editions of renaissance polyphony have increasingly been found wanting. In particular, many experienced conductors report how the intrusion of bar lines disrupts the original flow of the music and results in unwitting accentation that spoils the natural rhythm of the Latin text. The author explains how the use of modern notation has resulted in this and describes a system for negotiating the problem that is both faithful to the original manuscript and performance conditions whilst being readily comprehensible for singers used to modern notation.

Introduction

You Dia dhíobh, agus fáilte roimh go léir. If you don't understand this sentence, I forgive you! It is written in the Irish language. The element of 'not understanding a communication' is integral to this article. In the world of communication, for a message to be understood there needs to be a common understanding between the transmission and reception of the communication. In other words, when I wrote in Irish, though there was nothing wrong with my 'transmission' there might have been a problem on the reception side, as many people don't speak Irish. A conventional translation of the sentence is – *Hello and welcome to you all.* At least, that is the meaning of what I said. The phrase starts with 'Dia dhíobh' which literally means – God be with you. This difference between the meaning and literal translation is something that will come up again later.

When faced with a language or a communication style we do not understand, it is necessary to use the services of a translator. But the question must be asked, to what extent can we trust a translation? The Italians have a pithy phrase that deals with this issue – *traduttore, traditore* which translates as 'translator, traitor'. A slightly less criminal sounding phrase comes from Hungarian *fordításh, ferditésh* which tells us that 'translation is a distortion' (literally 'skewed').

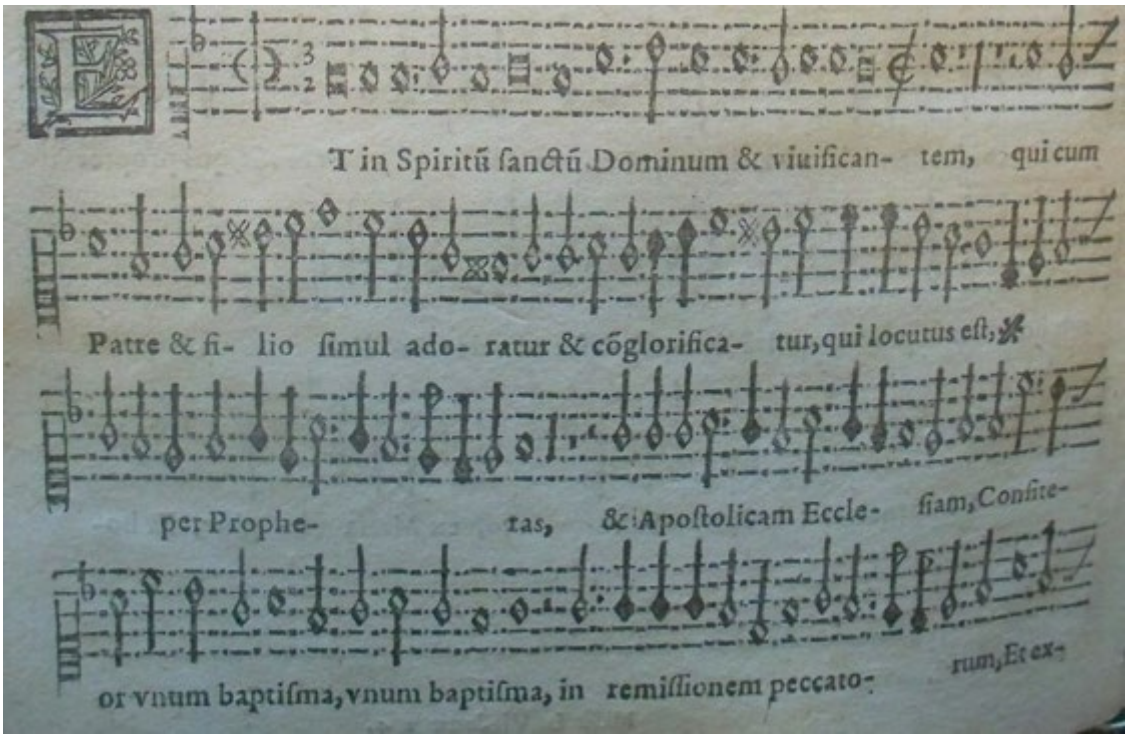
Scores and Part Books

Figure I below shows part of the Cantus part (effectively the soprano part) of a mass written by Ludovico Grossi da Viadana. This image is taken from what is known as a 'Part-Book'. When this was published in 1605, the norm was to publish compositions in a set of books where each book contained all the music for a particular voice part – and

To cite this article; O'Carroll, K. (2023) The phrased notation system: a new beginning for Renaissance polyphony? *abcd Choral Research Journal*, 113 – 128.

only that part. In some respects, it is a little like the music used in an orchestra today. The oboist in an orchestra has only the sheet music for the music that s/he is to play. Apart from an occasional cue, there is no reference to what the French horns might be playing. Similarly, the percussionist has the details of the various instruments s/he may be required to play but will not have any indication in the score as to what the violas are doing. Thus, it is that by just looking at their own sheet music, the principal horn player will surmise what their role should be at any point in the piece being played – sometimes providing rhythmic interest, sometimes harmonic underpinning and sometimes taking the melodic lead. All of this is gleaned from the sheet music and informed by the experience of the player.

Figure I
Ludovico Grossi da Viadana: Mass. Cantus part book.

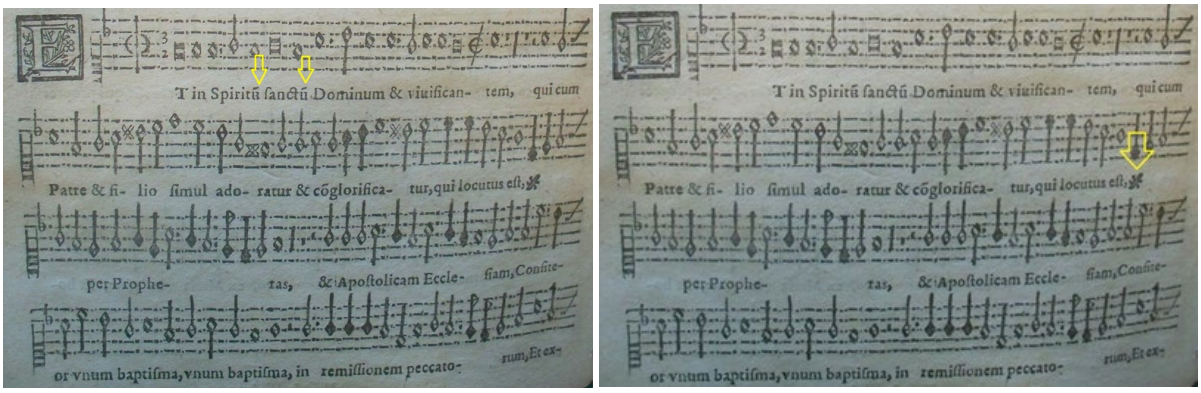


A modern choral score will show all the choral lines simultaneously but as you may well be aware, Renaissance publications did not do this. This is not the only difference between a Renaissance edition of a choral piece and its modern equivalent. Let's have a look at this Renaissance score in a little more detail. Figure II shows further extracts from the Viadana mass, this time the Credo. Although we can easily recognise the notation as music, few non-specialists can sing directly from scores of this type. There are several elements that are immediately identifiable as different. The text reads: *Et in Spiritum Sanctum Dominum et vivificantem* etc.

