

Aspects of Visuality in Nonantolan Music Script

There is no doubt that the debate on *visual/visuality* and 'visual culture' has come to the foreground in the past twenty years for its various implications – especially in relation to *material/materiality* – involving not only the broader field of social sciences, but also history, including medieval art and manuscript studies.¹ In particular, historical investigations focused on the reconstruction of discourses centred around the question of what and how were people in the past experiencing in the act of seeing; what inner, intellectual, emotional or bodily responses were triggered by the ocular perception of a visual object. Such responses were necessarily interrelated with cultural issues such as identity, politics and faith. Text script and decoration in medieval manuscript production are among those visual media which intersections with more complex and articulated intellectual frameworks have long been established.² The writing of music too interacts by means of visual parameters and conventional structures and, to this respect, it should be no exception: in the words of Leo Treitler, 'it is not only music that is conveyed through the medium of musical notation'.³ It may be possible to say that every type, or family, of early-medieval graphic representations of musical sounds possessed its own peculiarities in terms of visual impact. Yet, if there is a type of notation, which visual aspect particularly intrigued semiologist and musical palaeographers, is the music script associated with the northern-Italian Benedictine abbey of St Sylvester in Nonantola. Its unusual, unconventional design, with its long shafts and the graphic connection of signs to the chant text, is unique; especially since it was not simply the outcome of stylistic choices, but the result of radical choices of visual techniques for the representation of the complexities of musical sound.

Nonantolan music script developed sometime towards the end of the ninth century, the earliest surviving sources dating to around the year 900.⁴ This is, in fact, about the same time that other music script survive in written form in extensive compilations. Besides its strictly musico-graphic conventions, Nonantolan notation possesses some visual features and scribal tendencies that

¹ The bibliography on *visuality* and *visual culture* is too vast to provide here a full account. Among the most recent publications see *Visuality/Materiality. Images, Objects and Practices*, ed. by G. Rose and D. P. Tolia-Kelly (Farnham: Ashgate, 2012). For *visual culture* and the Middle Ages see, for example, R. Nelson, *Visuality Before and Beyond the Renaissance. Seeing as Other Saw* (Chicago: University Press, 2000); C. Hahn, 'Visio Dei: Changes in Medieval Visuality', *ibidem*, pp. 169–96; A. Sand, 'Visuality', *Studies in Iconography* 33 (2012), pp. 89–95; *Myth, Montage and Visuality in Late Medieval Manuscript Culture*, ed. by M. Desmond and P. Sheingorn (Ann Arbor: The University of Michigan Press, 2006); *Visual Culture and the German Middle Ages*, ed. by K. Starkey and H. Wenzel (New York: Palgrave, 2009); *Thresholds of Medieval Visual Culture: Liminal Spaces*, ed. E. Gertsman, J. Stevenson and P. Sheingorn (Woodbridge: Boydell, 2012).

² On the relationship between the text scripts and political, social, cultural and economical factors, as well as issues of identity and authority see S. Morison, *Politics and Script. Aspects of authority and freedom in the development of Graeco–Latin script from the sixth century B.C. to the twentieth century A.D.*, ed. N. Barker (Oxford: Clarendon Press, 1972). See also J. Hamburger *The visual and the Visionary: Art and Female Spirituality in Late Medieval Germany* (New York: Zone Books, 1998); *idem*, 'The Iconicity of Script: Writing as Image in the Middle Ages', *Word & Image* 27/3 (2011), pp. 249–261.

³ L. Treitler, *With Voice and Pen: Coming to Know Medieval Song and How it was Made* (Oxford: Oxford University Press, 2003), p. 323.

⁴ For a complete bibliography on Nonantolan notation and for the study of the earliest surviving sources see G. Varelli, *Musical Notation and Liturgical Books in Late Carolingian Nonantola* (PhD Diss., University of Cambridge, 2017); *idem*, 'Appunti sulla nonantolana come più antico canone notazionale di area italiana', *Studi gregoriani* 30/2014, pp. 47–76.

set it apart from other musical scripts. The first, and arguably the most characteristic, is that a single, isolated sign, or the first sign of a larger melodic movement, is graphically connected to the top of the vowel of the corresponding syllable in the text by means of a pen stroke.⁵ The earliest surviving source to providing enough material for a complete analysis is a gathering in the composite manuscript Rome, Biblioteca Nazionale Centrale, Sessoriano 96, ff. 314r–319v (hereafter Sess. 96).⁶ The gathering contains the notated Office and Mass for St Benedict, and it was possibly written in the first quarter of the tenth century.⁷ In Sess. 96, in place of an actual graphic connection, musical signs are often only pointed towards the syllable (Fig. 1). In general, these descending strokes are left separated from the syllable by a small gap in cases when they might otherwise generate ambiguity with the vowel, that is when the minims of *i*, *u* or *a* could merge with the sign and have their legibility compromised (Fig. 1: *oracio*, *munda*).

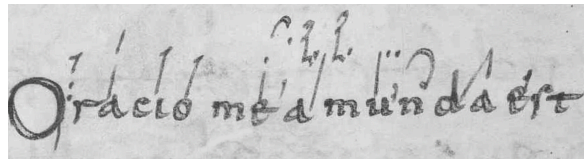


Fig. 1. Sess. 96, f. 319r.

