

Semitone Indication in a Twelfth-Century Source of Aquitanian Notation in Zamora

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Located in the Archivo Histórico Provincial of Zamora in Northwestern Spain are several fragments of a noted breviary deserving of attention for their distinctive usage of Aquitanian notation.¹ Their interest lies especially in the manner of indicating the semitone. Three signs are critical: the quilisma, the semicircular virga, and the special punctum. Although all are known in other sources of Aquitanian notation as semitone indicators, their manner of use here is curious and yet to be observed in another source.² In this paper, I present a study of the special features of the notation of the fragments (hereafter referred to as Zamora A) and will begin with the history of the source, its description, and some limited observations on the chant content. In addition

¹ Zamora, Archivo Histórico Provincial, Pergaminos musicales 196, 199 and 200. The fragments have already been introduced and briefly studied in Kathleen E. NELSON, *Medieval Liturgical Music of Zamora*, Ottawa: Institute of Mediaeval Music, 1996, see especially pp. 86-7, 92-3, 180-1, 232 and 294. The present article expands particularly upon the study of the notation of the source and its connections with other sources, adds to observations regarding its text hand, and commences a study of the content which had only been treated summarily previously with the exception of the commentary and transcription of the hymn *O lux beata*. In the 1996 publication I referred to these fragments as 'Book A', and my identification here as Zamora A derives from that title. The expression is mine and not that of the Archive. A list of manuscript abbreviations is given as Appendix 1.

² My survey of the available published literature concerning Aquitanian sources of France, Spain and Portugal, as well as my studies of manuscripts in Spain, have found no other source known to use this combination of semitone indicating signs in the manner of Zamora A. Of course, my knowledge of the sources cannot be complete, and further detailed studies of Aquitanian notation in Spanish sources (as well as others) may produce new significant findings. Some of the Spanish sources which I have investigated in the course of seeking to place the notation of Zamora A in its context will be referred to below.

to the discussion of notation in Zamora A, some commentary will be made on similar notational features in other sources and the paper closes with observations on transmission of notational practice into the Iberian Peninsula. Certain features allow me to propose that Zamora A was prepared in a central or northwestern part of the Iberian Peninsula, perhaps within León-Castilla or Portugal; however, although the source belongs to the secular *cursus* of the Roman rite, it has not been possible to identify the church for which it was intended.

Likely to date from the second half of the twelfth-century, Zamora A belongs to the transitional period in Iberian liturgical history which followed from the final change to the Roman rite of the later eleventh-century.³ Roman rite manuscripts were prepared during the twelfth-century using the imported Aquitanian notation, sometimes in the local Visigothic handwriting but increasingly with the late Carolingian or early Gothic forms of script that replaced the Visigothic. Zamora A appears to be from such a manuscript, written in a pregothic hand and showing signs of being locally prepared rather than imported from southern France as will be discussed below.

The more modern history of Zamora A is intriguing but not a rare one. Its fragmentary preservation stems from the fact that its sheets were employed as binding material for books of notarial documents dating from the 1560s and originating from the town of Toro, not far from Zamora. It may be that the sheets once belonged to a larger manuscript, which had fallen out of use and was perhaps sold, its valuable parchment able to be recycled some four hundred years after its original preparation. It seems most likely that the binding of the books would have taken place in Toro, but how the fragments came to be there is unknown. Perhaps the noted breviary from which the fragments were taken had been in use in a church of Toro, or perhaps, already out of use, the breviary or the loose sheets were brought there from another place. In much more recent times, the sixteenth-century books from Toro have come to be stored in Zamora, where these and other parchment sheets from the binding of a number of the books were separated so as to enable study. Those of Zamora A were thus able to be identified by this writer as having belonged to a single original source. Subsequent searches in the archive revealed no further sheets identifiable as belonging to the same source.⁴

³ On the implantation of the new rite from a musicological perspective, see Ismael FERNANDEZ DE LA CUESTA, «La irrupción del canto gregoriano en España», *Revista de Musicología* 8, 1985, pp. 239-48; and Michel HUGLO, «La pénétration des manuscrits aquitains en Espagne», *Revista de Musicología* 8, 1985, pp. 249-56.

⁴ For further discussion of the contents and history of the fragmentary sources of liturgical music

Zamora A consists of three bifolios numbered in the Archive's numbering system as *Pergaminos musicales* 196, 199 and 200, one of which (199) has been cut into two pieces. Although the bifolios have been found separately on the binding of different notarial books, they can be confidently identified as having originally been part of a single source because of their close likeness and their content. The content demonstrates that two of the bifolios (196 and 199) would have been adjacent in a single gathering although the former centre of the gathering is lost. The content of the third bifolio (200) places it in a nearby previous gathering, probably the adjacent gathering of the original manuscript.⁵

The page size is approximately 275 mm by 400 mm, the outer margins appearing to have been trimmed. There is some damage resulting from the use of the folios as book covers including holes made during the binding process, writing used to identify the notarial books,⁶ and other signs of wear including the rubbing away of some script and notation. Thus while the source is largely legible, there are portions which were unable to be studied. The layout of the texts and chants is in two columns per page, the columns measuring about 100 mm in width and 310 mm in height. The pages have been prepared with regular dry-point lines which serve as guides for both text and notation, 38 or 39 lines per column. There is no sign of colouring having been applied to the line when employed as a staff, a practice which can sometimes be observed with Aquitanian notation.

