

*The Captive Scribe:
The context and culture of scribal and notational
process in the music of the ars subtilior.*

by

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UXORI CARISSIMAE FILIOLAEQUE MEAE
HUNC OPUSCULUM DAMUS

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Abstract

The extant scribal record of the music of the *ars subtilior* is considered in terms of the reception of this musical style within particular cultural contexts. The first part of this study re-examines the two principal sources (F-CH 564 and I-MOe5.24) of a partially shared *ars subtilior* repertoire and concludes that, despite the presence in part of a repertoire ostensibly composed north of the Alps (*c.* 1380-1395), these manuscripts were compiled in or close to major centres on the Italian peninsula (Florence and Pisa/Bologna/Florence respectively). These conclusions form the background to the second part of this study that identifies cultural tendencies/influences in the notation of musical rhythm in the *ars subtilior* repertoire. Notational process as a whole is conceptualised according to neo-Aristotelean ontology present in musical theory of the fourteenth and fifteenth centuries. Notational process in relation to special note shapes is split into two groups: a northern Italian school originating in Lombardy and extending at least as far as Tuscany which employed an arithmetic process in the construction of new note shapes; and a tradition stemming from proportional processes with origins in France which were subsequently adopted and modified by scribes and composers from Italian centres. In relation to mensuration signs, variation in forms and meanings in datable works suggest the existence of a notational school of thought *c.* 1380 which bridges the earlier modes of intrinsic signification with the increasingly extrinsic modes that emerged at the end of the fourteenth century. A major revision of the received view concerning the influence of the mathematical process of algorism upon notational process is argued with the conclusion that algorithmic concepts were already present in the notation of the *ars subtilior* before the end of the fourteenth century. A new edition of pertinent works also accompanies the study.

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Jason Stoessel,
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Key to Abbreviations

B	<i>Ballade</i>	 	(red coloration)
V	<i>Virelai</i>	 	(white/void black coloration)
R	<i>Rondeau</i>	 	(void red coloration)
Mot	<i>Motet</i>		
Cac	<i>Caccia/Cacce</i>		dim. <i>diminutum</i> , diminished
Can	<i>Canon</i>		t. <i>tempus</i>
itB	<i>Ballata</i>		B., BB. <i>brevis, breves</i>
Mad	<i>Madrigale</i>		Vol. Volume
OM	<i>Ordinarium missae</i>		App. Appendix.
H	<i>Hymn</i>		Pitch names follow the conventions of medieval nomenclature: CC-GG, A-G (<i>graves</i>), a-g (<i>acutes</i>), a'-e'(f') (<i>superacutes</i>), whereby c=middle c.
iso-	<i>Isorhythmic</i>		
S	<i>Vox superius</i>		
Ct	<i>Contratenor/contreteneur</i>		
T	<i>Tenor/teneur</i>		
C ¹ , C ²	<i>Cantus primus, Cantus secundus</i>		
p.p.	<i>punctus perfectionis</i>		
p.d.	<i>punctus divisionis</i>		
Br	<i>brevis</i>		
Sbr	<i>semibrevis</i>		
Min	<i>minima</i>		
Smin	<i>semiminima</i>		
c.o.p	<i>cum opposita proprietate</i>		
f., ff.	<i>folium, folia</i>		
[3,3]	<i>tempus perfectum cum prolationis maioris</i>		
[2,3]	<i>tempus imperfectum cum prolationis maioris</i>		
[3,2]	<i>tempus perfectum cum prolationis minoris</i>		
[2,2]	<i>tempus imperfectum cum prolationis minoris</i>		

Prologue

*La harpe de melodie
faite saunz mirancholie
par plaisir
doit bien cescun resjoïr
pour l'armonie
oïr, sonner et veïr.¹*

With the prior verses begins one of the most fascinating musical works in the *ars subtilior* style, composed by the master musician Jacob de Senleches. This composer, as his name suggests, was a native of northern France whose scant biographical details indicate he was a valued musician at courts in the south at Castile, Navarre and possibly Avignon.² *La harpe de melodie* typifies several aspects of the present study. Firstly, its presence in a manuscript³ copied in the city of Pavia in Lombardy indicates the cultivation of ostensibly French music in the *ars subtilior* style in northern Italy. Secondly, its musical notation contains novel, experimental notational devices and note shapes that parallel intellectual developments in other fields of culture in this period.

¹ “The melodious harp made without melancholy to please, well may each person rejoice to hear, sing and hear its harmony.” (All translations are mine, unless otherwise specified.)

² The conclusion that Jacob de Senleches was a native of northern France is made on the premise that Senleches is the near-homophone of Senlecques, a village just south of Calais in the County of Artois. The only surviving archival evidence concerning Jacob de Senleches consists of a dispensation made at the Court of Navarre by Charles II of Navarre on 21st August, 1383 which specifies: ...100 libras a Jacomin de Senlaches, juglar de harpe, para regresar a donde se encontraba el cardenal de Aragon, su maestro (“100 libras for Jacob de Senleches, player of the harp, to return to where he was to meet the Cardinal of Aragón, his master.”), *vid.* Ursula Günther, ‘Zur Biographie einiger Komponisten der Ars Subtilior’, *Archiv für Musikwissenschaft*, vol. 21, 1964, p. 197. Senleches’ contact with Navarre, based on the absence of further documentation from that court, was apparently brief. The Cardinal of Aragón in 1383 was Pedro de Luna, a key proponent in the French party during the schism of the Holy Catholic Church in 1378, and later elected as Avignonese pope Benedict XIII (1394). His presence at Avignon would have been frequent owing to the fact that he was also a papal legate for Clement VII. Senleches’ connection to Castile is proposed on the basis of his ballade *Fuions de ci* that laments the (post-parturient) death of Queen Alionor of Castile on 15th September, 1382. Previous archival evidence sought to indicate Senleches’ presence at the court of John of Aragón, but has since been discredited by the research of Maria Carmen Gómez in ‘Musique dans les chapelles de la maison royale d’Aragon (1336-1413)’, *Musica Disciplina*, vol. 38, 1984, p. 72, fn. 17.

³ Chicago, Newberry Library, ms. 54.1, f. 10r. Inventories and descriptions of this manuscript can be found in Kurt von Fischer, ‘Eine wiederaufgefundene Theoretikerhandschrift des späten 14 Jahrhunderts’, *Schweizer Beitrag zur Musikwissenschaft*, vol. 1, no. 1, 1972, pp. 23-33; and Philip Schreur, (ed.), *Tractatus Figurarum*, Greek and Latin Music Theory Series 6, Lincoln and London, 1989, pp. 31-32. This is the *Codex cuiusdam ignoti bibliophili Vinobonensis* mentioned by Edmund Coussemaeker who viewed a copy of it made by Ferdinand Wolf in 1856. The original appeared to be lost for almost a century (*cf.* Gilbert Reaney, ‘The Manuscript Chantilly, Musée Conde, 1047’, *Musica Disciplina*, vol. 8, 1954, p. 82, fn. 77) until it was purchased by the Newberry Library in 1955.

Like this source of *La harpe de melodie*, the majority of the scribal record for the *ars subtilior* repertoire is found in sources that are ostensibly from regions now designated as northern Italy.⁴ This situation presents certain difficulties in that many works demonstrate connections not only with southern France and northern Spain (particularly Aragón), but occasionally with Paris and the Lowlands. Furthermore, the Italian sources with origins in the early fifteenth century, are often temporally remote from those northern works which contain references to events and persons extending over the last quarter of the fourteenth century. While the survival of extant manuscripts is possibly a matter of chance, the cultivation of French music by Italian composers was not incidental, but represents achievements paralleling, if not possibly surpassing, those notational and artistic trends in the north. While this study will often resort to anachronistic terms such as 'northern Italy' or 'southern France', the ensuing chapters seek to demonstrate regionally based applications of the *ars subtilior*.

This study is an investigation of scribal practices in extant sources transmitting the music of the *ars subtilior*. Its goals are three-fold: to contextualise the two principal sources containing a shared repertoire of the *ars subtilior* style using newly-applied methodologies; to examine notational process within an historically derived framework which demonstrates the rich diversity of scribal practices; and, perhaps most importantly, to tie aspects of notational process to broader cultural/intellectual developments contemporary to the cultivation of the *ars subtilior* style. This investigation proceeds on the premise that the musical notation, as a record of the actual music, reflects values integral to the concepts embodied by that music. The strength of this premise lies in the observation that, at the time the *ars subtilior* aesthetic first appeared, the system of mensural notation was less than a century old. Additional variation of notational procedure, frequently present at an authorial level, further argues for the presence of an inherent novelty and innovation arising from contemporary concepts.

This study is divided into two parts. The first part is concerned with two principal sources transmitting this repertoire: Chantilly, Bibliothèque du Musée Condé, ms. 564 and Modena, Biblioteca Estense e Universitaria, ms. α.M.5.24. The two chapters dedicated to these sources examine the role of scribal process in the works they transmit and include a

⁴ In particular the Emilia-Romagna, Veneto and Lombardy. In light of the subsequent discussion surrounding Codex Chantilly, we might include Tuscany in this category, although strictly speaking this is a central Italian region.

discussion of the origin of each manuscript. This investigation forms an important framework for the second part of the present study. This part of the study considers the development and nature of notational process. By couching this examination in terms of scribal process, I highlight the relationship that exists between the semiotic system of musical notation and elements discernible in other fields of intellectual culture in the middle ages.

In relation to the first part of this study, an adequate and comprehensive survey of the transmission of the *ars subtilior* is still lacking in its scholarship. I use the term transmission herein to denote the process by which the notated form of a musical composition and its text is preserved in various sources over time. An assessment of this process requires investigation of codicological and palaeographic issues, as well as detailed examination of variants found in respective sources. An ultimate result of this investigation is the construction of stemma in an attempt to demonstrate relationships between extant sources.

While some relationships between sources have been previous established or otherwise postulated, the study of transmission remains central to understanding the cultivation of the *ars subtilior* in Italy. Although sources from this period are plagued by uncertainties surrounding their origin and dating, one can argue that the investigation of variants and establishing of hypothetical stemma serves to delimit hypotheses concerning a source's chronology and geography. Moreover, the identification of direct relationships furthers this endeavour by demonstrating concrete instances within a repertoire's transmission. The attendant understanding of scribal process forms a key aspect of this investigation.

The notational practices of the *ars subtilior* still await full explication, and it is the aim of this author to demonstrate not only differing principles of notational devices but to also discern the effect of cultural values upon notational process. Through its rich diversity of notational practices, musical notation in this period suggests principles of thought based on cultural paradigms parallel to those also apparent in other fields of knowledge in this period. The nature of notational devices is intimately connected to these paradigms in that they form, consciously or subconsciously, delimiters to notational decisions made by scribes. The semiotic variation within the collective transmissions of a work is perhaps the most tangible illustration of cultural values that affect their decisions in the notation of music.

This study's investigation of notational practices of the *ars subtilior* is primarily concerned with the writing of musical rhythm. It does not discuss in any detail the equally important aspect of pitch notation and its corollary issues, such as counterpoint and pitch

inflections, which are manifest in polyphonic composition. This delimitation serves to focus the present study on issues, which are perceived, by the present author, to contain the greatest potential for establishing chronological, geographical and cultural distinctions in notational process. Issues of pitch notation, however, are seldom absent from my mind and play a vital role in assessing variant readings and editing the music of this repertoire. The premises for my consideration of pitch and pitch relationships are set out in the introduction to Appendix A in Volume 2 of this study.

Chapter 1 readdresses the definition of the term *ars subtilior* and argues for its retention by the present field of study not as an historically valid term, but a musicological/historiographical construct ostensibly based on available historical evidence. This definition is central to my position that the term defines not a period but a style or movement.⁵ Musical styles by their very nature are limited temporally to those cultures that created, adopted and/or modified them. Styles, however, are not mutually exclusive. While, from the point of view of the music historian, the period *c.*1380-*c.*1415 is marked by a proliferation of works espousing the *ars subtilior* aesthetic, the same period is witness to works which continue to practise the French *ars nova* style, see a cross-fertilisation of north Italian and French elements, or develop new stylistic aspects which, undoubtedly unknown to its innovators, were to become central aesthetics of musical composition in the subsequent period. The manuscript investigated in Chapter 2, for example, contains alongside works in the *ars subtilior* style works in a conservative polyphonic style, such as Solage's *Tres gentil cuer*, as well as the driving, modern homophonic style of Gacian Reyneau's *Va t'en mon cuer*. While others might be so bold as to attempt to subsume all these styles occurring in the last quarter of the fourteenth century under one broad definition, it is not my contention that the term and style *ars subtilior* is a style-periodic descriptor. Rather, it is but one (necessarily generalised) manifestation of a musical practice in the rich fabric of late fourteenth and early fifteenth century composed polyphony. In defining the term *ars subtilior* in Chapter 1, parameters for the definition of the style based on musical and notational indicators will be identified, forming a basis for the discussion in Part 2.

Chapter 2 investigates a central source of the *ars subtilior* style, *Chantilly, Musée Condé, MS 564* (=CH 564). This source represents the highest concentration of works by composers with links to both northern and southern France. Of its 99 chansons, 58 are

⁵ On the value of style movements in art history, *vid.* Ernst Hans Gombrich, 'In search of Cultural History', in *Ideals and Idols*, Oxford, 1979, pp. 24-60.

ascribed to composers who are plausibly from, or have connections to, France. However, Italian composers are not absent in this source. Notably, no less than seven compositions (with a possible eighth attributable to him) are ascribed to the Italian Philipoctus de Caserta. Also possibly from the Italian peninsula is the composer of two works in CH 564, Guido. This aspect of CH 564 is perhaps the first clue to this manuscript's origin. Through the consideration of codicological, palaeographic and orthographic elements supported by detailed models of stemmatic filiation, it is argued that this anthology originated in a professional workshop in or close to Florence. The salient aspect of this conclusion resides in the understanding that this source represents for the most part a French repertoire transplanted into a new geographic and cultural realm. This transplantation in turn affects the transmission of its northern repertoire through a complex set of scribal practices and reception of the music itself by individuals perhaps adherent to some aspects of the music's original cultural milieu but also able to colour the scribal record with their own values and concepts.

Chapter 3 examines the second principal source of the compositions in the *ars subtilior* style, *Modena, Biblioteca estense, MS. α.M.5.24* (=MOe5.24). The importance of this source lies in the fact that it provides the most direct evidence for the cultivation of the *ars subtilior* style by Italian composers. Up to fourteen works⁶ (including four by Machaut) can be linked to composers active in France. In this group, works not by Machaut are in the *ars subtilior* style or attributed to composers otherwise known for their *ars subtilior* works. While the outer gatherings (1 and 5) consist of mostly 32 works by the Italian Matheus de Perusio (mostly *unica*) and one work by the northerner Nicholas Grenon, of the 68 pieces in the three inner gatherings, there are 40 works (26 in the *ars subtilior* style) which are ascribed to composers with Italian origins. By focusing on the inner gatherings, codicological, palaeographic and stemmatic indicators are assessed in tandem with the biographical and historical data to reargue a case for the origin of MOe5.24 in the curial orbit of the Pisan papal party during its sojourns at Pisa, Pistoia, Bologna and Florence. Perhaps the most fundamental aspect of this chapter revolves around the proposition that the several Latin-texted chansons in MOe5.24 can be linked to the early humanistic culture in northern Italy in which the first Pisan Pope, Alexander V, participated. The importance of this conclusion lies in the shift of the *ars subtilior* aesthetic from French courtly modes to proto-humanistic modes in Italy. That MOe5.24, unlike CH 564, is a personal collection

of works by a musician closely connected to musical manifestations of this culture accentuates the importance of the former manuscript in the history of composed western polyphony.

Both chapters 2 and 3 progress by examining codicological and palaeographic aspects of the source in question which relate to scribal processes. In doing so, I demonstrate how a source was compiled over time, the working practices of its scribes and how scribal predilections affect the realisation of works. Select works transmitted in one or more other sources will be compared to their concordances in order to reveal further details regarding their transmission and to ascertain copying practices from the period. An underlying premise of this investigation, as suggested by Margaret Bent,⁷ is that the surviving sources of this repertoire are most likely first compilations of a series of works copied from diverse exemplars. This work-by-work approach to stemmatic filiation illustrates a need to move beyond previous scholarship and its hypotheses, which are frequently based on the assumption that sources, especially Codex Chantilly, are copies of a single exemplar.

The examination of transmission issues will also incorporate discussion of several lesser and fragmentary sources of the *ars subtilior* and related repertoires which nonetheless contribute immensely to our understanding of this repertoire's transmission. Lesser sources include: Codex Reina (Paris, Bibliothèque Nationale, nouv. acq. frç. 6771), which consists of four gatherings of Italian *trecento* works, three gatherings of middle to late fourteenth century French works and two further gatherings of music by Guillaume Du Fay and his early contemporaries; the Paduan Fragments; Paris, Bibliothèque Nationale, ital. 568; and, Florence, Biblioteca Nazionale Centrale, Panciatichiano 26. The last two manuscripts are predominantly anthologies of Italian *trecento* music to which later scribes have added several works from the *ars subtilior* repertoire, but, in both cases, with little concern for the text and its underlay. Several fragmentary sources have come to light over the past thirty years, such as Grottaferrata, Biblioteca dell'Abbazia di S. Nilo, segn. provv. Kript. Lat. 224 (olim 197), and most recently Codex Boverio (Turin, Biblioteca Universitaria, ms. T.III.2). Both manuscripts transmit versions of works by the Italian Philipoctus de Caserta, as well as northern composers such as Johannes Suzoy in the case of Codex Boverio. This situation begs careful re-consideration of the transmission of these works.

⁶ Items 14, 25, 26, 29, 43*, 44, 46*, 51, 54*, 66*, 68, 78, 79, 80(?). * indicates works by Machaut.

The second part of this study is a study of scribal practices in relation to musical notation. At the same time, through the examination of semiotic devices and their semantic relationships, this part of the present study concerns itself with the cultural basis of mensural music notation in this period. In doing so, I demonstrate both the novelty of this still young symbol system and also its relationship to other branches of knowledge evident in the cultures of the middle ages. The benefit of this approach is that it sheds light upon possible conceptual processes, which might lie at the heart of the musical compositions of the *ars subtilior*. An understanding of these conceptual processes can only assist further in approaching the largely lost musical fabric of these compositions.

The division of materials for the three chapters in Part 2 is governed by the rationale set out at the beginning of Chapter 4. Here, I propose that modes of signification, which developed from medieval theories of metalinguistics under the influence of the writings of Aristotle and which were also employed in the musical theory of the fourteenth and early fifteenth centuries, provide a useful means of discussing the processes of musical notation. Thus, Chapter 4 proceeds with an examination of intrinsic elements of notation, that is the actual note shapes. Chapters 5 and 6 continue this examination of notational and scribal processes by considering the use of extrinsic devices, that is mensuration signs and Indo-Arabic numerals, in the notation of the *ars subtilior*.

Chapter 4 also challenges assumptions concerning the ethnographic origins of particular notation-types by proposing that a sharp delineation between the concepts that lie behind notational practices and the actual note shapes employed. I propose that the nature of special note shapes, that is note shapes which exhibit a form beyond the five simple note shapes of French mensural notation found repeatedly in theory and practice, is essentially two-fold. Although I show a strong preference for the designation of all special note shapes as Franco-Italian, I demonstrate that there is contemporary evidence to suggest that one form of special note shapes, whose nature is *proportional*, evolved out of French notational concepts, while the other *arithmetic* form resulted from the adaptation of French concepts by Italian scribes and composers.

Chapter 5 continues the examination of notational issues in the music of the *ars subtilior* by moving from the intrinsic to the extrinsic modes of signification and considering

⁷ Margaret Bent, 'Some criteria for establishing relationships between sources of late-medieval polyphony', in *Music in Medieval and Early Modern Europe: Patronage, Sources and Texts*, ed. I. Fenlon, Cambridge, 1981, pp. 295-317.

the use of mensuration signs, both from a theoretical and practical perspective. The use of mensuration signs, although already codified in theoretical literature on mensural notation early in the fourteenth century, is only evident in extant musical sources from the last years of the fourteenth century. Yet, even with their appearance in musical sources dating from the last decade of the fourteenth and first decade of the fifteenth centuries, mensuration signs deviate in many respects from standard theoretical definitions. I argue that this situation reflects a period of instability and experimentation in the use of mensuration signs, which can be reconciled to localised and often individual applications.

The examination of the occurrence and development of extrinsic elements is continued in Chapter 6. In this chapter, I examine the cultural basis that resulted in the introduction of Indo-Arabic numerals into musical notation. The discussion proceeds from Alexander Murray's observation that the period around 1400 marks a turning point in Western culture whereupon the symbol system known today as Indo-Arabic numerals and their associated calculative processes referred to as algorism began to be more widely accepted and used in medieval society. In their own right, musical sources strongly mark this turning point by the inclusion of Indo-Arabic numerals as extrinsic signifiers in musical notation. But the presence of Indo-Arabic numerals is not equivalent to the adoption of algorithmic processes. Instead, their presence in musical notation marks the final stage of the use of algorithmic processes in relation to proportionality, which occurred in the first instance without the explicit presence of the numerals themselves. The gap, which exists between the application of a concept and the application of an associated symbol system, permits a broad outline of the chronology of the *ars subtilior*. In relation to this last aspect, I conclude my discussion of algorism in the music of the *ars subtilior* by examining the dating of the works of the composer Baude Cordier. I suggest that, based on the presence of the most advanced proportional techniques using Indo-Arabic fractions as signifiers and the delay in the use of Indo-Arabic numerals in musical notation, the activity of this composer must have occurred after the first or second decades of the fifteenth century.

The significance of that which follows lies in the application of the concept of cultural studies to the investigation of the music of the late fourteenth and early fifteenth centuries. It seeks to answer outstanding questions regarding the creative forces that lay behind this music and its reception. Most importantly, it argues that music could be transplanted into and modified/re-created by socio-cultural contexts other than those that originally created it. The exciting knowledge of this transformation also allows us to

understand how its artefacts might have come down to us as such today. It also results in an expansion of the boundaries occupied by music history by arguing the music of the *ars subtilior* reflects the many facets of late medieval culture.

Chapter 1 :

What is the ars subtilior?

The present chapter concerns itself with the term *ars subtilior*. Terms, which form a fundamental aspect of scholarship, may not be lightly brushed aside, nor their *status quo* be unquestioningly accepted. However, it is conceded that terms describing perceived historical movements are for the most part constructs of historians whose relation to historical “reality” may somewhat be abstracted from the truth, should such a concept be invoked. However, the following discussion seeks to circumvent objections to the application of terminology by the modern historian by formulating its definition on aspects containing an historical basis. While such a technique may not represent common historical reality, it does seek to interpret a contemporary perception of musical reality in the late fourteenth century.

In her article *Das Ende der ars nova*,¹ Ursula Günther proposed that the term *ars subtilior* be adopted to describe the music demonstrating features such as special note forms, cross-rhythms and *syncopa* with an approximate chronological correspondence to the Great Schism (1378-1417). By reference to contemporary theoretical treatises which are discussed below, she stated that “die Worte “*subtilitas*” <beziehungsweise> “*subtilis*” sind im späten 14. Jahrhundert bei französischen wie italienischen Musiktheoretikern nachweisbar”.² It is clear that Günther intended that the term denotes both a style and an epoch that was successor to what was then considered the *ars nova* period (c.1315-c.1370).³ This situation is paralleled by Apel who employed the phrase “manneristic style” as well as “manneristic period” as epoch designators.⁴ It is precisely the term “mannered” and

¹ *Die Musikforschung*, XVI, 1963, pp. 111-112;

² “The words ‘*subtilitas*’ or ‘*subtilis*’ are evident in French and Italian music-theorists in the late 14th century”; Günther, ‘Das Ende der ars nova’, p.112.

³ The use of the term *ars nova* as a periodic descriptor must be also considered a product of the earliest years of twentieth century musicology by which it was used to denote the period encompassing the music of Philippe de Vitry (1291-1361) to Johannes Ciconia (†1412), *vid.* Heinrich Besseler, ‘Ars nova’, in *Die Musik in Geschichte und Gegenwart*, 1st edn, ed. F. Blume, Kassel und Basel, 1948-51, vol. 1, coll. 702-729; In the revised entry to this encyclopedia by Karl Kügle, Maricarmen Gómez and Ursula Günther (‘Ars nova - Ars subtilior’, in *Die Musik in Geschichte und Gegenwart*, 2nd edition, ed. L. Finscher, Kassel, 1994, vol. 1, col. 878-918), the influence of Hugo Riemann, despite the reservations of Ludwig and Besseler, is held responsible for the transferal of Johannes Wolf’s earliest use of the term as a notational descriptor to a periodic and stylistic descriptor (*ibid.*, col. 878). It is also noted that Günther’s style-chronological designator *ars subtilior* limited the extent of the *ars nova* from c. 1315 to c. 1370 (*loc. cit.*).

⁴ Willi Apel, *The Notation of Polyphonic Music*, Cambridge (Massachusetts), 1953 (Revised 5th edition with commentary), pp. 403ff. For Günther’s criticism of Apel’s terminology which, she argues, emphasises the

“manneristic” which Günther sought to avoid on account of their perceived pejorative nature.⁵ However, the notion that the *ars subtilior* represents a new epoch is both absent in practical and theoretical evidence. Furthermore, as admitted by Günther in her article⁶ and as demonstrated below, the term *subtilis* was used in relation to music throughout the whole of the fourteenth century and not just towards the end of that century. This apparent deficiency necessitates a re-examination of the use of the term *ars subtilior*, in an attempt to redefine and to qualify further its significance.

In seeking contemporary attitudes, a resource available to scholars is the body of theoretical writings from the late fourteenth century, which are perceived to show close affinities with the extant musical record. The anonymous *Tractatus Figurarum* is one such treatise upon which Ursula Günther based her original thesis. The earliest source for this treatise is the Chicago manuscript held at the Newberry Library, shelf number MS 54.1 which was copied by a *frater G. de Anglia* in, or just after, the year 1391. The notational principles that it describes are found in a small number of works mostly by Italian composers. The only extant practical example of a note shape exactly the same as the novel shapes proposed by the author of the *Tractatus Figurarum* occurs in Bartholomeus de Bononia’s *Que pena maior*. Nonetheless, the author of the *Tractatus Figurarum* has some pertinent remarks concerning the development of notation during the fourteenth century. The treatise begins:

Et licet magistri nostri antiqui primum intellectum musicalem habuerunt, et hoc satis grosso modo sicut adhuc patet in motetis ipsorum magistorum, videlicet Tribum que non abhorruit et in aliis et cetera, tamen ipsi post modum subtiliorem modum considerantes, primum relinquerunt et artem magis subtiliter ordinauerunt ut patet in Apto caro. Sic nunc successive venientes, habentes et intelligentes que

negative aspects of the style (*betont...die negative Seite der Erscheinungen*), *vid* Günther, ‘Das Ende der *ars nova*’, p. 106.

⁵The negative connotations Günther sought to avoid are apparent when Apel writes: “Musicians, no longer satisfied with the rhythmic subtleties of the *ars nova*, began to indulge in complicated rhythmic tricks...”, *loc. cit.*; *cf.* Rudolf von Ficker, ‘Transition of the Continent’, in Dom Anselm Hughes & Gerald Abraham, *The New Oxford History of Music*, 1st edn, vol. III: *Ars Nova and the Renaissance*, London, 1960, p. 142. Günther’s views encouraged Jehoash Hirshberg to state in 1971 that “The earlier negative attitude was put aside in favor of careful and objective research leading to specialized studies of various aspects of the period.”, in “The Music of the Late Fourteenth Century: A Study in Musical Style”, Ph.D thesis, University of Pennsylvania, 1971. More recently, Philip E. Schreur who writes in his introduction to the *Tractatus Figurarum*, p. 1: “...there is a yawning chasm between the subtlety of making fine distinctions and the wilful obscuring of interrelationships. The fourteenth century was an era of fine distinctions.”

⁶ Günther, *loc. cit.*

*primi magistri relinquerunt majores subtilitates per studium sunt confecti ut quod per antecessores imperfectum relictum fuit successores reformetur.*⁷

Clearly, the theorist divides music in the fourteenth century into three stylistic phases: the first and second styles which were the product of the old masters, and a third style which was produced by their followers. But the author of the treatise makes it clear that he is a witness to the third style that has already come to pass when he uses the perfect tense (*confecti sunt*) to refer to the *maiores subtilitates* achieved by the new generation of composers. Of greatest interest to the present discussion, however, is this theorist's use of the term *subtilitas* and its related forms. What indeed does this author mean when he uses the term *subtilitas*?

The two motets cited by the author of the *Tractatus Figurarum*, *Tribum que non abhorruit* and *Apto caro*, are both connected to a French-based repertoire. Both motets also survive in extant sources. According to the author of the *Tractatus Figurarum*, the first motet, which is possibly by Philippe de Vitry,⁸ represents the earliest style under consideration. The earliest version of *Tribum que non abhorruit/ Quoniam secta latronum/ Meritur hec patimur* is found as a musical interpolation in the recension of the *Roman de Fauvel* found in the manuscript Paris, Bibliothèque Nationale, fonds français 146 (=Pn 146). In *Tribum* and other motets in Pn 146, groups of *semibreves* (or diamond-shaped notes) separated by a dot must be realised according to conventions demonstrated in the writings of Marchettus de Padua, Philip de Vitry and the Anonymous III of Coussemaker's *Scriptorum III*. This type of notation is henceforth referred to as undifferentiated *semibreves*.⁹

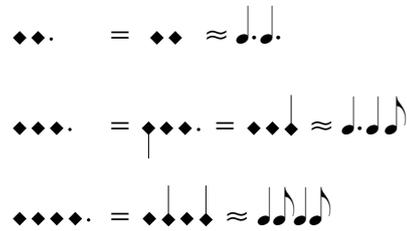
⁷“And granted that our ancient masters had the first musical understanding, and this was adequate in an unrefined manner as shown in the motets of those masters, namely *Tribum que non abhorruit* and in other motets, and so on. However, after carefully considering a manner to be a more *subtilis* one, they abandoned the first and constructed the art more *subtiliter*, as revealed in *Apto caro*. Thus those now coming later, possessing and understanding what the first masters have left, have accomplished greater *subtilitates* through study so that that which was left imperfect by predecessors might be reformed by their successors.”; Schreier, *op.cit.*, 66.5-68.5. I have intentionally modified the punctuation of this passage so that the grammatical ‘licet...tamen’ correspondence conforms to modern editorial practice.

⁸ Leo Schrade proposed initially that this work and four others in the *Roman de Fauvel* be attributed to Philippe de Vitry with several other motets also possibly by the same composer in ‘Philippe de Vitry: Some new discoveries’, *Musical Quarterly*, 42, 1956, pp. 330-54. Ernest Sanders limited the number of Vitry motets in the *Roman de Fauvel* to four including *Tribum* in, ‘The earliest motets of Philippe de Vitry’, *Journal of the American Musicological Society*, vol. 28, 1975, pp. 36-37. Cf. Edward H. Roesner, François Avril and Nancy Freeman Regalado, *Le Roman de Fauvel in the Edition of Mesire Chaillou de Pestain: A Reproduction in Facsimile of the Complete Manuscript Paris, Bibliothèque Nationale, Fonds Français 146*, New York, 1990, p. 40. For the quotation of material from this work by another motet in the *Roman de Fauvel*, *vid.* Margaret Bent, ‘Polyphonic texts and music in the fourteenth century motet: *Tribum que non abhorruit/Quoniam secta latronum/Merito hec patimur* and its “Quotations”’, in *Hearing the Motet: Essays on the Motet of the Middle Ages and Renaissance*, ed. D. Pesce, New York - Oxford, 1997, pp. 82-103.

⁹ The term undifferentiated *semibreves* is used here in relation to early fourteenth century French notational practices to describe strings of two or more *semibreves* enclosed by a dot of division which signifies that the

Often the first *semibrevis* in groups of three *semibreves* in Pn 146 has a downward stem. Rather than indicating another rhythm, this appears to be an attempt to clarify the intended realisation.¹⁰ Figure 1.1 gives examples of *semibrevis* groups and their realisation.

Figure 1.1: Interpretation of undifferentiated *semibreves* at the beginning of the fourteenth century.



In several instances, these realisations are verified by later transmissions of these works rewritten in later sources using *minime*.¹¹ Other features of *Tribum* include a short *talea* stated twelve times and a *color* repeated once. However, the work does not employ coloration,¹² syncopation or mensuration signs.

semibreves must be sung within the duration of a *brevis* or a *tempus* according to certain predetermined rhythmic patterns. This device is ostensibly descended from the visually identical device of Petronian *semibreves* employed in the last quarter of the thirteenth century. This notational device, whose invention is attributed to a Petrus de Cruce (*vid.* Ernest H. Sanders, rev. Peter Lefferts, 'Petrus de Cruce', in *The New Grove Dictionary of Music and Musicians*, 2nd edn, ed. S. Sadie, London, 2001, vol. 19, pp. 521-523.), grew out of late thirteenth century mensural notation, frequently referred to as Franconian notation (in reference to the theorist Franco de Colonia who first codified/postulated its rules). Whilst the concept of Petronian *semibreves* formed an integral part of classic Italian *trecento* notation, its only legacy in French notation after c.1330 was the *punctus divisionis* whose application was extended to the *prolatio* boundaries.

¹⁰ It should be noted that there are some points of contention among scholars regarding the interpretation of these signed and unsigned note groups. Furthermore, there is a discrepancy between later versions of this work and statements made by medieval theorists. One treatise suggests that this motet should be realised in minor prolation, *vid.* Leo Schrade, (ed.), *Commentary: The Motets of Philippe de Vitry and the French Cycles of the Ordinarium Missae*, Polyphonic Music of the Fourteenth Century Ib, Monaco, 1956, p. 92.

¹¹ A version of *Tribum que non abhorruit / Quoniam secta latronum / Meritur hec patimur* using differentiated *minime* and *semibreves* is found in the *rotulus* Brussels, Bibliothèque Royale, 19606 (=Br 19606). Other versions occur in Rostocker Liederbuch, f. 43r; Munich, Bayerische Staatsbibliothek, Handschriften-Inkunabelabteilung, Latinus monacensis 5362, Kasten D IV ad [31]; Strasbourg, Bibliothèque Municipale (olim Bibliothèque de la Ville) 222 C. 22 [destroyed 1870], ff. 71-71v; *cf.* Ursula Günther, (ed.), *The Motets of the Manuscripts Chantilly Musée Condé 564 (olim 1047) and Modena, Biblioteca estense α.M.5.24 (olim lat 568)*, Corpus Mensurabilis Musicae 39, Amsterdam, 1965, p. xxv. The re-notation of *Garrut gallus / In nova fert / Neuma* as found in Pn 146 using a combination of undifferentiated *semibreves* and *semibreves caudate a parte inferiori* into mid-century *ars nova* notation in Br 19606 and Paris, Bibliothèque Nationale, coll. Picardie 67 (=Pn Pic 67) is discussed in Richard Hoppin, 'Some remarks a propos of Pic', *Revue Belge de Musicologie*, vol. 10, 1956, pp. 105-111. Here, Hoppin dates Pn Pic 67 slightly later than Br 19606 on account of the former scribe's apparent difficulties in translating early fourteenth century *ars nova* notation into its mid-century form.

¹² Coloration is, however, found in another motet in Pn 146, *Garrut gallus / In nova fert / Neuma*, also attributed to Philippe de Vitry. Hoppin notes the use of void black coloration in Pn Pic 67 in place of red coloration in other transmissions, notably in Pn 146 and Br 19606, in 'Some remarks a propos of Pic', p. 106.

Textual references¹³ and the approximate date of compilation for the *Roman de Fauvel* in Pn 146¹⁴ suggest that *Tribum* was composed between 1315-1318. In terms of its notation, *Tribum* as transmitted in Pn 146 represents a transitional style from the *ars antiqua* with associations with Petronian motets found in the 7th and 8th fascicles of the manuscript Montpellier, Bibliothèque Interuniversitaire, Section Médecine, H. 196.¹⁵ Daniel Leech-Wilkinson has convincingly argued, however, that the musical style of the works in Pn 146 is sufficiently removed from the style of Petronian motets to suggest that the *Fauvel* motets embody a new style - the *ars nova* style.¹⁶ This assessment is supported by the views of the author of the *Tractatus Figurarum* who sees the first generation of composers, in whose maturity the *ars nova* style becomes fully manifest, as initially practising an older type of notation.

The second motet cited by the author of the *Tractatus Figurarum*, *Apta caro* appears in six extant manuscripts from this period – a fact that may attest to its popularity.¹⁷ In all transmissions of this work, *minime* are clearly differentiated from *semibreves* by the superior stem. Furthermore, the use of isorhythm in this work is more complex when compared to

¹³ The text of this motet appears to refer the execution of Philippe IV's finance minister, Enguerran de Marigny on 30th April, 1315, *vid.* Ph. Aug. Becker, 'Fauvel und Fauvelliana', *Bericht über die Verhandlungen der Sächsischen Akademie der Wissenschaften zu Leipzig. Philologisch-historische Klasse*, vol. 88, 1936, pp. 36ff; *cf.* Sanders, 'The Earliest Motets of Philip de Vitry', pp. 31-32.

¹⁴ The edition of the *Roman de Fauvel* in Pn 146 was compiled between c.1316-18, if not after the coronation of Philip V on 9 January 1317, *vid.* Roesner *et al.*, *Le Roman de Fauvel in the Edition of Mesire Chailluo de Pesstain*, p. 49. For a cautionary note on a too literal reading of the Marigny motets for the purposes of dating Pn 146, *vid.* Margaret Bent, 'Fauvel and Marigny: Which came first?', in *Fauvel Studies: Allegory, Chronicle, Music, and Image in Paris, Bibliothèque Nationale de France, MS français 146*, eds M. Bent and A. Wathey, Oxford, 1998, pp. 35-52.

¹⁵ For a recent reassessment of the nature and dating of the Montpellier Codex, *vid.* Mary Elizabeth Wolinski, 'The compilation of the Montpellier Codex', *Early Music History*, vol. 11, 1992, pp. 263-301. Wolinski dates the compilation of fascicles 1-7 to the 1360s and 1380s. The dating of the 8th fascicle on the basis of its illumination style remains uncertain, although Wolinski holds the view that it cannot be far removed from the dating of the earlier fascicles. In terms of their notation, fascicles 2-6 exhibit traits reflected in the reforms of the later thirteenth century theorist Magister Lambertus (*vid.* Gordon Athol Anderson, 'Magister Lambertus and nine rhythmic modes', *Acta Musicologica*, vol. 45, 1973, pp. 57-73). Fascicles 1 & 7 in the Montpellier Codex are Franconian, although Crucian elements are found in both fascicles 7 and 8. Based on her dating of the Montpellier manuscript, Wolinski dismisses the view that the Crucian motets mark a transition to the *ars nova*. Rather, they represent mature aspects of the *Ars Antiqua* (Wolinski, *op.cit.*, pp. 300-1).

¹⁶ Daniel Leech-Wilkinson, 'The emergence of *ars nova*', *Journal of Musicology*, vol. 13, 1995, pp. 285-317. On the view that the Pn 146 is a transitional source looking both to the past (especially the last fascicles of Montpellier) and future, *vid.* Leo Schrade, 'The chronology of the *Ars Nova* in France', *Les Colloques de Wégimont II, L'ars nova: recueil d'études sur la musique de XIV^e siècle (1955)*, Paris, 1959, pp. 46f.

¹⁷ The motet *Apta caro plumis ingenii/ Flos virginum decus et species/ Alma redemptor mater* is transmitted in Cambrai, Bibliothèque Municipale 1328, ff. 10v-11r; CH 564, ff. 60v-61r; Durham, Cathedral Library C.I.20, ff. 338v-339; Florence, San Lorenzo, Archivio Capitolare 2211 [palimpsest] ff. 61v,70; Ivrea, Biblioteca Capitolare 115 ff. 5v-6; MOe.5.24, ff. 18v-19, Pn 23190 (olim Serrant Château, ducs de la Trémoille)[index only] ff. 21v-22.

the previous motet, *Tribum que non abhorruit*. *Apta caro* also enjoys greater rhythmic sophistries with syncopation in the T and Ct, and the S using rhythms beyond the simple trochees inherent in the realisation of the undifferentiated *semibreves* of *Tribum*. According to Ursula Günther, the approximate dating of 1360 for this motet,¹⁸ and its presence in the older portion of F-Pn 23190¹⁹ index dated 1376,²⁰ suggests that, in conjunction with the *Tractatus Figurarum*, this motet is to be considered not “as the product of the young generation but rather of the advanced style of composition practised by their teachers who have progressed further than the old masters and achieved a more subtle art.”²¹ Or, perhaps better stated, the motet reflects notational developments that occurred as a result of the new musical style and its demands.

From prior analysis of the statements in the *Tractatus Figurarum* concerning the first and second styles of *ars nova* motets, it can be concluded that the theorist’s notion of *subtilitas*, as conveyed by the terms *modus subtilior* and *ars magis subtiliter*, refers to notational developments which can be typified as greater notational detail or precision in the representation of musical events. The notational style of *Apta caro* is more precise. Its notation contains finer distinctions because there is a progression in the realisation of notation based on neumatic processes found in *Tribum que non abhorruit* to a system in which individual musical durations, allowing for the conventions of imperfection and alteration, are directly associated with the individual *figure*. The consequence of this system was that composers now had the means to notate a greater range of rhythmic patterns. This second system of notation corresponds closely to our understanding of the French *ars nova* style whose most renowned representatives are Guillaume de Machaut and Philippe de Vitry. But it is also clear that the author of the *Tractatus Figurarum* perceives these notational developments to be motivated by stylistic demands.

The reading of *subtilitas* in musical notation of the fourteenth century as ‘precision’ or ‘precise signification’ is not new to scholarship. Anne Stone has also proposed the

¹⁸ Ursula Günther, *The Motets of the Manuscripts Chantilly Musée Condé (olim 1047) and Modena, Biblioteca Estense α, M.5,24 (olim lat. 568)*, p. XXVa.

¹⁹ Paris, Bibliothèque Nationale, nouv. acq. frç. 23190 [formerly Chateau de Serrant (Maine-et-Loire), ms of the duchess de la Trémoille].

²⁰ Günther’s dating remains valid even in light of Margaret Bent’s more recent observation that several items in the index of the Trémoille MS are later additions, in ‘A note on the dating of the Trémoille Manuscript’, in *Beyond the Moon: Festschrift Luther Dittmer*, eds B. Gillingham and P. Merkley, *Musicological Studies* 53, Ottawa, 1990, pp. 217-242.

²¹ Günther, *The Motets of the Manuscripts Chantilly Musée Condé (olim 1047) and Modena, Biblioteca Estense α, M.5,24 (olim lat. 568)*, p. XXVa.

difference between the notation of the two motets discussed in the *Tractatus Figurarum* is a degree of precision – a conclusion that closely follows that proposed by Philip Schreur.²² Both authors, however, scarcely substantiate their reading in the wider context of fourteenth-century literary and technical language. The adjective *subtilis* was used in classical Latin in both a literal and figurative sense. Used in a literal sense it signifies that which is thin, minute or materially fine.²³ Its figurative use pertained to judgements of taste or veracity with respect to something's preciseness, keenness, subtlety or refinement. It can also denote a plainness or simplicity when applied to orators or writing styles.²⁴ Overall, its figurative sense is connected with the notion that something is *subtilis* which is elegantly conceived and whose meaning is plainly or precisely perceived. The meaning of *subtilis* in Latin of the middle ages shows influences of its derivative form found in most Romance languages. In Old and Middle French, its derivative *soutil* is often employed to denote persons who are clever and, in the case of artifices, it describes “qui demande beaucoup d'industrie et d'habilité”.²⁵ In approaching its use in the musical treatises of the fourteenth century, *subtilis* is used predominantly in a figurative sense to suggest refinement or precision of persons, methods or ideas,²⁶ although it remains in its literal sense.²⁷ This usage also

²² Anne Stone, ‘Che cosa c’è di più sottile riguardo l’ars subtilior?’, *Rivista Italiana di Musicologia*, 31, 1996, p. 4. Cf. Schreur, *op.cit.*, p. 2.

²³ For example, Lucretius in the fourth book (ll.115,122) of his *De rerum natura* describes the primordial essence as *subtilia et minuta*; *vid.* Cyril Bailey, *Titi lucreti cari De rerum natura*, Oxford, 1947, vol. 1. This sense is closest to the plausible etymological root of *subtilis*: *tela*, that is, cloth being woven or threads within the weave, *vid.* A. Walde (rev. J.B. Hofmann), *Lateinisches Etymologisches Wörterbuch*, Heidelberg, 1954, pp. 619-620.

²⁴ *Vid.* P.G.W. Glare (ed.), *Oxford Latin Dictionary*, Oxford, 1976, p. 1853 where the definition of *subtilis* is divided into 6 categories, the first being its literal sense pertaining to the nature of matter, the second being precision in execution or fineness of works of art, the third and fourth the refinement in persons and towards the senses, the fifth rhetorical style and the last exact legal argument. Cf. Charlton T. Lewis, *A Latin Dictionary*, Oxford, 1879, pp. 1784-5. J. F. Niermeyer's *Mediae Latinus Lexicon minus*, Leiden, E.J. Brill, 1976, p. 1000 defines *subtilis* simply, and perhaps inadequately, as "cunning, crafty", also mentioning the adjectival substitute of *subtile* to denote a subdeacon's garments as found earlier in Du Cange, *Glossarium Mediae et infirmae latinitatis*, 1883-87 (repr. Akademische Druck-Verlagsanstalt, Graz, 1956).

²⁵ “That which requires much application and skill”; Frédéric Godefroy, *Dictionnaire de l'ancienne langue Française et de tous ses dialectes du IXe au XVe siècle*, Paris, 1892, p. 564.

²⁶ An example of its application to persons is: ...*subtilis cantor*... (Aegidius de Murino, *Tractatus cantus mensurabilis*, in Edmund de Coussemaker, (ed.), *Scriptorum de Musica Medii Aevii: novam seriem a Gerbertina altera*, 4 vols, Paris, 1864, vol. III, p. 127), and ...*musica, sicut libro primo tactum est, diversis hominum statibus se coaptet maioribus et minoribus, subtilioribus et rudioribus, minus peritis in scientiis et in philosophia magis imbutis* (Roger Bragard, [ed.], *Jacobi Leodiensis Speculum Musicae*, Corpus Scriptorum de Musica 3, Amsterdam, 1973, vol. 6, p. 7); To describe methods: ...*modo subtiliore investigant*... (Ernst Rohloff, [ed.], *Die Quellen handschriften zum Musiktraktat des Johannes de Grocheio*, Leipzig, 1972, vol. 2, p. 44); *Pythagoras subtili quadam examinatione proportionem consonantiarum investigaverit et de Platone qualiter subtilissima divinatione monochordum ordinaverit* (G. Pannain, ‘Liber musicae. Un teorico anonimo del XIV secolo’, *Rivista musicale Italiana*, vol. 27, p. 436); *Hic modus vel ars dividendi monochordum vel disponendi litteras, claves vel chordas in ipso subtilis est*... (Bragard, *op.cit.*, vol. 5, p. 61).

occurred outside the sphere of music theory as shown in the example, given by Anne Stone, of the English philosopher John Duns Scotus (1265-1308) who was known as the *doctor subtilis* on account of the precision of his philosophic argument. Stone also mentions the term *subtilitates anglicanae* used by a fourteenth century Parisian author to describe the dialectic logic of especially William of Ockham.²⁸

Turning to the use of the term in other musical writings of the fourteenth century, one notes that *subtilis* and its related forms are found repeatedly in the *Speculum musicae* of Jacobus de Liège, but in varied shades of meaning. This treatise is not from the late fourteenth century, but from its first half. In it, Jacobus vehemently attacks Johannes de Muris' theories concerning the *ars nova* movement contained in his *Notitia artis musicae* (1321) and *Compendium musicae practicae* (1322). In the *Speculum*, *subtilis* is frequently used to denote preciseness (or similar to the sense in sixteenth century English of 'making plain'), although often Jacobus tends to use the same adjective in a pejorative manner with connotations of complexity.

Most recently, Dorit Ester Tanay has evaluated Book 7 of the *Speculum musicae*, which deals with *musica mensurabilis*, as an Ockhamite, metalinguistic attack on Johannes de Muris' theories of notational developments of the *ars nova*, which also re-conceptualises the *ars antiqua* according to the most recent philosophic developments.²⁹ The statement amongst Jacobus' arguments relevant to this present discussion is that the *minima* and *semiminima* used by the Moderns are redundant due to the perceived logic that similar durations in the *ars antiqua* could be represented using *minor semibreves* sung in a rapid tempo.³⁰ The consequence of this argument is subsequently revealed in the Chapter XLV of Book 7 where Jacobus compares the *ars antiqua* to the *ars nova*. He reports the following opinion:

Videtur forsā aliquibus modernam artem esse perfectiorem quam sit vetus quia ipsa videtur subtilior et difficilior. Subtilior quia ad plura se extendit et multa super illam addit, ut patet in notulis, in modis et mensuris (subtile autem dicitur

²⁷ *vocum alia suavis est illa, scilicet quae subtilis, spissa, clara et acuta est* (Frederick F. Hammond, [ed.], *Walteri Odington Summa de Speculatione Musicae*, Corpus Scriptorum de Musica 14, s.l., 1970, p. 71)

²⁸ Stone, *op.cit.*, p. 45.

²⁹ Dorit Tanay, *Noting Music, Marking Culture: the Intellectual Context of Rhythmic Notation 1250-1400*, *Musicological Studies and Documents* 46, Holzgerlingen, 1999, pp. 146-181.

³⁰ Bragard, *op.cit.*, vol. 7, p. 36.

*quod est magis penetrativum attingens ad plura). Quod autem sit difficilior videtur in operibus Modernorum in modo cantandi et mensurandi.*³¹

This particular use of the comparative *subtilior* by Jacobus to compare the *ars antiqua* to the *ars nova* affords greater significance to the similar usage found in the *Tractatus Figurarum*.

Jacobus' statement leads to the conclusion that the new note shapes (especially the *minime* and *semiminime*), the mode or the division of time, and the mensurations are notational and conceptual elements which all give the new art greater precision. The first distinction concern note shapes accords well with the observable differences between the two motets cited by the author of the *Tractatus Figurarum*. As previously mentioned, *Tribum que non abhorruit* used undifferentiated *semibreves* while *Apto caro* makes full use of the *minima*. The statement recorded by Jacobus de Liège demonstrates that the concept of precision was closely connected to musical notation and that new note forms were especially indicative in the minds of the *moderni* as signifying greater subtlety or precision. *Subtilior modus*, as used by the author of the *Tractatus Figurarum*, describes the relationship of the second phase of notational development to the first in terms of greater significative precision.

This assessment is otherwise supported by documentary and literary evidence. The well known papal bull *Docta sanctorum patrum* (1324-25) of Pope John XXII censures the new musical notation and its practices by condemning *nonnulli novellae scholae discipuli, dum temporibus mensurandis invigilant, novis notis intendunt, fingere suas quam antiquas cantare malunt; in semibreves et minimas ecclesiastica cantatur, notilis percutiuntur*.³² While some practical aspects such as musical division (*notilis percutiuntur*) or embellishment are mentioned,³³ the statement is couched in notational terms whose potency lies in the suggestion that the new style was creating new note forms, least of all the *minima*.³⁴

³¹ "Perhaps it seems to some that the modern art is more perfect than the old because the former seems more subtle and more difficult. More subtle because it extends itself to more things and adds many things to the latter, as evident in the note forms, in the mode and the mensurations (however, subtle is said to be that which is more penetrating and affects many). However, it seems more difficult, in the works of the moderns, in the manner of its singing and measuring out (i.e. new note forms and mensurations)."; Bragard, *op.cit.*, p. 87, sent. 3.

³² "Several followers of a new school now pay attention to the measuring of time, concern themselves with new note forms <and> prefer to fashion there own <songs>, rather than sing the old ones; the holy office is sung in *semibreves* and *minimas* and it is divided into little notes"; the content of the bull can be found in Franz Xaver Haberl, *Bausteine für Musikgeschichte*, vol. 3: Die Römische "Scholae Cantorum" und die Pöpstlichen Kapellsänger bis zur mitte des 16 Jahrhunderts, 3 vols., Leipzig, 1888, p. 22, fn. 1.

³³ The passage continues: *Nam melodias hoquetis intesecant, discantibus lubricant, triplis, et motectis vulgaris nonnumquam inculcant; adeo ut interdum Antiphonarii et Gradualis fundamenta despiciant, ignorent super qua edificant, Tonos nesciant quos non discernunt, imo confundunt, cum ex earum multitudine notatrum ascensionis pudice dicensionesque temperate plani cantus, quibus Toni ipsi secernuntur, ad invicem. Currunt enim et non quiescunt, aures*

One of the foremost composers during the middle two-quarters of the fourteenth century, Guillaume de Machaut reveals the same level of cultural self-awareness in his *Le Remede de Fortune*. Towards the end of the poem, Machaut describes a gathering of musicians:

*Et s'i ot musiciens
Melleurs assez et plus sciens
ens la viez et la nouvelle forge
Que Musique qui les chans forge...*³⁵

Based on these lines and a new reading of the work as a whole, Margaret Switten has interpreted the *Remede* as a conflict between *la viez et nouvelle forge* with the eventual triumph of the latter.³⁶ In the first part of the *Remede*, the lover is unsuccessful in attracting the favours of his lady, only succeeding in the second part. As suggested by Switten, the songs occurring in the course of the first section employ archaic genres typical of the troubadours (*lai*, *complainte*, *chanson roiale*) notated in *longe*, *breves* and some *semibreves* which are suggestive of the old school. Yet, in the second section of the *Remede* the song forms are those of the *formes fixes* (*balad(e)*, *chanson baladée* = *virelai*, *rondolet*) written in note forms which include many *minime*. These latter literary and musical forms are therefore indicative of the new style, at least within the secular realm. Based on the contrast between the reception of each respective style by the lady, the eventual triumph of the lover can be viewed as a metaphor arguing for the suitability of the new art to the courtly genres. By extension, one essential difference between *la viez et nouvelle forge* is the degree of notational precision as embodied by the presence of the *minima* in works cast by the *nouvelle forge*.

Hitherto, the focus of this discussion has been the relation of the first and second notational styles, that is the *ars antiqua* and the *ars nova*, in relation to the use of *subtilis*. The use of *subtilis* in relation to the development of the second style from the first leads to

inebriant, et non medentur; gestibus simulant, quod depromunt, quibus devotio querenda contemnitur, vitanda lascivia propalatur.

³⁴ Helmut Hucke emphasises that while this decree seeks to address abuses of the performance of ecclesiastical song, that is, plainchant (*ars musica*), it is actually an attack on the *ars nova*, but only in relation to the performance of its motets in church, in 'Das Dekret 'Docta sanctorum patrum' Papst Johannes' XXII', *Musica Disciplina*, vol. 38, 1984, pp. 119-131.

³⁵ "And there were musicians more skilled and more knowledgeable in both the old and new styles than Music who fashions their songs"; Ernest Hoepffner (ed.), *Le Remede de Fortune*, Œuvres de Guillaume de Machaut, Paris, 1911, v. 3999-4002. For the use of the term *forge* as a poetic metaphor, *vid.* Cerquilini, 'Un Engin si subtil', in *Guillaume de Machaut et l'écriture au XIVe siècle*, Bibliothèque du XVe siècle 47, Geneva, 1985.

the understanding that the *majores subtilitates* achieved during the third period involve the evolution of notational devices to further quantify temporal durations and relationships. This association of notation and temporal preciseness continues to concern other theorists of the third phase of development as demonstrated in the Anonymous X treatise found in the third volume of Coussemaker's *Scriptorum*. The author states that his treatise is concerned with *minimis notulis artis mensurate quibus utuntur multi moderni subtililesque musici*.³⁷ The treatise then proceeds to describe the *minima*, *semiminima*, the *dragma* and a form called the *minima semiminimarum*, which is drawn as a *semiminima* with the addition of a tail descending from its lowest part. This association of smaller note values with *subtilitas* by Anonymous X is parallel to the previously discussed opinion of the earlier *moderni* reported by Jacobus de Liège. However, Anonymous X also permits the extension of the defining scope of *subtilis* in the third phase of notational development to include special note forms.³⁸ This aspect is perhaps integral to the definition of the third period of notational development described in the *Tractatus Figurarum*.

Advanced concepts in the division of musical time are a feature of the aforementioned *Tractatus Figurarum*. A concern for what is termed *polymensuralism*, or the simultaneous use of different divisions of musical time in each voice of a composition, is revealed when he writes:

*Et licet magistri instruxerunt nos in his figuris ac etiam in quatuor mensuris principalis, videlicet in tempore perfecto maioris prolationis et in tempore imperfecto ipsius, in tempore perfecto minoris prolationis et in tempore imperfecto ipsius, tamen non docuerunt quomodo super tempus imperfectum minoris discantare deberemus perfectum minoris et e converso, et sic de singulis temporibus quod clare singulariter inferius patebit. Quia esset multum inconueniens quod illud quod potest pronuntiari non posset scribi et clare ostendere tractatum hunc parvulum ordinare curavi.*³⁹

³⁶ Margaret Switten, 'Guillaume de Machaut: *Le Remede de Fortune* au carrefour d'un art nouveau', *Les niveaux de langue: musique et littérature jusqu'au XVIIIe siècle*: 1988, Société d'édition «Les Belles Lettres», 1989, pp. 101-118.

³⁷ "the smaller notes of measured music which many modern and deft musicians use"; Coussemaker, *op. cit.*, vol. 3, p. 413.

³⁸ cf. Günther, 'Das Ende der ars nova', p. 111.

³⁹ "And although the masters instructed us in these figures in the four principal mensurations, namely in perfect and imperfect time with major prolation, in perfect and imperfect time with minor prolation, they, however, did not teach us how we ought to sing (discant) perfect time with minor prolation over imperfect time with minor prolation, and vice versa, and so on for the individual *tempora* which will be clearly and individually revealed below. Since it would be greatly unfitting that that which can be performed is not able to be written and clearly shown, I have taken care to compile this little treatise"; Schreier, *op. cit.*, 70.5-72.2.

Again, it is also clear from the last sentence that the author is seeking to notate a pre-existing performance style. Just as the concern for mensuration was considered an indication of *subtilitas* in the early fourteenth century, the concern for the simultaneous use of different mensurations represents a stylistic progression beyond that of the *ars nova*. Furthermore, I believe that this observation supports an already-apparent shift in the definition of the *ars subtilior* to include works in which proportional relationships are represented through coloration and proportion signs as well as special note shapes.

The aforementioned Anonymous X also comments on a practice which is considered more precise when he writes:

*...notandum quod sepe aliqui cantus notantur aliquibus notulis ubi tamen notule sic semper cantande non sunt ut prima fronte apparent ut sic cantatur brevis pro brevis...sed patet ut talis cantus subtilius considerentur dimidiando sigulas notulas nulla excepta sic videlicet ubi ponatur longa, ibi cantetur brevis, etc...*⁴⁰

The author is referring to the device of diminution where the written notes are sung at half their written duration. However, it can be deduced from the *Expositiones* of Prosdocimus de Beldemandis on the early fourteenth century French theorist Johannes de Muris that diminution had a long history. In relation to de Muris' statement that *Diminutio motetorum semper fit in tenoribus*, Prosdocimus writes:

*Supra quam partem notandum quod ex hoc auctor dixit diminutionem reperiri in tenoribus motetorum <sic>, quia forsan suo tempore non fiebat nisi in tenoribus motetorum. Sed licet forsan sic fuerit tamen ad presens non solum diminutio reperitur in tenoribus motetorum, sed etiam reperitur in tenoribus baladarum et aliorum cantuum, et quod plus est reperitur etiam in discantibus quamplurimum baladarum.*⁴¹

While diminution was considered a *subtilitas* throughout the fourteenth century, Prosdocimus' statement permits the suggestion that diminution's use in the upper voices of a composition was a later stylistic development. It is therefore appropriate to include this

⁴⁰ "It must be noted that some songs are often notated by other notes wherein, however, the notes must not always be sung as they appear on first sighting, so that a brevis is sung for a brevis...but it is plain that such songs should be considered more subtle by halving individual notes without exception so that namely where a longa is placed, there a brevis will be sung, etc."; Coussemaker, *op. cit.*, vol. 3, p. 415a.

⁴¹ "From the passage above it is noted that the author said that diminution is found in the tenors of motets, since perhaps in his time diminution was not made except in the tenors of motets. However, granted this was so, today diminution is found not only in the tenors of motets, but is also found in the tenors of ballades and other songs, and what is more it is even found in the descant of many ballades."; F. Alberto Gallo (ed.), *Prosdocimi de Beldemandis Opera I: Expositiones tractatus practice cantus mensurabilis magistri Johannes de Muris*, Bologna, 1966, chap. XL, sent. 6-8.

device in the list of *ars subtilior* devices, especially considering the frequent use of diminution in compositions from the late fourteenth century.⁴²

The assessment of *subtilitas* in terms of significant precision in the representation of musical events has up to this point of time focused on its use in mensural notation in relation to rhythmic durations. However, the notion of significant precision also encompasses other aspects of the nexus between notated and actual music. Johannes Boen's *Ars musicae* written in the mid-thirteenth hundreds expresses similar prophetic opinions concerning the use of hexachords in new position when he states:

*Moderni maiori ducti lascivia, quasi nani super humeros gygantum plus longe respicientes quam veteres, tamquam cotidiana positione clavium fastiditi, ad subtiliores positiones dictas litteras b-fa-b-mi etiam in aliis clavibus statuendo, se rationabiliter profundarunt...*⁴³

It follows that an analogy exists between the representation of horizontal relationships (in time) and the vertical relationships in terms of relative pitch relations in music. This assessment has important consequences for the chromatic essays from this period such as Solage's *Fumeux fume* (Vol. II, App. A, No. 1), the anonymous *Le mont Aön de Trace* (Vol. II, App. A, No. 2) and Matheus de Perusio's *Le grant desir* (Vol. II, App. A, No. 3) which contain a great number of manuscript accidentals prescribing less usual hexachord-placement and tonal language.

In addressing the issue of whether the term *ars subtilior*, in relation to the *ars nova*, is a useful way of describing this music, I would like to conclude by referring to a recent re-assessment of the term *ars subtilior* by Anne Stone in which she proposes that the notation of the *ars subtilior* (which she reads as "the more precise art") can be read as a response to a conceptual problem residing in the invariability of durations which lay at the heart of the concept of *mensura* for both the Italian and French notational systems.⁴⁴ In as far as it concerns musical rhythm, I would agree with Stone⁴⁵ that a central focus of the *ars subtilior* resided in overcoming the invariability of the French *minima* through various devices such as special notes shapes, Indo-Arabic numerals, coloration and canons. For me, however, this

⁴² A survey of this device's use in Codex Chantilly is found in Ursula Günther, 'Die Anwendung der Diminution in der Handschrift Chantilly 1047', *Archiv für Musikwissenschaft*, vol. 17, 1960, pp. 1-21.

⁴³ "Led by licentiousness, the moderns, like dwarves atop the shoulders of giants seeing much further than the ancients, as if loathe to the ordinary position of the hexachord syllables, meanwhile placing the aforementioned letters b-fa-b-mi at more subtle positions and on other hexachords, rush forth by virtue of reason"; F. Alberto Gallo, (ed.), *Johannis Boen, Ars (musicae)*, Corpus Scriptorum de Musica 19, Rome, p. 35.

⁴⁴ Stone, *op.cit.*, p. 9.

⁴⁵ Stone, *op.cit.*, p. 23.

occurred in response to the conceptual role that the organising principle of proportionality⁴⁶ had in informing the new style. The very degree of separation in terms of the complexity of temporal subdivision which was finally achieved by the most advanced compositions in the *ars subtilior* style – for example: *Le sault perilleux* – from that occurring in Italian compositions, surely suggests proportionality and its clear representation was foremost in the minds of notators.⁴⁷ Much of Chapters 4 to 6 of this present study is devoted to discussing the very modes of representation of proportionality in notational process.

At issue here is not the appropriation of a historically evident term but the determination of a historiographic descriptor. If that term describes a historical concept then it is a useful historiographical device. There is little doubt that the concept of *subtilitas* existed in medieval culture on a broad basis. Its application to the music of the *ars nova* was made with reference to the broad set of contemporary cultural, intellectual and linguistic values that held this term to denote fine distinction. That contemporaries held that an extension of the *subtilitates* of the music of the *ars nova* occurred during the fourteenth century (which resulted in what today we might call the evolution of a new style), suggests that the use of the comparative *subtilior* is appropriate in relation to practical applications of the liberal art of music during the late fourteenth and early fifteenth centuries.

⁴⁶ On the role of proportionality in the organisation and generation of artistic representations in the middle ages, *vid.* Stephen G. Nichols, ‘The New Medievalism: Tradition and discontinuity in medieval culture’, in *The New Medievalism*, eds M. S. Brownlee, K. Brownlee and S. G. Nichols, Baltimore and London, 1991, p. 5.

