

## TWO NEWLY-DISCOVERED TENTH-CENTURY ORGANA

*At the same moment in time when the earliest chant books were compiled in the heart of the Carolingian Empire and polyphonic music was entering the realm of theoretical speculation in the anonymous writings of Musica enchiriadis and Scolica enchiriadis, organa were also being notated for performance outside music treatises. This fact would be unknowable, were it not for a two-voice organum for Saint Boniface written in the first decades of the tenth century on the last page of a long-neglected manuscript in London's British Library. A second notated antiphon Rex caelestium terrestrium also provides elements for a reconstruction of a further 'hidden' organum. These newly-identified organa shed light on a significant phase in Western Music History, being the earliest surviving musical sources of this kind, as well as the sole evidence from the tenth century of a polyphonic practice until the eleventh-century grand collection of organa from Winchester.*

Among the plethora of issues regarding the birth and development of polyphonic music in early medieval Europe there is a question still pending that is, what do we know of the practice of polyphonic singing in the tenth century and when, and in what forms, the first organa began to be notated on parchment? A musical annotation in London, British Library, MS Harley 3019 contains a two-voice organum on the antiphon *Sancte Bonifati martyr* as well as a second antiphon *Rex caelestium terrestrium*. Written in northwestern Germany during the first half of the tenth century, the annotation is therefore the earliest practical source for polyphonic music outside earlier and contemporary music treatises. Both the texts and the music of the two antiphons are *unica*, and the importance of such a discovery merges also with the history of early neumatic notation as both antiphons are notated in Palaeofrankish neumes. The aim of this study is to provide a preliminary analysis of the musical source and to set the basis for further discussions on notation and creativity in early polyphonic music.<sup>1</sup>

### THE MANUSCRIPT

---

<sup>1</sup> Scholarly literature on early polyphony is vast. For an introduction see Fritz Reckow with Edward Roesner, 'Organum §1-3' in *Grove Music Online* (accessed 15.5.12); *ibidem*, Raymond Erickson, 'Musica enchiriadis, Scolica enchiriadis §5'; Max Haas, 'Organum §I.1-III.2' in *Musik in Geschichte und Gegenwart: Sachteil*, vol. 7, pp. 853-864; *ibidem*, Nancy Phillips, 'Musica enchiriadis §IV', vol. 6, p.659; Sarah Fuller, 'Early polyphony', in Richard Crocker and David Hiley, eds., *The early middle ages to 1300*, The New Oxford history of music, vol. 2 (Oxford, 2<sup>nd</sup> ed., 1990), pp. 492-503; *eadem*, 'Theoretical Foundations of Early Organum Theory' in *Acta Musicologica*, Vol. 53, (1981), pp. 52-84; *The Winchester Troper: Facsimile Edition and Introduction*, Susan Rankin ed., (London: Stainer and Bell, 2007); *eadem*, 'The Early Theory and Practice of Organum' in *Music in the Medieval English Liturgy*, Susan Rankin and David Hiley eds. (Oxford: Oxford University Press, 1993); Ernst Waeltnr, *Die Lehre von Organum bis zur Mitte des 11. Jahrhunderts*, Münchner Veröffentlichungen zur Musikgeschichte 13 (Tutzing, 1975); Anselm Hughes, 'The Birth of polyphony', ch. 8 in *idem* ed., *Early Medieval Music up to 1300*, The New Oxford history of music, vol. 2 (Oxford, 1954).

London, British Library, Harley 3019 (hereafter Harley 3019) is an *in quarto* composite manuscript made up of four parts.<sup>2</sup> The fourth and last unit (ff. 54r-56v) is the latter part of the *Vita* of bishop Maternianus of Reims († 368), imperfect at the beginning, *inc.* “... <prae>dictus vero diaconus ...”.<sup>3</sup> The script is a Carolingian minuscule from the first half of the tenth century.<sup>4</sup> On f. 56v, after the explicit of the *vita*, is a two-voice organum for St. Boniface, *Sancte Bonifati martyr* as well as its chant version alone and the antiphon *Rex caelestium terrestrium*. Harley 3019 came to the British Museum Library in 1753 as part of the collection formed by Robert Harley (1661-1724), first earl of Oxford and Mortimer, and his son Edward Harley (1689-1741), second earl of Oxford and Mortimer, book collector and patron of the arts. Harley 3019 was listed in the 1808-1812 edition of the *Catalogue of Harleian Manuscripts in the British Museum* providing the following inventory: for MS 3019 - *Prosperi Aquitanici Epigrammata XII; Etymologicum, XII; Tractatus logicus, cum glossa. “Forma est compositioni contingens.” XII; Vita Materniani, Remorum episcopi, XII.*<sup>5</sup> This abridged entry, in what remained the only catalogue of the Harley Manuscript Collection for over two centuries, reveals that the four units were already bound together at the time of the description which is likely to have

---

<sup>2</sup> A brief codicological description is provided here. The manuscript Harley 3019 has 57 parchment folios + 3 unfoliated paper flyleaves at the beginning and 1 paper flyleaf at the end. The 19<sup>th</sup>-century (1882 ca.) pencil foliation, on the top-right corner, stops at f. 56. The first unit (ff. 1r-17v) contains the *Sententia* and *Epigrammata* by Prosper of Aquitaine, *inc.* “Iste Prosper Aquitanicus fuit vir eruditissimus ...”. The script is a French Protogothic from the 12th century (2nd quarter) and the decoration is plain with initials in brown and red (the red is oxidised). The dimensions are 215x130mm (writing block: 185x90mm). The parchment quality is either poor or heavily worn. Northern French neumatic notation is added by a later hand on f. 10v, probably as *probatio penne*. The second unit (ff. 18r-45v) is a treatise on Etymology *inc.* “Officii autem intentio est ...”, apparently imperfect at the beginning. The script is a later French Protogothic from the end of the 12th century and there are no significant decorative features. The dimensions are 215x140mm (writing block: 195x125mm). The third unit (ff. 46r-53v) contains a treatise on logic with a gloss, Gilberti Porretani *Sex principiorum liber*, *inc.* “Forma est componi contingens ...”. The script is a French Gothic from the 2nd half of the 13th century (written below the top line). The decoration consists of one large initial in blue with red pen-flourishing and two smaller plain initials in red (f. 46). The dimensions are 210x150mm (writing block: 115x60mm). The parchment quality is poor. On the fourth unit see above and note 4 below. The spine reads: PROSPER | AQUITAN | EPIGRAM | MATA | & C. || Codices | XII-XV | MUS. BRIT || BIB. HARL. | 3019 | PLUT. | XXXVIII ||.

<sup>3</sup> The dimensions are 215x145mm (writing block: 165x100mm). The parchment quality is good and there are no decorative features.

<sup>4</sup> Prof. David Ganz, private communication 18/06/2011. The script is small in dimension and is essentially tidy within justification and base lines. Words are not well separated and elements of cursiveness can still be found. Major and minor initials can be noted. The former are written in a thicker stroke, while the latter are thinner even though they obviously stand out from other letters as for dimension. Both types of initials bear elements that recall uncial script (see *u* and *m*).

<sup>5</sup> A *Catalogue of the Harleian Manuscripts in the British Museum*, 4 vols. (London: Eyre and Strahan, 1808-12), II (1808). The dating, indicated in Roman numerals, is approximate and correct only for the first two units. One may note also that the word *pontificis* in the original *explicit* of the fourth unit has been emended in the catalogue description and substituted by *episcopi*. The first catalogue for the collection was published between 1759 and 1763 and was reviewed in 1784. The catalogue is in the process of being updated as part of the British Library’s Catalogue of Illuminated Manuscripts.

[<http://www.bl.uk/catalogues/illuminatedmanuscripts/welcome.htm>] (accessed 20/09/11).

happened after a major rebinding program, as confirmed by the manuscript's late 18<sup>th</sup>-century brown, gold-tooled leather binding; so common among the volumes forming the founding collections of today's British Library. Whether they came together in the last binding process, arranging them in the actual composite volume, or were simply rebound keeping an older order, however, is difficult to tell as there are no visible clues of previous bindings such as offsets, rust stains, foliations, etc. Although little is known about the previous life of the Harley 3019 quires, some traces still remain on the second and third units' first folios (ff. 1r, 46r): the *ex libris* inscription *.J. de Selve*.<sup>6</sup> Whoever might have been the person behind the two units carrying the *de Selve* inscription, these were probably already loose when they were acquired by Harley as both units are complete texts in themselves and thus could have possibly been sold and bought as integer booklets. As for the other units, the tract on etymology and the *Vita Materniani*, these are fragmentary, for the former is imperfect at the end and the latter at the beginning.<sup>7</sup> Moreover, not only do they bear no inscriptions on their first folios, but because of their lacunary text it is also improbable that they could have been acquired as such by de Selve; who seemed to be interested in full, complete texts as in the case of the Prosper and the tract on Logic. The history of the four units will remain obscure until further research can engage in the tracking of this particular Harley acquisition. However, we may depict two plausible scenarios: either the four units were sold by a French dealer *en bloc* and became part of the collection, or the *Etymology* and the *Vita Materniani* came to Harley's collection independently from the de Selve booklets, the last being part of a different acquisition.

---

<sup>6</sup> The first figure that we can associate with this inscription is Jean de Selve (1457-1529), *premier président* of the Parliament of Paris and head of the Selve clan of Limousin, one of the most prominent French families at the turn of the sixteenth century. As an educated middle-class man of power - he studied jurisprudence at Toulouse - Jean might have collected books and manuscripts for his personal library, thus including the Prosper and the Logic treatise gatherings. However, it seems that his interests relied more on his background formation as a lawyer and in his political engagement, rather than in arts and humanities. The next closest figure in the family who was classically educated, and therefore possibly responsible for the *inscription*, is Jean's third son Georges de Selve (1508/9-1541). His education and placement provided him by his father differed from that given to his brothers resulting in his commitment as churchman. It was at the peak of his political career that Georges was portrayed along with Jean de Dinteville (1505-1555), a French diplomat, in a setting -besides many symbolical interpretations- with many references to Arts and Music: one of Hans Holbein's most famous and intriguing works, *The Ambassadors*. In this case, then the *inscription* would read 'J[orges] de Selve'. On the Selve Family see Robert Kalas, 'The Selve Family of Limousin: Members of a New Elite in Early Modern France' in *The Sixteenth Century Journal*, vol. 18, No. 2 (Summer, 1987), pp. 147-172.

<sup>7</sup> By comparison between the extent of the *Vita Materniani* in Harley 3019 and the version edited in the *Acta Sanctorum*, Societe des Bollandistes, vol. 4 (Aprilis), Tomus 3, pp. 759-763, the loss can be roughly assessed in a quaternion.