The pregothic text hand suggests dating to the second half of the twelfth century.⁷ Two letter forms recognized by palaeographers as characteristic of Iberian sources are observable and therefore suggest Iberian origin. The first is the letter 'a' formed with a large round lobe reaching to the top or nearly to the top of the letter; this is found frequently in Zamora A.⁸

The second is the form of 'z' which resembles the shape of the number 3, in this source, as in others, descending below the baseline and with the typical

manuscripts held in the collection of *Pergaminos musicales* of the Archivo Histórico Provincial de Zamora, see K. E. NELSON, *op. cit.*, and «Two Twelfth-Century Fragments in Zamora: Representatives of a Period of Transition», in David CRAWFORD and G. Grayson WAGSTAFF (eds.), *Encomium Musicae: Essays in Honor of Robert J. Snow*, Hillsdale, NY: Pendragon Press, 2002, pp. 161-74.

⁵ There is no folio numbering on the fragments.

⁶ For example, the dates 1562, 1563 and 1564 appear clearly.

⁷ Among the features important in dating are the absence of fusion of bows and the confinement of the ligature 'r' to use after 'o'. Further details of the script are given in K. E. NELSON, *Medieval Liturgical Music of Zamora*, Ottawa: Institute of Mediaeval Music, 1996, p. 232.

⁸ Albert DEROLEZ, *The Palaeography of Gothic Manuscript Books: From the Twelfth to the Early Sixteenth Century*, Cambridge: Cambridge University Press, 2003, p. 60.

flat top instead of the curve of '3'.⁹ A particularly distinctive Iberian marker found in Zamora A is the style of decoration frequently given to rubric abbreviations for chant genres such as 'a' for 'antiphon' and 'v' for verse. See Plate 1 for a variety of these. Those for the letter 'a' are the most elaborate consisting of a vertical series of as many as eleven dots or dashes placed in a column above the letter. Simple ones have only a single dash (often a dot with a horizontal extension up to the right) and one dot above the letter. A dash with a dot above it placed over a letter was a common abbreviation sign used in Visigothic script, and was still in use in the Visigothic scripts of the twelfth century.¹⁰ Similar decoration accompanying chant genre abbreviations is also found in some notated manuscripts written with Visigothic script, including Visigothic sources of the Roman rite which use Aquitanian notation.¹¹ On the other hand, the presence of this type of decoration in a Roman rite source written in a gothic or pregothic script and Aquitanian notation is undoubtedly rare, and is known to this writer in only one other source. This is Silos 9, a noted breviary dating from probably a little later than Zamora A, the late twelfth-century or the beginning of the thirteenth-century.¹² The style there is not identical to that of Zamora as a curved shape is placed at the top of the decoration, similar to that also seen in some Visigothic manuscripts. The decorated abbreviations are a feature which may eventually be useful for localizing the place or places of copying of both Zamora A and Silos 9. Their presence indicates a scriptorium or a scribe familiar with the practices of Visigothic script. Perhaps, therefore, a place of copying where Visigothic script continued in use or had only recently gone out of use can be inferred.¹³

⁹ A. DEROLEZ, *op. cit.*, p. 65; and S. Harrison THOMSON, *Latin Bookhands of the Later Middle Ages 1100-1500*, Cambridge: Cambridge University Press, 1969, no. 111. An example is found in Perg. mus. 196 of Zamora A in the abbreviated 'euglizare', and another in underlaid text of Perg. mus. 200, 'Babtizatur'.

¹⁰ Agustín MILLARES CARLO, *Tratado de paleografía española*, 3rd ed., 3 vols, Madrid: Espasa-Calpe, 1983, vol. I, p. 89.

¹¹ K. E. NELSON, *op. cit.*, p. 232.

¹² Rodríguez Suso also observed the likeness of the abbreviation decoration to "los códices visigóticos clásicos", and gives a reproduction showing one of these in Silos 9. See Carmen RODRÍGUEZ SUSO, «El Manuscrito 9 del Monasterio de Silos y algunos problemas relativos a la adopción de la liturgia romana en la Península Ibérica», *Revista de Musicología* 15, 1992, pp. 480, 507. Regarding the dating of Silos 9, Rodríguez Suso summarizes the dates which have been suggested by various writers and proposes "Si consideramos la posibilidad de que se copiara en un taller de calidad, podríamos aceptar una fecha alrededor de los años 1180 y 1190" (*op. cit.*, pp. 492-493).

¹³ Some limitation is offered by the observation from Agustín Millares Carlo that Visigothic script continued during the twelfth-century to be used only in "Asturias, León, Toledo y Portugal." See A. MILLARES CARLO, *op. cit.*, I, p. 179.

Zamora A includes parts of offices for the period from the Octave of Christmas through Epiphany to the Ferial Offices (for Sunday, Wednesday, Thursday and Friday), coming to an end after the second responsory of Friday. Because of the lacunae within the fragment, material for only one day – Thursday – is complete. As a noted breviary, Zamora A contains notated office chants and also texts for readings and prayers.¹⁴ Most of the notated chants are antiphons and responsories as would be expected, and the other notated content includes several invitatories as well as two hymns.¹⁵

It has not been possible to identify the source as belonging to any particular use, and despite its history, Zamora A does not represent the use of the church of Zamora as it is known from later breviaries.¹⁶ While extensive analysis of the liturgical content has lain outside the scope of my investigation, some preliminary observations regarding the chants in relation to other sources seem worthwhile.¹⁷ To begin with, the choice of two antiphons for Sunday Matins places Zamora A within an Iberian group of Aquitanian notated sources of the secular cursus incorporating Toledo 44.1, 44.2, and 35.9, as well as Huesca 2 and 7.¹⁸ This group have the antiphons *Novit dominus* and *Cantabo domino qui bona* in positions one and three for the first nocturn of Sunday, a single exception – Huesca 7 – having only one antiphon in each nocturn. None of the sources mentioned have an otherwise identical antiphon list for Sunday

¹⁴ In addition to the notated chants there are a few left without notation and some with only a text incipit.

