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Image-based Edition of Notated
Manuscripts Belonging to the *Carmina*
Cantabrigiensia Tradition

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ABSTRACT

My work aims at creating an image-based digital edition of notated manuscripts belonging to the collection of the *Carmina Cantabrigiensia* by means of a *software* called *Image Markup Tool* (IMT), which allows the text-image connection.

The first section is devoted to the description of the *Carmina Cantabrigiensia* anthology, analysing the role of the neumatic notation during the Middle Ages, and taking into account the 36 notated manuscripts, actual part of the project, recovered in several Italian and European libraries.

The second section deals with the theoretical aspects of the digital humanities, considering the role of the *New Philology*, several European and Italian projects, and the description of the markup languages to encode metadata, from the born of SGML until the release of XML and the TEI.

The last part of the work is dedicated to the description of the tool used for the realization of my digital edition, along with all the features of this project. The user is provided not only with the diplomatic and the critical edition of each text, but also with the description of the single neumes located on its lines. The critical apparatus has been shaped as a philological commentary, in order to better understand the *Carmen* from both a linguistic and historical points of view. Advantages, as well as possible drawbacks of my project are considered, connecting it with other works realised with the same tool.

INTRODUCTION

This work deals with an ambitious project: the creation of an image-based edition of notated manuscripts belonging to the *Carmina Cantabrigiensia* tradition. It aims at being not only an instrument to allow the direct consultation of these manuscripts within the digital domain, but also at being considered as a valid critic edition.

It has been realised taking into consideration a total number of 36 manuscripts, all of them showing neumatic notation on their lines. The project found its starting point in the poetic anthology known as the *Carmina Cantabrigiensia*. This collection shows a particular focus on the musical sphere; nevertheless, only two poems on it present neumatic notation on their lines. For that reason, the tradition outside the Cambridge manuscript has been investigated, in order to collect the highest number of notated witnesses possible. Those have been then analysed from a linguistic and historical point of view, in order to provide a comparison with the Cambridge sylloge whenever possible.

The first chapter of this work is meant as an introduction to the process of realisation of the digital edition. Therefore, this first part has the main goal to introduce the Cambridge manuscript, containing the *Carmina Cantabrigiensia* anthology in one of its gatherings. Besides this collection, the Frankfurt leaf has been considered as another important basis for my project. Officially part of the Cambridge manuscript since 1982, it can be regarded as the musical fulcrum of the whole sylloge, since it shows a large number of notated lines ascribed into the Boethian tradition of the *De Consolatione Philosophiae*.

Thus, considering the important role played by music within this anthology, and in general during the Middle Ages, a second part of this chapter will be devoted to an analysis of medieval musical notation. The origin of neumes will be taken into account, as well as their role in medieval manuscripts and, in particular, on excerpts of classical authors as Virgil, Statius, Horace and Boethius.

The last part of the chapter, instead, is focused on a philological analysis of all the manuscripts that have been included into the digital edition. Each of them has been provided with a philological commentary and a table specifying their Incipit, language, content and all the witnesses handing down the text in question. It has been considered advisable to specify all the notated witnesses, albeit only the effectively recovered ones, highlighted in yellow, are provided with the commentary and taken into account for the realisation of the electronic edition. In view of a hypothetic further development of this topic, in fact, these information may be useful to implement the current work.

Afterwards, the digital philology will be considered from a more theoretic point of view, accounting for the shift from a printed to a digital textual representation. Therefore, the aim of the second chapter of my work is to introduce the field of the Digital Humanities from a theoretical point of view.

In fact, a starting point for my analysis is the birth of the new philological approach known as the *New Philology*. It changed the way the medieval text was considered, letting it be more suitable for a digital representation.

Afterwards, several digital editions projects will be taken into account, from the pioneering ones until the most recent works. In describing them, criteria not only to produce but also to judge an electronic edition will be considered and discussed, taking into consideration studies about the advantages, as well as the drawbacks of these works. Thereupon, attention will be paid to the introduction of three theoretical models, which have been used for developing digital editions or digital collections: the *hypertextual representation*, the *encoded model* and the *database model*. Three different subchapters are devoted to their further analysis, providing examples for their explanation. Works as the *Parzival Projekt (2007-2010)*¹ edited by Stolz and the *Corpus Rhythmorum (2007)*², realised by Stella will be cited in considering the hypertext due, in particular, to their critical apparatus interactive nature. Regarding the encoded model, instead, the following subchapter will present a short history of the development of markup languages, from the rise of SGML until the release of the TEI, through which the largest number of projects ascribed into the Digital Humanities have

1 <http://www.parzival.unibe.ch/home.html/>

2 <http://www.corimu.unisi.it/>

been realised. Finally, along with the description of the database model as the fulcrum of the Italian projects ALIM³ and TLIO⁴, the new electronic paradigm of digital libraries will be introduced and analysed. Become a stable alternative to the archive model, digital libraries will be investigated through the most significant European projects.

The last section of this chapter, instead, is dedicated to the description of two important Italian projects: The *Ramusio project (2015)*⁵, coordinated by Burgio, Buzzoni and Ghersetti, and the *Corpus Rhythmorum (2007)*, edited by Stella and Barrett. The main advantages of these digital editions will be discussed, with a deeper emphasis on some of their features: in particular, the critical apparatus and the searching functionality. The latter has been described in connection with the new field of the *Information Visualisation*, which aims at providing the user with a more generous searching interface. In this way, both a generic and an experienced user might use this functionality, able to reach a wider audience than before.

Both projects have been taken into consideration for two main reasons. Firstly, they have been ascribed into a broader international landscape devoted to the field of the Digital Humanities; secondly, they were chosen because of their importance within this field of studies. In fact, they have been the first Italian digital editions to be published on the Web. Therefore, it would be useful to consider them to better understand the advantages they took in this field and, consequently, the role they play in it.

The third chapter closes my work; its main purpose is to introduce and analyse the image-based digital edition of notated manuscripts belonging to the tradition of the *Carmina Cantabrigiensia*. As final goal of my project, it will be explained taking into consideration all its sections.

The analysis will be preceded by a brief description of some useful tools for creating both printed and digital editions. Firstly, I will introduce a *software* called CTE (1997)⁶, developed by Hagel, taking into consideration its advantages as well as its drawbacks. On the one hand, noteworthy is its user-friendly interface, suitable also for not experienced users. On the other hand, a negative aspect is an impossibility to

3 <http://www.alim.dfl.univr.it/>

4 <http://tlio.ovi.cnr.it/>

5 <http://virgo.unive.it/ecf-workflow/books/Ramusio/main/index.html>

6 <http://cte.oeaw.ac.at/?id0=main>

publish the final work, since the tool provides the user with no stylesheets for the Web visualisation.

Secondly, the *software* EPPT⁷, realised by Kiernan, will be taken into account analysing, in particular, the possibility to implement the XML TEI-compliant language in it with spatial coordinates for the encoded text and the facsimile image connection.

Lastly, an Italian visualisation tool, *Electronic Visualisation Tool* (EVT)⁸, used for the realisation of the *Digital Vercelli Book* will be introduced. Developed with the main purpose of enabling the text-image connection, its advantages are a user-friendly interface and no requirements in web programming, a part from the realisation of XSLT Stylesheets.

Starting with the description of these three programs, attention will then be paid to the consideration of another *software*, called *Image Markup Tool*⁹, developed by Holmes at the University of Victoria in Canada, and lastly updated in 2012. In realising an image-based edition, in fact, the *software* IMT might be useful in the case of an image-text connection at a diplomatic or interpretative level, since it requires no web programming skills and guarantees immediate results. Thanks to its user-friendly interface, even a not experienced user can easily learn how to use it.

The *software* works with *annotations* defining spatial coordinates; they are meant to be “drawn” on the image, and then to be connected with the text. This expedient allows the user simplifying a rather complicated process, and in this way, also the least experienced ones may have immediate results.

Notwithstanding, the *software* presents also some drawbacks. Firstly, the obligation of creating a fixed maximum number of eight categories is a clear limitation of this tool; moreover, it is also important to underline how the program does not allow working on more than one image at the same time. Consequently, the final visualisation will contain only one facsimile image with the connected text.

The analysis continues with a further explanation of IMT functionalities, applied to the creation of the image-based digital edition. In fact, the last part of the chapter is

7 <http://www.eppt.org/>

8 <http://sourceforge.net/projects/evt-projects/>

9 http://tapor.uvic.ca/~mholmes/image_markup/download.php

entirely dedicated to the presentation of my work, realised using this program. Several screenshots have been made, in order to explain, in the best way possible, how it works and which are the components it is made of. Each section of the digital edition will be introduced and explained, dwelling the most on some salient features, for instance, the *Line Transcription* and the *Neumes Description* sections, the fulcrum of the image-based edition, and also on the *Philological Commentary*. That might be considered a new way of presenting the critical apparatus, aiming at reaching a broader audience than before. Its main purpose is to overcome the difficulties in reading and understanding both positive and negative traditional apparatus.

At the end, the criteria, through which the work has been realised will be specified, in order to ensure the highest level of validity and scientific efficacy of my work.

CHAPTER I

1.1 *The Cambridge Songs*

The most copious number of Latin lyric and metrical texts copied astride the eleventh and the thirteenth centuries are gathered into four main sylloges: *Carmina Rivipullensia*, *Carmina Arundelliana*, *Carmina Burana* and *Carmina Cantabrigiensia*. The last one, known also as the *Cambridge Songs*, is a poetic sylloge preserved at the end of the manuscript Ca U.L. Gg. 5.35, kept by the University Library of Cambridge. The poetic collection, copied around the eleventh century, might be found in the gathering comprehending folii 432r-441v. The last dated entry refers to the death of Conrad II in 1039; therefore, the manuscript has been dated back before the Norman invasion in England in 1066.

The *Cambridge Songs* are an anthology, presenting different typologies of lyric and metrical texts. The collection was originally copied by Anglo-Saxon scribes in St. Augustine *scriptorium* in Canterbury, around the mid-eleventh century, and moved to Cambridge during the seventeenth century. Its origin might be linked both to the German and the English environment. Strecker (1926) assumed that it has been originally copied from a German poetic anthology, wrote in the lower Rhine's area, close to Cologne. In that period, important and deep political, religious and cultural relationships bound the German and the Anglo-Saxon environments. The opportunity, during which the sylloge was gathered together and moved to Canterbury, would have apparently been the visiting of Worcester's Bishop in the German city. Afterwards, in the Anglo-Saxon territory, it was added to other local poems, coming from different places as Germany, France, and Italy. They were assembled together, giving birth to an anthology, to which scholars referred as a European collection, an important means to study the lyric poetry during the eleventh and twelfth centuries.

Nevertheless, the connection with the German world might be still noticed in few poems of the *Cambridge Songs*, showing a macaronic language, in which the Latin

form is interspersed with a non-vernacular language: Old High German. That creates an alternation that will be typical of the second section of the *Carmina Burana*.

With regard to the origin of this collection, Strecker (1926) made an important assumption concerning the existence of an *Ursequenzsammlung*, followed by both Bulst (1950), and Lo Monaco (2010). According to them, it might be possible that the whole collection was copied, or at least influenced, by an already existent one. The hypothesis might be considered plausible, taking into account the multiple tradition of the Cambridge Songs. In fact, a large number of Carmina are attested not only in the Cambridge manuscript but also in other collections, for a complete number of twenty-six texts. For instance, four of them might also be found in the work *Sermones* I,5 by Sestus Amarcus, while other four Carmina are also attested in a *modi* collection gathered in the codex **Wo** in Wolfenbüttel.

Realised through the collection of poems coming from several areas of the European continent, the *Cambridge Songs* are characterized by texts differing in their form, function, and content. Although the religious component is eminent within the collection, some poems might be included in different categories; for instance, among them, it is important to note how some Carmina deal with political or even erotic contents. Lo Monaco (2010) proposed a taxonomy comprehending eight groups. According to the scholar, one can distinguish between religious, *vernalina*, narrative, *amatoria*, moral, musical, political and commemorative Carmina (Lo Monaco 2010). He assigned to a different category the excerpts from Vergil, Horace, Statius and Boethius. The thematic distribution of the *Carmina Cantabrigiensia* leads to the so-called *Horacian combination between delectatio and utilitas* (Ziolkowski 1998), an equivalence between the sacred and the profane.

Taking into account and briefly describing these categories, one can assume that a prominent number of texts, in total one third of the collection, are ascribed into the religious tradition. This nucleus contains five texts related to the liturgical sphere, three in connections with liturgical sources, two prayers for the Virgin Mary, three biblical poems regarding Christ, Rachel and David and three compositions about the German theologian Gottschalk of Orbais. Instead, few are the so-called *vernalina* Carmina, since only two of them are ascribed in this typology. Some scholars like Bradley (1985) tried

to place them in the tradition of the *Carmen Philomelaicum*, written by Eugenius of Toledo, in order to attribute the texts to the para liturgical sphere connected with figures of the Virgin Mary and Christ. In fact, their profane content might be significantly reduced, whether analysed through a religious interpretation. Continuing the analysis about the thematic component of this collection, another important nucleus is characterized by the narrative Carmina. Bisanti (2013) masterly draws their features, bringing them close to the genre of the French *fabliaux*, circulated in Europe before the twelfth century (Dronke 1993). This genre reflects into the middle Latin literature, so that it is possible to make the comparison with the Old French *fabliaux*. In particular, two considerations are noteworthy: on the one hand, the two genres might differ about their style: higher in Latin texts, while less formal in the French ones. On the other hand, they are rather similar in their content (Faral 1924). From this point of view, considering the comical features characterizing eight texts in the *Cambridge Songs* collection, it is possible to bring the two genres closer and to assume that these Carmina might be analysed as an instance of *proto-fabliaux*. Instead, only one text might be ascribed into a hagiographic tradition. That is *Quisquis, dolosis antiqui*, handed down by the Cambridge manuscript only and regarding the life of St. Basil the Great. It is considered the most ancient text dealing with the topic of the *Deal with the Devil*, which then has its highest point in the figure of Mephistopheles in Goethe's *Faust*.

In sharp contrast with the religious and hagiographic component of the sylloge are the six Carmina *amatoria*. Because of their content, some of them underwent a strong process of censorship that led to their partial destruction. For instance, the twenty-eighth poem of *the Carmina Cantabrigiensia* should have been a dialogic and bilingual Carmen, written both in Latin and in Old High German. Badly damaged is also *Iam dulcis amica uenito*, considered the most ancient love poetry of the Middle Ages. Its text was recovered thanks to other two witnesses (**Pa** and **Wi**), in which the poem survived. In the 1980s, Chevalier and Huglo proposed a theory to explain the reason why the Carmen was spared in the French and Austrian manuscripts. They focused on the possibility to interpret the poem through the religious text of the *Song of Songs*. Thus, that might be the reason why it underwent no censorship and consequently, it is still possible to read it in its whole length in those witnesses. From

this point of view, all of these poems, in fact, present allegories that might change their interpretation, widely restricting their erotic component, whether analysed through a religious lens. Meagre is, instead, the presence into the sylloge of gnomic poems. According to the taxonomy proposed by Lo Monaco (2010), only one Carmen might be considered part of this tradition. *Audax es, vir iuuenis*, a rhythmic abecedarius with a rich tradition outside the Cambridge manuscript. In fact, it is handed down through seven different *codices*. Considered an archaic text, its origin might be dated back to the Merovingian period.

On the contrary, another relevant nucleus of the *Cambridge Songs* concerns the musical Carmina. It is important to consider the way those texts circulated in the ancient times. Their diffusion was principally oral and, for this reason, they were often meant to be recited or sung by a *ioculator* in front of an audience. Music, in general, plays a rather important role in the collection, in which some texts are provided with adiaستمatic neumatic notation, which unfortunately does not allow us retrieving the modern melody. Besides the Cambridge manuscript, a large number of witnesses hand down those Carmina provided with neumes. That proves how probably **Ca** was copied from other notated manuscripts and how the scribe chose texts that might have been sung. In the Cambridge manuscript, the largest part of musical Carmina are focused on the Boethius' *De institutione musica*. Nevertheless, only *Aurea personet lira clara modulamina*, on strophe 3.4, *Quisquis, dolosis antiqui*, and *O admirabile Veneris idolum* show neumes on their texts, whereas the others were copied without any musical notation.

Considered as an outstanding group within the taxonomy proposed by Lo Monaco (2010), the thirty-one classical excerpts are linked to different works of Vergil, Statius, Horace and Boethius. These classical texts are connected with the musical sphere both in the Cambridge Songs and in their tradition. In fact, right beside the notated incipit of the Boethius' *metra* handed down by the Frankfurt leaf, thirty are the notated manuscript, which witness five of the classical poems showed by **Ca**. Often, the neumes are located on the Incipit or on salient passages of the texts. For instance, in *Tempus erat quo prima quies mortalibus aegris*, adiaستمatic notation might be found on the highest point of the laments: the speech of Aeneas on Hector's body.

The last category identified by Lo Monaco (2010) concerns political and commemorative Carmina. As already stated before, this collection has several connections with the German environment, including its political and cultural reality astride the eleventh and the twelfth centuries. In total, thirteen are the texts aiming at celebrating German kings or clerical exponents. Other manuscripts, handing down poems of this thematic nucleus, enrich the tradition connected with the so-called *Adelsliteratur*. In particular, it is worth remembering Codex **Wo** of Wolfenbüttel, witness of the carmen *Magnus Cesar Otto*. Connected with the celebration of virtues of the Ottonian dynasty, the text might be chronologically dated back between 996 and 1002. Moreover, the codex **Wo** hands down a text provided with neumatic notation on its first stanza. As already mentioned regarding the neumes in **Ca**, these adiaستمatic signs are not enough to reconstruct a modern melody. Thus, studies also referred to musical notes as a decoration tool, used on texts often used or read and therefore considered noteworthy.

Several are also the assumptions about the goals of the *Cambridge Songs*. Ziolkowski (1998) suggested how the manuscript might have been copied in order to be a useful teaching instrument for pupils and monks. Following this interpretation, it may be possible to explain the presence of simple or fragmentary neumatic notation. In fact, those signs should have had the main purpose of being a mnemonic tool to recognize and retrieve an already learned melody, rather than a means to allow monks to sing it, while reading the manuscript.

Another important issue concerns the total number of texts, which should be considered as part of this anthology. In fact, whilst the beginning of this collection is generally accepted, its end cannot be taken automatically for granted. The recovered Frankfurt fragment shed new light on this topic and, considering its excerpts, the number of poems included in the Cambridge collection will rise from 49 to 76. Moreover, according to Dronke, Lapidge and Stotz (1982) other seven poems, found at the beginning of the following gathering, between folii 442r-443r, might be added to it. Considering all these expansions, the final amount of texts will reach 83 items. Additionally, one can take into consideration also Ziolkowski's hypothesis concerning another missing leaf, containing the remaining 12 *metra* of *De Consolatione*

Philosophiae by Boethius. Thus, the total number of poems might be even higher.

The *Cambridge Songs* may rely on a solid editorial tradition. In fact, three important critical editions were published in the last century. They were realised respectively by Strecker (1926), Bulst (1950) and Ziolkowski (1998). To these works might be added the more recent edition realised by Lo Monaco (2010), in which the scholar proposed for the first time the translation of the *Cambridge Songs* in the Italian language. All of them were a precious aid in the analysis of the recovered texts and in the realisation of this digital edition.

1.2 *The Frankfurt leaf*

According to Strecker (1926) and Bulst (1950), the *Cambridge Songs* collection comprehend 49 poems, corresponding to folii 432r-441v of the Cambridge manuscript. Their hypothesis is based on palaeographic evidence that all of them were written by scribe A, while other hands seem to have copied other gatherings of the same manuscript. Nevertheless, this assertion has to be readjusted. In fact, a study aiming at comparing the manuscript foliation between the fifteenth and the current century, showed how some leaves of the last gathering were missing. One of them was recovered in Frankfurt around the 1980s and brought to the attention of Gibson, Lapidge and Page by Dr Powitz, the Keeper of Manuscripts in Frankfurt. It was apparently removed and taken to the German city in the second half of the nineteenth century.

This small piece of parchment might be considered the remnant part of a conjugate bifolium. Several of its features bring it closer to the Cambridge manuscript. Firstly, it was ruled in two columns of forty lines each, like in the *Cambridge Songs*; its ink as well reminds of the Cambridge collection, since it presents a dark brown colour, with red or brown rubric initials. Punctuation marks are also congruent with the Cambridge manuscript and include punctus (.), periodus (. ,) and double periodus (. , . ,). However, in order to connect it definitely to the sylloge of *Carmina Cantabrigiensia*, scholars took its writing into consideration. Thus, from a palaeographic point of view, it was written in an Anglo-Caroline minuscule, dated back

the mid-eleventh century. The scribe, who copied the leaf in question, used to write margin letter later, in order to rubricate them and to separate run-over texts by means of paratextual elements, as geometric figures. In that, Page (1983) recognised the hand of scribe A, who is supposed to have copied the whole Cambridge collection. Once discovered, the leaf has been then reunited within the manuscript in 1982, thanks to Dr. Powitz, who generously returned it to the University Library in Cambridge, where it is nowadays kept awaiting for an eventual rebinding.

Known as Frankfurt leaf, it contains twenty-seven passages of opening lines from *De Consolatione Philosophiae* by Boethius. The first two *metra* (Book I, Meter I-II) have been reported completely, whereas the other ones show only a few initial lines. Six of them are provided with neumatic notation on their Incipits. This leaf represents the proof of the importance of Boethian *metra* in the Anglo-Saxon England. The question point, however, remains to understand whether those *metra* were copied in the German territory, where the whole collection of the *Cambridge Songs* originated or whether they were added later in Canterbury, where the collection was copied into the manuscript Ca Gg. 5. 35. Anyway, one can assume that the scribe copied this *metra* onto the Frankfurt leaf as part of the *Cambridge Songs* and as a continuation of *Veni dilectissime*, on folio 441v.

It was assumed that these excerpts from *De Consolatione Philosophiae* were chosen for the Cambridge collection since they could be probably orally performed or even sung. In fact, the anthology of *Carmina Cantabrigiensia* demonstrates a strong interest in the musicological sphere and, albeit manuscript Ca Gg. 5.35 shows few instances of notated texts, several are the witnesses in its tradition showing neumatic notation on their lines.

1.3 Neumatic Notation in the Frankfurt leaf

Handing down notated *metra* from the *De Consolatione Philosophiae*, the Frankfurt leaf might be considered the fulcrum of the musical component of that collection. As already stated above, six of the twenty-seven Boethian excerpts show

neumatic notation on few lines, in particular on six Incipits. They were notated by means of an adiaSTEMATIC notation, which does not measure intervals between notes and, therefore, does not allow us to reconstruct a modern melody starting from the medieval signs.

However, in comparison with the melodies found into the Cambridge manuscript, which shows only rudimental neumes, the musical notation of the Frankfurt leaf appears to be more complex and elaborated. The melody comprehends groups of composed neumes as well as vocal ornaments as *Quilisma*. Nevertheless, as stated by Gibson, Lapidge and Page (1983) it has still to be understood whether the notation was copied by scribe A from the German original or whether he added it later in Canterbury, supplying the neumes to an exemplar, which showed no melody. In this case, the most plausible hypothesis is that the notation should have been added because of the scribe strong interest for the musical setting.

Melodies in the Frankfurt leaf are characterised by several repetitions. That is a common phenomenon in notated texts and now it is clear how the reiterations in these Boethian *metra* are to be meant as a strophic refrain, fixed on the quantity of poetry that would have been heard. This consideration brings the excerpts of the Frankfurt leaf close to the hymn tradition.

However, it remains in doubt whether these neumes, although more ambitious than the ones found in **Ca** U.L Gg. 5.35, could have been sung at all. It might be also possible that this signs had no connection with a musical performance, and that, instead, they were meant as a way to *bestow canonical status to certain tradition* (Treitler 1981). Since in the Middle Ages musical notation was found in particular on liturgical poems and texts, these neumes might be regarded as a means to assign to these excerpts the same dignity and parity with liturgical poetry. A totally conceivable hypothesis, considering the important role of Boethian *metra* in the Middle Ages.

1.4 Music in the Middle Ages

The Cambridge collection might be considered a sylloge able to rise above national boundaries for several reasons. First of all, albeit they might be ascribed to a German environment, the texts were written in Latin, which was a multinational language, understood in the whole Europe. Moreover, the collection shows several dissimilarities in the meters used to compose its poems. In fact, the poetic sylloge presents sequences, as well as prose or hexameters verses. According to Ziolkowski (1998), that might reflect the differences contained in the manuscripts used by the scribe to assemble the collection. Thus, this hypothesis may gain plausibility taking into account the inconstancy in punctuation among the manuscripts as another characteristic of the *Cambridge Songs*.

However, another important issue has to be discussed. Although it does not represent the central nucleus of this collection, it can be at least considered an important part of it: the music.

Music, in fact, plays an important role in the eleventh-century sylloge and several scholars stated how the scribe chose to copy it from sources, in which the musical setting was important. Several elements disclose the lyric nature of these poems. Many comments written within the manuscripts deal with the musical topic; still, the form of some poems themselves connect them with musical performance. That is the case of sequences; one can take into consideration the texts known as *Modus Ottinc*, in which the title might be translated as *The tune of the Ottos*, and from which, consequently, emerges the musical nature of the sequence. Musical performance is also the main topic of other poems within the collection, as *Iam, dulcis amica, uenito* and *Quisquis dolosis antiqui*. It was assumed that these texts, in particular, were meant for an oral performance and perhaps to be sung as well.

Music was also related to some paratextual elements drawn on several manuscripts. For instance, the so-called *manicula*, found on folio 439r in the Cambridge manuscript. According to Ziolkowski (1998) interpretation, this paratextual element was

meant to point out the information that, in the same folio, a poem was provided with neumatic notation on its line (*Quisquis dolosis antiqui*). In fact, the presence of melodies might be considered the most important evidence of the connection between text and musical setting. Neumes pinpoint the performative nature of such poems that were probably meant for an oral or even sung fruition in front of different audiences.

The Cambridge manuscript is often provided with vacant spaces, probably meant to allow the scribe to add the notation later. Unfortunately, in fact, the presence of neumatic notation in **C a** is not only rare but when provided its adiastematic nature shows no pitch differentiation or lines for the notes. That makes these neumes totally useless, in order to reconstruct a modern melody. For this reason, it is important to take into account outside evidences of notations handed down by other manuscripts in the tradition, with more complex signs or eventually written with the aid of lineation and clefs.

This new kind of notation, spread from the twelfth century, is called diastematic and allows to distinguish the intervals among notes. Thus, considering the important role played by music not only in the Cambridge collection, but also in the Middle Ages, my digital edition focuses in particular on notated texts both copied into the Cambridge manuscript (*Quisquis dolosis antiqui* and *O Admirabile Veneris idolum*) and on the conspicuous tradition ascribed into that of the *Cambridge Songs* and handed down by a large number of witnesses provided with adiastematic and, more rarely, diastematic neumatic notation on their lines.

1.5 *The Role of Melody in Medieval Manuscripts*

Albeit in the *Cambridge Songs* and in their tradition notes are found on secular texts as well, it is important to remember how this kind of notation was born in a religious world, in particular within cloisters or important schools like Rome or Metz. These signs called *neumes* had in the first place the role of a mnemonic tool, born to help cantors remembering melodies.

The term *neume* refers to sung notes on the same syllable. These signs might be

derived from accents, elision signs or from punctuation marks. Their birth might be dated back to the year 800, when, in the French territories, one started writing down melodies of rarely performed texts, which took the risk to be forgotten.

In the Gregorian Chant, neumes corresponded to the natural intensity of the syllables. For that reason, the verbal context was really important to establish the value of these medieval musical notes. Thus, this invention remained ascribed into the oral transmission and did not claim to replace it. The best contribution of it was the improvement within the melody transmission throughout centuries.

According to their native place, neumes could have been distinguishing due to their shape. One can make a distinction between the Aquitanian notation, made of points, the accent notation from Germany, St. Gallen, France and Italy and the mixed notation, made of bound points and spread in Brittany, Catalonia, and Milan. However, the most important difference among neumes regarded their nature. Until the second half of the tenth century was spread a kind of notation called *adiastematic*. It provided no information about the intervals between the sounds. Therefore, it was impossible to read a melody from it. In that period, neumes shapes were fundamental, in order to establish their time and their value.

Afterwards, a process started from the second half of the eleventh until the twelfth century, led to the birth of the so-called *diastematic* notation. In comparison with the first one, this notation signalled notes pitches and intervals between sounds. The use of the tetragram settled the complete *diastematization* of the neumatic notation in most of the places around the European continent with the exception of Bavaria and Swiss. The mixed notation survived as the most suitable one to be written on the tetragram and developed into our modern musical notes throughout the centuries.

Below, *Figure 1* shows all the neumes in their different typologies in medieval notations and in the correspondent modern one.

Names	punctum	virga	pes	clivis	torculus	porrectus	climacus	scandicus	quilisma
Modern equivalent	•	•	••	••	•••	•••	•••	•••	
French Square Notation	■	┌	┌	┌	┌	┌	┌	┌	┌
St Gall	- -	//	∩	∩	∩	∩	∩	∩	∩
Messine	• - •	∩	∩	∩	∩	∩	∩	∩	∩
Breton	•	/	∩	∩	∩	∩	∩	∩	∩
Aquitanian	• -	∩	∩	∩	∩	∩	∩	∩	∩
Palaeo - Frankish	• -		∩	∩	∩	∩	∩	∩	∩
Beneventan	-	∩	∩	∩	∩	∩	∩	∩	∩

Figure 1 - Chart of Neumes¹⁰

Another important role was played by scribes. They, in fact, followed the rhythm of the melody while drawing the neumes above the manuscript lines. That helped cantors in singing properly. As stated by Cattin (1991), *pen's ductus coincides with voice's ductus*¹¹ and the signs over the parchment had the same role of an orchestra leader.

1.6 Florilegia and Tonaries

During the Middle Ages, manuscripts presenting neumatic notation on their lines had the role of a mnemonic tool, rather than the function of teaching new melodies. In fact, according to Levy (1998), often the signs were too small to be read without difficulties. They were rather *visual aids* used during the performance.

However, notated manuscripts were often also used as class books in schools and cloisters, so that pupils could have memorized new texts. In this context, two kinds of textbook came into existence: Florilegia and Tonaries.

10 Table taken from <https://www.futurelearn.com/courses/from-ink-to-sound/1/steps/48645>.

11 "Il *ductus* della penna aderisce al *ductus* della voce", italics mine.

A florilegium was a collection of classical and biblical excerpts copied with the purpose to help cantors, teachers and students to evoke already memorised materials. Tonaries followed the same principle and showed melodies classifications through their refrains. That might also explain why, in several cases, neumatic notation has been found only on the Incipit and not on the whole text. In fact, reading the beginning of a melody helped cantors in retrieving it completely through what Berger (2015) defined a *chain reaction*. The creation of tonaries and florilegia represented a proof for a cantor to have not only learned the chant but also mastered it.

Considering both typologies of textbooks, scholars pointed out how their melodies were rather similar to each other. The research process for my digital edition focused on some classical excerpts from Statius's *Thebaid* and Virgil's *Aeneid*. Besides the Cambridge manuscript, those texts have been found in several other witnesses, probably florilegia or tonaries, provided with neumatic notation. That one not only starts, in most of the cases, on the same line, but presents also similar notes, which led to the conclusion that the melody should have been rather similar among manuscripts coming from different areas of the European continent. That was explained by Levy (1998) through the assumption of a common archetype, in which the melodies were probably written during the Carolingian Renaissance. In conclusion, one can state that both tonaries and florilegia had the main purpose to help to retrieve long passages through short ones, for instance, the textual Incipit. They were *promptbooks* (Berger 2015) meant as mnemonic tools for cantors, teachers or students learning or teaching the Gregorian Chant.

The Gregorian Chant was mainly associated with religious texts, made to be recited or sung in liturgical celebrations. Nevertheless, several are the manuscripts handing down classical poems of Latin authors as Virgil, Horace or Boethius provided with neumatic notation. Scholars tried to explain in their works the purpose of the neumes on these passages, most of them laments.

As already stated above, and as the research for this edition confirms, in the tradition of the *Cambridge Songs* a conspicuous group of witnesses present neumes on classical excerpts as the Virgilian *Aeneid* or the Boethian *De Consolatione Philosophiae*. The following part of this chapter focuses on this topic, and has as main

goal the interpretation of these excerpts, taking into consideration studies realised by several scholars and their theories about this topic.

1.7 Notated Classics in the Middle Ages

Virgil's *Aeneid*, Statius's *Thebaid*, Horace's *Odes* and Boethius's *De Consolatione Philosophiae*. Those are all texts known to have been studied during the Middle Ages. In fact, in a period, in which Latin became a *multinational* language, been educated presupposed automatically knowing these authors.

Since their intensive use, it is not surprising to find neumatic notation on several excerpts of their works. As regards, Ziolkowski (1998) assumed that these classics were sung in school and, consequently, notated manuscript were used by schoolmasters, in order to prepare their lessons.

These texts were notated both *in toto* or in some of their parts, for instance on their Incipit. A clear example is the Frankfurt fragment. One can assume that the Boethian excerpts in it have been notated in order to preserve their melodies and to help who was supposed to sing them in the remembering process. A plausible hypothesis, by considering neumes of the Gregorian chant as a helping instrument to retrieve melodies.

In many cases, instead, neumatic notation had the role of elucidating the metric of some texts. That is the case of some Horace's *Odes*, notated because of their metrical interest, since melodies might clarify aspects of the syntax through pauses, lifts, and drops.

Furthermore, notated texts usually showed high signs of consultation through dense glosses that might occupy spaces meant for the notation to be written. That is the case of manuscript **Par Lat** 7979, handing down on folio 8r Horacian *Ode* 12, Book III. The text in the manuscript body was so heavy glossed that the scribe was forced to rewrite the notated lines separately onto the lower margin. The presence of glosses proofs that manuscript showing neumatic notation were often used or studied. Considering anthologies handing down classical poems as textbooks, it is not surprising that excerpts of Horace or Virgil have been deeply studied during the Middle Ages. In

fact, it is highly likely that the melody was added over the glosses, in order to set to music a well-known text.

As several scholars pointed out, most of the notated excerpts are dialogs or speeches. They are also pinpointed within the manuscript with some paratextual elements. For instance, in **Bu** Orszògos széchényi köntvar 7, a *manicula* points out the speech of Aeneas over Hector's body on its beginning. That rose questions as why those passages were neumes and why in some manuscripts the notation stops over words not belonging to the speech frame. Ziolkowski (1998) tried to answer to these questions arguing how those passages were chosen and, therefore neumed, because of something noteworthy about them. In this case, that should be their intensive *pathos* that had to be emphasised through the music itself.

As already stated above, some witnesses show no neumes outside the speech scheme. Spanke (1943) took as an example the manuscript **Wo** kept by the Herzog-August Bibliothek in Wolfenbüttel and handing down *Aeneid*, Book II. It shows lines 277-80 without any sign on them. The scholar proposed that the unnoted lines should represent a transition from the narrative to the beginning of the speech. Therefore, the decision to copy them without any musical notation might have had the purpose to apprise listeners attention of this turning point. This topic will be further developed in the commentary of the next section.

However, manuscripts were not always provided with neumatic notation from the beginning. In fact, the melody was often the result of a third stage operated by scribes. After having copied the text and written glosses over it, they finally placed neumes on it. That might be observed in several *codices* since they present neumes in a different ink colour. Consequently, it is important to remember that dating back and localise these medieval notes might be considered rather complicated and in most of the case their apposition on the codex is not coeval with the text on the manuscript body.

1.8 *The Manuscripts*

The digital edition is based on a total number of 36 manuscripts. All of them are ascribed into the tradition of the *Carmina Cantabrigiensia*. The sylloge was, in fact, a starting point for the textual research, and the creation of the edition itself.

The focus of the research was the collection of notated manuscripts, starting from the *Cambridge Songs*, in which unfortunately only two poems show neumatic notation. Therefore, the research took into account melodies preserved in manuscripts within the tradition of the Cambridge anthology and handed down by different witnesses, coming from several European libraries.

All the collected manuscripts present adiastrumatic and rarely diastematic neumatic notation drawn on a part of their lines or on their whole text. The goal of this section of Chapter I is to present these manuscripts from a historical and linguistic point of view. For this purpose, each witness has been provided with a Table showing, in its columns, its numerical ordering, the textual Incipit, the language, in which it has been written, its main content and lastly, in the right column, all the notated witnesses handing it down.

Highlighted in yellow, there are listed all the effectively recovered manuscripts, which were taken into consideration while realising the digital edition. Besides each Table, a philological commentary aims at describing them more precisely.

Although the texts have been divided into genres, the commentary is not organised through categories, since several might have been the cases of overlapping between them. The texts are, instead, considered singularly in the order, in which they appear in the collection of the *Cambridge Songs* and chosen by Ziolkowski (1998) and Lo Monaco (2010) for their critical editions of this anthology. That is shown also in the Table on the left-hand side column. This ordering was chosen to organise and present the texts of the digital edition to create a *continuum* with the Cambridge collection. Moreover, references to the poetic sylloge are provided whenever possible.

Within this classification, texts handed down by more than one witness have

been analysed at the same time, providing a comparison between them.

An exception to this numerical ordering is represented, however, by excerpts of classical works. As already stated above, a large section of this digital edition is made of excerpts from classical authors like Statius, Virgil, Horace, and Boethius. Since the recovered witnesses handing them down do not differ significantly to each other, neither in their text, not in their notation, it was chosen to gather all the manuscripts presenting the same notated excerpt into the same sub-category. Thus, the philological commentary aims at analysing all the witnesses handing down the excerpt in question, along with the description of the neumatic notation on their lines.

Albeit only the recovered manuscripts, highlighted in yellow, are taken into consideration in the philological analysis and in the digital edition, each commentary presents the total number of notated witnesses of the text in question, which is reported on the right-hand side column. That, in fact, might be a starting point for further investigation on this topic.

1.9 Notated manuscripts in the tradition of the *Carmina Cantabrigiensia*

➤ *Gratuletur omnis caro, Christo nato domino* - Na IV G 68, Bn VI 34

NUM.	INCIPIIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC1	Gratuletur omnis caro, Christo nato domino	Latin	<i>Religious Carmen.</i> First strophe of the hymn <i>Gratuletur omnis caro,</i> related with the theme of the Epiphany.	- Bam , Bamberg, Staatliche Bibliothek, Varia I (H.J.IV.20), f.63r, line 1 - Bn , Biblioteca capitolare di Benevento, VI 34, f.18r - Città del Vaticano ,

				<p>Biblioteca Apostolica Vaticana, Urb. lat., 602, f. 81r</p> <p>-In, Intra (Novara), Biblioteca Capitolare di S. Vittore 5, ff. 15r-16r</p> <p>- Kl, Klosterneuburg, Stiftsbibliothek 1000, ff. 39v-40v</p> <p>- Na, Napoli, Biblioteca Nazionale, IV G. 68, f.207r, str. 1</p>
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This text represents the first stanza of a fifteen strophes hymn celebrating the birth of Jesus Christ. The text in **Na** is dated back to the ninth century. Furthermore, the hymn is also attested in several manuscripts dated back between the ninth and the tenth centuries. In this manuscript, as in the *Cambridge Songs*, only the first strophe of the hymn was written down.

Moreover, **Na** IV G 68 shows neumatic notation on these two lines. Spanke (1943) considered the hymn as meant to be a prelude to a concert. Considering their ink colour, the scholar assumed that the neumes were not coeval with the manuscript, but added later on it.

From a linguistic point of view, it is interesting to notice that the manuscript shows in Line 1 the construction *Xristo nato domino*, typical of earliest manuscripts ascribed into that tradition; however, in Line 2 *quod* has been attested in later manuscript and not in those dated back to the ninth century.

The same text has been handed down also by folio 18r of the manuscript **Bn** VI

34. As in **Na** VI 68, **Bn** VI 34 shows neumatic notation on the first stanza.

In comparison with the Neapolitan manuscript, its neumes are more complex and the notation seems to have a diastematic nature. That means that it is possible to distinguish between the notes height and clefs might be seen at the beginning of each line. This manuscript is dated back to the twelfth century; nevertheless, from a linguistic point of view, it presents constructions typical of earliest texts of this tradition and found in the Neapolitan witness as well.

➤ *Omnis sonus cantilene trifariam fit*

NUM.	INCIPIIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC6	Omnis sonus cantilene trifariam fit	Latin	<i>Narrative</i> <i>Carmen.</i> The main focus is the friendship between Lantfrid and Cobbo, realted with Cicero <i>Laeluis de</i> <i>amicitia.</i>	- Wü , Würzburg, Universitätsbibliothek, MS M. p.th. f.45 str. 1a 1

➤ *Aurea personet lira clara modulamina* - Reg lat 586

NUM.	INCIPIIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC10	Aurea personet lira clara modulamina	Latin	<i>Musical-</i> <i>Didactic</i> <i>Carmen.</i> Text composed to celebrate the	- Ca , Cambridge U.L , Gg. 5.35 f. 434v str. 3.2 - Cs (Firenze)

			<i>Ars Musica.</i>	Biblioteca Nazionale Centrale, Conventi Soppressi F. 3. 565) f.4v -Rg , Città del Vaticano, Biblioteca Apostolica Vaticana Reg. lat. 586 f. 82r
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The manuscript **Reg Lat 586** (MS V) is dated back to the eleventh century and it hands down the text *Aurea personet lira clara modulamina*. It is also attested in two other manuscripts: **Ca** (Cambridge U.L. Gg, 35 f, 434v) and **Cs** (Florence, Biblioteca Nazionale Conventi Soppressi MS F. 3.565 f.4v) with neumatic notation.

It might be considered an oration to the nightingale voice, which lasts from April until June. Thus, as nature comes back to life during spring, the voice of this creature is compared to the one of other birds and the human being as well. As a conclusion, the superiority of the nightingale is celebrated with the use of *termini tecnici* (Ziolkowski 1998) regarding scales and music. Taking into account its content, the text might be ascribed into the tradition of poems about the nightingale written by *Eugenius of Toledo*. The text was meant to be a strophic poem, but according to some scholars, it was set to a melody by *Guido of Arezzo* (Spanke 1943; Ziolkowski 1998), becoming a sequence with frequent and irregular rhymes.

The poem was probably meant to celebrate the *Ars Musica*, and it presents neumatic notation *in campo aperto* on folio 82r.

A parody of this poem has been handed down by folio 246 of the manuscript of Limoges (today manuscript **Par Lat 1118**), written between 985 and 996. The neumes of the first stanza correspond to those of the French manuscript. Moreover, the poem seems to be closely related to the tradition of Boethius as well. It is important to note that in a manuscript kept in Brussels, where the text *Aurea personet lira clara*

modulamina has been handed down without neumatic notation, the poem is immediately followed by some neumed Boethian meters.

Another possible function of that poem, according to Lo Monaco (2010), might have been that of a class book. The scholar has promoted this hypothesis regarding the whole collection of the *Cambridge Songs*.

➤ *Magnus Cesar Otto - Wo aug 8° 56.10*

NUM.	INCIPIIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC11	Magnus cesar Otto	Latin	<i>Political Carmen.</i> Written to celebrate virtues of Ottonian dynasty. Focused on Otto I, Otto II and Otto III. It might be dated back between 996 ed il 1002.	- Wo , Herzog August Bibliothek, Wolfenbüttel, Augustanus 8°, 56.10 f. 62v, str. 1 a

The manuscript **Wo** Aug 8° 56.10 is dated back to the tenth century and on folio 62v it hands down one of the few political Carmina ascribed into the tradition of the *Cambridge Songs*. The text, also known as *Modus Ottinc*, “The tune of the Ottos”, is attested only in **Wo** and **Ca** (Cambridge U.L. Gg, 35 ff. 434v/435r). The title is found only in **Wo** and it is implied within the poem in its first strophe.

