Peter Woetmann Christoffersen

What every choirboy should know
Considering the motet *Ut Phebi radiis* by Josquin Desprez

('Hvad enhver kordreng skal kunne. Betragtning af motetten *Ut Phebi radiis* af Josquin Desprez', *Musik & Forskning* 28 (2003) pp. 97-118)

Inspired by the sumptuous sounding presence of Josquin's *Missa L'homme armé sexti toni* I embarked on a discussion of the treatment of sound and vocal instrumentation in the music of the fifteenth and sixteenth centuries in the last volume of *Musik & Forskning*.[1] I put forward the hypothesis that not only did norms of sound exist that developed and changed through generations, but also that composers consciously worked with the sonority of music. To begin with, the preliminary conditions were listed in a few schematic points:

- That the teaching of *contrapunctus* and its associated skills form the basis for the sounding presence of polyphonic music, both in the situations where it was improvised (*cantus super librum*) as where it was performed on the basis of carefully prepared written music (*res facta*);
- that the development of tonal awareness is linked to a specialization of professional singers and the emergence of corresponding ensemble types;
- that a 'consciousness of style and genre' concurrently resulted in relatively well-defined types of musical structures; and
- that *res facta* represents a 'frozen' realization in sound of the music.[2]

The vocal opulence in six- to twelve-part settings makes it quite easy to identify the role of sonorous elements in the music. It is a different matter to define the tonal means in the 'normal' music. By this I do not think of the sounding realization of melody and contrapunctus structures etc., but the conscious working out of sonority as an element alongside music's many other constitutive elements. It is difficult, because much fifteenth-century music contains a wealth of meanings that may be linked to different elements in the music. These elements may change their meaning, and the meanings often exist in a mutual balance that is influenced by its framework (the performance situation) and by the expectations and assumptions of those who hear the music.[3] Basically, these elements can be the meaning of the text in relation to the function of music in liturgy, ceremonies or court life, the incorporation of well-known symbols (religious or courtly), the use of pre-existing music as a model or cantus firmus – all in relation to the musician's/composer's usual way of expression and/or local or genre traditions.

*1 1 'Josquin og stemmernes klang. Et forslag om analyse af vokal instrumentation', *Musik & Forskning* 27 (2002) pp. 7-24.

2 *Ibid*. pp. 16-22.

3 A discussion of the last subject can be found in Rob C. Wegman, '»Musical understanding« in the 15th century', *Early Music* 30 (2002) pp. 47-66.

© 2023 Peter Woetmann Christoffersen

I have found it useful to start a series of studies of music that is limited in its spectrum of meanings in order to keep the discussion of the tonal aspects manageable. It can be limitations that may have been deliberately imposed on the music by the composer's employer, or which may be a natural consequence of the music's environment and traditions – or which the composer has imposed on himself.[4] A fruitful area to investigate may well prove to be the very simple, 'everyday' sacred music, which often has been characterized as retrospective or provincial, and which for a large part consist of hymns and prayers, especially music for intercession for the souls of the deceased.[5]

In the following I have chosen to look more closely at the four-part motet *Ut Phebi radiis* by Josquin Desprez (*c.* 1455-1521). It exhibits limitations that Josquin probably imposed on himself, because it combines a use of sounding symbols with an almost Spartan simplicity, and it directly relates to the skills and knowledge that any choirboy must have mastered. On the other hand, its 'cool' construction and improvisational ease are balanced by fervent prayer to the Virgin Mary and ecstatic appeal to Jesus as deliberate contrasts. The motet's way of constructing text and canon, its text and setting, and its musical expression are examined in turn in order to trace the composer's considerations and the sound concepts that he may have based it on.

Hexameters and hexachords

When Josquin had devised the text for *Ut Phebi radiis*, the music must also have been ready in his mind. At least in terms of sound and course of the music, probably just a number of details were missing that had to be worked out more precisely during the writing down in parts. The text is reproduced in the next section of this article in the original Latin and in translation, and the music can be found in transcription at the end of the article.[6]

As in other motets, the text falls into two sections, addressing Mary and Jesus. The use of classical hexameters and references to antique and biblical subjects suggest the author's ambitions in terms of Latin erudition. What makes the text into something special, in particular for those who were close to the teaching of music, is that it incorporates syllables and words that represent sounding notes. The first six lines of each section start with solmization syllables that are more or less successfully incorporated into the sentences. The first line quotes only the syllable *ut,* the second line adds *re*, and so on until the syllables name the entire ascending scale segment of six notes that makes up a hexachord. In the second section, the text starts from the top with the syllable *la,* and in its sixth line the full, descending hexachord is recited in the same way. The text is thus a construction with the number six as the basic element (2 x 6 lines of six metrical

*2 4 A study of music belonging to the first-mentioned category can be found in Peter Woetmann Christoffersen, 'Kirkemusik i stramme tøjler. Om altermatim-messer til Santa Barbara i Mantova', *Danish Yearbook of Musicology* 30 (2002) pp. 9-50.

*3 5 A preliminary discussion of related topics can be found in P. Woetmann Christoffersen, *French Music in the Early Sixteenth Century. Studies in the music collection of a copyist of Lyons. The manuscript* Ny kgl. Samling 1848 2° *in the Royal Library, Copenhagen I-III.* København 1994, vol. I, pp. 288 ff and 321 ff.

6 The Latin text is reproduced with italicized solmization syllables; for a diagram of the tone system and hexachords, see *figure 1* below. In the transcription of the motet, the use of hexachords is marked with letters: Letters in bold mark that the hexachord in question is forced by the text's solmization syllables, while 'normal' letters indicate where to mutate into another hexachord in order to follow the melodic progression; these indications take neither momentary semitone fluctuations above or below the current hexachord into account (here either *fa* or *mi* is sung) nor momentary pitch raises (*mi ficta*).

feet – hexameters, which use words to build formations of six tones – hexachords). Each section ends with a seventh line, a *punch line,* with the conclusion of the previous accumulation of statements. In the first section, it is the Virgin Mary who outshines all comparisons, and in the second section, the praise culminates in a prayer to Jesus to remember those who sing (and hear).

This structure is accurately reflected in the music. The hexameters are sung by the two highest voices ("Superius" and "Altus") in such a way that whenever the text pronounces solmization syllables, they sing the notes that can be named with these syllables in one of the three hexachords (*hexachordum naturale, durum* and *molle*), which together are used to create order in the tone system of the time. In each section for the first six lines, it happens above a canon at the fourth between "Tenor" and "Bassus", who sing solmization syllables only. The incremental ostinato, built into the text's hexachord structure, appears undiluted in the canon of the lower voices. At first only a single *ut* is sung in two hexachords a fourth apart. Then there is a pause of eight *breves* in both voices. The next entry is increased to two notes, *ut-re*, and so on until the full hexachord sounds in the sixth line; in the second section it happens in the same way, only now the hexachord is built from top to bottom. The rests between their entries are each time of eight *breves*' duration. In this way, the canon of the lower voices comes to stand as a series of sound columns that become ever wider, on top of which the more mobile upper voices are spun out like sung threads. As soon as the *comes* voice reaches the target of the canon's incremental ostinato,[7] it remains on the final note; in the first section the tenor stays on *d′,* and in the second the bassus ends on *c.* At this moment, the music changes character: In the first section there is a change to a homorhythmic, flexible declamation of the end of the sixth and of the whole seventh text line, in which the bassus participates, a change to the 'intercessory prayer' type of music. The same character is marked at the end of the second section, but here it quickly turns into a triumphant fanfare, where imitations between superius, altus and tenor play around the triad on *c′*. To clarify the boundaries between the six lines of hexachord building and canon and the conclusion of the seventh line, the setting of the beginning of the sixth line is in both sections is formed as a three-part canon in *brevis* notes on the now complete hexachords – altus participates in this while superius pauses.

The only source for *Ut Phebi radiis* from Josquin's lifetime is Ottaviano Petrucci's *Motetti libro quarto*, which was printed in four part-books in Venice in 1505. As Jaap van Benthem has demonstrated, Josquin's own version of the motet in choir-book format was probably notated with three voices only.[8] The original tenor voice would have been accompanied by canon prescriptions using signs and text, which indicated the interval and the distance between the entries and where and how long the *comes* voice should remain on its last note.[9] Obviously, this procedure was not feasible in printed part-books.

7 I use the traditional terms from fugue descriptions, *dux* and *comes*, about the entries of the first and second voice into the canon.

8 Jaap van Benthem, 'A Waif, a Wedding and a Worshipped Child. Josquin's *Ut phebi radiis* and the Order of the Golden Fleece', *Tijdschrift van de Vereniging voor Nederlandse Muziekgeschiedenis* 37 (1987) pp. 64-81 (at pp. 69-70).

9 The original tenor part can be reconstructed by combining bassus in the first section with tenor in the second section. A remnant of the original notation is found in the tenor bar 134, where the editor in the print forgot to delete a now redundant *signum congruentiae* (Petrucci's tenor-book, f. 37v). The original function of the sign was to show the *comes*-singer where he should stop and remain on his final note.

The customers expected ready-to-use music without having to understand a perhaps cryptic canon prescription, and the small format made it impractical for both the tenor and bass parts to be sung from the same book. Therefore, Petrucci's music editor took care to prepare resolutions of canons or – as here – to silently dissolve the canon into two printed voice parts.[10] The ending in bassus must be an editorial intervention intended to make the music look more 'normal'. This ending's long notes on *c* (consisting of a dotted *longa,* a dotted *maxima* and another *maxima*-value) seem confused in notation and lack two *breves* to reach the final note, a *longa* on *f*.[11] On the other hand, the tenor's long final notes in the first section of the motet seem logical considering the structuring of the canon around the number six (they consist of a *longa*, a *maxima* and a dotted *maxima*, or 2+4+6 = 12 *brevis* values). Therefore, if we can assume that *the comes* voice in the second section ought to proceed in a way similar to the first section, the ending will be three-part, as the bassus will then be five *breves* shorter than the other voices. It causes the *c*'s to sound while they are needed to legitimize the fourths appearing in the other three voices,[12] but leaves the stage free for the *fauxbourdon*-like ending.