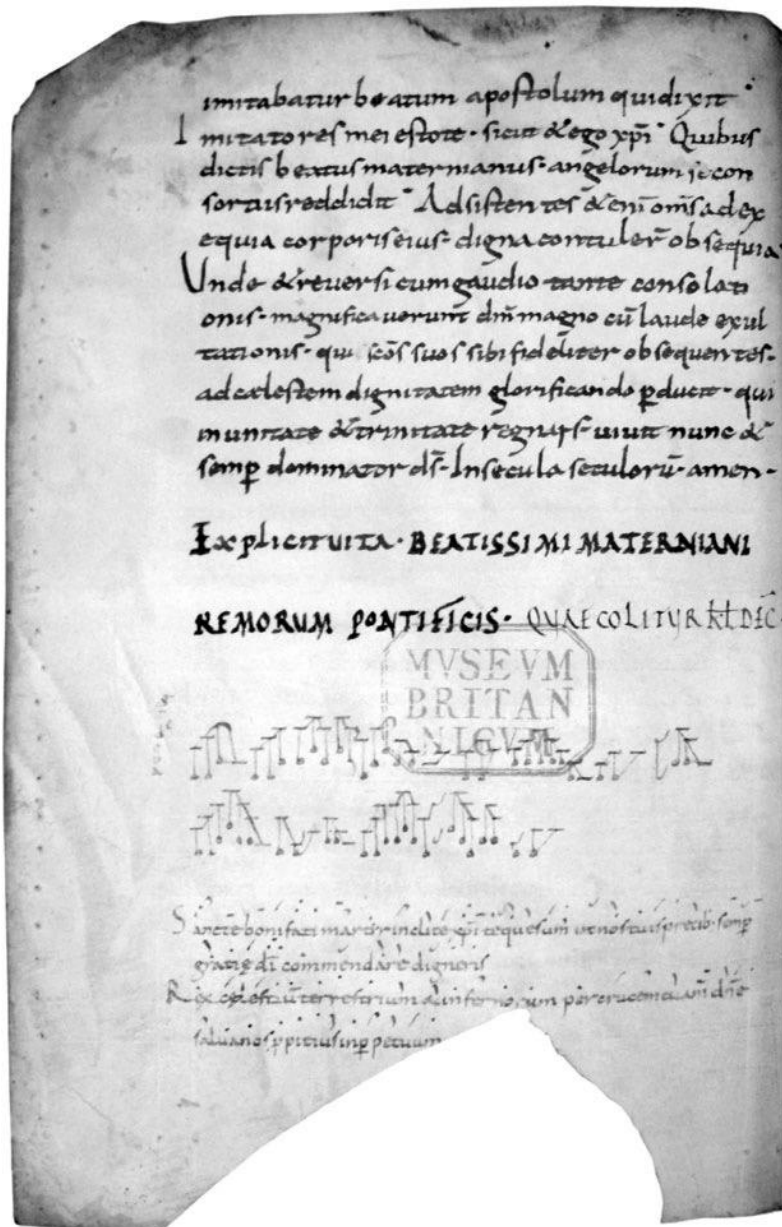


Fig. 1. London, British Library, Harley MS 3019, f. 56v. With permission of The British Library.

#### THE MUSICAL ANNOTATION

The music for the organum and antiphon *Sancte Bonifati martyr* and that of the antiphon *Rex caelestium terrestrium* is written in blank space left at the end of the *Vita Materniani*.<sup>8</sup> Questions about its provenance and use will be discussed further below, however, it is possible that it used to be part of a Passionary containing lessons from the Acts of the Martyrs or legends of the saints, for reading during the

<sup>8</sup> The two parchment bifolia in which it is contained are in a good state of preservation considering the medium quality of the writing material revealed by some cuts and a generally irregular thickness of the parchment. The text of the Life of St Maternianus is laid out in a single column with dry-point ruling, the text on each page starting above the top line. The pricking holes are also visible and there are no evident signs of trimming.

office on their feast days. The *mise en page* for the musical content is a feature which deserves to be analysed here. The annotation occupies the bottom half of f.56v and is carefully laid out using the preexisting ruling as a basis for the arrangement of the antiphon texts. In particular, one line of notated text corresponds to one ruled text line, with the notation filling in the interlinear space. In order to fit in a line of text and its notation, the scribe chose to compress his text script, which also enabled a semi-diastematic arrangement of notation signs. The space was calculated meticulously as the four lines of the two antiphons are written exactly on the last four ruled lines.

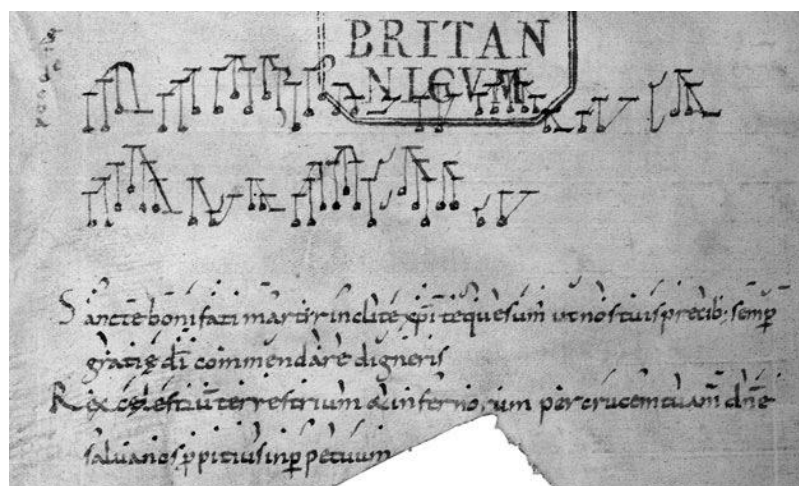


Fig. 2. London, British Library, Harley MS 3019, f. 56v (detail). With permission of The British Library.

The organum notation above these four lines finds its place on the page differently: the 'stave-lines' use the existing text lines, but the scribe added two more dry-point lines to four of the five lines from the original ruling. The space results in thirteen ruled lines where the first seven are labeled with the letters *a* to *g* as clefs. This aspect confirms a planned execution of the annotation, as opposed to a rough, careless jotting. The scribe's intervention on the original set space is the result of his graphical and theoretical acquaintance with the advanced forms of performance practice and notation that were available in its times: it is all the more demanding therefore to regard this annotation as a place for experimentation, given the purity of the musical hand and the few, almost excusable, signs of erasure in the organum notation.

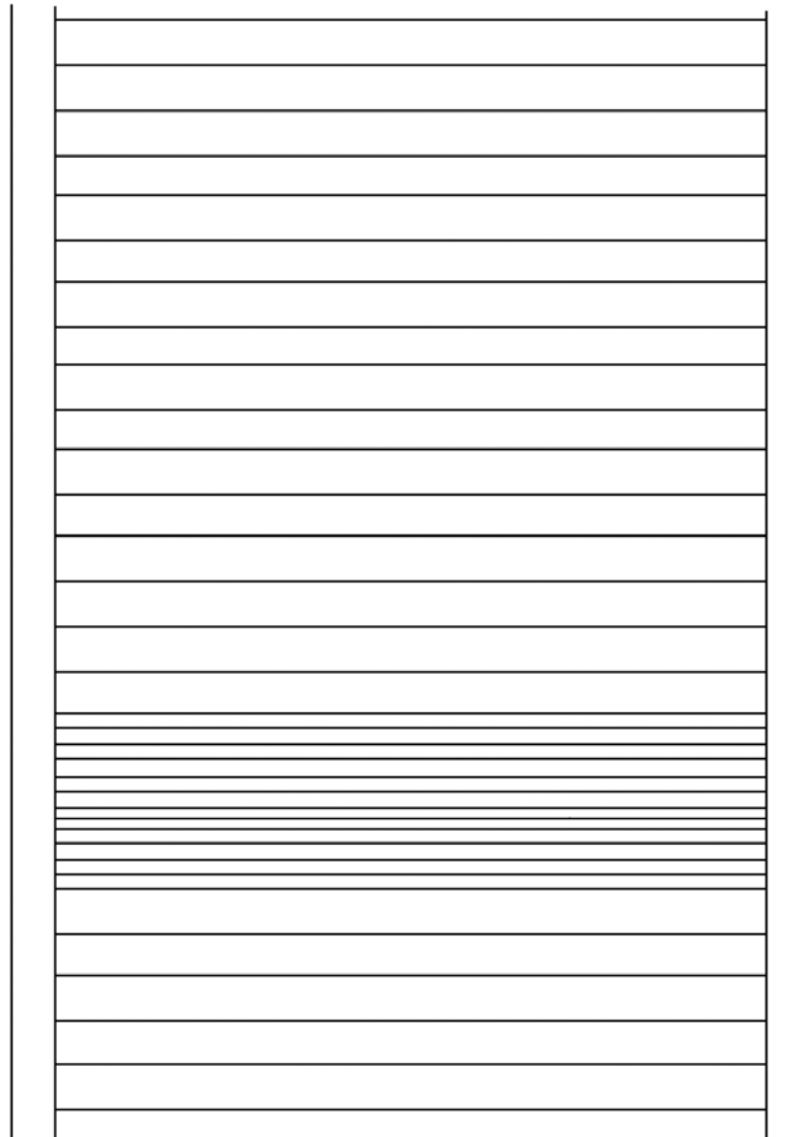


Fig. 3. London, British Library, Harley MS 3019, f. 56v. Page ruling.

#### THE ORGANUM NOTATION

A concern for diastemacy predominates in ninth- to eleventh century music treatises. The ‘line-diagrams’, where syllables of a text are written on a system of lines with pitches in the left margin is found primarily in theoretical texts.<sup>9</sup> Hucbald of Saint Amand (c. 840/850– June 20, 930), in his *De Harmonica Institutione*, presented a series of parallel horizontal lines whose spaces were designated *T* (tone) or *S* (semitone) in the left-hand margin, and then wrote the syllables of a text on the appropriate lines. The author of *Musica enchiriadis* used Daseian symbols to designate the pitches of lines arranged vertically, as did the authors of the *Commemoratio brevis* and *Bamberg Dialogues I* and *II*. Despite their wide circulation in theoretical texts, these elaborate notation systems did not find as broad an application in other contexts as the neumatic notation did and their use was confined to theoretical writings. Harley 3019 is the only example of a tenth-century

<sup>9</sup> See N. Phillips, ‘Notationen und Notationslehren von Boethius bis zum 12. Jahrhundert’, in *Geschichte der Musiktheorie, 4: Die Lehre von einstimmigen liturgischen Gesang*, ed. T. Ertelt and F. Zaminer (Darmstadt, 2000), pp. 293–623, particularly pp. 315–21.

source containing polyphony notated in precise pitches *outside* music treatises, employing that which will be defined here below as *cithara* notation.

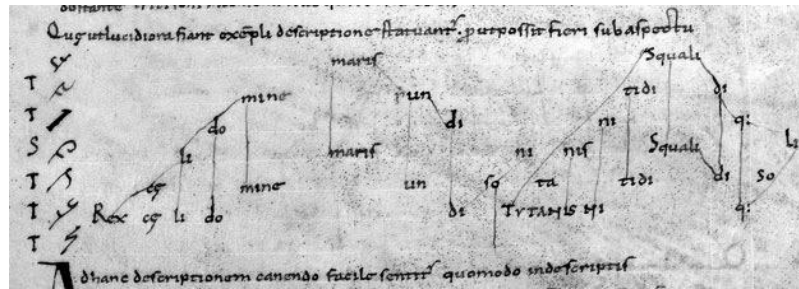


Fig. 4. *Musica enchiriadis* (Valenciennes, Bibliothèque Municipale, MS 337, f. 47v).

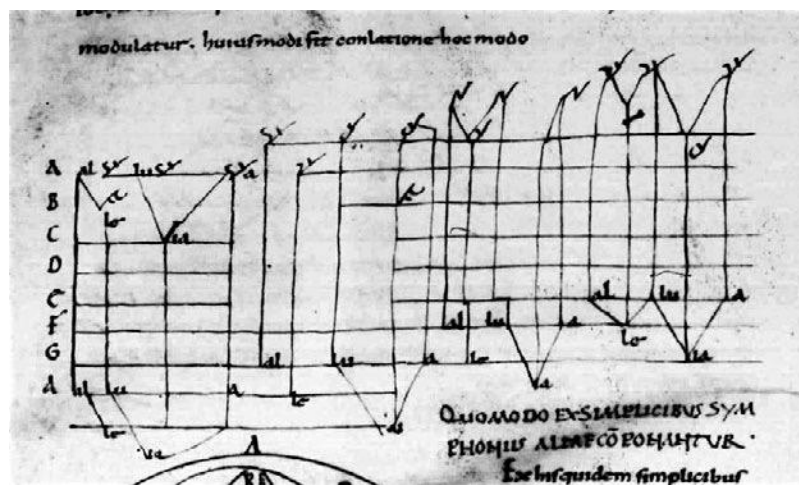


Fig. 5. *Musica enchiriadis* (Paris, Bibliothèque Nationale, lat. 7211, f. 9v).