The first letter of the first word 'Et' is rather large and decorated and is placed to the side of the first stave. The letter 'm' appears to be missing from *Spiritum* and *sanctum*. Those with experience of reading this music will immediately know that the 'm' is

suggested by the line over the 'u' in each case. The end of line two and the beginning of line three appear to have no text at all for several notes. The strange symbol at the end of line two, instructs the singer to re-use the last phrase of text for the subsequent notes i.e. *qui locutus est*. This freedom to insert a repeated text can sometimes give rise to different solutions. In most modern scores, the editor will already have made those decisions. Otherwise, the reading of the text is rather straightforward.

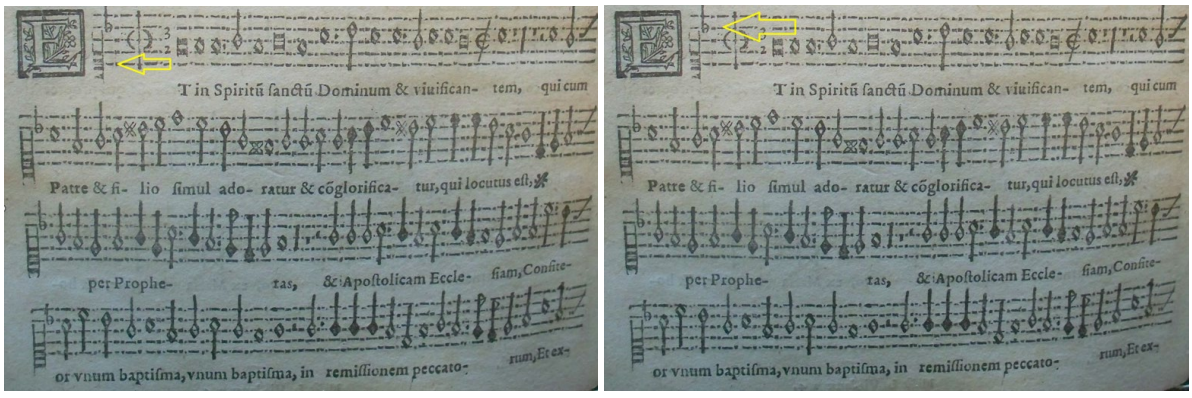
Figure II
Viadana Credo. Textual indications



Clefs and Mensural Indications

Though seldom used today, the clef used in the image below is the Soprano C clef. This clef shows 'Middle C' as the bottom line of the stave. Once the reader gets used to this clef it is relatively easy to read the pitches and intervals. C clefs are of course still used for certain instruments today such as bassoons, trombones cellos where C is denoted as on the middle line or the fourth line from the bottom. Older vocal scores of orchestral choral music often show C clefs for choristers, though modern scores usually replace the older clefs.

Figure III
Clef and Mode Indications

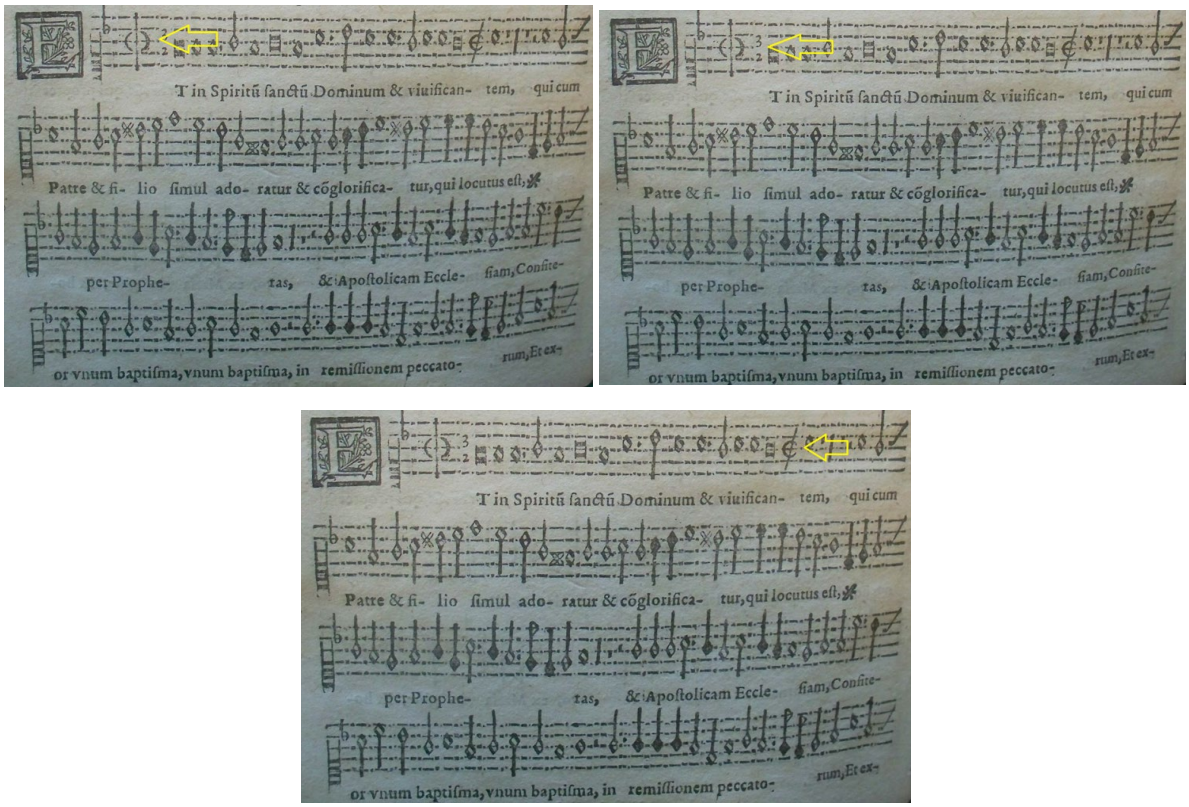


Though we might read the B*b* sign in the image below as a 'key signature', this is not an accurate reflection of what this sign meant to Renaissance choristers used to modes.