¹⁵ The hymns, each with notation for their first strophe, are *O lux beata* and *Primo dierum* (Perg. mus. 199). The first of these is briefly discussed and transcribed in K E. NELSON, *op. cit.*, pp. 180-81, 294. Only the second half of the notated chant for *Primo dierum* is legible as this section of the fragment is in poor condition. Regarding the two legible invitatories see below.

¹⁶ The use of Zamora may be studied in the fourteenth-century *Breviario de Zamora*, Zamora, Archivo Catedralicio, cód. 104; as well as in the sixteenth-century printed breviary *Breviarium secundum morem et consuetudinem Zamoranae ecclesiae*, (n.d.), Madrid, Biblioteca Nacional, R 25990). I am grateful to the Cabildo of the Cathedral of Zamora for allowing me to study the fourteenth-century manuscript.

¹⁷ Limited comparative analyses have been made of the chant texts, mainly focussed on the ferial offices, and also of musical content, mainly focussed on antiphon differentiae and invitatories. The comparative study has benefitted greatly from the availability of CANTUS with its growing database of sources available at <http://publish.uwo.ca/~cantus/>. Also of particular assistance has been the recent dissertation by Lila COLLAMORE, *Aquitanian Collections of Office Chants: A Comparative Survey*, Ph.D. diss., Catholic University of America, 2000.

¹⁸ A listing of the antiphons of the ferial offices in these sources with the exception of Toledo 35.9 is given in L. COLLAMORE, *op. cit.*, pp. 101-108. Collamore also addresses the provenance and relationships of the same sources (again with the exception of Toledo 35.9 which is not included in her study). She places Toledo 44.2, Huesca 2 and Huesca 7 into a 'Spanish group' of Aquitanian manuscripts, also identifying other influences for the first and last of these, and concludes in regard to Toledo 44.1 that it 'represents the Midi tradition, but with the Iberian influence current in Catalonia.' See L. COLLAMORE, *op. cit.*, especially pp. 308-312.

matins to that of Zamora A. They are also included in the Braga breviary for this matins but not with the identical positioning; searches have not located these two antiphons for the same day in any further source.¹⁹ Other findings show usage characteristic of Aquitanian practices more broadly. These are firstly two responsory verses both rare beyond Aquitanian sources: one is the verse *Sana me* for the responsory *Domine ne in ira* found as the second responsory of the first nocturn of Sunday; and the other is the verse *Deus ne elongeris* for the responsory *R[e]pleatur os meum* which occurs as the second responsory in Thursday Matins.²⁰ The single legible invitatory tone incipit (used for Thursday and Friday) is of interest as well. This is shown below.²¹ It is unusual, but appears related to one found in Braga sources, and also to another in Silos 9, all probably being connected to a tone in common and widespread use for ferial offices.²²



Other texts in Zamora A appear to demonstrate difference in relation to Aquitanian and other sources. As an example is the case of the first two responsories for Friday (the last chants in the source): *Domine deus propicius V. Adiuva nos deus* and *Cogitavi dies V. Memor fui dei* [sic]. CANTUS searches have revealed no other source using either on Friday, although a small number, including Aquitanian sources, are found with these on Thursday.²³ An anomaly occurs with the invitatory antiphons of Thursday

¹⁹ CANTUS accessed 25/9/2004. On the two chants see also L. COLLAMORE, *op. cit.*, pp. 252, 405, 421 and 572. For the Braga breviary, Pedro Romano Rocha, *L'office divin au moyen âge dans l'église de Braga*, Paris: Fundação Calouste Gulbenkian, 1980, pp. 90-91.

²⁰ Collamore, in *op. cit.*, draws attention to *Sana me* as an Aquitanian chant (p. 116, see also p. 463 for a list of its sources), and to *Deus ne elongeris* (pp. 116 and 465). CANTUS accessed 27/9/04. As the first part of the text of *Repleatur os meum* is largely illegible, the opening has had to be assumed from the first letter and later text.

²¹ Zamora A, Perg. mus. 196, fol. 2v.

²² Unlike the Braga and Silos 9 tones, that of Zamora A for Thursday has to be read as moving up to c, not to the b flat or b of the other two named. (The Zamora A incipit for the tone on Friday is further abbreviated to just the first three notes.) For the Braga tone, see 'Ven 2' in Manuel Pedro FERREIRA, «Braga's Invitatory Tones», in *Cantus Planus: Papers Read at the 9th Meeting Esztergom & Visegrád*, 1998, Budapest: Hungarian Academy of Sciences, 2001, pp. 140-141. For Silos 9 tone incipit, see L. COLLAMORE, *op. cit.*, p. 378, type 'FX'.