⁴⁷ One might question the centrality of Guido’s *Or voit tout* in Stone’s and Günther’s accounts. The work makes no reference to *subtilitas* or its French derivative, although its special note shapes undoubtedly embody aspects of *subtilitas*. As I argue below (Chapter 4, p. 204), despite the fact that *Or voit tout* contains implicit proportional relationships in its use of special note shapes, its notation of is primary concerned with one concept – the duration of half-a-*minima*. Stone’s reading of this work does much to clarify the poet’s choice of terminology based upon contemporary theory, but I believe the *nouvelles figures* that occur in the notation of this work are the key to an ironic reading of the work in so far as they rely on (and seek to extend proportionally) the invariability of the *minima* which exists in the De Vitry’s/De Muris’ system. Contrary to what is suggested by the text of *Or voit tout*, there is nothing Marchettan about its notation. Its wholly French notation is the basis of this piece of consummate *litotes* – the notation is the exact opposite of the literal text but perfect compliment of the ironic sub-text. The *nouvelles figures* that are so (ironically) blighted by the text are dependant upon this mensural context. One further cautionary note is also pertinent to this work and the current debate. Günther dates *Or voit tout* to the beginning of the last quarter of the 14th century based upon broad stylistic determinants (‘Das Ende der *ars nova*’, p. 111). But there is little to suggest that this work could not have been written just after the death of Philippe de Vitry in 1361. There remains some doubt as to whether *Or voit tout* can inform us fully of the many and varied notational developments of the 1380s and ‘90s.

Chapter 2 : *A source made in Italy? Observations of scribal process and filiation in Codex Chantilly*

The manuscript now in the possession of the Bibliothèque du Musée Condé at the Château de Chantilly with the catalogue number 564, has been known to musicology since before 1900.¹ As it is the only musical manuscript of importance at the Musée Condé, musicology generally refers to it as Codex Chantilly (hereafter CH 564). It contains 112 musical works² from the late fourteenth and possibly early fifteenth centuries. Its importance to the history of western music lies in the high proportion of *unica* it possesses (many of which are notated using special note forms and coloration to convey proportional relationships), the high level of ascription of works to composers (many of whom remain unknown beyond this source), and the unique nature of its contents. As a witness to a highly developed secular, polyphonic music, its absence would leave musicology with a much poorer picture of musical development at the end of the fourteenth century, even in light of the rich, but predominantly northern Italian tradition preserved in the other principal source of this style, Modena, Biblioteca estense e universitaria, ms. α.M.5.24 (=MOe5.24).³

The present chapter, in treating the nature of CH 564, provides observations concerning its physical structure, contents and scribal processes. A discussion of the nature of the contents of CH 564 examines relationships evident between works and proposes theories to describe the ordering of works. A description of scribal process explores not only the manner of each scribal contribution to this manuscript, but also discusses scribal activity as an editorial process over time. This facet of CH 564 is discussed further in an examination of the transmission of works in this manuscript. Here, the process of filiation is brought to bear on extant readings of works concordant with CH 564. This interpretive

¹ The first published description of the manuscript and edition of its texts occurs in Léopold Delisle, (ed.), *Institut de France, Le Musée Condé, Chantilly, Le Cabinet des Livres*, vol. 2, Paris, 1900, pp. 277-303. The description of the manuscript mostly follows that which appears at the front of the present manuscript and which was prepared by Henri d'Orleans, Duc d'Aumale. In his essay, d'Aumale synthesises the views of three scholars who were among the first to consult the manuscript: Paulin Paris (literary historian), Léopold Delisle (medievalist) and Henri Lavois fils (music historian). Delisle was responsible for the edition of texts found in the Institut de France catalogue, *vid.* Elizabeth Randell Upton, "The Chantilly Codex (F-CH 564): The Manuscript, Its Music, Its Scholarly Reception", Ph. D. thesis, University of North Carolina, 2001, pp. 9-39.

² There are 113 items in this manuscript, however items 13 and 81 are identical for the greatest part.

³ See the following chapter.

process is useful in providing limits for any considerations pertaining to the dating and origin of CH 564. For example, the subsequent discussion establishes that CH 564 is a parent in part of Florence, Biblioteca Nazionale, Panciatichi 26 (henceforth Fn 26). This conclusion imposes a limit upon our understanding of the transmission of these manuscripts with the result that any previous hypotheses concerning the origin of either manuscript must be brought to bear upon the present discussion. This chapter concludes with a reconsideration of the present manuscript's origins and dating.

The origin of Codex Chantilly is a subject that fuelled much scholarly debate during the twentieth century. The earliest published description of CH 564 in the *Institut de France* catalogue (1900) briefly describes its physical aspects and the nature of its texts and notation. The entry is almost identical to the report now found added as ff. 2-5 in CH 564 and is undoubtedly by Henri d'Orleans, Duc d'Aumale (1822-1897), the former owner of the manuscript who bequeathed it, along with the entire Château de Chantilly, to the Institut de France in his will of 1884.⁴ The duke's description of the manuscript is both a document of its times and a reflection of French national sentiment, which expresses several opinions that were to influence musicology over the next century.⁵ Of greatest importance to the present discussion is the view present in the catalogue entry stating that CH 564 was an early fifteenth century Italian copy of a French original copied during the reign of Charles VI.⁶

In 1902, Friedrich Ludwig published a brief description of Codex Chantilly in which he repeated the opinion that it was an Italian copy made at the beginning of the fifteenth

⁴ The duke acquired CH 564 in 1861 through the agency of his associate and sculptor Henri Triqueti from the private collection of a P. Bigazzi, Secretary of the Accademia della Crusca of Florence. In a letter to Triqueti dated 24 April 1861, the duc d'Aumale concludes with the following request: *Si vous pouvez m'envoyer de Florence une description détaillée du manuscrit de Chansons du 14.e Siècle que vous a signalé M. Robinson, et y joindre quelques indications sur son prix probable, vous me ferez grand plaisir.* (If you could send me from Florence a detailed description of the manuscript of fourteenth century chansons that you reported to Mr Robinson, and attach some indication of its likely price, you would make me very happy.). The letter survives as Chantilly, Bibliothèque du Musée Condé, File 155f1: Duc d'Aumale au Baron de Triqueti, Document 3. Triqueti's response (Chantilly, Bibliothèque du Musée Condé, File 115f2, Document 19) on the 2 May 1861 leaves little doubt that the Florentine volume in question is the manuscript being presently discussed.

⁵ I do not intend to discuss the reception of the manuscript during the nineteenth and twentieth centuries, as it is beyond the scope of the present work. Rather I direct the reader to Elizabeth Randell Upton's dissertation "The Chantilly Codex (F-CH 564): The Manuscript, Its Music, Its Scholarly Reception."

⁶ *Tout y est bien français, hors d'exécution, qui est italienne. La France est sa patrie d'origine, l'Italie sa patrie d'adoption. Le manuscrit original doit avoir été compilé en France dans les premières années du règne de Charles VI; notre copie a dû être faite au commencement du XVe siècle par un Italien qui ne comprenait guère le texte qu'il transcrivait. Entre autres indices de la nationalité du copiste, on peut citer la cédille qu'il a employé en beaucoup endroits (grimaçe, f. 53, puissance, f. 33 v^o); Delisle, *Institut de France: Musée Condé: Chantilly: Le Cabinet des Livres: Manuscrits*, vol. 2, p. 278.*

century from a French exemplar.⁷ Johannes Wolf also supported this hypothesis in 1904.⁸ Later (1926), in his commentary to his edition of the works of Machaut, Ludwig maintained his original view on the origin of CH 564.⁹ Nino Pirrotta suggested that CH 564 was essentially the principal collection of the repertoire from Avignon “fatto in Italia”.¹⁰ Pirrotta goes on to suggest in the broadest terms a *settentrionale* origin for this manuscript.¹¹ In an early attempt to locate CH 564 precisely, Guillaume de Van argued in 1948 that CH 564 was a fifteenth century pedagogic manuscript made in Naples.¹² In his brief notes pertaining to the sources for his edition, Apel was convinced by the palaeographic assessment of B. L. Ullman that CH 564 is a French original *circa* 1400.¹³ Heinrich Bessler, in an entry for the manuscript in the first edition of *Die Musik in Geschichte und Gegenwart*, rejected Apel’s hypothesis primarily based on the well established position that the level of textual corruption in CH 564 precluded the participation of a French scribe. He largely followed the established Italian-copy theory combined with De Van’s Naples hypothesis, although he suggested its exemplar was a French original copied in the 1390s.¹⁴

It was not until 1954 that a new description, discussion and inventory of CH 564 by Gilbert Reaney was published.¹⁵ Reaney incorporates recent archival findings pertaining to the composers named in the manuscript, summarises textual references and provides a hypothesis of its origins. In re-examining the assumption of its Italian provenance, Gilbert Reaney stated that despite the links with south-west France as suggested by some texts, it was difficult to determine whether the copy was made in France or Italy, although he suggested

⁷ Friedrich Ludwig, ‘Die mehrstimmige Musik des 14. Jahrhunderts’, *Sammelbände des Internationalen Musikgesellschaft*, vol. 4, 1902/03, pp. 42-43.

⁸ Johannes Wolf, *Geschichte de Mensural-Notation von 1250-1460*, Leipzig, 1904, p. 328.

⁹ Ludwig describes CH 564 as: *eine im Anfang des 15. Jahrhunderts in Italien geschriebene Pergament-<and>s<chrift>* (“A parchment manuscript written at the start of the 15th century in Italy”), in Friedrich Ludwig, (ed.), *Guillaume de Machaut Musicalische Werke*, Leipzig, 1926, vol. 2: Einleitung zu 1. Balladen, Rondeaux und Virelai - II. Moteten - III. Messe und Lais, p. 22*.

¹⁰ Nino Pirrotta, ‘Il codice estense lat. 568 e la musica francese in Italia al principio del ‘400’, *Atti della Reale Accademia de Scienze, lettere e Arti di Palermo*, Serie IV, vol. 5, part II, 1944-45, pp. 125-126. This article was also published as an extract in Palermo, 1946. The present study refers to the earlier publication of this article.

¹¹ Pirrotta, *op.cit.*, p. 133.

¹² Guillaume de Van, ‘Le pédagogie musicale à la fin du moyen âge’, *Musica Disciplina*, vol. 2, 1948, pp. 83-86.

¹³ Willi Apel, (ed.), *French Secular Music of the Late Fourteenth Century*, Cambridge (Massachusetts), 1950, p. 3b.

¹⁴ Heinrich Bessler, ‘Chantilly’, in *Die Musik in Geschichte und Gegenwart*, 1st edn, ed. F. Blume, Kassel und Basel, 1952, vol. 2, coll. 1085-1090.

¹⁵ Gilbert Reaney, ‘The Manuscript Chantilly, Musée Conde, 1047’, pp. 59-113; *q.v.* Gilbert Reaney, ‘A postscript to “The Manuscript Chantilly Musée Condé 1047”’, *Musica Disciplina*, vol. 10, 1956, pp. 55-59.

an Italian origin for CH 564 and gave it an approximate dating of 1400-1420, rather than 1390-1400.¹⁶

Subsequent scholarship continued to discuss CH 564's origins. Nigel Wilkins supported it being an original but from Barcelona.¹⁷ In his dissertation, Gordon K. Greene, following evidence put forward by Reaney,¹⁸ suggested that CH 564 may have been compiled from an earlier French source at Florence. He draws this conclusion on the following three bases: Francesco d'Altobianco Alberti, who is mentioned in an inscription dated 1461 on f. 9r of CH 564, was a member of the prominent Alberti family of Florence; the motet *Alma polis religio/Axe poli cum arctica* (108) refers to certain *Augustini de Florentia*; and Fn 26 was likely a direct copy of CH 564.¹⁹ Later, in his published edition of the works from Codex Chantilly, Greene expressed the revised view that the manuscript was in fact an original copied between 1393-1395 perhaps for Count Mathieu by a newly arrived Italian or Catalan scribe in Foix.²⁰ However, his explanation accounting for the presence of the Cordier inserts based on a chance meeting of the retinue of the Count of Foix with musicians of Philip the Bold at Avignon relies upon Wright's identification of Baude Cordier with Baude Fresnel (†1397/8).²¹ Problems with this hypothesis are examined in detail in Chapter 6. Furthermore, Greene appears to have treated circumstantial evidence, based around Günther's dating of item 38 in CH 564 to the period 1393-95, as a concrete indication of the manuscript's dating and origin. Although evidence such as Günther's dating is useful in a discussion of a repertoire's chronology, one must proceed with caution in using them in a discussion of the precise dates and origin of a physical object. The very existence of a great number of undatable works in CH 564 further begs appropriate

¹⁶ Reaney, 'The Manuscript Chantilly, Musée Conde, 1047', p. 81

¹⁷ Nigel Wilkins, 'Some notes on Philipoctus de Caserta (c.1360?-1435)', *Nottingham Medieval Studies*, vol. 7, 1964, pp. 89-91. A similar conclusion was also reached more recently by an editor of the Codex Chantilly's texts. Terence P. Scully concluded on the basis of references in its repertoire and oddities of orthography that CH 564 was from the court of John I of Aragón, in his 'French songs in Aragon: the place of origin of the *Chansonnier* Chantilly, Musée Condé 564', in *Courtly Literature - Culture and context: Select Papers from the 5th Triennial Congress of the International Courtly Literature Society, Dalfsen, The Netherlands, 9-16 August 1986*, eds K. Busby and E. Kooper, Utrecht Publications in General and Comparative Literature 25, Amsterdam and Philadelphia, 1990, p. 510.

¹⁸ Reaney, 'The Manuscript Chantilly, Musée Conde, 1047', p. 82.

¹⁹ Gordon K. Greene, "The Secular Music of Chantilly Manuscript Musée Condé 564 (olim 1047)", Ph.D. thesis, Indiana University, 1971, pp. 39f. Inexplicably, Greene also states that Florence is mentioned in *La harpe de melodie* (67). This is not the case.

²⁰ Gordon K. Greene, (music ed.), Terence P. Scully (text ed.) *French Secular Music: Manuscript Chantilly Musée Condé 564, First Part*, Polyphonic Music of the Fourteenth Century XVIII, Monaco, 1981, pp. X-XI.

²¹ Craig Wright, 'Tapissier and Cordier: New documents and conjectures', *Musical Quarterly*, 59, 1973, pp. 177-98.

investigative reserve. Greene's retraction of his earlier views, however, is a useful demonstration of the thorny issue of this manuscript's origin and date.

In 1984, Ursula Günther reconsidered this codex's origin predominantly through a discussion of its palaeographic features. Günther again focuses on the inscription found on f. 9v, which runs as follows:

A di xviii di luglio 1461 francesche daltobiancho degli alberti dono questo libro alle mie fanciulle care chollo lançalao suo figliolo Amen thomaso spinelly p<ro>p<ria> manu.²²

Two details are revealed by the inscription, the purpose of which is to indicate essentially a legal change of ownership. The first is that immediately prior to 18th July, 1461, the manuscript was in the ownership of Francesco d'Altobianco degli Alberti (14.VI.1401 – 9.XII.1461). Clearly, the inscription in CH 564 was written in Florence shortly before Francesco's death. Francesco's illegitimate son, Ladislao (†1463) acted on his father's behalf in giving the book to its new owners, the daughters of Tommaso Spinelli. After this date, the precise location of the manuscript remains unknown although it may have remained in the hands of one of Spinelli's daughters. The fact that the manuscript resurfaces in 1861 in Florence when it is purchased by Henri d'Orleans suggests nonetheless that the manuscript remained in Florence for the next four hundred years.

The ascription naturally leads to a consideration of the activity of the Alberti family before 1461. In January 1401, all adult male members of the Alberti family (Niccolao's branch) were banished from Florence as a result of the conviction of Antonio di Niccolao degli Alberti for conspiracy against the state.²³ Condemned along with Antonio to live for thirty years more than 300 miles distant from Florence, Francesco's father, Altobianco died in exile in Paris in 1417. Altobianco's brothers Diamante and Calcedonio, condemned to

²² The reading supplied here includes a correction of the previous reading found in Günther of "e a Rechollo" to "care chollo", as suggested James Haar and reported by Upton in her "The Chantilly Codex (F-CH 564): The Manuscript, Its Music, Its Scholarly Reception", p. 91, fn. 70. Translation: "On the 18th July, 1461 Francesco d'Altobianco Alberti, gave this book to my <Spinelli's> dear daughters through his <Francesco's> son, Lançalao. Amen Tommaso Spinelli. with due process." The meaning of this passage has been obscured by the ambiguity of 'fanciulla', which can denote a young girl, a daughter, a girlfriend (in an amorous sense), or a prostitute, *vid.* Giorgio Barberi Squarotti (ed.), *Grande Dizionario della lingua Italiana*, 17 vols, Turin, 1968. In many ways it is similar to the modern colloquial usage of 'girl' in English. In this context, reading the plural as 'daughters', not 'girl friends', seems only appropriate. Ursula Günther gives the latter reading in 'Unusual Phenomena in the Transmission of Late Fourteenth Century Polyphony', p. 98. The reading proposed here suggests that the book was given to Tommaso Spinelli's daughters. Elizabeth Randell Upton ("The Chantilly Codex (F-CH 564): The Manuscript, Its Music, Its Scholarly Reception", p. 100) has tentatively proposed that the names BETISE .F. and LISA. A. on f. 9r refer to Spinelli's two unmarried daughters, documented as Bice and Lisabetta.

live for twenty years 180 miles or more from Florence, also died in exile in Paris in 1408 and 1414 respectively. Another of Francesco's uncles, Niccolò (Cristallo), who continued to administer their family's commercial business, died at Montpellier in 1420. Francesco d'Altobianco was born at the beginning of the exile that lasted until October 1428 when all statutes against the Alberti were annulled.²⁴

Based on this early association of CH 564 with the Alberti and their exile in Paris and Montpellier,²⁵ Ursula Günther proposes that CH 564 was either copied by an Italian scribe during the Alberti's sojourn in France, or more likely from a Parisian source or sources brought back to Florence by Francesco d'Altobianco after 1428.²⁶ Based on this hypothesis, Günther proposes a mode of transmission whereby Paris or Montpellier forms a link in the distribution of works associated with Paris and with centres in South-West France.

There are, however, inconsistencies in Günther's preference for CH 564's dating after 1428. While Günther does admit that an Italian may have copied the book in France, she believes that "on account of palaeographic data" it was copied after Francesco's return from exile.²⁷ However, the very opinions of palaeographer Robert Marichal reported by Günther appear to contradict this statement. Marichal stated that the *ductus* of the principal hand showed great similarities to manuscripts from Vicenza, and Florence, dated 1400 and 1406 respectively. Concerning the formation of majuscules in CH 564, Marichal felt that there were similarities with features exhibited by a manuscript written at the Council of Constance in 1415.²⁸

Finally, recent scholarship on the Alberti of Florence has shown that in the years immediately before his return to Florence, Francesco d'Altobianco was not in France, but by

²³ Passerini, *op.cit.*, pp. 83 & 89.

²⁴ For an assessment of the effect of exile of the Alberti family in general, *vid.* Susan Foster Baxendale, 'Exile in practice: The Alberti family in and out of Florence 1401-1428', *Renaissance Quarterly*, vol. 44, 1991, pp. 720-756. It would appear that Francesco d'Altobianco, as well as other members of his family, prospered during this period of exile, *ibid.*, p. 739.

²⁵ Michael Long first explored the manuscript's connections to the d'Altobianco degli Alberti in his "Musical Tastes in Fourteenth-century Italy: Notational Styles, Scholarly Traditions, and Historical Circumstances", Ph.D thesis, Princeton University, 1981, pp. 386-389. Long, however, does not examine the manuscript's origin, but rather he focuses on CH 564 and Fn 26 as indications of musical tastes among the Florentine bourgeois.

²⁶ Günther, 'Unusual phenomena in the transmission of late fourteenth century polyphony', p. 107; *q.v.* Ursula Günther, 'Chantilly', in *Die Musik in Geschichte und Gegenwart*, 2nd edn, ed. L. Finscher, Kassel, 1995, vol. 2, coll. 631.

²⁷ Günther, 'Unusual phenomena in the transmission of late fourteenth century polyphony', p. 100.

²⁸ Günther, 'Unusual phenomena in the transmission of late fourteenth century polyphony', pp. 93-94, fn. 25.

1427 was working for a family bank in Rome.²⁹ Even after the exile of the Alberti was renounced and other family members began to return to Florence, Francesco d'Altobianco remained in Rome as head of his own business, possibly until shortly before his marriage to Giovanna di Bardo di Francesco de' Bardi in March 1432.³⁰ This situation throws doubt on Günther's proposal for the dating (and possibly origin) of CH 564 which relies on Francesco's period in France. The evidence of Francesco's time in Rome and further uncertainties of his location during the years of the Alberti family's exile from Florence suggests that the origin of this manuscript requires further reconsideration.³¹

2.1. *Physical and scribal characteristics*

This parchment manuscript consists of five sexterns, preceded by four inserted leaves, the first two containing the index (9v-10r) and the second two, which may have originally been a bifolium (on the basis of a clearly visible repair strip), containing two works ascribed to Baude Cordier (f. 11v & 12r).³² The dimensions of each folio are 387 x 286 mm.³³ The

²⁹ Susannah Kerr Foster, "The Ties that Bind: Kinship Association and Marriage in the Alberti Family 1378-1428", Ph. D thesis, Cornell University, 1985, p. 194.

³⁰ Foster, "The Ties that Bind", p. 402.

³¹ A proposition also supported by the varied views expressed at a recent conference held at the Centre d'Études Supérieures de la Renaissance, Tours, 13-15th September 2001. Participants in a round table concerning transmission of works in and provenance of CH 564 were split between Pavia (Strohm), Florence or the papal circle (Stone and Plumley), with Avignon and Paris also mentioned, *vid.* Barbara Haggh, 'Conference Report: Contemplating the Chantilly Codex', *Early Music*, vol. 30, no. 2, 2002, pp. 267-68.

³² I was not granted access to the manuscript itself during my visit to the Musée Condé in February, 2001. As affirmed by my conversations with several leading scholars in this field, this reflects a general situation witnessed in recent years. During my conversations with Mme Emanuelle Toulet, Conservateur of the Bibliothèque du Musée Condé, it was ascertained that a concern for the artefact's conservation was the basis for the decision to severely restrict access to Codex Chantilly. In particular, Mme Toulet cited the tightness of the spine and difficulty in opening the Codex as the main concern in this manuscript's conservation. Dr Julia Craig-McFeely, noted in a personal communication (16th March, 2001) that the archivists at the Musée Condé were unable to open the manuscript more than 90° during its photographic digitisation conducted mid-2000. (This can be clearly seen in the digitisation.) I am greatly indebted to Elizabeth Randell Upton for sharing, in our lengthy correspondence, her observations concerning physical aspects of CH 564 made when she consulted this manuscript in 1992. Observations concerning scribal practices, however, were facilitated by my use of the new high resolution digitisation of the manuscript supplied upon the present author's visit to the Musée Condé. I thank the Conservateur of the Bibliothèque du Musée Condé for access to these images, as I also thank the library staff at that institute for their kind assistance in many matters. I also thank Dr Margaret Bent for allowing subsequent consultation of the same images while at Oxford. As stated above, the digitisations, which I had the opportunity of viewing, were made by Dr Julia Craig-McFeely in her role as Project Manager developing the Digital Image Archive of Medieval Music Project, directed by Dr Margaret Bent and Dr Andrew Wathey, *vid.* Margaret Bent, Andrew Wathey (Directors) and Julia Craig-McFeely (Project Manager) <julia.craig-mcfeely@music.oxford.ac.uk>, 'The Digital Image Archive of Medieval Music', [path: <http://www.diamm.ac.uk/>]. This digitisation is the basis of a facsimile of Codex Chantilly published under the auspices of the Centre d'Études Supérieures de la Renaissance (who commissioned the DIAMM to photograph the manuscript) by Philippe Vendrix with an introduction by Yolanda Plumley and Anne Stone, *Chantilly, Musée Condé 564, a Facsimile Edition with Introduction*, Paris, [in preparation]. I thank Drs Plumley

first gathering of six bifolia commences with the folio numbered *xiii* in an ancient hand (see Section 2.4). Folia 9-12 are foliated in a more recent, possibly nineteenth century hand employing Indo-Arabic numerals. In its present form, an essay on the manuscript proper by the manuscript's previous owner, Henri d'Orleans, and a frontispiece (drawn by the Henri de Triqueti, a nineteenth century sculptor and colleague of the duke, shortly after the manuscript's purchase) were added at the front of the manuscript when bound in 1880. An index of works has also been added at the end of the manuscript. The binding itself consists of scarlet velvet over timber boards, with four silver bosses in the form of a radiant sun front and back (one in the centre of each quarter of the boards) and the arms of the Duke d'Aumale in the centre of the front board. The same arms also appear on the frontispiece by Triqueti.

The size and preparation of this codex in relation to several other sources of chansons from the late fourteenth and early fifteenth centuries suggests it was planned as a luxury item. A comparison of its dimensions with other sources of this period may be made by consulting Table 2.1.

Table 2.1: Page dimensions of selected manuscripts from the late 14th and early 15th centuries.³⁴

<i>Manuscript</i>	<i>Page dimensions</i>	<i>Material</i>
Fl 87	405 x 285 mm	Parchment
CH 564	387 x 286 mm	Parchment
Tn J.II.9	377 x 270 mm	Parchment
Pu 1115	316 x 222 mm	Parchment
Tn T.III.2	300 x 218 mm	Paper
Ob 213	298 x 215 mm	Paper
Fn 26	285 x 220 mm	Paper
Pn 6771	271 x 213 mm	Paper
Pn 568	272 x 184 mm	Parchment
MOe5.24	272 x 180 mm	Parchment
Las 184	232 x 158 mm	Parchment

The parchment used in the original layer is of a high quality with the hair side prepared to resemble the flesh side for the most part.³⁵ As such, considerable expense was probably involved in obtaining and preparing the basic materials. Another indication that this book

and Stone for discussing this forthcoming publication with me during my visit to the University College Cork (Ireland) and the Villa I Tatti (Florence, during Dr Stone's fellowship at that institute) respectively.

³³ Delisle, *Institut de France: Musée Condé: Chantilly: Le Cabinet des Livres: Manuscrits*, vol 2, p. 277. These measurements were confirmed by E. R. Upton, *op. cit.*, p. 45.

³⁴ Cf. Heinrich Bessler, 'Studien zur Musik des Mittelalters I', *Archiv für Musikwissenschaft*, vol. 7, 1925, p. 172, and Upton, *loc. cit.*

³⁵ I would like to thank Elizabeth Randell Upton for confirming the nature of the parchment in CH 564 in a personal communication, 3rd July, 2001.

was intended as an item of luxury resides in the fact that, aside from four instances (f. 25v, 36v, 40r, 43v), each page of the manuscript contains only one chanson (or voice part of a motet, which usually occupies two facing leaves) commencing at the top of the page, often with three or four blank staves remaining at the bottom of the page. This contrasts to the other central source of the *ars subtilior*, MOe5.24, which has every available space of the parchment filled with music. In this respect, the similarity of CH 564 to another early fourteenth century presentation anthology of works by *trecento* and early *quattrocento* composers, the manuscript Florence, Biblioteca Laurenziana, Mediceo Palatino 87, “Codex Squarcialupi” (=I-Fl 87),³⁶ does not go unnoticed.

There are three distinct layers of preparation. Layer I consists of the greatest part of the manuscript (ff. 13r-72v) and it appears to have been prepared together with 10 hexagrams (=6-line staves) per page. The hexagram can be considered a typically Italian trait,³⁷ although the pentagram is not unknown in Italian sources. Each staff was ruled in red ink by a rastrum 16.5 mm wide. The approximate writing area throughout Layer I is 280 cm x 225 mm.³⁸ As will be discussed at greater length below, Layer II consists of an index added at the front of the manuscript. Layer III consists of the two Cordier inserts between the index and body of the manuscript. This layer is typified by its preparation with pentagrams ruled in black ink. The lines of two upper staves of the heart-shaped *Belle, bonne, sage* and all staves of *Tout par compas* appear to have been drawn individually with a pair of compasses or a device closely resembling this implement. This resulted in staves of irregular width, which could not have been produced by a rastrum. The lower four staves on f. 11v, however, appear to have been drawn by such an instrument.

³⁶ Fl 87 is a Florentine source compiled in the second decade of the fifteenth century. A thorough discussion of nature and origin of this manuscript, *vid.* John L. Nádas, ‘The Squarcialupi Codex: An edition of Trecento songs’, in *Il Codice Squarcialupi MS. Mediceo palatino 87, Biblioteca Laurenziana di Firenze: Studi raccolti*, ed. F. A. Gallo, Firenze and Lucca, 1992, pp. 20-86; *cf. idem*, ‘The Transmission of Trecento Secular Polyphony: Manuscript Production and Scribal Practices in Italy at the End of the Middle Ages’, Ph. D. thesis, New York University, 1985; For the full colour facsimile of this source, *vid.* F. Alberto Gallo, (ed.), *Il codice Squarcialupi : Ms. Mediceo Palatino 87, Biblioteca medicea laurenziana di Firenze*, Firenze, 1992.

³⁷ The following manuscripts, for example, also employ hexagrams (their place of origin shown in brackets): Pn 6771 (Padua), Fn 26 (Florence), Rvat 215 (Verona?), Pu 658 (Padua); pentagrams are employed in MOe5.24 (Pisa, Bologna & Florence), the remainder of the Paduan fragments (Padua) and Las 184 (Padua and Florence). All northern sources from 1350-c.1410, including the Machaut manuscripts and Lowland fragments, preserve pentagrams. The pentagram appears to have been fully adopted in Italy by the end of the second decade of the fifteenth century, as can be determined from the dating of Fl 87 (Florence). A late exception to these observations occurs in the manuscript Real Monasterio de San Lorenzo del Escorial, Biblioteca y Archivo de Música, V.III.24 which contains hexagrams and was copied c. 1436-40 possibly at Bruges or Ghent – *vid.* Rob Wegman, ‘Review: Walter H. Kemp, *Burgundian Court Song in the Time of Binchois: The Anonymous Chanson of El Escorial, MS V.III.24*’, *Music and Letters*, vol. 72, 1991, pp. 264-8.

Codex Chantilly contains evidence of four text hands (A-D) and two music hands (I & II). Text Hand A wrote the index and foliated Layer I of the manuscript (including the now lost first gathering) with Roman numerals. This hand shares many features with Hand B in its use of a French *cancelleresca formata*, although it is not identical. Hand A will be discussed further in Section 2.5 in relation to the early provenance of this manuscript.

Text Hand B is found in the two Cordier inserts (Layer III) as well as three ascriptions on f. 34v (Hasprois), f. 35r (Matheus de Sancto Johanne) and f. 44v (J. Senleches). Its script may be described as a French-styled *cancelleresca formata* typified by the acute clubbing of the ascenders of b, h and l, the reverse clubbing of the ascenders of d and v and the use of a descending stroke on f and gothic s (except at the end of words) which extend below the base line. The height of ascenders may be accentuated. The typical trait of a gothic s (as an f without cross-bar) strengthened by a second stroke is a primary element. The hand is careful and neat in accordance with the general appearance of the two Cordier inserts. This hand uses a black ink. The scribe used a flat-nibbed writing implement angled at 45° clockwise from the vertical. It appears unquestionable, through the relatively precise alignment of syllables to notes on these unusual heart-shaped and circle staves, that this scribe practised text underlay, that is, the placement of text after the music had been copied.

Text Hand C belongs to the principal scribe.³⁹ It extends throughout the Layer I, which is presumably the oldest layer of the manuscript. Its script is a *gothica rotunda* and, apart from the formation of ‘r’, it shows traits common to both the *littera gothica textualis rotunda italiana* and *littera gothica textualis rotunda bononiensis* scripts.⁴⁰ There are, however, additional *chancelleresca* features found in the clubbing of the ascenders of b, h and l. Furthermore, it is important to note that writing styles similar to the *rotunda italiana* were common in southern France in the thirteenth and fourteenth centuries as well as in Italy.⁴¹ Decorated majuscules, with their prominent internal vertical dividers and tendrils looping

³⁸ Elizabeth Randell Upton, personal communication, 5th March, 2001.

³⁹ I cannot agree with Günther who states “the script of layers <read: fascicles> two and three differs very much from the type of script used in fascicles four...and one, which are similar”, in her ‘Unusual phenomena in the transmission of late fourteenth century polyphony’, p. 97. Apart from superficial elements, such as the decoration of majuscules and heightened ascenders, the scripts are identical and from the hand of the same scribe.

⁴⁰ *q.v.* B. Pagnin, ‘La littera bononiensis’, *Atti del Reale Istituto Veneto di Scienze, Lettere ed Arti*, vol. XCIII, no. 2/10, 1933-34, pp. 1593-1663.

⁴¹ Bernard Bischoff, *Latin Paleography*, Cambridge, 1990, p. 131.

from upper serifs are typical especially of the northern Italian tradition.⁴² All other ascriptions not by Hand B can be attributed to Hand C, although the appearance of the script here is often carefully formalised and dominated by majuscules. Features of the majuscules in these ascriptions, however, largely concur with those closely associated with Hand C and are clearly by the same scribe. The ink in the work of this Scribe C is generally a dark brown colour. The copying of text beneath music staves by the scribe of Text Hand C clearly preceded the copying of music. As Gordon K. Greene and more recently and extensively Gilles Dulong have observed,⁴³ there are several instances which betray this fact, such as the erasure and re-positioning of the last syllable of the word *loyaute* in top line of *Toute clerte m'est obscure* (3), the extension of a line from the beginning of the *oultre passe*⁴⁴ to its subsequent music in Johannes Cuvelier's *Ne Geneive* (f. 41v), and the generally nonsensical underlay of items such as Guido's *Dieux gart* (f. 25r).

Text Hand D is a non-professional hand belonging to a scribe who made small alterations and additions in the first layer of the manuscript. The script is a semi-cursive typical of the fifteenth century, written using a very narrow nibbed implement whose ink is now a light brown colour. This scribe adds a *T* label on f. 49r, adds a *Ct* label on f. 65v, inserts text in the top line of *Rex Karole / Leticie pacis* on f. 66r, adds the label *Tenor admirabile est nomen tuam* under the solus tenor on f. 69r, and rewrites a canon directly below the voice it affects on f. 71r. The same hand is also most likely responsible for the addition of a *Ct* label on f. 32r, but here he employs a slightly wider nibbed writing implement. Text Hand D's role appears to be a late corrector or reader of the manuscript.

Music Hand I occurs in the Cordier inserts (Layer III). It contains several features that distinguish it from the musical script of the principal scribe, Music Hand II. A wider C-clef is employed. In the formation of note forms, I note small tails on either side of a *brevis simplex*, a slight convexity of the bottom-left side and rounding of the right corner in rhomboidal forms such as the *semibrevis*, *minima* and *semiminima* and a distinct form of the

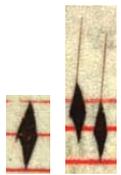
⁴² The palaeographer M. Robert Marichal, who advised Günther writes : "...les majuscules sont très italiennes..." and proceeds to cite a comparable document from the Council of Constance, Günther, 'Unusual phenomena in the transmission of late fourteenth century polyphony', p. 93, fn. 25.

⁴³ Greene, "The Secular Music of Chantilly Manuscript Musée Condé 564 (olim 1047)", pp. 57-69; Gilles Dulong, "La ballade polyphonique à la fin du moyen âge: de union entre musique naturelle et musique artificielle", Doctoral thesis, Université François-Rabelais, 2000.

⁴⁴ The term *oultre passe* is used herein in deference to the term *Abgesang* to denote the lines in a strophe of a ballade which occur between the *clos* couplet and refrain. The earliest use of this term to describe this poetic structure is found in Jacques Legrand's early fifteenth century treatise *Des Rimes*, whose modern edition is found in M.E. Langlois, (ed.), *Recueil d'arts de seconde rhétorique*, Paris, 1902, p. 8.

semiminima flag which resembles the numeral two. Indeed, the formation of the Indo-Arabic numeral two is distinguished from those used by Music Hand II by the ascending otiose stroke at the end of the lower horizontal bar. Note stems are usually perpendicular to staff lines. Mensuration signs are geometric in that there is no horizontal extension of the upper element of C and C compared to when the same signs are used by Music Hand II. With regard to manuscript accidentals, *b-rotundum* is b-shaped, while the diesis sign (#) is preferred to the *b-quadratum*. A comparison of these various elements with those employed by Music Hand II may be found in Table 2.2.

Table 2.2: A comparison of scribal traits in the writing of music in Codex Chantilly.⁴⁵

	C-Clef	Breves	Sbr and Min	Smin	Mensuration signs	Numerals	Accidentals
Music Hand I							
Music Hand II							

Music Hand II, rather than the black ink used by Music Hand I, employs a dark brown ink. This brown ink has often separated from the writing surface in the upper staves of many leaves in the first layer, possibly due to creeping moisture, leaving only shadowy impressions of the original. However, high quality digital reproduction or first hand inspection (as observed by Greene⁴⁶) reveals these portions legible. *Breves* are simply rectangular, and there is a slight ligature on the left of rhomboidal note forms. *Minima*- and related note-stems are at times elongated although they are regularly shortened to avoid text belonging to the staff above. These stems often slope to the right. This hand prefers to use the *b-quadratum* sign, and the *b-rotundum* is often elongated in its body. This elongation of the *b-rotundum* often lends itself to problematic interpretation of manuscript accidentals,

⁴⁵ Only significant elements which appear in both hands are able to be compared. Thus, the lack of F-clefs in the two works copied by Music Hand I makes comparison with F-clefs frequently found in the greater quantity of works copied by Music Hand II impossible.

⁴⁶ Greene, "The Secular Music of Chantilly Manuscript Musée Condé 564", p. 7.

especially in the case of the chromatic essays *Fumeux fume* by Solage and the anonymous *Le mont Aön de Trace*. In several other instances, notes, especially when part of ligatures, are ambiguously placed in terms of pitch indication.

Despite the distinction between music and text hands made above one may assume that Text Hand B and Music Hand I belong to a single scribe (Scribe α) who created the Cordier inserts (Layer III), while Text Hand C and Music Hand II appear to belong to the same scribe (Scribe β) responsible for the copying in Layer I. As the text, especially in the residuum of *Belle, bonne, sage* (1), is integral to the overall appearance of work whose music he copied, it can be assumed that Scribe α was also responsible for the preparation of Layer III, that is establishing their design and placing staff lines. As suggested by my examination of Text Hand B, Scribe α carefully copied out the music and then placed the text, often splitting words into their syllables to convey his precise intentions. See, for example, the underlay of *com-po-ses* in *Tout par compas* (2). Scribe β , on the other hand, copied out his text first and then copied the music. It is difficult to determine if Scribe β had any role in the preparation of his writing surface. However, the similarity of red ink used for ruling hexagrams and the same coloured ink used for coloration of note forms suggests that the leaves were prepared in the same workshop, not discounting the possibility that Scribe β may have contributed to this aspect.

2.2. *Contents and repertorial considerations*

Codex Chantilly contains 100 chansons, including the Cordier inserts: 70 ballades (items 13 and 81 are, however, identical), 13 virelais,⁴⁷ and 17 rondeaux (of which 4 are isorhythmic between their first and second section). Additionally, 13 isorhythmic motets are found in the last gathering.⁴⁸ There is also an unfinished, textless, and unidentified fragment on the seventh and eighth staves of f. 44v. Figure 2.1 gives a schematic representation of the gatherings of the manuscript showing the location of each item in the manuscript.

⁴⁷ I follow Richard Hoppin who regards *La harpe de melodie* as a virelai, Richard H. Hoppin, *Medieval Music*, New York, 1978, p. 486.

⁴⁸ On the relation of the motets in CH 564 to the motet repertoire of the fourteenth century, *vid.* Ursula Günther, 'The fourteenth-century motet and its development', *Musica Disciplina*, vol. 12, 1958, pp. 27-58.

Figure 2.1: Schematic inventory of Codex Chantilly, Musée Condé, ms. 564.⁴⁹

Inventory Number. Title / Composer (voices)[comments] [Form]/folio number

Index:	<i>Betise F Lisa A; Title: Musica: Inscription by Tommaso Spinelli</i> ⁵⁰	9
	<i>Index ff. xiii^r-lviii^r</i>	
	<i>Index ff. lviii^v-lxxiii</i>	10
	[Blank]	
Cordier Inserts:	[Blank]	11
	1. <i>Belle, bonne, sage</i> / Baude Cordier [Written in shape of a heart] (S, T, Ct) [R]	
	2. <i>Tout par compas</i> / Baude Cordier [written on concentric circles] (C ¹ , C ² , T) [R]	12
	[Blank]	
Gathering I (Old gathering II)	3. <i>Toute clerte m'est obscure</i> / Anonymous (S, T, Ct) [B]	13
	4. <i>Un crible plein de eau [orible plein de afie MS]; T: Adieu vos comant baudor</i> / Anonymous (S, T, Ct) [V]	14
	5. <i>Tres douce playsant</i> / Anonymous (S, T, Ct) [V]	
	6. <i>Ma dama, m'a congie doune</i> / Anonymous (S, T, Ct) [B]	15
	7. <i>A mon povir garde</i> / Anonymous (S, T, Ct) [V]	
	8. <i>Se doit il plus en biau semblant</i> / Jo. de Alte curie (S, T, Ct) [isoR]	16
	9. <i>Je chante ung chant</i> / M<atheus>. de Sancte Jo<hanne> (S, T, Ct) [isoR]	
	10. <i>Laus detur multifaria</i> / Trip: Petrus Fabri (S, T, Ct, Trip) [V]	17
	11. <i>Fuions de ci</i> / Senleches Jacob (S, T, Ct) [B]	
	12. <i>Tres doulz amis; Ma dame ce que; Cent mille fois</i> / Jo. Vaillant (S, Ct, T) [R]	18
	13. <i>Tres gentil cuer</i> / Solage [vid. 81] (S, T, Ct) [V]	
	14. <i>De petit peu</i> / G<uillaume> de Machaut (S, T, Ct) [B]	19
	15. <i>Se Zephirus; Se Jupiter</i> / Grimace (C ¹ , T, C ²) [doubleB]	
	16. <i>De Narcissus</i> / Magister Franciscus (S, T, Ct) [B]	20
	17. <i>En l'amoureux vergier</i> / [Sol]age (S, T, Ct) [B]	
	18. <i>Phiton, Phiton, beste tres venimeuse</i> / Magister Franciscus (S, T, Ct) [B]	21
	19. <i>Passerose de beaute</i> / Trebor (S, T, Ct) [B]	
	20. <i>En seumeillant m'a vint une vesion</i> / Trebor (S, T, Ct) [B]	22
	21. <i>Roses et lis ay veu en une flour</i> / Mag<iste>r Egidius de Aug<ustinus> (S, T, Ct) [B]	
	22. <i>Le mont Aön de Trace, doulz païs</i> / (Solage?) (S, T, Ct) [B]	23
	23. <i>Sans joye avoir ne puet longuement</i> / Anonymous (S, T, Ct) [B]	
	24. <i>Corps femenin</i> / Solage (S, T, Ct) [B]	24
	25. <i>Je ne puis avoir plaisir</i> / Anonymous (S, T, Ct) [V]	
	26. <i>Medee fu en amer veritable</i> / Anonymous (S, T, Ct) [B]	

⁴⁹The key to abbreviations used here is given at the beginning of this thesis. The names of composers containing portions enclosed by angle brackets <> are expanded abbreviations.

⁵⁰Traces also appear at the top of this leaf of an inscription which has been erased. Inspection of the original and the provision of an ultraviolet photograph of this page was not possible.

Figure 2.1 continued.

Gathering 2 (Old gathering III)

27. <i>Dieux gart qui bien le chantra</i> / Guido(S, T, Ct) [R]	25
28. <i>Or voit tout en aventure</i> / Guido (S, T, Ct) [B]	
29. <i>Robin muse</i> / Guido? (S, T) [R]	
30. <i>Pour ce que je ne say Gairez</i> / Jo. Vaillant (S, T) [isoR]	26
31. <i>Dame doucement trait</i> / Jo. Vaillant (C ¹ , C ² , T) [R]	
32. <i>Onques Jacob por la belle Rachel</i> / Jo. Vaillant (S, T, Ct) [B]	27
33. <i>Se je cudoie tous jours</i> / Anonymous (S, T, Ct) [B]	
34. <i>De quan qu'on peut belle et bonne estrener</i> / Anonymous (S, Ct, T) [B]	28
35. <i>Ung lion say de tots belle figure</i> / Anonymous (S, T, Ct) [B]	
36. <i>O bonne douce franse</i> / Anonymous (S, T, Ct) [R]	29
37. <i>Va fortune, trop as vers moy</i> / Anonymous (S, T, Ct) [B]	
38. <i>Se Alixandre et Hector fussent en vie</i> / Trebor (S, T, Ct) [B]	30
39. <i>Pictagoras, Jabol et Orpheüs</i> / Suzoy (S, T, Ct) [B]	
40. <i>Quant joyne cuer en may est amoureux</i> / Trebor (S, T, Ct) [B]	31
41. <i>Si con ci gist mon cuer</i> / Jo. Olivier (S, T, Ct) [B]	
42. <i>De ma dolour</i> / Ph<ilip>ot de Caserta (S, T, Ct) [B]	32
43. <i>En un peril doutous</i> / Anonymous (S, T, Ct) [B]	
44. <i>Plus ne put musique son secret taire</i> / Anonymous (S, T, Ct) [B]	33
45. <i>En atendant souffrir m'estuet</i> / Jo. Galiot (but Philipoctus de Caserta) (S, T, Ct) [B]	
46. <i>Ma douce amour, je me doy bien complaindre</i> / Jo. Simonis de Haspre (S, T, Ct) [B]	34
47. <i>Puisque je sui fumeur</i> / Hasprios (S, T) [B]	
48. <i>Sans vous ne puis, tres douce creature</i> / Matheus de Sancto Johanne (S, T, Ct) [B]	35
49. <i>Prophiliias, un des nobles de Roume</i> / Jo. Susay (S, T, Ct) [B]	
50. <i>S'aincy estoit que ne feust la noblesce</i> / Solage (S, T, Ct) [B]	36
51. <i>Loyaute me tient en espour</i> / Garinus (S, T, Ct) [R]	
52. <i>Espoir dont tu m'as fayt partir</i> / Anonymous? (S, T, Ct) [R]	

Figure 2.1 continued.

Gathering 3 (Old gathering IV)

53. <i>Le sault perilleux</i> / J. Galiot (S, T, Ct) [B]	37
54. <i>Par le grant senz d'Adriane</i> / Ph<ilip>ot. <de Caserta> (S, T, Ct) [B]	
55. <i>Se Galaas et le puissant Artus</i> / Jo. Cunelier (but Cuvelier) (S, T, Ct) [B]	38
56. <i>Il n'est nulz homs in ce monde vivant</i> / Ph<ilip>ot <de Caserta> (S, T, Ct) [B]	
57. <i>En remirant vo douce pourtraiture</i> / Ph<ilip>ot <de Caserta> (S, T, Ct) [B]	39
58. <i>En nul estat</i> / Goscalch (S, T, Ct) [B]	
59. <i>En attendant d'amer la douce vie</i> / Galiot (S, T, Ct) [isoR]	
60. <i>Se vos me voles fayre outrage</i> / Anonymous (S, T, Ct) [R]	
61. <i>Lorques Arthus. Alixandre et Paris</i> / J<ohannes> C<uvelier?> (S, T, Ct) [B]	40
62. <i>Inclite flos orti gebenensis</i> / Mayhuet de Joan (S, T, Ct) [B]	
63. <i>Ne Geneive, Tristan, Issout, Helainne</i> / J<ohannes> C<uvelier?> (S, T, Ct) [B]	41
64. <i>Helas, pitie envers moy doit si fort</i> / Trebor (S, Ct, T) [B]	
65. <i>Se Dedalus en sa gaye mestrie</i> / Taillandier (S, Ct, T) [B]	42
66. <i>Se July Cesar, Rolant et Roy Artus</i> / Trebor (S, Ct, T) [B]	
67. <i>La harpe de melodie</i> / J<acob> Senleches (C ¹ , C ² , T) [V]	43
67a. Textless fragment	
68. <i>En attendant esperance conforte</i> / Galiot (but Jacob de Senleches) (S, T, Ct) [B]	44
69. <i>Je me merveil aucune fois</i> / Jacomi; Jacob de Senleches (C ¹ , T, C ²) [Double B]	
70. <i>Lamech, Judith et Rachel</i> / Anonymous (S, T, Ct) [B]	45
71. <i>Par les bons Gedeon et Sanson</i> / (Philipoctus de Caserta) (S, T, Ct) [B]	
72. <i>En la saison</i> / Hymbert de Salinis; T: Jo. Cunelier (S, T, Ct) [B]	46
73. <i>La dieus d'Amours</i> / T: Johannes Cesaris (S, T, Ct) [B]	
74. <i>Adieu vous di</i> / Anonymous (S, T, Ct) [B]	47
75. <i>En Albion de fluns environee</i> / Anonymous (S, T, Ct) [B]	
76. <i>De tous les moys que sunt en sayson</i> / Anonymous (S, Ct, T) [B]	48
77. <i>Angolorum psalat</i> / S. Uciredor (Rodericus?) (S, T) [B]	

Figure 2.1 continued.

Gathering 4 (Old Gathering V): *Balades a iiii chans*

78. <i>Se fortune me doi plaindre</i> / (Guillaume de Machaut) (Trip, S, T, Ct) [B]	49
79. <i>Le basile de sa propre nature</i> / Solage (S, T, Trip, Ct) [B]	
80. <i>Calextone qui fut dame darouse</i> / Solage (S, T, Ct, Trip [label only]) [B]	50
81. <i>Tres gentil cuer</i> / Solage (S, T, Ct) [V]	
82. <i>Bien dire et sagement parler</i> / Anonymous (S, T, Trip, Ct) [B]	51
83. <i>Le home vray amour iugement</i> / J. Merucio (S, T, Trip, Ct) [B]	
84. <i>Armes, Amours, Dames, Chevalerie</i> / F. Andrieu (C ¹ , T, C ² , Ct) [B]	52
85. <i>A l'arbre sec puis estre compare</i> / Suzoy (S, T, Trip, Ct) [V]	
86. <i>Des que buisson me fu bontez d'enfance</i> / Grymace (S, T, Trip, Ct) [B]	53
87. <i>De ce que foul pense souvent remaynt</i> / P. des Molins (S, Ct, T) [B]	
88. <i>Quant Theseus / Ne quier veour</i> <Guillaume de> Machaut (C ¹ , T, C ² , Ct). [double B]	54
89. <i>He tres doulz roussignol ioly</i> / Borlet (S, Trip, Ct, T) [V]	
90. <i>Playsance or tost</i> / Pikyni (C ¹ , T, Ct, C ²) [R]	55
91. <i>Alarme, alarme sans sejour</i> / Grimace (C ¹ , T, C ² , Ct) [V]	
92. <i>Cine vermeil</i> / Anonymous (S, T, Ct) [B]	56
93. <i>Va t'en mon cuer</i> / Gacian Reyneau (S, T, Ct) [R]	
94. <i>Sience n'a nul annemi</i> / M<atheus> de S<ancto> Johan<ne> (Trip, S, T, Ct) [B]	57
95. <i>Helas ie voy mon cuer a fin venir</i> / Solage (S, T, Trip, Ct) [B]	
96. <i>Pluseurs gens voy</i> / Solage (S, T, Ct, Trip) [B]	58
97. <i>Joyeux dy cuer en seumellant estree</i> / Solage (S, T, Trip, Ct) [V]	
98. <i>Fumeux fume par fume</i> / Solage (S, T, Ct) [R]	59
99. <i>Fortune faulce parverse</i> / M<atheus> de Sancto Johanne (S, Trip, Ct, Ct) [R]	
100. <i>Par maintes foys ay oy recorder du rosignol</i> / Jo. Vaillant (S, T, Ct) [V]	60
<i>Motes</i> 101. <i>Apta caro plumis ingenis; Flos virginium; T: Alma redemptoris <mater></i> / Anonymous (Trip, Ct) [isoMot]	

Figure 2.1 continued.

Gathering 5 (Old Gathering VI): Collection of Motets

	<i>Apta caro plumis ingenis; Flos virginium; T: Alma redemptoris <mater> /</i> Anonymous (Mot, T)	61
102.	<i>Ida capillorum; Portio nature; T: Ante thronum trinitatis /</i> (Henricus – Egidius de Pusiex) (Mot, T) [isoMot]	
	<i>Ida capillorum; Portio nature; T: Ante thronum trinitatis /</i> (Henricus – Egidius de Pusiex) (Trip, Ct)	62
103.	<i>Degentis vita quid prodest; Cum vix ardidici prompti sint T: Vera pudicia /</i> Anonymous (Mot, Ct) [isoMot]	
	<i>Degentis vita quid prodest; Cum vix ardidici prompti sint T: Vera pudicia /</i> Anonymous (Trip, T)	63
104.	<i>Pictagore per dogmate; O terra sancta; T: Rosa vernans caritatis /</i> Anonymous (Mot, T) [isoMot]	
	<i>Pictagore per dogmate; O terra sancta; T: Rosa vernans caritatis /</i> Anonymous (Trip, Ct)	64
105.	<i>Alpha vibrans; Cetus venit; T: Amicum querir /</i> Anonymous (Mot, T) [isoMot]	
	<i>Alpha vibrans; Cetus venit; T: Amicum querir /</i> Anonymous (Trip, Ct)	65
106.	<i>Rex Karole Johannis genite; Leticie pacis concordie; T: [Virgo prius ac posterius] /</i> (Philippe Royllart) (Mot, Ct) [isoMot]	
	<i>Rex Karole Johannis genite; Leticie pacis concordie; T: [Virgo prius ac posterius] /</i> (Philippe Royllart) (Trip, Solus T)	66
107.	<i>L'ardure qu'endure; Tres dous espoir; T: Ego rogavi deum /</i> Anonymous (Mot) [isoMot]	
	<i>L'ardure qu'endure; Tres dous espoir; T: Ego rogavi deum /</i> Anonymous (Trip, T, Ct)	67
108.	<i>Alma polis religio; Axe poli cum artica /</i> (Egidius de Aurelia) (Mot) [isoMot]	
	<i>Alma polis religio; Axe poli cum artica /</i> (Egidius de Aurelia) (Trip, T, Ct)	68
109.	<i>Inter densas deserti meditans; Imbribus irriguis; T: Admirabilem est /</i> Anonymous (Mot) [isoMot]	
	<i>Inter densas deserti meditans; Imbribus irriguis; T: Admirabilem est /</i> Anonymous (Trip, Ct, Solus T)	69
110.	<i>Multipliciter amando; Favore habundare; T: Letificat juventutem /</i> Anonymous (Mot, T) [isoMot]	
	<i>Multipliciter amando; Favore habundare; T: Letificat juventutem /</i> Anonymous (Trip)	70
111.	<i>Sub Arturo plebs vallata; Fons citharizancium; T: [In omnem terram] /</i> (Johannes Alanus) (Mot) [isoMot]	
	<i>Sub Arturo plebs vallata; Fons citharizancium; T: [In omnem terram] /</i> (Johannes Alanus) (Trip, T)	71
112.	<i>Tant a sottille pointure; Bien pert qu'en moy; T: Cuius pulcritudinem /</i> Anonymous (Mot) [isoMot]	
	<i>Tant a sottille pointure; Bien pert qu'en moy; T: Cuius pulcritudinem /</i> Anonymous (Trip, T)	72
113.	<i>D'ardant desir; Refus d'amer; T: Nigra est set formosa /</i> Anonymous (Mot, Trip, T) [isoMot]	

As Gilbert Reaney has noted,⁵¹ the scribe who compiled the index to the manuscript imparts a somewhat informed, but nonetheless arbitrary, organisation when he inserts into the index a separate heading for *Balades a iiii chans* and *Motes* with respect to works in the fourth and fifth gatherings. The contents of Gathering 4 are not always four-part works as demonstrated by three-part textures in items 81, 87, 92, 93, 98 and 100, nor are they strictly ballades. As G. K. Greene observes, the appearance of the ballade *Tres gentil cuer* by Solage twice (13 & 81) suggests that the scribe had intended to supply a fourth part to several works in this section, but did not, perhaps due to the lack of space or the temporary lack of an available fourth part of which the scribe may have had knowledge.⁵² Greene's hitherto unsubstantiated hypothesis may have gained strength with the subsequent discovery of yet another concordance with item 100, *Par maintes foys* by Johannes Vaillant, which includes a fourth part.⁵³ Elsewhere,⁵⁴ *De ce que foul pense souvent remaynt* (87) by P. des Molins which appears in three parts in CH 564, is also transmitted in a four-part form.

The collection as a whole is notable for the large proportion of works (27 of 112) bearing texts that refer to persons or events from the late fourteenth century. Datable references to person and events in this period are listed in Table 2.3, while works referring to persons of this period but without any indications of exact dates are found in Table 2.4.

⁵¹ Reaney, 'The Manuscript Chantilly, Musée Conde, 1047', p. 60.

⁵² Greene, "The Secular Music of Chantilly Manuscript Musée Condé 564", p. 115.

⁵³ Fernand Leclercq, 'Questions à propos d'un fragment récemment découvert d'une chanson du XIVe siècle: une autre version de "Par maintes fois ai owi" de Johannes Vaillant', in *Musik und Text in der Mehrstimmigkeit des 14. und 15. Jahrhunderts*, eds U. Günther and L. Finscher, Göttinger Musikwissenschaftliche Arbeiten 10, Kassel, 1984, pp. 197-228.

⁵⁴ Pn 6771, 71v; F-CA B 1328, f. 16, (#23); F-CA B 1328, ff.17-18, fol. 18v (#15) (different Trip.). The transmission of this work is discussed below.

Table 2.3: Datable works in CH 564.

Work	Composer	Date	Textual references
<i>Dame doucement trait</i> (31)	Vaillant	1369	<i>Compilatium fuit Parisius anno domini .MCCC. sexag<esimo> nono</i>
<i>Rex Karole Johannis genite;</i> <i>Leticie pacis concordie; T:</i> <i>[Virgo prius ac posterius]</i> (106)	Philippus Royllart (only in Sm 222)	1375	Charles V, with references to the Peace of 1375 in the Hundred Years War. ⁵⁵
<i>Armes, amours, dames,</i> <i>chevalerie</i> (84)	F. Andrieu	after 1377	Eustache Deschamps' eulogy of the deceased Machaut set to music. ⁵⁶
<i>Par les bons Gedeon et</i> <i>Sanson</i> (71)	Philipoctus de Caserta	1378? no later than 1394.	Gideon and Samson saved the people of God from mortal servitude and iniquity. So too it is fitting that the world look to the sovereign pope, Clement for salvation. Avignon papacy of Clement VII (1378-94). (May have been composed before Clement left Italy in 1379). ⁵⁷
<i>Roses et lis ay veu en une</i> <i>flour</i> (21)	Magister Egidius de Anglia	before 1380	A rose and lily I have seen in one flower, in the garden of Engaddy. Intertextual and musical relationships with 19 suggestive of composition made before the marriage of Yolande of Bar to John of Aragón. ⁵⁸
<i>Passerose de beaute</i> (19)	Trebor	after 1380	Margarite, a flower whiter than a swan, is married to Jupiter in Engaddy. Intertextual relationship with ballade by Eustache Deschamps dedicated to Maria of Bar and textual reference may refer to her daughter, Yolande of Bar, after her marriage to John of Aragón. ⁵⁹
<i>Inclite flos orti gebenensis</i> (62)	Matheus de Sancto Johanne	1381- 83?	Clement VII with reference to French and Spanish obedience; <i>Tenor pro pape Clement</i>
<i>Par le grant senz d'Adriane</i> (54)	Philipoctus de Caserta	early 1382	References to Louis I d'Anjou (<i>O covert de lis</i>), Johanna of Naples (Ariadne) and Charles Durazzo (Theseus). Linked to Louis' campaign to establish his claim of the Kingdom of Naples (<i>un jouel de grant pris</i>) supported by Clement VII. ⁶⁰ Roland and Hector also used as devices.

⁵⁵ Ursula Günther, (ed.), *The Motets of the Manuscripts Chantilly Musée Conde 564 (olim 1047) and Modena, Biblioteca estense α.M.5.24 (olim lat 568)*, pp. xxix-xxxi.

⁵⁶ Delisle, *Institut de France: Musée Condé: Chantilly: Le Cabinet des Livres: Manuscrits*, vol 2, p. 280.

⁵⁷ Reinhard Strohm, 'Filippotto da Caserta, ovvero i francesi in Lombardia', in *In cantu et in sermone: A Nino Pirrotta nel suo 80° compleanno*, eds F. della Seta and F. Piperno, Firenze, 1992, p. 69.

⁵⁸ Maria Carmen Gómez, 'La musique à la maison royale de Navarre à fin du moyen-âge et le chantre Johan Robert', *Musica Disciplina*, vol. 41, 1987, pp. 139-141; Scully, *op.cit.*, p. 513. Reaney, 'The Manuscript Chantilly, Musée Conde, 1047', p. 76, opines that 19 and 21, like 50 (see below), refer to this wedding of Jean de Berry and Jeanne de Boulogne near Avignon on 25th May, 1389, although 21 was written before the event, 19 afterwards.

⁵⁹ Maria Carmen Gómez, 'La musique à la maison royale de Navarre à fin du moyen-âge et le chantre Johan Robert', pp. 139ff; Scully, *op.cit.*, p. 513.

⁶⁰ Nigel Wilkins, 'Some notes on Philipoctus de Caserta (c.1360?-1435)', pp. 84-86. For an early suggestion that the text refers to "le secours que Louis, duc d'Anjou, porta en 1380 à Jeanne, reine de Sicile..." vid. Delisle, *Institut de France, Le Musée Condé, Chantilly, Le Cabinet des Livres*, vol. 2, p. 280; cf. Nino Pirrotta, 'Scuole polifoniche italiane durante il sec. XIV: di un pretesa scuola napoletana', in *Collectanea Historiae Musicae*, vol. 1, Florence, 1953, pp. 11-18. Reaney had proposed this text was connected to Gaston III Phebus, Count of Foix, in Reaney, 'The Manuscript Chantilly, Musée Conde, 1047', p. 74. The historical elements of this work's text is discussed in detail in Chapter 5.

<i>Fuions de ci</i> (11)	Jacob de Senleches	late 1382	References to the post-parturient death of Alionor, Queen of Castile.
<i>Corps femenin</i> (24)	Solage	1386	Catherine of France and her wedding to Jean, the youngest son of Jean de Berry in 1386. Contains acrostic: CATHELLINE LA ROYNE D'AMOURS. ⁶¹
<i>Calystone qui fut</i> (80)	Solage	1386	References to Jupiter's transformation of Callisto into a heavenly being. Extant strophe contains the acrostic CATHELLI... ⁶²
<i>En seumeillant m'a vint une vesion</i> (20)	Trebor	1388	I dreamt of a Bat (<i>vespertilion</i>) who surpassed Alexander the Great in his conquests: Seril showed that bat to really be the king of great chivalry. The battle cry of Aragón shall cause all to fear since its king is most powerful on land and sea. Reference to John I of Aragón's Sardinian expedition of 1388. Contains intertextual relations with 84.
<i>Cine vermeil</i> (92)	Anon.	1389	Perhaps a clever reference to the wounded (white) swan which was a motif for Jean de Berry. Possibly composed for the wedding of Jean de Berry and Jeanne du Boulogne on 6 th June, 1389. ⁶³
<i>Se Alixandre et Hector</i> (38)	Trebor	1393-95	Like Alexander and Hector were renown for there prowess and strength, and even Achilles was regarded without envy by the Trojans whom he so grieved, above all the lords today so too should the lord of Foix and Bearn, Castelbon et Novailles, whose strength courage and valour is known in Europe and Armenia (The Holy Empire?). Refers to Mathieu de Castelbon, Count of Foix before hostilities with Armagnacs. ⁶⁴ (Provides <i>terminus post quem</i> for CH 564).

⁶¹ Ursula Günther, 'Die Musiker des Herzogs von Berry', *Musica Disciplina*, vol. 17, 1963, pp. 87-88.

⁶² Günther, *loc. cit.*

⁶³ Günther, 'Unusual phenomena in the transmission of late fourteenth century polyphony', p. 103.

⁶⁴ Ursula Günther, 'Eine Ballade auf Mathieu de Foix', *Musica Disciplina*, vol. 19, 1965, pp. 69-81. Gilbert Reaney stated earlier that the work referred to Gaston III Phebus, in 'The Manuscript Chantilly, Musée Condé, 1047', p. 78, while Willi Apel thought the reference was to Charles II of Navarre, in *French Secular Music of the Late Fourteenth Century*, p. 2b;

Table 2.4: Works in CH 564 without date containing textual references to persons of the period.

Work	Composer	References
<i>En Albion de fluns environnee</i> (75)	Anon.	Master Antheus leads a noble life in Albion, but Minos has condemned his court, exiling Lucidaire and Helie while Daedalus contrives against nature, and Zephirus has no sway. Possibly an oblique political statement whose meaning and subject is lost as are the last two strophes.
<i>En atendant souffrir m'estuet</i> (45)	Philipoctus de Caserta	Contains the motto of Bernabò Visconti, Count of Milan (†1385). ⁶⁵
<i>En la saison</i> (72)	Hybert de Salinis/ T: Jo. Cuvelier	References to Oliver du Guesclin (as an eagle) (†1397), seigneur de la Roberie, cousin of Bertrand du Guesclin (†1380), Count of Longueville, Constable of France. ⁶⁶ Oliver's heraldic device is also described.
<i>Inter densas deserti meditans/Imbribus irriguis/ T: Admirabilem est</i> (109)	Anon.	Gaston III Phebus, Count of Foix.
<i>Phiton, Phiton, beste tres venimeuse</i> (18)	Magister Franciscus	Python, the vile serpent slain by Phebus Apollo and described by Ovid, feasts on the delights of the world. Perhaps a reference to the Count of Armagnac, enemy of Count of Foix.
<i>Pictagore per dogmate/ O terra sancta/ T: Rosa vernans caritatis</i> (104)	Anon.	Implores Pope Gregory XI (1370-78) for help.
<i>Quant joyne cuer</i> (40)	Trebor	Refers to the colours (red and yellow) of the device of the House of Aragón, as a possible reference to John I. Also textual reference to Jupiter in the palace of Gemini. The Arthurian device of the Round table also occurs. ⁶⁷
<i>S'aincy estoit que ne feust la noblesce</i> (50)	Solage	Praises <i>Jhean duc gentilz de Berry</i> . ⁶⁸
<i>Se Galaas et le puissant Artus</i> (55)	Jo. Cuvelier	We hold the names Galahad, Arthur, Samson, Tristan, Ogier and Namon in such high regard, so too the name of the baron whose device bears the motto of Gaston III Phebus, Count of Foix: "Febus avant!".
<i>Se July Cesar, Rolant et Roy Artus</i> (66)	Trebor	Like Julius Caesar, Roland and King Arthur, Yvain, Lancelot, Tristan and Porus were of great honour and renown, so too is he whose banner bears the motto: "Febus avant!", in reference to Gaston III Phebus, Count of Foix.