Sometimes the stroke descends to just before or after the vowel, usually in order to save space for either a single, ‘bulky’ sign or short melismatic passages, if the necessary space was not left in the process of laying out the text (Fig. 1: *meam*, *munda*). In Sess. 96 this does not usually occur in the case of particularly large melismas, since enough horizontal space is generally provided. There is also a tendency to place separate elements of descending melodic movements vertically, rather than obliquely, often depending on the amount of space available. Some three-note descending movements make use of both the horizontal and vertical space for greater pitch specificity. The sole purpose of all these attentive considerations must have been to ensure the legibility of the text without compromising the placement of the signs. This graphic behaviour reveals the scribes’ awareness and control of the musical script: the space for certain signs is calculated carefully by considering their shape, their possible modification and the place they might occupy not only on the writing surface, but also in a precise musical context.

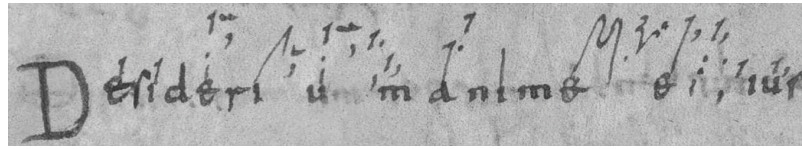
The separation of words and syllables in Sess. 96 is entirely functional in terms of accommodating the musical notation. It is not infrequent to find cases where the space between words is equal to or less than that between syllables (Fig. 2). The result might be said to produce the effect of a *scriptio continua*, where the text’s articulation is provided primarily by the musical signs and their meaning rather than by horizontal spacing: for the Nonantolan tenth-century scribe, therefore, compiling the manuscript by following the correct or, rather, conventional separation between words was not a primary concern. Another common phenomenon is that the letters *n*, *m*, and *s* are

⁵ Considered at times to be the equivalent of either a *virga*, or a *punctum*, the connecting trait in Nonantolan music writing generated one of the most widespread miscomprehension in the reading of its set of musical signs. A full discussion of previous interpretations may be found in G. Varelli, *Musical Notation*, ‘Introduction’. The close analysis of the notational signs revealed, instead that at a purely theoretical level it might be possible to remove this graphic connection while still preserving the meaning of the remaining graph as a musical sign, especially in the case of more complex graphs. This analytical issue will be particularly revealing about the basic alphabet of graphs and signs the Nonantolan notators were working with, as will be explored elsewhere.

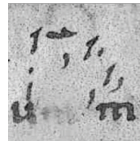
⁶ The earliest source is a palimpsest gradual in the composite manuscript Vatican, Biblioteca Apostolica, Pal. lat. 862, ff. 68–108. For a study of the palimpsest see Varelli, *Musical Notation*, §2.2; *idem*, ‘Appunti’, pp. 62–70.

⁷ *Ibidem*, §2.3; pp. 70–75.

often detached from the syllables they belong to and placed at the end of a musical melisma. This may be revealing of a very rational approach: sounds were to be sung on a vowel, while consonants did not carry sound and thus ought to be quickly pronounced only at the end of the musical passage (Fig. 2a: *desiderium*). In some cases, the scribe writes the full syllable and, upon realising the mistake, erases the consonant, writing it further along the ruled line, as in the case of *desiderium* (Fig. 2b).⁸



a.



b. (detail)

Fig. 2 a-b. Sess. 96, f. 318v.

It is likely that this particular correction was made during the first phase of compilation and not when the notation was being added, since the latter case would assume that the scribe would have left a considerable space between the first and second word, which is unusual in Sess. 96. Instead, the Nonantolan scribe must have realised his mistake almost immediately, and his prompt reaction would seem to demonstrate that the separation of the final consonant might be seen not just as an idiosyncrasy of the Sess. 96 scribe, but having an established notational and, arguably, musical function.

In Sess. 96, horizontal space is sometimes miscalculated in the laying out of the text, being either too little or too much. Sometimes the notation takes up more space than might be expected. An example of both cases can be found on the last two syllables of *precioso* (Fig. 3). The text scribe left just enough space for the first melisma on *-o-*, but it was not used efficiently in arranging the notation. This led the music scribe to make use of the space over the next syllable, causing the first musical sign for *-so* to be written after the vowel. Even if the end of the preceding melisma prevented the usual technique of connecting the sign for the first note to the top of the syllable *-so*, the scribe had no alternative other than to represent the connection with a downward stroke just next to the letter *o*. This reveals an approach to the graphic representation of signs as governed by standard procedures that were to be followed, ‘the first sign is always connected to the text’ being

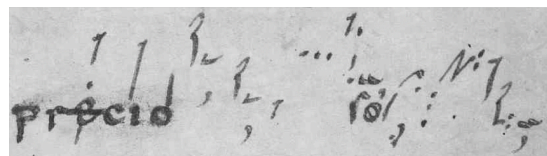


Fig. 3. Sess. 96, f. 319r.