The text, the fleece of Jason and the fleece of Gideon – and Mary

I
Ut Phebi radiis soror obvia sidera luna,
*Ut re*ges Salomon sapientis nomine cunctos,
Ut remi ponthum querentum velleris aurum,
*Ut remi fa*ber instar habens super aera pennas,
*Ut remi fas sol*vaces traducere merces,
Ut remi fas sola Petri currere prora,
Sic super omne quod est regnas, O Virgo Maria.
II
*La*tius in numerum canit id quoque celica turba,
*Lasso l*ege ferens eterna munera mundo:
La sol fa **ta** mina clara prelustris in umbra,
La sol fa mi **ta na** de matre recentior ortus,
La sol fa mi re **ta** quidem **na** non violata,
La sol fa mi re ut rore **ta na** Gedeon quo,
Rex, O Christe Jesu, nostri Deus alte memento.

I
As the moon, sister of Apollo, with her rays [rules] the stars on her path,
as Solomon [rules] the kings in the name of the wise,
as the oar belonging to those seeking the Golden Fleece [rules] the sea,
as the artisan with wings as oars [rules] the air,
as [it is] the task of the oar to transport saleable wares,
as [it is] the task of Peter's oar to steer the one ship,
so you, o virgin Maria, rule all that is.

10 Bonnie J. Blackburn, 'Petrucci's Venetian Editor: Petrus Castellanus and his Musical Garden', *Musica disciplina* 49 (1995 (1998)) pp. 15-45 (pp. 33 ff).

11 Cf. the edition in A. Smijers (ed.), *Werken van Josquin des Prés. Motetten I.* Amsterdam 1925, no. 22, see also Benthem, 'A Waif', p. 70.

12 See bars 141 and 143.

II
Far and wide the heavenly host sings this in verse
bringing gifts to an exhausted world according to eternal law:
La sol fa **ta** – the diamond shining in the darkness,
La sol fa mi **ta na** – recently born by the mother,
La sol fa mi re **ta na** – truly unblemished
La sol fa mi re **ta na** – as [the fleece of] Gideon by the dew,
King, O Christe, Jesus, high God, remember us.

In the first section Josquin makes great use of the first solmization syllable of the hexachord *ut,* which can start a series of comparisons "as ...", in which the given syllables with a little imagination can find a place. In the second section the row of syllables goes backwards – starts with *la* – and this is not so easy to deal with.[13] After the first two lines, the solmization syllables can no longer be integrated into the meaning of the text, but must, along with the two filler syllables ("ta na") that are good to sing, stand as word music that begins each praise.[14] Even without a meaningful content in parts of the lines, the text is rich in antique and biblical allusions and evokes an increasing intensity in the praise of Mary and Jesus.

In the first section strong images from antiquity are included in the comparisons: Here is the moon goddess Luna, Apollo's sister (*Phebus/Phoebus* (the radiant) is Apollo's most important epithet), Jason and the Argonauts from the widespread myth search for the Golden Fleece, and the craftsman Daidalos who built the labyrinth in Knossos and with his son Ikaros made wings to fly out of the labyrinth. Solomon belongs to the Old Testament, while the one ship that Peter's oar steers is the Christian church that must look after the souls (cargo/goods). The second section describes the birth of Jesus with a reference to the Book of Judges, where Gideon asks for a sign and lays a sheepskin on the ground. After the first night the fleece had become wet from the dew, while the ground around and below was dry, the following morning the ground was wet, while the fleece was untouched.[15] This story was interpreted as a foreshadowing of Mary's immaculate conception.

That Jason's search for the Golden Fleece as well as Gideon's fleece are mentioned has led William Prizer to connect the origin of the motet with the ceremonies at meetings of the Order of the Golden Fleece.[16] This order of chivalry was founded by the Burgundian duke Philippe le Bon in 1430 and had as its members representatives of the Burgundian

13 Virginia Woods Callahan has tried to solve this problem in a very subtle way by reading solmization syllables and words backwards in lines 10-13. Thus in line 10 "La sol fa ta mina" turn into "amimata flos", cf. her translation in "Ut Phoebi radiis': The Riddle of the Text Resolved' in Edward E. Lowinsky & Bonnie J. Blackburn (eds.), *Josquin des Prez: Proceedings of the International Josquin Festival-Conference ... New York City, 21-25 June 1971*. London 1976, pp. 560-563. As demonstrated by Jaap van Benthem ('A Waif', p. 68), her solution does not make everything fall into place, so we are on safer ground, if we stick to what is written – in accordance with the music.

14 In the poem and the translation above, the solmization syllables are highlighted in italics, the filling syllables in bold. That the heavenly host in line 8 with a distinctive expression sings in metrical feet/quantities "canit in numerum", may allude to what actually happens in the following, namely that the 'quantity' of the hexameters becomes more important than their meaning.

15 Judges 6:36-40.

16 William F. Prizer, 'Music and Ceremonial in the Low Countries: Philip the Fair and the Order of the Golden Fleece', *Early Music History* 5 (1985), pp. 113-153 (at pp. 129-133).

nobility with the duke himself at the head; later – in the sixteenth century with the emperor as head – the crowned heads of Europe were strongly represented among the members. The Golden Fleece of Jason was initially the most important symbol of the order, but later five other fleeces became equally important. With an intense worship of the Virgin Mary, Gideon's fleece came to the fore, and from 1458 the order used a special Marian *officium*, which emphasised Gideon's fleece. Prizer suggests that Josquin modelled his text on the texts of this office, and that the motet was composed for one of the meetings of the order in the years 1461 to 1501, with the one in Brussels in 1501 as the most likely.

With this hypothesis as a starting point and due to the logical and symmetrical structure of the motet, Josquin's work is open to numerological interpretations.[17] According to the far-reaching analysis by Jaap van Benthem, one finds hidden in the proportions of the whole not only the Golden Fleece in French and Latin (*Toison d'or* and *velleris aureum*), Josquin's own name as author as well as symbols for Mary and Jesus, but also a clarification of the reason for the motet, namely that it was commissioned by the Burgundian nobleman Philippe de Croy for a cancelled meeting in Brussels in 1479 or 1480.[18] As said, it builds entirely on a hypothesis, and when Barbara Haggh later found the text of the order's Marian office, it turned out that the text of the motet did not show any striking kinship with it.[19] In the scant information about Josquin's life and career, there is also nothing that can link him to a member of the order.[20] Finally, one must remember the starting point, namely the given syllables of the hexachord. In the first section, in lines 3-6, they give the meaning "as the oar...", and it is limited how many images that include oars it has been possible to come up with. Jason and the Argonauts is probably one of the most obvious. In the second section, the path from Mary to Jesus over the Immaculate Conception according to medieval thinking almost automatically leads past Gideon and his fleece.

17 Proportions between the numerical values of words calculated according to the alphabets of the time and counting and calculations of the elements of music.

18 Benthem, 'A Waif'. Later Benthem has more precisely pointed at the meeting that took place in Bois-le-Duc in 1481, cf. Barbara Haggh, 'The Archives of the Order of the Golden Fleece and Music', *Journal of the Royal Musical Association* 120 (1995), pp. 1-43 (p. 2, note 6). Benthem's calculations give thought-provoking results, but they are very sensitive to the uncertainties inherent in the transcription and reconstruction of a musical text. I cannot in all cases find his results, but funnily enough my use of the logical rhythmization of the final note in bassus reinforces Benthem's calculation (p. 72).

19 Reproduced in summary form in Haggh, 'The Archives', pp. 17 ff. Barbara Haggh suggests instead (p. 21) that the text may be derived from the three books on the fleeces that Guillaume Fillastre wrote for the order (six in total were planned). The De Croy family ordered copies of the volumes on Jason and Gideon (the books on Jacob (two copies) and Gideon's fleece are in the Royal Library, Copenhagen, as MSS Thott 463-465 2°, cf. N.C.L. Abrahams, *Description des manuscrits français du moyen-âge de la Bibliothèque Royale de Copenhague*, Copenhagen 1844, pp. 80-85).

20 In their eagerness to link well-known works to the musical practice of the order, musicologists usually forget that the knightly order of the Burgundian dukes was a political instrument, created to contain the influence of the great power France, and to keep wavering allies on their side. The French king and other princes created similar, competing knightly orders whose use of music has not been studied at all. Those of Josquin's patrons that we know – if we leave aside the papal chapel – all belong to or lean towards the French camp: René d'Anjou in Aix-en-Provence, the French kings, the Sforzas in Milan and Rome and Ercole d'Este in Ferrara. This should call for caution when hypothetically linking works to the order.

In this way, the meaning of the text is to some extent forced by the joint use of sounding syllables in the text and in the music, and therefore does not need to refer to the famous order of knights, but rather to generally known concepts. As also Willem Elders has pointed out, the sounding symbols, the scales and syllables of the hexachords, are the most important in the motet.[21] The ladder was an important symbol. In Jacob's dream in Genesis, a ladder connected heaven and earth, and God's angels ascended and descended it.[22] During the Middle Ages, the ladder was transformed into a symbol for Mary – she became *scala caelestis*, the connection to heaven. The tone series of the ascending hexachord raises the prayer to the all-controlling, all-forgiving Mary, while the descending hexachord shows that God descended to earth through her.[23] *Ut Phebi radiis* must then more probable be regarded as music for use in private devotion (the text excludes liturgical use) in the widespread worship of Mary, with the freedom that this function gives the composer.