⁶⁵ G. Thibault, 'Emblèmes et devises des Visconti dans les oeuvres musicales du trecento', in *L'Ars nova italiana del trecento* III, 1970, pp. 152-158. Thibault also observes that the same phrase appears in three other works: two which use the same text *La fiera testa* by Bartolinus de Padua and Nicolò da Perugia, and *Souffrir m'estuet* by Paolo Tenorista da Firenze.

⁶⁶ Ursula Günther, 'Zwei Balladen auf Betrand und Oliver du Guesclin', *Musica Disciplina*, vol. 22, 1968, pp. 24-38, also *eadem*, 'Unusual phenomena in the transmission of late fourteenth century polyphony', p. 101.

⁶⁷ Gómez, 'La musique à la maison royale de Navarre à fin du moyen-âge et le chantre Johan Robert', p. 139.

⁶⁸ Reaney proposes that this work may have been written for the wedding of Jean de Berry and Jeanne de Boulogne in 1389 in 'The Manuscript Chantilly, Musée Conde, 1047', p. 76. Q.v. fn 58 in this chapter.

<i>Sub Arturo plebs vallata / Fons citharizantium / T: [In omnem terram]</i> (111)	Johannes Alanus	Contains the names of fourteen musicians working in England between 1340-80. Written possibly for gathering of Order of the Garter at Windsor in 1358. ⁶⁹
<i>Le mont Aön de Trace</i> (22)	Anon. (Solage?)	In a palace on Mount Parnassus, the nine Muses (<i>neuf dames</i>) make sweet harmony for Phebus whose refined musical culture is attendant to his pursuit of the love of ladies refined and virtuous. Possible reference to Gaston III Phebus.
<i>Lorques Arthus, Alexandre et Paris</i> (61)	Cuvelier	Compares an anonymous potentate, who has removed a deceitful toll from a particular road to legendary rulers of history. Neither King Arthur, Alexander the Great, Paris, Hector, King David, Macabe, Jason and Julius Caesar nor anyone of good sense would have ever suffered such a toll.

As shown in both Table 2.3 and Table 2.4, several works refer to events in the 1370s and 80s. There are miscellaneous references (45) to the motto of Bernabò Visconti (1323-1385) (*Souffrir m'estuet*),⁷⁰ the death of Guillaume de Machaut (†1377) in 84, and the death of Alionor of Aragón, Queen of Castile in 1382 (11). Two works (62, 71) are possibly associated with the early years of the rule of Avignonese Pope Clement VII (r. 1378-94). Is it merely coincidental that the same bifolium in gathering three contains both ballades referring to Pope Clement VII, Matheus de Sancto Johanne's *Inclite flos orti gebenensis* and Philipoctus de Caserta's *Par les bons Gedeon et Sanson*? Indeed, the associations between these two composers extend to textually related themes and similar notational vocabulary.⁷¹

Another four works (19, 20, 21, 40) are connected to King John I of Aragón (1350-95, king 1387) or his second queen Yolande of Bar (†1416, married to John 1380). The identification of the works (19 & 21) with Yolande of Bar is based upon the strength of Maria Carmen Gómez Muntané's argument concerning intertextual relationships between these works and another ballade written by Eustache Deschamps (c.1346-1406). Deschamps' ballade is dedicate to Yolande's mother, Maria, wife of Robert of Bar and sister

⁶⁹ Brian Trowell, 'A fourteenth century ceremonial motet and its composer', *Acta Musicologica*, vol. 29, 1957, pp. 65-75; *q.v.* Günther, *The Motets of the Manuscripts Chantilly Musee Conde 564 (olim 1047) and Modena, Biblioteca estense α.M.5.24 (olim lat 568)*, pp. L-Lii.

⁷⁰ Thibaut, 'Emblèmes et devises des Visconti dans les oeuvres musicales du trecento', p. 156 suggests these works employing Bernabò Visconti's motto were written in the period 1370-1385. For another interpretation that the works contain Bernabò's motto by Paolo Tenorista, Bartolinus de Padua and Niccolò da Perugia were a response to the threat of the invasion of Florence by the forces of Giangaleazzo Visconti at the beginning of the 15th century, *vid.* John Nádas, 'The songs of Don Paolo Tenorista: the manuscript tradition', in *In cantu et in sermone: A Nino Pirrotta nel suo 80° compleanno*, eds. F. della Seta and F. Piperno, Italian Medieval and Renaissance Studies 2, Firenze, 1992, pp. 57-59.

⁷¹ *Vid.* Chapter 5.

of Charles (Valois) V of France, who is described also in terms of a flower. The close association of items 19-21 may suggest an organisational principle in part of this collection.

Three works (55, 66, 109) and a possible fourth (22) are closely connected to the house of Foix and refer to the vibrant fourteenth century personality, Gaston III dit Phebus (1331-91), Count of Foix (from 1343), while a fifth work (38) refers to Gaston's successor Mathieu de Castelbon and must date from the years 1393-95.⁷² A further work, Matheus de Sancto Johanne's *Science n'a nul annemi* (94) criticises the ignorant who can only cry "Hay avant!" in their compositions, in what appears to be poking fun at the music (55 & 66) composed for Gaston Phebus.

As Yolanda Plumley has recently argued,⁷³ the isorhythmic rondeaux 8 and 9 are linked by more than their shared compositional process. Johannes de Alte Curie (or Jean Haucourt) and Matheus de Sancto Johanne, to whom these respective items are ascribed, were at various but not concurrent times, members of the papal chapel at Avignon during the Great Schism. Furthermore, their common origin from the diocese of Noyon and intertextual relationships between Matheus' *Je chante ung chant* and Haucourt's *Se j'etoie aseüree* found in Ob 213, f. 82v, suggest some form of an association between these composers.⁷⁴ If it is not a case of scribal association of items 8 and 9 in CH 564, it is possible that these two works circulated in tandem.

Other figures from the House of Valois also appear in this collection. The motet *Rex Karol* (106) refers to Charles V (1338-1380). Solage's *S'aincy estoit* (50) celebrates Charles' brother Jean (1340-1416), Duc de Berry, while anonymous item 92 describes a red swan, perhaps as an oblique reference to the symbol of a wounded (and therefore bloody) white swan adopted by the Duke. A further two works (24 & 80) refer to Catherine of France and her marriage to Jean de Berry's youngest son in 1386. Another of Charles' brothers, Louis I d'Anjou, is alluded to in relation to events in the Kingdom of Naples in 1381 by Philipoctus de Caserta's ballade *Par le grant senz d'Adriane* (54). This work has

⁷² Günther, 'Eine Ballade auf Mathieu de Foix', pp. 69-81. "Phebus" is also referred to in Grimace's *Se Zephirus; Se Jupiter* (15). However, the use of the first person, the theme of "I suffer while I cannot see my lady" and the naming of several other conventional figures in the pantheon of *amour courtois*, suggest that this is not a dedicatory ballade. A reference to "Phebus" is found in the third strophe of Machaut's *Quant Theseüs/Ne quier veour* (88), but this strophe is not transmitted in CH 564.

⁷³ Yolanda Plumley, 'Haucourt [Altacuria, de Alte curie], Johannes [Jehan de Hancour]', in *The New Grove Dictionary of Music and Musicians*, 2nd edn, ed. S. Sadie, London, 2001, vol 11, pp. 133-4.

⁷⁴ Yolanda Plumley, 'Citation and allusion in the late *ars nova*: the case of *Esperance* and the *En attendant* songs', *Early Music History*, vol. 18, 1999, p. 292; *q.v. eadem*, 'Intertextuality in the fourteenth century chanson: Crossing borderlines and borders', *Music and Letters*, vol. 84/3, 2003 [forthcoming].

close associations with ballade 62, ostensibly composed in Avignon.⁷⁵ Oliver du Guesclin, nephew of the one-time Constable of France, Bertrand du Guesclin, is named in 72.

Another connection with Paris, aside from the good probability that works written for Jean de Berry and Charles V originated there, occurs in the case of *Le sault perilleux*. The notes of an anonymous Hebrew student explicitly refer to it as a work used at Jean Vaillant's school of music at Paris to demonstrate the singing of the 9:8 proportion.⁷⁶ The association of Vaillant with Paris in both cases strongly argues that all four works ascribed to this composer originated in that city. Another connection with Paris appears in the two works (47, 98) which appear to refer to the Society of Fumeurs. Solage's apparent association with this Parisian society of poets/composers further strengthens his ties with the Duc de Berry, although archival documentation to suggest his employment at that court is lacking.⁷⁷

Finally, mention should be made of the musicians' motet *Alma polis religio / Axe policum artica* by Egidius de Aurelia, which Greene used in his earlier thesis proposing the origin of CH 564 at Florence. The text of this work suggests that the *Augustini de Florentia* include only J. Strutevilla and Johannes Desideri. Of the other musicians named (also Augustinians), patronyms of origin accompanying their names refer to Paris, Cyprus, Cologne, Berry and Orléans, while contemporary documentation indicates that several belonged to the households of northern cardinals or the papal court at Avignon from whence the motet might have originated.⁷⁸ While the Augustinians of Santo Spirito in Florence maintained significant cultural and political ties with France during the fourteenth century,⁷⁹ the presence of this motet alone is scarcely indicative of connections between CH 564 and Santo Spirito.

Textual references in CH 564 suggest that the content of this codex represents a broad range of musical activity which encompasses the courts of France (Charles V, Jean de Berry, Louis I d'Anjou, Oliver du Guesclin), Aragón (John of Aragón, Yolande of Bar), Foix (Gaston III Phebus, Mathieu de Castelbon), the Avignon papacy (Clement VII), the Visconti

⁷⁵ Vid. Chap. 5.

⁷⁶ Israel Adler, *Hebrew Writings concerning Music in manuscripts and printed books from Geonic Times up to 1800*, RISM BIX², Munich, 1975, pp. 55-76; also discussed by Ursula Günther, 'Problems of dating in the Ars nova and Ars subtilior', *L'Ars Nova Italiana de Trecento IV*, 1975, p. 300, fn. 64, and Anna Maria Busse Berger, *Mensuration and Proportion Signs: Origins and Evolution*, Oxford, 1993, p. 167.

⁷⁷ vid. Günther, 'Die Musiker des Herzogs von Berry', pp. 79-95.

⁷⁸ Günther, *The Motets of the Manuscripts Chantilly Musee Conde 564 (olim 1047) and Modena, Biblioteca estense α.M.5.24 (olim lat 568)*, pp. xliii-xlv.

⁷⁹ Michael P. Long, 'Francesco Landini and the Florentine cultural élite', *Early Music History*, vol. 3, 1983, pp. 95-96.

(Bernabò) in Lombardy, and Castile (Alionor of Aragón). Datable works encompass the period 1369-1395 and refer to the early years of the Great Schism of the West, the usurping of the Kingdom of Naples and struggle of the house of Anjou in this regard, the maintenance of the then-more-recent acquisitions of the Kingdom of Aragón and, at the height of its rule, the county of Foix's struggle with the Armagnacs.

Although these facts are essential for dating the repertoire contained in CH 564, it is difficult to reconcile their various references to notions of political coherence. Gaston Phebus largely opposed the Valois in the early stages of the Hundred Years War. Aragón remained neutral in this struggle, despite John's marriage alliance with the Valois (Yolande was Charles V's niece). The Visconti also formed marriage alliances with the Valois, although their support was more pro-active, especially if one considers their financial support for Anjou's Italian campaign to conquer Rome for Clement VII and reclaim his inheritance of the Kingdom of Naples. The political relations of these various courts to Avignon could have hardly formed a basis for the collection considering not only the ambiguity of the Visconti's attitude to Avignon, the late acceptance (1385) of Clement VII's authority by Aragón, but also the waning of fortunes for the Avignonese parties from the mid-1390s. (Consider the attempt by the delegate consisting of the three regents of France, with the support of the Faculty of Theology at the University of Paris, to persuade Benedict XIII to abdicate in 1395.⁸⁰)

There are, however, other principles of organisation apparent in the manuscript's contents. An observation hitherto absent from scholarship on this source is that the contents of the second and third gatherings are for the most part restricted to those works containing the most advanced notational techniques. The second and third gatherings are dominated by works which employ proportional coloration or signs, special note forms and/or verbal instructions to represent their complex rhythmic structures. The works of a leading master of the *ars subtilior* style, Philipoctus de Caserta, only appear in these two gatherings, although there is some confusion over ascriptions in the second gathering where his *En attendant souffrir m'estuet* is ascribed to a Jo. Galiot, while *Par les bons Gedeon et Sanson* lacks any ascription whatsoever. Both works are ascribed to *Magister Filipoctus* and *Phylipoctus de Caserta* respectively in MOe5.24 (ff. 20r & 31r). The ascription of several

⁸⁰ Jean of Berry, Philip of Burgundy and Louis d'Orleans visited Avignon during May-July 1395, *vid.* François Lehoux, *Jean de France, duc de Berry: sa vie. son action politique (1340-1416)*, 3 vols, Paris, 1966, vol. 2, pp. 327-339.

works to Philipoctus de Caserta in Codex Chantilly is less than categorical with the apparent use of the abbreviation *Phot* to indicate Philipot. In fact, only item 42, *De ma dolour*, is ascribed to *Ph<ilip>ot de Caserta*, with all subsequent ascriptions restricted to the form *Phot*. In MOe5.24, *De ma dolour* (f. 26v) is clearly ascribed to *Filipoctus de Caserta*. It is likely that the ascription *Ph<ilip?>ot* and Magister Filipoctus found in the respective entries of Codex Chantilly and MOe5.24 indicate the same composer, Philipoctus de Caserta.⁸¹

Three works (55, 61, 63) and a tenor (72) possibly ascribed to Johannes Cuvelier also only occur in the third gathering. All works employ *ars subtilior* techniques. The ascriptions for these works, however, are plagued by uncertainty to an even greater extent than those ascribed to Philipoctus by aberrant orthographies (Cunelier) and excessive abbreviation (J.9 = Johannes Conelier?). The works ascribed to Cuvelier, however, show a high degree of similarity in notation and musical style using *ars subtilior* techniques.

The suggestion that the inner Gatherings 2 and 3 are representative of the *ars subtilior* style is strengthened by the separation of one work from the group of three works composed by Jacob de Senleches found in succession in the third gathering (67, 68, 69). *Fuions de ci* (11) appears in the first gathering, and contains a clear ascription to Senleches Jacob in the textual *residuum*. This work is also ascribed to *Senlesses* in MOe5.24 (ff. 14v-15r). In terms of notation and musical style, *Fuions de ci* is somewhat removed from the group of works in Gathering 3. It avoids all special note shapes and employs only the simplest coloration at the *tempus* level. *Fuions de ci* is representative of a syncopated style in

⁸¹ Possible confirmation that Philipoctus de Caserta is the composer of *En remirant*, *En attendant souffrir* and *De ma dolour* occurs in Johannes Ciconia's virelai *Sus une fontayne* which quotes all three works in what appears to be a homage to Philipoctus, *vid.* Ursula Günther, 'Zitate in französischen Liedsätzen de Ars Nova und Ars Subtilior', *Musica Disciplina*, vol. 26, 1972, pp. 53-68; Yolanda Plumley, 'Ciconia's *Sus une fontayne* and the legacy of Philipoctus de Caserta', in *Johannes Ciconia, Musicien de la transition*, ed. P. Vendrix, Paris, [forthcoming] (I would like to offer my sincerest thanks to Dr Plumley for providing me with a copy of this paper prior to its publication); Anne Stone, 'A singer at the fountain: Homage and irony in Ciconia's 'Sus une fontayne'', *Music and Letters*, vol. 82, no. 3, 2001, pp. 361-390. The designation of Philippus de Caserta employed by certain scholars has no foundation with respect to extant musical sources. The doubtful ascription of the two copies of the treatise entitled the *Tractatus Figurarum* to an individual of this name appears to be the only reference to a Philippus de Caserta. A commentary on the *Tractatus Figurarum*, however, does ascribe the work to Philipoctus de Caserta. On the authorship of the *Tractatus Figurarum* *vid.* Schreier, *op.cit.*, pp. 3-9. The counterpoint treatise in Seville, Catedral Metropolitana, Biblioteca Capitular y Colombina, 5.2.25, ff. 95v-96v begins: *Incipiunt regule contrapuncti secundum Magistrum Phylippottum de Caserta*: an edition can be found in Nigel Wilkins, 'Some notes on Philipoctus de Caserta (c.1360?-1435)', pp. 82-99. Wilkins also proposes a biography for Philipoctus which connects him to a document from the Court of Alfonso V of Aragón, dated 23 May, 1420, where the king requests the return of *Philipott, tenorista nostre, ibid.*, p. 86-87. Unfortunately, the remark occurring in Coussemaker's *Scriptorum de Musica Medii Aevii: novam seriem a Gerbertina altera*, vol. 3, which Wilkins uses in an attempt to strengthen his argument further, is less than categorical.

minor prolation which is also prevalent in the works of Trebor (especially 20, 38, 64⁸²). However, the assertion that the triad of works at the centre of Gathering 3 is by Jacob de Senleches is in itself not without difficulties. *La harpe de melodie* (67) bears a late ascription by Hand B. Its concordance in US-Cn 54.1 (f. 10r) is without ascription, despite this transmission representing the closest reading to a hypothetical autograph.⁸³ Item 68 is ascribed to the mysterious Galiot in CH 564, although transmission of the same work in MOe5.24 is ascribed instead to *Jacopinus Senlesses*, which is assumed to be another form of Jacob de Senleches.⁸⁴ Item 69 in CH 564 has the ascription *Jacomi* at the top of the page and *Jacob de Senleches* in the *residuum* of the ballade's text. There is a close association in terms of notational devices between the three works by Senleches in Gathering 3 and the last work (77) in that gathering, *Angelorum psalat* by S. Uciredor (=Rodericus). It appears that the ascription of Senleches' work to Galiot is, as also in the case of Philipoctus de Caserta's *En attendant souffrir m'estuet*, erroneous. That *En attendant d'amer la douce vie* (59) is also ascribed to Galiot may suggest the shared first part of the title (*En at[t]endant*) engendered a confusion in the principal scribe of Codex Chantilly.⁸⁵

Works containing unique notational principles within the context of this manuscript appear only in the second and third gatherings. Johannes Olivier's *Si con ci gist* (41) in the second gathering is unparalleled in its use of the ballade's text itself to indicate how the interpretation of the notation should proceed (*vid.* Vol. II, App. A, No. 4). Hasprois' *Ma douce amour je me doy complaindre* (46), Cuvelier's *Lorques Arthus, Alixandre et Paris* (61) and *Ne Geneive, Tristan et Yssout* (63) contain the novel device of indicating proportions by Indo-Arabic numerals, although as discussed in Chapter 6, these numerals are still closely connected to verbal instructions which reveal their meaning. The occurrence of rare substitute mensuration signs in Goscalch's *En nul estat* (58) and related *modus-tempus* signs in Solage's *S'aincy estoit* (50) is also limited to the third and second gatherings respectively.⁸⁶

⁸² This work also employs special note shapes to denote proportional relationships. Its presence in Gathering 3 is perhaps significant under the present hypothesis.

⁸³ Nors S. Josephson, 'Die Konkordanz zu "en nul estat" und "La harpe de melodie"', *Die Musikforschung*, vol. 25, no. 3, 1972, p. 300.

⁸⁴ *Vid.* Prologue, fn. 1.

⁸⁵ Reinhard Strohm suggests that, in reference to this work's ties to Lombardy, the ascription to J. Galiot may be a mistranscription of "Jean-Galeas Visconti" (the French form of the name of the Duke of Milan), in Reinhard Strohm, *The Rise of European Music, 1380-1500*, Cambridge, 1993, p. 60.

⁸⁶ On the terms substitute mensuration signs and *modus-tempus* signs, *vid.* Chapter 6, pp. 292 & 295.

Notational devices in Gathering 1 are generally limited to sesquialteral relationships at the *semibrevis* level, syncopation and at times so-called *tempus perfectum diminutum*.⁸⁷ It is perhaps significant that the three ballades by Guillaume de Machaut (14, 78 & 88), with their classic *ars nova* notation and style, are only found in the first and fourth gatherings. Perhaps the only exceptions to the division being proposed, wherein the second and third gatherings are representative of the *ars subtilior* style while the first and fourth gatherings are representative of less ornate registers of composition, occurs in the case of *Se doit il plus en biau semblant* (8), *Je chante ung chant* (9), *Je ne puis avoir plaisir* (25) and the subsequent *Medee fu en amer veritable* (26). All these works are found in the first gathering and employ a musical style and notational devices that link them to works found in the next two gatherings. Close relationships between 8 and 9, and the conjunction of 25 and 26, might suggest that these works circulated as paired compositions in exemplars not necessarily the same as those that were used for the subsequent gatherings. The exemplars for the *ars subtilior*-styled works in Gathering 1 were possibly not available at the same time as those used for Gatherings 2 and 3. It is possible that the copying of these works into Gather 1 was trigger for the focus of Gatherings 2 and 3 (and for obtaining exemplars of these works), if such a temporal ordering can be proposed. Scarcely can it be said that Gathering 4 is typical of an older repertoire with the presence of Gacian Reyneau's *Va t'en mon cuer* (93) in a modern homophonic style suggesting closer ties to the early fifteenth century than the fourteenth.⁸⁸ Rather, notational and scoring issues are central to the grouping and placement of works in this gathering.

As noted above, the contents of Gathering 4 are partially unified by the high occurrence of works in four parts (a total of 15), with the possibility that at least three other three-part works present in this gathering were added with a view to supplying a fourth part at a later date. However, many of the fourth voices supplied for these works are clearly alternative parts to be exchanged with the Ct.⁸⁹ Generally the styles of the works in

⁸⁷ Vid. Ursula Günther, 'Der Gebrauch des *Tempus perfectum diminutum* in der Handschrift Chantilly', *Archiv für Musikwissenschaft*, vol. 17, 1960, pp. 277-297.

⁸⁸ Gacian Reyneau appears to have served in the royal chapel of Martin I of Aragón between the years 1389 and 1410, *vid. Gómez*, 'Musique dans les chapelles de la maison royale d'Aragon (1336-1413)', p. 75. The passing of Martin I without heirs saw the transfer of the crown of Aragón to Ferdinand of Castile. The subsequent reorganisation of the chapel of Aragón saw Gacian Reyneau in the chapel of prince Alphonse (later Alphonse V) in 1413; *vid. ibid.* pp. 76-77.

⁸⁹ Greene notes in his edition that the fourth part (i.e. Trip) in several chansons from CH 564 are alternative parts, usually with the omission of the Ct, in *French Secular Music: Manuscript Chantilly Musée Condé 564, First Part*, p. XIV. More recently Elizabeth E. Leach has employed dyadic analysis in her

Gathering 4 avoid the complex rhythmic relationships found in works in Gatherings 2 and 3, although chromatic complexity is present in the anonymous *Calextone* (80) and *Fumeux fume* by Solage (98). The four mimetic virelais from this manuscript are found only in Gathering 4 (89, 90, 91, 100).

The presence of item 101 written on the last *verso* leaf of Gathering 4 and first *recto* leaf of Gathering 5 suggests that these two gatherings had been arranged as such at a very early stage in the compilation of the manuscript. There appears to be no central organising principle within the collection of motets in Codex Chantilly apart from the commonality of genre. The styles represented by these motets are diverse, with older established works such as *Apta caro / Flos virginum / Alma redemptoris mater* (101) along side those such as *Multipliciter amando / Favore habundare/ T: Letificat iuventutem meam* (110) wherein styles closer to those in the preceding chansons, especially the use of a *sesquialtera* proportion at the *minima* level, occur.⁹⁰ Thus, while earlier observations suggest the availability of exemplars may have been a contributing factor to the compilation of CH 564, a clear ordering of works according to style, genre and scoring can be observed.

The collection of works in CH 564 is representative of a retrospective anthology of works, especially those using the most advance notational processes. The very nature of many of these works, with their diverse political content and references to specific events and potentates invalidates any notion that this collection was assembled for any particular court. Yet, the material nature of the manuscript itself suggests that no expense was spared in its preparation. This situation leads to the view that if CH 564 represents a

outstanding assessment of performance practices in relation to four part ballades by Guillaume de Machaut, 'Machaut's balades with four voices', *Plainsong and Medieval Music*, vol. 10, no. 1, 2001, pp. 47-79. Leach identifies three groups of four-voiced compositions. If one considers the non-Machaut four-part works in CH 564 employing Leach's methods of analysis, one concludes that 79, 82, 84, 85, 89, 91, 95 and 97 all contain *tripla* or *triplum*-equivalent voices which show no direct discant relations with the Ct. Of the aforementioned group, items 82 and 95 appear to be compendia wherein only a three-part rendition is possible using either Ct or Trip (thus it belongs to Leach's Group 3 were one to propose the extension of her classification to the late-fourteenth century repertoire) and the remainder can be performed in four parts or as three-voice renditions employing either Ct or Trip (=Leach's Group 2). The double ballade 84 (=Group 2b?) would require (similar but not identical to Machaut's ballade 34 [as it is assessed to belong to Group 1b in *ibid.*, pp. 49-58]) that the *triplum*-equivalent voice is never omitted on account of textual issues, i.e. the *Triplum*-equivalent voice (=C¹) bears part of the first three strophes of the double ballade whose last three strophes are found in the S voice (=C²). Items 82, 83, 86, 90?, 94, 96, 99 all have *tripla* which at times demonstrate discant relations with the Ct, especially when the Ct behaves in a T function as lowest voice. For this last group (=Group 1a), any performance including the Trip must be a four-voice rendition, although a three-part performance would be possible as T-Ct-S.

⁹⁰ Ursula Günther dates this work solely on stylistic grounds to the 1380s or 1390s in *The Motets of the Manuscripts Chantilly Musee Conde 564 (olim 1047) and Modena, Biblioteca estense α.M.5.24 (olim lat 568)*, p. xxvii.

commissioned work, its patrons were neither royal nor noble, but possibly of the mercantile or wealthy bourgeois classes. The relative merit of works included in CH 564 is dictated by both their intrinsic and associated worth. The noble register of a great number of works in CH 564 may have played upon, or seen fit to play upon, the aspirations of its patrons and its regard particularly for French culture. This culture in turn encompasses several musical styles (and their notation) which are represented throughout this manuscript. Gatherings 2 and 3, with some overflow into the surrounding gatherings, appear to be representative of works of the *ars subtilior*. The presence of a select set of Machaut's ballades along with other widely transmitted works (*De ce foul pense souvent remaynt*, *Par maintes foys*, *Playsance! Or tost*) suggests another aspect in the collection's compilation wherein Gatherings 1, 4 and 5 reflect a (sometimes recently) established repertoire whose presence was dictated by modes of transmission, which are further discussed below.

2.3. Evidence of editorial activity

In his brief examination of scribal practices in CH 564, Gordon K. Greene states performance from the manuscript is supported by the addition of manuscript accidentals,⁹¹ the retouching of previously written elements and the correction of errors. In particular, he notes the retouching of parts of the *Ct* of *Sans vous ne puis* (48),⁹² the addition of a b-*rotundum* signature to the T of *Se Dedalus* (65) and *La harpe de melodie*, the addition of the syllable "ma" to *De quan qu'on peut belle et bonne estrener* (34), and modifications of counterpoint in *En nul estat* (58).⁹³ In this section, I discuss several additional examples of editorial process in Chantilly not mentioned in Greene's thesis. The central concern of my discussion, however, is not whether this editing is indicative of performance from this manuscript, although it will be argued that the editor showed some concern for satisfactory readings of parts. On the other hand, the ineptitude of the editor-scribe in matters pertaining to the notation of *ars subtilior* is generally demonstrated by modifications of the musical text which are semantically inconsistent with the works as whole in which they

⁹¹ Additional manuscript accidentals are to be found throughout CH 564, and are distinct from those employed by the principal scribe. Rather than the b-*quadratum* and elongated b-*rotundum* favoured by the principal scribe, the editor-scribe uses a *diesis* and a small b-*rotundum* with a rounded body.

⁹² In the critical notes to his published transcriptions of the works of CH 564 in *French Secular Music: Manuscript Chantilly Musée Condé 564, Second Part*, Polyphonic Music of the Fourteenth Century XIX, Monaco, 1981, Greene notes that the stems of *Par le grant senz d'Adriane* have been retouched in the S (p. 182). *Le mont Aōn* also shows signs of extensive retouching and editing.

⁹³ Greene, "The Secular Music of Chantilly Manuscript Musée Condé 564 (olim 1047)", pp. 43-47.

occur. Moreover, my concern is with demonstrating an early phase in this manuscript's life that might be linked to other indicators suggesting ownership and purpose.

The data supplied by modifications in CH 564 is insufficient information for describing a third scribe, although his existence is highly probable through distinct features. For the purpose of this study, I would like to describe four instances of modification. Each instance is significant, as it appears to address errors or semantic difficulties in the notation, although in most instances the modifications actually fail to supply a correct reading.

Perhaps the most significant modification occurs in the first staff of *La harpe de melodie*, f. 43v, as shown in Figure 2.2:

Figure 2.2: Detail from first staff of *La harpe de melodie*, CH 564 f. 43v.

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There are clear signs of erasure over the six *semibreves caudate* shown in this example. One can easily note that the downward stems are very different, for example, from those found on the three subsequent void *dragme*. The stems on the *caudate* were added by a different hand, unsteady and less spontaneous than that of Music Scribe II. Their width is inconsistent and a different ink colour is evident. The erasure marks betray the former upward stems, from which it can be concluded that these six notes were originally written as *minime*.⁹⁴

Semibreves caudate occurring elsewhere in this transmission of Jacob de Senleches' *La harpe de melodie* are clearly from the hand of Music Scribe II. As discussed in Chapter 4, this note shape is here equal to two black *minime* and it indicates a 3:2 proportion in relation to the *semibrevis*. However, any attempt to read the notes of the modified passage, shown as

⁹⁴ I thank Dr Margaret Bent for her excellent suggestion that original notes were *minime* rather than *dragme*, private conversation 7th March, 2001.

the bracketed passage in Figure 2.3, with this meaning produces unsatisfactory results in terms of its subsequent counterpoint.

Figure 2.3: Reading of *La harpe de melodie* in CH 564, BB. 1-8.

The musical score consists of three staves: C1, C2, and T (Tenor). The lyrics are: "1.5.La 4.Pour har plare pe un de e mel com lo pa di ni e fay - te pour a de mel com lo pa di ni". The score includes various musical notations such as triplets, slurs, and dynamic markings like "ff".

Rather than *caudate* in CH 564, the concordant reading found in Cn 54.1 has at this point *minime*, as was originally found in CH 564. The reading transmitted in Cn 54.1, as shown in Figure 2.4, is contrapuntally sound and contains no further complications in subsequent passages.

Figure 2.4: Reading of *La harpe de melodie* in Cn 54.1, BB. 1-8.

The musical score consists of three staves: C1 (Cantus I), C2 (Cantus II), and T (Tenor). The time signature is 3/4. The lyrics are: "1.5.La 4.Pour har plaire pe un de me com lo pai di gni e fai te me com lo pai di gni e pour a". The score includes various musical notations such as slurs, ties, and triplets.

The reason why the editor-scribe modified the original and ostensibly correct reading of the C1 supplied by Music Scribe II in CH 564 resides in the erroneous variant reading (also copied by Music Scribe II) at T 6 (see Figure 2.3). The elongation of the original durations by the editor-scribe in C1 6 responds to this T-variant by attempting to improve the subsequent counterpoint between C1 and T. This solution, however, seems to have been advanced without due consideration of the counterpoint that would result from the sounding of C2. In light of the additional observation that the modifications by the editor-scribe in Codex Chantilly resulted in the same length of the C1 and T voices in this virelai's refrain (unlike in Cn 54.1), it might even be proposed that the solution of the editor-scribe arises from the assumption (which was based upon the appearance of only C1 and T in the manuscript and disregard/incomprehension of the French instructions for providing a third voice) that this is a two-, rather than a three-, part composition.

Another modification is found on the next page in CH 564 facing *La harpe de melodie* in *En attendant esperance*, also by Jacob de Senleches. Figure 2.5 is a detail from the middle of the fourth staff on f. 44r showing the erasure of a *virgula* from below the void red special note shape.

Figure 2.5: Detail of Jacob de Senleches' *En attendant esperance* in CH 564

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There is a question as to whether this erasure resulted from the same editorial activity that occurred in the previously discussed example, or if it was the initiative of Music Scribe II. Music Scribe II does take on an active role in the modification of his musical text, in that there are examples of modified passages clearly in his hand. At the beginning of the Ct of *Se vos me voles* (last staff of f. 40r), the erasures shown in Figure 2.6 are found.

Figure 2.6: Detail from beginning of Ct in Anonymous *Se vos me voles*, f. 40r.

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Traces of two erased red *semibreves* (pitches F and g) can be seen after the first red *semibrevis*, while after the second, still visible red *semibrevis*, there originally followed four red *minime* (pitches G, F, E, D) of which the first, second and fourth have been erased while the third red *minima*'s stem was erased to create a colorated *semibrevis*.

Good fortune has left musicology with a concordant transmission of *En attendant esperance* in MOe5.24, ff. 39v-40r. The MOe5.24-reading equivalent to the passage shown

in Figure 2.5 consists of an identical pitch structure, but different durations. In MOe5.24, two void red *minime* are followed by three void red *minime* with *virgule* with stems added below the note and flagged to the right ($\overset{\lrcorner}{\diamond} \overset{\lrcorner}{\diamond} \overset{\lrcorner}{\diamond} \overset{\lrcorner}{\diamond} \overset{\lrcorner}{\diamond} \overset{\lrcorner}{\diamond}$).⁹⁵ As such, the passage in MOe5.24 extends over the duration of a perfect *semibrevis*. The form with the *virgula* $\overset{\lrcorner}{\diamond} \overset{\lrcorner}{\lrcorner}$ in Codex Chantilly and the form with the flagged stem $\overset{\lrcorner}{\diamond} \overset{\lrcorner}{\lrcorner}$ in MOe5.24 appear to be equivalent in meaning. Both result in a duration equivalent to a *semiminima*, although arriving at this meaning depends upon realising the compound relationship created by the multiplication of void red *sesquitercia* coloration (4:3) by the *sesquialtera* proportion indicated by the *virgula* or *flagged* stem (4:3 x 3:2 = 2:1).

The reading of the void red *virgula* form as equivalent to half a *minima* (a duration which is elsewhere internally consistent in the Chantilly transmission of *En attendant esperance*) demonstrates that problems existed and still exist in the passage containing the void red *minime* whose *virgula* has been erased (see Figure 2.5). In editing the passage in CH 564, the editor-scribe appears to have understood that the note form $\overset{\lrcorner}{\diamond} \overset{\lrcorner}{\lrcorner}$ indicated the duration of a *semiminima*. (The same cannot be said for the principal scribe who originally copied the passage.) Consequently, realising that the collective duration of five of these note shapes was problematic if they were to be sung in the space of a perfect *semibrevis* (that is, $5 \overset{\lrcorner}{\diamond} \overset{\lrcorner}{\lrcorner} \neq \blacklozenge$), the editor-scribe attempts to correct the passage by erasing the *virgula* of the last note, although strictly speaking $4 \times 1/2 (\overset{\lrcorner}{\diamond} \overset{\lrcorner}{\lrcorner}) + 3/4 (\overset{\lrcorner}{\diamond} \overset{\lrcorner}{\lrcorner}) = 2 \frac{3}{4} \blacklozenge \neq \blacklozenge$. A satisfactory reading only results if the duration of the last void red *minima* is regarded as equivalent to a plain black *minima*.

Rather than suggesting that the editing of *La harpe de melodie* and *En attendant esperance* in CH 564 is indicative of a scribe close to the repertoire, I interpret these clumsy modifications to be from the hand of an individual who has a fundamental understanding of mensural notation and musical composition (*sc.* counterpoint), but who does not have sufficient expertise in the realms of *ars subtilior* notation to make faultless, internally consistent modifications to the notation. This does not exclude the individual from an aural

⁹⁵ I discuss all passages using this *virgula* notation in Jason Stoessel, 'Symbolic innovation: The notation of Jacob de Senleches', *Acta Musicologica*, vol. 71, no. 2, 1999, pp. 157-8. *Q.v.* Chapter 4, p. 223. These variants are also discussed (without reference, however, to the modifications made in CH 564 and the grammar of special note shapes used therein) by Anne Stone in her "Writing Rhythm in Late Medieval Italy: Notation and Musical Style in the Manuscript, Biblioteca estense, alpha.M.5.24", Ph. D. thesis, Harvard University, 1994, pp. 157-163.

knowledge of the repertoire, although the likelihood of him being a practising musician with knowledge of the style's notational intricacies seems remote.

Mention should also be made of scribal alterations found in *En nul estat*. As G. K. Greene has previously assessed, modification of the original reading in CH 564 appears to have been an attempt to improve contrapuntal structures.⁹⁶ The original reading, which can be recovered from CH 564, bears semblance with its concordance found in Pn 6771, ff. 79v-80r.⁹⁷ The most pointed example of modification occurs at BB. 18-21 in CH 564. A digitally enhanced reproduction of this portion of the transmission in CH 564 is shown in Figure 2.7. Significant erasures and changes made subsequent to the original copying are indicated in Figure 2.7 by arrows labelled A, B, and C.

Figure 2.7: Detail of editorial changes in CH 564-transmission of *En nul estat* (f. 39v).

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The change labelled with the letter A in Figure 2.7 consists of an erased *binaria c.o.p.* that is replaced by a *brevis* and *semibrevis*. (Note the erased stem and hole in the page cause by the vigorous erasure of the ligature's body.) The change labelled B consists of an erased upward stem at the beginning of a ligature that originally indicated *c.o.p.* Before the changes were made, this ligature consisted of five notes, but the erasure labelled C has split it into two ligatures of three and two notes respectively. All changes significantly modify the rhythm of this passage. In its original form, the reading in CH 564 is identical to the one preserved in the transmission of this work in Pn 6771. As can be seen in Figure 2.8 the contrapuntal relation to the lower voices in this original reading is totally disjunct and most likely the

⁹⁶ Greene, "The Secular Music of Chantilly, Musée Condé, ms. 564", p. 46.

⁹⁷ It is likely that the variation in the first word of this work in Pn 6771, i.e. *Car nul estat*, resulted from the omission of *En* and the placing of the first word of l. 3 at the beginning of the staff. There is some question whether *Car* can function as the first word of both ll. 1 and 3, although I am inclined to consider the reading in Pn 6771 as an error requiring emendation according to CH 564.

result of a common error inherited by both extant readings from a shared, but possibly distant, ancestor.

Figure 2.8: Transnotation of *En nul estat* as it occurs in Pn 6771, BB. 18-21.

The modifications that occur in CH 564 suggest that the editor-scribe recognised problems in this section. Figure 2.9 gives a reading found in CH 564 based on the corrections made by the editor-scribe.⁹⁸

Figure 2.9: Transnotation of *En nul estat* as it occurs in CH 564, BB. 18-21.

As far as it can be determined, the editor-scribe of CH 564 has re-conceptualised the meaning of the substitute mensuration sign $\frac{2}{2}$ at this point of the work to indicate a *sesquitercia* relation rather than a simple change of mensuration with *minima* equivalence. The problem with this apparent re-conceptualisation of the semantic significance of this sign, apart from the fact that it only solves some of the contrapuntal problems at this point in the work, is that it is internally inconsistent with the meaning of mensuration signs

⁹⁸ This reading coincides with Greene's edition of this work from CH 564 in *French Secular Music: Manuscript Chantilly Musée Condé 564, Second Part, # 58*. My transnotation of this work can be found in Vol.II, App. A, No. 5. The reading at S 18.3 largely restores the original reading and meaning of the mensuration sign at this point, although as will be noted in the accompanying Critical notes, several amendments are required in this passage and previously in lower voices. The solution, however, offers a more satisfactory contrapuntal framework.

elsewhere in this work. In the two other instances where the mensuration sign $\frac{2}{2}$ occurs (Ct 40 and 51; *vid.* Vol. II, App. A, No. 5), *minima* equivalence is necessary.

Table 2.5 identifies instances in the CH 564-transmission of *En nul estat* where alteration by a subsequent scribe is evident. The respective portions from the transmission in Pn 6771 is given in comparison. The semblance of the original readings in CH 564 to those transmitted in Pn 6771 is apparent.

Table 2.5: Readings of *En nul estat*: original and edited CH5 564-readings compared with Pn 6771-readings.

Location	Present reading in CH 564	Original reading in CH 564	Reading in Pn 6771	Comments concerning corrections in CH 564
S 18.3				Re-conceptualisation of mensuration sign.
S 25.1				Correction of original scribal error.
Ct 7.5	D	C	D	Corrects pitch ambiguity.
Ct 10.2				Transformation based on a shift in understanding from major to minor <i>modus</i> .
Ct 24.2				Edited on the basis that p.d. copied from exemplar prevents imperfection of first <i>brevis</i> . Pitch ambiguity on second note also corrected.
Ct 27bis	a	G	a	Corrects pitch ambiguity.
Ct 30 and 54.				Corrects duration of middle note.
Ct 36.1				Erroneous correction whose basis may lie in a disregard of rest Ct 34.5.
Ct 39.1	$\frac{2}{3}$	$\frac{2}{3}$	$\frac{3}{2}$	Corrects common error shared by both sources, despite differing mensurations.
Ct 43.2 & 43.2+2	a	G	a	Corrects pitch ambiguity.
T 12.1				Corrects 4 th and 5 th durations.
T 21.1				Faint stem extending into residuum retraced.
T 36.3	a	b	a	Corrects pitch ambiguity.
T 39.5	a	b	a	Corrects pitch ambiguity.
T 41.1	 (aEGDaGD)	 (bEGDaGD)		Insignificant change, but last duration of group is incorrect in Pn 6771 as <i>maxima</i> .

Variants Ct 24.2 (added dot after the *brevis* in CH 564), Ct 39.1 and especially T 12.1 are notable differences, although it is impossible to determine whether these readings in CH 564 represent errors introduced by the principal scribe or inherited from an exemplar unlike the

one used by the scribe of Pn 6771. The editor-scribe introduces an element of contamination into CH 564, although the original readings clearly remove this complication. It is also evident that the editor-scribe misunderstands the need for *major modus* in sections of the Ct, although ambiguities do exist in this work where *modus* must be realised as minor.

As a last example of editorial intervention in Codex Chantilly, I turn to the work found on the first leaf of the Cordier inserts in CH 564, *Belle, bonne, sage* (f. 11v). As stated in Chapter 6 below, this work, written in the form of a heart in a clever reference to its text *le vous fais le don d'une chanson nouvelle / dedens mon ♥ [=cuer] qui a vous se presente*, demonstrates many similarities with the remaining *oeuvre* of Baude Cordier through its use of proportion signs and cut mensuration signs. At the end of the first staff (*cf.* Vol. II, App. A, No. 6, BB. 10-11), one finds a passage of white notes (void coloration relative to the normally black note forms) used to denote diminution in a *sesquialtera* relationship to the previous [2,3] *tripla*, that is $\odot \downarrow = 3 \downarrow \downarrow \downarrow = \diamond \diamond$. However, as shown in Figure 2.10, there are clear signs of erasure above this passage of white notes, indicating that the passage was originally written with the note forms $\diamond \diamond \diamond \diamond \diamond \lrcorner \diamond \diamond$.

Figure 2.10: Detail from *Belle, bonne, sage*, CH 564, f. 11v.

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As such, this augmented notation would indicate a *subsesquialtera* proportion (2:3). Unlike its present form where there is an apparent proportioning of *semibreves* to *minime*,⁹⁹ this results in the proportioning of *minime* to *minime*. I will return to the implications of these “corrections” in Section 2.6.

2.4. *The index: clues to Codex Chantilly’s early provenance*

Another early episode in the provenance of this manuscript revolves around the loss of the first gathering and the addition of a new index. It is evident that, after the principal scribe (Scribe β) had completed the copying of works into the six gatherings (assuming that lost first gathering also contained musical works) and before the addition of the inscription by Spinelli, the incomplete manuscript came into in the possession of another individual.

This individual conceivably foliated all leaves of the original six gatherings with Roman numerals (including the lost first gathering), possibly rearranging their order beforehand. Several details argue for this individual being the same person who composed the extant index. This scribe is the owner of Text Hand A described above. Details of calligraphy are replicated in the Roman numerals in both locations, notably the use of a *v* with a clubbed vertical left ascender and the use of a circle to dot the third *i* of Roman numerals *xLviii* (49), *Liiii* (54), *Lxviii* (69) (unfortunately 64 is trimmed off in the last part on the page),¹⁰⁰ and the bowing under of the second stroke of ‘x’. It follows, then, that the index as a whole was composed by the same scribe.

However, that the first gathering was already missing when the current index was composed, suggests that a period of time may have passed between the foliating of the manuscript and addition of the current index, during which the first gathering was lost or removed. The addition of the current index may itself be explained by the loss of the first gathering, in that it possibly contained the original index. An additional facet to this hypothesis may be proposed with respect to the different colour of the inks used for the folio numbers and the index.¹⁰¹ In subsequently composing the index, the owner of Hand A was unable to access the same type of ink due to a removal to another location, during which the first gathering was lost. Or it may be that several years passed between the foliation and the composing of an index, during which ink types gradually changed. Or perhaps the difference in ink colours is inconsequential. Nonetheless, it remains almost certain that the first gathering was lost while in the hands of the scribe who owned Text Hand A.

The identity of the owner of Text Hand A, however, must remain obscure. It is possible that he added “MVSICA” on f. 9r, especially if one considers the formation of *A* there and in the extant index. There is also some similarity in the formation of *M* in both locations, although its use in f. 9r is more decorative. One may speculate that this is the same individual whose editing of musical notation has been discussed above, although no evidence suggesting this is forthcoming. It appears that the Cordier inserts were added after the index had been completed, as these works are not contained in the index. Furthermore,

⁹⁹ It seems unlikely that this coloration indicates a *sesquitercia* relationship at the *minima* level when such a proportion is indicated by a fraction (4/3) in another of Cordier’s works which faces *Belle, bonne, sage* in CH 564, namely *Tout par compas*. I discuss the notational aspects of this work at length in Chapter 6, p. 309.

¹⁰⁰ The dot above the third *i* in the foliation for folio 24 (i.e. xxiii) is lacking in the index.

¹⁰¹ Upton, “The Chantilly Codex (F-CH 564): The Manuscript, Its Music, Its Scholarly Reception”, p. 85. Upton goes to considerable effort to argue that the foliator and index scribes were different. I cannot agree, however, that the form of ‘v’ in Roman numerals is significantly different in its overall ductus.

the additional leaves were not foliated by any ancient hand, but by a nineteenth century hand employing Indo-Arabic numerals.

The following sequence of events may thus be proposed in the compilation of CH 564. After initial copying of the text and music by one individual, the manuscript came into the possession of another individual who foliated all gatherings. After losing or removing the first gathering, an index of all works in the remaining gatherings was compiled by this second individual. The task of re-foliating all five remaining gatherings may have been viewed as too difficult or a substitute first gathering may have been envisaged. If it is the case that the editor of the body of CH 564 is the same individual who edited the first of the Cordier inserts, then it is reasonable to presume that the next stage of compilation consisted of obtaining two immaculately presented copies of Cordier's *Belle, bonne, sage* and *Tout par compas* from a French musician-scribe and inserting them between the index and first gathering. Although the Cordier inserts are currently in the form of two separate leaves joined by a mending strip along the spine,¹⁰² I would suggest that they originally constituted a bifolium, which over time has separated into two leaves along an acute fold, as parchment is often wont to do. Only after the insertion of Cordier's works does it appear that CH 564 was edited, possibly by one further individual, and used as an exemplar for Fn 26.

Yet, CH 564 remains unfinished. Illuminated initials were not supplied, despite the presence of minute guide initials to the left of the uppermost staff on each page and the inseting of music on the topmost staves providing adequate space for this undertaking. Majuscles are also absent on voice labels. Only ff. 25r and 37r contain stencils made in preparation for what would appear to have been intended as truly magnificent illuminations consisting not only of initials, but also extensive decoration of left-hand and bottom margins with acanthus leaves and drolleries. Ursula Günther reports the results of her consultation of several leading scholars on the nature of these illustrations. Their opinions vary from definite Italian traits being observed to no specific indication of the draughtsman's nationality.¹⁰³ However, it remains to be proven that these have any relation to the

¹⁰² Elizabeth Randell Upton kindly informed me of the present state of these two leaves in a personal communication, 5th March, 2001.

¹⁰³ Günther, 'Unusual phenomena in the transmission of late fourteenth century polyphony', pp. 92-93, 98. Elements suggesting an Italian origin to her include the use of *ignudi*, acanthus leaves, and a round shield. Günther also views the depiction of an *a cappella* performance as at odds with the repertoire in CH 564, although, the absence of text in lower voices cannot be used solely as a pretext for instrumental performance. Günther sees (*ibid.*, p. 100) the illustrated dragon biting itself on the tail on f. 25r as an heraldic symbolism referring to the coat of arms of Giovanna de Bernardo di Bardi (married Francesco d'Altobianco degli Alberti, 1432).

original preparation of the manuscript, or whether they are additions accrued to the manuscript during the fifteenth century.¹⁰⁴ One additional aspect also discussed by Günther is the use of the *fleur-de-lis* to decorate the first of the Cordier inserts, *Belle, bonne, sage*. While the hand which drafted these monuments of musical notation in Layer III was likely French in its origin, the question of whether *fleur-de-lis* illustrating f. 11v is the French or Florentine form¹⁰⁵ is possibly inconsequential to any consideration of the origin of the Layer I of the manuscript.

¹⁰⁴ Günther throws some doubt on whether the illustrations bear any relation to the scribes, or even the commissioning patron's, original plans due to the displacement into the margin of the lower voice labels. Adequate space for these minor initials was left below the beginning of the staff, *vid.* Günther, 'Unusual phenomena in the transmission of late fourteenth century polyphony', p. 96. Günther also suggests that the gathering starting at f. 37 was originally intended to be the first in the manuscript, *ibid.*, p. 97.

¹⁰⁵ Günther notes that the Florentine *fleurs-de-lis* were frequently associated with the Alberti of Florence, in 'Unusual phenomena in the transmission of late fourteenth century polyphony', p. 99. The Florentine *fleur-de-lis* is distinguished from its French counterpart by its so-called *flory* aspects.

2.5. Relationships with other sources¹⁰⁶

Of the 112 works in CH 564, 49 works presently have known concordances. However, of these works, three consist of text-only double-concordances (that is the second reading is not set to music).¹⁰⁷ Two further double-concordances (to 6 and 107 in CH 564) occur only in relation to a lost manuscript, Pn 23190. Text-only concordances are omitted from the present discussion for the benefit of future philological examination. Three concordances involve works of Machaut¹⁰⁸ and a further six concern motets,¹⁰⁹ which in both cases have been treated elsewhere in the literature. This leaves a total of 35

¹⁰⁶ In the following discussion, where variants are cited only as a voice and measure location (e.g. Ct 10.2 = the second note [or rest] of measure 10 of the contratenor), the reader should refer to the critical apparatus for that particular work as well as its transnotation both found Appendix B in the second volume of this present study.

¹⁰⁷ The text of Eustaches Deschamps' *Armes, amours, dames, chevalerie* (no. 84) and Jehan Hasprois' *Puisque je sui fumeux plains de fume* (no. 47) also occur in the text manuscript Paris, Bibliothèque Nationale, nouv. acq. frç. 6221 (=Pn 6221), f. 15v. The text of Grimace's *Se Zephirus / Se Jupiter* (15) also occurs in Philadelphia, University of Pennsylvania Library, French MS 15 (=US-PHu 15), f. 61b (France?, c. 1400). Aside from the works by Machaut, a textual concordance is also found for *Ma douce amour, je doi bien complayndre* (no. 46, musical concordance also MOe5.24, Ob 213) in the manuscript Turin, Archivio di Stato, ms. J.b.IX.10 (North western Italy, shortly after 1398). An edition of this textual transmission may be found in Alessandro Vitale-Brovarone, 'Recueil de Galanteries (Torino, Archivio di Stato, J.b.IX.10)', *Le Moyen Français*, vol. 6, 1980, p. 17.

¹⁰⁸ Any reconsideration of the collective transmissions of Machaut's works is outside the scope of this present study. With regard to the transmission of Machaut's works in the later, so-called Repertoire-manuscripts (which include CH 564, Pn 6771, Pn 568, Fn 26, MOe5.24, IV 115, CA B 1328), Wolfgang Dömling has proposed a hypothetical stemma whereby Pn 6771 and CH 564 draw on a common exemplar, which in turn draws on the exemplar used in part by Pn 9221 (Mach E), in Wolfgang Dömling, 'Zur Überlieferung der musikalischen Werke Guillaume de Machauts', *Die Musikforschung*, vol. 22, 1969, pp. 189-95. More recently, Margaret Bent has argued that Mach E is in part a copy of Mach B (Pn 1585) which in turn is a near exact copy of Mach Vg (US-NYw). Bent convincingly argues that B and Vg show a direct relation in the first and second layers (1-2), while Vg 3 appears to be a copy of B 3. Mach E draws on all three layers of Mach B. Mach E draws upon a tradition outside Mach B which is also reflected in the Repertoire-MSS, suggesting that the scribe drew upon multiple exemplars. The importance of Bent's argument lies not only in the filiation of sources, but her hypothesis that E may in some way represent the wishes or preferences of Machaut, even if beyond the grave: *vid.* Margaret Bent, 'The Machaut Manuscripts Vg, B and E', *Musica Disciplina*, vol. 37, 1983, pp. 53-82. In relation to the compilation of Mach E, Lawrence Earp proposes an alternative theory where the works of Machaut in versions representative of the Repertoire-manuscripts were collected into Mach E first, with Mach B being used to fill in the gaps. On the basis that they could represent revised versions, Earp also emphasises the value of Machaut's works transmitted in the Repertoire-manuscripts in the case on Mot 8, whose reading in CA B 1328 is superior to versions found in the central-manuscripts: *vid.* Lawrence Earp, 'Machaut's role in the production of manuscripts of his works', *Journal of the American Musicological Society*, vol. 42, no. 3, 1989, pp. 489-97. Mach E's role as witness to transmissions of Machaut's works in readings outside those in the so-called central Machaut manuscripts (Mach Vg, A, C, F-G) and the subsequent replication of this tradition in the Repertoire-manuscripts gives important clues to both the origin and motivating forces behind the transmission of these works by Machaut into the fifteenth century, especially on the Italian peninsula.

¹⁰⁹ Günther, *The Motets of the Manuscripts Chantilly Musee Conde 564 (olim 1047) and Modena, Biblioteca estense α.M.5.24 (olim lat 568)*.

concordances to be examined in the course of this chapter. Table 2.6 lists concordances in relation to sources.

Table 2.6: Concordances with CH 564.

Sources	No. of works concordant with CH 564	No. of works by Machaut also found in CH 564.	Total no. of Machaut's works in source.
<i>Machaut MSS:</i>			
Mach A, B, C, E, G, M, Vg,	3	3	n/a
Mach C, US-NYpm 396,	2	2	n/a
Mach F (Voir dit), Pn 1587 (text only)	1	1	n/a
<i>Other, or so-called Repertoire, MSS:</i>			
MOe5.24	13	1	4 + 1 text ¹¹⁰
Pn 6771	11	2	7 + 1 text
[Pn 23190]	[9]	[2]	7
Fn 26	8	-	6
[Sm 222]	[8]	[1]	3
Pn 568	7	1	3
CA B 1328 fragments	5	1	2
IV 115	4	-	5
Pn 6221 (text only)	4	2	8
US-PHu 15 (text only)	4	3	107 + 4 attr.
NL-Ga VarD.3360, NL-Uu 1846 ² , GB-YOX, Ob 213, Tn T.III.2, Bc 15, Hungarian fragments	2	-	(2: NL-Ga VarD.3360, NL-Uu 1846 ²)
CZ-Pa 9, GB-DRc C.I. 20, GB-Lbm 41667 (McVeigh), D-Mbs lat. 15611, F-AUT 152, E-Bbc 971, B-Bar 758, D-Nst 9, GR 197 + US-Hdc 2387, GR 16, NL-Lu LTK 342A, US-Cn 54.1, I-Ta J.b.IX.10 (text), B-Bc 1, A-Iu ss, D-Mbs lat 14274, A-Wn 2777, B-Mleclercq, Us-Wc M 2, NL-Lu 2720, F-AS 983, I-Las 184. (also Paris, Musée des Arts, tapestry "Le concert").	1	(Machaut concordances: CZ-Pa 9, D-Nst 9)	(2: CZ-Pa 9, 1: D-Nst 9)

A comparison with Reaney's table of concordances reveals 21 sources (mostly fragments, often incomplete) either unknown, presumed lost¹¹¹, or omitted in his article of 1954.¹¹² Reaney also omits one concordance each with MOe5.24¹¹³ and Pn 6771.¹¹⁴ These 21 new concordances can be divided into three groups according to presumed geographical origins: northern French/Lowlands fragments, Italian sources (north and central), and Central European sources.

¹¹⁰ Machaut's ballade *Beaute parfaite* set to music by Anthonellus de Caserta is transmitted in MOe5.24, f. 13r and Pn 6771, f. 46v

¹¹¹ The US-Cn 54.1-transmission of *La harpe de melodie*, for example, was known to Reaney only through a reference in Coussemaker's *Scriptorum de musica medii aevii: novam seriem a Gerbertina altera* (Paris, 1864, vol III, pp. XV, XXIV), where it is reported to occur in a *codex cuiusdam ignoti bibliophili Vindobonensis* ("the manuscript of a certain anonymous book collector from Vienna"). The differences between readings are discussed above, p. 55.

¹¹² Reaney, "The Manuscript Chantilly, Musée Conde, 1047", p. 80.

¹¹³ The three voiced *En attendant d'amer la douce vie* found in CH 564 appears as a two voice version (music identical) in MOe5.24 with the slight textual variation *En attendant d'avoir la douce vie*.

¹¹⁴ The work entitled *En nul estat* in CH 564 is also transmitted in Pn 6771 as *Car nul estat*.

The present section forms a basis for the last part of this chapter wherein the origins of CH 564 are reconsidered. While the following observations have come about through the application of an editorial process of stemmatic filiation, their importance to our understanding of the history of music in the late fourteenth and early fifteenth centuries will soon become apparent. In this respect, I concur with James Grier when he writes in his *The Critical Editing of Music* that “Stemmatic filiation...provides insight into the history of a work and its transmission.”¹¹⁵ I argue that the observation and interpretation of variants, coupled with additional data such as evidence provided by scribal processes can contribute significantly to our understanding of the transmission of music from this period.

Before discussing examples from CH 564, I will give a summary of my methodology in relation to textual criticism and the determination of filiation. Stemmatic filiation has origins in the textual criticism first articulated by classical philologists and biblical scholars of the 19th century.¹¹⁶ However, my approach is coloured not only by developments in critical theory of the twentieth century but by the special nature of musical notation which embodies several levels of meaning. For me, the process of stemmatic filiation is one tool in the historian’s toolbox whose purpose is not only the development of a hypothesis concerning an authorial original or originals but also the development of hypotheses concerning the local reception of a work as reflected by each particular transmission. Not only does the very absence of anything resembling an autograph in this period warrant a careful approach, but our assumptions concerning the primacy of authorial intention must also be tempered by considerations of local reception. Extant sources not only carry forward elements of the authorial original, but they accrue additional aspects or values which beg the question of whether extant transmissions of a particular work are representative of one composition or of several compositions, which as a musical event in each case may have been audibly different in each circumstance. Transmissions are often ambivalent in terms of compositional intention coupled with local reception, and positive identification of the latter is the aspect that for me is of the greatest interest.

¹¹⁵ Cambridge, 1996, p. 69. Similar views are articulated by Reinhard Strohm in his consideration of the effective management of contamination of sources in the determination of filiation: ‘Does textual criticism have a future?’, in *L'edizione critica tra testo musicale e testo letterario: Atti del convegno internazionale (Cremona 4-8 Ottobre 1992)*, eds R. Borghi and P. Zappalà, Studi e Testi Musicali Nuova serie 3, Lucca, 1995, pp. 193-211.

¹¹⁶ In relation to the principles of textual criticism (principally in relation to Classical Greek and Latin), the following titles continue to be fundamental to this methodology: Paul Maas, *Textual Criticism*, trans. Barbara Flower, Oxford, 1958; Martin L. West, *Textual Criticism and Editorial Technique*, Stuttgart, 1973.

The nature of music and its notation requires a careful approach to the determination of filiation. Generally, the various readings transmitted for a work are categorised according to the usual model of good readings, plausible readings and clear errors.¹¹⁷ Good readings are common to all transmissions, and therefore serve as a basis for the determination of plausible readings and errors based on our stylistic understanding derived from them. Plausible readings are variants which, from our stylistic perception based on good readings, appear sound. They include rhythmic and melodic variation, substitution and semiotic variation (but semantic equivalence), i.e. ligatures, coloration, special note forms. Erroneous readings stem from one factor: scribal error. This includes the common copying errors such as dittography, lapsography, register errors and semantic inconsistencies. Plausible readings and errors may be described as conjunctive or separative.¹¹⁸ Conjunctive readings are shared by some extant witnesses, while separative readings distinguish one source or a collection of sources from other exemplars. Thus, separative errors may also be conjunctive if evidenced by more than one source, but not all sources.

James Grier insists that only the third category of readings, that is clear errors, can be used to determine stemmatic filiations.¹¹⁹ This ideological position, however, is simply insufficient when dealing with the sources of the *ars subtilior*. In this respect, I side with other scholars, particularly medievalists of the twentieth century, who felt that the second category of readings, plausible readings, were valuable tools for determining relationships between various texts.¹²⁰ This approach still admits the primacy of the common error, but in the many cases where common errors are too infrequent or nonexistent, I believe that one must turn to plausible readings instead. This approach, nonetheless, has one possibly serious flaw, in that one can argue that plausible readings may reflect authorial revision. Yet, the rebuttal for this argument is simply that if each transmission is also a social document, then it is also valid to identify a moment of revision which is inextricably linked to the composer's or scribe's socio-cultural circumstance.

Previous assessments of the transmission of the music of the late fourteenth century are poor in their content and demonstrate a reluctance to deal with notation in its original form (that is mensural notation). In discussing the relationships of Codex Reina with other sources, Kurt von Fischer appears to accept the presence of concordant readings as

¹¹⁷ Cf. Grier, *op.cit.*, pp. 31 & 62.

¹¹⁸ Vid. Maas, *op. cit.*, pp. 42-49.

¹¹⁹ Grier, *op.cit.*, p. 79.

indications of “points of contact” between sources.¹²¹ Soon after the publication of von Fischer’s article, Ursula Günther took firmer steps in assessing the relationship of concordant readings with Codex Chantilly by including assessments of scribal process as determinants of the exemplar.¹²² However, Günther’s assessment of transmissions is coloured by the Chantilly-exemplar hypothesis. There are, however, several indicators, some of them already discussed above, which point to Codex Chantilly being an original anthology collected in Italy.

The Chantilly-exemplar hypothesis provoked Günther to consider that the collection of six concordant readings found in the last gathering (11th) of Florence, Biblioteca Nazionale, Panciatichi 26 (henceforth Fn 26) was copied from the hypothetical exemplar rather than Chantilly itself.¹²³ However, several inconsistencies in the transmission of these works, which Günther views as indicative of the exemplar, may also be explained as the scribal initiatives or errors in Fn 26. Greene’s brief discussions of the relationship between Fn 26 and CH 564 are dominated by the phrase “(very) close relationship”,¹²⁴ although he avoids any suggestion of direct relationships.¹²⁵ Greene’s observations of the relationship between both sources are flawed by the omission of several significant variants and by his mild form of textual criticism. There are indications that several works in Fn 26 were copied directly from Chantilly, not an exemplar (which in my view probably never existed, at least in a form bearing resemblance to the extant codex).

As an introduction to an assessment of the relationship between Codex Chantilly and Fn 26, several observations made by John Nádas in his codicological and palaeographic study of the latter source should be noted.¹²⁶ In Fn 26, rather than using a rastrum to rule hexagrams, the outer vertical edges of bifolia were pricked (usually a whole

¹²⁰ Vid. Grier, *op.cit.*, p. 62-67.

¹²¹ Kurt von Fischer, ‘The Manuscript Paris, Bibl. Nat., nouv. acq. frç. 6771’, *Musica Disciplina*, vol. 9, 1957, pp. 43-45.

¹²² Günther, ‘Die Anwendung der Diminution in der Handschrift Chantilly 1047’, pp. 1-21.

¹²³ The use of different ligatures between transmissions and omissions of accidentals in Panciatichi 26 prompted Günther to write: “Diese Tatsache allein schon läßt darauf schließen, daß auch FP die Werke keinesfalls aus Ch direkt übernommen haben kann” (This fact alone already suggests that the Fn 26-works could in no way have been copied directly from CH 564.) in ‘Die Anwendung der Diminution in der Handschrift Chantilly 1047’, p. 4.