⁸ Other cases of erasure in Sess. 96 include *que-sivit* (f. 314v), *sanctu-s, einu-s, santibu-s* (f. 315r), *dulce-dinis* (f. 319r).

one of these. In this case, moreover, the descending stroke clearly carries a twofold ‘symbolic’ meaning. Any Nonantolan music scribe would have known that while such a sign did exist autonomously, it would not usually have been found in such a position in this melodic context.⁹ In this respect, its practical meaning coincides not merely with a musical value, but also with its visual function of marking the beginning of a musical section. Finally, the melisma on *-so* is written in the right-hand margin of f. 319r, the only instance of this use of marginal space in Sess. 96. Correct planning and calculation for the laying out of this text would have involved writing the last syllable on the following line, or starting the melisma on *-so* and continuing its notation on the next line.¹⁰ Evidently the scribe did not expect to have to write such a lengthy passage or, conversely, considered it too short to be moved onto the next line, and the margin was hence considered space that could be exploited for this purpose. Miscalculations such as these in the layout, as well as in notating the Office and Mass chants, may have been due to careless copying from a written exemplar. However, it is plausible that the Nonantolan scribe of Sess. 96 was rather recalling instead from memory the musical repertory, possibly in order to compile a collection of liturgical material to make up for the considerable loss of manuscripts occurred in the sacking of the abbey by the Hungarians in 899.¹¹ Taking the latter case as a hypothesis and looking closely at the final result, it is possible to consider the process involved in dealing with such a necessity: it was not only the chants’ text that the scribe of Sess. 96 was recalling, but also his knowledge of the forms and aspect, the *visuality*, that a music manuscript needs to possess and of the range of techniques required for its compilation. These cases also provide interesting glimpses into how the notator of Sess. 96 behaved in contexts free of pre-fixed boundaries, such as ruling or text lines, and into the degree of flexibility of the notation itself.

The other, most notable, characteristic of Nonantolan music script is that the physical place for notation is not confined to the interlinear space above the words, but makes use also of the space below them, which I refer to as *sublinear*. In other traditions, the basic principle for the arrangement of musical graphs in the interlinear space is a virtual line, a conceptual boundary obtained by leaving a small gap between the music signs and the letters. In Nonantolan notation such a line is the text itself, or rather its bottom ruled line, below which only one sign is allowed if required. The main reason for such a graphic approach is once again a concern for pitch specificity. The Nonantolan approach to the height metaphor is that of a relative diastemata, whereby a sign representing a note is higher or lower than the preceding or following ones rather than being put in relation to a set reference system.¹² A few years ago, a major divide was brought to light by Susan Rankin in her seminal study of the treatment of pitch in early music scripts.¹³ By studying the relationship between the placement of signs and their intervallic relations in St Gall and Laon, Rankin exposed the different approaches to the height metaphor that governed East Frankish and Lotharingian notations at the turn of the tenth century. In Laon, signs are written higher or lower in the interlinear space in order to represent the relative pitches of successive tones. Such a conception, then, was fundamental in the very design of music graphs that may be considered as representations of the distance between different tones, joining them graphically. In St Gall, signs are placed almost

⁹ The sign, which I refer to as *acuta*, is used in early Nonantolan notation only at the top of rising movements. See Varelli, *Musical Notation*, in particular, §4.2.5.

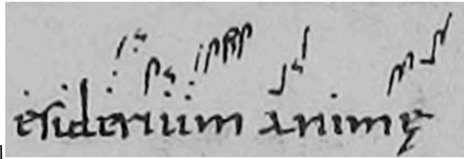
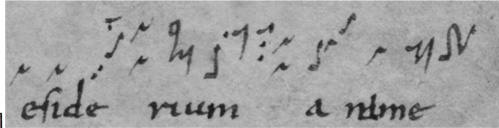
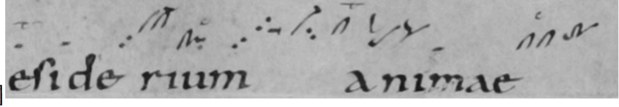
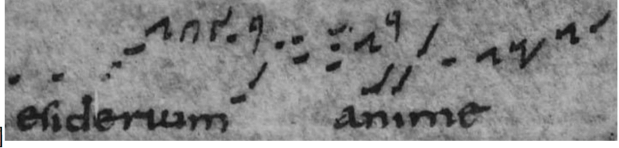
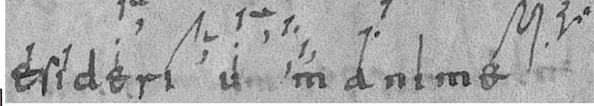
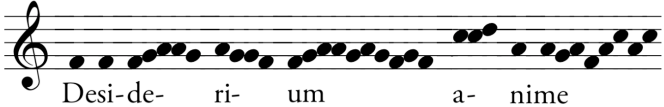
¹⁰ An example is the melisma on the last word of the offertory *Oratio mea* (f. 319r), *mea*.

¹¹ As I have argued in Varelli, *Musical Notation*, §2.3.2.

¹² *Ibidem*, §4.2.2.