The notational system used by the Harley 3019 scribe for the organum *Sancte Bonifati martyr* shares some important features with the polyphonic notation found in theory treatises but, at the same time, it also employs a range of innovative tools that differentiate it from the theoretical tradition. Replacing syllables are here a set of symbols, placed on a system of seven parallel lines. To each line is assigned a pitch, indicated by a letter of the alphabet (a-g). Two contrasting geometrical figures effectively specify the relationship between the two *voces*: short horizontal pen strokes ‘—’ are used to differentiate the *vox principalis* from the *vox organalis*, which is itself designated by little circles ‘o’ that may also possibly be considered to represent the letter o for (vox) *organalis*. In the case of a cadential unison or, to use Guido d’Arezzo’s terminology, an *occursus*, a single sign is employed and the *vox principalis* horizontal stroke, hierarchically, prevails. The presence of ligatures is a common feature in the ‘diastematic-syllabic’ notations: syllables are usually joined with lines to direct the eye through the notes. In Harley 3019, this feature reveals a system with a great level of precision; and its attention to detail confirms that it was developed with an intention that went beyond mere pitch recording. Ligatures in the *vox principalis* follow the organisation prescribed by the neumatic notation and isolated *tractuli* and *puncta* are considered part of the main melodic movement within which they belong. With the aid of a digitally-modified image, Fig. 6 shows

the correspondence between ligatures in the organum notation and the neumed chant version for the incipit *Sancte Bonifati martyr inclite Christi te quesumus*. To these general rules, exceptions are to be found in cases of unison meetings: generally, the *vox organalis* is only ligated to the following one by a pen stroke for the one- or two-step rising melodic movements in *occursus*. In case of a prolonged *occursus*, the held tone is not ligated in the *vox organalis* (with the only exception of the unison on ‘sancte’ and ‘nos’) and the same principle applies to the *vox principalis* (with the exception only of the unison on ‘inclite’ where, apparently, priority is given to the neumatic arrangement).

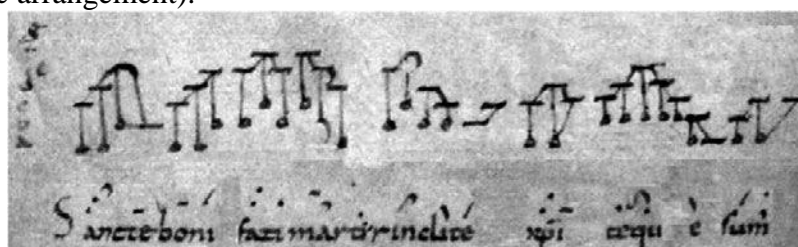


Fig. 6, correspondence of the organum ligatures to the neumatic arrangement.  
[this image has been altered digitally]

As mentioned above, ligatures in the *vox principalis* follow the neumatic groupings; as if to highlight the melodic inflections. Joining lines are provided in order to ensure correct vertical alignment.<sup>10</sup> Another possible reading for the meaning of the ligatures is, again, involving the hierarchical relationship between the *vox principalis* and *vox organalis*: the *vox organalis*, for its part, only follows the *vox principalis* to which it is joined; as if it existed in order to serve the chant melody and stressing its *contra punctum* status. One of the qualities of the Harley 3019 organum notation is the presence of liquescent signs. Once again, the level of advancement of this polyphonic notation is evidently exceptional, for there are no other extant sources that offer the use of ‘special’ neumes such as liquescences and therefore their employment is, for now, a unicum. In Harley 3019, *epiphonus*, *cephalicus* and liquescent *pes* are found integrated in the notation on particular vocal renderings of complex syllables in the text, especially at diphthongs and the juxtaposition of consonants as in *sancte*, *martyr*, *inclite*, *ut nos*, *semper*, *commendare* and *digneris*.

<sup>10</sup> In fact, vertical lines joining the two *voces* may be simply considered as inherited from the manuscript scribal practice of clarifying the vertical alignment of the two *voces*, rather than convening musical and performance indications. Indeed, may be the examples in manuscript sources where a vertical line is found only in case of ambiguous correlation i.e. on some syllables and rather than others, and not as a fixed notational principle.



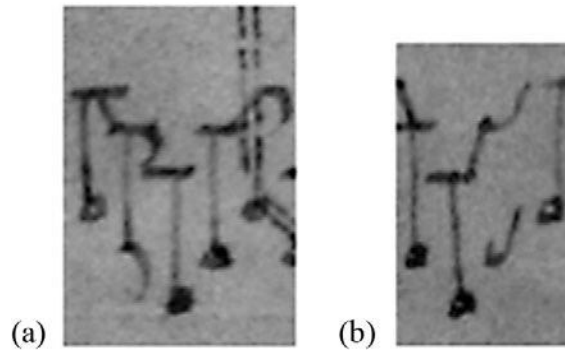


Fig. 7, liquescent neumes on (a) *martyr inclite* and (b) *commendare*.

Finally, it is important to consider the importance of the coexistence of two different kinds of notation. In particular, the *Sancte Bonifati* organum notation not only offers the possibility of writing out a second voice, i.e. the *vox organalis*, which could have been written using only neumes, as in the case of the organa in the Winchester Troper (Cambridge, Corpus Christi College, Parker Library MS 473) and the Chartres fragments (Chartes, Bibliothèque de la Ville, MS 4), but it also compensates for the lack of pitch-specificity of the neumatic version for both the *vox principalis* and the *vox organalis*.<sup>11</sup> In addition, what emerges from the analysis of the organum notation is a close relation with the neumatic arrangement: the presence of neumes was perhaps the only way possible known to the scribe in order to indicate rhythmic nuances such as longer or shorter note lengths. Therefore, it is possible to assert that both notations played different roles in the musical writing of Harley 3019; roles that we can legitimately define as complementary. The London organum notation is thus the earliest and most advanced synthesis of two different systems coming together that we can recall, before polyphony came to be notated on a staff.

#### A NOTATIONAL CONCORDANCE

A notational system remarkably similar to that of Harley 3019 is found in another music treatise: the Parisian *De organo*. The only extant source for this treatise is an autonomous tract on polyphonic singing written after the closing section of a copy of the *Musica enchiriadis* in Paris, Bibliothèque Nationale, lat. 7202 (hereafter *lat. 7202*).<sup>12</sup> The manuscript preserves a copy of Boethius' *De Musica* (ff. 1-50), the

<sup>11</sup> On the Winchester organa see *The Winchester Troper: Facsimile Edition and Introduction*, Susan Rankin ed., (London: Stainer and Bell, 2007). On the Chartres fragments see W. Arlt, 'Stylistic Layers in Eleventh-Century Polyphony: how can the continental sources contribute to our understanding of the Winchester organa' in *Music in the Medieval English Liturgy*, ed. Susan Rankin and David Hiley (Oxford: Oxford University Press, 1993), pp. 101-141.

<sup>12</sup> On the manuscript see C. M. Bower, 'Boethius' *De institutione musica*: A handlist of manuscripts' in *Scriptorium* 42/2 (1988), p. 232, n° 86. An added marginal gloss (f. 19) on Boethius' *De Musica* is attributed to Fulbert of Chartres. Paul Saenger, *Space between words: the origins of silent reading* (Stanford, California, Stanford University Press, 1997), p. 168. This manuscript, dating to the early eleventh century, is listed in the *Répertoire International des Sources Musicales, The Theory of Music. Manuscripts from the Carolingian Era up to c. 1500. Addenda, Corrigenda B/III* 6 ed. by Christian Meyer (München: G. Henle Verlag, 1961-2002), p. 187; *Répertoire International des Sources Musicales, The Theory of Music*.

*Tonarius additus in Boethii institutionem musicam* (ff. 24-36), the Parisian *Musica enchiriadis* in its version *Inchiriadon Uchubaldi francigenae* (ff. 50-54v), and finally, the *De organo* treatise (ff. 54v-56). At a place corresponding to Gerbert's Chapter XIII of *Musica enchiriadis*, the text in *lat. 7202* continues with a section entitled *De organo*, now generally known as the Paris *De organo* treatise, dating to the beginning of the eleventh century.<sup>13</sup> At the end of the treatise, on f. 56r, is an example of organum at the fourth: it is the polyphonic version of a complete melody, the sequence *Benedicta sit* for the Feast of the Holy Trinity.<sup>14</sup> Similarities between the notations in Harley 3019 and *lat. 7202* are indeed striking and they can be considered as different specimens of related notational types. As in Harley 3019, instead of writing the text of the sequence by setting syllables on 'line-diagrams' of the type commonly found in music treatises, the scribe drew little circles and lines in the appropriate spaces and connected them with vertical or oblique lines. However, the scribe of *lat. 7202* appears to be less consistent in the use of ligatures. Here, while the ligatures in the *vox principalis* seem to follow the same principle as those written by the Harley 3019 scribe, i.e. taking as a pattern the neumatic organization, the ligatures in the

Fig. 8. Paris, Bibliothèque Nationale, *lat. 7202*, f. 56.

*vox organalis* expand the rule of involving only the last two notes of its rising cadential melodic movement: a number of different segments, usually no more than three notes, are ligated in both voices. A similar lack of regularity in the use of the '–' and 'o' signs is apparent: the same sign is either found on the *vox principalis* or on the *vox organalis* and there are several instances where these signs are used interchangeably. Furthermore, in the London example, the letters *a-g* are used to indicate pitches for each line, while in *lat. 7202*, the employment of Daseian signs in the left-hand margin of each of the ten *distinctiones* (which are separated from each other by lines) shows the notational relationship between this example and those found in other organum treatises. This difference may also be noticed in relation to the manuscript and textual context of the London and Paris organa: one is practical, an annotation in the blank space at the end of the *Vita Materniani* to record the *Sancte Bonifati martytr* organum and chant as well as the antiphon *Rex caelestium terrestrium*, while the other is chiefly theoretical. This is understood by another important feature in *lat. 7202*, which is the presence of a series of additional signs explained in a detailed commentary at the bottom of f. 56r. In order to draw attention to or clarify the relationship between the voice parts, the author devised an elaborate set of supplementary signs which were written above, below, or beside the appropriate place in the polyphonic sequence. Some of these signs, listed below, are made up of Latin and Greek letters.<sup>15</sup> Other verbal indications for the repetition of the same passage are provided, such as *sequitur semel*, *eadem semel*, *duplicatur* etc. Given the theoretical context of the notation for the polyphonic *Benedicta sit*, it is possible that this complex series of letters and symbols was intended more as

---

*Manuscripts from the Carolingian Era up to c. 1400. Descriptive Catalogue in 6 volumes.* B/III 6 (München: G. Henle Verlag, 1961), p. 99. On the attribution to Hucbald of St. Amand in the Paris manuscript see Y. Chartier, *L'oeuvre musicale d'Hucbald de Saint-Amand : les compositions et le traité de musique*, Saint-Laurent Éditions, 1995.

<sup>13</sup> Edmond de Coussemaker, *Scriptorum de musica medii aevi nova series*, p. 74.

<sup>14</sup> Will Apel, 'The Earliest Polyphonic Composition and Its Theoretical Background', *Revue belge de Musicologie / Belgisch Tijdschrift voor Muziekwetenschap*, Vol. 10, No. 3/4 (1956), p. 134.

<sup>15</sup> *Ibidem*, p. 136.

*analytical* rather than *explanatory*, thus showing different relationships between the two voices and their role in the composition. At a closer inspection, it becomes evident that – with the exception of the cadential ‘S°’ and those indicating repetitions, whose absence would result in an incomplete organum – most signs are purely descriptive. Moreover, we may even infer that the basic notational system to which these signs were added was already in use, and common to the extent that it needed no supplementary explanations. The Parisian example can therefore be seen as an expanded version or advancement of the Harley 3019 organum notation; elaborated for didactic purposes.<sup>16</sup>

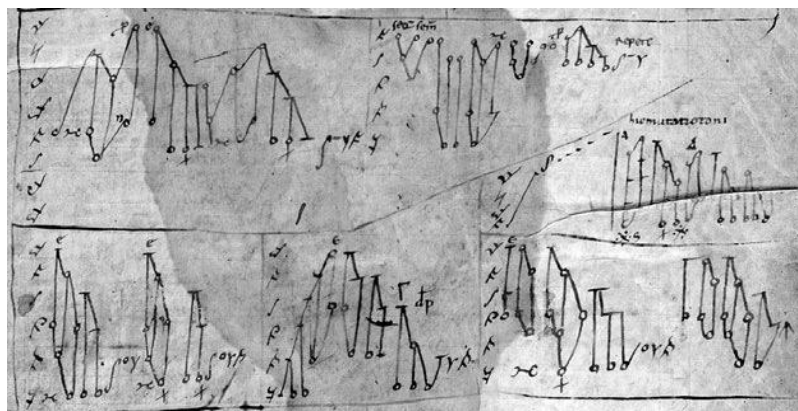


Fig. 9. Paris, Bibliothèque Nationale, lat. 7202, f. 56 (detail).

