



The Origins of Musical Notation in Central and Southern Italy

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HARVARD UNIVERSITY
Graduate School of Arts and Sciences



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The Origins of Musical Notation in Central and Southern Italy

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The Origins of Musical Notation in Central and Southern Italy

A dissertation presented
by
Giulio Minniti
to
the Department of Music

in partial fulfilment of the requirements
for the degree of
Doctor of Philosophy
in the subject of
Music

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The Origins of Musical Notation in Central and Southern Italy

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The Origins of Musical Notation in Central and Southern Italy

ABSTRACT

Musical notation in the Beneventan zone is attested in a brief explicit in a manuscript datable to 948-49. Other safely datable local testimonies to the practice of writing music have survived from about 40 years later; by the turn of millennium there are enough documents to allow us to see how a style of writing music inherently Beneventan was set that was to last for more than two full centuries.

What led to the creation of this new musical script in the years before 948-9 and how it evolved from an early experimental form to a more regulated system by about the year 1000; whether it was created *ex novo* or whether its foundations were laid on pre-existing imported models ... the present study seeks to answer these and similar questions. By examining two sizeable early sources of the Beneventan musical script first against each other and then against documents of several other plainchant scripts, this study proves that Beneventan scribes created it at the same time as a renovation of the equally distinctive Beneventan textual script by adapting elements typical of two earlier Carolingian musical scripts; and that the Beneventan musical script itself was in turn renovated around the year 1000 to emphasize intervallic precision over rhythmic detail, and made more calligraphic and regular in its appearance.

Corollary to these two main propositions, this study also presents new, original evidence for positing the Roman and Central Italian musical scripts as simplifying variants of a Beneventan original, in response to several scholars in the last decades who envisaged the opposite scenario of descendancy from Rome to Benevento.

per Tom

Table of Contents

List of Abbreviations	xi
List of Cited Manuscripts	xii
Introduction	1
Chapter One. A Matter of Style: Graphical Evolution of Early Beneventan Musical Script	
CHAPTER INTRODUCTION	22
Section One: The Musical Scribes of Vat. Lat. 10673 and Benevento 33	30
SECTION I.1 COMPARISON OF SINGLE NEUME SHAPES IN 10673 AND B33	30
I.1.i Series of four or more horizontal dashes	31
I.1.ii Oblique ascending dash	33
I.1.iii Liquescent Low-high neume	35
I.1.iiii Liquescent High-low neume	36
I.1.v Three-note ascent with a special middle element ('salicus')	38
SECTION I.2 INTEGRATION OF TEXT AND MUSIC	40

SECTION I.3	
OTHER ASPECTS OF MUSICAL NOTATION	45
I.3.i High-low <i>episema</i>	45
I.3.ii <i>Quilisma</i>	47
I.3.iii Joining of notes	48
I.3.iv Diversity in the first and last element of series of descending notes	50

Section Two:	
What Makes ‘Classic’ Beneventan Musical Script?	52
II.1 DASH MODULARITY	55
II.2 DIRECTIONALITY	60
II.3 ALTERNANCE OF THIN AND THICK STROKES	61
II.4 FIXITY OF DUCTUS AND OVERALL ORTOGRAPHY	65
CHAPTER CONCLUSIONS	68

Chapter Two. The Beneventan Origins of the Roman Musical Script

CHAPTER INTRODUCTION	72
PREVIOUS LITERATURE	75
I.1 EXAMINATION OF THE EARLIEST BENEVENTAN AND ROMAN SOURCES	81
I.1.i Montecassino 269	82
I.1.ii Vat. Lat. Archivio S. Pietro C. 105	85
I.2 COMPARISON OF OTHER EARLY SOURCES	89
I.2.i Early Beneventan sources, ca. 960-1030	89
I.2.ii Early Roman and Central Italian sources, ca. 1000-1080	92
II.1 SEMIOLOGIC DIFFERENCES: LIQUESCENCES	97
II.2 SEMIOLOGIC DIFFERENCES: LACK OF DIRECTIONALITY	101

II.3 SEMIOLOGICAL DIFFERENCES: LACK OF DIFFERENTIATION IN DESCENTS	104
III RELATIVE DIASTEMACY, GUIDO AND <i>NOTA ROMANA</i>?	106
CHAPTER CONCLUSIONS	111

Chapter Three. Carolingian models, Beneventan outcomes: the Creation of a New Musical Script.

Section One: Construction of Basic Beneventan Neumes	114
I.1 THE DASH	114
I.2 TWO- AND THREE-NOTE ALTERNATING NEUMES	120
I.2.i Two notes, high-low ('clivis')	120
I.2.ii Two notes, low-high ('pes')	121
I.2.iii Three notes, high-low-high ('porrectus')	123
I.2.iv Three notes, low-high-low ('torculus')	125
I.2.v Three-note ascent ('scandicus')	131
I.2.vi Three-note descent ('climacus')	132
Section Two: Rhythmic Organization of Early Beneventan Script	137
II.1 <i>EPISEMA</i>	140
II.2 IS MODIFICATION OF BENEVENTAN NEUME SHAPES RHYTHM-INFORMATIVE?	147
II.3 SEPARATION IN THE LOTHARINGIAN SCRIPT	154
II.4 RHYTHM IN ASCENDING AND DESCENDING CHAINS OF THREE OR MORE NOTES	158
II.4.i Descents	158
II.4.ii Ascents	165
II.5 <i>COUPURE</i> IN THE BENEVENTAN SCRIPT	172

Section Three:	
Graphical Organization of Early Beneventan Script	182
III.1 THE DASH AND DOT SYSTEM	182
III.2 DASHES IN SIMPLE CONTEXTS	192
III.3 CONNECTIVE QUALITY OF THE BENEVENTAN DOT	195
III.4 BENEVENTAN <i>RESUPINUS</i>	201
III.5 SIGN FOR CHAINS OF ALTERNATING NOTES	207
III.6 LACK OF <i>LITTERAE</i> IN THE BENEVENTAN SCRIPT	211
III.7 A NEUME-LESS SCRIPT?	212
III.8 COMMON GRAPHICAL ORGANIZATION OF LOTHARINGIAN AND BENEVENTAN SCRIPTS	215
 Conclusions	 223
 Bibliography	 236

List of Abbreviations

Journals:

<i>EG</i>	Études Grégoriennes
<i>EMH</i>	Early Music History
<i>JAMS</i>	Journal of the American Musicological Society
<i>PM</i>	Paléographie musicale
<i>PMM</i>	Plainsong and Medieval Music

List of Cited Manuscripts

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Benevento, Biblioteca Capitolare, MS 21. 12th – 13th c., KELLY 1989

MS 33. 10th – 11th c., KELLY

MS 33. 1/2 12th c., KELLY

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MS 40. 1/2 11th c., KELLY

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8737. 13th 2/2 BANNISTER 1913

9820. 981-87, CAVALLO – D’ANIELLO

10645, ff. 1-6. 11th c., KELLY

10673. Early 11th c., KELLY

Barberini Lat. 421. 11th – 12th, BANNISTER

560, f. 16v. 12th c., KELLY

587 f. 155v. 11th c. ex., BOE 2011/XI

Vercelli, Museo Leone Ms. 24. 13th c., BRUSA *et al.*, forthcoming

Introduction

OVERVIEW

This is a study on the origins and the first developments of musical notation in Central and Southern Italy: that is to say, in the centres of Rome and Benevento and areas under their influence in the 10th c., about a century after the first experiments in notating music in Europe. While much of the study pertains to what is known as ‘Beneventan notation’, the second of the three chapters explores the slightly different musical script found in Roman and Central Italian sources, hence the title chosen as ‘The Origins of Musical Notation in Central and Southern Italy’ rather than a more specific ‘The Origins of Beneventan Notation’.

A topic of great importance, how musical notation first developed in this region has nevertheless received little to no assessment in previous literature, with judgments usually halting at guesses and undeveloped hypotheses. It is easy to see why: the academic impulse for all ‘ur-things’ directed a century and a half of musico-palaeographic efforts towards the heart of the Carolingian empire where the European practice of writing music was born, leaving non-Carolingian and ‘peripheral’ zones mostly uncharted. I argue on the other hand that careful examination of how this practice developed in the Beneventan zone first and in Rome and Central Italy later can help understanding from precise, novel standpoints—those of musicians who coped in later times than Carolingians with the writing down of the Romano-Frankish repertoire (the Beneventans) and their own (the Romans)—the broader history of Gregorian chant itself. In fact, I aim this study to be an history of how several cultures—post-Carolingian, Beneventan, Roman—confronted, imported, created, adopted, adapted ways to write music down, ways that could suit each own’s needs.

And if the chronologically earlier needs of scribes north of the Alps have been dissected to an extraordinary degree by Susan Rankin in her recent trend-setting monograph,¹ those of Beneventans and Romans have not even remotely been questioned ever: it is my goal to do so.

CHALLENGES

Several testimonies to the practice, techniques and the need itself of writing music have survived from the fertile period immediately before and after the first experiments of Carolingian music scribes—Charlemagne’s *Admonitio Generalis* of year 789, the poem *Gregorius praesul*, the rich iconography portraying Gregory intent upon writing music, allusions in the very earliest Latin music theory treatises and so on. However few they are, such evidences for the practice of musical notation that are not sources of musical notation strictu sensu contribute greatly to clarifying the cultural, social and political milieux in which the need first arose in Christian Europe for writing sounds.

In contrast, no historical records exist testifying either the need for nor early practice of musical notation in the areas of Rome and Benevento other than those very same sources of musical notation. Of these, the earliest safely datable was written in the year 948 or 949 in Capua, a town near Naples. It carries, however, no more than a meagre twenty neumes as part of a decorated explicit. Such absence entails that everything regarding the practice of writing music in Central and Southern Italy—from singers’ vocal emission to a scribe’s cultural substratum, from the role of the local *Scriptura Beneventana* to the ties with other Carolingian musical scripts, from the working plan of the devisers of the Beneventan musical script to the concept of ‘note’ inherent

¹ SUSAN RANKIN, *Writing Sounds in Carolingian Europe* (Cambridge Studies in Palaeography and Codicology), Cambridge: Cambridge University Press, 2018.

I express my most profound gratitude to Professor Susan Rankin for the invaluable critique she has provided in the last stages of the dissertation. I am honoured that she saw fit to support my work and cherish her involvement as a humbling privilege.

to it—can only be grasped through analysis of sources of musical notation per se. A person who attempts to clarify the origins of the Beneventan musical script and the historical trajectories that went with it has almost no other road available than probing actual sources of musical notation. Such limitation has been the greatest challenge this dissertation posed, in so that every notational detail down to the smallest demanded interpretation: anything could potentially service the grander scheme of hypothesis—from time-honoured, pride-of-the-discipline comparisons of lengthy melismas across several sources down to superficial minutiae such as the times a particular scribe would raise his hand to draw a certain shape. While the reader might be more prone to follow a line of enquiry based on the former technique—there are plenty such cases in the third and final chapter—I ask for openness to considering how an history of transmission of early musical scripts might also be grounded on graphical details that sometimes verge on the imperceptible: indeed I made those be impactful evidences, especially so in the first two chapters.

PREVIOUS SCHOLARSHIP

Almost complete lack of previous scholarship proved yet another challenging factor throughout the development of this work. On the one hand, working on the *tabula rasa* that this topic is has meant that I have been freer to express new points of view and analytic strategies. On the other, it has also demanded a higher degree of experimentality, decision-making and intellectual responsibility since I had to develop the means to support each proposition myself, with no previous models I could rely on to some degree. Of course, scholars have studied plainchant scripts of Central and Southern Italy in the past, the list of those who did including some of the most notable names in the history at large of musicology such as Leo Treitler and Giacomo Baroffio. Yet for one reason or another I found myself rejecting all these scholars' thesis, methods

and conclusions each time, so that I ended up developing an entirely new project wholly detached from past attempts. Proof is that when set against the standard rates of a doctoral dissertation, bibliographic references are quite rare, many being simple cues intended for non-specialists to the reference textbook on neumes (this is especially true for the third chapter, the longest and more densely analytical).² RANKIN 2018 is the one notable exception to this lack of previous scholarship: a near-definitive study on the rise of musical notation in Carolingian Europe set to be the standard monograph for several decades ahead, it provided the reference model on which I built much of the third and final chapter.

The following paragraphs describe in greater detail the trends I have mentioned thus far.

The earliest studies (19th c. – 1920)

19th c. musicologists (Coussemaker, Fétis, de la Fage) sometimes discussed Beneventan musical manuscripts, but the work of these authors is marginal for my purposes; they are adequately assessed in the review found in *PM* XV.³

The first scholar in recent times to speculate about the history of our script—albeit in the space of half a page—was Dom André Mocquereau of Solesmes. In the introductory essay to *PM* II, published in 1891 and reproducing more than 200 sources from all over Europe 9th – 16th c., he spoke of a “notation lombarde”: his appellation was not connected to the current region of Lombardy in Northern Italy, but to that of the medieval *Langobardia minor* of which Benevento was the major centre. He noted that this notation had “ramifications dans tout le midi [of Italy]” and that “la notation italienne proprement dite” derived from it, eventually naming the musical script of Central Italy

² EUGENE CARDINE, *Semiologia Gregoriana*, Roma: Pontificio Istituto di Musica Sacra, 1968.

³ *Paléographie Musicale* XV, *Le Codex VI.34 de la Bibliothèque capitulaire de Bénévent (XI-XII^e siècle)*, *Graduel de Bénévent avec prosaire et tropaire*, Tournai: Desclée, 1937, pp. 98-100.

“notation de transition”, a term used in subsequent times in the Solesmes milieu.⁴ His observations stemmed from his acquaintance with the manuscripts he travelled high and low to photograph: while I agree with him on the descendance of Central Italian notation from Beneventan, his palaeographical assessments are based on visual glances and wholly empirical.

Another important source for the study of the history of Gregorian musical notation at large is Henry Marriott Bannister’s massive *Monumenti Vaticani di Paleografia Musicale* (1913), reproducing excerpts from musical manuscripts held in the Biblioteca Apostolica Vaticana. He goes in great length to describe the musical notation of every manuscript reproduced, but however careful his reports, they are little more than decontextualized and unconnected descriptions. The introduction to the collection, pristine and vibrant in tone and an excellent historiographic document in its own right, features an history of plainchant musical scripts based on the now superseded theory of points and accents. Possibly following Mocquereau, Bannister too supports the idea that the musical script of the Beneventan area stands at the root of that of Rome and Central Italy, but his arguments become muddled as he tries to distinguish the two on the ground the abovementioned theory.⁵

Paléographie Musicale (1950 – 2010s)

Studies specifically dedicated to musical sources of the Beneventan zone have been few, mostly consisting of palaeographic accounts of later Beneventan musical manuscripts (2/2 11th c. onward). Often quite short and purely descriptive, these studies backed up photographic reproductions such as, but not exclusively so, the

⁴ *Paléographie Musicale* II, *Le respons-graduel, Justus ut palma, reproduit en facsimile* [...], Solesmes: Abbaye Saint-Pierre, 1891 p. 22.

⁵ HENRY MARRIOTT BANNISTER, *Monumenti vaticani di paleografia musicale latina*, Leipzig: Otto Harrassowitz, 1913, 2 voll., vol. 1, pp. xvii-xlii, esp. xxix-xxxi. Historiographical overviews of the accent and point theory are in RANKIN 2018, pp. 26-33 and LEO TREITLER, ‘The Early History of Music Writing in the West’ in *JAMS*, 35 (1982) pp. 237-79 reprinted in *With Voice and Pen: Coming to Know Medieval Song and How it Was Made*, Cambridge: Cambridge University Press, 2007, pp. 317-64, pp. 338-ff. References of Treitler in following quotations taken from reprint.

series *Paléographie Musicale* edited by the monks of Solesmes.⁶ That in the course of the 20th c. reproduction campaigns focused on later Beneventan manuscripts is easily explained by the fact that these were soon celebrated for their secure melodic information ('diastematic notation', in technical terms) and their retaining of more archaic surface-level details that contemporary non-Beneventan sources left behind. These two qualities were clearly valuable throughout most of the 20th c., where a rush towards an *editio maior critica* of the entire Gregorian chant corpus was the foremost preoccupation of the Solesmes atelier and of many European scholars as well. Of *PM* volumes reproducing Beneventan manuscripts, two require further mention:

PM XIV (essay by Jean-Renée Hesbert) goes on great length into the study of Beneventan liturgical and melodic archaism and is still to this day a reference for archaisms in Gregorian chant at large, but it does not take upon matters of musical notation.

PM XV (essay by Jacques Hourlier) is in contrast still the longest, most detailed study on Beneventan notation. It provides a useful overview of past scholarship on Beneventan sources and a large list of sources; the rest of the essay proceeds to describe the shapes and graphical appearance of virtually every sign found in Beneventan musical sources. Topping more than three hundred entries, it is a neumatic catalogue unmatched in all Gregorian palaeography. Nevertheless, its usefulness for my study has

⁶ • *PM XIV, Le Codex 10673 de la Bibliothèque Vaticane, fonds latin (XI^e siècle), Graduel Bénéventain*, Tournai: Desclée, 1936;

• *PM XV 1937* (see footnote 3);

• *PM XX, Le manuscrit VI.33, Archivio arcivescovile Benevento, (début du XI^e siècle), Missel de Bénévent*, Berne: Lang, 1983;

• *PM XXI, Les témoins manuscrits du chant bénéventain*, ed. by THOMAS F. KELLY, Solesmes: Abbaye Saint-Pierre, 1992;

• *PM XXII, Codex 21 de la Bibliothèque capitulaire de Bénévent (XII^e et XIII^e siècles), Antiphonale monasticum*, Solesmes: Abbaye Saint-Pierre, 2001

• *PM XXIII, Montecassino, Archivio dell'Abbazia, ms. 542. Antiphonaire du 12^{ème} siècle*, ed. by KATARINA LIVJANIC, Solesmes: Abbaye Saint-Pierre, 2014

• *Benevento, Biblioteca Capitolare 40, Graduale*, ed. by ALBERTO TURCO – NINO ALBAROSA, Cremona: Torre d'Orfeo 1991.

been null again because of its mere descriptive quality as in Bannister's *Monumenti* and because of the accent – point interpretive system on which it is grounded.

Eugene Cardine's school (1970s – 2000s)

The influential Solesmes monk Eugene Cardine created ca. 1950-70 a system of plainchant musical scripts' analysis aimed at modifying Gregorian singing style in regard to rhythm.⁷ Among the many thesis he supervised for degrees at the Pontificio Istituto di Musica Sacra in Rome, some were on specific details of the Beneventan missal B33. The authors of these studies looked at those specific details ("pes quadratus", "salicus", "virga uncinata", "pressus"...)⁸ in the context of Cardine's own system, all while treating B33 as an imperfect reverberation of sources that in Cardine's circle were considered as perfect archetypes (SG 359, E121).⁹ Bernhard Johannes Goeschl and Nino Albarosa, among Cardine's closest trainees, later supervised dissertations (the former again at P.I.M.S. and the latter at Università di Bologna) now focusing on B34 and B40. With the exceptions of those published in reduced essay forms,¹⁰ I have not been able to consult individual unpublished studies because they remain as typewritten documents held in their respective institutions. However, judging by titles as provided in footnotes in BAROFFIO 1995-a¹¹ they follow in the same footsteps of earlier works

⁷ Summarized in CARDINE 1968 and subsequent translations in French, German, English.

⁸ Bibliographic references and short resumés of each study in NINO ALBAROSA, 'La scuola Gregoriana di Eugene Cardine', in *Rivista Italiana di Musicologia* 12 (1977), pp. 136-52, pp. 136-40.

⁹ On the problematic status of these few 'elected' sources of Gregorian chant see RANKIN 2018, p. 55.

¹⁰ CARMEN PETCU, 'Il significato dell'episema nel codice Benevento 33' in *Studi Gregoriani* 23 (2007), pp. 31-62; *ead.*, 'Il neuma pes isolato su sillaba nel codice Benevento 33' in *Studi Gregoriani* 26 (2010), pp. 83-161; BERNARDINO FERRETTI, 'La notazione del *Missale antiquum* beneventano Cod. 33' in *Rivista internazionale di musica sacra*, 26 (2005), pp. 3-19.

¹¹ GIACOMO BAROFFIO, 'Un secolo di ricerche sulla notazione beneventana' in *In the Shadow of Montecassino. Nuove ricerche dai frammenti di codice dell'Archivio di Stato di Frosinone*, Frosinone: Archivio di Stato, 1995-a, pp. 59-66, p. 66 (note 25).

supervised by Cardine and are irreconcilable with my method. Moreover, these authors (and, I must assume, Cardine, Goeschl and Albarosa as their supervisors) accepted all too easily that equal graphical appearance of a symbol across different musical scripts also implies equal meaning.¹²

Scholars at American and British institutions (1990s – present days)

John Boe (University of Arizona) has written two articles in which he describes some of the earliest sources of the Roman musical script, as well as melodic redactions of Gregorian, Old Roman and Beneventan chant, their geographical spread and so on. (1995 reprinted and quoted as 2011/XI; 1999 as 2011/XII).¹³ Suffice it to say here that he maintains—as I do—that Rome and Central Italy derived the practice of notating music from the Beneventan area, while I will put under greater scrutiny several of his points over the course of the second chapter.

Leo Treitler (City University of New York) has discussed the Beneventan musical script in both of his essays on early musical notation (1982, 1984). In the first one—in which he famously borrows the concepts of ‘iconic’ and ‘symbolic’ notation from Peircean semiology—he studied the ‘functioning’ of the Beneventan ‘virga’ in support of the abovementioned concepts. In the conclusion of the second essay he gave a brief overview of the problem of the origins of notation in Central and Southern Italy asserting, again on the grounds of Peircean semiology, that Benevento received notation before Rome. RANKIN 2018 problematises Treitler’s theory,¹⁴ and in third chapter I in

¹² With sometimes bizarre outcomes, such as when PECTU misinterprets standard ductus traces on the top of the neutral Latin preposition *qui* as note broadenings (‘episema’), suggesting in underscore type the alleged sonic effect to pursue: “*he who comes*” (2007, p. 43), “*blessed he who fears the Lord*” (2010, p. 102). I critique past interpretations of *episema* in Beneventan sources below, pp. 140–41.

¹³ JOHN BOE, ‘Chant Notation in Eleventh-Century Roman Manuscripts’ in *Essays on Medieval Music in Honor of David G. Hughes*, ed. by Graeme M. Boone, Cambridge MA: Harvard University Press 1995, pp. 43–54, p. 45. Reprinted in JOHN BOE, *Chant and Notation in South Italy and Rome before 1300* (Variorum collected studies), Farnham: Ashgate 2011, pp. XI/43–54 and ‘Music Notation In Archivio San Pietro C. 105 And In The Farfa Breviary, Chigi C. VI. 177’, in *EMH* 18 (1999), pp. 1–45. Reprinted in BOE 2011, pp. XII/1–47.

¹⁴ RANKIN 2018, pp. 60–64.

turn evaluate his brief but significant delves into Beneventan notation.

Thomas F. Kelly (Harvard University) has often touched on issues of musical notation of Beneventan sources, but this itself has not been the main focus of his work. Yet albeit briefly, in KELLY 1996 he develops two aspects that will have a focal role in this study. One is what he calls the “punctum rule”, the quality of most sources of Beneventan musical script to alter the direction of a single neume or the first element of a compound one in respect to the note that precedes it. The second is the distinction in four “types” of notation on a chronological basis, spanning the time from the earliest sources circa mid-10th to 14th century.¹⁵ In another study, Kelly describes the oldest safely datable source of Beneventan musical script, written in the year 948 or 949 (MC269, p. 351).¹⁶

One of the current experts on Beneventan chant and notation is Matthew Peattie, he himself having been a doctoral student under Thomas Kelly at this same University.¹⁷ The two have recently edited the complete corpus of Beneventan music, typeset using a digitized font created ad hoc on the handwriting of the musical scribe of B40. The volume has an introductory essay on the musical notation of said manuscript to which I reference often. Although it describes a source a century or so later than the earliest ones that are my focus, here they analyse many of the same ‘regulations’ already at play in sources that I look at—that is, in the Beneventan musical script from ca. 1000 onward.¹⁸

Writing Sounds in Carolingian Europe, the much-awaited 2018 monograph by Susan Rankin (University of Cambridge), is a work of immense scope and whose chronological

¹⁵ THOMAS F. KELLY, *The Exultet in Southern Italy*, Oxford: Oxford University Press, 1996, pp. 89-90.

¹⁶ THOMAS F. KELLY ‘The Oldest Musical Notation at Montecassino’, in *Et facciam dolci canti. Studi in onore di Agostino Ziino in occasione del suo 65° compleanno*, ed. by Bianca Maria Antolini, Teresa M. Gialdroni, Annunziato Pugliese, Lucca: LIM, 2004, pp. 37-45.

¹⁷ MATTHEW PEATTIE, *The Beneventan Antiphon and the Influence of Beneventan Style in the South Italian Office*, Ph.D. Dissertation, Harvard University, 2005.

¹⁸ THOMAS F. KELLY and MATTHEW PEATTIE, *The Music of the Beneventan Rite* (Monumenta Monodica Medii Aevi IX), Kassel: Barenreiter, 2016.

reach—I might dare to say—ends where mine begins. Due to her focus on 9th c. sources, Rankin never touches upon the appearance of musical notation in Central and Southern Italy, yet her findings are quintessential to my own work: her establishment of two prototypes of early Carolingian musical scripts is especially significant for me as I interpret the Beneventan musical script to present elements taken from both, and her methods of enquiry via ‘genealogical’ comparison will be a constant reference and example throughout the third chapter.

Italian scholars and the issue of ‘Nota Romana’ (2000s – present days)

Giacomo Baroffio and his (as well as Rankin’s) student Giovanni Varelli support the idea that Beneventan musical script derives from that of Rome or its surroundings. They have not framed this theory into dedicated studies; rather, it appears in several of their essays that touch upon other aspects of the history of early music writing as well as towards the end of Varelli’s Ph.D. dissertation.¹⁹ Baroffio puts the emphasis on the cultural history of the two centres, arguing that Rome is more likely to have developed a musical notation first, because of its importance as the Papal seat. Another argument of Baroffio is the mention by the 11th c. Aquitanian monk Adémar de Chabannes of something called *Nota Romana*, which Baroffio literally interprets as “Roman notation”. As for the second of Baroffio’s points I appropriate James Grier’s opinion of considering Ademar’s mention of *Nota Romana* a reference to the singing style of Rome and its repertoire (i.e. what we call ‘Old Roman’ chant) rather than to actual notation.²⁰

¹⁹ GIACOMO BAROFFIO, ‘Le grafie musicali nei manoscritti liturgici del secolo XII nell’Italia settentrionale. Avvio di una ricerca’ in *Cantus Planus, Papers Read at the 4th IMS Meeting*, Budapest: Hungarian Academy of Sciences, 1992, pp. 1-16; *id.*, 1995-a; *id.* and SOO JUNG KIM, edition and introduction of *Biblioteca Apostolica Vaticana, Archivio S. Pietro B. 70 (Sec XIII)*, Musica Italiae Liturgica 1, Roma: Torre d’Orfeo, 1995-b; GIACOMO BAROFFIO, ‘Nota Romana: l’espansione delle notazioni italiane e l’area d’influsso dei Canossa’, in *Matilde e il tesoro dei Canossa, tra castelli, monasteri e città*, ed. by Arturo Calzona, Cinisello Balsamo: Silvana Editoriale, 2008, pp. 165-175; *idem*, ‘Music Writing Styles in Medieval Italy’, in *The Calligraphy of Medieval Music*, ed. by John Haines, Turnhout: Brepols, 2011, pp. 101-23; GIOVANNI VARELLI, ‘Appunti sulla nonantolana come più antico canone notazionale di area italiana’ in *Studi Gregoriani* 30 (2015), pp. 47-76; *Id.*, *Musical Notation and Liturgical Books in Late Carolingian Nonantola*, Ph.D. Dissertation, University of Cambridge, 2016, pp. 212-37.

²⁰ JAMES GRIER, *The Musical World of a Medieval Monk: Adémar de Chabannes in Eleventh-century Aquitaine*, Cambridge: Cambridge University Press, 2006, pp. 46-9.

I critique both points in greater detail over the course of the second chapter.

Works by other scholars (Helmut Huckle, Bruno Stablein, Kenneth Levy, Virginia Brown, Elias A. Lowe, Alejandro E. Planchart etc...) will be employed and referred to in the course of the study, but as they pertain to other branches of Beneventan studies (textual script, liturgy, melodic variants, transmission etc...) specific description is unnecessary in this literature overview.

NOMENCLATURE ISSUES

The most recent scholarship on plainchant has radically revised and updated many aspects of the nomenclature pertaining the field—see the latest works e.g. by Susan Rankin, Emma Hornby, Andreas Haug, Giovanni Varelli, etc... I adopt this newer model, accommodating some parameters to the specificity of the Beneventan script. Names of neumes are not the pseudo-Greek classification found in 11th c. onwards tables from Germanic regions (*tabulae neumarum*) and then adopted in modern times by Solesmes and subsequent scholars, but more neutral descriptions of melodic movements. This has several advantages, most notably readability easiness for non-specialists, and separating universal melodic descriptions from terminologies that rose to common acceptance in 19th and 20th c. scholarship, but that in historical times had only been particular to scribes using one specific script in a specific zone (equivalent to most of modern Switzerland and Germany).²¹

The following is a list of the newer neutral terminology that I have adopted, exemplificative of the most often cited neumes:

‘pes’ becomes ‘low-high movement’,

‘clivis’ becomes ‘high-low movement’,

‘torculus’ becomes ‘low-high-low movement’

‘porrectus’ becomes ‘high-low-high movement’

‘scandicus’ becomes ‘series of ascending notes’,

‘climacus’ becomes ‘series of descending notes’, and so forth.

²¹ See KENNETH LEVY, ‘On the Origin of Neumes’ in *EMH* 7 (1987), pp. 59-90 and MICHEL HUGLO ‘Les noms des neumes et leur origine’, in *EG* 1 (1954), pp. 53-67.

I have chosen combinations of ‘high’ and ‘low’ rather than, e.g., “falling” and “rising” notes as used by Rankin, since I feel the greater geometrical sense of the former fits the Beneventan musical script better than the latter.

When referred to the Beneventan script, ‘tractulus’ and ‘virga’ become ‘dash’, oftentimes with further detailing of the dash orientation (e.g. ‘oblique ascending dash’) while ‘punctum’ becomes ‘dot’: these two names are my own, chosen to describe the system that I call ‘dash and dot’ lying at the core of the Beneventan musical script and discussed in Chapter 3.²² Special neumes retain their older names in italics since neutrally descriptive translations are otherwise impossible: on every first mention of a special neume I provide in footnote a brief explanation intended to non-specialists and bibliographic references. I leave neume names in citations as they appear. I generally omit the term ‘movement’ after the description of melodic direction and/or neumes to avoid redundancy (e.g. “the scribe draws the high-low in one stroke”).

Following Rankin, I use

‘script’ to signify ‘a way of writing’, thus systems for representing musical sound in writing, and ‘notation’ to signify ‘the written thing’, thus specific instances of written musical texts.²³

I generally omit to use the term ‘musical’ after ‘script’ to avoid the resulting far too frequent redundancy: it is understood that in a work of musicology focus is on musical scripts rather than textual. Thus with the expression “the Beneventan script” I refer to the Beneventan musical script, even though that same expression is common after Lowe to indicate the Beneventan textual script.²⁴ I specify whether textual or musical script is intended in places where it would be otherwise confusing.

²² In particular, I am indebted to VARELLI 2016 nomenclature for the musical script of Nonantola, which proved adequately superimposable on the Beneventan musical script. However, the expression ‘dash and dot system’ designates in my study a more tightly knit, integral technique proper to the Beneventan script than Varelli and Rankin’s use of the terms ‘dash’ and ‘dot’ designates.

²³ RANKIN 2018, p. 8.

²⁴ ELIAS AVERY LOWE, *The Beneventan script: a history of the South Italian minuscule*, Oxford: Clarendon Press, 1914.

Lastly, I also adopt Rankin's changes in the names of regional scripts. Most notably in the context of my work, 'St. Gall notation' becomes 'East Frankish script' and 'Laon/Messine notation' becomes 'Lotharingian script'.

WHY A DISSERTATION ON THIS TOPIC MATTERS

Writing a dissertation on the origins of musical notation in Central and Southern Italy matters for the simplest reason there can be: an history of the rise of this practice for the whole of Italy is still lacking—with the notable exception of the quite small area around the abbey of Nonantola near Modena (VARELLI 2016).²⁵ As said, Giacomo Baroffio, based more on general historical presumptions than musicological evidences, has pointed to Rome as the main developing centre from which the practice irradiates north and south in concentric circles: I dedicate the second chapter of the work proving his idea is untenable. More to this, adding up to Kelly and Planchart's studies that point to liturgical and repertoire imports from Benevento to Rome,²⁶ the fact that Roman scribes also imported the practice of writing music from the Beneventan zone provides yet another evidence, unbeknownst until now, for the sheer importance of the Beneventan zone in the broader cultural history of Medieval Italy. Corollary to the re-evaluation of the role of Beneventan scribes in the development of a musical script in Italy, I also question the spot-role musicological historiography has awarded Guido d'Arezzo with for the 'conquest' of diastemacy. His figure worked well in the 19th c.

²⁵ Other abbeys and cultural centres in Northern Italy (Vercelli, Bobbio, Como...) did practice writing music, sometimes as early as mid-9th c., but simply adopted foreign scripts without modifying or adapting them. For the case of Bobbio as witnessed by the missale now Milan, Biblioteca Ambrosiana D84 inf., see RANKIN 2018, pp. 114-19. For the case of Como, see LAURA ALBIERO, *Le fonti liturgico-musicali della diocesi di Como (sec. XI)*, Lugano: Vox Antiqua, 2016.

²⁶ THOMAS F. KELLY, 'A Beneventan Borrowing in the Saint Cecilia Gradual' in *Max Lutoff zum 60. Geburtstag: Festschrift*, ed. by Bernhard Hangartner – Urs Fischer, Basel: Wiese, 1994, pp. 11-20; *Id.*, 'New Evidence of Old Beneventan Chant' in *PMM* 9 (2000), pp. 81-93; ALEJANDRO E. PLANCHART, 'Old Wine in New Bottles', in *De Musica et Cantu, Studien zur Geschichte der Kirchenmusik und der Oper, Helmut Huke zum 60. Geburtstag*, ed. by Peter Cahn – Ann-Katrin Heimer, Hildesheim: Georg Olms, 1993, pp. 41-64.

framework of ‘masterminds’ single-handedly moving histories forward, but I maintain a re-evaluation of his role is now due, after showing how careful vertical disposition of notes on parchment is one of the essential characteristics of the Beneventan musical script from the very beginnings.

Lastly, a dedicated study on the origins of musical notation in Central and Southern Italy is an enterprise of some relevance not only for musicological histories, but also one that can shed new findings and perspectives on the material, scriptorial and intellectual history of medieval Italy at large. To this belief I dedicate much of the final conclusions of the study.

ORIGINS, BOUNDARIES, STRUCTURE AND QUESTIONS ASKED

This project was first intended as a semester-long research at Harvard University with Thomas F. Kelly in partial requirement for graduate studies coursework. But as evidence, suggestions, new ideas kept on amassing at an astounding rate, we soon realised that they could not be overlooked and that they demanded more time, space and effort. Conducting the most comprehensive investigation possible soon had the project growing from the scope of a semester-long research into a full doctoral dissertation. Yet I have been forced to leave out many other aspects that do find a place in a Ph.D. dissertation, so to both keep the work into a manageable size for the reader; and for myself to realistically conclude it in the three-year period in which it was expected to be. Most notably, I made the clear choice of leaving out almost any *res beneventana* and to avoid preliminary digests from scholarship on non-music-related Beneventan history and culture: the reader will not find mention of the 8th c. southward campaigns of the Lombards as they established the Duchy of Benevento, of Paul the Deacon and his *Historia Langobardorum*, of the rise to splendour of the Montecassino abbey under

abbot Desiderius in late 11th c.; nor to other cultural expressions of this community, however refined, such as liturgy, architecture, miniature and manuscript decoration, and of course the rightly celebrated Beneventan textual script—unless in some ways these matters intersected with the discourse on the origins of musical notation in Central and Southern Italy. This constraining choice has allowed me to keep a better focus there alone where I could actually offer new insights—the field of early music notation studies—although it is understood that to put into context these new findings is to ultimately contribute to the larger history of European middle ages culture. A *Brill Companion to the Beneventan zone* was scheduled to be out by Autumn 2020, but the current pandemic has impeded its publication. Once available, it will provide a broader and more precise contextualization of the Beneventan history and culture than I could offer here. Nonetheless, numerous and crucial analogies are evident when considering how textual and musical scripts in the Beneventan zone developed: I often resort to Lowe's standard monograph on the Beneventan textual script to highlight said analogies and to provide steadier support to my theories of organic changes across time of the Beneventan musical script.

The work consists of three chapters. Each begins by asking a question and concludes by providing an answer. The gaining of the answers is achieved with continuous interrogation of sources of Beneventan and Roman notation. I recognize how this brought the overall form of the work to appear as a relentless, hyper-focused dissection of a musical script for the sake of analysis itself. I am however firmly convinced that the analytical moment is the necessary and only possible means towards the building of broader conclusions pertaining both the cultural history of Central and Southern Italy and the history of musical notation itself.

Indeed the three questions have developed quite naturally either from my desire for a

verification of specific propositions forwarded in the recent past (chapter two) or from challenging more general ideas that the few 20th c. scholars who focused specifically on Beneventan notation took as truisms without of solid grounding (chapters one and three). In turn, each question is progressively broader in the scope of its domain, so that the work overall proceeds from the simpler to the more complex, from the more local to the global and from the extremely specific (habits of two particular Beneventan scribes, chapter one) to the maximally far-reaching (ties of Beneventan musical script to earlier ones, chapter three). The three questions and their answers, reduced to the core, are as follows:

Chapter one.

Question: Is the Beneventan musical script the independent ex novo creation of local scribes, or is it tied to foreign models?

Answer: The Beneventan musical script ostensibly resulted from the adaptation of foreign models: it cannot have come to be without knowledge of previously codified, earlier ways of writing music.

Chapter two.

Question: Is the original foreign model the closely related musical script found in Roman and Central Italian sources as Italian musicologists led by Giacomo Baroffio currently hold?

Answer: No, it is rather the opposite, the Beneventan musical script being the original that is later used with some modification by Roman and Central Italian scribes.

Chapter three.

Question: Once a Roman origin is ruled out, is it then possible to trace what other script(s) the Beneventan developers took as their model(s)?

Answer: Yes, and I prove how they intended their new script to be a syncretic mélange of not one but two pre-existing scripts that could suit their needs the best in different ways.

CHAPTERS PRESENTATION

Chapter one

In the first chapter I take two sizeable manuscripts as models for two early styles of the Beneventan musical script (BAV Vat. Lat. 10673 and B33). That the work of two single scribes can serve as paradigmatic for two styles at large is so because at least two other sources almost identical to 10673 and a dozen to B33 survive. This allows the inference that more than two particular scribes' hands, the two model sources are testimony to the styles their scribes were following.

In the first half of the chapter I present graphical analysis of five different neume shapes—some chosen for their basic qualities, others for the complexity of their ductus—as they appear in ten random occasions. The results of this analysis show that the scribes of the 10673 group draw these shapes with a less standardized, freer ductus; whereas those of the B33 group draw neumes of a more regulated fashion. After discussion of each shape in the two model sources, I show how later scribes perpetuate the rendering set in the B33 group but absent, or at least less clearly defined, in the 10673 group. In the second half of the chapter I show how four parameters ('dash modularity', 'directionality', alternance of thin and thick traits, fixity of ductus) are maintained as unmissable orthographic rules from the B33 group onwards.

This steady process of shape standardization is so clear-cut that I surmise a precise wish must have arisen of 'crystallizing' the graphical appearance of the Beneventan musical script by the time of this group (very early 11th c.). The very few documents of

the 10673 group must come on the opposite from the hands of scribes that learnt how to write music before this impulse towards greater graphical homogeneity and, in a word, calligraphy took place. I ultimately conclude that the 10673 group is testimony to the import of a foreign practice of writing music that had yet to be fully assimilated, whereas the B33 group shows a fully codified style that will be the standard for ‘classical’ Beneventan musical script for two full more centuries.

Chapter two

The question thus arises of where the devisers of the Beneventan script took their models from. I dedicate the second chapter to verifying the hypothesis put forward by Giacomo Baroffio and other musicologists after him, that Rome might be that centre. I conclude the chapter proving that, quite to the contrary, Roman notation derived from that of Benevento. I maintain so on the ground of three major points: antiquity of sources, difference in the drawing and in the usage of certain neumes, adherence (or lack of adherence) to calligraphic habits. Overall, the greater complexity of Beneventan musical script makes a transition from Beneventan complexity to Roman simplification the likely progression, rather than the other way around.

Once the relationship between Roman and Beneventan musical scripts is elucidated, a revision must necessarily follow of the role of Guido d’Arezzo in the development of ways to precisely indicate the height of each note. This because corollary to Baroffio’s ideas is that Guido implanted his innovations on features thought to be inherent to Roman musical script, whereas their origin is more properly Beneventan. I demonstrate how Beneventan scribes did develop techniques to place notes with exactitude on the vertical axis almost a century before Guido: the fact that they did not pursue complete precision until mid-11th c. is not proof of a supposed teleological conquest by Guido, only that they did not need such exactitude at least until that time.

Chapter three

With the third and final chapter I eventually try to understand why people in early 10th c. Beneventan zone created with a musical script that looks and acts the way it does. Analysis of the building process of standard Beneventan neumes (section one); of their rhythmic organization (section two) and graphical organization (section three) unravels this script's 'genome', allowing to read against the light what the way Beneventan musical script works says to the history of musical notation. In section one I describe how the devisers of the Beneventan musical script adapted the two basic signs of the East Frankish script (i.e. 'tractulus' and 'virga') to create the backbone of their own, resulting in what I have dubbed the 'dash and dot system'. In section two I describe how the Beneventan musical script has means to express rhythm that are proper to the East Frankish script. Analysis shows that the scribe of 10673—again as representative of earlier habits—is more attentive to rhythmic nuance than that of B33, who follows a later style of the Beneventan musical script. In section three I show the ties of the Beneventan script with the Lotharingian script, now pertaining vertical disposition—i.e. melodic precision and note-grouping—rather than rhythmic detail. I show that later scribes increase their attention over graphical organization and vertical disposition of notes. My takeaway is that the devisers of the Beneventan musical script initially sought to integrate the 'best of both worlds': rhythmic techniques proper to the East Frankish script together with the vertical precision of the Lotharingian. But if in earlier documents one can still appreciate this blending of attention to rhythm along with decent care to vertical disposition, as time goes on the former dims down and the latter is progressively boosted.

Conclusions

Indeed there are reasons behind the creation of a new musical notation and its evolution in time, and they must point to the needs scribes must have had in

those moments and places. The explication provided in the third chapter of the complex system lying at the base of the Beneventan musical script can now serve as a springboard for the final historical survey. I conclude the work by harvesting the fruits of my analysis: the elucidated reasons and needs that particular people in a particular time and place must have had in creating a new musical script, 'hidden' so to say in their musical code.

Chapter One.

A Matter of Style: Graphical Evolution of Early Beneventan Musical Script

CHAPTER INTRODUCTION

This first chapter analyses the two styles of early Beneventan musical script appreciable in 10673 and B33, sources chosen because of the sizeable amount of musical notation they contain. I say the two manuscripts are testimony of two styles rather than of their own scribes alone because enough (albeit much smaller) sources survive almost identical in style to 10673 and B33 to affirm that the two manuscripts are the most prominent testimonies of two different styles of writing the Beneventan musical script. Three more unconnected sources exhibit the same style of 10673¹ and at least half a dozen that of B33.²

I take the style of the 10673 group to be older than the style of the B33 group, as the two show small yet coherent graphic differences in the drawing of neumes and in the rationale behind several circumstances. Briefly, in the musical notation of B33 and its

¹ • Montecassino, Archivio della Badia 446 (ff. 83v-84r);

• Bamberg, Staatsbibliothek, Msc. Patr. 101 (front flyleaf), digitized at <https://www.bavikon.de/object/bav:SBB-KHB-00000SBB00000168?cq=&p=-1>;

• Manchester, John Rylands Library, Latin MS 2 (exulted roll), digitized at <https://www.digitalcollections.manchester.ac.uk/view/MS-LATIN-00002/1>.

² • Four fragmentary leaves of a missal from Bari, now Oslo, The Schoyen Collection MS 063 (two leaves); Cambridge, Mass., Houghton Library MS Typ 701; New York, Morgan Library, Bernard Breslauer Collection, no shelfmark. The Oslo leaves are digitized at <https://www.schoyencollection.com/palaeography-collection-introduction/latin-book-scripts/national-regional-scripts/beneventan-minusculum/ms-063>; the Cambridge leaf at [https://iif.harvard.edu/manifests/view/drs:6381695\\$ii](https://iif.harvard.edu/manifests/view/drs:6381695$ii).

• a fragmentary leaf of a pontifical from Dubrovnik held in the Franciscan monastery of the same city, no shelfmark;

• six leaves from a fragment of missal now Vatican City, BAV Vat. Lat. 10645 ff. 1-6 (see p. 26, footnote 11 for reproduction link);

• Montecassino, offsets in bindings of *Compactiones* VII and XXII;

• Lucca, Biblioteca Capitolare 606 add. ff. 150v-156v;

• several fragments of a missal now in Zurich, Staatsarchiv, W3 AG19 (ten fragments) and Zentralbibliothek, Z XIV 4, nos. 1-4; Lucerne, Stiftsarchiv S. Leodegar, 1912; Payerne (*olim* Peterlingen), Stadtarchiv, no shelfmark.

For the Bari missal see THOMAS F. KELLY, 'Fragments of a Notated Missal in "Bari-Type" Beneventan Script' in *Lingua mea calamus scribae: Mélanges offerts à madame Marie-Noël Colette*, ed. by Daniel Saulnier et al., Solesmes: Abbaye Saint-Pierre, 2009, pp. 207-221.

For the Montecassino *Compactiones* see JOHN BOE, 2011/XI p. 45, footnote 4: "the hand is small, early Beneventan; the notation, fine and spidery early Beneventan, perhaps from a tonary, and must date from the early tenth century or possibly still earlier". I would be more cautious in dating so far back in time this minuscule fragment, although it certainly is very early.

germane fragments one perceives a process of both standardization and elaboration of the shape of neumes, whereas in that of 10673 and the other three scant testimonies there is a freer, less controlled and less studied ductus. Thus I argue that the 10673 group is from a notational stage that is earlier than the B33 group. Whether this also means that sources of the 10673 group are earlier than those of the latter is hardly addressable and of secondary importance—whereas on an average I would cautiously tend to say the 10673 group is materially older than the B33 one, too.

In the second section, I consequently define B33 as the earliest substantial manuscript attesting the classic, fully codified Beneventan musical script: the rules and customs seen in this manuscript will be applied in virtually all scriptoriums of the Beneventan zone for the next couple of centuries whenever there was the need of writing sounds.

I emphasize how Lowe observed the same process of codification and standardization in the Beneventan textual script, an evidence that I invoke and rely on in building up my own theory for graphical changes in the early Beneventan musical script:

The most trustworthy test [for dating of Beneventan manuscripts] is the principle of evolution. It is not with hard and fast dating criteria that we are concerned here, but rather with marking out stages of development which reflect, not the exceptional heights reached by an individual, but the general level of progress and achievement.³

Few have tried to propose a date and place of origin for either 10673 and B33. Indeed this is an arduous task given the almost total lack of details and hints that might help.

Thus writes Bannister in 1913 of 10673:

[...] I had accepted the opinion of Lowe, that the codex had been written around the year 1000; but now, after a more accurate palaeographic study, we agree postponing it to the 11th c. The scriptorium is uncertain, but it was probably in South-East Italy.⁴

³ LOWE 1914, pp. 122-3.

⁴ BANNISTER 1913, vol. I, p. 120. This and all following translation from Italian and French mine.

A year later, Lowe simply points to a vague 10th – 11th c. for B33 and 11th c. for 10673, giving no further justification for his view.⁵

PM XIV, reproducing 10673 and published in 1971, provides a material description of the manuscript and dates it to “début du 11 siècle, tant il est proche, par sa notation, du Missel 33 du Chapitre de Bénévent, que le même Lowe date du 10 / 11”.⁶ Expanding on what Bannister only noted en passant, *PM XIV* also suggest that 10673 provenance leans towards Apulia since it is written in the so-called “Bari type, a graphical variation of Beneventan textual script starting to appear in the 10th century in documentary sources and at the beginning of 11th in librarian sources.”⁷ Although the text of 10673 certainly matches the characteristics of the Bari type, the rather complex decorated initials highlighting the first letter of the Introit of each mass do not seem to me to wholly match ornamentations of manuscripts assuredly written in Apulia—especially so in human and animal depictions: I would thus leave geographical attribution of this manuscript more open than the writers of *PM XIV* have set.

The authors of *PM XX*, the 1983 (poor) reproduction of B33, date B33 around “les premières décennies du 11th siècle” on the basis of textual details and proposes Benevento as its area of provenance.⁸ A few years later Mallet and Thibaut refuse a Beneventan origin because B33 lacks certain liturgical items proper to the city.⁹

⁵ LOWE 1914, pp. 336, 365.

⁶ *PM XIV*, pp. 197-198.

⁷ LOWE 1914 pp. 150-1 first gave mention of the two writing styles. Their most comprehensive overview is currently PAOLO CHERUBINI - ALESSANDRO PRATESI, *Paleografia latina: l'avventura grafica del mondo occidentale*, Città del Vaticano: Scuola Vaticana di Paleografia, Diplomatica e Archivistica, 2010, pp. 309-21.

⁸ *PM XX*, pp. 11-20, p. 17.

⁹ The two also prove that by the beginning of the 13th century the manuscript was in Castel San Giorgio, a village in the diocese of Salerno. See JEAN MALLET – ANDRÉ THIBAUT, *Les manuscrits en écriture bénéventaine de la Bibliothèque capitulaire de Bénévent*, Centre Nationale de la Recherche Scientifique: Paris, 1984, 3 voll., vol. I, pp. 90-1.

The difference in the textual script of 10673 and B33 merits further discussion, as it has been argued that it parallels that of the writing of neumes. In *PM XIII*, Paolo Ferretti dedicates to the handwriting of 10673 an important passage that I report in its entirety:

The kind of [textual] writing of this Codex 10673 is not the one known under the name of Benevento-cassinese [...]. Paleographers position [this kind of writing] in scriptoria along the South-East of Italy, across Apulia, and even on the coasts of Dalmatia, Bari being the principal centre; for this reason they name it Bari type. It is by all means [identifiable as the] Beneventan script, but it presents several features that are particular to it, the most prominent being the rounded form of traits, just as the Benevento-cassinese type of the same time differentiates itself for its angular and fragmented forms. Some paleographers think that this Bari type is nothing but the primitive Beneventan type, common to the whole of Southern Italy and Dalmatian coasts. [...] Yet we [*pluralis maiestatis*, ed.] had to report [the two types] to the reader to highlight the importance of this issue, since the same differences that the paleographers acknowledge among the two textual types, we often find across the two musical notation types: in the Benevento-cassinese musical notation traits and forms are hard, fragmented, sometimes coarse; in the Bari musical notation on the contrary traits and forms of neumes appear as light, delicate, full of grace. We ignore the exact place where the Codex 10673 was produced; and neither we know how to designate the notation that it offers: is it the Bari notation? Is it the primitive Beneventan notation? The two appellations are acceptable given the rarity of documents and the divergences that result in the opinions of paleographers.¹⁰

Always an insightful and precise observer, here Paolo Ferretti underlines the two main points at stake in the evaluation of 10673, at least in regard to its notation:

- 1) that the rounder textual writing of 10673 fits the rounder forms of its musical notation—as opposed to the more angular, somehow stiffer textual and musical script of B33 and its group—and
- 2) asking whether that of 10673 “est-ce la notation de Bari? Est-ce la notation bénéventaine primitive?”

¹⁰ *PM XIII. Le Codex 903 de la Bibliothèque nationale de Paris (XI^e siècle, Graduel de St. Yrieix*, Solesmes: Abbaye Saint-Pierre, 1925, p. 101. Translation from French.

That he was content proclaiming incertitude over the matter is understandable, as his remarks come in an essay dedicated to another manuscript and musical script altogether (the gradual now Paris, Bibliothèque Nationale de Paris, Ms. Lat. 903 written in the Aquitanian region in the homonymous script). Yet the question is not moot at all and indeed it is of crucial importance in framing hypothesis on the origins and evolution of the practice of writing music in Central and Southern Italy—the object of the present work. If the 10673 group would show Bari-type textual and musical scripts, then two independent early canonizations of ways of writing text and music in the larger Beneventan zone should be posited, one of which—the Benevento-type—eventually superseded the former as evidence allows to see. To conclude, I cannot find appreciable differences in neume-writing from Apulia and the Eastern side of the Adriatic in documents as early as the beginning of 11th century and I lean towards the identification of 10673 as the witness of an earlier notational stage rather than of a geographically separated custom: a separation of Beneventan-Cassinese against Apulian-Dalmatian music-writing styles does not seem to me to be the best way to address the difference between the two groups of 10673 and B33.¹¹ Over the course of this first chapter I will show why a theory of synchronic evolution rather than separate local customs is more plausible both on the grounds of analysis of musical notation alone and because of being more in line with the historical trajectory of the Beneventan textual script.

¹¹ The collection of fragments from several musical manuscripts now BAV, Vat. Lat. 10645 begins with six early 11th c. folios written in a Bari type text that is as calligraphic as the B33 type musical notation above it is. This is yet another important proof that the style of musical notation of 10673 is not the early neumatic companion to the textual Bari type.

BANNISTER 1913, vol. I, 67b reproduces one side of a folio of said portion of 10645. This plate is reproduced at <https://digi.ub.uni-heidelberg.de/diglit/bannister1913bd2/0086>. The two pieces shown in the plate also appear in B33 (f. 110r), allowing for a useful visual comparison. The only appreciable difference between the musical notation of the two sources is due to the scribe of 10645 using a thinner quill than that of B33, resulting in sleeker, less angular marks. BAV, Vat. Lat. 10645 is an invaluable testimony of the complete chronology of the Beneventan musical script: the several fragments bounded together that make up the codex present virtually all the evolution of the Beneventan musical script at once. I sorely regret that the current pandemic negates further access to it and that in the last year I have had to resort to handwritten notes I took on a preliminary visit in 2018 to the Vatican Library.

It must also be borne in mind that 10673 is a gradual, and thus solely intended for musical purposes. Here every verse of every musical item is in coloured majuscule and the initial letter of each introit is adorned by means of intricate, multicoloured decorations that often even support the sense of the introit itself:¹² there is no doubt that 10673 was conceived as a special item, worthy of being neumated by the most versed musical copyist available to the scriptorium where it was produced. In particular, Lent seems to hold a special place in the sensibility of the creators of the manuscripts. It is begun (f. 5v) by the coloured, majuscule title *In Nomine Domini incipit Introitu*. Then on the following page, the massive—it takes two-thirds of the entire page—initial “I” of the relative introit *Invocavit me* depicts the Lord imparting a benediction: on the reader, the copyist, the manuscript and perhaps even on notation itself?

¹² This is especially true when the introit directly engages with the Lord, such as in with *In Deo laudabo* (f. 9v), *Salus populi* (11r), *Domine exaudi* (22r).

FIGURE 1:



Vatican City, Biblioteca Apostolica Vaticana, Lat. 10673, f. 5v (detail)

Such special, evocative decorations might very well have preceded other major periods as Advent or Christmas and Easter, but unfortunately the manuscript lacks all of these.

On the other hand, B33 is a missal and is thus primarily concerned with the correct performance of a complete mass. Music is redacted with great care, but there is no attempt whatsoever to give it a special place. As said above, the manuscript almost surely does not come from Benevento. Therefore, I consider B33 to be not the result of a state-of-the-art neume compilation produced in the cultural capital of the region, but rather one exemplar of carefully executed, calligraphic but nonetheless standard South Italian missals: at least three other witnesses of the same two-column *mise en page*¹³ of B33 survive—one surely from Bari and another written in the Bari-type.

¹³ Setting the text over two columns per page became the rule for calligraphic, non-cursive manuscripts in Beneventan scriptoria “from about the last third of the 9th c.”. See LOWE 1914, pp. 289-90.

Section I: The Musical Scribes of Vat. Lat. 10673 and Benevento 33

SECTION I.1

COMPARISON OF SINGLE NEUME SHAPES IN 10673 AND B33

I begin this section discussing five particular neumes as they appear in 10673 and B33, providing ten examples of each shape.¹⁴

The five neumes are

- 1) series of four or more horizontal dashes;
- 2) oblique ascending dash;
- 3) liquescent low-high;
- 4) liquescent high-low;
- 5) the three-note ascending neume with a special middle element known as ‘salicus’.¹⁵

After the ten occurrences from each manuscript are presented, I highlight some relevant graphical features. I have chosen number 1 because of how indicative it is the way scribes juxtaposed independent dashes next to each other, while all others because of their rather complex ductus, with the understanding that the more complex the graphical rendition of a neume is, the more likely it is that several instances of an identical rendition subtend the application of scriptorial rules. Also, I compare the neumes from 10673 and B33 with how they appear in some later selected manuscripts. I do so to document how principles of calligraphy and conventionalisation subtend the coherent development of Beneventan neumatic shapes across time, a feature that finds a parallel in regards to the Beneventan textual script.