Formal 'keys', as we know them, had not yet come into regular use. Furthermore, the pitches we read as 'F' at the opening may have sounded at a different pitch when the same piece was sung in different locations. Studies of church organs from Renaissance to Baroque times have shown the pitch of the 'A' on the keyboard to have sounded anywhere from our modern 'G' to a 'B flat'. Pitch would not become standardised until well after the Renaissance era was a distant memory.

Meter or mensural indication is a better way to describe what we would today refer to as a time signature. What we see on this score is a circle with a line through it. This is an instance of *tempus perfectum cum prolatione perfecta diminution-1*. In other words, a triple pulse with divisions of two. The meaning is re-stated by the two numbers on the stave. Though we might like to think that this is our familiar time signature of 3/2 time, it is not. Our modern time signature tells us how many beats in a bar and what type of note gets one beat. However, there are no bar-lines and therefore no bars as we conceive them today.

Figure IV
Mensural indications

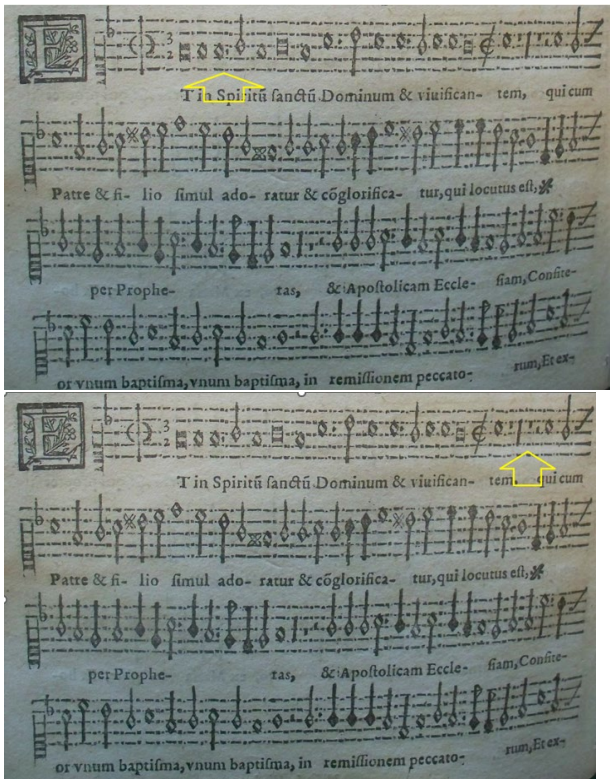


Towards the end of the first line there is what appears to be a modern 'Cut-Common' mark – a C with a line through it. This indicates a change of pulse to a duple pulse with divisions of two. An understandable misinterpretation of this mark would be that it is the same as our 2/2 time – again, it is not the same, but it is where our modern Cut-Common sign comes from. As the piece moves from a triple pulse to a duple pulse there is a significant question to be asked regarding the relationship between these two meters. This will be discussed shortly.

Note values and rests

Looking at Figure V, you may be struck by the very 'white' look of the music when compared with a modern score. The standard modern beat is a crotchet or a quarter note. To facilitate modern preferences, editors regularly reduce the value of the original notes to a half or even a quarter, thereby giving the score a more modern look. This is reduction is not, however, always undertaken and as a result there have been some very slow performances of Renaissance music due to a misunderstanding of this convention of reduction. Just before the last two notes on the first line, there are a series of downward or upward strokes. These are rests. The short strokes are easily recognisable as minim or semibreve (half-note or whole note) rests as we use the same marks in modern notation. The longer mark is an indication of a double breve rest

Figure V
Notational values and tempo



Bar lines

This question of time signatures and bar-lines is central to the appropriate performance of Renaissance polyphony. Bar lines feature as the key element of the research I am reporting. I have interviewed many professional choral conductors, all of whom stated that, for them, the primary inhibitor of good performance of Renaissance polyphony was the presence of bar-lines. As young music students we are told that the first beat of the bar is the strongest one. Adhering to this principal when singing Renaissance

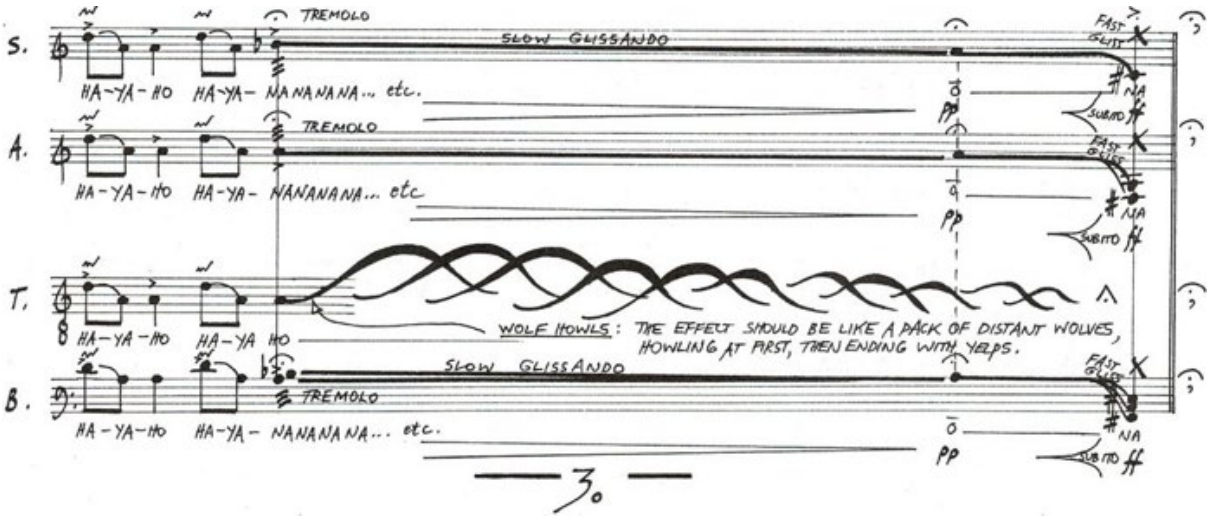
polyphony results in many stressed notes in inappropriate places. The role of a "translator" in mediation is a very necessary one.

The translator

When it comes to the performance of choral music, anyone with a love for the genre will want to perform it to the best of their ability. To do that we need to pay special attention to what the music notation is telling us. We need to understand what the composer is trying to communicate. We must also remember that the nature of this communication is always flawed. In interview, John Rutter confirmed to me that even in using modern music notation, he is not always able to communicate precisely what he wants in performance. The quality or quantity of a crescendo cannot always be easily detailed. In years prior to the invention of the metronome, composers used terms such as *Andante* which any good music student will tell you means 'at a walking pace'. I for one, don't know what that means! If I am walking with someone shorter than me, either they will have to use a faster stride, or I will have to slow my stride if we are to walk together. Therefore, Andante could be said to be dependent on the length of your legs!