#### A NEW DEFINITION FOR AN EARLY NOTATION: THE *CITHARA* NOTATION

A notational system which employs letters and syllables placed diastematically on a number of parallel lines in order to notate chant or polyphony, of which versions appear in Harley 3019 and *lat.* 7020, is perhaps the most common in early and late Carolingian music treatises. Despite its importance, there is no agreement on its designation. Until the discovery of the London annotation, its use was only known from music treatises such as *Musica* and *Scolia Enchiriadis* or Hucbald's *De harmonica institutione*, and not in any practical sources. This may have been the reason for a general reluctance to give this notation, which has been considered perhaps too sporadic and inconsistent, a clear and unique classification. It is usually defined as ‘diastematic-syllabic notation’, ‘notation syllabique diastématique’, ‘Textschrift zwischen linien’, ‘Liniendiagrammen’, etc.<sup>17</sup> These definitions,

<sup>16</sup> Whether or not any relationship existed between the author (indeed not the scribe) of the Parisian *De Organo* and the Harley 3019 organum, their notational proximity is indeed tantalizing. If we admit the use of exemplars, a question arises: could these be testimonies of a lost, independent transmission of *Musica* and *Scolia Enchiriadis*? Or may we push this even further and speculate on a parallel transmission of a third treatise with elements of both? At this stage, we would certainly need a broader and deeper set of evidences in order to sustain this hypothesis.

<sup>17</sup> For example, see entries for ‘Musica enchiriadis, Scolica enchiriadis §3’ in Grove Music Online and *ibidem* ‘Notation §3’; ‘Musica enchiriadis §II, IV’ in *Musik in Geschichte und Gegenwart*, vol. 6, p.655-659 for a detailed description even though no definition is provided. See also Nancy Phillips, ‘Notationen und Notationslehre’.

however, are either incomplete or misleading. When the presence of syllables is stressed (syllabic, syllabique, Textschrift, etc.), examples such as those described so far, using symbols such as ‘–’ and ‘o’, are excluded. Conversely, when attention is drawn to the presence of letters, examples featuring Daseian signs are left aside. The system of parallel lines, defining the musical space, is also an important feature which must be immediately recalled when referring to this kind of notation. Indeed, it is possible to recognise some basic principles, common to all these notational types, forming the analytical ground onto which we build our definition.

In continuity with the preceding theoretical tradition, where Boethius used as a reference the cithara’s strings to assign Greek names to musical notes (*proslambanomene*, *hypate*, *parhypate*, *lichanos*, etc.), Hucbald drew on Boethius’ *auctoritas* and made use of the Greek instrument for a similar pedagogical purpose, that is, in order to explain the difference between tone and semitone. Although already employed by Boethius and known from the wide transmission of his treatise, the first description of this kind of notation is given to us by Hucbald himself where, ‘au fin de bien marquer l’écart séparant le ton du demi-ton, Hucbald [...] dispose les paroles [...] dans les espaces délimités par les six lignes horizontals représentant les cordes de la cithara accordé en diatonique (de *ut* à *ut*, où cette fois A = *ut*) qu’il vient de décrire’.<sup>18</sup> Hucbald’s description of this notational system is the following: ‘Porro exemplum semitonii advertere potes, in *chitara* .VI. *chordarum*, inter tertiam et quartam chordam, seu scandendo seu descendendo. [...] Designetur quoque exempla [...] cum diductione .VI. *chordarum*, quarum vicem lineae teneant, *annotato semper inter chordas*, ubi tonus, ubi semitonium contineatur’ [my emphasis], (*De Harmonica Institutione*, § 21; ed. Chartier).<sup>19</sup> In this passage, Hucbald clearly suggests a graphical representation of the cithara’s *chordae* where, almost like a tablature *ante litteram*, the syllables of the Gallican responsory *Ecce vere Israhelita* are placed between the lines (*inter chordas*) defined by each of the instrument’s six strings (.VI. *cordarum*).

As mentioned above, this system, which I shall now refer to as *cithara* notation, was broadly adopted in later treatises and thus can also be considered the forerunner of the Harley 3019 and *lat.* 7202 notations. The number of ‘strings’ is sometimes increased to allow the notation either a larger *ambitus* or to accommodate more than two voices, while the addition of different sets of signs, including liquescent neumes, proved efficient in making the notation all the more exhaustive. Moreover, as Susan Rankin remarks, the system employing text syllables was ‘cumbersome – greedy for space and slow to write’, to the extent that the innovative use of symbols to replace syllables, instead, may be looked at in the context of a general tendency to guarantee diastemacy while saving space on parchment (which culminated a few years later with the use of both lines and spaces onto which to place neumes, i.e. Guido’s staff).<sup>20</sup> This of course required the chants’ texts to be already known or transmitted aside. The *Sancte Bonifati martyr* text was provided by the Harley 3019 scribe (although I argue that the reason for writing the text was chiefly subsidiary to the presence of neumes providing performance indications), while its absence in *lat.* 7202 indicates the manuscript’s theoretical purpose; engaged in the illustration of

<sup>18</sup> Yves Chartier, ‘Hucbald de Saint-Amand et la notation musicale’ in *Musicologie médiévale: notations et séquences*, ed. Michel Huglo (Paris: H. Champion, 1987), p. 150.

<sup>19</sup> Yves Chartier, *L’oeuvre musicale d’Hucbald de Saint Amand: le traité de musique et les compositions*, (Montréal: Éditions Bellarmin, 1995), p.160.

<sup>20</sup> Susan Rankin, ‘On the Treatment of Pitch in Early Music Writing’ in *Early Music History*, vol. 30/2011, pp. 105-175.

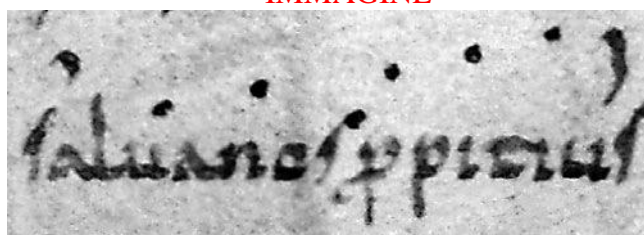
the rules governing polyphonic music, more than in notating an organum for performance.

In conclusion, *cithara* notation is a type of music writing in which syllables or symbols are placed diastematically on *either* lines *or* spaces designated by letters of the alphabet (e.g. *a-g*, *Tonus/Semitonus*) or Daseian signs. The distinction between the use of lines and spaces is crucial, in that it diverges from the early Guidonian system which employs *neumes* on both lines *and* spaces.<sup>21</sup> Hucbald's notational tool surely led the way for later developments but its heritage remained unfairly underestimated for, as Chartier remarks, 'il ne manquait plus au moine d'Elnone que d'imaginer des symboles tenant lieu des syllabes pour qu'il fût reconnu, cent cinquante ans avant Guido d'Arezzo, pour l'inventeur de la portée musicale', although we now know that symbols were already in use at the beginning of the tenth century during Hucblad's lifetime and that, more importantly, this mere substitution was still insufficient to consider the St Amand monk as the inventor of the staff.<sup>22</sup> The process was still to be completed and we shall look elsewhere in time and place for a definite responsibility for this pivotal notational shift.

#### THE CHANT NOTATION

The two antiphons added on Harley 3019 f.56v, *Sancte Bonifati martyr* and *Rex caelestium terrestrium*, are notated in Palaeofrankish neumes. Beside the evident graphical concordance with other known sources of Palaeofrankish notation, the following analysis was also made possible with the aid of the polyphonic diastematic notation for the organum *Sancte Bonifati martyr*; considerations of the significance of these neumes are corroborated by the arrangement of ligatures in the same notation. The terminology used for defining neume-shapes will be the standard and most common, even though is sometimes difficult to maintain the same criterion throughout as, in the case of some neumes e.g. *climacus* and *scandicus*, conventional nomenclature raises questions of conceptual interpretation by challenging our assumptions on the early medieval approach to music writing.<sup>23</sup>

#### IMMAGINE



<sup>21</sup> Because of this dissimilarity, an equation or direct descent such as that described by John Haines as 'though confined to the rather rarefied world of medieval music theory, this staff [*cithara* notation, my addition] predates Guido's time by a century and a half', is problematic if not questionable. John Haines, 'The Origin of the Musical Staff', *Musical Quarterly*, 91 (2008), p. 344.

<sup>22</sup> Yves Chartier, 'Hucbald de Saint-Amand et la notation musicale', *op. cit.*, p. 150.

<sup>23</sup> These and other issues are discussed in my contribution, Giovanni Varelli 'Rhythm, Pitch and Text Setting in Palaeofrankish Notation: The Case of London, British Library, Harley MS 3019' in *Cantus Planus: Papers Read at the 16th Meeting of the International Musicological Society Study Group, Vienna, Austria, Aug. 21 - 27 2011*, ed. by R. Klugseder (Vienna: Schneider Tutzing, 2012), forthcoming.

Figure 10 The *puncta* scale

The *punctum* is a single-pitch neume used (1) isolated, with syllabic value, or as (2) the two notes of a rising figure, the *pes* Type 4 (e.g. *bonifati*), (3) the first two elements of the liquescent *scandicus* (e.g. *sancte*), (4) the first and last element of the *torculus praepunctis subpunctis* (e.g. *te*) and (5) compound with a *clivis* as the third element of the *climacus* (e.g. *nos*). The other single-pitch neume is the *tractulus*. It can be found (1) isolated with syllabic value or (2) compound as the second element of the *quilisma pes* on *tuam*. It differs from the *punctum* in that it involves a lengthening of the sound.<sup>24</sup> The *pes* can be found (1) in the standard shape for Palaeofrankish notation (resembling a St Gall *virga*), (2) liquescent in the form of the St Gall *pes* (Type 2) and (3) in the form of the St Gall *cephalicus* and finally (4) in the shape of two *puncta* ‘:’. In this last case, a rhythmic nuance might be involved, such as a slower delivery. The *clivis* is a two-pitch neume in the standard shape for Palaeofrankish notation of a reversed slash ‘\’. The lack of the left-hand downward stroke, common in the Italian, French and German notations, is another feature which sets Palaeofrankish neumes apart from other major notational families. Generally, in Harley 3019 the slanting pen stroke of the Palaeofrankish *clivis* is thicker than that of the *pes*, as well as slightly thinner and curved towards the end. This neume is found (1) isolated and (2) compound with another *clivis* as well as the first element of the *climacus*. Harley 3019 contains a single example of the *torculus* and its shape is similar to that commonly found in other French sources. The *torculus* inserted in the melisma on *te* forms a more complex compound form, with the two preceding and following *puncta*: according to the standard semiological nomenclature, the resulting figure can be defined as *torculus praepunctis subpunctis*. It is possible that the choice for this arrangement may contain performance indications such as a more fluent vocal delivery for the middle part of the melisma, articulated by an emphasis on the first and last note, both designated by *puncta*. The *porrectus* is here *flexus* in the shape of two compound *clives*. The *scandicus* in Harley 3019 appears only in the intonation of the first antiphon, on *sancte*. The top note is liquescent and thus the *scandicus* can also be interpreted as a *pes* Type 2 with an added *epiphonus* at the top. The *epiphonus* is a liquescent *punctum* that can be found isolated or compound as the top element of a *scandicus*. The *climacus* is another peculiarity of Palaeofrankish neumes, in that it uses the characteristic *clivis* with an added *punctum* at the bottom (*clivis subpunctis*). The *quilisma pes* can be found on *tuam* in the form of a wavy *tractulus* followed by a higher straight *tractulus*: the shape recalls the standard French and German *quilisma episemata*, except that the two elements are disjunct in Harley 3019, possibly involving rhythmic nuance. The presence of this neume is of exceptional interest as it is the first appearance of this particular shape for a *quilisma pes* in any Palaeofrankish source. The lack of *quilisma pes* in early Palaeofrankish sources, which confirms the importance of the present Harley 3019 annotation discovery, is also remarked by Solange Corbin: ‘ist für die ältesten Zeugnisse als Merkmal anzuführen, daß Zierneumen wie Quilisma, Oriscus und Strophici fehlen’.<sup>25</sup>

Another important feature is a concern for diastemacy which can be discerned in the notation of the two antiphons. Although we cannot consider it as an absolute

<sup>24</sup> For its role and weight in both the chant and polyphony see *ibidem*.