¹⁴ To avoid cherry-picking, I have taken the ten images of each neume from the first two occurrences per page in a fixed set of these randomly chosen folios:

10673: 3r, 10r, 15r, 20r, 34r;

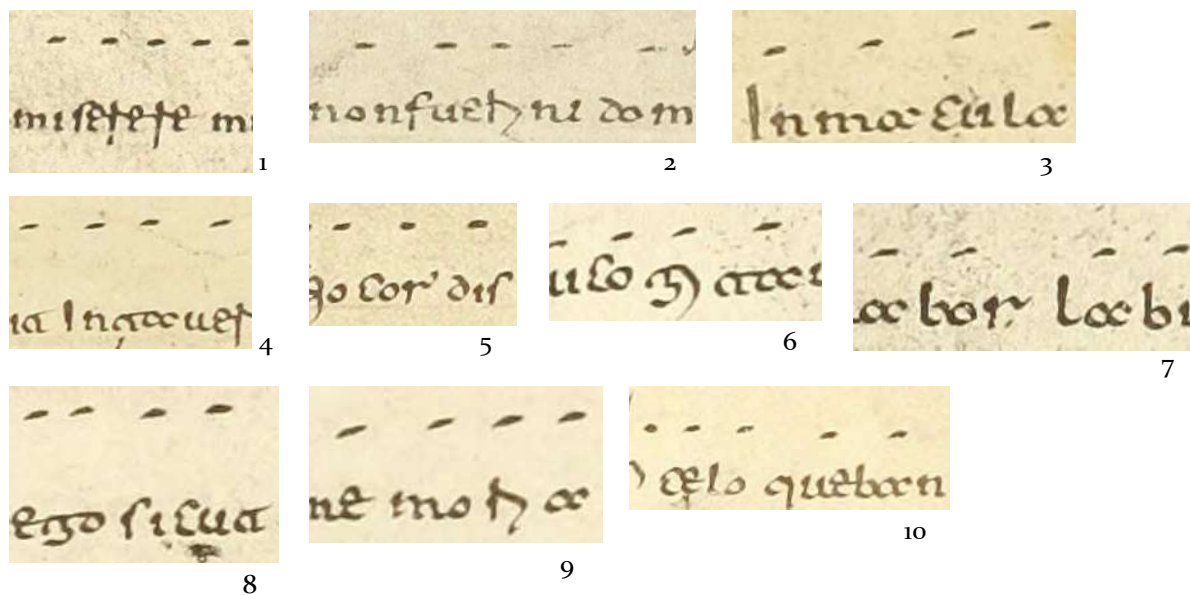
B33: 3r, 10r, 28r, 35r, 54r.

¹⁵ *Salicus* is a neume consisting of three or four ascending notes in which the penultimate is special. Not much can be said about its actual delivery other than it is lighter than the last one. For an overview as it pertains East Frankish sources see CARDINE 1968, pp. 118–31.

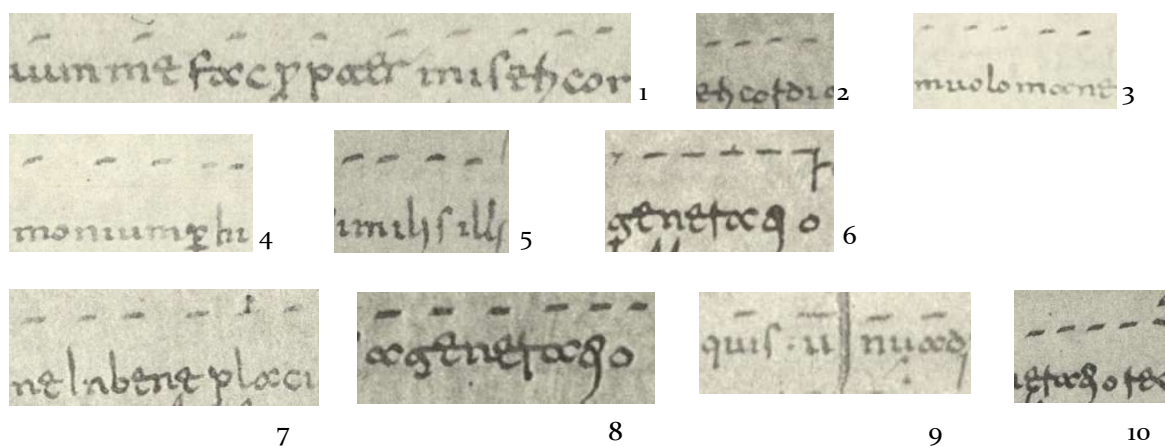
I.1.i Series of four or more horizontal dashes

TABLE 1

10673



B33



Analysis of 10673

The scribe of 10673 draws series of horizontal dashes rather freely. He does not put much attention in keeping dashes straight in a line, even though they all mark unison passages.

Moreover,

- some dashes are marked by a diagonal, bottom left to top right movement (figure 1, dash 1; f. 6, dashes 3 and 4);
- some resemble parallelepipeds (f. 4, dd. 1, 3; f. 6, d. 4);
- some are drawn as arches with a thinner start (f. 3, d. 2; f. 5, d. 1; f. 7, dd. 3, 4; f. 10, d. 5);

Analysis of B33

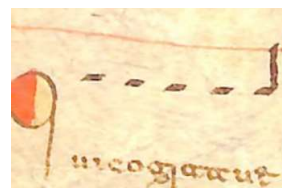
The scribe of B33 draws series of horizontal dashes that are more uniform in size and shape. They are longer than those of 10673 and have a clearer ductus, though they can still be slightly arched (ff. 3, 4, 5) or completely straight (ff. 7, 8, 10). This scribe also takes more care than that of 10673 in putting consecutive horizontal dashes on a straight line so to better represent the reiteration of the same pitch. Series of horizontal dashes in 10673 are rather detached from the text, whereas in B33 dashes are more integrated with the text: notice here the better alignment of each dash above its syllable and the more uniform distance between one dash and another.

Evolution in later manuscripts

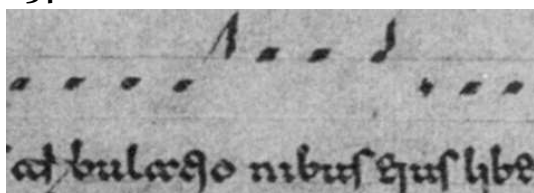
B40



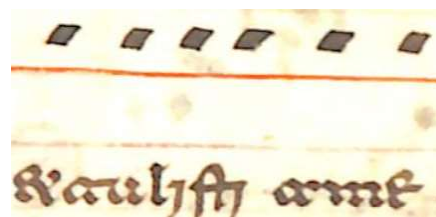
B39



B34



B21

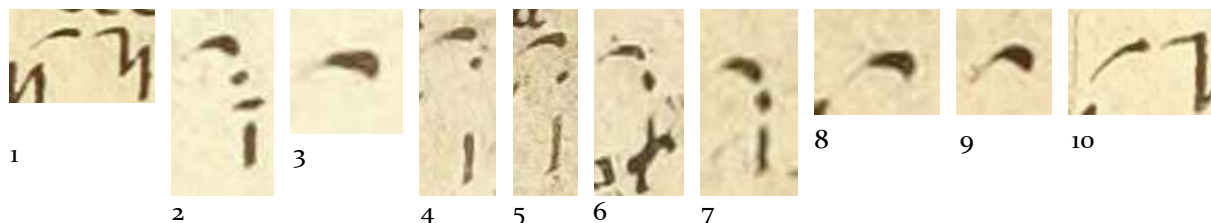


Scribes increase the geometrical precision of dashes in progressively later manuscripts,¹⁶ accompanying the—and required by—increased precision in the representation of pitches (i.e. ‘diastemacy’).

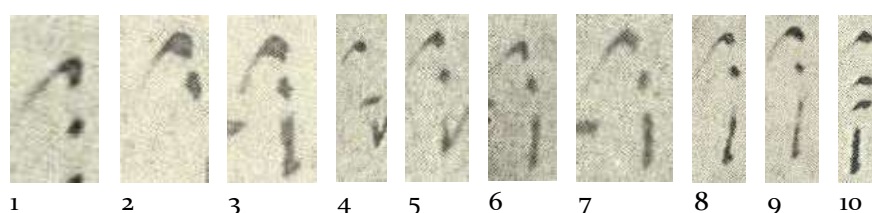
I.1.ii Oblique ascending dash

TABLE 2

10673



B33



Analysis of 10673

The scribe of 10673 very often draws oblique ascending dashes as a rather thick single stroke arching throughout its length. This stroke can occasionally be sleeker, though this is less common (as here in ff. 1 and 10).

The shape with the ascending beginning followed by the thicker descending conclusion is rare (f. 9), while it becomes customary in later styles.

Width, length, opening of the arch and whether the drawing starts with a thinner section or not are all unregulated elements of this neume, lending it great variability in its appearance throughout the manuscript.

¹⁶ I direct the reader to *List of Manuscripts*, pp. x-xii above for datings of every manuscript discussed throughout the study.

Analysis of B33

The scribe of B33 draws the oblique ascending dash more uniformly than that of 10673. He almost always begins with a diagonal upward hair-thin line and abruptly shifts to a thicker mark in the opposite direction via a change in the inclination of the quill: a decided increase in complexity compared to the same shape in 10673. Elements of some variation in B33 are the thickness of the descending conclusion, the angle at which the switch happens from thin to thick, and whether the thick line ends in a rounded (ff. 2, 9) or straight-cut mark (ff. 1, 7, 8).

Evolution in later manuscripts

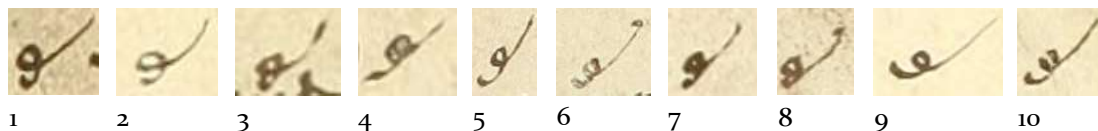


Later scribes draw the ascending oblique dash in a single stroke in a fashion similar to that of B33. The employment of wider pens in later times results in an ever-increasing difference between the width of the thin ascending beginning and the thick descending conclusion, leading to the characteristic squaring and spiking of the neume. In very late sources ascending oblique dashes become much rarer; or, to say it better, they lose their initial tail and become almost undistinguishable from the lozange-shaped isolated dot, as seen in B21 (see the almost null difference between the ascending oblique dash and the descending series of dots below the text).

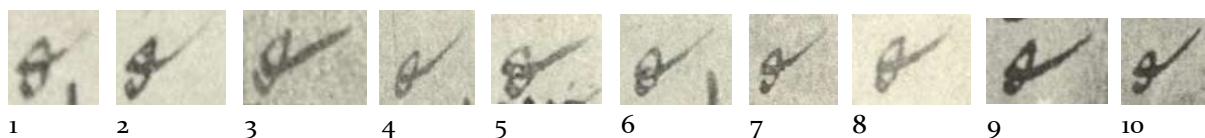
I.1.iii Liquescent Low-high neume

TABLE 3

10673



B33



Analysis of 10673

The 10673 liquescent low-high neume, too, is rather inconsistent in its overall shape. It has a recurrent left-to-right ascending direction, but it then varies in many other aspects, such as:

- the width of the loop;
- the size and direction of the initial mark;
- the length and the width of the rising tail;
- the distance between the initial mark and the loop;
- the presence or absence of an initial base.

The length of the rising tail does not provide intervallic information.

Analysis of B33

In B33 this neume has several characteristics making it more uniform than it is in 10673. Among them:

- the presence of a noticeable base obtained with a thick initial mark;
- a narrowing of the trait in the descending phase of the loop (often the trait at this point is straight, as in ff. 1, 2, 4, 7, 9, 10);
- a thick ascending phase of the loop.

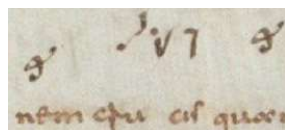
Most of the times B33-group scribes are quite careful to have the base of the sign

touching the beginning of the ascending phase of the loop. It is possible but not a given that the two points may even touch each other (as in ff. 1, 4, 5, 6, 8).

Here, too, the length of the rising tail does not provide intervallic information.

Evolution in later manuscripts

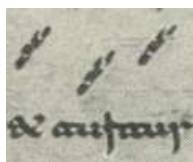
B40



B39



B34



B21

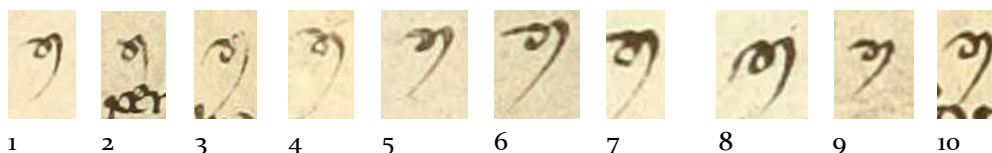


A process of increasing elaboration is visible in these examples.¹⁷ 'Bulkier' later shapes are the result of an overall process of thickening of the Beneventan textual and musical scripts. The overall uniformity among the two/three liquescent neumes in each image is even more marked than in B33. Moreover, by the time of B34 the shape of the neume is further complicated by a fragmentation of its components. The loop is now split in two distinct elements with opposite directions. This becomes customary by the 12th c. and will be discussed further in the second chapter.

1.1.iiii Liquescent High-low neume

TABLE 4

10673



B33



¹⁷ I apologise for the poor reproduction of B21 here. The current pandemic making it impossible to access PM reproductions in libraries or viewing the manuscript in flesh in Benevento, for this instance I could only resort to a heavily zoomed image from the five plates in THOMAS F. KELLY, *The Beneventan Chant*, Cambridge: Cambridge University Press 1989, pl. 9, line 2.

Analysis of 10673

In most cases the scribe of 10673 draws the liquescent high-low neume with a single stroke of the pen (the only exceptions here are ff. 3, 6 and 10). He also does not strive to standardize any of the parts making up the neume: compare for example

- the width and shape of the loop;
- the length and direction of the initial trait, sometimes ascending (ff. 3, 8, 10), sometimes horizontal (ff. 1, 5, 6, 7, 9);
- the angle, width and length of the tail. Length is also not informative of diastemacy: see e.g. how f. 3 notates the interval of a second but is nonetheless longer than f. 7, a fourth.

Analysis of B33

Though there is still variability in the width of the overall shape, the scribe of B33 draws the liquescent high-low neume in a more uniform manner than that of 10673. An important aspect differentiating the two is that very often—though not always—the scribe of B33 separates the loop in two elements: a thick reversed ‘c’ that does not close the circling loop, plus a downward tail starting from the mid-right of the reversed ‘c’. This shows an increase both in the complication and the standardization of a neume that in 10673 is simply drawn as a swifter continuous loop.

As in 10673, the length of the tail does not have diastematic value.

Evolution in later manuscripts

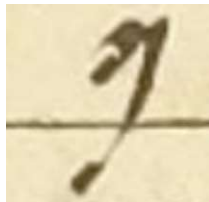
B40



B39



B34



B21

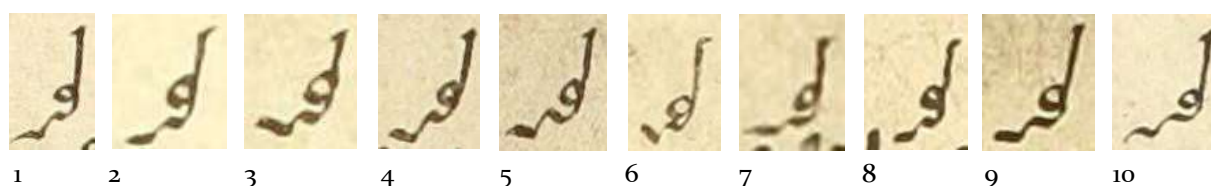


The liquescent high-low neume undergoes a somewhat different process of complication in later manuscripts, representing an exception to the other neumes analyzed thus far. B40, 39 and 34 all employ a rather round shape: the loop is left open and two appreciable liftings of the quill leave a thick mark at the end of the two descending, ‘reverse c’ curves. Very late sources such as B21 lose almost every graphical connection with earlier ductus. The loop is now substituted by a wave under which an almost imperceptible trait is added; the descending tail emphasizes greatly the alternance of thin and thick marks

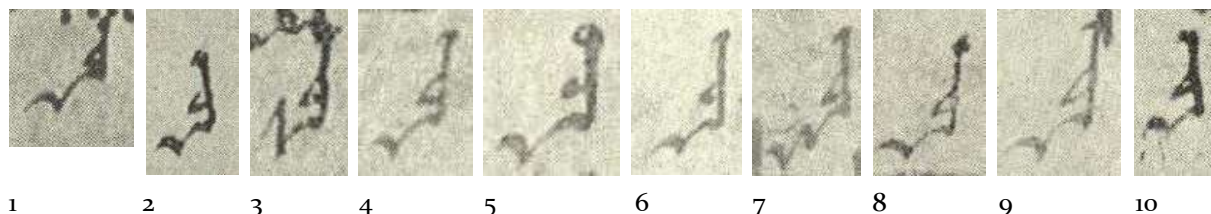
I.1.v Three-note ascent with a special middle element (‘salicus’)

TABLE 5: ‘SALICUS’

10673



B33



Analysis of 10673

The scribe of 10673 draws *salicus* with a single stroke of the pen. A rather freely-drawn and ‘quivery’ base begins the shape, then a complete loop follows for what is the special middle note and finally a straight dash.

The length of the bottom and vertical dashes is quite variable (compare ff. 5 and 7).

Analysis of B33

The scribe of B33 draws a much spikier shape than that of 10673, both at the base and in regards to the loop. The base is more rigid in its arching and it also has a thin/thick alternance not seen in the base of the 10673 shape. He also obtains this shape in two separate moments: he adds the special loop after he has drawn a standard shape for a series of ascending notes. In the images shown here, this detail is most clear where there is a minuscule gap between the two elements (as in ff. 2 and 5).

Somehow strangely, there is not a single *salicus* to be found in B33 across folios 57v and 73r. The sizeable amount of folios makes it unlikely to explain this oddity with complete absence of this special performative nuance in all the pieces found there.

Evolution in later manuscripts

B40



B39



B34

Absent

B21

Absent

Salicus becomes progressively rarer in later manuscripts and its use is altogether abandoned by the time of B34. In B40 it is still drawn with a loop added after the standard neume, as in B33. In B39 and other late 11th – 12th c. sources the loop consistently drops out in favour of a very small dot-like element attached mid-height to the left.

SECTION I.2.

INTEGRATION OF TEXT AND MUSIC

Kelly remarks how later sources of Beneventan musical script tend to integrate themselves better with the also highly characteristic Beneventan textual script. The progressive stiffening of neume shapes and the increasing difference in width between thick and thin lines are two elements also found in classic Beneventan textual script:

[mid to late 11th c. neume-writing] matches [better than 10th c. – early 11th] the Beneventan script in many particulars. [It] includes many more strictly vertical strokes; it uses the contrasting thin and thick lines typical of the script; and it is written with a pen of generally the same breadth as that used for the text.

[late 11th to 12th c. neume-writing ... matches] in its calligraphic precision the high point of the Beneventan script seen in the late eleventh and the twelfth century at Montecassino and elsewhere. [...] The neumes assume a regularity, an uprightness and an elegance that match the maturity of the script.¹⁸

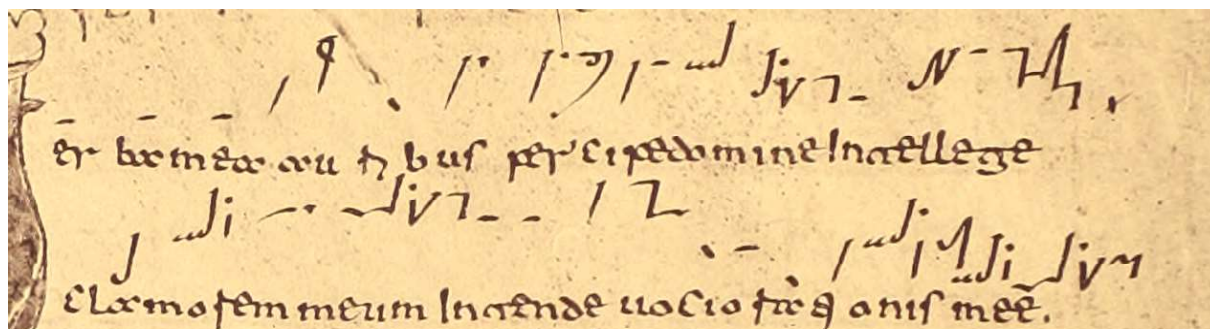
B33 and 10673 and their respective groups come from a time when neumes were all but stiff; here alternation of thick and thin lines has a smaller incidence on their looks when compared to later manuscripts and are thus ‘outside’ the track described by Kelly for late 11th – 12th c. sources. Still, several elements suggest that the musical scribes of the B33 group were more attentive integrating neumes with the text than those of the 10673 group were: attention to the calligraphic integration of text and music was already at play across the turn of millennium, roughly by the B33 group time.

The scribe of B33 aligns neumes better above syllables than that of 10673. This is especially evident in semi-ornate passages of introits, communions and offertory responses as the text there is still closely spaced, but with the occasional small melodic flourish breaking up its general continuity. Broadly speaking, the scribe of B33 is more

¹⁸ KELLY 1996, p. 90.

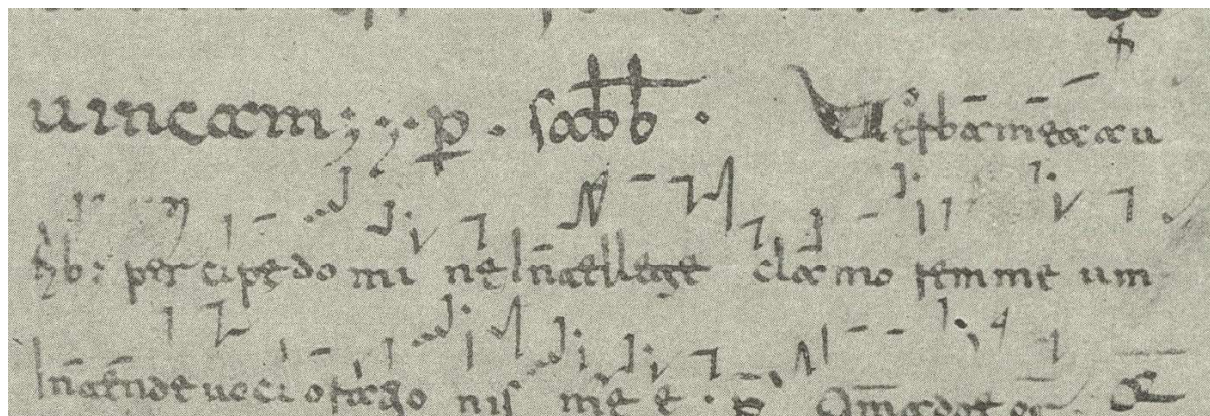
committed to placing neumes perpendicular to syllables, whereas that of 10673 sets them diagonally, more or less to the right of the vowel of the syllable. As a result, it is common to see neumes in 10673 positioned on the top of the successive syllable.

EXAMPLE 1 – 10673



f. 12v

EXAMPLE 1 – B33



f. 43v

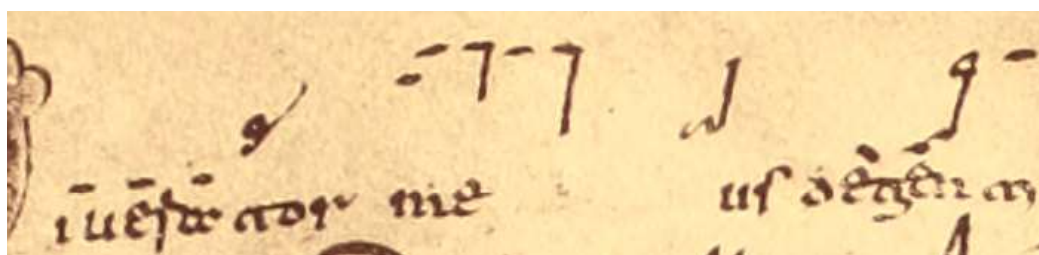
In EX. 1 the two initial neumes run strictly parallel to the text in B33, obliquely so in 10673; syllables on *percipe domine* and *orationis mee* are adequately spaced in B33 considering the neumes they will receive, whereas in 10673 they almost run in a sort of *scriptura continua*. The text scribe of B33 predicts generally well space on parchment for neumes (this is true for both melismatic and syllabic passages).¹⁹ On the contrary,

¹⁹ See for example B33, f. 18r. Here the very long and melismatic gradual *Adiutor in opportunitibus* and the tract *De profundis* are neatly laid out one after the other and the alternance between semi-ornate and melismatic passages is always carefully spaced. I do not agree with the judgement on the matter given by *PM XX*, p. 12: “l’espacement se trouve être parfois un peu large, parfois un peu court et, dans ce dernier cas, les neumes ont été serrés, ou bien ils débordent dans la marge.” At most, this behaviour is the uncommon exception in B33 and more or less the rule in 10673.

one finds in 10673 spots where text written too tightly forces musical notation into a cramped appearance (see e.g. 31v) next to those where too much space reserved for a melisma results in empty areas (see e.g. ff. 6v-7r). The offertory *Populum humilem* (ff. 16v-17r) is the most evident case of overabundance of space. Here almost every melisma gets roughly twice the space than it needs: the imbalance is so patent and general that one wonders if there might be any reason for it in this specific offertory.

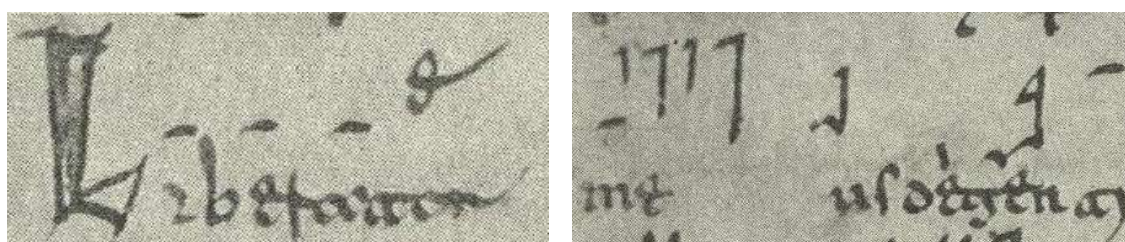
Closer analysis of the textual script of 10673 and B33 also reinforces the impression of a better integration of text and music in the latter, indicating the neume-to-text matching trend found in later manuscripts that Kelly describes is already at play in B33: here a more geometrical appearance of text supports an equally more geometrical notation, to the point that a horizontal line in the text and a dash in the notation are very often identical.

EXAMPLE 2 – 10673



f. 20r

EXAMPLE 2 – B33

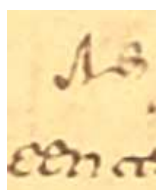


f. 55v

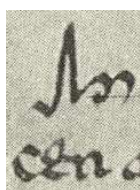
See how in EX. 2 the text of B33 is set more horizontally (*Liberator, de genti-*) and how parallel neumes proceed to it; while text and musical notation run more detached from each other in 10673. There is indeed in B33 a considerable similarity between the straight lines of text and the straight lines of the dashes. In 10673 musical dashes are less straight, nor do straight textual lines resemble—in length, width, direction—the shapes of the horizontal musical dashes. To a lesser extent, the same is also true for diagonal lines. See in TABLE 6/1 below how different in 10673 the initial diagonal trait is of the low-high-low figure compared to the topmost element of the “c” of *-cen-*, and how in B33 the two marks run parallel, almost identical to each other. In B33 syllables such as *te*, *ti*, *tri*, *re* and many more, have a markedly straight line as a middle element that connects the consonant to the vowel, as shown in TAB. 6/2. It is also common to have chains of straight lines running through all the successive letters that require them: Lowe denotes this feature as the “horizontal connecting-stroke” and adds that “in the developed script it regularly consists of a heavy horizontal stroke precisely on a line with the top of short letters [emphasis added].”²⁰ Though to a variable degree, in 10673 this connecting middling line is thinner than in B33. It can be slightly diagonal rather than straight, or even with a certain rotundity to it: e.g. the word *miserere* in TAB. 6/3 lacks the horizontal connecting-stroke in 10673, whereas it is very prominent in B33. TAB. 6/4 shows a perpendicular high-low neume on the syllable “[*sanas*]*ti*”. In this particular and wholly incidental situation, B33 shows again the greater degree of similarity between its text and superseding musical notation—the neume almost seeming to span out of the rightmost element of the syllable. In 10673, the shape of the syllable does just not match that of the high-low and the two elements are rather unaligned.

²⁰ LOWE 1914, pp. 130-31.

TABLE 6/1

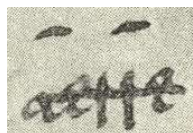


10673

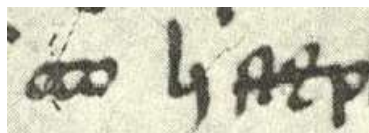


B33

TAB. 6/2

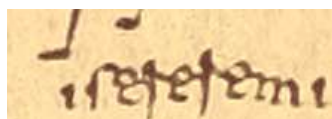


B33

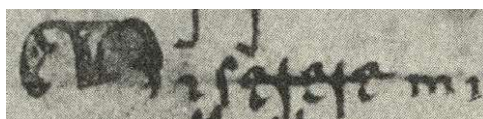


B33

TAB. 6/3



10673



B33

TAB. 6/4



10673



B33


Summarizing, B33 show a higher degree of integration than 10673 between text and music (the same being true of their respective groups); and this integration will further increase in later manuscripts. There are two takeaways, I think, in the analysis of the relationship between text and music in these two early examples of Beneventan musical script. One is that musical and textual scripts progressively match their looks because their constitutive elements forego an identical process of geometrical regularization and

‘stiffening’;²¹ another is that shapes of neumes seem to have been purposefully adapted to match the textual script as soon as around the turn of millennium, the time of the B33 group. This detail suggests the practice of writing music having been imported from areas where the textual script was not Beneventan, otherwise the integration of text and music would have been better right from the earliest neumatic style. The matter will be expanded later towards the conclusions of this first chapter.

SECTION I.3



OTHER ASPECTS OF MUSICAL NOTATION

I.3.i High-low *episema*

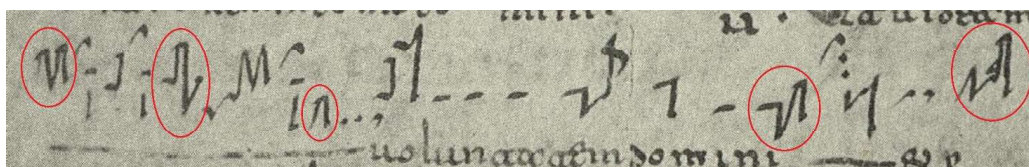
As the name implies, this particular Beneventan *episema*²² is found on a high-low combination or, more rarely, any such portion of a neume e.g. high-low-high or low-high-low (there is no equivalent *episema* for the opposite note combination of low-high). Moreover, this *episema* is only ever used when the first of the two notes is drawn with an initial ascending element, thus for a note higher than the one preceding it. If the note preceding a high-low neume is at the unison or higher than it, then the high-low neume cannot receive the *episema*. It is certainly puzzling that the Beneventan script is only provided with the possibility of adding the *episema* to high-low neumes whose first note is higher than the preceding one. It is also possible that other possibilities were dropped already by the time of the first surviving documents. Regardless, early sources employ the high-low *episema* in two graphical variants. One has a standard high-low shape on the top of which the scribe adds a horizontal mark []

²¹ I do not intend the term ‘stiffening’ here with necessarily negative overtones: the textual and musical script of 12th c. manuscripts such as B34 are at the same time stiffer than earlier manuscripts such as B40, but result just as elegant.

²² *Episema* is a sign added on the top of certain neumes (or parts of) signalling that the note(s) on which it is applied are to be sung somehow more prominently. I discuss it in greater length in Chapter 3. See CARDINE 1968, pp. 15-18 and RANKIN 2018 p. 177.

and is not dissimilar in principle, looks and execution to the *episema* found on the East Frankish high-low neume (although here the special element is not straight but slightly concave []). The other variant is uniquely Beneventan and has the usual two-dash high-low figure becoming a stiffer three-sided shape with two angles of roughly 90°. Here a thinner ascending initial mark connects with a thicker horizontal-then-descending mark []. This squared form appears with much greater frequency in B33 than in 10673.²³ While it is also present in 10673, its scribe still prefers the simpler addition of the horizontal trait on the top of the standard high-low neume. The stiffer high-low *episema* that the scribe of B33 prefers to use is another example of the increase in complication of ductus in the style of the B33 group.

EXAMPLE 3



B33, f. 21r

That the shape more often used in 10673 is closer to the East Frankish version suggests that the 10673 scribe was using a style also closer to foreign, imported models; whereas the scribe of B33, preferring an altered and complicated version of the high-low *episema*, is testimony to a later phase of the Beneventan musical script in which many foreign elements have been normalized into local shapes. The *episema* then disappears altogether from the Beneventan script around the 12th c. I argue this is one more evidence for the introduction of a notational system in Southern Italy borrowed from a place that did employ *episema*. Later neumators in the Beneventan area did not feel the urge to retain this nuance—one that likely only affected the graphical appearance of neumes rather than their sonic factual realization.

²³ I could count 106 occurrences of the second form in B33 and 57 in 10673 in pieces shared by both manuscript, almost twice as much.

I.3.ii Quilisma

Similar to *episema*, the Beneventan ‘quilisma’²⁴ too is a neume inherited from the East Frankish script—as its three-dented wavy shape makes clear. Beneventan scribes use it less and less through the 11th and early 12th c. and it virtually disappears by the late 12th c., substituted by a neutral ascending series of three notes.²⁵

Indeed the scribe of the stylistically earlier 10673 uses the *quilisma* more often than that of B33 does. The following table is a report of *quilisma* in pieces found in both manuscripts.

QUIL.	INT.	GR.	TR.	OFF.	COM.	TOTAL
10673	51	96	67	105	51	369
B33	43	68	63	80	43	297
RATIO	1.18	1.41	1.06	1.31	1.18	1.23

The seventy *quilisma* more in 10673 are the result of minimal but consistent differences in redaction: 10673 sometimes has a couple of *quilisma* more than B33 per piece, most of the times just one. In these occasions the scribe of B33 uses a standard three-note ascent instead of the ascent with *quilisma* (the whole ascent being called ‘scandicus quilismaticus’ in Cardine’s nomenclature). The largest observable difference in the use of *quilisma* across 10673 and B33 is in the offertory *Leva oculos*: the scribe of the former uses ten and that of the latter only four (see 10673, f. 7r; B33 24r-24v). I argue that the greater employment of *quilisma* in 10673 is again evidence of its scribe being the testimony of a very early style of Beneventan music writing, closer in time and practice to imported foreign musical scripts in which the use of this special neume is prominent. By the time of Type 1 sources, together with the crystallization of an inherently local and more standardized way of writing music that detaches itself

²⁴ *Quilisma* is the special middle sound of a particular three-note ascent usually spanning a minor third. Some French sources specify *quilisma* for series of descending sounds, too. There is no consensus over the exact interpretation of the special sound. See CARDINE 1968 pp. 145-53 and TIMOTHY MCGEE, ‘Ornamental Neumes and Early Notation’ in *Performance Practice Review* 9 (1996), pp. 38-65, esp. pp. 49-51.

²⁵ KELLY – PEATTIE 2016, pg. 56: “when the *quilisma* disappears from south Italian notation over the course of the twelfth century, it is typically replaced by a *scandicus*.”

from the inherited foreign matrixes, it also comes a progressive loss of interest for this nuance.²⁶

I.3.iii Joining of notes

One of the trademarks of the Beneventan musical script is the tendency to join in a single longer ‘neumatic chain’ groups of notes that could also be written as discrete, shorter neumes. I expand on the matter in the third chapter, now briefly pointing out that the scribe of the earlier style 10673 is much less prone to ligate series of notes together. There I show how lesser joining of notes is evidence for the scribe of 10673 lending greater attention to rhythmic specificity; here I treat this phenomenon as yet another constant difference among the two scribes and their styles. TAB. 7 shows ascending series of notes written as separate dashes in 10673 but ligated in chains in B33, B39 and B34: tendency to ligate single notes into longer chains increases in later sources and will indeed feature as one of the main characteristics of the classic style of the Beneventan script.²⁷

²⁶ The Beneventan script as a whole does not necessarily proceed in time towards a generalised loss of nuance: whereas by the second half of the 11th c. the use declines of imported techniques of rhythmic expression (to be discussed in Chapter III, section 2), in the same period Beneventan scribes also increased the use of many, apparently original special signs. One only needs to mention the so-called ‘musa’ or special *initio*, ‘gradata’ ‘aquasta’, ‘initio debilis’, the many different kinds of liquescences etc... They however fall outside the scope of the present work as they do not provide much insight into the origins of this script. I redirect the reader to KELLY – PEATTIE 2016, pp. 55-ff, currently the most complete and up to date overview of special Beneventan signs (although in the context of the local Beneventan repertoire).

²⁷ Other examples of this difference abound. The following is a partial list compiled from the first four masses shared by 10673 and B33 (10673: ff. 3v-7r / B33: 19r-24r):

10673: 3v, line 9 / B33: 19r b8 *noster*;

4v, ll. 1, 7, 11 / 20r, a4, b4, 20v, b2 *humiliavit, appropinquant, dominus*;

6r, last line / 23r, a5 *nomen*;

6v, l. 2 / 23r, a7 *tribulatione*;

6v, l. 6, 7 / 23r, b1, 2 *obumbravit, pennis*;

7r, l. 2, 3 / 23v, a1, 2 *scapulis, speravit*;

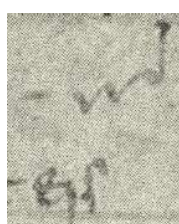
7r, l. 11 / 24r a4 *exaudi*.

TABLE 7: JOINING OF NOTES

10673



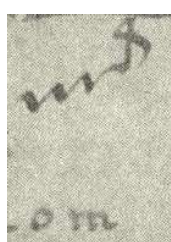
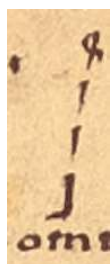
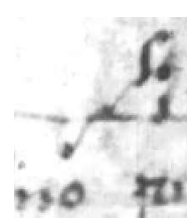
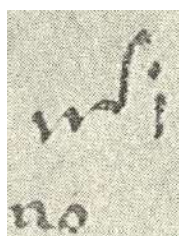
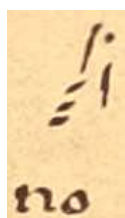
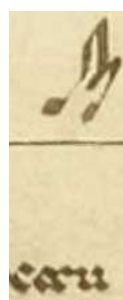
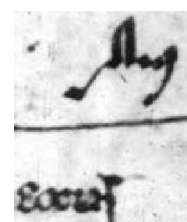
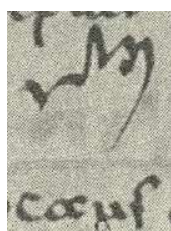
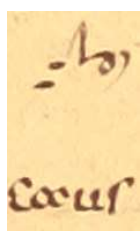
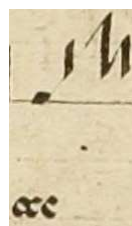
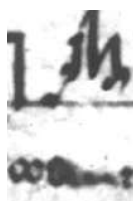
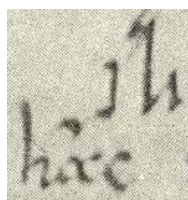
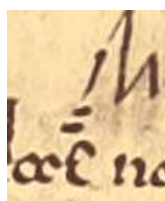
B33



B39

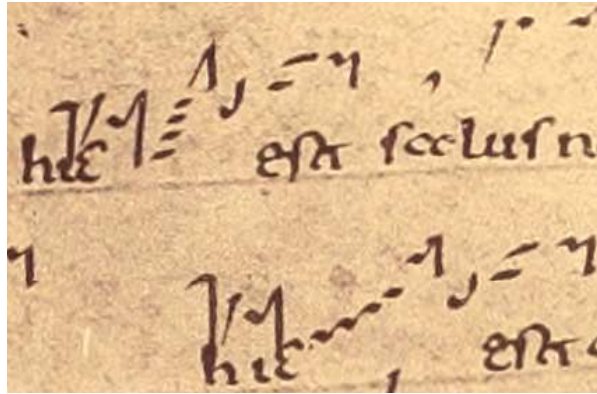


B34



A passage merits discussion of five ascending notes appearing twice in the antiphon *Cum audisset populus* in 10673 (ff. 22v-23r). The first ascent is written with a series of four single dashes plus a high-low; the second one, appearing one line lower in the page, has a three-note ‘*gradata*’,²⁸ a single dash and a high-low with *episema*.

EXAMPLE 4



10673, f. 23r

It is hard to tell whether this different treatment of the same repeated melody is due to reasons of rhythmic interpretation. The recourse to *gradata* could suggest more prominent singing—an analysis of the Gospel text might indicate so²⁹—or this may be yet another case of less standardized musical writing on the part of the 10673 scribe.



I.3.iv Diversity in the first and last element of series of descending notes

Beneventan scribes have a wide array of possible combinations to write series of three or more descending notes, as each note can be written as a dot, a dash variously oriented or the special neume ‘*pressus*’.³⁰ Nonetheless, the scribe of the earlier style 10673 uses more combinations than that of B33 and in later times several possibilities commonly

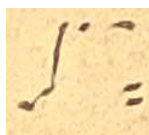
²⁸ *Gradata* is a special neume proper of the Beneventan script indicating a broad ascent of three or more notes. See KELLY – PEATTIE 2016, p. 56.

²⁹ John, Ch. 12, v. 12-13. *Cum audisset populus quia Iesus venit Ierosolymam acceperunt ramos palmarum et exierunt ei obviam et clamabant pueri dicentes pueri: hic est qui venturus erat pro salute populi, hic est salus nostra et redemptio Israel.*

³⁰ *Pressus* is a special sign standing for a single note, possibly indicating that the sound it stands for ‘pushes’ towards the following. See CARDINE 1968, pp. 88-103. For the use of *pressus* in the Beneventan script, somehow different than in other scripts, see KELLY – PEATTIE 2016, pp. 63-5 and below, pp. 175-9, 204-5.

seen in 10673 become rarer (e.g. the first element being a vertical dash) or disappear altogether (e.g. the last element being an horizontal dash). The mechanisms regulating the use and combination of a shape or another are not fully understood, though they likely reflect graphic customs and probably concur to rhythmic information.³¹ As with joining of notes, I postpone rhythmic analysis of this characteristic, too, to the third chapter, and limit discussion here to a graphical perspective. Again, I find the lesser array of combinations in B33 to be an evidence for the Beneventan script undergoing graphical systematization and stricter, more limited possibilities by the time of its group. It is telling, for example, how the scribe of 10673 recurs to ascending oblique dashes—that should be used for notes coming from below—even if the first note of the descending chain is at the unison with the note preceding, not below it []. Scribes of the B33 group are less prone to using the ascending oblique dash as the first element of a descending chain at the unison with the preceding note: their choices in this case is a horizontal dash [] or less often a *pressus*, both options in accord to the height of the previous sound. This results in increased precision of melodic information and it will become the standard in all later stylizations.

The scribe of 10673 also commonly uses a horizontal dash as the last note of a descent,



whereas that of B33 only does so in four cases.³²

The case of three consecutive undifferentiated horizontal dashes on their own—that is, not being part of a larger series of notes—is wholly exceptional in Beneventan script

³¹ KELLY – PEATTIE 2016, pp. 53-4.

³² Some other examples in 10673:

7r, l. 1 *ēum* (twice);

21v, last line *iniquitatem*;

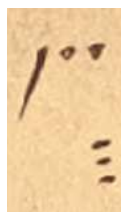
16v, l. 13 *introivit*;

15v, penultimate line *hominum*;

5v, l. 7 *portabunt* (twice).

The four cases in B33 are 32r l. a6 *universa*; 52r b3 *tuam*; 111v b3 *generatione*; 126v b2 *percipe*.

to the best of my knowledge, and I have only seen it used twice in B33.³³ Lastly, I report a four-note descent in 10673 (f. 11r) where the first element of said descent—a dot—is at the same time the last element of a series of notes at the unison.



Moot as this a description is, this particular case is rather a testimony to the flexibility and freer attitude of the 10673 scribe.

Section Two: What Makes ‘Classic’ Beneventan Musical Script?

In KELLY 1996 he distinguishes four ‘Types’ of the Beneventan script, from Type 1 to Type 4, set on chronological and stylistic basis:

Type 1, or early Beneventan notation (tenth to early eleventh century) [...] is written in campo aperto—with no line to guide the height of the neumes. They are finely drawn, thinner than text written by the same scribe. [...] Ascending and descending single notes are often drawn as slanting lines rather than as points, and there are a number of details that will ultimately disappear [in later times]: neumes with loops, episemata, the quilisma.

Type 2 (early to late eleventh century) [...] is more vertically oriented and matches the Beneventan script in many particulars: it includes many more strictly vertical strokes; it uses the contrasting thin and thick lines typical of the script; and it is written with a pen of generally the same breadth as that used for the text. It still lacks horizontal lines for orientation of the heightening [...] but the neumes are arranged so as to display pitches by the relative heights of the signs. The increasing thickness of the lines causes the disappearance of certain notational details used in Type 1 notation: episemata, neumes with internal loops.

Type 3 (late eleventh to twelfth century) [...] is the classic Beneventan notation, matching in its calligraphic precision the high point of the Beneventan script. [...] The neumes assume a regularity, an uprightness and an elegance that match the maturity of the script.

³³ Ff. 111r, l. a4 *eorum*, 135v, l. a5 *verba*.

Type 4 (thirteenth century –) [...] sees a decline in the regularity of the musical writing and an increasing fussiness in some unimportant details [such as] the “punctum rule” of Beneventan notation. This rule, part of the canon of classic Beneventan notation, holds that a punctum’s shape depends on its position: rising stroke ascending, lozenge descending, square at the unison; this is abandoned in later notations in favor of a uniform shape everywhere.³⁴

Furthermore, KELLY 2004 lists the earliest manuscripts or fragments in Beneventan textual script that carry musical notation. All “appear to date from no earlier than the end of the 10th century” and are labeled as “Type 1”.³⁵ This list includes both 10673 and B33 plus Exultet rolls and other fragments. I propose another distinction in the cataloguing of the earliest sources of the Beneventan music script, directing some of Kelly’s Type 1 documents towards a new grouping that I shall call ‘Phase o’.³⁶ The distinction between sources of Phase o and Type 1 musical notation cannot however be clear-cut, hinging as it does on a degree of variability—not on absence tout court—of the solid, patently sought-after calligraphic customs observable in documents from the new Type 1 to Type 3. My takeaway is that the new Type 1 sources, coming in the decades around the millennium turn, are testimony to a program of orthographic standardization and advancement that Beneventan scribes set up for their musical script. The exact same trajectory took place for the Beneventan textual script less than a century earlier: although Kelly does not cite him on the matter, Lowe too speaks of four chronologically progressive periods appreciable in the Beneventan textual script. Crucially, Lowe states that the passage between the first and the second period is accomplished in the wake of a “conscious reform”, and the third period is that of calligraphic accomplishment.

³⁴ KELLY 1996, pp. 89-92.

³⁵ KELLY 2004, pp. 37-38.

³⁶ I use of the expression ‘Phase o’ instead of ‘Type o’ since this the style of this group is soon to be substituted with a canonized, controlled one. I see ‘type’ somehow unfit as a word for such a magmatic, freer attitude.

The histories of Beneventan textual and musical scripts do follow the same paths at the same time (at least from the time that the practice of writing music appears in the Beneventan zone) and there can be no doubt that their changes in style up to the third most calligraphic stage were accomplished by homogenizing the teaching of writing so that scribes came to learn one and one way only of drawing letters and notes.³⁷ I will expand upon these matters in the conclusions of the work.

The reader can now retrospectively see that all of the differences among 10673 and B33 discussed so far in sections I.1 and I.2 are exemplary of the divide between the earlier stances of Phase 0 and a codified, reformed Type 1 style. Times and times again I have shown how the musical notation of 10673 is at once less regulated (as in the freer ductus for neume shapes) and more open to combinatorial variety (as in the greater array of possible elements in descending series of notes). I thus now address the features that, carefully applied by scribes of Type 1 onwards, define virtually all sources of the Beneventan musical script. In my view, these features are:

- dash modularity;
- directionality;
- alternance of thick and thin strokes of the pen;
- fixity of ductus.

It is impossible to quantify these four features as if they were objectively measurable. They are rather qualities more or less already at play in Phase 0 documents. Yet what Phase 0 sources lack compared to Type 1 is the conscious, clear, pervasive application of the four abovementioned features. It could be said that the passage from Phase 0 to Type 1 is concluded when they become orthographic rules. For sure, they are still occasionally evaded in Type 1 sources, sometimes blurring the boundaries between the two styles. The shapes of neumes studied in section I.1

³⁷ LOWE 1914, pp. 42-43, 121-26.

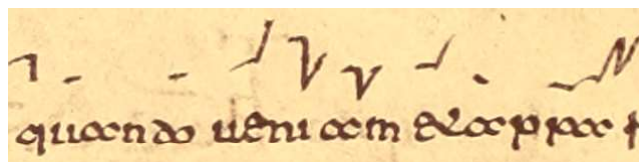
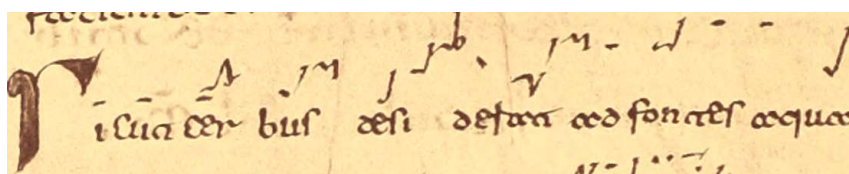
are an apt example: though they are more consistently fixed in B33 than in 10673, they are still open to some graphical variability in B33, too. This variability will then disappear for good from Type 2 onward in favour of almost total fixity, to the point where each neume will have one sole valid way of being drawn. I suggest this ‘orthographic trajectory’ warrants a re-evaluation of the appearance and chronology of music writing in the Beneventan zone: the regrettably scant Phase 0 sources describe a time when imported traditions had been almost but not yet fully absorbed into a syncretic adaptation—neumatic *ruminatio* if I may—that later resulted in the classical Beneventan musical script. I have little doubt that as of today B33 is, if only because of its size and completeness, the earliest and best testimony of a well-grounded and coherently codified musical script that is truly, uniquely Beneventan. I now compare the two manuscripts as paradigms of, respectively, Phase 0 and Type 1 styles.

II.1 DASH MODULARITY

I call ‘dash modularity’ the graphical quality of Beneventan neumes of two or more notes of being written as the factual combination of several basic dashes.

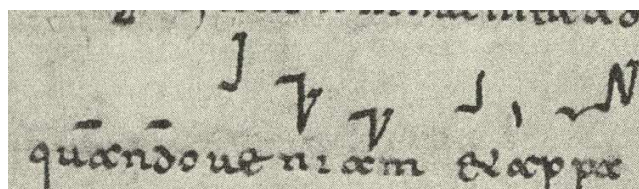
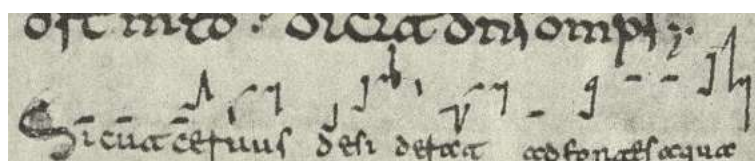
Eighth-mode tracts are a good standpoint from which to observe this feature, thanks to the frequent alternance of single and multiple-note neumes typical of their melodic style:

EXAMPLE 5/1 – 10673



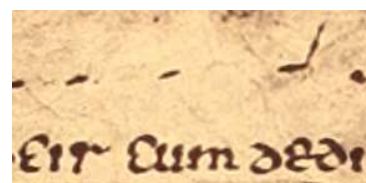
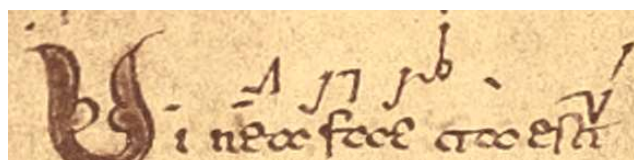
f. 35v

EXAMPLE 5/1 – B33



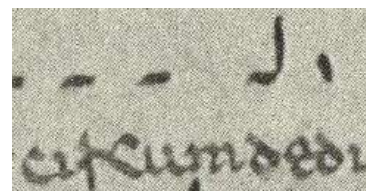
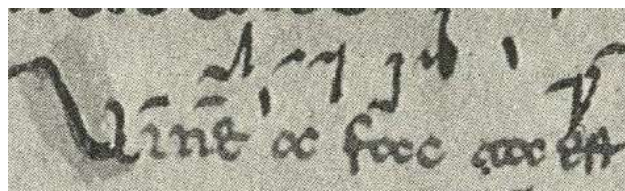
f. 77v

EXAMPLE 5/2 – 10673



ff. 35v, 36r

EXAMPLE 5/2 – B33



f. 76r

Excepting the neumes beginning with a *pressus*,³⁸ all two- and three-note neumes in EX. 5 start out with the drawing of an actual dash. Other pen marks follow this initial dash, finally resulting in the two- or three-note neumes. The scribe of 10673 pays less attention to dash modularity: it is less evident, less precise and sought after altogether. Sometimes the scribe starts out a multiple note neume with an actual dash (e.g. EX. 5/1: *aqua[rum]*), more often he does not. I stress once again that the four orthographic features of Type 1—perhaps with the exception of the alternation of thick and thin marks—are nonetheless present in Phase 0 sources; only here they stand as looser and much less systematic, even possibly open to contingency.³⁹

Turning for a moment to another manuscript, in a dozen folios of W6, a missal from the town of Canosa in northern Apulia, there appear an almost imperceptible detail in the design of the liquescent low-high neume. I date this manuscript on notational grounds around mid-11th c.⁴⁰ The main musical scribe of W6 stands as less calligraphic and up to date, if you will, than his colleagues who notated few other pieces in the same

³⁸ As on EX. 5/1 1: *cervus*, third neume; *desiderat*, second neume, etc...

³⁹ One case in 10673 seems to suggest so. In folio 3v ll. 2-3 the scribe pens down the very long conclusive melisma of verse *viam iniquitatis* of the offertory *Benedictus es Domine .. in labis* with far greater care for the vertical alignment of pitches—and thus a perceivable ‘increase’ in dash modularity—than what he does in the syllabic communio *Manducaverant* that follows right after on ll. 3-5. It is possible, I presume, that such a different realisation of the neumes reflects the wish to notate with greater vertical precision the virtuosic conclusion of the offertory verse as opposed to the humbler melody of the following communio.

⁴⁰ Virginia Brown dates it after 1054, but does not specify the reason for. See LOWE, *Beneventan script*, II edition, Rome: Edizioni di Storia e Letteratura, 1980, vol. 2, p. 13. Other scholars date W6 to a more generic 2nd half of 11th century:

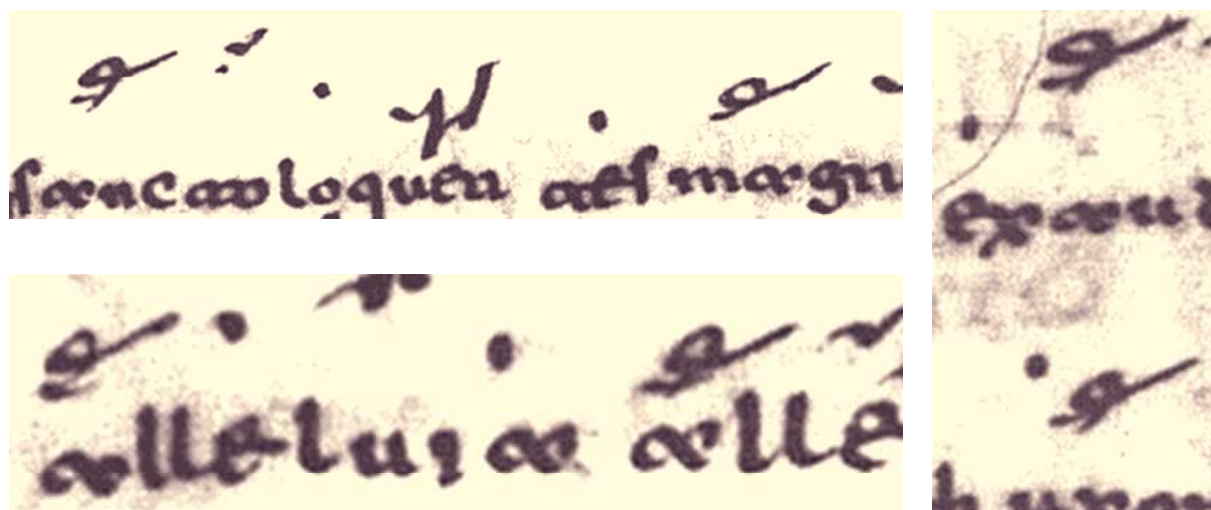
Missale Beneventanum von Canosa: Baltimore, Walters Art Gallery, MS W6, ed. by Sieghild Rehle, Regensburg: F. Pustet, 1972, p. 16: “De Zeitpunkt der Niederschrift unseres Codex liegt in der 2. Hälfte des 11. Jh.”

Klaus Gamber, *Codices liturgici latini antiquiores*, Freiburg: Universitätsverlag, 1963, Vol I, p. 244, No. 445 (“Plenarmissale in Baltimore”): “Ende des 11. Jh.” Only the curators of PM XV date it earlier: “du X-XIe s.” (PM XV, p. 76).

Incidentally, Walters 6 is the manuscript on which Kenneth Levy posited some of his evidences for the transmission of an early written archetype of the corpus of Gregorian chant. I am not aware of any other scholar that has studied its musico-liturgical contents beyond him. See KENNETH LEVY, ‘Charlemagne’s Archetype of Gregorian Chant’, in *JAMS* 40 (1987), pp. 80-108. The manuscript also presents an interesting case of alternance of the two variants of the Beneventan textual script: the copyist of the text still uses the ε-type c and shorter s and i of the Bari type, but the copyist of the musical text uses a fully Beneventan script.

manuscript (I was able to count at least four different hands based on the microfilm reproduction I consulted). His neumes being irregular and often haphazard, here and there other scribe(s) or reader(s) felt the urge to correct them: when the ductus of the liquescent low-high is but a thin hairline rising up, a dash was added at its base as if to declare that such a neume needs such a base, otherwise being defective and passive of being amended. This might be a testimony to the fact that dash modularity would not just be a graphical feature claimed by me a posteriori, but perhaps a requisite for a satisfactory drawing of the neumes in Beneventan scribal practices by mid-11th c.⁴¹

EXAMPLE 6

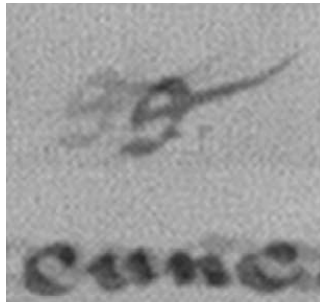


W6, f. 153r

Notice how in EX. 6 the neume on *magna* is the only one whose base has not been corrected. The exception is likely because this exemplary carries already a rather more solid, straight base than the others, one that must have satisfied the reviser's judgement. Ex. 7 below shows same neume as written by one of the secondary scribes. The microfilm reproduction here is badly shaded, but it is still appreciable how much closer this exemplar of liquescent low-high is to the Type 1 standards seen above (TAB. 3, I.1.iii), and how much more prominent its horizontal base is compared to those of EX. 6.

⁴¹ This is the only instance of calligraphic correction of neumes in Beneventan sources that I am aware of. Textual corrections in Beneventan manuscripts are on the other hand quite common: see LOWE 1914, pp. 93, 145 and 228.