²³ CANTUS accessed 27/9/04. The Aquitanian sources with both responsories on Thursday are Toledo 44.1 and Paris 1085, but only the former has both verses as in Zamora A. The verse *Memor fui dei* is found only once in CANTUS, that being in Toledo 44.1 with *Cogitavi dies*.

and Friday, as the same antiphon, *Dominum qui fecit*, is given for both days. *Dominum qui fecit* is commonly employed for the ferial Friday matins, but not for both days in a single manuscript.²⁴

Turning now to the notation of Zamora A, it may be asked whether the notator of Zamora A – perhaps working somewhere in northwestern or more central parts of the Iberian Peninsula – had a model from which he faithfully copied notational details, or whether he applied his own system of notation or a local one. Whatever the case, in general the notator employed the typical forms and methods of Aquitanian notation of the period. As was common practice, his work was oriented to the single dry-point line and was without clefs. Using the single line, he was in general able to achieve a good degree of diastemata, employing custodes where chants continue onto a new line.²⁵ The form of the custos is a common one with sinistral head and resembling a comma. See Plate 2. The notator followed the usual conventions of Aquitanian notation in choice of pitch allocated to the single line, placing the third on the line for authentic mode chants, and the final for plagal chants, although, as is also known in other sources, placing the second, F, on the line for mode 4. The notator however went outside the usual conventions of the time in applying his method for indicating the semitone as is discussed below. With three signs (quilisma, semicircular virga, and special punctum) he was able to mark the lower note of the semitone as it occurred in a good variety of melodic contexts. This method differed from that of the most famous of the semitone marking Aquitanian sources, the eleventh-century Gradual of St. Yrieix, Paris 903. Employing a range of semitonal signs mostly falling on the lower note of the semitone, the method of Paris 903 was not to become standard and does not appear to have been found in its entirety in any other manuscript.²⁶ Nevertheless, one of its semitone marking signs, the quilisma placed on the lower semitone note, was by at least the later twelfth-century in relatively common use in Aquitanian notation. The use of other semitonal signs during the twelfth-century does not appear to have been regular, but was by no means unknown. Sources from this time and earlier with a variety of semitonal signs will be returned to below.

²⁴ CANTUS accessed 26/9/04.

²⁵ The notator does not appear however to have used the custos consistently. The custos form of Zamora A and other similar ones are shown in K. E. NELSON, op. cit., pp. 93-94.

²⁶ The method of Paris 903 was detailed by Paolo FERRETTI, «Étude sur la notation aquitaine d'après le Graduel de Saint-Yrieix», in *Paléographie musicale*, vol. 13, *Le codex de la Bibliothèque Nationale de Paris (Xie siècle): Graduel de Saint-Yrieix*, 1925, pp. 165-76.

In Zamora A, the semitonal signs are placed only at the lower pitch of the semitone on the notes *e* and *b*, and there appears also to be one instance on *a* in association with *b flat*.²⁷ The use of the signs assists the reader but does not remove all ambiguity of pitch and does not indicate all instances of the lower semitone pitch.²⁸ Moreover, the semitone interval itself is not always present when the two signs other than the quilisma are used. Further details of usage vary for each of the signs and are discussed below.

The semicircular virga is the most unusual of the signs of Zamora A.²⁹ It always occurs on *e* or *b* as the second note of a major second. In this, the source is very unusual and I have been unable to find any other source of Aquitanian notation that uses this virga to mark the lower note of a semitone. Paris 903 also employs the semicircular virga, but there it signals the top note of the semitone interval and is always placed on *c*, *f*, and occasionally *b flat*.³⁰ In Paris 903, another form of virga, the virga cornue, occurs in the lower semitone position where it may appear as the top note of a pes covering a major second or larger interval, or in other contexts.³¹ The *virga cornue* is not used in Zamora A; however, the use of the Zamora A semicircular virga resembles that of the Paris 903 *virga cornue*. The notator of Zamora A placed the semicircular virga at the top of rising neumes, most often as the second note of a pes, and occasionally at the top of a scandicus or other group. Also occasionally it occurs within a longer group of notes, but with the same

²⁷ The chant in which the *a - b flat* relationship has been tentatively identified is the mode 6 antiphon *O admirabile commercium*. The flattening is read from the use of a special punctum on *a*. See Plate 2, line 7, 2nd syllable of 'corpus'. This example of the sign is less curved than its normal form in Zamora A. Modal identification of the chants for this study has been made through the identification of antiphon differentiae and responsory verse tones, and comparison with other manuscripts, as well as being assisted by the possibility of checking the mode of many chants as listed in the on-line CANTUS. The mode of a small proportion of the chants was not able to be identified with certainty, and so there are a small number of instances of each of the neumes which have not been included in my study.

²⁸ This is also true of Paris 903 where despite the consistency of its method of semitone indication, not all semitones are marked.

²⁹ Ferretti in his discussion of Paris 903 employed the term '*virga «semi-circulaire»*' for the sign, the name reflecting the form of the sign. See P. FERRETTI, *op. cit.*, pp. 154 and 166.

³⁰ Other sources with the same usage of the semicircular virga as Paris 903 appear to be very rare. Solange Corbin identified a fragment in Braga, written in Visigothic script and Aquitanian notation, which employs the semicircular virga. Her commentary suggests that she believed the sign in this fragment to have the same meaning as in Paris 903. See Solange CORBIN, *Essai sur la musique religieuse portugaise au moyen âge (1100-1385)*, Paris: Société D'Édition «Les Belles Lettres», 1952, pp. 236-237. Suñol suggested the Paris 903 use of the semicircular virga in a manuscript from the Spanish monastery of Valvanera; however, this example seems better interpreted as representing the more commonly occurring usage of the sign where it is without semitonal significance. See Grégoire M. SUÑOL, *Introduction à la paléographie musicale grégorienne*, Tournai, 1935, pp. 263-64.