<sup>25</sup> Solange Corbin, *Die Neumen* (Köln: Arno Volk-Verlag, 1977), p. 76.

diastematy, neumes are clearly arranged following the shape of the melody to the same degree as other Palaeofrankish sources, particularly Düsseldorf D.1, D.2 and D.3. *Puncta* are generally placed diastematically, except when followed by *pedes*: where this occurs, e.g. *Bonifati*, *tuis* and *gratiae*, they are placed at the same height as the base of the following *pes*, despite being one step lower in the antiphon melody. An interesting example is the upward line of *puncta* on *salva nos propitius* which clearly outlines an ascending scale [Fig. 16].<sup>26</sup>







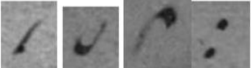

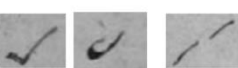






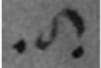
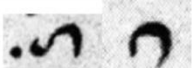













	Harley 3019	Düsseldorf D.1	Sankt Gallen 359
<i>punctum</i>			
<i>tractulus</i>			
<i>pes</i>			
<i>clivis</i>			
<i>porrectus</i>			
<i>flexus</i>			
<i>torculus</i>			
<i>climacus</i>			
<i>liquescent</i>			
<i>scandicus</i>			
<i>epiphonus</i>			
<i>quilisma</i>			

Table 1. Comparison between neumatic notation in Harley 3019, Düsseldorf D.1 and St. Gall 359.

<sup>26</sup> See also the latest article from Susan Rankin, ‘On the treatment of pitch’, for an in depth study of techniques employed by tenth-century scribes.



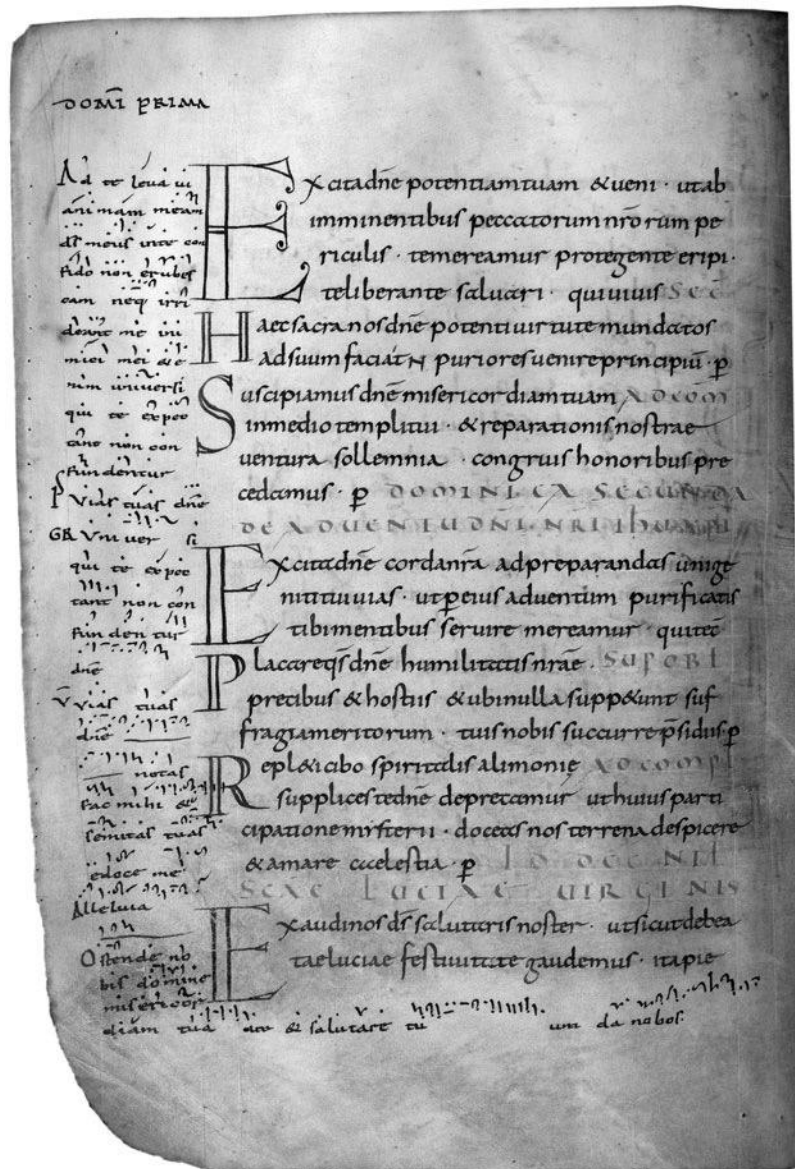


Fig. 11. The closest notational source to London, British Library, Harley MS 3019: Düsseldorf, Landes- und Stadtbibliothek, D.1.

Overall, the analysis of the neumes in Harley 3019 reveals a similarity with those used in other Palaeofrankish sources probably from Korvey and Cologne, i.e. the group D.1, D.2 and D.3 now in Düsseldorf as well as the Wolfenbüttel Gradual fragments. The presence of the *torculus* and *quilisma* in a design near to that of French and German sources also confirms that the notation might have originated in an area comprising north-eastern France, the Netherlands or, more possibly, north-western Germany. In conclusion, what the palaeographical analysis of the neume-shapes in Harley 3019 suggests is a performance-orientated notation, in which every neume carries its particular performance indication, reaching a greatly detailed



degree of interpretative nuance.<sup>27</sup> The semiological study of Palaeofrankish notation has hitherto been carried out mainly through comparative analysis with other later or contemporary neumatic sources.<sup>28</sup> When sources in pitch-specific notations have been compared to versions notated in Palaeofrankish neumes, these were, in most cases, either chronologically or geographically significantly far from the date and place of origin of the original notation. In Harley 3019, the unique coexistence of pitch-specific notation alongside the neumatic version is of exceptional interest as it helps us to compare the two systems within exactly the same geographical and chronological context.

#### THE *SANCTE BONIFATI MARTYR* ORGANUM: TEXT AND STYLE

Generally thought to have been written in the second half of the ninth century, the book entitled *Musica enchiriadis* is one of the most famous documents in early medieval music theory; the treatise's central concern was to illustrate a coherent pitch system and to elucidate relationships among its elements in *symphoniae*.<sup>29</sup> From the ninth century onwards, different types of organal technique have been described in other theoretical texts but *Musica enchiriadis* remains the most

---

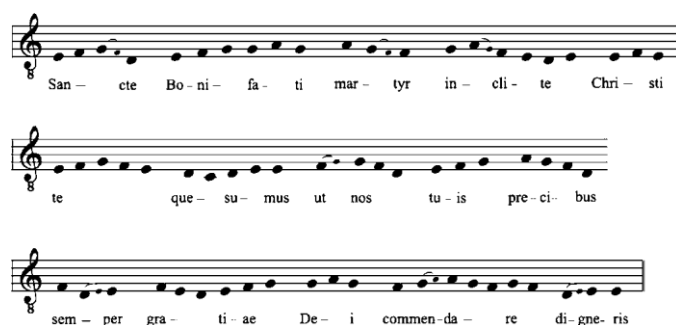
<sup>27</sup> It is commonly accepted that most chant books, e.g. antiphonaries, hymnals, notated breviaries, missals etc., were compiled for the use of a particular ecclesiastical community rather than for personal use. In some ways, exceptions are those books intended for the use of a soloist *cantor* (or soloists *cantores*), such as graduals, tropers, cantatories, etc. Both groups were compiled for consultation *and* performance. Rather, the distinction to be made here is between consultation *before* or *during* performances. To put it simply, one might argue that the Harley 3019 annotation was not conceived for consultation *in* performance. However, this does not exclude that a performance-orientated notation, prescriptive to the smallest detail and nuance-rich, might have led the performance of the *Sancte bonifati martyr* organum, as well as the two antiphons, directly from the Passional for the Office of St Boniface.

<sup>28</sup> For a summary of all theories and related bibliography see Kenneth Levy, 'On the Origin of Neumes', *Early Music History*, vol. 7 (1987), pp. 59-90 (in particular pp. 62-64), reproduced in his *Gregorian Chant and the Carolingians* (Princeton, 1998), pp. 109-40; L. Treitler, 'Reading and Singing: On the Genesis of Occidental Music Writing', *Early Music History*, 4 (1984), pp. 135-208; repr. with a new introduction in his *With Voice and Pen* (Oxford and New York, 2003), pp. 365-428; Charles Atkinson, 'De accentibus toni oritur nota quae dicitur neuma: Prosodic Accents, the Accent Theory, and the Palaeofrankish Script', in G. M. Boone (ed.), *Essays on Medieval Music in Honor of David G. Hughes* (Isham Library Papers, 4; Cambridge, Mass, 1995), pp. 17-42; *idem*, 'Glosses on Music and Grammar and the Advent of Music Writing in the West', in Sean Gallagher et al. (eds.), *Western Plainchant in the First Millennium: Studies in the Medieval Liturgy and its Music in Honor of James McKinnon* (Aldershot, 2003), pp. 199-215; *idem*, *The Critical Nexus: Tone System, Mode, and Notation in Early Medieval Music* (New York and Oxford, 2009), pp. 106-13.

<sup>29</sup> *Musica et scolica enchiriadis una cum aliquibus tractatulis adiunctis*, ed. H. Schmid (Veröffentlichungen der Musikhistorischen Kommission, 3; Munich, 1981); *Musica enchiriadis and scolica enchiriadis*, trans., with introduction and notes, R. Erickson, ed. C. V. Palisca (New Haven and London, 1995). On the manuscript transmission and on the literary, theoretical, and musical sources of the two tracts see N. Phillips, "'Musica" and "Scolica enchiriadis": The Literary, Theoretical, and Musical Sources' (Ph.D. diss., New York University, 1984), *eadem*, 'Classical and Late Latin Sources for Ninth-Century Treatises on Music', in *Music Theory and its Sources: Antiquity and the Middle Ages*, ed. A. Barbera (South Bend: University of Notre Dame Press, 1990), pp. 100-135. See also Sarah Fuller, 'Early Polyphony'; *eadem*, 'Theoretical Foundations of Early Organum Theory'.

authoritative theoretical source we shall refer to for analytical examination of the London organum, not only because it is the first known to us to discuss the principles of polyphonic music but also for the chronological proximity of its circulation. In the musical practice of that time, extempore polyphonic singing belonged to ‘a realm of ad hoc practice which required no written record’ and thus, no sources survived outside music treatises.<sup>30</sup> The Harley 3019 annotation represents the earliest example of organum in a practical context, less than a century after *Musica enchiriadis* was written, and constitutes an important source for the study of early polyphonic music. The following discussion will concern the transcription and analytical examination of both the text and the music of *Sancte Bonifati martyr* antiphon and organum.

The text of the antiphon *Sancte Bonifati martyr inclite Christi te quesumus ut nos tuis precibus semper gratiae Dei commendare digneris* (Saint Boniface, illustrious martyr of Christ, we beg you that you may always commend us to the grace of God by your prayers) has no concordances in any source containing the Office for St Boniface.<sup>31</sup> The only concordance is an antiphon opening the Office for St Vitus.<sup>32</sup> It is possible that the original Office for St Boniface, although with different responsories and verses, included the organum in the same position as the antiphon in the Office for St Vitus: a polyphonic elaboration of the opening antiphon would have conferred a solemn character on the saint’s celebration. Furthermore, the textual concordance with the antiphon *Sancte Vite martyr inclite* is significant as this appears to have been written before being adapted for the office of St. Boniface: the assonance *Vite-inclite* and its metrical arrangement suggest that the text was originally composed for St. Vitus.