The poem was probably composed around 1002, but according to some scholars, it was written before the coronation of Otto III as Emperor in 996, since no explicit mention of his emperorship is made in the poem. An opposite hypothesis concerns the

consideration of verbal tenses used in the text. One can notice that the anonymous author refers to all three Emperors in the past tense. Therefore, one can conclude that they were already dead when the poem was composed.

The aim of the text is to celebrate all three Emperors Ottos of the Ottonian dynasty. The first four strophes regard Otto I and celebrate his victories, in particular against Hungarians; whereas the fifth strophe is dedicated to Otto II, the sixth strophe, in the third part, to Otto III and finally strophe seven is considered a sort of conclusion to this poem. Since it was composed into a German environment, many attempts were made, in order to relate the *Modus Ottinc* to the German literature.

Considering the content of this poem, Naumann (1950) proposed a connection between it and Old Norse literature, where the celebration of dynasties was a common topic to deal with. However, the comparison cannot be made neither with Old High German, nor with Old Norse literature. On the one side, the *Ludwigslied* might be considered the only example of Old High German poem celebrating a historical event for a then-contemporary Emperor; on the other side, in the Old Norse Literature dynasties were often listed in clusters of nine members and their origins traced until a divine ancestor. Moreover, the flourish and classical style of the poem, several references to the Latin poet Virgil and a quotation of Horace in the last strophe sets the *Modus Ottinc* apart from the Germanic tradition.

Nevertheless, connection with the Germanic environment have to be found in some elements of the language, in which this sequence was written. For instance, the suffix *-inc* might be considered a reference to Old English and Frisian, in which it was used with the function of a patronymic. In the Old Germanic languages, instead, it was meant to express possess, but in particular to identify families or dynasties. Closely related to Germanic poetry is the term *Palatio* (in **Wo**) or *Palatium* (in **Ca**). It refers to a palace in flame, an event found in many works of early Germanic literature with disastrous consequences. The Cambridge manuscript shows the spelling *Odtinc* referring to Otto's name. That is a form closely related to an Old Saxon pronunciation.

In conclusion, the sequence might be better ascribed into an early Medieval Latin literature (Ziolkowski 1998), as a poem intended both for clerical and lay audiences. Among the manuscripts handing down this poem, the witness **Wo** is the only

one to show unheighted musical notation on the first strophe of it. The melody was meant to awaken Otto I the Great from his sleep, in order to be saved from the palace destroyed by the fire.

➤ *Vite dator, omnifactor*

NUM.	INCIPIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC1 2	Vite dator, omnifactor	Latin	<i>Musical- Didactic Carmen.</i> Text focused on the character of Pythagoras as <i>primus sapiens.</i>	- Sa , Schaffausen, Stadtbibliothek, MS Min. 10 ff. 140v-141r - Wz , Wützburg, Universitätsbibliothek, MS M p. th. f.190v str. 1a.1- 4a.15 <i>op-</i>

➤ *O Pater Optime*

NUM.	INCIPIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC13	O pater optime	Latin	<i>Religious Carmen.</i> Text related with the topic of Resurrection and the Judging Day.	- Be f.n.r. (Benevento Biblioteca Capitolare, 34 (28)) strr. 1 a-b, 2 a- b, 3 a - Bn (Benevento Biblioteca Capitolare, 39 (25)), strr. 1 a-b, 2 a-b, 3 a

➤ *Audax es, vir iuuenis* - Par Lat 1928

NUM.	INCIPIIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC18	Audax es, vir iuuenis	Latin	<i>Moral Carmen.</i> Abecedarius dated back to the Merovingian period. It is focused on the theme of youth chastity. Only example of Rügeliied in the Cambridge Songs.	-Pa3, Paris, Bibliothèque Nationale de France, lat. 1928, ff.170v, strr. 1-2

The manuscript **Par Lat** 1928, kept by the Bibliothèque nationale de France in Paris, is dated back astride to the eleventh and the twelfth centuries and it hands down, on folio 170v, the poem *Audax es, vir iuuenis*. That was meant to be an admonition to a young man, suggesting the audience not give in to carnal pleasures since on the judging day only charity, hope and faith will be useful, in order to save the human soul.

In the collection of the *Cambridge Songs*, it has been also considered the only example of *Rügeliied* (Spanke 1943).

Thus, the poem is focused on the theme of youthful chastity and it is written in the form of an abecedarius. The initial letter of each strophe represents, from *A* to *Z*, a letter of the alphabet. This kind of poem comprehended the use of a refrain (Luiselli 1996), suggested by the word *Adtende* located at the beginning of each strophe. It is thought to be a Merovingian text, originally composed around the seventh or eighth centuries.

It is handed down through several manuscripts: **Ca** (Cambridge U.L. Gg, 35 f. 436v), **Br** (Brussels, Bibliothèque royale MS 8860-8867, f.20v), **Kö** (Köln, Dombibliothek, 106, f.17r), **Sg** (Sankt Gallen Stiftsbibliothek MS Min. 108 p. 468), **Tr** (TrierBistumarchiv 133^e f. 56), **Ve** (Verona Biblioteca Capitolare XC 85 ff. 12r-13r) and **Wi** (Wien Österreichische Nationalbibliothek 11857 f. 244r-v).

None of them, however, show neumatic notation that has been handed down only by **Par Lat** 1928, as the Table above shows. The manuscript presents Northern French adiastrumatic neumes on the first two lines of the poem. The signs are rather simple and, since only a few lines of the manuscript have been notated, it has been thought that these signs were meant to be part of a class book used to retrieve an already known melody, like florilegia and tonaries. From this point of view, the notation located on those texts was supposed to be a teaching tool for pupils or cantors as well.

In its tradition, the text presents several titles. For instance, *Versus Bedae Presbiteri* in **Par Lat** 1928, while in one ninth-century manuscript one can read *Uersus de contempu Mundi*, and *De Castitate Iuuenum* in one tenth-century manuscript.

➤ *Iam dulcis amica venito* - Par Lat 1118 / Wi 116

NUM.	INCIPIIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC27	Iam dulcis amica venito	Latin	<i>Carmen amatoria.</i> Erased from the Cambridge manuscript because of its content. It might be interpreted also from a religious point of view	- Pa ₁₂ , Paris, Bibliothèque nationale de France, lat. 1118, f. 247v - Wi , Wien, Österreichische Nationalbibliothek 116, f. 157v

			through the comparison with Song of Songs.	
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The manuscripts, both dated back to the tenth century, hand down respectively on folio 247v and 157v, the poem *Iam dulcis amica uenito*, which has been considered the *oldest love poetry of the Middle Ages* (Huglo 1982). The text is attested also in the codex **Ca** (Cambridge U.L. Gg, 35 f. 438v) without neumatic notation. The poem has been largely erased from the Cambridge manuscript by a censor, apparently because of its erotic content. The text has been reconstructed thanks to the lines of **Pa**₁₂ and **Wi**, through which the song has been handed down. The manuscript **Par Lat** 1118 is an anthology of prose works in Limoges, which comprehends poetries from several places, among which also some German sequences unknown in Limoges. Those remind of the metrical structure of *Iam dulcis amica uenito*, which was thought to have been originated in Germany and then included into the French manuscript (Spanke 1943).

Also known as the *Inuitatio amicae*, the poem deals with the invitation to a celebratory meal that the lover refuses. Thereafter, her solitary life and readiness to engage in a new conversation are the focus of the following strophes. The poem ends with the renewal of the invitation and with the exhortation to his beloved to accept it.

A central point in its interpretation is to establish whether it was meant to be a religious or secular poetry. It might be possible that the original version was a worldly text, adapted afterwards for liturgical purposes; however, it has been speculated that the opposite might be possible as well. According to Ziolkowski (1998), in fact, it might have been a religious song, then adopted for worldly use. Dronke (1984) has identified in the French witness a more para liturgical hymn, whereas the Austrian manuscript seems to be a worldlier poem.

From another point of view, scholars tried to bring this poem closer to a liturgical interpretation, seeking similarities between it and The *Song of Songs*. Thus, its lines might be interpreted as an allegorical dialog between Christ and the human soul.

That could also explain the imprecise dialogical pattern, in which no speaker is

identified. In fact, the commentary of the *Origen* shows the tendency for speakers to change without any warning. Therefore, in trying to reconstruct a pattern of dialogical development, one might only constrain the text into parameters of modern aesthetics. Dronke (1984), instead, proposed the hypothesis of an *open work*. According to the scholar, the anonymous author, in realising this poem, allowed both the erotic and the religious interpretation. That still highlights how easily one can shift from a religious love poetry to a secular one.

Each manuscript, in which the text survived, presents a different pattern of strophes, and each of them shows an own and unique one, absent in the other two. According to Bulst (1976), taking into consideration the ten readable strophes in the Cambridge manuscript, the pattern might be represented in this way:

Ca 1 2 3 4 5 6 7 8 9 10

Pa 1 2 3 5 4 8 10 6 6b 9

Wi 1 2 3 5 4 6 6a

Bradley (2004) made an attempt to realise a unique poem with twelve strophes. The scholar ordered them as 1, 2, 3, 4, 5, 8, 10, 6a (from **Par Lat** 1118), 7, 6, 6b (from **Wi** 116), 9. Nevertheless, since the version of **Pa** and **Wi** significantly differ among them, it might be considered a mistake to merge their strophes together in order to construct an *original version*; instead, they should be analysed singularly.

Another important reason to consider these poems individually is the presence of neumatic notation in **Pa** and **Wi**. The Austrian manuscript shows adiaSTEMATIC neumes, whereas the French one presents Aquitanian notation, in which it is possible to distinguish notes height.

The presence of neumes reminds not only that the poem was meant to be truly lyric, but also that, eventually, differences have to be awarded to an accomplishment of imagination, rather than to eye or hand mistakes. According to musicologists, in both manuscripts the melody coincides. That lead to consider the author of the poem and of

the melody as the same person. (Huglo 2005).

➤ *Quisquis, dolosis antiqui* - Ca U.L. Gg. 5.35

NUM.	INCIPIIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC30 A	Quisquis, dolosis antiqui	Latin	<i>Narrative Carmen.</i> Based on the hagiographic text “ <i>Vita sancti Basili</i> ” written by Anfilochio d’Iconio.	-Ca, Cambridge U.L , Gg. 5.35 f.439r

Folio 439r of the Cambridge manuscript is the only witness of the poem *Quisquis dolosis antiqui*. It is closely related to the hagiographic text *Vita sanctii Basili*, based on the life of Saint Basil the Great (329-79), who was bishop of Cesarea in Cappadocia (370-79). This is the only narrative Carmen related to a hagiographic text from the second stanza on. In fact, Strophe 1 is the only one not attested in the hagiographic text and it is thought that its function was primarily to introduce the legend and to demonstrate thus its relevance.

The poem, written in the form of a sequence, deals with the story of the daughter of Protherius, and the servant, who fell in love with her. The focal point is the pact with the Devil in order to renounce of Christianity and secure the beloved girl. The help of Saint Basil the Great, sought by the girl, was necessary to invalidated, at the end, the deal.

The great circulation of this poem in both the East and West Europe was ensured from its connection with the text *Vita sancti Basili*. Furthermore, the Cambridge manuscript presents adiaSTEMATIC neumatic notation on strophes 1a and 1b. The neumes are rather simple, characterised mainly by *Puncti* and *Virgae*, but they suggest how this

text might have been read aloud or even sung in cloisters.

➤ *Rota modos arte personemus musica*

NUM.	INCIPIIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC45	Rota modos arte personemus musica	Latin	<i>Musical- Didactic Carmen.</i> Text focused on music and arithmetic proportion.	-Cb ₁ , Cambrai, Bibliothèque municipale, 172, f. 19

➤ *O admirabile Veneris idolum* - Ca U.L. Gg. 5.35

NUM.	INCIPIIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC48	O admirabile Veneris idolum	Latin	<i>Carmen amatoria.</i> Erotic text difficul to date, probably related with the “Scuola Veronese”.	-Ca, Cambridge U.L , Gg. 5.35 f.441v, strr. 1- 2 -VI, Città del Vaticano, Biblioteca Apostolica Vaticana, Vat. lat. 3227

O Admirabile Veneris Idolum is handed down by folio 441v in the Cambridge manuscript. Described by Curtius (2013) as one of the *pearls of the medieval poetry*, this poem is ascribed into the tradition of the love poetry.

This Carmen has been interpreted as a love poem composed by a male teacher for one of his pupils. That would place this text into the medieval tradition of homoerotic love, genre already known in the ancient Greece with the name *Paidikon*. However, some scholars tried to read it as written in the voice of a woman instead of a

man. This theory was supported by Jaffé, who entitled the poem *Faminae amantis gemitus*, and further elaborated by Vollman (1988)¹².

This is not, nevertheless, the only problem that this poem arises, in trying to analyse it. In fact, the debate focused on how erotic the content of *O Admirabile Veneris Idolum* was supposed to be. On the one hand, some interpretations suggest an innocent elegy of a schoolmaster for his favourite pupil; on the other hand, other analysis propose an old man cry for a boy seduced by a rival. It is important to consider that it survived a censorship, through which the poem *Iam dulcis amica uenito* has been almost entirely erased in the Cambridge manuscript. A possible explanation might be to consider this text from an allegoric point of view, bringing it closer to liturgical texts as the *Song of Songs* and the *Proverbs*.

Furthermore, problematic to establish are also place and dating information. The reference to the river *Adige*, called *Athesis* in Latin or *Etsch* in German and found in Strophe 2.5, let scholars suppose that the anonymous author belonged to the so-called *Scuola Veronese*. Moreover, considering the high level of culture showed by him in writing, one might assume that he lived in the same time of Rather of Verona (887-974) and consider this period as a dating for this poem (Traube 1981).

As already stated above, several are the references both to the mythology and to liturgical texts. For instance, names of gods and goddesses as Venus or Neptune were used along with references to the three Parcae (Clotho, Lachesis and Atropos) and to the myth of Deucalion and Pyrrha in the last strophe. The line *Dura materies ex matris ossibus*, in fact, refers to the Greek myth of the couple spared by the gods during the Great Flood. The myth is reported in Ovid, *Metamorphoses* 1.318-415. In order to populate the Earth again, Pyrrha tossed *the bones of the mother*, the earth itself, behind her. From that earth, the human kind lived again.

The term *hinnulus*, in Strophe 3.6, instead, might be related to the religious sphere and in particular to Proverbs 5.18-20, suggesting men to be faithful to their wives, far away from others carnal temptations. The same word might be found also in the *Song of Songs* 2.17.

Considering its metrical structure, *O Admirabile Veneris Idolum* is written

¹² Vollman K. B., "O Admirabile Veneris Idolum (Carmina Cantabrigiensia 48) - ein Mädchenlied?" In *Udo Kindermann at al. Festschrift für Paul Klopsch*. Göttingen: Kümmerle, 1988.

through three strophes, two of them show six rhythmic alexandrines, whereas the second strophe presents seven of them. In each strophe, lines have the same disyllabic rhyme, without the use of hiatus. Lastly, it is important to consider that the Cambridge manuscript shows adiastrumatic neumatic notation on this particular poem. That might be considered even more interesting considering both the few number of notated texts in this codex, but also the content of this poem.

Thus, hypothesis related to the use and the circulation of this Carmen might be reconsidered and reformulated. However, the question concerning whether the poem was notated, and therefore used, following a religious interpretation or taking its erotic component into account, arises spontaneously.

➤ *Davis, vates Dei, filius Isaï*

NUM.	INCIPIIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC82	Davis, vates Dei, filius Isaï	Latin	<i>Religious Carmen.</i> Biography of David, the text focuses on the conflicts with Saul. Source: Books of the Kings.	-Sz, Salzburg, Stiftsbibliothek Sankt Peter, A IX. 3 f. 1r, str. 1

CLASSICAL EXCERPTS

Stattus

Thebaid, Book V, lines 608-616

➤ *O mihi deserte natorum dulcis imago*

NUM.	INCIPIIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC31	O mihi deserte natorum dulcis imago	Latin	<i>Excerpt.</i> Stattus Thebaid. Book V, lines 608-16. Hypsipyle lament for Archemorus.	- Bx Bibliothèque Royale “Albert 1er” 5337-5338, f.55v - Città del Vaticano , Biblioteca Apostolica Vaticana, Barb. lat. 74, f.46 - Firenze , Biblioteca Medicea Laurenziana, plut. 38.7, f.51r - Genève-Cologne , Foundation Bodmer, Cod. Bod. 154, f.46v - München , Bayerische Staatsbibliothek, clm 6396, f.53v - Paris , Bibliothèque nationale de France, lat. 8051, f.22v

				<p>-Paris, Bibliothèque nationale de France, lat. 10317, f.62r</p> <p>-Paris, Bibliothèque nationale de France, lat 13046, f.62v</p>
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The manuscripts listed on the right column are all dated back to the tenth century and they hand down Book V, lines 608-16, excerpt from Statius's *Thebaid*, along with adiaSTEMATIC neumatic notation on all nine lines of the poem.

The text of the excerpt deals with the mourning of Hypsipyle on the body of the dead Archemorus. Hypsipyle was the Queen of the island of Lemnos, daughter of Thoas and Myrina. Because of the lack of attention to her shrines, the goddess Aphrodite cursed the women of Lemnos, making them unpleasant to their men. For that reason, taking revenge, the women decided to slay all the men of the island. Hypsipyle was the only one to save her father. Soon after the androicide, Jason and the Argonauts landed on Lemnos and the hero had a relationship with Hypsipyle. Nevertheless, Jason sailed away, abandoning both the woman and the twins she gave birth to. Meanwhile, the other women discovered how she saved her father and forced Hypsipyle to flee away from Lemnos. She was sold to Lycurgus, King of Nemea, who during his march against Thebe brought her as nursemaid of his son Archemorus. At a certain point of the march, Hypsipyle left the little child unattended and a snake killed him. This excerpt, written in dactylic hexameters, is an example of a grief expression.

As already mentioned above, several manuscripts of the *Thebaid* tradition present neumatic notation on this excerpt. As regards, it is possible to analyse their signs considering the colour of the ink in the manuscripts. In this way, one can not only date them but also make a comparison with the presumed century, in which the manuscript has been composed, in order to state if they are coeval to it or not. For instance, in the codex **Bod** 154, one can easily observe how its neumes were clearly

added later. They, in fact, show a darker ink. They are rather simple and unfortunately, due to their adiaستمatic nature, one can retrieve neither information about their height, nor reconstruct the modern melody. Taking into account, instead, manuscript **Par Lat** 8051 is clear how part of its neumes have been drawn later. In particular, all the *Climacus* are made of a *Virga*, which seems to be coeval with the manuscript and the colon sign, which instead presents a darker ink and therefore it might have been added later. A possible explanation might be the creation of more complex neumes starting from already existing ones. Finally, codex **Par Lat** 13046 as well show neumes drawn with a darker ink and, consequently, not coeval with the tenth-century manuscript. Although the manuscript was copied in France, its notation is more similar to the Beneventian kind, characterised by a sort of notes height even in adiaستمatic notations.

The aim of the neumes might be to highlight important and salient passages in a text. In this case, the mourning of Hypsipyle for Archemorus represents one of the highest climax of the passage and probably it was recited aloud or even sung. Moreover, it is important to take into account that Statius, as well as other classical authors, was largely read during the Middle Ages and his works occupied an important place in the Medieval Latin literature. Since their diffusion, it has been suggested that new musical composers trained their ability by notating those parts of classical readings characterised by a high *Pathos*.

Thebaid, Book XII, lines 325-35, 322-24

➤ *Huc adtolle genas defectaque lumina: venit*

NUM.	INCIPIIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC32	Huc adtolle genas defectaque lumina: venit	Latin	<i>Excerpt.</i> Statius Thebaid. Book XII, lines 325-35, 322-24. Lament of	- Bx Bibliothèque Royale “Albert 1er” 5337-5338, vv.322-335 - Genève-Cologne , Foundation Bodmer ,

			<p>Argia for her killed husband Polynices.</p>	<p>Cod. Bod. 154, f.117v</p> <p>-Kassel, Landesbibliothek, 2° Ms. poet. 8, vv. 325-335</p> <p>-München, Bayerische Staatsbibliothek, clm 6396, vv. 322-324, f.132v</p> <p>-Paris, Bibliothèque nationale de France, lat. 8051, f.56r</p> <p>-Paris, Bibliothèque nationale de France, lat. 10317, ff. 156r/156v</p> <p>- Paris, Bibliothèque nationale de France, Par. lat. 8674 f. 111v</p> <p>-Paris, Bibliothèque nationale de France, nouv. acq. lat. 1627, vv. 321-334, f.23</p> <p>- Leipzig, Universitätsbibliothek, Rep. I, 12, vv. 327-334,</p>
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The above-mentioned manuscripts are dated back astride to the beginning and the end on the tenth century. All of them hand down another excerpt from the *Thebaid* by Statius: lines 325-35, 322-24 of Book XII. It contains the lament of Argia for her killed husband Polynices. Oedipus, King of Thebe, cursed both his sons, Polynices and Eteocles, destining them to find the death by killing each other. When Oedipus was dethroned, the two brothers decided to rule Thebe in alternating years. In the first year, Eteocles was coroneted King of Thebe, while Polynices went to Argos, where he married Argia: daughter of King Adrastus. After one year, Eteocles refused to give his brother the crown. Therefore, they fought in a battle and, as their father predicted, they killed each other while fighting.

As other classical excerpts, this passage is ascribed into the literary tradition of women laments for their beloved. The manuscripts, in which it has been handed down, present neumatic notation on all eleven lines this text is made of. This passage, as the other one, represents an instance of high grief and *Pathos*; consequently, it is not surprising to find neumatic notation on this text. Spanke (1943) rose several interesting questions concerning the notation performance and the role of the melody upon this text. On the one hand, one is unfortunately not able to answer whether they have been sung during spoken recitation or performed as separate items in a concert. However, on the other hand, considering the presence of neumatic notation on several classics excerpts, one can state that their melody was somehow connected with the text. Therefore, it is plausible to assume that writing and music were complementary to each other. Probably, the melody was used in order to attribute *Pathos* to certain passages, in order to distinguished them from other parts of the same text.

Considering the neumatic notation of these manuscripts, all witnesses present adiaSTEMATIC notation, through which it is not possible to retrieve and reproduce a modern melody. In some of them, neumes seems to be coeval to the manuscript. That is the case of **Mü**, **Pa** and **Pa₃**. On the other hand, instead, manuscripts **Bod** and **Pa₁** show neumes added later. For instance, in **Pa** neumes were drawn through a different ink tonality. As already stated above regarding *Thebaid* Book V, the French manuscript

shows *Climacus* made out of a *Virga*, coeval with the manuscript, and a colon sign added later.

Virgil

Aeneid, Book II, lines 268-83

➤ *Tempus erat quo prima quies mortalibus egris*

NUM.	INCIPIIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC34	Tempus erat quo prima quies mortalibus egris	Latin	<i>Excerpt.</i> Book II of Virgil Aeneid. Aeneas lament over Hector body. Lines 268- 83.	- Bern , Burgerbibliothek, 239, f.12 - Bx , Bibliothèque Royale “Albert 1er”, 5325-5327, ff.46v/47r - Budapest , Országos széchényi könyvtár, 7, f.73 - Città del Vaticano , Biblioteca Apostolica Vaticana, Reg. lat.1671 - Città del Vaticano , Biblioteca Apostolica Vaticana, Reg. lat.2090, vv.274-276 - Firenze , Biblioteca

				<p>Medicea Laurenziana, Ashburnham 23, f.16v</p> <p>-Klosterneuburg, Stiftsbibliothek, 742</p> <p>-Mü, Bayerische Staatsbibliothek, clm 18059, f.184r</p> <p>-Napoli, Biblioteca Nazionale "Vittorio Emanuele III" Vind. lat.5, f.46r</p> <p>-Paris, Bibliothèque nationale de France, lat.8069, f.44r</p> <p>-Paris, Bibliothèque nationale de France, lat.9344, ff.58r/58v</p> <p>-Trento, Biblioteca Comunale, 1660 TC (Eneide pp. 86-362)</p> <p>-Wo, Herzog-August Bibliothek Wolfenbüttel, Gud. lat.66, vv.274-276,</p>
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				f.10v
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This group of manuscript hand down a notated passage from Book II of the Virgilian *Aeneid*, in particular, lines 274-83. They are dated back astride to the ninth and the twelfth centuries. These lines deal with the vicissitudes of Aeneas in Carthage, at Dido's palace. Here, the hero reveals a dream, in which the corpse of the dead Hector appeared to him. In this lament, Aeneas describes the terrible conditions, in which the body of the Great Hector was reduced.

The passage in question has been found, along with neumatic notation, in more than a dozen manuscripts and it is told to be one of the most notated text of the Middle Ages (Ziolkowski 1998). Alike the excerpts of Statius, this passage shows an epic content and a strong *Pathos*. An epic character mourning over the body of a dead person still represents the focus of the excerpt. Considering both its pathetic content and its diffusion in several manuscripts, it is not surprising to find neumatic notation on the whole passage or on some part of it.

The melody does not start from the beginning of the text. In fact, neumes appear only from line 274 *Ei mihi, quails erat!* From this point begins the so-called *planctus*, the heart of the passage, the mourning of Aeneas over the conditions of Hector body.

It is interesting to notice that the melody had a certain consistency throughout Europe. In fact, taking into account manuscripts copied in different places of the continent, one can find almost the same kind of notation in all of them, with the exception of **Par Lat** 8069 and **Wo Gud Lat** 66. All the manuscripts show a complex neume at the beginning of line 274. That is in most of the cases a *Climacus*. The remnant part of the notation is rather simple and similar among the witnesses, symbolising how the melody did not change significantly. In some of them, for instance **Vind Lat** 5, neumes present a darker ink and in better condition in comparison with the manuscript text. They were added later and, therefore, not coeval with the text.

As already stated above, **Par Lat** 8069 is considered an exception, since it shows Aquitanian neumatic notation, in which it is possible to distinguish notes height. Another difference might be found in the manuscript **Wo Gud Lat** 66, which shows a

smaller number of notated lines, in total just three of them. In fact, lines 277-80 have been copied without any sign. Spanke (1943) proposed an interesting hypothesis about this topic. The scholar noticed that the unneumed lines represent a transition from the narrative to the speech within the passage. Therefore, the decision to copy them without any musical notation might have had the purpose to catch listeners attention and to alert them about this turning point. Albeit this theory seems interesting, **W o** is the only witness, in which this interruption is present, while in other manuscripts the melody shows a certain consistency and covers also the final lines.

Horace

Odes Book III, 12

➤ *Miserarum est nec amori dare ludum neque dulci* - Par Lat 7979

NUM.	INCIPIIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC46	Miserarum est nec amori dare ludum neque dulci	Latin	<i>Excerpt.</i> Horace Ode 12, Book III. Lament of Neobule.	-Par. lat. 7979, str. 1.1, f.8r

The manuscript kept by the Bibliothèque nationale de France in Paris hands down on its folio 8r an excerpt of Horace. In particular Book III, *Ode 12 Miserarum est nec amori dare ludum neque dulci*. The poem is a soliloquy divided into three strophes. In the first one, a woman named Neobule mourns over her sufferings, invoking them as a common circumstance of all lovesick young women. In the second strophe, instead, Neobule addresses herself to another person and describes how her love sufferings made her to lose interest in women work, referred as *telas operosque Minerve*, goddess of the crafts. Finally, in the third strophe, the young woman defines her beloved Bellerofonte and his skill as a hunter, athlete, and equestrian, since he rode the winged horse Pegasus, son of Poseidon and Medusa.

This poem is ascribed into the tradition of women laments. That is related not

only with the above-mentioned and analysed excerpts of Statius and Virgil but also with the love poem *O Admirabile Veneris Idolum*. In the Cambridge manuscript, in fact, all these excerpt and laments have been copied in two contiguous folii, as to create a sort of *continuum*, in which three of them are women mourning. Interesting, it is also the musical settings, in which they have been found. In fact, a large part of the tradition of these texts presents manuscripts provided with neumatic notation. In the case of **Par Lat** 7979, the first stanza of Book III, *Ode* 12 presents Aquitanian notation, coming from Southern France. Although the medieval notes are not enough to retrieve a modern melody, the Aquitanian neumes give the idea of ascendant and descendant sounds, which might help us figuring out the melody of this ancient text. Moreover, in this manuscript, the first three lines have been written again, in the lower margin of folio 8r, with different musical notation. In the lower margin, the notes seem to be more precise and larger in number, while in the body of the manuscript they are made of only *Puncti* and *Virgae*. This manuscript, as other notated ones, has been deeply studied during the Middle Ages and, in fact, it shows a high number of glosses of its lines. That should have been the reason why neumatic notation has been copied, along with few lines, on the lower margin, since the manuscript body was too full of glosses to allow a scribe to write also a melody on it. Moreover, that suggests how the notation was added after the manuscript has been copied and commented.

This Horace *Ode* is characterised by a peculiar metrical scheme. The meter is a pure ionic with repetition of quantitative units grouped in three-line strophes. The melodic repetition should have helped the listener to understand how the metrical form had to be perceived. The poem might have been notated because of its melancholic content, dealing with the suffering of a young woman as the Incipit *Miserarum est* may suggest. The purpose of the melody has to be investigated into the desire to underline its *Pathos*, as already stated for other excerpts from Vergil and Statius.

Boethius

De Consolatione Philosophiae

➤ Fragm Lat I 56, Par lat 1154, Mü, clm 15825

NUM.	INCIPIIT	LANGUAGE	CONTENT	NOTATED MANUSCRIPTS
CC50	Carmina qui quondam studio florete peregi	Latin	<i>Excerpt.</i> Meter I, Book I of Boethius De Consolatione Philosophiae. Lines 1-8	-Frankfurt¹³ am Main Stadt- und Universitätsbibliothek Fragm. lat. I 56, vv.1-8
CC51	Heu quam praecipiti mersa profundo	Latin	<i>Excerpt.</i> Meter II, Book I of Boethius De Consolatione Philosophiae. Lines 1-10	-Frankfurt am Main Stadt- und Universitätsbibliothek Fragm. lat. I 56, vv. 1- 10
CC52	Tunc me discussa liquerunt nocte tenebrae	Latin	<i>Excerpt.</i> Meter III, Book I of Boethius De Consolatione Philosophiae. Lines 1-2	-Frankfurt am Main Stadt- und Universitätsbibliothek Fragm. lat. I 56, vv. 1-2
CC53	Quisquis composita serenus aevo	Latin	<i>Excerpt.</i> Meter IV, Book I of Boethius De	-Frankfurt am Main Stadt- und Universitätsbibliothek

13 Nowadays kept by The University Library in Cambridge (Ca U.L , Gg. 5.35).

			Consolatione Philosophiae. Lines 1-4	Fragm. lat. I 56, vv.1-4
CC54	O stelliferi conditor orbis	Latin	<i>Excerpt.</i> Meter V, Book I of Boethius De Consolatione philosophiae. Lines 1-4	- Frankfurt am Main Stadt- und Universitätsbibliothek Fragm. lat. I 56, vv.1-4 - Parigi , Par lat 1154, f.118r
CC56	Nubibus atris	Latin	<i>Excerpt.</i> Meter VII, Book I of Boethius De Consolatione Philosophiae. Lines 1-6 In Fragm Lat I 56, lines 1-2 are written again in the right margin with different neumatic notation.	- Frankfurt am Main Stadt- und Universitätsbibliothek Fragm. lat. I 56, vv.1-6. - Mü , Bayerische Staatsbibliothek clm 15825, f.12r .

The leaf **Fragm Lat** I 56 was recovered in Frankfurt in the 1980s and on its recto presents twenty-seven passages taken from Boethius *De Consolatione Philosophiae*; six of them are provided with neumatic notation on their Incipit.

Studying the hand that copied this folio, it was assumed to be part of the manuscript, which hands down the Cambridge Songs. In fact, this fragment would be

located between folii 441 and 442 of the Cambridge manuscript. It can be considered the fourth classical group of excerpts besides Statius, Virgil, and Horace ones. Alike the other classical Latin texts, **Fragm Lat I 56** shows adiaستمatic neumatic notation. The first eight lines hand down the text *Carmina qui quondam studio florente peregi*, Meter I, Book I of the Boethian work. In this case, the neumatic notation shows elements as *Punctum*, *Virga*, *Clivis* and *Podatus*, with few examples of complex neumes, which might be observed in larger number in the other *metra*. The neumes written on this text consist of two melodic members; this scheme repeats itself twice, once for each four couplets, revealing a reiteration in the melodic pattern rather common either in the Frankfurt leaf and in general in medieval notated poems.

The melodic scheme is illustrated by *Figure 2* below.

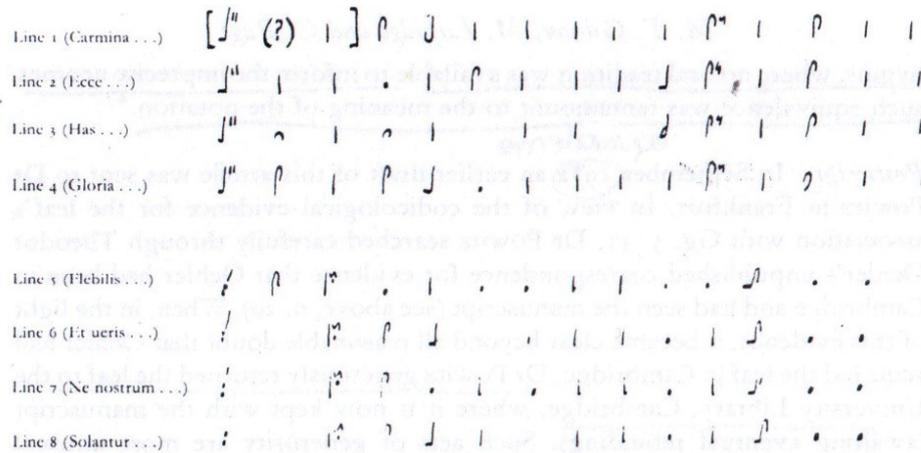


Figure 2 - Melodic scheme of Meter I Book I from Boethius *De Consolatione Philosophiae*¹⁴

The second notated text corresponds to Book I, Meter II (*Heu quam praecipiti mersa profundo*). In comparison with the first excerpt, neumes appear to be more complex, in particular at the beginning of the first line and on the last one. The text of this Meter has been copied in full, nevertheless, its neumes comprehend only ten lines, with a melody repeated every five lines. Thus, it has been proposed that the text was meant to be sung through a repeated setting of neumes, as in in first meter.

14 The image has been taken from Gibson, Lapidge, Page “Neumed Boethian *metra* from Canterbury: a newly recovered leaf of Cambridge, University Library, Gg. 5.35 (the ‘Cambridge Songs’ manuscript)”, in *Anglo-Saxon England* 12 (1983): 151.

The third excerpt, Meter III from Book I, (*Tunc me discussa liquerunt nocte Tenebrae*) presents neumatic notation only on the first two lines. The notation is rather simple, with the exception of few complex neumes.

The fourth excerpt handed down by this fragment is Meter IV of Book I (*Quisquis composito serenus aevo*). On lines 1-4 it shows adiastrumatic neumatic notation. That one is characterised by simple signs as *Punctum*, *Virga*, *Clivis* and *Podatus*.

The fifth excerpt is Meter V from Book I (*O Stelliferi conditor orbis*), provided with neumatic notation *in campo aperto* on lines 1-4. The same text is handed down by the manuscript **Par Lat** 1154, kept by the Bibliothèque nationale de France in Paris. Dated back to the ninth century, folio 118r shows Aquitanian notation on lines 1-7. In both cases, the neumes are rather simple and do not give any useful information to retrieve a modern melody. Moreover, the French manuscript shows a title (*Versus Boecii*) and a rubric initial at the beginning of each line. However, the two manuscripts show no significant dissimilarities in their lines.

The last excerpt handed down by the Frankfurt leaf is Meter VII of Book I (*Nubibus atris*). The first six lines show neumatic notation. In the parchment fragment this text has been copied twice. In fact, it is possible to read it also in the right margin with a different melodic pattern. Rather simple in the manuscript body, it is instead more complex in the right margin, where only two of the six lines have been copied again. The same Meter has been attested in the manuscript **Mü** clm 15825 on folio 12r as well. Lines 1-6 show adiastrumatic neumatic notation as in the Frankfurt leaf. In this case, the neumes are simple, made of only *Tractuli* and *Virgae*.

The presence of neumatic notation is closely related not only to the consideration that classical author as Virgil, Statius, Horace and Boethius present a rather large tradition of notated manuscripts but also to the interest that the copyist showed for the musical setting in the whole collection of the *Cambridge Songs*.

In comparison with the Cambridge manuscript, the neumes in the Frankfurt leaf appear more complex. Albeit one can reconstruct no melody from them, their presence is interesting in considering the role of music not only in this particular sylloge but also in the Latin Middle Ages.

The *Carmina Cantabrigiensia* might be considered a European collection, in which one can find elements related to the English, German, French and Italian world. The Latin language, used to compose the poems down, unites all of them.

CHAPTER II

2.1 *Theoretical aspects in the field of the Digital Humanities*

The term *Humanities* refers to the study of human-created artefacts; nowadays communities of scholar are moving into a period dominated by the need of digital resource. That is the reason why the discipline of Computer Science met the humanist field giving birth to the *Digital Humanities*. When computing implements the humanities, the result is the birth of *digital culture artefacts* (Nyhan et al. 2014). In fact, paradoxically, both computing and humanities might be considered *sciences about the artificial* (Simon 1969).

This *new* field relies on the convergence of the digital tool inside the humanist framework. A convergence between the ancient and the young, since the Computer Science discipline is dated back to the second half of the twentieth century. This cooperation of researchers gave birth to several ambitious projects; in the philological field, these works are known as digital editions.

A digital edition can be defined as a tool enabling the simultaneous representation of the diplomatic and critical edition in an electronic format, in which each text object is available in digital form (Rosselli del Turco 2012). That does not mean that the editorial components have to be organised through hypertextual links, nor that they have to contain mandatory multimedia elements connected with the manuscript.

Cerquiglini was the first scholar to recognise the electronic calculator as a valid instrument to interrogate medieval manuscript. He considered the digital environment more suitable to the new philological approach, born in the 1990s, and known as *New Philology*.

Built on the idea of a more fluid text, philologists of this new approach reconsidered the so-called Lachmannian method, intending to give more importance to each witness of the manuscript tradition, since it could have handed down important

historical and linguistic information. Their proposal was to free the text from the concept of authorship inherited from neo-Classical and Romance cultures. According to the *New Philology* scholars, the medieval text is characterised by non-linear features, due to the presence of musical notation, glosses or decorations on it. The idea of a more dynamic text became rapidly diffused, and it was proved to be easily representable in the digital domain, since it enabled to catch the dynamism of these characteristics. From this point of view, in fact, the electronic means allowed representing each witness, along with its transcription, facsimile image and critical edition; consequently, it was the most suitable way to realise in practice what Cerquiglini described in his work *Eloge de la Variante* in 1989.

A digital edition might contain all the traditional elements of a printed one. It presents the historical forms of the text, the dissimilarities among witnesses of the tradition, and aims at explaining their differences. It contains also the explanation of the editorial choices, giving the reader the possibility to test editors methods. On the other hand, however, a printed edition cannot present all the features of a digital one. In fact, a traditional edition cannot give the user access to every witness, to their digital reproduction and to the connection between the text and other elements as the critical apparatus, indices or appendices. Thus, the possibility for an electronic calculator to handle a large number of data is naturally the most important advantage. As a consequence, considering further the dynamic nature of computing, it is possible to obtain active artefacts, rather than static ones.

Pioneer in the Humanities Computing is Father Busa with his project *Index Thomisticus (2000-2013)*¹⁵. That is a monumental index to the works of St. Thomas Aquinas.

Concerning the Germanic philology field, a large number of projects proved how image-based editions are the most appropriate means to represent medieval manuscripts. In fact, in case of decorations, glosses, or neumatic notation, images can help the user to better analyse the text and to compare it with the original manuscript folio. Among these projects, one can remember the *Electronic Beowulf (1999/2013)*¹⁶,

15 <http://www.corpusthomicum.org>

16 <http://ebeowulf.uky.edu>

led by Kiernan and first example of image-based edition, or the *Digital Vercelli Book* (2016)¹⁷, edited by Rosselli del Turco, in which the images play an important role as well, and, lastly, the *Nibelungenlied*¹⁸, edited by Stolz and based on image facsimiles of the St. Gallen's codex.

The new aspects introduced by digital editions are directly connected to the technical tool used to produce them. Their potentials might be summarized in four main points (Stella 2007): *Quantity*, *Relationability*, *Interoperability* and *Multimediality*.

The first one refers to the computer quantitative availability that drastically reduces the need for choice, which instead characterises a printed edition.

The second point, instead, pinpoints the possibility to relate data to each other. In fact, digital editions are able to connect complex systems of data; that has been considered highly functional, in particular in case of traditions with a high number of manuscripts, in order to represent both the chronological and geographic dimension of the text, in case it was elaborated in different regions or in different epochs.

The third point regards the *interaction* with the scientific community. The dialog between the editor and the critical reader is another important feature of these digital works, and it has already become the basis of the so-called *pro-editions*. These works are realised through the online cooperation of several scholars, before publishing the final printed edition.

The last point is connected, instead, with the possibility to insert multimedia elements, e.g. audio or video files, within the digital domain. That might be considered the biggest advantage of an electronic textual representation, since it enables the reader to better understand those dimensions that can easily be lost by means of a printed edition. For instance, the reproduction of musical notations is useful to reflect on the role of musical notes in medieval manuscripts. That enables editors to create *musical* editions for *musical* manuscripts and to praise their importance during the Middle Ages. Moreover, it is useful to reconsider also other paratextual elements, like manuscripts decoration, which played a role as important as the text did.

Terras (2006) stated how these projects, although realised through the computer

17 <http://vbd.humnet.unipi.it/beta/#104v>

18 Müller S. und Sprünglin M.: Digitale Edition Codex St. Gallen 857, in: Text. Kritische Beiträge 10 (2005), S. 159-165.

means, focused more on the research about the text than in adding innovative elements on them, so that they might have been considered not that different from traditional printed editions. Albeit that could have been true in the past, an increase in multimedia tools and non-textual representation has been recently reported.

Digital Humanities scholarship is able now to place a high value on medium, understood, of course, as a digital one, as the fundamental premise for those works. Since the introduction on the *World Wide Web* and the confirmation of its role as the most natural medium to spread this kind of works, it is possible to make a distinction between Web-based digital edition and stand-alone ones. Anyway, also in this latter category, one can distinguish between browser-based editions that can, therefore, be published on the Web, and custom-based editions, which are rarely run online. In all those cases, in which a digital edition is published on the Web, the *Graphical User Interface* (GUI) plays an important role in its general aspect and functionality. Browser-based editions already present the software in the user computer, so that no installation is required, but on the other hand, not all browsers are always available for every *Operative System* and they might be inflexible or difficult to customise. In the case of stand-alone editions, the *software* shows a higher flexibility and an easier way to implement different functionalities. Unfortunately, they also present some drawbacks, found in particular in compatibility problems, or obsolescence dangers.

As already stated above, the convergence between the classical and the Computer Science field took several advantages in humanities studies. Nowadays, however, digital project within this field of studies are not yet widely spread. According to Robinson (2005), there are three main drawbacks of these works and they can easily be discovered in their costs, usually still expensive, in the lack of interest in their publishing and, lastly, in the lack of appropriate tools for their realisation.

Rosselli del Turco (2012) listed some general principles useful to improve the User Interface Design, which should be taken into consideration during the realisation of a digital edition. The first one is the *Consistency*, which refers to similar action performed in the same way. For instance, interpretative or textual notes should appear in the same place when selected by the user. Another important principle is the *Readability*, since the type and size of the character should always allow the reader to

consider the text as legible. Under the principle of the *Recognition*, instead, it is meant to make every aspect of the edition immediately recognisable in the context they were meant for. Moreover, the user has always to feel a *control* over the digital environment, moving through the areas by means of *visible navigation* tools. The scholar, then, takes into account some specific aspects concerning the digital edition as the *special character handling*, whether not included into the Unicode standard, the integration of *supplementary tools*, as glossaries or appendices, a good *hyper-textual functionality* and, lastly, an *advanced search functionality*.