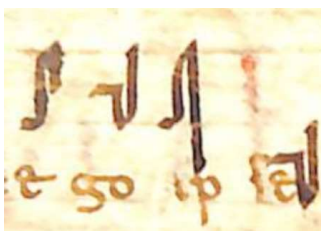
EXAMPLE 7



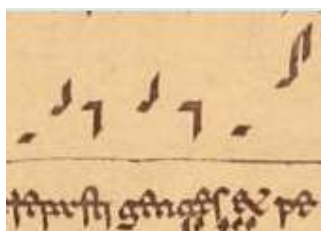
W6, f. 108v

In nuce already present in Phase 0, dash modularity reaches in Type 1 the status of a calligraphic norm providing a more geometrical disposition of neumes. This graphical quality is intimately tied to the increase of the diastematic precision of Beneventan musical sources: later Beneventan scribes obtain precise diastemacy by assigning to each dash that makes up a neume the appropriate vertical length in accord to the interval that it refers to. Such precision will necessarily drive the musical script to become more rigid and horizontal in Type 2 sources (B38, 40) then stiffer and more angular in Type 3 (B34, 39)—although this will not prevent Type 3 sources from being elegant, poised and calligraphic. Only in the latest Type 4 style dash modularity leads to a sort of exploded-view drawing: see how in B21 the low-high neumes are obtained with a very clear raising of the pen. The pen is raised in B39 and B34 as well, but their earlier scribes take care in ‘hiding’ this material aspect in favour of calligraphy.

EXAMPLE 8



B39, f. 37r



B34, f. 100v

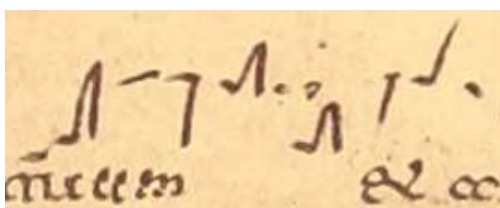


B21, f. 73r

II.2 DIRECTIONALITY

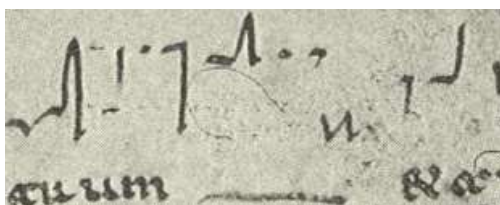
At once a stylistic and semiologic highlight of the Beneventan script, directionality is the possibility for the scribes to alter many neumes' initial dashes according to the height of the previous pitch.⁴² Thus Kelly and Peattie describe this aspect as seen in Type 2 B40: “these differences [in orientation] are the result of scribal convention, which indicates aspects of directionality and reflects the flow of the pen with the rise and fall of the melodic line.”⁴³ This remark also applies to Type 1 sources, whereas Phase 0 ones are as expectable less precise in their ‘directional accuracy’. Earlier scribes do follow the principle of directionality, but its graphical display under their quills is looser, as the next example show.

EXAMPLE 9 – 10673



f. 16r

EXAMPLE 9 – B33



f. 50r

⁴² Treitler, too, speaks of a “principle of directionality [...] common to all scripts” to express how “within [a] neume, at least, the upward direction on the page corresponds to an upward direction in the melodic figure” (TREITLER 2007, pp. 339-40). That is, he emphasizes how e.g. in a two-note low-high the second note will always be written higher on the parchment than the first, whatever the script considered. Kelly and Peattie’s meaning of the same word is more specific than Treitler’s, and I use it with explicit reference to the Beneventan script.

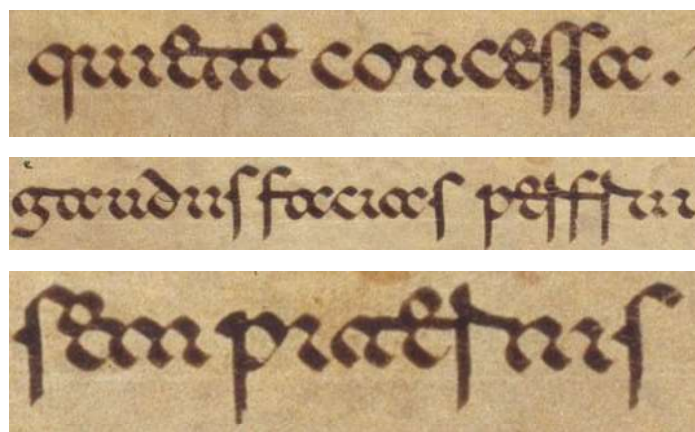
⁴³ KELLY – PEATTIE 2016, p. 52.

In EX. 9 the descending initial dash of the first low-high-low in 10673 is rather inappropriate by later scribal conventions, since the preceding sound is lower and the straighter dash seen in B33 respects directionality better. The same applies for the second low-high-low coming after the two dots.⁴⁴ B33's scribe greater awareness in applying directionality also shows in the far more oblique—almost perpendicular—last note shown in the example. In B33 a more pronounced dash modularity also helps the expression of directionality: a neat example of how the four features of classic Beneventan script all blend coherently at the same time, rather than appearing in separate occasions detached from one another.

II.3 ALTERNANCE OF THIN AND THICK STROKES

The alternance of thin and thick strokes is the result of complex calligraphic habits developed by Beneventan scribes both of text and music. It is easily identified as another major feature of classic Beneventan notation and it matches the same tendency found in Beneventan textual script.⁴⁵

EXAMPLE 10



British Library, add. MS. 30337,⁴⁶ Exultet roll, 12r l. 11 (BL numbering)

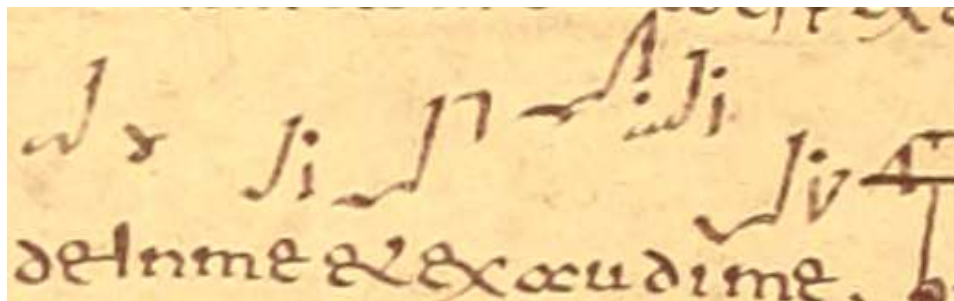
⁴⁴ This particular neume is the Beneventan 'cadential low-high-low'. I discuss some of its semiologic aspects below, pp. 127-31.

⁴⁵ See LOWE 1914, pp. 125, 130.

⁴⁶ Made in Montecassino, ca. 1060-80. Dating and provenance from CAVALLO – D'ANIELLO 1994, p. 249. Roll digitized at https://www.bl.uk/manuscripts/FullDisplay.aspx?ref=Add_MS_30337&

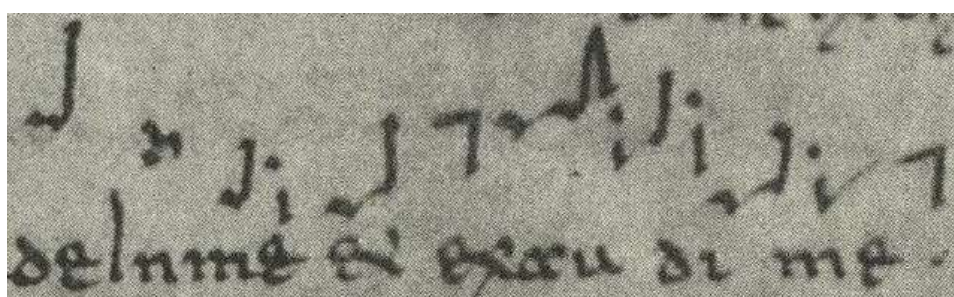
The following examples show how the scribe of B33 provides greater contrast to his neumes alternating between thin and thick strokes than that of 10673 does.

EXAMPLE 11 – 10673



f. 4v

EXAMPLE 11 – B33



f. 47v

Other than B33's abundant alternation of thin and thick strokes on all the series of ascending notes and on the last low-high, note how 10673 separates the ascending notes in two simpler strokes on *exaudi* (the base is slightly longer than the oblique stroke that rises for the second element: there one can see that the quill has been raised).

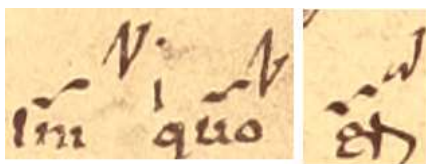
In EX. 12 below I focus on the ductus of the special low-high 'inflatilia'.⁴⁷ See how the scribe of 10673 draws it in two strokes on EX. 12/1, *quo* and *eri*[-*pias*] by raising the quill after having set its base. As in the previous example, the raising is made clear by the base being longer than the oblique ascending mark connected to it. On the other hand,

ga=2.211100951.302831367.1617297499-1281787252.1617297499. The curator of the British Library webpage provides an unqualified dating of ca. 1075 – ca. 1080.

⁴⁷ *Inflatilia* is a special Beneventan low-high neume. It seems to be the two-note equivalent of *gradata*. Described in KELLY – PEATTIE 2016, p. 65.

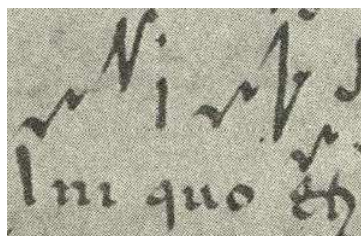
he still draws *inflatilia* with a single stroke most of the times, as the other cases in EX. 12/1 and 12/2 show. In B33 I could not find any *inflatilia* written with a lift of the pen, an indication that, unlike that of 10673, its scribe was following one fixed way of drawing it.

EXAMPLE 12/1 10673



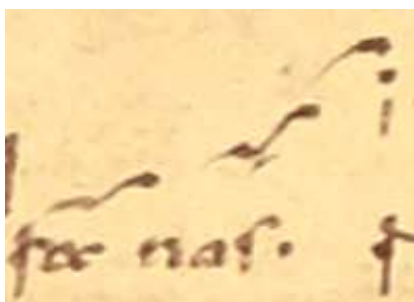
f. 20r

B33



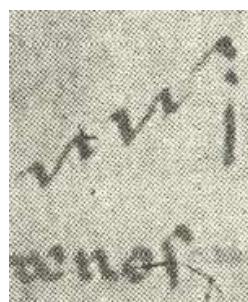
f. 55v

EXAMPLE 12/2 10673



f. 14v

B33

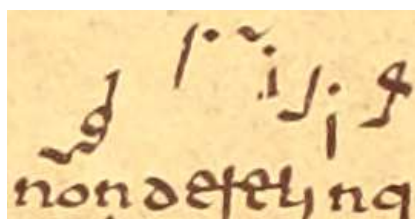


f. 48r

Given their complex shape, loops are ideal to observe differences in the alternation of thin and thick traits in the styles the two scribes use. The scribe of B33 draws the right-to-left descending phase of loops very thinly and with particularly precise oblique straight line, whereas that of 10673 draws loops that are altogether looser and less stylized and whose alternation between thin and thick traits is not as pronounced.

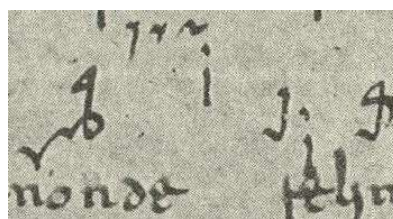
This difference in loop design is so pervasive in the two manuscripts that it is among the most characteristic elements distinguishing the two scribes and their respective styles, as the following examples should make evident.

EXAMPLE 13/1 10673



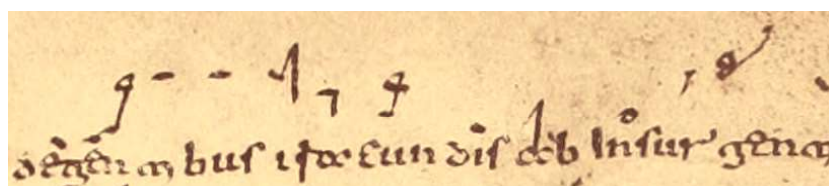
f. 19v

B33



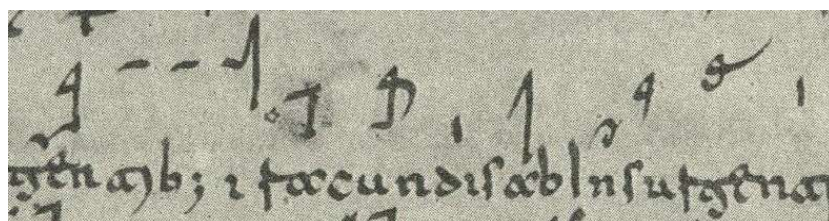
f. 55r

EXAMPLE 13/2 10673



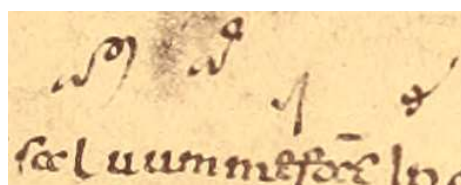
f. 20r

B33



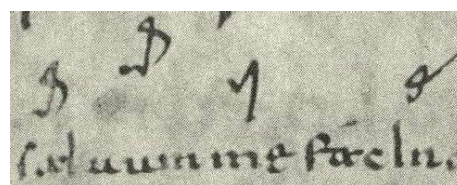
f. 55v

EXAMPLE 13/3 10673



f. 1r

B33



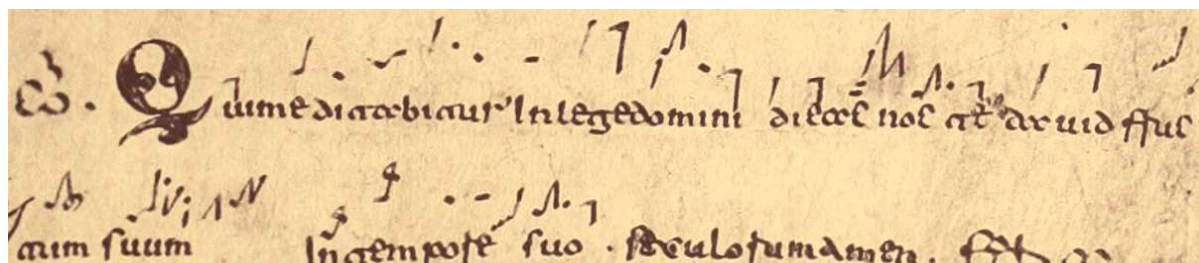
f. 18v

Abounding in special neumes, looping liquescences and three-note ascents, I propose the *communio Qui meditabitur* as a telling final example of the different degree

of the alternance between thin and thick strokes in B33 and 10673 (the same difference is also patent in the text).

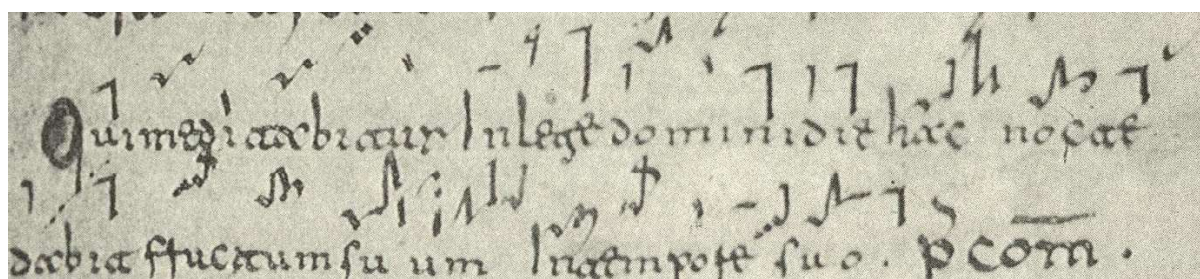
EXAMPLE 14

10673



f. 4r

B33



f. 20r

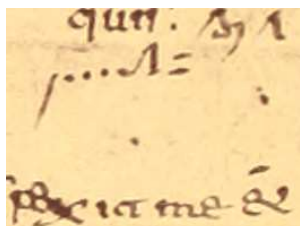
II.4 FIXITY OF DUCTUS AND OVERALL ORTOGRAPHY

In section one of this chapter I considered the shape of specific neumes, in section two the systematization of some specific features that are paradigmatic of classic Beneventan musical script, as appreciable in the style of the B33 scribe. Approaching the end of the first chapter of this study, I invite the reader to evaluate the musical notation of 10673 and B33 on a broader level, as if zooming out from single isolated aspects and neumes to examples that fuse together all that has been observed until now. Greater care in measuring and heightening each element according to the melodic line that results in a more geometric notation; dash modularity, directionality and alternation of thick and thin strokes ... they would not be as relevant if they did not blend under a fourth and last parameter, one that is somehow less objectively definable but that sums up the

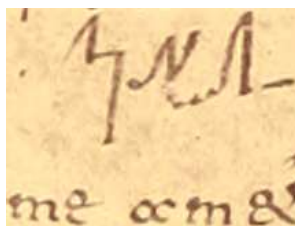
previous three. Roughly definable as fixity in the drawing of neumes and a greater overall complexity in their shape, it is an unquantifiable parameter whose accurate evaluation can only rest on personal acquaintance with the Beneventan script as a whole. Indeed it is the sum of the four elements that sets apart Type 1-onwards from the more fragmented, freer, less homogeneous Phase 0 style, not the isolated observation of a particular one. The following comparisons should make it clear enough.

EXAMPLE 15/1

10673

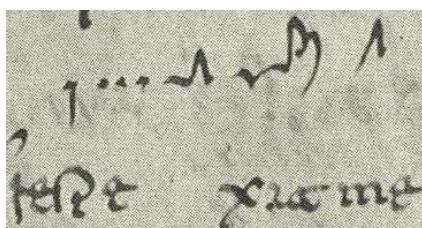


f. 14v

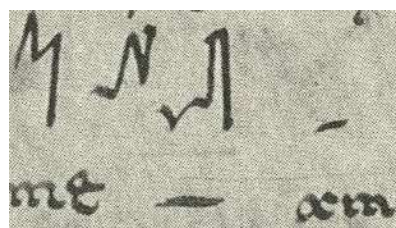


f. 14v

B33



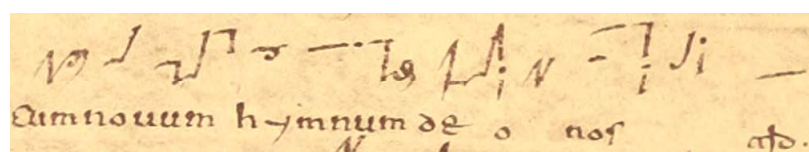
f. 48v



f. 48v

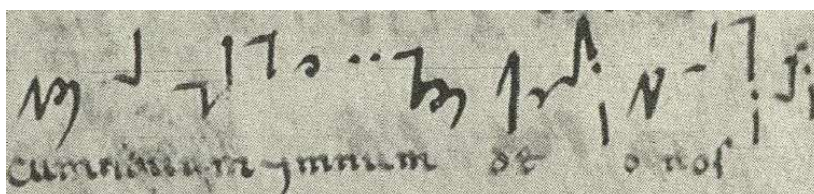
EXAMPLE 15/2

10673



f. 14v

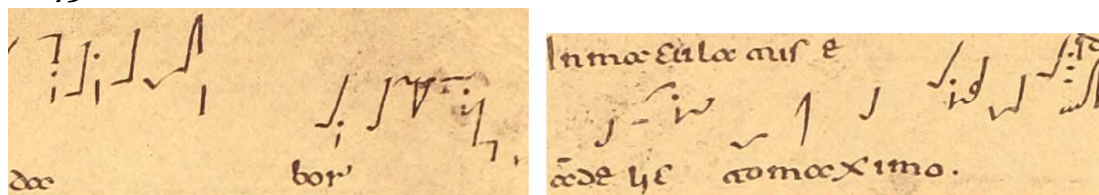
B33



f. 48v

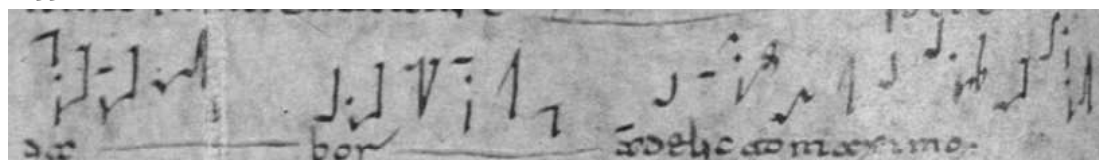
EXAMPLE 15/3

10673



f. 10r

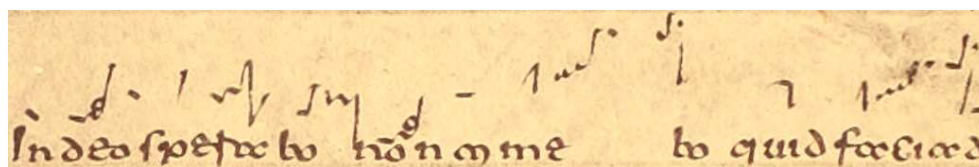
B33



f. 40v

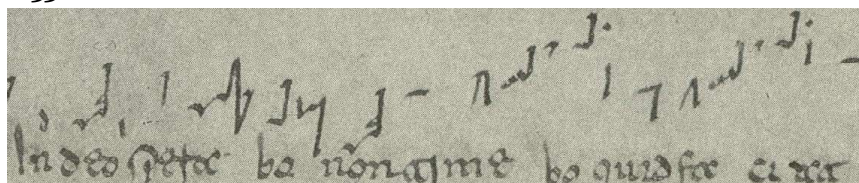
EXAMPLE 15/4

10673



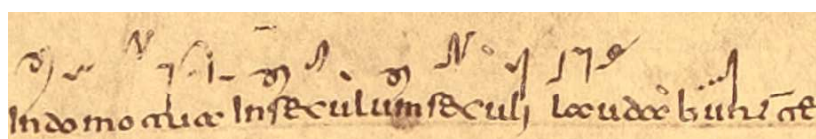
f. 9v

B33



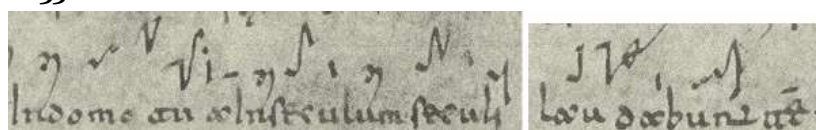
f. 39v

EXAMPLE 15/5 10673



f. 9v

B33



f. 39r

CHAPTER CONCLUSIONS

10673 and B33 represent two successive notational stages. As per current sources available, B33 is the starting point of a defined, well-seated custom of notating plainchant that is inherently, unmistakably Beneventan. Not just because of how it looks—there is no arguing that the musical script of 10673 is not Beneventan—but because of how it works. Everything that will rule and regulate the remarkably standardized Beneventan musical script until the late 13th century as far south as Salerno all the way to Istria and Dalmatia is already actively employed in B33 and in Type 1 documents.⁴⁸

In the passage cited above, Paolo Ferretti asks whether the Bari-type script of 10673 is a regional variant or an earlier textual style that has resisted over a longer time in a more peripheral region. The same question can now be translated to the two neumatic styles of 10673 and B33. What is patent is that 10673 was written following an earlier style in the development of the Beneventan musical script. Whether this also means that 10673 is older as an artifact than B33 is almost impossible to ascertain with current paleographic and semiologic evidence: on the one hand, one feels that the detail put into the elaborate decorations must have been matched by the best (and most carefully written) musical notation available at that time and place; on the other, the neumatic system of 10673 is in many respects so unique and dissimilar to every other contemporaneous Beneventan document that if one is to date 10673 later than B33 as most editors and curators have done, then the idea of its notation being a vestige of the past should be maintained. The alternative of a haphazard handling of music is surely

⁴⁸ The remarkable similarity of Beneventan notation across all latitudes of its dissemination is a feature that demands further critique and future studies. In particular, there seem to be no temporal discrepancies in the graphical evolution of the Beneventan musical script even in Dalmatia in respect to the core area. Miho Demovic has dated the earliest fragmentary document of Beneventan notation in Dalmatia to the 10th century. The musical notation of this pontificale fragment, as far as a low quality reproduction allows me to inspect, is indistinguishable from that of B33. I regret the current pandemic forbade me a much sought after personal evaluation of Croatian sources. Reproduced at <http://www.croatianhistory.net/etf/et12a1.html>.

to be ruled out because of the decorations, which sometimes even seem to sacralize the written content itself.

But it is not only a matter of graphical antiquity (which I regard patent, as well), rather one of systematization. The scribe of B33 employs customs—dash modularity, directionality, alternance of thin and thick traits, complexity of ductus—that the scribe of 10673 lacks or only hints at. And since all later Beneventan musical scribes carefully observe those customs in the following two centuries and more, I conclude that 10673 must be a witness of an earlier style of the Beneventan musical script. Unfortunately, the other very few Phase 0 sources carry so little notation (and often so simple, as in the Exultet rolls that I discuss in the next chapter) that a semiologic comparison between them and 10673 is impossible.

I also cannot emphasize enough how important it is that the exact same process of standardization happened less than a century before Type 1 sources in the Beneventan textual script from a cursive to a calligraphic style. In the words of Lowe, “the chief distinguishing feature of the Beneventan script is the adaptation of certain cursive elements to calligraphic purposes and their retention as essential parts of the script”.⁴⁹ Lowe indicates pre-Caroline features of Italian textual scripts as cursive elements that Beneventan scribes retained (“proclitic t-ligatures”, “enclitic i-ligatures”, “i-longa both initially and medially”...), whereas I consider many if not all the characteristics of the 10673 style as ‘cursive’: i.e. single-stroke ductus, rounder continuous loops, lack of (or lesser alternance between) thin and thick marks, the episema as a simple mark on top of a standard low-high neume rather than a two-stroke revised shape, and so forth... In the passage from Phase 0 to Type 1 all these elements and many other receive a standardization, an increase in ductus complexity and a general graphical refinement that allow for a better integration of text and music, ultimately

⁴⁹ LOWE 1914, p. 94.

leading to greater *tout court* calligraphy. Again I find support in the trajectory set out by Lowe now more than a century ago for the history of the textual script:

[in the 'tentative period'] the script is in a state of indecision and flux. [...] The general look of the script is uncalligraphic, the word-separation is poor. This period comprises the MSS. of the 8th century and the first three-quarters of the 9th.

[...] The second period seems to set in toward the end of the 9th century, as a result, unless I err, of a conscious script-reform. From this time onwards the script is fully equipped, in possession of all its essential features, and decided, so to speak, upon the course it is to follow. The letters have achieved normalized forms. [...] The general appearance is more calligraphic, and a distinct step has been made in regularity of alignment and word-separation.⁵⁰

I will further comment on this important passage in the conclusions of the study. For now I conclude the first chapter by stressing once again how lack of concordance between the Beneventan musical and textual scripts right from the earliest sources strongly suggests that the musical script was not autonomously developed in the Beneventan zone, but rather that it came as an import from a zone that used non-Beneventan textual script. The following chapter seeks to answer the question of whether that foreign area might be Rome or more generally Central Italy, as some musicologists—most notable among them Giacomo Baroffio—have argued and argue up to this day.

⁵⁰ LOWE 1914, p. 123-24.

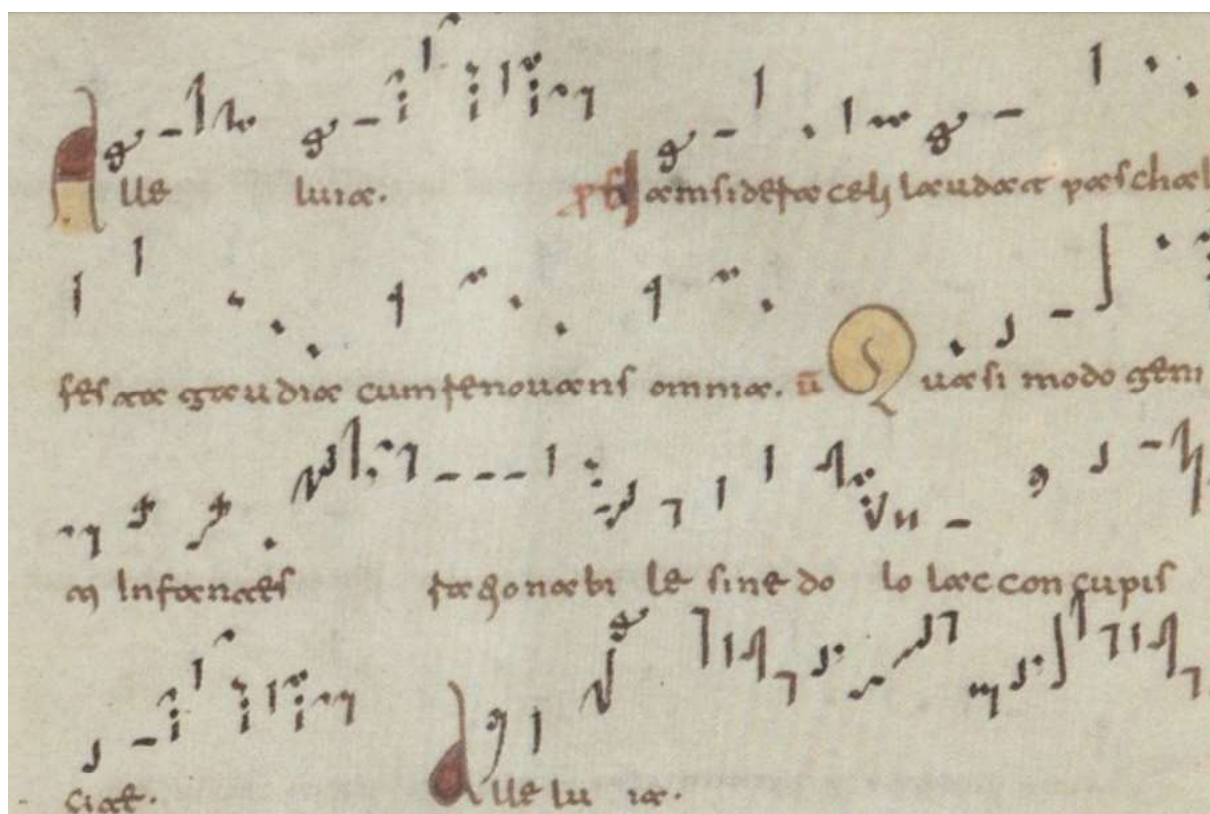
Chapter Two.

The Beneventan Origins of the Roman Musical Script

CHAPTER INTRODUCTION

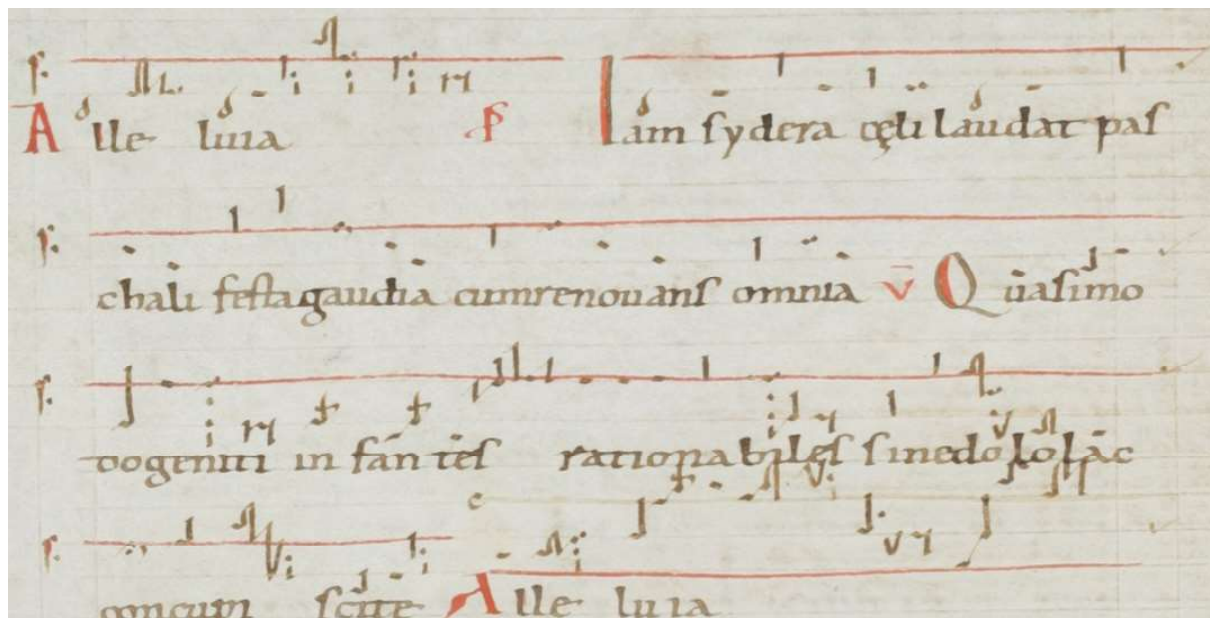
The more experimental quality of the few survived Phase o documents, their lesser attention to calligraphy, the total or partial lack of the four features described above ... when considered against how Type 1 sources from early 11th c. onwards follow precise conventions, pursuing a pervasive musical calligraphy matching that of the textual script, etc... these elements have brought me to conclude the previous chapter forwarding the proposition that the Beneventan musical script has its origins elsewhere than in the Beneventan area—the current documents of Phase o being the scarce testimonies of the period in which scribes had almost concluded moulding this foreign script into one truly local. Spanning out from that proposition, the question follows: from what cultural area Beneventan scribes received the practice of writing music? The second chapter examines this pressing hypothesis: whether the origins of Beneventan notation can be traced to Rome. Some scholars, most notably Giacomo Baroffio, have argued for such a case on the basis of the prominence of the papal seat as a primary cultural pole in Central and Southern Italy. Even without considering the medieval history of the two cities, a lineage of music writing practice between Rome and Benevento can be posited because their musical scripts show an undeniable graphic similarity:

EXAMPLE 1 – B₄₀



f. 4or

EXAMPLE 1 – BODMER 74



f. 87v

Roman and Beneventan notations share virtually all of their neumes' shapes, and both display a distinctive tendency to ligate chains of sounds in longer neumes, more so than in any other coeval neumatic families. They then diverge on the basis of three objective differences: 1) the Beneventan musical script is only found on the top of Beneventan textual script,¹ whereas the Roman musical script with the Roman adaptation of the Caroline script, sometimes referred to as *scrittura romanesca*, as well as scripts of Central Italy;² 2) Roman scribes use liquescences sparingly; by contrast, these abound in Beneventan sources, more so than in any other script in Europe; 3) the Roman script is not as regulated, standardized and ultimately, calligraphic, as the Beneventan is beginning with Type 1 sources in early 11th c.

The implications of points no. 2 and 3,³ paired with the evidence of chronology of early Beneventan and Roman sources with respect to the use of diastemacy and of the difference in certain neumes' shapes, lead me to conclude that the Roman script is derived from the Beneventan. My findings not only help to clarify an aspect of the history of the spread of music notation, but also offer a case of cultural importation into 11th c. Rome from the Beneventan zone. In this regard, musical notation finds a parallel in the borrowing of actual Beneventan chant items in some Old Roman sources, ultimately adding another element to the evidence that Rome looked with great attention at the culture of Benevento to integrate its musico-liturgical needs.⁴

¹ Other than in few exceptional cases, such as Lucca, Biblioteca Capitolare 606 ff. 150v-156v (late 10th – early 11th c.), a missal made in Salerno recently brought to scholarly attention by Gionata Brusa now Vercelli, Museo Leone Ms. 24 (late 12th – 13th c.) manuscripts produced in Subiaco, and, apparently, Franciscan breviaries from the second half of 13th c. (e.g BAV, Vat. Lat. 8737; Napoli, Biblioteca Nazionale VI G 38). Brief mentions of the Lucca and Subiaco manuscripts is in KELLY 1989, pp. 17-18 while the case of Franciscan breviaries is still completely uncharted.

² CHERUBINI – PRATESI 2010, pp. 389-396. Also see PAOLA SUPINO MARTINI, *Roma e l'area grafica romanesca*, Alessandria: Edizioni dell'Orso, 1987.

³ For economy of space I must disregard point number 1. However leaving the study of textual script aside will not affect the overall framing of my arguments.

⁴ KELLY 1994, 2000; PLANCHART 1993.

Few scholars, as notable as they are—Treitler, Boe and Baroffio among others—have come to conclusions too partial for what the topic demands. In what follows here, I first present what they and other scholars have said about the relationship between Roman and Beneventan musical scripts in the last fifty years: their opinions have contributed to the problem, since part of academia (especially Italian readers) has concurrently been brought to think that Roman is the most ancient. Then, first, I present palaeographic analysis of the earliest sources of Beneventan and Roman musical scripts; second, I discuss Beneventan and Roman neumatic differences; and third, I propose a re-evaluation of the role of Guido d'Arezzo in the evolution of music writing in Central Italy.

PREVIOUS LITERATURE

Giacomo Baroffio (BAROFFIO 1995-a) surveyed opinions of musicologists from the late 19th c. and the first half of the 20th. Leo Treitler discussed Beneventan notation in both of his essays on early plainchant notation (TREITLER 1982, 1984, both reprinted in TREITLER 2007).⁵ In the first he borrowed the concepts of 'iconic' and 'symbolic' notation from Peircean semiology. In symbolic notation there is not "anything inherent about the sign itself that suggests what is represented in order for it to function [... but] only the consistent habit of having it stand for that thing".⁶ Iconic notation "represents, by virtue of a resemblance that it bears to the thing represented, an isomorphism of some sort between sign and referent."⁷ Treitler defines Beneventan notation as a "reinforced iconic script", since it adopts "once symbolic forms for iconic function." He stresses how iconic

⁵ LEO TREITLER, 'Reading and Singing: On the Genesis of Occidental Music Writing' in *EMH* 4, (1984), pp. 135-208, reprinted in TREITLER 2007, pp. 365-428.

⁶ TREITLER 2007, p. 330.

⁷ *Id.*, p. 331.

scripts (“Lotharingian, Aquitanian, Beneventan”) are apter to represent the profile of the melody with greater diastematic precision.⁸ The Beneventan script would go one step further in that direction by including “eclectic elements [whose] greater explicitness extends the principle of directionality”.⁹ In the second essay Treitler briefly postulates that the tendency to indicate pitch-relations in the Beneventan script (“reinforced iconic script”) is an import of iconic models from northern Francia. He also states that “the earliest Roman notations are adaptations of Beneventan notation”,¹⁰ but does not further characterize or develop either propositions.

John Boe studied the earliest sources of Roman musical script in two articles. In BOE 1995 (reprinted and quoted as 2011/XI) he suggests that “Roman notation developed between 1020 and 1070 by imitating central-Italian notation”. He is quite set in separating Roman notation from that of Central Italy and in turn the latter from that of Benevento, defending the idea that Roman notation is “not a mere variety” of Beneventan.¹¹ He analyses four Roman manuscripts containing musical notation from before or around 1071—the year of compilation of Bodmer 74.¹² He dates around 1080-90 the first source he discusses, Vatican City, BAV, Barberini lat. 587 f. 155v, describing it as “diastematic Roman notation with dry-point lines”.¹³ He dates the second, BAV, Archivio S. Pietro 92, ff. 137v-8r,¹⁴ as circa 1060, describing its notation as “anachronistic ur-Beneventan”, “infected with Beneventan symptoms” and its liquescences as “only

⁸ *Id.*, p. 346.

⁹ *Id.*, p. 348.

¹⁰ TREITLER. 2007, pp. 425-6.

¹¹ BOE 2011, pp. XI/43-54, p. 45.

¹² Digitized at <https://www.e-codices.unifr.ch/en/list/one/fmb/cb-0074>.

¹³ Digitized at https://digi.vatlib.it/view/MSS_Barb.lat.587.

¹⁴ Digitized at https://digi.vatlib.it/view/MSS_Arch.Cap.S.Pietro.C.92.

three, though properly Beneventan in shape”.¹⁵ The third and fourth source, BAV, Biblioteca Angelica 1383¹⁶ and Arch. San Pietro H. 58 f. 49v¹⁷ are entirely adiastematic and employ “Dijonesque central French neumes of the types used in French monastic houses reformed or founded by William of Volpiano.” Boe sees a syncretic trend in notating music in Rome “during the fifty years between 1020 and 1070, [with] central-Italian [Dijon-derived] notation as a model but with Guidonian clefs and colored lines”.¹⁸ He himself ended the article stating that these hypotheses might have been “easily overturned by the discovery of even one passage in a manuscript written at and intended for use at Rome employing a notation foreshadowing that of Bodmer 74”.¹⁹ He eventually came to find such evidences and discussed them in BOE 1999 (reprinted and quoted as BOE 2011/XII).²⁰ Here Boe updates and makes more precise his theory of a dual Dijonesque-Guidonian notation by proposing that one “Romanesca” was in use in Rome already circa since 990-1000, as a palimpsest layer scantily visible today in Arch. San Pietro C. 105 f. 29r-30r.²¹ In his words this palimpsest layer would actually show a “proto-peninsular” or even “proto-Roman” form that matured over the course of the next century. A second notation arrived in Rome sometimes between the mid-10th c. and early 11th in those monasteries “touched by Cluniac and Dijonesque reforms” where Gregorian chant was more prominent.²² Then, during the second half of the century, this

¹⁵ BOE 2011, pp. XI/47-8.

¹⁶ Digitization not available, but the Boe article provides sufficient plates.

¹⁷ Digitized at http://digi.vatlib.it/view/MSS_Arch.Cap.S.Pietro.H.58.

¹⁸ BOE 2011, p. XI/56.

¹⁹ *Ibid.*

²⁰ JOHN BOE, ‘Music Notation In Archivio San Pietro C. 105 And In The Farfa Breviary, Chigi C. VI. 177’, in *Early Music History* 18 (1999), pp. 1-45. Reprinted in BOE 2011, pp. XII/1-47.

²¹ Digitized at https://digi.vatlib.it/view/MSS_Arch.Cap.S.Pietro.C.105.

²² BOE 2011, p. XII/41.

imported French notation was “replaced by the Guidonian version of Roman notation, cleffed and lined.”²³ A complete assessment of Boe’s theories will only be possible in the main body of this essay. For now it suffices to say that no documentary, palaeographical or semiological evidence available today suggests the existence of such a thing as a proto-peninsular notation.

Giacomo Baroffio has written over the course of almost twenty years several articles and essays describing notation of sources from Central Italy circa 11th – 14th c.²⁴ The following passage summarizes his point of view on the matter:

Despite the great variety of local scriptorial traditions, a single Italic notational culture established itself right in the centre of the Italian peninsula and spread from there to nearby areas. If we take as a starting point the city of Rome – or the Umbro-Laziale triangle Rome-Farfa-Narni – we can observe that the spread of the Nota Romana proceeded following concentric circles. Progressively, northern Umbria, Tuscany and Emilia were reached, and finally those Lombard areas that did not follow the Ambrosian rite. In the South, the Nota Romana spread to southern Lazio, northern Campania and Puglia (I do not agree with the tendency to consider the Beneventan notation as the notational matrix for many Italian musical scripts). Eventually, the area extended from Tuscany [...] to Marche, ranging from Lazio to Umbria, and from Abruzzo to Norman Puglia. It is highly plausible that during the tenth century, a graphic setting developed in the city of Rome or in a centre that was in close relationship with papal authority.²⁵

Baroffio regards Rome as the centre in which liturgical reforms in the course of the 11th c. gave the impulse for a renovation of musical literacy and writing:

our enquiry on Roman, Lazio and Beneventan sources suggest an influential cultural centre—in my opinion, Rome—as the laboratory where a primordial script was developed that, however variable, reveals an undoubtable homogeneity in the whole of Central and Southern Italy.²⁶

²³ Thus the discovery of S. Pietro C. 105 invalidated in his own eyes his previous theory that Roman notation resulted from the combination of the “Dijonesque” adiastematic matrix with Guido’s innovations.

²⁴ See above, p. 10, footnote 19.

²⁵ BAROFFIO 2011, pp. 115-6.

²⁶ BAROFFIO 1995-b, p. 31. Translation from Italian mine.

Cesarino Ruini has supported Baroffio's theories in two articles discussing musical notation in Emilia Romagna and upper-Central Italy.²⁷

Giovanni Varelli, also in agreement with Baroffio, hypothesizes that Beneventan notation descended from a Central Italian prototype. Thus far he has only expressed his opinion in the following footnote at the end of a study on Nonantolan musical script.

Without delving into more detailed discussion, it seems to me that the renowned Beneventan notation might be considered a canonization of types present in Central Italy from around 960-70, in turn influenced by transalpine models.²⁸

Italian scholars have sometimes labelled Roman notation as "Nota Romana" also from the use of this term in the *Historia Francorum* by the Aquitanian monk, historian and musician Ademar de Chabannes (989–1034). Ademar's mention of *Nota Romana* appears in the account of the dispute between Frankish and Roman cantors at the court of Adrian I in 787. The passage, in Ademar's own autograph manuscript,²⁹ reads

Correcti sunt ergo antiphonarii Francorum quos unusquisque pro arbitrio suo viciaverat vel addens vel minuens, et omnes Franciae cantores didicerunt notam romanam, quam nunc vocant notam franciscam.³⁰

The mention of *Nota Romana* by an historian and ground-breaking music scribe as important as Ademar seems to have given weight and plausibility to the concept of a Roman musical script as a well-defined phenomenon, foundational in its self-enclosed autonomy and documented in the authoritative historical testimony of Ademar.

²⁷ CESARINO RUINI, 'Political Changes and Music Writing Styles in 11th Century Bologna', in *Cantus Planus. Papers read at the 16th IMS meeting*, Wien 2011, Wien: Brüder Hollinek, 2012, pp. 349-54; *Id.*, 'Nota Romana In Aemilia: documenti sulla diffusione della notazione dell'Italia centrale nella diocesi di Reggio Emilia', in *Cantus Planus. Papers read at the 15th IMS meeting*, Dobogoko (Hungary), 2009, Lions Bay, British Columbia: The Institute Of Mediaeval Music, 2013, pp. 543-556.

²⁸ VARELLI 2015, p. 76 footnote 86. Translation from Italian mine.
I wish to thank Giovanni Varelli for his advices and for the occasions we have had in the recent past to exchange and confront ideas on the topic.

²⁹ JAMES GRIER, 'Adémar de Chabannes, Carolingian Musical Practices, and Nota Romana' in *JAMS* 56 (2003), pp. 43-98, p. 47.

³⁰ GRIER 2003, pp. 47-8.

If Ademar was speaking of a *Nota Romana* so can musicology today—the reasoning would be—since his mention provides an historical label with which to categorize the notated manuscripts that appear in the area of Rome since about the second half of the 11th c. But to do so is not only to accept an unique textual mention³¹ in the face of no evidence whatsoever of notation being employed or known in Rome by the latter 8th century—the time Ademar refers to—, but it is also to rely on an impressively organized falsification, as James Grier, the musicologist who has studied Ademar the most, proves.³² With the mention of *Nota Romana* and of singers sent by an unspecified pope Gregory to instruct Frankish cantors, Ademar

recorded [...] a propaganda campaign emanated from the Carolingians that accompanied the dissemination throughout the Frankish empire of the new chant and the books in which it was inscribed. [...] The Frankish cantors did not import a Roman style of notation [yet nonetheless] Ademar identifies the Frankish notation as adopted or adapted from his putative but false Roman notation.³³

All in all, nothing prevents the use of *Nota Romana* to refer to musical notation in the area of Central Italy, but it should be understood that Ademar's mention is in no way a justification to use that name: the *Nota Romana* Ademar refers to is a falsehood. On the other hand, there is no known contemporary mention of 'Nota Beneventana' or similar expressions, although Lowe does report six mentions of "Littera Beneventana" in documents as early as 1038.³⁴

The question of the relationship between Roman and Beneventan scripts has clearly not arrived at a conclusion—nor has reaching it actually been the primary goal of any scholar who has studied their affiliation. Here I propose the first detailed

³¹ *Id.*, p. 51.

³² Grier goes as far as calling "an eighth-century Roman notation a mirage" (*Id.*, p. 52).

³³ *Id.*, pp. 77-8 (with some rephrasing to accommodate the quote).

³⁴ See LOWE 1914, pp. 36-39.

study on the matter: I have tried to analyse every possible aspect worth considering and each time I was invariably brought to conclude that the Beneventan musical script lies at the origins of *Nota Romana*.³⁵ The findings that follow should rule out from future discussion the possibility that that foreign model standing at the basis of the Beneventan musical script is the Roman and make clear that it is actually the other way around. I posit my thesis on the grounds of three basic evidences: sources of Beneventan musical script appear earlier and with more frequency than sources of Roman; shapes found in Roman are clearly derived from more basic shapes found in Beneventan; and Roman is a relaxed variety of the very rule-specific Beneventan musical script.³⁶

I.1 EXAMINATION OF THE EARLIEST BENEVENTAN AND ROMAN SOURCES

In the following section I evaluate the earliest notated documents of Beneventan and Roman and Central Italian provenance. When put side to side, the relationship between these two groups evidences some notable constants: early Beneventan sources of Phase 0 musical notation are at once more numerous, dating earlier and more homogeneous in their style than sources from the areas of Rome and Central Italy. Analysis begins with each group's earliest datable source, Montecassino 269 for the Beneventan zone and Arch. S. Pietro C 105 for the Roman. The former (years 948-9) antedates of at least sixty years the latter (years 990-1005 ca.).

³⁵ As already mentioned I have only left out the matching of a regional textual script with that region's notation. Nonetheless, a closer enquiry on this particular aspect would still probably support my conclusion of Beneventan script as the basis for the Roman: the Beneventan musical script in time will merge more and more with the also progressively more geometrical Beneventan textual script, while Roman musical and textual scripts appear to be rather detached from one another.

³⁶ Here and elsewhere I obviously intend the adjective 'relaxed' in the sense of unfettered, freer from greater restraints.

I.1.i Montecassino 269

The scribe Iaquentus wrote the manuscript now Montecassino 269 while Montecassino's monastic community, following the Saracen sack of the abbey in 883, was in exile in Capua and Aligern its abbot. These two details safely provide a dating of this source to 948-9.³⁷ Iaquentus also wrote the scant, isolated and possibly unfinished musical notation that enriches the thanksgiving explicit to the book, as it is obvious from the fact that the neumes receive the same light-brown, green and red shading effect also used for the text in which Iaquentus subscribes himself.

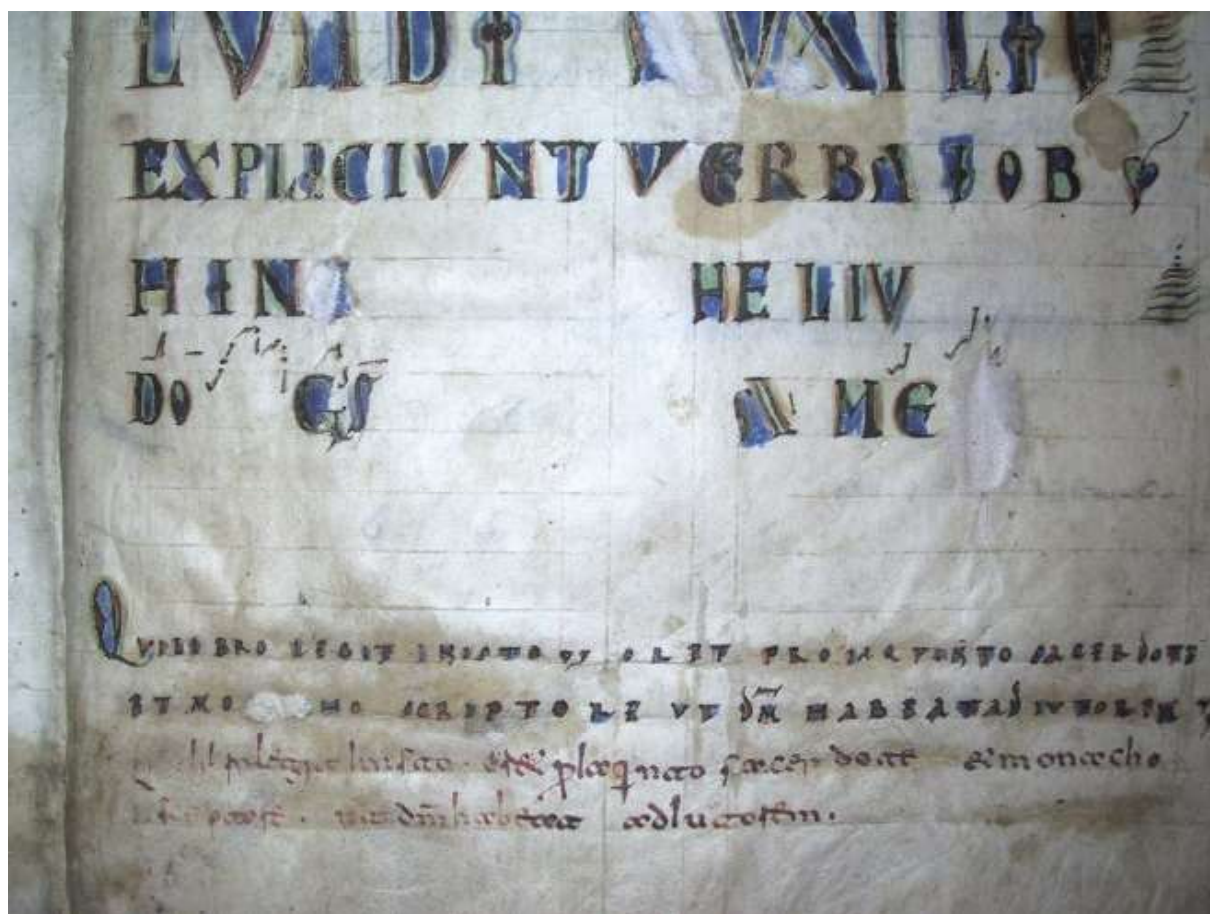
Kelly writes

The final words *Deo gratias Amen* are spread apart to receive the notation, and they have been decorated with green and red ink. [...] The neumes, few as they are, are in many ways typical of the earliest Beneventan musical notation. They are written *in campo aperto* [...]; finely drawn, much thinner than the text written by the same scribe; and they are only partially diastematic.³⁸

³⁷ KELLY 2004, p. 37 footnote 1.

³⁸ *Id.*, p. 38.

EXAMPLE 2



EXAMPLE 2 (DETAILS)





Montecassino 269, p. 351

Iaquintus' neumes fit the Phase o characteristics I described in the previous chapter: they lack for the most part alternation of thin and thick strokes, their geometry is rather rounded and supple and they are all invariably drawn with one stroke only, making for

an overall plain ductus. Nevertheless, they are carefully executed and a close look reveals an already well-developed system regulating and leading the scribal hand:

- The neumes have a solid relative diastemacy, quite impressive for the time. The scribe even hinges on of the dry-point line at least three times: for the first low-high neume in *deo*, for the last note of the melisma on said syllable, and for the dot that follows the second ascending movement on *amen*), as well as using it as an indirect reference throughout (see the low-high neume on *gratias* and the second ascending movement on *amen* running across the dry-point lines). Coming almost a century before Guido, the few neumes of MC269 prove that Beneventan musical scribes are sensible to pitch heightening from the very beginnings and to the diastematic potentialities that dry-point lines offer.³⁹

- Rather complex shapes typical of the Beneventan script are already present: the low-high-low neume in its two orientations (horizontal and descending vertical) indicating directionality; the two versions of the *oriscus* (the first shape used in Phase o and Type 1 sources , the second, swelled at the top, becoming the later standard ); the wavy three-note ascending neume; and finally the combination of dots and oriented marks as elements of ascending and descending neumes.

The notation of this *explicit* has little experimentality about it; it is regular, confident and swift at the same time. Dated 948-9, the few but careful neumes of Montecassino 269 show that musical notation was known and used in the Beneventan zone by that time in the most conservative dating. Yet a document-based date can be stretched back as early as 915 if considering that Iaquintus is also the known author of another manuscript (Montecassino 175) written in Capua somewhere between 915-34.⁴⁰

³⁹ Unfortunately this exemplar does not allow to tell if by this stage *custos* was employed, too, since the neumes do not reach to the end of the line and there is thus no need for it. The *custos* is a small heightened tick used as a visual aid: found in some scripts at the right end of the line, it anticipates what the first note of the following line is.

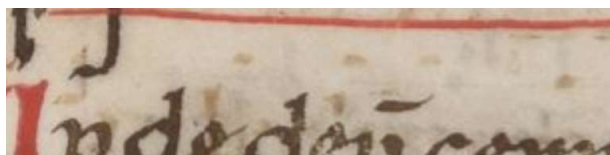
⁴⁰ A possible nineteen-year frame for dating is provided by the paschal table in the manuscript. See LOWE 1914, pp. 318-9.

Lowe emphasizes how Iaquintus “doubtless gives us the best penmanship and punctuation of the time”⁴¹ and that “perhaps it was not permitted to any but the master-scribes to indulge in a subscription”.⁴² If Iaquintus is proven as a musical scribe in the years 948-9 and to be the finest textual scribe (excelling in punctuation, too!) worth of signing himself in the years 915-34, it does not seem to me too much of a stretch to suppose he would be writing (or at least experimenting with) musical notation by the time he was compiling MC175.

I.1.ii Vat. Lat. Archivio S. Pietro C. 105

Fol. 29r of the office homiliary Archivio San Pietro C. 105 contains a notated version of the Song of the Sibyl whose first redaction (which Boe dates around 990-1005)⁴³ has been erased and superseded with new text and new notation in the late 11th or early 12th century. The scraping has rendered the first layer almost completely illegible. Even by direct observation of the actual manuscript the securely visible neumes are less than a dozen over more than a full column of material. The neumes that can still be discerned show a rather inelegant drawing of shapes that in coeval Beneventan manuscripts such as B33 had already reached a much higher level of finesse.

EXAMPLE 3/1



Arch. S. Pietro C. 105, f. 29r

In Ex. 3/1 there are a low-high neume and four dashes following. They are relatively diastematic: the first three are drawn just above the dry-point line that runs midway

⁴¹ *Id.*, p. 229.

⁴² *Id.*, p. 320. See also pp. 324-5 for further comments on Iaquintus' subscriptions.

⁴³ BOE 2011, p. XII/41.

through the original layer.⁴⁴ The last dot, likely one pitch lower than the previous three, lies on the dry-point line.

EXAMPLE 3/2



Arch. S. Pietro C. 105, fol. 29r

In Ex. 3/2 another low-high neume is again followed by three dots, the last two again likely one pitch lower. All dashes in Ex. 3/1-2 lack directionality, that calligraphic and diastematic feature that by this age Beneventan scribes coherently employ to designate the melodic direction notes are coming from.