The ladder, hexachords and tone syllables

Scala caelestis, the heavenly ladder up and down, sounds unusually clear in *Ut Phebi radiis.* Tenor and bassus consist largely of nothing but that, and their 'naked' canon differs in rhythmic and melodic formulation from the shapes of the upper voices. There is no doubt that the symbol must be audible.

It is well known that Josquin was happy to take advantage of the possibilities for symbol formation and musical structuring that are hidden in hexachords and in speaking solmization syllables. Frequently described examples of this need only be briefly mentioned here: The five-part motet *Illibata Dei virgo nutrix* contains – besides the composer's name as an acrostic (embedded in the first letters of the text lines) – as a cantus firmus in constant diminution an ostinato on the notes *la-mi-la,* which forms the name "Ma-ri-a", to whom the singers' prayer is addressed. It was printed by Petrucci in 1508 in *Motetti a cinque libro primo,* but also appears in an older manuscript.[24] In Petrucci's *Canti C* from 1503 we find the four-part textless piece *Vive le roy,* a regular canon for three voices that must be combined with a tenor voice, which according to the canon prescript can easily be deduced from the title: "Vive" = *ut-mi-ut-re*, "le" = *re*, "roy" = *sol-mi.* The found series of notes is sung three times in *brevis* values using *the hexachord naturale* and *durum.* Similarly, the cantus firmus in the *Missa Hercules dux Ferrariae* spells the duke's name (= *re-ut-re ut re-fa-mi-re*) mostly in regular *brevis* values, which are sung in different positions and then artfully manipulated. These works 'speak' in a distinct, poster-like manner using solmization syllables. Maybe *Missa La sol fa re mi* does too. According to the well-known anecdote about the creation of the mass, the syllables of the title can be heard as either "Laisse faire moy" or "Lassa far a mi" (Leave it to me). But here the resulting motif permeates the entire musical structure as an ostinato repeated more than 200 times, – both as a cantus firmus in the tenor and in the polyphonic play of the other voices – variedly rhythmizised and in every imaginable hexachord transformation with the exertion of an incredible imagination. These two masses was published by Petrucci in *Missarum*

21 Willem Elders, 'Symbolism in the Sacred Music of Josquin' in Richard Sherr (ed.), *The Josquin Companion*. Oxford 2000, pp. 531-568 (pp. 547-549).

22 Genesis 28:12.

23 On the literary interpretations of this, see Elders, 'Symbolism', p. 547.

24 More about this and the other works by Josquin in Helmuth Osthoff, *Josquin Desprez I-II,* Tutzing 1962-65, and Sherr, *The Josquin Companion*, and their references to older and more recent literature.

Josquin Liber secundus and *Misse Josquin* from 1505 and 1502 respectively. In the first mass book from 1502 we also find *Missa L'homme armé super voces musicales,* where the hexachord – and the ladder – plays a more hidden, subtle role. The well-known "L'homme armé" tune is moved through the mass step by step up the six notes of the *hexachordum naturale* and changes its modal character with each move, even though the main sections remain anchored on D. Here is demonstrated not only a thorough familiarity with the possibilities of the hexachord and the mode system, but also an ability to combine them in a new way.

I have emphasized above that the mentioned compositions by Josquin are all found in print in Petrucci's collections, although several – especially masses – are also found in older manuscripts. As will also appear from the mention of other composers' production, Petrucci's editor seems to have had a predilection for music with symbols formed from the basic elements of music theory. This kind of music seems to have flourished among the composers of Josquin's generation in the decades before Petrucci's first printed music collection, *Odhecaton A* from 1501; perhaps this occurred as a sort of liberation from pre-existing tunes and as an exploration of the possibilities of abstract motifs in new constellations of sound and form.

James Haar has noted that the spread of the technique of deriving musical figures from the syllables of the hexachord in the late fifteenth century had Ockeghem's prestige behind it.[25] He alludes to the textless four-part motet *Ut heremita solus,* which Petrucci published without composer attribution in *Motetti C* in 1504, but which is mentioned in Guillaume Crétin's poem *Deploration sur la mort d'Ockeghem,* however without Crétin explicitly making it clear that Ockeghem is the author.[26] Its tenor must be derived from a very obscure canon prescription, where 'relatives' to the tones of the *hexachordum durum* from the note *G-sol-re-ut* must be included.[27] It would hardly be possible to solve its riddle, if Petrucci's print had not appended a *Resolutio* – and once the principle has been explained, the solution almost belongs to the choirboys' first lessons. As Andrea Lindmayr-Brandl has discussed, the anonymous setting, which is strongly characterized by teeming sequencing figures, can hardly be the same as Crétin refers to as Ockeghem's motet; possibly the tenor – or the idea for the canon – may be Ockeghem's, while the printed piece more likely originates from the circle of Josquin's contemporaries.[28]

It is very conceivable that *scala caelestis* and the worship of Mary is the background for masses by Antoine Brumel (c. 1460-c. 1512, *Missa Ut re mi fa sol la*) and Johannes

25 James Haar, 'Some Remarks on the »Missa La sol fa re mi«' in Lowinsky & Blackburn, *Josquin des Prez: Proceedings*, pp. 564-588 (p. 575).

26 Published in J. Ockeghem (ed. Richard Wexler with Dragan Plamenac), *Collected Works III: Motets and Chansons.* Philadelphia 1992, p. 18; see also the introduction, pp. XLV ff.

27 Andrea Lindmayr, 'Ein Rätseltenor Ockeghems. Des Rätsels Lösung', *Acta Musicologica* 60 (1988) pp. 31-42. If you look at the note *g* in *Figure 1* below, it is itself *ut,* its "socii" are therefore the notes *sol-re,* which must then be sung after the notated tone; in the same way the note *e'* comes to be called *la-mi* and has only *mi* as 'relative'.

28 Andrea Lindmayr-Brandl, 'Ockeghem's motets. Style as an Indicator of Authorship. The case of *Ut hermitage solus* reconsidered' in Philippe Vendrix (ed.), *Johannes Ockeghem. Actes du XLe Colloque international d'études humanists. Tours, 3-8 février 1997* (Collection « Épitome musical » 1) Paris 1998, pp. 499-520. She proposes Alexander Agricola as her most likely candidate for the composer (pp. 515 ff). If one has to enter into this kind of speculation, it is perhaps just as reasonable to point to a composer who in other contexts has shown himself to be fascinated by the possibilities of the hexachord, Josquin first and foremost, with e.g. Brumel, Isaac or Ghiselin-Verbonnet as alternative candidates.

Ghiselin-Verbonnet (*c.* 1460-*c.* 1507, *Missa De les armes*), who both had their masses printed by Petrucci in 1503, and both use the hexachord as a starting point for elaborate developments in the tenor parts.[29] However, *Ut Phebi radiis* probably rather should be compared to motets by Loyset Compère (c. 1445-1518) and Heinrich Isaac (c. 1455-1517).

The hexachord is used quite openly as a symbol in Compère's small five-part motet *Virgo celesti*, which opens Petrucci's *Canti B* from 1502.[30] *Hexachordum molle* sounds as cantus firmus in tenor secundus in dotted *breves,* which are rhythmically shortened in the two following repetitions of the tone ladder. The awareness of the importance of the hexachord is revealed by the imaginative choice of the second cantus firmus in the tenor primus. It is a hymn tune, on which the solmization hymn "Ut quent laxis" is often sung, but exactly not the hymn tune that in connection with the text "Ut quent laxis" gave the steps of the hexachord their names. In order to grasp the connection, one must know the Gregorian melodies by heart, especially since the text here is completely different. It is of course a prayer to the Virgin Mary "... look down on your servants, who unceasingly devote themselves to you, O Virgin Mary".[31]

29 Brumel's mass was printed in *Misse Brumel*. Its title suggests the hexachord, but Brumel's disposition of the course of the mass incorporates the entire traditional tone system with a passage up through the various hexachords (*durum, naturale* and *molle*) of which it consists (see *Figure 1*): Kyrie uses the hexachord on *G*, Gloria that on *c,* Credo on *f*, Sanctus on *g,* Agnus Dei I on *c′,* Agnus Dei II on *f′* and Agnus Dei III on *g′* – thus the cantus firmus in the tenor includes the full range of the tone system from *G* to *e*". The tenor mostly sounds in long note values up and down through the hexachords; these motifs also occur occasionally in the other voices. Modern edition in Antoine Brumel (ed. Barton Hudson), *Opera omnia* (Corpus mensurabilis musicae 5), vol. I, 1969, p. 41.

The mass with the cryptic title by Ghiselin-Verbonnet is found in *Misse Ghiselin*. Its tenor is based on the *hexachordum durum*, which in the Kyrie is presented in two segments in *brevis* values: *g-a-h*, rest, *c′-d′-e′*, rest, and then down again. The hexachords appear again in Agnus Dei I (now on *g, f* and *c′*), but otherwise the material in the other parts is varied and expanded so that it looks more like an exploration of the authentic Mixolydian scale with motifs in long note values that are gradually moved up and down (in Gloria and Sanctus, four-tone scale segment; in Credo, movements in thirds; in Et iterum and Agnus Dei III (in superius), second steps; in Agnus Dei II, quarter leaps). Modern edition in Johannes Ghiselin-Verbonnet (Clytus Gottwald ed.), *Opera omnia* (Corpus mensurabilis musicae 23) vol. II, 1964, p. 38.