Albeit all efforts to improve digital editions, one can state that several projects show disadvantages derived from the lack in one of the above-mentioned principles. The scholar further analysed different digital projects focusing on their negative aspects. From the *legibility* point of view, projects like the *Canterbury Tales General Prologue (2000)*¹⁹, edited by Solopova, shows an unreadable navigation tree on the left-hand side of the screen, along with a rather small text font, which is, unfortunately, impossible to increase. Foy's *The Bayeux Tapestry (2005)*²⁰, shares the same problem concerning the font size; moreover, the colour and size of the navigation cursor make it likely to be confused with the background image. Other projects, instead, present problems regarding, mainly, the image manipulation. For instance, some archives show non-proportional scrollbars that do not allow the user to understand how large is the hidden part of the image and how much is, instead, currently visible.

A digital edition has to be not only a research instrument, but also a useful work for further digital projects within the field of antiquity sciences. It is important to consider how the digital means can allow to discover and to analyse less notable texts, giving back to the manuscript the ability to hand down the high quantity of information it was supposed to have done before the introduction of printed editions.

According to Father Busa (1997), the computer technology should allow scholars and researchers to realised their editions faster and with less human work on them. That, of course, does not mean that an electronic calculator might be able neither to exclude the human intervention, nor to completely succeed it. On the contrary, it is

19 Solopova E. , "Chaucer: The General prologue on CD-ROM". Cambridge University Press, 2000.

20 Foy's M.K., "The Bayeux Tapestry Digital Edition". SDE, 2005.

always important to remember the interpretative contribution given by the editor in every single aspect of the digital work (Buzzoni 2005). In fact, albeit the realisation of new and computer-oriented digital editions, it is still clear how the human intervention in realising these works is and will be indispensable (Chiesa 2002).

A digital edition is the by-product of a team work, in which experts of different field and coming from different backgrounds cooperate together from the research process to the publishing, in order to create the final work. Sometimes, text traditions are too wide for a single scholar or a single research group. Thus, the research process involves the so-called *crowdsourcing*, where communities of researchers add their own contribution to the final work (Robinson 2004). Nowadays, the editorial process requires the cooperation of more eyes, ears and hands. That reflects the best the shift from a static printed edition to a new and dynamic digital one, where artefacts are no longer unchangeable and where people have to work together, in order to praise the *mouvance* of medieval manuscripts.

That rose several questions about the necessity to create *hybrid* professional figures, *computer philologists*, which nowadays unfortunately still do not exist.

Readers may give their contribution to the work too. The extension of interactivity will change the way, in which the reader has been considered so far. In fact, it encourages the rise of a dynamic user, who might contribute to the final work, being part of it. A reader, who can see the documentary evidence that determines what is included in a digital edition, in order to understand the editorial choices and be open to new and further interpretations. Since everyone plays a role in its realisation, this new kind of *product* will be not only the *translation* of a printed work, but rather a totally new one. Collaborative works might be the solution to the usability issue concerning electronic editions. Such works might remain usable, as long as they *are* used. That is enabled thanks to the Internet. In fact, in an online edition, the user feedback should become an integral part of the editorial process. In this way not only the reader may vet, comment and review the work, but those feedbacks might be used to adjust and reshape it, until it becomes a more manipulable one, in comparison with the rigid freeze of the printed page (Smith 2004).

These commentaries might be collected in several ways: the development of

blogs on the edition Website, online newsletters or progress reports are few examples of means through which gather them; of course, in our digital era, social networks might equally contribute to receive and spread users feedbacks. In this way, the work may surely change over years, but it will stay in use and turn to be less vulnerable than an archived one.

In making available quantity of data that a printed work cannot manage, three theoretical models seems to have been useful: the hypertextual representation, the encoded model and finally the database edition. The following subchapters have the main goal to introduce them, describing their feature and their application in medieval and modern works.

2.2 *The hypertextual representation*

The first example of hypertextual writing was already discovered in Joyce's novel *Ulysses* (1922)²¹, due to its multiple narrative plots. Afterwards, other works as Calvino's *Il castello dei destini incrociati* (1973)²², and Cortàzar's *Hopscotch* (1966)²³ were considered examples of hypertextual writing.

The hypertextual representation within the Web domain was used for the first time in 1965, and it was born with the purpose of connecting information on the *World Wide Web*. Main features of this kind of structure are its non-linearity and interactivity, which allow also the presence of multimedia materials. Within the field of digital humanities and, in particular, in the case of a digital edition, it played and still plays an important role. Considered a characteristic of these works, the hypertextual model aims at creating a textual form, which is more suitable to a medieval manuscript (Ziolkowski 2001). In fact, it allows the possibility to represent the text in a more dynamic way, placing side by side the diplomatic and the critical edition with imagines, appendices, and other editorial contents. Including all witnesses variances, it makes possible to better understand the concept of textual *mouvance*, become a milestone of the *New*

21 Joyce J., "Ulysses". Sylvia Beach, 1922.

22 Calvino I., "Il castello dei destini incrociati". Ricci editore, 1973.

23 Cortàzar J., "Hopscotch: A novel". Pantheon Modern Writer Series, 1966.

Philology. In this way, each manuscript can be taken into consideration, and its variances fully represented, praising their importance within the tradition. The use of the hypertext with an appropriate encoding permits to preserve the whole textual tradition and to show it together with the diplomatic, the critical edition and the critical apparatus.

Robinson was the first one to illustrate how a digital apparatus can be much more versatile and functional than a printed one. For instance, taking into account the project *Parzival*, edited by Stolz, one can notice how this work is characterised through a *horizontale Kollationspartitur*, in which a four times divided screen can show simultaneously the facsimile image, the diplomatic and critical edition and also the critical apparatus; that makes possible to note variances within the texts of the manuscript tradition.

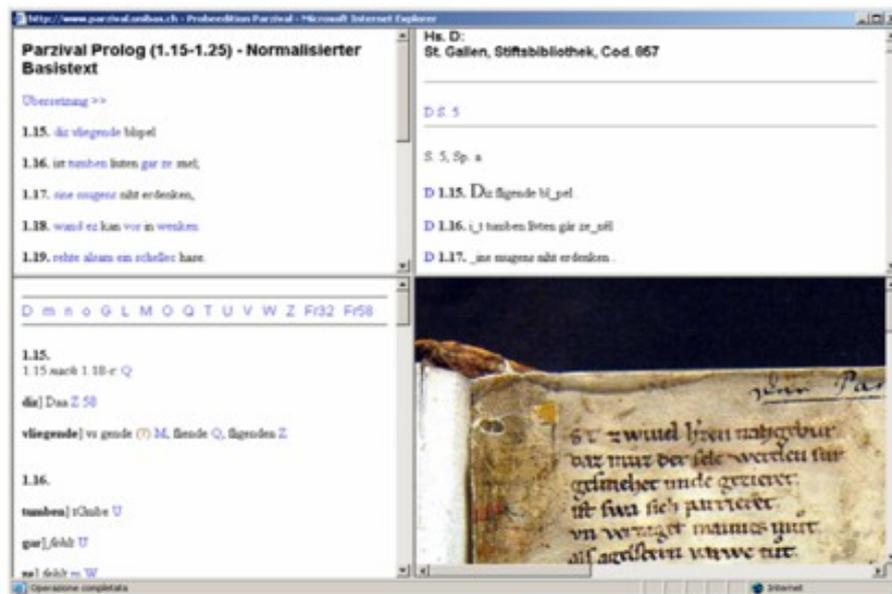


Figure 3 – Parzival Project. *Horizontale Kollationspartitur*²⁴

Another possibility is to build the critical apparatus in more layers, containing both the *Varia lectio* and a possible commentary. For instance, the project *Corpus Rhythmorum*, edited by Stella, deals with 140 witnesses, all transcribed and encoded

²⁴ Image taken from Stella, “Metodi e prospettive dell’edizione digitale di testi mediolatini” in *Filologia Mediolatina* 14 (2007): 15.

through a XML markup language. The critical apparatus has been organised into four groups (*Variations, Sources, Comparison and Fortune*), which can be compared with the text shown on the left-hand side of the screen.

However, both these kinds of critical apparatus seem to have a low user-friendly level. In fact, considering the *Parzival* project, the apparatus proposed by the editor includes the *Varia Lectio*, which might be, nevertheless, difficult to understand for a generic user. The same drawback has been registered in the case of the *Corpus Rhythmorum*. All four sections, in fact, do not provide the user with a more discursive commentary, which might be, instead, useful to correctly place the manuscript from a historical and a linguistic point of view. Notwithstanding, their functionality, relying on the hypertextual representation, is highly guaranteed. Thanks to their interactivity and multimediality, both works have been considered milestones of the new philological field.

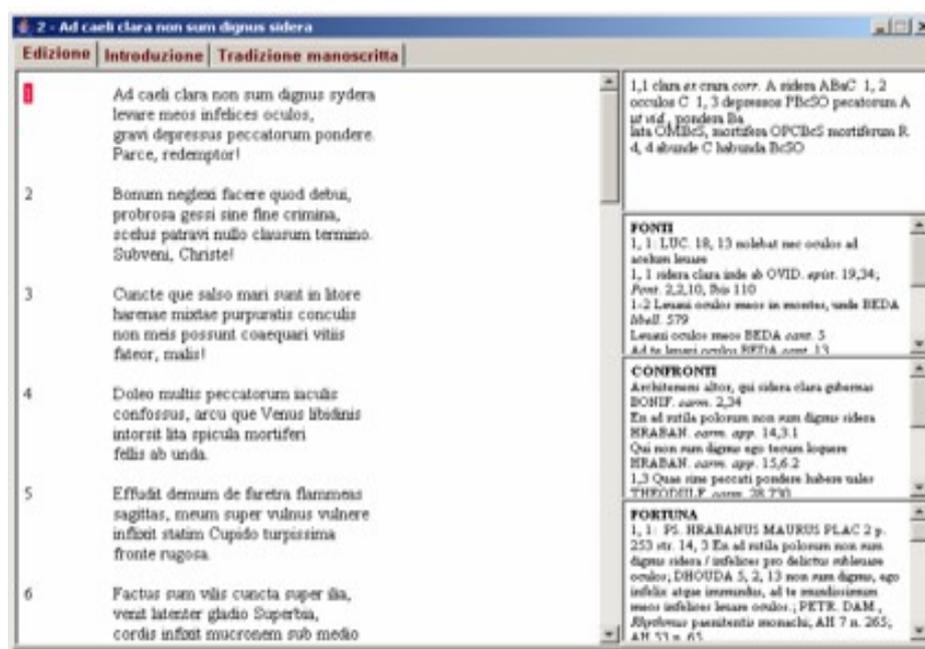


Figure 4 - *Corpus Rhythmorum. Critical Apparatus*²⁵

In conclusion, the hypertext, born as a tool in the field of the Computer Science,

²⁵ Ivi, 13.

has become a fundamental element through which realise digital editions. The possibility to publish these works online is the presupposition for its use and the reason of its fortune. Within the field of the digital humanities, it has become a means, through which the spatial limits of a paper edition might be overcome and improved by the digital non-space (Tomasi 2008).

2.3 *The development of markup languages*

Besides the hypertextual representation, the encoded model is one of the most used ones. In fact, it was adopted in the realisation of a large number of projects. In the field of the *Digital Humanities*, the communication with the electronic machine is allowed through the use of *markup languages*. A digital edition is nothing else than a series of textual *files*, first encoded by means of an international standard language that allows a high portability, like the XML, and then connected with multimedia resources, as facsimile images or musical transcriptions.

However, a digital edition has to be considered much more than a simple digitalized text. In fact, taking into account an already existing text, one has to consider the computer as an artefact; instead, in order to produce a new, digital born text, one has to refer to the computer as a medium. What is really able to make a distinction between a digitalization and a digital edition is the amount of metadata encoded by the editor during the creation process.

Within a digital edition, it is possible to distinguish three data categories: textual data, meta-textual data, and extra-textual data. Thanks to the use of an appropriate markup language, all of them can carry out a noteworthy amount of information within the digital environment. Each digital edition starts with a transcription of the witnesses, handing down the text. The transcription of one or more witnesses of the electronic text is always useful in the case of a *codex unicus*. The electronic edition would allow representing the facsimile of the original text, the diplomatic/interpretative edition, and the critical one, which would be realised not *ope codicum*, rather *ope ingenii*. In the case of multiple text traditions, instead, it would be useful to transcribe all the witnesses,

whether no critical edition has been realised, otherwise, some scholars suggest to take into account previous editions (Ferrarini 2007). That is the most important passage within the creation of an electronic work; the transcription, therefore, relies on markup languages, which are generally characterised by these four conditions (Ferrarini 2007):

- They have to be able to openly declare the transcription responsibility and its criteria;
- They have to be characterised by a high portability and consequently to be separated from *hardware* and *software*;
- They have to represent in the most appropriate way the textual source;
- They have to be normalised, realised through standard languages shared by the whole scientific community.

The portability of such works is an important point to develop and to take advantage of. The continuous changes in the technology field might make works obsolete and not able to be run on a selected *software* anymore. The realisation of editions characterised by portability would make possible to reconvert these works in the future, saving them from the obsolescence.

The use of a markup language can provide useful information about the textual structure, in order to represent *non omnes textus, sed textus toti* (Ferrarini 2007).

In general, markup languages are based on a set of instructions aiming at the description of such phenomena, as the structure, the composition or the text layout. These languages are made of strings of visible characters, which are inserted into the electronic file, according to specific rules. In fact, the markup is distinct from the digital textual transcription and it involves the identification of logical and physical characteristics or even to control later processing. The term markup means to *note a text*, it comes from the traditional publishing, in which an author marks up a manuscript adding his annotations or symbols: directive for the print process (Spring 1989). First examples of this process are dated back to the Middle Ages when copyists used to write notes or other noteworthy information about the text on the parchment margin. In the same way, the computer-based markup language allows specifying features of a selected

document or text. It is the preliminary and indispensable step for every following operation on the electronic document. The development of these languages started in the 1960s, years, in which the use of the electronic calculator for printing was rather common. Afterwards, the 1970s and 1980s were characterised by developments of the markup use to improve the digital typesetting; consequently, the use of these languages became explicit (Goldfarb 1981).

The markup represents the definition of a *text model* that suits the electronic representation the most. The proper use of a markup language allows retrieving the largest number of elements, which will be used for the realisation of the electronic work and, otherwise, highly likely to be lost. It has been described as the *core competence of digital humanities* (Terras 2011).

Within that field of studies, one can distinguish among different kinds of markup languages, according to their owner or their main characteristics. On the one hand, in fact, the markup might be owned by a company, or it might be defined as a set of standard instructions, shared by some organisations that do not own it, but make it available for the community. That represents the basis of *open sources* works. On the other hand, the greatest difference among markup languages might be found between the procedural and the descriptive kinds.

Generally speaking, a procedural markup is a set of instructions specifying, mainly, output features; on the contrary, a descriptive markup might be applied to any text genre, and it is focused more on the description of formal features shown by a document. Naturally, in choosing the markup, the editor has to account for the final purpose of the digital document. In fact, several factors have to be taken into account; from a production point of view, one has to consider whether the purpose is to digitalise an already existing text or to create a digital-born one; from a preservation point of view, it is important to decide whether the electronic text is destined to be part of an archive or, instead, whether it may be object of future manipulations and, at the end, from an interpretative point of view, one has to decide which aspects of the text are important in view of its final realisation and therefore, which kind of markup suits them the best. The possibility to implement such languages, from both a qualitative and a quantitative point of view, is an important feature, since both the addition of material or

the revision of an already existing one are two fundamental processes of digital works.

As already stated above, the procedural markup consists of a set of instruction aiming at defying the page typographic structure. It is called *procedural* since it tells the electronic calculator all the procedural actions, to which the character strings have to be subjected. This kind of markup is typical of the first developed kinds, which were created with the main purpose of taking care of the typographical aspects of a document. However, a procedural markup shows several drawbacks. Firstly, this language usually presents a strong connection with a selected *software*, able to interpret its instructions, and that might widely restrict its portability. Secondly, it comprehends the loss of all the abstract components of the text. In the field of the *Digital Humanities*, these components play an important role and they might be of great interest for a humanist.

In order to solve these lacks, the development of a new kind of markup language was seen as necessary. For this reason, *generic markup languages*, in which the character strings are interpreted not as formatting instructions, but as structural ones, were created. Generic markup is made of *tags* meant to be inserted into the electronic text to specify the logical structural function of the text portion they are referring to. For this reason, they were then called *descriptive markup languages*. They are not owned by a company, but rather they are *platform-independent* languages since they are based on text format instructions (Tomasi 2008). According to Renear (2004), the development of descriptive markup derives from three major events: William Tunnicliffe presentation at the *Canadian Government Printing Office* in 1967, Rice's project of realising a catalogue of *editorial structure* in the 1960s and Goldfarb early work about the text processing *Game Maker Language* (GML) in 1969.

A descriptive markup language presents many advantages for the transcription, the publishing, and the archiving processes. In comparison with a procedural markup, in which one has to remember style conventions, a descriptive one identifies each text component and the formatting process takes place automatically. Moreover, structure-oriented editing, as well as more natural editing tools are available and supported. The publishing process is simplified, since the formatting might be specified, but also modified; it is possible to automatically create apparatus, like an index or appendices.

This kind of markup languages allows a high portability and interoperability, with the result of an easier transfer to other text processing systems. Lastly, descriptive markup treats the document as a *Data Base*, facilitating retrieval functions, and finding aids. Due to the several advantages it allowed, this kind of markup was soon recognised as the *correct approach to organizing and processing text* (Goldfarb 1981; Reid 1981; Coombs et al. 1987).

Thanks to the introduction of descriptive markup languages, it was possible to produce several models of the same text through a more layers representation of it. Anyway, it is important to remember how each text encoding model is the result of a specific point of view about the text in question; therefore, it is the expression of the analysis that the scholar intends to perform upon such text.

2.3.1 SGML, HTML, XML

The origin of the descriptive markup might be dated back to the release of SGML in 1986 by Charles Goldfarb. Its main goal was to define a standard scheme in the markup field, in order to overcome the vast number of markup languages created until then and to encourage data exchange and portability.

It is based on a generic, description-oriented markup, which allows reproducing the abstract text structure through a hierarchic tree representation, in which each node corresponds to a *tag*. Then each textual portion might be described through a conventional name, called *element*. The technical concept of *elements* was introduced by SGML and applied to the XML language as well. It is an actual component of a document and, within the markup structure, it is visualised as surrounded by angle brackets (e.g. <element>). Each tag has to be closed through a slash into the angle brackets (e.g. </element>). Furthermore, each element might be implemented by so-called *attributes*, which have the function of better specify them.

Rather than a language, SGML is a meta-language; it was meant to specify another language. It supplies only the syntactic rules, while the value of each tag is specified into a *markup* vocabulary called *Document Type Definition* or DTD. Inside a

DTD are listed all what is needed, in order to elaborate a proper markup. For instance, the value of each element or attribute and the ASCII/Unicode strings for each *entity* that might represent a special character.

Based on SGML, HTML is a DTD, which makes use of SGML standard syntax and provides also a vocabulary for the interpretation of its elements and attributes. Some features of this languages might be summarised into its restrictive number of elements, a less power syntax and its preference toward stylistic-oriented elements, rather than structural-oriented ones. It was soon evident how all the disadvantages of this language had to be solved through the further development of the SGML itself.

In order to solve HTML lacks, an SGML subset was developed in the 1990s and released in 1998 under the name of *Extensible Markup Language 1.0*, or XML. As its predecessor, XML is a meta-language that allows specifying several kinds of markup languages. Its main goal was to be used on the Web, it has become the fulcrum of computing for humanists, without any coordination between the software developer and the content developer. The great novelty introduced by XML is the logical description of the textual information in a reader-friendly format, without taking into account how the final layout will appear. In fact, the XML language does not concern the typographical aspect of the text anymore; other languages are delegated to assign the text a layout. This point will be further developed later on in this chapter. Alike SGML, XML is organised through a hierarchical structure, which does not allow overlapping. This markup language works with elements, and its main characteristic is the mandatory end-tag; in fact, no tags may be omitted in an XML document, in order to consider it *well-formed*. The user can realise documents following an XML *Scheme*, or creating his own markers, in case existent ones were not enough for the markup work.

In general, a XML file is made of two main features: a XML *declaration*, which is the first string of the document (e.g. `<?xml version="1.0" encoding="UTF-8" ?>`) and a root element that comprehend a set of elements in hierarchical order. Within these languages, one can make a distinction between *data-centric* documents and *document-centric* ones (Tomasi 2008). The main difference is the use of XML, which is employed to carry out data in *data centric* documents, whereas its function is mainly to describe the constituent elements in *document centric* files. Since XML is provided

with instruments to create, to question and to transform data, it might be considered an example of *Data Base*.

XML is a flexible system, and its *self-describing* nature allows to describe the text structure through the writing itself, which can elucidate also implicit textual aspects. As already stated above, XML, as SGML, is characterised by the use of elements through a hierarchical organisation. Unfortunately, in some cases is common to find what Tomasi defined as an *overlapping hierarchy* (2008). Common examples are the rhetoric figures, like the poetical *enjambment*, in which there will be an overlapping between the markup of the metrical structure and the one concerning the syntactic analysis. Consequently, phenomena like this are difficult to solve and are considered a drawback of this markup language.

As already stated above, XML does not focus on the document layout, so that, in order to visualize the text on the Web from a typographical point of view, it is necessary to use transformation languages like the *Extensible Stylesheet Language* (XSL). This kind of stylesheet, developed by the *World Wide Web Consortium*, is used in order to create a HTML output for the Web visualisation of the electronic text. An elementary example of how an XSL language works is provided in the structure below:

```
<q> Example </q>
```

One can transform the content of the element `<q>` in a string surrounded by quotation marks by means of a XSL stylesheet, as shown below:

```
<xsl:template match="q">
<xsl:apply-templates/>
</xsl:template>
```

In the XSL language, the XML tag is transformed through a *xsl:template*. The specification given to the *template* takes place every time it fits into the XML document. Each *template* element has a *match* attribute that identifies where the transformation should be applied. Then an *xsl:apply-template* places the chosen transformation in the

right way. The result on the Web visualisation would be: “Example”.

The use of this transformation language allows both the editor and the user to choose which information they want the text to show. This multiple textual choice does not change the database content, which is located on a higher level, but it simply defines a different way to use these data and to combine them together. As a result, the unique content of the edition is able to show endless typologies, chosen according to the *medium* and to the audience. The use of XSL stylesheets underlines even more the flexible structure of an XML document, which is able to represent several aspects of the text, on which it is used.

2.3.2 *The Text Encoding Initiative*

In order to encourage the portability of digital products and to allow the format sharing, a project named *Text Encoding Initiative* found its starting point in 1987. Called simpler through its acronym TEI, it is a DTD for those texts ascribed into the humanities field. The project was led by three main associations: The *Association for Computers and the Humanities* (ACH), the *Association for Computational Linguistics* (ACL) and the *Association for Literary and Linguistic Computing* (ALLC). Scholars from all over the world collaborated to the creation of this literary-humanistic markup standard. Also the *TEI Guidelines*, a sort of instruction manual for the use of this markup language, are the by-product of the cooperation of experts from many countries and disciplines.

The TEI is based on a descriptive markup, rather than a procedural one and it comprehends a scheme, aiming at describing a large number of phenomena typical of classical texts and at finding a suitable vocabulary for them. The purpose of its creation was to obtain a common markup lexicon, based, in the first time, on the SGML language, and, from 1998 on the XML one. The first draft “P1” was released in 1990, followed by the “P3” in 1994. In 2002, the Consortium made a revision of the *TEI Guidelines*, within the release of the “P4” version, and, lastly, the “P5” and current version was released in 2007. It comprehends 504 *tags* and introduces several changes, for instance, the

integration of graphics, or the possibility to make references to other XML languages within the TEI document. Furthermore, a great advantage of this markup is its economy. For instance, a TEI subset, called TEI *Lite*, has been developed and it comprehended a simplified version of the markup scheme. The purpose is to spread this markup project, without demanding the audience to learn the whole scheme, so that the realisation of electronic texts might be easier.

Each TEI document is mandatory made of two section: a TEI *Header* and a TEI *Text*. Within the *Header*, all the information concerning the bibliography, the notes and the revisions are collected into several elements. Among these, one can list `<fileDesc>`, which gathers all the editorial information about the paper witness of the electronic text, `<encodingDesc>`, in which markup methodologies are declared, `<projectDesc>` that describes the aim of the electronic text, and `<editorialDecl>`, which comprehends a textual description of the markup used. With regard to the element `<text>`, it might be further divided into four different elements: `<front>` and `<back>`, which are optional and used only when the document shows paratextual information as an index or foreword at the beginning or an appendix or glossary at the end; mandatory is, instead, the use of the elements `<body>`, to introduce the text and, finally, `<group>` that is recommended in case of several texts gathered into the same publication. Within the element `<body>`, further subdivisions might be the elements `<head>` for titles, `<div>` for categories as books or metra and articulated in different section through the elements `<div0>`, `<div1>` and `<div2>`, and, at the end, the element `<p>` for paragraphs and `<l>` for lines.

The TEI has been criticised by a large number of scholars mainly because of its rigid hierarchical structure. In fact, alike the XML language, TEI does not allow markup overlapping. Unfortunately, not all texts might be described through rigid hierarchies (Renear et al. 1997). However, this problem has been, partly, solved thanks to the introduction of *self-contained* elements, like `<lb/>`, useful to avoid overlapping between the typographic line and the verse. Fortunately, equips of experts currently work on this markup language, taking it always updated.

2.3.3 *The dynamic aspect of markup languages*

So far, criticism about the creation of digital edition focused on a main issue; it primarily concerns the similarity between digital and printed editions, underlining the lack of novelty on them. These works are centred more on the textual visualisation than on its processual information. In them, the digital component is treated in an ancillary way, since they do not take advantages from the frame of the digital environment. In order to shift from a mere textual representation to the analysis of its informative content, a new understanding of edition is needed and, furthermore, the markup strategy has to be reconsidered.

The markup language may play an important role since it presents the electronic text not only as a representation of the original one, but rather as the outcome of both author and editor work. From a critical point of view, the markup has to be considered as a performative and dynamic tool; the result of an operation that considers the text both as a textual variance and as an interpretative variant. From this point of view, it might be seen as a diacritic sign, necessary for a correct textual criticism. At this point, it assumes a performative nature and its ambivalence allows to build a connection among data structures.

Buzzetti (2008) stated how a dynamic edition needs a dynamic representation as well. The goal of the markup should be to create a loop between the textual expression and content.

The scheme in *Figure 3* presents the dynamic model of the markup language, which might be compared to the text mobility. In this way, the outcome will be a text structured on several layers. Its development can be reconstructed through the connection between the revisions and the information concerning the textual expression. In a system based on a database, each modification will produce more markup, and every change in the markup will modify data inside the *database*.

As a conclusion, vagueness of textual phenomena are not to be considered an anomaly, rather they may be valued through the markup language, in order to create

better digital editions, more suitable to the digital environment and trying to make the user an active part of this dynamic process.

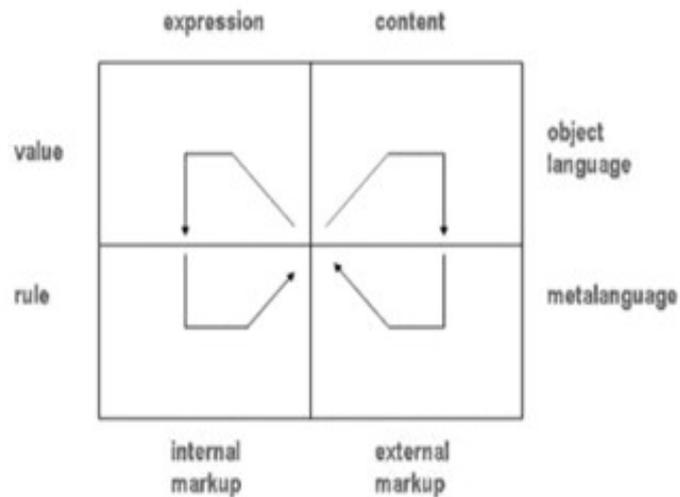


Figure 5 - Model of dynamic markup²⁶

2.4 The Database model and the Digital Library

A database edition uses the resources of IT (*Information Technology*) to solve some problems due to multiple traditions or re-writing of the text (Stella 2007). The database creation corresponds to the basis for a digital archive realisation.

These works, in comparison with digital edition, are known to be more static and to have a restricted usability, since often they cannot be updated and, therefore, after some years they cannot be used anymore. The most common problems are related to the *software* degradation, the dependence on specific hardware, and finally the possible obsolescence of systems and applications.

In the field of Latin studies, ALIM is an example of project based on a database. The work has been realised since 1996, and it is an archive of Italian-Latin texts realised

²⁶ Image taken from Buzzetti “Towards a model for dynamic text editions” Proceedings of the Conference Digital Humanities. University of Oulu, June 25-29, 2008.

during the Middle Ages. Its main purpose is linked to the lexicography field; the project, in fact, was meant as an Italian contribution to a medieval Latin vocabulary creation, promoted by the *International Union of Academies* (IUA) of Brussels. All texts inserted into the ALIM archive are taken from previous editions; the critical apparatus and images are excluded from the digital work. The project shows an accurate searching functionality for allophones, single phrases or words. All texts have been encoded through a TEI-complaint markup language. In particular, a TEI Lite markup language has been used to encode only typographic lines of already printed editions. Therefore, they are not *digital-born*; on the contrary, ALIM aims at presenting texts as they are shown by their printed editions. The content of the archive is divided into two kinds of sources: *Literary* and *Documentary* ones, both might be downloaded from the online Website. A further development of the ALIM has been hypothesised, in order to insert in the archive the previously excluded elements, for instance images and the critical apparatus. The new project will be named after ALIM 2.

Another Italian work based on the use of a database is the work *Tesoro della Lingua Italiana delle origini* (TLIO); it is an historical vocabulary of the Italian language from its origin until 1375.

The TLIO can be considered an online vocabulary, in which both poetry and prose are accepted, along with literary and non-literary texts. In fact, the project includes the Italian text production realised in the whole period taken into consideration. The idea of collecting and digitalizing these texts was already born in the 60s-70s, but the real starting point of the TLIO project began with the realisation of the OVI database, in which all the used lexical materials are gathered together. The power of the digital means enabled the periodic components update, guaranteeing the usability of the final product. Since it is an historical vocabulary, its contents are ordered according to a chronological point of view. The corpus shows both old and new editions of each text. Moreover, each transcription is preceded by a deep philological analysis.

In the last century, a large number of scientific works have been realised through the use of the database model; however, an alternative to the archive has become rather popular and it is found in the so-called *digital library*. A digital library is a digital collection, where files are gathered together and then published on the Web. Archivists

and librarians were the first ones to actively participate in the creation of digital collections, taking great advantages from digital tools and features. The first acknowledgement of their importance is dated back to 1994 when several millions of US federal funds were allocated for researching in this field. This experimental stage was followed by a developing one in the late 1990s when both social scientists and librarians became more interested in the existence of digital libraries.

However, in order to enter the mature stage, one has to work better and harder on the interoperability and on the sustainability of these projects. In order to call them *digital* libraries, there is the need to create modular, extensible and community-based metadata, along with a higher attention to their *digital preservation* (Tomasi 2008).

An important feature of a digital library would be the cooperation among communities, in creating packages of metadata, which can be used for several current and future projects. The possible development of a *middleware* platform (Tomasi 2008) would permit to interrogate large amount of data, located on different servers, and to implement them by means of different technologies. The *middleware* platform would become a common environment for different digital libraries.

The role played by these collections is important, since they enable scholars to access facsimiles of several institutions without having to visit them. Thus, their first aim is to make books consultation easier, providing scholars or students with digital repositories made of sustainable materials. In comparison with a traditional library, the digital one allows separating the physical aspect of the library from its access. However, a common misconception is that a large number of online materials can be considered a digital library (Besser 2004). In truth, as traditional libraries have both physical and ethical traditions, also the digital ones have to present both these aspects to be considered as such. In fact, they have to provide the same services of a traditional institution, as the acquisition, the preservation, the organisation and finally the possibility to consult the whole collection.

The most important stage in the creation of a digital library is the metadata choice since on them will depend the further operations on the digital collection. The description of a complex digital object may be realised through several levels and by means of different kinds of metadata. On the one hand, descriptive metadata are used

for creating the bibliographic description, while preservation ones inform the user about the technologies used during the digitalisation process. On the other hand, the use of structural metadata enables both the connection between different versions of the same material and to relate them together.

Digital libraries solve an important drawback of archives, which usually offer the data but no tool to interrogate them. A digital library, on the contrary, would provide a display and search tool to questioning such data. The disadvantage of this kind of collection has to be found in their lack of interoperability since each one comes with its own conventions and encodings.

In order to better understand the functional aspects of them, one can consider the development of several works, both in the Italian and in the European landscape. The project *Biblioteca Italiana* (BibIt)²⁷, promoted by the University of Rome “La Sapienza”, is based on a collection of electronic texts, encoded by means of an XML/ TEI markup language. The collection presents Italian texts dated back to the beginning of the twentieth century. Moreover, the TEI consortium has created digital collections as well. Among them, it is worth remembering the *Oxford Text Archive* (OTA)²⁸, and the *Electronic Text Center*²⁹.

Concerning more on the field of the historical bibliography is, instead, the *Google Books Library Project*.

Its main purpose is to make library data more visible and accessible on the Internet. The two main advantages that this project presents are the position of the library data alongside with *Google Books*, with a consequent search access to the full text and Google’s search algorithms. Within *Google Books*, it is possible to consider different editions. That creates a connection between a digital library and a more traditional one, a place where a bibliographer researcher would understand the concept of the *edition*. The main difference among them might be found in the starting point of a bibliographical research. While in a traditional library, scholars would start with the physical weight of the book in their hands, in *Google Books* the searching process starts with the metadata.

27 <http://www.bibliotecaitaliana.it>

28 <https://ota.ox.ac.uk>

29 <http://cte.virginia.edu/resources/the-electronic-text-center-online-archive-of-electronic-texts/>

In conclusion, digital libraries have become the new paradigm of the Web domain. They are based on the paradox that these new digital projects have the goal to provide stable access to endless changing editions; nevertheless, the more the product becomes volatile, the more the research will focus on providing it with a more stable permanency. In developing and publishing such works, an important starting point is to know both technologies and metadata that will be used within the project. Furthermore, it is necessary to acquire different competences, to be aware of the need for interoperability among different platforms, and of new and functional means to preserve digital collections.

All these challenges will shape the libraries of the future.

2.5 Italian Digital Projects

Several projects ascribed into the landscape of digital computing applied to the humanities took shape in the last century; as the above-mentioned examples show, a large number of them are related to the German or the Anglo-Saxon environments. After having considered the birth of digital humanities and the main characteristics of a digital edition, in this section, I would like to take into account the Italian contribution to this field. The main goal will be to analyse two important projects, ascribed into the Romance culture, which led our country into the field of humanities computing.

Firstly, I would like to introduce the *Ramusio* digital edition. The project has been realized within the *Ca' Foscari University of Venice*, and published on the Web in 2015. Coordinated by Burgio, Buzzoni, and Ghersetti, the edition involved the collaborative work of editors, orientalist researchers and philologists. It aimed at creating a digital representation for Ramusio's edition of *The Million* by Marco Polo (1559). The project concerned, therefore, the basis of the Italian tradition of this work, with the purpose to reconstruct its textual composing process.

It has been realised by means of an hypertextual representation, which sets it apart from an electronic archive. From this point of view, the digital environment enables to insert collations, sources, and an information selection, ensuring the

readability of all these elements. The user is also provided with a wordlist, in which a commentary aims at explaining the meaning of all those foreign words known to the author. The wordlist refers to the *Peliot* dictionary, updated to 1973. All the sources are read through the text **R**, siglum of Ramusio's edition. Already existing editions have been used, whenever available and reliable, whereas new scholarly ones have been created for the unpublished texts of **P** and **L**.

The edition is divided into several sections; the *Introduction* is followed by the three books that can be opened separately. The section *Testimoni* (witnesses) presents the redaction of all the manuscripts handing down the text. The wordlist, connected to the text, and the bibliographical section, organised through several links, represent an example of the hypertextual nature of this project. The three sections containing the contacts, the instructions, and the information about the project close the Italian digital edition.



Figure 6 – Sections of the Ramusio Project³⁰

By opening one of the text, one can notice that the left-hand side of the screen is

³⁰ All the images regarding the digital edition of the Ramusio's Project are taken from <http://virgo.unive.it/ecf-workflow/books/Ramusio/main/index.html>

devoted to the textual edition, in which hypertextual links are connected with it.

Figure 7 and Figure 8 show additional windows related to the wordlist itself, or to philological commentaries.



Figure 7 – Hypertextual wordlist



Figure 8 – Critical commentary

With regard to the critical apparatus, this digital edition is not provided with a traditional one. Instead, all the notes have been inserted into more discursive commentaries, which proved to be useful and highly functional.

Each commentary might be opened per periscopes, clicking on the number on the upper-left side of the screen. This kind of critical apparatus is totally different from classical ones, enabling a larger audience to analyse and understand the work, and it may be considered an advantage of the project. In fact, compared with a negative critical apparatus, a more discursive one might be used both by a generic user, interested in the field and by experts. It can be used as a tool within the didactic methodology for high schools as well. In fact, it might be more interesting for students to come into contact with these works and to study them through a complete commentary, which enables them to understand the text also from a historical and geographical point of view.

All the features of this project proved to be useful means for analysing all textual variants and witnesses. Nevertheless, the main drawback of this Italian digital edition is the lack of a TEI-compliant markup, since it is instead based on several HTML pages.

In conclusion, the possibility to personalise the desktop, opening and moving additional windows the way that suits the user the best, is, of course, an advantage of this project that encourages the interactivity with the reader, making it a user-friendly edition.

Another Italian project is the *Corpus Rhythmorum* (2007), realised through the cooperation of the Italian philologist Stella and the medieval musicologist Barrett. This digital work is focused on metrical Latin texts for a total number of 140 manuscripts. The goal of the digital edition is to create a database, based on metrical-structural evidence, of Latin texts dated back to the fourth until the ninth century. Less than a third of these texts have been published into the *Poetae Latini aevi Carolini* of the *Monumenta Germaniae Historica* (Dümmler, Traube, Strecker and Fickermann 1891-1953), while some of them remained unpublished. From this point of view, the creation of such a database would allow the collection of homogenous data. The main goal is to analyse the origin of versification and rhythms as a documentation to explain the

transition from Latin to early Romance languages.

The project uses several multimedia tools, like the witnesses facsimile images or, whenever possible, the musical transcription, realised by Barrett, and reconstructed from the neumatic notation found on some manuscripts lines. That might be considered as one of the first interdisciplinary philology experiment, focusing on a *multimodal* digital edition.

The *Corpus* proposes a sort of open edition. Each text is presented in seven different forms: manuscript reproduction, diplomatic transcription, diplomatic musical transcription, *historical* transcription, vocal execution and critical edition. Within the searching process, the user is provided with a cross-referenced consultation in the above-mentioned forms, in which the text appears in the edition. Elements can be compared diachronically and synchronically among each other; the user may start his research from a single word, or a section of more than one, until data related to Carmina, stanzas or to single verses, as shown in *Figure 9*.

All of them are important advantages for a digital edition enabling the reader also to compare the critical text with the original folio of the manuscript.



Figure 9 – *Corpus Rhythmorum*. Search interface³¹

31 All the images related to the *Corpus Rhythmorum* are taken from <http://www.corimu.unisi.it/>

Another important feature of digital editions might be considered the *search functionality*. According to the developed searching tool, it is possible to broaden the work audience, including both experts and inexperienced users. In fact, different audiences require different kinds of searching functionality. On the one hand, scholars and other *in the field* users might want a rapid tool that allows them being easily connected with the element they are looking for; on the other hand, instead, a generic user often has no exact objectives and looks for a searching tool that can help him during the reading process.

Whitelaw (2012) developed the concept of a *generous interface*, which might be implemented along with the standard one in order to provide the user with the largest amount of information possible. This searching tool works basically by means of filters, through which the user can subtract the element he is not interested in from a generic overview of the whole content of the archive. This new approach has been the focus of the so-called *Information Visualization*. It developed methodologies, in order to insert this new kind of searching tool within a digital edition. An example is the digital archive of the architect Baldessari, realised by LADA and the *DensityDesign Research Lab*³² in Milan.

The *Information Visualization* made possible to create and to employ an explorative interface, in which each user can be guided through the searching process from a generic overview to the single element of the digital collection. The purpose was to reach different audience typologies and to attract, consequently, the largest number of users, from experts to high school students. Therefore, the creation of an archive containing manuscripts editions built thanks to this kind of functionality might be meant for both a generic and a specific audience. A general reader may have several reasons for consulting a digital edition; among them one can consider the impossibility to access library, the distance from good collections, which might be located in other countries or the rarity of some books or manuscripts, which sometimes are available at a handful number of libraries and cannot always easily be consulted. On the one hand, in fact, researchers can have access to all manuscripts versions and their variants, whereas, on

32 <http://www.densitydesign.org>

the other hand, a generic user might use preferred reading paths created by the editor, which would allow him to better understand both the digital work and the manuscripts tradition. Unfortunately, apart from Robinson's *The Canterbury Tales Project*³³, few are the digital works realised in this way. However, the *Corpus Rhythmorum* shows a rather generous search interface, which might be considered without any doubts an advantage of this project.

The work is organised through a database, called DBR, divided into several sections. The *Texts* one is the focal point of the project; by clicking on the Incipit, a new window will appear within a list of all witnesses containing the text in question. This section is based both on the manuscript version and the philological reconstruction. In it, details about the witnesses are provided along with the facsimile image in the two sections called, respectively, *Manuscript* and *Image*. The section *Music* is, instead, devoted to the musical transcript, the alphanumeric transcript, and the musical reconstruction. All the sections are organised through hypertextual links that ensure a high interactivity, clear advantage of this user-friendly project.

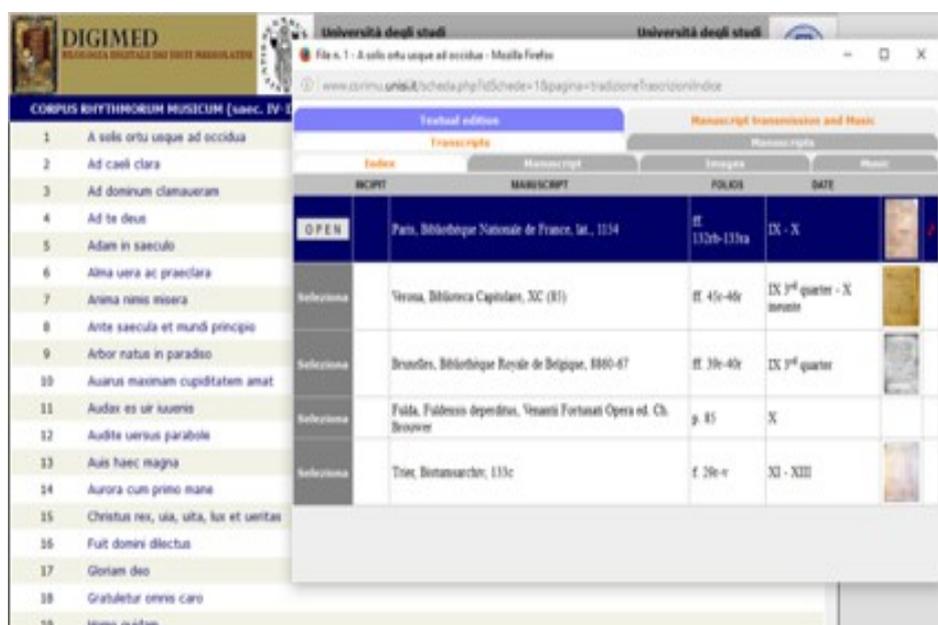


Figure 10 – *Corpus Rhythmorum*. Sections

33 <http://www.petermwrobinson.me.uk/canterburytalesproject.com/>

Through the section *Text edition*, the user can visualize the critical edition of the text along with the critical apparatus. It is organised per strophes, and a new box will appear while moving the mouse on the selected stanza, as shown in *Figure 11*.