Ex. 4 shows neume shapes in S. Pietro C. 105 relatable to Beneventan forms: the first one is cognate to a liquescent low-high neume ending with a half loop on top; the second neume is similar in many respects—especially its dash modularity—to the low-high-low seen in the above reproduction of Montecassino 269. Graphical differences such as the suppler curves of Montecassino 269 against the stiffer geometricity of S. Pietro 105 are well ascribable to the fifty or more years separating them.

EXAMPLE 4



Arch. S. Pietro C. 105, f. 29v

BOE 1999 provides a handwritten transcription of S. Pietro C. 105 (“diplomatic though inelegant” in his own words). He makes a laudable effort to bring this novel source to

⁴⁴ The dry-point line is barely visible in this reproduction. I suggest the reader evaluates it in the online reproduction at https://digi.vatlib.it/view/MSS_Arch.Cap.S.Pietro.C.105.

the attention of other scholars in times before our era of digitization. Two liquescent neumes from Boe's handwritten transcription are worth reporting and discussing (they are almost imperceptible in the current state of the manuscript and certainly impossible to reproduce here from digitization with any utility).⁴⁵



Arch. S. Pietro C. 105, Boe's handwritten transcription

Although the first neume leaves some doubts about its actual ductus and form (hence Boe's interrogative mark), it can be approximated to a liquescent high-low. The second one is easily identified as a liquescent low-high neume drawn in two strokes, one that in its original Beneventan configuration only has a single looping trait:



Indeed, the disaggregation of loops in two-trait crossed figures is a characteristic of Roman liquescent shapes. The original round form is found in the Beneventan area for a longer span of time—from Phase 0 through Type 1 script, then side to side with the two-stroke cross version in Type 2. Only in Type 3 will the latter become standard.⁴⁶

Thanks to the explicit in Montecassino 269 we can infer that scribes were writing musical notation in the Beneventan zone by the year 949 at the very latest. As said, Iaquinus' copying of another manuscript permits to believe Beneventan scribes had a musical notation by the first decades of the 10th c. To judge by Arch. S. Pietro C. 105, it is likely that the same practice began in Rome at the end of the same century, ca. 980-90.

⁴⁵ *Id.*, pp. XII/43-44.

⁴⁶ The low-high neume seems to be the neume whose liquescent version maintains a one-stroke ductus for longer, whereas other neumes (high-low, low-high-low etc.) turn to a two-stroke drawing earlier. B40 and BAV Ottob. Lat. 145 are examples of Type 2 notation where the looped and crossed versions of liquescences are still found side by side. B34, B39 and Montecassino 542 (*PM XXIII*) are examples of Type 3 in which looped one-trait ductus has disappeared in favour of the crossed two-trait version.

MC 269 exhibits a notational style neatly foreshadowing Type 1 style. The near absence of alternating thin and thick traits, and a ductus that is sleek, sinuous, and round yet still elementary characterize these few neumes as exemplars of Phase 0 script. Arch. S. Pietro C. 105 shows a close relationship with Beneventan notation in all its neumes, telling of a notation on the verge of separating from its Beneventan source: the low-high has the half-loop profusely found in the Beneventan sources that are earlier or coeval with this manuscript; the syllabic passages orient their relative diastemacy around drypoint lines but at the same time do not use the punctum rule very much present in the coeval Beneventan script; the liquescent crossed low-high in two strokes of Arch. S. Pietro C. 105 drawn by Boe is a graphic evolution of the swifter looped pes in one continuous stroke found in early Beneventan. The change from a one-stroke loop to a two-stroke cross, a constant of Roman notation, is already at play in its current earliest source.

It might be argued that both manuscripts show a magmatic, undifferentiated stage in which trying to ascertain Beneventan from Roman is only moot and that it might be more historically correct to speak of “Proto-Roman”, “Proto-Peninsular”, “Italic” notations or some such term, as Boe, Baroffio and Varelli have done. But this move is not backed up by any chronological or notational evidence currently available. All sources of 10th c. musical notation Central and Southern Italy—with the possible exception by a scant 5-10 years of Arch. S. Pietro C. 105—present Beneventan notation on the top of Beneventan textual script. By the central decades of the 11th c. musical notation is a reality diffused throughout the Beneventan zone, whereas the first exemplars of music notation in the area of Rome later than Arch. S. Pietro C. 105 have only survived from around 1060-70 onward.

Finally, I am aware of discussions asserting that the disappearance of Old Roman books at the hands of Pope Innocent III or Nicholas III clouds our insight into Roman musical notation and its early chronology, but I do not believe that such arguments,

which remain unpublished, are likely to be convincing, or to have any effect on the arguments presented here.

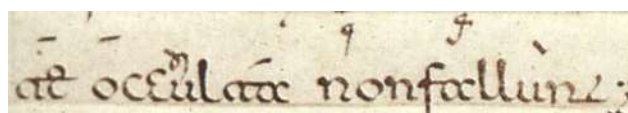
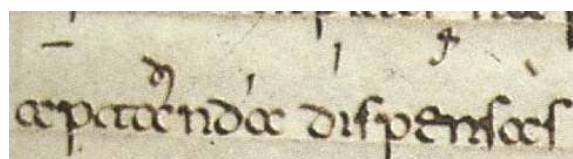
I.2 COMPARISON OF OTHER EARLY SOURCES

I now turn to other early sources of Beneventan and Roman musical scripts later than MC 269 and Arch. S. Pietro C. 105, with the understanding that early Beneventan sources can often be dated with good precision, which is never the case for Roman sources except for Bodmer 74. I consider most of the Beneventan sources presented below as exemplars of the Phase 0 style from late 10th – early 11th c.; and yet it is telling that, regardless of the lesser homogeneity the sources of this more experimental group display as opposed to Type 1 sources onward, they still make up for a more coherent stylistic group when set against the more scattered, heterogeneous Roman and Central Italian sources of about a century later.

I.2.i Early Beneventan sources, ca. 960-1030

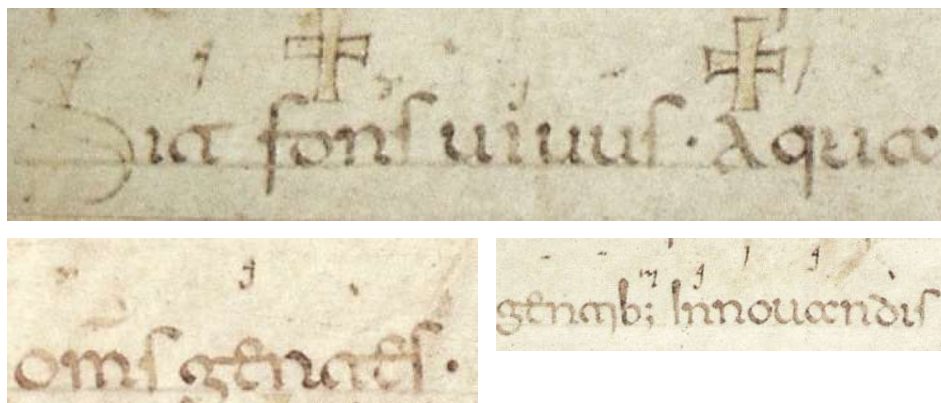
Exs. 5-6 taken from three rolls written in a timespan of 15 years in Benevento allow a very close look at musical notation in the Beneventan zone around 980.

EXAMPLE 5



Roma, Biblioteca Casanatense, Cas. 724 B I 13-1, Pontificale: Benevento, 969-70

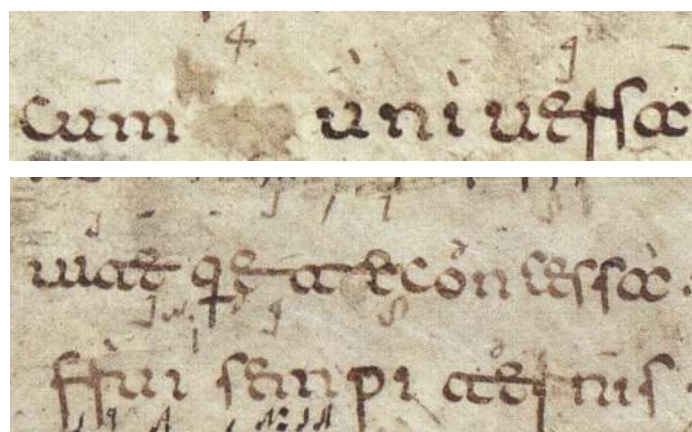
EXAMPLE 6



Rome, Biblioteca Casanatense, Ms. 724 B I 13-2, Benedizionale: Benevento, years after 969

The rolls Casanatense B I 13-1 (EX. 5) and 13-2 (EX. 6), however close in time and space and similar in their musical notation, were not actually compiled by the same scribes or authors: the decorators of EX. 5 Casanatense 13-1 are Beneventan whereas those of EX. 6 Casanatense 13-2 are Cassinese.⁴⁷ I would say the musical scribes are likely different as well. The scribe of 13-1 draws a liquescent high-low neume (see *aptanda*, *occulta*) with a more circular up-left to down-right loop, while that of 13-2 draws the same neume with a less full-circling loop whose tail end is up-right and lacking the descending phase (see *fons*, *omnes*).

EXAMPLE 7



BAV, Vat. Lat. 9820: Benevento, 981-87 (985-87?)

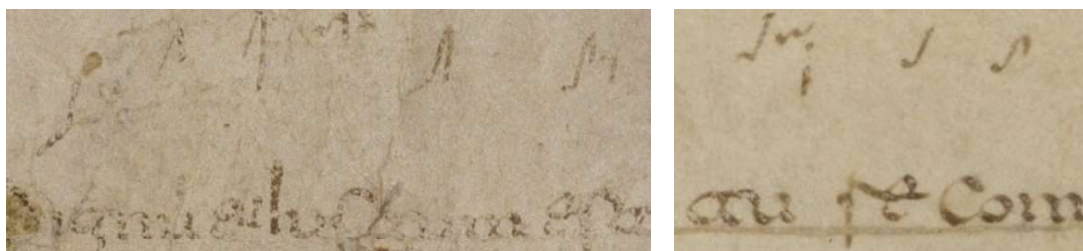
Notable features from the earliest musical layer of Vat. Lat. 9820 (EX. 7) include very thin, small neumes and liquescences being drawn with complete, fully circling loops,

⁴⁷ GUGLIELMO CAVALLO – ANTONIA D'ANIELLO (eds.), *Exultet. Rotoli liturgici del Medioevo meridionale*, Roma: Istituto Poligrafico e Zecca dello Stato, 1994, p. 89.

both characteristic of Phase o style. Unfortunately, the original neumes have been almost completely erased and substituted with the Type 3 style current at the time of this update—a common practice for Exultet rolls.⁴⁸

The slightly later Exultet roll fragment now in Manchester, UK (EX. 8/1) was probably written around year 1000, some two or three decades later than the previous three rolls of EXS. 5-7.

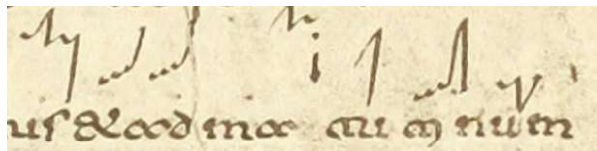
EXAMPLE 8/1



Manchester, John Ryland Library, Latin MS2⁴⁹

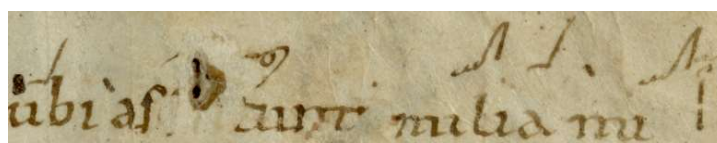
The neumes of this roll, badly preserved as they are, show clear stylistic affiliation with 10673 and the ‘Bamberg flyleaf’:⁵⁰

EXAMPLE 8/2



10673

EXAMPLE 8/3



Bamberg, Staatsbibliothek Msc. Patr. 101, front flyleaf

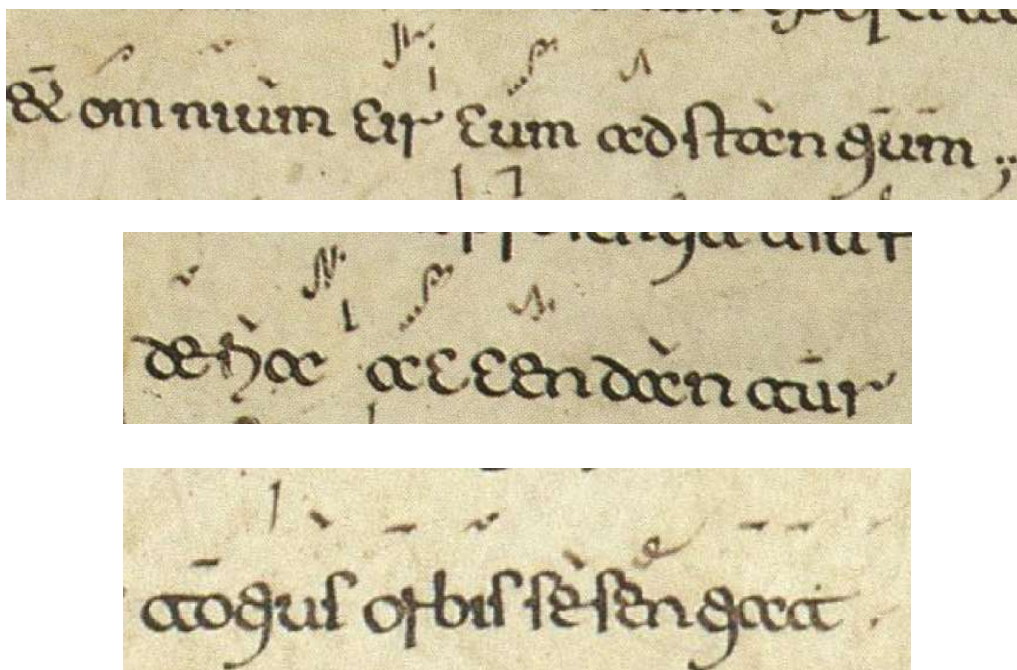
⁴⁸ KELLY 1996, pp. 95-6.

⁴⁹ The description in the Manchester University website (see above, p. 22, footnote 1) reporting the manuscript as written in Bari is unsubstantiated and unlikely. Its location might tentatively be set in Northern Campania but it must remain conjectural: see discussion by Lucinia Speciale in CAVALLO – D’ANIELLO 1994, p. 119-22.

⁵⁰ I discuss in greater detail the Bamberg flyleaf below, pp. 99-100.

When put against the four rolls presented above in EXS. 5-8 the sumptuous Bari Exultet 1 (EX. 9), written circa 1025⁵¹ and in my opinion the most elegant testimony of all Beneventan musical notation, demonstrates the stylistic progression in the sixty years ca. 970-1030—that is to say, the passage from Phase 0 to Type 1.

EXAMPLE 9



Bari, Archivio del Capitolo Metropolitano, Exultet 1

Notice the greater care of the Bari scribe for heightening neumes,⁵² the neater, clearly sought after differentiation between thick and thin lines and later, Type 1-onward graphical habits such as two-trait *oriscus* (*omnium*, *de*, *a*) and the occasional two-stroke, non-looping liquescences (*circum*, *accendantur*).

1.2.ii Early Roman and Central Italian sources, ca. 1000-1080

Turning now to Roman and Central Italian sources, extremely few have come down to us from the later decades of the 11th c., and none from or before the first half of the

⁵¹ CAVALLO – D'ANIELLO 1994, p. 129.

⁵² Melodic restitution in in KELLY – PEATTIE 2016, pp. 367-81.

century, with the possible single exception of S. Pietro C. 105. The following is a partial list, but probably not far from being complete:

Roman notated sources dating 2/2 11th c. with notation integral to the main body

Vatican City, BAV, Arch. S. Pietro C. 92, ff. 137v-8r

Neumes for the Prayer of Jeremiah that are contemporary to the main text. Boe reports a date of around 1080.⁵³

BAV, Arch. S. Pietro F. 11 pt. A

Collection of various special rites, masses and offices with Old Roman music, possibly last decades of 11th.⁵⁴

Cologne, Bodmer Collection 74

The oldest sizable manuscript of Old Roman chant and one of its three main graduals, written by the scribe John in 1071.

Oslo, Schoyen collection 1665

A fragment for the dedication of a church, possibly written in Tuscany. Its cleffed notation is safely ascribable to Central Italian standards of the 2/2 11th c. (confront it for example with syllabic passages from Bodmer 74 such as in f. 12r).⁵⁵

BAV, Vat. Lat. 5319

Slightly later than Bodmer 74, it is the second of the three graduals of Old Roman chant.⁵⁶

Bannister dates it from a generic 12th c., Stäblein from mid-11th to mid-12th c. Both scholars do not characterize their dating.⁵⁷

Roman notated sources dating 2/2 11th c. with notation added in margin

BAV, Barb. Lat. 560, f. 16v⁵⁸

Heightened *Dominus vobiscum* added by a later hand, possibly 2/2 11th.

~~BAV, Barb. Lat. 421~~⁵⁹

⁵³ BOE 2011, p. XI/48.

⁵⁴ Digitized at https://digi.vatlib.it/view/MSS_Arch.Cap.S.Pietro.F.11.pt.A.

⁵⁵ Digitized at <https://www.schoyencollection.com/music-notation/toscana-neumes/church-dedication-service-ms-1665>. The proposed dating of “circa 1000” in the webpage is far too early judging from the ductus of both text and music.

⁵⁶ The third one is the late 12th c. BAV, Arch. S. Pietro B. 79 reproduced in facsimile in BAROFFIO 1995-b.

⁵⁷ BANNISTER 1913, vol. I, p. 136; BRUNO STÄBLEIN *Die Gesänge des altromischen Graduale Vat. Lat. 5319* (Monumenta Monodica Medii Aevi II), Kassel: Barenreiter, 1970, p. ix. Digitized at https://digi.vatlib.it/view/MSS_Vat.lat.5319.

⁵⁸ Digitized at https://digi.vatlib.it/view/MSS_Barb.lat.560.

⁵⁹ Digitized at https://digi.vatlib.it/view/MSS_Barb.lat.421.


Probatio pennae and wordless notation added in margin in several places. This 11th c. Beneventan manuscript travelled to Rieti, where Central Italian hands added marginal notation throughout the years. The evolution of the shapes of neumes is well visible: compare the addition of f. 6r with 7r.

BAV, Barb. Lat. 587, 155v

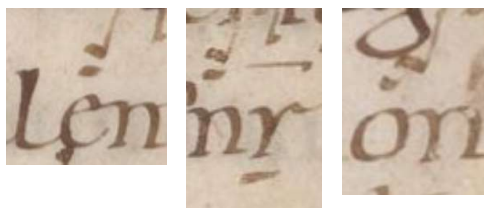
Incipit of the Prayer of Jeremiah added in the upper margin of this folio. Boe reports a dating around the last decade of 11th c. on the basis of previous studies.⁶⁰

Analysis of some of these Roman sources reveals an adaptation of Beneventan forms and relaxation both of shapes and attention to interpretive nuances.

Arch. S. Pietro C. 92, ff. 137v-8r, Prayer of Jeremiah

A rather coarse source of Roman notation. One salient characteristic is the presence of the Lotharingian shape for *quilisma*.⁶¹ The scribe of S. Pietro 92 simplifies the ductus of this neume's lower element (EX. 10/1) by drawing two parallel horizontal strokes rather than a semi-closed oblique "8" as seen e.g. in Laon 239 [].

EXAMPLE 10/1



Arch. S. Pietro C. 92, ff. 137v-8r

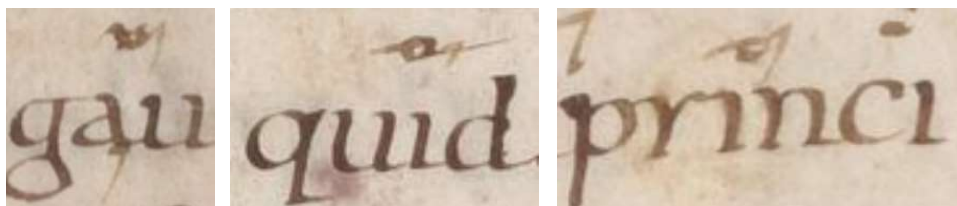
Boe puts emphasis on the three liquescences present (EX. 10/2), defining them as “properly Beneventan in shape” and the whole source as “anachronistic ur-Beneventan”.⁶²

⁶⁰ BOE 2011, p. XI/47.

⁶¹ It is odd that Boe, always a very precise observer, failed to report this detail. This *quilisma* is also found in the late 11th – early 12th c. BAV Vat. Lat. 10646 (see BANNISTER 1913, vol. II, tav. 67a). The ‘Dijonesque’ notation Boe talks about (see BOE 2011, pp. XI/51-56) uses the dented Frankish shape of the *quilisma*, rather than the semi-circular Lotharingian. ‘Dijonesque’ influences thus are not the reason for the presence in Roman sources of the semi-circular *quilisma*.

⁶² BOE 2011, p. XI/48.

EXAMPLE 10/2



Arch. S. Pietro C. 92, ff. 137v-8r

I would prefer to head this document under the filing of early Roman musical notation, although quite crude and unprecise. Reasons for the cursive quality of its neumes are perhaps explained by the simplicity of the melody to be notated. It is important to acknowledge the syncretic presence of the Lotharingian quilisma and that the poorly written looped high-low liquescent neume must not be considered Beneventan. This characteristic Roman shape has left and right halves peaking at the extremities to descend and meet at the centre. For the sake of simplicity of description, I might wish to call it a 'swallow-shaped' high-low liquescent neume. A better drawing of this neume can be found in Bodmer 74 and Arch. S. Pietro F. 11 pt. A—in both the resemblance to that bird's stylization is easy to see:

EXAMPLE 11 – BODMER 74



ff. 1r-1v

EXAMPLE 11 – ARCH. S. PIETRO F. 11 PT. A



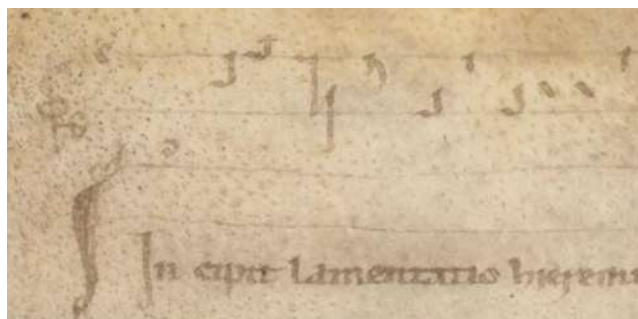
ff. 41v-42v

The swallow-shaped high-low neume can be contextualized in the complication and fragmentation of many liquescent forms in the passage from Beneventan to Roman and Central Italian styles. The infelicitous, poor ductus seen in Arch. San Pietro C. 92 might simply be blamed on to the scribe's poor understanding or poor memory for the sign—or both. The fact that this is ascribable to a Roman source of around 1080 rather than a Beneventan one is not casual, I think: the soundness, control and homogeneity of neumes under the hands of Beneventan scribes seem to indicate that the less stable Roman neumes were first developed in the Beneventan area and later imported north to Rome, with Roman scribes putting less care into calligraphy and homogeneity of ductus.

Barb. Lat. 587, ff. 137v-38r

Barb. Lat. 587, ff. 137v-8r has the first line of Jeremiah's prayer notated in a margin addition. Boe dates the whole manuscript, including the notation, to the last decades of 11th c.

EXAMPLE 12



Barb. Lat. 587, ff. 137v-38r

The typically Roman non-looping, twofold liquescences ductus is found over *Incipit* and *lamentatio*. Directionality is overlooked on the two oblique dashes on *Hieremie*—this scribe does never actually use single horizontal dashes. It is telling of Boe's view of the linkage of Roman and Beneventan scripts that he describes Barb. Lat. 587 as

“infected with Beneventan symptoms”, i.e. liquescent neumes.⁶³ I cannot but note how a theory of Roman style of writing music descending from a Central Italian style that is in turn “infected” with isolated Beneventan traits is unnecessarily convoluted.

Early Beneventan sources greatly exceed in number and are dated far earlier than Romans, also displaying greater graphical finesse and semiologic richness. The turn-of-millennium S. Pietro C. 105, the earliest testimony to Roman musical notation currently available, presents neumes that are hardly distinguishable from those of Benevento but that are drawn in a rather rudimentary way. After that, Roman exemplars from 60-80 years later do show some differences compared to the Beneventan script—a sign that the Roman script had by then acquired a certain independence from its Beneventan roots—but those differences, as I now turn to explain, mostly consist of relaxation or lack of application of parameters firmly employed in the Beneventan script. These relaxed parameters are:

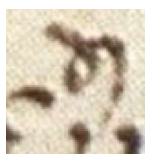
- lesser use of liquescences and change in their drawing;
- absence of directionality;
- lesser differentiation in descending chains of notes.

II.1 SEMIOLOGIC DIFFERENCES: LIQUESCENCES

As seen above, Phase 0 Beneventan scribes mostly draw liquescent neumes with relatively straightforward, one-stroke continuous loops of some sort. Type 1-onward scribes complicate those same shapes by alternating thick and thin strokes, adding angles and raisings of quill so that loops might now become, for example, triangles, ovals, half-loops and so forth. It is out of doubt that in comparing Phase 0 and Type 1 documents, scribes of the former draw shapes that stand behind in an imaginary line of

⁶³ BOE 2011, p. XI/47.

ductus evolution. For example, this continuous Beneventan loop



is an easier shape to envisage and draw than the twofold second shape.



The second (from Bari Exultet 1, ca. 1025, Type 1) shows a clear modification for the sake of calligraphy that brings an increase in complexity over the first (from Casanatense roll 13-1, 985-7, Phase o). Ex. 16 shows similar ever-increasing degrees of alternance between thick and thin traits, angularity, fragmentation of fundamental shapes, increases of raisings of the quill etc. in later sources of the Beneventan musical script.

EXAMPLE 13



Avezzano Exultet, 1057⁶⁴



B39



B34



B21

All sources from Rome and Central Italy exhibit at least some of these graphical complications, above all an increase in the raisings of quill and in the fragmentation of shapes. Most importantly, the Roman equivalents of Beneventan loops almost always come to be crosses of some sort. Thus Baroffio writes in regard to Roman sources:

The frequent liquescent forms show an evolved stage of the graphical custom [of loopy liquescences] [...]. [Archivio S. Pietro] B. 79 does not present eyelet shapes, rather a stylization [over their original form].⁶⁵

But if Roman manuscripts do exhibit a stylization of more original shapes whose

⁶⁴ CAVALLO – D'ANIELLO, p. 221

⁶⁵ BAROFFIO 1995-a, p. 30. Translation from Italian mine.

graphical changes can be traced across time, those original shapes are to be found nowhere else than in Beneventan manuscripts. The flyleaf of the 10th c. Bamberg, Staatsbibliothek Msc. Patr. 101 proves to be an excellent case for my point (EX. 14).⁶⁶ This flyleaf of a manuscript of Patristic works reports the antiphon *Cum venerimus ante conspectum*. The text up to *angelorum chori* is written in a minuscule Romanesca hand that did not intend notation to be added (as words are not spaced to accommodate music). Later a single Beneventan hand added Beneventan musical notation to the previous lines and completed the missing lines in Beneventan textual script, spatialized to accommodate music. Hardly datable as it is, it must still be one of the earliest documents of Beneventan notation judging by its looks.⁶⁷ It attests the rawest, most wholly circular looping ductus for liquescences among any notated manuscript of Central and Southern Italy.

EXAMPLE 14



Bamberg, Staatsbibliothek Msc. Patr. 101, front flyleaf

This source of Beneventan notation is as far back in graphical development as we are currently allowed to penetrate. Its liquescent looping shapes clearly anticipate the more refined but cognate shapes of Phase o sources such as 10673. I am convinced that this flyleaf decisively points to the Beneventan as the oldest archetype of notation in Central and Southern Italy. The reason why one could not more broadly speak of this as a ‘proto-Italian’ notation is as simple as noting that it is a Beneventan hand that added the missing text lines in the Beneventan script.

⁶⁶ Digitization link above, p. 22, footnote 1.

⁶⁷ Brown dates the flyleaf to a generic 10th c. See VIRGINIA BROWN, *Hand-list of Beneventan manuscripts*, vol. II of LOWE, *The Beneventan script* (reprint), Rome: Edizioni di storia e letteratura, 1980, p. 15.

Ultimately, early Beneventan sources exhibit earlier shapes of liquescence of which later Roman examples are an offshoot; this element alone would outline a lineage between the two in its own right. Yet an even more decisive feature is the comparative use of liquescent signs. In regard to liquescences, Beneventan is the musical script that employs it the most, with no other script showing a comparable degree of usage and number of symbols for them. Unlike other special neumes whose use diminishes with time, such as the *quilisma* and *salicus*, Beneventan scribes use liquescences at a high rate throughout all periods early from late. Also, the majority of these liquescent shapes might be inherent to the Beneventan tradition of music writing.⁶⁸ The precision and care with which Beneventan scribes translate finesses of liquescent sounds is in line with the general status of their attitude towards music writing as conservative, preserving many melodic features that are abandoned elsewhere in the same years.

By comparison, only a fraction of the liquescent shapes found in Beneventan sources are used in Roman and Central Italian ones, and even those few shapes are used much more sparingly. Roman and Central Italian scribes can perhaps ‘afford’ to overlook many notational details since they are ‘native’ singers of the repertoire they write down, i.e. Old Roman, and as such they do not need the same level of specification.⁶⁹

Wrapping up on analysis of liquescences, we can conclude that

- earlier Beneventan scribes draw looping shapes in one stroke; later Roman scribes stylize those basilar shapes into two-stroke crosses that are graphically more complex;
- Beneventan scribes developed the most refined system of liquescences of all

⁶⁸ Although roots for some of these shapes might be traced in very early French neumated manuscripts. See the looping low-high neume in the West Frankish manuscript now Paris, Bibliothèque de l’Arsenal Ms. 227, f. 202v, l. 13. The manuscript is dated 870-80. Digitization and description at <https://gallica.bnf.fr/ark:/12148/btv1b55005681f/f416.item.zoom>. Folio 202 also reproduced in RANKIN 2018, p. 121.

⁶⁹ See on the matter BAROFFIO 1995-a p. 31, esp. footnote 85.

neumatic scripts, probably because of the need of coping with the redaction of the imported Gregorian repertoire and of their care in reporting as many details as possible;

- on the contrary, Roman sources use a much smaller pool of liquescent shapes, and they do so more sparingly.

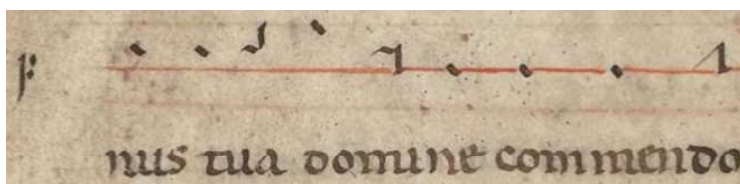
This situation suggests simplification, in which Rome imports musical notation from Benevento and reduces to a minimum the pervasive role of written liquescences, rather than complication, in which Benevento receives from Rome an underdeveloped system of liquescences that is then fuelled to become the richest of all of plainchant scripts. Moreover, the Rome-to-Benevento hypothesis goes against the evidence that simpler stages of liquescent shapes are found in Beneventan notation than in Roman.

II.2 SEMIOLOGIC DIFFERENCES: LACK OF DIRECTIONALITY

The second parameter setting the Beneventan musical script apart from that of Rome and Central Italy is the regularity with which notes are drawn in accord to the melodic direction they are coming from, a feature that I call ‘directionality’.

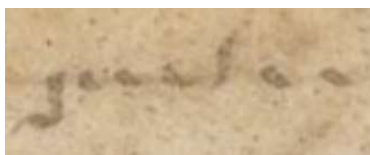
Roman scribes are much less prone to respect this rule. Its uneven, almost casual appearance in Roman and Central Italian sources defines them as much as its assiduous presence defines Beneventan sources. Exs. 15/1-3 show how in a melodic context of down – unison – unison(s)... Roman and Central Italian scribes draw oblique dashes well after the first one, the sole that according to Beneventan directionality would need to be oblique.

EXAMPLE 15/1



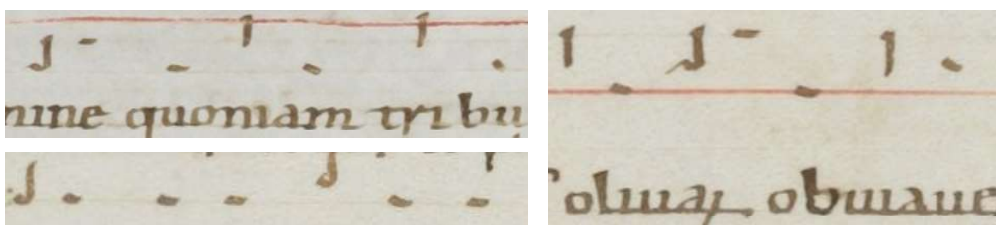
Arch. S. Pietro F.11.pt. A

EXAMPLE 15/2



Barb. Lat. 587

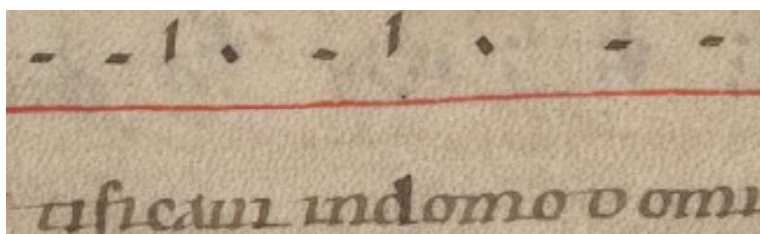
EXAMPLE 15/3



Bodmer 74

Of all the 11th c. sources of Roman notation, only Vat. Lat. 5319 is consistent in applying the rules of directionality and in defining a neat separation between straight and oblique dashes:

EXAMPLE 16



Vat. Lat. 5319

The relaxed attitude of Roman and Central Italian sources towards directionality is comparable to that towards liquescences. A process of simplification in Rome of scribal habits that in the Beneventan matrix developed to the status of rules explains the

situation better than one of complication in which the imperfect handling of sketchy oblique dashes found in Roman sources advances to the perfect systematization of directionality once it reaches the Beneventan zone.

No less important, directionality is a strong aid to relative diastemacy in the earlier Beneventan *in campo aperto* system. It is easy to see how in adiastematic environments such as Phase 0 and Type 1 sources, directionality is a welcome support. But as time progresses and Beneventan scribes turn to absolute diastemacy, what once were aids retain their status as calligraphic habits—possibly because of the strong homogeneity and conservatism of Beneventan scribes, both textual and musical.⁷⁰

Imperfect directionality in Roman sources suggest that Roman scribes inherited musical notation at a time when absolute diastemacy was already well-developed. Roman scribes must have felt it superfluous to integrate the not-so-immediate, foreign graphical habit of directionality in their borrowed practice only for the sake of calligraphy. Directionality was thus conceptually rejected, being applied in irregular, sketchy ways—with the notable exception of Vat. Lat. 5319 (EX. 16 above). The case of Vat. Lat. 5319 actually shows that directionality did arrive in Rome since its scribe saw, understood and adopted this technique precisely and that other Roman scribes had no use for strict application of directionality, but not that they were unaccustomed to it as would be true if the ‘non-directional’ Roman notation were the root of the ‘directional’ Beneventan.

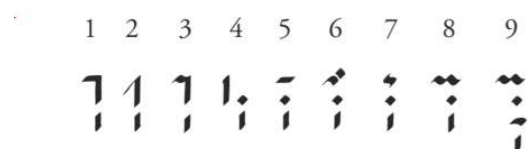
⁷⁰ The earliest Beneventan manuscript not always adhering to directionality rules might be the late 12th c. Montecassino 542: “Toutefois, il arrive qu’on rencontre le tractulus après une note plus aigue, meme si cela est moins frequent.” See PM XXIII, Montecassino, *Archivio dell’Abbazia, ms. 542. Antiphonaire du 12^{ème} siècle*, ed. and introduction by KATARINA LIVJANIC, Solesmes: Abbaye Saint-Pierre, 2014, p. 22.

II.3 SEMIOLOGICAL DIFFERENCES:

LACK OF DIFFERENTIATION IN DESCENTS

The third and last element that I present as setting the Beneventan musical script apart from the Roman and Central Italian is the combinations used for chains of three or more descending notes. Right from the earliest sources of Phase 0 and up until the early 13th century, Beneventan scribes demonstrate a wide array of possibilities—a detail even more evident in later diastematic manuscripts. Kelly and Peattie thus describe the phenomenon as it appears in B40:

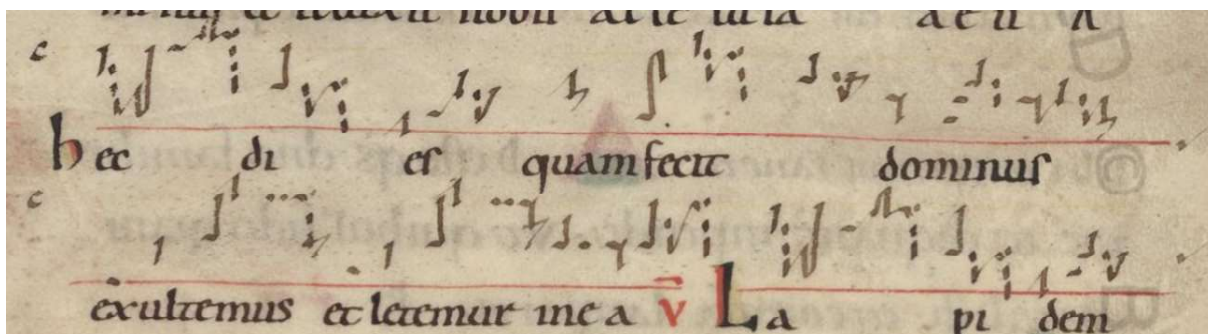
When notating a climacus of four notes, the scribe of Benevento 40 changes the direction of the pen, creating a characteristic sequence of oblique, horizontal and vertical strokes. The lowest note of all varieties of climacus is represented by a short vertical stroke that results from the direct downward motion of the pen; this appears only in the context of descending compound neumes. In the context of Beneventan notation, we believe that these aspects are a matter of calligraphy, and do not have implications for performance.⁷¹ [the next table integrates this passage in KELLY-PEATIE 2016, p. 53]



Roman scribes on the opposite assimilate virtually every element into vertical traits either short (more so in the middle of the descent) or long (more so at the end); the first element alone might receive the further specification of *oriscus*. EXS. 17/1-2 show this paucity in descending passages as seen in Roman sources.

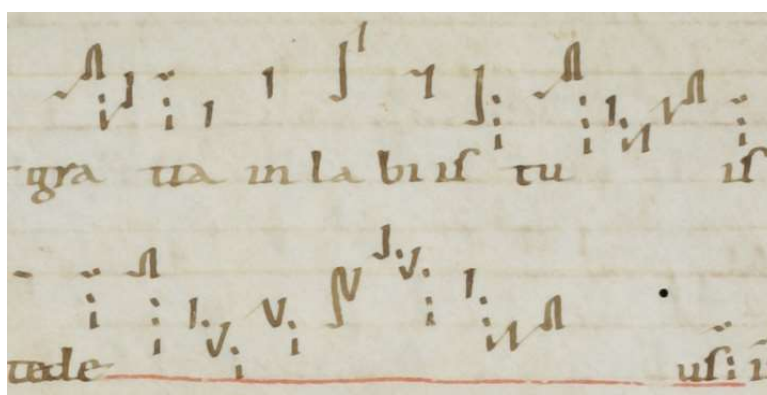
⁷¹ KELLY – PEATTIE 2016, pp. 54-5.

EXAMPLE 17/1



Vat. Lat. 5319, f. 85r

EXAMPLE 17/2



Bodmer 74, f. 2v

In EXS 17/1-2 *oriscus* is present at the top of some descents, then shorter vertical dash(es) in the middle and a longer vertical stroke concluding (EX. 17/1 shows a descending chain ending with a crossed liquescence three times). The scribe of Arch. San Pietro B. 79, written some fifty-seventy years later than Bodmer 74, almost solely employs vertical descending dashes barely differentiating length at all.⁷² Just as directionality, I see the reduction of graphical possibilities for descending chains of notes in Roman and Central Italian sources, too, as a simplification of more graphically nuanced scribal habits developed in Benevento when the wish for greater melodic and performative detail made a wider variety of options desirable.

⁷² See tables in BAROFFIO 1995-b, pp. 27-29.

III. RELATIVE DIASTEMACY, GUIDO AND *NOTA ROMANA*?

Striking similarities in the practice of notating music in the Beneventan area and Aquitania also hint that the practice of notation in the Beneventan area began earlier than in Rome. In fact, both Aquitania and the Beneventan zone dealt with the Frankish repertoire as a foreign imposition; both preserve older melodic details better than other regions from the centre of the Frankish empire and culture; and both developed a musical script that—as diametrically opposite as the two are—was far more indicative of pitch and diastemacy than all other scripts of the time.⁷³ In a word, Beneventan and Aquitanian musical scripts share the same preconditions of social and cultural alterity in regard to the repertoire they write down. Therefore a model of Aquitania and the Beneventan area developing strongly diastematic scripts unconnected with each other but at around the same time and because of the same historical preconditions is more convincing to me than a model in which two centres with drastically different ritual and cultural preconditions—Aquitania and Rome—first arrived at diastemacy: a Roman script could hardly have developed as so intrinsically diastematic given that the repertory Roman scribes wrote down was wholly local.

Along the same line of enquiry, a reconsideration of the role of Guido d'Arezzo in the 'conquest' of diastemacy is due. Boe, Baroffio and Ruini all stress how Roman notation might have received a decisive impulse from Guido's technological advance of the clef. Boe writes, arguing for his model of a "Roman version of central-Italian notation", that

the use of Guido's yellow line for c and red line for F at Rome can hardly antedate the decade 1025-35 [as the time of Guido's visit to Pope John 19th took place was 1032 or soon before]. It may be that similar uncleffed but diastematic notes in campo aperto were used at Rome before Guido's lines graphically established the place of the semitone in the scale.⁷⁴

⁷³ Thus writes Grier on the melodic precision of Aquitanian notation: "What is common to Ademar's [Aquitanian] musical notation [...] and constitutes a step of enormous importance in the development of musical literacy, is his technique of presenting accurate relative pitch, or intervallic, information." See GRIER 2006, pp. 38-9 (also pp. 42-4 on the early development of adiastrumatic notation in Aquitania).

⁷⁴ BOE 2011, p. XI/45.

Even more vocal about the influence of Guido is Baroffio, who writes

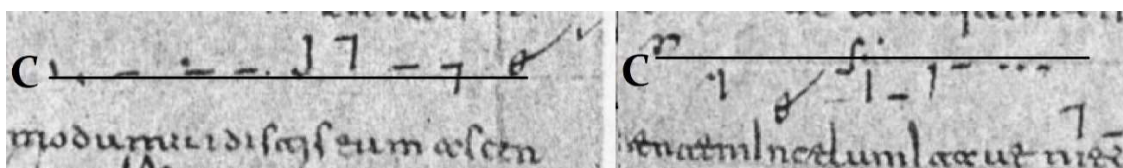
When, before year 1030, [Guido] has the occasion to present a copy of his antiphony to the pope [...], Guido sparks much interest and contributes to the diffusion of the new musical system that [had likely] combined [his] theoretical principles with the morphologic tradition of the musical notation of Umbria and Lazio, soon to become *Nota Romana*.⁷⁵

Lastly, Ruini:

it is very likely that the Guidonian staff was tested and spread initially in the morphological tradition of the notation which arrived in Tuscany from Rome, through a mutual fruitful exchange that would secure the success of both.⁷⁶

But leaning on dry-point lines as an aid to diastemacy is already visible in the two oldest sources of Beneventan and Roman notation. Peattie has similarly shown the strategies the music scribe of B40 uses to set on imaginary diastematic grids the very formulaic Beneventan chant. He stresses how the relative diastemacy of that manuscript does not take away from its readability for singers experienced in the local repertoire. Peattie's useful remarks are concerned with the notational technique of the Type 2 B40, while here I would like to present examples from the earlier Type 1 B33, expressly its reliance on dry-point lines. I have added letters and lines to show the clear diastemacy of the notation.⁷⁷

EXAMPLE 18/1



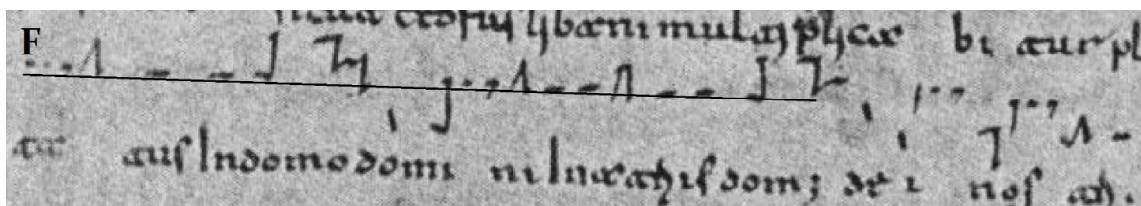
B33, f. 96v

⁷⁵ BAROFFIO 2008, p. 169.

⁷⁶ RUINI 2012, p. 353.

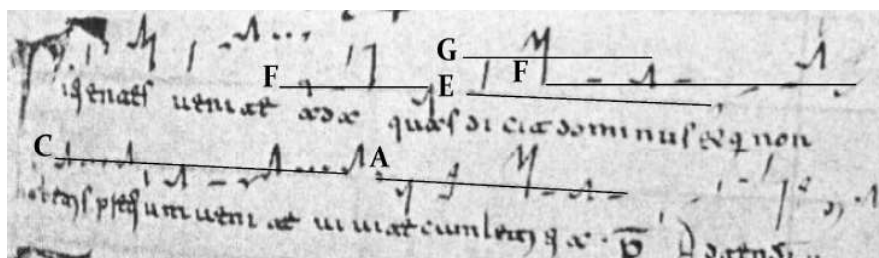
⁷⁷ I suggest the reader examine a reproduction of B33 side to side with the examples that I propose here: my addition of letters and of the black lines and the reduced sizes of the images hide some neumes and render it almost impossible to see the otherwise clear dry-point lines.

EXAMPLE 18/2



B33, f. 108v

EXAMPLE 18/3



B33, f. 51r

Exs. 18/1-3 show that relative diastemacy—especially when relying on dry-point lines—is so well established into early Beneventan script that a reassessment of Guido’s absolute diastemacy is not so far-fetched. I share Angelo Rusconi’s remarks in regard to diastemacy before Guido:

Numerous scripts reach [before Guido] a certain degree of precision in distancing notes proportioned to their intervals, [some] even elaborate a true musical line that allows to [... express intervals] with exactitude: one only needs to think of the diastematic precision of many Beneventan staff-less sources. Lines have been used in Aquitanian manuscripts, too, although with an inelegant system, detached from the brilliant simplicity of that of Guido.⁷⁸

Baroffio, Boe and Ruini have proposed that Guido’s advance, applied onto the hypothetical proto-*Nota Romana* at that time developing in Central Italy, aided the success of *Nota Romana*. In my view this is untenable, because no documentary evidence of cleffed diastematic sources has been identified in the Roman area in the

⁷⁸ Guido d’Arezzo: *Opere*, ed. and introduced by Angelo Rusconi, Firenze: Edizioni del Galluzzo 2008, p. xxxi (but see also pp. xlv-xlvii). Translation mine. I wish to thank Angelo Rusconi for a recent fruitful conversation on the matter.

fifty years that go from Guido's 'invention' to the closest later source of Roman notation, the Santa Cecilia gradual of year 1071; and because relative diastemacy was a solid reality in the Beneventan zone, perfectly handled by scribes.⁷⁹ What Guido did was to take the Beneventan 'relativity' out of the equation for the sake of his pedagogical duties. This passage by Peattie should make my point clearer:

[...] moments of unclear diastemacy [in Benevento 40] should not be understood as errors or scribal inconsistencies. Instead they should be viewed as the inevitable by-products of a notational system that was more concerned with representing a succession of well-known formulae, than with orienting each neume on a diastematically accurate axis. Even when singers encounter uneven heightening, it is possible to clearly recognize the formulaic material and to recreate the correct melodic figures in performance. The notation of each piece is not conceived primarily as a record of pitch, but as a symbolic representation of standard melodic figures. The scribe was not constrained, or even all that concerned with the vertical axis. Even though these transcriptions are not anchored by a more traditional system of pitch specific notation such as a staffline, the figures themselves are pitch specific [...]. These are not merely imaginative reconstructions, but transcriptions based on an understanding of a notational system in which figures, not diastemacy, is the principal source of information.⁸⁰

The key to the matter here is Peattie's expression "well-known": Guido shifted the emphasis towards graphical precision in order to do away with 'well-known-ness' and the mnemonic recollection it entailed. That he wished to do so came from his training of young singers who had not yet reached fluency in the repertoire and could not "recognize the formulaic material and recreate the correct melodic figures in performance" as easily as the Beneventan singers from the same milieu of B40 could. Guido must have been familiar with the use of dry-point lines as momentary anchors of relative diastemacy and merely 'de-relativized' such lines by making them the constant

⁷⁹ Of course point 2 is a stronger evidence than point 1. Point 1 could easily be invalidated by the discovery of a cleffed source of Roman notation around 1030-70.

⁸⁰ MATTHEW PEATTIE, 'Non Pitch-Specific Notation in Practice and Transcription: Beneventan Chant *in campo aperto* and *in voce*' in *Cantus Planus, Papers read at the 16th Meeting*, Vienna 2011, Hollinek: Wien 2012, pp. 309-315, p. 313.

signposts of the position of the upper semitone(s), also adding the graphic highlight of an actual coloured line.⁸¹

Far from minimizing Guido's pedagogical method or the impact of absolute diastemacy on musical notation, I intended to demonstrate that Guido's advancements cannot be regarded as integral to the early evolution of either Roman or Beneventan musical scripts: no historical nor theoretical evidence exists for attributing to Guido's agency the origins of that precision in Roman notation, which as the quotations above show is one of the main points of the *Nota Romana* hypothesis.⁸² The success of Guido's method did indeed help the spread of staffed sources, but Roman notation did not 'gain a boost' from it. Turning the argument on its head, the hypothesis that Guido's invention embedded onto a 'proto-Italian notation' resulted in the *Nota Romana* that expanded in concentric circles from Rome or nearby through Central and Southern Italy from around 1030-40 is weakened by the fact that dry-point lines were used as aids in relative diastemacy in the Beneventan area as early as 949, the year of Iaquinus' explicit (EX. 2 above), and that relative diastemacy is already developed in B33, written around 1000 (EXS. 18/1-3). That the scribe of B33 was not using absolute diastemacy is a proof, not of a flawed system waiting to be perfected, but of the uselessness of precise diastemacy in the context of notating the Gregorian mass proper in late 10th – early 11th c. All in all, the spreading of clefs in mid-11th c. Italy attributable to Guido must have not proven a significant deviation from the path already traced by the import of musical notation from the Beneventan to the Roman area.

⁸¹ For the practice of colouring lines see RUSCONI 2008, pp. xlv-xlvi.

⁸² That Guido became and still is a prominent character in the history of music at large is expectable as over time his figure has been made that of a single-handed pursuer of progress, a favoured attitude in musicological historiographies up until very recent times. Thus, however carefully crafted and rich in archival information, two major studies on Guido and 'his' clef regard him as contemporary mid-20th c. musicological trends would have regarded Beethoven and the opening chords of the Eroica symphony, if I am allowed this metaphor. See JOSEPH SMITH VAN WAESBERGHE, 'The Musical Notation of Guido of Arezzo' in *Musica Disciplina* 5 (1951), pp. 15-53 and JANKA SZENDREI, 'The Introduction of Staff Notation into Middle Europe' in *Studia Musicologica Academiae Scientiarum Hungaricae*, 28 (1986), pp. 308-19. Closer to our days, Haines has separated the wheat of many historical evidences (some even pertaining techniques of Medieval book production) from the chaff of quasi-mythical traditions. He did not however take into account the impact of the Beneventan script on diastematic development. See JOHN HAINES, 'The Origins of the Musical Staff' in *The Musical Quarterly*, 91 (2008), pp. 327-78.

CHAPTER CONCLUSIONS

This second chapter has assessed whether what has been called *Nota Romana* is at the origin of Beneventan musical script. My analysis has suggested the opposite is true: Beneventan stands as the basis of the Roman. Their relationship might be summarized by saying that the Roman and Central Italian musical scripts are relaxed variants of the Beneventan musical script. As I showed, the elements that Roman scribes relax or change with respect to Beneventan customs are at least three:

- sparser use of liquescences and a change in the shape of their loops,⁸³
- absence of directionality,
- lesser differentiation for descending chains of notes.

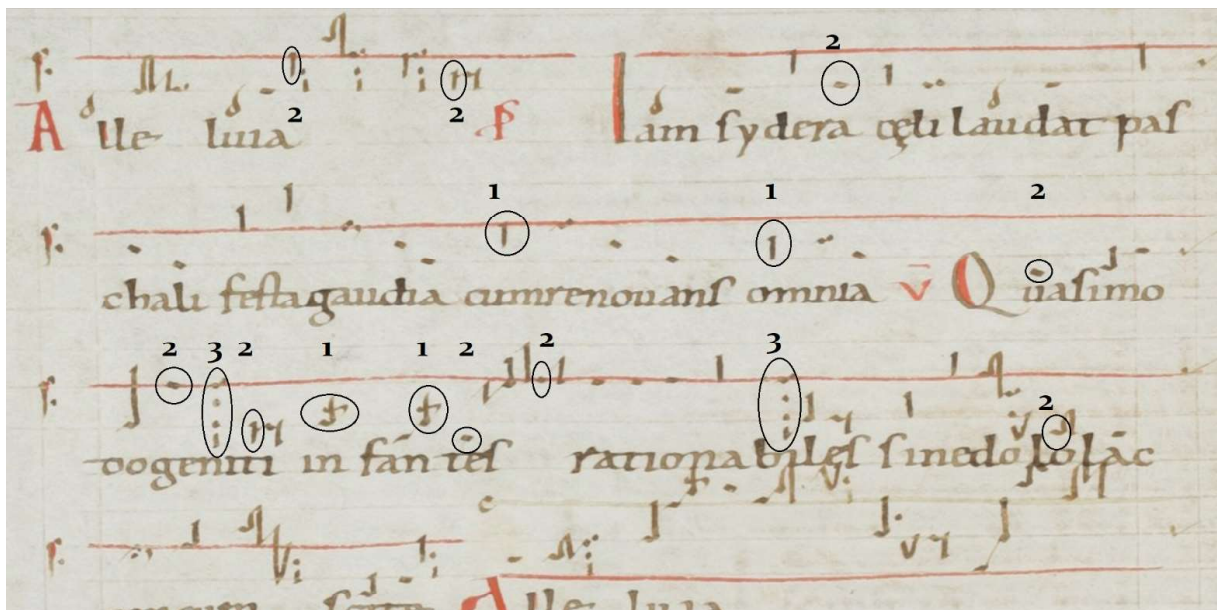
These relaxed elements all tell of a simplification in Rome of Beneventan scriptorial habits, habits that diastematic precision rendered superfluous by the time musical notation thrived in Rome and Central Italy ca. 1050 and by unconcern of Roman scribes towards providing finer performance details. Directionality and greater variety in descending chains of notes were discarded wholly or in part in Roman scriptoria because they lost the original aiding value they had in environments of relative diastemacy where they first developed—that is, in Phase 0 and Type 1 Beneventan sources. Liquescences (perhaps because of more secure pronunciation of Latin than in the Beneventan area?) never acquired much importance in Rome and Central Italy. By contrast, Beneventan sources maintained richness of liquescences throughout the centuries as well as good usage of directionality and different combinations of shapes for descending chains. In Benevento such habits were maintained even when their aiding value in specifying pitches ceased, superseded by absolute diastemacy.

⁸³ As for the shapes of loops, more than relaxing them I would speak of turning them into crosses. Beneventan scribes as well eventually turned to draw some liquescences as crosses, but less radically so and later than Romans—roughly from late 11th, Type 3 onward.

I now return to the first example discussed in the chapter for a conclusive comparison of how the Roman and Central Italian musical scripts can be regarded as a relaxed version of the Beneventan. The numbers juxtaposed to the encircled neumes direct the attention of the reader towards these by now familiar parameters, as they can be seen by comparing again B40 (EX. 1/1 shown above) to Bodmer 74 (EX. 20):

- 1) lack of liquescences or loops turned into crosses;
- 2) lack or worsening of directionality;
- 3) less combinations of shapes for descending chains of notes.

EXAMPLE 20



Bodmer 74, f. 87v

The early 10th c. import of musical notation in the Beneventan zone is not simply a matter of palaeographic inventory, rather it can shed new and better light on the larger history of Gregorian chant itself. It must be understood by and large as a case of cultural exchange that can advance our understanding of interrelations among post-Carolingian Francia—where European musical notation was first developed—and the Beneventan zone. It should now be clear that the Roman musical script does not lie at the root of the Beneventan, but the source of the latter remains a demanding question. I commit the next and final chapter to providing an answer.

Chapter Three.
Carolingian Models,
Beneventan Outcomes:
the Creation of a New Musical Script.

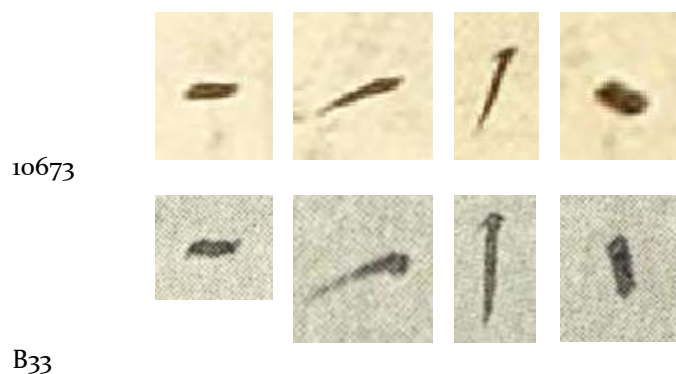
Section One:

Construction of basic Beneventan neumes

I.1 THE DASH

The fundamental tool of the Beneventan musical script is a dash oriented across four directions and heightened on the vertical axis, with the choice of one orientation over the other serving directional information while being rhythmically neutral. The permutation of this oriented dash plus a dot fabricates the whole range of standard Beneventan neumes. Table 1 shows the appearance of the basic sign in its four orientations in the two major early sources.

TABLE 1



As for the function of each orientation:

- The horizontal dash indicates that the syllable is sung at the unison with the previous note;
- the oblique ascending dash, on a pitch higher than the previous but lower than the following;
- the vertical peaking dash, on a pitch higher than the previous and either higher than or at the unison with the following;
- the oblique descending, on a pitch lower than the previous, regardless of what will follow.