Some modern composers find that they cannot visually represent their music by using standard music notation. Here, I am not referring to shorthand where a fixed series of pitches are used depending on the shape of a note or how the note is coloured. I am talking about representing a very precise sound which would not be possible using standard notation. This is exemplified in Figure VI.

Figure VI
R. Murray Schafer: 'Chant to bring back the wolf' from *Magic Songs*



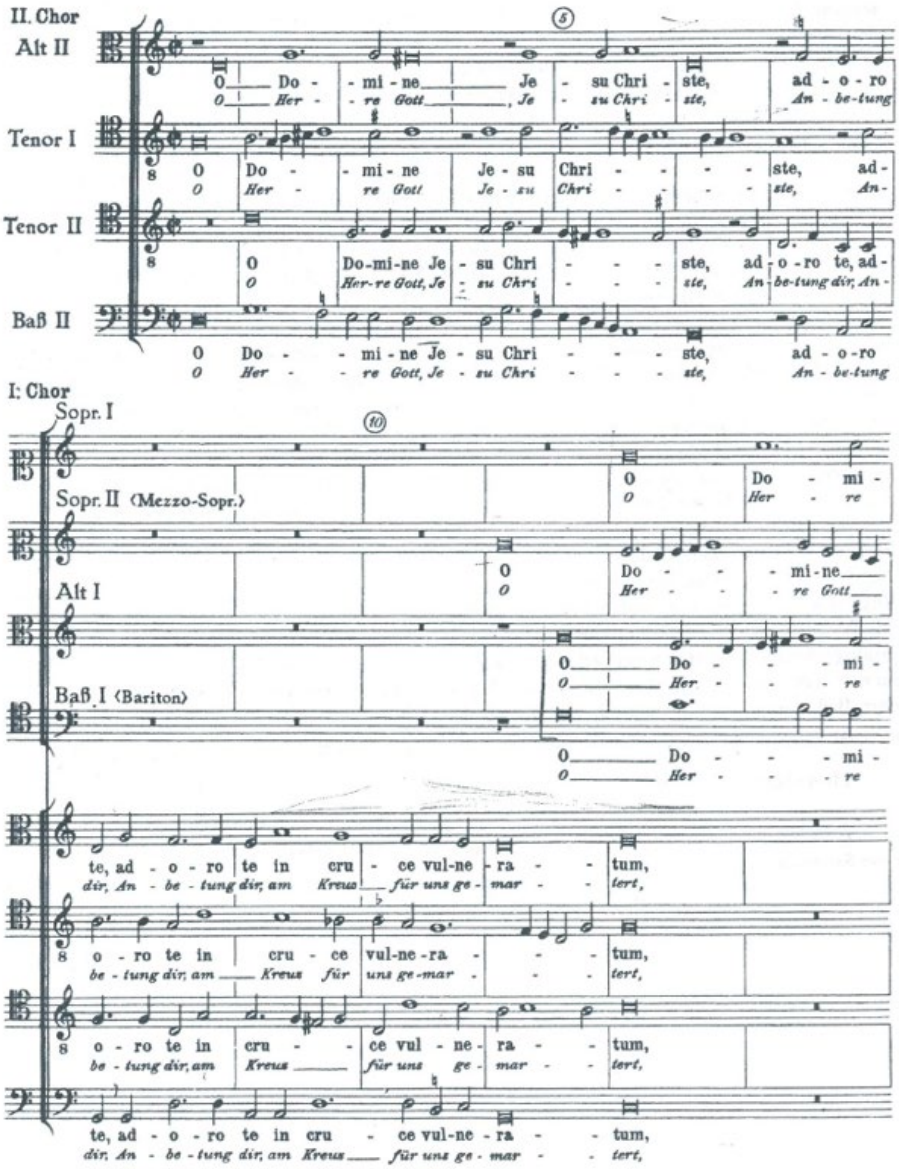
Here, the tenors are asked for a series of wolf howls. The nature of the graphic used to represent the sounds suggest repeated howls getting narrower in range of pitch and quieter over time. I can think of no better way to represent this and certainly don't think any standard notation would achieve the required result. From this simple example we can see that not everything fits into the nice, neat box of modern music notation.

It is therefore worth asking the question, when we do need to translate and what is it that we are translating? Are we translating the sounds imagined by the composer and notated in a form of communication of which both composer and performer have a common understanding? Or are we translating the Renaissance notation into a modern notation where the greater attention is paid to the printed matter? A friend of mine who translates novels from English into German professionally, has commented that when a turn of phrase in English is not going to translate neatly into German, it is sometimes necessary to engage in what she calls 'trans-creation' rather than 'translation' in order that the meaning of the phrase generates a common understanding in both English and German readers. In other words, what is important is the *meaning* of the text and not the words themselves. For me, a similar process is needed when translating Renaissance notation into a notation which can be easily read by modern choristers. Music is about *sound* and not about *notation*. Therefore, I am going to consider what a modern singer needs to see in the notation in order to re-create the sounds imagined by the Renaissance composer – insofar as we can understand what that was.

Mensurstrich

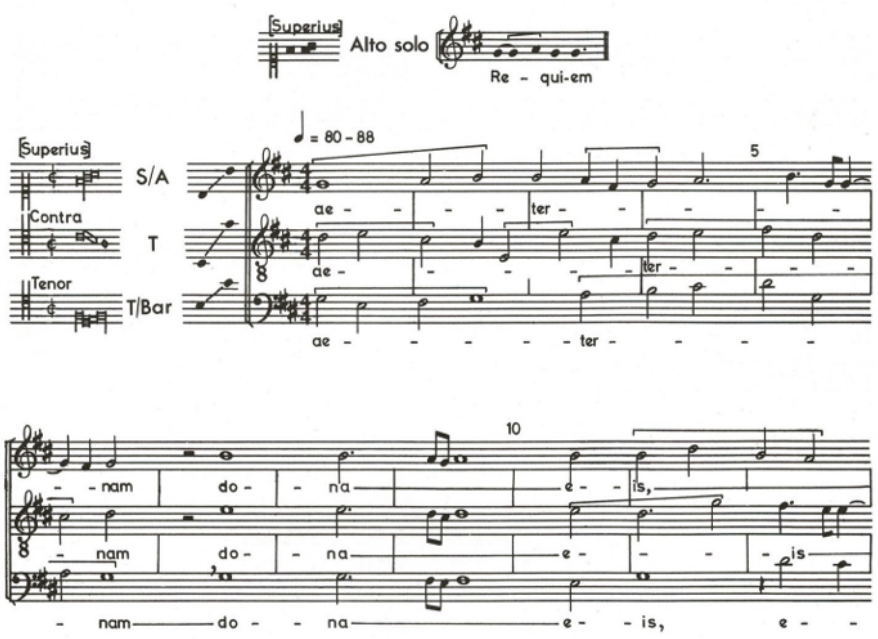
I am not the first to explore this area. As far back as the 1920s, German musician Heinrich Besseler introduced a form of notation known as *Mensurstrich* which was widely used by editors in the mid-20th century when working on medieval and Renaissance polyphony. Figure VII shows an extract from a motet by Gabrieli, edited by Besseler. It is easy to see how *mensurstrich* differs from standard modern notation. The original duration of notes is retained in this edition and in order to present an uninterrupted musical line, the bar-lines have been displaced to a location normally reserved for the text.