Example 1. Antiphon *Sancte Bonifati martyr*.

<sup>30</sup> Wulf Arlt, ‘Stylistic Layers in Eleventh-Century Polyphony: how can the continental sources contribute to our understanding of the Winchester organa’ in *Music in the Medieval English Liturgy*, ed. Susan Rankin and David Hiley (Oxford: Oxford University Press, 1993), p. 101.

<sup>31</sup> Prof. David Hiley, private communication 14/8/10. See also David Hiley, ‘Anglo-Saxon Saints in Hessen: the proper offices for St. Boniface and St. Wigbert’ in *Cantus Planus: Papers Read at the 13th Meeting of the IMS Study Group, Niederaltaich, Germany, Aug. 29 - Sept. 4 2006*, ed. by Barbara Hagg and László Dobszay (Budapest: Institute for Musicology of the Hungarian Academy of Sciences, 2009), p. 304.

<sup>32</sup> “In .I. Vesperis super psalmos ANT *Sancte Vite, martyr inclite Christi, te quesumus, ut nos tuis precibus semper gratiae Dei commendare digneris*” in *Analecta Hymnica Medii Aevi – Historiae rhythmicae: liturgische Reimofficien*, Erste Folge, ed. Guido Maria Dreves SJ (Leipzig: Fues’s Verlag, 1889), pp. 256-258. The two sources mentioned in it are a fourteenth-century Breviary for the use of Passau in Vienna (A-Wn, Cod. Palatino Vindobonienese 1891) and another, contemporary, under the name “Brev. Ms. Hospitalense saec. 14. Cod S. Pauli ad Laventum memb. 111”, possibly from the town of Zaventem in Belgium.

Example 2. Antiphon organum *Sancte Bonifati martyr*.

The *Sancte Bonifati martyr* antiphon opens with a typical third-mode intonation formula in a rising three-step movement (E-F-G). The melody then develops principally around E and G frequently reaching A and D. The overall character of the antiphon melody cannot be defined as melismatic; however it is surely ornate, with a minimum average of two notes per syllable, with a five-note melisma on the pronoun *te*. The relationship between the antiphon melody and its text makes it evident how phrase divisions are arranged according to a clear rhetorical significance: these divisions have the function to draw attention to certain concepts or attributes, e.g. *Bonifati martyr inclite* the dedicatee, *te quesumus* the scope, *tuis precibus* the means, etc. In Harley 3019, musical phrases are marked (1) melodically, by a constant return to the *finalis* E or to the *subfinalis* D of the mode; the former being perceived as stronger caesura; (2) rhythmically, by the employment of *tractuli* involving a lengthening of the sound and, in the case of the polyphonic setting, also (3) harmonically, by the meeting of the two *voces* on a unison in organal cadences. The existence of one to three of these musical techniques creates a hierarchy based on different degrees of rhythmic, melodic and harmonic articulation. The first two features generally fulfil musical and expressive necessities while the third responds solely to the absence of likely alternative organal solutions to the one actually employed in the source. When all of these conditions appear simultaneously in a particular place in the composition, a stronger caesura can be heard. Conversely, some instances present only the meeting of voices on a unison without being caesurae, as will be explained later. In the organum *Sancte Bonifati martyr* the most pronounced cadences are on *Christi*, *semper* and *digneris*; corresponding to the close of three longer phrases in which the melody is arranged. Each of these cases features a unison meeting on the *finalis* (E) as well as the presence of a *tractulus*; except for *digneris* where a *punctum* is used instead, for no supplementary notational and rhythmical emphasis was needed since this was already at the end of the composition. The other marked division is on *Sancte*, where cadence on the *subfinalis* (D) makes the caesura less distinct than that aforementioned despite also being weighted by a *tractulus*; the opposite case is found on the *inclite* and

*quaesumus* divisions, where the cadences on the *finalis* (**E**) are notated with a *punctum*, thus resulting in a moderate rhythmic caesura. An even lighter articulation is the unison meeting on *nos* and on *precibus*, both cadencing to the *subfinalis* (**D**) and with no particular rhythmical prominence. In the following example, divisions are indicated by || for stronger cadences, and by | for unison meetings within words.

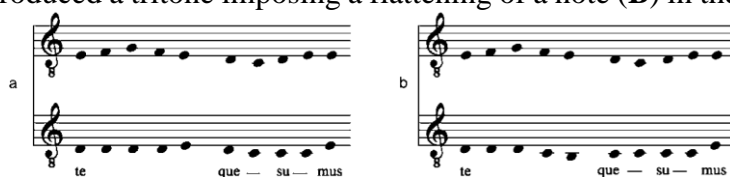
Sancte || Bonifati martyr inclite || Christi ||  
te que|sumus || ut nos || tuis precibus || semper ||  
gra|tiae Dei commendare digneris ||

Table 2. Phrases' articulation and sense units  
in the antiphon *Sancte Bonifati martyr*.

Thus, strong cadences are used to highlight specific words in the text, e.g. *sancte*, *Christi* and *semper*. In the case of the first phrase division, the intonation is accentuated by a rhythmically articulated *pes* compound with an *epiphonus* on the first and stressed syllable, providing a clear rendering of the rising melodic movement **E-F-G**, while the presence of a *tractulus* on the last syllable of *sancte* directs the weight of the phrasing to the end of the word. This effect is sustained by another *tractulus* on the first syllable of the following word *Bonifati*, the combination of the two producing an emphasis of the opening through slowness. The third phrase employs an articulated *pes* on the first syllable of *Christi* followed by a *tractulus* on the last syllable. Here too the result is to slow down the melody, corresponding to one of the most crucial points in the antiphon text. Another case is that of *semper*, where this technique is even more emphasised by the presence of two *tractuli* on the first and last syllable, separated by a melodic inflection leading to the *finalis* of the mode (**E**) through a liquescence on the *subfinalis* (**D**). All of these cases end on a unison with the *vox organalis* and allow the singers to give prominence to the articulation of the musical phrases. Two meetings of the chant on a unison with the *vox organalis* are also found within words. The first occurs on the first two syllables of *quesumus*, while the second is on the first syllable of *gratiae*. Musically, these are not perceived as cadences compared to other unison meeting in the *organum*, as the delivery of the words allowed no rest, thus ensuring the flowing of the chant.

The case of the *te quesumus* division, where the unison is reached just after a short melisma on *te*, on the second note of *quesumus*, is particularly interesting. The *vox principalis* starts on **E** with an interval of a second with the *vox organalis* (**D/E**) then rises up a third with the same melodic movement as the antiphon's intonation (**E-F-G**), while the *vox organalis* holds the tone (**D**) providing a drone-effect, in this way giving prominence to the melisma on *te*. The *vox principalis* then stresses the accented syllable of *quesumus* by a descending two-note inflection (**D-C**) and designs a cadence rising up to the *finalis* (**D-E-E**). As mentioned above, the unison with the organal voice (**C/C**) ends up being partially audible, almost lost in the flow imposed by the delivery of the word, and the *vox organalis* waits for the end of the sense unit to return to the *finalis* of the mode (**E**): the organal voice holds the tone one step below the *subfinalis* (**C**) and by the end of the word prepares a cadence by meeting again in a unison on *quesumus* where the main phrase ends. Here, the *vox organalis* repeats the same melodic movement of the cadence in the *Christi* phrase (**C-C-E**), albeit in a different chant context (**D-E-E** vs. **E-F-E**), using the interval pattern second : fourth : unison. The same *vox organalis* formula can be found later for the *semper* phrase, again in a different chant context (**F-D-E**), and also at the end of the organum, this time identical to *sancte*, on *digneris*. The main purpose of the

antiphon, an invocation to St Boniface, is professed by the words *te quesumus* ('we beg you') so that a sole emphasis on *te* might have been unnecessary and, perhaps, even confusing. Moreover, the shift of the *vox organalis*' held tone from **D** to **C** also enhances the textual articulation of the phrase and must have been preferred to a parallel sequence of intervals. This is why, instead of continuing to hold the tone and reaching the unison exactly at the end of the melisma by a cadence on **E**, the choice was to avoid the cadential movement and follow the chant closing with a cadence only on the last syllable of *quesumus*. Furthermore, another possible realization for the *vox organalis* was holding the tone until it reached the interval of a fourth with the *vox principalis* (on the third note of the melisma on *te*) and then continuing in parallel fourths right to the end of the phrase, preparing the cadence on *quesumus* [Example 3 b] but this was avoided following the *Musica enchiriadis* rule that the *vox organalis* could not go below the *tetrardus* in which the phrase ends. It would also have produced a tritone imposing a flattening of a note (**B**) in the organal voice.



Example 3. (a, b) alternative organal solutions for *te quesumus*.

A similar consideration applies to the last phrase, *gratiae Dei commendare digneris*, where the two voices meet on a unison on the first syllable of *gratiae*. The resulting phrases would have been comparable to the sequence of intervals in the division *Bonifati martyr inclite*. Instead, the descending melodic contour of the *te quesumus* and *gratiae Dei commendare digneris* divisions required a unison imposed by the *vox organalis*' *ambitus* (a major third) which was not to be extended further below its bottom limit. These choices reveal a lesser mobility of the *vox organalis* than that found in later organa. On the contrary, the style of *Sancte Bonifati martyr* may be defined as 'archaic'; an example of an old type of organum, a generation or so before the Winchester organa.<sup>33</sup>

In general, the *vox organalis* adopts three procedures of movement in relation to the chant, recognizable as the principal stylistic characteristics also of the later Winchester repertory of organa: a parallel movement in fourths, the holding of one tone against changing tones in the chant and frequent meeting with the chant on a unison. As I have discussed above, the whole organum can be divided up into short sections based on one or other of these procedures. The three events follow each other in regular order as oblique movement (held tone) : parallel movement : unison. Moreover, in contrast to the musical style of the Winchester organa, in the Harley 3019 organum there is no inclusion of extra notes to prolong some cadential moments. Instead of the cadence with prolongation, an organal technique used in

<sup>33</sup> See the analysis of the Winchester Troper responsory *Sint lumbi vestri* in Susan Rankin, 'The Early Theory and Practice of Organum' in *Music in the Medieval English Liturgy*, ed. Susan Rankin and David Hiley (Oxford: Oxford University Press, 1993) and *ibidem* Wulf Arlt, 'Stylistic Layers in Eleventh-Century Polyphony: how can the continental sources contribute to our understanding of the Winchester organa', for discussions on other eleventh-century organa. See also Susan Rankin ed., *The Winchester Troper*, in particular ch. 5 'The Composition and Compilation of the Repertories III: The Organum'.

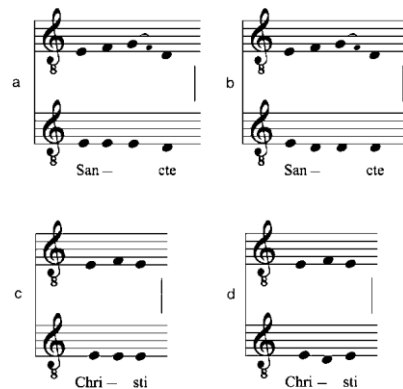
Winchester to create a hierarchy of cadences, *Sancte Bonifati martyr* employs different tools as the means to emphasize certain moments of unison meeting more than others. Unisons are reached on pitches each occurring in a part of the organum where that pitch is crucial to the overall structure. The close analysis of *Sancte Bonifati martyr* has revealed how the frequency with which each of these is used and the points at which one gives way to another, are governed by the musical and textual structure of both the chant itself and that of the composed organum. In Harley 3019, the interval relationship between the *vox principalis* and the *vox organalis* is also based on the fourth, with frequent meetings on the unison. However, some exceptions are found in incipits and cadences: the former feature an extensive use of the third (phrases 1, 2, 3, 5 and 8), while the latter produce patterns such as second : unison (phrases 2 and 7), third : unison (phrases 5, 6 and 8) or fourth : unison (phrases 1, 3 and 4). Table 3 shows the interval patterns between the *vox principalis* and the *vox organalis* for each of the eight phrases of *Sancte Bonifati martyr*.