All the dashes except the vertical peaking can be repeated if the same conditions apply for the next note: e.g. three horizontal dashes in a chain of unisons **D D D**, two oblique dashes in an ascent **D E F G G**, three oblique dashes in a descent **G F E D D**.

In order to discuss the functioning and ideas behind this basic sign of Beneventan script, I briefly outline how the basic signs of the Lotharingian and East Frankish scripts work.¹

The Lothringian script employs a dot or ‘punctum’ and a hook-like shape dubbed by Cardine ‘uncinus’² to respectively differentiate between lighter and broader notes. *Punctum* and *uncinus* serve a rhythmic difference, while heightening of the neumes approximately informs about the melodic turns of the chant. In the East Frankish script an horizontal (‘tractulus’) and an oblique dash (‘virga’) characterize the note as lower or higher in pitch than the note preceding (application of the neume “ex parte ante”) or following (“ex parte post”).³ The East Frankish *virga* and *tractulus* offer no rhythmic information per se and their placement in the interspace overlooks vertical spatialization almost completely, at least when notating the repertoire of the *proprium missae*.⁴

Turning back to the Beneventan script, even the most basic case discussed here of one isolated note on a syllable shows the hybridizing plan of its devisers. The Beneventan script exploits to an even greater degree the typical vertical arrangement of notes of the Lotharingian, while leaving behind rhythmic characterization in shapes

¹ Also see RANKIN 2018, pp. 223-24, 240; CARDINE 1968, pp. 3-21.

² See RANKIN 2018, p. 241, footnote 8.

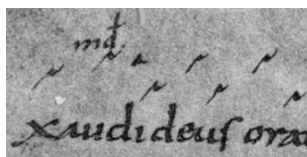
³ CARDINE 1968, p. 10. Cardine’s expressions *ex parte ante* and *post* have found wide acceptance in his school but are rather cumbersome—possibly explaining why they are not used in the latest treatise on the subject, FULVIO RAMPI – ALESSANDRO DE LILLO, *Nella mente del notatore*, Vatican City: Libreria Editrice Vaticana, 2019.

⁴ Frankish scribes did spatialize neumes in syllabic pieces such as hymns, *sequentiae* and *prosulae* as well as office antiphons. See RANKIN 2018, pp. 77-82, 157-60 (and also the antiphonary of the monk Hartker, SG390-91).

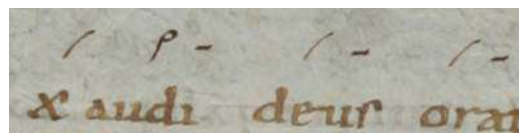
for single sounds. Additionally, the Beneventan dash appears to be a simplifying re-elaboration over the graphical and conceptual essential difference between East Frankish *tractulus* and *virga*. The Beneventan script carries over the Lotharingian use of vertical space to represent the curve of the melody together with the East Frankish use of different signs to represent higher and lower pitches. This ‘Lotharingian use of space with East Frankish-derived signs’ mélange is further bolstered, as to relative pitch, by greater vertical precision than in the Lotharingian script and greater directional character than East Frankish *tractulus* and *virga*.⁵ This clears the *ex parte ante* and *post* relationships provided by the alternance of *tractulus* and *virga*, hence simplifying the visual interpretation of the written sign.

Ex. 1, taken from the introit *Exaudi deus orationem*, shows the different concepts at work in East Frankish, Lotharingian and Beneventan scripts.

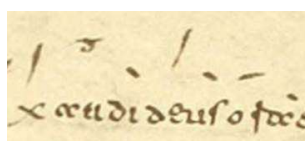
EXAMPLE 1



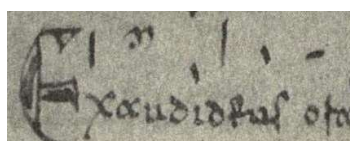
L239, f. 35v



SG339, p. 85



10673, f. 14v



B33, f. 47v

The scribe of L239 uses *uncinus* throughout that are spatialized to roughly represent the melodic profile. Heightening is still quite inconsistent and is not intervallically

⁵ On rare occasions SG359 might still use an oblique descending *tractulus* comparable in shape to the oblique descending dash. There it does not indicate directionality but rather an unusually low pitch. See CARDINE 1968, p. 12. It is noteworthy that Aquitanian notation, too, occasionally slants its basic sign to accommodate the turns of the melody, although its practice is far looser and graphically less evident than in the Beneventan script. Indeed, this detail of Aquitanian notation simply reflects the ease of conceiving the slanting of basic signs in an environment that takes great care in heightening neumes.

precise in its indication of the notes over the third **F - a**. The second **a** is drawn higher than the first, the **G** on *ora[tionem]* is also at level with the **a** of *deus* rather than with the same **G** of *deus*.

The scribe of SG339⁶ does not provide rhythmic information, only instructing about the alternation of high and low notes. What he writes has no serviceable information at all if the chant (or, to our modern eyes, pitches) is not known beforehand: not only because neumes are neutrally aligned on the horizontal axis, but also since the relationship between pitches can change according to whether neumes are to be read *ex parte ante* or *post*, a decision evidently only possible with prior knowledge of the chant. Only by knowing that the intended pitches are **a a G a G G F** one can infer this is an *ex parte post* relationship: every *virga* is higher than the following *tractulus*. The *ex parte post* relationship is especially evident on *deus ora[tionem]*: the two syllables are at the unison but the second receives a *virga* for standing higher than the sound following on *ora[tionem]*. In both Lotharingian and East Frankish the neumes function as reminders of something already known, leading the reader into something he or she must recall.

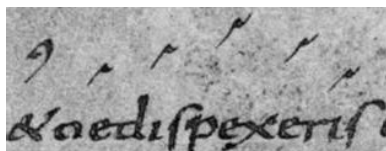
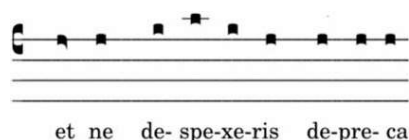
The Beneventan scribes follow the abovementioned rules for the oriented dash and spatialize dashes with good precision: regardless of what pitches are indicated, the abstract relationship of the third interval is visible (if only slightly weakened in 10673 by **a** on *deus* being a bit higher than the two **a** on *exaudi* and in B33 by **G** on *exaudi* a bit lower than the two **G** on *deus ora[tionem]*). In this sense they provide more guidance for recall.

EX. 2, taken from the same introit of EX. 1, again shows the divide between the *ex parte ante* / *post* system and that of heightened and oriented dashes.⁷

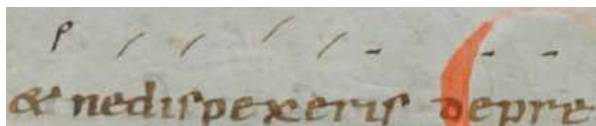
⁶ Here I use SG339 instead of E121 (E121 being my chosen reference for introit, offertory and communio examples), because E121 spreads out on three lines the beginning word *Exaudi* and writes it in bigger characters, making it impossible to report a compact image of it. The signs SG339 uses here are the same of E121.

⁷ Here I omit discussion of Lotharingian as it would add nothing to the previous example.

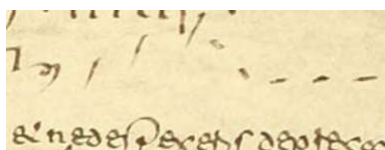
EXAMPLE 2



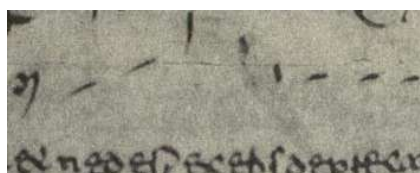
L239, f. 35v



SG339, p. 85



10673, f. 14v



B33, f. 47v

The East Frankish *virga* on *despexeris* signals that the syllable following will be lower (relationship *ex parte post*).⁸ B33 and 10673 use three of the four orientations of the basic dash on a solid bi-dimensional axis to represent the ascent to and descend from the peaking *e* of *despexeris*, a strategy more visually immediate than East Frankish's.

The oriented slanting on the horizontal axis and the heightened disposition on the vertical axis render the basic Beneventan dash a more direct visual reflection of the melody. East Frankish on the other hand leans on a system of symbols that requires more insider knowledge to be deciphered.

In regard to single notes on a syllable, the devisers of the Beneventan script must have taken the East Frankish script as a visual model but greatly simplified its typical alternation of *tractulus* and *virga* by using one single neutral dash. They enforced inclination and slanting of this simple dash to better suggest the high – low information on the horizontal axis (thus also eliminating the need for more contingent *ex parte ante / post* interpretive choices).⁹ At the same time, they took

⁸ The alternative *ex parte ante* possibility for *despexeris* would have been a *tractulus* highlighting *e* on *despexeris* as the peak of the ascent. Yet scribes prefer the use of *virga* over *tractulus* where multiple options are equally possible: see CARDINE 1968, p. 12.

⁹ As a purely scholastic exercise with no use in deciphering Beneventan neumes (since directionality and heightening render it superfluous), applying the above rules of the four oriented marks to *ex parte*

from the Lotharingian script the exploitation of the vertical axis to graphically reflect on parchment the rising and descending of the singing voice. The real takeaway from the study of single notes on a syllable is something that will also be evident from all the following cases of two- and three-note neumes: the desire of the devisers of the Beneventan script to increase melodic precision via directional orientation of the basic dash plus its vertical disposition.

With its fourfold possibility modulated across a vertical axis—the basic dash peaks, moves downward, upward or keeps at the same height changing its shape to match—the Beneventan script visually represents the melodic profile that it commits to parchment from the beginning of its history. Treitler remarks that such script is “reinforced iconic”, as it uses “once symbolic forms [i.e. East Frankish *tractulus* and *virga*] for iconic functions”.¹⁰ I feel that the explanation does not address the point at its fullest: the ‘reinforced’ quality of the Beneventan script in regards to its models Lotharingian and East Frankish does not only come from the reinterpretation of East Frankish *tractulus*, *virga* (and in Treitler’s view, of other neume shapes as well, this in my opinion an unnecessary complement), but rather from the sharp increase of the ‘iconic’ approach to verticality of its iconic ‘parent’ the Lotharingian script, if I am to use his terminology.

Lastly, the attentive reader will not have missed that I have avoided giving a name to the basic dash or to any of its four orientations. This would not be an easy task, given the very wide array of names used to dub them in previous scholarship all the way from the 12th c. *tabula neumarum* of Montecassino 318:¹¹ among them *tractulus*, *virga*, *virga*

relationships, one can see that:

- the horizontal dash is always *ex parte ante*;
- the oblique ascending dash is always *ante* and *post* (but *post* is lower);
- the vertical peaking dash is always *ante* and *post* (with the double possibility for the next sound of being at the unison or lower);
- the oblique descending dash is always *ante*.

¹⁰ TREITLER 2007, p. 346.



¹¹ See MATTHEW PEATTIE, ‘Neumatic Notation in Ms. Montecassino 318’ in *Sciences du quadrivium au Mont-Cassin* ed. by Laura Albiero – Isabelle Draelants, Brepols: Turnhout, 2018, pp. 327-40.

acuta, *virga obliqua*, and even the *contradictio in terminis virga gravis*. None of these names is faithful at once to both the graphical and logical qualities of the basic dash. This is likely a methodical slip obfuscating the Beneventan dash autonomous, original qualities and its combinative power. I consider that the term ‘dash’¹² can communicate in the most neutral form possible and without further and undue systematic accretions the direct, what-you-see-is-what-you-get qualities of the Beneventan basic dash upon which any longer combination of sounds is built, as we now turn to see.

I.2 TWO- AND THREE-NOTE ALTERNATING NEUMES

Early Beneventan script has between two and four different shapes to express each of the two- and three-note neumes that alternate their direction—low-high, high-low, low-high-low, high-low-high. The choice of a shape over another rests, with only a few exceptions, on which one allows orientation better in relation to the previous pitch, be this at the beginning of a new syllable or a subsequent element in a melisma.

I.2.i Two notes, high-low (‘clivis’)

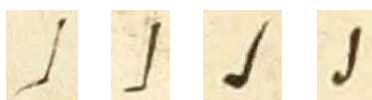
The Beneventan sign for a high-low neume functions on straightforward directional logic. The two shapes subsume two clear-cut choices: whether the note before this neume is lower than its first element [] or at the unison or higher []. There is no difference in the use of the two shapes among the two scribes of 10673 and B33 (which, again, I take as paradigmatic users of Phase 0 and Type 1 styles). It is noteworthy that, forming the angle at roughly 90°, the second sign is graphically apt to represent a unison with the previous sound, but not a descent from above. For this case, which would entail the stylization of an obtuse angle, there is no

¹² Lat. *tractus* – It. *tratto* – Fr. *trait* do not overlap with the en. *trait* in the sense of graphical mark but only on that of ‘particular quality’ or ‘personal/psychological feature’ etc... Therefore En. *trait* is a misleading option that cannot be used.

distinct sign. Since this hypothetical obtuse sign has its diametrical opposite in the almost disappearing yet documented obtuse shape of low-high only found in Phase o sources (see below), one can speculate whether the obtuse high-low neume has never existed even in the very first Beneventan experiments in writing music, or if it eventually did not make it into the first surviving sources.



I.2.ii Two notes, low-high ('pes')


The scribe of 10673 uses four shapes for a low-high neume






whereas the scribe of B33 only three.



Indeed this neume in early Beneventan sources is less systematic than that for two descending notes and entails more exceptions. The directional hints of each low-high shape are too seldom respected to see a sufficiently precise choice made of one shape over the other. The overall preference is undeniable both of Phase o and Type 1 sources for a horizontal first dash [], with an oblique descending dash [] as a rather distant second favourite option. At least statistically, this is explained by the fact that the horizontal first dash translates two out of three directional possibilities—i.e. preceding note lower and at the unison (wholly so in Type 1 sources, still in the large majority of cases in 10673¹³)—and that it is still used quite often where an oblique descending dash would be more appropriate.

As for the rounder J-like shape [], it is almost only ever used when the note

¹³ I say '10673' rather than a general 'Phase o' since these sources are all too musically scant to provide space for satisfying analysis. Even the Bamberg flyleaf reporting the quite long *Cum venerimus* antiphon does not have more than a couple of instances where the first sound of a low-high is higher than the previous one, activating the possibility for the ascending slant. But in such cases (*centenamilia*; *et seraphim*) this detail is so tenuous that it might be argued it is not there to convey directionality at all.

following the neume (not preceding!) is at unison with the neume second element (e.g. **Ga a**).¹⁴ It likely indicates a lighter performance of the first note and more focus on the second.¹⁵ Providing a distinct shape for this special nuance suggests that the Beneventan devisers thought it to be worth showing this difference graphically. This special shape is already visible in the oldest dated source of the Beneventan script, Montecassino 269. There it is used for what seems to be the cadential gesture on *gratias* (see reproduction above, p. 83). That this shape is intentional seems to be demonstrated by its difference from the preceding low-high on *domino*, which in accord to directionality begins with an oblique descending dash. I stress how a melodic movement that in East Frankish receives the standard round low-high is not translated in Ben with this same shape. Or to put it differently, the rounder shape  does not stand for a generally light low-high as in East Frankish, only for one “with sliding beginning”. The standard Beneventan shape for a low-high is  and as such has no rhythmic connotation. In fact, other than the J-like shape, no other shape of Beneventan low-high seems to convey any rhythmic information, as I show in section two of this chapter. Already in Type 2 sources the 90° shape becomes the sole option: here a slightly narrower angle or inclination of the first trace might give the impression that the ‘old-fashioned’ sign  is called into play, but these deviations are most of the time insignificant.

¹⁴ Not exclusively so as Bernardino Ferretti writes in regards to B33 (FERRETTI 2005, p. 9). Some melodic exceptions of the fourth shape followed by a lower or higher note:

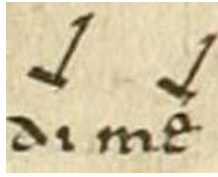
In 10673, 15v l. 5, 14r l. 3, 8r l. 5, 7v last line, 1v l. 3;

In B33, 30r l. b1, 34r l. a5, 79v l. a1 (five consecutive times in an ornate cantillation), 100v l. a1.

In 8th mode tracts in both sources as the occasional ornated syllable in cantillation passages.

¹⁵ Authors of the Cardine school have named its equivalent in East Frankish script “pes inizio scivolante”: ‘pes with a sliding beginning’. See LUIGI AGUSTONI – JOHANNES BERCHMANS GOESCHL, *Introduzione all’interpretazione del Canto Gregoriano*, Rome: Torre d’Orfeo, 2009, vol. II, pp. 83-88, 93-95.

In extremely rare circumstances the scribe of 10673 draws the acute low-high in two separate strokes, as if wishing to carefully emphasize the break of ductus:



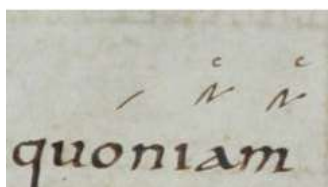
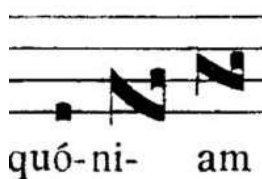
I have only been able to count six such occurrences across the manuscript. Of these, E121 reports five as more prominent, with only one as two lighter *puncta* in a three-note ascent. The comparison of these six cases allows the interpretation that the scribe of 10673 intended as particularly emphatic these extraordinary six ‘broken’ low-high signs, although I think that more than the narrower angle itself, the added layer of meaning must be found in the unusually sharp looks.¹⁶

1.2.iii Three notes, high-low-high (‘porrectus’)

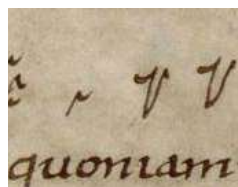
The two Beneventan shapes for three notes in the succession high-low-high do not pose particular problems of semiologic interpretation. The same rationale is at work as that regulating the high-low neume: the first element is an oblique ascending dash if the preceding sound is lower [*N*] (as in EX. 3/1 below, gradual *Sciant gentes*), an horizontal dash if higher or at the unison [*V*] (EX. 3/2, tract *Commovisti domine*). The two scribes of 10673 and B33 use the two shapes in comparable ways, and a preceding note that is higher does not result in a beginning with an oblique descending element, as with the high-low neume. Indeed this seems to indicate that the high-low-high is nothing more under the hands of early Beneventan scribes than a high-low neume to which a third ascending dash is added to service the additional high note.

¹⁶ I used E121 for comparison with an East Frankish source since these six cases of broken low-high all come from introits, offertories and communio. They are found in 10673 on f. 12r, line 11 (twice, see image shown above); 14v l. 14 (*pedes*: E121 disagrees here); 15r l. 11 (*spiritum*); 17v l. 6 (*disperdisti*); 19v l. 8 (*et*).

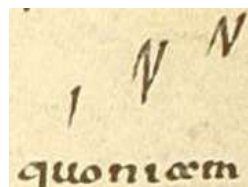
EXAMPLE 3/1



SG359, p. 60

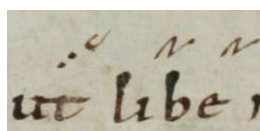
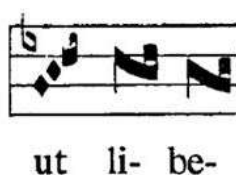


L239, f. 17r

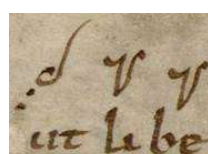


10673, f. 2r

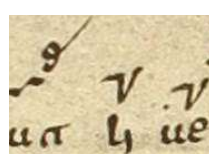
EXAMPLE 3/2



SG359, p. 60





L239, f. 17r





10673, f. 1v

The vertical disposition of the Beneventan high-low-high is clear in both examples. In EX. 3/1 the two neumes are set progressively higher; in 3/2 lower, in respect to the curve of the melody. Also see how the first high-low-high in EX.3/1 is taller than the second. All these qualities lack altogether in the East Frankish source and are so sketched in the Lotharingian as to be misleading if taken at face value. I stress once again how it is not simply a matter of shapes or how much a single shape can conceptually aid directionality and height. The most original character of the Beneventan script, especially when seen in the light of the rise and first development of musical notation, is its radical approach to heightening.

I.2. iv Three notes, low-high-low ('torculus')

The shapes for low-high-low beginning with an horizontal dash [] and oblique descending dash [] are the standard choices for Beneventan scribes. The inclination of the first dash provides directional information resulting in one of the two shapes, while the length of the second and third dashes provides intervallic—that is, diastematic—information.¹⁷ Similar to the low-high neume, the shape beginning with an horizontal dash signals the previous note is either lower or at the unison. However, the option of an ascending initial dash that the scribe of 10673 uses for low-high does not find a correlative in low-high-low neumes. Under this light, the two shapes shown above are once again nothing more than a two-notes shape onto which a descending dash is added to fit the additional note. I emphasize how my interpretation of the relationship between a Beneventan two-note and three-note alternating neume is not comparable to the interpretation customary to the Cardine school of the *porrectus* and *torculus* being a *clivis* and *pes* with an added *virga*: the Beneventan shapes are built via the quasi-algebraic addition of dashes, whereas Frankish neumes are independent symbols, each having regulations and possibilities that do not as readily overlap with its relative.¹⁸

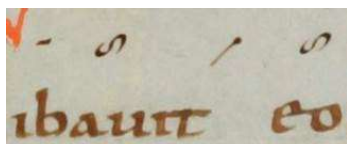
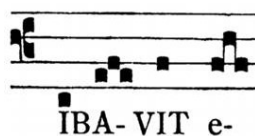
A rounder shape [] and one beginning with a vertical descending dash [] are used in particular contexts that are discussed separately below.

Ex. 4, from the introit *Cibavit eos*, shows the marked vertical qualities of the Beneventan low-high-low neume:

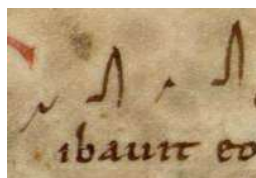
¹⁷ With good approximation in Phase 0 and Type 1, precisely so from Type 2 onward.

¹⁸ Hence in Cardine's own counting a high-low has five possible figurations, a high-low-high four; a low-high has four, a low-high-low even eight, twice as much. See CARDINE 1968, pp. 22, 24, 28, 32.

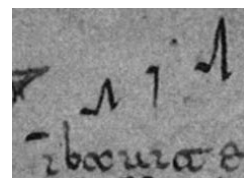
EXAMPLE 4



SG339, p. 124¹⁹




L239, f. 63v



B33, f. 100r

Note how Lotharingian neumes are roughly spatialized, a quality lacking altogether from the East Frankish script. B33 enhances this diastematic difference by not only disposing all the pitches with greater precision than Lotharingian on the vertical space, but also by differentiating the length of the second and third dashes of the two low-high-low. This latter detail comes in accord to the fact that the two dashes of the neume on *cibavit* stand for a major second; those for the neume on *e[os]* for a minor third.

A third Beneventan shape of low-high-low [] is reserved for particularly light melodic turns. One might see again an analogy between this rounder Beneventan neume resembling the standard low-high-low of the East Frankish script and thus interpret the two as equivalent. However it is almost exclusively used where the Lotharingian scribe of L239 specifies a feeble initial sound for a low-high-low movement ('initio debilis'), often seen in the context of preparing the rise to a strong accent.²⁰

Rare instances are found where early Beneventan scribes use this neume for melodic turns other than *initio debilis*, though nonetheless light.²¹ The rounder *initio debilis*

¹⁹ Here again I use SG339 as the introit decoration makes E121 unsuitable to report.

²⁰ See CARDINE 1968, pp. 35-40; HERMINIO GONZALES BARRIONUEVO, 'Das Phanomen *initio debilis* und seine Wiedergabe in der Neumenschrift', in *Beiträge zur Gregorianik* 26 (1998), pp. 35-62; RAMPI – DE LILLO 2019, pp. 133-36.

²¹ Such examples, also noticeable since they fall on the strong accents of their respective words rather than preparing them, are on *salutare* on v. 13 of tract *Qui habitat* (B33, f. 23r; 10673, f. 6v), *susceptor* on

shape disappears in Type 2 sources from around the second half of the 11th c. such as B38, 39, 40, probably because its sleeker curves adapt poorly to the increasingly rigid diastemacy-oriented calligraphy of later times.

The matter is completely different for the fourth shape of Beneventan low-high-low. Although virtually impossible to prove with complete certainty, I deem it possible that it might be a direct import from Breton notation due to its quite distinctive shape, resembling a modern Cyrillic **И**, and the mostly overlapping meaning across these two scripts, where it is only found. Conveying in both scripts a moment of melodic poise or rest, it is only possible if the note before it is higher. Amand Ménager, curating the essay in *PM X* on the Breton notation of Chartres, *Bibliothèque Municipale 47*, does not attach particular importance to this shape—unjustly so, in my opinion (he gives this shape the special name of “*torculus mélodique*”, but does not characterize its function further).²² Indeed this particular low-high-low neume serves not just any ‘melodic’ function in the Breton script, but a very specific cadential one. Nino Albarosa extensively researched the cadential low-high-low in the three most studied sources of Gregorian chant, SG359, Einsiedeln 121 and Laon 239—the first two sources respectively using for this broad low-high-low cadential gesture what Carine called a “torculus ritorto”²³ while L239 three separated *uncini*. We need not delve into the technicalities of Albarosa’s essay on the subject, rather note two things: first, that he certifies with a detailed analysis that the ‘grammar’ of Gregorian chant does contemplate a precise melodic gesture that might be called a cadential low-high-low; and secondly, that in all these cases the scribe of Chartres 47 uses “un seul type de torculus, le torculus sui

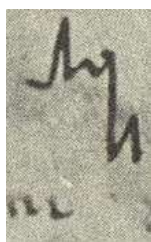
verse *Dicet domino* from the offertory *Scapulis suis* (10673, f. 6v), on *dicentes* of the lesson *Tunc hi tres* (10673, f. 30v). On *susceptor* E121 even adds the rarer *littera vol[ubiliter]*. For *litterae* *significative* see below, p. 211.

²² *PM X*, pp. 75-8, esp. fig. 51 at p. 77.

²³ See CARDINE 1968, p. 33 shape 3.

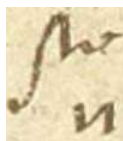
generis, qu'Amand Ménager denomnait *melodique*".²⁴

Beneventan sources use **И** for all the 128 instances studied by Albarosa. Out of these 128 cases, 95 are present in B33 and 45 in the far less complete 10673. As for the 95 cases of B33, its scribe always uses **И**, with three exceptional instances where this sign's first element is merged with the tail of the descending previous note, as in

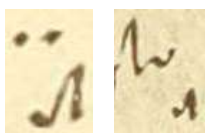


The scribe of 10673, too, employs the cadential low-high-low in all the 45 cases shared with Albarosa's sources, but his solutions are less homogeneous than those of the scribe of B33. The 45 cadential low-high-low that he draws can be thus subdivided:

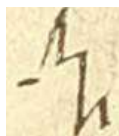
- 18 have a more geometrical **И**



- 15 have a less precise ductus lacking to a various degree symmetry, precise alignment and neat design, as in



- 12 merge with the tail of the descending previous note



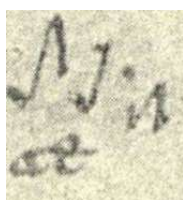
These variations in 10673 are unlikely to imply semiotic difference, and must rather reconduce to Phase 0 lesser graphical homogeneity. It is noticeable nonetheless that in 10673 12 cases out of 45 are merged with the previous sound; whereas in B33 this

²⁴ NINO ALBAROSA, 'Le torculus en fin de neume cadentiel' in *EG* 23 (1989), pp. 71-98, p. 98.

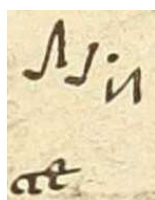
happens in a mere 3 cases out of 95. As said, Beneventan is together with Breton the only script that uses this shape not simply to convey generic broadness, as East Frankish and Lotharingian do with their *torculus ritorto* and three separated *uncini*, but a more specific sense of poise. For its use in exceptional contexts, its complete agreement—it is always used in 10673 and B33 in places where the Breton scribe of Chartres 47 uses it—and identical shape, the Beneventan **H** might be tentatively taken to descend from the “torculus *mélodique*” of the chronologically older Breton script. This would add yet one more script to the group of those that the Beneventan devisers would have observed. The scarcity of comparable documents and the borrowing of one sole neume out of the entire very distinctive Breton script—however specific and matching this neume is across the two scripts—nonetheless suggest care in forwarding this proposition.

It must also be noted that Beneventan scribes increase the possible uses of the cadential low-high-low by employing it in contexts where other scripts prefer to use combinations of 1+2 (*tractulus* plus high-low) or 3+2 (three descending notes plus high-low). This is most evident in second mode tracts: the longest, *Qui habitat*, includes thirteen cadential low-high-low in B33 and 10673, nine of which appear in the context of repeating formulas.²⁵ The scribe of Chartres 47 only uses the cadential low-high-low on the formula **GFFDED** that appears three times in this tract. In the remaining nine cases where Beneventan scribes still use it, the Breton scribe uses a combination of three descending notes plus high-low. Ex.5 shows how the first element of the Beneventan cadential low-high-low equals to the last element of the descending series of notes in Ch. 47.

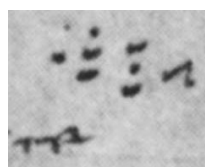
EXAMPLE 5



B33, f. 22v



10673, f. 5v



Ch. 47, f. 15r

²⁵ Six times with the formula **FGFEDCDC**, three with **GFFDED**.

The gradual *Oculi omnium* is exceptionally rich in cadential low-high-low in Beneventan sources, with 10673 carrying six, B33 seven and the later B35 and 34 eight. Leaving aside the latter two sources for visual economy, I report in TAB. 2 these cadential low-high-low side by side with East Frankish, Lotharingian and Breton corresponsives.

[The following is the first of a series of tables I made by editing squared notation out from digitized modern sources and then drawing neumes with a digital pen. Such tables are of better and svelter use than cutting images from actual manuscripts when ductus, matters of shape, or other graphical finesse are irrelevant to the discourse. Brackets across square notation indicate that I have artificially edited the portion of melisma out of its natural place (for example, to highlight out of a longer melisma only the section that I need showing). Bracket placement indicates towards what side music has been eliminated: if a portion of a table has one bracket to its left, it means that the melody is edited out of a longer section, but its last sound actually concludes the melisma/syllable; if on the right, that the notes shown begin the melisma but not end it; if present on both sides, that the notes shown are found in the middle of the melisma.]

TABLE 2²⁶

B33, f. 42r								
10673, f. 11r								
Ch. 47, f. 22r								
L239, f. 32v								
SG359, p. 78								
GR. VII								
	-ne 1		-lis 3	-scam 4	-re 5	ma- 6	-ples 7	-ne. 8



²⁶I adapted this and the following longer melodic restitutions either from gregor-und-taube.de/ or Omnigreg.at, with a preference for Omnigreg whenever possible given its free Creative Commons status. Omnigreg is also a useful resource to examine a conspicuous number of sources at once for almost the entire repertoire of Gregorian chant. I obtained permission to use gregor-und-taube scores from their author Anton Stingl Jr., whom I thank dearly. I use Stingl's scores when Omnigreg's are not available, when I deem Omnigreg's peculiar use of modern shapes dubious or confusing, and when Stingl's superimposition of East Frankish neumes allows for a more economic mise en page of examples and images than adding actual snippets of sources.



None of the eight cases in the table has a full cadential low-high-low across all sources. 2 has the widest agreement—expectable as it marks the end of the first melisma and phrase of the gradual. Most of the times (1, 4, 5, 6, 8) non-Beneventan scribes do not use a low-high-low, but rather three descending notes with a final light note, followed by a high-low (as seen in EX.5 above). The scribe of B33 always adapts this 3+2 combination notes into one cadential low-high-low, while that of 10673 keeps closer to non-Beneventan sources twice (on 1 and 6). Closeness with other sources would suggest that in Phase 0 10673 the cadential low-high-low still encompasses a narrower range of cases than in mature, Type 1-onwards Beneventan script. This, together with the fact that later scribes use cadential low-high-low even more often than the scribe of B33, seems to suggest that the rethinking of the Breton cadential low-high-low into something more than it is originally envisaged for is a process unfinished by the time of Phase 0 scribal habits, and that keeps on growing as time and Types go on. It is also plausible that the Beneventan cadential low-high-low carries more than the simple indication of a broad delivery of its three sounds, bringing a richer host of modal, melodic and rhythmic nuances—for one thing, it is almost never used for intervals other than a whole tone outside of cadences.


Among innumerable other occurrences, the examples of *Qui habitat* (Ex. 5) and *Oculi omnium* (TAB. 2) seem to indicate that, starting from the inherited base of the older Breton script, Beneventan neumators eventually expanded the range of **H** to more possibilities and formulas than it covered in its original design: it would thus prove as a relevant example of Beneventan scribes re-elaborating something imported from outside as time went on.

I.2.v Three-note ascent ('scandicus')

The neume for three ascending notes is perhaps the least problematic and most straightforward shape among all the standard Beneventan neumes, hence its study here will be minimal in comparison with others.

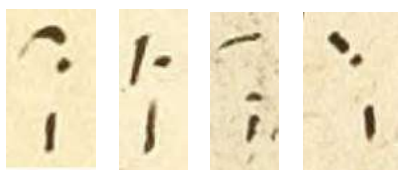
It follows the same rough directional characterization as the low-high. Just as with the low-high, three ascending notes are drawn with a somewhat relaxed attitude in the orientation of the first trace in relation to the previous pitch: the ascending shape does not have an upward slant to indicate that the previous note is lower, and its beginning is most often drawn with a slightly descending inclined dash []. Horizontal initial dashes, though rarer, are also possible [].

The scribe of 10673 often draws this neume—either alone, or more often as part of a more complex chain—with more prominent lower ‘dents’ than other usual dashes, as in [] and []. No appreciable difference is observable other than merely graphical, and it is safe to assume this is simply scribal inconsistency. This more jagged version of the neume should not be taken as a variation of *inflatilia* or *gradata*.

The single difference that asks for closer scrutiny is whether three ascending notes whose elements are not connected by a thin line [] has any difference to the standard connected shape. This is a matter that relates to rhythm and as such will be analyzed in the following section.

I.2.vi Three-note descent (‘climacus’)

Directionality mandates the choice for the first element of descending series of notes in early Beneventan sources, with its inclination depending on the pitch of the preceding note.

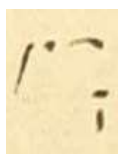


Both shapes with the oblique and the vertical ascending dash serve the case in which the previous note is lower.²⁷ The two shapes make for an apparently redundant


²⁷ 10673 has one wrong occurrence of a initial vertical peaking dash on f. 8v, penultimate line (on *me*). The first note (a) of the descent is at the unison with the last note of the previous syllable *deus*. The horizontal dash would then be the correct choice to begin the neume, which is what the scribe of B33 (f. 25v) employs. This is the only such patent slip I was able to spot across all the early Beneventan sources I observed.

behaviour as they cover a single melodic situation. I believe the choice depends on rhythmic characterization hence they too will be discussed in the section pertaining to rhythmic analysis.

The third option, starting with a horizontal initial dash, is used when the first note of the descent is at a unison with the previous note. Sometimes in 10673 a descending series of notes coming from a unison might again appear as written with an initial oblique uprising dash



but this is simply ascribable to the lesser calligraphic precision of its scribe.

The fourth option [] presents interesting taxonomic issues and demands closer scrutiny. Scholars in the past have dubbed its first element as *virga gravis*, in my opinion a contradiction in terms best avoided.²⁸ That this descending series of notes has the first element lower than the tone preceding it means that the whole passage entails a melodic descent of at least a stepwise fourth, more commonly a descending fifth with one leap of a third inside (the topmost sound of the overall descent being the last of the preceding syllable). Since these melodic gestures are not very common in the vocabulary of Gregorian *proprium missae*, this shape is only rarely encountered. The place in Gregorian repertoire where it is seen the most is the second mode tracts, in the descents from **G** to **D** or **C** of Apel C_1 and C_3 formulas.²⁹ The scribe of B33 uses two such neumes in close succession in the tract *Domine audivi*, verse 3 (the piece is missing in 10673).

²⁸ See RUPERT FISCHER, *Die Rhythmische Aussage von Benevento 40*, in TURCO – ALBAROSA 1991, pp. ix-xii, p. ix; FULVIO RAMPI – MASSIMO LATTANZI, *Manuale di canto gregoriano*, Editrice Internazionale Musica e Arte, Cremona: 1991, pp. 529, 533.

²⁹ In C_3 the descent is structural, whereas in C_1 it is a contingent embellishment of the connection between **G** and **C** or **D**. SEE WILLI APEL, *Gregorian Chant*, Bloomington: Indiana University, 1958, pp. 325-30.

EXAMPLE 6



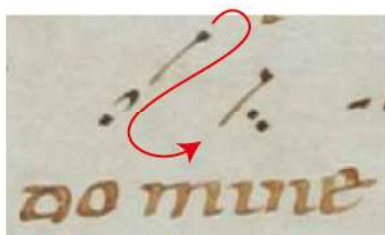
This shape brings to mind the special East Frankish high-low-lower in which the last element is an oblique downward dash. Of this special East Frankish neume Cardine writes that “the last element is a ‘grave’ accent [that] indicates a leap [“un grado disgiunto”] between the last and penultimate note”.³⁰ The first element in this East Frankish neume is a standard *virga*: in EX. 6 it marks a strong separation between the three-note descent and the preceding low-high that stands higher: the initial *virga* in the East Frankish descent is only acute in respect to the self-enclosed symbol of the descent itself, not in the larger melodic context. The special status of the last element of the second three-note descent in SG359, too, is a self-enclosed reference to the precise melodic rarity described above.

In the Beneventan script, on the contrary, it is standard to conclude a descending series of notes with a descending vertical dash, while it is only rare to see the first element as a descending vertical dash because of the rarity of the melodic gesture that triggers it—it is by no means exceptional for the Beneventan directional logics. And indeed to draw the first element as a descending vertical trait is to connect the descent in a larger melodic context than the East Frankish special neume of EX.6 does: the flux of the melody is less interrupted on the inked page, the melodic reconstruction is more a matter of connecting the various neumatic elements that make a phrase than recalling on parchment discreet events on a syllable-by-syllable basis. Ex.7, from the *communio*

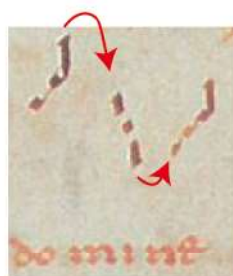
³⁰ CARDINE 1968, p. 41. I do not agree regarding the last element as an “accento grave”, or rather do not think East Frankish neumators saw this mark as reflecting one. See RANKIN 2018, esp. pp. 303-28.

Potum meum, shows the very different semiotic attitude of Beneventan and East Frankish in regards to this. (Squared notation, too, has a tail on F that is logically inconclusive, but that we have come to accept as a standard albeit insignificant appendix.)

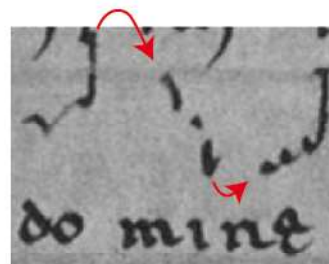
EXAMPLE 7



SG339, p. 100³¹

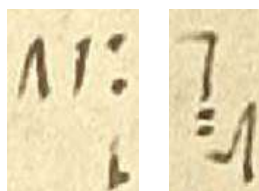


B40, f. 3v



B33, f. 63r

To conclude discussion of three-note descents with a passing remark, in early Beneventan sources this neume can sometimes start off with other elements, e.g. a dot (if coming from one or more unisons) or a high-low:



These less common cases, more than an actual high-low-lower itself, are testimony to the many combinations that basic Beneventan dashes and dots allow. The same is true for complex figures of four or more elements. Indeed one of the main characteristics of the Beneventan script is the tendency to ligate together chains of notes that in all other scripts would be split into smaller units. This leads to the drawing of complex figures that are as clear in their melodic representation as they eschew common semiologic characterization and nomenclature. In Beneventan script

³¹ I report SG339 since E121 splits the two syllables across two lines.

complex figures of 4+ notes are thus at the same time too unsystematic and clear-cut in their meaning and function. They cannot be discussed in a fashion similar to the figures just studied, but will figure prominently in the third section of this chapter, pertaining the overall graphical organization of the early Beneventan musical script.

Section Two: Rhythmic Organization of Early Beneventan Script

A great deal of Gregorian scholarship through the 20th c. has focused on rhythmic information that few sources of just two scripts provide (SG 359, SG 390-91, E121 for the East Frankish, L239 for the Lotharingian). The dubious conclusion was often that these two scripts at large would be especially rich in rhythmic information, whereas the high level of detail of these few sources should more correctly speak for their particular musical scribes. Still, if as I have posited in the introduction to this chapter, the devisers of the Beneventan script took the East Frankish and Lotharingian scripts as their major models, two questions arise: do early Beneventan scribes use those same techniques that East Frankish and Lotharingian scribes use?, and are they as proficient in their use? Aside from KELLY – PEATTIE 2016 and BOE 1983,³² the only studies that have tackled the matter of rhythm in the Beneventan script were by authors tied to Cardine and his school. Such studies are all flawed by taking the Beneventan script as an imperfect reverberation of the East Frankish: the quality of B33, almost the only source they ever evaluated, was assessed time after time in regard to how closely it stood to the *lectiones* of the abovementioned SG359 and E121. John Boe addresses the question with his usual sharp wit:

Some of Cardine's followers have elevated concepts validly derived from these schools of notation [East Frankish and Lotharingian, ed.]—especially the “disaggregation of neumes” and the notion that the notes of almost every neume “press on towards” its last note, which (it seems) must be emphasized by one means or another—to the status of self-evident axioms and have applied them to other regional chant notations without discrimination or exercise of critical judgment.³³

³² JOHN BOE, ‘The Beneventan Apostrophus in South Italian Notation A. D. 1000-1100’ in *EMH* 3 (1983), pp. 43-66.

³³ JOHN BOE, ‘Review of TURCO – ALBAROSA 1991’, in *Notes* 49 (1992), pp. 511-520, p. 518.

Here I shift the perspective and try to find out—rather than how much of faithful replicas early Ben sources are to L239, SG359 and E121—if the ‘tools’ that East Frankish and Lotharingian scribes have to express rhythmic information are taken up by early Beneventan scribes and if they use these tools to a comparable extent. For me it is not a matter of whether Historically Informed Practice (or, even more vaguely, theological exegesis) is possible out of, say, B33 or B40; rather I aim at evaluating the consistency in the Beneventan script of means that are present in its matrixes East Frankish and Lotharingian. The presence itself of rhythmic tools proper to East Frankish or Lotharingian scripts would eventually signal on yet another level the relatedness of the Beneventan script to these two, and the degree of usage of one particular tool over the other, the greater indebtedness in regard to rhythmic aspects to one or another family according to said degree.

The main means of rhythmic expression³⁴ of the Lotharingian script are

- differentiating between punctum and *uncinus*;
- the separation of the otherwise continuous shapes of two- and three-note neumes into groups of separated *uncini*;
- the joining together of neumes to obtain longer chains;
- the use of *litterae significative*.³⁵

East Frankish scribes express rhythmic difference via

- adding *episema* to certain neumes or parts of (*virga*, *tractulus*, high-low, the second element of low-high, the second and third elements of low-high-low and high-low-high, *apostrophus* etc...);
- drawing certain neumes as more angular and/or bigger (‘pes quadratus’, ‘torculus ritorto’);

³⁴ I do not include special signs in the present discussion (*oriscus*, *quilisma*, *liquescence*...).

³⁵ *Litterae significative* are initial letters (or portions) of words that add verbal connotations to neumes, pertaining both to melody and rhythm (e.g. *c[eleriter]*: swiftly; *s[ursum]*: raising pitch). Degree of their use vary greatly between one source and another inside of a single script. See CARDINE 1968, pp. 162-64; JACQUES FROGER, ‘L’épître de Notker sur les *litteres significative*: édition critique’ in *EG* 5 (1962), pp. 23-71.

- differentiating between punctum and *tractulus* in descending and ascending series of sounds and other composite neumes;
- separating in specific ways two contiguous elements to indicate a rhythmic separation at that point where the graphical separation occurs (Fr: “coupure neumatique”, It: “stacco neumatico”, Ger: “Neumentrennung”);
- *litterae significative*.

The East Frankish difference between punctum and *tractulus* is in many respects comparable to the difference between punctum and *uncinus* in the Lotharingian. Angular neumes and *episema* are means more or less exclusive to the East Frankish script: the Lotharingian script attains the same rhythmic indications of *episema* and angular neumes with the use of separated *uncini* instead of continuous shapes of neumes. Lastly, both Lotharingian and East Frankish scribes use *litterae significativae*, which on the opposite are so exceedingly rare as to be virtually absent in the Beneventan script.³⁶ Nonetheless, their rare appearance shows that Beneventan scribes did know about their existence and that—only emending heightening imprecisions—they took *litterae* as tools for melodic rather than rhythmic instruction: as such I postpone discussion of *litterae* for the graphical organization section.

Lying down in a quasi-list fashion these techniques, although mostly uninformative, allows me to better frame the present section since each point will now be individually discussed in relation to the early Beneventan script. Yet no technique of plainchant rhythmic expression can meaningfully be explained on its own, only gaining value in relation to what surrounds it. To extrapolate one single technique at a time is a forced structural necessity of writing essays such as this and I ask the reader a contextualized understanding about the limits this approach necessarily poses.

³⁶ On the different treatment of *litterae* in Lotharingian and East Frankish scripts see MICHAEL HUGLO, ‘L’absence de lettres significatives notkériennes dans l’école de Metz au IX^e siècle’ in *L’art du chantre carolingien*, ed. by Christian-Jacques Demollière, Metz: éditions Serpenoise, 2004, pp. 67-79.

II.1 *EPISEMA*

Early Beneventan scribes employ *episema*, but its importance in the Beneventan script has been severely overestimated for two reasons: misinterpreting as actual *episema* neutral swellings that come from raisings of the quill, and taking B33, a decidedly idiosyncratic source in respect to *episema*, as the general benchmark for the Beneventan script as a whole.³⁷ Again John Boe, criticizing such misinterpretations by authors of the Cardine school—in this case Rupert Fischer, who curating an essay on the notation of B40 intended swellings on the top of vertical dashes as actual *episemata*—³⁸ wrote that “there are far more *virgas* written with the nub at the top than without it in Benevento 40 and a distinction between their use is hard to see.”³⁹ Not content with just criticizing Fischer on a conceptual basis, Boe went all the way to counting at least 33 swellings on the ff. 2v-3r that Fischer got his examples from to expose the inconsistency of the Cardine school’s method when applied indifferently on the Beneventan script for which it was not intended. Still, B40 numbers pale in comparison with B33. Here in two columns of music that carry chants comparable in length and melodic complexity to the folios of B40 I could count no less than a surprising 107 swellings!⁴⁰

Solesmes scholars earlier than Cardine already interpreted swellings at the top of dashes as

une épisème [est] placée à la fin du trait, formant avec lui un angle légèrement obtus, ou même assez court, tracé le plus souvent vers le haut [...] Dans les manuscrits où il se trouve, il s’oppose très clairement à l’accent sans épisème, et traduit donc un effet particulier du chant.⁴¹

³⁷ See BERNARDINO FERRETTI 2005, PECTU 2007, 2010, FISCHER 1991.

³⁸ FISCHER 1991, p. ix.

³⁹ BOE 1992, p. 519.

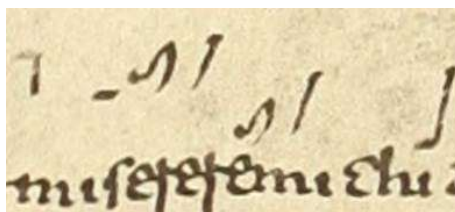
⁴⁰ B40, ff. 2v-3r have one each of *communio*, *introit*, *gradual* and *tract*; B33, f. 8v column b - 9r col. a have two *communio*, an *introit*, an *alleluia*, a *gradual*.

⁴¹ *PM* XV, pp. 120 and 119.

Yet however misinterpreted and overestimated by past scholarship, the presence of *episema* in Beneventan script cannot be denied. It is beyond any doubt that this is a direct import from the East Frankish script and, together with the shape of the *quilisma*, the soundest evidence for positing a degree of relatedness between the two. *Episema* is even a stronger evidence than *quilisma*: the use of the *quilisma* is customary across all early notations (although Ben and East Frankish shapes graphically match), while *episema* seems to have been favoured by scribes in the orbit of the St. Gall abbey more than by East Frankish scribes elsewhere.⁴²

Ex. 8/1-2, from the *communio Cum invocarem*, show how the scribe of B33 exaggerates the actual use of *episema*. Here out of the nineteen syllables receiving only one note, none is provided with *episema* in five out of the six East Frankish sources I consulted,⁴³ while the scribe of 10673 possibly only uses *episema* once, on the top of a vertical dash on the word *miserere*.

EXAMPLE 8/1



10673, f. 8r

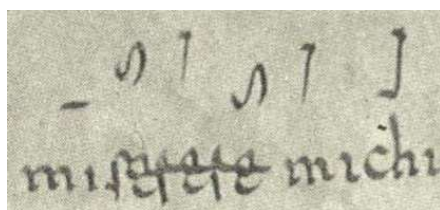
Hard as it always is to tell an *episema* from a pen swelling in 10673, here the nib might be intended as an actual *episema* given that the swelling is more prominent on this syllable—the primary stress of the word—than on others. The preceding special round low-high-low that prepares rise to strong accents, seems to reinforce this interpretation. Such judicious use of *episema* is typical of 10673, although the swelling is often so imperceptible as to be burdening on the modern reader looking at the *Paleographie Musicale* reproduction, currently the sole available. B33 on the contrary

⁴² RANKIN 2018, p. 206.

⁴³ Compared at <http://www.omnigreg.at/wiki/doku.php?id=grad:o619&s>.

adds true episema to both of the two vertical dashes on the words *miserere michi*, as well as on the following low-high on *michi*: see the rather apparent marks running ever so slightly to the right of the vertical dash, exposing a twofold ductus. Overall, the scribe of B33 adds an unmistakable *episema* to six out of the nineteen single-note neumes of this piece, always on vertical dashes.

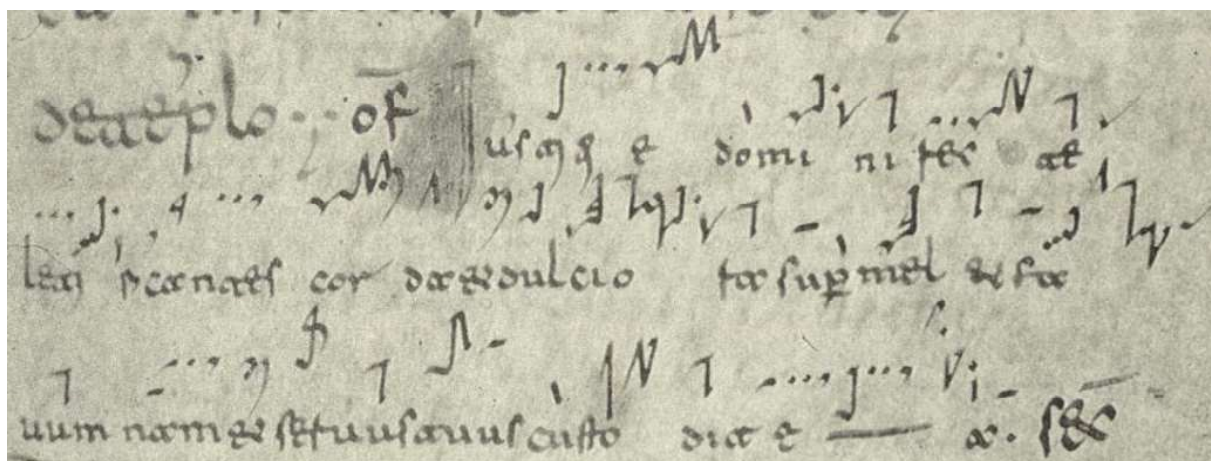
EXAMPLE 8/2



B33, f. 25r

But almost always what in B33 looks to be an *episema* on a vertical dash—be it simple or combined as in low-high—must rather be interpreted as a simple material detail pertaining how its scribe raises the quill from the parchment. The offertory *Iustitiae domini* is a telling example:

EXAMPLE 9



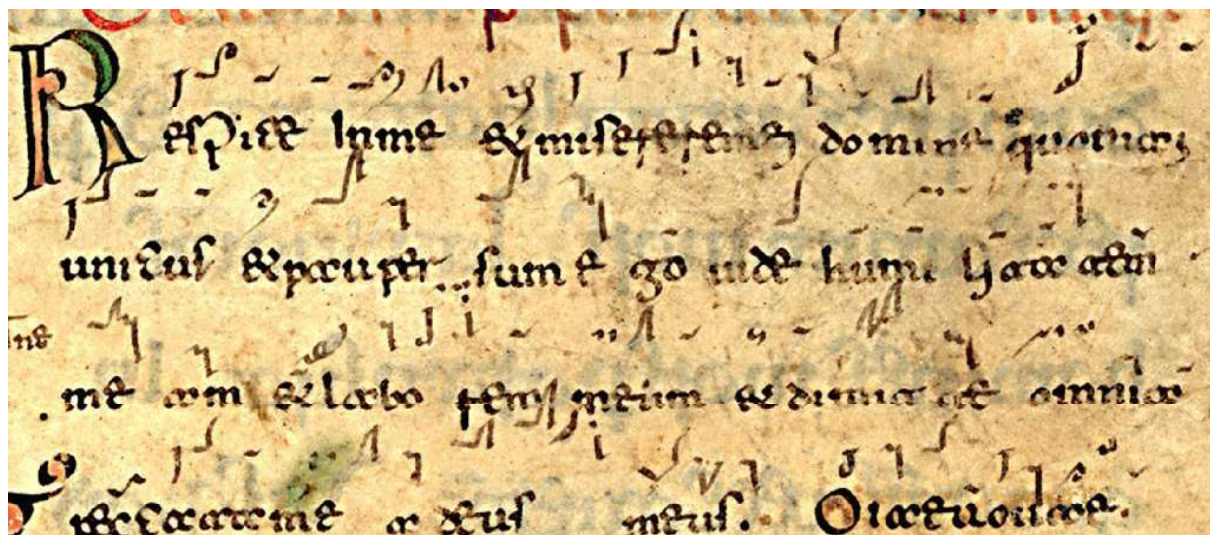
B33, f. 39r

Here all the ascending elements end with a swelling. I highly doubt the scribe would have intended these nibs as *episema*: if any differentiating sign is applied every time a

chance arises, it ends up nulling the differentiation that it should bring.

A look at other, lesser known early Beneventan sources highlights how easily quill dashes have generally been mistaken as *episemata* in past literature.

EXAMPLE 10



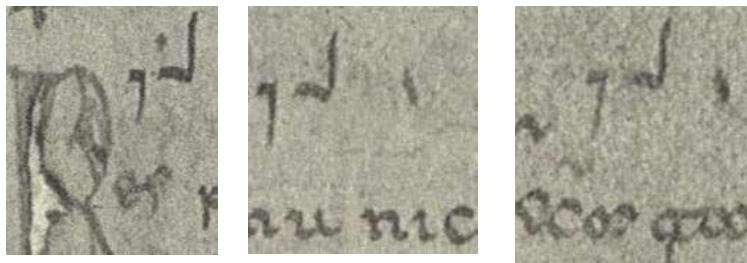
Oslo, Schoyen Collection, Ms 63 (1)

In EX.10, from one of the four surviving folios of the sumptuous Bari missal, a great deal of vertical and horizontal dashes ends with a hair-thin appendix. This is common, among other sources, to the later B40 and B38 as well, but under the pen of the Bari missal scribe the variance in length and presence of the thin appendix is greatest. None of the syllables that in this introit have this appendix are broadened in L239 and several East Frankish sources.⁴⁴ The three appearances in EX.10 of the F-FG melodic cell typical of fifth and sixth mode introits and graduals is quite telling of the inconsistent use of *episema* by Beneventan scribes. As a standardized formula, rhythmic sources regularly report the first F as broader than the second.⁴⁵ In particular, East Frankish sources use

⁴⁴ Compared at <http://www.omnigreg.at/wiki/doku.php?id=grad:0132>.

⁴⁵ E.g. other examples of the initial stock-phrase in the repertoire: Gr. *Christus factus est*, Co. *Domine quinque*, Co. *Quinque prudentes*. In this last piece a slight spacing error betrays the B33 scribe's actual use of *episema* on vertical marks (f. 11v): crammed between the bigger, slightly ornate "Q" of *Quinque* and the liquescent low-high FG, he writes the initial F of the piece with a dash much thinner than customary for him. He then proceeds to add on the top of this thin dash a bold mark running to the left that can only be an *episema*.

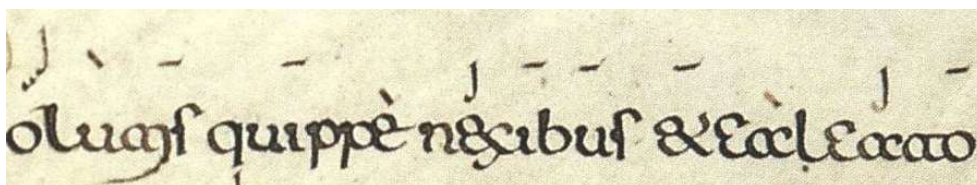
a *virga episemata* for F followed by the light shape of low-high for FG. The scribe of B33 uses three very bold, very long counter-directional marks that can in these occasions be taken as *episemata*





while the Bari missal fragment has thin lines on *respice* and *unicus* but not on *peccata*. Also notable is the fact that these thin lines in the Bari missal seem to be all drawn together in a single stroke with the rest of the neume, further suggesting that they are better understood as simple marks incidentally produced by the raising of quills rather than actual *episemata*.


Even in the very calligraphic Bari Exultet roll hair-thin dashes sprawl from the extremity of almost all neumes. It would approach absurdity to think these dashes stand for *episema* given the simplicity of the roll's reciting tones.