30 Published in Loyset Compère (L. Finscher ed.), *Opera omnia* (Corpus mensurabilis musicae 15) 1958-72, vol. III, p. 20, and Ottaviano Petrucci (Helen Hewitt ed.), *Canti B 1502* (Monuments of Renaissance Music II) Chicago 1967, p. 92. The motet occupies the first complete opening in *Canti B*; before it, Josquin's brief setting of "L'homme armé" is inserted to fill out the space.

31 See further Ludwig Finscher, *Loyset Compère (c. 1450 1518). Life and Works* (Musicological Studies and Documents 12) 1964, pp. 124-127, and Petrucci, *Canti B,* pp. 25-27. Compère is also the author of a three-part motet-chanson *Royne du ciel /Regina celi* in Petrucci's *Odhecaton* A from 1501. In its contratenor, the first segment of the antiphon "Regina caeli" (*Antiphonale Romanum*, Tournai 1949, p. 691) is quoted as an ostinato. The motif (*c-d-c-d-e*) is moved up stepwise four times with fixed pauses between the repetitions. In this way it comes to precisely fill *the hexachord naturale* and constitute a *scala caelestis*. Throughout the section with ostinato countertenor (to bar 39), the tenor keeps within *the hexachord durum* (*g-e′*); this stability only disintegrates when new melodic material is introduced in the countertenor. None of the sources for the song have more than text incipit. However, in the manuscript Paris, Bibliothèque Nationale, ms. f.fr. 1722, there are preserved two anonymous rondeaux quatrains, which fit the music perfectly, "Royne du ciel, chief d'euvre de nature" (f. 1v) and "Royne de ciel du layt virginal" (f. 2). Both poems with the prayer from the earthly sinner to the Queen of Heaven fit equally perfectly into the *scala caelestis* genre. The song is published with the latter rondeau in H. Hewitt & I. Pope (eds.), *Harmonice Musices Odhecaton A* (The Medieval Academy of America Publ. No. 42, Cam. Mass. 1942, p. 395; without text it is found in Compère, *Opera omnia*, vol. V, p. 7, and in Johannes Prioris (T. Herman Keahey & Conrad Douglas eds.), *Opera omnia* (Corpus mensurabilis musicae 90) vol. III, 1985, p. 124.

The tenor in Isaac's five-part Marian motet in two sections, *O decus ecclesie – Te laudant*, is similar to Josquin's in *Ut Phebi radiis,* only it is even more strictly structured. It presents *the hexachord naturale* as an ostinato that both increases and decreases and includes notes as well as rests: First a *brevis ut* followed by a *brevis* rest, then *ut-re* plus two rests, *ut-re-mi* plus three rests, etc. until the entire hexachord sounds followed by six rests. After this, the whole thing comes in retrograde, where the hexachord and rests fade out, until only *ut* is back as the final note. This construction is used in both sections of the motet.[32]

Josquin's *Out Phebi radiis* thus falls into a pattern that was not unknown to his contemporaries or slightly older colleagues. But where Compère and Isaac build the ladder to heaven into a relatively common sort of setting, Compère in a very short and urgent setting close to the 'intercessory prayer' type, and Isaac's is widely varied around the strict tenor, Josquin creates a sound that cannot be found elsewhere in the music of the period.

What every choirboy should know

On top of all this artifice, *Ut Phebi radiis* seems simple, as if Josquin has deliberately limited himself to the possibilities of hexachords with the rigid fourth canon in *brevis* values, which gradually develops chains of parallel thirds, placed at the bottom of the structure and upper voices that expand the initiatives of the canon. The development is tied to the text line by line as the entries of the canon voices mark a new line of text with more and more hexachordal syllables.

The upper voices form a largely self-supporting *contrapunctus* structure that can of course be combined with the canon, but mostly does not need its notes to function. Only in bar 34 does a fourth appear between the upper voices (*c′/f′*), which must be legitimized by the concord of the canon (*f/a*). The fourth appears in connection with a refined idea: instead of imitating the movement *ut-re-mi-fa* in the upper voices, it is sung simultaneously in the two voices, each in its own hexachord (at the distance of a fourth) in different rhythmizations. It functions as a 'simultaneous imitation' and is part of Josquin's strategy of constant variation in the upper voices' presentation of the solmization syllables. He meets the contemporary ideal of *varietas*, where it can be done within the predetermined structure of the motet.

At the beginning of the motet, an illusion of a normal three- or four-part imitation of the given melodic material with the involvement of all voices is created,[33] thereafter – until the sixth text line – the upper voices themselves develop the motifs of the solmization syllables using different hexachords. It happens in basically the same way in both sections of the motet, partly in canonical imitation[34] and partly in simple polyphony,

32 The first section is printed in Petrucci, *Motetti a cinque Libro primo* from 1508; complete it is found in the manuscripts Leipzig, Universitätsbibliothek, Ms. 1494 (Apel-Codex; with several copies of the motet, of which some are fragmentary) and Berlin, Staatsbibliothek Stiftung Preussicher Kulturbesitz, mus. ms. 40021 (without text), published in R. Gerber (ed.), *Der Mensuralkodex des Nikolaus Apel II* (Das Erbe deutscher Musik 33) Kassel 1960, p. 155.

33 In fact, only the note *ut* is imitated, but Josquin lets superius and altus 'hear' the canon entry as a fourth movement, and they accordingly imitate it.

34 In the second line, the imitation of the canon's step up a second is 'hidden' by not cadencing before the entries (bb. 12-13), the first line is allowed to run out in parallel thirds (bb. 10-12). During the first two lines, the solmization syllables have been connected to the three elementary hexachords on C, F and G (see further the transcription, where the hexachords are indicated by letters). The third line starts as a

which in places approaches the 'intercessory prayer' type.[35] The first two lines are tied together without a cadence (bb. 12-13), while the following lines all cadence on F, at the same time as the bassus goes from *c* to *d* (bb. 21, 32 and 44) – all 'deceptive' cadences forced by the canon structure.

In the second section the descending cantus firmus gives rise to a greater number of cadence types, and a greater variety of steps are touched in this way (D, A, E and C).[36] The last three lines of each section are not separated by cadences, and they are very different in type of setting: As previously mentioned, the sixth text line starts as a three-part hexachord canon (bb. 55-62 and 127-35), where superius pauses. They stand out in the harmonic and tonal progression of the motet not only by the change in instrumentation, but also by virtue of the concords, which include the tritone that occurs between altus and tenor, and which neither can nor must be modified by means of *musica ficta* (bb. 57, 60 and 131). The preparation for this (the fifth line) is in the first section a close canon at the fifth of a scale segment (bb. 48-50), which shows the characteristic alternation between concords of fifths and sixths, which prevents the forbidden parallel movement of perfect intervals (displaced parallels). It is exactly the same principle that lies behind the relationship between altus and bassus in the following three-part canon in twice as long note values. In the descending canon in the second section, the reverse is overshadowed by resolutions of fourths into thirds between altus and tenor (bb. 128-132). In the second section, the preparation for the three-part canon is the last 'simultaneous imitation' (bb. 121-123). The final lines (line 7) in each part form a contrast to the rest of the motet, to which I shall return.

In his design of the upper voices Josquin shows a light hand, which in formulation can be close to the improvisational practice of the time. Imitation of undemanding motifs at the fifth and in unison belongs to what Tinctoris expected from skilled singers who improvised two or three voices over a given tune,[37] passages in parallel thirds and sixths, and stereotypical figurations as well. The 'bridge passages' that connect the lines of text, and which altus in particular takes care of, exhibit many standard figures, and the passage in bars 44-47 is a mechanical putting-in-sound of the ascending thirds in the canon voices – without any *contrapunctus* function.[38] Also the staggered parallel lines are typical improvisational procedures. The canon of the lower voices does not need to be noted at all. It can be described in a few words, and once the connection between the text and its

close canon at the fifth (bb. 23-25), but it turns out that the actual entry in altus only comes in bar 26 at the unison. The close canon on the first five notes of the hexachord comes in the 5th line (b. 48). The second section follows a slightly changed course with the first two lines in imitation at the fifth (bb. 75-76 and 86) and the 3rd line at the unison (bb. 96-97). The effect with 'simultaneous imitation' is saved to the 5th line in bar 121.

35 Bars 38-42 with the text "instar habens super aera".

36 Bar 83 on D, Phrygian cadences bar 94 on A and bar 105 on E (the low voices reinterpret it to a chord on *a*), and bar 117 on C (*a*).

37 Cf. Bonnie J. Blackburn, 'On Compositional Process in the Fifteenth Century', *Journal of the American Musicological Society* 40 (1987) pp. 210-284 (pp. 255 ff).

38 Similar to corresponding places in Agnus Dei III in *Missa L'homme armé sexti toni*, cf. Christoffersen, 'Josquin', pp. 12-13 (incl. Ex. 2). Viewed as an independent structure, the upper voices in *Ut Phebi radiis* call to mind the 'provincial' French church music from the first decades of the 16th century, e.g. an anonymous two-part *Stabat mater* in the manuscript Copenhagen, The Royal Library, Ny Kgl. Saml. 1848 2°, p. 27-33, which shows exactly the same simple elements, just in a much more extended development, cf. Christoffersen, *French Music,* vol. I, pp. 283-285, and vol. III, p. 250.

realization is explained to the singers, much of their movement through the hexachords in the upper voices can also be verbally agreed upon. Music that corresponds to these, the longest passages in the motet, can thus in principle be performed solely on the basis of agreements with support in the hexachord theory supplemented with improvised filling in.