³¹ P. FERRETTI, *op. cit.*, pp. 169-70, 172-74. The *virga cornue* is also employed for the lower semitone pitch in some other sources of Aquitanian notation, see below for this in Paris 1139.

characteristics of placement. Unlike the Paris 903 *virga cornue*, the Zamora A semicircular virga is not used at the top of intervals larger than a second. A final point regarding the context of the Zamora A virga is important. This is that the note following the semicircular virga, usually the first of the next syllable, can be of variable pitch. This last point further distinguishes Zamora A from many other sources which mainly or only use a semicircular virga when it is to be followed by a note of the same pitch; such sources do not employ the sign with any semitonal significance.³² How then might one explain the curious use of the semicircular virga in Zamora A? Perhaps the notator substituted it for the *virga cornue*, a virga used in Paris 903 and elsewhere for the lower semitone pitch. If so, it is not apparent whether this might have been the result of a choice, or of a mistake. The plates show several instances of the semicircular virga of Zamora A.

The special punctum in Zamora A has a curved form sometimes with a short tail descending on the right.³³ See especially Plate 2. Always occurring on the semitone position already identified, the special punctum is used in a variety of contexts, most frequently standing in isolation or at the end of a descending neume. The upper note of the semitone immediately precedes the special punctum at the end of descending neumes but is not always present when the sign appears in isolation. In isolation it is particularly noticeable in the more syllabic chants. Although not commonly found, the employment in Aquitanian notation of the special punctum with semitonal significance and in a variety of forms is recognized elsewhere. Its use was made well known in Portuguese sources by Solange Corbin who used it to identify a Portuguese style of notation, and its presence in southern French sources has been made known more recently by Marie-Noël Colette.³⁴ These sources will be returned to in the concluding section of this paper. The use of the sign in Spanish sources of Aquitanian notation has however been much less apparent.³⁵

³² This usage was remarked by P. FERRETTI, *op. cit.*, p. 173, n. 1. Spanish sources employing this type of semicircular virga include Toledo 44.2 and Aemil. 45. Further detail on its usage in Spanish sources will be reported in another paper I am currently preparing.

³³ During my earlier study of this source (in K. E. NELSON, *op. cit.*), I did not identify this sign. Not initially obvious, it became apparent on closer examination during the course of preparing the present study.

³⁴ S. CORBIN, *op. cit.*, especially pp. 251-258; Marie-Noël COLETTE, «La notation du demi-ton dans le manuscrit Paris, B. N. Lat. 1139 et dans quelques manuscrits du Sud de la France», in *La tradizione dei tropi liturgici*, Spoleto: Centro Italiano di Studi Sull'Alto Medioevo, 1990, pp. 297-311. The term I use here 'special punctum' is drawn from Colette's expression 'forme spéciale de point'. Corbin used the names 'virgule' and 'losange'.

³⁵ A sign which might be identified as a special punctum was discussed by Suñol, who described it as 'une sorte d'*apostropha*', employed for the lower semitone position in a source from La Massana,

The third semitone marking sign of Zamora A is the quilisma. It is also one of the Paris 903 semitonal signs.³⁶ The quilisma is probably now the best known semitonal sign in Aquitanian notation, having been employed in this way in many of its sources and especially in those from the twelfth-century and later. The semitonal usage places the quilisma on the lower note of the semitone at the centre of a pattern of three rising notes usually covering a minor third, the three-note group either associated with a single syllable or part of a longer melisma.³⁷ The employment of the sign in Zamora A conforms to these characteristics of usage. It was the semitone marking sign used most frequently by the notator, and as such might have been viewed as the foundation of his method. Examples of the use of the quilisma are particularly found in the responsories of Zamora A and may be seen in Plate 3.

Examination of a number of other Aquitanian sources associated with Spain suggests that, amongst these, the placement of the quilisma on the lower note of the semitone only became regular from about the middle of the twelfth-century. Zamora A is therefore representative of this stabilising usage. In four major sources dating from the eleventh through to the early twelfth-century (Toledo 44.1, Huesca 1, Aemil. 51, and Ripoll), the quilisma is observable on a wide variety of pitches with the three-note quilisma group covering ascending major and minor thirds, and occasionally wider intervals. The later firm association with the semitone was not yet in place.³⁸ Toledo 44.2, from the late eleventh- or early twelfth-century, is an early example of a Spanish source in which the quilisma may have been restricted to the typical semitonal placement at the centre of a three-note movement with the semitone at the top.³⁹ (Of course the restriction to

Andorra (Montserrat, Biblioteca del Monasterio, ms. 790/111). He pointed out that the notation of this source mixes Aquitanian and Catalan methods. See G. M. SUÑOL, *op. cit.*, pp. 264, 269, and 279.

³⁶ P. FERRETTI, *op. cit.*, p. 176.

³⁷ On the quilisma in Aquitanian notation and Spanish sources, see Carmen RODRÍGUES SUSO, *La monodía litúrgica en el País Vasco: Fragmentos con notación musical de los siglos XII al XVIII*, 3 vols, Bilbao: Bilbao Bizkaia Kutxa, 1993, vol. II, pp. 503-6; and K. E. NELSON, *op. cit.*, pp. 87-88.