¹³ S. Rankin, ‘On the Treatment of Pitch in Early Music Writing’, *Early Music History* 30 (2011), pp. 105–175.

in repeated horizontal succession, or rising diagonally in cases of larger melodic movements such as melismas. Directionality was visually expressed rather by the signs' 'iconicity' – to use Treitler's terminology – than by their exploitation of the vertical space. In Frankish music scripts the specification of pitch was, thus, possibly perceived as less of a priority than the correct representation of rhythmic and performance nuances.¹⁴ As it became evident in the analysis of the notation, Nonantolan scribes adopted the former approach, where verticality played a major role in the specification of intervallic patterns. This approach, in which pitch is 'mapped out' on parchment in relation to its relative height, is shared with Palaeofrankish music scripts, Aquitanian and Breton notation. As far as the treatment of pitch is concerned, therefore, the music script developed in the Benedictine abbey in the second half of the ninth century belongs to this family of notations, and is in this light that signs should be approached in their analysis.

| | | |
|----------|--|-----|
| MR | | |
| f. 11v |  | [D] |
| L239 | | |
| f. 15r |  | [D] |
| SG359 | | |
| p. 56 |  | [D] |
| Ch47 | | |
| f. 12r |  | [D] |
| Sess. 96 | | |
| f. 318v |  | [D] |
| NO | | |
| f. 30r |  | |

Tab. 1.

Table 1 illustrates the different behaviours in representing the melody from the Tract *Desiderium animae* by scribes employing, respectively, Nonantolan, Breton, East-Frankish, Lotharingian and West-Frankish music scripts.¹⁵ Nonantolan's approach to the visualization of the height metaphor

¹⁴ Rankin, 'On the Treatment of Pitch', pp. 169–170.

¹⁵ Ch47 = Chartres, Bibliothèque de la Ville, MS 47 (ca. 900, Breton); SG = St Gall, Stiftsbibliothek, MS 359 (ca. 900, East Frankish); E121 = Einsiedlen, Stiftsbibliothek, MS 121 (ca. 960, East Frankish); MR = Private ownership, Graduel de Mont-Renaud (ca. 950, West Frankish); L239 = Laon, Bibliothèque municipale, MS 239 (ninth century, last quarter, Lotharingian); NO = Nonantola, Museo dell'Abbazia, *Cantatorium* [sine numero] (ca. 1100).

necessarily required signs to be arranged reflecting their relative pitch, sometimes even in anticipation of the height of the following sounds or phrase. The tract *Desiderium animae* (ff. 318v–319r) provides a very clear example of this technique (Fig. 4). The first two notes (F) are represented by a sequence of two connected dashes while, on the next line, the same pitch (F) is repeated thrice on *et voluntatem* and represented, instead, by three sublinear connected dots.¹⁶ The reason for this decision becomes evident by looking at the melodic passages that follow: on the word *desiderium*, the maximum extent of the melodic range is a major third (F–A), while on *voluntatem* the melody reaches c with a triadic movement from F (F–a–c).

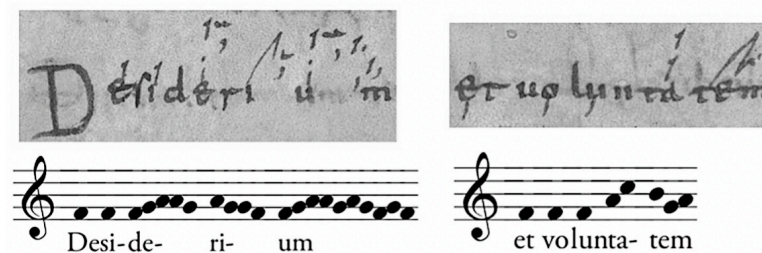


Fig. 4. Sess. 96, f. 318v.

The notator probably foresaw such leaps and decided to move the notation for the entire phrase accordingly to fit the interlinear space. This reveals not only that the notator was conscious of the melodic range that needed to be notated, but also that in calculating this he was aware of the space required for the correct arrangement of signs. More importantly in this context, it shows that the scribe knew exactly how much space a certain Nonantolan graph or combination of signs would have occupied, and what was the best way to arrange them coherently. It could be argued that shapes and graphical entities of musical signs formed a picture in the notator's mind that was represented graphically in relation to his expectation of the melodic profile.

In these cases, the possibility to write musical signs in the sublinear space was a useful tool for the specification of pitch relations, and such cognitive approach may have originated already in the earliest phases of development of Nonantolan music script. It is an entire different idea in respect to the writing of music in other areas of late Carolingian empire, whereby the text is not conceived as a different entity from the notation itself, and its place on the page was not seen as a boundary to define the space reserved for the placement of music signs. If we were to trace a possible origin of such a strategy for the visualisation of pitch relations, this may be the association between musical sounds and the accents of speech as defined by late-antique grammarians.¹⁷ Although Donatus does not describe the accents strictly in terms of their pitch inflections, Isidore of Seville and Martianus Capella do. In the words of Isidore, for example, the grave accent differs from the acute by *deprimere*

¹⁶ The terminology 'connected dash' and 'connected dot' comes from the results of my analysis of the design of Nonantolan music graphs, which considered those signs as constructed from the basic shapes of a dash and a dot. However, a discussion of such process is beyond the scope of the present study. See Varelli, *Musical Notation*, §4.2.2.