The critical apparatus is not organised as a philological commentary, but rather as a traditional one. Unfortunately, while the discursive one would have reached a wider audience, that one might be destined to be ascribed to the small group of experts, without being spread among less specialised users.



Figure 11 – *Corpus Rhythmorum. Critical Apparatus*

Anyway, the philological approach of the edition is masterly able to provide the user with a large number of tools, in order to recover the plural character of the tradition. Thanks to a complete work, textual and multimedia elements are combined together to reconstruct the *mouvance* of the medieval manuscript, in a way impossible to realise by means of a printed edition.

The development of new digital collection has met a long history of skepticism among both traditionalists and humanists. One can notice how difficult it is to find

digital text collections cited as sources in scholarly edited articles; moreover, apart from specialised journals of digital humanities, it is rare to deal with the methodology of creating e-texts. In fact, scholars have been slow in considering the existence of digital humanities and in accepting its role in that field of studies. Notwithstanding, the digital approach has been adopted first by classicists and medievalists than by scholars studying later periods. That is because the computer gives the opportunity to explore a large number of works and to interrogate a medieval text in different ways, in comparison with a printed edition. However, the creation of these works does not require the destruction of books or libraries. On the contrary, it may provoke interest not only in their existence but also in their study through electronic works provided with user-friendlier tools.

In general, the shift from printed editions to digital ones may be easily compared with the one from a manuscript culture to the print era at the end of the Middle Ages. Thus, this change has not to be considered a threat to ancient works and their value, but rather a way to better investigate and study them, enabled by the digital tool to make further and deeper analysis on medieval manuscripts than before (Bornstein and Tinkle 1998). According to Adams (2007), the digital means should enable us to do much more in the research on literary texts than we actually do.

In fact, the goal of a scholarly digital edition is to find the medium transmitting more, rather fewer, about what is found on the printed page.

CHAPTER III

3.1 *Tools for printed and digital editions*

As already stated above, the advantages of a digital edition allow representing the manuscript *mouvance* in a way impossible to realise in the classical printed page. Notwithstanding, if editors are not encouraged in the realisation and in the consequent publication of such works, all these advantages will have no effect on the philological studies (Hagel 2007). Sometimes, scholars and editors have to account for the mandatory creation of a printed edition; therefore, the realisation of a digital one seems to be an investment of money, time, and human work, and for this reason, these projects have been often considered a sort of *ancillary* tool of the printed page.

A suitable solution would be the use of certain *software*, enabling the creation of both outputs with a little additional effort. Hagel (2007) recognised the criteria, through which these tools should be characterised. Firstly, the scholar has to be able to use a single tool, enabling the creation of both printed and digital editions. Moreover, this tool should also allow the user having acceptable results involving the minimal technical expertise. Lastly, all users should be able to expand the basic functionality of this hypothetical tool.

All these requirements have been firstly fulfilled by a *software* called CTE - *Classical Text Editor* (1997), realised by Hagel thanks to the support of the CSEL, the *Austrian Academy of Science*. It is provided with a general orientation that reminds to *Microsoft Word*, albeit it has nothing to do with this word processor. The similar interface has been developed, in order to facilitate the transition to this tool for the general *Windows* user.

Within this *software*, the text may be provided with critical apparatus or notes, applying XML tags with no impact on the printing process. By adding the appropriate tags within the CTE, it is also possible to insert digitalised images. The syntax of the final file is based on the TEI standard. Possible outputs might be the print and the PDF

format for book production, along with a HTML visualisation. The last one is characterised by separated frames, in which notes are connected thanks to hypertextual links, as shown in *Figure 12*.

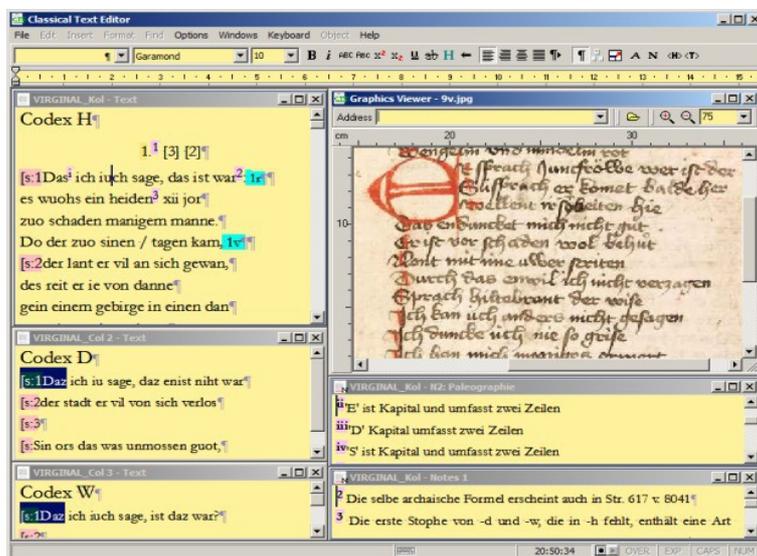


Figure 12 – Example of Graphic Viewer within the CTE Software

Another useful functionality of this program is the possibility to perform image-text connections within the realisation of digital editions.

The CTE *software* is useful to create a digital edition, in particular, whether the editor has no familiarity with more complex realisation programs. However, the main drawback of this tool might be found in the impossibility to publish the final work. In fact, no tools for the stylesheets realisation are included in it, so that the Web visualisation is not guaranteed.

In conclusion, the overall simplicity of the CTE tool may attract not experienced scholars, whether no other tool is available. Within the realisation of bigger projects, a basic tool like CTE may be useful in terms of economical management of large textual quantity, ensuring a uniform output at a fundamental level. Notwithstanding, this *software* seems to be more useful for the creation of printed editions than of digital ones.

However, the possibility of a text-image connection, enabled by CTE, has been further developed by other tools. Gaining more importance in the past years, it has become the basis for the creation of image-based digital collections. Considering this

opportunity, one can list several advantages connected with it.

Firstly, it is useful, in particular, in the case of badly damaged or rare witnesses. It can be a valid instrument during the textual analysis of those editions comprehending more than one witness, or in the case of users not experienced in a particular textual tradition. Noteworthy is also the possibility to use this feature as a didactic method, in order to enable students to make a comparison between the text and the facsimile image during their studies. Lastly, this functionality may be also an important *framework* for other possibilities, for example within the researching process of palaeographic details or single words.

In the past, in order to realise this connection, it was necessary to divide the image into *slices* corresponding to the text lines. Afterwards, the image was recomposed through a HTML frame and then image further associated with a Java instruction, in order to connect it with the text. This method was rather complicated and presented also several drawbacks (Rosselli Del Turco 2016). Among them, the investment of time, in order to divide each image into *slices*, a process, for which a high attention is required. Moreover, with this method the text-image connection was not realised by means of an XML markup language. Since digital editions rely on standardised creation criteria, that did not suit works realised through TEI-compliant markup languages. Therefore, several have been the proposals to insert spatial information within the markup language to enable that connection.

The first attempt was made with the *software* EPPT - *Edition Production and Presentation* (2008), realised by Kiernan. Two modules of this software allow introducing spatial coordinates as elements and attributes of the TEI document; they might be retrievable by delimiting the area of the image.

The *TEI Guidelines* contains different elements that might be used for this purpose³⁴:

`<facsimile>` *containing a representation of some written sources in the form of a set of images;*

³⁴ The definitions of both elements and attributes are taken from the *TEI Guidelines* Section 11, <http://www.tei-c.org/Guidelines/>

`<surface>` *defining a written surface in terms of a rectangular coordinate space;*

`<zone>` *defining a rectangular area contained within a surface element.*

The element `<facsimile>` is a structural one and it has to be collocated at the same level of the element `<text>` into the hierarchical structure of a TEI document. In fact, it can also present elements as `<front>` and `<back>`. Once the transcription module is added to the markup scheme, it is possible to choose among a `<teiHeader>` and a `<text>`, a `<teiHeader>` and a `<facsimile>` and finally among a `<teiHeader>`, a `<text>` and a `<facsimile>`.

Furthermore, it is possible to create a facsimile module, containing only the images, or both images and the manuscript transcription. According to which kind of markup has been chosen, there will be two different XML structures. In case the facsimile contains only the images the document will appear as:

```
<TEI>
  <teiHeader>
    [...]
  </teiHeader>
  <facsimile>
    <graphic url="ex1.png"/>
    <graphic url="ex2.png"/>
  </facsimile>
</TEI>
```

On the other hand, instead, the facsimile may present not only the images but also the textual connection with them thanks to the use of the attribute `@facs`. It *points to all part of an image, which corresponds with the content of the element*³⁵. It is used within the element `<pb>`, a reference point, in this kind of TEI document structure:

```
<TEI>
  <teiHeader>
    ...
  </teiHeader>
  <text>
    <body>
```

35 Ibidem.

```

[...]
<pb facs="ex1.png"/>
  <!-- Text of page n.1 -->
<pb facs="ex2.png"/>
  <!-- Text of page n.2 -->
[...]
</body>
</text>
</TEI>

```

Within this kind of markup, the connection between text and image is located on the level of the single manuscript page. Afterwards, applying an appropriate XSL stylesheet, it is possible to let text and image appearing in two different frames within a HTML page, so that the correspondent image will be visualised while scrolling the text.

In conclusion, these three elements might be used to define areas that will be firstly associated with the main image, and then with the correspondent text. The only limitation is that the selected portion of an image has to be of a rectangular shape. In order to associate the text with these elements, one has to assign a `xml:id` to each facsimile element. The most difficult part of this procedure is the identification of the coordinates and their further inclusion into the already encoded TEI document. Unfortunately, the final result won't suit the expectations, whether no precise values are inserted within the XML language.

The Italian software *Electronic Visualisation Tool* (EVT)³⁶, was realised in order to enable a text-image connection between the diplomatic edition and the manuscript facsimile image in a simplified way.

Developed within the University of Pisa, EVT was designed to create web editions, starting from TEI encoded documents. Its user-friendly interface is inspired by Holmes's *Image Markup Tool* (IMT), implemented in XSLT and CSS. It has been used for the creation of the *Digital Vercelli Book*, published in its beta version in 2013.

The starting point is the TEI encoded file, which then will be turned into a web-based application (made of HTML, CSS and JavaScript) sharable on the Web. In order to do that, the user has to apply an XSLT-Stylesheet to his encoded document. In fact, EVT is built around a single stylesheet, which starts a chain of XSLT 2.0 transformations. These transformations have two main purposes: generate the HTML file, and create the

³⁶ <http://sourceforge.net/projects/evt-projects/>

homepage that will recall all the other HTML files (Buomprisco et al. 2013).

EVT is a creation and navigation open source tool, characterised by an innovative layout that goes beyond the tradition printed page. Its main advantage is to require a little configuration and no specific web programming skills, except for the stylesheet creation. The EVT viewer will be presented with the manuscript facsimile on the left part of the screen, and the corresponding text on the right. The user is also provided with other tools for the image visualisation, to analyse it in a deeper way.

In fact, on the top-right corner, three different icons refer to three different available views (Buomprisco et al. 2013). These are *Image Text* view, the default manuscript folio representation, the *Text-Text* view, to compare different edition levels and the *Bookreader* view, which expands the image frame showing double-side images.

On the image side, instead, tools are available to improve the manuscript analysis. The user will find *Magnifier*, to explore the image in greater detail, *Hotspot*, to activate those parts of the facsimile, for which specific notes are provided, *TextLinks* that connects the original lines with the edited text and *Thumbnails* that shows miniature images for the digitalised folio.

Figure 13 shows the EVT Web viewer of the *Digital Vercelli Book*.



Figure 13- *Digital Vercelli Book* edited with EVT

EVT can be used to create an image-based edition of different levels of textual

representation. So far, the supported ones are, respectively the diplomatic and the interpretative editions. The text of the transcription has to be divided into smaller parts, and the XML document has to be provided with a TEI page break, the element <pb>, at the beginning of each folio side, and with the letters *r* and *l* to mark recto and verso pages. With regard to his predecessor, within EVT the section identification process is more complicated. In fact, in using *Image Markup Tool*, the encoded file has to be implemented with no other elements; the user can simply use the TEI document within the *software* and then create spatial coordinates by drawing rectangular shapes onto the facsimile image.

Nowadays, a new important feature has been developed for EVT new version. In fact, the tool is now able to support also the critical edition, encoded in TEI XML P5 standard (Alzetta et al. 2016). Based on the *TEI Guidelines*³⁷, EVT will provide a connection between a specific reading and the critical apparatus, allowing the collation of witnesses. Thus, they might be examined in a parallel way, from a palaeographic point of view.

Even if born for the specific contest of the *Digital Vercelli Book*, EVT has also been used to publish the digital edition of the *Codice Pelavicino*³⁸ manuscript, dated back to the 13th century, and by the *Centre Virtuel de la Connaissance sur l'Europe* (CVCE)³⁹, in order to create a framework for bilingual documents (French, English) of the *Western European Union* (W.E.U.) in the 1954-1982 period. These collaborations led to an enrichment of this tool with new features (Alzetta et al. 2016).

In particular, the tool was implemented with:

- a list of all the entity names into the text;
- an internal searching engine;
- a method to add critical notes;
- a method to show all the information in the TEI Header, in <msDesc>, and in

37 TEI Guidelines. Chapter 12. Critical Apparatus

<http://www.tei-c.org/release/doc/tei-p5-doc/en/html/TC.html>

38 Codice Pelavicino Digital Edition

<http://labcd.humnet.unipi.it/>

39 CVCE

<http://www.cvce.eu/>

- <front> in a separate panel;
- a more flexible user interface that allows the configuration options in several languages.

The need to adapt it to different projects and, consequently, different kinds of documents demonstrates the flexibility of this tool, and the possibility to expand it, in order to be more suitable for different works (Armalesu et al. 2015).

Developed by Holmes at the University of Victoria in Canada with the same purposes of EVT, the *software Image Markup Tool* offers an even simpler way to reach the same outcome. It is an *open source* tool, whose main purpose is to enable an image-text connection, and it will be taken into further consideration into the next subchapter.

3.2 Image-markup Tool (IMT)

The IMT *software*, thanks to a user-friendly interface, allows realising rectangular sections of an image in an easy way and with a short time investment. It has been used for the *Digital Vercelli Book* project, edited by Rosselli del Turco (2014). In particular, one section of it, the diplomatic edition of folio 112r has been connected with the facsimile of the image, in order to allow their parallel study. Another project that used this tool for a text-image connection is *Le Mariage sous l'Ancien Régime*⁴⁰, edited by Carlin. Images are connected with some annotations, which might be displayed in new windows.

In order to better explain the results of using IMT, *Figure 13* and *Figure 14* represent respectively the text-image connection during the realisation process (*Digital Vercelli Book*, *Fig. 14*), and after the Web publication (*Le Mariage sous l'Ancien Régime*, *Fig. 15*).

40 <http://mariage.unic.ca/>

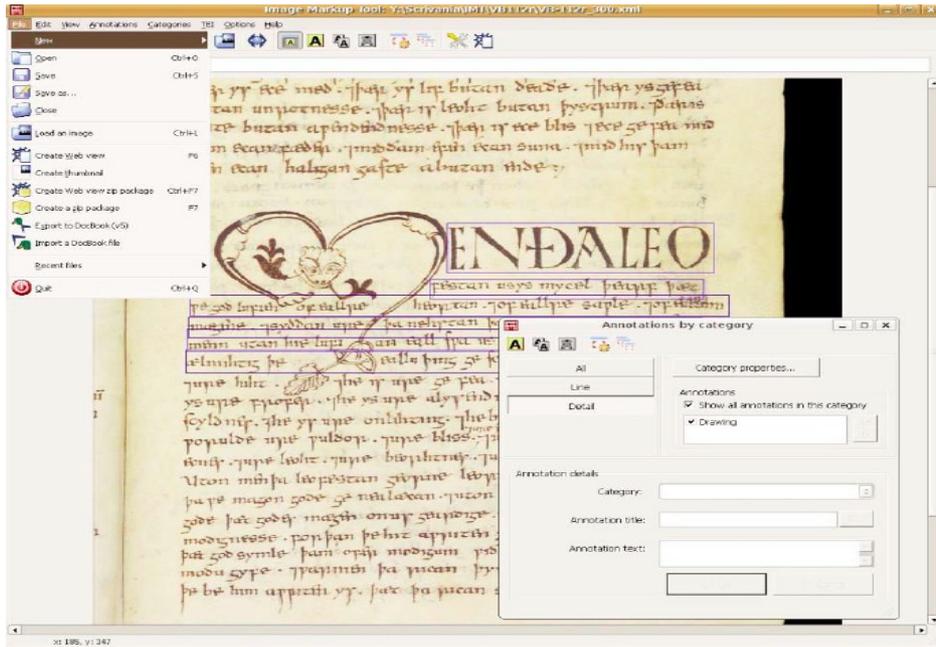


Figure 14 – Vercelli Book, Folio 112r. Annotation through IMT

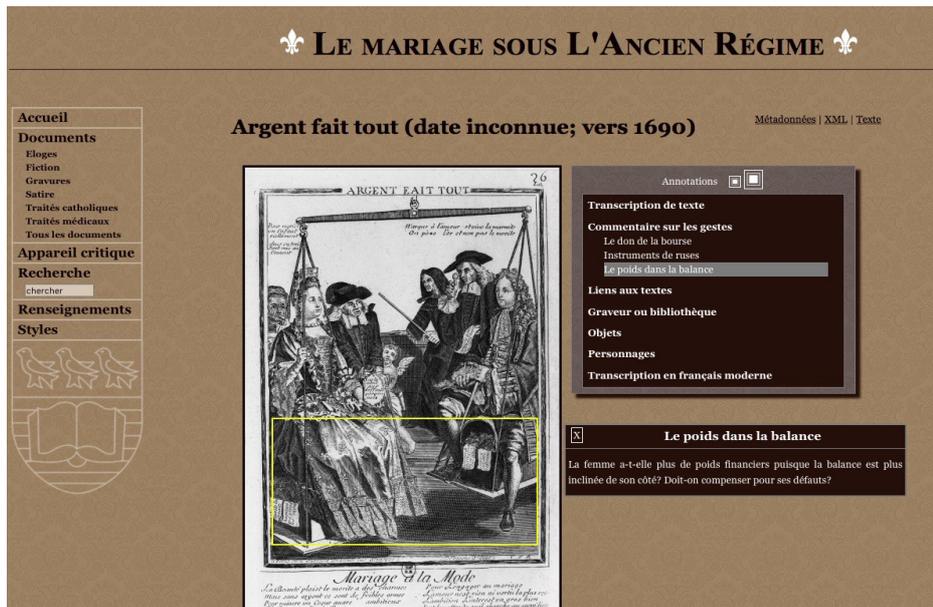


Figure 15– Le Mariage sous L'Ancien Régime. Annotations on the image

The software enables the creation of an XML file, TEI-compliant that can be used, in order to create HTML pages for the visualisation and the possible publication on

the Web. The program will generate not only the stylesheet and the HTML page, but also the mandatory Javascript code to create a text-image connection.

Albeit it is a really efficient *software*, it presents some limitations. Firstly, it supports the annotation of one single image; therefore, it is not possible to create a document with the markup of the whole manuscript. Secondly, the produced TEI XML files have to be implemented later with the ones related to the text transcription. In conclusion, IMT should be integrated within advanced XML editor that supports also the TEI standard; however, the possibility to help philologists in defining the image area to connect with the text might be considered an important advantage and, therefore, it deserves further consideration by the scientific community.

I carried out the project of an Image-based edition, which is the goal of my work, using this specific tool. The edition takes into account 36 notated manuscripts belonging to the tradition of the *Carmina Cantabrigiensia*.

I chose IMT since it gave me not only the possibility to praise manuscripts from a palaeographic point of view, but also to create separated sections regarding the critical edition and the critical apparatus of each poem. Lastly, it was a precious instrument to study the neumatic notation on these witnesses. In fact, the possibility to connect each neume to a brief description of it allows the user better understanding the role of the music during the Middle Ages, while directly observing the notes on the original folio.

In the following subchapter, I will provide a further explanation of how this *software* works.

3.2.1 *The Annotations*

Image Markup Tool works with an annotations creation system, which allows the scholar/user marking the image portion that has to be connected with the text.

The process finds its starting point in the selection of an image in the .JPEG format. Once chosen from an already saved one, this image will be displayed in the main window of IMT, where it might be named on the upper part of the screen. At this point, clicking on *Annotations*, it is possible to open the Annotation window.

Annotations, displayed on the left-hand side of the new window, are the fulcrum of the program, and each of them is made of three major sections: the *Category*, the *Annotation Title* and finally the *Annotation Text*, shown in the lower part of the window.

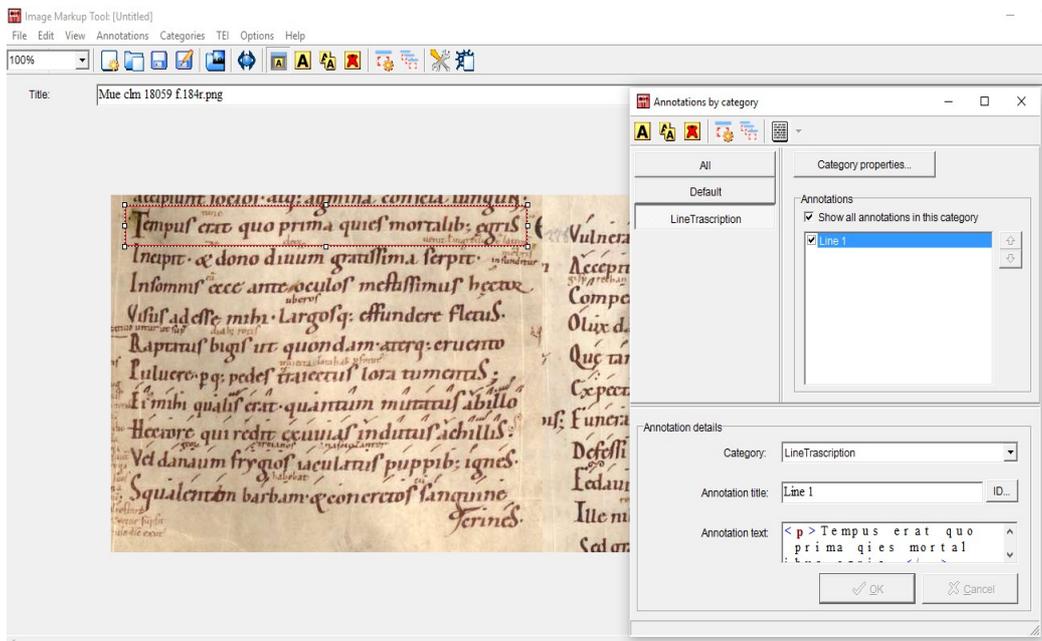


Figure 16 – IMT. Category creation

Once the user has created a category, he can also decide to personalise it in choosing different shapes for the annotation sections, or in assigning different colours to those shapes that will be then drawn on the image. The creation of categories allows distinguishing between several sections, in which then the image will be marked. It is a really convenient way to trace the work and to allow the user orientating easily among annotations. In fact, in case of deeply analysed texts, they may also reach a high number.

After having created and personalised the category, the user has to assign a title to it. The *Annotation Title* is the text that then will be shown on the top of each box within the Web page in the HTML visualisation.

The last section to fill up in the annotation window is the *Annotation text*. In this part, it is possible to insert the real content of the annotation, which will be displayed next to the image, by moving the mouse on it, in the HTML visualisation. This section

allows one inserting also an already encoded XML file.

For instance, taking into consideration *Figure 16*, one may imagine the work of a hypothetical user, aiming at realising an edition of medieval manuscripts. In particular, he may want to create a parallel between the lines of the original folio and the ones of the diplomatic edition. For this purpose, he might choose to create the *Line Transcription* category. It might be useful, in order to connect the text with the image since it will show all the annotations regarding the palaeographic transcription of the folio in question. Afterwards, the scholar might decide to assign the title *Line 1/2/3/...* to those annotations regarding manuscript lines. Lastly, it is also possible to insert a TEI-compliant XML document within the *Annotation Text* section, as the one below:

```
<p>Tempus erat quo prima quies mortali<choice><abbr cert="high">b:</abbr><expan  
cert="high" resp="editor, W.B.">bus</expan></choice>egris</p>
```

This expedient is useful and it might be considered a great advantage of IMT. In fact, it allows reusing already encoded files, while at the same time enabling the *software* to gain all the useful information inserted in the markup language. In fact, IMT will then create an XML document, showing all the information regarding the image-text connection, using those XML inputs properly inserted within the *Annotation Text* section.

Once all the desired sections have been created and drawn on the image, it is possible to save the final file. It is commendable to save it within a folder, where the .JPEG image is easily retrievable, in order to ensure the connection with it.

Within the saving process, IMT creates all the noteworthy files, in order to allow the HTML visualisation. Moreover, the user can visualise the result of his work thanks to the creation of a HTML preview. In this way, he may consider possible changing on the file or just experiment how an IMT file will be displayed on the Web. By clicking on *Create Web View* in the main *Menu*, an Internet page, in which the final file will be displayed, will be opened.

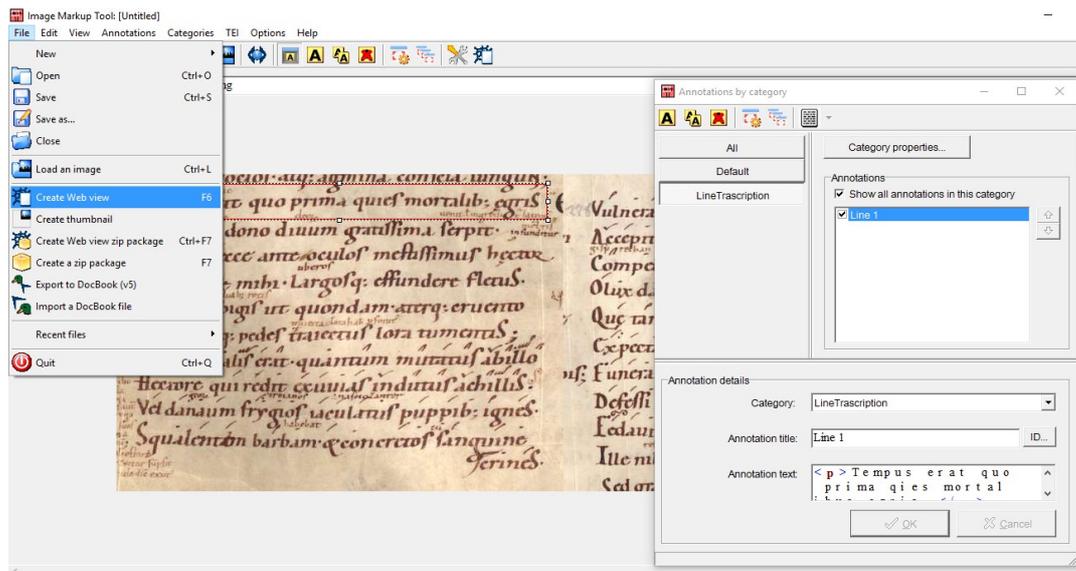


Figure 17 – IMT. Creating a Web view

In case the user is satisfied with his work, he can then save the document. During this process, IMT will create a folder with eight different files. In fact, the program will gather together the image, on which the user worked, an XSL and CSS stylesheets, the HTML visualisation, the Javascript code, and finally the XML file. The simplicity, with which all these operations are processed is incredible. This program, thanks to its user-friendly interface, supports the user not only in easily creating a final file but also in having the first visualisation of that one on the Internet.

Figure 18, shows a folder sample, created by IMT.

Nome	Ultima modifica	Tipo	Dimensione
mue clm 18059	21/04/2008 11:24	Cascading Stylesh...	4 KB
mue clm 18059	22/07/2016 11:29	File HTML	195 KB
mue clm 18059	21/04/2008 13:17	File JavaScript	16 KB
mue clm 18059	19/06/2016 18:32	Documento XML	53 KB
mue clm 18059_wv	22/07/2016 11:29	Documento XML	68 KB
mue clm 18059_wv	22/07/2016 11:29	Foglio di stile XSL	27 KB
mue clm 18059_wv_Mue clm 18059 f.184r	22/07/2016 11:29	File JPG	199 KB
mue clm 18059_wv_zoom_Mue clm 1805...	22/07/2016 11:29	File JPG	320 KB

selezionato 194 KB

Figure 18 – Folder with all created files after having saved the IMT document

IMT provides the user with all the necessary materials to enable the realisation of a TEI-compliant document, which might be implemented or can implement an already existing one; besides, it creates two different stylesheets, maybe the most difficult part to realise for humanists. In fact, it guarantees the user independence during the whole creation process, since it needs no web programming skills.

In conclusion, using IMT, the user might have immediate results; the tool might be considered an example of how humanists can show their project in their final form in an easy and complete way, without eliminating any of those important elements and features characterising a *scholarly edition*.

Of course, this *software* shows some limitations, and it is not comparable with the work of a specialist in the Computer Science field, but it is useful for having immediate outcomes, thanks to a user-friendly interface and a software able to create all the useful languages for the Web visualisation. Besides that, the presence of XML files ensures their use within other projects, or their modification through the creation of other stylesheets, in order to provide the most suitable representation for the philological project.

This is the reason why I chose to work with it on my final project. In the following subchapter, I will focus on the creation of my mage-based edition. I will take as an example one of the 36 notated manuscripts recovered for the realisation of my work, and through it I will consider all the categories created thanks to IMT, focusing

also on the Web visualisation of the final work. The Web preview will be used in order to analyse all the sections characterising my work and the advantages it can bring to this field of studies.

3.3 Image-based Edition of Notated Manuscripts Belonging to the Carmina Cantabrigiensia Tradition

The creation of an image-based digital edition of notated manuscripts finds its starting point in both a high interest into the musical setting and in the wish to take advantage of the possibilities offered by the digital domain in realising critical editions.

The project began with a long research period, in which my aim was to collect all those folii, belonging to the tradition of the *Carmina Cantabrigiensia*, in which neumatic notation was added on manuscripts lines. The research was spread to several European libraries, some of them provided with digitalised facsimile images or with microfilms of the original manuscripts.

After having collected all the recovered witnesses, they have been transcribed; that was a first step for the creation of a diplomatic edition of each poem. Afterwards, each transcribed text has been encoded through a XML TEI-compliant markup language. The markup has been realised by means of <Oxygen/> XML editor⁴¹, which has been a precious aid for the realisation of this project thanks to its user-friendly interface, and a really efficient customer service, offering immediate and precise help in every step of my work.

However, the goals of my project had to be modified and adjusted, in order to match the real possibilities of outcomes. In fact, in a first time, I focused my attention more on the possibility to reproduce the modern melodies of those medieval notes, starting from the neumes written on the recovered witnesses, and to insert them within the digital edition through mp3 audio files. I asked for professional help, and I was told that, unfortunately, the adiastematic notation of those manuscripts gave no information about the intervals between the notes and, consequently, the modern melody couldn't

41 <https://www.oxygenxml.com>

have been recovered starting from them. A possible alternative might have been to collect later witnesses of a specific text, provided with a more modern notation, characterised by tetragrams and clefs. Unfortunately, the latest manuscript that I found during my research can be dated back to the 12th century and, albeit it shows more complex notes, it is characterised only by one line and a not precise clef at the beginning of each verse.

For this reason, I soon understood that the melody recovery process was not possible; therefore, I rather focused my attention on the possibility to praise the text-image connection, in order both to present the diplomatic edition in parallel with the original text, and also to provide at least a description of all the neumes in a way enabling the user to directly see them on the facsimile image.

Therefore, I decided to create an image-based edition, using the *software* IMT, a complete instrument, affordable and easy to perform even for a not experienced user. In fact, as already stated above, it is characterised by a user-friendly interface and it allowed me easily realising my digital edition without further technical support.

In conclusion, the final aim of my project is to create a digital version of all those notated manuscripts kept by several libraries spread in the whole European continent. It should be a valid alternative to their direct consultation, in particular in those cases of rare manuscripts or of *codices* difficult to consult.

The user will be provided with the possibility to connect the text of the diplomatic edition of each witness with the facsimile image of it, along with a description of every neume found in its line. Other sections aim at showing a critical edition of each poem, besides information about the text and the manuscript itself. The edition has been provided also with a critical apparatus. It is made of two sections: a *Varia Lectio*, shown whenever more than one witness handing down the same text has been found, and a discursive philological commentary. It has been realised for each poem, and it aims at presenting them in a more complete way, helping the user in a historical and philological contextualisation. The main purpose of realising a commentary of this kind might be found in the wish to overcome the traditional critical apparatus, often difficult to consult for a more *generic user*, and unable to reach, consequently, a wider audience. The work is then closed by a detailed bibliographic

section.

3.3.1 *The digital edition*

In this subchapter, I would like to pay a deeper attention on the final realisation of my digital edition, in particular on its Web visualisation enabled by the above-mentioned *Web view* functionality of *Image Markup Tool*.

As already stated above, this *software* does not allow to work on more than one manuscript at the time; therefore, each Web page will deal only with one witness, and in this case, with those passages of it containing neumatic notation.

In order to show how this digital edition is displayed in its HTML visualisation, I took into consideration the manuscript **Mü** clm 18059, which shows, on folio 184r, a passage taken from the second book of Virgil's *Aeneid*. It deals with the lament of Aeneas on the deceased body of Hector. The poem has been also handed down by the Cambridge manuscript without musical notation on its lines, and by several other witnesses presenting neumatic notation as in **Mü**. In fact, adiaSTEMATIC neumatic notation has been found on those lines characterised by a stronger *pathos*; that means on the direct speech of Aeneas on the body of the deceased Hector.

I chose this witness, in order to present the final result of my work because the digitalised facsimile image, retrieved on the Website of the Staatsbibliothek of Munich, is characterised by a high definition, so that not only the copyist writing but also the neumatic notation on it is easy to read and to recognise.

In this case, two sections of the folio, 184r A/B, have been merged together, since the *software* does not allow magnifying the image. Therefore, the two sections have been juxtaposed, in order to provide the user with an immediate representation and to make the text-image connection easier.

On the upper part of the screen the file name of the saved document, will be displayed into a violet strip. The image, fulcrum of the edition, is located in the upper-left side of the screen, while on the right-hand side the user might find a *Menu* with all those categories created thanks to IMT. They are gathered under the menu called

Annotations. The whole *Menu* might be moved through the whole screen, in order to suit the users needs the best.

The *Web View* is shown in *Figure 19*.

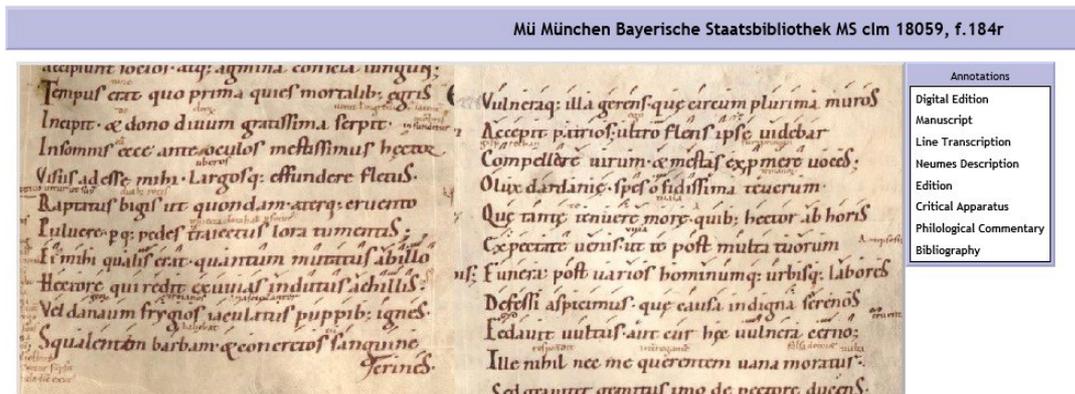


Figure 19 – Web view - Image-based Edition

Each element might be expanded and a new window will be displayed. That might be also moved through the screen, enabling the user to have a personalised desktop and to create his own reading path.

After having created all the categories with IMT, the uploaded image has been divided into section, in which annotations have been created. In fact, I realised a total number of eight categories, which unfortunately is also the maximum allowed number. All of them deal with important information regarding both the poem palaeographic and textual features, taking into consideration also the description of the single neumes found on the manuscript lines.

Figure 20 below, shows the creation of the eight categories within the IMT, the last step before realising a *Web view*.

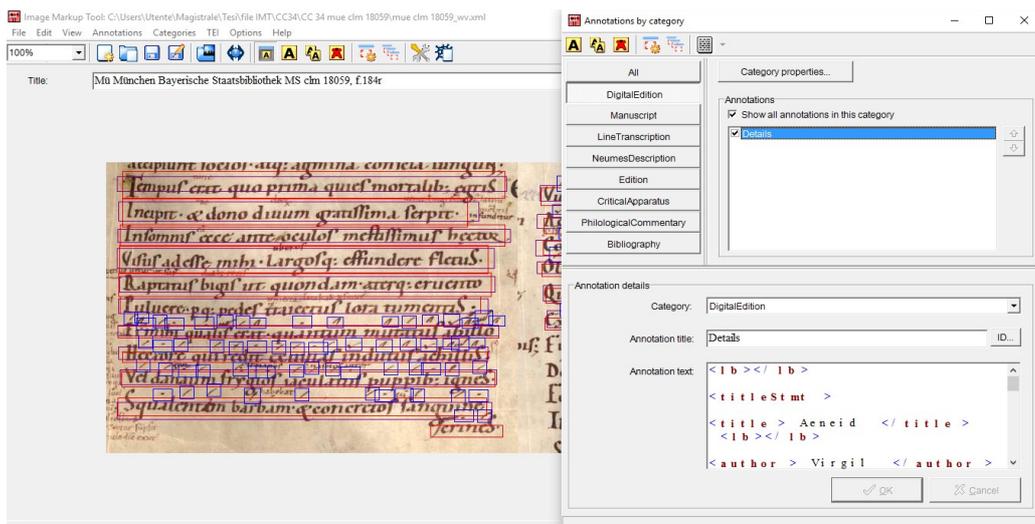


Figure 20 – IMT. Final categories connected with the image

The first category has the function of a *Header*, in which all the information regarding the work in question are provided. By clicking on the category *Digital Edition*, and then on *Details* from the *Menu*, a new window will be displayed, which might be also moved throughout the screen. In this case, the user will find the name of the work, its author, and the lines corresponding to the poem in question. Besides, one can also retrieve information about the editor of the digital edition and the creation date of it. Eventually, changes to the document have been reported in this section as well, in order to provide a complete analysis.

The content of the *Header*, as well as all the other contents of this digital edition, has been encoded through an XML markup, inserted into IMT and presenting this kind of structure:

```

<teiHeader>
<fileDesc>
<titleStmnt>
  <title> Aeneid </title>
  <author> Virgil </author>
<respStmnt>
  <resp> Electronic edition created by</resp>

```

```

<name> Nicoletta Guido </name>
</respStmt>
<publStmt>
  <creation>
    <p> Document not intended for publication</p>
  </creation>
  <date when="06-12-2015"> December 6, 2015</date>
  <p> Last Change <date when="17-07-2016">July 17, 2016</date></p>
</publStmt>
</titleStmt>
</fileDesc>
</teiHeader>

```

Thanks to the possibility to use XML documents, the software can then process them until their final Web visualisation, shown in the *Figure 21* below. The *Header* window has been specially located in the middle of the screen, in order to show the possibility of personalisation offered by the *software*. The possibility to create a *Web view*, without the necessity to publish the work or to create a Website for it, is a real advantage of this *software*. That allows the scholar visualising immediately his own work, in order to use this visualisation or to further modify it.

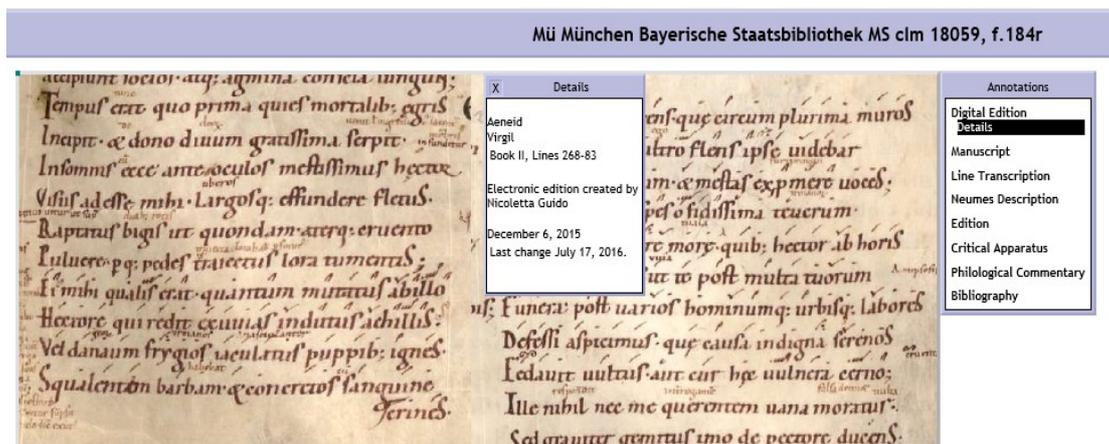


Figure 21– Web view. The Header of the Digital Edition

The second section, instead, is focused on the manuscript description. All the

information presented in it have been previously encoded through a TEI-compliant markup. The TEI module used in this section is the `<msDesc>`, which provides information about the witness repository and the settlement.

Nevertheless, these are not the only information the user will be provided with. In fact, a brief description of those features like the presence of neumatic notation or glosses eventually found on its lines have been inserted in this section as well. Also in this case, the user has to click on the category name and, afterwards, on *Details*, in order to open the new window with all the information.

The second section is represented in *Figure 22*.



Figure 22 – Web view. The Manuscript section

Its first part provides the user with information regarding the place, in which the manuscript is kept (Staatsbibliothek of Munich), along with its siglum (**Mü** clm 18059) and the century, to which the manuscript might be dated back (11th century). The second part of it, instead, is focused on a short and essential description of the witness. For this manuscript, I decided to highlight the presence of glosses and neumatic notation on its lines, since during the Middle Ages they were important elements. Added on often used or read manuscripts, the presence of both of them is a proof of the important role that this poem might have had during that period. In fact, the neumatic notation may concern an orally or even sung performance of it. Considering the topic it deals with, one might also assume that it has been notated on its most salient parts.

The third section of my work might be considered the main core of an image-based edition since it deals with the transcription of the lines composing the manuscript. It has been realised through a text-image connection, using an IMT category. By clicking on the line number from the *Menu* on the right, the user will be able not only to open a new window, containing the palaeographic transcription of that line, but also to compare it directly with the image, thanks to the possibility, offered by *Image Markup Tool*, to highlight the correspondent line within the image. In fact, each verse will be surrounded by a red rectangle, defined during the category creation process. The manuscript line will be equivalent to the textual portion in the transcription box. In this case as well, the window might be moved, so that the user can build his own reading path strategy, placing side by side the transcription and the selected part of the image.

This possibility is shown in *Figure 23*.

An important advantage of these digital works is the high level of interactivity that they offer. Overcoming the traditional static nature of the printed page, the user can now navigate in a new edition, in which he might be able to move in a more intuitive and immediate way among all the elements the work is made of. The topic will be further developed during the description of the critical apparatus chosen for this project.