Figure VII
Gabrieli: *O Domine Jesu Christe* (ed. Besseler)



Having sung a complex work presented in *mensurstrich,* I confess I did not find it easy to work with – though many people do favour this method of presentation. *Mensurstrich* has been used by the American Institute of Musicology for their multi volume *Corpus mensurabilis musicae.* Experimentation with notation didn't stop in the 1920s. Specialist publishing house Mapa Mundi issued this piece in 1978. It uses *mensurstrich* but also includes other elements to guide the singer as to how the original publication was presented.

Figure VIII



A 1996 publication from the same company presented a notation which was much easier to read. Here *mensurstrich* was not used. Instead, the editor used dotted bar-lines to help lessen the impact of the imposition of the ubiquitous bar-line (Figure IX). An alternative to the dotted bar line is a small bar mark at the top of the staff (Figure X).

All these editions and their various novel notational approaches have sought to address the same collection of issues raised by our lack of familiarity with the notation used in the original Renaissance publication. However, I believe that one of the reasons each falls short in one way, or another is the fact that they used the original publication as their primary inspiration and not just their source. It appears to have been a question of 'How do we present this old notation to a modern audience so that they will understand it?' In taking this approach they may have overlooked one very important fact. The original renaissance notation is not the original music. As I mentioned above, music has to do with sound and not vision.

In creating the original edition, composers were using the technology available to them at that time to present their thoughts to a cohort of musicians who fully understood the nature of the music and the contemporary notation. Without being asked, Renaissance singers would have known how to treat dissonance and resolution, as they were highly trained individuals. In contrast, today's singers do not have the same ears as their choral forbears. We cannot unhear Tchaikovsky, or Stravinsky, Stockhausen or the myriad of modern composers for whom dissonance is almost a consonance

Figure IX
Dotted bar lines

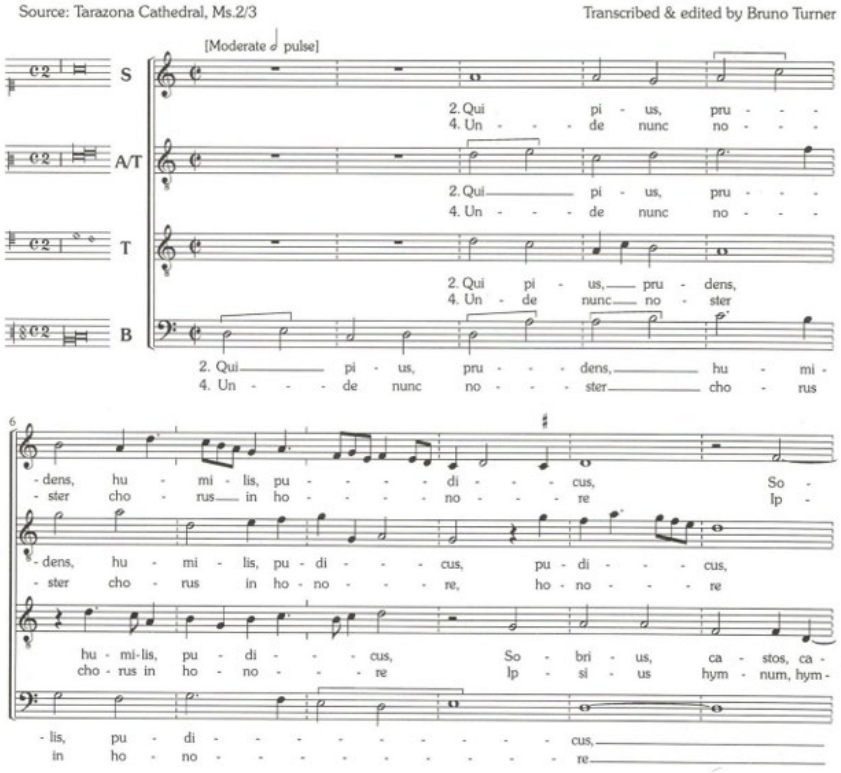
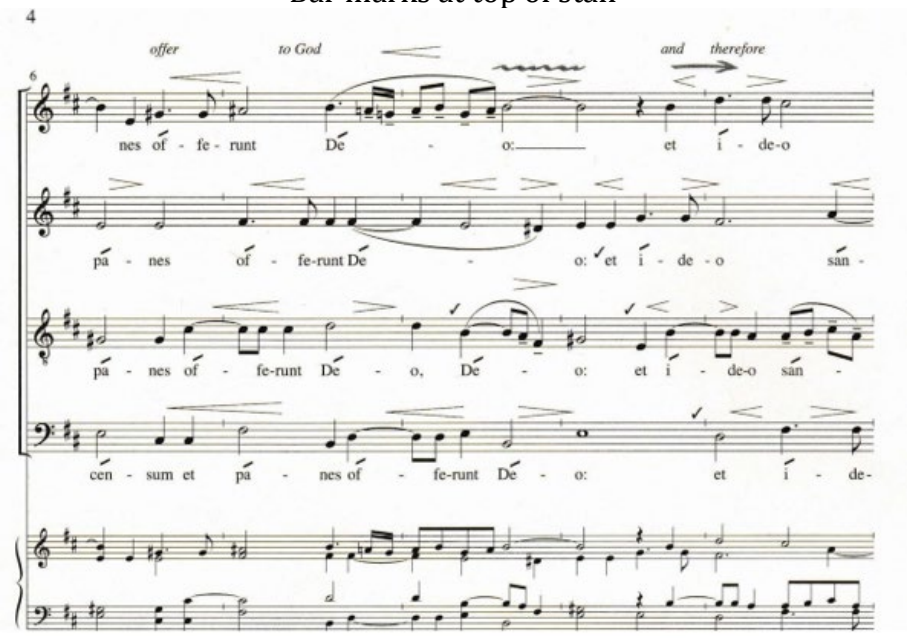


Figure X
Bar marks at top of staff



I believe that a new approach to the creation of an edition for use with Renaissance polyphony is required. We need to ask a different question. What does a modern singer have to see in the notation in order to replicate the sounds imagined by the composer, insofar as we can determine what that was? How, though, can we truly know what a composer intended? Questions like this can lead us back down into the rabbit hole that

is *Authenticity* or *Historically Informed Performance*, but I don't believe we need to go there. Even if we could produce an authentic performance, the reception can never be as it was for the original hearers of the music, for the very reason I mentioned above. Our ears have been 'modified' by the music that came in the centuries following the Renaissance.