¹⁷ For an assessment of the relationship between prosodic accents and musical notation see L. Treitler, 'The Early History of Music Writing in the West', *Journal of the American Musicological Society* 35/2 (1982), pp. 237–279; *idem*, 'Reading and Singing: On the Genesis of Occidental Music-Writing', *Early Music History* 4 (1984), pp. 135–208. Reprinted with introductions in L. Treitler, *With Voice and Pen*, respectively §13 and 14.

and *deponere* ('depress' and 'push down').¹⁸ Confronted by the challenge of having to preserve pitch relations in a notational context, early Nonantolan scribes may have found transferring such a conception in the use of the space below a syllable as the most natural option, producing the effect of leading the eye downwards and, in doing this, emphasising visually that the sound is lower than what precedes and/or follows. In this precise context, however, notators possibly drew on the idea of prosodic accents not so much in terms of their graphic representation, rather as the movements of the voice in its enunciation of language, connected to the concept of sound of a syllable as the basic unity of *cantus*. In Nonantola, therefore, the notation develops *around* the text, and letters form an essential part of the music script, which simply *cannot* be written without the support of the chant text (Fig. 5).¹⁹

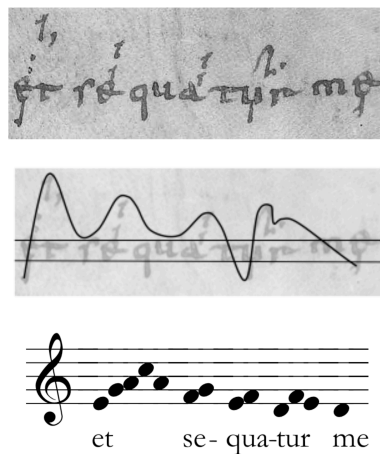


Fig. 5. Sess. 96, f. 319v.

Music signs are represented visually almost as arising from the words themselves, and the graphic connection of signs to the syllables in the text – both in the inter- and sublinear spaces – was evidently an essential feature of the visual communicative function of Nonantolan notation. This very strict reliance of the writing of musical signs on that of the chants' text may appear to us as a limitation of this music script. However, it was arguably not perceived as such by early Nonantolan scribes. This graphic technique for the representation of melody, and pitch in particular, was for them surely the most effective and logical solution, stemming from the very contemporary conception of music and its relation to language and words. *Cantus*, the liturgical chant, was conceived of and functioned as an extension of the prosody of language; syllables and their inflections were regarded as the primary units of melody.²⁰ The division of melodies was often

¹⁸ *Acutus accentus dictus, quod acuat et erigat syllabam, gravis quod deprimat et deponat* (*Etymologiae*, I §18). For a commentary and translation see C. Atkinson, *The Critical Nexus: Tone System, Mode, and Notation in Early Medieval Music* (New York and Oxford, 2009), esp. p. 43.

¹⁹ For this reason, the few surviving textless musical marginalia and pen trials in manuscripts from the Benedictine abbey usually consist only of a sequence of trials of a few isolated musical signs, and not of a melody. For example, Rome, Biblioteca Nazionale Centrale, Sess. 66 (f. 1r), Sess. 96 (ff. 310v, 318v), Sess. 94 (f. 3r).

²⁰ Treitler, 'The Early History', p. 243. On the relationship between text and music in liturgical chant see L. Treitler and R. Jonsson, 'Medieval Music and Language: A Reconsideration of the Relationship' in *Studies in the History of Music* (New York: Broude Brothers Ltd., 1983), vol. 1, pp. 1–23.

induced by divisions in the text, marking and articulating their sense units.²¹ While it is possible to trace this attitude towards the music–language relationship throughout most of the Middle Ages and, arguably, for much of the history of European music, it is certainly during the ninth century that these reflections became so inherent to thinking about sounds, and their performance through vocal delivery, as to influence and shape their actual graphic manifestation. Late antique grammarians – especially Donatus and Priscianus – were read, and interest in them was revived in the early Carolingian period, forming a component of education and scholarship that set the essential basis for a new phase in the study of language. Knowing more about written language meant knowing more about how to sing it and, thus, how to display its constitutive elements.²² In this intellectual environment, we may see the gradual emergence of a whole new development in musical thought: an exploration of the relationship between both oral and written elements of the musical discourse and their ‘grammar’, ‘rhetoric’ and ‘logic’.

The Nonantolan approach to the representation of sound must have been formed at an early stage in the written transmission of music, when notation did not play the role of mere musical tool – independent in its representation from the singing and writing of words – but rather served as a means to their very amplification, and an aid for the correct delivery of meaning. Such a phase may be identified with the emergence of musical scripts in Carolingian Europe, and especially with the most prolific period for their design, during the course of the ninth century. It is not unlike that Nonantolan scribes were initially aware of other ways of writing music down, even if these were still in their early stages, and of how the Po-valley Benedictine abbey was differentiating itself in shaping its own institutional musical script.²³ However, the extent to which this differentiation was the result of a conscious effort is not possible for us to determine. Yet, *de facto*, Nonantolan scribes did not adopt these graphic techniques from any other music script or, at least, none has survived that shows a similar approach to the representation of sound (i.e. the connecting trait) and pitch in particular (i.e. the exploitation of sublinear space). This fact alone would show the great degree of independence and freedom in designing a music script that responded to the needs of this particular community. Would it be possible, therefore, to argue that such distinctive features of Nonantolan notation were perceived as a visible manifestation of a centre that was able to elaborate a distinctive type of script, as an expression of its musical and liturgical customs, thus contributing to the establishment of the abbey’s independence and influence? May the perception of the notation’s visuality have prompted inner responses concerning issues of identity, and belonging to a particular monastic community, besides the primary function of recording the abbey’s repertory of liturgical chant in written form? In other words, may the Nonantolan music script have constituted an ‘identity trait’, just like the abbey’s text script and decoration?²⁴

²¹ Treitler, ‘The Early History’, p. 244.