³⁸ This type of quilisma usage resembles that in other early notations in which it is found with both minor and major thirds. It has been suggested that it indicated an ornament, and in a recent study M. P. Ferreira has suggested its function as as microtonal inflection. See Manuel Pedro FERREIRA, *Music at Cluny: The Tradition of Gregorian Chant for the Proper of the Mass. Melodic Variants and Microtonal Nuances*, Ph.D. diss., Princeton University, 1997, pp. 255-58.

³⁹ In his valuable study of Toledo 44.2, Olexy read the quilisma groups of Toledo 44.2 falling on the pitches *g-a-b* as major thirds, and therefore as exceptions to the normal semitonal quilisma usage of the manuscript. His observation on this matter seems however not entirely convincing and the meaning of the signs in this position warrants further consideration. See Ronald Thomas OLEXY, *The Responsories in the 11th Century Aquitanian Antiphonal Toledo*, Bibl. Cap. 44.2, Ph.D. diss., Catholic University of America, 1980, pp. 64-66.

semitonal usage of the quilisma was already present in the eleventh-century Paris 903 as noted above.) Among Spanish manuscripts of Aquitanian notation, at least, the semitonal association appears to have become increasingly prevalent during the twelfth-century. Dated to the second half of the twelfth-century, a fragment from Zamora now located in the Archivo Histórico Nacional of Madrid shows the earlier style of quilisma usage with major and minor thirds;⁴⁰ this is the latest source I have found with the non-semitonal usage.

Finally in this discussion of notation in Zamora A, it is also relevant to comment on the choice of F rather than E as the pitch of the line used for mode 4. While this choice was not exceptional, it might be argued that the notator's interest in semitone indication could have influenced his decision in favour of F. This had also been the choice of the notator of Paris 903. The mode 4 use of F was the single regular exception to the pattern commonly employed for the one-line staff of Aquitanian notation which required the final to be placed on the line in plagal mode chants.⁴¹

Observations of the mode 4 line in a range of Spanish sources of Aquitanian notation show a trend away from E towards F. Among twelfth-century manuscripts examined, both E and F lines are found for mode 4, but from the thirteenth-century, the F line became the standard for mode 4 in single line sources.⁴² Why this change took place is not clear. It is notable however that the move to the F line was occurring at the same time as the move to the semitonal quilisma among the Spanish sources, but it is also important to remark that during this transitional period the two features were not necessarily employed together. There are sources with the semitonal quilisma and the E line (Toledo 44.2 being an important example and probably also Aemil. 45), but I have yet to find a manuscript displaying both

⁴⁰ Madrid, Archivo Histórico Nacional, Códices 1455 B-5. The dating and origin is that given by José JANINI, *Manuscritos litúrgicos de las bibliotecas de España*. Vol. 1 Castilla y Navarra, Burgos: Aldecoa, 1977, p. 178.

⁴¹ The pattern in Paris 903 is discussed in P. FERRETTI, *op. cit.*, pp. 160-162, and more generally for Aquitanian notation in Bruno STÄBLEIN, *Schriftbild der einstimmigen Musik, Musikgeschichte in Bildern*, vol. 3, pt. 4, Leipzig: VEB Deutscher Verlag für Musik, 1975, pp. 41, 56. See also C. RODRÍGUES SUSO, *op. cit.*, pp. 521-2. Colette has referred to a gradual move away from the modal pattern occurring in Aquitaine and perhaps influenced by Guido of Arezzo's thinking. See M.-N. COLETTE, *op. cit.*, p. 309.

⁴² The E line is employed in the late eleventh or early twelfth century Toledo 44.2 (R. T.OLEXY, *op. cit.*, p. 41). Rodríguez Suso's study of fragments in the País Vasco found only a single folio of the late twelfth century to employ E for mode 4, a characteristic she attributes to its relatively early date (C. RODRÍGUES SUSO, *op. cit.*, p. 522). Similarly, amongst the documented collection of Zamoran fragments only the two earliest (from the 1st half of the twelfth century) use an E line for mode 4 (K. E. NELSON, *op. cit.*, p. 84).

the non-semitonal quilisma and the F line.⁴³ Given these observations and remembering the use of the F line in Paris 903 (as well as in the twelfth-century Zamora A), it can be proposed that the change to the F line may have resulted from a mix of factors associated with interest in semitonal signification. The use of the mode 4 F line certainly allowed for easy recognition of that mode with its distinctive placement of the final a second below the line, and it resonated with the emphasis placed on the upper semitone positions of F and C by Guido of Arezzo who recommended the colouring of lines on those two positions in the early eleventh-century.

Returning then to Zamora A, its use of both the F line and the semitonal quilisma have been noted, these being features which were both moving towards becoming standard. As has also been noted, in other pre-thirteenth-century sources associated with Spain, these two elements of the emerging system of one-line Aquitanian notation did not always occur together. The notator of Zamora A was making modern choices.

The semitone signs in Zamora A take further significance from the clues which they suggest for understanding the transmission of the notator's practice. The signs connect the source with various eleventh and twelfth-century manuscripts from the region of Limoges including the unique Paris 903 (as already seen above), and a group identified by Marie-Noël Colette as using the semitonal special punctum, the main one of which is Paris 1139.⁴⁴ Much like Zamora A, Paris 1139 also employs three signs to mark the lower note of the semitone, these being the quilisma, the special punctum, and the *virga cornue* (not the semicircular virga).⁴⁵ Paris 1139 is thought by Colette to be possibly the earliest source to utilize the semitonal special punctum, its oldest sections perhaps dating from as early as the end of the eleventh-century.⁴⁶ Another group of sources from Moissac also utilizes the semitonal punctum.⁴⁷ Particularly noteworthy for Zamora A, are twelfth- and thirteenth-century Portuguese sources notated in Aquitanian notation which also make use of the semitonal punctum.⁴⁸ The earliest of these is the Missal

⁴³ Preliminary study suggests that Aemil. 51 employs an E line with the non-semitonal quilisma. Two early sources associated with eastern Spain, Toledo 44.1 and Huesca 1, appear to employ the non-semitonal quilisma without a visible staff line.