EXAMPLE 11



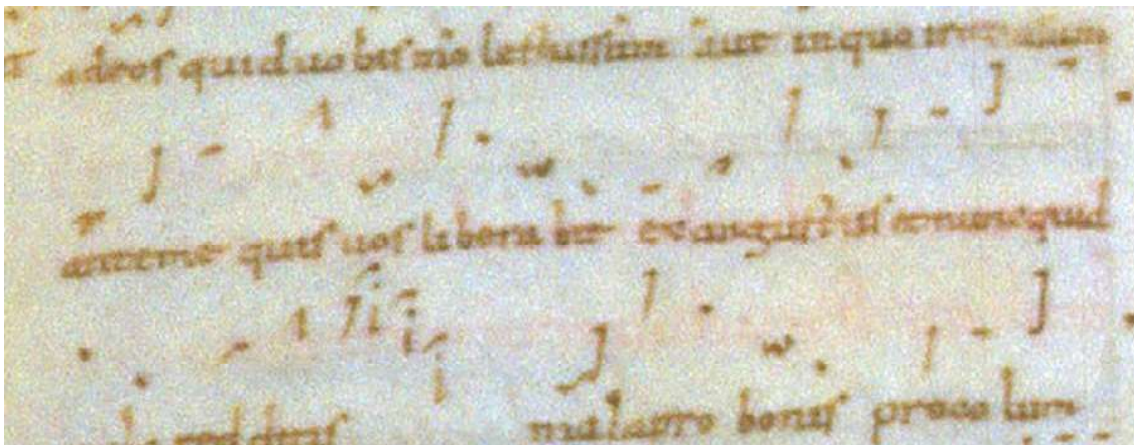
Bari, Archivio del Capitolo Metropolitano, *Exultet* 1

The use of *episema* on high-low is on the contrary unmistakable. Two shapes are found, one with a single mark on the top of a standard high-low [] and the other in the spikier variant that I call 'squared high-low' []. *Episema* is patent on the former because of the adjunct trait consecutive to the drawing of the neume itself; on the latter because the shape itself leaves no doubt about its meaning. The first of the two shapes is more commonly found in the Phase o 10673, the second in the Type 1 sources. This suggests that the earlier Phase o style is still tied to a ductus closer to the 'original'

East Frankish high-low with *episema* [] (although the evidence must be regrettably reduced to 10673 alone as the neumes of other Phase 0 sources are too few and too simple), while later scribes went on designing the distinctively Beneventan squared shape.

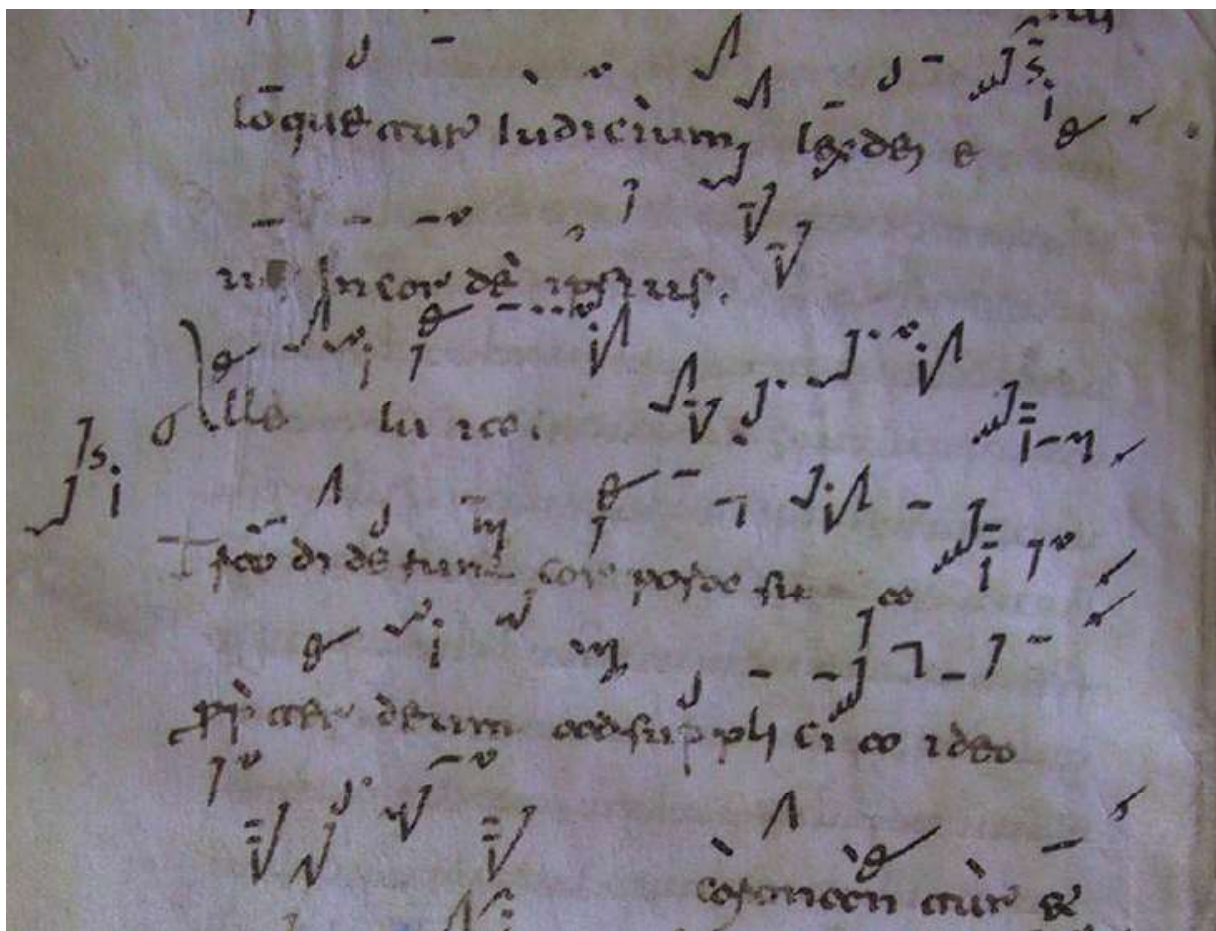
It is possible, given the current understanding of the melodic grammar of plainchant, that the peak of an ascending melodic gestures be often a goal of tension that asks for a careful, rhythmically prominent delivery: is this the justification for the presence of thick, clear counter-directional marks only at the top of ascending figures in early Beneventan sources? I stand sceptical, but if early Beneventan scribes truly intend all the swellings on top of peaking dashes as actual *episemata*, then they demonstrate a less subtle usage than in the East Frankish script where *episema* was first developed. To conclude I provide the reader with images from lesser-known sources for a broader perspective on the matter.

EXAMPLE 11/1 –



Lucca 606, add. f. 156r (detail)

EXAMPLE 11/2



Montecassino 446 p. 84 (detail)

EXAMPLE 11/3



Bamberg Ms. Lat. Patr. 101, front flyleaf (detail)

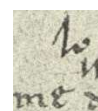
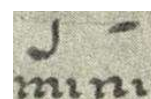
II.2 IS MODIFICATION OF BENEVENTAN NEUME SHAPES

RHYTHM-INFORMATIVE?

East Frankish scribes can alter the shape of several neumes so to convey rhythmic information: the rationale at work is that the more ponderous it is to draw the shape of a neume the more prominent its delivery is.

I have shown in section 1 of this chapter how early Beneventan scribes can alter the shape of neumes to indicate rhythm in at least four cases:

- a J-shaped rounder low-high for a lighter attack of the syllable;
- the squared high-low with *episema*;
- a loopy low-high-low for a light execution, particularly—but apparently not exclusively—on the first sound;
- the **И** cadential low-high-low.



The exclusively cadential application of this neume seems to ask for a precise cadential ‘gesture’, rather than a generally broad rhythm.

Other than in these four cases, does analysis suggest that the Beneventan scribes alter the shapes of low-high, high-low, low-high-low, high-low-high so to convey rhythmic nuance? In section 1 of this chapter, I have stressed how different neume shapes primarily convey directional information. Now I analyse those same neumes as they appear in two introits to ascertain whether change in their shape also brings rhythmic information.

EXAMPLE 12 – INTROIT *LAETATUR COR*

10673 f. 16r

B33 f. 49v

L239 f. 78

E121 p. 157

Intr.
2.

L

1 2 3 4 5 6 7 8 9 10 11

AETĒTUR cor quaerén-ti- um Dómi- num:

10673

B33

L239

E121

12 13 14 15 16 17 18 19 20 21 22 23

quaé-ri- te Dó- minum, et con- fir- má- mi- ni:

10673

B33

L239

E121

24 25 26 27 28 29 30 31 32 33

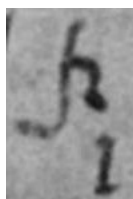
quaéri- te fá- ci- em e- jus sem- per.

High-low: on syllables 4 and 23, L239 and E121 respectively use two separate *uncinus* and high-low with *episema*, agreeing on their broad execution; B33 and 10673 use the shape with the horizontal beginning [7] to indicate the previous sound is at the unison. On 8 and 31, L239 and E121 both have standard high-low; B33 and 10673 write the same shape used for 4 and 23; nothing in the Beneventan sources differentiates the two different natures of these four high-low neumes. Here an introductory digression is due as this first comparative example is a paradigm for the following ones: from now on, a fruitful palaeographic observation needs support of good knowledge of the Gregorian *proprium missae* repertoire. For example, it takes some confidence with the 2nd mode melodic vocabulary to see the diametrically opposite nature of the cadential high-lows on DC of 4 and 23 against the fluid, effortless high-lows on FE that serve as springboard to the formulaic ascents to a of 8 and 31. To think of plainchant melodies as travelling and spreading through Europe devoid of their natural rhythm is an absurdity: what the lack of differentiation in these neumes and many other cases suggest is not the rhythmic neutrality of the Beneventan dialect of Gregorian chant, but the rejection of notating on parchment rhythmic nuance as finely as other scribes using other scripts do.

Low-high: The only low-high to report is on 22, incidentally also part of a larger cadential cell. As with the high-low, here again a 90° shape reports directionality (the previous note is higher), not rhythmic instruction. On 2 L239 has two *uncini* and E121 a ‘pes quadratus’: here Ben sources do use a special ‘pes quassus’⁴⁶ to fine-tune the rhythm. This however does not prove that the Beneventan *pes quassus* translates Lotharingian disjointed *uncini* and/or East Frankish *pes quadratus*: it is rather possible that here the Beneventan *quassus* adds a nuance that the other scribes do not report.

⁴⁶ *Pes quassus* is a low-high movement in which the first sound is an *oriscus*. See CARDINE 1968, pp. 133-144.

Low-high-low: L239 and E121 use the standard shape on 14 and 27. On 4, 17 and 26 E121 highlights the last note with the apposition of *episema*; on 17 and 26 L239 achieves the same effect with the *littera a[ugere]* on the last element of its standard shape. Beneventan sources do not distinguish the rhythm of 4 and 27 (standard) and 14 (broad), while they do use an hardly definable shape on 17 that I tend to see as a low-high-low-lower with a third element being somehow special:



The taxonomic question is irrelevant : more importantly, this uniquely early Beneventan shape is used in cadential movements to the low regions of a mode (often in contexts where the discourse is left ‘open’, as in a tonal half cadence, waiting to rise up again).⁴⁷

In the fully cadential turns of 10 and 32 B33 uses **H**; 10673 reserves this shape for the final cadence alone of the piece.

High-low-high: L239 and E121 have this neume on 13 and 25, even though on 13 the second and third notes are at the unison. In such cases of high-low-unison northern scripts at large still employ this shape, making up for the abovementioned exception.⁴⁸ The Beneventan script at large does not share this exception, and the two scribes use a high-low followed by *oriscus*, representing with greater precision the actual curve of the melody. 25 is standard in all sources and does not express any relevant rhythmic or directional detail.

⁴⁷ Most often and notably, this special sign is used at the end of F_{II} and F_{13} of Apel’s catalogue of graduals’ stock-phrases (APEL 1958, pp. 345-50). The scribe of B40 still uses it, but this source is as far in time as I have been able to observe it before it disappears.

⁴⁸ See CARDINE 1968, pp. 28-30.

EXAMPLE 12 – INTROIT *OCULI MEI*⁴⁹

B33 f. 37v

L239 f. 65r

E121 f. 131

Intr.
7.
O

1 2 3 4 5 6 7 8 9 10 11
-CULI me- i sem- per ad Dó- mi- num,

B33

L239

E121

12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
quí- a ipse evél- let de lá- que- o pe- des me- os:

B33

L239

E121

27 28 29 30 31 32 33 34 35 36 37 38
réspi- ce in me, et mi-se-ré-re me- i,

B33

L239

E121

39 40 41 42 43 44 45 46 47 48 49 50
quóni- am uni- cus et pau- per sum e- go.

⁴⁹ I chose this introit as it is particularly rich in rhythmic characterization in the two Northern sources, even though it is not found in 10673.

High-low: Eight times out of nine the scribe of B33 uses high-low shapes that instruct about directionality but not rhythmic difference. Only once on 25 a squared high-low stands out in B33 as providing rhythmic information—although it is more correct to speak of the addition of *episema* more than a modification of shape stricto sensu. This again shows that early Beneventan scribes can distinguish by means of *episema* a neutral high-low from a more prominent one. Yet whether the B33 scribe uses an *episema* or not on high-low neumes in this introit seems the result more of arbitrariness than precise planning as in E121 and L239: I cannot see any reason why in B33 the neume of 25 should stand out as more prominent than those of 7, 18, 38 and 41. Lastly, the Beneventan scribe draws the acute shape on 18 since the previous neume on 17 ends with a liquescence on **d** (as it can be inferred by B34, f. 82r). The apparent confusion on 18 is only because modern square notation does not report this liquescent sound.⁵⁰

Low-high: This 7th mode introit begins with the broad ascending leap of a fifth **G-d** (1). Northern scribes indicate its brilliant, dignified intonation with two separated *uncini* and a broad low-high. In B33 the top swelling of the neume does not stand out as particularly emphatic when compared to other ascending dashes: I do not take it for granted that the swelling of this neume on this particular syllable, usual in thickness and length, stands as *episema*, nor the Beneventan scribe has any means to highlight the first note of the neume **G**. Other low-high in this piece are found on 14, 30 and 33. Again one can see L239 and E121 differentiating between swift (33) and broad (14, 30), but the same shape being used in B33. At most, here different inclinations of the initial dash and the resulting angle only report directional information.

⁵⁰ Another liquescence missing from square notation is on 24, again descending to **d**.

Low-high-low: 6 starts with a very prominent low-high-low on the *repercussio* of the mode **d**—the whole neume does in fact revolve around this pitch with stately, grand up-down movements. L239 and E121 specify this broad gesture with three *uncini* and a broad shape, again followed by two *uncini* in L239 and a high-low that has *coupure* before its first element and after its second in E121. B33 nonetheless merges all the notes in a single continuous stroke up to the concluding *pressus c-d*.⁵¹ This shows how in the Beneventan script a chain of linked notes does not stand for swifter execution as it does in the East Frankish script: it is unlikely that Beneventan singers and scribes might have sung this grand intonation lighter than their Northern colleagues.

L239 and E121 use standard shapes on 20 and 28, setting these two instances of low-high-low as different from that on 6. B33 on the contrary only modifies the initial orientation so to accommodate directionality.

31 is an interesting case of different neumatic organization. B33 has one single continuous chain that can be theoretically split into 3-1-3: this is diastematically nimble but rhythmically neutral. Both E121 and L239 group the passage in a 1-3-3 solution that emphasizes the initial *coupure* but omits *pressus* indication altogether. The choice of B33 might be explained by the prominence *oriscus* has in the Beneventan script throughout the centuries or because as already said, a high-low-unison movement such as **d-c-c** is never reported with the directional exception found in Northern scripts—or because of both.

B33 uses the cadential low-high-low on 49, an example of how the special **И** shape might offer greater characterization than the broad but less specific shapes of the East Frankish and Lotharingian scripts.

⁵¹ Even here there is the chance that the graphic interruption is only mandated by the impossibility of notating an upward *pressus* without interrupting the ductus—as it can happen for a descending *pressus*.

High-low-high: the few high-low-high in this introit are not useful for the present analysis: on 9 and 17 all three sources have standard, rhythmically neutral examples;⁵² on 25 and 37 L239 and B33 adopt a different grouping that is slightly contrasting to that of E121. More than rhythmic though, such details pertain to graphical organization and will be addressed later.

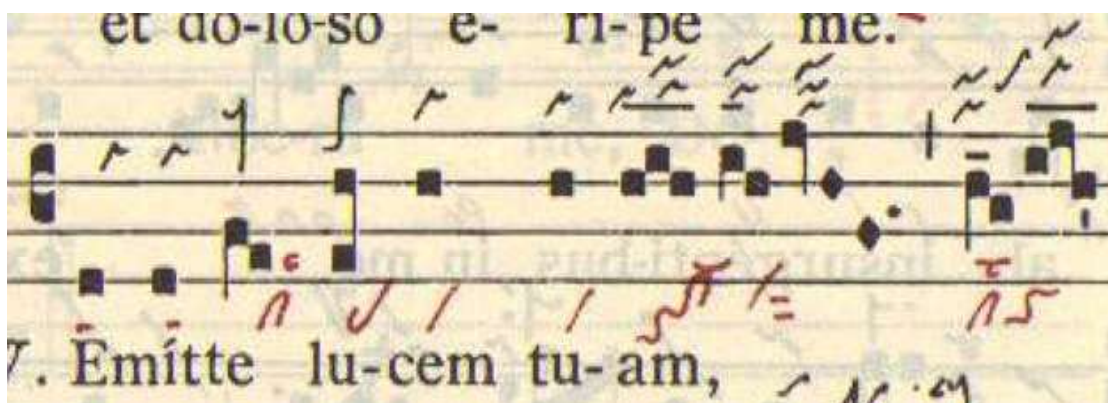
Section one of this chapter highlighted the sheer importance of directionality and diastemacy for the design and choice of Beneventan neumes. The question was still left to the present section pertaining rhythm to ascertain whether modification in neume shapes also lends rhythmic information. Analysis of these two introits negated this possibility. No shape of the four investigated neumes beside the four exceptions shown above provide rhythmic information. The rhythmic organization of the Beneventan script must be searched for elsewhere: the next technique under scrutiny is Lotharingian's unique separation.

II.3 SEPARATION IN THE LOTHARINGIAN SCRIPT

As said, the primary tool to differentiate between a light and broad note in the Lotharingian script is by choosing between a punctum and an *uncinus*. Building upon this fundamental means, Lotharingian scribes write broad neumes, all or in part, not by modifying their standard shapes as East Frankish scribes do, but by assigning to each broad note a separated *uncinus*. The visual metaphor at play has a series of discreet *uncinus*—indicators of broad delivery—set next to each other in lieu of the figure that would incorporate a plurality of notes: graphic discreteness conveys the rhythmic emphasis requested for each element, whereas graphic union stands for swifter agglomeration.

⁵² Here I do not take into account liquescences.

EXAMPLE 13⁵³



In Ex. 13, from the 5th mode gradual *Discerne causam meam*, the East Frankish scribe of SG359 characterizes the rhythm with the use of as many as four techniques: *litterae* (*emitte*, *tuam*), use of standard shapes (*lu-cem*) against special ones (twice on *tuam*, at beginning and end), *episema* (*tuam*) and difference between punctum and *tractulus* for each element of a descent (*tuam*). This last occasion has one more implicit information that the reader must infer by him- or herself: the second note of the three being broad since it is a *tractulus* ‘retroactively’ broadens the initial *virga*, too, even though none of the two possible means (*littera* and/or *episema*) characterize the *virga* itself.⁵⁴

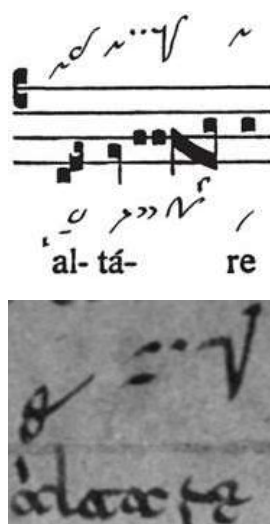
The scribe of L239 reports the same rhythm with less interpretive and combinatorial effort: he simply uses standard shapes for the initial lighter low-high and high-low, set against combinations of two and three *uncini* that substitute two-and-three notes continuous neumes. It is this approach to separating neumes into discreet *uncini* that I am focusing on in the following discussion: it is generally safe to say that Beneventan scribes do not use separation as a technique to express rhythm *stricto sensu*, or at least in the way Lotharingian scribes do. The one exception where Beneventans do separate a low-high movement that would normally ask for a standard Beneventan low-high

⁵³ I use *Graduale Triplex*, Solesmes, Abbaye Saint-Pierre, 1979 p. 127 for the more convenient juxtaposition of the three notations discussed.

⁵⁴ See CARDINE 1968, p. 42.

is when this movement notates either a *coupure* or the equivalent of East Frankish ‘tristropa’ that has its first element a minor third lower than the two other notes. The upper note in this second case of low-high Beneventan separation is always the first of a series of unisons usually on F or c—even as few as two. No other Beneventan neume shows a comparable exception. Yet when Beneventan scribes separate elements of a low-high in such a way, it is more the fortuitous combination of other phrasing nuances than the application of the specific rhythmic technique of separation of the Lotharingian script. Ex. 14/1 (offertory *Acceptabis sacrificium*) shows how this first case of Beneventan separation of a low-high is better filed under the circumstance of *coupure* happening between E and F:

EXAMPLE 14/1⁵⁵

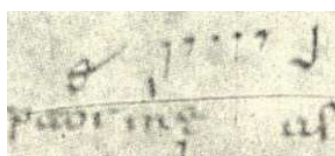


B33, f.20v

Ex.14/2 (tract *Qui habitat*, v. 1) shows the second case of Beneventan separation of low-high, resulting from unisons preceded by a lower note—the equivalent of an East Frankish *tristropa* in which the first note is a minor third lower than the following ones.

⁵⁵ On Exs. 14/1-2 I use *Graduale Novum*, Regensburg: Conbrio, 2011, p. 292 and p. 62 for the juxtaposition of the three notations as in Ex.13 and for a melodic restitution closer to the sources than GT.

EXAMPLE 14/2



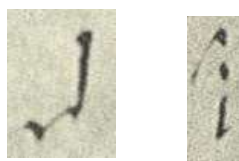
B33, f. 22v

The Beneventan separation of low-high thus reflects two special though common melodic instances: *coupure* and the beginning of a repercussion on F or c approached from the minor third below. By no means can these two special cases be compared to the all-encompassing system that is separation in the Lotharingian script, nor there is any reason to think Beneventan and Lotharingian separations are comparable at all. In Lotharingian it is a systematic concept that it intentionally applied to a variety of neumes to represent rhythmic information per se. In Beneventan it is rather the graphical resultant of a phrasal, more than merely rhythmic, disjunction (it is interesting to notice that the two special cases are rhythmically opposite: *coupure* expresses a strong fracture between the lower and higher note; the leap toward unisons a smooth flow, and yet they are written the same).

Devisers of the Beneventan script disregarded Lotharingian separation altogether. With the added understanding that the most characteristic technique to express rhythm of the Lotharingian script is absent in the Beneventan, I now turn to studying the remaining East Frankish techniques of rhythmic expression.

II.4 RHYTHM IN ASCENDING AND DESCENDING CHAINS OF THREE OR MORE NOTES

East Frankish and Lotharingian scribes select different elements to instruct about the nature of each note forming ascents of three or more notes: *tractulus* vs. *punctum*, *uncinus* vs. *punctum* etc... Early Beneventan scribes do employ different shapes to form ascending and descending chains—this is especially true for descending chains—but they clearly emphasize vertical instruction more than rhythmic precision. Indeed the standard Beneventan shapes for low-high-higher and high-low-lower



are also those that provide the least rhythmic information. They cover the vast majority of instances of series of ascending and descending notes—especially when alone on a syllable—but at the same time they are quite rare on their own and are prone to be merged with elements coming before or after. This gives rise to longer chains of neumatic elements that often go beyond the possibilities of semiologic analysis based on the East Frankish script. Although this peculiarity of the Beneventan script will be discussed in the next chapter, it needed to be specified before the following discussion.

II.4.i Descents

In Lotharingian and East Frankish scripts the discreteness of each element in a descending series of notes—every note receiving a single, separated symbol that stacks up to form the neume—easily allows rhythmic characterization.⁵⁶ Quite systematic

⁵⁶ In this regard the East Frankish script is even more propense to separate each element; the Lotharingian can in fact tie together some elements of a descent (i.e. high-low followed by *punctum*, 2-1) that East Frankish keeps discreet (i.e. *virga* – two consecutive *puncti*, 1-1-1). It is not surprising that the Lotharingian technique is carried on in the Beneventan script since it results in easier and more precise heightening. Because of the impact on representation of pitches, I discuss this characteristic in the graphical organization section following.

As a first element of the descent, the ascending oblique dash is by far the most used in this gradual. As said, it responds to directional logics and indicates that the previous note is lower. The scribe of B33 uses it indifferently where the East Frankish and Lotharingian scribes specify different rhythmic profiles: 4 and 5 have wholly swift descents in L239 and SG359; 1, 2, 7c⁵⁸ differ due to a broader final element.





In 6b the Beneventan scribe uses a horizontal dash as the middle element instead of a dot. This neume however still reports the same wholly swift descents of 4 and 5 that earlier in the piece he has written with a middling dot, as it can be seen comparing 4, 5 and 6 in the other two sources. The shape beginning with a high horizontal dash only indicates that the previous note is at the unison. The scribe uses it on 3 and 6a regardless of the fact that these two descents have diametrically opposite rhythms in Lotharingian and East Frankish sources: entirely swift 3, entirely broad 6.

As for the shape beginning with a peaking dash, it is never employed in this particular gradual but a study of its occurrences seems to indicate it marks a rhythmic difference in opposition to the more usual shape beginning with an ascending dash (both indicate the first sound of the descent is higher than the previous one). The use of the vertical peaking dash as the first element of a descent diminishes as time and types progress and by the 12th c. the shape with the oblique upward dash becomes the norm. The vertical peaking dash begins a three-note descent about 36 times in 10673. Not counting the occurrences in pieces of the local Beneventan repertoire, the first note of this descent is broad in 23 cases out of 28 shared pieces in E121 and in 23 out of 26 shared pieces in L239. In B33, out of the 20 shared pieces⁵⁹ only 10 use this vertical first dash. Of the differing 10 cases, B33 uses the more common oblique upward dash three times, and seven times, crucially, B33 merges the otherwise discreet first dash of the descent with what precedes it. This is a matter of key importance and

⁵⁸ The second descent in 7c is illegible in B33, although likely to have been the same as the first one.

⁵⁹ A smaller pool of cases in B33 is due to the fact that many occurrences in 10673 are in offertory verses, absent from B33. This is also why I used the more complete E121 than SG359 as the East Frankish benchmark.

will be further discussed in the following section pertaining graphical organization. Nonetheless, it seems safe to assume that the less common descent with an initial vertical dash does indicate a broad first sound in Phase 0 10673, whereas scribes lose sight of the rhythmic difference between the vertical and ascending dash as times and Types progress.

The reasonable amount of concordances between a descent with vertical initial dash in 10673 and broad descents in E121 and L239⁶⁰ makes it plausible to believe that the scribe of 10673 chooses more attentively between a peaking vertical [] or an oblique [] first dash in order to distinguish rhythm, but he can only do so when coming from below. No such difference is possible when the previous note is at the unison [] or higher []. The scribe of B33, although still acknowledging this difference, often overlooks it either by using the oblique ascending dash or, more importantly, because he merges together neumatic elements that the scribe of 10673 keeps separated.⁶¹

The antiphon *O quando in cruce*⁶² presents a formula three times consisting of three consecutive descents. In the third instance of the formula the scribe of B40 substitutes the oblique dash with the vertical for two of the three descents:

EXAMPLE 16



B40, F. 9V

⁶⁰ 23 descents with vertical initial mark in 10673 corresponding to 26 broad climacus in E121 and 28 in L239, that is 85% of cases avg.

⁶¹ I have found only one case where a descent with an initial vertical mark in B33 is reported in 10673 with an initial oblique upward mark (*meis*, from the gradual *Eripe me*, 10673, f. 15v; B33, f. 52r).

⁶² See KELLY 1989, pp. 207-9.

It is hard to see a reason for the difference across the three cases. The lack of the high-low **dc** in *patre* and the consequent **e** in place of **d** as the first note of *patre* might or might not point closer to the solution of the enigma—if a logical explanation of the different third passage is possible at all.⁶³

As for the middle element, early Beneventan scribes write it as a dot more often than a horizontal dash. Yet a horizontal dash is not a guarantee of a broad sound when compared against East Frankish and Lotharingian sources. The choice of the dot over the dash as the middle element appears to be a well-grounded calligraphic preference among early Beneventan scribes and provides no rhythmic information to a reliable extent.⁶⁴

The last element is nearly always a vertical perpendicular dash: its invariability opposes any rhythmic characterization. Descents do end in rare cases with a horizontal dash in 10673 and B33. Yet these cases too baffle any search for a logical, consequential rhythmic information. Such special descents are particularly puzzling as they are found both in ponderous passages as those common in tracts and graduals—especially the IIA graduals—, as well as in diametrically opposite swift descents.⁶⁵ In the Type 1 B33 and later sources there is an already visible habit of dropping the rare final horizontal dash, still present in the Phase 0 10673, in favour of the customarily Beneventan final vertical dash that nulls rhythmic information for good. It is unfortunate that this ‘old-fashioned’ chain of descending notes has, to the best of my knowledge, only survived in 10673 and B33 (and, as a possibly archaizing detail, in the later B35).⁶⁶

⁶³ I would not share an explanation for the different shapes on the ground of different theological ‘weight’ of the words *redditis*, *aquas* and *patre*.

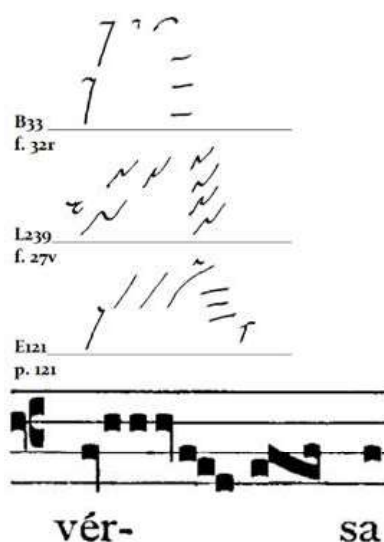
⁶⁴ See for example Gr. *Eripe me Domine de inimicis*, on *meis*: 10673, f. 17v; B33 52r; verse *Domine ne in ira* of the offertory *Domine convertere*, on *ossa* (twice toward the end of the melisma): 10673, f. 19r.

⁶⁵ Some other examples of dash-only descents for rhythmically broad passages as per northern sources: 10673: f. 1v, f. 7r, f. 7v; B33: f. 32r.

⁶⁶ In the context of IIA formulas B35 retains this final dash (although the first two sounds become a high-low, the descent thus appearing as high-low – dash – dash). However, in non-centonized contexts where B33 and 10673 use a final dash, B35 reverts to using the by-then customary vertical dash (e.g. the *communio Domine Dominus* and the offertory *Exaltabo te*). It is possible that the scribe(s) of B35 retained the dash in that formula—and possibly other similar cases—as the conservative proposition of an outdated habit. Attention to rhythmic detail is certainly not a characteristic of B35 that could explain this special dash in IIA as needing greater nuance.

Given the rarity of the descent with a final horizontal dash, one could be brought to think that it might be reserved for passages felt by neumators as particularly broad—retaining the meaning that in East Frankish series of descending *tractulus* have in opposition to descents that also use punctum. This seems to be the case for the broad descent of EX. 17 (communio *Domine dominus noster*).

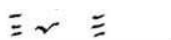

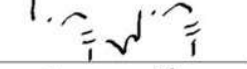

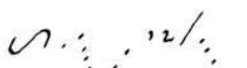
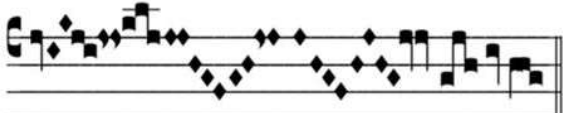
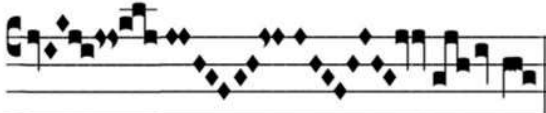
EXAMPLE 17



The scribe of 10673 uses the same combination to consistently report the very light, almost feathery up-and-down runs of Apel G_2 stock-phrase in 8th mode graduals.⁶⁷ For these formulas the scribe of B33 sometimes uses the exceptional dash-only combination and sometimes that with the usual vertical concluding dash, even inside of the same piece. See EX. 18, where the same stock-phrase concludes response and verse of the same gradual (*Deus exaudi orationem meam*):

EXAMPLE 18

⁶⁷ SEE APEL 1958, pp. 356-7.

10673 f. 19r		Idem	
B33 f. 54r			
L239 f. 39v		Idem (without litterae)	
SG359 p. 86		Idem	
			
-i.		me.	
Response conclusion		Verse conclusion	

sources are especially light or especially broad to one and the same rhythm, either swift or broad (as if the two descents with a final horizontal dash of EXS. 17-18 indicate equal rhythm because of their graphical identity). While minor rhythmic discrepancies are found across sources and zones, the cases at play here are simply too different to imagine a different rhythmic lesson in the Beneventan tradition: the exceptional case of descend series of notes that with a horizontal dash, too, must be regarded as rhythmically inconsistent. It might also be that early Beneventan scribes resort to practical expedients that do not provide any information other than “this is exceptional”. The featheriness of the 8th mode gradual stock-phrase and the pondersome descent of the IIA gradual and communio in the above passages both getting the same very rare horizontal dash-only descent might possibly indicate so.

To conclude, early Beneventan series of descending notes are radically unsystematic. Analysis has shown how early Beneventan scribes did have the tools to express the rhythmic nuances of Gregorian chant in this melodic context as well as East Frankish and Lotharingian scribes—the possibility for a dot or a horizontal dash to be middle elements; for vertical or oblique initial dashes; for vertical or horizontal final dashes and so forth—but they simply did not choose to provide exact, repeatable rhythmic

preciseness to any of these available combinations.

II.4.ii Ascents

The standard Beneventan ascent appears as a conjunction of dented horizontal dashes plus a conclusive vertical dash. As it is, it does not express rhythmic information (the nib-swelling often seen on the top of the conclusive dash being too dubious to be taken as *episema*). With the following examples I analyse whether the less common shape consisting of unconnected dashes provides different rhythmic information.⁶⁸ The first example is taken from the offertory *Scapulis suis*.

EXAMPLE 19

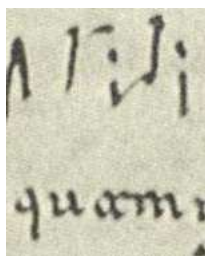
10673 f. 23r				
B33 f. 23r				
L239 f. 42				
E121 p. 102				
OF VIII				
	1 um- bra- bit	2 sub pen- nis	3 4 spe- ra- bis scu- to	5 te ve- ri-

in three and two elements and B33 employs the standard scandicus form in one stroke, as do all later Beneventan sources I could consult.⁶⁹ There is a noticeable disagreement between L239 and E121 on 3, but regardless of this Beneventan sources opt for the same shapes already used for 1 and 2. The ascent on 4 is once again swift in northern sources,

⁶⁸ Only horizontal dashes can be used as unconnected elements of ascents, not dots or oblique dashes. I have only been able to spot two exceptional three-note ascents whose first two elements are dots rather than dashes. They are both in B33 in the gradual *Dispersit* (f. 118r). In both cases the scribe of SG359 uses a *salicus* (he uses a *salicus* three more times in the piece, but there B33 returns to the standard connected shape).

⁶⁹ Respectively B38, f. 8r; B35, f. 31 r; B34, f. 66v. See <http://www.omnigreg.at/wiki/doku.php?id=grad:0582> for reproductions of B35 and B34 (the site lacks reproduction of B38, which I was able to consult *in situ*).

whereas 10673 uses the standard shape connected in one trait. Thus we see the scribe of 10673 using four different combinations to notate two rhythmic options (even just one, if compared against L239); B33 and later sources only use the standard connected shape. This suggests that the scribe of 10673 uses connected and unconnected shapes both for light (1, 2, 4), and broad ascents (3) while in B33 and later sources the standard connected shape covers both instances. And yet the Beneventan script does have means available to specify rhythm to a good extent: see how the three-note ascent on 5 has the first two notes (F-G) broader than the third peaking note (**b**). This third note can rather be regarded as the first of a mostly swift descent: all Beneventan sources agree in splitting this melodic gesture in a rhythmically instructive *inflatilia* and a neutral descent (as does Lotharingian using a separated low-high and a light descent). The preoccupation to differentiate an ascent into several combinations for rhythmic information is still quite visible in Phase 0 and Type 1 sources: analysis, especially when backed up with comparison between earlier and later Beneventan sources, indeed reveals the use of more combinations to notate ascents than descents. As said, the standard shape for a Beneventan ascent [] does not lend itself to rhythmic characterization. Further impediment to rhythmic expressivity is the fact, already hinted at before, that Beneventan ascents and descents are rarely found on their own. More often than not they serve as one of several elements 'glued' together due to the Beneventan tendency to produce neumatic chains as long as possible:

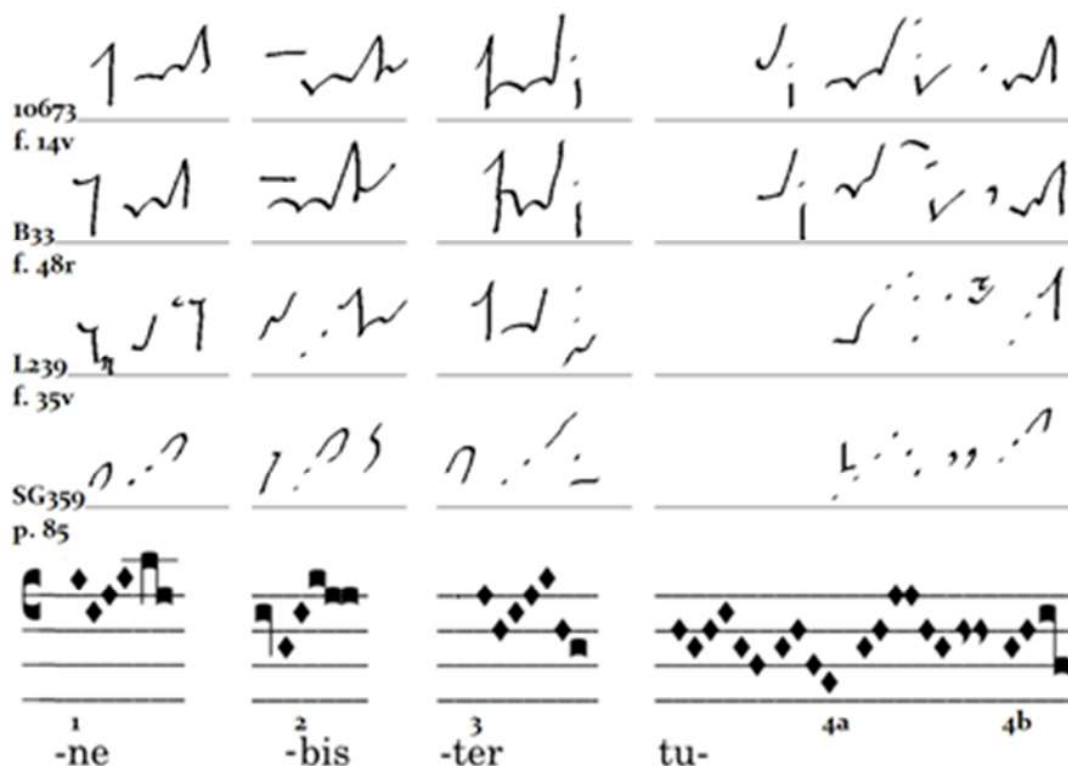


In this image the ascent is a part to the whole unity: it is at the same time the end of

a descent and the beginning of another.

Mirroring descent analysis, the next series of examples focus in greater detail than EX.19 on the functioning of early Beneventan ascent and whether its various forms point to rhythmic indication.

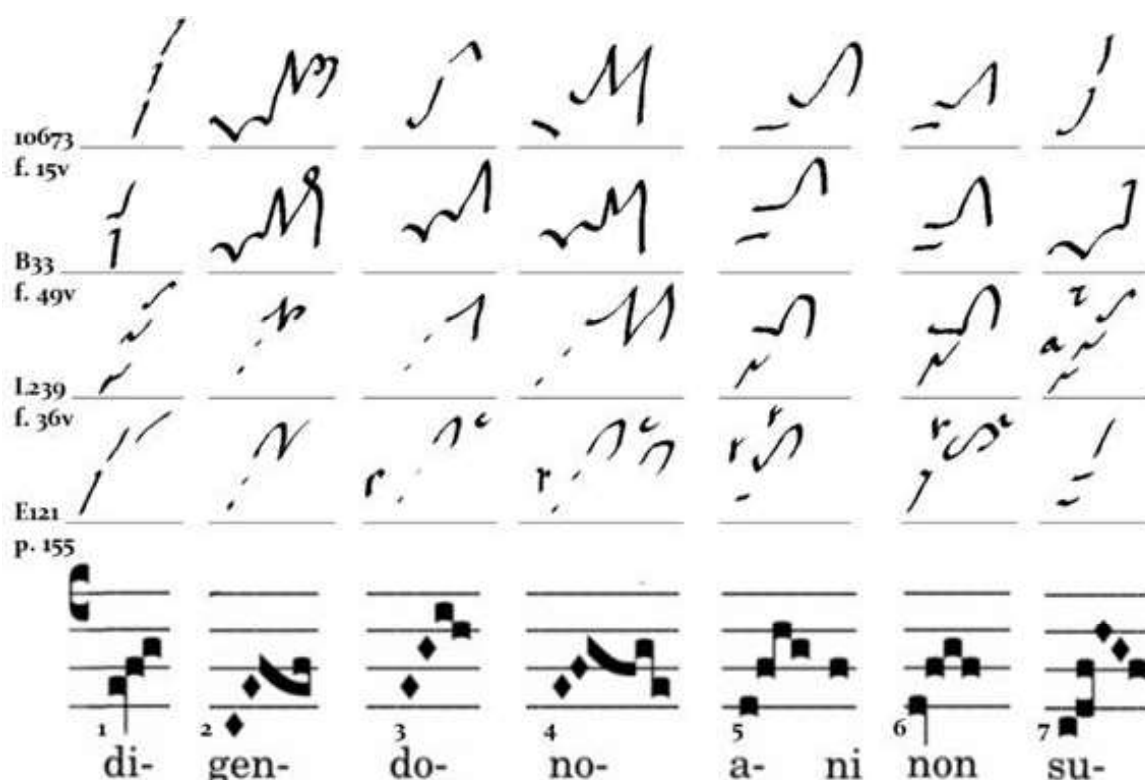
EXAMPLE 20



EX. 20, from the gradual *Exsurge Domine ... fer opem*, shows the case where the standard connected shape—either on its own or merged to other elements to form a longer neumatic chain—is used there where rhythmic sources have swift passages.

EXS. 21/1-3, all taken from the offertory *Benedicite gentes* and its verses, have far greater rhythmic variety in northern sources than they do in EX. 20, yet Beneventan sources overlook this variety by using the standard connected shape for different rhythms.

EXAMPLE 21/1 (Off. Response)



IN EX.21/1 10673 agrees with E121 and L239 on every case except for 3 and 4.

Looking at 10673, the combination on 3 of low-high plus high-low would indicate an augmentation for the second note of the syllable (a) as per current *coupure* understanding;⁷⁰ on 4 the dash plus low-high-low would indicate a broader beginning on the initial note (E). On three occasions (3, 4 and 7) the use of the standard Beneventan ascent does not allow B33 to characterize rhythm as precisely as 10673. In passing, the three ascending dashes on 1 are as striking as rare: the agreement here between E121 and 10673 is nothing short of astonishing.⁷¹ However and as much as it cannot reasonably be a mere coincidence, the fact that it is a unicum occurrence in 10673 hinders any further observation.

EXAMPLE 21/2 (Off. vv. 1-2)

⁷⁰ On *coupure* see below, pp. 172-81.

⁷¹ Stacked *virgas* in lieu of broader shapes of ascending movements seem to be a common option only in the Bamberg Cantatorium (Bamberg, Staatsbibliothek Msc. Lit. 7) among the better-known sources of the East Frankish script. See CARDINE 1968, p. 12.

10673

E121

different melody

Off. Verse 1

Verse 2

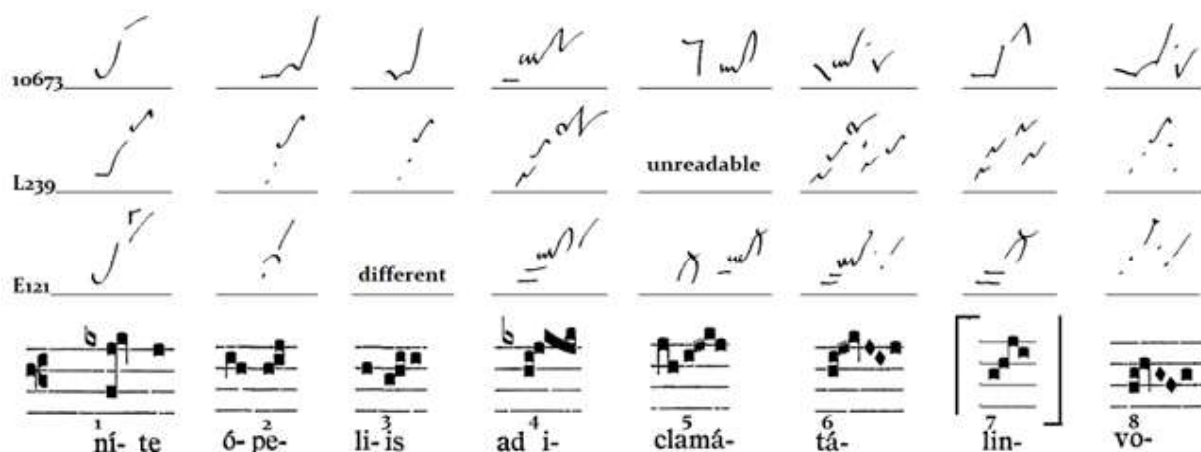
1 psal- lau- 2 di

3 tu- di- 4 tu- 5 ra 6a tis- 6b

IN EX.21/2 10673 uses different means to characterize the rhythm of the ascents,

much as the northern sources do. Some of these means are breaking up of the ascent into smaller elements (1), *inflatilia* (2), squared *episema* (3). It is particularly interesting how 10673 differentiates the two ascents in 6a and 6b: in the rhythmically nuanced E121 the first *quilisma* takes off after a swift *punctum* descent, the second after a broad *tractulus* descent. 10673 seems to report this rhythmic nuance by joining 6a in one unit but separating 6b in two (although in 10673 the *quilisma* is absent in both and the descent of 6b still ends with a dot).

EXAMPLE 21/3 (Off. V. 3)

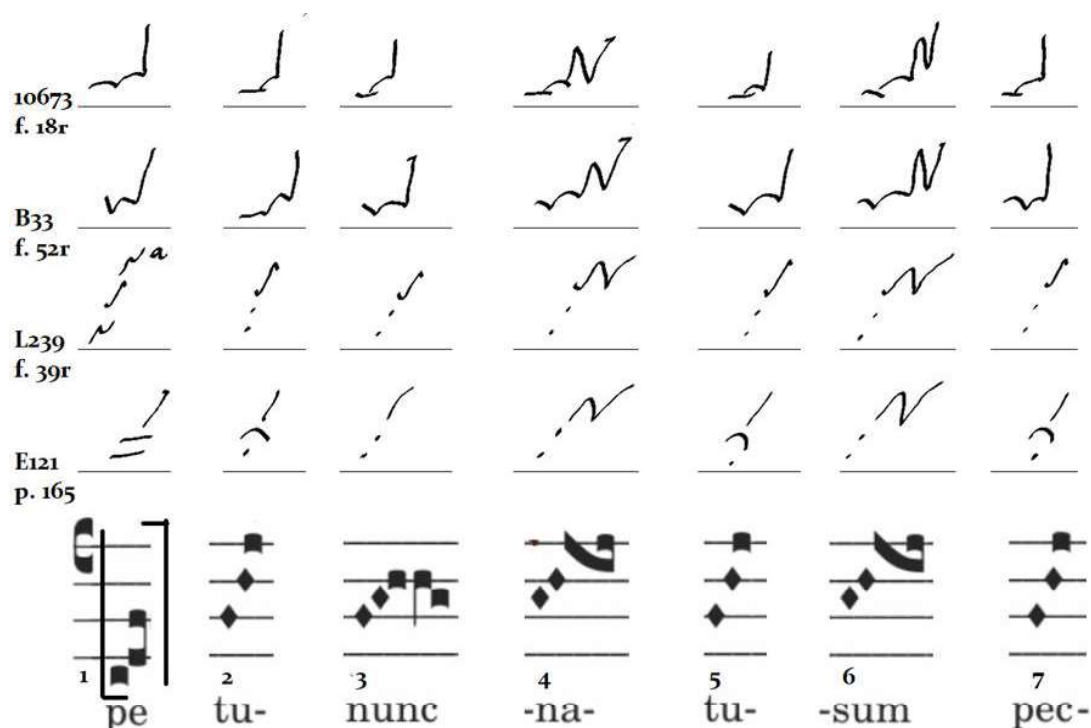


After the previous examples, discussion of this third and longest verse is redundant. I report it to provide a complete outlook of the numerous ascents found in this offertory, but for economy of reading I demand personal investigation to the reader. There are some minor discrepancies among sources, but once again 10673 is quite exact in specifying all the different rhythmic details.

6 alone merits specific analysis: it shows a peculiar oddity where the Beneventan script simply cannot specify rhythm. E121 is clear in specifying that the *quilisma* is approached via two broad notes (that the note approaching a *quilisma* can be light and broad is shown by EX.21/2, 6b) while the scribe of 10673 here is at loss: the first note on F is represented by a descending oblique dash that denotes directionality but not rhythm, while the second note of the passage, on G, is incorporated in the *quilisma*, as in the Beneventan script this special neume includes the lower non-special tone, too. Thus on F the Beneventan script renounces rhythmic precision for directional precision; on G it has no possible differentiation whatsoever on parchment—assuming one was intended in performance—since G is incorporated in the special *quilisma* sign.⁷²

⁷² The Beneventan script shares this behaviour, the *quilisma* shape standing for all three notes of the ascent, with the Spanish version of the Frankish script and, apparently, with East Frankish sources from Austria. Given the unrelatedness in regard to each other of Beneventan, Spanish and Austrian scripts, but their degree of relatedness with the East Frankish (where the sign for *quilisma* only represents two out of three notes), I wonder whether the three-note version is the most archaic, and whether German scribes re-elaborated the sign for *quilisma* to stand only for two notes after its three-note version had been ‘exported’ elsewhere maintained as such. To use Cardine’s nomenclature, the special symbol entails

EXAMPLE 22⁷³



To conclude analysis of rhythmic variation in the shapes of Beneventan ascents, in EX. 22 (8th mode tract *Saepe expugnaverunt*) we see again 10673 and B33 lacking rhythmic characterization. Checked against northern sources, all the melodic ascents are generally swift except 1, which is broad. Ascents on 2, 5 and 7 have a *salicus* in East Frankish, only reinforcing the light nature of these passages; B33 and 10673 omit it, although Beneventan script does employ *salicus*, as seen above in the analysis of Phase 0 and Type 1 shapes. Yet lack of differentiation in Beneventan sources between 1 and the other six instances shown is likewise telling, as 1 is unambiguously broad in East Frankish and Lotharingian.

a *quilisma pes* in the East Frankish script, a *scandicus quilismaticus* in the other three. The matter is certainly worth further studying.

⁷³ Curiously, here the scribe of 10673 raises the quill more often than it is usual for him to notate shapes that do not necessarily require liftings (compare f. 18r with 18v, 19r etc.). This is unlikely to have any semiologic implication, nonetheless I have tried to report all the visible liftings in my handwritten rendering.

Overall, the Phase 0 10673 tends to use the standard connected ascent for swifter melodic passages (EX. 20), and to indicate broader ascents with several strategies common to Lotharingian and East Frankish scripts (EX. 21). This is not a consistent divide and it is still easy to find cases in 10673 where a standard ascent is used regardless of different rhythms (EX. 22/1). Type 1 B33 on the opposite uses the standard connected ascent far more often, resulting in less rhythmic detail. This homogenizing trend increases as time and Types go by. The decay of rhythmic precision in ascents is one of the several evidences that suggest the developers of the Beneventan script initially looked positively at adopting the rhythmic tools of their nuance-rich models; then, as time went by, later scribes regarded these tools as secondary and not worthy of being kept.

II.5 *COUPURE* IN THE BENEVENTAN SCRIPT

Coupure neumatique is a technique that indicates a rhythmic fracture in the melodic flow by separating elements in a neume that could also be written continuously. It regulates, broadly stated, at what point across a neume the flow of a single neumatic element has to stop in order to mark the beginning of a new neumatic element. As the logics of *coupure* are currently understood, this strategy seems to indicate that a single drawing to represent, say, five up-down notes on a single syllable, is different than if these five notes were written as two groups of 2+3, 3+2, 1+4 etc... with the separation point graphically highlighting a relevant point in the musical discourse. This scribal convention was first noted by Cardine,⁷⁴ and subsequently almost exclusively championed by his school up to our days.⁷⁵

In what follows I show that Beneventan scribes know and use *coupure*, then I compare the function of *coupure* and confront the number of occurrences across

⁷⁴ See EUGENE CARDINE, 'Neumes et rythme. Les coupures neumatiques' in *EG* 3 (1959), pp. 145-54; *Id.*, 'Preuves paléographiques du principe des "coupures" dans les neumes', in *EG* 4 (1961), pp. 43-54.; *Id.* 1968, pp. 56-65.

⁷⁵ Research led by Andreas Haug at the University of Würzburg is expected to provide a new theory of neume-writing that would also update current understanding of *coupure*.

the Beneventan and East Frankish scripts. On a first look East Frankish script seems to employ *coupure* to a greater extent than the Lotharingian, but this apparent prominence simply reflects more scholarly analysis of *coupure* in East Frankish sources, and the fact that the Lotharingian script joins and separates elements according to different logics altogether. This is however not to say that Lotharingian scribes do not employ *coupure*: in many cases, at least as observable in the most thoroughly studied Lotharingian source that is L239, the use of *coupure* simply overlaps with East Frankish sources, especially when it is expressed in Lotharingian by means of a *virga*. Since L239 does not add any significant insight into the usage of *coupure* in the Beneventan script, I only compare Beneventan against East Frankish sources, analysing *coupure* appearances in the lengthy mass for the first Sunday of Lent, in the tract *Sicut cervus* and in two graduals. I chose the first mass of Lent as it appears complete in five important Beneventan sources: 10673, B33, 34, 35 and 38; *Sicut cervus* in no less than six. I chose the two graduals, *Si ambulem* and *Exsurge ... non praevalcat*, for the ample presence of *coupure*, although they are only found in three and four sources.

Incongruities and lack of systematicity have been true constants across every parameter up until now in the analysis of rhythmic behaviour of the Beneventan script. This scenario changes in respect to *coupure*, the only rhythmic technique that is not only used throughout all times and sources, but that is also closest in its application to East Frankish logics and numbers. The introit *Invocabit me* (EXS. 23/1-2) that opens the first mass of Lent is a good starting point to begin analysis.

EXAMPLE 23/1

1
rí-

2 3
cá-

4
plé-

1 2 3 4 1 2 3 4 1 2 3 4

10673, f. 5v B33, f. 22r B35, f. 30r

1 2 3 4 1 2 3 4

B38, f. 7r B34, f. 64v

2, 3 and 4 are clear cases of *coupure* in E121 (here reported on the top of modern square notation); 1 is somehow less immediately recognizable as *coupure*, but still understood in the Cardine system as being one.⁷⁶ All Beneventan sources mark 1 and 2 as *coupure* points, turn 3 from *coupure* to *pressus*, and use low-high instead of *coupure* on 4.

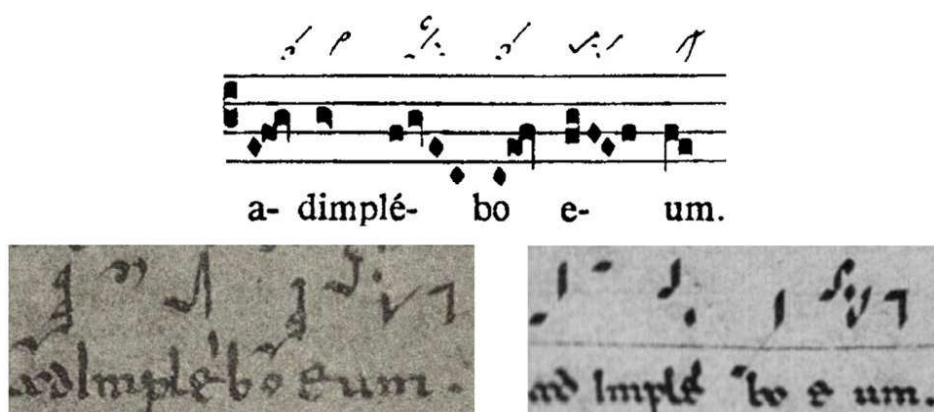
E121 also writes the repercussed c as *coupure* on 3, while Beneventan scribes turn this *coupure* into a *pressus*. This implies that Beneventan scribe felt a different quality in performance between 1 and 3, as the former presents the same pitches as separated

⁷⁶ See RAMPI – DE LILLO 2019 pp. 103-4: “stacco all’acuto con articolazione all’unisono” and p. 172 table 1/3; AGUSTONI – GOESCHL 2009, pp. 695-7: “raggruppamento neumatico con discontinuità grafica al punto alto”.

dash and dot. From early through late times, a unison that East Frankish scribes report with *coupure* separation often turns into a *pressus* in Beneventan sources (later sources even increase preference of *pressus* over *coupure*, a point I expand upon below). This suggests that East Frankish and Beneventan scribes had a shared understanding of the melodic premises that turn an East Frankish *coupure* into the Beneventan *pressus*.

Beneventan sources only disagree with E121 on 4. The low-high Beneventan scribes use (low-high-low in B33) hampers the focal point of **a** against which, almost like a see-saw, hinges the light descent of thirds that prepares the final cadence of the piece (see EX. 23/2). Moreover, the same low-high shapes neutralize the strong melodic difference between **ab** on *adimplebo* and **ab** on *eum*. In E121 use of *coupure* and *virga* with *c[eleriter]* on *adimplebo* and broad low-high on *eum* reports the different weight of **ab** across the two words, a detail all lost in Beneventan sources. I provide B33 and B34 as examples:

EXAMPLE 23/2



But overall, numbers of the scrutinized four masses and other pieces tell of a very high rate of agreement in the use of *coupure* between East Frankish and Beneventan sources. I was able to count a total of 135 cases of *coupure* in E121 in the five *proprium* pieces of the first mass of Lent.⁷⁷ Applying the numbers of the five Beneventan sources in a table with percentages, we have

⁷⁷ I leave out from all counting the rhythmically neutral (as per current understanding) “stacco in basso” in which the written fracture happens on a note lower than the two at its sides. See CARDINE 1968, pp. 62-65.