¹²⁴ vid. Greene, *French Secular Music: Manuscript Chantilly Musée Condé 564, First Part*, pp. 146, 154 and *idem, French Secular Music: Manuscript Chantilly Musée Condé 564, Second Part*, pp. 182, 184 & 195.

¹²⁵ In his thesis, however, Greene does propose a direct relationship between CH 564 and Fn 26: Greene, “The Secular Music of Chantilly Manuscript Musée Condé 564 (olim 1047)”, p. 40. Gilbert Reaney assumes a direct relationship between CH 564 and Fn 26 in ‘The Manuscript Chantilly, Musée Conde, 1047’, p. 76.

¹²⁶ John Nádas, ‘The structure of MS Panciatichi 26 and the transmission of Trecento polyphony’, *Journal of the American Musicological Society*, vol. 34, no. 3, 1981, pp. 393-427.

gathering at a time) at intervals to guide the ruling of individual staff lines. With regard to the 11th gathering, Nádas observed internally inconsistent preparation between the two outer bifolia (ff. 101/110, 102/109), which lacked any sign of pricking, and the three inner bifolia (ff. 103/108, 104/107 and 105/106), which were pricked as a unit.¹²⁷ This grouping, according to Nádas, was supported by the presence of two different watermarks corresponding to different preparation. The “three mounts surmounted by a cross” watermark (Nádas’ type 2 watermark) occurs in outer two bifolia of Gathering 11.¹²⁸ Gatherings 1, 3, 6, 7, 8, 9, 10 and most of 5 employ paper bearing this water mark. The “three mounts in a circle surmounted by a cross” watermark (Nádas’ type 3 watermark) occurs in the inner ternion of Gathering 11, the whole of Gatherings 2 and 4 and the two outer bifolia of Gathering 5.¹²⁹

A point of contention, which arose from my own inspection of this source, concerns Nádas’ conclusion that the inner ternion of Gathering 11 predates its outer additions. While the outer two bifolia of Gathering 11 and a similar natured bifolium (ff. 55/56) occurring in the middle of Gathering 6 may suggest a later preparation through the absence of prick marks and differing demarcation of writing space, there exists a noticeable difference in the ink quality used to rule staff lines of the inner ternion of Gathering 11. Unlike the staff lines throughout most of the manuscript including the two outer bifolia of gathering 11, which employ a viscose ink that settles into the minute valleys of the paper’s chain-marks, the ink employed for the staves on ff. 103r-108v frequently only sits on the raised areas of the paper, indicating a less viscose ink, or the lighter application of the writing implement when ruling lines. As Nádas himself admits,¹³⁰ correspondence of prick marks between gatherings is usually absent. While the assumption that the lack of pricking is indicative of subsequent preparation is a fair one, there is nothing to suggest that the inner ternion of Gathering 11 was not prepared later as a unit using prick marks, possibly by a scribe other than the one responsible for the preparation of the bulk of the manuscript. The matter, however, is of relatively minor significance to the present discussion in light of the strong possibility that CH 564 concordances were entered after the gathering was already assembled. The work of Scribe F spans ff. 103v-109r.

¹²⁷ Nádas, ‘The structure of MS Panciatichi 26 and the transmission of Trecento polyphony’, p. 398.

¹²⁸ Plates showing water marks found in Fn 26 are found in Nádas, ‘The structure of MS Panciatichi 26 and the transmission of Trecento polyphony’, pp. 405-407.

¹²⁹ Nádas, ‘The structure of MS Panciatichi 26 and the transmission of Trecento polyphony’, pp. 396-97.

¹³⁰ Nádas, ‘The structure of MS Panciatichi 26 and the transmission of Trecento polyphony’, p. 401.

According to Nádas,¹³¹ palaeographic evidence and diversity of repertoires suggests that there exist at least four layers of copying in Fn 26: a collection of Italian *trecento* repertoire initiated by Scribe A which was continued by the collaborative efforts of Scribes B and C; Scribe D may have subsequently joined Scribe C; Scribe E was responsible for the addition of several mid-fourteenth century French works to the manuscript; Scribe F was mostly responsible for the Chantilly inserts (103v-109r), two *unica* inserted in the second gathering – an untexted work on f. 16v ascribed to Marcus and a *ballata* ascribed to “do” on f. 17r with the incipit *O lieta stella* – and the addition of a *La douce cere* by Bartolinus de Padua at the end of the manuscript¹³²; Scribe G adds two works at the beginning of Gathering 11. Hands H and I add a later repertoire, which includes works by the composers Du Fay, Cesaris, and Antonio da Civitate, to previously blank pages in Gatherings 2 and 4. However, it appears, based on the cross-relation of watermarks, that scribes initially responsible for the preparation of the writing material (Scribes A, B, C, and D) drew on a limited source of papers that were relatively uniform in their preparation, indicating all stages of its composition were carried out in the one vicinity, if not the one workshop. Nádas also proposes that the index was compiled by Scribe D “since the early days of the fifteenth century” before the entry of works such as Cesaris’ *Bonte bialte*, whose index entry appears not under the Letter B but at the end of the index.¹³³

In a recent re-examination of Fn 26, Stefano Campagnolo has proposed that a fifth scribe be added to Nádas’ principal Scribes A, B, C, and D.¹³⁴ He proposes that in the place of Nádas’ Scribe B, Scribe A2 is responsible for the oldest layer of Gathering 2 (10v-14r, 20r), the first part of Gathering 4 and an addition to Gathering 5. This scribe, he argues, was responsible for a group of less widely or uniquely-transmitted works by Landini (which might represent Landini’s final creative stage) added subsequent to a more widely circulated repertoire copied by Scribe A. Campagnolo also suggests that Scribe D is responsible for an addition to Gathering 4 and is present at the end of Gathering 5. Additionally,

¹³¹ Nádas, ‘The structure of MS Panciatichi 26 and the transmission of Trecento polyphony’, pp. 401, 409, 426.

¹³² Pierluigi Petrobelli proposes that this work refers to the arms of Masilio Papafava da Carrara, Lord of Padua 1390-1405, in ‘Some dates for Bartolino da Padova’, in *Studies in Music History: Essays for Oliver Strunk*, ed. H. Powers, Princeton, 1968, p. 104.

¹³³ Nádas, ‘The structure of MS Panciatichi 26 and the transmission of Trecento polyphony’, p. 414.

¹³⁴ Stephano Campagnolo, ‘Il codice Panciatichi 26 della Biblioteca Nazionale de Firenze nella tradizione delle opere de Francesco Landini’, in *Col dolce suon che da te piove: Studi su Francesco Landini e la musica del suo tempo in memoria di Nino Pirrotta*, eds A. Delfino and M. T. Rosa Barezani, Studi e Testi Scuola di Paleografia e Filologia Musicale 2, Firenze, 1999, pp. 89-91.

Campagnolo challenges Nádas' hypothesis concerning Scribe D's authorship of the index based on palaeographic and orthographical features. Based upon these revisions, Campagnolo suggests the dating of the earliest layers of the manuscript to around 1390, similar to that previously proposed by Nino Pirrotta and Kurt von Fischer.¹³⁵ In turning to the later additions in Fn 26, Campagnolo sees similarities between the J initial of *Je prins conget* entered by hand G (and G') and the initials in the two Cordier inserts in Codex Chantilly. He sees this as indicative of a later dating of 1420-30. Based on this dating, the similarity of one initial, its Florentine (even Landinian) origin, and Michael Long's thesis concerning its connections to Florentine bourgeois,¹³⁶ Campagnolo proposes that Fn 26 was taken to Paris or Montpellier by the Alberti family during their exile from Florence, and the additions of Scribes F and G were "fatte direttamente in Francia".¹³⁷

Yet the fallibility of Campagnolo's hypothesis in relation to the late additions to Fn 26 resides in his acceptance of Günther's own hypothesis that CH 564 was copied from French exemplars in France before 1428 and that concordances with Fn 26 are copies of these exemplars and not CH 564 itself. The result is an historiographic house of cards. Campagnolo makes no mention of Scribe H's entry of Antonio de Civitate's *Long temps j'ay mis mon cuer* on f. 38r of Fn 26, which is also present in northern Italian I-Las 184, f. 37v.¹³⁸ The topicality of the text of motets ascribed to Antonio da Civitate with events in Italy *circa* 1412-21 tends to suggest that he was active in that region,¹³⁹ not in France. Antonio's connection with Florence in the second decade of the fifteenth century suggests the possibility that his works were already available at that time for copying into Fn 26 in that city.¹⁴⁰ Furthermore, the similarity of initials in the Cordier-inserts and the initial

¹³⁵ Campagnolo, *op.cit.*, pp. 92-111.

¹³⁶ Long, "Musical Tastes in Fourteenth-century Italy: Notational Styles, Scholarly Traditions, and Historical Circumstances", p. 178.

¹³⁷ Campagnolo, *op.cit.*, pp. 112-114.

¹³⁸ It is argued that I-Las 184 originated in Padua, with associations with the Carrara, and contains elements from the Visconti court during the years c. 1390-1408. A final layer was added to the south-bound codex by a Florentine scribe, whose work is also evident in Pn 568 and Lowinsky fragment (now Chicago, Newberry Library, Case Lo96.P36); *vid.* John Nádas and Agostino Ziino, *The Lucca Codex: Codice Mancini: Lucca, Archicicio de Stato, MS 184. Perugia Comunale "Augusta," MS 3065*, *Ars Nova* 1, Lucca, 1990, pp. 48-49. On the Lowinsky fragment, *vid.* Nino Pirrotta, *Paolo Tenorista in a New Fragment of the Italian Ars Nova*, Palm Springs, 1961; Nádas, 'The songs of Don Paolo Tenorista', p. 51.

¹³⁹ *Vid.* Hans Schoop, revised Robert Nosow, 'Antonius de Civitate Austrie', in *The New Grove Dictionary of Music and Musicians*, 2nd edn, ed. S. Sadie, London, 2001, vol. 1, pp. 766-7, where motets with references to Florence, Forlì, Trani and to the return of Martin V to Rome after his election at the Council of Constance are discussed.

¹⁴⁰ There are similar uncertainties regarding works copied by Hand I. The early transmission of Du Fay's *Invidia nimica* in Italy is attested to by its presence in Ob 213, copied in Venice 1428-36, *vid.* David Fallows,

found in *Je prins conget* copied by Hands G and G' is superficial at best. Finally, Campagnolo's dismissal of G. K. Greene's broad assessments of direct relationships between CH 564 and Fn 26 appears premature and begs further attention.

Collation of readings (*vid.* Vol. II, App. B, No. 2, *Variants*) transmitted in both sources reveals a low level of variation, particularly in the concordances copied by Scribe F. In terms of pitch and rhythmic variants between works copied by Scribe F with Codex Chantilly, the following observations apply. Compared with CH 564, the Fn 26 transmission of *Le mont Aön de Trace* (CH 564, ff. 22v; Fn 26, ff. 103v-104r) sees the omission of two p.d. (before S 18.1, after S 52.1), and the addition of one p.d. (before Ct 55.3). Although additional p.d. clarify readings, their absence is inconsequential if note groupings are considered. One further small variation occurs in the case of the last note of the Ct: in CH 564 it is written as a *longa*, in Fn 26 as a *brevis*.¹⁴¹

In addition to these simple variants, signs of modification suggesting a close relationship between these two transmissions. The most notable occurs in the S voice in the refrain where the fourth and fifth *semibreves* in both transmissions have been modified.¹⁴² In both cases the pitch of these two durations has been corrected by erasing the original colorated *semibrevis* (red in CH 564, void in Fn 26) on the pitches *d* and *c* and rewriting each note one pitch higher (*e* and *d*). The relative portions of both readings are shown in Figure 2.11 and Figure 2.12.

Oxford, Bodleian Library, MS. Canon. Misc. 213 with an Introduction and Inventory by David Fallows, Late Medieval and Early Renaissance Music in Facsimile 1, Chicago and London, 1995, p. 19. It is possible that the copying of Ob 213 began as early as 1422. Invidia nimica also occurs in I-Bc 15, which also was copied c. 1420-1436 possibly in Padua and Vicenza, vid. Margaret Bent, 'A contemporary perception of early fifteenth century style: Bologna Q15 as a document of scribal editorial initiative', Musica Disciplina, vol. 41, 1987, pp. 183-201. Du Fay was likely at Rimini by 1423; in 1434 he was at Florence in the chapel of Martin V, vid. David Fallows, Dufay, London, 1982, pp. 22 & 44. Ob 213 also provides ample evidence of the transmission into Italy of the works of composers from the Sainte Chapelle de Bourges, including Johannes Cesaris, Pierre Fontaine, Guillaume Legrant, Johannes de Bosco and Mathieu Poullet, vid. Paula Higgins, 'Music and musicians at the Sainte-Chapelle of the Bourges Palace, 1405-1515', in Trasmissione e ricezione della forme di cultura musicale. Atti del XIV Congresso della Società Internazionale di Musicologia, eds A. Pompilio, D. Restani, L. Bianconi & F. A. Gallo, Turin, 1990, vol. 3, pp. 689-701. This evidence is strengthened by the south-ward movement into Italy of several northern composers during the 1420s. Pierre Fontaine, Nicholas Grenon, and Guillaume Lenfant are documented as singers of Martin V's chapel from 1419/20, vid. Franz Xavier Haberl, op.cit., vol. I, pp. 57, 59; vol. II, p. 32. Nicholas Grenon soon joined them (before 1425), vid. Craig Wright, Music at the Court of Burgundy 1364-1419: A Documentary History, Henryville, 1979, pp. 174-77.

¹⁴¹ It is even possible that this note is a *longa*, as the right hand side of the note is flush with the right hand vertical guide which might obscure the presence of the stem.

¹⁴² Greene, in the critical notes to his transnotation of this work in *French Secular Music: Manuscript Chantilly Musée Condé 564, First Part*, p. 153, states that "The argument for there having been a close relationship between CH 564 and Fn 26 is strengthened by observing a minor correction that occurred in both MSS. The two red SB ed (bars 68-69) are corrections added after something else was erased."

Figure 2.11: Detail of modifications in the refrain of the Superius voice of *Le mont Aön* in CH 564, f. 22v.

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Figure 2.12: Detail of modifications in the refrain of the Superius voice of *Le mont Aön* in Fn 26, f. 103v.

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As can be seen in Figure 2.11, an additional correction appears only in CH 564 where the durations $\blacklozenge \blacksquare \blacklozenge$ have been erased and shifted a third lower. Although the original reading would have been contrapuntally acceptable, the corrected reading gives fuller three-part sonorities (*vid.* Vol. II, App. A, No. 2, BB. 71-77). In the Fn 26-transmission of *Le mont Aön*, the reading in question appears to have been copied in the first instance. Yet, it is difficult to ascertain whether the reading in CH 564 represents a scribal alteration or restoration of the original text. It appears, from the unsteadiness of note stems, that the alterations in the CH 564 transmission of *Le mont Aön* were made by the same individual who was responsible for the alterations discussed in Section 2.3. One might conclude that if *Le mont Aön* in Fn 26 is a copy of the CH 564 transmission of this work, then the editing of Chantilly must have occurred beforehand.

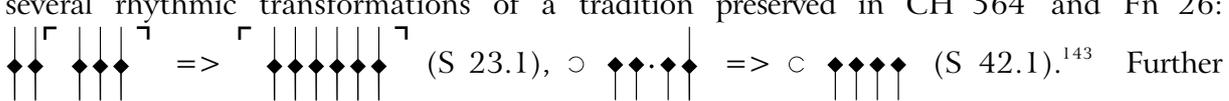
In the case of identical modifications in the first part of the refrain section of the S of *Le mont Aön*, in CH 564 there are indications that the corrections in a very similar red ink were not executed using the same writing process. The principal scribe (β) of CH 564 executes red notes as he would black notes by placing the broad nibbed writing implement at approximately 30° from the upright vertical and making a short movement in a direction approximately 150° from the upright vertical. The corrections, however, bear signs of the use of a smaller nib, or the corner of an implement that was used to draw the outline of the

note, which was then filled in with red ink. The bolder line of the corrections in Fn 26 may be due to a different writing implement, but are most likely due to the different nature of a paper writing surface after scraping.

The probability of the coincidence of these simultaneous corrections in both sources of *Le mont Aön* appears remote, even in light of each scribe's hypothetical aural knowledge of this repertoire. Evidence of a second correction in CH 564 and the appearance of this corrected reading in Fn 26 in the first instance, suggests multiple scenarios. Either it is a copy of the corrected reading in CH 564, or it represents another tradition. Much depends on when CH 564 was edited. The following hypothesis may be proposed. Scribe F copied from a hitherto uncorrected reading of *Le mont Aön* occurring in CH 564. Pausing at the end of the first phrase of the S refrain section, he sought to correct the fourth and fifth *semibreves* in his copy, also taking pains to modify his exemplar (notably, using red ink). In examining the next passage of his exemplar, the second correction was imposed, which was subsequently copied in Fn 26.

Yet, an apparent contradiction exists in the aforementioned hypothesis in that the corrections in CH 564 are not made with a broad nibbed implement. Scribe F of Fn 26 appears facile in the use of this implement and would have presumably employed it to correct the red notes in CH 564 if this was the case. It is also possible that the second correction existed in CH 564 before Scribe F copied the work into Fn 26, but Scribe F or a subsequent editor was responsible for the correction of both colorated *semibreves* in both sources. Both hypotheses remain mere conjectures limited by certain discrepancies, despite a higher level of probable association between sources. As such, notions of direct relations between the transmissions of *Le mont Aön* in CH 564 and Fn 26 alone are less than conclusive.

Je ne puis avoir plaisir sees little significant variation between the transmissions in Fn 26 (f. 104v-105r, copied by Scribe F) and in CH 564 (f. 24r) apart from slightly different ligature configurations (*vid.* Vol. II, App. B, No. 7, *Variants*). In fact, the greatest level of variation occurs between the CH 564-Fn 26 pair and the MOe5.24 (f. 20v) transmission of this work. The active nature of MOe5.24's scribe most likely resulted in several rhythmic transformations of a tradition preserved in CH 564 and Fn 26:



(S 23.1), o => o (S 42.1).¹⁴³ Further

¹⁴³ See my discussion of this work in terms of the transmission of mensuration signs in Chapter 5, p. 275.

comparison of the CH 564-Fn 26 pair and MOe5.24 yields one additional, but highly significant variant at S 27.4. Two dragma () are found at this point in MOe5.24, whereas CH 564 and Fn 26 transmit two *semibreves*. Taking into account the context of each reading, in that the CH 564-Fn 26 reading is preceded by the mensural sign \circ and the MOe5.24 reading by C, the semantic inconsistency of the two *semibreves* in CH 564-Fn 26 clearly reveals a shared common error. Nowhere else in CH 564-Fn 26 do two *semibreves* after the sign \circ indicate the *subsésquialtera* at the *minima* level required for this reading. Instead, this signification is reserved to the *dragma* combined with the sign \circ .¹⁴⁴

Comparison of the two transmissions of *Toute clerte* (CH 564, f. 13r; Fn 26, 105v-106r; *vid.* Vol. II, App. B, No. 8, *Variants*) yields two significant variants: a p.d. is not present after S 11.3 in Fn 26, but is in CH 564, giving the correct rhythm of  rather than ; at S 37.2 a *minima* appears on the pitch *e* in CH 564, while in Fn 26 it is *g*'. Both variants may be attributed to copying errors made by Scribe F in Fn 26 when copying from an exemplar exactly as CH 564.¹⁴⁵

Comparison of the two transmissions of *Pluseurs gens voy* (CH 564, f. 58r; Fn 26, f. 106v-107r; *vid.* Vol. II, App. B, No. 9, *Variants*) yields three significant variants. At S 22.1, CH 564 has two *minima* rests and Fn 26 has, erroneously, a *semibrevis* rest. At S 26.1, CH 564 lacks a necessary *semibrevis* rest that is found in Fn 26. The close proximity, almost touching, of the additional *semibrevis* rest in Fn 26 to the previous *semibrevis* suggests that it was inserted by Scribe F (or a subsequent reader) before the *minima* rest which is present in both transmissions of this work. Based on the assessment that the reading in Chantilly is an error, its transmission into and correction in Fn 26 argues strongly for the latter manuscript's direct descent from CH 564. Greene has previously noted a pitch correction in Fn 26 at Trip 25.4 where *e*, as read in CH 564, has been corrected to *g*.¹⁴⁶ Erasure of the binary ligature *c.o.p*, whose first part is on the pitch in question, is clearly

¹⁴⁴ There is also the issue of mensural signs in the passage beginning at S 29.1. Again, CH 564 and Fn 26 are identical, while MOe5.24 sees a different configuration of signs that yields a reading no less satisfactory than in CH 564-Fn 26 pair.

¹⁴⁵ Greene, based on his incorrect reading of the music of *Toute clerte*, asserted that the transmission of S 9.2 as a *semibrevis* in both Fn 26 and CH 564, which he (and Apel) read as a *brevis*, was evidence of common error, in his *French Secular Music: Manuscript Chantilly Musée Condé 564, First Part*, p. 146. This is not the case as the Sbr is the correct duration, whose significance is thereby diminished. Ursula Günther demonstrates this transnotation error in 'Sinnbezüge zwischen Text und Musik in ars nova und ars subtilior', in *Musik und Text in der Mehrstimmigkeit des 14. und 15. Jahrhunderts*, eds U. Günther and L. Finscher, Göttinger Musikwissenschaftliche Arbeiten 10, Kassel, 1984, pp. 232-234.

¹⁴⁶ Greene, *French Secular Music: Manuscript Chantilly Musée Condé 564, Second Part*, p. 195.

visible in Fn 26. This second example of a shared but subsequently corrected error further argues for a direct relationship of Fn 26 to CH 564. One should also note that Scribe F crosses out the first part of a dittographic error in the Trip where he started copying the passage at 52.1 but then his eye wandered to the previous passage at 50.1 only to realise his error upon arriving again at the *brevis* in 51. Fn 26's status as a child manuscript relative to Chantilly is also suggested by the complete lack of text apart from an incipit in the works copied by Scribe F.

The most pointed evidence of direct copying is found in the anonymous ballade *Medee fu* (vid. Vol. II, App. B, No. 10, *Variants*). While the third transmission of this work occurring in Ob 213 presents numerous variants indicative of another tradition of transmission in northern Italy, the transmissions in Fn 26 (ff. 107v-108r) and CH 564 (f. 24v) agree to a high degree. Based on purely text-critical methods, it is impossible to determine any relationships between these transmissions based on two plausible readings (S 10.1 f CH 564, g Fn 26; Ct 14.1 $\blacklozenge\blacklozenge$ CH 564, $\blacklozenge\blacklozenge$ Fn 26). Another curious variant exists at S 2.2 where the redundancy of p.p. in CH 564 (p.p.) is demonstrated by their absence in the transmission in Fn 26 (p.p.). It seems plausible that Scribe F recognised this when copying from CH 564, and omitted the redundant dots.

However, the copying process in the Fn 26 transmission of *Medee fu* reveals much more. The Indo-Arabic numerals 2, 3 and 4 are used in this work to indicate proportions as explained by a canon (2=4:3, 3=3:2, 4=2:1). The canon is absent in Fn 26. In the third staff of the S voice commencing on f. 107v of Fn 26 (B. 39), one finds a figure that resembles the figure 8. The numeral 4 is written in the same relative location on the third staff in Chantilly, although in this instance only it is drawn in such a manner that the transversal merges with the descender. This numeral 4 was then misread from Chantilly as the numeral 8 by the scribe of Fn 26, providing evidence of a direct relationship between these transmissions.¹⁴⁷

The additional concordance with CH 564, *Cine vermeil* (CH 564, f. 56r; Fn 26 ff. 101v-102r), was copied by Scribe G into Fn 26. This concordance is unique among the works in Gathering 11 of Fn 26 due to the presence of the near-complete first strophe of

¹⁴⁷ The other significant variation in scribal process consists of C-clefs of the S in Fn 26 always on the third line from the bottom of the staff. CH 564, meanwhile, sees a C-clef on the third line from the bottom for the first stave and then on the second line for all other subsequent staves bearing this voice. However, it could be easily argued that the scribe of Fn 26 recasts his exemplar to a uniform clef usage.

the text as underlay beneath the S. The underlay in Fn 26 shows many similarities to that found in CH 564. The word *pris* in first line of the ballade is also unnecessarily repeated in both transmissions. Both transmissions of this work also are lacking the second and third strophes of the ballade. Variance between both readings is again small (*vid.* Vol. II, App. B, No. 11, *Variants*), most consisting of plausible readings. These include several instances where the configuration $\blacklozenge\blacksquare\blacksquare$ found in CH 564 (a type of written out alteration, but reliant on the incorrect imperfection of the first *brevis* by the preceding *semibrevis*) is rewritten more correctly in Fn 26 as $\blacklozenge\blacklozenge\blacksquare$ (S 10.1, Ct 33.2, 54.1), where the second *semibrevis* is altered in the perfect *tempus*. That Scribe G is responsible for rewriting these portions is suggested by correction of the two instances in the Ct where there are visible signs of an erased *brevis* under the second *semibrevis* in the present reading. Similar rewriting may also be evidenced by the $\blacklozenge\blacklozenge\blacksquare$ group in CH 564 (S 28.1), whose second *minima* must be arbitrarily altered, being correctly written as $\blacklozenge\blacklozenge\blacksquare$ in Fn 26.

Additional differences are observable between transmissions of *Cine vermeil*. Scribe G appears to introduce an error by omitting the last *brevis* of the T. The mensural sign \odot is observed at the beginning of the Ct in Fn 26. It is absent in CH 564. Furthermore, where CH 564 has the sign O at Ct 10, Fn 26 transmits \odot . The prolation in both cases is major. However, the reading in CH 564 cannot be merely assigned to the status of an error. As I argue in Chapter 5, the status of this sign is less than categorical, often signifying *tempus* relationships only with prolation indicated through intrinsic signs. It is also possible that a variant found at the beginning of the T, which consists of a dotted *brevis* in CH 564 and a *brevis* imperfected by a subsequent *semibrevis* rest, is a copying error where the *punctus* has been copied as a rest. Both readings remain plausible.

Several observations in the previous paragraphs support the proposition that Fn 26 contains copies of works made from CH 564 in so far as the activity of Fn 26's Scribe F is concerned. Comparison of these concordances in the first instance reveals a significantly low level of variance suggestive of a close relationship. According to the principles of stemmatic filiation, the transmission and correction of a common error in *Pluseurs gens voy* from CH 564 to Fn 26 argues strongly for the child status of Fn 26 in relation to CH 564. This relationship would appear to be direct based on an error described above which is introduced in *Medee fu. Je ne puis avoir plaisir* also contains evidence of a distinct

tradition in the CH 564-Fn 26 pair when compared to MOe5.24. Finally, the transmissions of *Le mont Aön* argue for a close interaction between CH 564 and Fn 26.

While one can conjecture why certain works were copied from the CH 564 compendium to Fn 26 by Scribe F, it is perhaps significant that four works are found in the first gathering of CH 564 (13r, 22v, 24r, 24v), three of which are on the same bifolium (13-24). The fifth work copied by Scribe F, *Pluseurs gens voy*, is found in the fourth gathering. The proximity of this work to *Cine vermeil* in CH 564, copied into Fn 26 by Scribe G, may not be coincidental. Based on Scribe F's preference for void coloration in Fn 26, it is reasonable to conclude that several works (16 in total) were avoided in CH 564 which would necessitate the re-notation of several levels of coloration. Fifteen works employing this category of notation occur in the third (4) and fourth (11) gatherings. It is debatable whether any textual interrelations between these works were significant to Scribe F whose reluctance to preserve any more than the incipit of each work instead betrays an interest in the music.

All five works copied into Fn 26 from CH 564 are linked by the same tonal behaviour. According to the Lefferts' nomenclature,¹⁴⁸ the alpha minor tonal type is used throughout, untransposed (d) in *Pluseurs gens voy* and *Medee fu*, transposed flat-wards once (g) in *Le mont Aön* and transposed twice flat-wards (c) in *Je ne puis avoir plaisir* and *Toute clerte*. However, Yolanda Plumley has shown that this tonal type is present in 51% of the repertoire in CH 564, although she does suggest that an increase from 27% of Machaut's repertoire in this tonal type indicates a standardisation of tonal types which resulted in the lesser frequency of beta-tonal types.¹⁴⁹ While common tonal behaviour may explain the presence of these works in Fn 26, it only partially explains why certain works were chosen from CH 564. It may explain why works were not copied in the sequence that they occur in CH 564, as the works occur sequentially on g, c, c, d, d in Fn 26.

The copying of the Chantilly concordances into Fn 26 may be summarised as such: an assembled collection of *trecento* repertoire (copied by Scribes A-D) with earlier additions from the French repertoire by Scribe E came into the hands of Scribe F; Scribe F also had access to CH 564; based on a set of decisions limited by notational constraints and possible

¹⁴⁸ Peter M. Lefferts, 'Signature-systems and tonal types in the fourteenth-century French chanson', *Plain-song and Medieval Music*, vol. 4, no. 2, 1995, pp. 117-47.

¹⁴⁹ Yolanda Plumley, *The Grammar of 14th Century Melody: Tonal Organization and Compositional Process in the Chansons of Guillaume de Machaut and the Ars Subtilior*, New York & London, 1996, p. 20. Cf. Lefferts, 'Signature-systems and tonal types in the fourteenth-century French chanson', p. 147.

musical criteria such as tonal behaviour, Scribe F copied five works from CH 564, making small adjustments where he saw fit, onto blank folia at the end of Fn 26. In this scenario, there is scope to argue that Scribe F also made some changes to his exemplar. It seems probable based on the Florentine origin of works in its earlier gatherings and subsequent associations¹⁵⁰ that the Fn 26 never left Florence.¹⁵¹ I would also argue that the presence of works subsequently entered by Scribes H and I into Fn 26 using white notation, which are indicative of a repertoire dating before 1425 or earlier, suggests that the additions from CH 564 were copied before this date.

It has been proposed by previous scholars that the manuscript Paris, Bibliothèque Nationale, nouv. acq. frç. 6771 (henceforth Pn 6771) has connections with CH 564. Kurt von Fischer sees “points of contact” between French-texted works copied by his Hand D into Pn 6771 and their concordances in CH 564 and MOe5.24.¹⁵² Similarly, he proposes that, in relation to the French works copied by his Hand E, Pn 6771 and CH 564 show evidence of common exemplars. Wolfgang Dömling, in his brief assessment of the transmission of Machaut’s works also proposes the hypothetical stemma wherein CH 564 and Pn 6771 share the same exemplar.¹⁵³ Dömling’s assessment, however, must

¹⁵⁰ John Nádas provides an overview of the later provenance of Fn 26 in his “The Transmission of trecento Secular Polyphony: Manuscript Production and Scribal Practices in Italy at the End of the Middle Ages”, p. 57, fn. 108. The manuscript possibly came into the possession of Lorenzo Panciatichi (1635-1676), custodian of the Medici library in 1661. Panciatichi may have acquired the manuscript from the illustrious Florentine Benedictine Vincenzo Borghini (1515-80), although specific evidence of this ms is lacking in the inventories (and will) of the latter’s collection. The present manuscript came into possession of the Biblioteca Nazionale at Florence in 1859.

¹⁵¹ Aside from the presence of composers representative of the Florentine *trecento*, F. Alberto Gallo notes in the introduction to the facsimile edition of Fn 26 that the composer of the first entry by Scribe F (f. 16v) may be identified with Marcus, a singer documented at the S. Reparata in 1410, Florence, *Il codice musicale Panciatichi 26 della Biblioteca nazionale di Firenze*, Studi et Testi per la storia della musica 3, Firenze, 1981, p. 8.

¹⁵² Kurt von Fischer, ‘The Manuscript Paris, Bibl. Nat., nouv. acq. frç. 6771’, p. 45. Von Fischer observed the presence of 7 hands in Pn 6771: The first part of the collection was copied by Hands A (1r-39v, 43r-44r, 47v-52v), B (39v-41r, 45b-46r), and C (44v-45r); Scribe D (53r-62v, additions 12v-13r, 46v-47r, 65v-66r, 72v-73r, 77v, texts on 65r and 70r), who is for the most part identical with Nádas’ Scribe W; Scribe E (f. 63r-84v) who encompasses the additions of Nádas’ Scribe Y and Scribe T to Gatherings 6 and 7), and Scribe F, who corresponds to Nádas’ Scribe Z. Nigel Wilkins contested von Fischer’s assessment wherein he asserts von Fischer’s Scribes A and E are identical (=Wilkins’ Scribe I), as are Scribes C and D (=Wilkins Scribe III), while von Fischer’s Scribes B and F are relabelled as Scribes II and IV, in Nigel Wilkins, ‘The Codex Reina: A revised description (Paris Bibliothèque Nationale n.a.fr. 6771)’, *Musica Disciplina*, vol. 17, 1963, pp. 60-66. Wilkins’ conclusions are largely rebutted in John Nádas, ‘The Reina Codex revisited’, in *Essays in Paper Analysis*, ed. S. Spector, Washington, 1987, pp. 69-114.

¹⁵³ Dömling, ‘Zur Überlieferung der musikalischen Werke Guillaume de Machauts’, p. 192. Nádas’ Scribe W is responsible for copying Machaut’s *Quant Theseus/ Ne quier* (ff. 54v-55r), while Scribe Y is responsible for copying into Gathering 6 *En amer la douce vie* (f. 63r), *De Fortune me doy pleindre et loer* (f. 64v), *Gais et jolis, lies, chantans et joieus* (f. 65r), *Dame, de qui toute ma joie vien* (f. 68v), *Il m'est avis qu'il n'est dons de Nature* (f. 69v), and *De toutes flours*, f. 72r.

be viewed within the context of the one-source exemplar hypothesis that was attributed to CH 564 by scholars in the early part of the twentieth century. Ursula Günther also maintained that concordances with CH 564 in Pn 6771 were in part descended from the “Chantilly exemplar”.¹⁵⁴

Pn 6771 contains nine non-Machaut works concordant with CH 564. In considering the transmission of works in Pn 6771, a recent codicological and palaeographic study of this source, also by John Nádas, forms a vital framework upon which the fabric of any assessment of the relation of individual layers and scribes to their exemplar can be overlaid.¹⁵⁵ Nádas’ examination of watermarks reveals that there are at least four different divisions in the present codex. Gatherings 1 to 3 form a distinct unit with a single paper type used throughout (watermarks 1a and its twin). Gatherings 4 and 5 show a mixture of two new paper types (watermarks 2a and 3) with papers from the first division, mostly the twin of 1a. Gatherings 6 and 7 are dominated by papers with a watermark similar to 1a, referred to as 1b by Nádas, although the use of an another paper type (4) as the outer bifolium of 6 and 7 and the innermost bifolium of 7, in addition to an orphaned catch word on 67v suggests a complex process of compilation. Gathering 8 and what has survived of 9 is in yet another paper type, and represents a late addition of French works composed by the young Du Fay and his contemporaries.

Nádas identifies seven scribes in Pn 6771. Scribes S and T collaborated for the first layer of the manuscript (Gatherings 1-3).¹⁵⁶ Copying in Gatherings 4 and 5, which represent a second layer of compilation, was continued by Scribe S who was joined by Scribe U.¹⁵⁷ Scribe W,¹⁵⁸ responsible for the most part of Gathering 5 (but also appearing in Gathering 4), also appears for the first time in this gathering and may have also been associated with Scribe U. Scribes U and W were also responsible for an addition each to

¹⁵⁴ Ursula Günther, in an assessment based on K. von Fischer’s analysis of scribal hands, states that *Playsance! Or tost, Phiton, Phiton, Quant Theseus/Ne quier*, and *Fuions de ci, Alarme, alarme, En remirant* and *En nul estat* can be feasibly linked to the a so-called Chantilly original in ‘Die Anwendung der Diminution in der Handschrift Chantilly 1047’, pp. 6-8.

¹⁵⁵ John Nádas, ‘The Reina Codex revisited’, pp. 69-114.

¹⁵⁶ According to Nádas, Scribe S is responsible for works copied on ff. 1r-12r, 14r, 16v-24v, 26r, 28r-36r, 48v-49v with additions to 15r, 26v-29r, 30v-31r, 33v-34r, 50v-51r; Scribe T= ff. 13r-13v, 14v-16r, 25r-25v, 26v-27v, 23r?, 81r-v?, 82r-84v with additions on ff. 14r, 17v-18r, 26r.

¹⁵⁷ Nádas’ Scribe U = ff. 38r-39v, 43r-44r, 47r (? = S?), 50r-v, 52r, 61v with additions to ff. 9v & 62r.

¹⁵⁸ Nádas’ Scribe W = ff. 44v-45r, 46v-47r, 53r-61r, 62r-v with additions on ff. 12v, 65v-66r, 72v-73r & 77v.

Gathering 1. Additions to the second layer were also made by scribes V and X.¹⁵⁹ In general, Scribes S, T, U, V and X were responsible for copying a *trecento* repertoire of works by Florentine and Paduan composers. Scribe W, although having a hand in some *trecento* works, shows a preference for French and even Flemish texted works in French *ars nova* notation. Gatherings 6 and 7 witness the presence of Scribe Y who was responsible for most of the French-texted works in French notation in gathering 6 (Scribe W also added some portions) and parts of Gathering 7.¹⁶⁰ Gathering 7, however, sees the return of a hand very like Scribe T, but in this case, this scribe was responsible for copying French works. It is also possible, based on the presence of different papers in this layer, that this portion of the manuscript represents a separate project brought into the collection by Scribe T, or Scribe W. The final layer in the collection (ff. 89v-119r) was copied by a single Scribe Z.

According to Nádas' assessment of scribal hands in Pn 6771, all concordances with CH 564 appear to be additions by later scribes. Scribe Y copied *Alarme, alarme sans sejour* (f. 69r) and *De ce que foul pense souvent remaynt* (f. 71v). Although Nádas was reluctant to indicate the scribe responsible for the copying of the following works, it is also likely that *De Narcissus* (f. 81r), *En nul estat* (f. 79v) and *En remirant* (f. 80v) were also copied by Scribe Y. It is evident that Scribe Y was drawing on a tradition not immediately shared with CH 564 or its exemplars. Collation of the relatively numerous transmissions of *De ce que foul pense souvent remaynt* reveals two separate traditions (*vid.* Vol. II, App. B, No. 12, *Variants*). The variant at S 5.1 (as shown in Figure 2.13) suggests an early bifurcation in the transmission of this work wherein CH 564 and Gr 3360 are representative of one branch, while CA B 1328, Lbm 41667 and, most importantly for any consideration of Italian transmission of this work, Fn 26 represent another branch.

Figure 2.13: Variant readings in the S of *De ce que foul pense souvent remaynt*.

¹⁵⁹ Nádas' Scribe V = ff. 36v-37v with an addition on f. 35v; Scribe X = ff. 40r-41r, 45v-46r with an addition on f. 39r.

¹⁶⁰ Nádas' Scribe Y = ff. ff. 63r-72v, 73v-76v?, 77r-79r with additions on ff. 74v-76r & 84r. Scribe T = ff. 73r?, 81r-v?, 82r-84v [? denotes doubtful scribal attribution and is reflective of Nádas' own assessment]. A schematic representation of Codex Reina, showing gathering structure, scribes and paper types can be seen in John Nádas, 'The Reina Codex revisited', pp. 75-80.

The northern origin of Gr 3360, CA B 1328 and possibly Lbm 41667 suggests that the aforementioned variant was introduced before the works were transmitted southwards, if the simplest scenario obtains.

CH 564 occupies a unique position among the four extant transmissions of Magister Franciscus' *De Narcissus* by virtue of its transmission of a Ct not found in Pn 6771 and Fn 26. (Fragments of *De Narcissus* are also found in F-AUT 152, where only the S survives, and H-Bu Fr 298, where only a portion of the S is found.) Collation of the Ct transmitted in Pn 6771 and Fn 26 results in seven separate readings, two of which are erroneous in both transmissions with the remaining five being equally plausible readings (*vid.* Vol. II, App. B, No. 13, *Variants*). Variants S 18.1 and S 20.1 also separate these two sources but in a way that links them to a distant archetype also shared by CH 564. Fn 26 omits several p.d., while Pn 6771 lacks the mensuration signs found in all voices of Fn 26 and CH 564. None of these sources appears to have any direct relationship to one another. CH 564 transmits a fair reading of all three strophes of the text (one error-filled strophe in Pn 6771, incipit only in Fn 26), although there are some difficulties in ll. 13, 18 and 20. The presence of this work in the portion of the Pn 23190 index representative of the oldest layer of the lost manuscript suggests this work was circulating in Paris sometime before 1376.¹⁶¹

The CH 564 and Pn 6771 also share transmissions of *Alarme, alarme sans sejour* and *En nul estat* (*vid.* Vol. II, App. B, No. 14 and 5, *Variants*). However, any assessment of these double concordances is relatively weak. (*Alarme, alarme* was also present in Sm 222, a source destroyed by the burning of the Strasbourg municipal library in 1870 during the Franco-Prussian War.) The transmissions of *Alarme, alarme* are significantly different at Ct 5.1 and Ct 15.1 and these variant readings may or may not be indicative of separate traditions.¹⁶² As already discussed above, small differences between the original (unedited) reading of *En nul estat* in CH 564 and the reading surviving in Pn 6771 are insufficient evidence for determining whether or not both sources share a common exemplar. The varied presence (often erroneous in Pn 6771) of substitute mensuration signs between

¹⁶¹ Based on her reassessment of the scribal "hands" in the surviving index Margaret Bent observes that only the works contained on the first 32 leaves of the MS can be said to be copied before 1376, the original date given in the erased portion of the heading, in 'A note on the dating of the Trémoille Manuscript', pp. 217-242.

¹⁶² *cf.* Ursula Günther, 'Bemerkungen zum älteren französischen Repertoire de Codex Reina', *Archiv für Musikwissenschaft*, vol. 24, 1967, pp. 247-49. Günther judges the CH 564 transmission of this work to be superior.

sources might suggest different exemplars, but the case is far from conclusive.¹⁶³ On the other hand, the Pn 6771 transmission of *En remirant* (also found in MOe5.24, f. 35v-36r) demonstrates several aspects which suggest it is neither directly related to CH 564, nor the immediate exemplar of that source (*vid.* Vol. II, App. B, No. 15, *Variants*). Shared traits link MOe5.24 and Pn 6771 to the same tradition. Scribe T's copy of *En atendant souffrir m'estuet grief payne* in Pn 6771 also contains several variants which separate it from CH 564 and align it closer to MOe5.24 (*vid.* Vol. II, App. B, No. 16, *Variants*). The transmission of both *En atendant souffrir m'estuet grief payne* and *En remirant* will be discussed further in the next chapter.¹⁶⁴

As far as can be determined through collation, the works copied by Scribe W into Pn 6771 witness a tradition separate from CH 564. The transmission of Jacob de Senleches' *Fuions de ci* in Pn 6771 contains variant readings consisting of two erroneous (Ct 1.1 and 33.1) and three plausible readings (13.2, 19.1, 46.1) which separate this source from CH 564 and MOe5.24 (*vid.* Vol. II, App. B, No. 17, *Variants*). It remains to be ascertained whether this level of separation can be attributed to Scribe W alone, although the simplest explanation occurs if one considers Pn 6771 to be descended from a tradition slightly removed from that evidenced by CH 564 and MOe5.24. A collation of the triple concordance *Phiton, Phiton beste tres venimeuse* (CH 564, 20v; Pn 6771, f. 56r; H-Bu Fr 298) contains several separative readings and errors (*vid.* Vol. II, App. B, No. 18, *Variants*). As variants S 48.1 and Ct 46.3 demonstrate, there is no direct relation between the transmissions in CH 564 and Pn 6771. The variant at Ct 22.1 (repeated identically at Ct 62.1) suggests scribal intervention. Whether the separative reading occurred during the copying of the extant source or previously in its lost exemplar cannot be determined in the absence of any corroborating evidence, such as a complete third transmission.

The last concordance shared by CH 564 and Pn 6771 exists in a third version found in the fragment MLeclercq. It is also transmitted in CA B 1328, but is for the most part illegible. The reading in Pn 6771 of *Playsance! Or tost* contains several readings (C¹

¹⁶³ See critical notes for *En nul estat* in this present study, Vol. II, App. B, No. 5. Q.v. Greene's graphical representation in "The Secular Music of Chantilly Manuscript Musée Condé 564 (olim 1047)", p. 153. Another consideration of variants in *En nul estat* occurs in Josephson, *op.cit.*, pp. 292-300.

¹⁶⁴ Günther linked both *En remirant* and *En nul estat* to the Chantilly original, although she did not draw the same conclusion for *En atendant souffrir m'estuet grief payne* and *De ce que foul pense souvent remaynt*, in 'Die Anwendung der Diminution in der Handschrift Chantilly 1047', pp. 7-8.

18.2, C¹ 25.3, C¹ 29.1,¹⁶⁵ C¹ 34.1, C¹ 40.1) which separate it from the tradition inherited by CH 564 and MLeclercq, although it is patently clear that MLeclercq introduces or is witness to a bifurcation in this work's filiation (*vid.* Vol. II, App. B, No. 19, *Variants*). The transmission in MLeclercq contains different music in the second section (mm. 29.1-41.4, also modification at T 3.1, T 13.1=T 30.1, T 18.1) and a different Ct. (The Ct, however, has been crossed out in MLeclercq and is perhaps representative of a failed attempt at scribal composition). It is possible that *Playsance! Or tost* originated in a Lowlands' court.¹⁶⁶

As it stands, this detailed collation of concordances between CH 564 and Pn 6771 suggests that some distance exists between their respective transmissions. It is especially significant that concrete evidence for a common (set of) exemplar(s) between CH 564 and Pn 6771 is not forthcoming although several works suggest a broader tradition that was brought to bear on the Italian peninsula, for example *En nul estat, Alarme, alarme* and *Playsance! Or tost*.

In addition to aforementioned concordances with *De ce que foul pense souvent remaynt* and *De Narcissus*, CH 564 shares a further four concordances with another early fifteenth century Florentine source Pn 568.¹⁶⁷ Unlike the aforementioned works (especially *De ce*

¹⁶⁵ Günther highlights the different readings between CH 564 and Pn 6771 in C¹ (with a transnotation of the first 5 measures of this section) in her article 'Bemerkungen zum älteren französischen Repertoire der Codex Reina', p. 247. I would tend to agree with her assessment that CH 564 presents a better reading at this point.

¹⁶⁶ Günther, 'Zur Biographie einiger Komponisten der Ars Subtilior', pp. 178-79 and Nigel Wilkins, 'The post-Machaut generation of poet musicians', *Nottingham Medieval Studies*, vol. 12, 1968, p. 58 proposed that the textual reference to a *papegay* (parrot) concerns a pope. Remco Sleiderink, 'Pykini's Parrot: Music at the Court of Brabant', in *Musicology and Archival Research: Colloquium Proceedings*, eds B. Hagg, F. Daelemans and A. Vanrie, Brussels, 1994, pp. 387-90, proposes that the text might refer to King Wenceslas of Brabant and that the work was composed by this king's musician Nicholas de Picquigny.

¹⁶⁷ Based on textual references in Pn 568's works, the collective scholarship of Ursula Günther and John Nádas suggests that this manuscript was compiled in Florence between 1405 and 1409. Works central to their argument are Paolo Tenorista's *Godi Firenze*, which refers to Florence's victory over Pisa in 1406, and *Girand' un bel falcon*, which possibly describes sentiments against a schismatic pope during the Council of Pisa in 1409, *vid.* Ursula Günther, 'Zur Datierung des Madrigals 'Godi Firenze' und der Handschrift Paris, B.N. fonds it. 568 (Pit)', *Archiv für Musikwissenschaft*, vol. 24, 1967, pp. 99-119; Ursula Günther, John Nádas and John Stinson, 'Magister Dominus Paulus Abbas de Florentia: New documentary evidence', *Musica Disciplina*, vol. 41, 1987, p. 204, fn. 3; It has been proposed that Pn 568 and Fl 87 were products of the famous *scriptorium* at Santa Maria degli Angeli of Florence, *vid.* Mirella Levi D'Ancona, "'Don Silvestro de Gherarducci" e il "Maestro delle Canzoni"', *Rivista d'arte*, 32, 1957, pp. 3-37; Luciano Bellosi, 'Due note in margine a Lorenzo Monaco miniatore: il "Maestro de Codice Squarcialupi" e il poco probabile Matteo Torelli', in *Studi di storia dell'arte in memoria de Mario Rotili*, eds Antonella Putaturo Muraro and Alessandra Perriccioli Saggese, Napoli, 1984, pp. 307-314 and Plates CXXXVIII-CXLIV; *idem*, 'The Squarcialupi Codex Master', in *Il Codice Squarcialupi MS. Mediceo palatino 87, Biblioteca Laurenziana di Firenze: Studi raccolti*, ed. F. A. Gallo, Firenze and Lucca, 1992, pp. 145-157. The work of Scribes D, H and E in Pn 568 is also evident in several other fragments containing the works of Paolo Tenorista, Landini and Ciconia, *vid.* Nádas, 'The songs of Don Paolo Tenorista', pp. 52-52. Of the six works discussed here, four were copied into Pn 568 by Scribe B (*De ce que foul pense, De Narcissus, Sans joye avoir, Se Zephirus/Se Jupiter*), *Loyaute me tient* possibly by Scribe A, and *Par*

foul pense whose transmission in CH 564 represents a tradition unconnected to any other Italian transmission), these last four concordances possess a remarkable level of similarity if one allows for scribal processes. Collation of the transmissions of *Loyaute me tient* (CH 564, f. 36v; Pn 568, f. 121r) yields one minor error in Pn 568 (omission of dots of division in the passage at T 16.1 and T 37.1 – it is possible that the scribe of Pn 568 saw this as equivalent to the reading transmitted in CH 564) and two separate readings both in the Ct (*vid.* Vol. II, App. B, No. 20, *Variants*).¹⁶⁸ At Ct 23.1, a *brevis* in CH 564 is written as two *semibreves* in Pn 568. The variant Ct 32.1 is rhythmically viable in both readings, although the reading in CH 564 at the beginning of B. 34 is more stylistically correct. This variant also appears to attest to no direct relationship of Pn 568 to CH 564. Pn 568 contains two more accidentals in the Ct of this work, but is otherwise identical in quantity of accidentals despite some different placement. While CH 564 preserves all eight lines of the text, Pn 568 preserves the incipit only. It is possible that both transmissions share the same exemplar.

Again, Pn 568 only preserves the incipit of the text of *Par le grant senz d'Adriane*, while CH 564 maintains all three strophes of text but with two corruptions (both in line 19). Aside from small semantic differences in the notation (Pn 568 contains additional, auxiliary p.d. at S 39.1 and S 45.1; *semiminime* are written as solid red *minime* in CH 564, void red in Pn 568), three separate readings occur (*vid.* Vol. II, App. B, No. 21, *Variants*). Plausible variant readings at S 17.3 and S 70.1 represent small differences, which, when grouped with variant Ct 42.2, might suggest either previous branching inherited by each respective transmission or scribal intervention. The latter variant (as shown in Figure 2.14) is viable in both cases, although the Pn 568 reading ameliorates several dissonances, avoids the awkward leap to a dissonant fourth in the S and presents a better sonority at the end of the first *semibrevis* of B. 43.

le grant senz d'Adriane by Scribe D. Scribe D appears to have had access to Paolo Tenorista's works, especially those in an advanced style which was possibly influenced by the *ars subtilior* style cultivated by composers such as Philipoctus de Caserta (composer of the last work). For a full discussion of scribal contributions and their repertorial connections in Pn 568, *vid.* Nádas, "The Transmission of trecento Secular Polyphony", pp. 216-290 and *idem*, "The songs of Don Paolo Tenorista", pp. 50-57.

¹⁶⁸ Five significant (semiotic) variants occur at S 12.1=S 33.1, S 19.2= S 40.2, Ct 13.1. These appear to be dictated more by scribal process than manuscript tradition.

Figure 2.14: Variant readings in CH 564 and Pn 568 transmissions of *Par le grant senz d'Adriane* B. 42.

I propose that CH 564 represents a correction from an exemplar that omitted the *semibrevis* G found in Pn 568 at Ct 42.2. The scribe of CH 564 or its exemplar's copyist then rhythmically reorganised the retained pitches in an appropriate manner. The closer relationship of Pn 568 to the archetype may also be suggested by the presence of two additional manuscript accidentals in Pn 568 (S 32.4 and Ct 53) not found in CH 564. This statement must be tempered, however, by the observation that both additional accidentals occur at positions that would be frequently subject to *musica ficta*.

Sans joye avoir (CH 564, f. 23r; Pn 568, ff. 27v-28r) is transmitted in two very different forms in terms of their notational process, although they are for the most part semantically equivalent (*vid.* Vol. II, App. B, No. 22, *Variants*). Whereas the version in CH 564 employs red coloration to indicate *sesquialtera* at the *semibrevis* in [2,3] and, in the case of *minime*, as a frequent substitute for p.d. in *syncopa* passages, Pn 568 employs instead the *dragma* (♣) and maintains *syncopa* involving *minime* by using the p.d. In addition to these notational issues, four variants are found in the S, one consisting of an error in CH 564 (25.1), another of an error in Pn 568 (36.1), and a set of two equally plausible readings (28.1 and 46.1) between transmissions. One variant is found in T 13 where the duration occupied by two *semibreves* on E in CH 564 are written in Pn 568 as a *brevis*. The Ct is not transmitted in Pn 568. The plausible readings between parts found in both transmissions, however, are sufficient to suggest some degree of separation between the two extant transmissions, although both remain proximate to the same tradition. The question concerning which notational devices might be closer to the authorial original is an interesting one, although the transformation of the original notation in at least one of these transmissions may reflect the local reception of this particular work.

Collation of the transmissions of Grimace's double-ballade *Se Zephirus/Se Jupiter* (CH 564, f. 19r; Pn 568, f. 43r; H-Bu Fr 298) suggests that CH 564 and Pn 568 inherit slightly different traditions (*vid.* Vol. II, App. B, No. 23, *Variants*).¹⁶⁹ Eight significant musical variants occur between the transmissions of this work in CH 564 and Pn 568, although only one involves an error. In C² (not labelled in CH 564, but labelled as a Ct in Pn 568), a register error is found in Pn 568 at 25.1. The remaining variants between these two sources are plausible (C1 13.2, 21.1, 37.1, 52.3, 63.3, C2 44.3, 68), although all suggest some degree of separation between these sources.

The evidence which can be gleaned from a comparison of concordances between CH 564 and Pn 568 suggests that no direct relationship existed between these sources, but that their level of agreement supports the hypothesis that CH 564 drew in part on exemplars very similar to those used by Pn 568. At issue is whether the degree of separability between these two sources is significant enough to warrant the assumption that they represent different traditions. Scribal initiative is frequently difficult to discern in the works copied by the scribes of Pn 568, although one underlying assumption regarding the copying of works with French text and French *ars nova* notation comes into play. It consists of a parallel between the reluctance of the scribe to copy French text and the copying of a less familiar notational system. Several variant readings that occur between CH 564 and Pn 568 involve simple copying errors such as the substitution of a p.d. for a *minima pausa* or vice versa. However, the level of modification of passages in *Se Zephirus/Se Jupiter* and *De ce que foul pense souvent remaynt belie* a complex set of relationships caused by scribal intervention not evident in the case of particularly *Par le grant senz d'Adriane* and perhaps *Loyaute me tient*.

The goal of the present section has been to determine the relationships that exist between CH 564 and sources containing concordant readings, and develop theories concerning their filiation accordingly. The evidence of an early child relationship of Fn 26 to CH 564 is strongly suggested by a high level of agreement between sources as well as additional aspects of scribal process which can be understood as directly related to the exemplar. This observation has important implications for the chronology and origins of

¹⁶⁹ H-Bu Fr 298 is a single flyleaf and only preserves the end of the T and a different C² (or Ct) for this work, thus possessing small value in the collation process. The rest of the T and C¹ almost certainly occurred on the facing leaf of the manuscript from which this leaf was possibly removed, *vid.* Charles E. Brewer, "The Introduction of the Ars Nova into East Central Europe: A Study of Late Medieval Polish Sources", Ph. D. thesis, City University of New York, 1983, Appendix XX, pp. 543-44.

CH 564. The lack of co-ordination between CH 564 and Pn 6771 is not surprising in light of additional evidence which places the latter source at Padua as a partial exemplar to Pu 1115.¹⁷⁰ The slight divergence that exists between the traditions illustrated respectively by Pn 568 and CH 564 may reside in either chronological and/or geographic issues or the suggestion that multiple exemplars were employed in the compilation of either source.

2.6. Conclusions

In establishing the bases by which the origin of CH 564 can be demonstrated, this chapter has explored a wealth of issues which contribute circumstantially to the conclusion that this manuscript was located at an early stage in Florence. At the broadest level, textual corruption suggests that, while apparently influenced by the multiple traditions upon which the manuscript has drawn, the principal scribe (β) is not a native French speaker who is unable to thoroughly comprehend and/or correct problematic textual readings. Furthermore, problems with the transmission of notational aspects found throughout the work of Scribe β suggest that he is not grounded in the refinements of the *ars subtilior* style. Editing of problematic readings in this manuscript suggests that its subsequent owner had some, albeit imperfect, appreciation of the notational complexities of the *ars subtilior*. The opinions of Robert Marichal support the view that the main script in this manuscript demonstrates affinities to northern and upper central Italian hands in sources from 1400-1415. The same locality and dating is also suggested by the ruling of the first layer of the codex throughout with red hexagrams.

Several points suggest an early provenance for the manuscript in Florence. The first concerns the inscription found at the beginning of CH 564 which indicates that in 1461 it passed from the ownership of the Florentine banker Francesco d'Altobianco degli Alberti shortly before his death to Tommaso Spinelli's daughters through the agency of Francesco's illegitimate son. Before this time, I have proposed that CH 564 was used as an exemplar for the additions in the last gathering of Fn 26, which is most likely to have been copied at Florence. In view of the fact that additions entered into Fn 26 by Scribes H and I are representative of the activity of composer Antonio da Civitate and Guillaume Du Fay in Italy before 1425, the additions copied by Scribes F and G in Fn 26 from CH 564 were plausibly made in Florence before this time. This conclusion again excludes the participation of the then exiled Francesco d'Altobianco in the formation of CH 564. In addition to the

¹⁷⁰ See Chapter 3.

direct relationship which exists between CH 564 and Fn 26, several works transmitted in the former manuscript betray traditions of transmission which are shared by the Florentine source Fn 26, but at the same time is distinct from the Paduan (and hence northern) traditions found in Pn 6771.

All indicators point to the creation of this manuscript no earlier than 1395, but possibly no later than 1415, in Tuscany or an adjacent region. The relationship CH 564 shares with Fn 26 certainly adds weight to the view that both sources draw on exemplars available at Florence. In light of the view that CH 564 demonstrates codicological and scribal habits that link it to professional scriptoria or workshops, I conjecture that this manuscript was commissioned within Florence. There is abundant evidence of a thriving book industry in that city at the beginning of the fifteenth century. CH 564 represents an imported repertoire, with a diversity of political content to suggest its context lay outside the court and in the wealthy households of gentry. Channels through which this repertoire might have become available have been already suggested by Long with respect to the Augustinians of Santo Spirito of Florence.¹⁷¹ Their contact with the papal curia at Avignon provides one route of transmission of the northern repertoire into Italy well before it was utilised in the compilation of CH 564. There is little evidence that the vibrant activity of music copying at Padua forms any direct basis for the transmission of this repertoire. Nor does the cultivation of the *ars subtilior* in Italy appear to have had any influence upon this manuscript except in the case of Philipoctus de Caserta. Rather, this manuscript marks a foreign eclecticism that favours French cultural tendencies prevalent at the time and location of production of the manuscript.

¹⁷¹ Long, 'Francesco Landini and the Florentine cultural élite', pp. 83-99.

Chapter 3 :

A French legacy in the hands of Italian masters: The manuscript Modena, Biblioteca estense, α.M.5.24 (olim lat. 568)

The contents of parchment manuscript α.M.5.24 (*olim* Lat. 568; IV.D.5) now shelved in the Biblioteca Estense e Universitaria di Modena (henceforth MOe5.24) represent the cultivation of the *ars subtilior* style in northern and central Italy. Although the manuscript is connected through its repertoire to several other musical manuscripts from the same era, for the most part it contains unique works ascribed to composers with Italian geographical origins. This manuscript attests to the international status of the *ars subtilior* style, even if this internationalism resided in the eclecticism of a limited number of musicians practising music on the north Italian peninsula. Its value as a testimonial to the local practices in musical style and notational processes without doubt necessitates further examination. In particular the question of this source's origin, dating and relation to other extant sources requires reconsideration, despite the presence of several studies already conducted by musicologists during the course of the twentieth century.

Although already known in literary scholarship of the later nineteenth century,¹ Friedrich Ludwig was the first scholar to draw serious attention to musical aspects of this codex.² Johannes Wolf included its inventory and examples of its unusual notation in his pioneering *Geschichte der Mensural-Notation*.³ Thirteen years later, the texts contained in this manuscript were published in a diplomatic edition by G. Bertoni.⁴ In 1923, a catalogue of musical works in the Estense library compiled by Pio Lodi was published. This brief assessment of MOe5.24 is noteworthy as it contains the original suggestion that miniatures in the manuscript were from the school of Niccolò di Giacomo da Bologna.⁵

¹ A. Cappelli, *Poesie musicali dei sec. XIV, XV, XVI*, Bologna, 1868; Valdrighi, in *Giornale d'erudizione*, Firenze, 1890; G. Carducci, *Cacce in rima dei sec. XIV e XV*, Bologna, 1896.

² Friedrich Ludwig, 'Die mehrstimmige Musik des 14. Jahrhunderts', pp. 21 and 24.

³ Johannes Wolf, *op.cit.*, vol. 1, pp. 335-339.

⁴ Giulio Bertoni, 'Poesie musicali francesi nel cod. estense lat. n° 568', *Archivum Romanicum*, vol. 1, 1917, pp. 21-57.

⁵ Pio Lodi, *Catalogo delle Opere Musicali: Teoriche e pratiche di autori vissuti sino ai primi decenni del secolo XIX, esistenti nelle Biblioteche e negli archivi pubblici e privati d'Italia : Città di Modena, R. Biblioteca estense*, Bollettino dell'associazione dei musicologi italiani Series VIII, Modena, 1923 (repr. Forni Editore, Bologna, 1967), pp. 522-24.

It was not until after the Second World War that the first major study of the manuscript by the late Nino Pirrotta was published.⁶ His study, which was actually commenced before the war, in many ways remains exemplary in its methods. Pirrotta concluded that the manuscript was the work of two scribes. Essentially, he determined that Gatherings 2 to 4 were the work of a single scribe and Gatherings 1 and 5 of a later scribe. Of the five quinterns, Pirrotta suggested, based on repertorial considerations and the assumption (after Lodi) that initials in the second and third gatherings were representative of a Bolognese school,⁷ that the inner three gatherings were copied in the vicinity of the Bolognese chapel of popes elected under the Pisan obedience, Alexander V and John XXIII during the years 1409-1414. Pirrotta also concluded that the two outer gatherings (1 and 5) were compiled at Milan by an associate of Matheus de Perusio (or, in Pirrotta's terms,⁸ an *amanuensis*) after 1419/20 based on his view that the work of Frenchman Nicholas Grenon in the fifth gathering could not have been transmitted to Italy at an earlier date.⁹ These more recent gatherings were joined to the earlier layer, which Pirrotta suggested had returned with Matheus de Perusio to Milan.¹⁰ The central aspect of Pirrotta's study is the instrumentality of Matheus de Perusio in the manuscript's earliest layer and his subsequent influence attested to by the predominance of works ascribed to him in the outer gatherings. Pirrotta proposes that Matheus' employment with Cardinal Pietro Filargo was the connecting thread between both layers. After entering into the cardinal's service in 1406 at Pavia, Pirrotta suggests that Matheus travelled in 1408 in the cardinal's entourage to Pisa, becoming a member of Filargo's papal chapel in 1409 when the cardinal was elected Alexander V at the Council held there. After Alexander V's death, only ten months after his election during the night of either 3rd or 4th May 1410 at Bologna, Pirrotta suggests that Matheus remained in the chapel of Filargo's successor, John XXIII (former Cardinal Baldassare Cossa), until 1414, when the composer is once more documented at the Duomo of Milan. By situating Matheus in or near the chapel of the Pisan popes, Pirrotta sought to establish the means by which Matheus would have had contact with other composers represented in the oldest portion of the manuscript. To this end, Pirrotta proposed Antonius

⁶ Pirrotta, 'Il codice estense lat 568 e la musica francese in Italia al principio del '400', pp. 101-154.

⁷ Pirrotta, 'Il codice estense lat 568 e la musica francese in Italia al principio del '400', pp. 123-141 and 151-152.

⁸ Pirrotta, 'Il codice estense lat 568 e la musica francese in Italia al principio del '400', p. 142.

⁹ Pirrotta, 'Il codice estense lat 568 e la musica francese in Italia al principio del '400', p. 153.

¹⁰ Pirrotta, 'Il codice estense lat 568 e la musica francese in Italia al principio del '400', pp. 152-153.

dictus Zacharias de Teramo, Johannes de Janua, Bartholomeus de Bononia (=Bologna) and Corradus de Pistoria (=Pistoia) were members of the papal chapel.