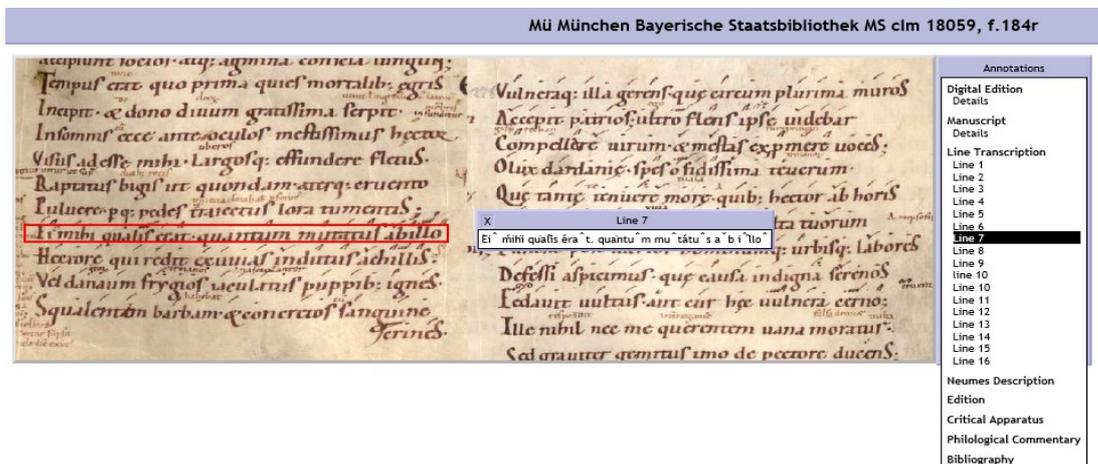


Figure 23 – Web view. Line Transcription

The following category is focused on the description of the neumatic notation presented by the manuscript. In the XML document, this part has been realised in a more

discursive way, through the use of `<musicNotation>`, contained in the element `<msDesc>`. On the contrary, the digital edition presents a short description of each neume connected with the image thanks to blue little rectangles, which surround the medieval notes. Within the *Neumes Description Menu*, it is possible to randomly choose a musical note on the image; afterwards, this one will be underlined thanks to the blue shape, settled during the creation of the category. A new window containing its *Unicode* representation and its interpretation will appear on the screen. Therefore, as already stated for the *Line Transcription*, the connection between the text and the image is guaranteed by the highlighting of the neume within the image. That allows the user comparing the musical sign with its description provided into the new window.

In *Figure 24*, the box showing information about the neume *Podatus* has been moved and located under the sign on the image, in order to better allow the comparison between them. A sign representing the anti-circumflex accent (ˇ) is provided in the upper part of the window, followed by a brief description of this note, and its function into the musical setting.

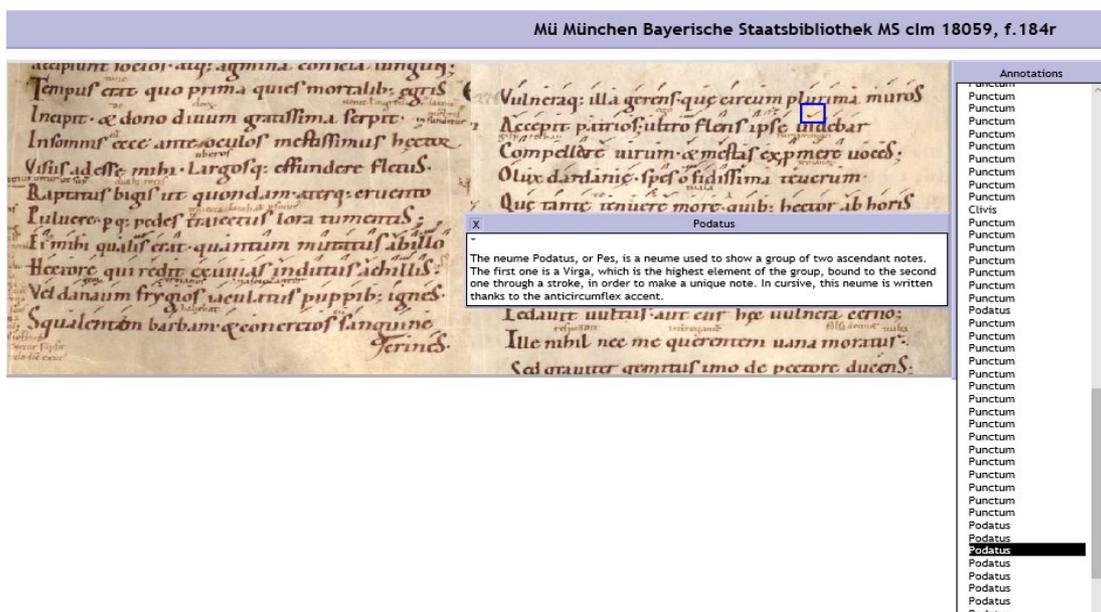


Figure 24 – Web view. Neumes Description

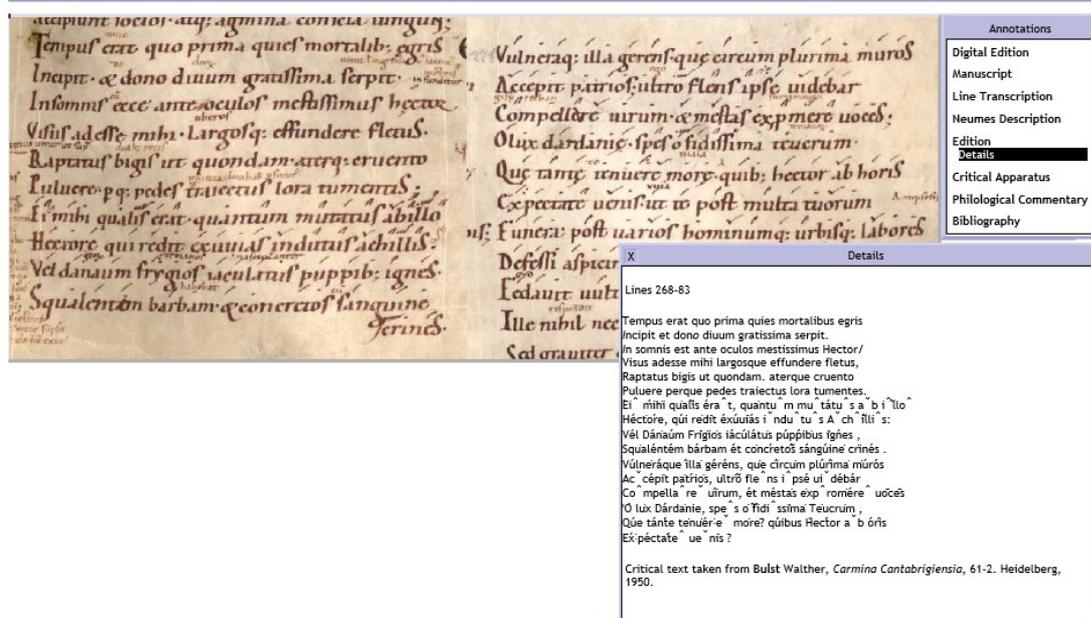
Since the neumatic notation gives no information about the interval between notes, and it is also not spread for the whole length of the text, one cannot either retrieve

modern notes nor state which kind of melody the manuscript was handing down. In this case, it might be useful to take into account Ziolkowski's hypothesis (1998) regarding the consideration of such manuscripts as teaching instruments, aiming at supporting pupils and cantors during the melody learning process. According to the scholar, in fact, the neumes on these *codices* might have been considered more as mnemonic tools, through which students were able to retrieve an already learned pattern of melodies, which had to be reiterated for the whole length of the text. Following this statement, one can understand the reason why the melody has not been written on the whole text, but only on some parts of it. It is also clear why neumatic notations of several witnesses, handing down the same poem, share so many similarities.

The fifth section of my project is dedicated to the critical edition of each text taken into consideration. By clicking on the *Menu* line *Edition*, and expanding it through *Details*, a new window will be displayed. It presents, in its upper part, the number of lines contained in this section. In this case, the edition deals with lines 268-83 of the second book of Virgil's *Aeneid*. In the central part of this new window, one can find the textual edition of the poem in question, provided with a transcription of the musical notation found on its lines. Such edition is taken from already published critical work, whereas the transcription of the melody is the result of my own work on these poems.

Finally, in the lower part of this section, the reference to the consulted critical edition is provided, giving all the useful information about the text.

For this poem, it regards the work *Carmina Cantabrigiensia*, edited by Walther Bulst (1950), providing also pages numbers, along with all the other editorial information, as shown in *Figure 25*.



Tempus erat quo prima quies mortalibus egris
 Incipit et dono diuum gratissima serpit.
 In somnis ecce ante oculos mestissimus Hector
 Visus adesse mihi. Largosque effundere fletus.
 Raptatus bigis ut quondam aterque eruento
 Puluere perque pedes traiecit lora tumentas.
 Et mihi qualis erat quantum mutatus ab illo
 Hector, qui redit exuvias induit achillis.
 Vel danaum frygios iaculatus puppibus ignes.
 Squalentem barbam et concretos sanguine crines.
 Vulneraque illa gerens, que circum plurima murus
 Accipit patrios, ultrò fleus ipse uidebar
 Compellere uirum, et mestas experire uoces:
 O lux dardanie, spes o fidissima teucrum
 Que tante tenuere more quibus Hector ab horis
 Expectate uentis ut post multa tuorum
 Desessi aspicias
 Sed uultu
 Ille nihil nec
 Sed grauer

Annotations

- Digital Edition
- Manuscript
- Line Transcription
- Neumes Description
- Edition
- Details
- Critical Apparatus
- Philological Commentary
- Bibliography

Details

Lines 268-83

Tempus erat quo prima quies mortalibus egris
 Incipit et dono diuum gratissima serpit.
 In somnis est ante oculos mestissimus Hector/
 Visus adesse mihi largosque effundere fletus,
 Raptatus bigis ut quondam, aterque eruento
 Puluere perque pedes traiecit lora tumentas.
 Et mihi qualis erat, quantum mutatus ab illo
 Hector, qui redit exuvias induit achillis:
 Vel Danaum Frigios iaculatus puppibus ignes,
 Squalentem barbam et concretos sanguine crines.
 Vulneraque illa gerens, que circum plurima murus
 Accipit patrios, ultrò fleus ipse uidebar
 Compellere uirum, et mestas experire uoces
 O lux Dardanie, spes o fidissima Teucrum,
 Que tante tenuere more quibus Hector ab horis
 Expectate uentis?

Critical text taken from Bulst Walther, *Carmina Cantabrigiensia*, 61-2. Heidelberg, 1950.

Figure 25 – Web view. Critical Edition

The digital edition is naturally provided also with a critical apparatus. As already mentioned above, it is divided into two main sections: a proper and classical critical apparatus, which contains the *Varia Lectio*, and a philological commentary. The main difference among them concerns the presence of the former only for those manuscripts, for which I was able to retrieve enough witnesses to study and analyse the textual dissimilarities among them. In fact, since my edition deals with notated manuscripts belonging to the tradition of the *Carmina Cantabrigiensia*, I was not able to recover all the notated witnesses. Notwithstanding, I inserted them into a table, in Chapter I of this work, in order to allow further analysis and developments of this topic. Besides that, it is also important to consider how some poems have been handed down by the Cambridge manuscript only, and therefore it is not possible to study the divergences with another text. Therefore, not all texts have been provided with a critical apparatus. On the other hand, each of them shows a philological commentary.

The main purpose of this kind of commentary is to overcome the typical reading difficulties that many users experience while consulting a classical critical apparatus.

The aim of the critical apparatus is to signalise which variance has been chosen and inserted into the critical text and which ones, instead, have been excluded. One may

distinguish between two kinds of apparatus: the positive and the negative one. The former, which is also the most used one, presents the accepted version and, after the sign], all those variances that have been rejected, signalling the manuscripts, in which they have been found through their siglum. The latter kind, instead, does not comprehend the witnesses of the accepted lessons. On the one hand, it could be a means to save space within the page, but on the other hand, its consultation has been considered complicated and, therefore, it is not commendable to be used into an editorial process aiming at broader audiences.

However, thanks to the computer possibility to manage a large amount of metadata, space problems do not concern new digital editions. Consequently, some of these projects prefer the use of a more discursive critical apparatus, in order to better contextualise the text in question within a broader tradition, providing some historical, geographic and linguistic information about it. It would be commendable that the digital interface provides the user with a section, in which an apparatus containing the *Varia Lectio*, or other annotations are available for each witness of the tradition.

As already experimented for the *Ramusio Project (2015)*, a more discursive commentary would not only make the textual understanding easier but would also be hypothetically able to reach a broader audience. The addressees of this new kind of work will be, therefore, not only experts in the field, but also generic users, interested in the topic but provided with not enough information to be independent during the textual analysis. Moreover, this kind of works, in particular those characterised by intuitive and user-friendly interfaces, might also be used as an ancillary tool during the didactic process, in order to bring students closer to this topic and to let them feel more confident in studying medieval text, offering the possibility to compare dynamically text and manuscript. That might be an important and interesting added feature to a classical critical edition.

Of course, as first addressee would be considered the scientific community, and all those scholars, who work hard at these projects, taking advantage of the new possibilities given by the digital domain, in order to keep them always updated.

Figure 26 and *Figure 27* show two examples of critical apparatus and philological commentary within my work. As already stated above, the chosen sample

poem is ascribed into the Aeneid's tradition, in which other notated manuscripts have been found during the research process. Therefore, a critical apparatus presenting the *Varia Lectio* has been provided for this text.

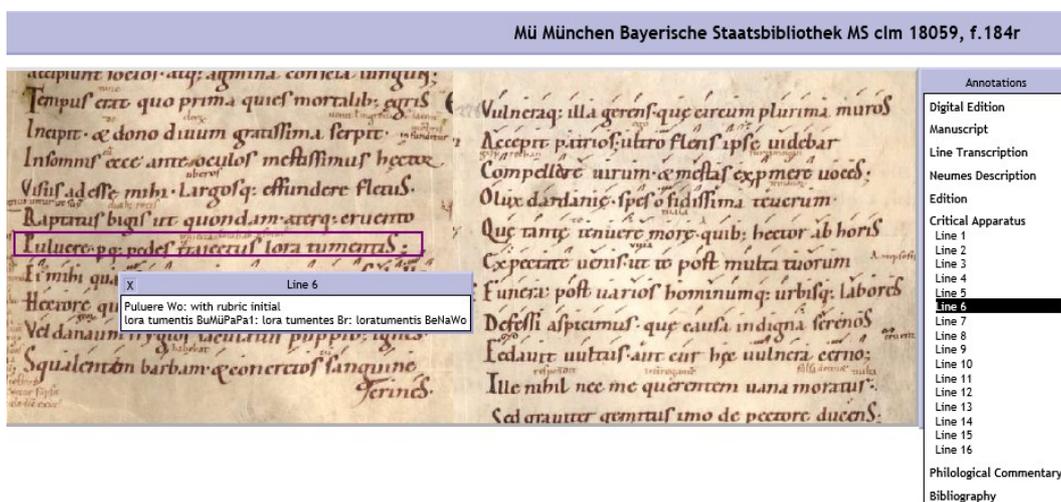


Figure 26 – Web Preview. Critical Apparatus

The connection between the text contained in the apparatus and the correspondent line within the image has been provided through a coloured rectangle. It will be displayed on the image, while clicking on the line of interest from the *Menu* located on the right-hand side of the screen. All the windows of this section might be moved so that the user can compare even better the critical lesson with the original manuscript folio. As already mentioned above, the critical apparatus is organised as a *Lectio Variorum*, in which each lesson that is dissimilar in other witnesses of the tradition is followed by the siglum of each manuscript showing that textual form. For instance, the lesson *lora tumentis* is found in manuscripts **Bu**, **Mü**, **Pa** and **Pa₁**, whereas the variance *lora tumentes* in the witness **Br**, and finally the expression *loratumensis* in codices **Be**, **Na** and **Wo**.

The philological commentary, instead, is found in the seventh section and it will be displayed by clicking on *Textual Notes* from the *Menu* under *Philological Commentary*. Since it is organised in a discursive way, it is characterised by a longer text in comparison with traditional apparatus. Its main goal is to describe the manuscript

handing down the text, giving basic information as the possible composition date, the place where it is kept, the work contained in it, and all the other manuscripts handing the same text and showing neumatic notation on their lines. Afterwards, a brief description of the text contained into the folio taken into consideration will be provided, in order to allow the user better understanding its content. In the case of **Mü** clm 18059, the topic it deals with is rather important, since it might also explain the presence of neumatic notation on it.

Lastly, a conspicuous part of the commentary is devoted to the description of the medieval melody found on the poem lines, comparing it also with other classical excerpts taken from other Latin poets like Statius, Boethius or Horace. The description of the neumes is not focused on the single musical notes, purpose of the section *Neumes Description*, but on a general consideration of them. It focuses in particular on their nature, providing a comparison with the ones of other witnesses of the same tradition and, finally, on the hypothetical possibility to reconstruct a modern melody starting from them.

Mü München Bayerische Staatsbibliothek MS clm 18059, f. 184r		X
<p>accipunt locos: aq; argmina. comella unguis. Tempus ecce quo prima quies mortalib; curis Incipit: a dono diuum gratissima serpit. Infans! ecce ante oculos melissimus hecax. Visus ad esse mihi. Largofq; effundere fleus. Raptauis biq; ut quondam. atq; erucio Pulvere: q; poles traxerit lora tumens. Imihi qualis erat. quantum munitus ab illo Hecare qui redit. exuuias indutus ad illud. Vel dantium fryq; uelutis puppis: ignes. Squalentem barbam q; conerctos lanquine ferens. Vulnera: illa q; erant que circum plurima. miras Accipit patrio: ulro flens ipse uidetur Compellere uirum. a melas expere uocis. O lux dardanio: spes uisissima. tuorum Que tamq; igne nort: quib; hecor ab horis Expetate uenit: ut post muta tuorum us: Funera: post uarios hominum: urbis: labores Defessi aspectus: que causa indigna ferens Edaxit uultus: aut hic hec uulnera. certis. Ille nihil nec me querentem uana motus. Sed grauiter q; erant imo de peccore ducens.</p>		<p>Annotations</p> <p>Digital Edition</p> <p>Manuscript</p> <p>Line Transcription</p> <p>Neumes Description</p> <p>Edition</p> <p>Critical Apparatus</p> <p>Philological Commentary</p> <p>Textual Notes</p> <p>Bibliography</p>
		<p>The manuscript MG (München Bayerische Staatsbibliothek MS clm 18059) hands down, on folio 184r, a notated passage from Virgil Aeneid, in particular, lines 274-283. It is dated back to the eleventh century.</p> <p>These lines deal with the vicissitudes of Aeneas in Carthage, by Dido's palace. Here, the hero reveals a dream, in which the corpse of the dead Hector appeared to him. In this lament, Aeneas describes the terrible conditions, in which the body of the Great Hector was reduced.</p> <p>The passage in question has been found, along with neumatic notation, in more than a dozen manuscripts and it is told to be one of the most notated text of the middle Ages (Zolkowski, <i>The Cambridge Songs</i>, 1998 p. 277). Other witnesses, in which it is possible to find this passage are: Be (Bern, Burgerbibliothek C 29, f. 11), Bu (Budapest, Országos széchényi könyvtar, f. 7), Br (Brussels, Bibliothèque royale MS 5325-5327, ff. 46v/47r), Fl (Florence, Biblioteca Medicea Laurentiana, Ashburnham 23, f. 16r), Ni (Nöteborg, Stiftsbibliothek 742), Na (Napoli, Biblioteca Nazionale "Vittorio Emanuele III", Virg Lat 5, f. 46r), Pa (Paris, Bibliothèque nationale de France, MS Par Lat 8069 f. 44r), Pa1 (Paris, Bibliothèque nationale de France, MS Par Lat 9344, ff. 58r/v), Rg (Citta del Vaticano, Biblioteca Apostolica Vaticana, Reg Lat 2090), Tr (Trento, Biblioteca Comonale, MS 1660 TC) and Wo (Wolfenbütel, Herzog-August Bibliothek, MS Gud Lat 66, f. 100).</p> <p>Alike the excerpts of Statius, this passage shows an epic content and a strong Pathos. An epic character mourning over the body of a dead person still represents the focus of the excerpt. Considering both its pathetic content and its diffusion in several manuscripts, it is not surprising to find neumatic notation on the whole passage or on some part of it. The melody does not start from the beginning of the text. In fact, neumes appear only from the line 274 "Ei mihi, quis erat?" From this point begins the so-called <i>placatus</i>, the heart of the passage, the mourning of Aeneas on the body of Hector, appeared to him in a dream.</p> <p>What is interesting to notice, it is how the melody had a certain consistency throughout Europe. In fact, taking into account manuscripts copied in different places of the continent, one can find almost the same notation in all of them, with the exception of Par Lat 8069 and Wo Gud Lat 66.</p> <p>All the manuscripts show a complex neume at the beginning of line 274. That is in most of the cases a <i>Climacus</i>. The relevant part of the notation is rather simple and similar among the witnesses, symbolising how the melody did not change significantly.</p> <p>As already stated above, Par Lat 8069 is considered an exception, since it shows Aquitanian neumatic notation, in which it is possible to distinguish notes' height.</p> <p>Another difference might be found in the manuscript Wo Gud Lat 66, which shows a smaller number of notated lines. In fact, lines 277-283 have been copied without any sign on them. Spanke (Liederbuch, 121) proposed an interesting hypothesis about this topic. The scholar noticed that the unneumed lines represent a transition from the narrative of the passage to Aeneas' speech. Therefore, the decision to copy them without any musical notation might have the purpose to catch listeners' attention and to alert them about this turning point.</p>

Figure 27– Web Preview. *Philological Commentary*

In order to conclude the analysis of this digital image-based critical edition, it is important to take into consideration the last part of it. It is devoted to a bibliographic section, which gathers together all those references that were useful for the creation of my project.

The need of bibliographic references has been identified by Bozzi (2006) as one of the mandatory requirement of these new digital works. Therefore, my project is provided with a Bibliography comprehending all such noteworthy publications regarding the *Carmina Cantabrigiensia* and their tradition. Besides them, those works regarding the role of neumatic notation and music during the Middle Ages have been included in this section as well. The focus of interest regards classical manuscripts, a conspicuous number of the ones recovered for this edition.

The *Bibliography* might be opened from the right-hand side *Menu*, and its window might be move throughout the screen.

The representation of this last section is represented in *Figure 28*.

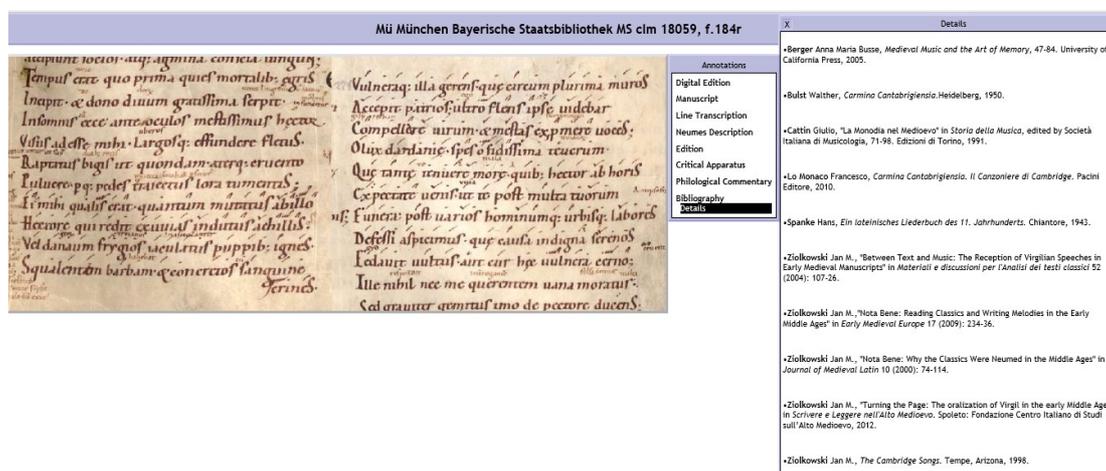


Figure 28 – Web Preview. Bibliography

Eight and last section of my work, the bibliographic section closes the image-based digital edition.

The work has been primarily based on the facsimile image of each manuscript collected during the research process, and on the possibility to connect this one with the text.

The whole project has been realised through a strict scientific methodology, and all the information provided and the hypothesised theories about the role of the melodies during the Middle Ages, in particular regarding classic manuscripts, find a valid and wide documentation in studies carried out by important and well-known scholars of this field.

In the same way, the digital representation of my work has been closely supervised by experts; all these elements have the main role to ensure not only the validity of my statements but also to guarantee the scientific value of this work.

CONCLUSIONS

The aim of my work was to introduce the project of an image-based edition of notated manuscript realised by using the *software* IMT.

The analysis begins with the introduction of the Cambridge manuscript containing the *Carmina Cantabrigiensia*. This poetical anthology, copied around the 11th century, was the starting point of my work since it contains two poems with neumatic notation on their lines. Starting from them, in fact, my research was spread to all those manuscripts, ascribed into the tradition of the *Cambridge Songs*, which were provided with neumes on their verses. Therefore, the first chapter of this work has been spent not only to introduce the sylloge but also to analyse, from a stylistic and linguistic point of view, all witnesses taken into account for the realisation of my digital edition. Even if philological commentaries have been provided only for the recovered leaves, all the notated manuscripts have been inserted into a table, in order to allow further analysis on this topic.

The second chapter, instead, is focused on the theoretical aspects of *Digital Humanities*. Starting from the *New Philology*, its main purpose is to explain the birth of this new philological approach, providing examples of digital works to closer analyse the three major representation models within the digital domain: the *Hypertext*, the *Encoded Model* and the *Database*, with a focus on the role of Digital Libraries. The chapter then has been concluded considering two important Italian digital editions, and underlining their importance in this field of studies: the *Ramusio Project (2015)*, coordinated by Burgio, Buzzoni and Ghersetti, and the *Corpus Rhythmorum (2007)*, edited by Stella.

The last chapter is devoted to the introduction of my digital edition, considering firstly international and Italian tools for the digital representation. *Software* as CTE, EPPT, EVT and finally IMT, used for my image-based edition, have been accounted for their major advantages, along with their limits, in realising such works. Afterwards, my project has been considered in each section it is made of, in order to explain all its

features.

The goal of the introduction of the electronic calculator within the philological field is to provide the user with a new kind of edition, which takes into account not only the witnesses handing down the text, but also all the documented phases of its composition process.

By using IMT, I did not require technical support, since the *software* provides the user with all the useful files for the Web visualisation. However, in most of the cases, the description of the textual *mouvance* of medieval manuscripts, enabled by the digital domain, is the outcome of the cooperation between philologists and Computer Scientists. Notwithstanding, this collaborative work does not show only positive aspects. In fact, sometimes scholars tend to take advantages of the new technologies, without considering those philological elements, which should be the core of a critical edition.

As a result, these new digital works are sometimes characterised more by *quantitative*, rather than *qualitative* choices, trying to adapt the critical edition for the electronic device and not *vice versa*. Without considering the computer limits and the fundamental role of human intervention within these projects, the result is the publishing of a digital edition, in which the *critical* part of it ends where, instead, it should have begun.

Surely, these works will be characterised by a high portability; they will be able to process a large amount of data, and they will show innovative interfaces connecting materials to each other through multimediality, or hypertextual representations. However, on the other hand, they will probably show meagre critical apparatus, in which an electronic calculator cannot replace the philologist work. Unfortunately, in some cases, the *new* philologist seems more focused on realising countless windows showing the endless *mouvance* of a medieval manuscript, or more interested in *catching* all the possibilities offered by the digital domain, than focused on the critical aspects of the new digital edition (Stussi 2006).

Notwithstanding, it is also important to underline that this *new* way of editing, whether realised in the proper way, has several advantages and it may be a useful tool, whose spread is guaranteed by the Web itself. These digital works might be consulted

by a high number of people, identified in the Web users.

Digital editions may exit the *niche*, in which they have been located for a long time and reach a broader audience, made of not only experts of the field, but also by more generic users interested in the topic.

Whether the creation of a digital edition is provided with *software* able to give also a qualitative contribution to the editorial process, these works might be considered as part of the *Digital Computational Philology* field (Bozzi 2006).

They would be the result of a deep interaction among textual data, electronic means and the scholar personal competence. During the realisation of these works, the cooperation between the technical experts and the editor is unavoidable and noteworthy, in order to create a final work coherent with the philological critical work. Nevertheless, it is important to remember how the electronic means can also offer a potential and constant check instrument, depriving the scholar *iudicium* of some of its subjectivity (Bozzi 2006).

The electronic *software* becomes, therefore, an integral part of the editorial process, but in order to be really useful, it should fulfil requirements. Bozzi (2006) recognised them in some main features, regarding the transcription, the use of images, their possible connection with the text and lastly the presence of bibliographic references.

Firstly, the scholar deals with the transcription, core of a digital edition, that has to be realised in the most appropriate way, to be then encoded through a standardised markup language, which in this moment may be recognised into the TEI model, mostly used for *humanities computing* projects. The system, moreover, has to be provided with a section to identify the *Varia Lectio*, in case of variances within the witnesses. The full *corpus* of this section will then be the basis, upon which the editor may realise a critical apparatus with all textual variances gathered together.

Another important point concerns the introduction of images within these works. It should be commendable to use only digital images, realised by means of scanners of photographic copies. The .JPEG format gained a solid predominance in the *electronic philology* field since it allows reducing the space occupied by these files twenty times more than other not-zipped file formats. As an international standard, it offers the

possibility to guarantee the portability of the images and to promote their sharing among different users worldwide.

The software used to create a digital edition should give the opportunity to connect witnesses in a comparative way, enabling a text-image parallel visualisation.

The last fundamental element, which has to be present in a digital critical edition, is the bibliographic section. In fact, each lesson inserted inside the apparatus might have been already the focus of a previous analysis. Therefore, it is necessary to provide the user with all the possible references about them, enabling a further analysis on the text.

Following these statements, I tried to insert all these elements in my project, in order to realise a complete image-based digital edition. My goal was to provide not only an electronic visualisation tool for all those manuscripts difficult to consult but also a valid instrument to analyse witnesses from a palaeographic, linguistic and critical point of view. Outcomes have been achieved thanks to the possibility of an image-text connection and an exhaustive philological commentary, able to reach broader audiences.

Using these kinds of digital works, a critical edition may offer a new way of displaying old contents.

In fact, what a digital edition might offer is anything but new; all the elements it is made of have already been used for traditional printed ones during centuries. The real novelty of these works is their possibility to deal with traditional topics in a totally different and new way.

APPENDIX

Within this appendix are inserted all the xml files, regarding my digital edition, encoded through the TEI P5 standard and thanks to <Oxygen/> XML editor.

Metadata

Gratuletur omnis caro, Christo nato domino - Bn VI 34

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  <settlement xml:lang="Italian"> Benevento </settlement>
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<musicNotation>
  <p> Neumatic notation "in campo aperto". Neumatic notation dated back to the
12th century. This kind of notation shows clefs and lines, upon which neumes are written. The
geometrical signs are drawn with high precision, so that the melody is simpler to read in
comparison with other neumes dated back between the IX and XI centuries. The presence of the
line allows establishing the pitch of the notes. That is typical of that neumatic notations, called
diastematic, spread from the XI century. On the contrary, in the previous adiastrumatic notations
there were no information about intervals between sounds. In this manuscript, medieval notes
can be described as Benevento's notation, recognisable by its gothic stroke. Its main
characteristic is the high presence of liquescences. The phenomenon appears every time a two-
syllable articulation presents a liquid consonant on the last note of the group. As a result, the
note loses half of its strength. The liquescence is drawn by cursive neumes with a shortening of
their strokes.</p>
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been realized by Rampi-Lattanzi in "Manuale di canto gregoriano".</desc>
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Gratuletur omnis caro, Christo nato domino - Na IV G 68

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      <p> This manuscript, dated back to 9th century, presents neumatic notation on the
      first stanza of the text. Its neumes are rather simple; in fact, one can notice most signs like
      Punctum, Virga, Clivis and Podatus or Pes. The first one describes a low note; otherwise, a
      Virga denotes a higher one. A Clivis represents a group of two descending notes. The first one
      is a Virga, which is the highest element of the group, bound to the second one through a stroke,
      in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent.
      On the other hand, a Pes is used to show a group of two descending notes. The first one is a
      Virga, which is the highest element of the group, bound to the second one through a stroke, in
      order to make a unique note. In cursive, this neume is written thanks to the anticircumflex
      accent. All these neumes are typical of an adiaستمatic notation, which spread during the IX
      century. Nevertheless, it is important to notice that this notation already shows a certain
      distinction in the height of notes. That could be a first sign of the shift from an adiaستمatic
      notation to a diastematic one, which later will lead to modern musical notes. </p>
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resp="editor, W.B.">Ch</expn>rīstō</choice></orig>dōmíno .</l>
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Aurea personet lira clara modulamina - Reg. Lat. 586

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      <idno> Reg. lat. 586 </idno>
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      <p> Neumatic notation, “in campo aperto”, dated back to the 11th century. This
      manuscript is an example of Italian notation. Its neumes are rather simple, with a large use of
      signs like Punctum, Virga, Pes and Clivis. The first neume, Punctum, is found in isolation and it
      describes a low note, in opposition to the Virga, which is a higher one. The neume called Pes or
      Podatus represents a group of two ascending notes. In the cursive notation, this sign results from
      the union of Punctum and Virga and it is obtained through the anticircumflex accent. On the
      contrary, the sign called Clivis represents a group of two descending notes. The first one is a
      Virga, which is the higher element of the group, bound to the second one through a stroke, in
      order to make a unique note. In cursive, this neume is written thanks to the circumflex accent.
      These four elements (Punctum, Virga, Podatus and Clivis) are the simplest neumes and they can
      be found in a large number of manuscript of the X-XI centuries. In this case, the notation seems
      to be coeval with the text of the manuscript. This kind of neumatic notation is called
      adiaستمatic, because one can retrieve no information about the interval between two sounds.
      This is the reason why it is not possible to recover the melody. </p>
    </musicNotation>
  </msDesc>
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```

<title> Carmina Cantabrigiensia </title>
<author> Walther Bulst </author>
<date when="1950"> 1950 </date>
<place xml:lang="German"> Heidelberg </place>
</bibl>
</sourceDesc>
</teiHeader>
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<leaf n="82r">
<head xml:lang="Latin">Aurea personet lira clara modulamina</head>
<l n="1" xml:lang="Latin"> Aúrea<choice> <abbr cert="high">ρ</abbr><expan
cert="high" resp="editor, W.B.">per</expan></choice> sónét lírá <orig reg="clara
modulamina" resp="editor, W.B."> cłáramódûlâmĭná</orig> </l>
<l n="2" xml:lang="Latin"> Siplĕx còrdâ sít éxtĕsâ uócĕ quindĕnâriâ</l>
<l n="3" xml:lang="Latin"> Prim <choice> <abbr cert="high">ú</abbr> <expan
cert="high" resp="editor, W.B."> um</expan></choice> sóń<choice> <abbr cert="high">
u</abbr> <expan cert="high" resp="editor, W.B."> um</expan></choice> mĕse fĕddât légĕ
ýpôdôricâ .</l>
<l n="4" xml:lang="Latin"><orig reg="philomele" resp="editor,
W.B.">Fílómĕnĕ</orig>dĕm<choice> <abbr cert="high">²</abbr><expan cert="high"
resp="editor, W.B."> us</expan></choice> laudĕs <orig reg="in uoce" resp="editor, W.B.">ín
uócĕ</orig> ôrganĭcâ</l>
<l n="5" xml:lang="Latin"><orig reg=" Dulce melos" resp="editor,
W.B.">Dúlcĕmĕlôs</orig>dĕcántântĕs sícuĭ docĕt músĭcâ</l>
<l n="6" xml:lang="Latin">Sínĕ cúius ártĕ ûerâ <orig reg="nulla ualent"
resp="editor, W.B.">ńulĭauálĕnt </orig>çanticâ</l>
<l n="7" xml:lang="Latin"><orig reg="Cum telluris" resp="editor,
W.B."><choice><abbr cert="high">Ćú</abbr><expan cert="high" resp="editor,
W.B.">cum</expan></choice>tĕllúris</orig>úerĕ<orig reg="nouo" resp="editor,
W.B.">ńouâ</orig><choice><abbr cert="high">þ</abbr><expan cert="high" resp="editor,
W.B.">pro</expan></choice>dúcuñ <choice><abbr cert="high">t̄</abbr><expan cert="high"
resp="editor, W.B."> tur</expan></choice>gĕrrĭnâ </l>
<l n="8" xml:lang="Latin">Nĕmôrôsâ <orig reg="circumcirca" resp="editor,

```

W.B.">círc<choice><abbr cert="high">ũ</abbr><expan cert="high" resp="editor,
W.B.">um</expan></choice> círcã</orig> ffrondesçunt et bráchîã</l>
<l n="9" xml:lang="Latin"><orig reg="Flagrat odor" resp="editor,
W.B.">Flagrátódór</orig>qu<choice><abbr cert="high">ã</abbr><expan cert="high"
resp="editor, W.B.">am</expan></choice>sûâuîs floridã<orig reg="per gramina" resp="editor,
W.B."><choice><abbr cert="high">þ</abbr><expan cert="high" resp="editor,
W.B.">per</expan> </choice>grãmîná</orig></l>
<l n="10" xml:lang="Latin"><orig reg="Hilarescit" resp="editor,
W.B.">Ílárécít</orig><orig reg="philomela" resp="editor, W.B.">filómená</orig>dulcis<orig
reg="uocis conscia" resp="editor, W.B.">úociscõsciã</orig></l>
<l n="11" xml:lang="Latin">Et extendens modulando</l>
</leaf>
</body>
</text>
</TEI>

Magnus Cesar Otto - Aug. 8° 56.10

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        <name> Nicoletta Guido </name>
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      <settlement xml:lang="German"> Wolfenbüttel </settlement>
      <idno> Aug. 8° 56.10 </idno>
    </msIdentifier>
    <musicNotation>
      <p> The neumatic notation located on the first stanza of this political text seems to
be coeval to the text, on which it was written. The focus of this text is to celebrate the virtues of
Otto I, Otto II and Otto III. The neumes used are simple. One can just note signs as Punctum,
Virga and Clivis. All these neumes are typical of an adiastematic musical notation, which
coincides with the origin of this manuscript, dated back to the 10th century. In that kind of
notation, Punctum describes a low note, while Virga a higher one and finally Clivis represents a
group of two descending notes. The first one is a Virga, which is the higher element of the
group, bound to the second one through a stroke, in order to make a unique note. In cursive, this
neume is written thanks to the circumflex accent. The place in which this notation was realized
is not clear but, according to shapes and typology of neumes, it could be ascribe to St. Gallen's
monastery. Lastly, it is important to notice that only the first stanza presents notation, while on
the remnant text there are no neumes. A notated incipit was a very popular mnemonic tool used
by chantors during the Middle Age, in order to remember an already known melody. </p>
    </musicNotation>
  </msDesc>
  <bibl>
    <title> Carmina Cantabrigiensia </title>
    <author> Wanther Bulst </author>
    <date when="1950"> 1950 </date>
    <place xml:lang="German"> Heidelberg </place>
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<text>
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    <leaf n="62v">
      <head xml:lang="Latin"> Magnus cesar Otto </head>
      <l n="1" xml:lang="Latin"> Mágnús cêsar Ötío </l>
      <l n="2" xml:lang="Latin"> qú<choice> <abbr cert="high">ē</abbr> <expan
cert="high" resp="editor, W.B.">em</expan></choice> hić mōduš rêfért</l>
      <l n="3" xml:lang="Latin"> iñ nomínié</l>
      <l n="4" xml:lang="Latin"> óttiñc díct <choice> <abbr cert="high">ś</abbr> <expan
cert="high" resp="editor, W.B.">us</expan></choice></l>
      <l n="5" xml:lang="Latin">quád<choice> <abbr cert="high">ã</abbr> <expan
cert="high" resp="editor, W.B."> am</expan></choice> nócté: </l>
      <l n="6" xml:lang="Latin"><orig reg="somno membra" resp="editor,
W.B.">mémbrā sūá</orig> </l>
      <l n="7" xml:lang="Latin"> dūm cóllocát</l>
      <l n="8" xml:lang="Latin"><orig reg="palatium" resp="editor,
W.B.">pālātió</orig></l>
      <l n="9" xml:lang="Latin">cáśu sūbitó</l>
      <l n="10" xml:lang="Latin">iñflāmā <choice> <abbr cert="high">ĩ</abbr><expan
cert="high" resp="editor, W.B.">tur</expan></choice></l>
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</text>
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Audax es, vir iuuenis - Par. Lat. 1928

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        <author> Anonymous </author>

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    <settlement xml:lang="French"> Paris </settlement>
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    <p> Neumatic notation coeval with the manuscript and dated back to the 10th
century. The adiastematic nature of this kind of neumes does not allow one to retrieve the
melody and to transpose it into modern notes. The signs used in order to notate the incipit of
that text are simple, as Punctum, Virga and Clivis. Punctum describes a low note, while Virga a
higher one and finally Clivis represents a group of two descending notes. The first one is a
Virga, which is the higher element of the group, bound to the second one through a stroke, in
order to make a unique note. In cursive, this neume is written thanks to the circumflex accent.
Two main characteristics of this notation have to be noticed. Firstly, some neumes are more
distressed than the text of the manuscript and sometimes they are almost illegible. That could be
a proof of the intense use of this text. Secondly, neumes are not present on the whole text, but
only the incipit is notated. In fact, notated incipit were a common mnemonic tool used by
chantors during the Middle Age to recover the melody. Neumes on the first text lines should
have been an input from which retrieve the whole melody. For that reason, it is common to find
manuscripts with a few notated lines. </p>

```

```

    </musicNotation>
  </msDesc>
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    <title> Carmina Cantabrigiensia </title>
    <author> Walther Bulst </author>
    <date when="1950"> 1950 </date>
    <place xml:lang="German"> Heidelberg </place>
  </bibl>
</sourceDesc>
</teiHeader>
<text>
  <body>
    <leaf n="170v">
      <head xml:lang="Latin"> Audax es uir iuuenis</head>
      <l n="1" xml:lang="Latin">Aúdax : és uír íuuénis </l>
      <l n="2" xml:lang="Latin">dùm fèruet carò mòbílís .</l>
      <l n="3" xml:lang="Latin">audáctér ágís pèrpêram</l>
      <l n="4" xml:lang="Latin">túa mèmbrá<orig reg="coinquinas" resp="editor,
W.B.">coinquínáns</orig></l>
      <l n="5" xml:lang="Latin">aéndé hómó .<orig reg="quia puluis" resp="editor,
W.B.">`qũiapúlúis</orig>ès</l>
      <l n="6" xml:lang="Latin">et<orig reg="in puluerem" resp="editor, W.B.">
inpúluerém</orig> fèuertĕrís <add hand="copiyst">at teéndé hómó.</add></l>
      <l n="7" xml:lang="Latin"> Břéué est tempus iuuenis .</l>
      <l n="8" xml:lang="Latin">considera quod morieris</l>
      <l n="9" xml:lang="Latin"><orig reg="uenitque" resp="editor,
W.B.">ueniet</orig>dies ultimus</l>
      <l n="10" xml:lang="Latin">et perdes flores. optimos</l>
      <l n="11" xml:lang="Latin"><orig reg="Adtende" resp="editor, W.B.">at ten
de</orig>homo.</l>
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  </body>
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Iam dulcis amica uenito - Par. Lat. 1118

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          <name> Nicoletta Guido </name>
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          <idno> Par. lat. 1118 </idno>
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        <musicNotation>
          <p> This manuscript is dated back to the 11th century and presents a particular kind
of neumes that have to be ascribe to the Aquitaine notation. Also called “point notation”, its
main characteristics are the rounded shape of their signs and the possibility to retrieve
information about intervals between two sounds. That bears witness to the shift between an
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adiastematic notation to a diastematic one. A crucial moment, which will lead to the development of modern notes. The neumatic notation of this manuscript is very clear even without the use of clefs or lines; it is made up of single neumes, as Punctum Virga and Clivis and more complicated ones, as Porrectus and Quilisma. In order to describe these signs, one can take into consideration firstly the simplest ones. Punctum describes a low note, while Virga a higher one and Clivis represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. On the other hand, Porrectus describes the union of three notes, in which the middle one is lower than the other two. Porrectus represents three notes: the first one is located where the line begins and it is generally the highest one, while the second note is located where the line ends and it's a low note. The third one is bound to the second through a vertical line. One can interpret this note as a melodic pitch. Lastly, Quilisma is a note used to extend the previous one and for that reason it is never found alone. </p>

```

    </musicNotation>
  </msDesc>
  <bibl>
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    <author> Walther Bulst </author>
    <date when="1950"> 1950 </date>
    <place xml:lang="German"> Heidelberg </place>
  </bibl>
</sourceDesc>
</teiHeader>
<text>
  <body>
    <leaf n="247v">
      <head xml:lang="Latin">Iam dulcis amica uenito</head>
      <l n="1" xml:lang="Latin"><orig reg="Iam dulcis" resp="editor,
W.B.">Iãmdũlcis</orig> àmicã ueni:tò</l>
      <l n="2" xml:lang="Latin"><orig reg="quam sicut" resp="editor,
W.B.">quãmsicùt</orig> <orig reg="cor meum" resp="editor,
W.B.">còrméuñ</orig>diligò</l>
      <l n="3" xml:lang="Latin">intra <orig reg="in cubiculum" resp="editor,

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W.B.">incubīcūlūm</orig>meūm</l>
 <l n="4" xml:lang="Latin">ornāmētis cūñctis orñatūm</l>
 <l n="5" xml:lang="Latin">Ibí sūnt sedi·liā st·rāta</l>
 <l n="6" xml:lang="Latin"><orig reg="atque" resp="editor,
 W.B.">ab̄sque</orig>uelis domūs <orig reg="parata" resp="editor, W.B.">ôñhata</orig></l>
 <l n="7" xml:lang="Latin">florēs<choice><abbr cert="high">q.</abbr><expan
 cert="high" resp="editor, W.B.">que</expan></choice><orig reg="in domo" resp="editor,
 W.B.">índómo</orig>spārgūntur</l>
 <l n="8" xml:lang="Latin"><orig reg="herbeque" resp="editor,
 W.B.">herbóque</orig>flāgrāntes miscentur</l>
 <l n="9" xml:lang="Latin">Ēst íbi mēnsā<orig reg="apposita" resp="editor,
 W.B.">adpo·sitā</orig></l>
 <l n="10" xml:lang="Latin">uñiũersis cibis<orig reg="honusta" resp="editor,
 W.B.">orñhata</orig></l>
 <l n="11" xml:lang="Latin">ibi clā·rūm uñūm <orig reg="habundat" resp="editor,
 W.B.">abundāt</orig></l>
 <l n="12" xml:lang="Latin">et quicquid te <orig reg="cara" resp="editor,
 W.B.">kara</orig><orgi reg="delectat" resp="editor, W.B.">dēlectānt</orgi></l>
 <l n="13" xml:lang="Latin">Ibi sōnānt du·lces <orig reg="simphonie" resp="editor,
 W.B.">atm·oniāe</orig></l>
 <l n="14" xml:lang="Latin">in̄flantur et altius tibiē</l>
 <l n="15" xml:lang="Latin">ibi p̄uer̄ et d̄ōcta puēllā</l>
 <l n="16" xml:lang="Latin"><orig reg="canunt" resp="editor,
 W.B.">cāntant</orig><orig reg="tibi" resp="editor, W.B.">ibi</orig>cāñtīcā p̄lchra</l>
 <l n="17" xml:lang="Latin">Híc cūm plēctro<orig reg="citharam" resp="editor,
 W.B.">cý·tharám</orig><add place="superlinear" hand="copiyst">tañgit</add></l>
 <l n="18" xml:lang="Latin">illā melos cum <orig reg="lira" resp="editor,
 W.B.">lyra</orig>pāngit</l>
 <l n="19" xml:lang="Latin">pōrtant̄que miñístri pátēras</l>
 <l n="20" xml:lang="Latin"><orig reg="diuersis" resp="editor,
 W.B.">uñiuersis</orig>póçúlis plénas</l>
 <l n="21" xml:lang="Latin">Eḡo fui so·la<orig reg="in silua" resp="editor,
 W.B.">insi·lúa</orig>ét dilēxi locá sec̄retā</l>
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</body>
</text>
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Iam dulcis amica uenito – Wi Ms 116

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          <name> Nicoletta Guido </name>
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<p> Neumatic notation coeval to the manuscript and for that reason dated back to the 10th century. In that case, the notation is extended on the whole text. The manuscript in question exhibits an adiastrumatic notation characterized by simple signs as Punctum, Virga and Clivis. Punctum describes a low note, while Virga a higher one and Clivis represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. Shapes and typology of these neumes can ascribe them to St. Gallen's monastery, where a large part of manuscript were notated. Unfortunately, it is not possible to retrieve the melody because of the adiastrumatic nature of this neumatic notation.