<hr/>							
	3 4 4 1		3 4 4 4 4 4		4 4 4	4 4 3 2 1 1	3 4 1
(1)	<i>Sanc - te</i>	(2)	<i>Boni - fa - ti</i>		<i>mar-tyr</i>	<i>in - cli - te</i>	(3) <i>Chri - sti</i>
	2 3 4 3 2		2 1 2 4 1		4 4 3 1	3 4 4	4 4 3 1
(4)	<i>te</i>		<i>que - su - mus</i>	(5)	<i>ut nos</i>	(6)	<i>tu - is preci - bus</i>
	4 2 1		3 2 1 3 4 4	4 4 4	4	4 4 4 4 4 3	2 3 1
(7)	<i>sem - per</i>	(8)	<i>gra - ti - ae</i>	<i>De - i</i>	<i>commen-da - re</i>	<i>digneris</i>	
<hr/>							

Table 2. Intervals patterns in *Sancte Bonifati martyr*.

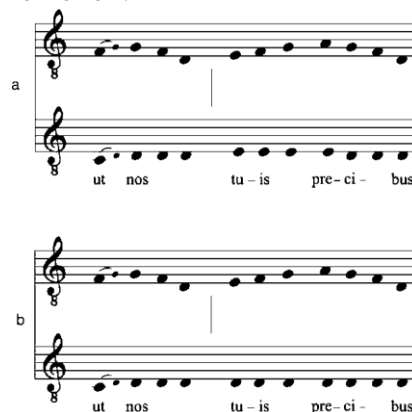
The employment of thirds in incipits is particularly significant, for it is not a common feature in early types of organum, where the unison is preferred. Indeed, alternative solutions involving a unison start would have been possible for each of these instances. However, they would have created ‘irregular’ sequences of intervals, in contradiction with basic organal techniques, as the following examples will show. The first case involves phrase 1 (*sancte*). Two alternative solutions would have been possible by starting on a unison instead of a third, but these would have created problematic results. The first solution would have involved an **E** held tone in the *vox organalis* which, however, would not have reached the interval of a fourth with the *vox principalis* before the phrase ended, meeting on a unison on **D** [Example 4 a]. The phrase, instead, was perceived as self-contained and thus, it needed the presence of a fourth in order to validate its autonomy. The phrase’s self-sufficiency, possibly given by the invocatory weight of the word *sancte*, is also confirmed by looking at the neumatic version of the *Sancte Bonifati martyr* antiphon: the presence of a *tractulus* clearly indicated a musical caesura by lengthening the sound. The second possible realization, not so different from the actual one, would have involved starting on a unison and descending to **C**, thus creating a contrary motion with the *vox principalis* [Example 4 b]. Instead, what will be a common technique in later organa is here avoided in favour of a greater adherence to conventions. A similar situation is found in the *Christi* phrase [Example 4 d]. The lack of fourths produced by a held **E**, or the contrary motion resulting from a micro phrase unison : fourth : unison (**E-D-E**), would have prevented the regular arrangement of this

passage. Once again, the presence of the *tractulus* on the last syllable, intensified by the preceding *pes* on the first syllable, rhetorically enhances the musical realization of the word *Christi*.



Example 4 (a-d). Alternative organal solutions.

To be sure, at least one other place in the organum reveals a deliberate use of the third by choice rather than of necessity. The *tuis precibus* phrase starts with an interval of a third (C-E) between the *vox organalis* and the *vox principalis* preceded by a unison meeting on the *subfinalis* (D) which closes the *ut nos* phrase. This last phrase features a *climacus* on *nos* in its neumatic version which, although it articulates the three descending notes in two and a final separated neume, at the same time does not suggest a strong musical caesura, as in the case of the *sancte* and *Christi* phrases. Conversely, the choice of a third to start the *tuis precibus* division may be seen as a vertical compensation for such a caesura. If the *vox organalis* had proceeded with a held E tone for the first four notes on *tuis*, or simply a D drone throughout the entire phrase [Example 5] it would have been theoretically correct. However, a new phrase in the text begins on *tuis* and thus, these solutions would have prevented a ‘new’, clearly audible interval form stressing the textual articulation. This set of organal techniques definitely defines the phrase as a both textual and musical phenomenon.



Example 5. Alternative organal solution for *ut nos tuis precibus*.

The remarkable balance of adherence to *conventions*, a term conceptually more appropriate in this context than prescriptive *rules*, and innovative solutions that we can identify in *Sancte Bonifati martyr* organum brings us to the reflections proposed by Susan Rankin in her article *The Early Theory and Practice of Organum*: ‘is there

really no evidence of ‘creativity’ in examples of early organum? What was actually going on in practice?’.<sup>34</sup> Practical sources, such as Harley 3019 and the later Winchester Troper, made evident use of procedures of the type described in *Musica enchiridis* and its associated treatises offering, at the same time, a rich scenario in which standard conventions are found alongside ways of experimentation, due also to embracing a larger repertory which imposed new choices and musical challenges. Moreover, early medieval theory about polyphonic music usually described a picture of a practice that was, in fact, in constant change and development. As later sources will show, we may not want to think of early organum as immutable, governed by a fixed set of rules for an unchallengeable, mechanical practice. This is why it is only through direct and accurate knowledge of organa as actually sung, as well as of the musical techniques by which they were arranged, that a clear assessment can be made of the extent to which theoretical rules actually reflected practice and of the degree of creativity exercised by the tenth-century *cantores*. As Rankin states, ‘theoretical rules and concepts may only be regarded as a starting point for interpretation of the practical examples, rather than as controlling and limiting factors’.<sup>35</sup> Evidence from the analytical examination of the musical style of the organum *Sancte Bonifati martyr* confirms once again that the Harley 3019 scribe recorded a procedure of which the roots belonged to a previous musico-theoretical tradition, but at the same time broke away from it by exploring new compositional paths that may have been unexpected by contemporaries; hence the need for recording this organum in written form.

A gap hitherto existed in the history of early organum as, until the discovery of the London organum, no practical sources of polyphonic music survived from before the early eleventh century. Throughout the eleventh century, with the exception of the Winchester repertory of 174 organa, a few scattered sources, often fragmentary, contain small groups of polyphonic pieces copied as additions to monophonic repertories or scribbled on empty flyleaves, mainly associated with Chartres, Fleury, Tours, and Saint-Maur-des-Fossés.<sup>36</sup> Only with the various Saint-Martial codices in the early twelve-century, do we next find polyphonic pieces assembled together in a relatively systematic way. In conclusion, what stands out here is an example of tenth-century organum practice transmitted in a practical context, the missing link between two milestones for early medieval music history, the *Musica enchiridis* and its related treatises from the late ninth century, and the early eleventh-century organum, as represented by the grand collection from Winchester as well as Guido’s *Micrologus*.<sup>37</sup>

#### THE *REX CAELESTIUM TERRESTRIVM* ORGANUM: A RECONSTRUCTION

The second notated antiphon on f. 56v in Harley 3019 is *Rex caelestium terrestrium et infernorum per crucem tuam domine salva nos propitius in perpetuum*

<sup>34</sup> Susan Rankin, ‘The Early Theory and Practice of Organum’, p. 61.

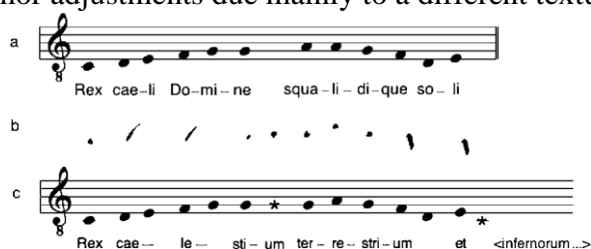
<sup>35</sup> *Ibidem*, p. 65.

<sup>36</sup> For a detailed study of these sources see W. Arlt, ‘Stylistic Layers in Eleventh-Century Polyphony’.

<sup>37</sup> Guido of Arezzo, *Micrologus*, ed. J. Smits van Waesberghe, *Corpus scriptorum de musica* 4 (American Institute of Musicology [Rome], 1955). English trans. W. Babb, *Hucbald, Guido and John on music* (New Haven and London, 1978), pp. 57-83.



(King of all that is heavenly, earthly and infernal, save us, O Lord, for eternity through your cross). There are no extant concordances for the text and a direct relationship with the office for St Boniface will be questioned here in favour of a different liturgical use. Furthermore, the antiphon melody, notated in Palaeofrankish neumes, cannot be transcribed in a pitched version. Although the subject of a further study, it will be worth mentioning here a possible path to follow for the reconstruction of the antiphon's melody shape as well as for its role in the Harley 3019 annotation.<sup>38</sup> Let us start *in medias res* by asserting that the antiphon *Rex caelestium terrestium* was notated along with *Sancte Bonifati martyr* because they were both meant to be sung polyphonically. This hypothesis, which alludes to the presence of a second, hidden polyphonic composition, is based on a series of observations. The reiterative references to *Musica enchiriadis* that appeared so clearly in many of the aspects of the musical annotation are too insistent not to take the treatise into consideration as a possible source of the musical material of *Rex caelestium terrestium*.<sup>39</sup> The *Musica enchiriadis* example of organum at the fourth *Rex caeli domine* is not only the most interesting piece of music in the treatise but also serves as a basis for my reconstruction [Example 6]. Besides the interesting textual correspondence of the two incipits which, alone, would be of too little consequence as an evidence, a comparison between the melody of the first verse of the polyphonic sequence *Rex caeli domine squalidique soli* and that of the neumatic incipit *Rex caelestium terrestium* reveals remarkable similarities, as shown in Example 7. The few melodic variants are of no substantial impact and can be considered as minor adjustments due mainly to a different textual underlay.



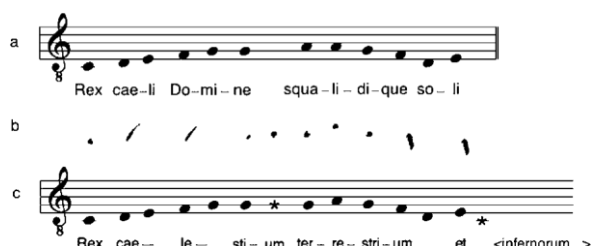
Example 6. The organum *Rex caeli Domine* in *Musica Enchiriadis*.

The same applies then to the explicit *salva nos propitius in perpetuum* of the London manuscript and the *Musica enchiriadis* example's second verse of the sequence *te humiles famulis modulis venerando piis* (see ex. 7). The resulting transcription of the two segments of *Rex caelestium terrestium* with the added organal voice drawn from the treatise's example reveals a second organum elaborated partly on pre-existing musical material and adapted for the liturgy with the additional middle section *et infernorum per crucem tuam domine*. Overall this responds to standard canons and extempore organal techniques. In this regard, the absence of a fully written-out *vox organalis* in Harley 3019 accounts for the easily-improvised nature of the *Rex caelestium terrestrium* organal voice as well as corroborating the status of *Sancte Bonifati martyr* as newly-composed musical work with the use of innovative and, may we also say, experimental solutions which

<sup>38</sup> Giovanni Varelli, 'Paleofrankish Polyphony', *forthcoming*.

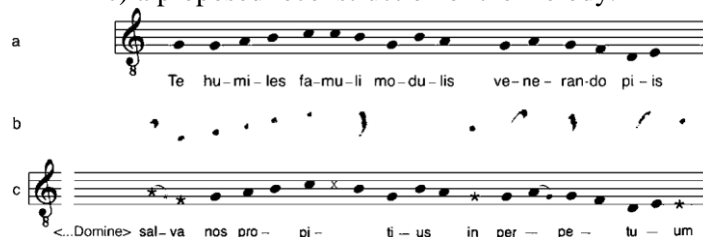
<sup>39</sup> See Nancy Phillips, Michel Huglo, 'The versus Rex caeli – another look at the so-called archaic sequence' in *Journal of the Plainsong and Mediaeval Music Society*, vol. 5, 1982, pp. 36-43. For an edition and commentary of the full text of the sequence, see Peter Dronke, *The Medieval Poet and his World*, Roma: Edizioni di Storia e Letteratura, 1984, pp. 116-123.

warranted written recording. In the Harley 3019 annotation, the practice of composing new material for a different liturgical use through the adaptation of something preexisting has also been noted here already for the text of the antiphon *Sancte Bonifati martyr*. The musical and textual elaborations of these two organa constitute vivid examples of the ways in which the musical and liturgical practice in the Carolingian empire was constantly evolving and transforming at the turn of the tenth century.