The hexachord system was among the basic knowledge when new choirboys had to learn the enormous church song repertoire and in addition to that learn to sing counter voices to given melodies. In order to navigate the tone system (see *figure 1*), they had to build a mental map, where they could learn to constantly anticipate where the important semitone step should be placed. They could achieve this by moving between the various positions in which the hexachord's invariable scale segment could be placed (*mutatio*). Through endless practice and lifelong use, fixed tracks emerged in this mental map, which gave singers the confidence to launch into complex polyphonic performances based on a pre-existent melody. Composers could also rely on these habitual tracks in written music, and even often challenge the singers with passages that they could not foresee.[39]

Something could indicate that it is precisely these skills, 'what each choirboy should know', which Josquin has imposed on himself as a limitation in this motet. However, it is hardly written as teaching material for young singers.[40] Rather, its sounding identity seems to be inspired by a process of oral instruction and learning by singing after the master's example. Adrianus Petit Coclico (c. 1500-62), who cannot in all respects be considered a witness to the truth, gives in his *Compendium musices*, printed in Nuremberg in 1555, a credible description of a successful master-apprentice relationship:[41]

> My teacher Josquin des Prez never lectured or wrote a *Musica*, yet he created in a short time perfect musicians, because he did not keep back his pupils with long and thoughtless instructions, but taught them the rules in few words and by exercise and practise while singing. When he saw that the pupils were well grounded in singing, good pronunciation, embellishing the singing and applying the words in their right places, he taught them about perfect and imperfect concords and how to sing counterpoint over a plainsong using these concords. However, if he among them found some of sharp minds and promising disposition, he taught them in few words the rules for composing with three voices, and then with four, five, six voices etc., always providing them with examples, which they had to imitate.[42]

39 An easily accessible introduction to hexachords can for example be found in Rob C. Wegman's article 'Musica ficta' in Tess Knighton & David Fallows (eds.), *Companion to Medieval and Renaissance Music.* London 1992, pp. 265-274.

40 In 1926 Otto Ursprung assumed that the small motet was a practice piece for a church choir, a view Helmuth Osthoff could agree with; cf. Osthoff, *Josquin Desprez*, vol. II, p. 80.

41 Regarding the assessment of this passage, see Patrick Macey's article 'Josquin Desprez' in Stanley Sadie (ed.), *The New Grove Dictionary of Music and Musicians. Second Edition.* London 2001, vol. 13, p. 228.

42 Adrianus Petit Coclico, *Compendium musices.* Nürnberg 1555 (Facsimile edition by Manfred F. Bukofzer, Kassel 1954) f. Fii^{v}: "Item Præceptor meus Iosquinus de Pratis nullam unquam præleget aut scripsit Musicam, brevi tamen tempore absolutos Musicos fecit, quia suos discipulos non in longis & frivolis preceptionibus detinebat, sed simul canendo præcepta per exercitium & practicam paucis verbis docebat. Cum autem videret suos utcunque in canendo firmos, belle pronunciare, ornate canere, & textum suo loco applicare, docuit eos species perfectas & imperfectas, modumque canendi contra punctum super Choralem, cum his specibus. Quos autem animadvertit acuti ingenij esse & animi lecti his tradidit paucis verbis regulam componendi trium vocum, postea quatuor, quinque, sex & c. appositis semper exemplis, quæ ille imitarentur."

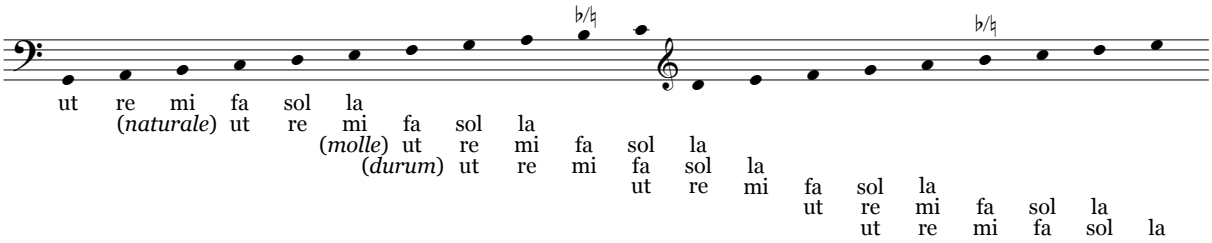


Figure 1, The elementary tone system with hexachords (*hexachordum naturale, molle* and *durum*).

What improvisation, on the other hand, cannot produce is the delicate balancing of the elements of the motet, its elegance in *varietas* and the many subtle details in the play with hexachords and symbols. Here the professional composer steps in and controls the flow and sound, so that the music, in accordance with the most developed aesthetics of the time, could become a pleasure for the senses as well as for the mind[43] – and strengthen the self-esteem of the initiates through the understanding of symbols and technique and thereby become an identity affirming pass to the 'guild' of former choir boys. In this way, the motet also comes to stand as an expression of the singers' adoration of Mary, as a discreet counterpart to Josquin's *Illibata Virgo Dei radix.*

There are three easily definable types of musical setting in the motet, of which the canon structure accounts for the longest developments and is balanced by the others. The first type of setting is distinctly layered, with the canon voices and the upper voices in separate layers. The first are stiff and calm, engaged in a slow construction of the motet's most important symbol, the others are mobile, close to the words and expressive. The relationship between them approaches a parodic rendering of the roles of the singers, the insisting *tenorista* against the teeming trebles and countertenors, and they are easy to distinguish from each other even when they are placed in the same range (altus, *f-a'*, and tenor, *f-d'*, in the passages in question) solely by virtue of their rhythmic design. That the role of the canon voices must be seen as primarily a sonorous/symbolic idea on the part of the composer is evident from the fact that, as previously described, they stand outside the *contrapunctus* structure that carries the coherence of the movement. Usually, the cantus firmus or another melodic formation takes part of this principal role. The sonorous/symbolic idea is potentiated through the use of the three-part hexachord canon at the start of the sixth text line, just before the contrasting types of setting are put into use.

The layering gives associations to the generations before Josquin, where the isorhythmic motet was a highly esteemed, learned form of music. Here the tenor melody (or less often two tenors) functions in long note values as the backbone of the composition, developed through repetitions and often mensural transformation, and most of the time in pronounced contrast to the upper voices singing a different text. This type of music survived on a smaller scale in Josquin's generation in the form of the motet-chanson, in which the upper voices sang a French poem in *forme fixe*, while the tenor performed an appropriate Latin quotation in calm note values. It is mostly associated with Loyset Compère, but Josquin himself contributed to the genre with three works.[44] Characteristic of both of these types is that an independent upper voice duo begins before the tenor(s) come in and take

43 See further Wegman, '»Musical understanding«'.

44 Sherr, *The Josquin Companion,* pp. 336-340.

their place in the structure. Josquin starts *Ut Phebi radiis* opposite by presenting all four voices at once. If he consciously points to the separate sound layers of the old, learned motet type, it is probably more to its idea and sound than to its real design. He hardly wants to revive an outmoded model either, rather it is the play with sound in the form of the syllables of the hexachord that has made the model arouse his interest. And his start of the motet has become more of a play with sheer sound than a normal imitative presentation. The singers send out the syllables as individual sounds consisting of pronunciation, pitch and tone of voice, only later on does one gradually begin to perceive what they are becoming.

As unique as the timbre and design of the setting are in the canon passages, just as banal, and effective, is the style in the conclusion of the first section (bb. 62 ff). Recitation of prayers and praises in rhythmically flexible chordal settings with frequent use of parallels in thirds and sixths is used in countless masses and motets, where it is found as a contrasting element, and some compositions stick to this type of setting entirely.[45] Josquin lets this model, which had already been hinted at earlier by the upper voices, take care of the praise of Mary around the sustained notes in the tenor. Three voices are sufficient to produce it.

To finish the motet he chooses another model, the fanfare, which has the same right of birth in the vocabulary of his predecessors, just think of the end of Du Fay's ballad *Se la face ay pale* and the use that Du Fay made of it in the mass of the same name, or the whole accumulation of sound at the end of Josquin's own *Missa L'homme armé sexti toni*.[46] The close imitation of motifs that traverse the C-triad and are accelerated with the introduction of *sesquialtera*, brings the modally more varied second section to a very effective climax. At the same time, the fanfare was probably the only type of setting that could be used effectively, when the motet's internal logic dictates that it must be done over a sustained low *c* in bassus. After bassus' *c* has died away, the three remaining voices can go to the cadence with a sweeping *fauxbourdon*-like gesture, perhaps a hinted *cadeau* to style models of the past, which after all contributed some sonorous atmosphere to Josquin's motet.

As with most other music by Josquin, this motet is very difficult to date. Helmuth Osthoff considered it a very early work because of its simple technique,[47] while William Prizer would place its appearance late, at 1501, very close to the time of publication.[48] A more precise placement in time is probably irrelevant. It is more important to place it in the decades and in the same world of thought, where the work on the two *L'homme armé* masses belongs, where Josquin in *Super voces musicales* was preoccupied with the

45 Bonnie J. Blackburn has identified this type of devotional or intercessory prayer from another point of view, by studying the many passages in fermata chords, in the article 'The Dispute about Harmony *c.* 1500 and the Creation of a New Style' in Anne-Emmanuelle Ceulemans & Bonnie J. Blackburn (eds.), *Théorie et analyze musicales 1450-1650. Actes du colloque international Louvain-la-Neuve, 23-25 septembre 1999* (Musicologica Neolovaniensia Studies 9) Louvain-la-Neuve 2001, pp. 1-37; see also the introduction and note 5 in the present article.

46 Christoffersen, 'Josquin', pp. 15-16.

47 Osthoff, *Josquin Desprez,* vol. II, p. 79; René Bernard Lenaerts goes so far as to call it "… obviously a scholastic work from an early date period of the master" in the article 'Musical Structure and Performance Practice in Masses and Motets of Josquin and Obrecht' in Lowinsky & Blackburn, *Josquin des Prez: Procedings*, pp. 619-626 (p. 624).