⁴⁴ M.-N. COLETTE, *op. cit.*, pp. 301-2, 307-8.

⁴⁵ *Ibid.*, pp. 301-2.

⁴⁶ *Ibid.*, pp. 298, 308.

⁴⁷ *Ibid.*, pp. 305-6.

⁴⁸ The semitonal punctum in the thirteenth-century Pontifical of Braga (Lisbon, Bib. Nac., Cod. Alcobaça 162) was discussed by S. CORBIN, *op. cit.*, pp. 184, 251-3, who believed it had been copied 'dans la Péninsule' and classified its notation as Portuguese because of its use of the sign. It has

of Mateus, a book of significance for the history of the Roman rite in Braga, and thought to have been brought there after the middle of the twelfth-century. Although its precise origins are not known with certainty, the information which has been gathered by various scholars strongly associates it with the same southern French regions in which the semitonal special punctum has been found. According to Joaquim Bragança, the Missal of Mateus dates from the 'second quart du XIIe siècle' and is likely to have been copied in Limoges; its liturgical practices closely connect it with the region of Moissac.⁴⁹ For Colette, this book may have been very important in the transmission of the special punctum into Portuguese territory.⁵⁰

Zamora A adds to the developing picture of transmission. Although it is still not possible to give definitive conclusions about the origins of Zamora A, the presence of the special punctum and the interest in semitone indication are certainly suggestive of links with the Missal of Mateus and other Portuguese sources, and with those of the Limoges and Moissac regions. The presence of the Iberian features of rubric abbreviation decoration and handwriting, and the suggestions of Iberian chant practices point to Zamora A having been copied on the Iberian Peninsula and most probably in a northwestern or central part of the Peninsula. Perhaps Zamora A was copied within Portugal, even within the sphere of influence of Braga and the Missal of Mateus. Alternatively, the notational practice from the regions of Limoges and Moissac, with a strong concern for marking the lower note of the semitone, may have been more widespread than has been realised. Practices could have been spread by other books now lost or not yet identified, by southern French clergy who requested or supervised preparation of books, or by the notators themselves. Our understanding of transmission of notational

recently been pointed out that the semitonal punctum on *e* and *b* is also found in the twelfth-century Pontifical of Braga (Porto, Bibl. Mun. ms. 1134) and in another Pontifical (Porto, Bib. Mun. ms. 353); see Thomas Davies KOZACHEK, *The Repertory of Chant for Dedicating Churches in the Middle Ages: Music, Liturgy, and Ritual*, Ph.D. diss., Harvard University, 1995, pp. 211-12, fn. 69. The origins of these sources are discussed by J. Bragança who dates the early Pontifical of Braga to the last quarter of the twelfth century, and Porto, Bib. Mun. ms. 353 (the so-called Pontifical of Santa Cruz de Coimbra) to the second half of the same century. See Joaquim O. BRAGANÇA, «L'influence de la liturgie languedocienne au Portugal (missel, pontifical, rituel)», in *Liturgie et Musique (IXe-XIVe s.)*, Cahiers de Fanjeaux 17, Toulouse: Privat, 1982, pp. 175-80, 182.

⁴⁹ J. O. BRAGANÇA, *op. cit.*, pp. 174-5. The priory of Bayne in the vicinity of Moissac has been suggested as the destination of the Missal of Mateus by Manuel Pedro FERREIRA, «As Origens do Gradual de Braga», *Didaskalia* 15, 1995, pp. 70-72.

⁵⁰ M.-N. COLETTE, *op. cit.*, p. 306, writes «le Missel de Mateus peut être considéré comme l'importateur privilégié du signe». The earliest of the Portuguese sources identified by Corbin with the special semitonal sign was the probably early twelfth-century Pontifical of Alcobaça, (Lisboa, Biblioteca Nacional, Alcobaça 162). See S. CORBIN, *op. cit.*, pp. 250-53.

practices into and within Portuguese and Spanish territories during this period is far from complete; it can be expected that further studies of sources of the late eleventh-, twelfth-, and early thirteenth-centuries are likely to show more notational details of interest and relevant to this question.