</p>

</musicNotation>

</msDesc>

<bibl>

<title> Carmina Cantabrigiensia </title>

<author> Walther Bulst </author>

<date when="1950"> 1950 </date>

<place xml:lang="German"> Heidelberg </place>

</bibl>

</sourceDesc>

</teiHeader>

<text>

<body>

<leaf n="157v">

<head xml:lang="Latin"> Iam dulcis amica uenito </head>

<l n="1" xml:lang="Latin">Iám dúlcís amicá uenitó</l>

<l n="2" xml:lang="Latin">qu <choice><abbr cert="high">ã</abbr><expansion cert="high" resp="editor, W.B.">am</expansion></choice> sícût cõr méúm díligo</l>

<l n="3" xml:lang="Latin">intrâ ín cubicúl<choice><abbr cert="high">ú</abbr><expansion cert="high" resp="editor, W.B.">um</expansion></choice> mé<choice><abbr cert="high">ú</abbr><expansion cert="high" resp="editor, W.B.">um</expansion></choice></l>

<l n="4" xml:lang="Latin">õrnáñmentis cúnc̄tis <orig reg="ornamentis" resp="editor, W.B.">ónústú</orig></l>

<l n="5" xml:lang="Latin">Íbí sùnt sêdîlíá strátá</l>

<l n="6" xml:lang="Latin"><orig reg="atque" resp="editor, W.B.">ê</orig><orig reg="uelis domus parata" resp="editor, W.B.">domús ãêlísórnata</orig></l>

<l n="7" xml:lang="Latin">flórés<choice><abbr cert="high">q̇.</abbr><expansion cert="high" resp="editor, W.B.">que</expansion></choice>íñ dómo spárgúntúr</l>

<l n="8" xml:lang="Latin">hérbé<choice><abbr cert="high">q̇.</abbr><expansion cert="high" resp="editor, W.B.">que</expansion></choice><orig reg="flagrantes" resp="editor, W.B.">fláglântès</orig>míscéntúr</l>

<l n="9" xml:lang="Latin">Ést íbí ménsá áppósítá</l>

<l n="10" xml:lang="Latin">úniúersís cíbís ónústá .</l>

<l n="11" xml:lang="Latin">íbí clárúm úin<choice><abbr cert="high">û</abbr><expansion cert="high" resp="editor, W.B.">um</expansion></choice>hábuñdát .</l>

<l n="12" xml:lang="Latin">ét<orig reg="quicquid" resp="editor, W.B.">quie quíd</orig>tê cará deléctái</l>

<l n="13" xml:lang="Latin">Íbí sónañt dúlcés sýmphóníé</l>

<l n="14" xml:lang="Latin">inflántúr ét áltíús <orig reg="tibiae" resp="editor, W.B.">týbié </orig> .</l>

<l n="15" xml:lang="Latin">íbí púér<orig reg="et docta" resp="editor, W.B.">dóctús ét</orig>púéllá</l>

<l n="16" xml:lang="Latin"><orig reg="canunt tibi cantica pulchra" resp="editor">pángút tíbí carmiña béllá</orig></l>

<l n="17" xml:lang="Latin">Híc c<choice><abbr cert="high">ñ</abbr><expansion cert="high" resp="editor, W.B.">um</expansion></choice>pléctró<orig reg="citharam" resp="editor, W.B.">cýthará </orig>tangit .</l>

<l n="18" xml:lang="Latin">íllá mélós cúm<orig reg="lira" resp="editor, W.B.">lýrá</orig> pángīt .</l>

<l n="19" xml:lang="Latin">pórtañt<choice><abbr cert="high">q̇.</abbr><expansion cert="high" resp="editor, W.B.">que</expansion></choice>mínístri pátérás</l>

<l n="20" xml:lang="Latin"><orig reg="diuersis" resp="editor, W.B.">pígúitáns</orig>pócúlís plénás</l>

<l n="21" xml:lang="Latin">Nón mé íuuat tãnt<choice><abbr cert="high">û</abbr><expansion cert="high" resp="editor, W.B.">um</expansion></choice>cónuiui<choice><abbr cert="high">û</abbr><expansion cert="high" resp="editor, W.B.">um</expansion></choice></l>

<l n="22" xml:lang="Latin">quânt<choice><abbr cert="high">ũ</abbr><expan
 cert="high" resp="editor, W.B.">um</expan></choice><orig reg="predulce" resp="editor,
 W.B."><choice><abbr cert="high">ṗ</abbr><expan cert="high" resp="editor,
 W.B.">pre</expan></choice>dũlcé</orig>có llóquí<choice><abbr
 cert="high">ũ</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice></l>

<l n="23" xml:lang="Latin">neç rérum tántár<choice><abbr
 cert="high">ũ</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice><orig
 reg="ubertas" resp="editor, W.B.">úb órtás</orig>ût<orig reg="cara" resp="editor,
 W.B.">dílêctâ</orig>fámíliárítás</l>

<l n="24" xml:lang="Latin">Iám nũnc úení sôror élêctâ .</l>

<l n="25" xml:lang="Latin">et<choice><abbr cert="high">ṗ</abbr><expan
 cert="high" resp="editor, W.B.">pre</expan></choice>cũnctís mĩhí dílêctâ .</l>

<l n="26" xml:lang="Latin">lúx <orig reg="mee clara" resp="editor, W.B.">méá
 clári</orig>púpiállé .</l>

<l n="27" xml:lang="Latin">párs<choice><abbr cert="high">ṗ</abbr><expan
 cert="high" resp="editor, W.B.">que</expan></choice>máior ánima méa</l>

<l n="28" xml:lang="Latin">Egó fui sôlá ín sílua</l>

<l n="29" xml:lang="Latin">et dílêxí lôca sécraéta:</l>

</leaf>

</body>

</text>

</TEI>

Quisquis dolosis antiqui – Ca U.L Gg. 5.35

```

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    <fileDesc>
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        <title> Quisquis dolosis antiqui </title>
        <author> Anonymous </author>
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        <settlement xml:lang="English"> Cambridge </settlement>
        <idno> Ca U.L Gg.5.35 </idno>
    </msIdentifier>
    <musicNotation>
        <p> The manuscript Ca U.L. Gg.5.35 of Cambridge might be dated back to the
11th century. It shows neumatic notation “in campo aperto” on two of its leaves: 439r and 441v.
That neumatic notation comes from England and it has an adiastematic nature. For this reason, it
does not allow us to reconstruct the original melody. In comparison with other manuscripts
dated back to the same period and provided with neumatic notation, one can notice that the
neumes in Ca are extremely simplified. In particular, on leaf 439r, the only two signs to be seen
are Punctum and Virga. The first one describes a low note, whereas the second one depicts a
higher one. Considering those, it is easy to regard this kind of notation as based on accents and
thereby unable to provide for information about intervals between notes or about their height.
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    </musicNotation>
</msDesc>
<bibl>
    <title> Carmina Cantabrigiensia </title>
    <author> Walther Bulst </author>

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</bibl>
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<lg n="1a" type="stanza">
<head xml:lang="Latin">Quisquis dolosis antiqui</head>
<l n="1" xml:lang="Latin">Quisquis dólórór ántiqui</l>
<l n="2" xml:lang="Latin">circ<choice><abbr cert="high">ū</abbr><expan
cert="high" resp="editor, W.B.">um</expan></choice>uèntùs frawd´i<choice><abbr
cert="high">b: </abbr><expan cert="high" resp="editor, W.B.">bus</expan></choice></l>
<l n="3" xml:lang="Latin">inimici .</l>
<l n="4" xml:lang="Latin"><choice><abbr cert="high">þ</abbr><expan
cert="high" resp="editor, W.B.">pro</expan></choice>fúndítát<choice><abbr
cert="high">ē</abbr><expan cert="high" resp="editor,
W.B.">em</expan></choice>mághorum</l>
<l n="5" xml:lang="Latin">íncaútús încurrerit </l>
<l n="6" xml:lang="Latin">þeccátórum</l>
<l n="7" xml:lang="Latin">hoc séquenti c<choice><abbr
cert="high">ō</abbr><expan cert="high" resp="editor,
W.B.">om</expan></choice>mónítús</l>
<l n="8" xml:lang="Latin">éxempló sit</l>
<l n="9" xml:lang="Latin">merèns né dés<choice><abbr
cert="high">þ</abbr><expan cert="high" resp="editor,W.B.">per</expan></choice>èt
pénitús</l>
<l n="10" xml:lang="Latin">séd cón/ físus. in <choice><abbr
cert="high">dño</abbr><expan cert="high" resp="editor,
W.B.">domino</expan></choice></l>
<l n="11" xml:lang="Latin">libèrari póssé spérèt</l>
<l n="12" xml:lang="Latin">Uel moftú<choice><abbr
cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>si

```

pénítèt</l>

<l n="13" xml:lang="Latin"><orig reg="ex inferno" resp="editor,
W.B.">èxinférno.</orig></l>
</lg>
<lg n="1b" type="stanza">
<l n="1" xml:lang="Latin">Cesarie urbis ciuis </l>
<l n="2" xml:lang="Latin"> <choice><abbr cert="high">p</abbr><expan
cert="high" resp="editor, W.B.">pro</expan></choice>terius locuples </l>
<l n="3" xml:lang="Latin">ualde nimis</l>
<l n="4" xml:lang="Latin">unicam habuit gnatam</l>
<l n="5" xml:lang="Latin">sacro uelamini</l>
<l n="6" xml:lang="Latin">destinat<choice><abbr cert="high">ā</abbr><expan
cert="high" resp="editor, W.B.">am</expan></choice></l>
<l n="7" xml:lang="Latin"><choice><abbr cert="high">p</abbr><expan
cert="high" resp="editor, W.B.">pro</expan></choice>pius inqu<choice><abbr
cert="high">ā</abbr><expan cert="high" resp="editor,
W.B.">am</expan></choice>seruulus</l>
<l n="8" xml:lang="Latin">inlicitis</l>
<l n="9" xml:lang="Latin">infl<choice><abbr cert="high">ā</abbr><expan
cert="high" resp="editor, W.B.">am</expan></choice>mat <choice><abbr
cert="high">?</abbr><expan cert="high" resp="editor,
W.B.">us</expan></choice><choice><abbr cert="high">÷</abbr><expan cert="high"
resp="editor, W.B.">est</expan></choice>ardori<choice><abbr cert="high">b</abbr><expan
cert="high" resp="editor, W.B.">bus</expan></choice></l>
<l n="10" xml:lang="Latin">cuius uinclo coniugii </l>
<l n="11" xml:lang="Latin">se non posse cernens iungi</l>
<l n="12" xml:lang="Latin">auxili<choice><abbr cert="high">ū</abbr><expan
cert="high" resp="editor, W.B.">um</expan></choice>agressus est</l>
<l n="13" xml:lang="Latin">malefici.</l>
</lg>
<lg n="2a" type="stanza">
<l n="1" xml:lang="Latin">A quo práui</l>
<l n="2" xml:lang="Latin">süscepta scédulá nūnciī</l>
<l n="3" xml:lang="Latin">déférènda démōni</l>

<l n="4" xml:lang="Latin">iüssít<orig reg="eam" resp="editor,
 W.B.">é<choice><abbr cert="high">ū</abbr><expn cert="high" resp="editor,
 W.B.">um</expn></choice></orig></l>

<l n="5" xml:lang="Latin">nöcte cêcâ suprà géntil<choice><abbr
 cert="high">ē</abbr><expn cert="high" resp="editor, W.B.">em</expn></choice></l>

<l n="6" xml:lang="Latin">récitate tumb<choice><abbr
 cert="high">ā</abbr><expn cert="high" resp="editor, W.B.">am</expn></choice>.</l>

<l n="7" xml:lang="Latin">iüuênis stâtim pâruît</l>

<l n="8" xml:lang="Latin">démônûm ét ecce</l>

<l n="9" xml:lang="Latin">sibi ág<choice><abbr cert="high">m̄</abbr><expn
 cert="high" resp="editor, W.B.">men</expn></choice>âpparûit</l>

<l n="10" xml:lang="Latin">quí aúditis clâmôfi<choice><abbr
 cert="high">b</abbr><expn cert="high" resp="editor, W.B.">bus</expn></choice></l>

<l n="11" xml:lang="Latin">înfêlícis sécū îll<choice><abbr
 cert="high">ū</abbr><expn cert="high" resp="editor, W.B.">um</expn></choice></l>

<l n="12" xml:lang="Latin"><orig reg="adduxerant" resp="editor,
 W.B.">âddûxérât</orig>âd princîp<choice><abbr cert="high">ē</abbr><expn cert="high"
 resp="editor, W.B.">em</expn></choice></l>

<l n="13" xml:lang="Latin"><choice><abbr cert="high">p̄</abbr><expn
 cert="high" resp="editor, W.B.">pra</expn></choice>uitâtis.</l>

</lg>

<lg n="2b" type="stanza">

<l n="1" xml:lang="Latin">Cui inuisi </l>

<l n="2" xml:lang="Latin">datis commercii</l>

<l n="3" xml:lang="Latin">li <choice><abbr cert="high">t̄</abbr><expn
 cert="high" resp="editor, W.B.">ter</expn></choice>is</l>

<l n="4" xml:lang="Latin">a malefîco missis </l>

<l n="5" xml:lang="Latin">it<choice><abbr cert="high">ē</abbr><expn
 cert="high" resp="editor, W.B.">em</expn></choice>sui</l>

<l n="6" xml:lang="Latin">causa aduent<choice><abbr
 cert="high">?</abbr><expn cert="high" resp="editor,
 W.B.">us</expn></choice>expositis</l>

<l n="7" xml:lang="Latin">amoris<choice><abbr cert="high">q</abbr><expn
 cert="high" resp="editor, W.B.">que</expn></choice>furiis</l>

<l n="8" xml:lang="Latin"><orig reg="protimus" resp="editor,
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 W.B.">pro</expn></choice>timus</orig>fit discussio </l>
 <l n="9" xml:lang="Latin"><orig reg=" de fidei" resp="editor,
 W.B.">defide</orig><choice><abbr cert="high">xpi</abbr><expn cert="high" resp="editor,
 W.B.">Christi</expn></choice></l>
 <l n="10" xml:lang="Latin">ac baptismi repudio</l>
 <l n="11" xml:lang="Latin">iube<choice><abbr cert="high">t</abbr><expn
 cert="high" resp="editor, W.B.">tur</expn></choice><choice><abbr
 cert="high">q:</abbr><expn cert="high" resp="editor, W.B.">que"></expn></choice><orig
 reg="de singulis" resp="editor, W.B.">desingulis</orig></l>
 <l n="12" xml:lang="Latin">abrenuntiationis</l>
 <l n="13" xml:lang="Latin">manuscript<choice><abbr
 cert="high">ū</abbr><expn cert="high" resp="editor,
 W.B.">um</expn></choice>efficere</l>
 <l n="14" xml:lang="Latin"><choice><abbr cert="high">i </abbr><expn
 cert="high" resp="editor, W.B.">quod</expn></choice>effecit.</l>
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O mihi deserte natorum dulcis imago - Cod. Bod. 154

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        <author> Statius </author>
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      <p> The manuscript shows adiaSTEMATIC neumatic notation on the whole extension
of the text, on which it was written. In comparison with the ink used to write the text, one can
notice how that notation is written using a different one. That can be a proof of a later
inscription of neumes on this text. The signs used are simple. In fact, one can note Punctum,
Virga, Clivis and Pes (this one used only twice in the text) as the most frequent neumes of this
manuscript. Considering them, one can describe a Punctum as a low note, while Virga as a
higher one. Clivis represents a group of two descending notes. The first one is a Virga, which is
the higher element of the group, bound to the second one through a stroke, in order to make a
unique note. In cursive, this neume is written thanks to the circumflex accent. On the contrary, a
Pes is used to describe a group of two descending notes. The first one is a Virga, which is the
higher element of the group, bound to the second one through a stroke, in order to make a
unique note. In cursive, this neume is written thanks to the circumflex accent. It is important to
notice how the last lines of that manuscript show more faded neumes, while the first ones
present traced sings. One possible explanation could be the necessity to use neumatic notations
to remember particular parts of a melody. According with that theory, chantors could have
traced the first neumes in order to remember their melody. As a result, the first lines show better

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preserved neumes. Another theory suggests that faded neumes could be the result of an intense use of the manuscript and its notation. That might be the reason why some parts of it have been rewritten with different ink. This neumatic notation is inscribed in the German tradition and come from the west side of that country </p>

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    <author> Walther Bulst </author>
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    <place xml:lang="German"> Heidelberg </place>
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        <l n="1" xml:lang="Latin">Ó míhí désérte nátor <choice><abbr
cert="high">ú</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>dúléis
iinágo</l>
        <l n="2" xml:lang="Latin"><orig reg="Archemore" resp="editor,
W.B.">Alchémófe</orig>ó rér<choice><abbr cert="high">ú</abbr><expan cert="high"
resp="editor, W.B.">um</expan></choice>ét pátríe sólámeñ ádēpté</l>
        <l n="3" xml:lang="Latin">Serúitii<choice><abbr cert="high">q̄</abbr><expan
cert="high" resp="editor, W.B.">que</expan></choice>décús . quí te méa gâúdiá sóntes</l>
        <l n="4" xml:lang="Latin">Extinxeṛé déi módo quém digrésáa rélíqui</l>
        <l n="5" xml:lang="Latin">Lásciū<choice><abbr cert="high">ū</abbr><expan
cert="high" resp="editor, W.B.">um</expan></choice>e <choice><abbr
cert="high">p</abbr><expan cert="high" resp="editor, W.B.">pro</expan></choice>no
uexánteñ grámíná cúrsu</l>
        <l n="6" xml:lang="Latin">Heu ubi siderei uultus ubi uerba ligátis</l>
        <l n="7" xml:lang="Latin"><orig reg="Imperfecta" resp="editor,

```

W.B.">Inperfecta</orig>sonís risús<choice><abbr cert="high">q:</abbr><expn cert="high" resp="editor, W.B.">que</expan></choice>et múrmurà sóli</l>
 <l n="8" xml:lang="Latin">Intellečta míhi . òquotiés tibi<orig reg="Lemnon" resp="editor, W.B.">lénòn</orig>et Argos</l>
 <l n="9" xml:lang="Latin">Súeta loqui et lońga soġn<choice><abbr cert="high">ũ</abbr><expn cert="high" resp="editor, W.B.">um</expan></choice>súadére querela</l>
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O mihi deserte dulcis imago - Mü clm 6396

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<p> This manuscript, dated back to the 10th century, shows an adiastematic neumatic notation, coming from southern Germany and belonging, in particular, to St. Gallen monastery. That kind of notation spread all over the European continent during the that century. The neumes showed by this manuscript are rather simple. One can find Puntum, Virga, Clivis and Pedatus or Pes as the most common signs. Although there are few of them, also neumes that are more complex are present: Climacus and Quilisma. One can describe a Punctum as a low note, while Virga as a higher one. Clivis represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. On the contrary, a Pes is used to describe a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. Climacus corresponds to three or more descendent notes. This sign is made of two notes: a Virga subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. On the contrary, Virga subpunctis is the only accented sign in this neume. Lastly, Quilisma is a note used to extend the previous one and for that reason, it is never found alone.</p>

</musicNotation>

<notatedMusic>

<desc>A clear representation of the neumes usually used by the St. Gallen notation is provided by the AISCg (Associazione internazionale Studi di Canto Gregoriano)</desc>

<ptr target="http://www.aiscgre.it/images/tavole/sangallo.pdf"/>

</notatedMusic>

</msDesc>

<bibl>

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cert="high">ũ</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>đu·lcis
îmâgó</l>
<l n="2" xml:lang="Latin">Ařchémóre. ó rêt<choice><abbr
cert="high">ũ</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>ět pãtrĩae
sóla·m̄<orig reg="adempte" resp="editor, W.B.">âd êptâe</orig></l>
<l n="3" xml:lang="Latin">Sêruítĩi<choice><abbr cert="high">ř</abbr><expan
cert="high" resp="editor, W.B.">que</expan></choice>de·cũs. qũĩ té meá gãũdĩâ sôntés </l>
<l n="4" xml:lang="Latin">Eřtĩnxé·ré dêĩ . ~ módó qú<choice><abbr
cert="high">ē</abbr><expan cert="high" resp="editor, W.B.">em</expan></choice>digressã
rêliquĩ</l>
<l n="5" xml:lang="Latin">Láscí·ù<choice><abbr cert="high">ũ</abbr><expan
cert="high" resp="editor, W.B.">um</expan></choice> . ét <choice><abbr cert="high">
p̄</abbr><expan cert="high" resp="editor, W.B.">pro</expan></choice>nó
uêxánt<choice><abbr cert="high">ê</abbr><expan cert="high" resp="editor,
W.B.">em</expan></choice>grá·mĩnã cũrsú.</l>
<l n="6" xml:lang="Latin">Hé·ú·î ubĩ sídéréĩ ûultũs. ubĩ uêrbá· ligâtĩs</l>
<l n="7" xml:lang="Latin"><orig reg="Imperfecta" resp="editor,
W.B.">În<choice><abbr cert="high">p̄</abbr><expan cert="high" resp="editor,
W.B.">per</expan></choice>fê·ctá</orig> sônĩs . risũs<choice><abbr
cert="high">q̄</abbr><expan cert="high" resp="editor, W.B.">que</expan></choice> . êť
mũrmũrá sôli·</l>
<l n="8" xml:lang="Latin">Întélléctã mihi quótiéns tibĩ Lémnõn ét Árgós</l>

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    <l n="9" xml:lang="Latin">Súéta lòqui eĩ lònghà sòm̃<choice><abbr
cert="high">ũ</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>suadêré
quêrêlà. ~ </l>
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O mihi deserte dulcis imago - Par. Lat. 8051

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</msIdentifier>

<musicNotation>

<p> The manuscript in question shows neumatic notation “in campo aperto”, which does not allow us to retrieve the melody from its sings, because of the adiaستمatic nature of this kind of notation. It comes from northern France and it is inscribed in the tradition of French notations. As one can note, the melody is present all over the manuscript’s text. The majority of used neumes are simple, as Punctum, Virga and Clivis. There are few examples of more complex ones as Porrectus and Climacus. In order to describe them all, one can start with the simplest ones. Punctum defines a low note, while Virga describes a higher one. Moreover, Clivis represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. Than one might take into account the more complex neumes. Climacus corresponds to three or more descendent notes. This sign is made of two notes: a Virga subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. On the contrary, Virga subpunctis is the only accented sign in this neume. Porrectus represents three notes: the first one is located where the line begins and it is generally the highest one, while the second note is located where the line ends and it’s a low note. The third one is bound to the second through a vertical line. One can interpret this note as a melodic pitch. </p>

</musicNotation>

</msDesc>

<bibl>

<title> Carmina Cantabrigiensia </title>

<author> Walther Bulst </author>

<date when="1950"> 1950 </date>

<place xml:lang="German"> Heidelberg </place>

</bibl>

</sourceDesc>

</teiHeader>

<text>

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  <div n="V" type="book">
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    <l n="1" xml:lang="Latin">O mihi désêrtê nâtôr<choice><abbr
cert="high">ũ</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>dũlcis
imago</l>
    <l n="2" xml:lang="Latin">Afchêmôrê ô. rê<choice><abbr
cert="high">ũ</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>et pâtriê
solâ:mên âdem̃pte</l>
    <l n="3" xml:lang="Latin">Sêrũitii<choice><abbr cert="high">q.</abbr><expan
cert="high" resp="editor, W.B.">que</expan></choice>dêcũs qũi tê meâ: gâudĩá sôntês</l>
    <l n="4" xml:lang="Latin">Extinxerê dêl módô qu<choice><abbr
cert="high">ẽ</abbr><expan cert="high" resp=" editor, W.B.">em</expan></choice>digr:ẽssá
rêliqũi</l>
    <l n="5" xml:lang="Latin">Lâsçhũ<choice><abbr cert="high">ũ</abbr><expan
cert="high" resp="editor, W.B.">um</expan></choice>êt<choice><abbr
cert="high">þ</abbr><expan cert="high" resp="editor, W.B.">pro</expan></choice>nô
uêxânt<choice><abbr cert="high">ẽ</abbr><expan cert="high" resp="editor,
W.B.">em</expan></choice>ğramĩna cũrsũ .</l>
    <l n="6" xml:lang="Latin">H:é:ũ ũbi sideret uũltũ:s ũbĩ uêrba: ligãtis</l>
    <l n="7" xml:lang="Latin"><orig reg="Imperfecta" resp="editor, W.B.">Inþfeçtã
</orig>sôñis. risũs<choice><abbr cert="high">q.</abbr><expan cert="high" resp="editor,
W.B.">que</expan></choice>et mũrmurã solĩ</l>
    <l n="8" xml:lang="Latin">Intêllêcta mihi` quôtiens tibĩ L<choice><abbr
cert="high">ẽ</abbr><expan cert="high" resp="editor, W.B.">em</expan></choice> et Ârgôs
</l>
    <l n="9" xml:lang="Latin">Su:etã lóqui et lôngã sômnũ<choice><abbr
cert="high">ũ</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>suãdê:rê
querelã</l>
  </div>
</leaf>
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</text>
</TEI>

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O mihi deserte dulcis imago - Par. Lat. 10317

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        <author> Staius </author>
        <respStmt>
          <resp> Electronic edition created by</resp>
          <name> Nicoletta Guido </name>
        </respStmt>
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          <settlement xml:lang="Frech"> Paris </settlement>
          <idno> Par. lat. 10317 </idno>
        </msIdentifier>
        <musicNotation>
          <p> The manuscript, dated back to the 10th century, shows neumatic notation “in campo aperto” over all the text of this poem. The adiastematic nature of that notation fits into the traditional musical notation spread between 9th and 11th centuries, but it does not allow to retrieve the melody from its notes. This notation is characterized by the alternation between
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simple signs, as Punctum, Virga and Clivis with more complex ones, as Porrectus and Climacus. In order to describe them, one can take into consideration firstly the simplest ones. Punctum describes a low note, while Virga a higher one and Clivis represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. Secondly, one can consider the more complex neumes. Porrectus represents three notes: the first one is located where the line begins and it is generally the highest one, while the second note is located where the line ends and it's a low note. The third one is bound to the second through a vertical line. One can interpret this note as a melodic pitch. Climacus corresponds to three or more descendent notes. This sign is made of two notes: a Virga subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. On the contrary, Virga subpunctis is the only accented sign in this neume. </p>

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</musicNotation>
</msDesc>
<bibl>
  <title> Carmina Cantabrigiensia </title>
  <author> Walther Bulst </author>
  <date when="1950"> 1950 </date>
  <place xml:lang="German"> Heidelberg </place>
</bibl>
</sourceDesc>
</teiHeader>
<text>
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      <div n="V" type="book">
        <head xml:lang="Latin"> O mihi deserte natorum dulcis imago</head>
        <l n="1" xml:lang="Latin">O mĩhĩ <orig reg="deserte" resp="editor,
W.B.">désértã</orig>nãtór <choice><abbr cert="high">ũ</abbr><expan cert="high"
resp="editor, W.B.">um</expan></choice>dũlcis ímãgõ</l>
        <l n="2" xml:lang="Latin">Archēmõrè õ~ rër <choice><abbr
cert="high">ũ</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>ét pãtfie
sólã<choice><abbr cert="high">m̃</abbr><expan cert="high" resp="editor,
```

W.B.">men</expan></choice>adempté</l>
 <l n="3" xml:lang="Latin">Seruítí<choice><abbr cert="high">q̄.</abbr><expan
 cert="high" resp="editor, W.B.">que</expan></choice><orig reg="decus" resp="editor,
 W.B.">dúcûs</orig>. qúi té meá gáúdiá sóntès</l>
 <l n="4" xml:lang="Latin">Éxtinxérè<orig reg="dei" resp="editor,
 W.B.">dúi</orig> m̀ódó qué<choice><abbr cert="high" resp="editor, W.B.">ē</abbr><expan
 cert="high" resp="editor, W.B.">em</expan></choice> dígréssā féliquí</l>
 <l n="5" xml:lang="Latin">Lāscīu<choice><abbr cert="high">ū</abbr><expan
 cert="high" resp="editor, W.B.">um</expan></choice>.et <choice><abbr
 cert="high">p̄</abbr><expan cert="high" resp="editor, W.B.">pro</expan></choice>nò
 uéxan̄t<choice><abbr cert="high">ē</abbr><expan cert="high" resp="editor,
 W.B.">em</expan></choice>gráminá cûrsū̄ .</l>
 <l n="6" xml:lang="Latin">Héú úbí sidérēí uúlt <choice><abbr cert="high">
 </abbr><expan cert="high" resp="editor, W.B.">us</expan></choice>. ubí uefbá ligátís</l>
 <l n="7" xml:lang="Latin"><orig reg="Imperfecta" resp="editor,
 W.B.">Inpérfectá</orig> sônís . risús<choice><abbr cert="high">q̄.</abbr><expan cert="high"
 resp="editor, W.B.">que</expan></choice>ét múrmûra sôli</l>
 <l n="8" xml:lang="Latin">Intélléctá: m̄hi. q̄ótiens tibi Lémnón et Árgós </l>
 <l n="9" xml:lang="Latin"><orig reg="Sueta" resp="editor,
 W.B.">Súo:ta</orig> lóquí .ét lóngá somn<choice><abbr cert="high">ū</abbr><exoan
 cert="high" resp="editor, W.B.">um</exoan></choice>:súadèrè q̄erelá</l>

</div>

</leaf>

</body>

</text>

</TEI>

O mihi deserte dulcis imago - Par. Lat. 13046

<?xml version="1.0" encoding="UTF-8"?>

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<fileDesc>

<titleStmt>

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<author> Statius </author>
<respStmt>
  <resp> Electronic edition created by</resp>
  <name> Nicoletta Guido </name>
</respStmt>
<publStmt>
  <creation>
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      <settlement xml:lang="Frech"> Paris </settlement>
      <idno> Par. lat. 13046 </idno>
    </msIdentifier>
    <musicNotation>
      <p> This manuscript is dated back to the 10th century and it presents neumatic notation all over extension of its text. That kind of notation inscribes into the French tradition and in fact, it comes from northern part of the country. Its notation is characterized by a large variety of neumes. In fact, on one hand one can find simple sings as Punctum, Virga, Clivis and Pes or Podatus on the other hand there are more complex ones al Climacus, Scandicus, Porrectus and Quilisma. In order to describe them all, one can start from the simplest ones. Punctum defines a low note, while Virga describes a higher one. Moreover, Clivis represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. On the contrary, Pes or Podatus represents a group of two ascending notes. In the cursive notation, this sign results from the union of Punctum and Virga and it is obtained through the anticircumflex accent. Taking into account the

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more complex neumes, one can describe Climacus as corresponding to three or more descendent notes. This sign is made of two notes: a Virga subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. On the contrary, Virga subpunctis is the only accented sign in this neume. Scandicus is a three notes ascending neume. In the cursive notation, it is represented by a Virga preceded by two Puncti. That means a Virga praepunctis. In its interpretation, the melodic accent is found on the third note that is the stronger one, while the first two notes have an ornamental function. Porrectus represents three notes: the first one is located where the line begins and it is generally the highest one, while the second note is located where the line ends and it's a low note. The third is bound to the second one through a vertical line. One can interpret this note as a melodic pitch. Lastly, Quilisma is a note used to extend the previous one and for that reason, it is never found alone. It is important to notice how in this manuscript some neumes have been traded with a different ink in comparison with the one used to write the text. That might suggest an intense use of it and perhaps the necessity to rewrite the notation, in order to remember it in a better way. </p>

</musicNotation>

</msDesc>

<bibl>

<title> Carmina Cantabrigiensia </title>

<author> Walther Bulst </author>

<date when="1950"> 1950 </date>

<place xml:lang="German"> Heidelberg </place>

</bibl>

</sourceDesc>

</teiHeader>

<text>

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<leaf n="62v">

<div n="V" type="book">

<head xml:lang="Latin"> O mihi deserte natorum dulcis imago</head>

<l n="1" xml:lang="Latin">Ō mīhī dēsêrte nâtofum dû·lcīs imâgô</l>

<l n="2" xml:lang="Latin">Afchêrnoře ó rēr <choice><abbr

cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>êt pātīē

śola:<choice><abbr cert="high">̄m</abbr><expan cert="high" resp="editor,

W.B.">men</expan></choice> adē:mp̄tē </l>

<l n="3" xml:lang="Latin">Sérútíí<choice><abbr cert="high">q̄.</abbr><expan cert="high" resp="editor, W.B.">que</expan></choice>dēcus<choice><abbr cert="high">ī </abbr><expan cert="high" resp="editor, W.B.">qui</expan></choice>tē mēā: gāudiā sōntēs</l>

<l n="4" xml:lang="Latin">Ēxtínéxēre dēi mōdó qú<choice><abbr cert="high">ē</abbr><expan cert="high" resp="editor, W.B.">em</expan></choice>dīgrē:šsā rēti<choice><abbr cert="high">ī </abbr><expan cert="high" resp="editor, W.B.">ui</expan></choice></l>

<l n="5" xml:lang="Latin">Lāscīū<choice><abbr cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>ét<choice><abbr cert="high">p̄</abbr><expan cert="high" resp="editor, W.B.">pro</expan></choice>ñô ũéxānt <choice><abbr cert="high">ē</abbr><expan cert="high" resp="editor, W.B.">em</expan></choice> gřāmīnā cūrsū .</l>

<l n="6" xml:lang="Latin">H̄:é:ū ũbī sīdērēi ũúltū:s ũbī ũerb:a ligátis̄ </l>

<l n="7" xml:lang="Latin">Īm̄<choice><abbr cert="high">p̄</abbr><expan cert="high" resp="editor, W.B.">per</expan></choice>fēctā sōnís . risus<choice><abbr cert="high">q̄.</abbr><expan cert="high" resp="editor, W.B.">que</expan></choice>et murmura<orig reg="soli" resp="editor, W.B.">sola</orig></l>

<l n="8" xml:lang="Latin">Intellecta mihi . quōtīeñs tībī Lēmñón ēt Ârgōs</l>

<l n="9" xml:lang="Latin">Šu:étá lō<choice><abbr cert="high">q̄</abbr><expan cert="high" resp="editor, W.B.">qui</expan></choice>ét Īoñgā sōmñ: <choice><abbr cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>súádē:fē quērēĭa;</l>

</div>

</leaf>

</body>

</text>

</TEI>

Huc adtolle genas defectaque lumina uenit - Cod. Bod. 154

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        <author> Staius </author>
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          <resp> Electronic edition created by</resp>
          <name> Nicoletta Guido </name>
        </respStmt>
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          <settlement xml:lang="English"> Cologne </settlement>
          <idno> Cod. Bodmer 154 </idno>
        </msIdentifier>
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          <p> This manuscript might be dated back to the 10th century and it shows neumatic notation "in campo aperto" all over the written text. This kind of notation might be attributed, according to the sings' shape and typology, to the German type. In fact, it is likely to come from West side of that country. It presents both simple and complex neumes: on the one hand
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Punctum, Virga, Clivis and Pes or Podatus, on the other hand Climacus and Quilisma. Considering the colour of the ink used to write them, the neumes seem coeval to the manuscript, but it is interesting to note how, in the same manuscript on the leaf 46v, they were added later on the text “O mihi deserte natorum dulcis imago”. One possible reason might be the necessity to notate the text, in order to remember the melody in a better way. In leaf 117v, instead, the neumatic notation was created at the same time of the manuscript, so it should be more ancient than the one on the leaf 46v. As already stated before, this German notation shows both simple and complex signs. In order to describe them, one can take firstly into consideration the simplest ones. Punctum defines a low note, while Virga describes a higher one. Moreover, Clivis represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. On the contrary, Pes or Podatus represents a group of two ascending notes. In the cursive notation, this sign results from the union of Punctum and Virga and it is obtained through the anticircumflex accent. Taking into account the more complex neumes, one can describe Climacus as corresponding to three or more descendent notes. This sign is made of two notes: a Virga subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. On the contrary, Virga subpunctis is the only accented sign in this neume. Lastly, Quilisma is a note used to extend the previous one and for that reason, it is never found alone. </p>

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</musicNotation>
</msDesc>
<bibl>
  <title> Carmina Cantabrigiensia </title>
  <author> Walther Bulst </author>
  <date when="1950"> 1950 </date>
  <place xml:lang="German"> Heidelberg </place>
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</sourceDesc>
</teiHeader>
<text>
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<head xml:lang="Latin">Huc adtolle genas defectaque lumina uenit</head>
<l n="1" xml:lang="Latin">Hú:c ádtòllē ġeñas deféctá<choice><abbr
cert="high">q̄:</abbr><expn cert="high" resp="editor, W.B.">que</expn></choice>lúmiña
úenit</l>
<l n="2" xml:lang="Latin">Ad<orig reg="Taebas" resp="editor,
W.B.">th̄:ebás</orig>árg:ia túás<orig reg="eia" resp="editor, W.B.">ǵe</orig>ménibus
índúc</l>
<l n="3" xml:lang="Latin">Ei pátriós ôsténdè lârès . ēt mútuá feddè</l>
<l n="4" xml:lang="Latin"><orig reg="Hospicia" resp="editor,
W.B.">Hóspitiā</orig>; h̄:eu quíd<orig reg="agam" resp="editor,
W.B.">ǵó</orig> .<choice><abbr cert="high">þ</abbr><expn cert="high" resp="editor,
W.B.">pro</expn></choice>iěctús cespíte n̄udó </l>
<l n="5" xml:lang="Latin">Hóc pátrié tellúfis hābēs; que iūrġiá c̄erte</l>
<l n="6" xml:lang="Latin">Im̄périum̄ nōn frater hābēt . nūllá:sne túórúm</l>
<l n="7" xml:lang="Latin">Móuistí lâçrimas. ūbī mātèr ūbī ínclitá fāmá </l>
<l n="8" xml:lang="Latin">Āntigōne . mih̄:i nēp̄e iáces . mih̄:i ūic<choice><abbr
cert="high">t̄</abbr><expn cert="high" resp="editor, W.B.">tus</expn></choice>és
úní .</l>
<l n="9" xml:lang="Latin">Dícebám q̄uo tēndís iter quíd sc̄:ep̄tra nēgatá</l>
<l n="10" xml:lang="Latin">P̄oscis hābēs Ārgós. sóçeri fegñabis ín aulá.</l>
<l n="11" xml:lang="Latin">Hic t̄ibi lóngus hónós hic índiúsá pótestás .,</l>
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</leaf>
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Huc adtolle genas defectaque lumina uenit - Mü cIm 6396

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  <name> Nicoletta Guido </name>
</respStmt>
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  <date when="06-12-2015"> December 6, 2015</date>
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<msDesc>
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    <settlement xml:lang="German"> München </settlement>
    <idno> Mü clm 6396 </idno>
  </msIdentifier>
  <musicNotation>
    <p> The manuscript is dated back to the late 10th century and it shows adiastematic
neumatic notation. It probably comes from Southern Germany. The notation is present not only
on the incipit, but on the whole text. Considering the kind of ink used, the signs seem to be
coeval to the manuscript itself. The complex neumes are few, whereas the simpler ones are
more often used and among them one can recognize Punctum and Virga, which characterized
more than the half of this notation and then Clivis and Podatus or Pes. Punctum defines a low
note, while Virga describes a higher one. Moreover, Clivis represents a group of two descending
notes. The first one is a Virga, which is the higher element of the group, bound to the second
one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to
the circumflex accent. Pes or Podatus represents a group of two ascending notes. In the cursive
notation, this sign results from the union of Punctum and Virga and it is obtained through the
anticircumflex accent. Considering the adiastematic nature of the neumatic notation in question,