TABLE 3/1 (FIVE LENT MASSES)

E 121: 135 coupures	10673	B33*	B35**	B38	B34
Agreements	118	72 / 83	105 / 128	102	96
<i>Pressus</i>	11	6	11	27	27
Disagreements	6	5	12	5	12
Agreement w/ E121 (when including <i>pressus</i>)	87% (95%)	86% (96%)	83% (91%)	75% (95%)	71% (96%)

* B33 shares only 83 instances with E121 since it lacks the first gradual altogether and the offertory verses.

** Abbreviations and omissions of centonized melodies account for 7 less shared cases in B35.

Consistency is remarkably high also when compared against the tract *Sicut cervus*:

TABLE 3/2 (TRACT *SICUT CERVUS*)

SG359: 22 coupures	10673	B33	B40	B35	B39	B34
Agreements	17	18	17	15	13	13
<i>Pressus</i>	5	3	3	5	7	7
Disagreements	-	1	2	2	2	2
Agreement w/ SG359 (when including <i>pressus</i>)	77% (100%)	82% (95%)	77% (91%)	68% (91%)	60% (91%)	60% (91%)

Exact agreement reaches 85-75% across early sources and 80-60% across later ones. Numbers rise across all sources to 90-100% rate when counting in *pressus* as a typical Beneventan adaptation of *coupure* on unison.

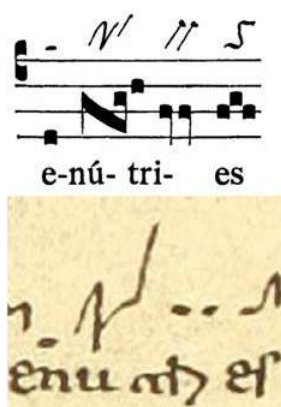
In the gradual *Si ambulem* out of the 17 *coupure* that I was able to count in SG359, there is an agreement rate of 100% with the three Beneventan sources B33, 34, 35 reporting it (only once in B35 one East Frankish *coupure* is turned into a *pressus*). The gradual *Exurge ... non praevalcat* found in B33, 34, 35, 38 has an overall agreement rate of 91% (26 out of 29 cases) in each of the four sources.

That Beneventan scribes early and late report >90% of a pool of more than 200 *coupure* as seen in two nuance-rich East Frankish sources, means that Beneventan scribes never

overlook or drop it as a rhythmic and notational nuance, regardless of whether earlier scribes maintain *coupure* on unisons and later ones convert it into a *pressus* more often.

Beneventan sources systematically omit *coupure* between the penultimate and last note of the strongest syllable of a word, as in EX.24 from the introit *Esto mihi*:

EXAMPLE 24



10673, f. 2v

Here the East Frankish final *coupure virga* marks a neat separation between **a** as the peaking focal point of the word and the high-low-high that prepares it. Beneventan sources favour the creation of a single chain. I could find no exception whatsoever in all of Beneventan sources and occurrences, except for the 1st mode well-known intonation (C)**Dab a**—where **b** receives a separate vertical dash in Beneventan sources as well—and when the movement from below is approached with a *quilisma* ascent.⁷⁸

It is also interesting to note that all the disagreements shared by Beneventan sources against East Frankish *coupures* always occur at the same places. Ex.23/2 on

⁷⁸ I report the following ten cases after a cursory search. They should suffice to turn this observation into a rule of the Beneventan script, however much negligible such a rule actually is.

In. *Oculi mei, respice* (B33, B34, B35, B38, B39); In. *Caritas Dei, diffusa* (B33, B34, B35, B38, B39, B40); Gr. *Tu es Deus, facis* (10673, B34, B35, B38); In. *Esto mihi, enutries* (shown above, 10673, B34, B35, B38); In. *Miserere ... conculcavit, conculcavit* (10673, B33, B34, B35, B39); Gr. *Ab occultis, meis* (10673, B33, B34, B35); Off. *Benedictus es ... labiis v. 1, eius* (10673, B34, B35, B38); Gr. *Iacta cogitatum, meam* (10673, B33, B34, B35, B38, B39); Co. *Servite Domino, timore, ei* (10673, B33, B35, B34); Off. *Iubilare Deo, exultatione* (B33, B35, B34).

For examples of the 1st mode intonation exception see B33, 14r (In. *Suscepimus*), 14v (In. *Gaudeamus .. Agathae*) and 124r (In. *Gaudeamus .. sanctorum*), 126v (In. *Factus est dominus*).

adimplebo shown above is one such case, to which I now add one that reverses the order of things: here Beneventan sources report a *coupure* that East Frankish sources do not have (on the contrary indicating a light ascent). The example is found in the stock cadence to C of 2nd mode tracts, always unchanged in its appearances throughout Beneventan sources.⁷⁹ I report it from B34 for its graphical clarity in this case (from tract *Qui habitat*, verse 1).

EXAMPLE 25



B34, f. 65r

Whether this discrepancy testimonies a different interpretation of this particular cadence or not is hardly assessable, though plausible. What I deem more important is highlighting the cohesion of Beneventan sources in reporting *coupure*, whether they agree with East Frankish sources, differ with them or turn *coupure* into a *pressus*. *Coupure* in the Beneventan script is a detail as accounted for as is directionality: it is true that later sources turn more *coupure* than earlier ones into *pressus*, yet scribes early and late take always great care in reporting it. It is possible that we do not currently understand all the notational implications of *coupure*: after Cardine's pioneering studies, we have come to think of it as an eminently rhythmic nuance, but it is also possible that more than a rhythmic nuance *coupure* is an organizational concept at the core of the very practice of notating plainchant. This would explain why, of all means to express

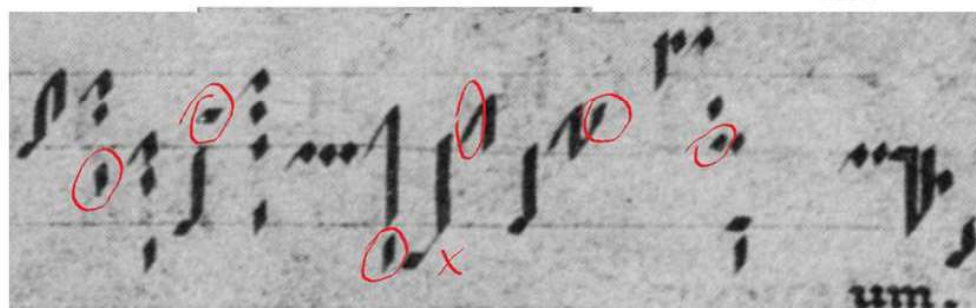
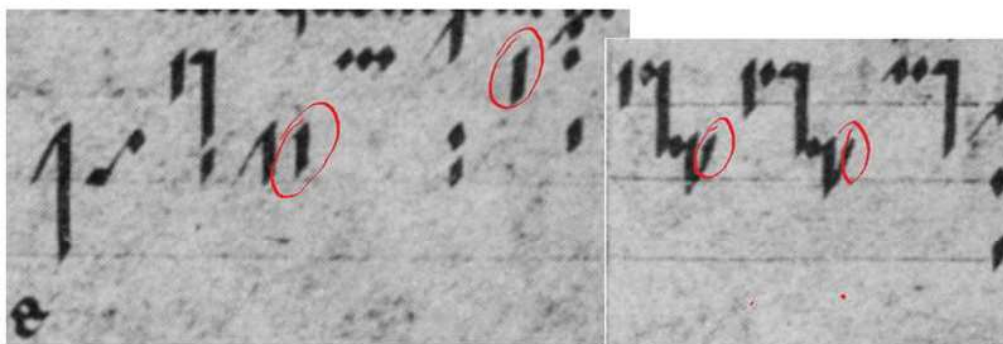
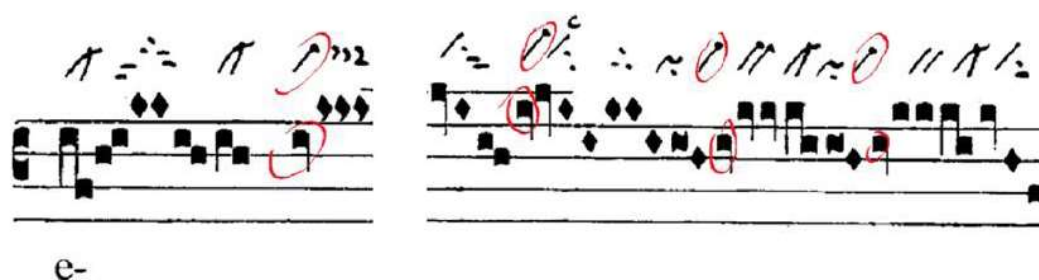
⁷⁹ Also notice how East Frankish *coupure* on FFE on *[al]tissimi* typically becomes a *pressus* in B34 (this, too, happens in all sources early and later).

rhythm, *coupure* is by far the more stable and cultivated by Beneventan scribes.

Examples and statistics have shown that as time and Types progress there is only a slight decrease in the rate of *coupure* usage. It is not a simple decline however, since very often *pressus* substitutes for *coupure*. The change from *coupure* to *pressus* is the main reason why later Beneventan sources appear to be so rich in *pressus*. Indeed, *pressus* is a genuine distinctive Beneventan trait, on a par with the large employment of liquescences. As per why the scriptorial habit of *coupure* around the second half of the 11th c. started being substituted with *pressus* and its wavy indentations—a figure much more complex to draw than it is to just raise the quill to initiate a new neumatic element—is a fascinating evidence that asks for explanation. Why would the special performance sign of *pressus* see its use increase in time when all others—*quilisma*, *salicus*, *episema*, rounder low-high and low-high-low, etc...—all face progressive disappearance? I think it is because of all the performance signs, *pressus* is the only one that can aid graphical orientation and provide a chance to merging neumatic elements, two things that Beneventan scribes wished for with ever-increasing attention through time. *Pressus* in the Beneventan script is as much a rhythmic mean as is of pure graphical expression. This will be further evaluated in the upcoming chapter on graphical organization.

Lastly, I propose to the personal scrutiny of the reader the lengthy final melisma of the 3rd offertory verse *Super aspidem of Scapulis suis*, also taken from the first mass of Lent. Here the three Beneventan sources provided with offertory verses all share ten of the eleven different *coupures* of E121—all three Beneventan sources reporting *coupure* at the exact same points:

EXAMPLE 26



B34, f. 67r

To conclude this section on the rhythmic organization of the Beneventan script, early scribes do acknowledge and employ all tools used in the East Frankish script to express rhythmic nuance. Separation alone, Laon's unique tool of rhythmic expression, is not integrated: it is, in fact, antithetical to the drawing of chains of notes as long

as possible—one of Beneventan musical scribes’ main goals as the next section will show. But regardless of the adoption of all East Frankish techniques to specify rhythm, a pervasive use of these techniques is not a priority of Beneventan scribes. It was never my intention to show that the Beneventan is not the ideal script from where to gain insight of Gregorian rhythm and/or performance indications. Yet poor rhythm expressivity is not because Beneventan sources “have begun losing the best references” as Bernardino Ferretti writes.⁸⁰ Early Beneventan scribes did not lose some vague “best references”, as if SG359 and L239 were precisely copied and sent along all Europe only to find lazy overlooking copyists unworthy of their excellence. Simply put, Beneventan scribes had desiderata other than rhythmic precision, although in the beginning some attention was put into it as well. On the top of their agenda there was the will to raise the directional and diastematic potential of their notation to the very maximum. It is to the study of this priority that we now turn, reserved for last in the analysis as the chief achievement of the Beneventan script.

⁸⁰ FERRETTI 2005, p. 18.

Section Three: Graphical organization of early Beneventan script

This final section is dedicated to the graphical organization of early Beneventan musical script. I began this chapter outlining my theory that the Beneventan musical script results from a single oriented dash—either on its own or combined—and a dot. There I applied this idea to syllabic passages—i.e. where one syllable receives one single sound—and to shapes for two- and three-note neumes. Here I put the dash and dot system idea in a broader context, from how two dashes merge to discussing lengthy melismas. I begin by describing how a Beneventan scribe creates *loci* that indicate pitch—what I call the ‘angular aspect’ of the Beneventan script. Then I discuss the important but as yet still overlooked Beneventan ‘resupinus’, a unique dash for a rising note coming after a descent. Then I compare the tendency of Lotharingian and Beneventan scripts of merging shorter neumes in longer chains (as well as one small but significant adjustment proper to Beneventan in this regard) and their similar use of *pressus* as a relevant means in the creation of such chains. Finally, I present how the dash and dot system gives rise with ease to complex uninterrupted combinations of as many as nine or ten notes. By this point and with the aid of concluding examples, it will be plain to see how even notating the lengthiest offertory melismas is a mere matter of combining oriented and heightened dashes and dots and how these two very simplest tools indeed constitute the conceptual and factual backbone of all Beneventan musical script.

III.1 THE DASH AND DOT SYSTEM

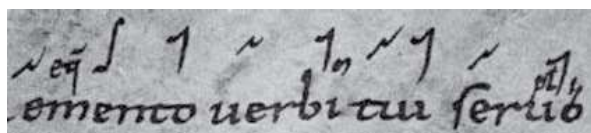
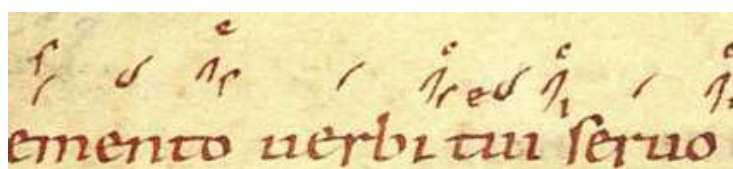
The Beneventan script determines pitches at three geometrical *loci*: where a dot is, where an angle occurs and where the final dash of a neume (or a single dash, if

alone on a syllable) ends. A technique inherently present from the beginning of the script, its vertical precision is of course looser in Phase 0, quite more precise in Type 1 and absolutely precise from Type 2 onward (Type 3 almost only adds staff lines to the precise but still abstract grid of Type 2 style). Dashes and dots thus coordinate to form an implicit grid that illustrates the position of pitches, as EX. 27 shows:

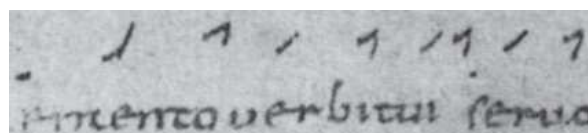
EXAMPLE 27



E121, p.156

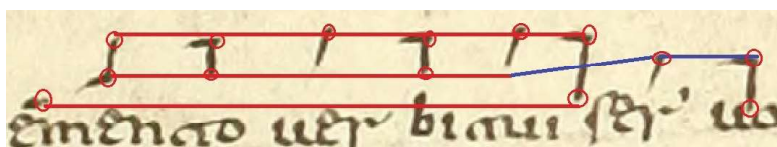


L239, f. 42v

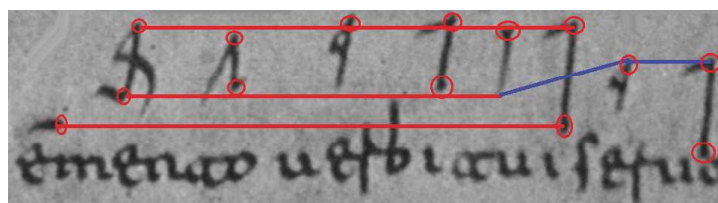


Ch. 47, f. 28r

10673, f.21r



B33, f. 57r



In the two Beneventan sources the vertical disposition of the three pitches **F-G-a** implicitly creates one organic 'grid'. My red lines show in concrete what the three

geometrical *loci*, marked with red circles, implicitly organize.⁸¹ Of course it is still demanded of the reader to provide the intervallic relationship along the grid, but aside from this, the three pitches are absolutely consistent in their relationship in the initial portion of the piece *memento verbi tui*. Then, at the beginning of a new section on *servo*, both B33 and 10673 scribes shift the grid slightly upward: they adapt the available vertical space to accommodate the melodic descent towards lower regions of the mode (i.e. G now stands slightly higher than in the previous section—see the change in line colour). However, attention to vertical disposition of pitches is not a Beneventan novelty. Working much earlier than the times of both Beneventan sources, the scribes of Chartres 47 and Laon 239, respectively using the Breton and Lotharingian scripts, are also sensible to verticality, but their disposition of the three pitches is not as regulated as that of the Beneventan scribes: they provide little to no difference in length to the high-low neumes regardless of the different melodic span of the descending intervals (a second then a third); also the Breton scribe does not adapt *servo* downwards.⁸² It should be borne in mind that such difference only proves how the wish for greater vertical accuracy was greater in the Beneventan milieu than in Breton and Lotharingian; not that the French scripts are flawed or inadequate in regards to this parameter. On the opposite, the East Frankish scribe of E121, roughly contemporary to the two Beneventan scribes, almost entirely overlooks attention to vertical disposition. Susan Rankin has gone to great lengths showing how descendancy from the conceptually and factually earlier Paleo-Frankish script lies at the core of the Breton and Lotharingian attention to verticality; and how on the opposite the East Frankish script was developed on the basis of a fundamental renouncement of the vertical paradigm of the Paleo-Frankish script. Thus EX. 27 shows that attention to vertical detailedness is primarily a characteristic integral to scripts rather than

⁸¹ I disregard liquescence indication in B33 as irrelevant to the discussion.

⁸² RANKIN 2018, p. 240 describes the approach of Chartres 47 scribe as “semi-diastematic”.

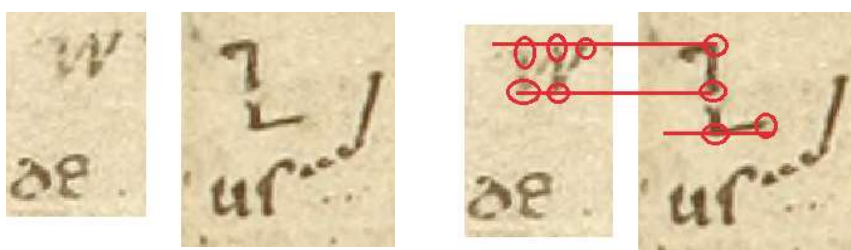
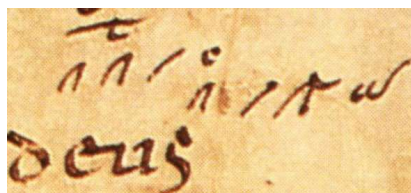
depending upon mere chronology (also, inside of a script, to individual scribes' greater or lesser interest in reporting it). It will be repeatedly seen in the course of this section how the Beneventan script inherits from the Lotharingian the attention to the vertical disposition of pitches—just as in the previous section it was seen to inherit techniques of rhythmic expression from the East Frankish. Indeed the Beneventan script is designed not to have the reader recall a melody and its rhythm via discreet symbols and verbal hints as does the East Frankish (see in EX. 27 the various *celeriter*, *equaliter*, *sursum*, *iusum* of E121) but rather as one that concretely represents pitches on parchment with uninterrupted flows of dashes and dots. These are more often than not as silent about rhythmic details as they are instantaneous about melodic indication. Indeed to speak in EX. 27 of—in order of appearance—*tractulus*, *pes*, *clivis* and *virga* does not bring analytical nor interpretive advantage at all. Nor I feel that recourse to accents as the theoretical foundation of the Beneventan dash is useful or even accurate. What a more neutral analysis shows here is a series of oriented and heightened dashes and angles that precisely posit pitches on an abstract grid. My 'neume-less' reading, if not more correct, is—I deem—certainly closer to the intentions of the devisers of the Beneventan script.

In longer chains of sounds this angle-based criterium is even more evident. Truly it is decisive in guiding the scribal hand: each angle and each last dash creates and at the same time qualifies a pitch, all while keeping silent about that pitch's own rhythmic profile.

EXAMPLE 28



SG359, p. 156



10673, f. 16v

Ex. 28⁸³ (verse *Venite* of offertory *Benedicite gentes*) shows the sensible divide between East Frankish and Beneventan scripts. The scribe of SG359 is as careful regarding rhythm as it is silent on any intervallic information. Its 2+1+2+2 grouping on *Deus* accompanies the reader with the *celeriter* clivis towards the F – D modal ‘inner core’ of the neume, and specifies the broad rhythm of the two Fs with *episemata* and 1+2 *coupure* articulation. 10673 on the opposite simply places each single intervallic relationship on the abstract grid⁸⁴ and makes clear the disposition of each diatonic step on the two syllables (although it does not specify whether a semitone falls across this series of stepwise intervals). The final *quilisma* ascent in 10673 lacks precise heightening for at least two reasons: most of the times it is a stock melodic gesture rising through a minor third and as such does not need it, and because its final dash

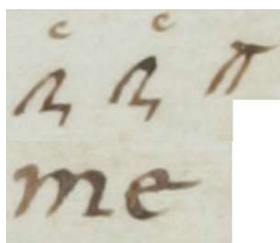
⁸³ Here and in the next example I report 10673 twice as my elaboration makes it difficult to see the original notation. Also notice that the neume on EX. 28, *deus* begins in 10673 with a barely visible horizontal mark.

⁸⁴ Notice that the neume on *deus* begins in 10673 with a barely visible horizontal mark.

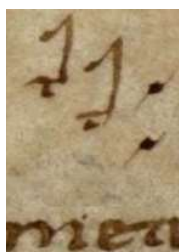
would have been too short were it cut at the height where the previous F is.

Ex.29 (gradual *Ego autem*) shows how closer the Beneventan script is to Lotharingian than to East Frankish. The scribe of E121 resorts to *episemata* and *litterae* to differentiate between broad and light notes; that of L239 does so with *litterae* and joined / disjoined low-high, at the same time also supplying some degree of vertical information by heightening the neumes. The scribe of 10673 sets a pure grid that disposes of any rhythmic detail but supplies a clear-cut representation of the four stepwise descending pitches.⁸⁵

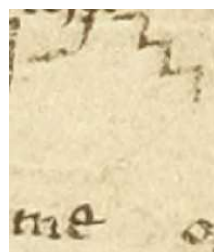
EXAMPLE 29



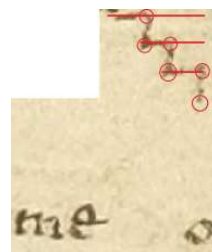
SG359, p. 93



L239, f. 47r



10673, f. 26r



As for dots, they communicate pitch in a straightforward way simply according to where they are laid. Ex.30 (offertory *Eripe me de inimicis*, verse *quia ecce captaverunt*) shows the strong geometrical effect of dots in the Beneventan script, especially evident in passages where they are numerous. The Beneventan dot, too, is conceptually closer to the Lotharingian *punctum*—also marking heights in the vertical space to some extent—than the East Frankish *punctum*—at most signalling unison.⁸⁶

⁸⁵ Interestingly, there is no difference in the height of each step, even though the first two stand for a tone and the third for a semitone.

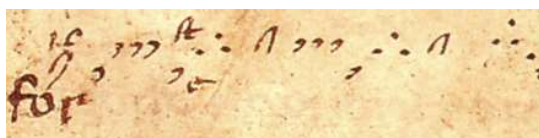
⁸⁶ In this example nonetheless the fifth and ninth 'comma' of E121—that is, the two *apostrophus* before the first two *trigon*—stand much lower than previous elements, even though they are all on c. The scribe resorts to the letter *e*[*qualiter*] to verbally suggest the unison.

EXAMPLE 30

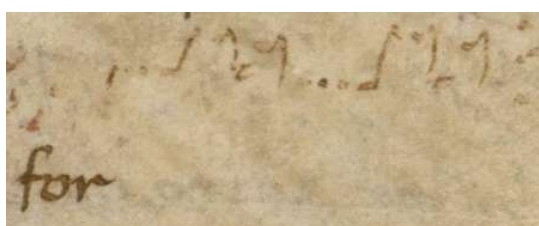


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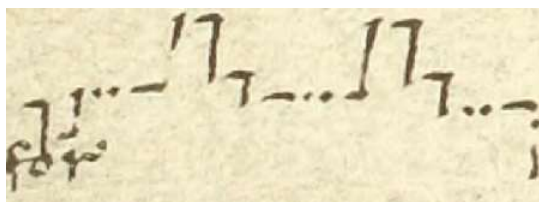
E121, p. 174



L239, f. 41r



10673, f. 20r

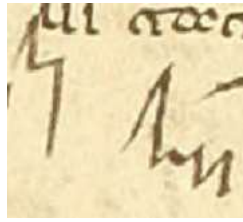


The abstract grid of 10673 in EX. 30 is consistent regardless of the fact that the line of repercussed *c*'s dips down slightly each time (it is such imprecisions that later Beneventan scribes and Types adjust even without resorting to cleffed diastemacy). As per the difference between a longer horizontal dash or a dot as the first or last in a series of repercussed sounds, to the best of my understanding it is a simple visual aid. In this aspect there might be ties with how Lotharingian ends *bi-* and *tristropa*.⁸⁷

So far I have discussed the three *loci* where pitches are determined: where a dot is, where an angle occurs and where the last dash ends. On the opposite, the length of the first dash and the point where it begins have no value in determining pitch. In the following picture, the neumatic element on the left

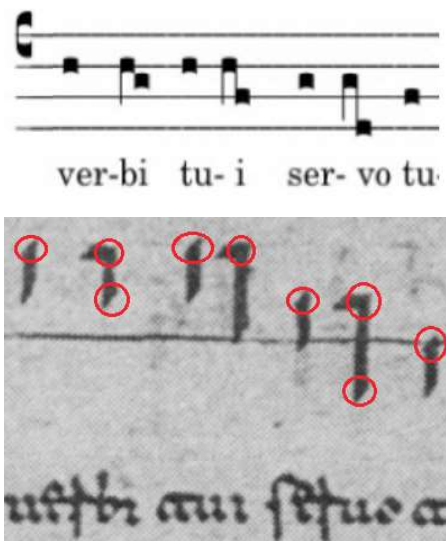
⁸⁷ This difference mostly disappears starting from Type 2. From this moment, horizontal dots for unisons are all consistent lozenges.

ends at the same height where that on the right begins:



yet the ending of the left element does mark a pitch; the beginning of the right one does not. In regards to the right element, it is the position of the first angle that determines the pitch, not the length of the dash leading to that angle. At the very most, perhaps the scribe here has drawn a longer rising dash as a visual aid to guide the sight—a sort of in-line *custos*, if you will. Indeed the length of an initial dash or that of a dash for a single note can be at first glance somehow confusing in later, perfectly diastematic sources. See how in EX. 31 vertical dashes appear as if the lower pitch were also implied somehow since dashes extend from exactly one position in the grid below the intended actual pitch.⁸⁸

EXAMPLE 31



B34, f. 103r

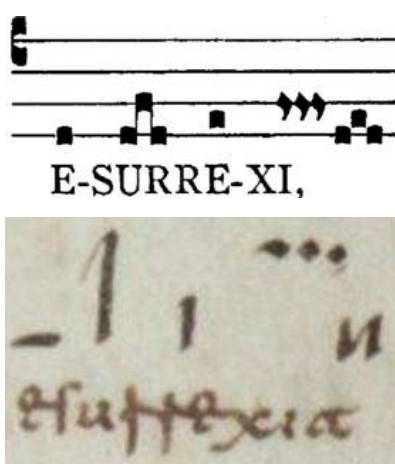
⁸⁸ From communio *Memento verbi servo*.

Similarly, Kelly and Peattie have described the ‘low torculus’ (what I call cadential low-high-low) of B40 as

not perfectly diastematic: the scribe notates the upper limit of the first note at the same height as the upper limit of the second note, which sounds a step higher. The calligraphy of this neume appears to be a stylized remnant of an earlier phase of Beneventan notation.⁸⁹

This is the example they provide, from the introit *Resurrexi*.

EXAMPLE 32



B40, f. 21r

The “upper limit of the first note” of the low-high-low is what I call the initial dash of the neume: as such it has no diastematic value. While it is true that in later sources such as B39 and B34 this initial dash is shortened (thus not forming the characteristic **И** shape), the length of the first mark does not disturb the precise diastematic quality of the entire neume since the first angle—what solely matters—is at the same height with the end of the last dash. This detail alone specifies that the pitches the first angle and the last dash stand for are at the unison, in this case **D**.



⁸⁹ KELLY – PEATTIE 2016, p. 52.

The only sensible element of any dash of the Beneventan script is where it forms an angle with another dash or where it ends—not where it begins and how long it is. Under this light, the occasional hair-thin initial dashes for rising notes are not as odd as they can appear. If the initial line leading to the first angle of a Beneventan neume had musical value in itself, we wouldn't sometimes see it drawn almost invisibly thin (whereas its practical aid in guiding the scribal hand is quite obvious). Such thin dashes are even more frequent in later Types and manuscripts, when the difference between thin and thick quill strokes increases with the adoption of ever-widening pens (and becoming almost spectacular in its precision in the more carefully redacted later manuscripts such as B34).

EXAMPLE 33

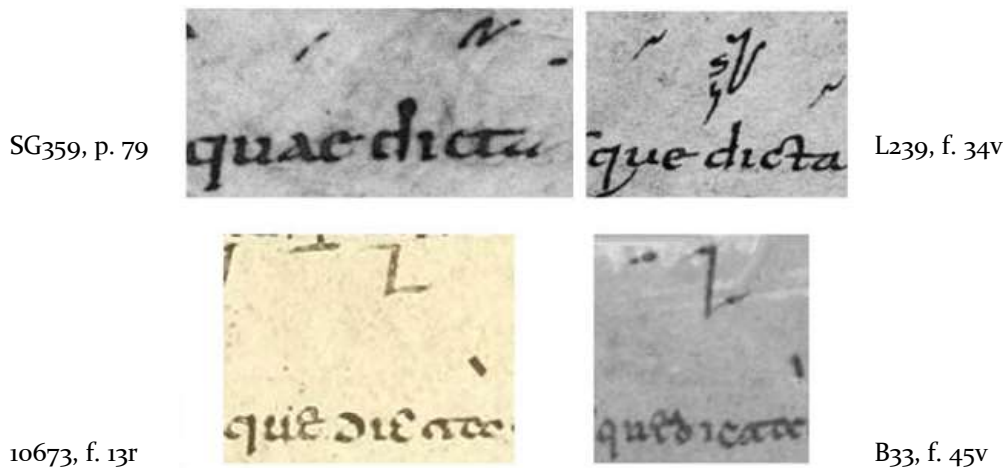


III.2 DASHES IN SIMPLE CONTEXTS

I now discuss the dash and dot system in melismatic or moderately melismatic contexts. Highlight is put on how it is certainly closer to the Lotharingian concepts of graphical organization than of East Frankish.

The following three examples 34-36 are all taken from the gradual *Laetatus sum*:

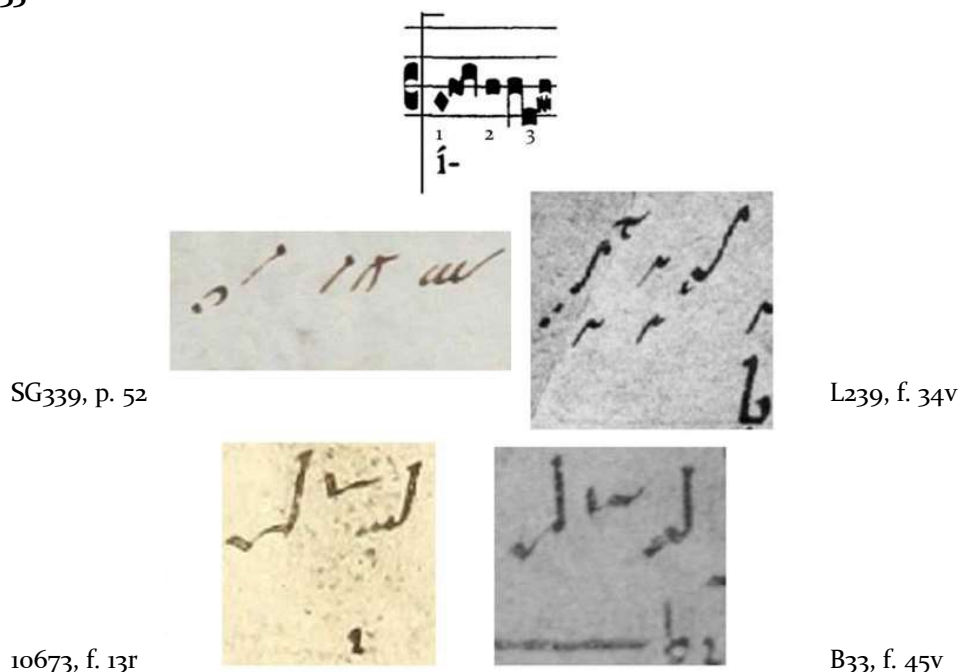
EXAMPLE 34



In EX. 34 both Beneventan sources show the profile of the melodic curve with immediate clarity: angles and dash endings report the presence of a note; their position in the vertical space across the two lines of text reports their melodic height in relation to each other and to their proximities. The dash standing for the second note of *dicta* is half the length of the distance between the endpoint of the third dash on the same syllable and that of the dash on *dicta*: this in respect to the intervals of a second and of a third. Here Lotharingian and East Frankish are both conceptually quite distant from the Beneventan system. While Lotharingian does report some heightening information, in both scripts the neume on *dicta* does not set the third note at the same height of the second, even though the two notes are both *f*. This is due to an exception apparently only proper to the high-low-high neume shape (i.e. this shape standing in some early

scripts for high-low-unison).⁹⁰ More than melodic mis-representation however, the difference of the three-note neume between the Beneventan against the northern scripts is telling of different attitudes towards the goal of writing plainchant melodies.

EXAMPLE 35



SG339, p. 52

L239, f. 34v

10673, f. 13r

B33, f. 45v

In EX.35⁹¹ the Beneventan three-note ascent rising from **b** to **d** is in itself the combination of three oriented dashes that create two angles. The two dashes on **2** fuse in an exclusively, original Beneventan figure expressing two unisons coming from above (as in B33, the second note is often written as *oriscus*). Lastly, the Beneventan *quilisma* ascent on **3** is a self-enclosed sign that includes all of the three rising sounds, giving no other option to notate them.⁹² 3+2+3 is thus the only neumatic combination possible: even in such short melodic fragments there is proof that Beneventan neumators draw chains as long as possible. That **2** is not merged with the last element of **1** in a fashion similar to *dicta* of EX. 34 is quite likely because **1** is a melodic cell that has its own

⁹⁰ See CARDINE 1968, pp. 31, 74.

⁹¹ Ending of the melisma on *ibimus*, closing the refrain of the abovementioned gradual. I take the East Frankish example from SG339 instead of SG359 as the latter is barely readable in this spot (the two have the same neumes).


⁹² See above, p. 170 footnote 72.

autonomy, with **d** marking an important articulatory point, as the East Frankish scribe makes explicit by using a *salicus* instead of a more neutral three-note ascent.

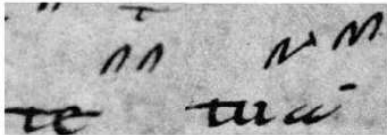
Writing the first two *uncini* at different heights, the Lotharingian scribe does not visually represent the unison of 2. This might reflect the need to emphasize the rhythmic unity of the **ca** high-low as separated and independent from the note before (3+1+1+2 note grouping). The East Frankish source does the same with the use of *coupure* at the same spot (**c** / **ca**). Just as careful as Lotharingian and East Frankish scribes are arranging neumes so to emphasize rhythm, Beneventans are completely silent about it. This neutral 3+2+3 juxtaposition of oriented dashes and a *quilisma* ascent proves at once the most compact neumatic grouping and the most precise heightening, yet mostly overlooking rhythmic organization.

EX.36 shows even more clearly the vertical rationale Beneventan scribes follow.

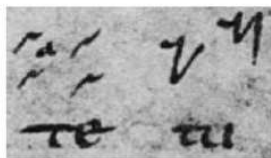
EXAMPLE 36



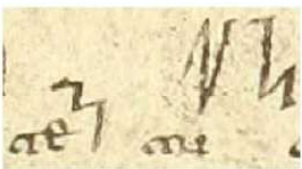
SG359, p. 79



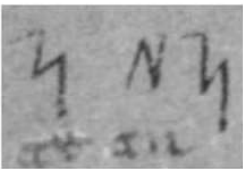
L239, f. 34v



10673, f. 13r



B33, f. 45v



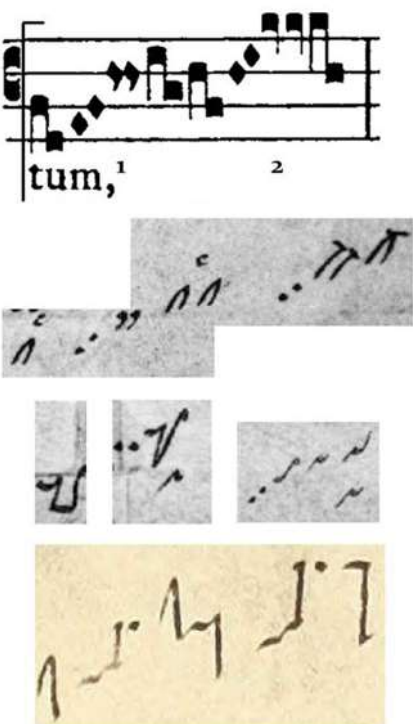
Again we see that Lotharingian and East Frankish scribes prefer rhythmic precision over everything else: the first four-note neume on te is split up in a 2+2 combination of two broad high-low; the second, on tu[a] is drawn with one swifter joined stroke. Heightening is as usual absent from SG359, but even L239 overlooks it completely. The series of connected Beneventan dashes only provides one rhythmic piece of information: *coupure* happening between 2 and 3. On the other hand the same combination of four dashes is used to notate 1 and 3, two passages so dramatically different in regard

to rhythm. This is a fine example of how series of connected dashes are rhythmically neutral, at most having the possibility of expressing *coupure* with a fracture between otherwise connected units. Thanks to its effortless display of heightening and orientation, it is melodic indication that this 4, 3+4 arrangement⁹³ of dashes truly emphasizes.⁹⁴

III.3 CONNECTIVE QUALITY OF THE BENEVENTAN DOT

A Beneventan scribe uses dots either as internal elements of descents (high-low-...-lower) or as connective elements inside of a melisma. The first case was discussed in the section pertaining rhythm, now follows analysis of the second case.

EXAMPLE 37



The image displays a musical score at the top with square neumes on a four-line staff. Below the staff, the word 'tum,' is written with a superscript '1' and a '2' indicating different parts of the melisma. Below the score are three manuscript excerpts. The first, labeled 'SG359, p. 67', shows a series of dots connected by a line. The second, labeled 'L239, f. 22r', shows a similar series of dots. The third, labeled '10673, f. 7v', shows a series of dots with a vertical gap between them.

In this first example (gradual *Protector noster*, toward the end of the melisma on [virtu]tum) the East Frankish scribe makes clear the rhythmic difference between the

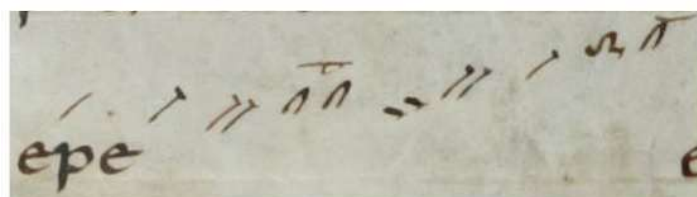
⁹³ The comma intends the beginning of a new syllable.

⁹⁴ In B33, the third dash of 1 is slightly tilted up so to leave enough space for the longer final dash expressing the larger interval of a third. In 10673, the wide vertical gap between 1 and 2 is an apt example of the beginning of a new 'relative diastemacy area': 1 ends a passage on a melodically higher region, 2 begins a new passage on a lower region. The conspicuous shift upward is required so that neumes do not sink beneath the text line.

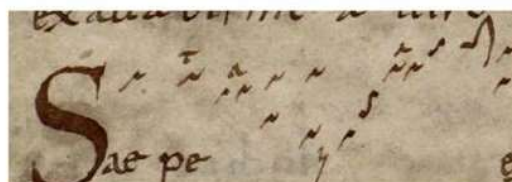
two repercussed *cs* on 1 notated with *apostrophae* and the two repercussed *fs* on 2 with *virgae*. The Lotharingian scribe uses *punctum* on 1 and *virga* plus *uncinus* on 2. By using the alternance of shapes—*apostrophus* and *virga*, *punctum* and *uncinus*—, both scribes easily differentiate the qualities of the light repercussion on *c* and the broad repercussion on *f*. On the opposite all Beneventan sources early and late notate this passage with an isolated dot that connects on a graphical level the preceding ascent and the following high-low.⁹⁵ This solution abandons rhythmic specification of either *bivirga* or *bistropa* in favour of the graphical immediacy of the dash and dot system: the identical dots of 1 and 2 plane off the wide rhythmic difference that the northern scribes report.

Ex.38 (from the tract *Saepe expugnaverunt*) is another case of dots as graphical appositions, made even more evident by the following *coupure*.

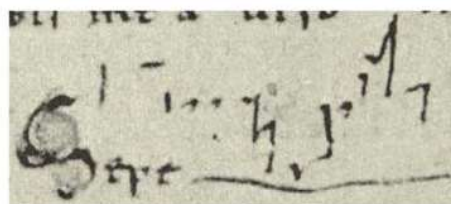
EXAMPLE 38



SG359, p. 85



L239, f. 39r

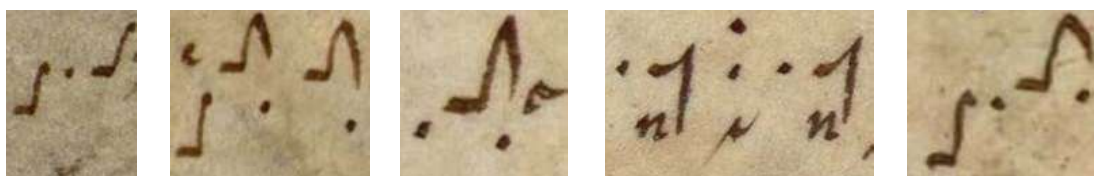


B33, f.52r

⁹⁵ Sources other than 10673 include B33, B38, B35 and B34. The scribe alone of B34 misses reporting the dot on 2—almost certainly an inattention rather than the actual drop of the second of the three high *f*'s in his interpretation of the passage. See reproductions at <http://www.omnigreg.at/wiki/doku.php?id=grad:0475>.

Here I focus on the rise back up from the low point **C** to **G**: the northern scribes encase the two repercussed and broad **F**s between the equally broad ascending **CD** and the *coupure virga/uncinus* on **G**. In B33 and 10673 on the other hand, such integrity is not only overlooked but even lost to the dash and dot system: here the first **F** is part of an ascent **CDF**, while the second **F** does not have any connection to the first one. With the use of a standard ascent followed by a simple dot, the scribe of B33 does not emphasize the two **F**s in any way. Only the dash on **G** stands as more relevant since it marks *coupure*. As in EX. 37, this case too shows how the dash and dot system graphical immediacy is preferred over rhythmic and articulatory precision. The Beneventan dot on the second **F** is nothing but a connective atom in the sequence of very clear-cut, geometrical figures that guide the observer through the melisma.

Having discussed the rhythmic neutrality of connective Beneventan dots, the next examples show the similar use of Lotharingian and Beneventan dots as tools of graphical organization. This practical and conceptual similarity proves as another element for the indebtedness of the Beneventan script to the Lotharingian on matters of graphical organization. To begin with, the only occasions where the East Frankish script uses a single dot on its own are the special melodic gestures of *pressus maior*⁹⁶ and *salicus*. That is, the occurrence of a single dot in the East Frankish script is only ever integral to the occurrence of two particular special signs: the dot of *pressus* and *salicus* is one inseparable element out of three that form the special melodic and rhythmic profile. The Lotharingian script does use single dots on their own, though in a manner not quite as radical as the purely connective Beneventan dots. An independent Lotharingian *punctum* can still indicate the initial or final light part of a neumatic element, almost as if it were a pre- or suffix:



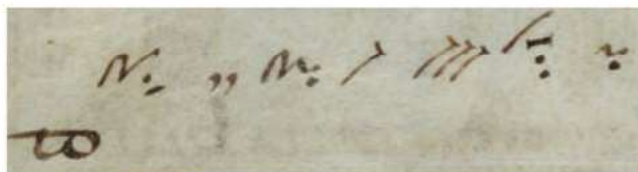
⁹⁶See CARDINE 1968, pp. 88-92.

As in the Beneventan script and to the best of my knowledge, a Lotharingian *punctum* is not used alone when the note following it is lower (e.g. in the first image above the *punctum* would not have been used were the low-high neume following it on a pitch lower).

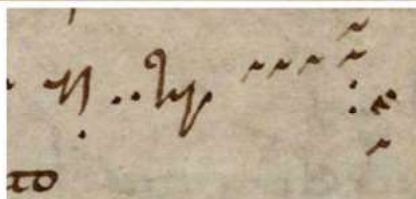
EXAMPLE 39



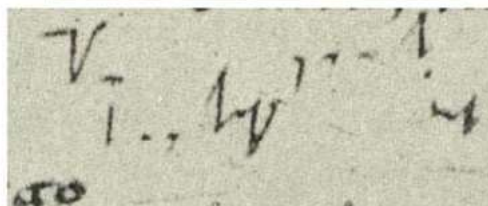
SG359, p. 86



L239, f. 39r



B33, f. 52r

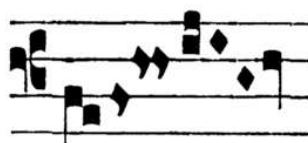


Ex.39 (fourth verse of the tract *Saepe expugnaverunt*) shows a case similar to Ex. 38. In L239 one suffix-like dot ends the first neumatic element of 1 and the two dots of 2 precede the following neumatic element of 3. The Beneventan scribe does the same, only altering the connective dot of 1 into the final vertical dash of a descent, then organizing the rest the same as L239. That is, the note that stands for the first of the three Gs in L239 and B33, functions as a connective element between 1 and 2. The SG359 scribe uses a different strategy: a combination of a standard high-low-high, a *punctum* and a *tractulus* makes up the independent unit 1 ('porrectus subbipunctis'), followed by an equally independent *bistropa* for 2. This *bistropa* is a good example

of neume as symbol in the East Frankish script: probably even more so than *bivirga* and *trivirga*—they are simply repeated *virgae*—*bistropa* and *tristropa* must have signalled to the contemporary eye fluent in the East Frankish script something more than just two or three light sounds at the unison. They must have been symbols that with their modification brought attention over performative nuances that neither Lotharingian and Beneventan connective dots nor East Frankish basic *punctum* imply. That is, the *apostrophus* shape has more information about light repercussed sounds than the more neutral Lotharingian *punctum* and Beneventan dots. East Frankish scribes use *punctum* just as well—in ascents, descents, *salicus* and so on—so that when *apostrophus* take its place, it must mean something more than ‘this shape stands for a single note’, which is what the Lotharingian *punctum* and especially Beneventan dot stand for. I do not wish to imply that in ex. 39/2 neutral dots also brought neutral performance: it is more likely that Lotharingian and Beneventan singers, too, modified their emission somehow for the two *G*s—but the graphical rendering of their script overlooks the nuance that the East Frankish reports on parchment.

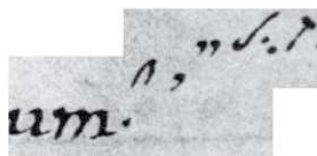
Ex. 40 (tract *Qui habitat*, end of verse 12) shows one last example about the proximity of Beneventan dots to Lotharingian *punctum*.

EXAMPLE 40

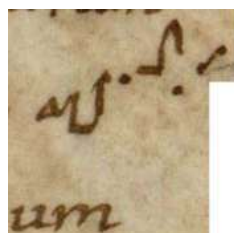


um.

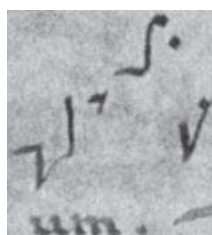
SG359, p. 67



L239, f. 21v



B33, f. 23r



Here both Lotharingian *puncta* and Beneventan dots act as neutral connective elements, with the only differences being 1) the different inclination of **Ga** in the initial four-note element—horizontal in L239 and oblique upright in B33 in accord to directionality—and 2) the customary use of ‘resupinus low-high’ in B33 there where L239 has a dot plus *virga*.⁹⁷ The East Frankish scribe employs a different graphical organization altogether: with no purely connective elements available to his script, he breaks down the passage into four separated units.


These examples have shown that the Lotharingian script employs single dots as light connective elements in neumes of more than two notes with some frequency. Dots are even more frequent in early Beneventan script because here they maintain the

⁹⁷ I analyse both issues below in paragraphs III.4 (inclination) and III.5 (*resupinus*).

connective function while mostly losing rhythmic connotation, therefore being also used in cases where Lotharingian scribes would use *uncinus*. The East Frankish script is decidedly removed from this technique, resulting in a quite different graphical rationale—sequences of discreet self-enclosed units.⁹⁸ Roughly generalising, the East Frankish script resorts to *bistropa* and *tristropa* where the Lotharingian and Beneventan connect two neumatic elements with a dot—as in EX. 40.

The Beneventan script is not simply closer in its behaviour to Lotharingian: it exploits the potentialities of connective dots of Lotharingian, turning them into the ubiquitous ‘glue’ that concurs keeping together its very long chains.

III.4 BENEVENTAN *RESUPINUS*

The Beneventan dash and dot system gives rise to a particular method for writing a movement upward that follows one downward. Often found in contexts of *coupure*, cadences and standard ‘resupinus’ movements,⁹⁹ I call it ‘Beneventan *resupinus*’. It creates low-high shapes not seen in other families¹⁰⁰ and facilitates the drawing of lengthy uninterrupted chains of notes so typical of the Beneventan script as a whole. After discussing its appearance, I bring about specific comparisons of Beneventan *resupinus* with East Frankish and Lotharingian in 1) *coupure* contexts; 2) in the common  cadence; 3) in cadential contexts employing *pressus*; and 4) in non-cadential contexts. It will be seen that Beneventan use of *resupinus* is decidedly

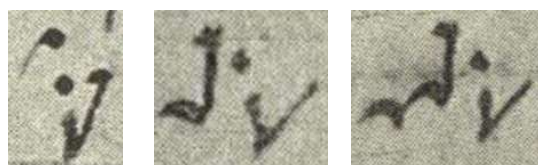
⁹⁸ It is under this light that the utility is most evident of the German *tabulae neumarum*. The names they specify truly only work best inside of the East Frankish script, not universals that Solesmes affixed to every script. Thus in EX. 40, notes **GaGE**, the name of *pes subbipunctis* can be valid in SG359 since there actually are two dots below a particular shape that was given the name of *pes*, but nothing of this sort is at play in L239 and B33. In these two sources a neutral sequence of low-high-low-lower(-high, in B33) is more appropriate—one more proof of the proximity of their scripts. I expand on this matter below, pp. 212-15.

⁹⁹ See CARDINE, pp. 52-54.

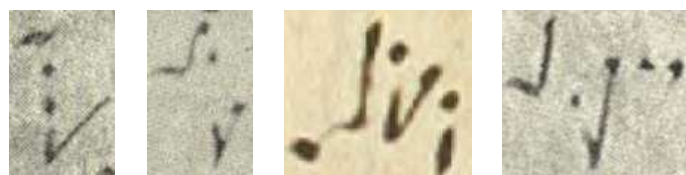
¹⁰⁰ Most notably and frequently a high-low-lower-high in which the last two sounds are graphically united.

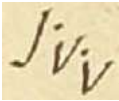
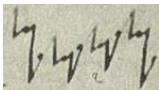
distant from East Frankish and Lotharingian, while these two use comparable means to express the upward note. Only in case 3 involving *pressus* there is remarkable similarity of graphical organization between the Beneventan and Lotharingian scripts: this points out to a common understanding of *pressus*.

The uniquely Beneventan method to write *resupinus* upward movements is simply to attach an oblique ascending dash to the previous vertical descending dash. As the vertical dash is drawn perpendicular to the text or roughly so, the ascending *resupinus* dash forms together with the vertical a very distinctive narrow angle of about 30-45°. The three following images show the most common melodic gestures where a *resupinus* element is employed in the Beneventan script:



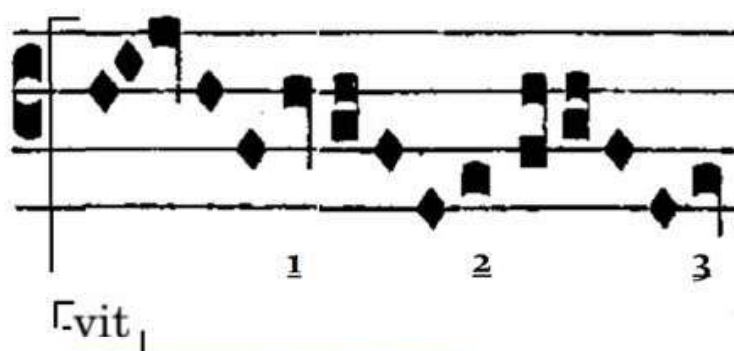
The next images show combinations more complex but less frequent than the ones above. They testify of the numerous combinations that the Beneventan *resupinus* can give rise to:



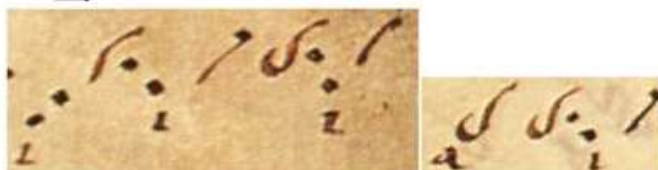
Indeed, with the possibility of being reiterated (as in ) and regularly serving as a 'welding' point between several neumatic elements (as in ) , the Beneventan *resupinus* is a prominent feature of long chains of notes. EX.41, from the verse *Exaltabitur* of the offertory *Bonum est confiteri*¹⁰¹ shows at once three noticeable things:

¹⁰¹ The passage in 10673 appears uninterrupted and on a single line in the manuscript. I split it in three parts for better alignment with the two other sources shown.

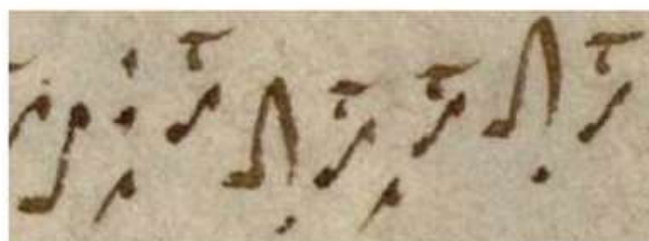
EXAMPLE 41



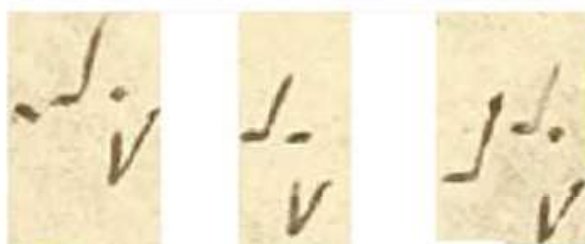
E121, p. 83



L239, f. 16v



10673, f. 11r



1) the length of the resupinus dash changes in accord with the interval it notates so to accommodate correct heightening/diastemacy. See how the resupinus dash of **1** is taller than those on **2** and **3**, reflecting the wider interval; 2) it denotes *coupure* in regard to the note following; 3) it creates a low-high shape out of what Lotharingian and East Frankish scripts keep separated. In regard to this last point, Beneventan resupinus produces this low-high joined shape where Lotharingian and East Frankish scribes use a disjointed *virga* after the note preceding the *resupinus*. On closer observation and when considering the respect due to *coupure* rules,¹⁰² again we see

¹⁰² Further suggesting that *coupure* might likely have been a rule for how to write musical notation, rather than an exclusive rhythmic indication as how Cardine saw it.

that the combination of EX. 41 is the longest enchainment the Beneventan scribe could produce: every neumatic element is as long as is possible, only interrupted by *coupure*. Even the **ac** low-high after **z** could have not been tied to the following high-low **bc** to create an hypothetical low-high-low-high, since, as East Frankish and Lotharingian indicate, another *coupure* occurs there.

Although Ben resupinus is also found outside of stock cadential formulas, it is in two of them that is most often used: the common **§ 2 ↑** gesture found on all finals except E and in similar but less common cadential stepwise gestures implying *pressus*.

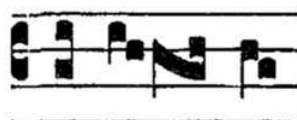
Here is a **§ 2 ↑** cadence notated with *resupinus*. East Frankish and Lotharingian scribes keep the last *virga* separated:



In cadences including *pressus*, Beneventan and Lotharingian scribes organise the grouping in the same way.¹⁰³ Ex.42 from the 7th mode *communio Notas mihi* shows one such occurrence (the cadence is on the modally important **b**).

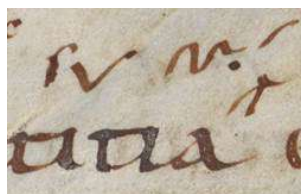
¹⁰³ Tying the otherwise separated virga in *pressus* contexts is also a prerogative of the later and less calligraphic hand that has drawn neumes on offertory verses in L239 (see e.g. verse *Domine deus tu* of offertory *Expectans*, on *domine*, f. 36r). This suggests Lotharingian scribes were consistent in writing this stock cadential passage this way.

EXAMPLE 42

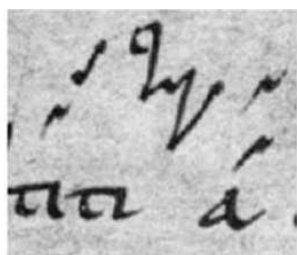


tí- ti- a

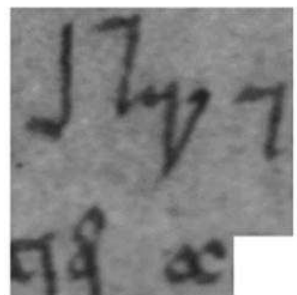
E121, p. 140



L239, f. 32v



B33, f. 42r


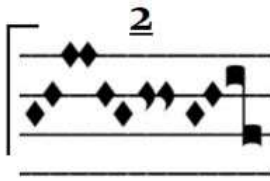

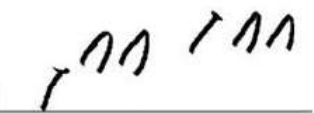
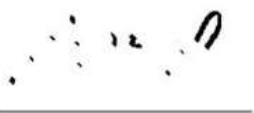
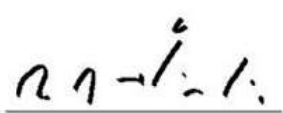
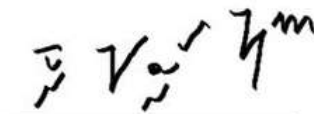
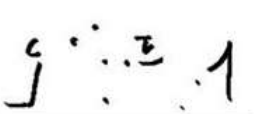
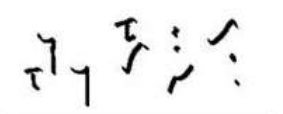

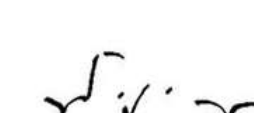
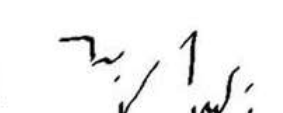
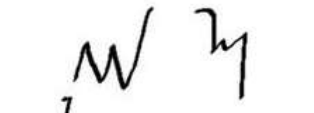
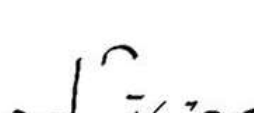
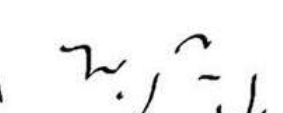


The Lotharingian and Beneventan *resupinus* element is tied to the note preceding it, which is in turn tied to the *pressus*. This solution opposes that of the East Frankish script, where the element following the *pressus* is a punctum,¹⁰⁴ and the *resupinus* element a detached *virga*. The only difference between the Lotharingian and Beneventan rendering is a calligraphic one: the little loop that the former starts the neumatic element is a horizontal dash oriented in respect to the note preceding it in the latter.