48 Prizer, 'Music and Ceremonial', p. 132.

hexachord and with advanced canon technique and in the *Sexti toni* ventured into letting the tune sing forwards and backwards at the same time as the basis of a sound composition. In *Ut Phebi radiis* he could work purely in sound and canon without the demands of the large form.

I have dared to trouble the reader with this long-winded account of Josquin's *Ut Phebi radiis*, because I believe that on this background I can draw conclusions that set up some useful benchmarks for a future work with the treatment of sound and vocal instrumentation, even if they of course have to be adjusted to accommodate music that does not have the same unique appearance:

– That Josquin transformed a well-known musical symbol for the Virgin Mary (*scala caelestis*) into a sonorous idea by expanding the principles of the hexachords to the whole sounding complex, text as well as tones, and thus produced a motet for devotion, which was at the same time a summary of the singers' training and a symbol of the singers' worship of Mary.

– That the solmization syllables with associated tones appear at the same time as sound phenomena, as symbols and as part of a meaning-bearing text.

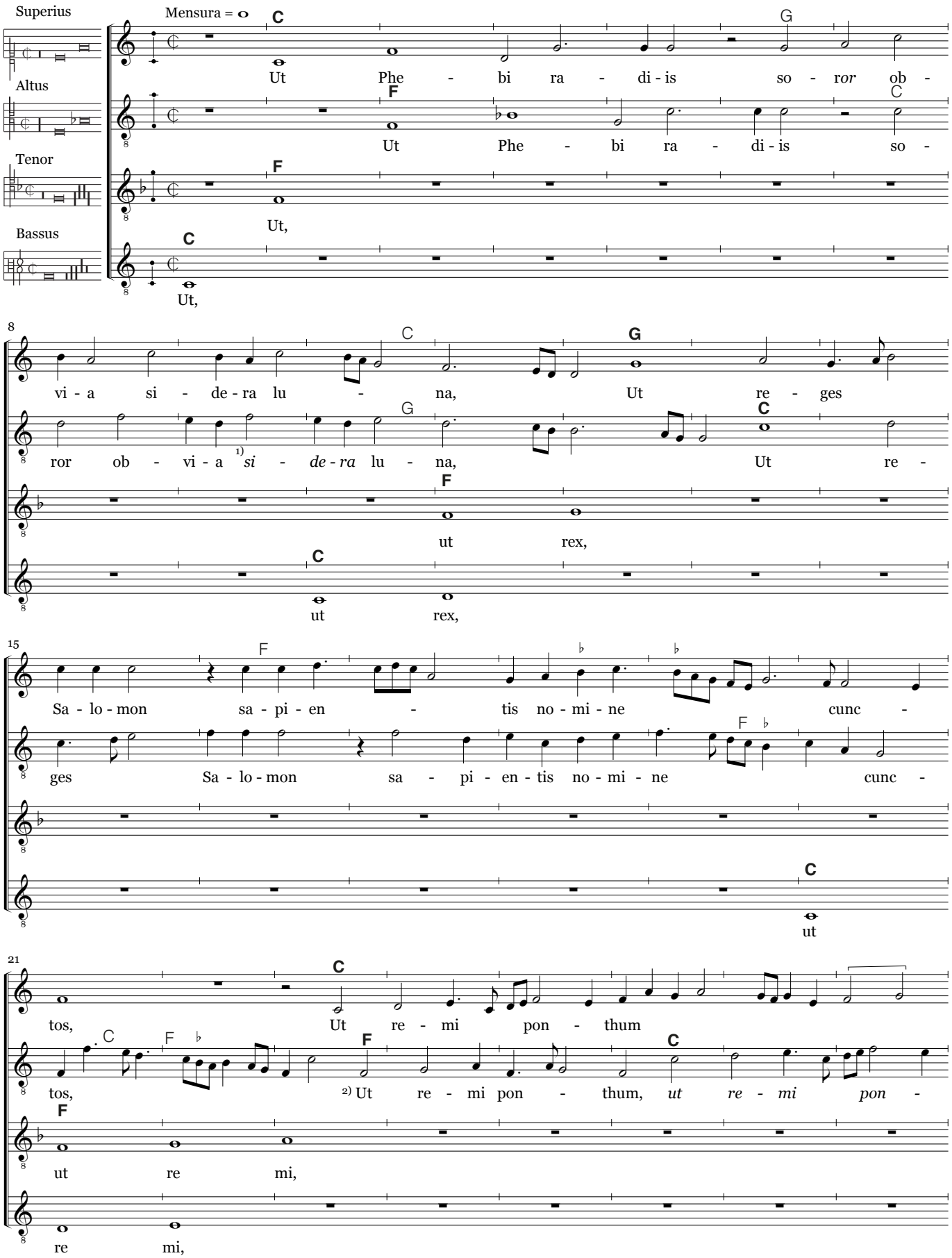
– That the perception of its sound in this case must have arisen together with the idea for the motet, and that the conception of the whole was largely finished at the same time as the writing of the text.

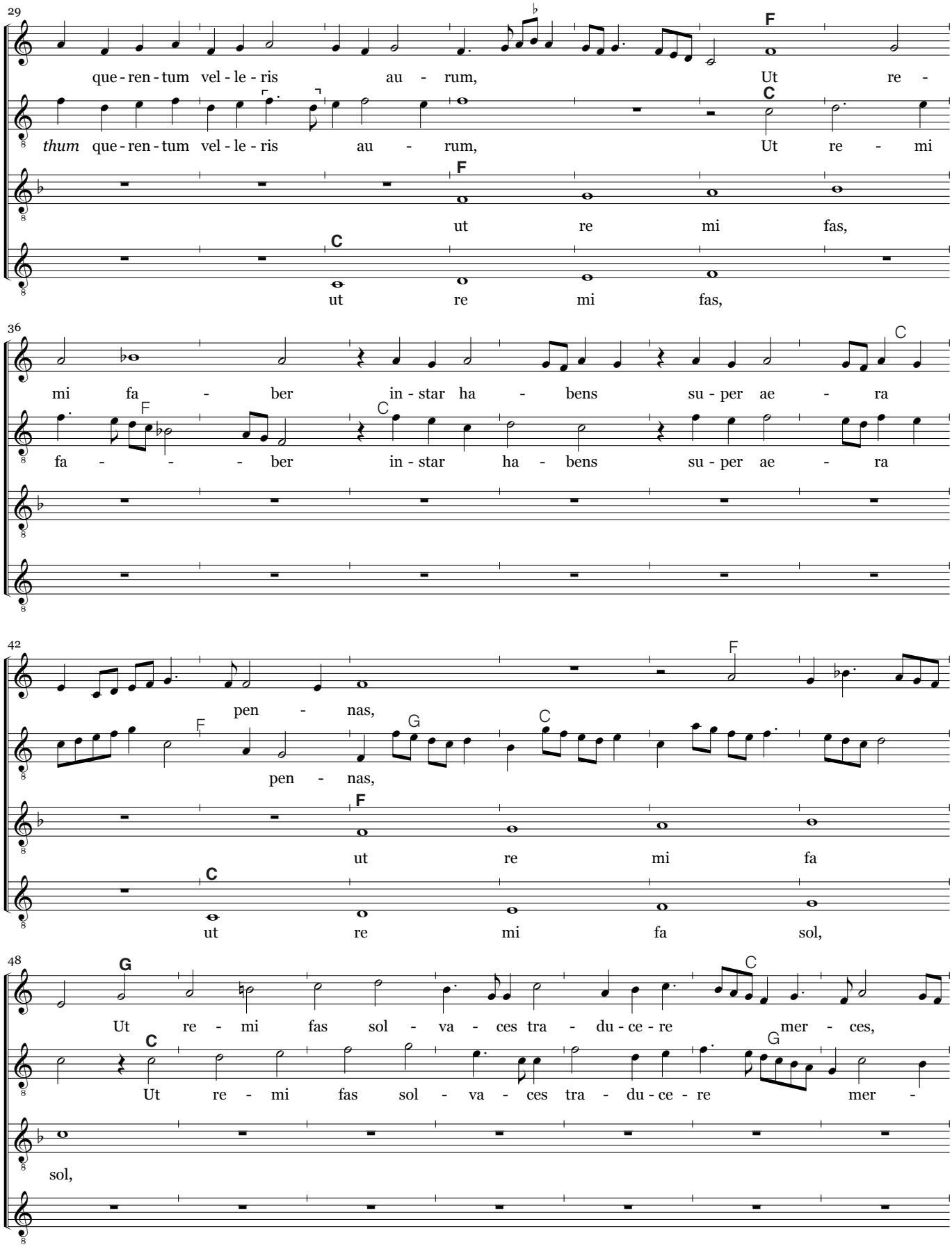
– That he reshaped existing setting and sound types and used them for purposes that he himself defined.