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it is not possible to recover the melody starting from the neumes in the manuscript. </p>

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  <author> Walther Bulst </author>
  <date when="1950"> 1950 </date>
  <place xml:lang="German"> Heidelberg </place>
</bibl>
</sourceDesc>
</teiHeader>
<text>
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cert="high">q.</abbr><expan cert="high" resp="editor, W.B.">que</expan></choice>lúmíná .
uěníť </l>
        <l n="2" xml:lang="Latin"><orig reg="Ad Taebas" resp="editor,
W.B.">Ádthêbás</orig>Árgîâ tũás<orig reg="eia" resp="editor, W.B.">ágé</orig>méñibus
úidúc.</l>
        <l n="3" xml:lang="Latin">Et pátriós ósténdē lâres et mútúa réddē </l>
        <l n="4" xml:lang="Latin">Hóspiciã héũ quíd<orig reg="agam" resp="editor,
W.B.">ãgō</orig><choice><abbr cert="high">þ</abbr><expan cert="high" resp="editor,
W.B.">pro</expan></choice>iéctūs éspítē nũdó</l>
        <l n="5" xml:lang="Latin">Hóc páfrié tellúris hábēs qũe úirgĩa cěrtē</l>
        <l n="6" xml:lang="Latin">Ímpériúm nón frater habét . núllásne túórúm</l>
        <l n="7" xml:lang="Latin">Móuísti lácrimas . úbí mâtêr . ũbí ínclitã fãmá</l>
        <l n="8" xml:lang="Latin">Ántigōnē mihi nēmpē íacēs mihi úictūs és úní .</l>
        <l n="9" xml:lang="Latin">Dícébañ qũo tэндis íter quíd scéptrã négatã</l>
        <l n="10" xml:lang="Latin">Póscis hábēs Árgós sóceri rěgnâbis ín áulá .</l>
        <l n="11" xml:lang="Latin">Híc tíbí lóngus hónós. hĩc índúisá<orig
reg="potestas" resp="editor, W.B.">þotastās</orig> . . </l>
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</div>
</leaf>
</body>
</text>
</TEI>
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Huc adtolle genas defectaque lumina uenit – Par. Lat. 8051

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        <respStmt>
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          <name> Nicoletta Guido </name>
        </respStmt>
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          <date when="06-12-2015"> December 6, 2015</date>
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<musicNotation>

<p> The manuscript is dated back to the 10th century, and shows neumatic notation on its lines. The neumatic notation is called “in campo aperto” because of its adiaستمatic nature that does not allow to recover the melody, since it does not provide information about the intervals between sounds. It is inscribed in the French notations and, in fact, it probably comes from Northern France. Mostly, the neumes used in this manuscript are Punctum and Virga. A Punctum defines a low note, while Virga describes a higher one. Virga is the most used neume and that might lead to the conclusion that high notes characterized this melody. Among neumes that are more complex, one can recognize Porrectus and Climacus. Porrectus represents three notes: the first one is located where the line begins and it is generally the highest one, while the second note is located where the line ends and it is a low note. The third is bound to the second one through a vertical line. One can interpret this note as a melodic pitch. Virga subpunctis is the only accented sign in this neume. Climacus corresponds to three or more descendent notes. This sign is made of two notes: a Virga subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. Lastly, considering the typology and the colour of the ink used by the copyist, one can state that both the manuscript and the neumatic notation are coeval to each other.</p>

</musicNotation>

</msDesc>

<bibl>

<title> Carmina Cantabrigiensia </title>

<author> Walther Bulst </author>

<date when="1950"> 1950 </date>

<place xml:lang="German"> Heidelberg </place>

</bibl>

</sourceDesc>

</teiHeader>

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<head xml:lang="Latin"> Huc adtolle genas defectaque lumina uenit</head>

<l n="1" xml:lang="Latin">Húc: adtó:llè génàs défectà<choice><abbr

cert="high">q̄.</abbr><expan cert="high" resp="editor, W.B.">que</expan></choice>luminá
uēnit</l>

<l n="2" xml:lang="Latin">Ad <orig reg="Taebas" resp="editor,
W.B.">thē·bās</orig>·árgiá: tús <orig reg="eia" resp="editor, W.B.">ágé</orig>
móeni<choice><abbr cert="high">b̄</abbr><expan cert="high" resp="editor,
W.B.">bus</expan></choice>·iñdúc̄</l>

<l n="3" xml:lang="Latin">Et pátríós ostendé lárés. ét m̄tuá réddé</l>

<l n="4" xml:lang="Latin">Hóspiçiá . héu: q̄úid<orig reg="agam" resp="editor,
W.B.">āgó</orig>.<choice><abbr cert="high">ḡ</abbr><expan cert="high" resp="editor,
W.B.">pro</expan></choice>·iéctús<orig reg="cespite" resp="editor,
W.B.">caéspitē</orig>·núdó</l>

<l n="5" xml:lang="Latin">Hóc<orig reg="patrie" resp="editor,
W.B.">pátríae</orig>·tèllúrís hábés.<orig reg="que" resp="editor, W.B.">quáe</orig>·iùrgiá
c̄esté</l>

<l n="6" xml:lang="Latin">Iñp̄erium non fráter háb ét nullá·sñ et
úor<choice><abbr cert="high">ū</abbr><expan cert="high" resp="editor,
W.B.">um</expan></choice></l>

<l n="7" xml:lang="Latin">Môulsti lácrimás ūbí mâtêr . ūbi<orig reg="inclita"
resp="editor, W.B.">iñclýtá</orig>·fámá</l>

<l n="8" xml:lang="Latin">Án·tigoné mihí: nêmp̄e iácés<choice><abbr
cert="high">m̄</abbr><expan cert="high" resp="editor, W.B.">mihi</expan></choice>·últús
és ūni .</l>

<l n="9" xml:lang="Latin">Dícéb<choice><abbr cert="high">ā</abbr><expan
cert="high" resp="editor, W.B.">am</expan></choice>·quó tēdis<choice><abbr
cert="high">it̄</abbr><expan cert="high" resp="editor, W.B.">iter</expan></choice>·quid
scep̄·tra négatā</l>

<l n="10" xml:lang="Latin">Pòscls hábés Árgós sóceři regnábis in aulá .</l>

<l n="11" xml:lang="Latin">Hic tibi lōngus hónós hic indiuísá potēstás</l>

</div>

</leaf>

</body>

</text>

</TEI>

Huc adtolle genas defectaque lumina uenit - Par. Lat. 8674

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          <settlement xml:lang="Frech"> Paris </settlement>
          <idno> Par. lat. 8674 </idno>
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        <musicNotation>
          <p> Neumatic notation dated back to the 10th century and belonging to the French
typology. In fact, it is fair to assume that this manuscript comes from the northeast part of that
country. The neumatic notation is spread over the text on its whole length. It shows both simple
and complex neumes' forms. One can account for the simplest ones as Punctum, Virga, Clivis
```

and Pes or Podatus. Punctum defines a low note, while Virga describes a higher one. Moreover, Clivis represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. On the contrary, Pes or Podatus represents a group of two ascending notes. In the cursive notation, this sign results from the union of Punctum and Virga and it is obtained through the anticircumflex accent. On the other hand, one can find among the more complex sings Climacus, Strophicus and Pes subpunctis. Climacus corresponds to three or more descendent notes. This sign is made of two notes: a Virga subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. On the contrary, Virga subpunctis is the only accented sign in this neume. Strophicus appears often in group of two notes (distropha) or three notes (tristropha). It is found after a neume, in order to extend it. In fact, distropha and tristropha represent a two or three time repetition on the same note. Strophicus might also indicate a slight pitch variation, under the semitone. Lastly, Pes subpunctis is a Podatus: a group of two ascending notes realised from the union of Punctum and Virga, through the anticircumflex accent, which presents two or three Puncti under it. It is important to note that, although the adiaستمatic nature of this notation, in that manuscript it is possible to see the height of the notes. That might be a proof of the shift from an adiaستمatic notation to a diastematic one, which will lead to the modern musical notes. </p>

</musicNotation>

</msDesc>

<bibl>

<title> Carmina Cantabrigiensia </title>

<author> Walther Bulst </author>

<date when="1950"> 1950 </date>

<place xml:lang="German"> Heidelberg </place>

</bibl>

</sourceDesc>

</teiHeader>

<text>

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<div n="XII" type="book">

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<l n="1" xml:lang="Latin">Huc <orig reg="adtolle" resp="editor, W.B.">
 attolè</orig>gēnās defectā<choice><abbr cert="high">q:</abbr><expn cert="high"
 resp="editor, W.B.">que</expn></choice>lúmiņa uenit.</l>
 <l n="2" xml:lang="Latin">Ad <orig reg="Taebas" resp="editor,
 W.B.">thēbās</orig>Arġiā tuās<orig reg="eia menibus" resp="editor, W.B.">āge
 móeņi<choice><abbr cert="high">b:</abbr><expn cert="high" resp="editor,
 W.B.">bus</expn></choice></orig>īnduc </l>
 <l n="3" xml:lang="Latin">Eī pātīriōs īostēndē la`rēs ēt mutūā reddē .</l>
 <l n="4" xml:lang="Latin"><orig reg="Hospicia" resp="editor,
 W.B.">Hōspitiā</orig> hē·ū quid āgam .<choice><abbr cert="high">p</abbr><expn
 cert="high" resp="editor, W.B.">pro</expn></choice>iectūs cēspitē nudō.</l>
 <l n="5" xml:lang="Latin"><orig reg="Hoc" resp="editor,
 W.B.">Hāc</orig>pātīriē tellūris hābēs quē iūrgiā cērie .</l>
 <l n="6" xml:lang="Latin">Im̄pēriūm nōn<orig reg="frater habet" resp="editor,
 W.B.">fratris hābēs </orig>núll·ās nē tuōrum. </l>
 <l n="7" xml:lang="Latin">Mōuisti lācřimās . ubi mātēr . ubi īclitā fāmā. </l>
 <l n="8" xml:lang="Latin"><orig reg="Antigone mihi" resp="editor,
 W.B.">Añfigōnes. mič·i </orig>nēmpe iacēs . <orig reg="mihi" resp="editor,
 W.B.">mīc·hi</orig>uictūs és ūni.</l>
 <l n="9" xml:lang="Latin">Dícēbām quō t'endís iter̄ . quid scēptřa nēgātā </l>
 <l n="10" xml:lang="Latin">Póscis . hābēs Ārgōs <orig reg="soceri" resp="editor,
 W.B.">socē·ris</orig>reghabis in āulā.</l>
 <l n="11" xml:lang="Latin">Hic tibi lóngūs hōnōs hic índúisā pótēs·tās.</l>
 </div>
 </leaf>
 </body>
 </text>
 </TEI>

Huc adtolle genas defectaque lumina uenit - Par. Lat. 10317

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      <name> Nicoletta Guido </name>
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    </msIdentifier>
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      <p> This manuscript, dated back to the 10th century, shows neumatic notation “in campo aperto”, on the whole length of the text contained in it. This kind of neumatic notation provides no information about the interval between sounds and, for that reason, it is impossible to recover the modern melody starting from the neumes. The typology of the signs permits to trace back the original location in Luxemburg. Simple signs mainly characterize this neumatic notation. However, more complex ones are present in the manuscript, like Porrectus and Climacus. The less complex are Punctum, Virga and Clivis. Punctum defines a low note, while Virga describes a higher one. Moreover, Clivis represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex

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accent. On the other hand, Porrectus represents three notes: the first one is located where the line begins and it is generally the highest one, while the second note is located where the line ends and it is a low note. The third is bound to the second one through a vertical line. One can interpret this note as a melodic pitch. Virga subpunctis is the only accented sign in this neume. Climacus corresponds to three or more descendent notes. This sign is made of two notes: a Virga subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. Some neumes are clearly more faded than others are, which might be read easily. That can lead to think about a process of rewriting of the signs upon the text, perhaps due to the constant use of this manuscript and its melody.

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  <author> Walther Bulst </author>
  <date when="1950"> 1950 </date>
  <place xml:lang="German"> Heidelberg </place>
</bibl>
</sourceDesc>
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        <l n="1" xml:lang="Latin">Hūc:<orig reg="adtolle" resp="editor, W.B.">át
        íolló</orig>génás deféctá<choice><abbr cert="high">q;</abbr><expan cert="high"
        resp="editor, W.B.">que</expan></choice>lúmíná ; uênit</l>
        <l n="2" xml:lang="Latin">Ad <orig reg="Taebas" resp="editor,
        W.B.">thébás</orig>Árgi:á. túás <orig reg="eia" resp="editor, W.B.">ǻgé</orig>móeñibūs
        ĩndúc .</l>
        <l n="3" xml:lang="Latin">Ēt pátríós ósténdè lārēs. ět mútuá réddè</l>
        <l n="4" xml:lang="Latin"><orig reg="Hospicia" resp="editor,
        W.B.">Hóspítĭa</orig>; ĥeu qūid<orig reg="agam" resp="editor,

```

W.B.">ǎgó</orig>.<choice><abbr cert="high">p̃</abbr><expan cert="high" resp="editor,"
W.B.">pro</expan></choice>lectus és píté nûdó .</l>
<l n="5" xml:lang="Latin">Hòc <orig reg="patrie" resp="editor,"
W.B.">patriá</orig>téllurís hábès ;<orig reg="que" resp="editor," W.B.">quíae</orig>iúrgiá
čértē:</l>
<l n="6" xml:lang="Latin">Ímpériúm nón fráter<orig reg="habet" resp="editor,"
W.B.">há bá</orig> . nûllâ·sñe túórúm. </l>
<l n="7" xml:lang="Latin">Môuístí lácrimás . ũbî mâtêr . ũbí ínclítã fámá. </l>
<l n="8" xml:lang="Latin">Añtígõne . míhî· nêmpè íacès . míhî· ũictús és úní ;</l>
<l n="9" xml:lang="Latin">Dícébám . qûo tēndís ítér . quod scē·ptra nēgãtã. </l>
<l n="10" xml:lang="Latin">Póscís . hábès Árgós . sóceri régnâbis ín áulá ;</l>
<l n="11" xml:lang="Latin">Híc tíbí loñgús hónós . hīc índiũisá pótèstás . </l>
</div>
</leaf>
</body>
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Tempus erat quo prima quies mortalibus egris – Be Ms 239

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        <author> Virgil </author>
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          <name> Nicoletta Guido </name>
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<p> This manuscript, dated back to the 9th century, shows adiastematic neumatic notation on its lines. This notation is inscribed in the French tradition and comes probably from the Eastern part of that country. It is important to note that the notation does not start from the incipit, but from the line “Ei mihi quails erat quantum mutatus ab illo”. Several theories have been advanced in order to explain this phenomenon. However, the work “Between Text and Music: The Reception of Virgilian Speeches in Early Medieval Manuscripts” of Ziolkowski seems to be the most influent study on this topic. His work is focused on the main idea that neumes were often used to emphasize speeches in Virgil Aeneid. The leaf of the manuscript in question hands down an extract from the second book; and the line where the notation begins, seems to be the most emphasized part of the speech. Considering now the typology of neumes used in this notation, one can say that most of them are simple, and among them it is possible to describe Punctum, Virga, Clivis and Pes or Podatus. Punctum defines a low note, while Virga describes a higher one. Moreover, Clivis represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. Pes or Podatus represents a group of two ascending notes. In the cursive notation, this sign results from the union of Punctum and Virga and it is obtained through the anticircumflex accent. Although in few lines, it is possible to note more complex neumes as well. Among them, one can notice three examples of Quilisma and four of Climacus. Quilisma is a note used to extend the previous one and for that reason, it is never found alone. Lastly, Climacus corresponds to three or more descendent notes. This sign is made of two notes: a Virga

subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. The last point to be taken into account is the ink used to draw the neumes. In fact, it seems to be darker than the one used to write down the manuscript. That might lead to a conclusion that the notation has been added later to the text. </p>

```

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    <author> Walther Bulst </author>
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reg="egris" resp="editor, W.B.">aegris</orig></l>
        <l n="2" xml:lang="Latin">Incipit et dono diuum gratissima serpit.</l>
        <l n="3" xml:lang="Latin"><orig reg="In somnis est" resp="editor,
W.B.">Insomnis ecce</orig>ante oculos mestissimus Hector</l>
        <l n="4" xml:lang="Latin">Visus adesse mihi largos<choice><abbr
cert="high">q:</abbr><expn cert="high" resp="editor,
W.B.">que</expn></choice>effundere fletus.</l>
        <l n="5" xml:lang="Latin">Raptatus bigis ut quondam ater<choice><abbr
cert="high">q:</abbr><expn cert="high" resp="editor,
W.B.">que</expn></choice>cruento</l>
        <l n="6" xml:lang="Latin">Puluere per<choice><abbr
cert="high">q:</abbr><expn cert="high" resp="editor, W.B.">que</expn></choice>pedes
traiectus lora tumentes</l>

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<l n="7" xml:lang="Latin">E' i mihí quālis êrât . quântúm mu:tâtús âb îllô</l>
 <l n="8" xml:lang="Latin ">Héctore qui fedit exuuias indútus Achíllís. </l>
 <l n="9" xml:lang="Latin">Vél Dánaúm<orig reg="Frigios" resp="editor,
 W.B.">phrygîos</orig>îaculátus púppîbûs ignés.</l>
 <l n="10" xml:lang="Latin">Squālentém bārbām ét cóncretos sanguîne crínes</l>
 <l n="11" xml:lang="Latin">Vúlñera<choice><abbr cert="high">q:</abbr><expan
 cert="high" resp="editor, W.B.">que</expan></choice>illá géréns que circúm plúfi:má
 múros</l>
 <l n="12" xml:lang="Latin">Accèpít patr'ios. úlfró fleñs ípse uidébar</l>
 <l n="13" xml:lang="Latin">Cómpeñlârê úrum. ét máestas expro:méré uocés;</l>
 <l n="14" xml:lang="Latin">Ó lux Dárdániaē. spés ó fídissímâ Téucrum.</l>
 <l n="15" xml:lang="Latin"><orig reg="Que tante" resp="editor, W.B.">Quae
 tantie</orig>tènuêré móre quíbus Héctór<orig reg="ab oris" resp="editor,
 W.B.">âbórís</orig></l>
 <l n="16" xml:lang="Latin">Expéc'tate: uēnis.</l>
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Tempus erat quo prima quies mortalibus egris - Budapest Ms 7

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 <author> Virgil </author>
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 <resp> Electronic edition created by</resp>
 <name> Nicoletta Guido </name>
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      <settlement xml:lang="English"> Budapest </settlement>
      <idno> ms 7 </idno>
    </msIdentifier>
    <musicNotation>
      <p> The manuscript in question shows German neumatic notation. Considering the
ink, the neumes seem to be coeval to the text of the manuscript, so that both might be dated
back between 10th and 11th century. The neumatic notation is adiastematic or “in campo
aperto”. Thus, since the neumes give no information about the interval between notes and the
height of them, it is not possible to recover the melody. As well as in other manuscript handed
down the Aeneid, the notation does not start from the incipit “Tempus erat [...] aegris”, but
rather from the verse “Ei mihi quails erat quantum mutatus ab illo”. A possible explanation
might be the use of neumatic notations in order to emphasize speeches, as stated by Ziolkowski
in his work “Between Text and Music: The Reception of Virgilian Speeches in Early Medieval
Manuscripts”. In fact, the verse “Ei mihi [...] quails ab illo” represents the highest moment of
the Aeneas’ monolog on Hector’s body. Both simple and complex neumes are used in that
notation. Punctum, Virga, Clivis, Pes or Podatus are the simplest ones. Punctum defines a low
note, while Virga describes a higher one. Moreover, Clivis represents a group of two descending
notes. The first one is a Virga, which is the higher element of the group, bound to the second
one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to
the circumflex accent. Pes or Podatus represents a group of two ascending notes. In the cursive
notation, this sign results from the union of Punctum and Virga and it is obtained through the
anticircumflex accent. On the other hand, several Quilismae and Climacus represent the

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complex ones. Quilisma is a note used to extend the previous one and for that reason, it is never found alone, while Climacus corresponds to three or more descendent notes. This sign is made of two notes: a Virga subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. </p>

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cert="high" resp="editor, W.B.">perque</expan></choice>pedes traiec<choice><abbr
cert="high">t.</abbr><expan cert="high" resp="editor, W.B.">tus</expan></choice>lora
tumentis.</l>
        <l n="7" xml:lang="Latin">Éî míhí qualís érat . qúant<choice><abbr
cert="high">ū</abbr><expan cert="high" resp="editor,
W.B.">um</expan></choice>îmũta<choice><abbr cert="high">t'</abbr><expan cert="high"
resp="editor, W.B.">tus</expan></choice>ăb iîlô</l>
        <l n="8" xml:lang="Latin">Hécôrè . í qui fedit éxúuíás índîtus Ăchîlíîs.</l>
        <l n="9" xml:lang="Latin">Vél Dána<choice><abbr cert="high">ū</abbr><expan
cert="high" resp="editor, W.B.">um</expan></choice><orig reg="Frigios" resp="editor,
W.B.">ph·rigiô</orig>iáculá<choice><abbr cert="high">t'</abbr><expan cert="high"
resp="editor, W.B.">tus</expan></choice>þuppí<choice><abbr cert="high">b.</abbr><expan
cert="high" resp="editor, W.B.">bus</expan></choice><orig reg="ignes" resp="editor,

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W.B.">İğnis</orig>.</l>

<l n="10" xml:lang="Latin">Squalént<choice><abbr cert="high">ē</abbr><expansion cert="high" resp="editor, W.B.">em</expansion></choice>barb<choice><abbr cert="high">ā</abbr><expansion cert="high" resp="editor, W.B.">am</expansion></choice>.ét
<choice><abbr cert="high">ċ</abbr><expansion cert="high" resp="editor, W.B.">con</expansion></choice>ċr ét òs šangũĩne ċrĩnēs .</l>

<l n="11" xml:lang="Latin">Vũlnċrá<choice><abbr cert="high">q̄</abbr><expansion cert="high" resp="editor, W.B.">que</expansion></choice>ĩllá ġeréns . que ċifċ<choice><abbr cert="high">ũ</abbr><expansion cert="high" resp="editor, W.B.">um</expansion></choice>plũrĩma mũfos.</l>

<l n="12" xml:lang="Latin">Āċċepĩt patřio:s . ũlrō flċns ģpse ũidċbár</l>

<l n="13" xml:lang="Latin">Ċ<choice><abbr cert="high">ō</abbr><expansion cert="high" resp="editor, W.B.">om</expansion></choice>pċllárċ ũĩr<choice><abbr cert="high">ũ</abbr><expansion cert="high" resp="editor, W.B.">um</expansion></choice>ét mũstās ģx<choice><abbr cert="high">p̄</abbr><expansion cert="high" resp="editor, W.B.">pro</expansion></choice>mċrċ ũċċēs;</l>

<l n="14" xml:lang="Latin">Ó lũx Dārđanċe spċs ó fidĩssĩma Ťeũċrum .</l>

<l n="15" xml:lang="Latin">Qũe tãntċ tċnuċr:ċ mŃrċ . <choice><abbr cert="high">q̄b.</abbr><expansion cert="high" resp="editor, W.B.">quibus</expansion></choice>ĤċċtŃr ģb Ńrĩs</l>

<l n="16" xml:lang="Latin">Ēxpċtãtċ ũċnĩs .</l>

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Tempus erat quo prima quies mortalibus egris - Bx 5325-5327

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      <p> The manuscript in question shows French neumatic notation, which comes
from the Eastern part of the country. Considering the ink, the neumes seem to be coeval to the
text of the manuscript, so that both might be dated back to the first half of the 9th century. The
neumatic notation is adiastematic. Thus, since the neumes give no information about the interval
between notes and the height of them, it is not possible to recover the melody. As well as in
other manuscript handed down the Aeneid, the notation does not start from the incipit “Tempus
erat [...] aegris”, but rather from the verse “Ei mihi quails erat quantum mutatus ab illo”. A
possible explanation might be the use of neumatic notations in order to emphasize speeches, as
stated by Ziolkowski in his work “Between Text and Music: The Reception of Virgilian
Speeches in Early Medieval Manuscripts”. In fact, in this manuscript neumes highlight the
pathos of the speech. In this Belgian manuscript mainly simple signs as Punctum, Virga, Clivis
and Pes or Podatus characterize the neumatic notation. Punctum defines a low note, while Virga

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describes a higher one. Moreover, Clivis represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. Pes or Podatus represents a group of two ascending notes. In the cursive notation, this sign results from the union of Punctum and Virga and it is obtained through the anticircumflex accent. Nevertheless, it is possible to read more complex neumes as well, like Qualisma, Strophicus and Climacus. Quilisma is a note used to extend the previous one and for that reason, it is never found alone. Strophicus depicts a slightly variation of the note's pitch. It is never found in isolation, but rather with other neumes. It might be occur in distrophae and tristrophae, so in groups of two or three signs; at the end of a neume in order to extent it on the same note (in this case, it is called Oriscus) and before a distropha. In the cursive writing, it is realized through three consecutive Puncti. Climacus corresponds to three or more descendent notes. This sign is made of two notes: a Virga subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. It is also important to signal the presence of a Trigon on the verse "In somnis ecce ante oculos maestissimus Hector", that means before the start of the neumatic notation. It a light neume, the first two strophae are fast and without accent, whereas the last one is more slowly and might be extended. </p>

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  <author> Walther Bulst </author>
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cert="high">b:</abbr><expan cert="hohg" resp="editor, W.B.">bus</expan></choice><orig
reg="egris" resp="editor, W.B.">aegris</orig></l>

<l n="2" xml:lang="Latin">Incipit et dono diuum gratissima serpit</l>

<l n="3" xml:lang="Latin">Insomnis<orig reg="est" resp="editor,
W.B.">ecce</orig>ante oculos maestissimus Hector</l>

<l n="4" xml:lang="Latin ">Visus ade<choice><abbr
cert="high">ē</abbr><expan cert="high" resp="editor, W.B.">esse</expan></choice>mihi.
largos<choice><abbr cert="high">q:</abbr><expan cert="high" resp="editor,
W.B.">que</expan></choice>effundere fletus</l>

<l n="5" xml:lang="Latin">Raptatur bigis . ut quondam ater<choice><abbr
cert="high">q:</abbr><expan cert="high" resp="editor,
W.B.">que</expan></choice>cruento</l>

<l n="6" xml:lang="Latin">Puluere perque pedes traiectus lora tu<choice><abbr
cert="high">m̄</abbr><expan cert="high" resp="editor, W.B.">men</expan></choice>tes</l>

<l n="7" xml:lang="Latin">Éĩ míhi quāliš éřât quánt<choice><abbr
cert="high">ū</abbr><expan cert="high" resp="editor,
W.B.">um</expan></choice>mutatús<orig reg="ab illo" resp="editor,
W.B.">ābĩl̄l̄ó</orig></l>

<l n="8" xml:lang="Latin"><orig reg="Hectore" resp="editor,
W.B.">Háéc̄tořē</orig>quí rēdiť éxũĩiás indũtũs Āchĩl̄l̄ĩs</l>

<l n="9" xml:lang="Latin">Věl Dánaũř<orig reg="Frigios" resp="editor,
W.B.">přr:yǵiõs</orig>iācũlátus pũppĩ<choice><abbr cert="high">b':</abbr><expan
cert="high" resp="editor, W.B.">bus</expan></choice> ģǵnės;</l>

<l n="10" xml:lang="Latin">Śqualént<choice><abbr
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W.B.">em</expan></choice>bāřb<choice><abbr cert="high">ā</abbr><expan cert="high"
resp="editor, W.B.">am</expan></choice>èt cóncretõs sǵngũi:nē crĩnēs</l>

<l n="11" xml:lang="Latin">Vúulnerá<choice><abbr
cert="high">q:</abbr><expan cert="high" resp="editor, W.B.">que</expan></choice>íllā
gērēs quē circũm plúrimā mūrõs</l>

<l n="12" xml:lang="Latin">Ačcepiť pāřĩõs. ũltro flens ģpsē uidebār</l>

<l n="13" xml:lang="Latin">Cópélláré uĩř<choice><abbr
cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>.èt mēstas
éx<choice><abbr cert="high">ř</abbr><expan cert="high" resp="editor,

W.B.">pro</expan>></choice> méré úōces; </l>
 <l n="14" xml:lang="Latin">Ó lúx Dafđâniê spes ó fídissímâ Tēucrum .</l>
 <l n="15" xml:lang="Latin"><orig reg="Que tante" resp="editor, W.B.">Quâe
 tañtañte</orig>teñu'érêfê mófe qùi<choice><abbr cert="high">b:</abbr><expan cert="high"
 resp="editor, W.B.">bus</expan></choice>Hêctor <orig reg="ab oris" resp="editor,
 W.B.">ábõris</orig></l>
 <l n="16" xml:lang="Latin">Expécta·tè úenis .</l>
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Tempus erat quo prima quies mortalibus egris - Mü clm 18059

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          <name> Nicoletta Guido </name>
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<p> Manuscript dated back to the 11th century, which shows neumatic notation from the verse “Ei mihi quails erat quantum mutatus ab illo”. Therefore, the neumes don not start from the Incipit “Tempus erat [...] aegris”. According to Ziolkowski’s work on notation in medieval manuscripts handing down the Aeneid “Between Text and Music: The Reception of Virgilian Speeches in Early Medieval Manuscripts”, a possible explanation might be the necessity to emphasize, through the notation, important passages of the speech itself. In fact, this verse represents the highest moment of Aeneas’ monolog on Hector’s body. Thus, the notation has the role to highlight the pathos of the speech. The manuscript in question alternate simple neumes as Punctum, Virga, Clivis, Pes or Podatus with complex ones, as Quilisma and Climacus. Punctum defines a low note, while Virga describes a higher one. Moreover, Clivis represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. Pes or Podatus represents a group of two ascending notes. In the cursive notation, this sign results from the union of Punctum and Virga and it is obtained through the anticircumflex accent. On the other hand, Quilisma is a note used to extend the previous one and for that reason, it is never found alone, while Climacus corresponds to three or more descendent notes. This sign is made of two notes: a Virga subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. Taking into account the shape of neumes, one can state this kind of neumatic notation has to be inscribed into the German notation system. Moreover, it seems coeval to the text of the manuscript, since the same ink was used for them both. </p>

</musicNotation>

</msDesc>

<bibl>

<title> Carmina Cantabrigiensia </title>

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<author> Walther Bulst </author>
<date when="1950"> 1950 </date>
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W.B.">bus</expan></choice>egris</l>
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<l n="3" xml:lang="Latin">In somnis<orig reg="est" resp="editor,
W.B.">ecce</orig>ante oculos mestissimus Hector.</l>
<l n="4" xml:lang="Latin">Visus adesse mihi . largos<choice><abbr
cert="high">q:</abbr><expan cert="high" resp="editor,
W.B.">que</expan></choice>effundere fletus.</l>
<l n="5" xml:lang="Latin">Raptatus bigis ut quondam. ater<choice><abbr
cert="high">q:</abbr><expan cert="high" resp="editor,
W.B.">que</expan></choice>cruento</l>
<l n="6" xml:lang="Latin">Puluere<choice><abbr cert="high">pq:</abbr><expan
cert="high" resp="editor, W.B.">perque</expan></choice>pedes traiectus lora<orig
reg="tumentes" resp="editor, W.B.">tumentis</orig>;</l>
<l n="7" xml:lang="Latin">Èî míhi quális érât. quântûm mûtátûs äb îllô </l>
<l n="8" xml:lang="Latin">Hécófe qui rêdit éxúuiás ñdûtûs Ächîlîs:</l>
<l n="9" xml:lang="Latin">Vél Dánaúm<orig reg="Frigios" resp="editor,
W.B.">ffýgiós</orig>iácúlátûs púppibus ígnes . </l>
<l n="10" xml:lang="Latin">Squáléntém bárbám .ét cóncretôs sánguínë
crínés .</l>
<l n="11" xml:lang="Latin">Vúlnérá<choice><abbr cert="high">q:</abbr><expan
cert="high" resp="editor, W.B.">que</expan></choice>íllá géréns . que círcùm plúrímá

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múrós</l>
    <l n="12" xml:lang="Latin">Accépit pátriós : últrõ flêns îpsé uĩdebár</l>
    <l n="13" xml:lang="Latin">Cõmpellâre uírũm .ét méstás êxprimérê uõcēs:</l>
    <l n="14" xml:lang="Latin">Ó lùx Dárdánié . spês ò fĩdĩssimâ Tèucrũm .</l>
    <l n="15" xml:lang="Latin">Qúe tánte tènúer:ě mòrè qúí<choice><abbr
cert="high">b:</abbr><expn cert="high" resp="editor, W.B.">bus</expn></choice>Héctor
    ěb<orig reg="oris" resp="editor, W.B.">hórís</orig></l>
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Tempus erat quo prima quies mortalibus egris - Na Vind. Lat. 5

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      <p> The manuscript is dated back to the 11th century and it shows neumatic
notation “in campo aperto” from the line “Ei mihi quails erat quantum mutatus ab illo”, as well
as other manuscripts with neumatic notations in the Aeneid tradition. Ziolkowski’s work
“Between Text and Music: The Reception of Virgilian Speeches in Early Medieval
Manuscripts” seems to be the most influent study on this topic. His work is focused on the main
idea that neumes were often used to emphasize speeches in Virgil Aeneid. The leaf of the
manuscript in question hands down an extract from the second book; and the line where the
notation begins, seems to be the most emphasized part of the speech. This manuscript presents
an Italian notation, probably composed in the Southern part of the country. Its neumes have
been clearly written through a darker ink than the one used to write down the text. The signs
were added later. The most complex neumes are Porrectus and Climacus. Porrectus represents
three notes: the first one is located where the line begins and it is generally the highest one,
while the second note is located where the line ends and it is a low note. The third is bound to
the second one through a vertical line. One can interpret this note as a melodic pitch. Virga
subpunctis is the only accented sign in this neume. Climacus corresponds to three or more
descendent notes. This sign is made of two notes: a Virga subpunctis that presents an accent on
the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent
and it is considered as a transaction neume. More are, instead, the simpler neumes, like
Punctum, Virga, Pes and Clivis. Punctum defines a low note, while Virga describes a higher
one. Moreover, Pes or Podatus represents a group of two ascending notes. In the cursive
notation, this sign results from the union of Punctum and Virga and it is obtained through the
anticircumflex accent. Lastly, Clivis represents a group of two descending notes. The first one is
a Virga, which is the higher element of the group, bound to the second one through a stroke, in
order to make a unique note. In cursive, this neume is written thanks to the circumflex accent.

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        <l n="4" xml:lang="Latin">Visus adesse mihi largos<choice><abbr
cert="high">q;</abbr><expan cert="high" resp="editor,
W.B.">que</expan></choice>effundere fletus</l>
          <l n="5" xml:lang="Latin">Raptatus bigis ut quondam ater<choice><abbr
cert="high">q;</abbr><expan cert="high" resp="editor,
W.B.">que</expan></choice>cruento</l>
          <l n="6" xml:lang="Latin">Puluere <choice><abbr cert="high">pq;</abbr><expan
cert="high" resp="editor, W.B.">perque</expan></choice>pedes traiectus lora tumentes </l>
          <l n="7" xml:lang="Latin"><orig reg="Ei" resp="editor, W.B.">Hēi</orig>mihi
qualīs era`t quantū mu`ta`tus āb il̄lō</l>
          <l n="8" xml:lang="Latin">Hēctōre<choice><abbr cert="high">q</abbr><expan
cert="high" resp="editor, W.B.">qui</expan></choice>rēdit éxuūia`'s ínđu`tu`'s Aĉh`il̄līs</l>
          <l n="9" xml:lang="Latin">Vél Dānāum<orig reg="Frigios" resp="editor,
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cert="high" resp="editor, W.B.">bus</expan></choice>iġnés</l>
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cert="high">e'</abbr><expan cert="high" resp="editor, W.B.">em</expan></choice>ġarbam

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ét cónctetós šangúine crínes</l>

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<l n="12" xml:lang="Latin">Accēpit patr·iōs ūltřo flēns ípse ūidebár</l>

<l n="13" xml:lang="Latin">C<choice><abbr cert="high">ó</abbr><expan cert="high" resp="editor, W.B.">om</expan></choice>p·ellāre uir<choice><abbr cert="high">ú</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>ēt m̄estas ex<choice><abbr cert="high">p̄</abbr><expan cert="high" resp="editor, W.B.">pro</expan></choice>m̄erē uóces</l>

<l n="14" xml:lang="Latin">lūx Dardániē spēs ó fīdīssīma Téucr<choice><abbr cert="high">ú</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice></l>

<l n="15" xml:lang="Latin">Qūē t·āntē tēnuér·é m̄ore<choice><abbr cert="high">qb</abbr><expan cert="high" resp="editor, W.B.">quibus</expan></choice>Héctōr āb ōfis</l>

<l n="16" xml:lang="Latin">E&pectá·tē uēńis</l>

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Tempus erat quo prima quies mortalibus egris - Par. Lat. 8069

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<author> Virgil </author>

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<p> The leaf of the manuscript in question hands down the second book of the Virgil's Aeneid. It is dated back to the 11th century and shows adiastrumatic neumatic notation from the verse "Ei mihi quails erat quantum mutatus ab illo". This pattern of notation is rather common in manuscript handing down the Aeneid because of the possibility to highlight, through neumes, the highest part of the speech itself. According to Ziolkowski's work "Between Text and Music: The Reception of Virgilian Speeches in Early Medieval Manuscripts", the verse "Ei mihi [...] ab illo" represents the highest moment of Aeneas' monolog on Hector's body and thus, the neumatic notation does not start from the incipit "Tempus erat [...] aegris". However, it is important to note that this manuscript shows a particular kind of neumatic notation: the Aquitanian one. The main characteristic of that kind of neumatic notation is that all signs are written through points, rather than through strokes. Consequently, because of the circle shape of its signs that reminds of points, it is also called "point notation". Albeit they are still inscribed into the adiastrumatic notations, Aquitanian neumes provide more information about notes' height, but since the signs are not written on lines, it is anyway impossible to retrieve the melody from them. The neumes used are both simple and complex. On one hand, one can find

Punctum, Virga, Clivis and Pes (or Podatus); on the other hand instead, Climacus and Quilisma. Punctum defines a low note, while Virga describes a higher one. Clivis represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent, but in the Aquitanian notation, it appears as a colon. Pes or Podatus represents a group of two ascending notes. In the cursive notation, this sign results from the union of Punctum and Virga and it is obtained through the anticircumflex accent; in the Aquitanian notation instead Pes is made of a Punctum with a Virga on its top. Furthermore, Quilisma is a note used to extend the previous one and for that reason, it is never found alone, while Climacus corresponds to three or more descendent notes. This sign is made of two notes: a Virga subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. The notation comes from the Western part of France. </p>

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  <place xml:lang="German"> Heidelberg </place>
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cert="high">b.</abbr><expan cert="high" resp="editor,
W.B.">bus</expan></choice>egris.</l>
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cert="high">ū</abbr><expan cert="high" resp="editor,
W.B.">um</expan></choice>gratissima serpit .</l>

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<l n="3" xml:lang="Latin"><orig reg=" In somnis est" resp="editor,
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 W.B.">oculos</orig>mestissim<choice><abbr cert="high">?</abbr><expan cert="high"
 resp="editor, W.B.">us</expan></choice>Hector .</l>

<l n="4" xml:lang="Latin">Visus ade<choice><abbr cert="high">ē</abbr><expan
 cert="high" resp="editor, W.B.">esse</expan></choice>mihi . largos<choice><abbr
 cert="high">q:</abbr><expan cert="high" resp="editor,
 W.B.">que</expan></choice>effundere fletus .</l>

<l n="5" xml:lang="Latin">Raptatus bigis ut quond<choice><abbr
 cert="high">ā</abbr><expan cert="high" resp="editor,
 W.B.">am</expan></choice>ater<choice><abbr cert="high">q:</abbr><expan cert="high"
 resp="editor, W.B.">que</expan></choice>cruento</l>

<l n="6" xml:lang="Latin">Puluere .<choice><abbr cert="high">ρ</abbr><expan
 cert="high" resp="editor, W.B.">per</expan></choice>quepedes traiectus lora<orig
 reg="tumentes" resp="editor, W.B.">tumentis</orig></l>

<l n="7" xml:lang="Latin">Ēi· mihi quālis ēra·t . quan·t<choice><abbr
 cert="high">ū</abbr><expan cert="high" resp="editor,
 W.B.">um</expan></choice>m·uitat<choice><abbr cert="high">?</abbr><expan cert="high"
 resp="editor, W.B.">us</expan></choice>.<orig reg="ab illo" resp="editor,
 W.B.">:ab·iīlo·</orig>.</l>

<l n="8" xml:lang="Latin">Hēctōrē qui rēdit ēxiūuas īnd·ūt<choice><abbr
 cert="high">?</abbr><expan cert="high" resp="editor,
 W.B.">us</expan></choice>A·ch·illis</l>

<l n="9" xml:lang="Latin">Vēl Dānāum<orig reg="Frigios" resp="editor,
 W.B.">Phryg·iōs</orig> iāculāt<choice><abbr cert="high">?</abbr><expan cert="high"
 resp="editor, W.B.">us</expan></choice>pūppi<choice><abbr cert="high">b:</abbr><expan
 cert="high" resp="editor, W.B.">bus</expan></choice><orig reg="ignes" resp="editor,
 W.B.">ignis</orig>.</l>

<l n="10" xml:lang="Latin">Squālēt<choice><abbr cert="high">ē</abbr><expan
 cert="high" resp="editor, W.B.">em</expan></choice>barbām ét ĉ<choice><abbr
 cert="high">ō</abbr><expan cert="high" resp="editor, W.B.">on</expan></choice>cretōs
 sānguīne crinēs .</l>

<l n="11" xml:lang="Latin">Vūlnerā<choice><abbr cert="high">q:</abbr><expan
 cert="high" resp="editor, W.B.">que</expan></choice>illā gērens quē circ<choice><abbr

cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>plūrimā
mūrōs.</l>

<l n="12" xml:lang="Latin">Ācēpit patriōs . ūltrō flēns i·psē iudēbār</l>

<l n="13" xml:lang="Latin">Cōmpellāre uir·<choice><abbr

cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice> . èt

me·stās èx<choice><abbr cert="high">p</abbr><expan cert="high" resp="editor,

W.B.">pro</expan></choice> mēre· uocēs .</l>

<l n="14" xml:lang="Latin">Ō lux Dārdaniāe . spēs o· fidi·ssimā· Tēucrūm . </l>

<l n="15" xml:lang="Latin">Quē tānte tenue·re . mōrē . qui<choice><abbr

cert="high">b·</abbr><expan cert="high" resp="editor,

W.B.">bus</expan></choice> Hēctorāb<add place="superlinear"

hand="copyist">h</add>ōris .</l>

<l n="16" xml:lang="Latin">Ēxpectatē· ū·enis .</l>

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Tempus erat quo prima quies mortalibus egris - Par. Lat. 9344

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<author> Virgil </author>

<respStmt>

<resp> Electronic edition created by</resp>

<name> Nicoletta Guido </name>

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<p> The manuscript, dated back to the 11th century, shows neumatic notation from the verse “Ei mihi quails erat quantum mutatus ab illo”. This pattern is common in those manuscripts that hand down the Aeneid’s tradition. According to Ziolkowski, a possible explanation might be the necessity to emphasize, through neumatic notation, some part of the speech itself. As stated in his work “Between Text and Music: The Reception of Virgilian Speeches in Early Medieval Manuscripts”, the verse “Ei mihi [...] ab illo” seems to present the highest concentration of pathos in the Aeneas’ monolog after Hector’s killing. The neumatic notation in question might be defined as adiaSTEMATIC or “in campo aperto”. Consequently, it is not possible to retrieve the melody starting from the neumes, since they provide us with no information about the notes’ height or about intervals between sounds. The most common neumes are Punctum, Virga, Clivis and Pes (or Podatus). Punctum defines a low note, while Virga describes a higher one. Clivis represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. Pes or Podatus represents a group of two ascending notes. In the cursive notation, this sign results from the union of Punctum and Virga and it is obtained through the anticircumflex accent. Moreover, one can note one example of Quilisma: a note used to extend the previous one, never found alone and three examples of Climacus. It corresponds to three or more descendent notes. This sign is made of two notes: a Virga subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent

and it is considered as a transaction neume. The origin of that notation is not clear. In fact, according to some scholars, it might come from the Eastern part of France, but it might be inscribed into the German kind as well, supposing the Western part of the country as its native place. Lastly, the ink used to write down the neumes seems more faded than the one used for the text. A reason might be the frequent use of the manuscript that led to that fade. </p>

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reg="egris" resp="editor, W.B.">aegris</orig></l>
        <l n="2" xml:lang="Latin">Incipit et dono diuum gratissima serpit</l>
        <l n="3" xml:lang="Latin">In somnis <orig reg="est" resp="editor,
W.B.">ecce</orig> ante oculos mestissimus Hector</l>
        <l n="4" xml:lang="Latin">Visus ade<choice><abbr cert="high">ē</abbr><expan
cert="high" resp="editor, W.B.">esse</expan></choice> mihi. largos<choice><abbr
cert="high">q.</abbr><expan cert="high" resp="editor,
W.B.">que</expan></choice> effundere fletus </l>
        <l n="5" xml:lang="Latin">Raptatus bigis ut quond<choice><abbr
cert="high">ā</abbr><expan cert="high" resp="editor,
W.B.">am</expan></choice>. ater<choice><abbr cert="high">q.</abbr><expan cert="high"
resp="editor, W.B.">que</expan></choice> cruento</l>

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<l n="6" xml:lang="Latin">Puluere. per<choice><abbr
 cert="high">q.</abbr><expan cert="high" resp="editor, W.B.">que</expan></choice>pedes
 traiectus lora tumentis </l>

<l n="7" xml:lang="Latin">É:i mīhi quališ érât . quânt<choice><abbr
 cert="high">ū</abbr><expan cert="high" resp="editor,
 W.B.">um</expan></choice>mûtâtús<orig reg="ab illo" resp="editor, W.B.">
 ábílló</orig></l>

<l n="8" xml:lang="Latin"><orig reg="Hectore" resp="editor,
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 cert="high" resp="editor, W.B.">um</expan></choice><orig reg="Frigios" resp="editor,
 W.B.">phrýgí:os</orig>iacúlátúsþuppi<choice><abbr cert="high">b.</abbr><expan
 cert="high" resp="editor, W.B.">bus</expan></choice>ígnés</l>

<l n="10" xml:lang="Latin">Squaléntém bārbām .ét cónkrétòs saánguínè crínés</l>

<l n="11" xml:lang="Latin">Vúlñeña<choice><abbr cert="high">q.</abbr><expan
 cert="high" resp="editor, W.B.">que</expan></choice>íllā gērēns qué circūm plúrimá m
 úrós </l>

<l n="12" xml:lang="Latin">Áccepíť pátri:òs ũltro flēns ipse uídébár </l>

<l n="13" xml:lang="Latin">Cómpéllârē uír<choice><abbr
 cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>ét
 mēstás<orig reg="expromere" resp="editor, W.B.">expfímerê</orig>uócēs</l>

<l n="14" xml:lang="Latin">Ó lúx Dárdánié . spēs ð fídíssím:a Téucfūm</l>

<l n="15" xml:lang="Latin">Qué tânté ténúé:rè móré . quí<choice><abbr
 cert="high">b.</abbr><expan cert="high" resp="editor, W.B.">bus</expan></choice>Héctór
 āb órís</l>

<l n="16" xml:lang="Latin">Éxpécta:tē uénis . . </l>

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</TEI>

Tempus erat quo prima quies mortalibus egris - Gud. lat. 66

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Virgil's Aeneid. It is dated back to the 10th century and shows adiastrumatic neumatic notation
from the verse "Ei mihi quails erat quantum mutatus ab illo". It is common to find this pattern
of notation in manuscript handing down the Aeneid because of the possibility to highlight,
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through neumes, the highest part of the speech itself. According to Ziolkowski's work "Between Text and Music: The Reception of Virgilian Speeches in Early Medieval Manuscripts", the verse "Ei mihi [...] ab illo" represents the highest moment of Aeneas' monolog on Hector's body and for that reason, the neumatic notation should be present from that line and not from the incipit "Tempus erat [...] aegris". However, it is important to note that in this manuscript the notation ends with the verse "Vel Danaum Frigios iaculatus puppibus ignes". A hypothesis might be the necessity to give even more emphasis to that part of Aeneas' speech. The kind of neumes used is rather simple. In fact, Punctum, Virga and Clivis are the only sings to be read on these Virgillian verses. Punctum defines a low note, while Virga describes a higher one. Lastly, Clivis represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. The neumatic notation of that manuscript comes from the Eastern part of France and thus it is inscribed into the French kind. Some neumes are faded and for this reason, difficult to read. </p>

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reg="egris" resp="editor, W.B.">aegris</orig></l>
        <l n="2" xml:lang="Latin">Incipit et dono diuum gratissima serpit ; </l>
        <l n="3" xml:lang="Latin"><orig reg="In somnis est" resp="editor,
W.B.">Insomnis ecce</orig>ante oculos mestissimus Hector</l>

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<l n="4" xml:lang="Latin">Visus adesse mihi largos<choice><abbr
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 W.B.">que</expn></choice>effundere fletus: </l>

<l n="5" xml:lang="Latin">Raptatus bigis ut quondam ater<choice><abbr
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<l n="6" xml:lang="Latin">Puluere perque pedes traiectus lora tumentes; </l>

<l n="7" xml:lang="Latin">Éî míhí . qūalĩ éráť qúantúm mútáťus éráť<orig
 reg="ab illo" resp="editor, W.B.">abílló</orig></l>

<l n="8" xml:lang="Latin">Hécťoře qúi fedĩť : éxúuíás inđútús Āchíľĩs :</l>

<l n="9" xml:lang="Latin">Vel Dánāúm<orig reg="Frigios" resp="editor,
 W.B.">phřýgíós</orig>íacūlátus púppibūs ignés :</l>

<l n="10" xml:lang="Latin">Squalentem bárbam et concretos sanguine crines</l>

<l n="11" xml:lang="Latin">Vulnera<choice><abbr cert="high">q:</abbr><expn
 cert="high" resp="editor, W.B.">que</expn></choice>illa gerens <choice><abbr
 cert="high">q:</abbr><expn cert="high" resp="editor, W.B.">que</expn></choice>circum
 plurima muros</l>

<l n="12" xml:lang="Latin">Accepit patrios: ultro flens ipse uidebar</l>

<l n="13" xml:lang="Latin">Compellare uirum : et mestas expromere uoces ; </l>

<l n="14" xml:lang="Latin">O lux Dardanie spes o fidissima Teucrum </l>

<l n="15" xml:lang="Latin">Que tante ténúere mōre : quibus Hector ab oris</l>

<l n="16" xml:lang="Latin">Expectate uenis : </l>

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</TEI>

Miserarum est nec amori dare ludum neque dulci - Par. Lat. 7979

<?xml version="1.0" encoding="UTF-8"?>

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      <p> The manuscript in question might be dated back to the 12th century and hands
down Horace’s Carmina III, 12. It presents neumatic notation, inscribing into the French
tradition. An important point to be considered is the presence of that notation not only on the
main text of the manuscript, but also on two lines of the inferior margin. Moreover, this
manuscript shows a particular kind of neumatic notation: the Aquitanian one. Its main
characteristic is the way the signs are written. Rather than through strokes, the neumes have a
circle shape that reminds of points. Consequently, the Aquitanian is also known as “point
notation”. Albeit they are still inscribed into the adiastematic notations, Aquitanian neumes
provide more information about notes’ height; one can figure out, in fact, the ascendant or
descendant nature of the neumes themselves. However, since the signs are not written on lines,

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it is impossible to retrieve the melody from them. As already stated, this manuscript shows different notations; the first one is written on the text in the main part of the manuscript, whereas the second one is located on the text in the inferior margin. That portion of text corresponds to the first two lines of Horace's *Carmina* III, 12 "Miserarum est nec amori dare ludum neque dolci / Mala vino lauere laut exanimari metuentis patruē verbera lingue". Neumes appear as rather different between these two parts of the manuscript. On the one hand, in the main text they are simpler, since the most used ones are Punctum and Virga. The first defines a low note, while the second describes a higher one. On the other hand, instead, in the inferior margin the number of neumes is higher, although they are rather simple as well. Among them, one can recognize Punctum, Virga and Clivis. The last one represents a group of two descending notes. The first one is a Virga, which is the highest element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent, but in the Aquitanian notation, it appears as a colon. However, the main difference stays in the number of signs located on the text. One can notice that the inferior margin shows a larger number of neumes. Thanks to the notes' height of the Aquitanian notation, it seems possible to figure out the ascendant and descendant melody of these two lines. A possible explanation for that might be the intense use of the lines in question, which furthermore represent the incipit of the *Carmina* as well. That leads the way to the theory of the notated incipit, used by chantors in the Middle Ages in order to better memorize a melody or, through the notation on the first line, to better remind the whole melody, previously learned.

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 cert="high" resp="editor, W.B.">um</expan></choice>est nec amóri dare lúdum<orig
 reg="neque" resp="editor, W.B.">nec</orig>dúlcī</l>
 <l n="2" xml:lang="Latin">malá uíno lauère aút exanimāri<orig
 reg="metuentis" resp="editor, W.B.">mētuentes</orig></l>
 <l n="3" xml:lang="Latin">pātrūe uerbēra līngue</l>
 <l n="4" xml:lang="Latin">Tíbi<orig reg="qualum" resp="editor,
 W.B.">cál<choice><abbr cert="high">ū</abbr><expan cert="high" resp="editor,
 W.B.">um</expan></choice></orig>Cithēreē puer ales tibi telas</l>
 <l n="5" xml:lang="Latin">o<choice><abbr cert="high">p</abbr><expan
 cert="high" resp="editor, W.B.">per</expan></choice>ose<choice><abbr
 cert="high">q</abbr><expan cert="high" resp="editor, W.B.">que</expan></choice>
 Minerue stūdi<choice><abbr cert="high">ū</abbr><expan cert="high" resp="editor,
 W.B.">um</expan></choice>aũfert<orig reg="Neobule" resp="editor,
 W.B.">nēobole</orig></l>
 <l n="6" xml:lang="Latin"><orig reg="Liparei" resp="editor,
 W.B.">lípáre</orig> nitor Ebrí</l>
 <l n="7" xml:lang="Latin">Simul unct<choice><abbr
 cert="high">o'</abbr><expan cert="high" resp="editor, W.B.">os</expan></choice>Tibérinis
 humeros láuít<choice><abbr cert="high">ī</abbr><expan cert="high" resp="editor,
 W.B.">in</expan></choice>undis.</l>
 <l n="8" xml:lang="Latin">equès<orig reg="ipso" resp="editor,
 W.B.">lpsè</orig> melior <orig reg="Bellerofonte" resp="editor, W.B.">Béllorófonte</orig>
 nē<choice><abbr cert="high">q</abbr><expan cert="high" resp="editor,
 W.B.">que</expan></choice>pugno</l>
 <l n="9" xml:lang="Latin">ne<choice><abbr cert="high">q</abbr><expan
 cert="high" resp="editor, W.B.">que</expan></choice>segñi pede uic<choice><abbr
 cert="high">t'</abbr><expan cert="high" resp="editor, W.B.">tus</expan></choice></l>
 <l n="10" xml:lang="Latin">Ĉatus fd<choice><abbr
 cert="high">ē</abbr><expan cert="high" resp="editor,

W.B.">em</expan></choice><choice><abbr cert="high">p</abbr><expan cert="high" resp="editor, W.B.">per</expan></choice>á<choice><abbr cert="high">p</abbr><expan cert="high" resp="editor, W.B.">per</expan></choice>t<choice><abbr cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>fugientes agítato</l>

<l n="11" xml:lang="Latin">grēge céru<choice><abbr cert="high">ó</abbr><expan cert="high" resp="editor, W.B.">os</expan></choice>iaçulari etcelē<orig reg="alto" resp="editor, W.B.">arçto</orig>latitant<choice><abbr cert="high">ē</abbr><expan cert="high" resp="editor, W.B.">em</expan></choice></l>

<l n="12" xml:lang="Latin">fr·útictetò exci<choice><abbr cert="high">ř</abbr><expan cert="high" resp="editor, W.B.">per</expan></choice>e ařrüm</l>

<add xml:lang="Latin" place="inferior margin"><l n="1" xml:lang="Latin">Misèrarum<choice><abbr cert="high">÷</abbr><expan cert="high" resp="editor, W.B.">est</expan></choice>nēc àmori<orig reg="dare" resp="editor, W.B.">dari </orig>lūdùm<orig reg="neque" resp="editor, W.B.">ñēc</orig>dulcî</l></add>

<add xml:lang="Latin" place="inferior margin"><l n="2" xml:lang="Latin">málá uino l'auère<orig reg="laut" resp="editor, W.B.">aut</orig>èxànimari<orig reg="metuentis" resp="editor, W.B.">metuèntes</orig>pàtruè uer<choice><abbr cert="high">b</abbr><expan cert="high" resp="editor, W.B.">ber</expan></choice>à lingûe</l></add>

</div1>

</div>

</leaf>

</body>

</text>

</TEI>

O admirabile Veneris idolum – Ca U.L. Gg.5.35

<?xml version="1.0" encoding="UTF-8"?)>

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<p> The manuscript Ca U.L. Gg.5.35 of Cambridge might be dated back to the 11th century. It shows neumatic notation “in campo aperto” on two of its leaves: 439r and 441v. That neumatic notation comes from England and it has an adiastematic nature. For this reason, it does not allow us to reconstruct the original melody. In comparison with other manuscripts dated back to the same period and provided with neumatic notation, one can notice that the neumes in Ca are extremely simplified. However, leaf 441v presents more complex signs than leaf 439r. In fact, beside Punctum and Virga other neume like Clivis and Climacus have been used. Clivis represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. Climacus, instead, corresponds to three or more descendent notes. This sign is made of two notes: a Virga

subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. On the contrary, Virga subpunctis is the only accented sign in this neume. Considering the ink, the neumatic notation seems coeval to the manuscript. Moreover, it is interesting to note how the notation has been written on stanza 1 and stanza 2 of an “erotic” Carmen. In the same manuscript, 438v and 439r are two of the leaves, in which erotic Carmina were erased because of their content. In this case, instead, the erotic Carmen not only has not been erased, but it has been notated. Neumatic notations were often added to salient texts, often used by chantors in the Middle Ages. That may lead the way to a new interpretation. It might be possible that this Carmen was considered important and, for this reason, it shows neumatic notation on its lines. That is, furthermore, a proof of the union between profane and secular, characteristic of the whole collection of the Cambridge Songs. </p>

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cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice></l>
        <l n="2" xml:lang="Latin">cúíús má<choice><abbr cert="high">ť</abbr><expan
cert="high" resp="editor, W.B.">ter</expan></choice>iè níhíl<choice><abbr
cert="high">÷</abbr><expan cert="high" resp="editor,
W.B.">est</expan></choice>friüol<choice><abbr cert="high">ū</abbr><expan cert="high"
resp="editor, W.B.">um</expan></choice>.</l>

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<l n="3" xml:lang="Latin"> arcós té<choice><abbr cert="high">ṑ</abbr><expan cert="high" resp="editor, W.B.">pro</expan></choice>tégaí quí stéllás ét pól<choice><abbr cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>.</l>

<l n="4" xml:lang="Latin">fécít ét maría cóndídít ét solum</l>

<l n="5" xml:lang="Latin">fúris íngeñoio .<orig reg="non sentias" resp="editor, W.B."><choice><abbr cert="high">ñ</abbr><expan cert="high" resp="editor, W.B.">non</expan></choice>señtías</orig>dól<choice><abbr cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>.</l>

<l n="6" xml:lang="Latin">Clótó té díligát. qué báiolát cólum.</l>

</lg>

<lg n="2" type="stanza">

<l n="1" xml:lang="Latin"><orig reg="Saluato" resp="editor, W.B.">Sálútó</orig>ṑuér<choice><abbr cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>nón<choice><abbr cert="high">ṑ</abbr><expan cert="high" resp="editor, W.B.">per</expan></choice>ipótésim.</l>

<l n="2" xml:lang="Latin">séd fírmó pécitore dé<choice><abbr cert="high">ṑ</abbr><expan cert="high" resp="editor, W.B.">pre</expan></choice>còr Lách'ésim</l>

<l n="3" xml:lang="Latin"><orig reg="sororem" resp="editor, W.B.">sórórís</orig>Atfópòs, nè cùrèt hérésim</l>

<l n="4" xml:lang="Latin">Néptúnúm cómítem hábéas ét Tétim.</l>

<l n="5" xml:lang="Latin">c<choice><abbr cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>uéctus fúéris<choice><abbr cert="high">ṑ</abbr><expan cert="high" resp="editor, W.B.">per</expan></choice>flúuì<choice><abbr cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>Tésim .</l>

<l n="6" xml:lang="Latin">quó fúgís ámábó c<choice><abbr cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>té . diléxérím .</l>

<l n="7" xml:lang="Latin">mísér/ quíd faciâm c<choice><abbr cert="high">ū</abbr><expan cert="high" resp="editor, W.B.">um</expan></choice>té <choice><abbr cert="high">ñ</abbr><expan cert="high" resp="editor, W.B.">non</expan></choice>úidefím.</l>

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</leaf>
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Carmina qui quondam studio florente peregi - Fragm. lat. I 56

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          <name> Nicoletta Guido </name>
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<p> The Frankfurt leaf presents a collection of notated incipit from the Boethius' De Consolatione Philosophiae. Although it has been considered as part of the Cambridge manuscript and therefore of the Carmina Cantabrigiensia, this leaf recovered in Frankfurt in the 1980s shows a more complex neumatic notation. The first text in this fragment is first Book Metro 1 of Boethius' work. Besides simple neumes as Virga that describes a high note and Punctum that describes instead a low one, it is possible to notice examples of Clivis and Podatus. The first one represents a group of two descending notes. The first one is a Virga, which is the highest element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. The neume Podatus, or Pes, is a neume used to show a group of two descending notes. The first one is a Virga, which is the highest element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the anticircumflex accent. In a few lines, it is possible to find the neume Porrectus as well. It describes three notes: the first one is located where the line begins and it is generally the highest one, while the second note is located where the line ends and it is a low note. The third is bound to the second one through a vertical line. One can interpret this note as a melodic pitch. Scandicus and Climacus are considered more complex signs. The neume Scandicus is realised through one or two Puncti followed by a Virga. It represents a group of three ascendant notes. The third compound of this neume is interpreted as a melodic strengthens, while the first two component of a Scandicus bear no melodic accent and are considered ornamental notes. Lastly, the neume Climacus corresponds to three or more descendent notes. This sign is made of two notes: a Virga subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. Virga subpunctis is the only accented sign in this neume. That means a Virga praepunctis. In its interpretation, the melodic accent is found on the third note that is the stronger one, while the first two notes have an ornamental function. </p>

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<title> Corpus Scriptorum Ecclesiasticorum Latinorum Vol. LXVII </title>

<author> Guilelmus Weinberger </author>

<date when="1934"> 1934 </date>

<place xml:lang="German"> Leipzig </place>

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G.W.">quândam</orig>stúdió flórêntè pêrêgi .</l>
<l n="2" xml:lang="Latin">fle·bīlilis hēu<orig reg="maestos" resp="editor,
G.W.">mèstòs</orig>cógór inirê módòs.</l>
<l n="3" xml:lang="Latin">EJ' 'ccē mihi<orig reg="lacerae" resp="editor,
G.W.">lácêrē</orig>díctánt scríbēndá<orig reg="Camēnae" resp="editor,
G.W.">Câménē</orig>.</l>
<l n="4" xml:lang="Latin">E:t vérīs élēgi flētibus órà rigánt.</l>
<l n="5" xml:lang="Latin"><orig reg="has saltem" resp="editor, G.W.">hJ
''assālt<choice><abbr cert="high">ē</abbr><expan cert="high" resp="editor,
G.W.">em</expan></choice></orig>nūllūs pótúit <choice><abbr cert="high">þ</abbr><expan
cert="high" resp="editor, G.W.">per</expan></choice>uīn `cérē<choice><abbr
cert="high">ṛ</abbr><expan cert="high" resp="editor, G.W.">ter</expan></choice>roř.</l>
<l n="6" xml:lang="Latin">ne: <choice><abbr cert="high">ñĩm</abbr><expan
cert="high" reso="editor, G.W.">nostrum</expan></choice>cómítēs<choice><abbr
cert="high">þ</abbr><expan cert="high" resp="editor, G.W.">pro</expan></choice>
'séquērentūr itēr . </l>
<l n="7" xml:lang="Latin"><choice><abbr cert="high">GJ' 'łá</abbr><expan
cert="high" resp="editor, G.W.">Gloria</expan></choice>fēlicis ólim vīrdiŝ<choice><abbr
cert="high">q:</abbr><expan cert="high" resp="editor, G.W.">que</expan></choice><orig
reg="iuventae" resp="editor, G.W.">iūuēnte</orig></l>
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'</abbr><expan cert="high" resp="editor, G.W.">nunc</expan></choice>méa<orig reg="fata"
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Heu quam praecipiti mersa profundo - Fragm. lat. I 56

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<p> Book I Metro II is the second notated Incipit of the Boethius' De Consolatione Philosophiae to be found on the Frankfurt leaf. Its neumatic notation shows both simple neumes as Punctum, Virga, Clivis and Podatus, and complex ones like Porrectus, Scandicus, Quilisma and Climacus. Therefore, its neumes are rather more complicated than the ones found in Ca, which shows only simple signs as Punctum, Virga, Clivis and Podatus. In order to describe them, one can start with simple neumes like Punctum that describes a low note or Virga, which instead pinpoints a higher one. Clivis and Podatus are groups of descending or ascending notes. Respectively, the neume Clivis represents a group of two descending notes. The first one is a Virga, which is the highest element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. On the contrary, the neume Podatus, or Pes, is a neume used to show a group of two ascendant notes. The first one is a Virga, which is the highest element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the anticircumflex accent. Among the more complex neumes, Scandicus is realised through one or two Puncti followed by a Virga. It represents a group of three ascendant notes. The third compound of this neume is interpreted as a melodic strengthens, while the first two component of a Scandicus bear no melodic accent and are considered ornamental notes. The neume Climacus corresponds to three or more descendant notes. This sign is made of two notes: a Virga subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. Virga subpunctis is the only accented sign in this neume. That means a Virga praepunctis. In its interpretation, the melodic accent is found on the third note that is the strongest one, while the first two notes have an ornamental function. The neume Porrectus represents three notes: the first one is located where the line begins and it is generally the highest one, while the second note is located where the line ends and it is a low note. The third is bound to the second one through a vertical line. One can interpret this note as a melodic pitch. Lastly, one can found the neume Quilisma. It is a note used to extend the previous one and for that reason, it is never found alone. </p>

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<title> Corpus Scriptorum Ecclesiasticorum Latinorum Vol. LXVII </title>

<author> Guilelmus Weinberger </author>

<date when="1934"> 1934 </date>

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resp="editor, G.W.">prae</expan></choice>cipiti mersá<choice><abbr
cert="high">ṗ</abbr><expan cert="high" resp="editor,
G.W.">pro</expan></choice>fũh̄dò.</l>
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félicitá </l>
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G.W.">in</expan></choice><choice><abbr cert="high">ĩm</abbr><expan cert="high"
resp="editor, G.W.">men</expan></choice>š<choice><abbr cert="high">ũ</abbr><expan
cert="high" resp="editor, G.W.">um</expan></choice></orig>nóxiá'· çurá. .,.,</l>
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reg="caelo" resp="editor, G.W.">céló</orig>li<choice><abbr cert="high">b</abbr><expan
cert="high" resp="editor, G.W.">ber</expan></choice> ā<choice><abbr
cert="high">ṗ</abbr><expan cert="high" resp="editor, G.W.">per</expan></choice>tõ'·</l>
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G.W.">éthérêôs</orig> îrē méatüs.</l>

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G.W.">gélidè</orig> sīdèrà luñé .</l>
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G.W.">quē cûm<choice><abbr cert="high">q:</abbr><expan cert="high" resp="editor,
G.W.">que</expan></choice></orig> vâg:ós stélla fecurs<choice><abbr
cert="high">?</abbr><expan cert="high" resp="editor, G.W.">us</expan></choice>.,</l>
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Tunc me discussa liquerunt nocte tenebrae - Fragm. lat. I 56

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          <name> Nicoletta Guido </name>
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<musicNotation>

<p> Metro III, Book I is the third text of the Boethius' De Consolatione Philosophiae found on the Frankfurt leaf. It presents adiastematic neumatic notation characterised by simple neumes as Punctum, Virga and Podatus, but also more complex one like Quilisma, Porrectus and Climacus. Alike the other notated Incipit found on this leaf, that neumes appear as more complex than the ones found in the Cambridge manuscript. In order to describe them, one can start from the simplest ones: the neume Punctum describes a low note, whereas the neume Virga a higher one. Moreover, the neume Podatus, or Pes, is used to realise a group of two ascendant notes. The first one is a Virga, which is the highest element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the anticircumflex accent. Among the more complex signs, instead, Quilisma is a note used to extend the previous one and for that reason, it is never found alone. The neume Porrectus represents three notes: the first one is located where the line begins and it is generally the highest one, while the second note is located where the line ends and it is a low note. The third is bound to the second one through a vertical line. One can interpret this note as a melodic pitch. At the end, the neume Climacus corresponds to three or more descendant notes. This sign is made of two notes: a Virga subpunctis that presents an accent on the first note and the proper Climacus made of two Puncti. The proper Climacus owns no accent and it is considered as a transaction neume. Virga subpunctis is the only accented sign in this neume. That means a Virga praepunctis. In its interpretation, the melodic accent is found on the third note that is the strongest one, while the first two notes have an ornamental function. </p>

</musicNotation>

</msDesc>

<bibl>

<title> Corpus Scriptorum Ecclesiasticorum Latinorum Vol. LXVII </title>

<author> Guilelmus Weinberger </author>

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        <div2 n="3" type="metro">
          <head xml:lang="Latin"> Tunc me discussa liquerunt nocte tenebrae </head>
          <l n="1" xml:lang="Latin">Tũnc mé díscússá liquè<choice><abbr
cert="high">ř</abbr><expn cert="high" resp="editor, G.W.">runt</expn></choice>nocté
<orig reg="tenebrae" resp="editor, G.W.">ténébré</orig></l>
          <l n="2" xml:lang="Latin">lúmínibús<choice><abbr
cert="high">q: </abbr><expn cert="high" resp="editor, G.W.">que</expn></choice>: p̄riór
řēdīřt v̄řgōř</l>
        </div2>
      </div>
    </leaf>
  </body>
</text>
</TEI>