The second major study on this manuscript appearing in 1970 was conducted by Ursula Günther.¹¹ It was preceded by two studies that made ancillary observations concerning MOe5.24 in relation to the central concerns of their respective studies. Perhaps the most influential study was Claudio Sartori's investigation of the first two *maestri di capelle* (Matheus de Perusio and Bertrandus Feragut) at the new Duomo of Milan at the beginning of the fifteenth century. Contrary to Pirrotta, Sartori suggested that the manuscript as a whole was compiled at Pavia in 1406/7 or Pisa in 1409 and was directly connected to Matheus and his employment by Cardinal Filargo.¹² Yet, another view was present by Suzanne Clercx in her study on the composer Johannes Ciconia. Clercx proposed that the older portion of the manuscript was compiled at Avignon, before being brought to Italy by a member in the entourage of one of the several Italian magnates who had visited Avignon.¹³

Günther, conscious of Pirrotta's precedent, sought to update Pirrotta's inventory and findings, as well as supply new information critical to the dating of the manuscript. Most importantly, Günther dismisses Clercx' hypothesis concerning an Avignonese origin of the inner gatherings by recalling Pierluigi Petrobelli's then-recent dating of *Inperial sedendo* to 1401¹⁴ and stating her own convincing observations for the dating of *Ore Pandulfum* to 1399.¹⁵ By considering the historical fact that Avignon was besieged by French forces between 1398-1403, making Pope Benedict XIII a prisoner in his own palace, Günther convincingly concludes that these two datable works from the inner gatherings could not have found their way into a manuscript compiled in that pope's court.¹⁶ Günther also observes that the lack of ascriptions to works ostensibly by members of the Avignonese papal

¹¹ Ursula Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24 (olim lat. 568=Mod)', *Musica Disciplina*, vol. 24, 1970, pp. 17-69.

¹² Claudio Sartori, 'Matteo de Perugia e Bertrand Feragut i due primi maestri de cappella del Duomo di Milano', *Acta Musicologica*, vol. 28, 1956, p. 20.

¹³ Suzanne Clercx, 'Johannes Ciconia et la chronologie des MSS. Italiens, Mod. 568 et Lucca (Mn)', in *Les Colloques du Wegimont II (1955): L'ars nova: recueil d'études sur la musique de XIVe siecle 1955*, Society d'Édition "Les Belles Lettres", 1959, pp. 112ff.

¹⁴ Petrobelli, *op.cit.*, pp. 94ff.

¹⁵ Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', pp. 35-40. Günther's observations were based upon Pirrotta's more general suggestions, in Pirrotta, 'Il codice estense lat 568 e la musica francese in Italia al principio del '400', p. 140.

¹⁶ Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', p. 34.

chapel and that the italianisation of Jacob de Senleches' name to Jacopinus Senleses further indicate the unlikeliness of this manuscript's origin at that essentially French court.¹⁷

Günther's study further proposes a mode of transmission of the works that she believed originated from Avignon. She sees Benedict XIII's departure and travels through Italy with his chapel as an opportunity for the southwards transferral of the repertoire from this court. In particular, she focuses on Benedict's sojourn in Genoa, a city not unknown for its French cultural tendencies in this period. Based on the appearance of two Johannes in the papal chapel at this time, Günther suggests that one may be the composer Johannes de Janua, represented by two works in MOe5.24.¹⁸

The privilege of conducting the last detailed study of this manuscript during the twentieth century belongs to Anne Stone.¹⁹ The first chapter of her doctoral dissertation from 1994 reopens the question of MOe5.24's origin by bringing new methodological tools and recent archival findings to bear. Chief among Stone's claims is that, based on codicological evidence and repertorial considerations, the inner gatherings of the manuscript represents at least two different initial projects that were subsequently joined together. In particular, Stone suggests that the second gathering was originally commenced as a collection of the works of Anthonellus de Caserta and the third gathering as a collection of liturgical works.²⁰ Stone draws our attention to recently discovered archival evidence placing a *Frater Antoniello de Caserta* in the archbishop's curia at Pavia and the suggestion that Anthonellus' *Del glorioso titolo de duce*, connects him to Pavia in the 1390s.²¹ Stone also highlights recent studies that suggest that the illumination style of Niccolò di Giacomo was practised by imitators beyond Bologna into the Veneto.²² These observations and Matheus' associations with Pavia, led Stone to conclude that the manuscript was commenced at Pavia, before travelling to Pisa, where works by Tuscan composers were included.²³ Stone maintains the view that Matheus de Perusio was instrumental in the copying of the more

¹⁷ Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', p. 33.

¹⁸ Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', pp. 41-44.

¹⁹ Stone, "Writing Rhythm in Late Medieval Italy"

²⁰ Stone, "Writing Rhythm in Late Medieval Italy", p. 17.

²¹ These points are further discussed below, p. 131.

²² Stone, "Writing Rhythm in Late Medieval Italy", p. 24. In an earlier study, Reinhard Strohm notes that the style does not necessarily indicate the illuminations in MOe5.24 where executed in Bologna, in 'Magister Egardus and other Italo-Flemish contacts', in *L'ars Nova del Trecento VI*, eds G. Cattin & P. D. Vecchia, Certaldo, 1992, p. 59.

²³ Stone, "Writing Rhythm in Late Medieval Italy", p. 24.

recent outer gatherings. She, however, does leave open the question of whether the scribes of the older and newer sections of the manuscript might in fact be the same individual.

The following study seeks to reconsider these earlier studies and to augment our understanding of the transmission of this repertoire by the application of methodological tools either new or formerly (and in my view prematurely) deemed inadequate for this purpose.²⁴ In particular I question Stone's conclusions concerning this manuscript's origin at Pavia on the bases of codicological evidence and stemmatic filiation. By examining the confluence of archival evidence with cultural movements and composers in this manuscript, I propose that Gatherings 2-4 of this manuscript are closely tied to the movements of the popes of the Pisan obedience in *settentrionale* Italy. But first, a re-examination of physical, scribal and repertorial aspects is necessary background to any further conclusions.

3.1. Physical and scribal characteristics

In addition to five quinterns, MOe5.24 also contains a flyleaf before the first gathering and after the fifth gathering. These two flyleaves clearly belong to the original manuscript as they contain on the inner side of the leaves respectively the T of item 1 and a rondeau in the same hand as the preceding leaves.²⁵ The slight difference in the length of these flyleaves, which measure 272-274 x 198 mm as opposed the almost uniform dimensions of the leaves of the gatherings (280 x 198 mm), suggests that they were added in the last phase of copying the manuscript, possibly when the gatherings had already been assembled. Comparison with the dimensions of manuscripts shown in Table 2.1 (Chapter 2, p. 31) illustrates the small format of MOe5.24. The implications of this small size will be discussed below.

The 52 leaves of this manuscript are surrounded by a modern binding of blue with gilt inlay.²⁶ The parchment pastedowns do not connect the flyleaf to the boards, resulting

²⁴ *vid.* Pirrotta, 'Il codice estense lat 568 e la musica francese in Italia al principio del '400', p. 122.

²⁵ These flyleaves are attached to the first and last gatherings in the usual manner whereby an overhanging edge is stitched in with the rest of the gathering and then glued to the other side of the spine edge of the gathering.

²⁶ Günther reported the new binding in 1970, in 'Das Manuskript Modena, Biblioteca estense α .M.5.24', p. 17. The present dimensions of the manuscript as a whole (i.e. including binding) is 288 x 212 x 28 mm. The spine consists of five raised bands corresponding to the stitching of the gatherings. Below the fifth band one finds a red leather label with the shelf number of the manuscript α M 5 24 in gilt tooled letters arranged vertically and enclosed in the outline of a gilt rectangle. The exterior of the manuscript is generally in good condition, although I would conclude from my inspection of this manuscripts that the blue stained leather reported in 1970 has faded somewhat to an aqua-green.

in a suitably flexible binding.²⁷ This method of binding permitted the inspection of part of the spine. It was noted that along the verso spine edge of the back flyleaf, the following was written in an ancient hand: *Nota Figura[t?]a. Sumite [lacuna] del ç[ch]ara*. This note may indicate that the manuscript was assembled, but remained unbound for some time. One also notes the erased title of *Canti francesi* on the *recto* of the front flyleaf, although this inscription would appear to be of more recent provenance.

The first inventory of this manuscript by Johannes Wolf numbered the folia of the manuscript beginning at 1 for the first flyleaf. The present study follows Nino Pirrotta's restoration of the old foliation which is found on the three inner gatherings (as ancient Indo-Arabic numerals in red ink), whereby the foliation is *a* for the front flyleaf, 1-10 (first gathering), 11-40 (three inner gatherings), 41-50 (fifth gathering) and *z* (back flyleaf). Both Günther and Stone adopt this foliation in their respective studies of the codex.²⁸ Bifolia are arranged throughout according to Gregory's rule (hair side to hair side – flesh side to the flesh).

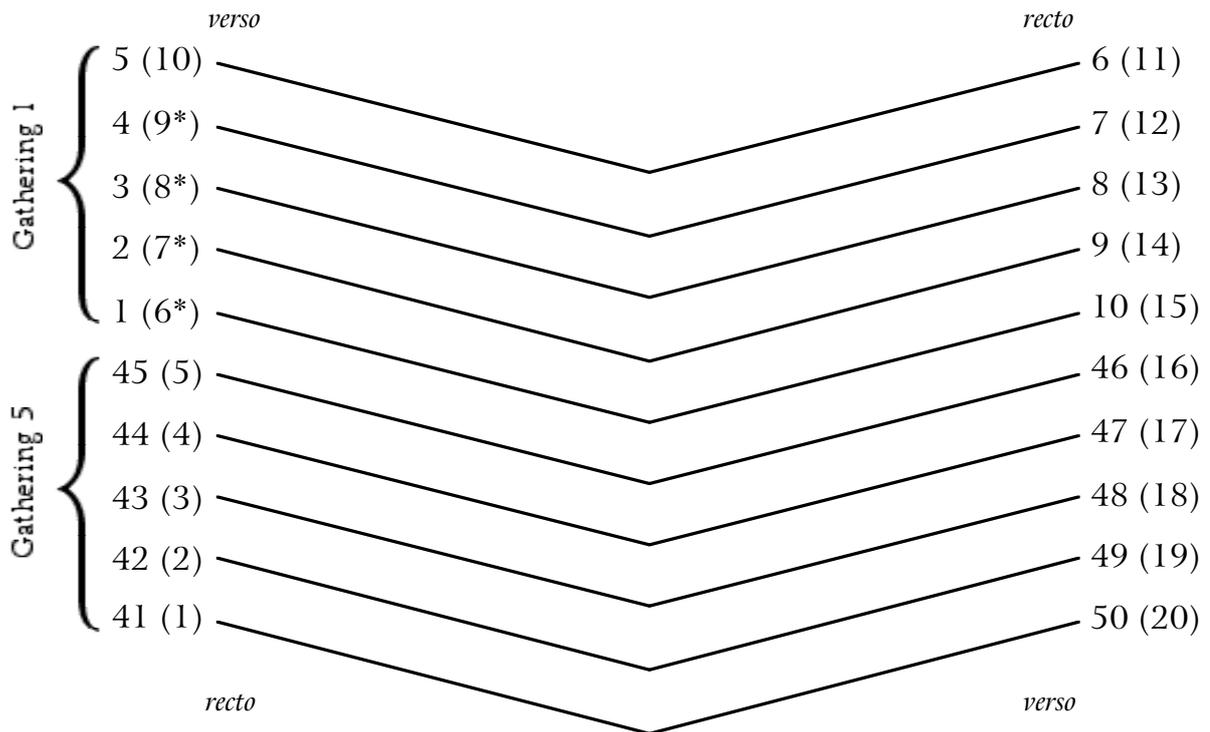
This manuscript's five gatherings of five bifolia show three distinct layers of preparation. Layer III consists of the two outermost gatherings. These leaves bear traces of an old Indo-Arabic foliation which Nino Pirrotta astutely assessed as the original numbering of these outer bifolia when they had formed one large ten bifolia gathering, referred to here as the protogathering. The inner five bifolia of this protogathering became Gathering 1 and the remaining bifolia were formed into Gathering 5.²⁹ Figure 3.1 shows the structure of the protogathering. Numbers in brackets reflect original foliation (those with asterisks can be still detected); other numbers reflect the modern foliation.

²⁷ There is some minor warping of the boards. The binding leather is turned under the boards 13mm, the parchment paste down flush to its edge, rather than overlapping. Glued to the back paste down is what appears to be a much older rectangular paper cut-out (93 x 23 mm) which contains the 18th century shelf number of this manuscript, IV.D.5, crossed out. The hand is similar to that found in the 18th century catalogue of the Estense Library. To the right of the aforementioned label is the old 18th century catalogue number of the manuscript, L. 568, and underneath it the modern shelf number α.M.5.24. At the bottom of this paste down is a small label containing notice of the manuscript's restoration in 1966, and the observation that the manuscript previously had "...la tipica rilegatura in bazzana rossa eseguita nella seconda metà del sec. XVIII..." (the typical binding executed in red leather in the second half of the 18th century). At the time of his study, before restoration, Pirrotta notes that the binding is "tipicamente estense e settecentesca", in 'Il codice estense lat 568 e la musica francese in Italia al principio del '400', p. 104. This or a previous red binding would be the cause of red staining on the exterior of the flyleaves.

²⁸ Stone also discusses the fact that foliation in the inner gatherings begins at 11, suggesting that a previous gathering was lost, "Writing Rhythm in Late Medieval Italy", p. 22.

²⁹ Pirrotta, 'Il codice estense lat 568 e la musica francese in Italia al principio del '400', p. 110; Cf. Stone, "Writing rhythm in late medieval Italy", pp. 20-21.

Figure 3.1: Protogathering (MOe5.24 Gatherings 1 and 5)



That the two outer gatherings were uniformly prepared with a writing area of 150-155 x 215-220 mm occupied by ten pentagrams ruled with a 12 mm rastrum, further supports this sequence of compilation. Dry point guidelines used to delimit the left and right margins are occasionally visible. In five instances, a 13 mm rastrum-ruled pentagram was added below the tenth stave, while two other cases saw the addition of an 11th staff ruled without a rastrum.³⁰ The pentagrams ruled on f. zr demonstrate a variation in gauge of between 14 and 16 mm, which strongly suggests this leaf was prepared separate from the two outer gatherings. Despite Stone's claims that all evidence of prick marks was removed by trimming, remnant marks at the right hand edge can be consistently found in the first gathering at 132, 153 and 172 mm from the top of the folio, further suggesting a uniformity in the preparation of this gathering. Based upon these observations, I conclude that the outer gatherings were prepared as a unit. Additional staves were then added to them as copying required without recourse to the original rastrum, and the addition of the flyleaves occurred simultaneously with the copying of the work onto 1r. The absence of the original rastrum may suggest that the protogathering was removed from its original context, that is workshop or scriptorium.

³⁰ This occurs on ff. 7v, 8r, 10v and 43v, 44r using a 13 mm rastrum. The pentagram added on f. av consists of a 14 mm gauge, although it may have been ruled a line at a time if one considers the irregular length of each line. The staff added at the bottom of f. 50v was also executed without the use of a rastrum.

Considering that f. 1 originally was f. 6 in the protogathering, it can be concluded that outside *recto-verso* faces of the folio could not have been filled with music before the protogathering was split into two quinterns. It can be concluded that ff. 1r and 10v were blank at the splitting of the protogathering if one considers Matheus de Perusio's *Dame que i'aym sour toutes* which at present starts on f. 10v and continues onto the bottom of the new gathering beginning at 11r. As there is no copying of music across the pages that would have originally faced ff. 1r and 10v (ff. 6r & 15v of protogathering), it is possible that the works now found on what are presently ff. 45v and 46r (protogathering ff. 5v and 16r) were copied before the splitting of the protogathering. These observations, as well as the palimpsest on f.16v, which involved the removal of the motet *Gratiosus fervidus/Magnanimus opere* (also found in Gathering 5, f. 50v and therefore most likely copied before the protogathering was brought together with Gatherings 2-4) and its replacement by Matheus de Perusio's *Pres du soloil* by the scribe of the outer gatherings, unambiguously demonstrate that this subsequent scribe was responsible for partitioning the protogathering, copying additional music into the newly formed outer gatherings and assembling the manuscript into its present form.

The inner gatherings, despite a uniformity in script (discussed below), demonstrate at least two different stages of preparation. As this aspect has already been treated by Pirrotta, Günther and Stone, it suffices to summarise their views, to add additional details and to present my own observations where they might differ. Layer II consists of the second and fourth gatherings. These are generally prepared with nine pentagrams ruled with a 14 mm rastrum (with the occasional half-staff below the ninth on ff. 11r, 13r, 20r, 31v and a full staff on f. 40r). The third gathering, which constitutes Layer I, was prepared as ten 12 mm pentagrams (added 11th staves on ff.23v, 24r). It is notable that across Gatherings 2, 3 and 4, there is little variation in writing space – 212-215 by 150-155 mm.³¹ Clearly visible vertical ink guides delimit the left and right hand margins in all inner gatherings.

My examination of the manuscript confirms the results of Anne Stone's study of the prick marks used for ruling wherein she concludes that Gatherings 3 and 4 were "pricked together as units", that is all leaves of each gathering were pricked together but independent

³¹ Writing area was measured vertically from the top of the first staff to the bottom of the last staff (additional staves are considered independently) and horizontally from the left vertical guide to the right vertical guide.

of the next gathering.³² A further difference in these two gatherings is the relationship between prick marks and staves. In the third gathering, the tops of staves are placed 3-4 mm below the level of prick marks. In the fourth gathering, the tops of staves are level with the prick marks. Different preparations within the second gathering itself also suggest various stages of compilation in these inner gatherings.³³

Stone suggests that the second gathering contains traces of what was originally conceived as a compilation of the works of Anthonellus de Caserta.³⁴ In the manuscript's present form, works by Anthonellus are found on ff. 12v, 13r, 13v, and 19v. Stone proposes that the "Idem" on f. 19v and the erased ascription on f. 18v also refer to Anthonellus. My examination of the erased ascription under ultraviolet light conditions did not yield an "A", as reported by Stone, but "...us" or "...fa", that is, only the end of the ascription was visible.

From my examination of the preparation of the second gathering, I conclude that bifolia 11/20, 12/19 and 15/16 were prepared as a unit. Closely corresponding double prick marks on ff. 12, 15 and 16, 19 (different position for each corresponding pair) may suggest that these leaves were prepared earlier and used as templates for additional bifolia. The locations of prick marks in these bifolia correspond to those found in the fourth gathering. No prick marks and a slight increase in the writing area by 5 mm distinguish bifolium 13/18. Similarly, the wider cast of prick marks on bifolium 14/17 resulting in the loss of all but two prick marks suggests this bifolium was not prepared with others in this gathering.

Yet the copying process suggests that the two irregularly prepared bifolia were inserted early in the copying process. Zacharia's *Caciando per gustar* was copied across the facing leaves 16v-17r. Similarly the motet *Apta caro / Flos virginum / ALMA REDEMPTORIS MATER* links the inserted bifolia 13/18 and 14/17 through its copying over ff. 17v-18r. From this, one can most likely assume that the bifolia were blank upon insertion and that 18r (part of original gathering) was also blank. *Hors sui je bien* and Senleches' *Fuions de ci* can only have been copied after the inserts were in place. Based on this analysis, one can conclude that a greater priority was accorded to works by Anthonellus only after the inserts

³² Stone, "Writing Rhythm in Late Medieval Italy", pp. 15-16. Stone comments (*ibid.*, p. 16, fn. 11) that in the third gathering, f. 21 "appears to have a slightly different pattern of holes, suggesting it was ruled in order to match the existing bifolios". I would suggest that the different appearance of prick marks on f. 21 resulted from a skewing of the page caused by a slight misplacement of the bifolium fold.

³³ Stone correctly reports that ff. 11, 12 and 15 have corresponding prick marks, while 16, 18 and 19 have partial prick marks independent of each other and of 11, 12 and 15, *loc. cit.*

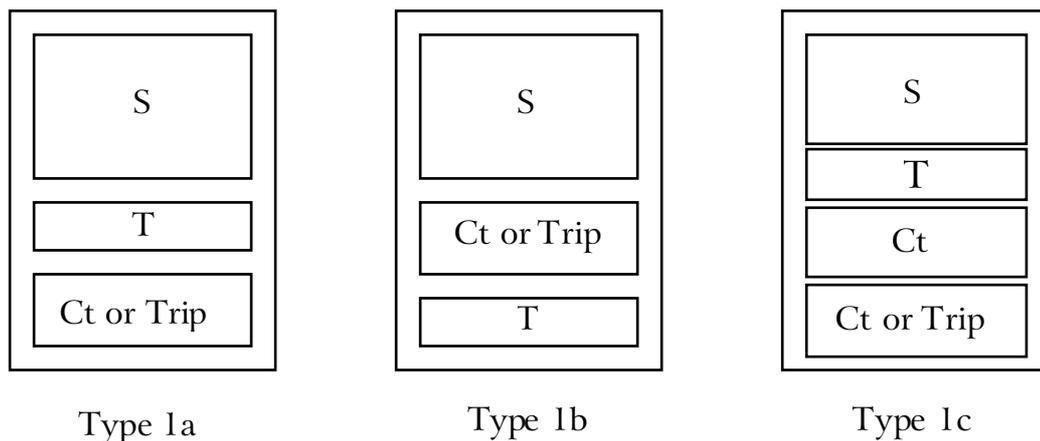
³⁴ Stone, "Writing Rhythm in Late Medieval Italy", pp. 15-20.

had been added. It is possible that bifolium 12/19 was originally at the centre of the gathering if one allows bifolium 15/16 to have been originally the outer bifolium of an early form of the gathering. The disconnected *idem* on f. 19 may have referred to f. 12v.

The preparation of the inner gatherings presents several entwined relationships which can be summarised as such: 2 and 3 share the same style of illuminated initials; 2 and 4 were essentially prepared in the same manner (pricking and staves). In terms of preparation, I would conclude that the second and fourth gatherings are closely tied together and likely the result of a single plan with some inserted leaves in the second gathering. On the other hand, it is clear that Stone's aforementioned view that the third gathering was started as a separate project based on its preparation and repertorial considerations remains valid, although it is patently clear that Layer I (the third gathering) was incorporated into the Layer II project at an early stage during the copying process.

Throughout MOe5.24, several different but closely related page layouts are employed according to the genre, nature and length of the piece being copied. All but one page (f. 38r) begins with a work, a section of a work or the beginning of a lower voice of the composition on the facing page. The most common layout is the single page layout Type 1a shown in Figure 3.2 with the occasional variation of Type 1b. This layout, as would be expected based on general observations in other sources, is employed predominantly for secular compositions, especially the French *formes fixes*.

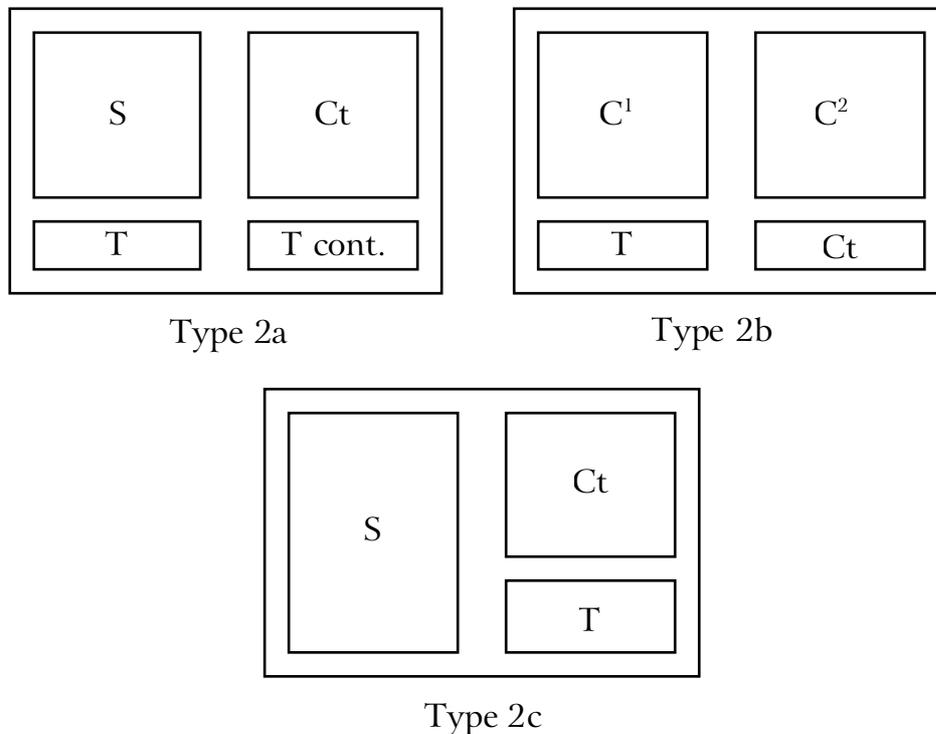
Figure 3.2: Page layout Type 1 in MOe5.24



Layout Type 1c is a variation on Type 1a employed for four-voice secular works (ff. 26r, 33r). The habit of the lowest voice extending beyond the limits of the page's staves results in either the addition of half staves at the bottom of the page or the continuation of the voice on the bottom line of the facing page should it be available.

The second most common layout types (but less frequent than the previous types) are mostly associated with settings of the ordinary of the mass and motets, and typified by a facing *verso* and *recto* folio pair (See Figure 3.3).

Figure 3.3: Page layout Type 2 in MOe5.24



The two occurrences of layout Type 2a (ff. 2v-3r, 23v-24) are three voice settings of sections of the mass ordinary (a *Gloria* and *Credo* respectively). A slight variation on layout Type 2a occurs when the tenor does not extend onto the bottom of the recto page (ff. 22v-23r & 47v-49r). This space is usually occupied by a new composition. Layout Type 2b can be found on ff. 3v-4r, 4v-5r and 48v-48r and are entries of a *Gloria*, a sacred motet and a further *Gloria* respectively. There are four occurrences of layout Type 2c (ff. 1v-2r [*Gloria*], 5v-6r [*Credo*], 7v-8r [*Credo*] & 49v-50r [*Gloria*]) and again this layout is associated solely with the genre of ordinary settings (*Gloria* and *Credo*). The motet *Apta caro / Flos virginum* on ff. 17v-18r has a layout very similar to Type 2c with the exception of the Ct voice which is instead a texted *triplum* copied above the Ct and then the T. These layout types naturally arise from the relatively greater length of sacred texts and motets, and the mostly syllabic setting of the texts of these works. Whereas notation in the secular works can be compressed in melismatic sections, the almost syllabic declamation required for *Credo* and *Gloria* settings require a more generous spacing of notes on the page to facilitate the accurate underlay of the music.

These aforementioned layouts represent the greater part of initial layout designs, but the following occurrences should be noted:

Type 3a: The two voice composition set on one page (39r);

Type 3b: Two voice composition of two pages (16v-17r);

Type 4a: Two voices with a third voice at the base of the facing page (4v-5r, 21v-22r, 6v-7r, 42v-44r);

Type 4b: Insertions at the bottom of two facing pages. The general character of these additions is the cantus on the verso, Ct on recto and the T over both pages (14v-15r, 19v-20r, 27v-28r) in the case of three voiced works or S on the verso with T beginning on verso and proceeding to or starting on the recto in the case of two voice compositions (13v-14r, 28v-29r, 39v-39r);

Type 4c: Insertion of whole works at the bottom of single pages.

Types 3a and 3b need little comment except that they are naturally related to Types 1 and 2 respectively. Types 4a-c are invariably accidental layouts which demonstrate a consistent method of ordering similar to Type 1a. Layout Type 4a suggests, although not categorically, that the layout arose out of the previous entry of another work which only occupied a portion of the facing page and not vice versa.

The examination of layouts with particular attention to the apparent order of entry reveals that, within each assembled gathering and with respect to an open *verso* and *recto* pair, the scribe proceeded from left to right (i.e. *verso* to *recto*) in the copying of works. If the first piece, which was begun on the *verso* page, extended by a small amount beyond the limits of the page, the end of the piece was placed on the lowest staff of the facing *recto* page. If there remained a substantial amount of the piece, which was first commenced on the verso, to be copied, then the scribe proceeded to copy to the top of the facing *recto*. The *recto* was then filled, beginning at the top of the page if available or after the end of the longer work which already occupied the top of the *recto* page. If there remained space below the initial entries at the top of the facing verso and recto pair then another work could be inserted, proceeding from the verso to the recto. In the case of Layout Types 2a and 2b space was left firstly at the bottom of the verso page and then the facing recto in which the T or Ct voice could then be entered. The scribe of the three inner gatherings takes great pains to squeeze works at the end of these gatherings onto the last page, suggesting that gatherings were completed as single units without the immediate physical presence of the next gathering, or

that care was taken not to link gatherings should a reordering be required. The absence of catchwords is also notable.

Two Text Hands (A & B) and two Music Hands (I & II) can be observed in MOe5.24. Pirrotta sees the script of Text Hand A in Layer III as being influenced by humanist elements and temporally divergent from the gothic script of Layers I and II.³⁵ The *ductus* of Hand A is distinguished not only by its right sloping humanistic script, but also by the clubbing of 'd' back towards the right as opposed to the leftwards turn of the 'd' ascender in the typically gothic style. Text Hand B, responsible for the most entries in both Layers I and II, is gothic and somewhat rounded,³⁶ although there are cursive influences evident in the style of 'a', the clubbing of the 'h' and occasionally 'l', suggesting that it can be termed a *gothica textualis rotunda bastarda*, a script used in both France and Italy.³⁷ There are some similarities in the formation of 'g' in both hands. With regard to the orthography of voice labels, Text Hand A prefers the Latinate/Italianate forms 'tenor' and 'contratenor' (the one notable exception occurs on f. 45v with the label 'Teneur' in Grenon's *Je ne requier*), while Text Hand B discerningly employs the French forms 'teneur' and 'contreteneur' for French-texted works (exceptions are found on f. 31v and 40v) and 'tenor' and 'contratenor' for Latin or Italian texted works.

Music Hand I, responsible for copying music into Layer III, contains several distinguishing features. Ascending note stems, often shorter than those of Music Hand II, slope very slightly to the left. C- and F-clefs are wider than those employed by Music Hand II, despite similar modes of formation. The lower element of the C-clef is slightly longer than the upper and slopes downwards. The first element of F-clefs is always a double-tailed form (similar to a *longa* with a *plica* in the early fourteenth century). *Diesis* signs are small but with more space in their centre than those belonging to Music Hand II. *B-rotundum* signs are small and drawn with a pointed nib edge. *B-quadrata*, a special feature of this hand in MOe5.24, have modern appearance (♯) but are frequently ornamented by a dot along each internal edge.³⁸ The presence of the same distinctive form of this manuscript accidental in the *T* and *Ct* of *Ore Pandulfum* (f. 33r), the body of which was copied by Music Hand II, again betrays the role of the scribe of the outer gatherings in assembling the

³⁵ Pirrotta, 'Il codice estense lat 568 e la musica francese in Italia al principio del '400', p. 109.

³⁶ Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', p. 18.

³⁷ Jacques Stiennon, *Paléographie du Moyen Age*, Paris, 1973, pp. 120-121.

³⁸ This ornamented sign has associations with the Veneto, *vid.* Pedro Memelsdorff, 'Motti a motti: reflections on a motet intabulation of the early Quattrocento', *Recercare*, vol. 10, 1998, pp. 39-68.

manuscript. Music Hand I employs a slightly wider nibbed writing implement than Music Hand II. The ink colour in Music Hand II tends to a lighter brown colour, although there is variation towards almost black. It is darker on 2v-3v, 4v-5r, 6r, 7r, 8v-9r, 44v-50v. This may indicate differing porosity of the writing surface, or a pattern in the entry of works. The ink employed for Music Hand II contrasts sharply with the uniformly black ink (that is more grey when it is thinner) in the inner gatherings. The difference between inks used by both Music Hands can be immediately noted in the case of the additional staff on f. 11r where the new scribe completes the *Ct* of the work on 10v.

Music Hand II, who is active in Layers I and II, is clearly not a variation of the former music hand. C- and F-clefs are narrower, and there is some variation in the appearance of the first element of the F-clef (the element with the appearance of a *longa cum plica*), as also employed by Music Hand I, and a simple *longa* form. Ascending note stems are vertical, or occasionally sloped slightly to the right when adjoined to ligatures. The *b-rotundum* is similar to the form employed by Music Hand I, although the loop is marginally greater in extent and there is a bowing under of the ascender. The *diesis* sign is drawn very lightly, often only able to be detected by first hand consultation of the manuscript. Frequently, in drawing the horizontal elements of the *diesis*, the writing implement was not lifted sufficiently, resulting in a ligature and indicating that these particular elements were drawn in a very narrow v-like movement from left to right and then back. This clearly explains the skewing of the horizontal elements in *diesis* signs where the ligature is not observed. The *b-quadratum* is never used by this scribe. The form of Indo-Arabic numerals employed in the foliation of Layers I and II is identical to those employed by Music Hand II, suggesting the same owner for both elements. Table 3.1 gives a comparison of various features found in both music hands.

Table 3.1: Characteristics of various elements of notational devices in the Music Hands of MOe5.24.

	Clefs	Breves	Sbrs and Min	Smin	Mensuration signs	Numerals	Accidentals	Custodes
Music Hand I								
Music Hand II								

The close relation between music and text in each portion of MOe5.24, permits the reduction of music and text hands to two scribes: Scribe α (=Music Hand I & Text Hand A) and Scribe β (=Music Hand II and Text Hand B). The procedure of text and music entry in the work of Scribe α in Layer III consists of all music being copied first on all staves, followed by the copying of the text. This *modus operandi* is suggested by the frequent, but not universal avoidance of stems from notes on the staff below, the careful placement of final syllables and compression (with abbreviations) of the text in works containing rapid text declamation (eg. in a *Credo*). Scribe α has a well-developed method whereby the music is spaced according to text delivery. In syllabic passages, notes are usually more widely spaced while parchment is conserved in melismatic or sparsely texted flourishes. Perhaps the most conclusive evidence for this method of entry is derived from the incomplete work on f. 47r where the music has been written out to the end of the section, the initial is present, but the text has not yet been inserted. An additional aspect of Scribe α 's copying procedure is the re-positioning of individual notes due to limitation of text underlay. However, it is difficult to determine whether this re-positioning occurs after text has been already set or in anticipation of the text during the music copying process.

An examination of the work of Scribe β in Layers I and II reveals the same copying processes as Scribe α , in that musical notation is underlaid by text. This assessment is most strongly supported through the examination of instances where red ink note forms intersect the text belonging to the staff above. In these instances, the black ink of the text clearly overlays the red ink of the note stems, or in one instance a *diesis* sign, suggesting *ficta* was

copied/applied during the music copying process.³⁹ Post-texting is also supported by observing precise placement of syllables after melismas (without any indications of partial texting), use of abbreviations in compressed texting (insufficient spacing of music) and the avoidance of features (lower stems, low pitch registers) from the staff being set with text.⁴⁰ Generally, Scribe β also anticipates his text underlay, with wider spacing in syllabic sections, but to a lesser degree than Scribe α .

The former observations suggest that Layers I and II were prepared and initially commenced as two separate projects by Scribe β , but were soon incorporated into a single unit by him. Layers I and II then appear to have come into the possession of Scribe α , possibly after the loss of a first gathering numbered 1-10. Using a large protogathering to form the present outer gatherings, Scribe α assembled the codex in its present order and finished copying works onto remaining blank leaves (if the protogathering was not entirely blank before its division). It was during the filling of the outermost faces (1r, 50v) that the flyleaves were added, the front leaf to accommodate the tenor of the work begun on 1r, and last to contain yet another rondeau by Matheus de Perusio. Scribe α also added the palimpsest on f. 16r, preferring to preserve his copy of *Gratiosus fervidus*, and supplied a small number of additional accidentals to the inner gatherings.

3.2. *Illumination and rubricae*

As such, space was not provided for initials in Layers I and II except in two cases. There is space for the historiated initial on f. 11r, while the first 10 mm of the first staff on f. 31r appears to have been erased in preparation for the same treatment, despite the presence of a simpler styled P. Gatherings 2 and 3 feature modest, but richly finished, illuminated major initials at the head of the page employing variously pale pink, scarlet red, lime green, azure blue, and black inks often bordering rectangular applications of gold leaf as

³⁹ The following examples can be noted: f. 11v, 'pedem' is written over a red stem; f. 12v, text overlays 3rd last red *minima* on 2nd staff; f. 14v, the text overlays the stems of several *minime* in this work, see especially end of staff 2; f. 26v, stems of red *semiminime* at the beginning of *outrépasse* (over the syllable 'que') are overlaid by the text set to the staff above; f. 31r, overwriting of stems of last group of red *semiminime* at the end of the 3rd staff by text set to the staff above; 32r, stems of second group of red notes on the 2nd staff are overwritten by the text belonging to the staff above; f. 33r, the first 'u' of 'Pandulfum' overwrites a *diesis* sign.

⁴⁰ The two letters of the first syllable of 'cuius' on the first staff of f. 15r is split by a *binaria c.o.p*; the fifth staff of f. 23v sees the descending flags of the special note form \downarrow avoided in the last syllable of 'celis'; the brevis on the pitch *e* below the first staff on f. 26v is avoided; f. 31r, superscription of 'remis' to avoid black *semiminime* flags in third staff; 33v, superscription of last three letters of 'mant' to avoid *semiminime* flags in staff three; f. 37r, superscripting of second syllable of 'major' in staff 1 due to compression; f. 37v, artificial division of 'su-scipere' to avoid stems from notes in staff below.

backgrounds to initials. There is one historiated figure⁴¹ and several accompanying drolleries, some illustrating the text (eg. the nightingale and cuckoo on f. 25v, *En ce gracieux temps*), and frequent, decorative acanthus leaves and rosettes below major initials. Marginal rayed bezants (small gold disks) are also frequent. Early scholars saw the style of the illuminations in this manuscript to be indicative of the Bolognese school typified by the master illuminator Niccolò di Giacomo da Bologna (†1402).⁴² Pirrotta used this view to support his argument that this manuscript was connected to the Bolognese papacy.⁴³ However, as argued by Anne Stone, several recent studies have shown that this style was broadly current throughout the Emilia-Romagna and Veneto regions.⁴⁴

Pieces added at the bottom of pages in the Gathering 2 sometimes lack illuminated initials, possibly suggesting their entry after initial illumination (eg. ff. 13v & 14v). On the other hand, the lack of the 'C' initial for the Ct label on f. 15r and similarly 'P' at the beginning of the T voice on f. 19r appear to be an oversight. The palimpsest on f. 16r is without initials, again suggesting a late entry into the collection.⁴⁵ These facts and the incomplete work on f. 47r suggest that the manuscript lacks its finishing touches, although all other works are generally complete including corrections such as the marginal insertion on f. 12r.

⁴¹ Jubal or Pythagoras is depicted with the initial accompanying Egidius' *Franchois sunt nobles*, f. 11r. He is kneeling at an anvil bare chested with a yellow tunic, a hammer in the left hand striking the anvil and another hammer in his right hand lifted to his ear. A palmer monk is found on the tendrils decorating the initial of Egardus' *Gloria*, f. 21v and a white cherub or Eros (Amor) with gilded wings standing on a stork's head is found on f. 30r. The head of a Saracen and the constellation of the chariot adorning Bartolinus de Padua's *Imperial sedendo* (31r) appear to be emblems of the Francesco Novello da Carrara, *vid.* Petrobelli, *op.cit.*, p. 97. *Cf.* Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', p. 18.

⁴² Pio Lodi, *op.cit.*, p. 522; *cf.* Bertoni, *op.cit.*, p. 22.

⁴³ Pirrotta, 'Il codice estense lat 568 e la musica francese in Italia al principio del '400', p. 151-52; *cf.* Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', pp.18-19.

⁴⁴ Stone, "Writing Rhythm in Late Medieval Italy", pp. 23-25. My own examination based on Pächt and Alexander's hand list of illuminated manuscripts in the Bodleian library has concluded with observations of features such as acanthus leaves, drolleries and the historiated figure which demonstrate appreciable similarities with sources dated from the early to mid-fifteenth century from centres such as Bologna, Verona, Venice and Mantua. *Vid.* Otto Pächt and J.J.G. Alexander, *Illuminated Manuscripts in the Bodleian Library*, 3 vols, Oxford, 1970, vol. 2 (Italian School), numbers 131, 133, 379, 437, 595(?), 628, 648-52, 751(?). There is a close similarity between the stork drollery on f. 11r of MOe5.24 and one found in a possibly Veronese manuscript in the Bodleian Library, ms Laud lat. 112, *vid. ibid.*, vol. 2, #628. There are remarkable similarities between acanthus leaves throughout MOe5.24 and decoration of the majuscule 'D' on ff. 38v and 40v, and those found in the Venetian manuscript (c. 1400), Bodleian Library ms Canonici. Class. Lat. 259, *vid. ibid.*, vol. 2, #437. Regarding execution of gothic initials in illuminations of Gatherings 2 and 3 of MOe5.24, the only similar style identified to this date occurs in Padua, Biblioteca di Stato, ms 67, copied in the Veneto in the early 15th century. However, there is little similarity in decoration styles used in both manuscripts; *vid.* Giulia Bologna, *Illuminated Manuscripts: The Book before Gutenberg*, London, 1988, p. 130.

⁴⁵ Traces of the former initial, in the same style as those initials in the second and third gatherings, can be readily detected in the manuscript.

Nino Pirrotta has previously drawn attention to the similarity between the script and initials in the fragment Parma, Archivio di Stato, busta 75 (=I-PAas 75) and Layer III (Gatherings 1 and 5) of MOe5.24.⁴⁶ I-PAas 75 contains works by Grenon, Fontaine, Ciconia, Bertrandus Feragut and Anthonellus de Caserta with three Cts by Matheus de Perusio. Again, a scribal link to Matheus de Perusio is encouraged by the evidence in PAas 75. The initials that appear in PAas 75 are drawn in the same ink colour as the script, unlike MOe5.24 wherein red ink is employed. This fact, and the observation that the unfinished piece entered on f. 47r of MOe5.24 already has an initial, leads to but one conclusion: the initials in PAas 75 and MOe5.24-III are from the hand of Scribe α .

The order in which MOe5.24 was finished can be established from scribal traits and decoration. With Layers I and II already conjoined, filled with music and foliated, all three inner gatherings (and possibly a now-lost first gathering) were furnished with simple red and blue minor initials in the case of voice labels. Gatherings 2 and 3 were then modestly illuminated by an individual schooled in the style of Niccolò di Giacomo. The lack of this style of illumination in Gathering 4 suggests that it was either furnished with simple majuscule initials beforehand, or that a change of circumstance removed access to the materials and/or illuminator responsible for the major initials in Gatherings 2 and 3. At any rate, the completion of the illuminations in Gatherings 2 and 3 before the manuscript was placed in the hands of Scribe α is testified to by the removal of an initial G, which formerly headed the palimpsested *Gratiosus fervidus* on f. 16r, illuminated in the style of Gatherings 2 and 3. Scribe α did not supply a new initial to newly entered *Pres du soloil*, possibly expecting that an illumination in the style of Niccolò di Giacomo would be furnished later. Based on the removal of *Gratiosus fervidus* from Gathering 2, it is likely that Layer III contained some music before being joined to the inner gatherings and subsequently completed.

3.3. Contents and repertorial considerations

Figure 3.4 (over page) gives a schematic representation of MOe5.24, indicating the position of works in the various gatherings of the manuscript. The numbering of items differs somewhat from those inventories found in Pirrotta and Günther in that each item, including alternative contratenors, is designated uniquely.⁴⁷

⁴⁶ Vid. Pirrotta, 'Il codice estense lat 568 e la musica francese in Italia al principio del '400', p. 141, and Stone, "Writing Rhythm in Late Medieval Italy", pp. 36-37.

⁴⁷ This removes the inconsistent numbering of the alternative Ct to *Se vous n'estes par mon guerredon nee* as 7a (with no relation to 7) – all other alternative Cts are given unique numbers by Pirrotta and Günther.

Figure 3.4: Schematic representation of the contents of MOe5.24.⁴⁸

Inventory Number. Title/Composer (voices)[Form]	folio number / Scribe
<i>Fly leaf</i>	
<i>Gathering I</i>	<i>a</i>
1. <i>Ave sancta mundi; Ave sancta mundi; T: Agnus Dei / M. de Perusio (T) [isoMot]</i>	1
<i>Ave sancta mundi; Ave sancta mundi; T: Agnus Dei / Matheus de Perusio (S1, S2)</i>	1
2. <i>Gloria / Idem (=Matheus de Perusio) (S) [OM]</i>	2
<i>Gloria / Matheus de Perusio (Ct, T)</i>	2
3. <i>Gloria, spiritus et alme / Anonymous (S, T (Ct)) [OM]</i>	3
<i>Gloria, spiritus et alme / Anonymous (Trip, T' (Ct))</i>	3
4. <i>Gloria Agnus dei / Anonymous (S, T, SolT) [isoOM]</i>	4
5. <i>El no me giova né val donna fuzire / (Bartolinus de Padua) [Alternative Ct, itB]</i>	4
<i>Gloria Agnus dei / Anonymous (Trip)</i>	4
<i>El no me giova né val donna fuzire (Ct')</i>	4
6. <i>Laurea martirii; Con laudanda est; T: Proba me domine / Anonymous (S, SolT, T) [isoMot]</i>	5
<i>Laurea martirii; Con laudanda est; T: Proba me domine / Anonymous (Trip, Ct)</i>	5
7. <i>Credo / Anonymous (S) [OM]</i>	6
8. <i>Se vous n'estes pour mon guerredon nee / (Guillaume de Machaut) [Alternative Ct]</i>	6
<i>Credo / Anonymous (Ct, T)</i>	6
<i>Credo / Anonymous (S, T, Ct).</i>	6
9. <i>Puis que la mort tres cruelment a pris /Anonymous (T) [B]</i>	7
<i>Puis que la mort tres cruelment a pris /Anonymous (S, Ct, T')</i>	7
10. <i>Credo / Anonymous (S, T) [OM]</i>	8
<i>Credo / Anonymous (Ct, T)</i>	8
<i>Credo / Anonymous (S, T)</i>	8
11. <i>Plus onques dame n'ameray / Anonymous (residuum) [V]</i>	9
<i>Credo /Anonymous (Ct)</i>	9
<i>Plus onques dame n'ameray / Anonymous (S, T, Ct)</i>	9
12. <i>Gloria fuga / M. de Perusio (C¹, C², T) [OM]</i>	10
13. <i>Par vous m'estuet languir et soupirer - Soyés par moy, mon amy gracieux / Idem (=Matheus de Perusio) (S, T) [R]</i>	10
<i>Gloria fuga / Matheus de Perusio (T')</i>	10
14. <i>Dame que j'aym sour toutes de ma enfance / Matheus de Perusio (S, T, Ct) [R]</i>	10

⁴⁸ See the Key to Abbreviations at the beginning of this study. The sign ' beside a voice label indicates it is a continuation of that part started on a facing leaf. Composers names in brackets occur either in the case where the work transmitted anonymously is ascribed to a composer in a concordant reading, or where *idem* written by the scribe refers to the previous ascription.

Figure 3.4 continued.

Gathering 2

15. <i>Franchois sunt nobles, preus, vaylans /</i> M. Egidius ordinis heremitarum sancti Agustini (S, T, Ct) [B] <i>Dame que j'aym sour toutes de ma enfance /</i> Matheus de Perusio (Ct')	11	β α β
16. <i>Sumite, karissimi /</i> Magister Zacharias (S, T, Ct) [B]		
17. <i>Une dame requis l'autrier d'amer /</i> Frater Johannes Janua (S, T, Ct) [B] <i>Sumite, karissimi /</i> Magister Zacharias (Ct')	12	
18. <i>Du val prilleus ou pourpris de jeunesse /</i> Antonello de Caserta (S, T, Ct) [B] 19. <i>Hors sui je bien de trestoute ma joye /</i> Anonymous (T) [R]		
20. <i>Beaute parfaite, bonte soverayne /</i> Idem (=Antonello de Caserta) (S, T, Ct) [B] <i>Hors sui je bien de trestoute ma joye /</i> Anonymous (S, T')	13	
21. <i>Notes pour moi ceste ballade /</i> Idem (=Antonellus de Caserta) (S, T, Ct) [B] 22. <i>Sol mi trafige 'l cor l'aquila bella /</i> Magister Zacharias (S) [itB]		
23. <i>Langue puens envenimee /</i> Anonymous (S, T, Ct) [B] <i>Sol mi trafige 'l cor l'aquila bella /</i> Magister Zacharias (S', T)	14	
24. <i>Se pronto non sara l'omo al ben fare /</i> Franciscus de Florentia (=Landini) (S, T) [itB] 25. <i>Fuions de ci, fuions, povre compaigne /</i> (Jacob Senleches) (S, T) [B]		
26. <i>Inclite flos orti gebennensis <sic> /</i> (Matheus de Sancto Johanne) (S, T, Ct) [B] <i>Fuions de ci /</i> (Jacob Senleches) (T', Ct)	15	
27. <i>Sans vous ne puis, tres douce creature /</i> (Matheus de Sancto Johanne) (S, Ct, T) [B] 28. <i>Pres du soloil deduissant s'esbanoye /</i> Matheus de Perusio (residuum) [B] <i>Pres du soloil deduissant s'esbanoye /</i> Matheus de Perusio (S, T, Ct) [palimpsest]	16	α β
29. <i>Caciando per gustar de quel tesoro - Ay cinçi, ay toppi, ay bretti /</i> Magister Z<acharias> (S) [Čac] <i>Caciando per gustar de quel tesoro - Ay cinçi, ay toppi, ay bretti</i> (T, S')	17	
30. <i>Apta caro; Flos virginum; T: Alma redemptoris mater /</i> Anonymous (Trip) [isoMot] <i>Apta caro; Flos virginum; T: Alma redemptoris mater /</i> Anonymous (C, T, Ct)	18	
31. <i>En un vergier clos par mesure /</i> Anonymous (S, T, Ct) [B]		
32. <i>Puer natus in Bethелеem /</i> Idem (=Anonymous) (S, T, Ct) [H]	19	
33. <i>Dame d'onour, c'on ne puet esprixier /</i> Anthonellus <de Caserta> (S, T, Ct) [R] 34. <i>A qui Fortune est toudis ennemie /</i> Anonymous (S, T, Ct) [V]		
35. <i>En atendant souffrir m'estuet grief payne /</i> Magister Filipoctus <de Caserta> (S, T, Ct) [B] <i>A qui Fortune est toudis ennemie /</i> Anonymous (S', Ct')	20	
36. <i>Je ne puis avoir plaisir /</i> Anonymous (S, T, Ct) [V] 37. <i>Quod jactatur /</i> J. Ciconia (S?) [Can]		

Figure 3.4 continued.

Gathering 3

38. <i>I bei senbianti con busiardi efetti /</i> Frater Camelitus [=Bartolinus de Padua] (C ¹ , C ² , T) [Mad]	21
39. <i>Gloria / Egardus</i> (S, T) [OM]	21
<i>Gloria / Egardus</i> (T', Ct)	
40. <i>Benche lontan me trovi in altra parte /</i> Magister Zacharias (S, T) [itB]	22
41. <i>Gloria / <Matheus> de Perusio</i> (S, T) [OM]	22
<i>Gloria / <Matheus> de Perusio</i> (Ct)	
42. <i>Plus lies des lies, plus joieux et plus gay /</i> Idem (=Matheus de Perusio) (S, T) [R]	23
43. <i>Credo / Zacharias</i> (S, T) [OM]	23
<i>Credo / Zacharias</i> (Ct, T')	
<i>Credo / Zacharias</i> (S, T)	24
44. <i>De toutes flours n'avoit et de tous fruis /</i> (Guillaume de Machaut) (S, T, Ct) [B]	25
45. <i>En ce gracieux temps joli /</i> Selesses (=Jacob de Senleches) (S, T, Trip) [V]	25
46. <i>Sans mal penser et sans folour /</i> Anonymous (S, T) [V]	25
47. <i>De petit po, denient volente /</i> (Guillaume de Machaut) (S, T, Ct, Trip) [B]	26
48. <i>De ma dolour ne puis trouver confort /</i> Magister Filipoctus de Caserta (S, T, Ct) [B]	26
49. <i>Sus une fontayne /</i> J. Ciconia (Ct') [V]	27
<i>Sus une fontaynet /</i> J. Ciconia (S, T, Ct)	27
50. <i>Ma douce amour et ma sperance /</i> J. de Janua (S, T, Ct) [V]	27
51. <i>Soit tart, tempre, mayn ou soir /</i> Anonymous (S, T) [V]	27
52. <i>Ma douce amour, je me doi bien complayndre /</i> (Johannes Symonis Hasprois) (S, T, Ct) [B]	28
<i>Soit tart, tempre, mayn ou soir /</i> Anonymous (T', Ct)	28
53. <i>Tres nouble dame souverayne /</i> Anthonello [V]	28
54. <i>Dame sans per, en qui est ma speranche /</i> A<ndrea> da Firenze? (S) [B]	28
55. <i>Amor me fait desirer loyaument /</i> Anonymous (S, T, Ct)	29
<i>Dame sans per, en qui est ma speranche /</i> Andrea da Firenze? (T)	29
56. <i>Gais et jolis, lies, chantans et joieus /</i> (Guillaume de Machaut) (S, T, Ct) [B]	29
57. <i>Inperial sedendo fra piu stelle /</i> Dactalus (=Bartolinus) de Padua (T') [Mad]	30
<i>Inperial sedendo fra piu stelle /</i> Dactalus (=Bartolinus) de Padua (S, T)	30
58. <i>Amour doi je servir, regraciiier /</i> Anonymous (S, T, Ct) [B]	30
59. <i>Tre doulz regard amoreus en moi tret /</i> Anonymous (S, T) [R]	30

β



Figure 3.4 continued.

Gathering 4

60. <i>Par les bons Gedeon et Sanson delivre</i> / Phylipoctus de Caserta (S, T, Ct) [B]	31	β
61. <i>Se doulz espour ne me donne confort</i> / Frater Corradus de Pistoria (S, T, Ct) [B]		
62. <i>Le greygnour bien que nature</i> / M. de Perusio (Ct') [B]		+α
<i>Le greygnour bien que nature</i> / M. de Perusio (S, T, Ct)	32	
63. <i>Amour m'a le cuer mis en tel martire</i> / Anthonello (S, T, Ct) [B]		+α
64. <i>Ore Pandulfum modulari dulci</i> / Blasius (in text)[B] <i>Amour m'a le cuer mis en tel martire</i> / Anthonello (Ct')	33	
65. <i>Le grant desir que j'ay du retourner</i> / M. de Perusio (S, T, Ct)[B]		+α
66. <i>Je la remiray sans mesure</i> / Anonymous (S, T, Ct) [V]		
67. <i>Se vous n'estes pour mon guerredon nee</i> / (Guillaume de Machaut) (S, T) [R]	34	+α
68. <i>En remirant vo douce pourtraiture</i> / Magister Filipoctus (S, T, Ct) [B]		
69. <i>Cortois et sages et a tous doit plasir</i> / Magister Egidius (S, T, Ct) [B]	35	+α
70. <i>Furnos reliquisti quare; Equum est et salutare</i> / Egardus (Mot) [CacMot]		
<i>Furnos reliquisti quare; Equum est et salutare</i> / Egardus (Trip, T)		+α
71. <i>La grant beaute de vous, ma souverayne</i> / Anonymous (S, T) [R]	36	
72. <i>Veri almi pastoris</i> / Frater Corradus de Pistoria ordinis heremitarum (S, T, Ct) [B]		+α
73. <i>Que pena maior agitanda menti</i> / Frater Bartholomeus de Bononia ordinis sancti benedicti et c<amaldolensi>(Ct')[V]	37	
<i>Que pena maior agitanda menti</i> / Frater Bartholomeus de Bononia (S, T, Ct)		+α
74. <i>Arte psalentes anexa dulcori patrum</i> / Idem frater (=Bartholomeus de Bononia) (S, T, Ct) [B?]		
<i>Arte psalentes anexa dulcori patrum</i> / Bartholomeus de Bononia (Ct')		+α
75. <i>Dame souvrayne de beaute, d'onour</i> / <Matheus> de Perusio (S, T, Ct) [V]	38	
76. <i>Dame zentil, en qui est ma sperance</i> / Anthonellus (S, T, Ct) [R]		+α
77. <i>Helas! merci, merci, pour Dieu merci</i> / <Matheus> de Perusio (S, T) [R]		
78. <i>Perché canzato è 'l mondo da l'antico</i> / Frater Bartolinus <de Padua> (S, T) [itB]		+α
<i>Helas! merci, merci, pour Dieu merci</i> / Matheus de Perusio (T')	39	
79. <i>En attendant esperance conforte</i> / Jacopinus Selesses (S, T, Ct) [B]		+α
80. <i>Tel me voit et me regarde</i> / Idem (=Jacopinus Selesses) (S, T, Ct) [V]		
81. <i>En atendant d'avoir la douce vie</i> / (Johannes Galiot) (S, T) [isoR]		+α
<i>En attendant esperance conforte</i> / Jacopinus Selesses (Ct')	40	
82. <i>Dame d'onour, en qui tout mon cuer maynt</i> / Anthonello (S, T, Ct) [B]		+α
83. <i>Andray soulet au mielz que je pouray</i> / <Matheus> de Perusio (S) [Can]		

Figure 3.4 continued.

Gathering 5

84. <i>Pour Dieu vous pri, haulte dame d'honneur</i> / M. de Perusio (S, T, Ct) [R]	41	α
85. <i>Heylas, que feray je maintenant</i> / Idem (=Matheus de Perusio) (S, T, Ct) [V]		
86. <i>Belle sans per d'haulte douchour paree</i> / Idem (=Matheus de Perusio) (S, T, Ct) [V]	42	
87. <i>Se je me plaing de fortune, j'ay droit</i> / Idem (=Matheus de Perusio) (S, T, Ct) [B]		
88. <i>A qui fortune ne se vuelt amer</i> / Idem (=Matheus de Perusio) (S, T, Ct) [R] <i>Se je me plaing de fortune, j'ay droit</i> / Matheus de Perusio (Ct')	43	
89. <i>Se pour loyaulment servir on puist merir</i> / Idem (=Matheus de Perusio) (S, T, Ct) [R]		
90. <i>Puisque je sui pour loyaulté tenir</i> / Idem (=Matheus de Perusio) (T) [V] <i>Puisque je sui pour loyaulté tenir</i> / Matheus de Perusio (S, Ct)	44	
91. <i>Pour bel acueil suy je, las, deceü</i> / Idem (=Matheus de Perusio) (S, T, Ct) [R]		
92. <i>Tu me solevi donna</i> / (Matheus de Perusio?) (Alternative Ct, itB)		
93. <i>Helas, Avril, par ton doulz revenir</i> / Idem (=Matheus de Perusio) (S, T, Ct) [R]	45	
94. <i>Je ne requier de ma dame et m'amie</i> / (Nicholas) Grenon, Ct Mathey de Perusio (S, T, Ct) [B]		
95. <i>Trover ne puis aucunement confort</i> / M. de Perusio (S, T, Ct) [R]	46	
96. <i>Gia da rete d'amor</i> / Idem (=Matheus de Perusio) (S, T, Ct) [itB]		
97. <i>D...</i> / Idem (=Matheus de Perusio) (S, unfinished) [?]	47	
98. <i>Sera quel zorno may</i> / Idem (=Matheus de Perusio) (S, T) [itB] <i>Sera quel zorno may</i> / Matheus de Perusio (Ct)	48	
99. <i>Ne me chaut vostre mauparler</i> / Idem (=Matheus de Perusio) (S, T) [V]		
100. <i>Gloria</i> / Idem (=Matheus de Perusio) (C ¹ , T) [OM]	49	
101. <i>Jusques a tant que vous veray</i> / Idem (=Matheus de Perusio) (S) [R] <i>Gloria</i> / Matheus de Perusio (C ² , Ct) <i>Jusques a tant que vous veray</i> / Matheus de Perusio (Ct, T)	50	
102. <i>Gloria</i> / Idem (=Matheus de Perusio) (S) [OM] <i>Gloria</i> / Matheus de Perusio (Ct, T)		
103. <i>Gratiosus fervidus; Magnanimus opere; T: Alleluia preveniamus faciem</i> / Anonymous (S, Ct, T) [Mot]		
104. <i>Dame d'honneur plesant et gracieuxe</i> / M. de Perusio (S, T, Ct) [R]		z

Fly leaf

The nature of the contents in MOe5.24 has been previously discussed by Pirrotta and Günther in their respective articles. As Günther suggests, the contents of MOe5.24 represent a shift from the repertoire found in its peer manuscript CH 564 (consisting wholly of *formes fixes* and motets) through the presence of settings of *Ordinaria missae* and other liturgical pieces, of Italian forms (*madrigale*, *caccia* and *ballata*) and of less orthodox forms encountered in items 37, 83 and 70. Three alternative Cts are also inserted in the outer

gatherings. MOe5.24 retains an emphasis on French or French-inspired *formes fixes* indicated by the presence of 38 ballades (including alternative Cts), 19 virelais and 17 rondeaux.⁴⁹ The already proposed division between the inner and outer gatherings is further emphasised by the presence of 33 of 38 ballades found in the manuscript in the inner gatherings.⁵⁰

The presence of three settings of the *ordinarium misse* at the beginning of the third gathering has already been discussed by Stone.⁵¹ While they appear to represent an early organisational principle in this manuscript, the departure from it seems to have been swift with a new emphasis on the *ars subtilior* repertoire. Yet, there are also certain factors which see the inclusion of works by the long dead Machaut and the late (and strictly Italian in their notation) works of Bartolinus de Padua. While at least two of Machaut's works appear to have been entered as afterthoughts or as space-fillers at the bottom of pages, the remaining two works occupy principal positions on their respective leaves. All works of Bartolinus, on the other hand, are accorded principal positions on the page and within their gathering's structure. All three of his compositions appear on *recto* faces.

The distribution of composers' works throughout the inner gatherings varies and suggests that little attempt was made to group works according to their composer, such as found in collections of *trecento* (=Italian) repertoire of this period. Rather it represents a copying process reflective of various stages of availability of exemplars. Works by Anthonellus de Caserta, Philipoctus de Caserta and Senleches appear in each inner gathering. It is notable that seven out of eight works ascribed to Anthonellus appear in Gatherings 2 (four works) and 4 (three works). This situation further distinguishes these gatherings from the Gathering 3. Of the works by Senleches, the two examples of his *ars subtilior* style occur on facing leaves in the Gathering 4. Seven works by Matheus de Perusio were copied into the inner gatherings by Scribe β . Five occur in the Gathering 4, with a further two works in the Gathering 3. His absence in the second is only avoided by the palimpsest of *Gratiosus fervidus* on f. 16r, over which Scribe α copied *Pres du soloil*. Works by Bartolinus de Padua (2 and 1 respectively), Egardus (one in each gathering) and Machaut (3 and 1 respectively) likewise only occur in the third and fourth gatherings. Works by Johannes de Janua (2), Zacharias (5) and Ciconia (2) only occur in the second and third gatherings. Two works, one each in Gatherings 2 and 4, are by Egidius. The two works

⁴⁹ Günther, 'Das Manuskript Modena, Biblioteca estense α .M.5.24', pp. 19-21.

⁵⁰ However, one of these 33 ballades occurs as a palimpsest on f. 16r added by Scribe α .

⁵¹ Stone, " Writing Rhythm in Late Medieval Italy ", p. 17.

ascribed elsewhere to Matheus de Sancto Johanne and a work by Francesco Landini occur in the second gathering. The one work by Hasprois (unasccribed) is found in the third gathering. The works of Corradus de Pistoria (2), Blasius (*Ore Pandulfum*) and Bartholomeus de Bononia (2) occur in close association in the fourth gathering.

In the introduction to this chapter, several previous observations concerning the dating of works that appear in MOe5.24 were mentioned. The tenable, but by no means incontestable dating of Bartolinus de Padua's *Inperial sedendo* to 1401 has already been considered an approximate *terminus post quem* for the copying of Layers I and II. More concrete in its associations is the text of the ballade *Ore Pandulfum*. Its text also contains several other important details. Ursula Günther took Pirrotta's suggestion that this work referred to Pandolfo III di Malatesta di Fano (Rimini branch of Malatesta),⁵² and convincingly argued that this work was written to celebrate the pilgrimage by the aforementioned lord to the Holy Lands and to Jerusalem (=Solima) in 1399.⁵³ It seems beyond dispute that the text and its musical setting were created almost simultaneously (*vid.* Vol. II, App. A, No. 24). The single strophe, which appears in MOe5.24, is as follows:

*Ore Pandulfum modulari dulci.
cantibus sevos totiens amores
Dompne, cur, Blasi, recinis sonoris
qui tibi duros acuant dolores?
Freta permensus Solima sub urbe
vidit Excelsi tumulum tonantis
militis signum referens decorum.*⁵⁴

⁵² Pirrotta, 'Il codice estense lat 568 e la musica francese in Italia al principio del '400', p. 140.

⁵³ Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', pp. 35-41

⁵⁴ Translation:

"Sing of Pandolfo with a sweet voice!
Why, with resounding songs, do you,
Don Biagio, repeat desires often fierce
which arouse harsh suffering?
Having traversed the seas, at the city of Jerusalem
he saw the tomb of the most high thunderer,
bringing back the knight's adorned standard."

I have adopted Gregor Maurach's emendation in the line 5 of the nonsensical *freta*, as appears in the manuscript, to *freta*, *vid.* Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', p. 35, fn. 64. The poetic flourish *Excelsi tumulum tonantis* clearly refers to the Holy Sepulchre. The composer of this work would appear to be the Blasius named in the body of the text. Pirrotta suggests that this individual may be Blasius d'Este, *maestro dei fanciulli* and *cantor* in the Cathedral of Padua in 1421, or *frate Biasgio* who is mentioned alongside Zacharias in the first tercet of sonnet 47 in the *Liber Saporecti* of Simone Prudenzianni, which was written before 1417, *vid.* Nino Pirrotta and Ettore LiGotti, 'Il codice Lucca', *Musica Disciplina*, vol. 5, p. 121, fn. 17.