²² The broadly accepted theory about the origin of early musical signs as derived from prosodic accents (acute, grave and circumflex) may also be yet another proof of such connection. See C. Atkinson, ‘*De accentibus toni oritur nota quae dicitur neuma*: Prosodic Accents, the Accent Theory, and the Palaeofrankish Script’ in *Essays on Medieval Music in Honor of David G. Hughes*, ed. G. M. Boone (Cambridge, MA: Isham Library Papers, 1995), pp. 17–42; C. Atkinson, ‘Glosses on Music and Grammar and the Advent of Music Writing in the West’ in *Western Plainchant in the First Millennium: Studies in the Medieval Liturgy and its Music in Honor of James McKinnon*, ed. Sean Gallagher et al. (Aldershot: Ashgate, 2003), pp. 199–215; C. Atkinson, *The Critical Nexus*, pp. 106–113.

²³ If it were not so, we should be prepared to consider that Nonantolan music script was entirely created *in loco*, without any external influence. In a forthcoming work I will argue, instead, that Nonantolan scribes drew initially on other existing experiences for their design of the notation.

²⁴ For a palaeographical study and a bibliography on Nonantolan minuscule see G. Varelli, *Musical Notation*, §1.2. For the decoration see *La sapienza degli angeli: Nonantola e gli scriptoria padani nel medioevo*, ed. G. Zanichelli

One piece of evidence for such conception of a meta-musical significance may be found in the use of the connecting trait and sublinear signs as visual devices even after the long tenth-century period of desolation.²⁵ When Nonantola rose again in the early eleventh century, these features were maintained in the resumed production of notated manuscripts, despite the abbey's being surrounded at that time by Po Valley centres already adopting (or adapting) transalpine notational models, mainly West- and East-Frankish.²⁶ The production of this generation of music books is witnessed only by fragments now in the Österreichische Nationalbibliothek in Vienna, coming from a Nonantolan gradual, as well as by a palimpsest in the Bodmer Library in Geneva.²⁷ The two fragments, one strip of parchment and one folio from the same original bifolio re-used as binding material for two separate volumes, and contain part of the chants for the Mass on Trinity Sunday (including the sequence *Benedicta sit*) and three series of Post-Pentecost antiphons (Sundays I–III). In Bodmer cod. 177 several folios, especially in the second half of the volume, are palimpsests the oldest surviving Nonantolan antiphoner. It was only during the eleventh century ‘renaissance’ of the Benedictine abbey that copying activity resumed at Nonantola, accompanying a resumption of liturgical practice. By the end of the century Nonantola also had a flourishing production and a large repertory of tropes and sequences that required the compilation of volumes separate from the rest of the gradual.²⁸ Such musico-visual feature was transferred a few decades later on to the newly ‘invented’ musical staff, and it persisted well into the production of manuscripts in the twelfth century.²⁹ Indeed, it is at the turn of the twelfth century, during the second golden age of this

and M. Branchi (Modena: Franco Cosimo Panini, 2003); M. Branchi, *Lo scriptorium e la biblioteca di Nonantola* (Modena: Artestampa, 2011); *eadem*, ‘Le origini della miniatura nonantolana (secoli VIII–IX)’ in *Il monachesimo italiano dall’età longobarda all’età ottoniana (sec. VIII–X)*, ed. G. Spinelli OSB (Cesena: Centro storico benedettino italiano, 2006), pp. 609–641.

²⁵ Besides Sess. 96, no other notated manuscript survives from the Benedictine abbey. To the tenth century, however, date the marginalia in Monza, Biblioteca Capitolare, f. 1/101, and the *membra disiecta* of a gradual in now between the Biblioteca Capitolare in Monza and the Biblioteca Ambrosiana in Milan. On these fragments see, in particular, K. Messina, ‘La tradizione liturgica di nonantola nei frammenti monzesi’, *Rivista Internazionale di Musica Sacra* 23 (2002), pp. 149–169; K. Messina, ‘I neumi nonantolani nel patrimonio frammentario monzese’, *Studi gregoriani* 20 (2004), pp. 85–125.

²⁶ The most important nearby centres employing other notations were Bologna and Modena, Verona, Mantova, and Ravenna. A further point may be made for the cantor Stephanus in Verona using Nonantolan signs. In charge of the liturgy, he compiled the *carpsum* – a type of ordinal, a manual for the liturgical activity of the secular cathedral – now in Verona, Biblioteca Capitolare, XCIV (89). The Nonantolan notation of the tonary at the end of the *carpsum* and some marginal additions with chant incipits to the sacramentary Verona, Biblioteca Capitolare, LXXXVI (81), are also in his hand. On *Stephanus cantor* see *L’orazione dell’arcidiacono Pacifico e il carpsum del cantore Stefano: studi e testi sulla liturgia del duomo di Verona dal IX all’XI sec. (Spicilegium Friburgense, 21)*, ed. G. G. Meersseman, E. Adda and J. Deshusses (Fribourg: Universitätsverlag, 1974). For the presence of Nonantolan notation in Verona see the list of manuscripts in G. Baroffio, ‘Music Writing Styles in Medieval Italy’ in *The Calligraphy of Medieval Music*, ed. J. Haines (Turnhout: Brepols, 2011), pp. 111, note 36.