¹⁰⁴ Combining in a 'pressus maior', a melodic figuration of two notes at the unison (a *virga* and *pressus*) and a third lower pitch (a *punctum*). See CARDINE 1968, pp. 88-92.

Ex.43, taken from the gradual *Exsurge ... fer opem* shows three different *resupinus* outside of common cadential formulas:

EXAMPLE 43

	1	2	3
			
	no-	tu-	nos-
SG359, p. 81			
L239, f. 35v			
10673, f. 14v			
B33, f. 48r			

The three passages are all quite different from each other as per their context, position in the melisma, melody and rhythm. Still, in B33 and 10673 they share the tying of an upward note that SG359 and L239 separate. On 1 Beneventan scribes draw one continuous chain of dashes after the first **a**, while northern scribes adopt different solutions to reach the first high **d**—3+2 that of L239 and 2+2+1 with *coupure* that of SG359. Beneventan scribes adapt the length of the *resupinus* dash to the wide leap of a fourth, ending it at the same height of note following at the unison. The melodic context of 3 is similar to 1: northern scribes use *coupure* while Beneventans use the *resupinus* dash the same as in 1 (notice again that the *resupinus* dash does not hinder indication of *coupure*, since what matters in designating *coupure* is the break after the

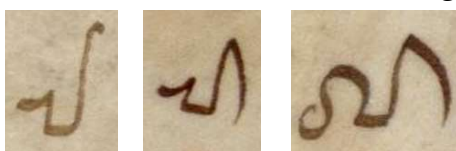
relevant note, not before). **z** is on the other hand a different case altogether: it comes in the middle of the typically light, airy melismas of 3rd mode graduals as part of a *bistropa* in East Frankish and Lotharingian but as resupinus dash plus connecting dot in Beneventan sources. That is, the two **as** of L239 and SG359 are one coherent element separated from what comes before and after, in B33 and 10673 the same notes are elements of a continuous flow of dashes and dots. Also noticeable is that using *resupinus* instead of two dots shows that *resupinus* in the Beneventan script notation does not necessarily imply *coupure* or broader sound. Out of the two **as** of **z**, only the second is broad—as East Frankish and Lotharingian scribes instruct—but it is the first that has a *resupinus* dash in Beneventan sources.

All the examples and discussions on Beneventan resupinus ultimately show that this, too, is one of the tools Beneventan scribes resort to enhance diastemacy. It results in improved heightening—as the *resupinus* dash is as tall as its interval requires—and emphasizes graphical organization over rhythmic—as rhythmic detail is often blurred by the connection of pre-*resupinus* and *resupinus* elements.

III.5 SIGN FOR CHAINS OF ALTERNATING NOTES

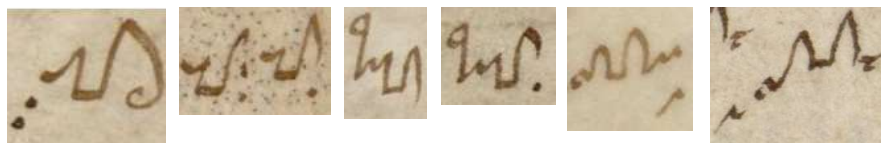
The Lotharingian script uses a distinctive group of conceptually related shapes to indicate series of pitches alternating high and low, possibly with a unison in the middle. This group presents at once many of the genuine characteristics of the Lotharingian script: rough diastematic disposition, length of its elements in accord with the melodic curve, tendency to ligate signs together (between four and seven).¹⁰⁵

The following images present basic iterations of these signs on four-, five- and six-note chains:

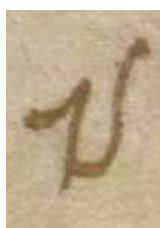


¹⁰⁵ See RANKIN 2018, pp. 248-54.

Such basic versions can be further characterized with the addition of *pressus* and *quilisma* and/or more elements attached to the whole chain:



These signs result from the juxtaposition of smaller elements in a longer one—as simple as a high-low plus a low-high in the simplest shape. Sometimes the ductus itself is broken into the basic elements, clearly allowing to see that the neumator ‘welded’ together smaller units. See how in the next image the low-high fuses just above the end of the high-low tail, betraying a lifting of the quill:

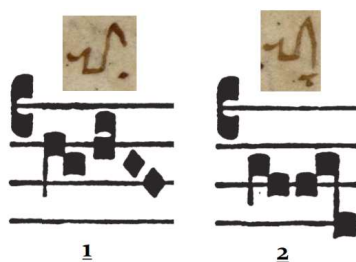


It might occur that the proximity of longer signs with the shorter ones allow to appreciate how the scribe’s hand moved in the same ways, further confirming the conceptual derivation: the neume on 1 is the ‘sum’ of the two shapes on 2.

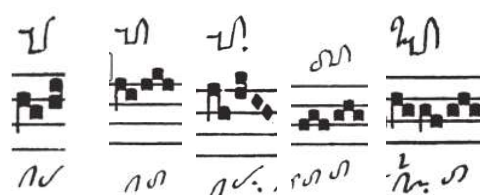


What all the signs of this group have in common is that there is always a quite rectilinear horizontal dash somewhere in the middle of the chain. Taken at face value, each element would seem to indicate alternance of high and low pitches interrupted by one unison represented by the straight dash. But almost always the pitch that the horizontal dash stands for is higher than that preceding, although unisons can rarely

be found at this same place in the chain:

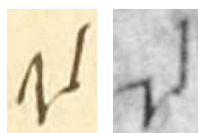


This detail will show to have important repercussions on the equivalent sign found in the Beneventan script. Before turning there, it will suffice to say that the East Frankish script keeps the smaller elements separated, an evidence coherent with the tendency of this script not to create longer chains:

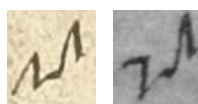


The graphical similarity between this Lotharingian group of shapes and its Beneventan equivalent is very remarkable. Here are some examples from 10673 (on the left) and B33 (on the right):

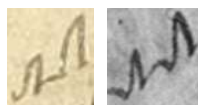
Four-note chain:



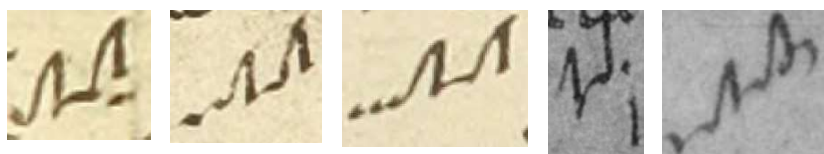
Five-note chain:



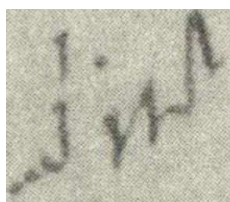
Six-note chain:



Other 6+ combinations:



Even more so than in the Lotharingian script, in the Beneventan this group of signs often aids in creating extremely long chains—the following has eleven notes!



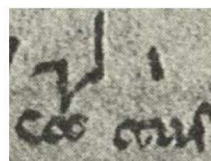
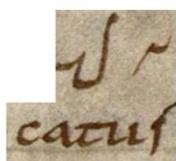
The crucial difference is that the Lotharingian horizontal element standing for a pitch higher than its orientation suggests is re-designed in the Beneventan script with an oblique upward dash that fits the rise of the melodic curve. Thus in EX.44 (tract *Cantemus domino*, v. 1, [*honorifi*]*catus*) the element connecting F and G is straight in Lotharingian, upward in B33:

EXAMPLE 44



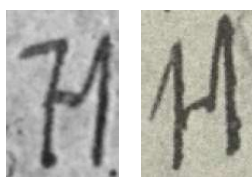
cá- tus

L239, f. 51r



B33, f. 75v.

More rarely and only up to (and including) Type-1 sources, rather than using an oblique dash the second part of the chain can show to be melodically higher by beginning midway through the tail of the first part—a graphical oddity unlikely to convey any substantial meaning when set against the standard ductus starting from the tail base.



To conclude, the group of signs in which at one point there is a straight horizontal line is exclusive to Lotharingian among the earliest notations. In all its combinations, it represents all the characteristics of this script, most notably the tendency to create longer chains out of simpler neumes and heightened disposition of notes. It is in such

occurrences that the Beneventan dash and dot system shows its indebtedness to the Lotharingian graphical organization. Does the almost total overlapping of these signs across the two scripts indicate a direct descentance? One might say that, with the dash and dot system at the core of the Beneventan script, these signs are nothing but its results. However, if as I maintain the devisers of the Beneventan script saw the Lotharingian and ‘studied’ its graphical organization, then a direct descentance becomes more plausible, and the modification of the Lotharingian horizontal line smoothly integrates into a narrative of ‘creating’ a new own script.


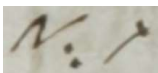
III.6 LACK OF *LITTERAE* IN THE BENEVENTAN SCRIPT

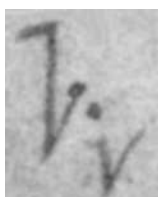
In the East Frankish script, *litterae significativae* serve both rhythmic and melodic purposes; in Lotharingian they are still quite present, but employment of rhythmic letters far surpasses that of melodic ones. It is easy to imagine that in Lotharingian it is so because its heightened neumes can visually communicate to some degree what melodic *litterae* in East Frankish only suggest verbally inside of a unheightened environment. Coming to our notation, Beneventan scribes do know the system of *litterae*, but they seldomly if ever use them at all. In the extremely few cases where *litterae* are found, they only ever signal out slight diastematic imprecisions, never rhythmic expression.¹⁰⁶ The reason—I assume—is twofold and plain to see: rhythmic information is not the foremost preoccupation for scribes even in early stages of the script; and necessity of melodic *litterae* is rendered superfluous by the very precise heightening—except to emend rare neumators’ faults.

¹⁰⁶ PM XV, pp. 151-3, provides a list of *litterae* occurrences across 10673, B33 and B40. I do not share the view expressed there that the scribe of 10673 makes use of the *littera t[enere]* with the rhythmic meaning of keep the note, slow down. FISCHER 1991, p. ix briefly reviews the presence of *litterae* in B40.

III.7 A NEUME-LESS SCRIPT?

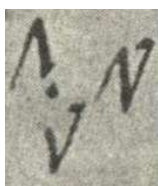
In its sharp practicality the Beneventan script is best described as neume-less, consisting of dashes and dots alone. The dash and dot system not only does not have the performative character fundamental to earlier 9th c. Carolingian systems, it also cannot adhere to a nomenclature that, born among the circles of Frankish scribes alone, modern scholarship has indiscriminately regarded as equally valid for all others scripts. To look out for the qualities of Beneventan *virga*, *punctum*, *pes*, *clivis* ... is not only an endeavour bound to bring nowhere; it also potentially gives rise to awkward nomenclature and plain-out nonsense.

This melodic figuration  would be considered in standard nomenclature as a *porrectus subbipunctis resupinus*, in line after all with the actual drawing of East Frankish from which the name spans: . This literally is a *porrectus* followed by two *puncta* and a *virga*, the latter serving a *resupinus* function (in turn, *resupinus* has richer modal and rhythmic overtones than a generic 'higher than previous sound'). But when under the pen of a Beneventan scribe the above figure becomes



how can one say that out of the two oblique upward dashes, the first is the last element of a *porrectus* and the second, although identical, is the *resupinus* in a *subbipunctis* that only has one dot and not two as the name entails? Or, even more abstrusely, that the first is the last element of a *porrectus* and the second the last of a *pes* that follows a single *punctum*? They are nothing of the sort, and the whole musical notation shown here is but a combination of dashes and a dot.

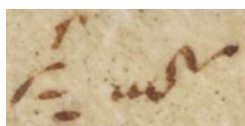
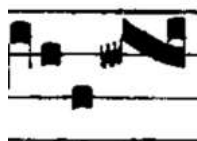
Equally awkward is to read this passage as a *clivis subbipunctis resupinus* plus a *porrectus*:



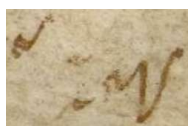
What it shows, would be, at most, a *clivis*, one single *punctum*, the odd ‘resupinus’ (now a novel ‘*resupinus pes*’?), and a *porrectus*. But such a clumsy reading gains absolutely nothing from simply describing the passage as consisting of a series of oriented and heightened dashes and a dot. The image is also noticeable for its circumstantial yet neat symmetry: the high-low and low-high are the mirrored inversion of each other, and in turn the high-low-high is the almost algebraic combination of the two—a further example of the strong geometrical character of the dash and dot system.

These two examples already show how weak and inconsistent is the application of the concept of ‘neume’ onto the Beneventan musical script, but in their relative simplicity they only scratch the surface of the matter. Much longer chains of notes can produce far bolder clusters of dashes and dots that utterly resist not only neumatic nomenclature, but also any meaning other than their diastematic immediacy:

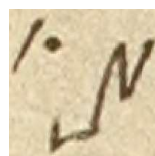
EXAMPLE 45/1 (Offertory *Scapulis suis*, v. *Super aspidem*, *eum*)



E121, p. 103

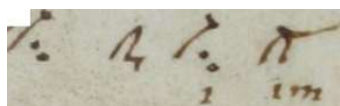
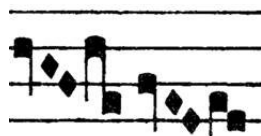


L239, f. 22r

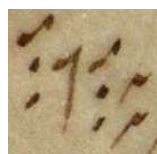


10673, f. 7r

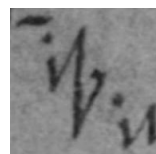
EXAMPLE 45/2 (Gradual *Iacta cogitatum*, *te*)



E121, p. 96

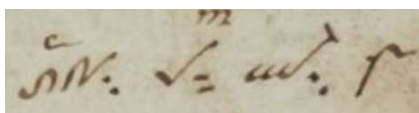


L239, f. 19v

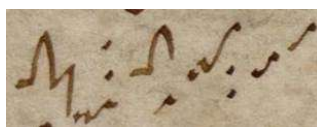


B33, f. 20r

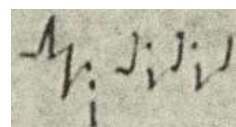
EXAMPLE 45/3 (Gradual *Beata gens, domini*)



SG359, p. 82

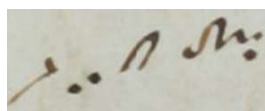


L239, f. 36v

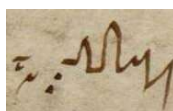


B33, f. 49r

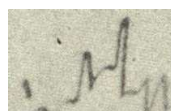
EXAMPLE 45/4 (Tract *Ad te levavi oculos*, v. 4, *nostrum*)



SG359, p. 75



L239, f. 30v



B33, f. 37v

No neume needs to be invoked to understand the concept at work in any Beneventan rendering of these passages—only dashes and dots. Each passage shown resists neumatic analysis, unless one would wish to name, e.g., the chain in EX. 45/4 some absurdity such as *bi-scandicus resupinus cum pressus cum torculus*. Even then I would not see the actual utility for such an exercise.

9th century scripts do organize the articulation of the melody around the succession of neumatic elements: e.g. in EX. 45/2 both L239 and SG359 make clear that the descent hinges at particular places, highlighted by the succession of the four neumatic elements. The 3+2+3+2 visual division supports the phrasing that the reader must have known by heart already (this must have held true regardless of whether performance was mensural, free or of any sort). In B33 on the contrary no such pre-made division is discernible: this uninterrupted chain of dashes and dots stands mute on the rhythmic and performative quality of the passage yet lays down with almost total exactness the position of every pitch in relation to each other.

Although the concepts that the devisers of the Beneventan script drew their models from do lie in the classical Carolingian neumatic thinking, they ultimately had their own specimen evolve into something radically different. That the difference lies in writing long, geometrical chains of notes with an unprecedented degree of diastematic precision tells how, I suppose, the attitudes had changed since when Carolingians began devising ways to write down plainchant. Indeed this attitude of the Beneventan script to vertical precision is comparable to that also seen in Aquitanian and Nonantola scripts, both later than Carolingian scripts but older than Beneventan by a few decades at most, given current documentary evidence. Aquitanian reaches perfect diastemacy, only lacking clefs, but in a system mostly made of simple unconnected dots that is conceptually as removed as possible from the long chains of the Beneventan system. Nonantolan on the other hand has several contact points and commonalities with Beneventan, and I will briefly discuss the implications of their ties in the conclusions of the work.

III.8 COMMON GRAPHICAL ORGANIZATION OF LOTHARINGIAN AND BENEVENTAN SCRIPTS

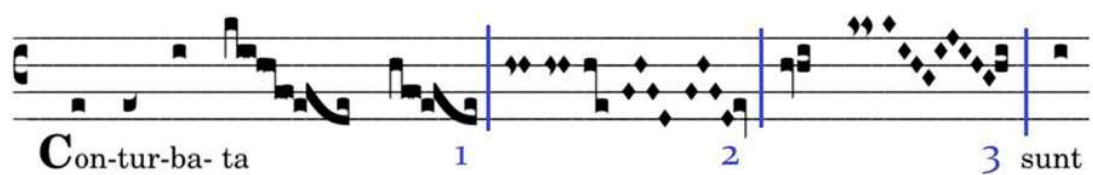
After having addressed every aspect of graphical organization in the Beneventan script on its own terms, I now propose a final *vue d'ensemble* across longer and melodically more complex passages. It should now be easy for the reader to appreciate the bold claim I opened this sub-chapter with: that even the longest melismas in the Beneventan script reduce down to series of dashes and dots. It has been seen time and time again how the devisers of the Beneventan script had to be familiar with at least the Lotharingian and East Frankish script. They did provide for rhythmic expression by implementing East Frankish own techniques, however their script resulted much closer to the Lotharingian—conceptually and graphically—thanks not only to the

implementation, but to the very boosting of the Lotharingian script sensibility to vertical disposition and to the tying of notes into longer chains. Rather than the recollection of memorized melodies pursued by scribes using any regional form of the Frankish script, Lotharingian and Beneventan scribes ink down on parchment visual representations of melodies. The difference between Lotharingian and Beneventan scripts then, is that the latter increases the degree of precision of a characteristic Lotharingian feature (heightening) while adding a wholly new feature (directionality). The result is a far more diastematic script than Lotharingian, something that speaks in my opinion for the goals the Beneventan devisers sought to achieve.

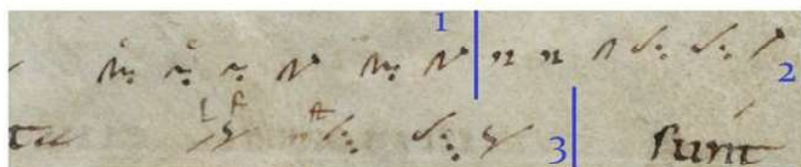
The next examples all present a spectacularly similar understanding of graphical organization between the Lotharingian and Beneventan scripts. One might ask whether independently pursuing the same goals of vertical precision promoted unrelated development of similar strategies and thus similar looks, or whether a script is indebted to another (in which case, there is no reason to doubt the direction is from Lotharingian to Beneventan). I am firmly convinced it is the second hypothesis that holds true and will further address the implications of my hypothesis in the conclusions of this study.

Ex. 46, from the 7th mode gradual *Miserere mihi*, begins with a long melismatic passage, followed by shorter melismas and moderately ornate syllables:

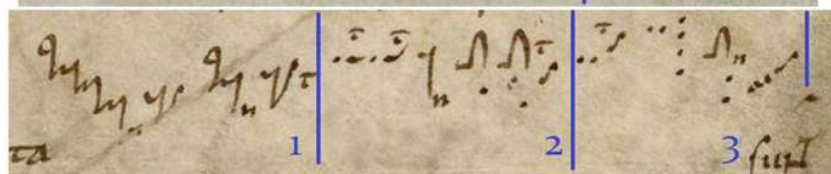
EXAMPLE 46



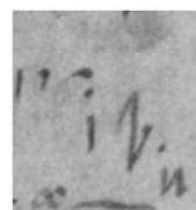
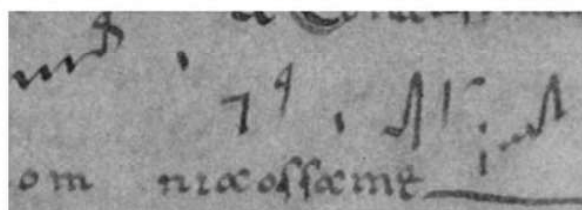
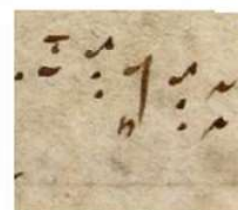
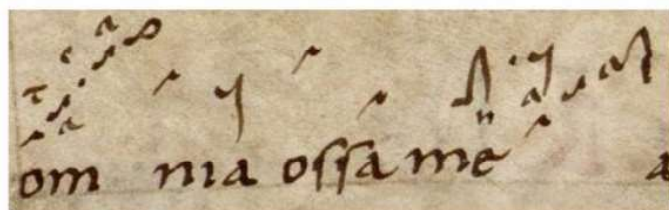
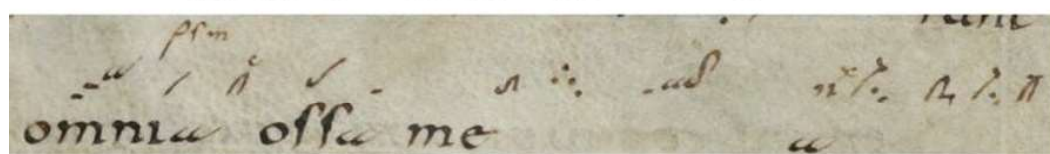
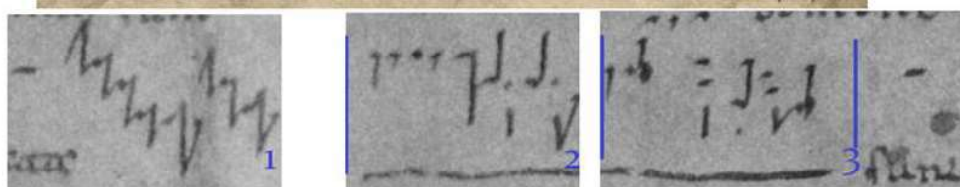
SG359, p. 70



L239, f. 24v



B33, f. 41v



The first melisma on *conturbata* can be broken down into three main sections for easiness of analysis. It is safe to say that my three sections are true to the rhythm and modal profile of the melisma, as they all end with broad *resupinus* movements on the *finalis* **G** and *repercussio* **d**. To begin with, section **1** spans across an octave: the scribes of L239 and B33 make use of the available vertical space to graphically represent the melodic curve, whereas that of SG359 draws all its elements on a perfectly horizontal line. The management of *pressus* across the three scripts is also of the utmost importance. There are three *pressus* on the first descend (on **d**, **c** and **a**), and one in the second (on **a**). Each single East Frankish *pressus*-unit is well separated and indicates the post-*pressus* note with a *punctum* that effectively ends the unit. Lotharingian and Beneventan *pressus* are identical to the point where conceptual commonality becomes undoubtable.¹⁰⁷ The only differences are the calligraphic eyelet in L239 that becomes a standard directional dash in B33, and whether the last three notes of each chain are connected or not to the *pressus*. Both scribes treat the post-*pressus* sound as a descending connective dash that merges *pressus*-units together. The ductus for the special sign is also identical, assimilable to that of a Lotharingian *uncinus*.¹⁰⁸ The connective quality of the post-*pressus* sign also helps the drawing of longer chains, one of the trademarks of both scripts. In **2** and **3** we again see in Lotharingian a method of writing music that is closer to the dash and dot system of Benevento, in so that rather than drawing symbols as East Frankish does (the two separated *bistropa*, a high-low etc.), the L239 scribe heightens and connects to a certain degree all the neumatic

¹⁰⁷ Interestingly, Levy took such instances of graphical identity as proofs of concrete copying of “common written sources”. See KENNETH LEVY, ‘Charlemagne’s Archetype of Gregorian Chant’, in *JAMS* 40 (1987), pp. 1-30. I would not share his view that, taking this passage as an example, the identity of the *pressus* chains on *conturbata* is proof of ‘translating’ notation from a master manuscript in Lotharingian script to a copy manuscripts in Beneventan; only that the two scripts share the concept and the shape of said *pressus* chains.

¹⁰⁸ Whether the *uncinus* itself is what Lotharingian scribes intended when drawing a *pressus* is a fascinating question. The shape of a hook is also found in the Breton script, there standing for both *pressus* and *quilisma* (see RANKIN 2018, pp. 252-54).

elements—though still not as much as the Beneventan scribe. Notably, B33 maintains the indications of *pes quassus* in **3** present in the East Frankish and altogether absent from the Lotharingian script.

In the second part of the passage¹⁰⁹ see the substantial amount in L239 and B33 of vertical space to allocate the descending fourth **aa-e** between the peak of *omnia* and *omnia*; the greater detail of East Frankish ‘trigon’¹¹⁰ on *mea* and *bistropa* on *mea*, signs reduced to combinations of dashes and dots in B33 and of *puncta*, high-low and *uncinus* in Lotharingian; the more compact, intertwined succession of heightened notes in the concluding descend on *mea* in L239 and B33, again opposed to the succession of discreet unheightened symbols in SG359.

I have outlined here the salient points to be observed, but the whole passage stands as a very good example of the divide in graphical organization between the two groups: the reader should be able by now to grasp further details that would be too long to report.

Ex. 47, from the tract *Commovisti domine*, highlights the differences between East Frankish against Lotharingian and Beneventan in a way perhaps even more striking and dramatic.

¹⁰⁹ The modern notation used here (omnigreg) omits *quilisma* on *omnia* and *mea*.

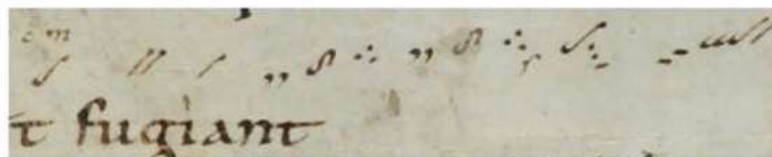
¹¹⁰ ‘Trigon’ is a succession of three light sounds, the first two at the unison and the third lower. Thus it has the same melodic configuration of *pressus maior*, but different rhythmic interpretation. See CARDINE 1968, pp. 77-82.

EXAMPLE 47

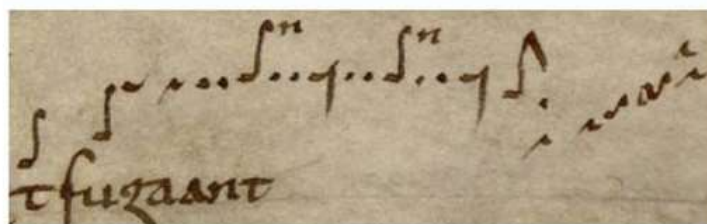


Ut fú- gi- ant

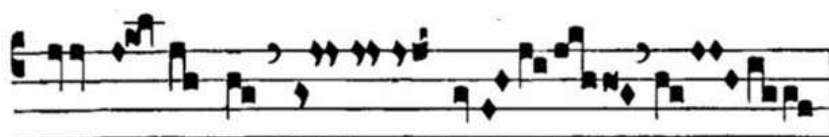
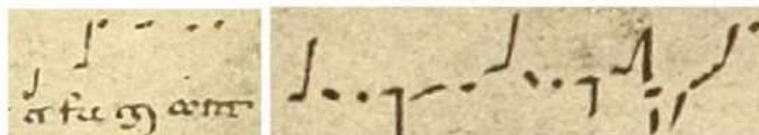
SG359, p. 60r



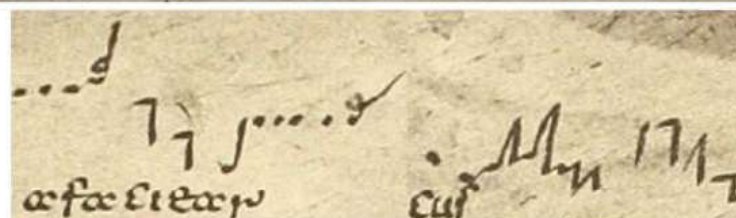
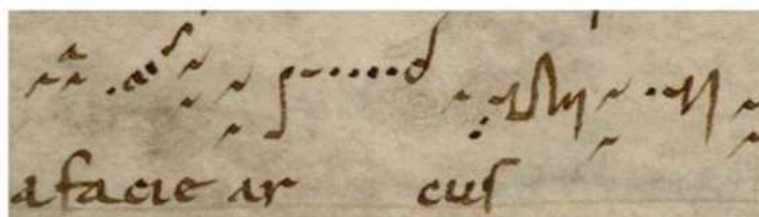
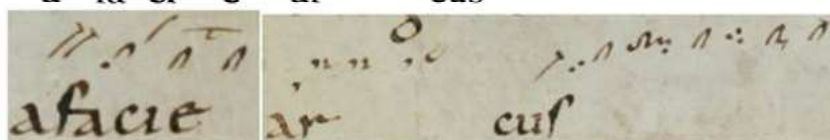
L239, f. 17r



10673, f. iv



a fá- ci- e ar- cus



The fundamental similarity of the Lotharingian and Beneventan scripts is evident in the chains of notes hovering around *c* on *fugiant* and *arcus*, as well as in the close-to-identical treatment of the whole neume on *arcus*.¹¹¹ Looking at SG359 one has the impression that here, even just by looking at the wider gap between a shape and the next one, the main concept at work is the juxtaposition of several unconnected sonic events, as if the scribe were saying, on *fugiant*: “here is the sound of a *bistropa*, here that of the low-high-low that follows, then that of a *trigon* and again that of a *bistropa*; and you, the reader, know that a *bistropa* entails such a delivery, different from that of the *trigon* even though the pitches are the same... and so forth”.

Indeed the places where the similar approach of Lotharingian and Beneventan scripts is most evident are moderately to extensive melismatic passage—the last two examples being excerpts from a tract and a gradual is not casual.

Another good place to make this point would be offertory verses, but their analysis proves problematic for two reasons: B33 not carrying them and being notated in L239 by a less calligraphic hand with an ink that has badly faded out.¹¹² The verse *Ego autem dixi* of the offertory *Exaltabo te domine* is still quite legible in L239, and features a conclusive very long melisma that is typical of many offertories, even disproportioned when set against the rest of the verse. I present this melisma to the reader as the final example of this analysis chapter: here every aspect can be observed of rhythmic and graphical organization discussed throughout the chapter, and I leave it to the personal examination of the reader as commenting will be by now redundant.

¹¹¹ The small differences on *arcus* again account for customs that have been treated already: the separation of two *uncini* instead of the cadential low-high-low [**GaG**]; and the separation of ascending *puncta* in Lotharingian that become a connected ascent in Ben [**Fac**]. For the former see above, pp. 130-31, for the latter, pp. 165-68.

¹¹² Whether the musical finesse of this hand is really inferior compared to the main hand is a generic assumption that still goes unsubstantiated.

EXAMPLE 48

A musical score for a single melodic line. The notation consists of a series of square notes on a five-line staff. The notes are mostly eighth and sixteenth notes, with some beamed together. The lyrics 'de-có-' and 'ri' are written below the staff, aligned with the notes. The 'de-có-' is under the first half of the staff, and 'ri' is under the second half.

A fragment of a handwritten manuscript. It shows a few lines of text in a Gothic script. The word 'deco' is visible at the bottom left of the fragment.

E121, p. 95

A fragment of a handwritten manuscript. It shows a few lines of text in a Gothic script. The words 'meo uirtute' are visible at the bottom right of the fragment.

A fragment of a handwritten manuscript. It shows a few lines of text in a Gothic script. The word 'deco' is visible at the bottom left of the fragment.

L239, f. 19v

A fragment of a handwritten manuscript. It shows a few lines of text in a Gothic script. The word 'deco' is visible at the bottom left of the fragment.

10673, f. 5r

Conclusions

How were plainchant scripts invented? What was the process that brought to the rise of each of the dozen or so actual musical scripts sprawling throughout 9th and 10th c. Europe? Can this process be reconstructed to any degree? And was it each time, for each script, the result of the same “preconditions”—to use Ganz’ expression—, theoretical ideas and practical attitudes?¹ It seems to me that we are at a fertile time for musicology to try answering such questions, thanks to the decided shift in perspective set since some decades now by current scholars. Indeed plainchant scripts are being studied more for their role in the history of musical ideas than, as it was for much of the 20th c., as treasure boxes allowing the recovery of performance practices that are only irremediably lost.

Some of the most recent efforts in this direction include of course Susan Rankin’s *Writing Sounds in Carolingian Europe* and Giovanni Varelli’s doctoral dissertation under Rankin’s own supervision *Musical Notation and Liturgical Books in Late Carolingian Nonantola*: my research has been heavily indebted to both scholars and the models their work provided. *Mutatis mutandis*, I have offered answers to questions they too asked, pertaining in my case the particular musical script attested since at least year 948 in the Beneventan zone, but likely conceived at the beginning of the same century. I have shown that the Beneventan musical script could not have been invented without knowledge of scripts previously developed in the North. If this might sound a truism in the face of mere chronology—the earliest Carolingian witnesses to musical notation currently dated around 830, about a century earlier than the earliest Beneventan—, it is not as much on the analytical level. The question in fact ‘was the Beneventan script created in a wholly original stance or

¹ DAVID GANZ, ‘The Preconditions for Caroline Minuscule’, in *Viator* 18 (1987), pp. 23-44.

is it dependent upon previous models?’ was never asked before or, at most, only addressed *en passant*.

The practice of writing sounds in the Beneventan zone was not an autonomous pursuit as if, in a land far away from the Carolingian ‘core-land’ where all of innovation was blooming—repertoire, notation, theory—, the developers of the Beneventan script invented their own way of writing sounds without knowing others had done so already; and/or as if Beneventan developers refused all influences from and ideas of pre-existing scripts. On the opposite, the Beneventan musical script must have resulted from the observation, adoption and adaptation of such foreign pre-existing models. Indeed many of its characteristics are the result of proactive adaptation of distinct, precise features of two earlier scripts—East Frankish and Lotharingian—rather than fortuitous similarities or *talis qualis* adoption of imported models—as is the case of the Bobbio abbey and the zone of Como respectively using the East Frankish and Lotharingian scripts with little change, if at all. It is the evidence of proactive selection of some elements from one script—rhythmic organization and a re-elaboration of the basic sign from East Frankish—and others from another—graphical organization from Lotharingian—that can answer from the standpoint of the Beneventan script the questions that open these conclusions.

Thus, *how was the Beneventan musical script born?* There can be no doubt that either notated manuscripts and/or instructor scribes travelled southward from centres where the writing of East Frankish and Lotharingian scripts was cherished and that Beneventan scribes devised a hybrid out of those two (the presence of *episema* in the Beneventan script cautiously allowing to hypothesize the East Frankish centre might have been the very abbey of Saint Gall).² The fact that neither script was merely adopted but both adapted into an hybrid speaks for the needs and goals of the Beneventan

² The particular case of the cadential low-high-low, as it was seen, might indicate the devisers might have known the Breton script, too. It adds little, however, whether this particular neume is an actual isolated import from this third script, or just a coincidence arising from the dash and dot system.

devisers; of how they came to understand the two models and took from each what served them best. The construction of their own script proved a well-structured and calculated enterprise in which, as with all successful man-made hybrids, both parental constituents are evident in the final product as carry-overs of selected parameters. In turn (and to keep on with the arboricultural metaphor), that the hybrid that is the earliest Phase 0 script was rearranged into a more local variety, so that by the time of Type 1 some inherited characteristics of one strain lost value (i.e., East Frankish techniques of rhythmic expression) while others from the second strain were boosted (Lotharingian precision of vertical disposition) is an eloquent evidence about how the needs differed of the devisers ca. 915-960 and of scribes possibly one to three generations after them, 980-onwards. The process of importation and adaptation happened no later than 930-40 since the first safely datable Beneventan neumes, written in 948-9, come from the secure hand of the master scribe Iaquintus. And since he mastered the Beneventan textual script to a degree that he could subscribe himself by the years 915-34, I deem it plausible that Iaquintus knew about ways to write music in the same years he was indulging in subscriptions. Whether he himself was one of the persons in charge to create the new Beneventan musical script or whether he was one generation removed from these actors, we cannot say based on current documentary evidence. Yet I would not be surprised if future new testimonies would prove practice of music writing in the Beneventan zone as early as at the turn of the 9th – 10th centuries.

Levering on the technical aspects outlined in the three main chapters, we can now draw conclusions about the reasons at large that set off the creation of the Beneventan script. This, I think, is the fundamental ‘what’ in the series of questions surrounding its rise: at the beginning of the 10th c. the Beneventan literacy decided to provide itself with a new and independent system of musical notation—by then a reality elsewhere in Europe—to pair with its own unique, cherished textual script. Beneventan scholars and

scribes in charge of the task (those that I have called the ‘devisers’) must have known and observed other previous ways of writing sounds. Regardless of how the devisers came to know older scripts, they merged in a new and original hybrid techniques from the East Frankish and the Lotharingian scripts. This proves the Beneventan script as rooted in Carolingian models, adding as another case of derivation from a musical script to another. The creative path from the northern models towards the establishment of the Beneventan script is much like that that Rankin has described in regard to Lotharingian and Breton scripts deriving from the older Paleo-Frankish model, and to the Frankish group of scripts deviating from that same model. In creating their own script, the Beneventans preserved some elements from both models (most notably from the East Frankish: a re-arranged basic sign, *coupure*, special expression signs such as *episema*, *quilisma*, *pes quassus* and *salicus*; from the Lotharingian: heightening, tendency to create longer chains of notes, treatment of *pressus*) and discarded others (from the East Frankish: *ex parte ante / post* treatment of the basic sign, the use of melodic *litterae*, the concept of neumes as self-enclosed melodic gestures; from the Lotharingian: attaching rhythmic value to basic signs, the fragmentation of a neume into single basic rhythm-nuanced signs, the unmeaning calligraphic loop at the top of some note-chains). Such evidences provide a fascinating insight at what the creators of a new musical script ca. 900 deemed necessary for it to be. And whereas they and the first generations of Beneventan musical scribes apparently sought to maintain a balance between rhythmic detail and vertical disposition—as 10673 and few other scant Phase 0 sources allow to see—by the end of the 10th century later scribes set a new semiologic and stylistic agenda for the script. Semiologic, as they lessened the use of many techniques and signs pertaining rhythmic detail while increasing diastematic precision. Stylistic, as such semiologic changes proceeded in pair with a calligraphic reform of neume-drawing aimed at better, more homogeneous matching and merging of text and notation.

The result of this new agenda is the classic Beneventan musical script of Types 1 to 3, ca. 1000 – 1200. In regard to the Beneventan textual script, Lowe wrote that “in South Italy

to write a book was to write Beneventan; and to write Beneventan was to observe certain rules” and that “every form of letter used in the Desiderian period [1058 – 1100, ed.] is in fact nothing else than a more conventionalized, more calligraphic form of letters and ligatures which we already find in the 8th c.”³ The exact same trajectory is true for the shift from the Phase o “tentative period”, in keeping with Lowe’s terminology, and the “periods of formation” and “of maturity” of Types 1 and 2-3.⁴ By and large, Phase o style is still Beneventan script; what sets it apart from Type 1 onward is that scribes of the later style follow “certain rules” and adhere to “more conventionalized, more calligraphic form[s]” for drawing neumes. Shapes for liquescent neumes provide the most easily observable examples of these changes: the swifter loops characterizing Phase o liquescences are not substituted by some different shape in Type 1, rather they become more angular, less round and of a more complex design; then what was once a loop is fragmented in Type 2 and 3 into two semi-circles drawn in two strokes. First in the lineage of all these signs though, it lies the original and more basilar loop.

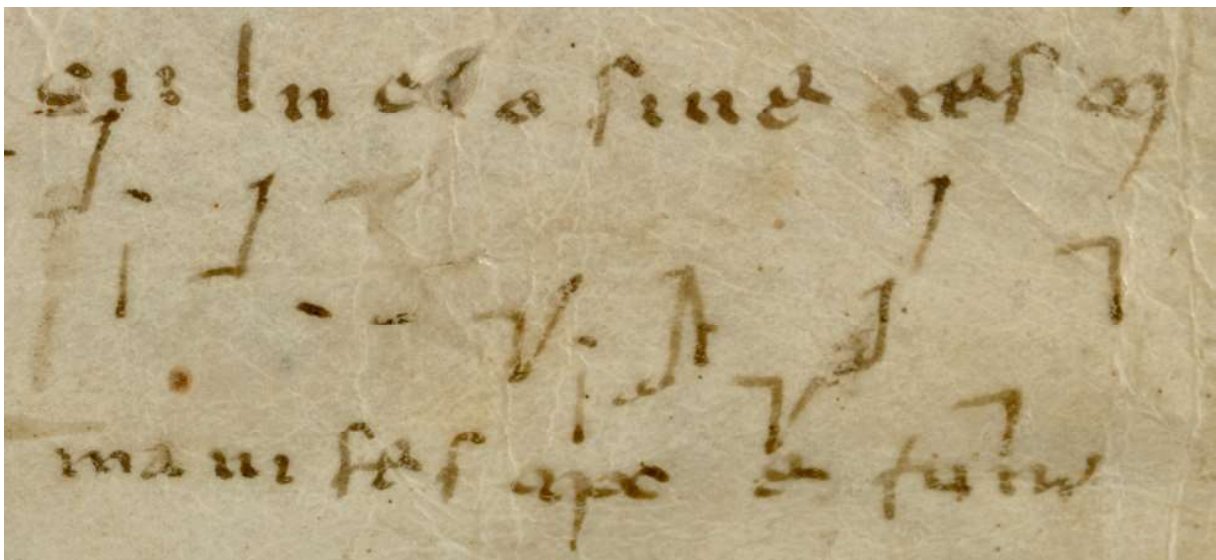
There is finally much to attain by merging the histories of the Beneventan textual and musical scripts together. “Resulting from a conscious script-reform toward the end of the 9th century”, the formative period of the Beneventan textual script comes at the same time of the emergence of the Beneventan musical script. Those in charge of the text script reform ca. 900 must have regarded the occasion ideal to provide the Beneventan cultural milieu with a musical script, too. Most strikingly, this textual reform was also accompanied by the “foreign importation (since it is used a full century earlier in MSS. written in Charlemagne’s court) of a new system of punctuation which rapidly came into general use”.⁵ We thus see that it happened at the exact same time in the Beneventan zone

³ LOWE 1914, pp. 309 and 127.

⁴ As said, differences between Type 2 and 3 are often as few as the simple presence or absence of an actual clef and staves. For the four periods of the Beneventan textual script, see LOWE 1914, pp. 123-26.

⁵ LOWE 1914, p. 228.

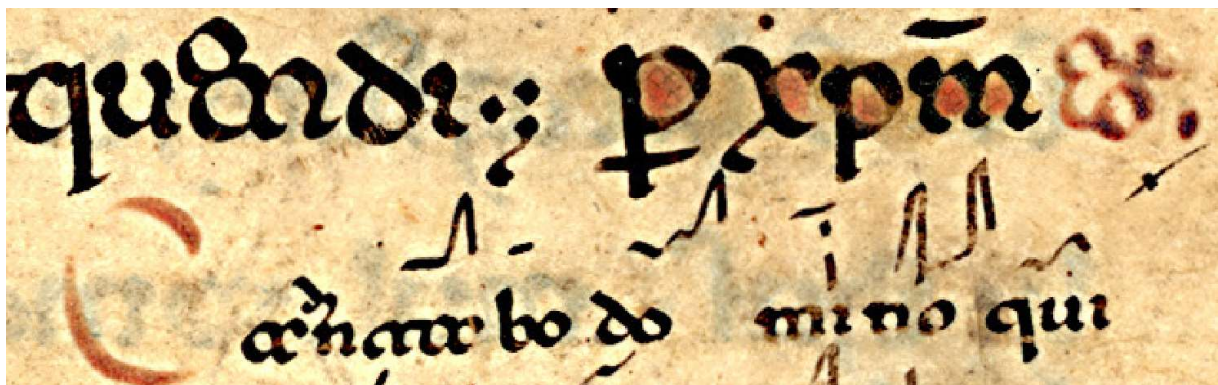
1) a calligraphic and homogenizing reform of the textual script, 2) the importation of a punctuation system from the Carolingian North and 3) the emergence of a musical script that is also heavily indebted to Carolingian models. The textual and musical evidences cannot reasonably be unrelated—the acquisition of an imported system of punctuation being the fascinating link between the two spheres—and the late 9th c. reform of the textual script can now be bounded with the rise of the musical script as the shared results of an organic enterprise. Beneventan scribes are therefore equipped in the first half of the 10th c. with a local textual script in its “formative period” that is being shaped into a more homogeneous and calligraphic version; plus a newly introduced musical script in its “Phase o” period that still shows unrelatedness from the textual script. The Bamberg flyleaf exemplifies this state of things:⁶



Bamberg, Staatsbibliothek Msc. Patr. 101, front flyleaf (detail)

⁶ Being the later addition of a Beneventan scribe on an antiphon text in a marginal document sketched by a *romanesca* hand, the Bamberg flyleaf certainly cannot be calligraphic to begin with, as if it had been an ad hoc made, more conspicuous manuscript. Still, the Beneventan scribe did take some care in providing the second half of the antiphon text, spacing it to accommodate music, and drawing neumes for the rather long piece, which in this variant includes an extended final melisma. Its notation can thus be regarded as fairly representative of style current at the time it was made. The scribe is also very regular in following the rules of the “formative period” of the textual script (LOWE 1914, pp. 124, 140-ff): difference between short and long semi-vocal *i* (*quia ibi Iudicii*), *ti*-distinction (*testibus*), ligatures of enclitic *i* (*patriarcarum*), *nt*-ligature (*erunt*) and so forth.

Then, by the last decades of the same century what must have been yet another conscious reform was now aimed at the graphical and semiologic characteristics of the musical script. This resulted in the Type 1 style, the starting point of classic Beneventan notation. Scribes updated the nature of musical information their script should have had—now tilted more towards vertical precision than rhythmic detail—and at the same time integrated its looks better with the graphical characteristics of the textual script: more angular neume shapes, increase in dash modularity lending a more regular appearance, greater alternance of thin and thick strokes, the shape of every neume standardized and less prone to change both over the reiterations of a single scribe, and under the pens of different scribes in separate, unrelated sources. The Bari missal is perhaps the best example of the attained integration of carefully designed Beneventan textual and musical scripts, almost as if neumes were effortlessly spanning out of letters.



Oslo, Schoyen Collection, Ms 63 (1), f. 1 (detail)

An excursus is now due before addressing the conclusive remarks: at the end of his doctoral dissertation Giovanni Varelli proposed an hypothesis for contextualizing the musical script used in Nonantola in the larger picture of early musical notation in Italy. Among Varelli's main thesis is that the musical scripts of Nonantola, Benevento and Rome might all be descendants of a common Italic script that, as it spread over time and places, eventually developed into different variants. He points to the shared attention to vertical disposition of notes, and just as importantly, the sharing of some symbols for

performative nuances such as *apostrophus* and *oriscus*. Since I maintain that Roman is a derivation of Beneventan, I narrow down the matter to the scripts alone of Benevento and Nonantola; and since I also maintain the descendance of the Beneventan script from concepts proper to both the Lotharingian and East Frankish script, I resort to those to explain some of the elements that Varelli explains via the linkage between *nota romana* and the Nonantola script.

In regard to the *apostrophus*, a common meaning across the two scripts as a “quick, shortened note leading to the following one”⁷ is quite evident. But the systematics of its use are opposite: in the Beneventan script it indicates a light syllabic ascent to the next accented syllable;⁸ in Nonantola “it is always found compounded [...] and never isolated with syllabic value—for which Nonantolan uses, instead, the connected dot”.⁹ The Beneventan use of isolated *apostrophus* is consistent with the dash and dot system in so that it is a nuanced alternative for the basic dash (since dots do not stand alone on syllables); whereas it could never be used in a chain of notes since the only Beneventan special sign employed in connected chains of notes is the *pressus*. If a degree of relatedness is still plausible for the Nonantolan and Beneventan *apostrophus* sign, the specific use each script makes of *apostrophus* tells of their different higher logics steering its use in separate directions.

As for *pressus*, which in the context of the Nonantola script Varelli calls a “hook with dot”,¹⁰ I take it in the context of the Beneventan as a direct import from the Lotharingian, as was seen in Chapter 3. The graphical and conceptual equivalence of the Lotharingian and Beneventan *pressus* is almost total, and in both scripts it eminently serves the production of long connected chains of sounds. I would not share

⁷ VARELLI 2016, p. 222.

⁸ See BOE 1983, p. 44.

⁹ VARELLI 2016, p. 222.

¹⁰ *Id.*, pp. 224-27.

the opinion that the upper end of an early Beneventan *pressus* is a dot, as I rather see the whole Beneventan shape as the imported hook that in the Lotharingian script serves both *uncinus* and *pressus*, and in Breton *pressus* and *quilisma*.¹¹ The occasional, more prominent swelling at the top of early Beneventan *pressus* possibly results from the conclusive pressure on parchment before raising the quill, much as it does the swelling that previous scholars have taken as *episema*. Later Beneventan drawings of this neume as two separate elements of which the second recalls a dot simply account for evolving Types and styles, wider nibs and increase in the difference between thin and thick strokes.¹² As I maintain direct descendancy of the Beneventan *pressus* from the Lotharingian, positing a degree of relatedness between the Beneventan *pressus* and the Nonantolan hook with dot would in turn entail relatedness of this latter script with the Lotharingian—this is however not the place to consider this issue.¹³ Yet structural tying of notes together to an extreme degree of the Beneventan script, in comparison with the Nonantolan less strict connective logics—a difference especially evident in melismas—makes me sceptical about a common Italic root subsuming a fundamental ground-level link. The refusal of Nonantolan scribes to connect the two notes of a low-high neume is particularly telling, being a principle simply irreconcilable with those proper to the Beneventan script.¹⁴ Also and perhaps more important of all is that the emergence of the two scripts seems more easily explained to me by the respective histories and needs—the Aemilian abbey being closer and in closer affiliation with Carolingian

¹¹ Varelli suggests this sign in the Nonantola script “might be interpreted as a sequence of two dots”. VARELLI 2016, p. 226.

¹² KELLY – PEATTIE 2016, pp. 55-7 and 63-7. See esp. p. 80, EX. 34 and p. 57: “the two strokes [of *pressus* in B40] are sometimes joined with a hairline stroke on the right side, a ligation that is likely a remnant of the calligraphy of earlier manuscripts in which this sign is drawn with a single stroke of the pen.”

¹³ Varelli does acknowledge of course how the script of Nonantola shares attention to verticality with the Breton and Lotharingian scripts, but he does not openly conclude for a degree of relatedness between them. On the opposite, the cultural relationships since mid-9th c. of the abbey of Nonantola with that of St. Gall are well documented: see VARELLI 2016, pp. 131-32 and 13-14.

¹⁴ *Id.*, pp. 153-56, esp. p. 155.

cultural centres North of the Alps; and Beneventan literates taking the occasion of the canonization of their textual script to develop a new and related musical script. The attention to verticality and similar—though not wholly superimposable—combinatory rationales of the Beneventan and Nonantolan scripts would be more easily explained by both being indebted to the Paleofrankish group of scripts (of this in regard to the Beneventan script I have no doubt) and also because of their status as musical scripts having originated at a time when attention to the abstract and measurable qualities of notes became a major discriminant of music theory, as treatises from late 9th – 10th c. allow to see. The development of both scripts came about at the same time of the “emergence of a medieval concept of pitch”, and so it only makes sense that both the Nonantolan and Beneventan scripts show this paradigmatic shift in their graphical organization. In this regard, Standley Howell has recently forwarded quite bold claims about early Carolingian music theorists and scribes only having “hazy” understandings of pitch, in his view explaining why “[early] neumes are vague about [it]”. Howell supposes that rather than the irrelevance of precise intervallic information for the final users of musical notation, a plain out absence of concepts of pitch accounts for the “lack of interval sizes [in early music scripts]”.¹⁵ While his judgment of early 9th c. Carolingian musical ideas somehow sounds too hastily dismissive, it is patent how sensible the late 9th – early 10th c. Beneventan and Nonantolan scripts are to matching the graphical display of intervals—in length and vertical disposition—to the actual melody. This is proof that by then, also possibly because of the impact of treatises, musical scribes did gain “precise understanding of pitches and intervals” so that new scripts were being developed in accord to this newer understanding. As it pertains the Nonantolan script I redirect the reader to VARELLI 2016, p. 166 TABLE 4.22: midway in the melisma the pitches **ccac**bc**ca**G**** are an example of dashes of different lengths representing different intervals, with the **ca** interval of a third drawn with a dash about twice as long as that

¹⁵ STANDLEY HOWELL, ‘The Emergence of a medieval pitch concept’ in *PMM* 29 (2020), pp. 99-117, p. 115.

for the following **cb** interval of a second. As for the Beneventan script, there are no better, more immediate examples than the different extensions of the two high-low-high of Chapter 3, Ex 3/1 and the two low-high-low of EX. 4 (pp. 124-6) as representing the differences between the intervals of a tone and a third. All in all, further research on the relationship between the Beneventan and Nonantolan scripts is certainly needed, just as it is securely bound to provide fruitful new results.

The ultimate aim for the introduction of a musical script in the Beneventan zone was to provide the Beneventan culture with an independent and local musical script, flanking the equally independent and local textual script. In doing so scribes developed a script that could have provided ‘the best of both worlds’ so to say: the rhythmic means of the East Frankish script (perhaps arrived from the very St. Gall scriptorium because of the evidence of *episema*) together with the vertically-driven graphical organization of the Lotharingian script. The goal of blending text and music into a coherent Beneventan style is clear from the calligraphic, standardising shift from Phase 0 to Type 1 and, once reached this point, from how evenly textual and musical scripts change over time. The need to keep both rhythmic and vertical precision was on the contrary soon to diminish, tilting scribal attention towards the latter. Regarding rhythm, I hope my study will provide an organic attempt, if particular to just one script, to trace down and describe with more precision the historiographic truism in the field of musical notation roughly put as “as diastematic precision increases over time, rhythmic decreases” that has only ever been perpetuated as an unprobed self-evidence.

Regarding the role of the Beneventan musical script in the cultural history of the Beneventan zone, if I am to put forward an hypothesis for the place where it was first developed, then current documentary evidences (Iaquintus’ neumes in MC 269 and his subscription in MC 175) and Lowe’s assessment can only cautiously set it in Capua: fleeing the Saracens sack of Montecassino in 883, “in Capua the monks made good

use of peace and security, [and] here their sojourn marks a new epoch of the script. They produced a number of MSS., the first in fact which evidence distinct progress in calligraphy and ornamentation.”¹⁶ Wherever the place, from the moment of the Type 1 reform all the way to the 13th c. the astounding likeness of virtually all the specimens of Beneventan notation cannot but point to one conclusion: the local, distinctive musical and textual scripts were perceived as interrelated things of great pride, as complex in their execution as worthy of being homogenized in every scriptorium: no variability but only one ‘pure’ script would have resulted. This is accomplished already with Type 1 sources in early 11th c., and the fact that they originate from Campania (B33), Apulia (Bari Missal, Bari Exultet, Zurich fragments),¹⁷ Montecassino (Compactiones VII)¹⁸ and even Dubrovnik in what is now Croatia on the other side of the Adriatic (pontifical fragment) testimonies that such homogeneity was pursued almost immediately and that it must have been deliberately regulated by some sort of standing committee or something akin to it. Indeed I cannot see any other explanation over the fact that Types (1, 2, 3 and to a lesser extent 4) proceed synchronically over the whole Beneventan zone: as documents datable and localized with some safety allow us to see,¹⁹ not only orthographic calligraphy is patently sought after everywhere, but changes both on surface and deep levels—diastemacy, graphical design, disappearance of special neumes, ductus—are contemporary across space. In other words, a Type 3 two-stroke ductus for a liquescent high-low neume is not observed in the supposedly ‘central’ Montecassino while in

¹⁶ LOWE 1914, p. 7.

¹⁷ On the Zurich fragments decorative apparatus and its textual script see the recent GIULIA OROFINO, ‘Un messale e il suo sistema illustrativo. Contributo per la miniatura *Bari type*’ in *Aspice Hunc Opus Mirum, Festschrift on the occasion of Nikola Jakšić’s 70th birthday*, Zadar (Croatia): University of Zadar, 2020, pp. 327-38.

¹⁸ The missale described in LOWE 1980, vol. ii, p. 92, not the offsets with the same shelfmark described in BOE 2011/XI. See Ch. 1, footnote 2.

¹⁹ In this regard Exultet sources are of utmost guidance, since they can be localized and dated more often than other documents.

‘peripheral’ Dalmatia the ductus for the same neume still is that of earlier Type 1, quite the contrary it is only ever seen one and only ‘correct’ way of drawing that neume at any given time anywhere in the Beneventan zone.²⁰ This goes back to the evidence that “in South Italy to write a book was to write Beneventan; and to write Beneventan was to observe certain rules”. Lowe’s results have been unanimously accepted down to present days, but he only assessed the textual script: I hope I have been convincing in proving how by year 1000 the path taken by the two Beneventan scripts was one and the same. The striking sameness that renders specimens of musical notation almost indistinguishable along the whole Beneventan zone is an achievement speaking for how refined and solid the Beneventan scriptorial culture was, as no other plainchant script in medieval Europe shows this degree of stylistic uniformity over such a long time-span and vast area.²¹

²⁰ That the concept of ‘centre’ and ‘periphery’ putting Montecassino and Benevento against the eastern side of the Beneventan zone is very likely not sustainable also results from studies of Beneventan miniatures and decorations: see EMANUELA ELBA, *Miniatura in Dalmazia: i codici in beneventana (XI-XIII secolo)*, Galatina (Lecce): Congedo, 2011.

²¹ I hope to be able in the near future to complete an illustrated catalogue of as many sources as possible of Beneventan notation indexed by Type and graphical characteristics: such a catalogue would make even more evident this conclusive remark.

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