```

Quisquis composita serenus aevo - Fragm. lat. I 56

```

<?xml version="1.0" encoding="UTF-8"?>
<TEI>
  <teiHeader>
    <fileDesc>
      <titleStmt>
        <title> De Consolatione Philosophiae</title>
        <author> Boethius </author>
        <respStmt>

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    <resp> Electronic edition created by</resp>
    <name> Nicoletta Guido </name>
</respStmt>
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        <p> Document not intended for publication</p>
    </creation>
    <date when="10-12-2015"> December 10, 2015</date>
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        <repository xml:lang="Germna"> Stadt-und Universitätsbibliothek </repository>
        <settlement xml:lang="German"> Frankfurt </settlement>
        <idno> Fragm. lat. I 56 </idno>
    </msIdentifier>
    <musicNotation>
        <p> This notated Incipit of Metro IV of Book I of Boethius' De Consolatione
Philosophiae sets apart from the other Incipit of the Frankfurt leaf, because of its neumatic
notation. Although its adiastematic nature, the neumes of this Incipit are rather different from
the others found in the same leaf. In fact, that notation is characterised by rather simple signs as
Punctum and Virga. The first neume describes a low note, whereas the second one a higher one.
This characteristic brings this portion of the Frankfurt leaf closer to the Cambridge manuscript
(Ca) than to all the other texts found in this leaf recovered in 1980s and characterised by
complex neumes. That may be an important element from an interpretative point of view. In
fact, one can think that the use of this text could have been different and therefore its notation is
rather dissociated from the other ones. The neumes might, in fact, help gathering information
about the function of a text in the Middle Ages and also the frequency, with which it was
used.</p>
    </musicNotation>
</msDesc>
<bibl>

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<title> Corpus Scriptorum Ecclesiasticorum Latinorum Vol. LXVII </title>
<author> Guilelmus Weinberger </author>
<date when="1934"> 1934 </date>
<place xml:lang="German"> Leipzig </place>
</bibl>
</sourceDesc>
</teiHeader>
<text>
<body>
<leaf n="recto">
<div n="1" type="book">
<div2 n="4" type="metro">
<head xml:lang="Latin">Quisquis composita serenus aevo</head>
<l n="1" xml:lang="Latin">Quisquis compositó sérénus áevó</l>
<l n="2" xml:lang="Latin">fátúm súb pédîbus égít sú<choice><abbr
cert="high">ṑ</abbr><expan cert="high" resp="editor, G.W."></expan></choice>búm .</l>
<l n="3" xml:lang="Latin">fořtúnař<choice><abbr
cert="high">ṙ</abbr><expan cert="high" resp="editor, G.W.">que</expan></choice> túëns
útrám<choice><abbr cert="high">ṙ</abbr><expan cert="high" resp="editor,
G.W.">que</expan></choice> rëctús</l>
<l n="4" xml:lang="Latin">i' nuíct<choice><abbr cert="high">ũ</abbr><expan
cert="high" resp="editor, G.W.">um</expan></choice> pótúit ténéré vultúm.</l>
</div2>
</div>
</leaf>
</body>
</text>
</TEI>

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O stelliferi conditor orbis - Fragm. lat. I 56

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<?xml version="1.0" encoding="UTF-8"?>
<TEI>
<teiHeader>

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<fileDesc>
  <titleStmt>
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    <author> Boethius </author>
    <respStmt>
      <resp> Electronic edition created by</resp>
      <name> Nicoletta Guido </name>
    </respStmt>
    <publStmt>
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      <settlement xml:lang="German"> Frankfurt </settlement>
      <idno> Fragm. lat. I 56 </idno>
    </msIdentifier>
    <musicNotation>
      <p> In the Frankfurt leaf, Metro VI, Book I of Boethius' De Consolatione Philosophiae shows a notated Incipit. Alike the other Metra of Boethius' work collected within this recovered leaf, Metro VI "O Stelliferi" presents, in fact, adiaSTEMATIC neumatic notation of its Incipit. The neumes are rather simple and one can notice Punctum, Virga, Podatus and Clivis. The neume Punctum describes a low note, whereas Virga pinpoints a higher one. Podatus and Clivis represent compound of respectively ascendant and descendant notes. In particular, the neume Podatus, or Pes, is a neume used to show a group of two ascendant notes. The first one is a Virga, which is the highest element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the anticircumflex accent. The neume Clivis represents a group of two descendant notes. The first

```

one is a Virga, which is the highest element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. </p>

```
</musicNotation>
</msDesc>
<bibl>
  <title> Corpus Scriptorum Ecclesiasticorum Latinorum Vol. LXVII </title>
  <author> Guilelmus Weinberger </author>
  <date when="1934"> 1934 </date>
  <place xml:lang="German"> Leipzig </place>
</bibl>
</sourceDesc>
</teiHeader>
<text>
  <body>
    <leaf n="recto">
      <div n="1" type="book">
        <div2 n="5" type="metro">
          <head xml:lang="Latin">O stelliferi conditor orbis</head>
          <l n="1" xml:lang="Latin">O stéllifèri cóndítôr órbit</l>
          <l n="2" xml:lang="Latin">quĩ <choice><abbr cert="high">þ</abbr><expansion cert="high" resp="editor, G.W.">per</expansion></choice>pétuò ñixus sólío.</l>
          <l n="3" xml:lang="Latin">râpidó<orig reg="caelum" resp="editor, G.W.">célúm </orig>túrbíné v̄ersás.</l>
          <l n="4" xml:lang="Latin">légeñ<choice><abbr cert="high">q̄</abbr><expansion cert="high" resp="editor, G.W.">que</expansion></choice>páti sídéra cõgis.</l>
        </div2>
      </div>
    </leaf>
  </body>
</text>
</TEI>
```

O Stelliferi conditor orbis - Par. Lat. 1154

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<?xml version="1.0" encoding="UTF-8"?>
<TEI>
  <teiHeader>
    <fileDesc>
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        <title> De Consolatione Philosophiae</title>
        <author> Boethius </author>
        <respStmt>
          <resp> Electronic edition created by</resp>
          <name> Nicoletta Guido </name>
        </respStmt>
        <publStmt>
          <creation>
            <p> Document not intended for publication</p>
          </creation>
          <date when="28-11-2015"> November 28, 2015</date>
        </publStmt>
      </titleStmt>
    </fileDesc>
    <sourceDesc>
      <msDesc>
        <msIdentifier>
          <repository xml:lang="French"> Bilbiothèque nationale de France </repository>
          <settlement xml:lang="French"> Paris </settlement>
          <idno> Par. lat. 1154 </idno>
        </msIdentifier>
        <musicNotation>
          <p> The manuscript in question might dated back to the 10th century. It hands
down Metro V, book I of Boethius' De Consolatione Philosophiae. It shows neumatic notation
"in campo aperto" on the whole length of the text. Considering the adiaستمatic nature of this
kind of neumes, it is not possible to retrieve the melody from the medieval signs. They, in fact,
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do not provide any information about the notes' height or about the intervals between sounds. Moreover, the notation has been realised through simple neumes, as Punctum and Virga. They describe, respectively, a low note and a higher one. Few are examples of more complex signs like Clivis, Pes, Porrectus and Scandicus. The first one, Clivis, represents a group of two descending notes. The first one is a Virga, which is the higher element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent. Pes or Podatus, instead, represents a group of two ascending notes. In the cursive notation, this sign results from the union of Punctum and Virga and it is obtained through the anticircumflex accent. Furthermore, Porrectus represents three notes: the first one is located where the line begins and it is generally the highest one, while the second note is located where the line ends and it is a low note. The third is bound to the second one through a vertical line. One can interpret this note as a melodic pitch. Virga subpunctis is the only accented sign in this neume. Lastly, there is only one example of Scandicus in this text; this neume is created using one Punctum before a Virga that means a Virga Praepunctis. In the tradition of Boethius' *De Consolatione Philosophiae*, several are the manuscripts presenting neumatic notation on their lines. </p>

```

    </musicNotation>
  </msDesc>
  <bibl>
    <title> Corpus Scriptorum Ecclesiasticorum Latinorum Vol. LXVII </title>
    <author> Guilelmus Weinberger </author>
    <date when="1934"> 1934 </date>
    <place xml:lang="German"> Leipzig </place>
  </bibl>
</sourceDesc>
</teiHeader>
<text>
  <body>
    <leaf n="118r">
      <div n="1" type="book">
        <div1 n="V" type="metro">
          <head xml:lang="Latin"> O Stelliferi conditor orbis </head>
          <l n="1" xml:lang="Latin"> O· stèlli·fè·ri· cònditòr òrbis </l>
          <l n="2" xml:lang="Latin"> qui pèrpetuò nī xūs so·lí</l>

```

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<l n="3" xml:lang="Latin"> rāpidò cèlùm tūrbinè ue3rsàs</l>
<l n="4" xml:lang="Latin"> lègémque: páti s'idèrè cògis</l>
<l n="5" xml:lang="Latin"> út nūnc plénò lucida cornu</l>
<l n="6" xml:lang="Latin"> tófi3 frātris o buia flammis </l>
<l n="7" xml:lang="Latin"> còndāt stéllās </l>
</div1>
</div>
</leaf>
</body>
</text>
</TEI>

```

Nubibus atris - Fragm. lat. I 56

```

<?xml version="1.0" encoding="UTF-8"?>
<TEI>
  <teiHeader>
    <fileDesc>
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        <title> De Consolatione Philosophiae</title>
        <author> Boethius </author>
        <respStm>
          <resp> Electronic edition created by</resp>
          <name> Nicoletta Guido </name>
        </respStm>
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          <date when="11-12-2015"> December 11, 2015</date>
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<msDesc>

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<repository xml:lang="German"> Stadt-und Universitätsbibliothek </repository>

<settlement xml:lang="German"> Frankfurt </settlement>

<idno> Fragm. lat. I 56 </idno>

</msIdentifier>

<musicNotation>

<p> The last Metro of Boethius' De Consolatione Philosophiae written on the Frankfurt leaf is number VII of Book I. As the other ones, it shows adiastrumatic neumatic notation on few lines. A peculiarity of this Metro is that its lines might be found not only in the manuscript body but also in the right-hand side margin, where two on them have been written down again with different neumes. In the main body of the manuscript, the adiastrumatic neumatic notation shows rather simple signs as Punctum, which describes a low note, Virga that pinpoints a higher one, and some examples of Porrectus. This neume represents a group of three notes bound together. The first one is located where the line begins and it is generally the highest one, while the second note is located where the line ends and it is a low note. The third is bound to the second one through a vertical line. One can interpret this note as a melodic pitch. On the right margin, instead, the lines coincide with those of the manuscript body, while the neumatic notation presents some differences with the previous one. In particular, the signs are rather more complex. Besides examples of Clivis (group of two descendant notes. The first one is a Virga, which is the highest element of the group, bound to the second one through a stroke, in order to make a unique note. In cursive, this neume is written thanks to the circumflex accent) and Quilisma (a neume used to extend the previous one and for that reason, never found alone) it is possible to note several Pes (Podatus) Subpunctis and a rather complex Scandicus located above the first line. Scholars suggested the hypothesis that the Cambridge Songs were meant as a class book for monks to learn melodies. In fact, according to some theories about that, neumes were written above a text, in order to retrieve an already learned melody. In this leaf, the difference between the two notations may suggest the possibility for those who were studying it to learn or retrieve two different melodies, perhaps meant for different functions. By analysing this Metro of Boethius' De Consolatione Philosophiae, it is clear that the frequency, with which the text was used, was rather high and thus it is possible that new melodies were created upon it.

</p>

</musicNotation>

</msDesc>

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<bibl>
  <title> Corpus Scriptorum Ecclesiasticorum Latinorum Vol. LXVII </title>
  <author> Guilelmus Weinberger </author>
  <date when="1934"> 1934 </date>
  <place xml:lang="German"> Leipzig </place>
</bibl>
</sourceDesc>
</teiHeader>
<text>
  <body>
    <leaf n="recto">
      <div n="1" type="book">
        <div2 n="7" type="metro">
          <head xml:lang="Latin">Nubibus atris</head>
          <l n="1" xml:lang="Latin">N'ũbĩbũs àtris.</l>
          <l n="2" xml:lang="Latin">cõnditã nũllum</l>
          <l n="3" xml:lang="Latin">fũndéré pôssuñt.</l>
          <l n="4" xml:lang="Latin">sĩdèrà lú'ĩmèn</l>
          <l n="5" xml:lang="Latin">sĩ márez võlvèns.</l>
          <l n="6" xml:lang="Latin">tũrbidũs Aũstèr</l>
          <add xml:lang="Latin" place="right margin"><l n="1"
xml:lang="Latin">Nũbĩb: á:tris</l></add>
          <add xml:lang="Latin" place="right margin"><l n="2"
xml:lang="Latin">cõnditã nũllum</l></add>
          <add xml:lang="Latin" place="right margin"><l n="3"
xml:lang="Latin">fũndèré pòssunt</l></add>
          <add xml:lang="Latin" place="right margin"><l n="4" xml:lang="Latin">
sĩdèrà</l></add>
        </div2>
      </div>
    </leaf>
  </body>
</text>
</TEI>

```

Nubibus atris - Mü clm 15825

```
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<TEI>
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    <fileDesc>
      <titleStmt>
        <title> De Consolatione Philosophiae</title>
        <author> Boethius </author>
        <respStmt>
          <resp> Electronic edition created by</resp>
          <name> Nicoletta Guido </name>
        </respStmt>
        <publStmt>
          <creation>
            <p> Document not intended for publication</p>
          </creation>
          <date when="15-11-2015"> November 15, 2015</date>
        </publStmt>
      </titleStmt>
    </fileDesc>
    <sourceDesc>
      <msDesc>
        <msIdentifier>
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          <settlement xml:lang="German"> München </settlement>
          <idno> clm 15825 </idno>
        </msIdentifier>
        <musicNotation>
          <p> The manuscript is dated back to the 11th century and hands down metro VII,
          book I of Boethius' De Consolatione Philosophiae. It presents neumatic notation "in campo
          aperto" on the Incipit. Considering the adiaستمatic nature of this kind of this notation, it is not
          possible to retrieve the melody from the neumes, since they provide no information about the
```

notes' height or the intervals between them. The signs used in this manuscript are rather simple, since one can notice just Punctum and Virga among them. The first describes a low note, whereas Virga represents a higher one. In this case, however, it would be better to refer to Punctum as a Tractulus: a Punctum that occurs together with an episemon. The episemon might be located on a neume for two main reasons. Firstly, in order to extend its length (horizontal episemon) and secondly aiming at signaling it as a rhythmical support (vertical episemon). In the case of Tractulus, Punctum and horizontal episemon merge, giving birth to a new neume. As already mentioned, the neumatic notation is located only on the incipit of the Boethian Metro. A possible explanation might be the necessity to recover melodies already memorized through the first lines of a manuscript. Thus, in the Middle Ages, chantors used neumatic notation on the incipit as a mnemonic tool, in order to remind notes and melodies they had already studied and memorized. That would explain why the notation is not spread on the whole manuscript. </p>

</musicNotation>

</msDesc>

<bibl>

<title> Corpus Scriptorum Ecclesiasticorum Latinorum Vol. LXVII </title>

<author> Guilelmus Weinberger </author>

<date when="1934"> 1934 </date>

<place xml:lang="German"> Leipzig </place>

</bibl>

</sourceDesc>

</teiHeader>

<text>

<body>

<leaf n="12r">

<div n="1" type="book">

<div1 n="VII" type="metro">

<head xml:lang="Latin"> Nubibus atris </head>

<l n="1" xml:lang="Latin"> Nūbībūs átrís </l>

<l n="2" xml:lang="Latin"> cōndíta ñullūm </l>

<l n="3" xml:lang="Latin"> fuñdēre pōssūnt . </l>

<l n="4" xml:lang="Latin"> síderā lūmén . </l>

<l n="5" xml:lang="Latin"> Si maře uòluens </l>

<l n="6" xml:lang="Latin"> turbidus auster . </l>

```
</div1>  
</div>  
</leaf>  
</body>  
</text>  
</TEI>
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[%3DPoster_Translation_Studies_and_XML_Bibli.pdf#page=95/](http://s3.amazonaws.com/academia.edu.documents/33191991/Digital_Humanities_2008_Book_of_Abstracts.pdf?AWSAccessKeyId=AKIAJ56TQJRTWSMTNPEA&Expires=1469550525&Signature=K9rSfLmXegCF7T7cAnIfg0aKpuU%3D&response-content-disposition=inline%3B%20filename%3DPoster_Translation_Studies_and_XML_Bibli.pdf#page=95/).

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http://eprints.biblio.unitn.it/4132/1/Labirinti_122_completo.pdf.

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