The grammatical tense makes it clear that the reference to Pandolfo's pilgrimage occurs after he has already visited the Holy City, although the present participle *referens* in l. 8 suggests the ballade was written upon his return from abroad. Günther suggests that the composition was written for Pandolfo's entrance into Rimini, although Allan Atlas has more recently suggested that the composer of this work might have been the cathedral organist in Pandolfo's seignorial town of Fano.⁵⁵ Günther is also of the view that the presence of an *Alius contratenor* suggests that the version transmitted in MOe5.24 may have originated some time after 1399. Could this addition have been made during Pandolfo's period in Lombardy after 1400-1421⁵⁶ or while he was at the Council of Pisa in 1409? In the absence of explicit indicators of geographical origin of the additional voice, this question must remain open to speculation.

Pandolfo III Malatesta was a prominent figure in the politico-military history of northern Italy during the period 1389-1421. He was proficient in several tongues, kept a fine library and appreciated art. His role as a patron of music is also evident.⁵⁷ Yet, with all these attributes, he did not, as already apparent in relation to his pilgrimage in 1399, neglect matters spiritual and religious. In the years preceding the lead-up to the Council of Pisa, Pandolfo's obedience clearly lay with the pope in Rome.⁵⁸ Following the Council of Pisa and the election of Pietro Filargo, Pandolfo's new allegiance to Alexander V saw him attempting unsuccessfully to reconcile his brother and lord of Rimini, Carlo, to the Pisan obedience. Continued support for the Pisan papacy is evidenced by Pandolfo's presence at the conclave of John XXIII's election.⁵⁹ The presence of *Ore Pandulfum* in MOe5.24 might be indicative of its subject's favoured position during the short period of Alexander V's papacy.

Bartholomeus de Bononia's *Arte psalentes* (Vol. II, App. A, No. 25) contains an explicit reference to singing in the presence of a pope (*summo pontifice coram*). Adriano

⁵⁵ Allan W. Atlas, 'Pandolfo III Malatesta mecenate musicale: musica e musicisti presso una signoria de primo Quattrocento', *Rivista italiana di musicologia*, vol. 23, 1988, pp. 51-52.

⁵⁶ Pandolfo and his forces entered the services of Giangaleazzo Visconti in 1400, and continued to serve the Visconti state after Giangaleazzo's death until 1404, whereupon with Pandolfo's seizure of Brescia, Giovanni Maria Visconti declared him an enemy of the state. Pandolfo's intrigues in Lombardy continued until his surrender of Brescia in 1421, *vid.* Philip J. Jones, *The Malatesta of Rimini and the Papal State: A Political History*, London and New York, 1974, *passim*.

⁵⁷ On Pandolfo's artistic ability and patronage of the musical arts *vid.* Atlas, 'Pandolfo III Malatesta mecenate musicale', & *idem*, 'On the identity of some musicians at the Brescian Court of Pandolfo III Malatesta', *Current Musicology*, vol. 36, 1983, pp. 11-20.

⁵⁸ Boniface IX, for example, named Pandolfo papal vicar of Todi in 1397.

⁵⁹ *vid.* Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', p. 45.

Cavicchi suggests *Arte psalentes* may have been intended for one in a series of papal events at Ferrara during this period, including either Alexander V's bestowing the Order of the Golden Rose on Nicolò III d'Este on 2 March 1410, the meeting of Holy Roman Emperor Sigismund and John XXIII at Lodi 18 February 1414, or the arrival of newly elected Martin V at Ferrara 8 February 1419. Although it seems likely that *Arte psalentes* was written for a papal event at or near Ferrara,⁶⁰ the absence of direct evidence to suggest any particular individual or event leaves open the question of this work's dating.

*Arte psalentes anexa dulciori
patrum patre summo pontifice coram,
Placido notas scolarunculi vultu
magistrale decus suscipere velit.
Et si canticulus
non cantus existat,
formam illi cantus
prebere delectet.*⁶¹

The text itself explains the curious situation whereby there appears to be no attempt to follow accepted poetic conventions of a French ballade which usually includes a chiasmic rhyme across the first two couplets. There is a clever play in the last four lines between the rhyme *canticulus* - *cantus* and so-called half-rhyme *existat* – *delectet*. Musically, the work follows the ballade form, including alternative *overt* and *clos* endings for the first section and strict division of the *outrépasse* and *refrain*. An understanding of this work's text resides in its musical setting – since the poetry (*canticulus*) itself is not a ballade, the poet/composer asks that the pope be pleased that the text itself is set to music in the ballade form.

Corradus de Pistoria's *Veri almi pastoris* (Vol. II, App. A, No. 26) is another example from MOe5.24 of a musical ballade form set to a Latin text, although, unlike the former example of *Arte psalentes*, the lyrics follow a ballade-like scheme. Yet, the structure is

⁶⁰ On Bartholomeus' role in state celebrations under the rule of Ferrara's Marquis Niccolò III d'Este (ruled 1393-1441) *vid.* Lewis Lockwood, *Music in Renaissance Ferrara 1400-1505*, Oxford, 1984, pp. 17-25; E. Peverada, 'Vita musicale alla cathedrale di Ferrara nel Quattrocento: note e documenti', *Rivista Italiana di Musicologia*, vol. 25, 1980, pp. 3-30.

⁶¹ Translation:

"Singing, with art applied to the sweeter things
In the presence of the supreme pontiff and father of fathers,
with the serene look of a choirboy,
Masterful dignity wishes to sustain notes.
And if the canticle appears not a song,
Might the form of the song delight him."

extended into a 3-3-2-3 rhyme scheme, which is unusual in the context of the lyric poetry repertoire.

*Veri almi pastoris
musicale collegium
hunc cantum suscipite.
Vinculoque amoris
excitate ingenium
Ipsamque corrigite.
Et dulcis melodia
in ore canentium
Sonet cum armonia,
aures mulcendo
omni audientium.*⁶²

There is little doubt that the phrase *veri almi pastoris* refers to the True Earthly Shepherd of the Church, that is the pope. The use of the *verus* would appear to allude to the Schism and advocate the patron of the *musicale collegium* as the true pope. In relation to the use of *pastor* to denote the pope, one only need refer to Ciconia's *O Petre, Christi discipule* in which Saint Peter is referred to as *primus pastor*. Ostensibly written for the investiture of the Venetian humanist Pietro Miani (patronymic: Emilianus) as Bishop of Vicenza,⁶³ the text of *O Petre, Christi discipule* also urges Saint Peter to look over *pastorem nostrum*.⁶⁴ It was Alexander V to whom Pietro Miani owed his obedience and the privilege of being appointed bishop of Vicenza as one of the first acts of the aforementioned pope.

In terms of their music and notation, both *Arte psalentes* and *Veri almi pastoris* are closely related and draw upon (and expand) the idioms of the *ars subtilior* inherited by these

⁶² Translation:

“O musical college
of the merciful, true shepherd,
sustain this song
and from (earthly) love's bond
exercise the character
and make straight its way.
And may sweet melody
sound from the mouths
of those singing with harmony,
delighting all ears
of those listening.”

⁶³ For a summary of Miani's biography, *vid.* Margaret King, *Venetian Humanism in an Age of Patrician Dominance*, Princeton, 1986, pp. 402-3.

⁶⁴ A discussion of this motet accompanied by the text with an English translation by Leofranc Holford-Strevens is found in Margaret Bent, 'Music and the early Veneto Humanists', *Proceedings of the British Academy*, vol. 101, 1998, pp. 115-116.

Italian composers from French masters.⁶⁵ Both ballades suggest an intended papal audience possessing an appreciation of French cultural sensibilities. To which pope might these attributes of fall? Roman Pope Innocent VII (1404-06) [Cosimo Gentile de' Migliorati] was undoubtedly a patron of learning, as attested to by his reorganisation of the University of Rome and the founding there of a chair in Greek. His official roles during his career, however, were confined to Italy and England. His successor Gregory XII (1406-1415) [Venetian patrician Angelo Correri] pursued a career confined to centres in Italy and Greece. The Avignon Pope Benedict XIII (1394-1415) [Pedro de Luna], from a noble household of Aragón, lectured in canon law at Montpellier until his appointment as cardinal in 1375. His appreciation of the music of the French *ars subtilior* is without doubt, especially considering his patronage of Jacob de Senleches in the 1380s. However, the possibility that Bartholomeus de Bononia, like other Italian composers in MOe5.24, could have composed this work for Benedict XIII seems remote, especially given that this Bartholomeus is located during the years 1405-1427 at Ferrara and Benedict XIII only arrived in Genoa in 1405. Perhaps the most plausible candidate is Alexander V.⁶⁶ Pietro Filargo, a native of then Venetian Crete, studied and taught throughout Europe. His studies in theology were conducted at Padua, Norwich and Oxford. He taught in Franciscan houses in Russia, Bohemia and Poland, before lecturing at Paris on the *Sentences* of Peter Lombard during 1378-80 to obtain a doctorate in 1381. His reputation as a humanist drew the attention of Giangaleazzo Visconti, who ensured Filargo's securing a series of bishoprics at Piacenza (1386), Vicenza (1388) and Novara (1389), and the archbishopric of Milan (1402). Filargo was also active in procuring the title of Duke for Giangaleazzo in 1395. On 12 June 1405, Innocent VII named Filargo cardinal legate to Lombardy. After that date, Filargo became entangled in the affairs of the Schism that resulted in his election in 1409 at Pisa. Two aspects of Filargo's life are central to this present study. Firstly, Filargo had many opportunities to experience French culture during his years in Paris. Secondly, he was a reputed humanist, a patron of (new) letters and learning.⁶⁷

It is the nexus of relationships between humanists in the early fifteenth century that offers tantalising clues to the transmission of culture in northern Italy. Margaret Bent has

⁶⁵ Vid. Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', p. 29.

⁶⁶ The following statements draw upon Nerio Malvezzi, 'Alessandro V. Papa a Bologna', *Atti e memorie della reale deputazione de storia patria per la provincia di Romagna*, Series 3, vol. ix, 1891, pp. 362-379 & vol. x, 1892, pp. 39-55, and 'Alexander V', in *The Oxford Dictionary of Popes*, ed. J.N.D. Kelly, Oxford, 1991.

⁶⁷ Vid. Malvezzi, *op. cit.*, vol. ix, p. 371.

proposed common intellectual interests may have linked Pietro Filargo and Pietro Miani.⁶⁸ Both men were ostensibly Venetians, although the former originated from the Venetian colony of Crete. Miani's contact with the Florentine humanists is attested to by a letter to him in which Leonardo Bruni dedicates his translation of Plutarch's *Life of Aemilius Paulus* to the recipient. It is also notable that Bruni dedicated his *Life of Sertorius* to the Pavian humanist Antonio Loschi. Filargo was undoubtedly a member of the same humanist circle in Pavia (which included Loschi, Uberto Decembrio and Gasparino Barzizza) before his departure to Pisa. A plausible friendship also existed with the Paduan canonist Francesco Zabarella, especially in his role as Venetian legate at the council of Pisa, and Filargo. These connections likely extended to musicians active at Pavia and Padua, such as Matheus de Perusio and Johannes Ciconia. Zabarella's presence at Pisa may be enough to warrant Ciconia being there also, while another northerner Humbertus de Salinis, whose sole *ars subtilior* essay *En la saison* survives in CH 564, is documented as a member of Alexander V's chapel immediately after his election.⁶⁹

The unique transmission of Zacharias' *Sumite karissimi* in MOe5.24 (Vol. II, App. A, No. 27) contains broad textual references to members of religious orders and church dignitaries. Musically and textually it resembles a ballade, but is again distinct through the use of Latin text.

*Sumite karissimi,
Capud de REmulo, patres;
Caniteque musici,
Idem de CONSule, fratres,
et de JuMENto ventrem,
de gurgiDA pedem,
de nupTIis ventrem,
capud de Oveque
pedem de leoNE, milles
cum in omnibus Zacharias salutes.⁷⁰*

⁶⁸ Margaret Bent, 'Music and the early Veneto Humanists', p. 114; cf. Anne Hallmark, 'Protector, imo verus pater: Francesco Zabarella's patronage of Johannes Ciconia', in *Music in Renaissance Cities and Courts: Studies in Honor of Lewis Lockwood*, eds J. A. Owens and A. M. Cummings, Michigan, 1997, p. 165.

⁶⁹ Giuliano Di Bacco and John Nádas, 'The papal chapels and Italian sources of polyphony during the Great Schism', in *Papal Music and Musicians in Late Medieval and Renaissance Rome*, ed. R. Sherr, Oxford, 1998, p. 71, fn. 77. On his motets transmitted in Fl 2211 and Bc 15, *vid.* John Nádas, 'Manuscript San Lorenzo 2211: Some further observations', in *L'ars Nova del Trecento VI*, eds G. Cattin and P. D. Vecchia, Certando, 1992, pp. 148; Margaret Bent, 'Early papal motets', in *Papal music and Musicians in Late Medieval and Renaissance Rome*, ed. R. Sherr, Oxford, 1998, pp. 28-29.

⁷⁰ Translation:

"Take, O dearest fathers,
the head of "Remulus";
And Sing, O musical brothers

The text itself contains a puzzle for which Nino Pirrotta provided a solution. The references to “head”, “belly” and “foot” equate to the first, middle and last syllable of the specified word. The combination of the specified syllables results in the word *recommendatione*.⁷¹ Those who are asked to solve the puzzle are referred to as “most beloved fathers” and “musical brothers”. The inference accepted by most scholars is that these terms refer to the church fathers (cardinals, bishops and abbots) and a musical chapel.

Von Fischer and Gallo have suggested that this work may have been an audition piece written by Zacharias for employment in the papal chapel of John XXIII.⁷² However, it is possible that Zacharias gained his employment during the papacy of Alexander V, especially in light of that composer’s *Dime fortuna* and its references to Alexander’s papacy.⁷³ Could *Sumite karissimi* not be another case of a Latin ballade set for the listening pleasure of Alexander V, just as *Arte psalentes* and *Veri almi pastoris*? It remains equally plausible that this work was written before Filargo’s election if Zacharias is placed at Pavia for a brief period after his departure from the curia of Gregory XII.^{73a}

Another common thread running through these four previous works is the poetic practice of exhorting singers or the audience to celebrate in song. Looking outside MOe5.24, one does not have to go too far to find similar models. Striking textual similarities occur in Johannes Ciconia’s motet *Doctorum principem/Melodia suavissima/VIR MITIS*,⁷⁴ written in honour of his patron Francesco Zabarella. The text of C² begins with the following four lines:

*Melodia suavissima cantemus
tangant voces mellifue sidera
concorditer carmen lira sonemus*

the same of "consul",
and belly of "jumento" (mule),
foot of "gurgida" (stream),
belly of "nuptiis" (nuptials),
head of "ove" (sheep),
foot of "leone" (lion):

since in all these Zacharias [sends] a thousand good wishes.”

Milles is read as a false declension of the adjective *mille*, which in the accusative plural usually takes the form *milia*.

⁷¹ The word *recommendatio* appears to be a late medieval creation, a noun denoting recommendation, commendation, or greetings.

⁷² Kurt von Fischer and F. Alberto Gallo, (eds), *Italian Sacred and Ceremonial Music*, Polyphonic Music of the Fourteenth Century XIII, Monaco, 1987, p. 283.

⁷³ *vid. infra*. pp. 137-140.

^{73a} Zacharias’ presence at Pavia is suggested by Nádas and Ziino, *op.cit.*, p. 46.

⁷⁴ See a transnotation of this work in Margaret Bent and Anne Hallmark, (eds), *The Works of Ciconia*, Polyphonic Music of the Fourteenth Century XXIV, Monaco, 1985, No. 17, commentary: p. 207.

*resonet per choros pulsa cithara.*⁷⁵

The remaining lines of the motet praise the good name of Zabarella and the light he brings to Padua. Undoubtedly, the work was written in the first decade of the fifteenth century, espousing rhetorical conventions of the period. The presence of similar, if not identical language in the works of MOe5.24 and *Doctorum principem* alludes to a cultural context and artistic expression that is shared at various levels by the musical language of these works. This context, in light of proposed associations of *Veri almi pastoris* and *Arte psalentes*, is arguably early humanist.

The recurrence of this rarely transmitted sub-genre of the Latin-texted ballade is very useful in explaining the inclusion of *Inclite flos orti gebenensis*, transmitted anonymously in MOe5.24 but ascribed in CH 564 to Matheus de Sancto Johanne. I discuss this work, which is closely tied to the early years of the Schism and the Avignon party, at length in Chapter 5. In a similar vein, the Latin text virelai *Que pena maior*, also by Bartholomeus de Bononia is unique within the surviving repertoire (Vol. II, App. A, No. 28). However, like his *Arte psalentes*, it again avoids in part conventional rhyming schemes between strophes.

*Que pena maior agitanda menti?
age, fungor benigna
fronte prauis indigna
Invida proles
odiosa genti.*

*Improba mordet fatiscenti sono
me cithare dum musa resonantem.*

*Iam lingua falax inretita bono
hec cecha plorat mundo floridantem.*

*Diue virtutis portus affectantem
plebs ociosa monstrat.
Set Apollo demonstrat
aureos crines
nubere intenti.*

*Que pena maior, etc.*⁷⁶

⁷⁵ Translation:

“Let us sing in the sweetest of melodies
let our honey soft voices touch the stars
let us sound a song harmonously on the lyre
let the strummed cithara resound through our choral.”

⁷⁶ A possible translation of this often asyndotonic text follows:
“What greater torment than the mind astir?”

The subject of this virelai distances itself from the former Latin-texted ballades, taking up the familiar vein of the “musician’s complaint” with heavy emphasis on the poetic and musical “I”. Precedents, although of various literary registers, are found for example in Francesco Landini’s madrigal *Musica son* and Jacob de Senleches’ *Je me merveil* (vid. Vol. II, App. A, No. 29). In *Que pena maior*, the poet-musician, in concert with the Muses, sings and plays to an indifferent audience: only those that understand that music is the way to virtue shall see the glorious wisdom of Apollo. The text is permeated with ideas which suggest the presence of a proto-humanistic literature, relying heavily not only on Greek mythology but also Aristotelean-Thomistic attitudes to the value of music in spiritual matters, a concept which witnessed steady growth during the fourteenth century in relation to Dominican proselytising. Eleanor Beck has discussed this aspect in relation to the music and art of the *trecento* in her *Singing in the Garden*,⁷⁷ and it is most appropriate to see Bartholomeus’ virelai as reflective of fourteenth century Italian culture mingled with a poetic interest in ancient literary *topoi* whose growth is witnessed in the fourteenth and fifteenth centuries.

The suggestion that the aforementioned four Latin chansons *Arte psalentes*, *Veri almi pastoris*, *Sumite karissimi* and *Que pena maior* are indicative of both proto-humanist elements and associations with Pietro Filargo is not at odds with all accounts of this manuscript’s origin. However, the presence of two works, *Arte psalentes* and *Veri almi pastoris*, which arguably date from the papacy of Alexander V, is central to any consideration of the dating of Layers I and II of MOe5.24. Although it is abundantly clear that Layers I and II contain works composed several years before 1409, not only in France, Spain, Rimini, Ferrara, Padua but most likely Pavia, the compilation of these works was completed after the election of Alexander V. The presence of *Inclite flos* and *Ore Pandulfum*, again Latin-texted chansons, suggests the wider currency of this mode of artistic and celebratory expression. The context

Come! I act, expression
 benign; unseemly depravity
 envious offspring, hated by humanity,
 the wretch with a weakening sound
 gnaws at me resounding the cithara with the Muse.
 Now this deceitful tongue, goodness ensnared,
 blindly bewails bountifulness in the world.
 Him, who strives for the doors of divine virtue,
 the mocking people point at;
 But Apollo reveals
 golden locks to those set on joining [him].”

of these works reside in a situation where the audience is Latinate, educated, often ecclesiastical, and touched to varying degrees by early humanistic thought. Such a context may have been conducive to the transmission and compilation of the collection of works in Layers I and II of MOe5.25, whereby the chanson repertoire, as opposed to the sacred and motet repertoire,⁷⁸ was sought in those Italian centres of humanistic learning and musical excellence at especially Pavia, Padua and Florence.

3.4. *Composers in MOe5.24*

The Modena manuscript is rich in ascribed works, a situation which, in light of continuing archival research, links this source's repertoire with individuals active for all or the greater part of their lives in Italian centres, including Rome, Padua, Ferrara, Florence, Milan and Pavia. The following paragraphs summarise the biographies of composers whose works are found in MOe5.24 on the premise that this manuscript's repertoire and its transmission might be connected to them. While an understanding of the life of Matheus de Perusio perhaps remains central to any consideration of this manuscript, the significant confluence of the biographies of other composers represented in the manuscript also presents opportunities in relation to the nature of the collection. In particular, the confluence of the lives of Zacharias and Johannes Ciconia may have been a catalyst which affected the compilation of this codex in the early years of the fifteenth century.

A disproportionate ratio of works are ascribed to Matheus de Perusio, especially in the outer gatherings where, apart from ten works without ascription and a ballade by Nicholas Grenon (with Ct by Matheus), 24 works are ascribed to Matheus.⁷⁹ It is possible on stylistic grounds, but by no means certain, that the ten anonymous works in the outer gatherings are also by Matheus. A further eight works are found in the third and fourth gatherings, one of which is a copy over a palimpsest made by Scribe α . Works (including alternative Cts) by Matheus are found only in two other fragmentary sources. Although one of these

⁷⁷ Eleonora M. Beck, *Singing in the Garden: Music and Culture in the Tuscan Trecento*, Biblioteca Musicologica-Universität Innsbruck, Vienna & Lucca, 1999, pp. 51-66.

⁷⁸ One cannot fail to recall the argument of Margaret Bent, whose recent examination of the socio-cultural context of the manuscript Bologna, Civico Museo Bibliografico Musicale Q 15 (=Bc 15) places its repertoire collected between 1420 and 1435 in the realm of the early Veneto humanists, including Zabarella and his circle at Padua; *vid.* Margaret Bent, 'Music and the early Veneto Humanists', pp. 101-130. The presence of several works of Ciconia in Bc 15 which are demonstrably connected to the Veneto humanists is but one thread of the musical experience of the early humanists in the Veneto and surrounding regions: a musical experience which must have also included the chanson.

⁷⁹ Of these 24 works, six bear a direct ascription, while ascription is implied in a further 17 works by *idem*. It also appears likely that the alternative Ct on 44v-45r is also by Matheus.

concordances has only recently come to light,⁸⁰ one is still able to maintain the view of earlier scholarship that the outer gatherings betray a strong connection to Matheus. As already mentioned in the introductory remarks to this chapter, it has been universally proposed that Matheus or his *amanuensis* was the scribe of these gatherings.

From what can be derived from Italian summaries of now lost archival documents,⁸¹ evidence exists to suggest that Matheus de Perusio was *magister capelle* and singer in the chapel of the then-new, but as yet incomplete, Duomo of Milan in the years 1402-1406.⁸² In 1406, Cardinal Pietro Filargo appears to have requested that Matheus be transferred into his service at nearby Pavia, but that the administrators of the Duomo continue to provide his monthly salary. The Duomo continued to provide Matheus' salary until July 1407, when all trace of his employment there disappears. Only in entries for June 1414 does his name appear once again through the reference to a payment to *Matheus de perusio musichus et discantator*. The last reference to Matheus' employment in the account books of the Duomo occurs in October 1416 in relation to his salary for the previous August.

Several scholars assume that his transferral to the Cardinal of Milan's service in 1406 indicates Matheus was a *familiaris* of Filargo, remaining in his household at Pavia. It is clear that in 1408 Filargo left Pavia in preparation for what would become the Council of Pisa, where he was elected Alexander V. He arrived at Pisa in August 1408. Scholars have suggested that Matheus may have travelled southward with his patron, perhaps remaining in Filargo's service after his election to the papacy.⁸³ Yet archival evidence is lacking that would confirm either of these hypotheses. Neither of the two Matheuses in the chapel of Alexander V's successor, John XXIII, can be regarded as the Perugian singer on the basis of the framework of his career at Milan and his presumed origin. The singer named as Bruant appears to be Matheus Thorote alias Bruyant, priest and *tenorista* from Cambrai, while the singer actually named as Matheo in the *Introitus et Exitus* books from 1413 appears to be

⁸⁰ On the recently discovered fragment containing a concordance of Matheus' *Pour Bel Acueil* (MOe5.24, # 91), *vid.* Christian Berger, "Pour Doulz Regard...": Ein neu entdecktes Handschriftenblatt mit französischen Chansons aus de Anfang des 15. Jahrhunderts', *Archiv für Musikwissenschaft*, vol. 51, 1994, pp. 51-77. The other source of *contratenores* by Matheus is PAas 75.

⁸¹ *Annali della Fabbrica del Duomo di Milano dall'origine fino al presente pubblicati a cura sua Amministrazione* (=AFDM), Milan, 1877-1885, 6 vols. The original first volume of *Ordinazioni Capitolari de Fabbricieri de Duomo* containing records for the years 1390-1444 was destroyed by fire in 1906.

⁸² For Matheus' biography, *vid.* Claudio Sartori, *op.cit.*, pp. 12-27; Fabio Fano and Gaetano Cesari, *La capella musicale del duomo di Milano: Le origine e il primo maestro di capella: Matteo da Perugia*, Milan, 1956; Ursula Günther, revised Anne Stone, 'Matteo da Perugia', in *The New Grove Dictionary of Music and Musicians*, 2nd edn, ed. S. Sadie, London, 2001, vol. 16, pp. 136-138.

Matheus Hanelle, again a cleric of Cambrai who was to go on and serve for periods of time in the chapels of Popes Martin V and Eugenius IV.⁸⁴ There is also the unusual discrepancy that none of Matheus' works seem to have been composed to celebrate his patron or the papacy, although some commentators have sought to link some of his works to Pisa.⁸⁵

The documentary hiatus between 1407 and 1414 leaves this portion of Matheus' career open to speculation. If Matheus followed his patron to Pisa, Pistoria and Bologna, nothing can escape the fact that Filargo was dead by 1410. If Matheus did seek employment in the chapel of John XXIII, it could have only been a brief tenure, as the records from the curia of 1413 contain no mention of him. Certainly, on the face of it, the several settings of the Mass by Matheus according to the Roman rite suggest that Matheus had the opportunity to compose for sacred institutes outside those centres dominated by the Ambrosian rite of Milan and Pavia.⁸⁶

Finally, there is the matter of Matheus' death. Several scholars have held that this occurred in 1418.⁸⁷ The existence of two differing accounts, both purportedly drawn by scholars from the original documents, forces scholarship, in view of the loss of the original documents, to refrain from the conclusion that 1418 is the year of Matheus' death. One account states that Matheus was dead at the election of his successor,⁸⁸ the other simply

⁸³ Pirrotta, 'Il codice estense lat 568 e la musica francese in Italia al principio del '400', pp. 149-150. Cf. Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', p. 25.

⁸⁴ *vid.* John Nádas, 'Further notes on Magister Antonius dictus Zacharias de Teramo', *Studi Musicali*, vol. 15, 1986, pp. 178-181.

⁸⁵ Even Brad Maiani's scholarship which recognised the reworking (or perhaps, better put, re-composition) of a *Gloria* (MOe5.24, ff. 49v-50r), which was texted in accordance to the Ambrosian rite of Milan, into a *Gloria* (MOe5.24, ff. 48v-49r) in the Roman practice (or vice versa) cannot prove Matheus' presence at Pisa – it only proves that Matheus composed a work for performance outside the immediate environs of Milan for the Roman practice, *vid.* Brad Maiani, 'Notes on Matteo da Perugia: Adapting the Ambrosian liturgy in polyphony for the Pisan Council', *Studi Musicali*, 1994, pp. 3-28. As suggested by Stone ('Writing Rhythm in Late Medieval Italy', p. 41), Maiani's *terminus ante quem* of 1409 for the Ambrosian *Gloria* setting seems based on his conviction that the Roman setting was made subsequently, whereas it could equally apply that a Roman setting made during the seven years Matheus was not at Milan might have been adapted to the Ambrosian rite after his return.

⁸⁶ *Vid.* Kurt von Fischer, 'Bemerkungen zur Überlieferung und zum Stil der geistlichen Werke des Antonius dictus Zacharias de Teramo', *Musica Disciplina*, vol. 41, 1987, pp. 181-182.

⁸⁷ Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', pp. 25, 46; Gilbert Reaney, 'Matteo da Perugia', in *Die Musik in Geschichte und Gegenwart*, 1st edn, ed. F. Blume, Kassel und Bassel, Bärenreiter, 1960, vol. 8, col. 1794; Kurt von Fischer, 'Trecentomusik – Trecentoprobleme', *Acta Musicologica*, vol. 30, 1958, p. 187.

⁸⁸ Ambrogio Nava, whose research predates the destruction of the original documents from Milan recorded: *Il 13 gennaio 1418 moriva Matteo da Perusio, detto anche Perusino, celebre cantore e viene eletto prete Ambrosino de Pessano con soli 2 fiorini a mese. Questi si lamenta e viene augmentato a 3 fiorini mensili.* ('On 13 January 1418 Matheus de Perusio, also called Perusino, celebrated singer died, and Ambrosino da Pessano was elected (in his place) with the salary of 2 florins a month. After complaining about this <rate of pay> it was increased to

that Matheus' successor feels that he is not being paid enough in comparison to his predecessor.⁸⁹ Here, one needs only to repeat Stone's caution⁹⁰ against using this date, not withstanding new archival facts that might come to light, as a *terminus ante quem* in relation to the Matheus' works and the copying of MOe5.24, should there be any inclination to attach the manuscript directly to this composer.

Matheus continues to be represented in the inner gatherings (2-4) of MOe5.24, although, as already mentioned, to a much lesser degree than in the outer gatherings. The works by Matheus copied by Scribe β into MOe5.24 emphasise his works, mostly chansons, composed in the *ars subtilior* style. The composer with the greatest number of works (8 chansons) ascribed to him in the inner gatherings is Anthonellus de Caserta. Anthonellus, despite the fact that he might be regarded as *the* Italian master of the *ars subtilior*, remains largely an enigmatic figure in relation to his biography, despite the one small archival find that records a payment to a *Frater Antonello de Caserta* by the Archbishop of Milan at his curia in Pavia.⁹¹ All eight of his French-texted works are found in MOe5.24, with two concordances appearing in Pn 6771, a source with strong Paduan connections. His *alter ego* Antonello Marot da Caserta is responsible for 7 works with Italian texts found mostly in I-Las 184 (again a source with ostensibly Paduan origins according to John Nádas and Agostino Ziino⁹²). These works are no less indicative of a master composer's output, despite the fact that they often cultivate a very different musical style. If it can be assumed that both composers were the same individual, those works with Italian texts provide some

3 florins per month"), in Ambrogio Nava, *Memorie e documenti storici intorno alle origini, vicende e riti del Duomo di Milan*, Milan, 1857, p. 190, cited by Satori, *op. cit.*, p. 22.

⁸⁹ *Giovedì 13 gennaio 1418. Lettasi l'istanza di prete Ambrogio da Pessano, maestro di canto, il quale si lagna del suo salario di soli fior. 2 mentre Maestro Matteo da Perugia, prima di lui, riceveva fior. 6, dichiarando che se no si accresce il salario, egli andrà altrove, i deputati, considerando non essere conveniente che ai divini uffici manchi il canto, mentre vi occorre quasi la totalità dei cittadini, deliberano portare il suo stipendo a fior. 3 ossia £. 4. s. 16 imperiali al mese* ("Thursday, 13 January 1418. One reads the instance involving priest Ambrogio da Pessano, master of song, complaining of his salary of 2 florins, while Matheus de Perusio, his predecessor, received 6 florins, saying that if the salary is not increased, he will go elsewhere; the deputies, considering it to be unfitting that the divine office be without song, while almost all citizens would notice, decide to put his stipend at 3 florins or 4 lire 16 soldi imperial a month."), in AFDM, vol II, p. 26, cited in Satori, *op. cit.*, p. 23, fn. 34. Satori's cautioning on these conflicting testimonies is found on the same page. He also points out that Ambrosino da Pessano had already been *maestro di canti* since 1411 (*loc. cit.*).

⁹⁰ Stone, "Writing Rhythm in Late Medieval Italy", p. 51.

⁹¹ Pavia, Archivio di Stato, Università, Fondo Griffi, Cart. 15, cited by Stone, "Writing Rhythm in Late Medieval Italy", p. 63, fn. 82. Stone notes that the reference to a *procura* is found only in the a *rubrica* of Alberto Griffi who was a notary at the archbishop's curia at Pavia; cf. Anne Stone and Ursula Günther, 'Antonello da Caserta', in *The New Grove Dictionary of Music and Musicians*, 2nd edn, ed. S. Sadie, London, 2001, vol. 1, pp. 761-2.

⁹² Nádas and Ziino, *op.cit.*, p. 48.

tangible historic links to the period which are totally lacking (or undiscernible) in his French-styled output.

Nádas and Ziino have proposed that Antonello Marot da Caserta's madrigal *Del glorioso titilo d'esto duce* can be read as a work honouring the investiture of Giangaleazzo Visconti as Duke of Milan in 1395.⁹³ Further connections with the Visconti are proposed in *Più char che'l sol* which contains the *senhal* "Lucia", perhaps a reference to Bernabò Visconti's daughter of that name and sister to Giangaleazzo's second wife Catarina (married 1380). However, beyond these few enticing fragments of information, little evidence exists to construct a biography of this composer. While it is possible that Anthonellus was at Pavia in 1402, that is the same year Filargo was appointed Archbishop of Milan, and that he wrote a song or two containing references to members of the Visconti court, it remains uncertain whether Anthonellus remained at Pavia after that date. The source situation discussed below, especially Las 184 and Pn 6771 indicate the circulation of Anthonellus' works in the Veneto, especially at Padua.

Further Paduan associations in MOe5.24 occur in the case of Bartolinus de Padua. Again, little is known of this composer. Three of his works, all Italian madrigals in late *trecento* notation, appear in MOe5.24. However, in two cases the ascriptions to these works are at first glance puzzling: *Frater Carmelitus* (38) and *Dactalus de Padua fecit* (57). Only one work (78) is ascribed to Frater Bartolinus. In the case of the two former works, both are ascribed to *Magister Frater Bartolinus de Padua* in Fl 87. In at least the case of *Dactalus de Padua*, the inscription is considered erroneous.⁹⁴ However, in his important article concerning Bartolinus and the dating of his works, Pierluigi Petrobelli sees the first inscription (38) in conjunction with the composer's portrait in Carmelite habit in Fl 87 as strong indication that Bartolinus was a member of the Carmelite order.⁹⁵

There is the question whether *Dactalus* is a lexical error or it actually refers to Bartolinus. *Dactylus* (Anc. Greek Δακτυλος) refers to "finger", although it may also denote a small muscle or blade of grass. *Dactylus* is also a term referring to a poetic foot (according to Ancient Greek models) of long-short-short which remains in use in the middle ages. Medieval Latin usage also includes the basic Greek definition, although *dactylus* and its

⁹³ Nádas and Ziino, *op.cit.*, p. 38.

⁹⁴ Pirrotta, 'Il codice estense lat 568 e la musica francese in Italia al principio del '400', p. 124; cf. Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', p. 61.

⁹⁵ Petrobelli, *op.cit.*, pp. 86-87.

variants including *dactalus* can refer to the date fruit.⁹⁶ If *Dactalus* is a nickname, there appears to be no direct connection to the very little we know about the composer himself. Nor can any natural connections with the musical nature of *Inperial sedendo*, the work in MOe5.24 over which this ascription appears, be entertained. Pirrotta concluded that the illuminations accompanying *Inperial sedendo* in MOe5.24 suggest a separation from the original tradition. Yet, I am reluctant to agree with Pirrotta's views since the chariot named in the text is cleverly represented by the constellation of the chariot, while the Saracen emblem appears remarkably consistent with numismatic representations from the period.⁹⁷ This fact alone suggests that the intentional use of *Dactalus* as a nickname by the scribe of MOe5.24 should be given further consideration.

Petrobelli also concludes that Bartolinus set Giovanni Dondi dall'Orologio's ballata *La sacrosanta carità d'amore* to music sometime between c. 1368 and 1389 (the year of Dondi's death, at Genoa). Perhaps another important fact highlighted by Petrobelli is that Dondi moved from Padua to Pavia to take up his employment as physician to Giangaleazzo Visconti in 1383. Dondi returned to Padua briefly some time during the years between his appointment at Pavia and his death. There is also Bartolinus' musical setting of the ballata *Chi tempo à* by Matteo Griffoni (1351-1426), the minor poet who became Bologna's ambassador to Padua in 1391. The expansive *Le aurate chiome* may refer to Francesco Novello da Carrara's sister Caterina and her wedding in 1372.

Pirrotta realised at an early stage that Bartolinus' *Inperial sedendo* contained precise references to the arms of the Carraresi, Lords of Padua. Nicole Goldine interpreted the text of *Inperial sedendo* as a reference to Francesco il Vecchio da Carrara (1325-1393) and dated it between 1364 and 1367.⁹⁸ However, Petrobelli's detailed reading of this madrigal's text argues that it refers to the investiture of Francesco Novello da Carrara (1359-1406) as captain-general of the imperial army in the later half of 1401.⁹⁹ The same author argues that *La douce cere* (not in MOe5.24) was written between the years 1390 and 1405 in honour of a descendant of the second lord of Carrara Marsilio Papafava,¹⁰⁰ and *Alba columba* (again not in MOe5.24) contains the emblem of the white dove and motto (*à bon droit*) of Giangaleazzo Visconti and is dated to the end of 1388 after the surrender of the

⁹⁶ R. E. Latham, (ed.), *Revised Medieval Latin Word-list*, London, 1965.

⁹⁷ Petrobelli, *op.cit.*, pp. 97-98.

⁹⁸ Nicole Goldine, 'Fra Bartolino da Padova, musicien de cour', *Acta Musicologica*, vol. 34, 1962, pp. 150-151.

⁹⁹ Petrobelli, *op. cit.*, pp. 98-100.

Francesco il Vecchio to the Visconti. Petrobelli suggests that Bartolinus may be identical to *Frater bartolomeus de santa cruce de padua* listed in a document from 1380, who is identical to Carmelite Frater Bartolomeus de Sato named in a document from 1376.¹⁰¹

As such, Petrobelli concludes that Bartolinus was active at Padua from 1380 or earlier and up to the first years of the fifteenth century,¹⁰² thus situating him among the last generation of *trecento* composers.¹⁰³ Bartolinus' *madrigali*, therefore, represent a more recent repertoire composed within a decade of MOe5.24's compilation. While most of Bartolinus' compositions employ a late form of northern *trecento* notation, they often tend musically towards a French aesthetic. In *La douce cere*, for example, we hear a stratification of voices: a florid cantus, which is filled with rhythmic nuances reminiscent of several *ars subtilior* works, over slower moving lower voices. The infiltration of a French style is possibly paralleled by the presence of French text (even if as mottos) in his *La douce cere* and *Alba columba*, although this situation is already evident in Landini's *Adiu, adiu dous dame iolye*, and possibly contemporary with Paolo Tenorista's and Niccolò da Perugia's macaronic *Souffrir m'estuet*.¹⁰⁴

An additional connection to Padua occurs in the case of Johannes Ciconia. Two of his works are transmitted in MOe5.24 including his so-called *ars subtilior* essay, *Sus une fontayne*. The biography of Johannes Ciconia is inseparable from phases of scholarship in the present era, so that a survey of its changing attitudes and newly accumulated facts is most appropriate. Ciconia's first biographer, Suzanne Clercx proposed that Ciconia was a priest from Liège born about 1335 first mentioned in a papal document from Avignon in 1350. Clercx was of the view that Ciconia was a member of the retinue of Cardinal Gil Alvarez Albornoz in the years 1358-1367 and that he died at the relatively grand age of 76 in 1411 in Padua.¹⁰⁵ In 1976 (after an earlier suggestion by Heinrich Besseler¹⁰⁶),

¹⁰⁰ Petrobelli, *op. cit.*, pp. 100-104.

¹⁰¹ Petrobelli, *op. cit.*, p. 111.

¹⁰² Petrobelli, *op. cit.*, p. 110.

¹⁰³ For views on Bartolinus' possible residence at Florence and anti-Visconti sentiments in works such as *La Fiera testa*, *vid.* Kurt von Fischer, revised Gianluca D'Agostino, 'Bartolino da Padova', in *The New Grove Dictionary of Music and Musicians*, 2nd edn, ed. S. Sadie, London, 2001, vol. 2, pp. 820-822.

¹⁰⁴ Q.v. F. Alberto Gallo, 'Bilinguismo poetico e bilinguismo musicale nel madrigale trecentesco', in *L'Ar Nova Italiana de Trecento IV*, 1975, pp. 237-243; Piero Gargiulo, 'Landini e il «cantar a la Francescha»: alcune note sul virolai *Adiu adiu dous dame iolye*', in *Col dolce suon che da te piove: Studi su Francesco Landini e la musica del suo tempo in memoria di Nino Pirrotta*, eds A. Delfino and M. T. Rosa Barezzani, Studi e Testi Scuola di Paleografia e Filologia Musicale 2, Firenze, 1999, pp. 323-337.

¹⁰⁵ Suzanne Clercx, *Johannes Ciconia: un musicien liégeois et son temps (vers 1335-1411)*, 2 vols, Brussels, 1960.

David Fallows questioned whether the style of the surviving musical works ascribed to Johannes Ciconia was consistent for an individual born in 1335, and suggested that the Johannes Ciconia documented by Clercx might actually represented two distinct individuals, perhaps a father and a son, the latter identical to the composer.¹⁰⁷ Fallow's hypothesis was confirmed in the last decade by Giuliano Di Bacco and John Nádas who drew attention to a hitherto ignored papal dispensation from 27 April 1391 which frees one *Iohanni Cyconia clerico leodensi* from any obstacles to his future taking of prebendal office, a privilege which is usually prohibited by canon law for the illegitimate son of a priest.¹⁰⁸ The young cleric named in the document is most likely the twelve year old (*duodenus*) choir boy documented in 1385 at St-Jean's of Liège, and the Johannes Ciconia who spent his last years at Padua and declared himself in 1405 to be the son of *quondam Johannis de civitate Leodensis*.¹⁰⁹ It seems that Johannes Ciconia the younger, in a process common in the middle ages, was to go onto hold the same office (*in absentia*) as his father, the canonicate of St-Jean at Liège, of which the latter was deprived in 1408.

The dispensation of 1391 also contains one further reference to Ciconia as *clericus capelle ac domesticus continuus commensalis* of Cardinal Philippe d'Alençon. It is noteworthy that d'Alençon was of noble Valois stock, but, contrary to the national tendencies of this period, he maintained Roman allegiance during the Schism. Between 1381 and 1387, d'Alençon served as the administrator to the Patriarch of Aquileia at Friuli. However, from 1385, he was at Padua, with his residence at Monselice. As Di Bacco and Nádas suggest, Ciconia probably benefited in later years from d'Alençon's earlier Paduan connections when he sought employment in that city.¹¹⁰ After visiting Flanders and the Lowlands as papal

¹⁰⁶ Heinrich Bessler, 'Hat Matheus de Perusio Epoche gemacht?', *Die Musikforschung*, vol. 8, 1955, pp. 19-23.

¹⁰⁷ David Fallows, 'Ciconia padre e figlio', *Rivista italiana di musicologia*, vol. 11, no. 2, 1976, pp. 171-7.

¹⁰⁸ Giuliano Di Bacco and John Nádas, 'Verso uno "Stile internazionale" della musica nelle capelle papali cardinalize durante il Grande Scisma (1378-1417): il caso di Johannes Ciconia da Liège', in *Collectanea I*, ed. A. Roth, Vatican City, 1994, pp. 13-14; for a repetition of those points in the aforementioned article *q.v.* Di Bacco and Nádas, 'The papal chapels and Italian sources of polyphony during the Great Schism', pp. 50-52. Clercx held that Johannes Ciconia was the son of Johannes Ciwagne of Liège, a furrier active around 1350, in Suzanne Clercx, 'Ancora su Johannes Ciconia (1335-1411)', *Nuova Rivista Musicale Italiana*, vol. 11, 1977, p. 40.

¹⁰⁹ Di Bacco and Nádas, 'Verso uno "Stile internazionale" della musica nelle capelle papali cardinalize durante il Grande Scisma (1378-1417)', p. 15. These authors also draw attention to a contemporary document which mentions 'plusiers enfans natureis de Saingnor Johan de Chywongne, canonne de Saint-Johan'.

¹¹⁰ Di Bacco and Nádas, 'The papal chapels and Italian sources of polyphony during the Great Schism', p. 52. For the argument that Ciconia was at Padua in 1401 (definitely by 1402), contrary to Clercx' view that Ciconia only took up his appointment in 1403, *vid.* Anne Hallmark, 'Gratiosus, Ciconia, and other musicians at Padua Cathedral: Some footnotes to present knowledge', in *L'Ars Nova Italiana del Trecento VI*, eds G. Cattin

legate, d'Alençon returned to Rome after the death of Urban VI (1389) in 1390, to remain there until his own death on 14th August 1397. A further document from 27 July 1391 clearly places Johannes Ciconia at Rome as a witness to a will made at d'Alençon's cardinalate church of S. Maria in Trastevere.¹¹¹ Di Bacco and Nádas suggest Ciconia was recruited before d'Alençon's return from Flanders in 1388, whereupon Ciconia was brought to Rome by the cardinal. This permits a connection between the choirboy at St-Jean of Liège (1385) and Ciconia's presence early in his career at Rome in 1391. The absence of Ciconia's name in d'Alençon's will neither proves nor disproves his continued presence in Rome, although Di Bacco and Nádas are inclined to view Ciconia's stay in Rome to be an extended one.¹¹² It should be noted that as yet there exist no references to Ciconia as a musician in his Roman period. Di Bacco and Nádas also suggest that Ciconia would have had the opportunity at Rome to meet composers in the service of the papal chapel such as Zacharias.

Ciconia appears to have taken up his new role at Padua in 1401. It is noteworthy that at the same time the canon, Johannes Ciconia the elder, is still documented at Liège.¹¹³ From 1403, Ciconia the younger is *cantor et custos* of Padua's cathedral. Another document from 1403 also refers to Ciconia as *musicus*, thereby removing any uncertainty in this case, which might surround the designation and role of *cantor*.¹¹⁴ At Padua, Ciconia benefited from close connections to the canonist and diplomat Francesco Zabarella (Archpriest of

and P. Dalla Vecchia, Certaldo, 1992, pp. 75-76. Hallmark's dissertation (Princeton) containing a documentary history of Ciconia promises to contain many details which will further contribute to musicology's understanding of Ciconia and music in this period.

¹¹¹ Di Bacco & Nádas, 'Verso uno "Stile internazionale" della musica nelle capelle papali cardinalizie durante il Grande Scisma (1378-1417)', p. 25.

¹¹² Di Bacco and Nádas, 'The papal chapels and Italian sources of polyphony during the Great Schism', p. 55. Di Bacco and Nádas suggest that Ciconia may have remained in Rome after d'Alençon's death in 1397. This considerably limits the earlier suggestion of Ziino and Nádas that Ciconia may have resided at the Visconti court in the 1390s on the basis of possible reference to Giangaleazzo in his works, in *The Lucca Codex*, pp. 41-45. The situation, however, is not clearly defined in the absence of archival documents (most of the Visconti archives and library were dispersed or destroyed after the demise of the Sforza dynasty at the end of the fifteenth century and subsequent social upheaval) and in view of similar references in Bartolinus de Padua's works. For a reconstruction of the Visconti-Sforza library, and a discussion of its dispersal, *vid. Élisabeth Pellegrin, La bibliothèque de Visconti et des Sforza ducs de Milan, au XVe siècle*, Publications de l'Institut de recherche et d'histoire des textes V, Paris, 1955. Although a great part of the Visconti library passed into the hands of Louis XII and were transported to Paris (where many still reside in the Bibliothèque Nationale), the wide dispersal of the collection throughout libraries in Europe suggests a more complex picture of dispersal, *vid. ibid.*, pp. 71-72.

¹¹³ Di Bacco and Nádas, 'The papal chapels and Italian sources of polyphony during the Great Schism', p. 53.

¹¹⁴ Hallmark, 'Gratiosus, Ciconia, and other musicians at Padua Cathedral', pp. 76-77.

Padua 1397, Bishop of Florence 1410, cardinal 1411 under the Pisan obedience).¹¹⁵ Indeed, Zabarella is honoured in two motets by Ciconia: *Ut te per omnes celitum / Ingens alumpnus padue* (Ob 213, ff. 129v-120r; Bc 15, f. 260v) and the aforementioned *Doctorum principem / Melodia suavissima / VIR MITIS* (Bc 15, ff. 270v-271r). It is also now apparent that Ciconia died between 10 June and 12 July 1412, a year later than supposed by Clercx.¹¹⁶

The works of Ciconia contain several celebratory motets also written for church and state in connection to events at Padua and Venice. *O Felix templum iubilia* celebrates the investiture of Stefano Carrara, Bishop of Padua 1402-1404.¹¹⁷ *Padu...serenans* celebrates Andrea da Carrara, titular head from 1396 and abbot (1402-04) of Santa Giustina.¹¹⁸ Di Bacco and Nádas have proposed that his motet *O Petre, Christi discipule* refers to the new Pisan Pope Alexander V.¹¹⁹ Ciconia's secular works also contain references to the Carrara family. *Per quella strada lactea de cielo*, like Bartolinus' *Inperial sedendo*, describes the Carraresi arms. There is also Ciconia's musical setting of Leonardo Giustinian's *Con lagrime bagnandome el viso*: a lament on the death of Francesco II Novello da Carrara in 1406.¹²⁰ Nádas and Ziino also suggest that *Una panthera in compagnia de Marte* was written for the celebrated visit of Lazzaro Guinigi of Lucca to Giangaleazzo's court in Pavia to form an

¹¹⁵ Hallmark, 'Protector, imo verus pater: Francesco Zabarella's patronage of Johannes Ciconia', pp. 153-168; *q.v. eadem*, 'Gratiosus, Ciconia, and other musicians at Padua Cathedral', p. 75.

¹¹⁶ Hallmark, 'Protector, imo verus pater', p. 76.

¹¹⁷ Fallows, *Oxford, Bodleian Library, MS. Canon. Misc. 213*, p. 32. This work occurs in Ob 213, ff. 22v-23r and Bc 15, ff. 223v-224r, the former version in *trecento* notation, the latter in French notation, *vid.* Bent and Hallmark, *op.cit.*, p. 205.

¹¹⁸ Hallmark, 'Protector, imo verus pater', p. 165.

¹¹⁹ Di Bacco & Nádas, 'Verso uno "Stile internazionale" della musica nelle capelle papali cardinalize durante il Grande Scisma (1378-1417)', p. 33, fn. 63. Di Bacco and Nádas suggest that at another level (besides referring to St. Peter and Pietro Filargo) the motet might also refer to Pietro Marcello, appointed Bishop of Padua in 1409 by Alexander V. Margaret Bent, on the other hand, suggests that, just as Ciconia wrote the 'full-dress motet' *Petrum Marcellum venetum/O petre antistes* for Marcello's investiture September 1409, *O Petre, Christi discipule* may refer to one of Alexander's earliest appointments, Pietro Emiliani as Bishop of Vicenza, in 'Early papal motets', pp. 24-26.

¹²⁰ Clercx thought this work referred to the death of Cardinal Albornoz, the patron of the individual now regarded as Johannes Ciconia senior, in Suzanne Clercx, *Johannes Ciconia*, vol. I, p. 23. Nicole Goldine stated that it referred to the death of Francesco il Vecchio da Carrara in 1393, in *op. cit.* Nádas and Ziino supported its association with Il Novello's death in 1406, in *The Lucca Codex*, pp. 41-42. Hallmark has recently re-argued for this work's association with Il Vecchio's death, in 'Protector, imo verus pater', p. 164. However, David Fallows' argument that the text of *Con lagrime bagnandome* was written by the Venetian poet Leonardo Giustinian (c. 1382-1446) during his student years (c. 1403-1407) at Padua, and the same scholar's location of this work in the Paduan layers of I-Las 184, strongly swings the pendulum back in favour of the text referring to Francesco II Novello. Thus it appears that this work was composed somewhere between 1406 and the death of Ciconia in 1412; *vid.* David Fallows, 'Leonardo Giustinian and Quattrocento polyphonic song', in *L'Edizione critica tra testo musicale e testo letterario: Atti del convegno internazionale (Cremona 4-8 Ottobre 1992)*, eds R. Borghi and P. Zappalà, Studi e Testi Musicali Nuova Serie 3, Lucca, 1995, pp. 247-260.

alliance with the Visconti in May and June 1399.¹²¹ Günther and Strohm have already suggested Ciconia's Pavian connections in relation to *Sus une fontayne* and its links to Philipoctus de Caserta and fountain imagery¹²² although recent research views the latter imagery instead as a general literary *topos*.¹²³ Nádas and Ziino suggest this strengthens the attribution of the anonymously transmitted canonic work *La ray au soleyl*, which contains references to the motto (*à bon droit*) and the emblem (a dove within a radiant sun) of Giangaleazzo, to Ciconia.¹²⁴ The proportional and canonic compositional devices, according to Nádas and Ziino, see similarities with MOe5.24, which they place at Pavia.

The emerging picture of Ciconia's Roman period and his subsequent transferral to northern Italy sheds light on possible lines of transmission for works contained MOe5.24, especially several works by Zacharias. Antonius dictus Zacharias de Teramo has emerged during the past two decades of medieval music research as one of the foremost and better-documented composers of this era. However, this has not always been the case for the greater part of the twentieth century. Early in the debate, Nino Pirrotta judiciously proposed that three individuals might be identified by ascriptions Zacara or Zacharias in extant sources: Nicholaus Zacharie, *cantor* of Martin V 1420-24; *Magister Zacharias cantor Domini nostri Papae*, who was loyal to Bolognese pope John XXIII; and *Magister Antonius Zachara de Teramo*, who was loyal to Roman pope Gregory XII.¹²⁵ In 1979, Agostino Ziino presented the findings of his archival research conducted in the Vatican Archives which placed *magister Antonius dictus Zacharias de Teramo*, papal letter writer, in the curia of Roman pontiff Boniface IX (1389-1404) as early as 1 February 1391.¹²⁶ It is clear from the same papal document that this Zacharias was already *in nostra capella cantor*. The continued presence of Zacharias in the Roman curia as *scriptor litterarum* of three successive popes is attested to by a series of documents, the last of which is dated 1 June 1407 during the pontificate of Gregory XII.¹²⁷ After this time, Ziino suggests that Zacharias may have left Rome with Gregory XII on his journey to Viterbo, defecting in 1408 to the Pisan party and perhaps

¹²¹ John Nádas and Agostino Ziino, *The Lucca Codex*, pp. 42-43.

¹²² Günther, 'Problems of dating in the Ars nova and Ars subtilior', p. 294; Strohm, 'Filippotto da Caserta, ovvero i francesi in Lombardia', p. 71.

¹²³ Anne Stone, 'A singer at the fountain: Homage and irony in Ciconia's 'Sus une fontayne'', *Music and Letters*, pp. 361-390; Plumley, 'Ciconia's *Sus une fontayne* and the legacy of Philipoctus de Caserta'.

¹²⁴ Ziino and Nádas, *The Lucca Codex*, p. 44.

¹²⁵ Nino Pirrotta, 'Zacharus musicus', *Quadrivium*, vol. 12, 1971, pp. 153-175.

¹²⁶ Agostino Ziino, 'Magister Antonius dictus Zacharias de Teramo: alcune date e molte ipotesi', *Rivista italiana di musicologia*, vol. 14, no. 2, 1979, pp. 311-348.

¹²⁷ Ziino, 'Magister Antonius dictus Zacharias de Teramo', pp. 317-319.

finding employment in the papal chapel of the Pisan obedience. A link is thus envisaged whereby *Antonius dictus Zacharias de Teramo* (of the Roman obedience) and *Magister Zacharias cantor domini nostri pape* (as appears in Fl 87) can be construed as homonyms. Ziino also argues that stylistic aspects across the body of works ascribed to either name in part support this hypothesis.¹²⁸

Shortly after the publication of Ziino's article, two new articles appeared which further confirmed Zacharias' associations with Rome. Richard Sherr reported on the contents of *mandati camerales* from the Roman curia that had remained in Paris after the return of Vatican Archives previously removed by Napoleon's invading armies.¹²⁹ Records for the year 1400 contain references to Zacharias as both *scriptor apostolicus* and singer in the papal chapel. In the same year Sherr's article appeared, Anna Esposito published a transcript of a contract dated January 1390 which required *Magister Antonius Berardi Andree de Teramo alias dictus vulgariter Zacchara...optimo, perito et famoso cantore* to prepare, notate and illuminate an Antiphonal for the church of the Hospital of Santo Spirito in Sassia, an institute located a short distance from the Vatican.¹³⁰ Not only does this document provide the fullest form of this musician's name, it attests to his fame and expertise in writing musical manuscripts, even if the manuscript named in the aforementioned document would ostensibly contain only liturgical monophony. It also indicates an extended Roman phase in his career.

Ziino's hypothesis concerning the migration of the Roman Zacharias to the Pisan party was confirmed by John Nádas whose article published in 1986 (also found in his earlier dissertation) noted the discovery of a *Magister Antonius dictus Çachara* named in the once-thought-lost *Introitus et Exitus* books from the Florentine curia of the second and last pope of the Pisan obedience, John XXIII.¹³¹ Zacharias is referred to as *magister capelle* in entries from January to April 1413. It is possible that he was a member of John XXIII's

¹²⁸ Pirrotta accepts Ziino's views in a postscript to his earlier article republished in a collection of his writings, identifying the latter two names with the same individual, in Nino Pirrotta, 'Zacara de Teramo', in *Music and Culture in Italy from the Middle Ages to the Baroque: A Collection of Essays*, ed. N. Pirrotta, Cambridge (Massachusetts), 1984, pp. 126-144.

¹²⁹ Richard Sherr, 'Notes on some documents in Paris', *Studi Musicali*, vol. 12, 1983, pp. 5-16.

¹³⁰ Anna Esposito, "'Magistro Zaccara" e l'antiphonario dell'Ospedale di S. Spirito in Sassia', in Paolo Cherubini, Anna Esposito, Paola Scarcia Piacentini, 'Il costo de libro', in *Scrittura, biblioteche e stampa a Roma nel Quattrocento, Atti del. 2. seminario*, eds M. Miglio, P. Ferenga and A. Modigliani, *Littera Antiqua* 3, Vatican City, 1983, pp. 334-42, 446-9; For a more recent recasting of the significance of the document in light of recent biographical research, *vid. eadem*, 'Maestro Zaccara da Teramo «scriptore et miniatore» di un antiphonario per l'ospedale di Santo Spirito in Sassia a Roma', *Recercare*, vol. 4, 1992, pp. 167-178.

¹³¹ Nádas, 'Further notes on Magister Antonius dictus Zacharias de Teramo', pp. 178-79.

court at an earlier date, although details of chapel expenses until late 1412 are scarce. Nádas also contributes significantly to the debate concerning the homonymic designations for Zacharias by noting that physical details of the musician and composer *Zaccaria Teramnensis* described in a 15th century *necrologio aprutino* are also present in the portrait of *Magister Zacharias cantor domine nostri pape* in the Squarcialupi Codex (Fl 87).¹³² He also argues that circumstantial evidence, consisting of a trail of compositions in sources still located at those centres through which the Roman pope's itinerant curia would have passed - such as Siena (1407), Lucca (1408), Rimini, Padua and finally Cividale del Friuli (1409) - suggests Zacharias had left the service of Gregory XII only at the last moment on the eve of the Council of Pisa.¹³³ Nádas further notes the presence of an *Antonius de Teramo* as a witness to the granting of the doctorate to one Simone Lellis de Teramo in Padua, December 8, 1410, in the presence of Cardinal Zabarella.¹³⁴

The most recent scholarship on Zacharias has consolidated those findings mentioned above and sought to discuss source situations further.¹³⁵ However, two important discoveries further refine our understanding of this composer's career. The first consists of the composition *Dime fortuna*, the *unicum* found in the recently discovered Tn T.III.2 fragments and attributed to Zacharias by Ziino. The text of this work undoubtedly refers to Alexander V's failed return to Rome and thereby associates that composer with the Pisan obedience in its earliest days.¹³⁶ The second discovery of a will dated 1416 of a nephew and heir of *Magister Antonius Berardi Andree dicti alias Zaccharus dudum cantor et scriptor Romane Curie et Sedis apostolice...de civitatis Terami* shows that Zacharias owned a house, land, orchards and vineyards at Teramo and suggests that Zacharias' death occurred some time between May 1413 and September 1416.¹³⁷

As such, surviving sources transmit no less than 35 compositions which either are ascribed or can be attributed to Zacharias.¹³⁸ In Rome, his reputation seems to have been

¹³² Nádas, 'Further notes on Magister Antonius dictus Zacharias de Teramo', pp. 170-172.

¹³³ Nádas, 'Further notes on Magister Antonius dictus Zacharias de Teramo', pp. 177-178.

¹³⁴ Nádas, 'Further notes on Magister Antonius dictus Zacharias de Teramo', p. 178, fn. 40.

¹³⁵ Di Bacco and Nádas, 'The papal chapels and Italian sources of polyphony during the Great Schism', pp. 56-58, 63-69.

¹³⁶ Agostino Ziino, *Il codice T. III. 2 : Torino, Biblioteca nazionale universitaria = The codex T. III. 2, Ars nova* 4, Lucca, 1994, pp. 80, 103.

¹³⁷ Di Bacco and Nádas, 'The papal chapels and Italian sources of polyphony during the Great Schism', p. 58.

¹³⁸ This number includes *Deduto sey*, formerly an *opus dubium* of Ciconia (*vid.* Bent and Hallmark, *op.cit.*), but recently identified as a work by Zacharias based upon the reading of a newly edited early fifteenth century treatise on music, *vid.* Maria Caraci Vela, 'Una nuova attribuzione a Zacara da un trattato musicale

well developed by 1390, suggesting his activity before this time, perhaps in the chapel of Urban VI. It seems that his reputation did not wane upon his switch to the Pisan obedience if one considers his compositions mentioned in Simone Prudenzi's *Il Solazzo*, an early fifteenth century set of poems written at Orvieto.¹³⁹ Even in light of John Nádas' recent conclusion that Prudenzi was largely dependent upon the content of musical anthologies like those compiled in Florence in the first decade of the fifteenth century for the musical repertoire cited in his poetry,¹⁴⁰ there remains in extant sources ample evidence of the reception of Zacharias' works in settentrionale and northern Italy.

Another possible Roman connection occurs in relation to the proposed identity of the composer Egardus. Reinhard Strohm hypothesises that the composer Egardus be identified with Flemish organist Johannes Ecghaerd. Strohm bases his thesis upon several elements, which might be summarised thus:¹⁴¹

- a. A *Gloria spiritus et alme* which appears in the Paduan fragments Pu 1475 and Pu 1225 is also found (in a fragmentary form) in the Netherlandish source Utrecht, Universiteitbibliotheek, 1846 I (*olim* 6E37I) (= NL-Uu 1846, *olim* NL-Uu 37), f. 2r. Strohm holds, based upon further repertorial, codicological and palaeographic considerations, that the latter source was written in Bruges possibly for a choir school.
- b. *Magister Johannes Ecghaerd* was appointed succentor of the collegiate church of St. Donatian in Bruges in 1370.
- c. Johannes Ecghaerd also had a chaplaincy at St Nicholas of Dixmunde near Veurne. The Latin name of Veurne is *Furni*.
- d. On this basis, the first line of Egardus' canonic motet *Furnos requisti/Equum est* transmitted in MOe5.24 may be a reference to Veurne, rather than 'hearths'.¹⁴² The text of the work addresses a certain (possibly fictitious) Frater Buclarus and reproaches him for leaving Furni in search of better fortunes across the Black Sea (*Novi Pontus*).
- e. Thomas Fabri, student of Jean de Noyers dit Tapissier and also succentor of St Donatian's 1412-15, also wrote a canon with features similar to Egardus' motet and addressed again to Buclarus, whom he bids to meet him in Bruges for some recreation. No records naming a Buclarus are as yet to be found at Bruges.

Strohm also proposes that, based on the general tendency of Franco-Flemish singers filling the Roman curia during the schism, an Eckhardus, *scriptor apostolicus* (and therefore

del primo Quattrocento', *Acta Musicologica*, vol. 69, 1997, pp. 182-185; Anna Cornagliotti and Maria Caraci Vela, (eds), *Un inedito trattato musicale del medioevo: Vercelli, Biblioteca Agnesiana, cod. 11, La tradizione musicale 2*, Firenze, 1998, pp. 15-19, 77.

¹³⁹ *vid.* Ziino, *Il codice T. III. 2*, pp. 135-36.

¹⁴⁰ John Nádas, 'A cautious reading of Simone Prodenzi's *Il Saporetto*', *Recercare*, vol. 10, 1998, pp. 23-37.

¹⁴¹ Strohm, 'Magister Egardus and other Italo-Flemish contacts', pp. 41-68.

¹⁴² The manuscript reading is actually *furnis*. Billy Jim Layton proposed the emended reading to *furnos* in his dissertation "Italian Music for the Ordinary of the Mass 1300-1450", Harvard University, 1960, pp. 144-46; *cf.* Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', pp. 21-22.

colleague of Zacharias) who signed a papal letter from 14 May 1394, may be identical to Johannes Ecghaerd.¹⁴³ Yet, it should be noted that any evidence of this *scriptor apostolicus* as a papal singer in Rome is still lacking.¹⁴⁴

Considering that Ciconia found new employment at Padua in 1401 and Zacharias may have travelled northwards with his papal patron (it remains without doubt that he did move north in the period after 1407), I would concur with Anne Stone that a situation arises whereby one may propose certain means by which the music of Zacharias and Egardus was transmitted northwards to find its way into MOe5.24.^{144a} In assuming Strohm's hypothesis concerning Egardus' presence in the Roman curia is correct, Stone proposes that Ciconia could have easily brought Egardus' and Zacharias' music from Rome to Padua and from there to MOe5.24. In my view, the transmission of Zacharia's music may in fact be a two-fold process, the first phase of which was initiated by Ciconia and other ultramontanes quitting Rome, while the second phase was brought about by Zacharias' actual physical presence in the north. Ciconia's Paduan years represent a focal point, during which the compositions from the south (Rome), perhaps assisted by a visit of Zacharias to Padua in 1410, were collected alongside local compositions and those possibly from the north. This hypothesis is supported largely by the repertoire of the Paduan fragments.¹⁴⁵ From here, the further dissemination of this repertoire could have taken place.