If it is not really possible to be certain what a composer wanted, is there any way we can move towards more appropriate performance practice of Renaissance music? Rather than say 'What do I need to do to sing this music in a more appropriate manner?', we can say, 'What do I need to stop doing in order to sing in a more appropriate manner?' We have known for decades that standard modern notation is not helping the cause of performance practice, yet commercial publishers continue to produce sheet music which works against best performance practice. Even if we cannot identify what that best practice is, we can stop working contrary to that which we do know supports better performance practice.

Developing the Phrased Notation System (PNS)

The phrased notation system has been introduced to overcome some of the main difficulties discussed in this paper. I have chosen Palestrina's well-known, *Sicut cervus* to illustrate it. As we work through the series of changes incorporated in this new notational system, I hope you will appreciate and understand the impact of seemingly small changes on the overall performance possibilities of the piece.

We know that Renaissance singers received extensive musical training with lessons in vocal technique, language, acoustics etc. Those who excelled at plainchant were the first to be selected to engage in polyphonic singing. We also know that boy choristers were schooled in the speaking, reading, and writing of Latin. Singing plain chant and familiarity with Latin are two important elements that can guide us towards a more appropriate performance.

When we sing, we do not merely produce pitches and vowel sounds. We need to do more than transmit words. We need to communicate meaning. To be able to do this we need to understand what it is that we are singing. To this end, it is very helpful to have, not merely a translation, but a literal translation. I began this article with a phrase in the Irish language. By laying the literal translation directly below the appropriate words, it becomes very easy to convey the meaning of a word through the attitude with which we sing it. We cannot communicate the meaning of words we do not understand.

The Latin word *quocumque* sounds significant by virtue of the number of syllables. In contrast, the word *Rex* seems like such a small word. The sound of it certainly doesn't convey any royal connotations – unless, that is, its meaning of Rex as 'King' is understood by the person singing it. In contrast, *quocumque* simply means *wherever*!

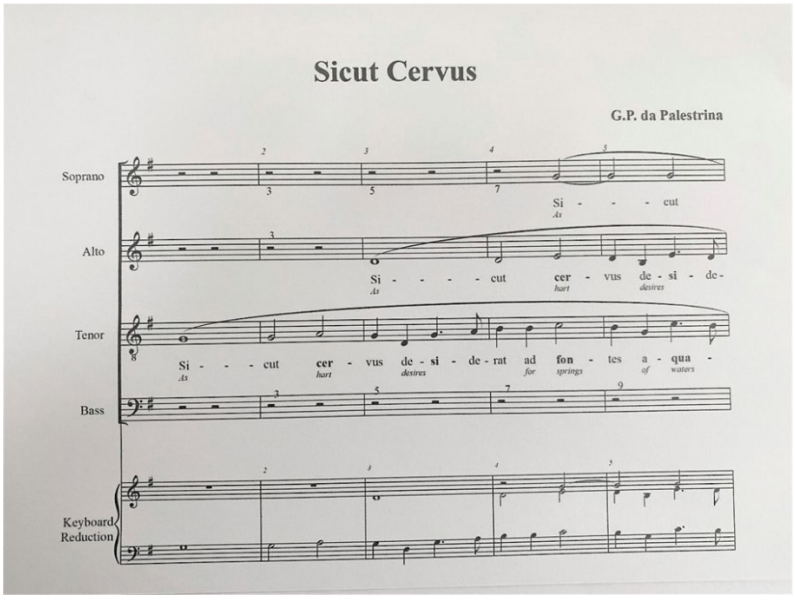
Another element considered essential to improve performance values of Renaissance polyphony is the correct pronunciation of Latin. Like all languages, Latin has a rhythmic

flow of its own. We often smile at non-native speakers as they accent an incorrect syllable in a multi-syllabled word. By encouraging correct stressing, an edition can bring to the fore the micro-rhythms contained within the text which is independent of the rhythm of the music itself. Computerised typesetting provides an easy solution. Through presenting stressed syllables in bold print, singers are sub-consciously encouraged to lean on particular syllables without actually accenting them. A lifetime working with amateur singers has informed me that asking for a stress or accent can often lead to excessive enthusiasm in this regard, thus creating a new set of problems.

Phrasing

We have all heard choirs singing languages which they patently do not understand. The places in which breaths are taken can indeed be breathtaking! By definition, polyphony requires an independence of line, not only in terms of musical line but also in terms of phrasing. Experienced singers may spot an imitative entry, but in complex music such awareness is not always present amongst people who do not regularly sing this genre of music. Traditionally, phrase marks are not used in choral music. By and large, the text suggests where a phrase should start and finish. Community choirs, in my experience, do not always follow these suggestions. The simple insertion of a phrase mark goes some way towards inhibiting the worst offences. The inclusion of phrase marks on the individual lines also has additional benefits, according to singers who have used the system. Some now maintain that the independent phrase marks are a continuous, visible reminder of the independence of the parts, which are an integral part of polyphony. This is clear in Figure XI.

Figure XI
The addition of full-length phrase marks



To reiterate one of my key points, every conductor interviewed as part of my research commented that the single biggest inhibitor to a good performance of Renaissance polyphony was the presence of bar-lines. We have already seen the various approaches used by editors to get around the problem. *Mensurstrich* displaces the bar-line to a place normally reserved for the text. In the process, it complicates the reading of the text. It becomes more difficult to determine what are complete words and what are just syllables. This is especially the case for those who do not regularly sing in Latin. It also makes it very difficult to recreate the language's micro-rhythms referred to earlier.