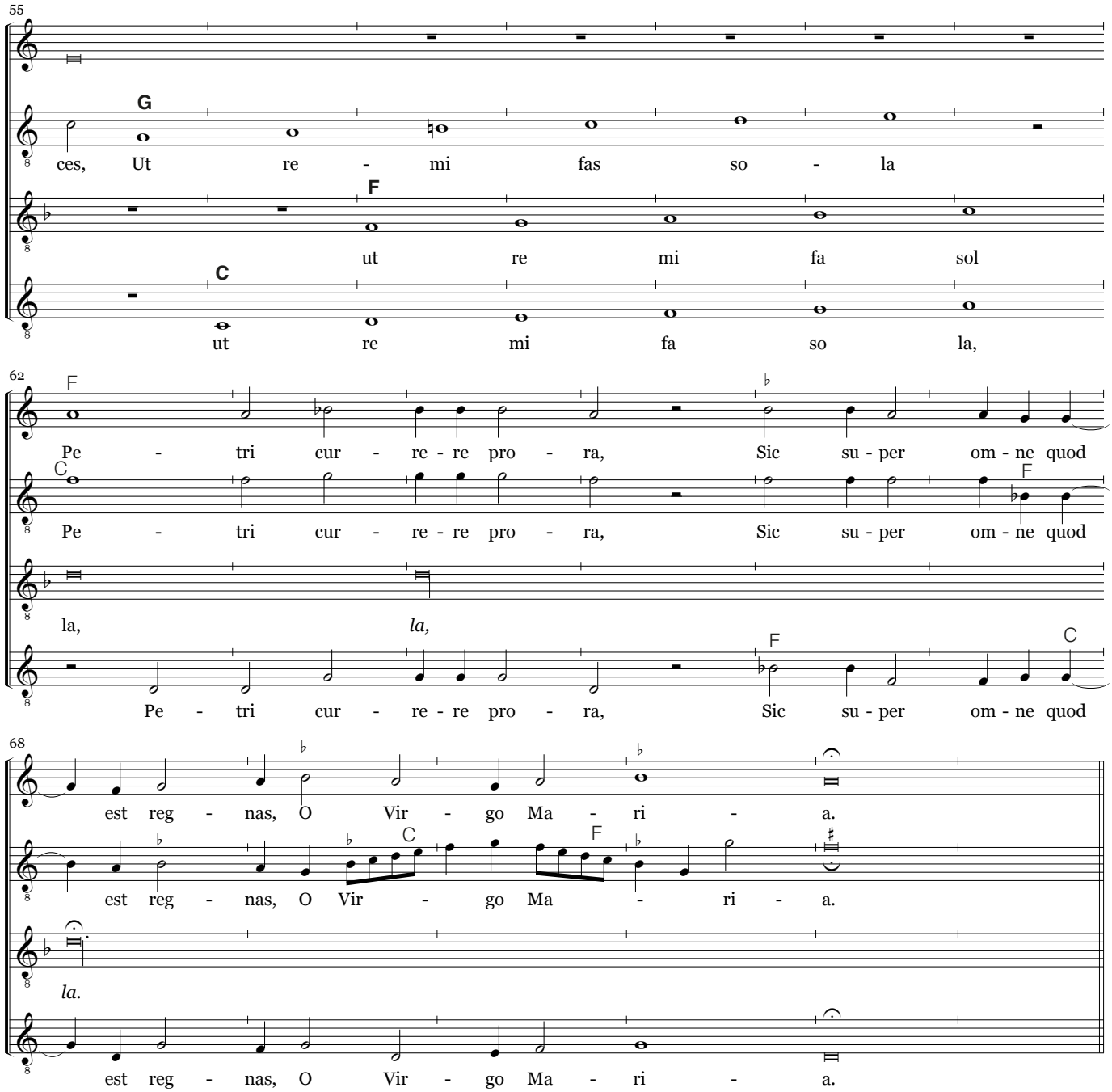
– That the idea for the motet may have arisen in connection with Josquin's work on other compositions and in agreement with similar efforts by contemporary composers, perhaps in some form of competition.

– That Petrucci's production of music prints shows that there was great interest in and perhaps also prestige tied to this type of music around the year 1500.

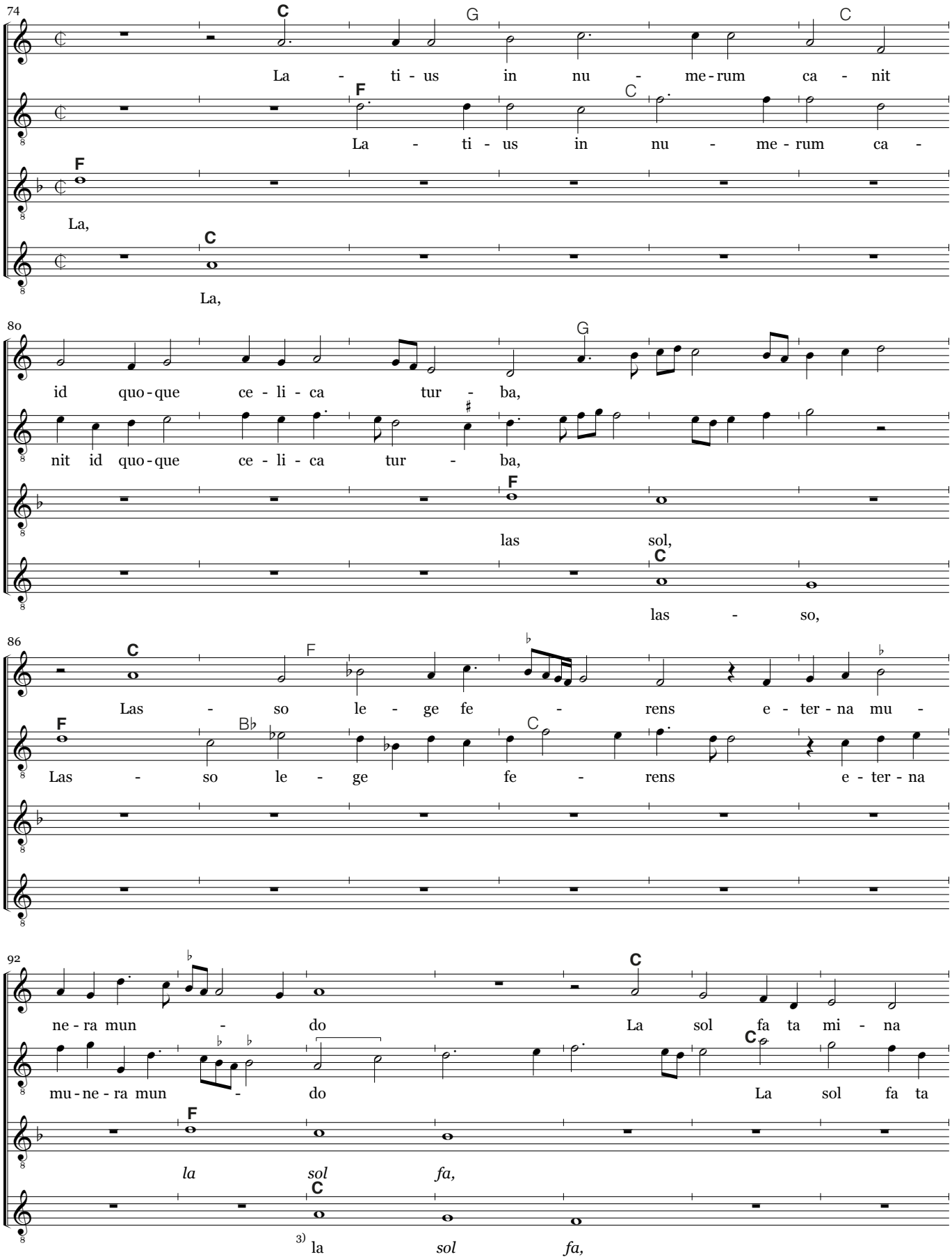
– That the simple can encompass much more than what the music's appearance in notation immediately suggests.