A further connection to Ciconia exists with respect to Philipoctus de Caserta in that Ciconia's virelai *Sus une fontayne* quotes the music and text from three ballades by Philipoctus.¹⁴⁶ The nature of this connection – that is whether Ciconia was a student or admirer of Philipoctus – is open to debate. One possibility is unlikely to be denied. Considering the extended and exact nature of the quotations in Ciconia's virelai, Ciconia undoubtedly possessed (or had access to) copies of Philipoctus' ballades. Whether this was at Rome, Padua or during a brief sojourn to another musical centre is difficult to ascertain, although most scholars tend to date *Sus une fontayne* to the 1390s. Of Philipoctus himself, little concrete archival evidence exists through which he might be securely located at a particular centre. However, from the dating of the texts of his musical works, it is clear that he belongs to the first generation of *ars subtilior* composers. Several of his works contain

¹⁴³ Strohm, 'Magister Egardus and other Italo-Flemish contacts', p. 56.

¹⁴⁴ *vid.* Di Bacco and Nádas, 'The papal chapels and Italian sources of polyphony during the Great Schism', pp. 88-92.

^{144a} Stone, "Writing Rhythm in Late Medieval Italy", p. 60.

¹⁴⁵ *Vid. infra*, p. 145.

references to the Avignonese Pope Clement VII and the political intrigues surrounding the Kingdom of Naples in and around 1380. Another work appears to contain the motto of Bernabò Visconti (†1385), although recent scholarship has tended to lessen the importance of this coincidence in favour of intertextual musico-literary factors.¹⁴⁷ Finally, one might recall again the possibility, following Reinhard Strohm, that Philipoctus' works were written before Clement VII's departure from the Kingdom of Naples or Italy on his way to Avignon 1378-9.¹⁴⁸

Archival evidence also suggests that other composers in MOe5.24 were active in Florence and Ferrara. In her discussion of MOe5.24, Ursula Günther proposes that Johannes de Janua might be identical to one of two Johannes – Johannes Burec and Johannes Desrame – newly listed in an entry for the 21 June 1405 in the *Introitus et Exitus* books as members of the papal chapel of Benedict XIII during the latter's sojourn at Genoa.¹⁴⁹ Günther also argues that Genoa, as a centre for French culture in northern Italy, might be a suitable location for the cultivation of the French idiom present in Johannes de Janua's works, although her desire to forge a direct link between the music from the papal court of Avignon and their supposed transmissions in MOe5.24 would appear to be instrumental in her reasoning. It is perhaps more appropriate, if one assumes that the designation 'de Janua' denotes a native of Genoa, that Johannes be identified not with the two Frenchmen in the chapel of Benedict XIII, but rather, as suggested by Michael Long, with an Augustinian *Frater Johannes (de) Janua* named in 1385 in a document from the Convent of S. Spirito in Florence.¹⁵⁰ Although less than categorical, the laws of probability would argue that this last Johannes is the composer in MOe5.24 based on the evidence that in 1385 a *Fra Curradus ser gualandi de pistorio* witnesses a document at S. Spirito.¹⁵¹ This

¹⁴⁶ *Vid. infra*, pp. 155ff.

¹⁴⁷ Plumley, 'Citation and allusion in the late *ars nova*: the case of *Esperance* and the *En attendant* songs', pp. 287-363.

¹⁴⁸ Strohm, 'Filippotto da Caserta, ovvero i francesi in Lombardia', pp. 65-74. Strohm, however, seems to have accepted his hypothesis of Philipoctus' activity at Milan as fact, as betrayed by statements such as "It seems that Philipoctus actually lived at this <i.e. the Visconti> court", in *The Rise of European Music*, p. 59.

¹⁴⁹ Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', pp. 42-43.

¹⁵⁰ Long, 'Francesco Landini and the Florentine cultural élite', pp. 98-99, *q.v. idem*, "Musical Tastes in Fourteenth-Century Italy", p. 205. Another possible candidate for the composer is the musician 'Jo. de Genesisii' who worked in the chapels of various Avignon cardinals between 1371 and 1394, *vid.* Stone, "Writing Rhythm in Late Medieval Italy", pp. 55-56 (based on a personal communication with John Nádas); Ursula Günther, revised Yolanda Plumley, 'Johannes de Janua', in *The New Grove Dictionary of Music and Musicians*, 2nd edn, ed. S. Sadie, London, 2001, vol. 13, p. 142.

¹⁵¹ Frank A. D'Accone, 'Music and musicians at Santa Maria del Fiore in the early Quattrocento', in *Scritti in onore di Luigi Ronga*, Milan & Naples, 1973, p. 105; *idem*, "A Documentary History of Music at the Florentine Cathedral and Bapistry during the Fifteenth Century", Ph.D, Harvard University, 1960, p. 204.

would appear to be the individual who in 1410 is once again named as singer at Santa Reparata (=Santa Maria del Fiore) in Florence and is most likely identical to Augustinian (*ordinis heremitarum*) Frater Corradus de Pistoria who has two works ascribed to him in MOe5.24.¹⁵² The second of the two unique works ascribed to Corradus in MOe5.24, *Veri almi pastoris*, has already been read as a reference to a papal chapel.

The Benedictine Bartholomeus de Bononia, prior of the convent of San Niccolò of Ferrara and composer of two works in MOe5.24, is documented as the organist in that city's cathedral from 1405 to 1427,¹⁵³ although it appears that after leaving the post of organist Bartholomeus remained prior at San Nicolò until at least 1435, but no later than 1441.¹⁵⁴ His activity beyond MOe5.24 is attested by the presence of several other works in Ob 213, including two settings of sections of the mass using parody technique which are juxtaposed with their secular models. Hans Schoop proposes that the emergence of parody technique in Bartholomeus' music was influenced by Zacharias whose works must represent some of the earliest composition utilising this technique.¹⁵⁵ It is possible that Bartholomeus forged links with Zacharias during the Zacharias' years in the chapel of the Pisan Popes, a situation made even more likely by the proposition that Bartholomeus' *Arte psalentes* was written for Alexander V.

The presence of other composers in MOe5.24 betrays an eclecticism which includes two works by Florentines - Landini¹⁵⁶ and Andrea da Firenze - and several works by composers from beyond the Alps. Guillaume de Machaut, already dead for approximately thirty years, is represented by three works which appear to have been widely received in Italy. The presence of works by three southern French *ars subtilior* masters Jehan (Johannes) Hasprois, who is documented at the court of the Avignon popes in the 1390s, Matheus de Sancto Johanne, active in the 1370s and '80s,¹⁵⁷ and Jacob de Senleches, who appears to

¹⁵² Long, "Musical Tastes in Fourteenth-Century Italy", p. 204.

¹⁵³ Adriano Cavicchi, 'Sacro e profano: documenti e note su Bartolomeo da Bologna e gli organisti della cattedrale di ferrara nel primo quattrocento', *Rivista italiana di musicologia*, vol. 10, 1975, pp. 46-71.

¹⁵⁴ Adriano Cavicchi, 'Altri documenti per Bartolomeo da Bologna', *Rivista italiana di musicologia*, vol. 11, no. 2, 1976, pp. 178-81.

¹⁵⁵ Hans Schoop, 'Bartolomeo da Bologna', in *The New Grove Dictionary of Music and Musicians*, 2nd edn, ed. S. Sadie, London, 2001, vol. 2, pp. 822-23.

¹⁵⁶ A recent summary of Francesco Landini's archival biography can be found in Beck, *Singing in the Garden: Music and Culture in the Tuscan Trecento*, pp. 22-23.

¹⁵⁷ *vid.* Chapter 5, p. 270.

have been active in the 1380s and early '90s,¹⁵⁸ poses questions concerning the transmission of their repertoire into Italy which will be addressed below.

The biography of one further composer, Magister Egidius, remains unresolved. Two works appear in MOe5.24 ascribed to Egidius, in the first instance to *Magister Egidius ordinis heremitarum sancti agustini*, the next simply to *Magister Egidius*. The second of these compositions sets a polemical text containing the acrostic CLEMENS, and as such, clearly suggests this ballade was composed in praise of Avignonese Pope Clement VII (*vid.* Vol. 2, App. A, No. 36). It is likely that the *Magister Egidius Aug<ustinus>* who has one composition in CH 564, *Roses et lis ay veu en une flour*, is the same composer. The presence, however, of *Roses et lis ay veu* in a source with likely Lowlands origins, suggests that the composer of this work was active north of the Alps. Granted that there could be more than one Egidius who was a French Augustinian, the probability of all being composers is considerably less. Richard Hoppin and Suzanne Clercx first suggested that this composer might be identical with Egidius de Aurelianus, an Augustinian in the curia of Clement VII, and perhaps also the Egidius de Aurelia named in the (Augustinian) musicians' motet *Alma polis religio* (CH 564, #108).¹⁵⁹

The presence of the Italian texted works by Augustinians Guillelmus and Egidius da Francia in Fl 87 suggest connections with Italy, if indeed this is the same Egidius as the composer in MOe5.24. Even if Egidius was never in Italy, it seems that Guillelmus da Francia was associated with the Santo Spirito of Florence considering the diverse ascriptions in musical sources to either *Guillelmus da Francia* or *Guillelmus de Santo Spirito*. Some archival documentary evidence from the Sancto Spirito suggests his presence in Florence during the 1360s.¹⁶⁰

This secondary confluence of biographical details in relation to the Augustinian convent of S. Spirito in Florence, while not central to the discussion concerning the origin of MOe5.24, possibly represents an avenue through which some of the repertoire in MOe5.24 may have been transmitted or created. Michael Long has emphasised the pro-French, elitist tendencies in this convent during the 1380s and '90s which may have contributed French elements to Florentine musical life, especially the introduction of French notational and

¹⁵⁸ *vid.* Prologue, fn. 2.

¹⁵⁹ Richard H. Hoppin and Suzanne Clercx, 'Notes biographiques sur quelques musiciens français du XIV siècle', *Les Colloques de Wegimont II 1955*, Society d'Editions "Les Belles Lettres", 1959, pp. 64-92. On individuals with the name of Egidius in the curia in schismatic Avignon, *vid.* Andrew Tomasello, *Music and Ritual at Papal Avignon 1309-1403*, Studies in Musicology 75, Ann Arbor, 1983, pp. 57-58, 225.

stylistic practices. Long also notes the preponderance of Augustinians, often itinerant, at Avignon in the 1360s and 1370s which may have promoted the spread of French culture to Italian centres such as Florence.¹⁶¹ Even if these lines of transmission were disrupted by the Schism, the realisation of a French aesthetic and musical process, which might nurture further interest in its style among composers, was already in place, despite the various political climates in Florence during this period. It is possible that Corradus de Pistoria and Johannes de Janua, given that these composers were indeed the singers at S. Spirito in the 1380s, were witnesses and contributors to this culture. This allowed them to compose those works found in MOe5.24, possibly at a later stage in Florence's history, embodying many elements of an essentially French, although by then increasingly international style of polyphony. As I have already suggested, this style was the one plausibly favoured at the papal court of the Pisan obedience.

The currently known biographies of composers represented in MOe5.24 suggests relationships and influences which were catalysts in this manuscript's formation. Central among these relationships is the presence of Zacharias de Teramo and Johannes Ciconia in the north of Italy. The removal of both these composers in separate stages from Rome, and their relocation in *settrionale* and northern centres (possibly including Pavia), present opportunities for the transmission of repertoire from Rome (Egardus) and the north (Anthonellus de Caserta, French repertoire) to Padua and curia of the Pisan obedience. Further connections to Padua are suggested by the presence of works by Bartolinus de Padua, whose last years appear to have overlapped Ciconia's period in Padua. An association between Bartholomeus de Bononia and Zacharias is also possible in light of their shared compositional techniques and works which can be linked to the papacy of Alexander V. The close association of the Pisan obedience with Florence and its subsequent transfer there goes far in explaining the presence of composers active in Florence. These biographical relationships offer some clues to the transmission of this repertoire, which must be further investigated through the appropriate methods of stemmatic filiation.

3.5. Relationships with other sources

Of the 104 musical compositions in MOe5.25, 43 have known concordances. Of these concordances I will exclude from present consideration: four musical compositions (44,

¹⁶⁰ Long, 'Francesco Landini and the Florentine cultural élite', pp. 96-97.

¹⁶¹ Long, 'Francesco Landini and the Florentine cultural élite', p. 95.

47, 56, 67) and the text of 20 (its musical setting by Anthonellus de Caserta is considered) all by Machaut; two further works with a single concordance of text only (50, 99); three unique alternative *contratenores* (5, 6, 92) to works known elsewhere (8 is an alternative Ct to 67); and one work (54) whose only concordance is known from a lost manuscript, Pn 23190. The one motet (30) is not treated in this study. Furthermore, discussion concerning works in CH 564 which occurs in Chapter 2 will not be repeated, although additional remarks will be made that clarify the relationship between MOe5.24 and the former manuscript. Of the remaining concordances, the present section focuses on those works which are represented by numerous transmission and contain indications of a work's phases of transmission.

In this section I once again apply methods of stemmatic filiation to determine the relationship of MOe5.24 to certain extant sources. As most of the works in the outer gatherings are *unica*,¹⁶² much of my attention will be focussed on the relationship of works in the inner gatherings to extant concordances. Several outcomes result from this examination. The first is that, so far as the inner Gatherings 2-4 are concerned, there is no evidence of direct relationships between MOe5.24 and extant sources in either a child or parent capacity. In relation to Pn 6771, this observation has particular import with regard to the distancing of MOe5.24 from the musical scriptorium of the Santa Giustina of Padua, although connections to a Paduan tradition cannot be excluded on the basis of an examination of Johannes Ciconia's *Sus une fontayne*. In relation to the Grottaferrata-Dartmouth College fragments,¹⁶³ I identify shared conjunctive readings which suggest both sources are witness to a single tradition, separable from other perceived traditions. The implications of these findings in the light of recent scholarship will be subsequently explored. I also inspect the concordances between MOe5.24 and the recently discovered Boverio

¹⁶² Grenon's *Je ne requier* is found in three additional sources, Monserrat, Biblioteca del Monestir 823, 7v-8r (=MO 823); I-PAas 75, 1v (text residuum only); New York, fragment in personal library of Stanley Boorman; and in the destroyed manuscript F-Sm 222, f. 80r. The transmissions in MOe5.24 and the Boorman fragment preserve a Ct by Matheus de Perusio. On the Parisian provenance and a reconstruction of MO 823, *vid.* Gordon K. Greene, 'Reconstruction and inventory of Monserrat Manuscript 823', in *L'ars Nova del Trecento VI*, eds G. Cattin and P. D. Vecchia, Certaldo, 1992, pp. 209-220. A near complete reading of Matheus de Perusio's *Pour belle Acueil* is also found in the recently discovered fragment Bern, Burgerbibliothek, Sammlung Bongarsiana, Fragm. 827 (=CH-BEsu), a source which further demonstrates the cultivation of French techniques by Italian masters, *vid.* Christian Berger, *op.cit.*, pp. 51-77. A concordance of *Gratiosus fervidus* (MOe5.24, f. 50v; also erased as in the palimpsest in the inner gatherings of MOe5.24, f. 19r) appears intact in the flyleaf fragment in Padua, Biblioteca Universitaria, ms. 1475 (=Pu 1475), f. Cr.

¹⁶³ Grottaferrata, Grottaferrata, Biblioteca dell'Abbazia di S. Nilo, segn. provv. Kript. Lat. 224 (olim 197) (=GR 197), and Hanover, Dartmouth College Library, MS 002387 (olim Santa Barbara, Academia Monteverdiana) (=Hdc 2387).

Codex. Considering scholarly views that the latter source may have been connected to the Pisan papacy, it is appropriate to exhaust this avenue of investigation, utilising evidence extracted from the sources themselves, in light of associations proposed between MOe5.24 and the Pisan movement. One final aspect of this discussion is to demonstrate further instances of scribal intervention by Scribe β in MOe5.24 with regard to matters of notational semiotics.

As a point of departure, I would like to discuss Anne Hallmark's assessment of the transmission of *Sus une fontayne* from the aspect of the work's two extant transmissions.¹⁶⁴ Additionally, I regard the citation of the various portions of three ballades of Philipoctus de Caserta (*En remirant*, *En attendant souffrir m'estuet* and *De ma dolour*) in *Sus une fontayne* to be similar to lemmata in classical textual criticism¹⁶⁵ which contribute to an understanding of the reception of Philipoctus' ballades in Ciconia's virelai. The one further transmission of *Sus une fontayne* occurs in a set of former fly leaves now found bound in the centre of the Bodleian Library manuscript Canon. Pat. Lat 229 (=Ob 229).¹⁶⁶ These leaves are clearly not insular in their origin, but contain sufficient evidence to place their copying at Padua in the first decade of the fifteenth century.

The Paduan and related fragments consist mostly of flyleaves from several dismembered, parchment musical manuscripts. Of these fragments, palaeographic similarities permit their allocation into four groups, referred to as Padua A, B, C and D.¹⁶⁷

¹⁶⁴ Anne Hallmark, 'Some evidence for French influence in northern Italy, c. 1400', in *Studies in the Performance of Late Medieval music*, ed. S. Boorman, Cambridge, 1983, pp. 193-225.

¹⁶⁵ On the role of lemmata in textual criticism, *vid. West, op. cit.*, pp. 10-11

¹⁶⁶ Inspection of these leaves reveals that each separate bifolium was originally used as a loose pair of fly leaves (there is no evidence to suggest that one side was ever pasted to the boards of a binding) for the manuscript in which they are still found. This observation is supported by the correspondence of holes in the bifolium 33/38 (old foliation) and those found on the earliest leaves of the body of this manuscript. The manuscripts of the Canonici collection were acquired by the Bodleian Library in 1817. Originally consisting of 3550 manuscripts, these manuscripts were part of the collection amassed by avid collector and bibliophile Matteo Luigi Canonici (1725-1805) during his retirement in Venice from 1773. Upon Canonici's death, the collection passed to Canonici's brother Guiseppe and upon his death in 1807 to Giovanni Perissinotti and Girolamo Cardina, who divided them. Most of Perissinotti's portion represents the volumes acquired by the Bodleian Library. Additional volumes of the Canonici collection were offered for public auction in London in 1821, *vid. Falconer Madan, A Summary Catalogue of Western Manuscripts in the Bodleian Library at Oxford which have not hitherto been catalogued in the Quarto Series*, 7 vols., Oxford, vol. IV, 1897, pp. 313-314. For a brief description of Ob 229, *vid. Anselm Hughes, Medieval Polyphony in the Bodleian Library*, Oxford, 1951, pp. 25-27.

¹⁶⁷ An overview of previous scholarship on the Paduan fragments before 1955 can be found in Dragan Plamenac, 'Another Paduan fragment of Trecento music', *Journal of the American Musicological Society*, vol. 8, no. 3, 1955, pp. 165-166. Before Plamenac's article only the fragments Pu 658, 684, 1115, 1475, Ob 229 and STr 14 were known to scholarship, although the Paduan A group had been recognised, and the labels B, C and Dom (=STr 14) employed for the remaining fragments. Plamenac reports on the discovery of the fragments from Pu 1106, the first among fragments clearly in the hand of *Rolandus monachus*, which he labelled Padua D

Padua A consists of fragments from Padua, Biblioteca Universitaria, Mss. 684 (=Pu 684), 1475 (=Pu 1475), and Ob 229.¹⁶⁸ A reconstruction based on remnant foliation and contents suggests that these leaves originally formed a manuscript of at least 70 leaves (7 quinterns).¹⁶⁹ The second large group is referred to as Padua D, and consists of flyleaves in Padua, Biblioteca Universitaria, Mss. 675,¹⁷⁰ 1106,¹⁷¹ 1225,¹⁷² 1283. The fragment Stresa, Biblioteca Rosminiana 14 (*olim* Domodossola)(=STr 14) is also in the same hand as Padua D, although it is clear from codicological evidence that this fragment represents a substantial¹⁷³ copying project separate from the Paduan fragments.¹⁷⁴ Padua B is hitherto indicative of one bifolium fragment in Padua, Biblioteca Universitaria, ms. 1115 (=Pu 1115), as is Padua C with respect to Padua, Biblioteca Universitaria, 568.

The early provenance of these fragments from the library of the monastery of Santa Giustina of Padua is at first suggested by the presence of numerous shelf numbers written on the fragments (added when they became flyleaves) during the mid-fifteenth century at that library which are also found in the inventory of 1453-1484.¹⁷⁵ Frequently these are accompanied by *ex libris* inscriptions placing the manuscript at the Santa Giustina. But perhaps the most significant aspect concerning the origin and dating of these fragments

and did not associate with the STr 14 fragment. *Q.v.* Kurt von Fischer, 'Paduaner Handschriften (part 3)' in *Die Music in Geschichte und Gegenwart*, 1st edn, ed. F. Blume, Kassel, 1962, vol. 10, coll. 571-2. For inventories and description of Pu 656, 658, 684, 1106, 1115, 1225, 1283 and 1475, *vid.* Kurt von Fischer and Max Lütolf, (eds), *Handschriften mit Mehrstimmiger Musik des 14., 15., und 16. Jahrhunderts*, Repertoire International des Sources Musicales BIV/4, Munich-Duisberg, 1972, pp. 988-1002.

¹⁶⁸ On the Pad A complex *vid.* Heinrich Bessler, 'Studien zur Musik des Mittelalters II', *Archiv für Musikwissenschaft*, vol. 8, 1926-27, pp. 233-235. Marco Gozzi sees similarities between the recently discovered fragment Trent, Biblioteca dei Padri Francescani, Incun. 60 (=TRf 60) and Ob 229, and suggests both manuscripts, despite some differences, might stem from the one *scriptorium*, in 'Un nuovo frammento trentino di poliphonia del primo quattrocento', *Studi Musicali*, vol. 21, no. 2, 1992, pp. 238-39.

¹⁶⁹ For a diagrammatic reconstruction of Padua A, *vid.* Michael Scott Cuthbert, "Fragments of Polyphonic Music from the Abbey of S. Giustina: Codices, Composers, and Context in Late Medieval Padua", B.A. (Hons) thesis, Harvard University, 1998 (online at <http://www.hcs.harvard.edu/~cuthbert/thesis/chp6.html>).

¹⁷⁰ On the then-newly discovered fragments Pu 675, 1225 and 1283 *vid.* Kurt von Fischer, 'Neue Quellen zur Musik des 13., 14. un 15. Jahrhunderts', *Acta Musicologica*, vol. 36, 1964, pp. 84-85. Giulio Cattin recognised the hand of Rolandus da Casale in Pu 675 and 1283 in his 'Ricerche sulla musica a S. Giustina di Padova all'inizio del Quattrocento: Il copista Rolando da casale. Nuovi frammenti musicali nell'Archivio di Stato', *Annales Musicologiques*, vol. 7, 1978, pp. 28.

¹⁷¹ On the discovery of the fragment in Pu 1106, *vid.* Plamenac, 'Another Paduan fragment of Trecento music', pp. 165-181.

¹⁷² The flyleaves/paste downs formerly occupying this manuscript have been removed and are now contained in the file Ba 2/2 at the Biblioteca Universitaria at Padua. Cattin was the first to recognise correctly the hand of Rolandus da Casale in STr 14 in Cattin, *op. cit.*, p. 29.

¹⁷³ Remnant foliations 133 & 141 is found on these leaves, suggesting a large collection of music.

¹⁷⁴ Unlike 10 pentagrams per page in the Pu 1106, 1225 and 1283, STr 14 consists of only 8 pentagrams per page.

occurs in the case of the Padua D complex where in several instances one witnesses *frater Rolandus monachus de padua* signing his work.

Giulio Cattin has convincingly argued that this individual is the monk Rolandus da Casale, who was most well known from the Benedictine reforms of the early fifteenth century whose origins lay at Padua.¹⁷⁶ He was one of the three Black Benedictines who prevented the succession of Santa Giustina to the Olivetani (White Benedictines) and consequentially saw the appointment of famed reformist Ludovico Barbo to the abbacy of Santa Giustina in 1409. Rolandus' role as music copyist is hinted at by documentation from 1433 in which he is delegated the task of copying ecclesiastical music. His copying of *cantus planus* in 1433, not *figuratus*, is significant in light of Barbo's reforms of Santa Giustina and Rolandus' career. The earliest evidence of Rolandus' presence at Santa Giustina dates from January 1396, and he continues to be associated with that institute until his death in 1448. However, after 1410, considerable responsibilities concerning his priorship at S. Salvaro in Monselice, saw his time divided between both locations. This and the consideration that Barbo's worldly predecessors Philippe d'Alençon and especially Andrea da Carrara (1405-1407), in many respects the root of abuses that necessitated the reforms, conducted their ecclesiastic court in the vein of a secular one, suggests that the copying of *cantus figuratus* at Santa Giustina by Rolandus occurred no later than 1409.¹⁷⁷ If nothing else, the prescription found in the new rule after Barbo's appointment – *cantus figuratus vetetur omnino* – makes this clear.¹⁷⁸ The presence of several works by Johannes

¹⁷⁵ The original inventory is housed in the Museo Civico of Padua, *vid.* Plamenac, *op. cit.*, pp. 166-167. The inventory is published in L. A. Ferrai, in G. Mazzatinti (ed.), *Inventario dei manoscritti italiani delle biblioteche di Francia*, Ministero della Pubblica Istruzione, Indici e cataloghi V, vol. 2, 1887, pp. 549-661.

¹⁷⁶ The following paragraph draws heavily on Cattin, *op. cit.*, pp. 17-41.

¹⁷⁷ Cattin, *op.cit.*, p. 29.

¹⁷⁸ Cattin, *loc.cit.* Latitude exists to suggest this prohibition refers to the use of mensural music in daily observance, but not necessarily the writing of mensural music. However, it seems unlikely that the copying of mensural music would have taken place when its performance was banned. Margaret Bent (in introduction to *The Works of Ciconia*, p. XI) suggests that Rolandus da Casale may have continued to copy mensural music after 1409 on the basis that Ciconia's *Gloria Suscipe trinitas*, which was copied by Rolandus into Pu 675, was composed during the three-fold, rather than two-fold, schism of the church. Bent also notes that no documentary evidence of the prohibition against mensural music can be found until the 1420s or 1430s (*ibid.*, p. XIV). The recent hypothesis by Nádas and Di Bacco ('The papal chapels and Italian sources of polyphony during the Great Schism', pp. 71-77) made in light of the emerging picture of Ciconia's Roman period, however, throws some doubt on Bent's *terminus post quem* for the composition of his *Gloria Suscipe trinitas* by suggesting that no concrete references to contemporaries exist in the text itself, and the work could have been written by Ciconia during his time during the 1390s in Rome. Nádas and Di Bacco propose that either the Jubilee in Rome in 1390 (and the focus on the dogma of the Trinity established by Urban VI's bull of 1385) or the attempt to end the Schism in 1395 may have been contexts for the composition of this work. While Bent's caution concerning the dating of Barbo's prohibition against measured music remains valid, the presence of the *Gloria Suscipe trinitas* in Rolandus' hand can no longer be used to argue convincingly against Cattin's

Ciconia in Padua D may be indicative of Ciconia's arrival (1401) at Padua. If we entertain the possibility that Ciconia was in Rome in the 1390s, this also explains the presence of works by Zacharias de Teramo and Egardus in Rolandus' hand. The year 1409 is too early to propose Zacharias de Teramo might have personally visited Padua, although, as already stated above, this composer may be documented at Padua in 1410.

The presence of so tangible a dating of the scribal work of Rolandus da Casale begs the question of how are the complexes Padua A, B and C related to D. Table 3.2 lists several features that both unify and differentiate all sources. Clearly, Pu 658 (=Padua C),¹⁷⁹ STr 14 and TRf 60 represent different projects with varying degrees of connection with the scriptorium of Santa Giustina. Comparison of writing spaces and the placement of elements within them, with due consideration of trimming suffered in the process of becoming flyleaves, reinforces the view that all fragments belonging to Padua A were from a single manuscript whose original dimensions were closest to the present folio dimensions of Ob 229. Fragments in the Padua D group, on the other hand demonstrate a slightly smaller writing area and marginally smaller rastrum which dismisses any notion that Pad A and D could have formed a single manuscript. The fact that Egardus' *Gloria spiritus et alme* appears in both Pu 1225 (Padua D group) and Pu 1475 (Padua A group), while Ciconia's *Gloria* appears in both Pu 1283 (Padua D group) and Pu 1475, further supports this position. It would be exceptional to see these relatively long settings twice in the one manuscript. Additionally, all elements of Padua A are modestly decorated with red, blue or black "lombard" initials and majuscules highlighted with blue or red, while Padua D lacks these finishing touches. There is also some variation in rastrum width in Padua D to suggest that these fragments are representative of more than one project. Padua B as far as can be determined from the extant bifolium represents a manuscript of slightly larger dimensions (in the order of 5-10 mm), but with near identical page preparation. Based on codicological evidence, the Paduan fragments represent several different projects and could not have been extracted from a single codex.

conclusion that 1409 marks the *terminus ante quem* for the copying of the Paduan fragments. Yet, the absence of any works in the Paduan fragments which can be dated significantly later than 1409 suggests that Barbo's reforms were swift, even if not fully documented for more than a decade.

¹⁷⁹ *vid.* Bessler, 'Studien zur Musik des Mittelalters II', p. 233.

Table 3.2: A comparison of various elements in the Paduan fragments.¹⁸⁰

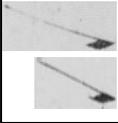
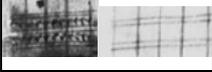
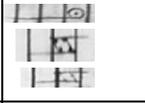
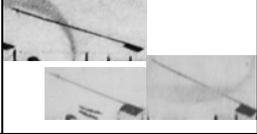
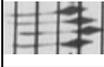
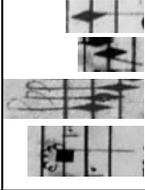
Fragment	Text Scribes	Music scribes	Staves	Folio dimensions (width x height)	writing area	Additional remarks
Ob 229 (A)	I	A	10 x 13.5 mm pentagrams, 11 mm apart, text guide 6-7 mm below staff	235 x 323 mm	180 x 235 mm	15 th cent. S. Giustina shelf number: ZZ.2.no. 111; old foliation in intact bifolia 33/38, 36/37
Pu 658 (C)	V	B	8 x 17.5 mm hexagrams, 10-12 mm apart	205 x 278 mm (width trimmed)	165 x 216 mm	15 th cent. S. Giustina shelf number: YY.3.n.35, AC.3.
Pu 675 (D)	II (Ar)	C (Ar)	10 x 14 mm pentagrams	208 x 278 mm (width trimmed)	n/a	Verso of one folio fragment contains additions by a later amateurish hand.
Pu 684 (A)	I	A	10 x 13.5 mm pentagrams, 10-11 mm apart, text guide 6-7 mm below staff	212 x 310 mm (width trimmed)	180 x 230 mm	15 th cent. S. Giustina shelf number: YY.2.n.24, AC.3
Pu 1106 (D)	II	C	10 x 14 mm pentagrams	207 x 290 mm ¹⁸¹	172 x 240 mm	15 th cent. S. Giustina shelf number: YY.3.n.43, AC.3. Signed by Rolandus monachus.
Pu 1115 (B)	III & IV	D & E	10 x 14 mm pentagrams, 11 mm apart, text guide 5 mm below staff	222 x 316 mm (intact) ¹⁸²	184 x 242 mm	15 th cent. S. Giustina shelf number: YY.2.n.23, AC.3
Pu 1225 (D)	II	C	10 x 13 mm pentagrams, 11 mm apart, text guide 5 mm below staff	230 x 307 mm (intact)	167 x 231 mm	15 th cent. S. Giustina shelf number: YY.3.n.85, AC.4. Signed by Rolandus monachus.
Pu 1283 (D)	II	C	10 x 14 mm pentagrams	142 x 208 mm (excessive trimming)	n/a	Single severely trimmed folio. In the hand of Rolandus monachus.
Pu 1475 (A)	I	A	10 x 13.5 mm pentagrams, 10-11 mm apart, text guide 6-7 mm below staff	242 x 276 mm (mild to excessive trimming)	178 x 231 mm	f. Av contains end of Ct of Sanctus on Pu 684, f. Ar, indicating these leaves originally faced one another. Remnant Folio numbers 47 (Cr) and 48 (Er).
STr 14 (D')	II	C	8 x pentagrams			In the hand of Rolandus monachus.
TRf 60	I'	C?	8 x 14 mm pentagrams	142 x 204 (orig. 150 x 220?)	115 x 185 mm	Possibly from same workshop as Padua A, remnant of foliation 57 or 67.

¹⁸⁰ Italicised numerals denote measurements obtained using photographs. All other measurements resulted from consultation of the actual sources.¹⁸¹ von Fischer approximates the original folio dimension to be 230 x 305 mm, in *Handschriften mit Mehrstimmiger Musik des 14., 15., und 16. Jahrhunderts*, p. 993.¹⁸² von Fischer suggests the leaves are trimmed from an original format of 230 x 330 mm in *Handschriften mit Mehrstimmiger Musik des 14., 15., und 16. Jahrhunderts*, p. 995.

Table 3.3 catalogues chief elements of each musical hand in the Paduan Fragments. Pu 684, STr 14 and TRf 60 immediately demonstrate traits which separate them from the Padua A, C and D scribes. Close examination of the musical hands of Padua A (Music Hand A) and D (Music Hand C) reveals the following differences: Music Hand A only uses the *b-quadratum*, frequently in the so-called Veneto style with internal dots, Music Hand C uses the *diesis*; in most instances, Music Hand C executes the first element of the *custos* with the quill edge at greater angle to the horizontal than Music Hand A; the second element of the *custos* is frequently extended in the Music Hand A; both scribes use different forms of the F-clef; and the lower element of the C-clef is angled downwards by Music Hand C. This hand also betrays a distinctly formed *longa* and *brevis* which have little descending pen strokes from the bottom left corner. Music Hand C draws oblique ligatures that are tapered to the right, Music Hand A's ligatures are slightly more convex and of uniform width. In Music Hand D, ligatures are acute and lack convexity. However, both Music Hands A and C share several traits including the dotted *b-rotundum* and similar decoration of the so-called *finis punctorum*. In many respects, Music Hand D contains elements similar to Music Hands A and C, although the formation of the *longa* and *brevis* clearly differentiates it from these latter hands. Music Hand E has similarities with Hand C in the formation of *longe*, although the form of *semiminime* is distinct in both cases.

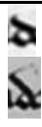
Table 3.3: Elements of Music Hands in the Paduan Fragments.

Manuscript	Clefs	Accidentals	Custodes	Longa	Brevis	Semibrevis	Minima	Other Note shapes	Ligatures	Staff	F.P.
Ob 229 (Music Hand A)										5-lines	
Pu 658 (Music Hand B)										6-lines	
Pu 675 (Music Hand C)	none visible due to trimming									5-lines	
Pu 684 (Music Hand A)										5-lines	
Pu 1106 (Music Hand C)										5-lines	
Pu 1115 (a) (Music Hand D)										5-lines	
Pu 1115 (b) (Music Hand E)		none							none	5-lines	
Pu 1225 (Music Hand C)										5-lines	

Pu 1283 (Music Hand C)										5-lines	
Pu 1475 (Music Hand A)										5-lines	

Five distinct text hands can be determined by observing elements shown in Table 3.4. The clubbing of the ascender on *d* is distinguishing feature of Text Hand I (Padua A). This hand also distinguishes itself from Text Hands II and III in the form of *x*. Text Hand II (Padua D) is distinguishable through the use of the 2-like *r* with an extended ascending stroke, the use of a *g* with a closed inferior loop, and a particular form of final *s*, a feature shared to some extent with Text Hand III. Text hand IV is distinct through the use of a particular form of cedilla, the extended serif at the base of the vertical stroke and, although comparison with Text Hand II is lacking in this category, the use of cursive *s*. Text Hand V shows a very open form of *g*, and the presence of a square serif on *r*. While these features serve to identify each scribe, there also exists a uniformity of script through shared traits, which is possibly indicative of a close relationship in time and space between them. It is therefore reasonable to propose that the surviving fragments connected to Santa Giustina at Padua are indicative of a relatively large-scale copying endeavour, presumably within its scriptorium. If the facts surrounding Rolandus da Casale are representative, it is likely that this copying was ceased by 1409.

Table 3.4: Principal forms in Text Hands of Paduan Fragments

Text Hand	r	g	c-cedilla	d	x	s	s final
I							
II							
III							
IV							
V							

Transmissions of Johannes Ciconia's *Sus une fontayne* (vid. Vol. II, App. A, No. 30) are to be found in both the Paduan fragment Ob 229. (part of the Padua A complex) and in MOe5.24 in versions chiefly differentiated from one another through the use of mensurations signs. Between both versions, there exist several variants, which

have recently attracted the attention of Anne Hallmark and Anne Stone. In her brief examination of *Sus une fontayne*, Anne Hallmark focuses on a variant T 67.1. Figure 3.5 and Figure 3.6 show the relative portion as transmitted in each manuscript. In MOe5.24, the variant reading can be found at the end of the word “dolour”. Hallmark assessed the reading in MOe5.24 as a compound error derived from a reading like that found in Ob 229 on the premise that two *minime pause in tempus imperfectum minoris* are employed rather than more regular a *semibrevis pausa*.¹⁸³

Figure 3.5: *Secunda pars* of T in *Sus une fontayne*, MOe5.24.

Image removed due to copyright restrictions

Figure 3.6: *Secunda pars* of T in *Sus une fontayne*, Ob 229 (continues onto next staff).

Image removed due to copyright restrictions

While the notation is “unusual”, the reading is better treated as a plausible reading, albeit clumsily re-notated, rather than simply a compound error. The lacuna occurring at this point in Ob 229 must also encourage caution.

¹⁸³ Hallmark, ‘Some evidence for French influence in northern Italy, c. 1400’, pp. 207-8.

A more pointed example of a compound error is found instead in the Ct 17.4 of MOe5.24 at the very end of the *En remirant* citation. Figure 3.7 transcribes readings found in transmissions of *Sus une fontayne* and the cited ballade.

Figure 3.7: Transnotation of variant readings in transmission of *Sus une fontayne* and *En remirant*.¹⁸⁴

The figure shows a musical score with six staves. The top staff is for Soprano (S) with the text "En remirant S:" and notes "re - mi - rant" and "Oy". Below it are five staves for Contralto (Ct) and Tenor (T) parts. The first Ct staff is labeled "Ct Sus un fontayne Ob 229". The second Ct staff is labeled "Ct Sus un fontayne MOe5.24". The third Ct staff is labeled "Ct En remirant MOe5.24". The fourth Ct staff is labeled "Ct En remirant Ch 564, Pn 6771". The T staff is labeled "T Sus un fontayne". The score includes various musical notations such as clefs, time signatures, and notes. Variants are indicated by boxes labeled 1a, 1b, 1c, 2a, 2b, and 2c. A note "Omitted in Pn6771" is present in the fourth Ct staff. The number 17 is written below the T staff.

In her assessment of both these readings in the Ct of *Sus une fontayne*, Anne Stone provides two important observations based on her consultation of the original in MOe5.24.¹⁸⁵ Before the first g in B. 17 there is an erased *tempus imperfectum maioris* sign, and before the second G in B. 17, an erased F is replaced by a second g. Compared to the reading in MOe5.24, the Ob 229 reading of *Sus une fontayne* agrees closely with the surviving manuscript tradition of the ballade *En remirant*. Variant 1a of *Sus une fontayne* in Ob 229 is also present in the Chantilly transmission of *En remirant*. Variant 1b (in the MOe5.24 transmission of *En remirant*) suggests a close subsequent tradition, perhaps introduced by the MOe5.24 scribe. Stone suggests the following scenario where Variant 2c causes Variant 1c. Rather than preserving the tradition of semantically equivalent variants 2a and 2b, the scribe of MOe5.24 introduced or copied from his exemplar the “incorrect” *tempus imperfectum minoris* sign at the beginning of b. 18. He or a subsequent

¹⁸⁴ Variant passages to be discussed in the following paragraph are enclosed in the score by a rectangle which also contains the variant number.

¹⁸⁵ Stone, ‘A singer at the fountain: Homage and irony in Ciconia's 'Sus une fontayne', pp. 380-81; cf. eadem, “Writing rhythm in late medieval Italy”, pp. 115-130. Stone’s observations were confirmed by my inspection of the original.

scribe repaired his text by retaining the “incorrect sign” (understood to indicate [2,2]) at the beginning of B. 18 and altering the immediately subsequent passage. The reading in MOe5.24, although able to be performed, is not necessarily correct. As seen in Figure 3.7, the Ct-reading in MOe5.24 produces some stylistically questionable counterpoint at the second quaver of B. 19 and the third quaver of B. 20. These are largely avoided in the other sources. The reading in MOe5.24 is an error, despite the clear scribal intent behind it.

The notion of priority of the Ob 229 transmission of *Sus une fontayne*, as proposed by Hallmark, is not conducive to the idea of local tradition. Although MOe5.24 introduces scribal errors through incorrect revision, it is clear that to maintain the priority of Ob 229 over MOe5.24 results in the loss of diverse and separate traditions evident in both transmissions of *Sus une fontayne*. Although no one can be certain which reading represents the original and what other complexities may be factors in the transmission of these works, the variant reading in MOe5.24 at S 78.2 (see Figure 3.8 below) suggests a tradition where the appoggiatura in Ob 229 was avoided in favour of a subsequent passing tone.

Figure 3.8: Variant S 78.2 in Jo. Ciconia’s *Sus une fontayne*.

The figure shows a musical score for four parts: S (MOe5.24), S (Ob 229), Ct, and T. The S (MOe5.24) and S (Ob 229) staves are in treble clef, while Ct and T are in bass clef. The S (Ob 229) staff has an asterisk above a note, indicating a variant reading. The Ct and T staves show the corresponding bass line for each part. The number 78 is written below the T staff.

Finally, there are the two plausible readings in the T at the beginning of the citations of *En attendant souffrir m'estuet* and *De ma douleur* as shown in Figure 3.9 and Figure 3.10.

Figure 3.9: Variant readings in citations and transmissions of *En attendant souffrir m'estuet*.

in Oxford 229

T *Sus une fontayne* Ob 229
En attendant MOe5.24
 & Pn 6771

T *Sus une fontayne* MOe5.24
En attendant CH 564

Figure 3.10: Variant readings in citations and transmissions of *De ma dolour*.

T *Sus une fontayne* Ob 229

T *Sus un fontayne* MOe5.24
De ma dolour MSS

The variant shown in Figure 3.9 (*Sus une fontayne*, T 51.1) is a contamination of the MOe5.24 exemplar. Whether it is intentional or simply scribal initiative is open to question. The second variant (Figure 3.10, *Sus une fontayne*, T 69.1) suggests, in light of the overwhelming evidence provided by readings from the cited ballade *De ma dolour*, that the scribe of Ob 229 deliberately modified his musical text. As such, these variants increase the validity of each tradition, and suggest that the recovery of the authorial original in its purest form is impossible. This by no means diminishes the values that lie at the heart of each transmission, but increases our awareness of complex issues in respective transmissions. In considering the relationship of the extant transmissions of *De ma dolour* in MOe5.24 and CH 564, it can be concluded that variants S 32.1 and Ct 50.4 (*vid.* Vol. II, App. B, No. 31, *Variants*) indicate alternative traditions. However, any conclusions based on such a small sample must be viewed as relatively weak.

En remirant, on the other hand, is better situated with three surviving transmissions currently known to scholarship in the three central sources of this period: MOe5.24, CH 564 and Pn 6771 (*vid.* Vol. II, App. B, No. 15, *Variants*). Pn 6771 represents one terminal point on the hypothetical stemma of this work, containing at least one error and an omission not replicated in the other witnesses.¹⁸⁶ CH 564, when compared to MOe5.24, shares several features in common with Pn 6771, especially at the notation/semiotic level. MOe5.24 transmits a notational record for this work that uses mensuration signs in place of coloration found in CH 564 and Pn 6771. This is but one example of the process of substitute coloration further discussed in Chapter 4. An omission at Ct 12.4 further supports MOe5.24's childless status. The MOe5.24

¹⁸⁶ S 30.1 is most likely an error, although it may have a semantic basis. There is an omission at Ct 5.4.

transmission also sees the re-notation of several notational quirks in CH 564 and Pn 6771, such as the reading $\downarrow \uparrow \uparrow \downarrow$ at Ct 1.2 to the more economical $\downarrow \downarrow \downarrow$ where alteration of the second *minima* is implicit in major prolation. At S 15.4, adjacent pairs of repeated *minime* on the same pitch in a *sesquitercia* proportion have been each incorporated into a single *semibrevis*. The independence of these sources or the level of scribal participation is betrayed nowhere more than at S 32.5, where, although semantically equivalent, a different form of *semiminima* is employed in each source: $\downarrow \downarrow$ (Pn 6771), $\downarrow \downarrow$ (MOe5.24) and $\uparrow \downarrow \downarrow \uparrow$ (CH 564). Yet conjunctive readings exist between MOe5.24 and Pn 6771 at S 34.1 and T 49.5 which tend to distance these two sources from CH 564. The apparent conjunctive reading shared by MOe5.24 and Pn 6771 at T 17.2 (=T 50.3) occurs only on account of a pitch emendation (b changed to d) by the editor scribe at this point in CH 564. The original reading in CH 564 at this point was identical to that found in the concordant sources. Conjunctive readings between CH 564 and Pn 6771 at Ct 7.5 and Ct 16.1 may instead suggest the intervention of the scribe of MOe5.24 upon these readings in his manuscript.

As already demonstrated by my previous comments in Chapter 2 concerning the transmissions of *Medee fu* in CH 564 and Fn 26, comparison of variants is only one tool in a scholar's critical methodology. Often, observations that are more pertinent can be made through elements such as the physical placement of symbols on the page.¹⁸⁷ Blind copying, for example, often produces some spectacular evidence. This is demonstrated nowhere more clearly than in the transmission of Jacob de Senleches' *En ce gracieux temps* (vid. Vol. II, App. A, No. 32). Three transmissions of this work have survived to the present day: MOe5.24, Pn 6771 and Pu 1115. (A fourth version in Sm 222 was destroyed during the Franco-Prussian war in 1870). The relationship between the transmissions in Pn 6771 and Pu 1115 offers substantial chronological data. At a textual level, the orthographies in Pn 6771 and Pu 1115 are close, and frequently distinct from MOe5.24. The reading in Pn 6771 is good in a text-critical sense. Pu 1115 offers a generally poorer, often nonsensical, reading (for example: *vi->vil*, *dedens->dedel*). The scribe of Pu 1115 appears to be blind copying a language

¹⁸⁷ Vid. Bent, 'Some criteria for establishing relationships between sources of late-medieval polyphony', pp. 295-317.

beyond his comprehension. One notable difference between respective transmissions is the spelling of *douchement*: *dolcement* (Pn 6771), *douchement* (MOe5.24), *duolcement* (Pu 1115). While the scribes in Pn 6771 and MOe5.24 preserve variants of French orthography, the scribe of Pu 1115 betrays his Veneto or Tuscan origins through the transformation of the diphthong *o(u)* to *uo* and the substitution of the sibilant *ch* with the cedilla. Similar orthographic transformations are witnessed in the text of *Sus une fontayne* copied by the scribe of Ob 229, further drawing the transmission of that work away from an hypothetical archetype.

Considering that the scribe of Pu 1115 was active at Padua, it is not surprising to observe difficulties in his text underlay of *En ce gracieux temps*. His inexperience has resulted in the preservation of several features from his exemplar. The examination of notational and textual details reveals that Pu 1115 is in fact a direct descendant of Pn 6771. This is demonstrated by the following details:

1. in the *secunda pars*, the incorrect underlay of the S with *vois/le bois* is replicated in both sources (as shown in Figure 3.11 and Figure 3.12). The scribe of MOe5.24 avoids this problem by omitting the article 'le'.

Figure 3.11: Excerpt of S from *En ce gracieux temps* in Pn 6771

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Figure 3.12: Excerpt of S from *En ce gracieux temps* in Pu 1115.

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2. A *b-rotundum* sign on b, added by another hand into Pn 6771 at the beginning of the second staff of T is also found mid-staff in the Pu 1115 in almost the same relative location (as shown in Figure 3.13 and Figure 3.14). Instead, the MOe5.24 transmission uses a two flat signature at the beginning of the tenor.

Figure 3.13: Excerpt of T from *En ce gracieux temps* in Pn 6771

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Figure 3.14: Excerpt of T from *En ce gracieux temps* in Pu 1115.

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Additional evidence of the slavish copying between Pn 6771 and Pu 1115 is also suggested by the consistent use of the same ligature groupings, a fact highlighted by consistent re-notation of these groups in MOe5.24, as shown by Figure 3.15.

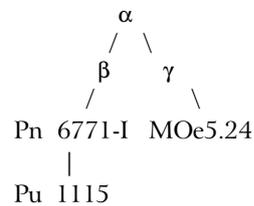
Figure 3.15: Re-notation of ligatures in MOe5.24 transmission of *En ce gracieux temps*.

Based on these observations and the increased textual corruption of Pu 1115, the Reina-transmission of *En ce gracieux temps* must have existed before Pu 1115. The scribe of Pu 1115 had access to at least an early form of Pn 6771 (=Pn 6771-I). With the likelihood that the Paduan fragments still reside within the geographical realms where they were originally copied, this direct relationship may confirm the earlier suggestion by Nigel Wilkins that Pn 6771-I was copied in Padua,¹⁸⁸ not in Venice as Kurt von Fischer proposed.¹⁸⁹ In light of this relationship with Pu 1115 and repertorial considerations (the presence of *Inperial sedendo*) it can be suggested that the French additions in Pn 6771-I were made by Scribe W (and U) between 1401 and 1409 at the latest. Although a negative argument which assumes the creation of this source at Padua, I am inclined towards an earlier dating of Pn 6771-I considering the absence of works by Ciconia. Pu 1115, on the other hand, is probably contemporaneous with MOe5.24 and witnesses the presence of Ciconia's compositions.

¹⁸⁸ Wilkins, 'The Codex Reina: A revised description (Paris Bibliothèque Nationale n.a.fr. 6771)', p. 64.

¹⁸⁹ von Fischer, 'The Manuscript Paris, Bibl. Nat., nouv. acq. frç. 6771', p. 47.

In terms of musical variants, *En ce gracieux temps* in MOe5.24 is distinguished from Pn 6771-I/Pu 1115, which exhibit no variation in relation to one another, by a single separative error of a *minima pausa* added in the *Trip/Ct* at B. 10.1. MOe5.24 also includes two unique manuscript accidentals at S 13.1 and S 29.3. Although I am inclined in light of the general trend to attribute these accidentals to scribal initiative, it is likewise difficult to explain the erroneous *minima pausa* which occurs in this transmission, whose scribe often shows a high degree of notational competence. Although the possibility exists that the scribe of MOe5.24 may have added the erroneous *minima pausa*, I regard it as an inherited error and conclude that MOe5.24 transmits a version of this work which resulted from a ever-so-slight branching into two traditions before it was copied into any extant manuscripts. As such, the following stemma is proposed:



At this point I would like to examine the relationship between MOe5.24 and the fragments GR 197/Hdc 2387..¹⁹⁰ Of the 14 works which survive in this fragment, three are shared with MOe5.24: Philipoctus de Caserta's *En attendant souffrir m'estuet* (GR 197, f. 3v and Hdc 2387, r), Egardus' *Gloria* (Hdc 2387, v and GR 197, 4r) and Zacharias' *Credo* (GR 197, f. 6v). Concerning GR 197, it is known that the leaves were removed from the binding of a manuscript owned by the Liguori family of Rome in the early 1960s whereupon they almost immediately subject to the scholarly investigation of Oliver Strunk and Ursula Günther.¹⁹¹ Although it seems logical to expect that the Hdc 2387 leaf must have at some point of time originated from this same location, it was circulated independently and now resides in the Special Collection at Dartmouth College

¹⁹⁰ The single leaf Hdc 2387 belongs to the same paper codex from the fragments GR 197 were also extracted. The fragments have been severely trimmed so that most of the top stave and the beginnings of all staves are lost.

¹⁹¹ Oliver Strunk, 'Church Polyphony Apropos of a New Fragment at Grottaferrata', *L'ars nova italian del trecento* III, 1970, pp. 305-313; Günther, 'Quelques remarques sur des feuillets récemment découverts à Grottaferrata', pp. 315-397.

Library, Hanover (New Hampshire).¹⁹² As a whole, the fragments show the presence of six hands, although the present enquiry only deals with works copied by two of them.¹⁹³

The earliest studies on the Grottaferrata fragments proposed that these fragments originated from the Veneto, possibly at the scriptorium of Santa Giustina at Padua.¹⁹⁴ The presence of the motet *Marce, Marcum imitaris* containing references to a Venetian doge of the 1360s¹⁹⁵ also contributed to locating the source in the Veneto. The recent scholarship of Di Bacco and Nádas has challenged this previous view and suggests that the Grottaferrata fragments are central Italian sources that may have originated at Rome.¹⁹⁶ Their hypothesis is based upon several observations made in relation to the fragments and their repertoire. The first is the emerging picture of Ciconia's Roman period (a *Gloria* and *Credo* by him are transmitted in GR 197) and possible connections to Zacharias (in addition to that work already mentioned, a further *Credo* and *Gloria* by Zacharias occurs in GR 197). The second is central Italian linguistic traits (found between Rome and Naples) of Italian texts in the Egidi fragment that also contains *Marce, Marcum imitaris* and thereby witnesses the transmission of this Veneto work southwards. Finally there is Di Bacco and Nádas' reading that Ciconia's troped *Gloria Suscipite trinitas*, which appears in the Grottaferrata fragments, refers to attempts to end the schism not at the Pisan Council of 1409 but by the Roman curia during the years 1390-95.

The transmission of Philipoctus de Caserta's *En attendant souffrir m'estuet* offers a unique situation within the *ars subtilior* repertoire by virtue of its transmission in four extant sources, albeit one in a somewhat fragmentary state (*vid.* Vol. II, App. B, No. 16,

¹⁹² For a facsimile and introduction to this fragment, *vid.* William Summers, 'Medieval polyphonic music in the Dartmouth College Library: An introductory study of Ms. 002387', in *Alte in Neuen, Festschrift Theodor Göllner zum 65 Geburtstag*, eds B. Edelmann and M. H. Schmid, Tutzing, 1995, pp. 113-30. I am particularly grateful to Prof. Summers for his kind assistance in my investigation of this important musical fragment.

¹⁹³ *Vid.* Di Bacco and Nádas, 'Papal chapels and Italian sources of polyphony during the Great Schism', p. 62; *cf.* Günther, 'Quelques remarques sur des feuillets récemment découverts à Grottaferrata', pp. 318-19; The first authors, whose analysis of scribal hands is followed in this study, have reconstructed the gathering structure of the surviving fragments to resemble two adjoining sexterns, *ibid.*, p. 64.

¹⁹⁴ Günther, 'Quelques remarques sur des feuillets récemment découverts à Grottaferrata', p. 353. Günther based her hypothesis on the close correspondence between the repertoire of the Grottaferrata fragments and the Paduan fragments.

¹⁹⁵ This work also survives in one other source, the Egidi Fragment. For its contents and references to Venice in *Marce, Marcum imitaris*, *vid.* Kurt von Fischer, 'Neue Quellen zur Musik des 13., 14. und 15. Jahrhunderts', pp. 90-92. Di Bacco and Nádas also discuss this fragment in 'Papal chapels and Italian sources of polyphony during the Great Schism', pp. 65-71, where the authors suggest that this is a central Italian source.

Variants).¹⁹⁷ No direct relationships are evident between MOe5.24, CH 564, Pn 6771 and GR 197/Hdc 2387. In terms of unique separative readings, Pn 6771 shows the least number with the single variant at Ct 1.1. CH 564 exhibits the same class of readings in at least four instances,¹⁹⁸ MOe5.24 in five instances (although one is semiotic),¹⁹⁹ and GR 197/Hdc 2387 in three instances.²⁰⁰ These are regarded as products of the copying process in each codex. The transmission of this work which appears in GR 197/Hdc 2387 seems to be a late entry by a hand referred to as Scribe IV.

The more telling variants are found in Ct 10.1 and Ct 42 in *En attendant souffrir m'estuet*. Their conjunctive, but at the same time separative, status permits a formulation of the relationship between extant transmissions of this work. In the case of Ct 10.1, there is a clear branching into two archetypes, one the parent (A) of MOe5.24 and GR 197/Hdc 2387 and the other the parent (B) of CH 564 and Pn 6771. The former archetype exhibits the reading $\downarrow \uparrow$ at this point, the latter $\uparrow \downarrow$. This assessment is, however, complicated by the presence of variant Ct 42.2 which shows a kinship between MOe5.24 and Pn 6771, and a relationship between GR 197 as a derivative of the tradition betrayed by CH 564. Here the first tradition transmits the reading $\uparrow \blacksquare \blacklozenge \blacklozenge \blacklozenge$, the second tradition: $\uparrow \blacksquare \blacklozenge \blacklozenge \blacklozenge$. (CH 564) and its erroneous derivative $\uparrow \blacksquare \blacklozenge \blacklozenge \blacklozenge$ (GR 197). I hypothesise that first tradition is derived from the original reading reflected in second tradition, which, poorly transmitted in the kin of GR 197, was emended by the removal of the p.d in MOe5.24.

On the face of it, the two aforementioned conflicting traditions present the critic with the difficult situation of contamination. This is further complicated by the presence of variant T 1.1 which has been already discussed above in relation to *Sus une fontayne* (vid. Figure 3.9). Within the tradition of *En attendant souffrir m'estuet* one might conclude that the variant in CH 564 is initiated by the scribe. However, the presence of the

¹⁹⁶ For the views present in the remainder of this paragraph, vid. Di Bacco and Nádas, 'Papal chapels and Italian sources of polyphony during the Great Schism', pp. 63-77.

¹⁹⁷ Concerning the transmission of *En attendant souffrir m'estuet* in GR 197/Hdc 2387, the S and end of T (on trimmed top staff) are found in the Dartmouth portion, the Ct occurs in the Grottaferrata portion. Further aspects of these fragments will be discussed below. A brief discussion of variants in relation to the GR 197 transmission of *En attendant* can be found in Ursula Günther, 'Quelques remarques sur des feuillets récemment découverts à Grottaferrata', p. 327.

¹⁹⁸ T 1.1, Ct 38, Ct 44.3 and Ct 46.3.

¹⁹⁹ S 14, S 50.1, T 22.4, Ct 14.1. S 53.2 represents a semiotic variation with semantic equivalence discussed in Chapter 4, pp. 211.

²⁰⁰ Ct 4.2, Ct 7.2, Ct 22.2.

conflicting testimony in *Sus une fontayne*, as I have previously concluded, scarcely permits such a simple conclusion in light of our inability to determine critically which instance represents scribal initiative or contamination. The situation is resolved by considering scribal process and the laws of probability, which are inevitably fundamental factors in critical theory. Variant T 1.1 more likely arrived out of a scribal process that frequently groups repeated pitches into a single long duration or separates a long duration into shorter, metrically oriented values. The probability of simultaneity is increased by this proposition. This process continues to represent contamination, but of the type discussed by Maas as being dependent on recollection rather than direct comparison of sources.²⁰¹ If, in the same sense the variation at Ct 42 can be attributed to the simultaneous omission of the p.d. (a relatively easy oversight in the copying process), then greater priority is given to the variant at Ct 10.1 (*vid.* Vol. II, App. A, No. 16). This last variant is unlikely to have arisen from the copying process, but represents a recasting (albeit minute) of the musical event which has occurred at some time before the copying of the extant sources. The reading in Parent B is perhaps more stylistically consistent in the language of the Ct, suggesting its priority, while Parent A provides a stronger arrival at the phrase juncture, although it contains a movement in obvious (as opposed to hidden) fifths between the S and Ct.

Egardus' *Gloria* survives in four transmissions: MOe5.24 (complete), PL-Wn 8054 (complete), Pu 1225 (S and part of T) and GR 197/Hdc 2387 (complete, but with many *lacune*).²⁰² Examination of variant readings between sources reveals a close relationship between MOe5.24 and GR 197/Hdc 2387. The various readings at T 9.1, for example, link the two former sources and distance them from Wn 8054 and Pu 1115. These readings are shown in Figure 3.16.

²⁰¹ Maas, *op.cit.*, p. 7.

²⁰² Editions in transnotation of this work can be found in Kurt von Fischer and F. Alberto Gallo, (eds), *Italian Sacred Music*, Polyphonic Music of the Fourteenth Century XII, Monaco, 1976, pp. 21-24, notes pp. 193-4; Mirosław Perz and Henrik Kawalewicz, (eds), *Sources of Polyphony up to c. 1500: Transcriptions*, *Antiquitates musicae in Polonia* 14, Warsaw, 1973, pp. 372-376, critical notes pp. 94-99. The measure numbers given in the present discussion of this work refer to the latter edition, although the former preserves the same number of measures in transnotation. Both these editions were published before the Dartmouth fragment came to light and, therefore, provide only a partial consideration of variants. The following discussion reflects my collation of the readings in Hdc 2387 and all other original sources in consultation with particularly Perz' critical notes.

Figure 3.16: Variant readings at T 9.1 in Egardus' *Gloria*.

MOe5.24
GR 197/
Hdc 2387
Wn 8054
Pu 1225

Lau - da - mus
Lau - da - mus
Lau - da - mus te
Lau - da - mus

9

Similarly, conjunctive readings at S 34.4, Ct 47.1 (erroneous), S 59 and S 96 suggest MOe5.24 and GR 197/Hdc 2397 are the result of a single tradition separate to those betrayed by the remaining sources. Yet it is unlikely, based on variants such as that found at Ct 10.1 in the previous example and the unique error in MOe5.24 at Ct 58.1, that GR 197/Hdc 2387 is directly descended from the former source. Evidence, especially auxiliary, to suggest the reverse scenario is also lacking. Pu 1225 represents a tradition which preserves aspects in common with MOe5.24 and GR 197/Hdc 2387, but it also preserves several features of the archetype, particularly manuscript accidentals that are sometimes lacking in the latter manuscripts. Yet, it also attests to elements that were to influence Wn 8054. In the case of variant S 36.1, as shown in Figure 3.17, I propose that the reading in Wn 8054 represents a tradition that erroneously inserted a *semibrevis pausa* after the first *brevis*.

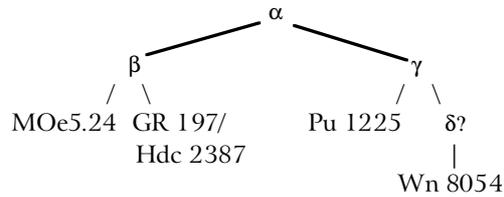
Figure 3.17: Variant S 36.1 in transmissions of Egardus' *Gloria*.

MOe5.24
GR 197/Hdc 2387
Wn 8054
Pu 1225

36

The reading in Pu 1225 corrects this error by changing the *brevis* to a *semibrevis*, while it is retained in Wn 8054. In view of this assessment, the presence of several unique readings and several instances of resetting of the text underlay, Wn 8054 presents itself as a late derivative. Considering this factor and the transmission of several unique copying errors,

Wn 8054 was possibly dependent on a previous source created by an active scribe. The following stemma serves to summarise my reading of this work's transmission:



Zacharias' *Credo* survives in six sources, although half this number of transmissions (Tn T.III.2, GR 197, Pu 1225) are in a fragmentary state which transmits only part of the work in one or two voices. Bc 15 and PL-Wn 378 transmit the whole mass section, as does MOe5.24, although in the latter source the cantus has been ornamented with many small notes and subtle rhythmic divisions. This ornamentation of the S in MOe5.24, whose notational basis is discussed in Chapter 4 (pp. 232f), has been attributed speculatively to Matheus de Perusio²⁰³ or Zacharias himself.²⁰⁴ Certainly, the notational devices show similarities with other works by Matheus although, as also suggested below, this notational process cannot be ascribed solely to this composer.

I accept von Fischer and Gallo's assessment that neither MOe5.24 nor Bc 15 were a model for Wn 378, and draw attention to their observation that the text underlay in MOe5.24, Wn 378 and Pu 1225 show many similarities, especially in light of the underlay of Bc 15, which frequently coincides with different divisions of the measure and ligatures. Wn 378, through the absence of all accidentals shared by MOe5.24, Pu 1225 and GR 197, betrays its childless status. It is clear that MOe5.24 is not dependent on Pu 1225 considering, for example, the error in the latter source at T 18.2²⁰⁵ where the stem has not been drawn for what should be a *minima*. Clearly, the reverse is improbable considering the unornamented S in Pu 1225. Tn T.III.2, which von Fischer and Gallo could not have considered in 1987, shows many similarities with the tradition to which Bc 15 belongs, despite the fact that only the Ct from the *Et in Spiritum Sanctum* survives in this source. Notably the variants at Ct 250.1 and Ct 264 shared by Tn T.III.2 and Bc 15 legitimise this tradition, although Tn T.III.2's child status is suggested by the

²⁰³ Layton, *op.cit.*, pp. 297-98.