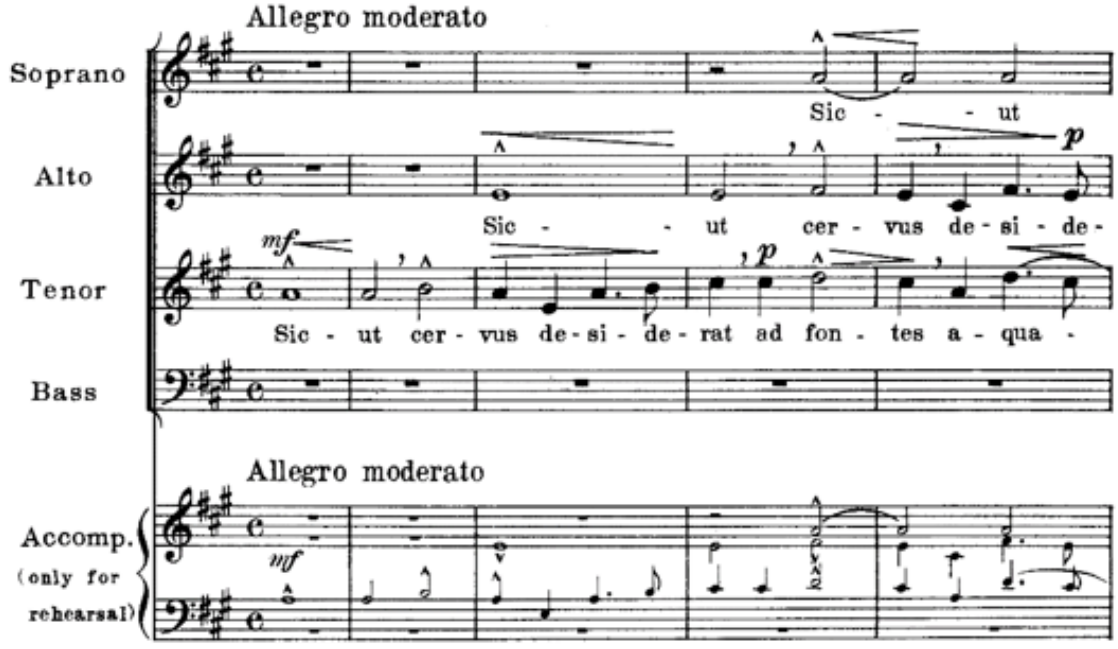
For me, dotted bar-lines do not alter the reality of their presence in the sheet-music. Though less prominent, they are still an inhibiting factor in the creation of a seamless flow of melody. The use of small quarter bar-lines is rather more successful, though the use of a time signature rather reinforces the modern concept of 'two-in-a-bar'.

Bar lines and consistency between parts

Figure XII below shows a 'standard' edition of *Sicut cervus* with modern bar-lines. The extent to which this particular edition is over-edited is easily seen by the insertion of breath marks at frequently inappropriate places. The accurate translation of Sicut cervus desiderat ad fontes - aqarum is *Just as a deer yearns for - springs of water,* though it is commonly translated as *As a deer yearns for running streams.* Applying the breath marks as indicated in the score below, the text appears as follows:

As' a deer yearns' for running' streams,

Figure XII
Standard bar-line edition

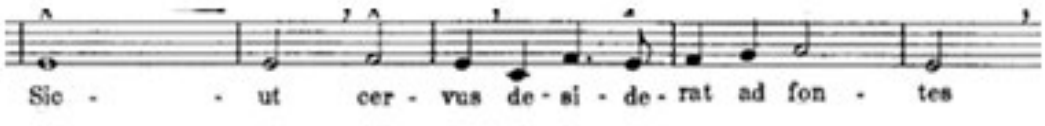


Moreover, the pronunciation of the text, when driven by the bar-lines, is very different for each voice part. Sometimes the 'bar-line-accents' support good pronunciation and

sometimes they do not. Compare the following – the first line shows the text as pronounced in the standard manner – the second line shows how the pronunciation of the alto line has been distorted by the presence of the bar-line**.**

Si-cut **cer**-vus de-**si**-de-rat ad **fon**-tes a-**qua**-rum,

Si-cut cer-**vus** de-si-de-**rat** ad fon-**tes** a-qua-rum,

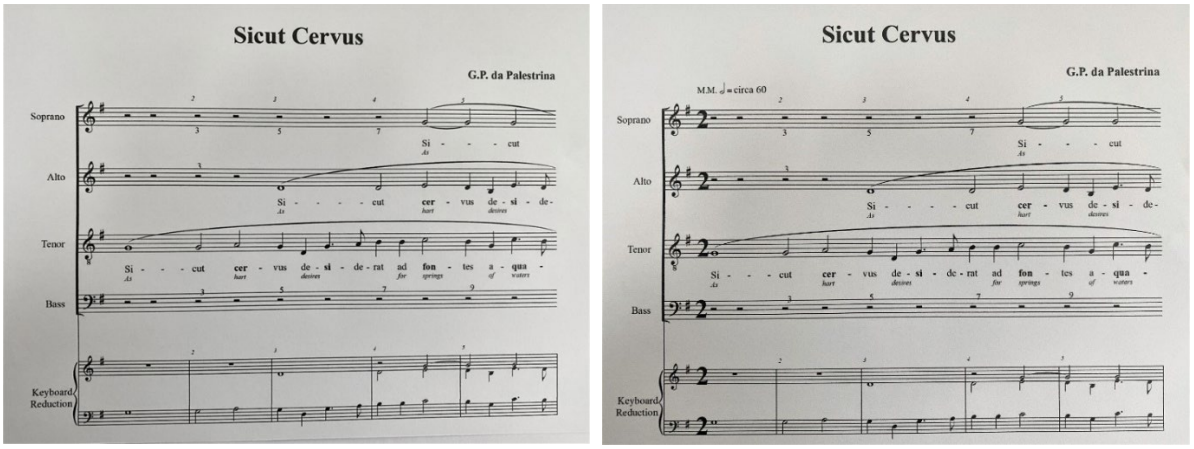


Although it unlikely that any self-respecting alto would pronounce the text in the manner shown in the second example above, anything is possible if we are not familiar with the language and rely on other music conventions to assist with pronunciations. Hopefully you will agree that something must be done to support the singer in such circumstances.

My solution to this problem is to remove the bar-lines entirely within the choral parts. This is shown in Figure XIII below where bar-lines are within the keyboard support part as an aid during rehearsals. Although the bar-lines themselves are removed, the duration of the notes is not as it appears in the original but rather, presented in modern duration equivalents, in order that the score has a familiar feel. Where notes would have crossed a bar-line in a manner that would have necessitated a tie, a tie continues to be used. In other words, the only thing missing is the bar-line. Because the grouping of notes is as it would have been in standard modern notation, it is not difficult to work out where a bar-line would appear, if required. To further assist rehearsal, bar numbers are included on the accompaniment reduction and these numbers are replicated at the appropriate point in the top voice line. In this way, it is possible to stop and/or start at a point within the score during rehearsal.