Example 7.

- a) melody of the first verse of the sequence *Rex caeli Domine* in *Musica echiriadis*,
- b) neumatic notation for the antiphon *Rex caelestium terrestrium* (incipit) in Harley 3019,
- c) a proposed reconstruction of the melody.



Example 8.

- a) melody of the third verse of the sequence *Rex caeli Domine* in *Musica echiriadis*,
- b) neumatic notation for the antiphon *Rex caelestium terrestrium* (explicit) in Harley 3019,
- c) a proposed reconstruction of the melody.



Example 9. A possible reconstruction of the incipit and explicit of the antiphon organum *Rex caelestium terrestrium*.

## PROVENANCE OF HARLEY 3019: A READING OF THE EVIDENCE

The problem of localising the polyphonic annotation's provenance deserves to be treated separately here. Several clues can help us to determine a possible place of

origin for the Harley 3019 fascicle and its musical annotation: some are formal and some are textual. The palaeographical evidence, for both the music and text, will constitute the main point of departure for the analysis of the formal hints, while the *Vita Materniani*, the addition *qui colitur kalendae decembris* at the end of the explicit and the *Sancte Bonifati martyr* antiphon are those pertaining to the textual level. We may start with the first group and subsequently refine our considerations with the aid of the second type of evidence. Firstly, the script of the *Vita Materniani*, as well as that of the two antiphons, is a fairly standard Carolingian minuscule and thus, it contains no particular features pointing to a precise copying centre. However, it has already been remarked that it is possible that it could not have been written East of the Rhine during the first half of the tenth century. This indication circumscribes an area corresponding approximately to the modern north-eastern France, the Netherlands and part of north-western Germany. The estimated provenance is valid for both hands, despite a difference in style between the hand of the *vita* and that of the musical annotation. The latter is more elegant than the former, but this feature is not so sharp as to suggest a very different geographical provenance. Secondly, the presence of Palaeofrankish neumatic notation confirms the fascicle's provenance in the same area where the main text was written. At the time, among other major monastic centres where Palaeofrankish notation was employed were Werden, Anchin, Marchiennes, Korvey, Cologne, Beauvais and St Amand. I have already pointed out the morphological differences between the Harley 3019 neumes and those commonly associated with St. Amand, revealing a similarity to other north-western German sources such as the Düsseldorf manuscripts and Wolfenbüttel Gradual fragments. Furthermore, the notational system employed for the organum *Sancte Bonifati martyr* reveals a link with the theoretical context in which the Paris *De Organo* originated. As I have suggested above, the *cithara* notation in *lat.* 7202 may be seen as a later development of the notational stage represented by the Harley 3019 organum and the scribe responsible for the *Sancte Bonifati martyr* annotation was certainly in direct contact with sources of music theory that had large diffusion in the area now defined, and in circulation at the time.

The textual evidence I am about to describe also confirms this area on the basis of two cases. The main textual clue for a possible provenance is the addition *qui colitur kalendae decembris*. It is very likely that the hand which wrote this addition at the end of the explicit *Vita Materniani* might be the same responsible for the musical annotation. The similar tone of the ink and the employment of a different style for the rustic capital as compared to the *explicit* rubric, tend to confirm this hypothesis. Therefore, it is in this direction that I will consider the weight of the *qui colitur* addition: an important piece of evidence for the provenance of the fascicle, if not of the hand. In other words, although we must still be cautious as to the identity and provenance of the hand which made the annotation, the following textual arguments might answer the question of *where* the annotation was written: we might be facing the case of a traveling cleric, who moved to the host abbey in a later stage of his life. Usually, St. Maternianus is celebrated on 30th April.<sup>40</sup> However, the introduction to the Life of Maternianus in the *Acta Sanctorum* (IV/3, pp. 757-758) contains an important indication: “Extat ea vita [*Vita Materniani*] in Passionali MS. insigni Bodecensis coenobii, Ordinis Canonicorum Regularium dioceses

<sup>40</sup> ‘Maternianus ep. Remensis’ in *Hagiographica Latina Antiquae et Mediae Aetatis*, ed. by Société de Bollandistes, (Bruxelles, 1900-1901), p. 833.

Paderbornensis, *mensis Decembris* fol. X, unde ipsam transcripsit nobis noster Ioannes Gamansius; haud dubie ex vetustiori *Egmondani monasterii Codice desumpta*, in quo S. Materniani *festum solitum fuerit tali mense agi*, credo, ob memoriam facae ad eum locum translationis” [my emphasis].<sup>41</sup> According to this commentary, the life of St. Maternianus edited by the Société de Bollandistes was contained in a Passional from Bodeeken abbey (*Bodecensi coenobii*) in the diocese of Paderborn. There, St. Maternianus was included in the section corresponding to the month of December. The Passional, it continues, was without doubt (*haud dubie*) copied from an older source from Egmond abbey (*ex vetustiori Egmondani monasterii Codice desumpta*) where St. Maternianus used to be celebrated in December; possibly (*credo*) to commemorate the *translatio* of his body to the abbey (*ob memoriam facae ad eum locum translationis*) by Hincmar of Reims on the 30th of April 855.<sup>42</sup> Edgmond Abbey, or St. Adalbert's Abbey (*Abdij van Egmond, Sint-Adelbertabdij*) is a Benedictine monastery in the historic region of Frisia, in the actual municipality of Bergen in the Dutch province of North Holland. Founded in 975 and destroyed in the Reformation, it was re-founded in 1935 as the present *Sint-Adelbertabdij*, under the Diocese of Haarlem. The presence of *vitae* of Saints whose cult was particularly associated with the Netherlands provinces is also confirmed almost two centuries later in a detailed study of the Passional by Moretus in *De magno Legendario Bodecensi*: “Demum tam multae occurrunt in Bodecensi legendario Vitae sanctorum qui in Hollandia, Belgio Rhenive provinciis vixerunt aut coluntur” [my emphasis].<sup>43</sup> Maternianus became Bishop of Reims in 351.<sup>44</sup> However, we must exclude the see of Reims as a possible provenance for the Harley 3019 fascicle, since the saint continued to be commemorated on the 30th of April, as stated in the *Acta Sanctorum* (IV/3, p. 758): “apud Remensis Natalis eius memoria perseveravit ad hunc XXX diem Aprilis”.<sup>45</sup>

The other textual clue comes from the very organum and antiphon *Sancte Bonifati martyr*. We shall be looking at Saint Boniface (c. 672 – June 5, 754), the Apostle of the Germans, born Winfrid, Wynfrith, or Wynfryth in the kingdom of Wessex, possibly at Crediton (now in Devon, England) or Nursling. Winfrid was a missionary who propagated Christianity in the Frankish Empire during the eighth century. He is the patron saint of Germany and the first archbishop of Mainz.<sup>46</sup> The full cycle of Boniface chants can be found in a Fulda antiphony of the late fourteenth or early fifteenth century.<sup>47</sup> Finally, as for the connection of the text of the *Sancte Bonifati martyr* antiphon and organum with the Office for St Vitus, it is possible to define a geographical proximity with the area which has been emerging so far. In 756 AD the relics of St Vitus were brought to the monastery of Saint-Denis by Abbot Fulrad.

<sup>41</sup> *Acta Sanctorum*, vol. 4 (Aprilis), Tomus 3 (Antwerp: Société des Bollandistes, 1675), pp. 757-758.

<sup>42</sup> Gérard Mathon, ‘Materniano’, in *Bibliotheca Sanctorum*, vol. 9 (Roma: Città Nuova Editrice, 1961-2000), p. 84.

<sup>43</sup> H. Moretus, ‘De magno legendarius Bodecensis’ in *Analecta Bollandiana*, vol. 27 (1908), p. 209.

<sup>44</sup> *Ibidem*, p. 84.

<sup>45</sup> *Acta Sanctorum*, *op. cit.*, p. 758.

<sup>46</sup> For the life of St Boniface see *The Anglo-Saxon Missionaries in Germany: Being the Lives of S.S. Willibrord, Boniface, Strum, Leoba and Lebuin, together with the Hodoeporicon of St. Willibald and a Selection from the Correspondence of St. Boniface*, ed. C. H. Talbot (New York: Sheed and Ward, 1954).

<sup>47</sup> David Hiley, ‘Anglo-Saxon Saints in Hessen’, p. 304.

They were later presented to Abbot Warin of Corvey in Germany, who solemnly transferred some of them to this abbey in 836. From Corvey the veneration of St Vitus spread throughout Westphalia and in the districts of eastern and northern Germany. In particular, Corvey is among those centres from which remained some Palaeofrankish sources such as those discussed above, D.1 and D.2.

To sum up my considerations, drawing on the evidence I have presented, I will propose a possible provenance for the Harley 3019 annotation to be confirmed by deeper liturgical and historical analysis for which this essay represents a point of departure. A circumscribed area has emerged from the analysis of both textual and musico-palaeographical data, confirmed by the textual clues discussed so far: north-eastern France, the Netherlands and north-western Germany. A few centres have been identified which celebrated the cult of St Maternianus in the second half of December: Bodeeken in the diocese of Paderborn and Egmond in Frisia (now diocese of Haarlem), even though a broader diffusion cannot be excluded. The St Boniface cult was celebrated throughout Germany but with a particular connection with the Abbey of Fulda and with the historical region of Frisia. Moreover, St. Vitus, whose Office showed textual similarities between the antiphon *Sancte Vite martyr* and the Harley 3019 antiphon *Sancte Bonifati martyr*, was also celebrated in the same area comprising the main centres of Saint-Denis and Corvey, where Palaeofrankish notation is known to have been employed. In conclusion, the Harley 3019 annotation was written in the first half of the tenth century in an area which I suggest to be modern day north-western Germany or the Netherlands by a scribe trained in music and polyphonic practice who had direct access to those treatises forming essential literature for any *musicus*.

The birth of European polyphony is one of those aspects of music history which has been discussed extensively since the very early days of modern musicology. One of the reasons for this is, of course, the lack of original source material: an issue which is, in turn, the object of divisive argumentation. That the sporadic nature of written sources of polyphony reflected either its wide and usual practice is still to be unquestionably determined. The discovery of a new source of polyphonic music is an exceptional event, which requires cautious preliminary analysis. Moreover, writing on the origin of an undated, unattributed and partially untranscribable *unicum* musical annotation, is all the more challenging, taking into account the debates which may hardly be answered in the space of a single essay. Consequently, of all the broad range of different approaches and investigations that might have been followed here, the path chosen was the palaeographical and musical analysis of the Harley 3019 organum and antiphons in order to establish a possible provenance and date.

A carefully laid out annotation on the blank space left at the end of an early tenth-century Passional, the Harley 3019 antiphons offer interesting textual and notational comparisons with other similar sources. The Palaeofrankish notation has been compared with existing examples and has revealed connections with north-western Germany sources. Most importantly, it has shown a definite concern with nuances of delivery, which suggests a close relation to a practical context. The same features emerged from the study of the organum notation, a specific elaboration of the group of *cithara* notations found in earlier and contemporary music treatises, for which only one later concordance survive (in Paris, Bibliothèque National, *lat.* 7202). At every turn, the stylistic analysis of the Harley 3019 organum has confirmed *Sancte Bonifati martyr* as an example of an early type of organum, which may be attributed

to the tenth century. Techniques as described in the *Musica enchiriadis* and its related treatises blend with innovative organal solutions that will bring new perspectives to the development of this liturgical musical technique. It is therefore with new vigour that we can now acknowledge the presence of a compositional practice of polyphonic music in the early tenth century, but the definitive answers to the problems arising from the study of Harley 3019 and its musical content will entail further enquiries for which this essay intends to offer a solid point of departure.