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APPENDICES

APPENDIX 1. Manuscript abbreviations

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| Aemil. 45 | Madrid, Biblioteca de la Real Academia de la Historia, Aemil., cód. 45 |
| Aemil. 51 | Madrid, Biblioteca de la Real Academia de la Historia, Aemil., cód. 51 |
| Huesca 1 | Huesca, Archivo de la Catedral, Ms. 1 |
| Huesca 2 | Huesca, Archivo de la Catedral, Ms. 2 |
| Huesca 7 | Huesca, Archivo de la Catedral, Ms. 7 |
| Missal of Mateus | Braga, Arquivo Distrital, Ms. 1000 |
| Paris 903 | Paris, Bibliothèque Nationale de France, lat. 903 |
| Paris 1139 | Paris, Bibliothèque Nationale de France, lat. 1139 |
| Ripoll | Paris, Bibliothèque Nationale de France, lat. 742 |
| Silos 9 | Silos, Archivo del Monasterio, Ms. 9 |
| Toledo 35.9 | Toledo, Biblioteca Capitular, Ms. 35.9 |
| Toledo 44.1 | Toledo, Biblioteca Capitular, Ms. 44.1 |
| Toledo 44.2 | Toledo, Biblioteca Capitular, Ms. 44.2 |
| Zamora A | Zamora, Archivo Histórico Provincial, Perg. mus. 196, 199, and 200 |

APPENDIX 2. Notes to Plates

Plate 1: from Zamora, Archivo Histórico Provincial, Perg. mus. 196, fol. 2v (upper right quarter)

(This is an enlargement of part of the same section reproduced in Nelson, *Medieval Liturgical Music*, Plate 1.)

Shows the series of antiphons for Thursday Matins. Note the decorated abbreviations for the letter ‘a’ for antiphon.

Plate 2: from Zamora, Archivo Histórico Provincial, Perg. mus. 200, fol. 1v (lower right)

Includes the first two antiphons for Lauds on the Octave of Christmas.

O admirabile commercium: in mode 6 with the final of *f* placed on the faintly observable line.

Quando natus est: this has been read as mode 3, with *g* on the line. The absence of the immediately following folio means the differentia is unavailable to confirm this reading.

The following notational features may be observed.

Semicircular virgae: line 9, 2nd syllable of ‘natus’ (the preceding punctum is partially obscured); line 10, last word, 1st syllable of ‘scrip[ture].’

Special puncta: line 7, isolated on 2nd syllable of ‘corpus’; line 8, 2nd note of clivis on ‘sine’; line 10, isolated on 2nd syllable of ‘implete’.

Custodes (lightly visible): end lines 1, 7 and 8.

Plate 3: from Zamora, Archivo Histórico Provincial, Perg. mus. 199, fol. 2v (lower right)

From the final page of the source showing part of Matins for Friday including its second responsory, the last chant in the source.

Cogitavi dies antiquos V. Memor fui dei: in mode 8 with the final on the line.

See examples of the quilisma and the semicircular virga.



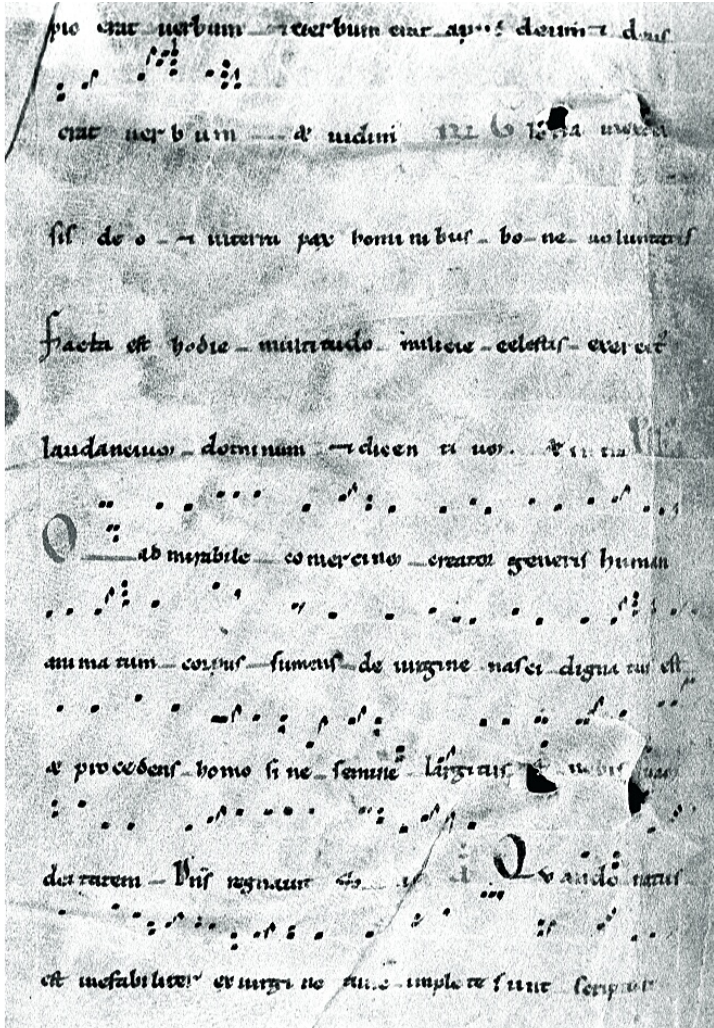


Plate 2

Que autem ex fide et iustitia sit deus
 in corde tuo quod ascendat in celum id est deducere christum. Aut quod descendat
 in abissum hoc est christum ex mortuis revocare
 sed quod est deus scriptum. Prope est illi in
 tuo in corde tuo. hoc est ubi fidei quod
 predicamus. Quia si crederemur more la-
 dum ipsum in corde tuo crederemur quod deus
 illum resuscitavit a mortuis factum est.

Cogi te in deum quod non timor are
 mege habui et mortuus sum in hoc te no-
 cor de me o. et dixi misere re deus

Memor fui de i. et de la. et tuu tuor ex
 de fecit spiritui tuu

Corde enim creditur ad iustitiam
 aut confessio fit ad salutem. Deum in iustitia
 tum. Omnis qui credit in illum non confundetur.

Plate 3