Having included a literal translation, stressed syllables, phrase marks and removed inappropriate bar lines, other items remaining to be considered include meter and tempo. As we have seen in earlier images, original editions were specific in their direction as to a pulse in either three or two. The further divisions into two or three is easily accommodated by the modern approach governed by the grouping of notes. Therefore, a simple insertion of a '2' or '3' at the start of a piece will suffice for most pieces as an indication of pulse. This has been added in Figure XIIIb. This is not a new idea. It was originally mooted by Marin Marsenne, who died in 1648, but his ideas in this regard were not adopted as an industry standard. Marsenne was also the person who initially wrote on the harmonics of a vibrating string and is known as the father of acoustics.

Figure XIII
Bar lines removed (a) and pulse indication added (b)

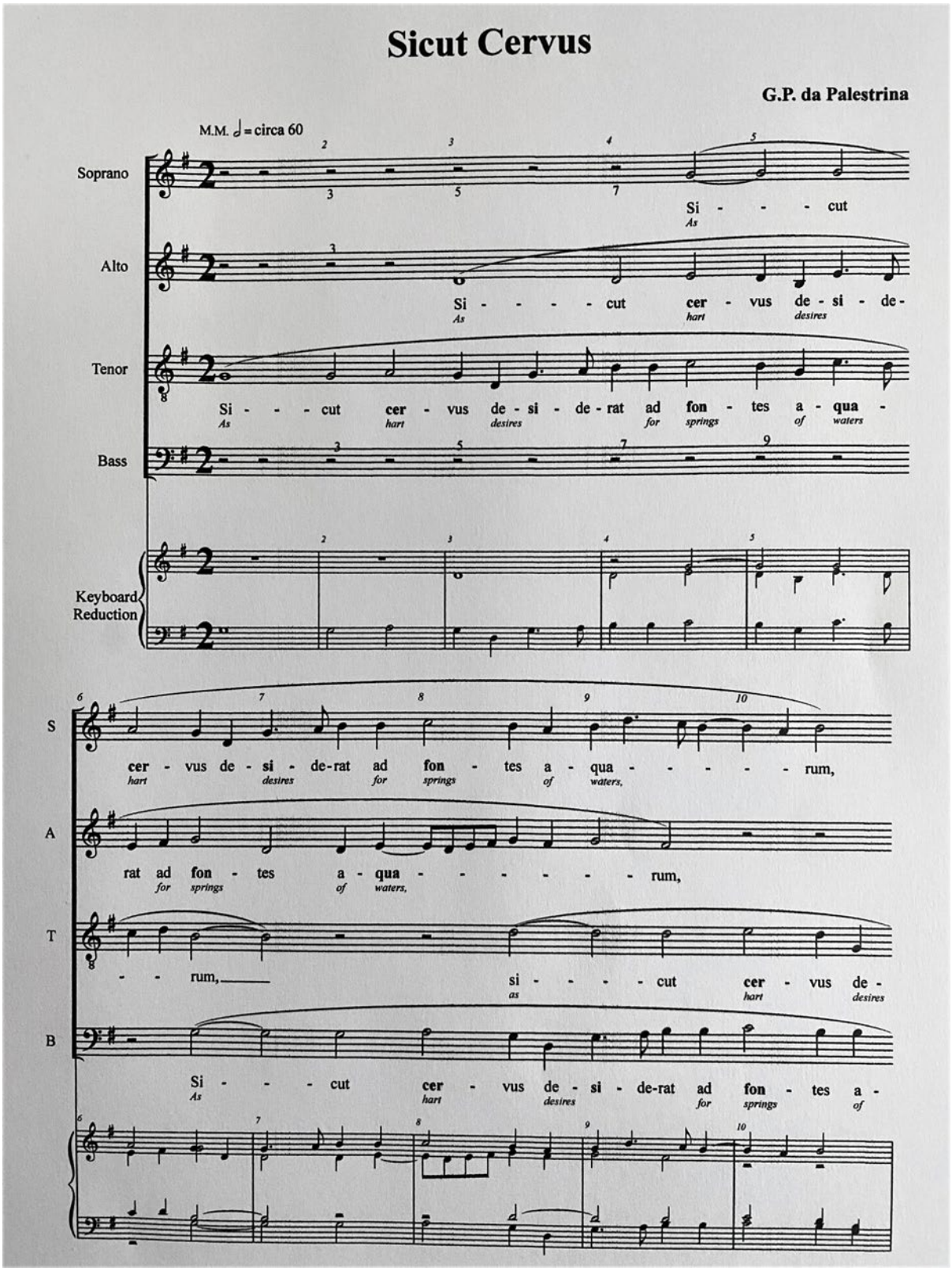


Changes in meter are very much part and parcel of Renaissance polyphony. Changes in pulse from two to three and back are regularly found in music of this era. What is not always clear, however, is whether the relationship is one of *tripla* (three to one) or *sesquialtera* (two to three) or a strict equivalence of minim = minim. Indeed, Ruth DeFord writes convincingly about other relationships, but that is a specialist discussion for another day. In any event, whatever the preferred relationship it can nowadays be easily communicated by using a change in the metronome mark, thus dispelling any uncertainty of interpretation. Notwithstanding the use of metronome marks as recommendations, it is accepted that the size of choir and the acoustics encountered during performance can require an alteration of the primary tempo. However, the relationship between the duple and triple pulse sections should always be retained.

To assist with rehearsals, a keyboard reduction is provided which includes bar numbers. These numbers are also included in the top vocal part as an aid to 'navigation'. The small numbers below each stave refer to the rests and are a count of the silent pulses.

The first page of the final Phrased Notation System (PNS) edition is reproduced as Figure XIV on the next page.

Figure XIV
Palestrina: *Sicut Cirvus*, Phrased Notation System edition



Conclusion

Trials of PNS with Irish professional musicians, amateur choirs, and post-graduate conducting students from Louisiana State University have all returned reports of significant changes in performance. One report was that 'it sounded as if they were singing earlier music'. For others, returning to standard notation was problematic having used PNS. They reported seeing the barred notation as very 'blocky' and restrictive in performance.

Many years ago, I visited Rome and looked forward to seeing the Pantheon. I was rather disappointed when I arrived to see the building surrounded by scaffolding. I did see the Pantheon, but not as it was supposed to have been seen. To me, listening to non-specialist choirs singing Renaissance polyphony from a modern score can sometimes sound like the music has had a scaffold applied to it. A scaffold that camouflages the subtle intricacies of the micro-rhythms; a scaffold that clouds the word painting and imitative entries; a scaffold that makes the music less than it can be … even if we cannot be specific in terms of what it sounded like to the composer. From working with PNS, I am convinced that its adoption for use with Renaissance polyphony can significantly help non-specialist choirs be the best they can be in performing this much-loved genre of music.

If you have any questions regarding PNS or would like to source music in a PNS edition, please feel free to contact me at info@kevinocarrollmusic.com.