²⁷ Vienna, Österreichische Nationalbibliothek, cod. 765 + cod. 1050; Geneva, Fondation Martin Bodmer, Cod. Bodmer, MS 177. For a description of the manuscript (not of the *scriptio inferior*), see E. Pellegrin, *Manuscrits latins de la Bodmeriana* (Cologny-Genève: Fondation Martin Bodmer, 1982), pp. 420–422. As these are recent discovery, there is no musicological literature on these fragments.

²⁸ See the editions of these chants in *Early Medieval Chants from Nonantola*, ed. J. Borders and L. Brunner (Madison, WI: A-R Editions, 1996–1999), esp. vols 1, 2 and 4.

²⁹ It is possible that, in the Italian peninsula, attention to the exact specification of pitch arose first in the notational experiences of Po Valley communities. The Italian music theorist Guido – one of those responsible for introducing the use of the musical staff – was trained and worked in Pomposa, an important monastic community some seventy miles east of Nonantola and another Lombard foundation. Literature on

northern Italian abbey, that some of the most important surviving music manuscripts were compiled. Exceptional examples of this phase are the famous *Cantatorium*, now in the Abbey Museum, and the troopers Rome, Biblioteca Casanatense, MS 1741, Bologna, Biblioteca Universitaria, ms. 2824, and Rome, Biblioteca Nazionale, Sessoriano 62.³⁰ It is not unlikely that these compilations were copies of older Nonantolan notated books that needed to be replaced by new volumes, their content reorganised and adapted to a new type of notation which required a complete rearrangement of the layout; the already wide interlinear space exploited by adiastematic neumes is here expanded in order to accommodate the new system of parallel lines. Consequently, the number of notated lines per page diminished, meaning that a single chant would now occupy at least double the previous writing area. The balance between the requirement for more parchment and the need to maintain a reasonable size for the volumes – necessary for easy consultation – might have led to a separation of liturgical material into different books. What previously would have been collected into a single book was now arranged into separate compilations, as the *Cantatorium* and the Casanatense troper suggest.³¹ Figure 6a-b shows one segment of the Tract *Desiderium animae* and one from its verse *Posuisti super caput* from the twelfth-century *Cantatorium*. The comparison with the same chant notated in Sess. 96 (cfr. Fig. 2–4; Tab. 1) reveals the almost obstinate use of the connecting trait and a similar approach to the writing of the chant text, where the space between words is minimal, even two centuries after the compilation of the Sessoriana gathering. On the other hand, the transferral of Nonantolan music signs onto the more pitch-specific, wider system of lines made the exploitation of the sublinear space unnecessary (cfr. Fig. 4 and 6a: *et voluntate*).

The analysis of surviving manuscripts shows that the use of such technique did also endure, even after Nonantolan music scribes adopted the newly-introduced musical staff in the late eleventh century. At least in the first half of the following century, parallel to these large musical compilations which the troopers and the *Cantatorium* are examples of, books for a more everyday use were being produced at Nonantola. An example of these is a fragment of a missal now in Bologna, Biblioteca della Musica, Q.10, F. 11 (Fig. 7). Not unusually, the notation is written along with the text in a smaller script than the prayers and readings; the music signs, in particular, feature a pronounced slant to the right. Such almost exaggerated slant – visually contrasting with the somewhat rigid, yet highly functional, verticality of the diastematic Nonantolan notation – may have originated as a scribal technique, developed in order to save space on the page by compressing the already-reduced interlinear one. This rather practical function not only confers an overall cursive appearance to the notation, but it may tell us also something about the destination and use of the manuscript. It is clear how the inclusion of written music in the original missal had a different purpose than in the *Cantatorium*. Free from the necessity of being pitch-specific to the highest degree, and less of an instrument for recording chant for the use of highly trained singers, the notation goes 'back' to its function of *aide-mémoire*, acquiring also an almost iconic value as part of the *visualisation* of the Nonantolan *ritual*. Finally, it may be argued that, by choosing to employ the older style for the notation (besides the connecting trait and the sublinear sings, a certain slant is found in early sources too) the scribe effectively conferred the missal the status of authoritative *instrumentum liturgicum* by enriching, and completing it with all the trademarks of the Benedictine abbey, among which the notation certainly constituted one of the most vivid and graphically forceful ones.

Guido and his works is vast: for a short biography and introduction see C. Palisca, 'Guido of Arezzo' in *The New Grove Dictionary of Music and Musicians*, ed. Stanley Sadie (New York: Macmillan, 2001), vol. 10, p. 522.

³⁰ The *Cantatorium* is *sine numero*. On this manuscript in particular, see G. Baroffio, *Appunti di viaggio – Travel Notes: Cantatorium Abbazia di Nonantola* (Nonantola: Comune di Nonantola, 2002), study and facsimile.