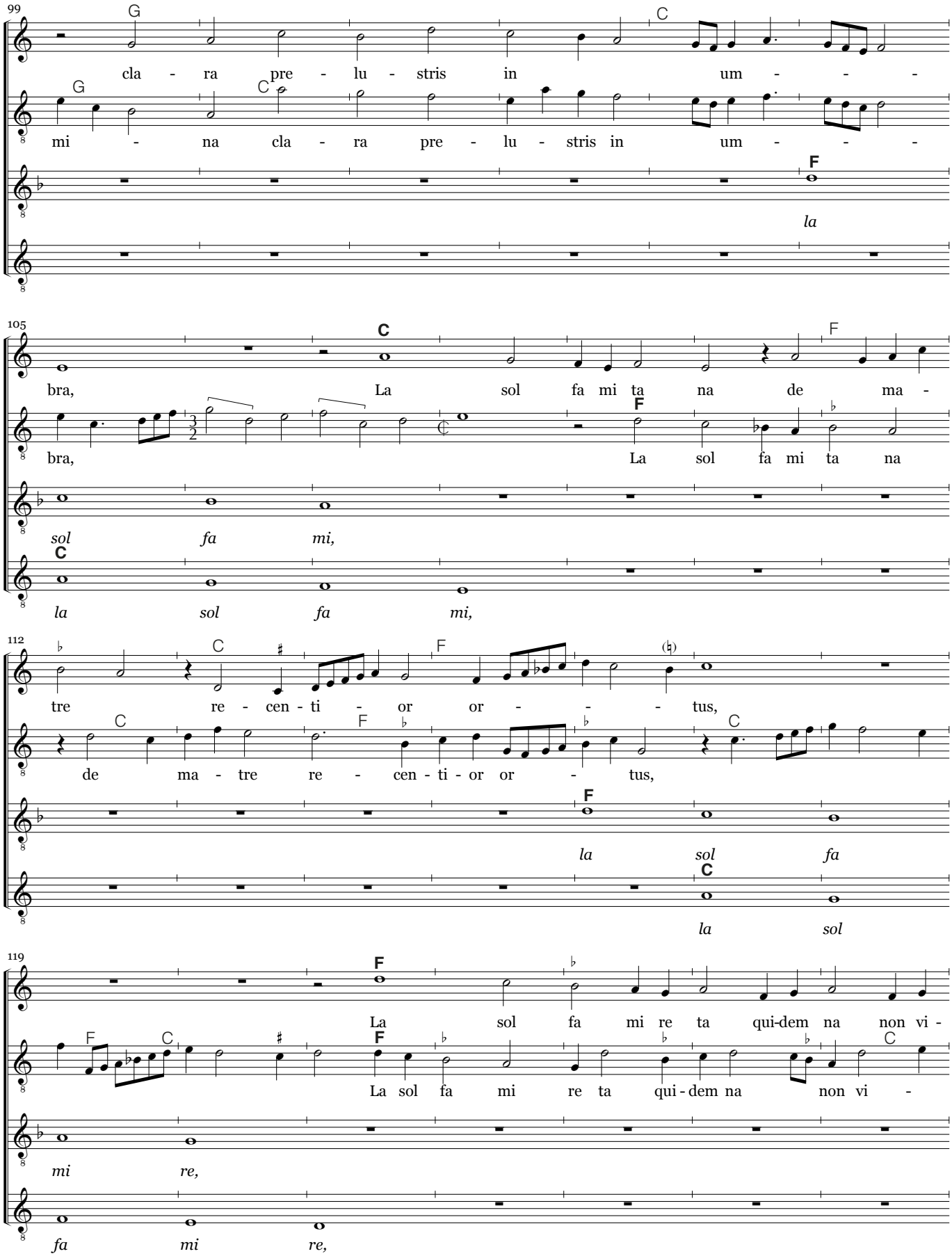

Superius
Altus
Tenor
Bassus
Mensura = o
Ut Phe - bi ra - di - is so - ror ob -
Ut Phe - bi ra - di - is so -
Ut,
Ut,
vi - a si - de - ra lu - na, Ut re - ges
ror ob - vi - a 1) si - de - ra lu - na, Ut re -
ut rex,
ut rex,
Sa - lo - mon sa - pi - en - tis no - mi - ne cunc -
ges Sa - lo - mon sa - pi - en - tis no - mi - ne cunc -
ut
tos, Ut re - mi pon - thum
tos, 2) Ut re - mi pon - thum, ut re - mi pon -
ut re mi,
re mi,

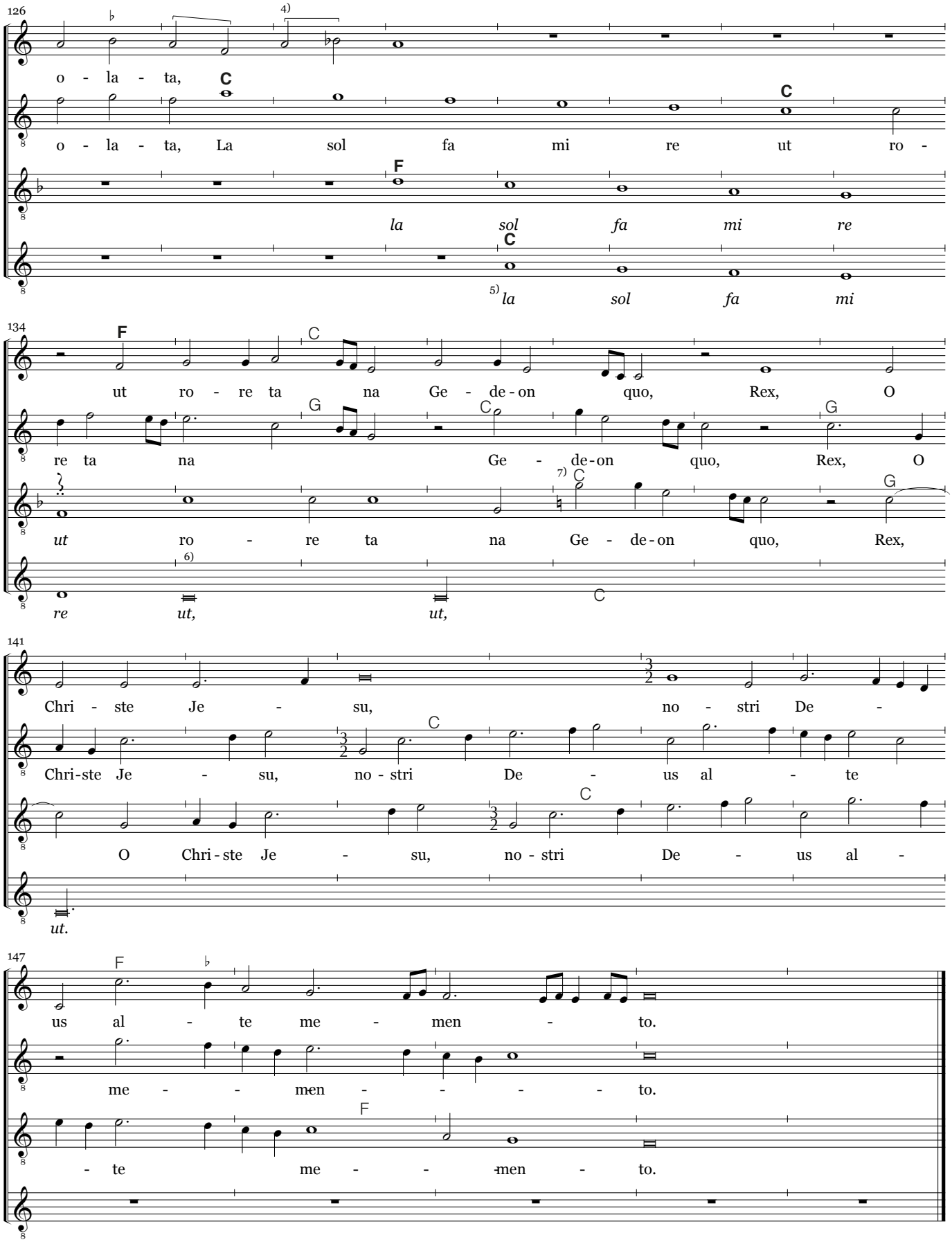

29
que - ren - tum vel - le - ris au - rum, Ut re -
thum que - ren - tum vel - le - ris au - rum, Ut re - mi
ut re mi fas,
ut re mi fas,
36
mi fa - ber in - star ha - bens su - per ae - ra
fa - - - ber in - star ha - bens su - per ae - ra
42
pen - nas,
pen - nas,
ut re mi fa
ut re mi fa sol,
48
Ut re - mi fas sol - va - ces tra - du - ce - re mer - ces,
Ut re - mi fas sol - va - ces tra - du - ce - re mer -
sol,



1) *Altus, text,* bars 9.2-10, the word "sidera" is missing (error).
2) *Altus, text,* bars 26.2-29.1, the words "Ut remi ponthus" are placed here (error); obviously they must start bar 23.2 and then repeated when *Contra* repeats *Superius'* preceding phrase.
3) *Bassus, text*, bars 94-96, "Latius" (error).
4) *Superius,* bar 128.1, *g'* (error).
5) *Bassus, text*, bars 130 ff, "Rex o Christe Jesu" (error).
6) *Bassus*, bars 135 ff, dotted *longa c* – dotted *maxima c* – *maxima c* – l*onga f* (error).
7) *Tenor*, before bar 138, a natural for *b*; the omly *b* in the following appears in bar 148.1. At the change of staff in bar 144, the typesetter has retained the one-flat signature, which probably is an error.


74
La - ti - us in nu - me - rum ca - nit
La - ti - us in nu - me - rum ca -
La,
La,
80
id quo - que ce - li - ca tur - ba,
nit id quo - que ce - li - ca tur - ba,
las sol,
las - so,
86
Las - so le - ge fe - rens e - ter - na mu -
Las - so le - ge fe - rens e - ter - na
92
ne - ra mun - do La sol fa ta mi - na
mu - ne - ra mun - do La sol fa ta
la sol fa,
3) la sol fa,


99
G
C
cla - ra pre - lu - stris in um - - -
mi - na cla - ra pre - lu - stris in um - - -
F
la
105
C
F
bra, La sol fa mi ta na de ma -
bra, La sol fa mi ta na
sol fa mi,
C
la sol fa mi,
112
C
F
tre re - cen - ti - or or - - - tus,
de ma - tre re - cen - ti - or or - tus,
F
C
la sol fa
C
la sol
119
F
La sol fa mi re ta qui-dem na non vi -
La sol fa mi re ta qui - dem na non vi -
mi re,
fa mi re,


126
o - la - ta,
4)
C
o - la - ta, La sol fa mi re ut ro -
F
la sol fa mi re
C
5) la sol fa mi
134
F
ut ro - re ta na Ge - de - on quo, Rex, O
C
G
re ta na Ge - de - on quo, Rex, O
7) C
G
ut ro - re ta na Ge - de - on quo, Rex,
6)
re ut, ut,
C
141
Chri - ste Je - su, no - stri De -
C
Chri-ste Je - su, no - stri De - us al - te
C
O Chri - ste Je - su, no - stri De - us al -
ut.
147
F
us al - te me - men - to.
me - - men - - - - to.
F
- te me - - men - to.

Supplementary notes (2023)

*1 English version, 'Josquin and the sound of the voices. Analysing vocal instrumentation – a suggestion' (at http://www.pwch.dk/Publications/PWCH_Josquin_Sound.pdf).

*2 English version, 'Liturgical music in a tight rein. *Alternatim* masses for Santa Barbara in Mantua' (at http://www.pwch.dk/Publications/PWCH_Mantua.pdf).

*3 These studies have resulted in an online book, *Songs for funerals and intercession. A collection of polyphony for the confraternity of St Barbara at the Corbie Abbey. Amiens, Bibliothèque Centrale Louis Aragon, MS 162 D*. Edited by Peter Woetmann Christoffersen, 2015 (at http://amiens.pwch.dk/; e-book version, 2 vols. at http://amiens.pwch.dk/V1.pdf and http://amiens.pwch.dk/V2.pdf).
French Music in the Early ... is now available online at http://www.pwch.dk/Publications/PWCH_Cop1848.pdf.