³¹ In the palimpsest gradual Pal. lat. 862 the *Gloria* for the Christmas Mass is written with its trope *Pax sempiterna*. See Varelli, *Musical Notation*, pp. 67–70 and §3.2; *ibidem*, 'Appunti sulla nonantolana', p. 64.

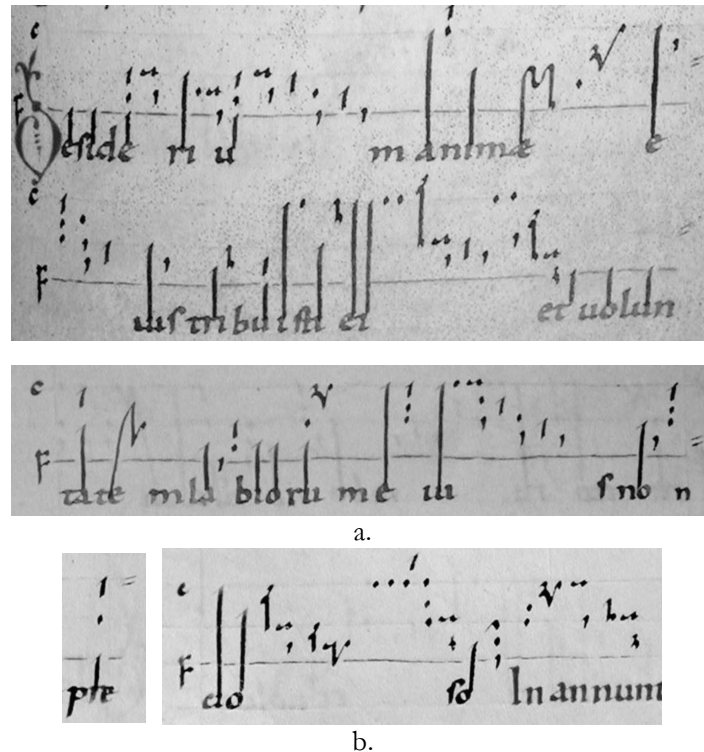


Fig. 6. Nonantola, Museo Abbaziale, *Cantatorium*, ff. 30r-v.

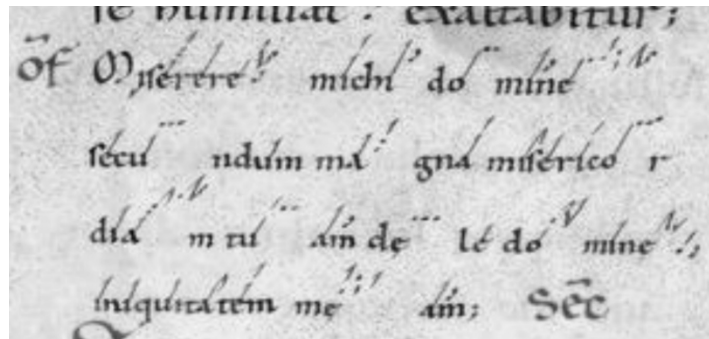


Fig. 7. Bologna, Biblioteca della Musica, Q.10, F. 11r.

Nonantolan scribes certainly considered music signs as flexible and malleable entities, but these graphic modifications always followed a rational and disciplined set of precise procedures – often to the smallest detail. Notators' approach to the representation of sounds and specification of pitch relations resulted from the merging of early experiments in the design of musical notation with contemporary ideas about music, language and the enrichment of liturgical practice. The music script elaborated at Nonantola towards the end of the ninth century was both a musical and a cultural achievement. With time, such distinctive script became something more than a mere tool in the hands of the music scribes. Its continuous use at the abbey – and, later, also at its dependences – made the Nonantolan particular type of music script become an integral part of the eleventh-century process of rebuilding the community's reputation, identity and influence, by claiming its long-

standing history and liturgical tradition, dating back to the late eight century.³² Certainly, it may be argued that such attachment to an 'institutional' way of writing down music could have been simply the result of habit, or of a conservative approach with no other purpose than the strictly musical one. I believe, instead, that the observation of those *Strategien der Visualisierung* provide a standpoint from which to explore how music writing may have been visually perceived at Nonantola: not just as an insight into the graphic and musical world of liturgical chant in Nonantola, but also into the construction and shaping of a collective monastic identity.

³² These efforts to reaffirm the abbey's illustrious past even went as far as the forgery of charters. For the documents that were forged during the late tenth century to the late eleventh see *Codice diplomatico longobardo*, ed. L. Schiapparelli (Rome: Istituto storico italiano, 1929), pp. 290–294 and 305–310. The *Vita* of the founder St Anselm was also one of a series of texts, both hagiographical and historiographical, that were composed in Nonantola during the course of the eleventh century, aimed at reconstructing the sense of identity and historical heritage after the desolation of the preceding century. The manuscript of the *Vita Anselmi* has no shelfmark and it is now in the Archivio Abbaziale. On the *Vita* see P. Bortolotti, *Antica vita di S. Anselmo abate di Nonantola* (Modena: Regia Deputazione di Storia Patria, 1892); P. Golinelli, 'L'agiografia monastica nell'Italia settentrionale. Un esempio: la *Vita Anselmi abbatis Nonantulanus*' in *Il monachesimo italiano*, pp. 17–38, esp. 23–38.