²⁰⁴ von Fischer and Gallo, *Italian Sacred and Ceremonial music*, p. 273; *q.v.* von Fischer, 'Bemerkungen zur Überlieferung und zum Stil der Geistlichen Werke des Antonius dictus Zacharias de Teramo', p. 172.

unique reading at Ct 200. GR 197 transmits a partial S (up to B. 194) and a significant portion of an untexted T (to B. 95). Despite the textless condition of the T, it preserves features (such as the division of the measure at 26 into 2 *semibreves* rather than the first *brevis* of a *brevis-brevis* ligature as in Bc 15) which tie it to the tradition of MOe5.24 and Pu 1115. Although these evaluations cannot take into account the lost portions of pertinent fragments, the extant portions suggest that two traditions of this work evolved in the early fifteenth century, the first witnessed by MOe5.24, Pu 1225, GR 197 and slightly later Wn 378, the second by Tn T.III.2 and the late Bc 15.

In light of Di Bacco and Nádas' sound hypothesis for a Roman origin of GR 197, the presence of variants in MOe5.24 which suggest a descent from a similar if not identical exemplar requires careful reconsideration of the origin of MOe5.24. Other observations by Di Bacco and Nádas invalidate any notions of a Roman origin of MOe5.24 that might be entertained. In particular, they report that contrary to the centro-meridionale orthographic traits of the text of Zacharias' *Caciando per gustar* as transmitted in the Egidi fragment, the transmissions in MOe5.24 and Fl 87 employ northern (Tuscan/Veneto) orthographies.²⁰⁶ Further evidence of a northern (Paduan) transmission of Egardus' *Gloria* and Zacharias' *Credo* before the end of the first decade of the fifteenth century emerges with the presence of these works in Pu 1225. Their entry, in close vicinity to one another, in Pu 1225 (Rolandus da Casale), GR 197 (Scribe I) and MOe5.24 (Scribe β) suggests that these works circulated together in the exemplars for these sources. However, the Paduan tradition appears to have separated at an earlier stage from that found in MOe5.24 and GR 197.

The presence of *En attendant souffrir m'estuet* in GR 197 and MOe5.24 in related readings is complicated by the subsequent entry of this work into GR 197 by another scribe (Scribe IV). This may suggest a more complex relationship between these sources as a whole and the presence of multiple exemplars, especially with regard to the contamination that is apparent in Philipoctus' ballade. Yet, the evidence of stemmatic filiation suggests that these multiple sources travelled through time and space in roughly parallel paths to converge almost simultaneously in both sources. Taken as a whole, the relationships between the Paduan fragments, the Grottaferrata fragments and MOe5.24

²⁰⁵ Measure numbers in the discussion of Zacharias' *Gloria* refer to the edition of von Fischer and Gallo, *Italian Sacred and Ceremonial Music*.

signal in part the transferral of a Roman repertoire northward to join a collection of local works. The other large collection of works – Pn 6771 – which can be situated at Padua in the early years of the fifteenth century, provides a northern parallel to MOe5.24 through its anthologising spirit.

I now turn to the relationship between works transmitted by both MOe5.24 and the Boverio fragments (Tn T.III.2). The 15 paper folia of Tn T.III.2, once used to reinforce an old binding²⁰⁷ and now restored, represent one of the most significant discoveries of the last decade of the twentieth century for *ars subtilior* studies.²⁰⁸ They contain the third extant transmissions of Philipoctus de Caserta's *Par les bons Gedeon et Sanson* and Anthonellus de Caserta's *Du val perilleus*. Also present is a concordance to *Pictagoras, Jabol et Orpheüs* (or *Pytagoras, Jobal et Orpheüs* if the orthography of Tn T.III.2 is to be maintained) long known from its transmission in CH 564 (*vid.* Vol. II, App. A, No. 37). All three works were copied by the same scribe into Tn T.III.2 (Text and Music Scribe A).²⁰⁹

Collation of variants for *Par les bons Gedeon et Sanson* (*vid.* Vol. II, App. B, No. 33, *Variants*) shows that none of the extant transmissions warrant a parent status through the presence of unique errors and omissions not replicated in each source. Furthermore, only MOe5.24 transmits two strophes of the ballade's text, CH 564 and Tn T.III.2 transmit one only. Tn T.III.2 also contains a potent textual variant where in the place of *pape* in CH 564 and MOe5.24, one finds *antipape*. As has become increasingly apparent in this discussion, several instances of semiotic variation of notation appear between CH 564/Tn T.III.2 and MOe5.24. This is readily apparent in the use of void black *semiminime* in CH 564 and Tn T.III.2 (♭) contrasted to the flagged-*mimina*-type *semiminima* in MOe5.24 (♮). Likewise at S 59.1, there emerges a semiotic gulf between CH 564/Tn T.III.2 and MOe5.24 where in the former *sesquialtera* breves (in [2,2]) are indicated by semantically ambivalent void red coloration, while in MOe5.25 red coloration requires a *sesquialtera* relationship with the preservation

²⁰⁶ Di Bacco and Nádas, 'Papal chapels and Italian sources of polyphony during the Great Schism', pp. 66-67.

²⁰⁷ Unfortunately the provenance of this old binding has not been noted in studies relating to this source.

²⁰⁸ Apart from the absence of any consideration of the origin of the binding in which these fragments were found, a full discussion of them complete with accurate colour facsimiles of all leaves can be found in Ziino, *Il codice T. III. 2*.

²⁰⁹ Ziino, *Il codice T. III. 2*, pp. 91-101 gives a correct analysis of text and music scribes in Tn T.III.2.

of imperfect time. Similarly, colorated passages of *semibreves* ligated in the pattern 1+2 are found in the reverse pattern 2+1, a pattern more conventional in French sources of the fourteenth century and becoming standard during the fifteenth century.

Besides those semiotic differences described above, the most significant conjunctive variants in the transmissions of *Par les bons Gedeon et Sanson* occur at S 41.1 and Ct 52.1. At S 41.1, Tn T.III.2 and MOe5.24 share a reading distinct from that found in CH 564. Figure 3.18 gives both readings and their accompanying counterpoint in the Ct and T.

Figure 3.18: Parallel readings of *Par les bons Gedeon et Sanson*

Stylistically, the reading in CH 564 is more appropriate when compared to the uncharacteristic rhythmic staidness in Tn T.III.2 and MOe5.24. On this basis, it is reasonable to propose that the reading in Tn T.III.2 and MOe5.24 indicates a shared tradition separate from CH 564's. The same separation is suggested by variant Ct 52.1 where MOe5.24 and Tn T.III.2 share the durations $\downarrow + \downarrow \blacklozenge$, while CH 564 reads $\blacklozenge + \downarrow \downarrow$.²¹⁰

Collation of variants between transmissions of Anthonellus de Caserta's *Du val perilleus* in MOe5.24, Pn 6771 and Tn T.III.2 yields very few variants (*vid.* Vol. II, App. B, No. 34, *Variants*). Pn 6771 is distinct from the other manuscripts through the presence of several pitch errors.²¹¹ Tn T.III.2 presents a slightly different and possibly

²¹⁰ There is also the case of the conjunctive variant between CH 564 and Tn T.III.2 a Ct 27.2. MOe5.24 differs only in the modification of the rhythmic configuration of $\blacklozenge + \downarrow \blacklozenge$ to $\blacklozenge + \downarrow \blacklozenge$. However, Tn T.III.2 incorporates errors into the subsequent part of this passage as well as at Ct 66.1, each case involving the omission of *minima* stems and suggesting some carelessness on the part of the copyist or an error inherited from his exemplar.

²¹¹ e.g. Ct 34.2, Ct 44.5-46.2, Ct 52.2, Ct 67.2.

erroneous variant reading based on the presence of the interval of a fourth between the S and T, at S 86.2 (*vid.* Vol. II, App. A, No. 34). This variant is significant as it occurs in a passage of complex notation employing the *sesquialtera* proportion at the *minima* level. The reading in Tn T.III.2 is plausibly a simplification of the more demanding rhythm of $\lceil (\downarrow)\downarrow\downarrow\downarrow\downarrow \rceil$ to $\lceil \downarrow\downarrow\downarrow \rceil$.²¹² This variant appears to have occurred before it was copied into Tn T.III.2: there are no traces of erasure in Tn T.III.2. Likewise, in MOe5.24 alone, there is a simplification of durations in the passage commencing at T 53.1 where $\downarrow\downarrow$ groups on repeated pitches in Tn T.III.2 and Pn 6771 are rewritten as perfected *semibreves* ($\diamond\cdot$). Although the relatively low incidence of variation between sources might suggest the same tradition, there exists little strong evidence to provide an exact filiation beyond the observation that the several pitch errors in Pn 6771 are not shared in the remaining two sources.

Another masterly work of Anthonellus, his *Beaute parfaite* (Vol. II, App. A, No. 35) is also transmitted in both MOe5.24 and Pn 6771. The copying into Pn 6771 of this *ars subtilior* master's *Du val perilleus* and *Beaute parfaite* by Scribe W (who is also responsible for copying Jacob de Senleches' *En ce gracieux temps*),²¹³ hints at this scribe's interest in the recent French-texted repertoire. It also assuredly indicates the presence of Anthonellus' works at Padua. The tenuous threads which enmesh Pn 6771, Tn T.III.2 and MOe5.24 provide a scenario in which one can begin to appreciate the picture of the transmission of the works of particularly Philipoctus and Anthonellus in the Veneto and surrounding regions. Similar observations apply for the two transmissions of Egidius' *Courtois et sages* in MOe5.24 and Pn 6771, although each transmission preserves several different readings to suggest, in terms of filiation, that no common exemplar existed (*vid.* Vol. II, App. B, No. 36, *Variants*). This observation is heightened by aspects of the transmission of *Courtois et sages* in Pn 6771, again copied by Scribe W, which contains so many errors and omissions in its musical notation as to render it scarcely useful. Yet, a twist of fate has resulted in a better transmission of the text (in terms of its sense) copied by the Italian scribe of Pn 6771 than the version found in MOe5.24.

²¹² There is also semiotic variation between sources, which for the sake of simplicity has been excluded from this example. The scribe of MOe5.24 used full red coloration to indicate the *sesquialtera* proportion in this passage, while the scribe of Tn T.III.2 uses void red and Pn 6771 uses void black.

²¹³ *vid.* Nádas, 'The Reina Codex revisited', pp. 76-77, 100; *cf.* Chapter 6 of the present study.

The processes of stemmatic filiation can provide several insights into the transmission of this repertoire into MOe5.24. MOe5.24 shows very few connections with CH 564, despite the fact that they contain 13 works in common. Relationships between Pn 6771, which shares 15 works with MOe5.24, are a little closer, perhaps close enough to suggest a tradition of transmission in the regions of northern Italy around the Veneto. The same situation is suggested by concordances with MOe5.24 found in the Paduan fragments. Relationships with Tn T.III.2 suggest common traditions, separate from CH 564, but at the same time close to Pn 6771. By far the most tantalising relationship exists in the case of concordances with GR 197. In the next section, I will bring these observations to their logical conclusion in a discussion on the origin of MOe5.24.

3.6. *The provenance and origin of the manuscript*

The presence of MOe5.24 in the Estense Library can be traced without any doubt to the second half of the eighteenth century if it is taken that Gioacchino Gabardi (†1790) had completed his relatively detailed description of this very manuscript in the *Catalogus codicum latinorum Bibliothecae Atestiae* by 1769.²¹⁴ Item DV in this catalogue contains a description that also includes the names of sixteen composers in the order in which they occur in MOe5.24.²¹⁵ The manuscript is described there as *da messa et cancion de musica*.²¹⁶ Lombardi's subsequent reference to Gabardi's entry under the new Latin manuscript item number DLXVIII (L. 568) in volume 3 (begun after 1813) of the aforementioned catalogue contains the descriptive title which continues to be employed today at the Biblioteca Estense.²¹⁷ Before the eighteenth century, the brief descriptions of items in Estense catalogues do not detail each source's contents to any great extent,

²¹⁴ F. A. Zaccaria, Gioacchino Gabardi and Antonio Lombardi, *Catalogus codicum latinorum Bibliothecae Atestiae* (1769-1813), in the manuscript Modena, Biblioteca estense e Universitaria, ms. ε.40.2.6-9. It should be noted that the first two volumes were copied by Nicola Algeri at a later date from Zaccaria's and Gabardi's autographs.

²¹⁵ Bartolinus de Padua is actually listed three times, as Frater Carmelitus, Dactalus and Bartolinus.

²¹⁶ Pirrotta, 'Il codice estense lat 568 e la musica francese in Italia al principio del '400', p. 103, fn. 3 gives Gabardi's entry in full.

²¹⁷ *Liber continens hymnos et alia Ecclesiastica notis musicis a variis auctoribus distincta. Item que Canciones gallicas, quarum musica similiter a variis auctoribus composita est. Codex Membrane. in 4o. Saec XV. bene servatus cum initialibus partim rubricatis partim aure variisque coloribus et ornatibus non ineleganter depictis.* ("A book containing hymns and other religious settings set to musical notation by various authors. Likewise, it contain French chansons, the music of which is similar, composed by various authors. Parchment quarto manuscript, 15th century, well maintained with initials, some rubricated, others painted tastefully with gold, colours and other ornaments.")

leading early scholars to conclude that MOe5.24 entered the Estense Library in the second half of the eighteenth century.²¹⁸ Nino Pirrotta was the first to propose that the description by Gabardi may be linked to Item 98, *Libro de Canzoni in Musica circa 1400 in 4. pergam.*, in the *Catalogus Bacchinus* which may date as early as 1697.²¹⁹ Pirrotta then suggested that the item found listed in an inventory from 1495 of the contents of the Oratory at Ferrara of Ercole I d'Este (1431-1505), Duke of Modena, Ferrara and Reggio, and described as a book containing *Messe et canzone de musiche, in albe senza fondello* might be MOe5.24.²²⁰ He drew attention the similarity of this descriptive title and that given by Gabardi. There is no indication of such a book in the 1436 catalogue of the Estense library.²²¹ Although the manuscript lacks any stamps or devices to suggest previous ownership other than the “B.E.” stamp of the modern Estense library, Pirrotta’s suggestion that the manuscript was part of the Estense library some seventy to eighty years after its compilation is plausible based on Ercole I’s love of books and music.²²²

Physical aspects and scribal procedures in MOe5.24 suggest that it was created as a personal object, a collection of a repertoire in which its compiler and owner were intimately interested, especially at a musical level, and which could be easily transported should the need to travel arise. Factors leading to this view are its small size, which speaks both of its portability and the modest raw materials required for its construction. The amount of parchment and the frugal use of every available space in the inner gatherings suggest that Scribe β, in particular, was mindful of the expensive materials and sought to maximise their potential. This contrasts to the luxurious parchment manuscripts such as CH 564, Fl 87 and Tn J.II.9 (the last with visible connections to nobility made apparent by the arms on the first folio) wherein little concern for the expense of the material is apparent with single works, in most cases, occupying a large

²¹⁸ *vid.* Bertoni, *op. cit.*, p. 22.

²¹⁹ P. Benedetto Bacchini, *Registro de' manoscritti della Biblioteca del Ser.^{mo} Sig.^r Duca de Modena* in the manuscript Modena, Biblioteca Estense e Universitaria, ms. e.40.4.4. The manuscript of Bacchini’s catalogue held in the Biblioteca Estense is a copy made in 1756 (clearly indicated on title of this particular volume) of the original held in the Archivio di Stato at Modena, dated possibly to 1697.

²²⁰ Pirrotta, ‘Il codice estense lat 568 e la musica francese in Italia al principio del ‘400’, p. 104. The inventory of 1495 is published in Giulio Bertoni, *La Biblioteca estense e la coltura ferrarese ai tempo del duca Ercole I (1471-1505)*, Torino, 1903, Appendix II, part 2. For an extract from this list and the probable work sheet for the 1495 inventory, Archivio di Stato di Modena, Fondo ‘Biblioteca Estense’, B.1, *vid.* Lockwood, *Music in Renaissance Ferrara 1400-1505*, p. 218.

²²¹ A. Cappelli, ‘La Biblioteca estense nella prima metà del secolo XV’, *Giornale Storico della Letteratura Italiana*, vol. XIV, 1886, pp. 1-30.

²²² Werner L. Gundersheimer, *Ferrara: The Style of a Renaissance Despotism*, Princeton, 1973, pp. 193-194.

format page. The number of blank staves remaining in MOe5.24 pales into insignificance when one considers the same in the former codices.

Both scribes in MOe5.24, especially Scribe β , were notationally proficient. With regards to Scribe β , there is little doubt in my mind that he was an experienced musician who understood the complexities of the *ars subtilior* notation and musical style, who sought to modify it when he considered it appropriate. Yet, this scribe is only human and commits errors, especially when faced with difficult problems presented to him by his exemplar, such as is the case described above in Ciconia's *Sus une fontayne*. His musical knowledge surpasses that encapsulated in his exemplars in that he confidently changes musical notation when he sees fit. He is most likely a native Italian speaker, capable in Latin, but frequently not very interested in recording the full text of French works, presuming that they were available in his exemplars.

It is from this perspective that I wish to explore the possible origins of this codex. The confluence of the biographical details of composers represented in MOe5.24, the movement of historically significant persons and institutes in this period and the testimony of the sources themselves (that is through their filiation) suggests that a hypothetical origin at or near the curia of the popes of the Pisan obedience should be revisited. A central aspect of this reconsideration is the arrival of Antonius Zacharias de Teramo in northern Italy, although the presence of Ciconia in the north from 1401 holds considerable importance for the transferral of a southern repertoire northwards in light of his time at Rome.

I am reluctant to propose that the MOe5.24 can be attached directly to Zacharias, apart from the presence of its faultless and carefully underlaid transmission of the unique *Sumite karissimi* which is given special precedence in the ancient inscription found on the spine side of the back fly-leaf (see above p. 99). Comparison of the only purported surviving example of Zacharias' hand²²³ with the hands in MOe5.24 yields few similarities. In particular, the only features that bear any resemblance between the *cancelleresca* of London, Public Record Office, SC 7/41/7 and the *textualis bastarda* in the inner gatherings of MOe5.24 is the formation of majuscules A, R and S. Yet, the question remains whether an accurate comparison can be made between a highly formal script from November 1389 and a script in a musical manuscript copied around twenty

²²³ *vid.* Di Bacco and Nádas, 'Papal chapels and Italian sources of polyphony during the Great Schism', p.57, fn. 48.

years later. The register and temporal expanse of twenty years are factors that affect even the best of hands, perhaps more so in the case of Zacharias whose physical deformities may have caused drastic changes in his hand over time. Yet, it is feasible that Zacharias could have and must have at some time copied *cantus figuratus* and was thereby an agent in its transmission. The ability of Zacharias as a musical copyist is attested to by the commission he received to copy an antiphonal for the Hospital of the Santo Spirito in Sassia near Rome (even if this refers to *cantus planus*). However, in the absence of firm evidence and the likelihood that other capable copyists/musicians would have had access to Zacharias' works, I leave this hypothesis unresolved, although I believe that the suggestion that Zacharias was an agent for the transmission of repertoire northwards is supported not only by the source situation, but by the filiation of sources.

Ciconia's presence in Rome in the 1390s and subsequent arrival at Padua (1401) provides the means by which the works of Zacharias, for example, and possibly of Egardus found their way to Padua before 1409. It is difficult to argue against the view that, with his patent familiarity with the works of Philipoctus de Caserta, Ciconia would have retained copies of this composer's works while at Padua. Ciconia's plausible association with Giangaleazzo Visconti's court at Pavia as suggested by Nadas and Ziino's reading of his *Una panthera in compagnia de Marte* with the visit of Lazzaro Guinigi and the attributed *Le ray au soleyl*, offers a mode of transmission of a repertoire to the Veneto that might have been based in Lombardy. Certainly one could propose that the works by Matheus in the *ars subtilior* style came into the hands of MOe5.24's Scribe β through this mode of transmission. However, I view these works as responsive to the bold spirit also shown in the compositions of Johannes de Janua, Corradus de Pistoria, and Bartholomeus de Bononia, and are reflective of a situation where Matheus had left Pavia to travel southwards. It was the same responsiveness to a thriving musical culture espousing the aesthetic of the *ars subtilior*, which I believe, created Zacharias' *Sumite karissimi*. Matheus' *Le greynour bien* and Zacharias' *Sumite karissimi* show a remarkably similar set of musical characteristics, which, for the most part, reside in a highly developed S line utilising several levels of coloration to achieve syncopated proportions within proportions.

These points of contact would have also permitted the transfer of Anthonellus de Caserta's composition from Lombardy, if one were to accept the view that he was active at Pavia around 1400. Certainly, there is the strong evidence that his works were at

Padua in the early years of the fifteenth century though their presence in Pn 6771, Pu 1115 and Las 184. Searching for the means of transmission for Anthonellus' works is possibly unnecessary in the face of this evidence, although the aforementioned sources do not account for the six additional French styled works in MOe5.24. Yet the state in which these works are transmitted in MOe5.24 appears less than direct, particularly in the case of his ballade *Dame d'onour en qui tout mon cuer maynt* which omits the third and fourth lines of the first strophe and all remaining strophes. This is the only instance of this type of lacuna in the inner gatherings. On the other hand, the other works of Anthonellus present relatively complete texts, suggesting the copyist of MOe5.24 was victim of his exemplar in the case of *Dame d'onour ed qui tout mon cuer maynt*. Indeed, this collection of Anthonellus' *ars subtilior* repertoire (with the total exclusion of his Italian texted works) in MOe5.24 may have been derived from multiple exemplars. There is scope to argue based on the filiation of Anthonellus' works that exemplars from Padua or close copies of them used earlier by Scribe W in Pn 6771, were available to MOe5.24's Scribe β. The same situation may also be evident in the case of the early layer of Tn T.III.2.

It is apparent that in the inner gatherings of MOe5.24 transmissions of the compositions of Matheus de Perusio are received readings with several *in libro* corrections or semiotic modifications. It is therefore unlikely that any direct links with this composer existed in this portion of the manuscript. Certainly, the presence of at least seven works ascribed to Matheus²²⁴ in the inner gatherings of MOe5.24 places him on a par with Anthonellus with his eight ascribed works, followed closely by Zacharias' five. The prominence of Philipoctus is perhaps diminished by the presence of an equal number of works (four) by both Machaut and Jacob de Senleches in this manuscript. In the case of the last composer, particularly, any proposals of direct connections between MOe5.24 and Pavia must be treated with caution considering the omission of his *La harpe de melodie*, a work whose presence in Pavia as early as 1391 is evidenced by US-Cn 54.1.

If the Antonius de Teramo documented at Padua in 1410 is the composer Zacharias, a means by which the northward bound repertoire transmitted from Rome intersected the repertoire of the north and Padua becomes apparent. It is likely, however, that the repertoire of the inner gatherings of MOe5.24 was not copied at Padua but elsewhere. One can propose again that the papal curia of the Pisan obedience was this

centre. Here music brought from Padua on a journey that would have passed through Ferrara could be joined with music already circulating in the papal chapel. It is precisely in this curia in the period after 1409 that an environment was manifest and arguably suited to the collecting of this repertoire with the presence of the Pisan Party representing the centre of power in northern Italy. This situation was short lived, ending with John XXIII's deposal at the Council of Constance in May 1415 to make way for the election of a new pope and the end of the then tripartite schism that had plagued the West. After an initial period at Pisa immediately after his election, Alexander V transferred his curia first to Pistoia and then to Bologna, the bishopric seat of his eventual successor Baldassare Cossa. It is clear that Alexander V was intent on returning the curia to Rome, but was prevented by the capture of Rome by Ladislas of Naples, an adherent to Gregory XII, in early 1410. Alexander thus remained in Bologna for the few months before his death. As already mentioned above, the attribution of *Dime fortuna* to Zacharias, which laments Alexander's failed return to Rome at the hands of fickle Lady Fortune, suggests that this composer may have joined the curia in Bologna in 1409 or 1410, if not beforehand at Pisa.²²⁵ The disappointment of not being able to return to his beloved Rome is palpable in this work surviving solely in Tn T.III.2.

Zacharias' presence at Padua in 1410 may represent a period of leave from the papal chapel, which allowed a reunion with his old Roman colleague Ciconia. Ciconia's finely lettered patron at Padua and supporter of the Pisan Party, Francesco Zabarella, may have provided other incentives for Zacharias' visit to Padua. Alexander V's successor, John XXIII, remained at Bologna until March 1411, and after a brief sojourn in Florence, returned in November 1413. One thing is clear from documentation. The period of John XXIII's Florentine sojourn corresponds to those years when Zacharias is documented at the Pisan curia.

Based on these events and biographical coincidences a situation might be proposed which saw the genesis of the collection in MOe5.24. The manuscript initially drew upon a collection of works, which may have been present at Pisa and augmented by a tradition that was available at Padua already by 1409. This repertoire included works

²²⁴ An eighth work attributable to Matheus may be *Le grant beaute*.

²²⁵ On the question of whether Alexander V was able to assemble and keep a chapel in his short term, *vid.* Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', p. 44. Günther refutes Satori's previous views that Alexander could not have possessed a chapel by citing a passage in the *Chronique d'Enguerran de*

of Matheus de Perusio (principally via Pisa), as well as some ultramontane masters, the music of northern Italian masters such as Bartolinus, and a central Italian tradition brought northward from Rome first by Ciconia and then Zacharias and his colleagues. The inner gatherings began to be compiled, possibly in the one instance, as Stone suggests, as a collection of sacred works which now survives in the third gathering, but soon expanded to include the repertoire of music that came to hand, particularly those works exemplifying the secular *ars subtilior* style. It is notable that Ciconia's *Sus une fontayne* is one of the next works to appear in the third gathering and it is preceded only by compositions by northern masters Machaut and Senleches. It is possible that the third gathering represents the first fruit of contacts with Padua. Subsequent sojourns at Florence may then have permitted the incorporation of local elements which aspired to the central aesthetic of the collection, perhaps as a result of musical influence residing in curial musical life.

Central to my hypothesis is the nature of this manuscript. Its small size and multiple levels of development (especially in the case of illuminations in the inner gatherings and revisions *in libro*) support the view that it was compiled over a period of time, and most importantly that it was a manuscript that could be easily transported from place to place, even if as loose gatherings. A member of the chapel of Alexander V and John XXIII or their cardinals would thus have had the opportunity of collecting works for his own use, drawing on sources that might have been in the hands of his colleagues before and during the Council of Pisa, from Zacharias' contacts with Padua and from sources encountered in Florence. Some works may represent actual compositions written in response to the arrival of Alexander or John at a particular centre. This is particularly attractive in the case of *Veri almi pastoris*, which could have been written by Florentine resident Corradus de Pistoria for the arrival of John XXIII at Florence in 1411. It is notable that in this same year, Francesco Zabarella left Padua for Florence to take up his appointment (which occurred in the previous year) as that city's bishop.

It is plausible that the collection of works in the inner gatherings was complete before John XXIII's departure for Constance in 1414 in preparation for the general council that was to be held there, although it is evident that he still maintained a chapel

Monstrelet (ed. L. Douët-d'Arcq, Paris, 1958) which describes the participation of the chapel singers of his predecessor, singers of the cardinals and other singers of Italy in the coronation (17th May, 1410) of John XXIII.

there.²²⁶ The absence of references to Constance or the end of the Schism may indirectly support this analysis. There may also be reason to believe that the collection was complete in 1413 before the departure of Zacharias from John's chapel.

The outer gatherings mark a new phase in the early life/compilation of the manuscript. As discussed above, it appears certain that the leaves were prepared as a single gathering of ten bifolia before being split into the two outer gatherings. Whether musical compositions already appeared in this protogathering remains open to speculation, although it is apparent that several compositions were entered into the outer gatherings after they were joined to the inner ones. On the other hand, the palimpsest of *Gratiosus fervidus* in the second gathering and its presence in the fifth gathering suggests that the outer gatherings may have already had this work at least copied into it. It also marks the transferral of the collection from the hands of a musician interested in the diverse expressions of the *ars subtilior* to an individual, most likely also a musician scribe, who had near exclusive access to the compositions and arrangements of Matheus de Perusio. The natural assumption is that this close relationship to Matheus required the physical presence of the outer gatherings, indeed the whole manuscript for its completion, at Pavia or Milan. Yet, the lacuna in Matheus' biography between 1407 and 1414 urges caution in this matter. This caution is reinforced by those sacred works by Matheus, which follow the Roman rather than the Ambrosian rite, suggesting his activity outside the orbit of Milan and Pavia. However, in view of the absence hitherto of concrete documentation or source evidence that places Matheus at Pisa, Pistoia, Bologna or Florence in the period during his absence from Milan, speculation can run rife.²²⁷ Yet the stylistic devices explored in works recorded in the inner gatherings, particularly *Le greygnour bien* and *Le grant desir*, which show common features with the aesthetics of other works by Italian composers in those gatherings, may suggest contact with the latter.

Reinhard Strohm has argued that MOe5.24 could scarcely reflect the music in the chapel of John XXIII, and that it is most likely an early compilation completed in the pontificate of Alexander V. Yet this statement is at odds with the apparent nature of the chapel during John XXIII's term of office: Italians are a minority, northerners are predominant in a situation that was to set the scene for papal chapels throughout the

²²⁶ *vid.* Günther, 'Das Manuskript Modena, Biblioteca estense α.M.5.24', p. 46.

fifteenth century. The northerners undoubtedly demonstrated a proclivity for their native idioms, in both language and music, which would favour the French-texted music of the *ars subtilior*. Certainly, it is the case that Zacharias is the only composer whose presence is documented in the curia of John XXIII, although there is the notable presence of Humbertus de Salinis in the chapel of his predecessor. Yet, this need not diminish the chapel as a focal point for musical practice, where such a repertoire might be exercised by a group of highly skilled musicians. This repertoire through its rhythmic complexities demands a soloistic economy of parts, not large choirs.

Strohm, Nádas and Stone, in their various discussions on the origin of MOe5.24, have suggested that the inner gatherings were begun at Pavia and augmented at Pisa. Yet, aspects of the inner gatherings, while indicating connections to Matheus de Perusio and Anthonellus de Caserta, also suggest an hiatus between the compiler and these composers. There is also the question of whether a polyphonic transmission reflective of Roman sources might have found its way to Lombardy, especially Milan and Pavia. In light of the large lacuna which exists in our knowledge of the Visconti court in Lombardy due to the lack of archival evidence which might clarify the matter, the Visconti hypothesis must be treated as such until further scholarship might prove otherwise. Certainly, the connections of the Visconti court to the Valois house and its cultural status as betrayed, for example, by Deschamps' remarks made upon his visit there in 1391, permits one to speculate that the courts of Pavia and Milan may have been vehicles for the transmission of a northern repertoire southwards.²²⁸ It is also likely that the aesthetic of the *ars subtilior* was cultivated there. Yet, the repertoire in MOe5.24 is much broader than that plausibly created in Lombardy and extends into the Veneto, Emilia-Romagna, Umbria and Tuscany, without even considering those northern elements whose transmission as far southward as Florence has been already suggested in the previous chapter.

Several questions remain unanswerable in the context of the present study. The most pressing is the means by which this source found its way to the Estense library by

²²⁷ For the view that Roman settings of the mass indicates Matheus' connection to the court of Alexander V, *vid.* von Fischer, 'Bemerkungen zur Überlieferung und zum Stil der geistlichen Werke des Antonius dictus Zacharias de Teramo', p. 181.

²²⁸ There is certainly the well known case of the manuscript (#84) contained in the 1426 catalogue of the Visconti Library which appears to begin with the venerable motet *Apta caro / Flos virginium / Alma redemptoris mater*, *vid.* Pellegrin, *op. cit.*, p. 91. However, it cannot be known when (before 1426) this manuscript entered into the Visconti collection.

the late fifteenth century. An early connection exists in the case of Bertrandus Feragut, Matheus' eventual successor as *Magister capelle* at Milan during the years 1425-30. A plausible connection with Ferrara exists in his *Francorum nobilitati*. This motet celebrates the provision granted to Nicolò I d'Este to quarter his arms with those of France in 1431, and as such suggests Bertrandus' presence at Ferrara in that year.²²⁹ Documents from that year also mention payments to a singer named *Bertrandus* at Ferrara.²³⁰ It is unlikely that Bertrandus could have taken any role in the compilation of the codex at this date, but it might provide an opportunity whereby the book was brought from Milan and remained at Ferrara, if in fact MOe5.24 was to be found in the Estense collections at this early date.

3.7. Conclusions

I would suggest that the inner gatherings of MOe5.24 were compiled by a musician in or close to (possibly in the chapel of a cardinal) the curia of the popes of the Pisan obedience between the years 1409 and 1413, but no later than 1414, drawing on a repertoire collected at Pisa, Pistoia, Bologna and Florence. This layer of the manuscript reflects a broad selection of polyphony from composers active at that time in northern Italy, from Florence to Pavia. The outer gatherings were compiled by an individual close to Matheus de Perusio. Whether this occurred during Matheus' absence from Milan, or upon his return there, remains open to speculation, although the incorporation of the Roman rite, which had no function at Milan, argues for its completion before Matheus' return to Milan. The means by which the inner gatherings were acquired by Scribe α is also open to speculation, although it is tempting to suggest that if a personal association existed between Zacharias and the inner gatherings, this composer's death may have resulted in a transferral of ownership.

By proposing that the collection of works of the *ars subtilior* made by Scribe β occurred in the orbit of the Pisan obedience, I am conscious of a return to a similar model proposed by Pirrotta and Günther, and one which is contrary to the scholarship of Sartori and more recently of Strohm and Stone. The means, however, by which I arrived at my conclusion differ in many respects from previous scholarship. In particular, through the observation of the relationships between extant sources a colourful picture

²²⁹ Lockwood, *Music in Renaissance Ferrara*, pp. 34-35.

²³⁰ Lockwood, *Music in Renaissance Ferrara*, p. 35.

emerges in which the accumulation of an northern *ars subtilior* repertoire in the Veneto and nearby regions is paralleled by the northwards transmissions of works from Rome. This situation is only enhanced by recent biographical research which has observed the presence of at least two prominent composer-musicians, Ciconia and Zacharias, in Rome in the 1390s, but who were later situated in the north in the first and second decades of the fifteenth century.

Chapter 4 : *The notational grammar of the ars subtilior*¹

In Chapter 1, I discussed the role of significative precision in musical notation and its role in defining the style of the *ars subtilior*. I also identified an anxiety in the author of the *Tractatus Figurarum* regarding the representation of musical events through notation. Composers and musician scribes from this period also shared this anxiety, although many individuals exhibited a confidence in their own masterly abilities, for example Jacob de Senleches, at both a musical and intellectual level, which resulted in their developing or adopting a standard grammar for notational representation. This and the subsequent two chapters detail elements of the semiotic system which composers and scribes developed in the late fourteenth century and used to record or represent musical compositions (or even improvisations) employing refined divisions of musical time. This chapter retains an emphasis on the fundamental elements of this system, the actual note shapes.

It is difficult for a citizen of the twenty-first century, especially one literate in Western musical notation(s), to appreciate the vibrant energy which resides in the notational practices of this period, an energy whose radiance has been dimmed by the space of more than six hundred years. More than half of this expanse of time has been witness to a musical notational system, which might be called common practice notation. Certainly this more recent notational system, as especially distinct from the many experimental types proposed in the twentieth century, is continually evolving and subject to the demands of its users and readers. Yet it is underpinned and maintained by a body of established repertoire, which continues to be performed in the concert hall and influence pedagogic activity. Its fundamental principles of inherently and singularly binary division and a predominant focus on the crotchet as a unit of measurement have remained unchallenged. The notational system of the fourteenth century, the mensural system, embodied a somewhat different set of fundamentals that distinguishes it from the later systems.

¹ The reader should note that parts of this current chapter draw on and develop the views published in Stoessel, *op.cit.*, pp. 136-164.

The mensural system of musical notation came into existence during the second half of the thirteenth century and is most famously and succinctly codified in the treatise of Franco of Cologne.² Rather than relying on the prescriptive realisation of patterns of notes and ligatures as in the earlier modal notation, the system codified by Franco sought to express discretely the durations themselves. Yet, it is only in the early decades of the fourteenth century that the mensural system developed in France into a particular form that was to remain fundamental for the next two centuries. I have already discussed a central aspect of this development in Chapter 1 in relation to the invention of the *minima* in the second phase of *ars nova* notation. In Italian regions, an equally viable, arguably more expansive, alternative system developed from the same origins, which, despite its subsequent extinction, may have conceptually influenced the French mensural system in the later part of the fourteenth century. At their very creation or evolution, both French and Italian mensural systems were inherently ambivalent, each of their durational signs able to represent a division into three or two parts. The Italian system actually went further by proposing divisions into up to nine parts, a principle sustained from late manifestations of the Franconian system. In both systems, the division into three or two parts was referred to on a regular basis as respectively perfect and imperfect.

Unlike the later repertoire utilising common practice notation, music recorded in mensural notation forms part of a discontinuous tradition, replaced by subsequent systems and the repertoires largely forgotten until their slow revival over the past one hundred years or so. The recognition of this discontinuation forces today's music historians to reconsider the assumptions they might bring from their musical experience, often founded in repertoires employing common practice notation, and to admit that the conceptual hiatus between it and mensural notation may be considerable.^{2a}

It is the purpose of this chapter to detail concepts that lay at the heart of the French mensural system and their role in the music of the *ars subtilior* style. For this reason and in the absence of any possible aural record of music from this period, I turn to the two most

² Gilbert Reaney and André Gilles, (eds), *Franconis de Colonia Ars Cantus Mensurabilis*, Corpus Scriptorum de Musica 18, s.l., 1974. For an overview of the development of the mensural system *vid.* Margaret Bent, 'Notation, §3, 3: Polyphonic mensural notation c. 1260-1500', in *The New Grove Dictionary of Music and Musicians*, 2nd edn, ed. S. Sadie, London, 2001, vol. 18, pp. 129-140.

^{2a} For a discussion of the challenges involved in editing early music into modern notation, *vid.* Margaret Bent, 'Editing Early Music: the dilemma of translation', *Early Music*, vol. 22, no. 3, 1994, pp. 373-392.

invaluable resources at hand: the practical musical sources containing the notation and the writings of musical theorists who discuss the various elements of musical notation. Admittedly, this approach is restricted by the very process of writing and cannot answer every question concerning this repertoire. Nonetheless, musical and theoretical sources are often the only first hand witnesses, the closest in most cases to the creators or practitioners of this music, not always in relation to space, but undoubtedly in time. The present chapter is not concerned with the actual aural landscape of this music, although it will consider some of the implications of various concepts on our re-creation of a lost aesthetic. Instead, it seeks to answer the question of what concepts lay behind the notational processes of the late fourteenth century in relation to musical rhythm and were factors in its formation on the page. This approach might form the basis for further inquiry, in particular, providing answers to questions concerning how the notation is a response to musical demands, notions which might lie at the heart of the performance of music in the *ars subtilior* style.

A constant distinction encountered in musical theory, and one which I believe is useful to the present study, concerns intrinsic and extrinsic modes of signification. To a certain extent, this reflects intellectual tendencies during this period that I will detail in subsequent paragraphs. Predominantly, this intellectualisation of a symbol system arose out of medieval theories of metalanguage, which were closely entwined with philosophical thought at that time. This situation can also be viewed as a response to this new symbol system whereby it is resident in, and respondent to, theories of language or meaning. What I wish to emphasise is the view that the intellectual culture behind musical notation is not merely confined to musical circles, but like composers from this period, it operates in a broader context subject to the influence of the other six liberal arts. In what follows, I will demonstrate how intrinsic elements of music notation include the properties of the notes themselves, while extrinsic elements are exterior to, but give additional meaning to, those note shapes.

The *Expositiones tractatus practice cantus mensurabilis magister Johannes de Muris*, a gloss by the early fifteenth century Paduan polymath Prodocimus de Beldemandis on Johannes de Muris' *Libellus cantus mensurabilis*,³ not only contains direct references to the

³ Prodocimus' version of the *Libellus* corresponds closely with *Recensio major A* as found in the edition Christian Berkold, (ed.), *Ars practica mensurabilis cantus secundum Iohannem de Muris: Die Recension maior de*

works of the Ancient Greek philosopher Aristotle, but reveals thought processes imbued in an ontological framework inherited from Aristotle's *Metaphysica*. In chapter LVII of the *Expositiones* Prosdocimus distinguishes mensuration signs and the like (*prima signa*) from the coloration and variation of note forms (*secunda signa*) with the following statement:

*...prima signa extrinseca nomenavi, quoniam totaliter cantui extranea et extrinseca et non de essentia cantus; secunda vero signa intrinseca nominavi, quoniam bene sunt de essentia cantus. Quot patet, quia ista signa secunda sunt ipsemet figure sic variate in colore vel evacuatione et plenitudine. Sed cum ipse figure sive note sint bene de essentia ipsius cantus in quo sunt, sequitur quod ista signa secunda sunt etiam de essentia ipsius cantus et per consequens intrinseca...*⁴

The key to this passage rests in the term *essentia* (essence). The distinction between intrinsic nature belonging of the essence of something and extrinsic or accidental nature belonging not to that “thing’s” essence rests firmly in concepts derived from Aristotelean metaphysics.⁵ In *Metaphysics*, Book Zeta, Chapter 4, Aristotle defines the essence of each “thing” as what it is said to be by its own nature (*propter se*).⁶ Furthermore, “cause” is defined as the form or pattern, which is in turn the definition of essence.⁷ By following the terminology of the *Metaphysics*,⁸ Prosdocimus can define a note form or shape as its essence, which in turn is part of the musical substance or the cause of the song’s actuality. In terms of mensural theory, the shape of a *semibrevis* represents a *semibrevis*, but its substantiation is only possible in conjunction with other elements including the mensuration, the pitch and other complex physical manifestations. However, the passage cited above reveals a critical element in

sogenannten "Libellus practice cantus mensurabilis", Veröffentlichungen de Musikhistorischen Kommission 14, München, 1999.

⁴ “I have called the first signs <sc. mensuration signs> extrinsic since <they are> totally extraneous and extrinsic to the song and not of the essence of the song; I have called the second signs intrinsic since they are correctly of the essence of the song. This is obvious because those second signs are the very figures thus varied in colour, hollowing out and fullness. But since the figures or notes themselves are correctly of the essence of their song in which they occur, it follows that those second signs are also of the essence of their song and as a consequence are intrinsic”; F. Alberto Gallo (ed.), *Prosdocimi de Beldemandi Opera I: Expositiones tractatus practice cantus mensurabilis magister Johannes de Muris*, chap. LVII, sent. 10-12.

⁵ On problems associated with the translation of Aristotle’s term οὐσία into both Latin and English, *vid.* Joseph Owens, *The Doctrine of Being in the Aristotelian 'Metaphysics'*, 3rd edn, Toronto, 1978, pp. 137-154; on the reception of this term in medieval philosophy, *vid.* John F. Wippel, ‘Essence and existence’, in *The Cambridge History of Later Medieval Philosophy*, eds N. Kretzmann, A. Kenny and J. Pinborg, Cambridge, 1982, pp. 385-410.

⁶ W. D. Ross (trans.), *The Works of Aristotle*, Oxford, vol. VIII - *Metaphysica*. Q.v David Bostock, (ed.), *Aristotle: Metaphysics Books Z and H*, Clarendon Aristotle Series, Oxford, 1994.

⁷ Ross, *op.cit.*, Book Delta, ch. I.

⁸ On the translation of Aristotle into Latin and the availability of his writings during the middle ages, *vid.* Bernard G. Dod, ‘Aristoteles latinus’, in *The Cambridge History of Later Medieval Philosophy*, eds N. Kretzmann, A. Kenny and J. Pinborg, pp. 45-79.

Prosdocimus' (and his contemporaries') conceptualisation of written note forms. That figures are considered part of the essence of the song (*de essentia cantus*), presupposes a conceptual link between the song itself (as a physical, that is audible, manifestation) and the actual notation. While this situation is perhaps an oversimplification on the basis that the actual manifestation of a notated pitch-duration would be correctly considered an *accidentia* which maintains its *essentia* but also includes separable, individual parts not proper to its *essentia*, the distinction stems from the Aristotelean precept that knowledge resides in the recognition not of *accidentie*, as these do not define a thing, but in its *essentia*. Thus, knowledge of the essence of a thing can only be gained through *accidentie*.

Prosdocimus is not alone in his application of Aristotelean ontology to musical notation. The very structure of Marchettus de Padua's *Pomerium* resides in the distinction between the accidental and extrinsic, and the essential and intrinsic. This is made clear in the introductory sentence at the beginning of the first part of the *Pomerium*:

*Quoniam, dicente Philosopho in proemio de Anima, accidentia multum conferunt ad cognoscendum quod quid est, id est, per cognitionem accidentium devenimus in cognitionem essentiae rei. Cum igitur in praesenti opere nostrae intentionis sit cognitionem tradere per rationes essentiae musicae mensuratae, igitur primo de accidentibus sive de accidentalibus concurrentibus in musica mensurata principaliter est tractandum, deinde de essentialibus musicae praelibatae.*⁹

The first part of the *Pomerium* concerns itself with the *cauda* and related notions of propriety, the *pausa*, the *pontellus* (*punctus divisionis*) and *musica ficta*. The second concerns itself with time, and its applications to music (the *divisiones*) and the proportions of various notes within it. The *Pomerium*'s principles of organisation are appropriate for the Italian system of notation, but would not be followed by a French theorist. This can be concluded from the remarks of the early *ars nova* theorist Anonymous OP:

*Item caudatum et incaudatum non accidunt notulae, sed sunt differentiae specificativae et de essentia notarum, prout contingit in hiis reperire ordinem generis vel speciei.*¹⁰

⁹ "Since, as the Philosopher <sc. Aristotle> says in the introduction to *De Anima*, accidentals contribute much to knowing what a thing is, that is, by the comprehension of accidentals we arrive at an understanding of a thing's essence. Since in the present work it is our intention to lay down by means of reason the essence of measured music, therefore the accidentals or accidentals occurring principally in measured music must be covered first, before the essences of music are examined"; Joseph Vecchi, (ed.), *Marchetti de Padua Pomerium*, Corpus Scriptorum de Musica 6, s.l., 1961, p. 39.

¹⁰ "Likewise being tailed or not tailed do not belong to the note, but are specific things that differentiate and pertain to the essence of notes, as is contingent in discovering the order of genus or species in these things";

Unlike Marchettus' conceptualisation of early *trecento* notational system where tails (*caude*) are indicators of accidental manifestations of major *semibreves* (downwards tail) or *minime* (upwards tail) dependent on context within the *tempus*, the upwards tailed *semibrevis*-shape in the *ars nova* system is distinct and always a *minima*. This distinction is an important one in relation to the discussion below regarding special note shapes and their various forms.

The connection between an ontological framework and a metalinguistic model occurs at the earliest stages of *ars nova* theory. In 1321, Johannes de Muris in his *Notitia artis musicae* premises his discussion of the various note forms (*de protractione figurarum*) with the following statement:

Restat quoque, quibus figuris, signis, notulis, quae dicta sunt, convenienter debeant designari quibusque sermonibus vel vocibus appellari, cum modo tempore nostro super hoc cotidie nostri doctores musicae ad invicem convixantur. Et licet signa sint ad placitum, tamen quoniam omnia sibi invicem consonant quodammodo signa convenientiora vocibus signandis debent a musicis inveniri.

In quorum inventione figuras geometricas sisse signa vocum musicalium iam diu est antiqui sapientiores unanimiter concesserunt, quas puncta non pro indivisibili, sed ut medicus nunc pro die voluerunt appellare. Figura autem scripturae aptior superficies quadrilatera est, cum ex sola calami linea procreetur. In qua tamquam in genere convenit omnis notula musicalis per eamque formis essentialibus variatam omnis modus cantus cuiuslibet explicatur, essentialibus dico, id est naturalibus figurae post impositionem, vel essentialibus, id est de forma essentiali notulae, id est figurae significativae.¹¹

De Muris acknowledges that even in previous times there was some consternation over new note shapes among their inventors. He also observes that notes should be easy to write and able to express every manner of song. This gloss-like clarification makes it clear that De Muris regards the form/shape of a note, that is its very essence, to be tantamount to the

Ulrich Michels, 'Der Musiktraktat de Anonymus OP: Ein frühes Theoretiker-Zeugnis der Ars nova', *Archiv für Musikwissenschaft*, vol. 26, 1969, p. 62.

¹¹ "There remains by what figures, signs or notes those aforementioned things ought to be properly indicated and by what terms or words they ought to be referred to, since in our times our teachers of music rail daily against one another over this matter. Granted that signs should please, however, since all agree with one another in as much as signs more appropriate for indicating tones, they ought to be invented by musicians. In the invention of these signs, the wiser men of old for a long time unanimously agreed that geometric figures are themselves signs of musical tones, which they desired to call "points" not for their indivisibility, but as a physician <does> now for a moment of time. A figure more suited to writing, however, is the square two-dimensional form (*superficies*), since it is generated from a single stroke of the pen. In which, as every musical note agrees in general and through its variation of essential form, every manner of any song can be represented: I say essential in that it pertains to the nature of a figure after being set down <on the page>, or it is of the essential form of a note, that is a significative figure."; Ulrich Michels, (ed.), *Johannes de Muris: Notitia artis musicae et Compendium musicae practicae*, Corpus Scriptorum de Musica 17, s.l., 1972, pp. 74-75.

significant character of the note.¹² In other words, the shape of a note or figure has a direct bearing on its meaning.¹³ But the arrival at this truism is through an ontological framework, similar to that articulated later by Prosdocimus above, which provides a useful departure for my discussion of the notation of the *ars subtilior*.

While the division proposed by Prosdocimus of notational devices into intrinsic and extrinsic forms can seem artificial to the modern reader, who might conjecture that such a distinction was brought about more by the theorist's desire to aspire to a learned audience than any concern for reality, one must not be quick to overlook the fact that this artifice is representative of a culture that also fostered the development of *musica mensurata*. Aristotelianism was viewed by many writers from the fourteenth century, including several musical theorists, as an appropriate means of providing the ontological framework for musical notation and events. To dismiss this distinction as inconsequential is to separate the music itself from one facet of its very context, and to deny a cultural truth which ties into the notion of increased significant precision in the musical notation of the *ars subtilior*.

The distinction between intrinsic and extrinsic modes of signification also reflects the developments in French notation during the fourteenth century. While theorists discuss modes of extrinsic signification (and there are some instances of their use in practical sources before 1400), the actual and therefore practical manifestation of musical notation before this date was almost totally reliant upon intrinsic modes of signification. As I argue in the next chapter, seldom were mensuration signs used in the early French mensural system. Instead, the mensural context was determined through intrinsic elements, such as coloration, the *punctus divisionis* (p.d.), the *punctus perfectionis* (p.p.) and the grouping of note forms. Much of the music of the *ars subtilior* still relied on intrinsic modes of signification, which included coloration and the modification of note forms through *differentia*. In so far as special note shapes are concerned, it is only through the use of mensuration and proportion signs that intrinsic modes of signification were challenged and eventually succumbed to extrinsic modes of signification. Such was the state of affairs that, by the last third of the

¹² Cf. F. Alberto Gallo, 'Die Notationslehre in 14. und 15. Jahrhundert', in *Die mittelalterliche Lehre von Mehrstimmigkeit*, ed. F. Zamminer, Geschichte der Musiktheorie 5, Darmstadt, 1984, pp. 273-274.

¹³ Cf. F. Alberto Gallo, '*Figura and regula*: Notation and theory in the tradition of *musica mensurabilis*', in *Studien zur Tradition in der Musik: Kurt von Fischer zum 60. Geburtstag*, eds H. Eggebrecht and M. Lütolf, Munich, 1973, pp. 43-48.

fifteenth century, mensuration signs were a dominant and inseparable aspect of a work's notation.¹⁴

This distinction between intrinsic and extrinsic forms of signification, which runs through this and the next two chapters, resides in a progress of cultural values among the practitioners of the *ars subtilior* repertoire. These values themselves appear to overlap: resistant to change in one place, while in another, developments take place, and *vice versa*. Perhaps one of the strongest examples of the meeting of both systems occurs in Bartholomeus de Bononia's *Que pena maior*, where special note shapes (◻, ◊ and ↓) occur alongside signs of proportion (Indo-Arabic numerals 2 & 3). As such, there exists a level of semantic equivalence (as equivoques) between both systems, so that, for example, the third special note shape given above is also expressed as a dotted *semibrevis* after the duple proportion sign 2. Similarly, the *semiminima* is equal in duration to the *minima* in the sections governed by the proportion indicated by 2. This situation contrasts with the music of Jacob de Senleches in which proportional relationships are always expressed by special note shapes whose natures are purely intrinsic. Significantly, the Senleches' notation lacks the equivoques found in *Que pena maior* which result from the conflation of extrinsic and intrinsic modes of signification.

Throughout the fourteenth century and into the fifteenth century, *ars nova* and *ars subtilior* theorists identify five fundamental note types, the *maxima* (◻), the *longa* (◻), the *brevis* (■), the *semibrevis* (◊) and the *minima* (↓). Each note shape, shown here proceeding from the largest to the smallest duration, denoted a step in the *gradus* system whose duration was divisible into three or two of the immediately lesser magnitude. The second, third and fourth note shapes were already available in the second half of the thirteenth century, but the first and last types are inventions of the *ars nova*, whose very names represent a conceptual leap beyond the essentially qualitative names of the inner three notes.¹⁵ They denote respectively the longest duration and the shortest duration available in the *ars nova* mensural system. However, unlike the *maxima*, the *minima* in the French system was of an equivalent duration over all the mensurations (a feature not shared by the Italian system) and predominantly considered indivisible by *ars nova* theorists. Indeed, the notation of an

¹⁴ I thank Dr Eakins for this observation, made in a private communication, 8th November, 2001.

¹⁵ For the proposition that the terms are connected with developments in natural philosophy in the fourteenth century, particularly in relation to the Oxford calculators, *vid.* Dorit Tanay, *op.cit.*, pp. 82-84.

absolute value for the *minima* remains a theoretical tenant far beyond its actual application, as is testified by its obstinate centrality in the writings of late fifteenth century theorists Johannes Tinctoris and Franchinus Gaffurius.¹⁶

The concept of *minima*-equivalence was central to the formation of the four mensurations of the French *ars nova* notational system. It may be seen as an attempt to remove the dominance of the *longa-brevis* relationship central to modal and Franconian notation. While I will reserve a discussion of mensurations until next chapter, it should be noted that in the four mensurations of the French *ars nova* system, the equality of *minime* was responsible for the different and therefore unequal durations of the *semibrevis* (=3 or 2 *minime*), *brevis* (=4, 6 or 9 *minime*) and *longa* (=8, 12, 18 or 27 *minime*). The obstacle of *minima* equivalence can be seen as one of the major factors contributing to the developments in musical notation of the late fourteenth and early fifteenth centuries,¹⁷ although it would be rash to exclude new stylistic demands as a major cause behind such notational experimentation.

Before proceeding, it is useful to recall two further principles of French *ars nova* notation: alteration and *syncopa*. Alteration, which was inherited from Franconian notation, involved instances where two notes belonging to a distinct level of mensuration (*gradus*) preceded a note of the next order of magnitude. If the large note was perfect according to the mensuration, then the second of the two smaller notes was double in its length. Thus, if two *minime* preceded a *semibrevis* in major or perfect prolation, the second *minima* would be altered and sung with the duration of two *minime*. It should be noted that alteration could only occur when the division of the *longa*, *brevis* or *semibrevis* (which are called respectively *modus*, *tempus* and *prolatio*) is perfect.

A *syncopa* is the division of a note into smaller values such that they are interpolated by other notes or imperfections.¹⁸ In its earliest guise, this device was dependent on the *punctus*. In the *Libellus*, it is stated that there are two types of *puncti* namely the *punctus perfectionis* (p.p.) and the *punctus divisionis* (p.d.).¹⁹ The p.p. is also called the *punctus*

¹⁶ Vid. Bonnie J. Blackburn, 'Did Ockeghem listen to Tinctoris?', in *Johannes Ockeghem: Actes du XLe Colloque international d'études humanistes*, ed. P. Vendrix, Paris, 1998, pp. 618-619; Busse Berger, *op.cit.*, pp. 72-77.

¹⁷ Margaret Bent, 'Notation, §3, 3: Polyphonic mensural notation c. 1260-1500', pp. 129-140.

¹⁸ Cf. Wolf Frobenius, (ed.), *Johannes Boens Musica und seine Konsonanzenlehre*, Freiburger schriften zur Musikwissenschaft 2, Stuttgart, 1971, p. 163.

¹⁹ Berktold, *op. cit.*, p. 42; cf. Prosdocius de Beldemandis gloss on this passage in Gallo, *Prosdoci de Beldemandi Opera 1: Expositiones*, Chap. XLIX.

additionis. The p.p. is used after a note that is imperfect according to the mensuration to make the note perfect, that is to increase the note's value by half, similar to the dot in common practice notation. The p.d. serves to separate one note from the other, usually to prevent the alteration or imperfection of an adjacent note. The p.d. is put to use in *syncopa* or *syncopatio*, as illustrated by the anonymous author of the *Ars cantus mensurabilis mensurata per modos iuris* treatise, who writes:

In maiori prolatione multe syncope inveniuntur et varie, quamvis sint idem in substantia, et primo inveno in motetto Ida capillorum talem syncopam ut hic:



*Illa prima minima reducitur cum illis duabus posterioribus, scilicet cum pausa minime et minima.*²⁰

In conjunction with the definition given by this theorist that

*...syncopa est quo ad totum alicuius note mediante imperfecto vel divisio facta in modo, tempore, vel prolatione. Dixi imperfectio quo ad modum, tempus, vel prolationem perfectam; dixi divisio et hoc quo ad modum, tempus, vel prolationem imperfectam...*²¹

it can be concluded that *syncopa* is the process whereby a perfection is divided into smaller values. This may be achieved by imperfection in the case of a perfect duration or division in the case of an imperfect duration. By extension, the example given by this theorist shows that, by effectively protecting each division of a 'syncopated' perfection from adjacent notes, the p.d. allows these divisions to be interpolated by other notes or perfections. This device, which Willi Apel termed displacement syncopation,²² is first found in the late works of Machaut, which suggests its development after *circa* 1360 within the French tradition.

As will be discussed below, coloration brought about new strategies in relation to the avoidance of alteration and use of syncopation. It should not be forgotten, however, that these processes evolved as a response to developing stylistic features, especially the use of long phrases of often-complex *syncopa* that required notational clarity beyond that offered by the

²⁰ "In major prolation many and varied syncopations are found, although they are the same in their substance, and I first found this kind of syncopation in the motet *Ida capillorum* as here...the first minima is grouped together with the later ones, that is the minima rest and the minima"; C. Matthew Balensuela, (ed.), *Ars cantus mensurabilis mensurata per modos iuros*, Greek and Latin Music Theory 10, Lincoln and London, 1994, p. 212.

²¹ "*Syncopa* is made in *modus*, *tempus*, or prolation whenever the whole of any note is split by imperfection or division. I have said imperfection whenever *modus*, *tempus* or prolation are perfect. I have said division and this is whenever *modus*, *tempus* or prolation are imperfect"; Balensuela, *op. cit.*, pp. 212.

²² Apel, *Notation of Polyphonic Music*, pp. 395-402, 414-417.

p.d. The proportional use of coloration marked another level stylistically in that it facilitated scribes with the ability to notate syncopation of three or more proportional divisions of time. The next section outlines the various guises in which coloration can be found in extant sources from this period.

4.1. Coloration

The use of coloration in the music of the *ars subtilior* is a subject that has already received much attention.²³ Rather than repeating the findings of previous scholarship, the following paragraphs serve to outline the fundamental elements of coloration in the musical notation of the late fourteenth and early fifteenth centuries and then further discuss its neglected aspects.

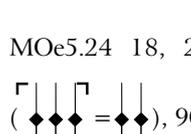
The origins of coloration coincide with the evolution of the *ars nova* style. Already in the early fourteenth century (c. 1318), red coloration appears in the T of Philippe de Vitry's *Garrit gallus/In nova fert/Neuma* in Pn 146 to indicate a shift from major to minor *modus*, that is perfect *breves* become imperfect. *Thalamus puerpere thronus salomonis/Quomodo cantabimus* also uses the same device in Pn 146. At a proportional level, a *sesquialtera* relationship operates relative to the *brevis*. Black and colored *minime* are still equal. The same device occurs later in the works of Guillaume de Machaut.²⁴ The last decades of the fourteenth century are witness to an expansion of the principle of coloration to signify other proportional relationships and the diminution of note values. Rather than indicating diminution of the note's duration, coloration could indicate augmentation. While equivalence of the *minima* remained a fundamental principle in many forms of coloration, there is a particular emphasis on the use of coloration to circumvent this effect which resulted in new forms of coloration and experimentation in the manner of coloration.

Four principal types of coloration may be identified in the extant repertoire. Three additional phenomena also exist which, although distinct, are derived from the six principal types. Table 4.1 catalogues the various coloration types that occur in the two principal sources of the *ars subtilior*, MOe5.24 and CH 564.

²³ Wolf, *Geschichte der Mensural-Notation*, pp. 141-146, 174, 305-313, and especially 340-349, 370-373; Apel, *The Notation of Polyphonic Music*, pp. 126-144, and especially 405-406; Robert Davis Reynolds, "Evolution of Notational Practices in Manuscripts Written between 1400 -- 1450", Ph.D. thesis, Ohio State University, 1974, pp. 66-73. An extensive discussion of the use of coloration in relation to diminution in CH 564 is found in Günther, 'Die Anwendung der Diminution in der Handschrift Chantilly 1047', pp. 1-21 and *eadem*, 'Der Gebrauch des *Tempus perfectum diminutum* in der Handschrift Chantilly', pp. 277-297. For coloration used in MOe5.24, *vid.* Stone, "Writing Rhythm in Late Medieval Italy", pp. 92-98.

²⁴ Wolf, *op. cit.*, p. 174.

Table 4.1: Coloration types in CH 564 and MOe5.24.²⁵

Coloration type	Ink colour	Occurrences
Type 1a: imperfecting 3:2 Sbr (<i>minima</i> equivalent)	Red	CH 564 2, 4, 7, 11, 13, 19, 23, 24, 27, 28, 29, 31, 34, 35, 36, 37, 38, 40, 42 ²⁶ , 44, 45, 49, 50, 52, 53, 54, 55, 57, 60, 61, 62 (+O), 64, 65, 66, 68, 70, 72, 73, 74, 75, 76, 77, 80, 81, 90, 91, 92, 93, 97, 98, 99, 101, 104, 106 (@Br only), 107, 109, 110, 111 (+○=C); MOe5.24 4, 6, 13, 15, 16, 18, 20, 22, 23, 25, 31, 32, 35, 42, 46, 48, 50, 53, 62, 65, 68, 72, 74, 75, 76, 79, 81, 82, 102
	Void black	CH 564 67, 69, 70; MOe5.24 2, 3, 7, 9, 10, 41, (58), 69, 73, 85, 89, 91, 96, 104.
Type 1b: perfecting/augmenting (2:3 Sbr) (<i>minima</i> equivalent)	red	CH 564 5, 33, 43, 48, 63, 105*, 113 (@Br only); MOe5.24 27, 61, 72, 73, 74
Type 2a: 3:2 Min/Smin+	Void black	MOe5.24 11, 14, 28, 43 (Smin only), 63, 84, 88, 93, 95, 98, 99, 100;
	red	CH 564 1, 9*, 25 (d), 71, 75 & 76 (=2:1 with ○); MOe5.24 18, 20, 24, 36 (◆), 60, 62, 77, 80?, 82  (◆◆◆ = ◆◆◆), 90, 97
Type 2b: 2:3 Min/Smin	red	CH 564 69; MOe5.24 18, 20
	Void black	MOe5.24 62
Type 3: 4:3 Min	Void red	CH 564 4, 35, 36, 37, 42, 55, 57, 68, 70, 72, 75, 76; MOe5.24 16, 22, 32, 48, 63, 79
	Void black	MOe5.24 94.
	red	CH 564 10, 39 (on 2:1); MOe5.24 34.
Type 4: 2:1	Void black	CH 564 71 (Min only), 72
	red	CH 564 47*, 54 (Smin); MOe5.24 17*, 48
Type 5: Compound (9:4 = 3:2 x 3:2)	Void red	CH 564 71 (Brevis only), 76 (relative to red in ○), 77?, 110; MOe5.24 62 & 102.
Type 6: Particoloration	Brevis+ ²⁷	MOe5.24 23 & 62 (b/w)
	Semibrevis+ ²⁸	CH 564 69 (b/w), 77 (r/vr);
Type 7: Special	Red	CH 564 42 (Smin), 67* (1:2), 77 (tenor); MOe5.24 29 (Smin).
	Void black	CH 564 68=MOe5.24 79 (special note shape);

Coloration Types 1a and 1b represent complementary opposites (as inverse proportions), as do Coloration Types 2a and 2b. The first four types are related semantically in that they express the relationship of 3 to 2 or vice versa, although *minima* equivalence in Types 1a and 1b distinguishes them from Types 2a and 2b. Types 1a and 2a represent diminution, Type 1b and 2b augmentation. Types 3 and 4 represent discreet meanings that are separate from

²⁵ An asterisk denotes coloration whose meaning is explained by an canon.

²⁶ Also uses full red *semiminima* as half a *minima*.

²⁷ Indicates only durations greater than a *brevis* are particoloured.

²⁸ *Semibrevis* or greater is particoloured.

all previous types semantically but not conceptually through their property of diminution. Types 5, 6 and 7 involve complex relationships determined by compounding the effect of Types 1-4, or association with special note shapes or verbal instructions.

Type 1a coloration is the oldest and most common form of coloration which effects a *sesquialtera* proportion at the *longa*, *brevis* and *semibrevis* level through the imperfection of perfect durations. It appears in two guises: either full red or void black note shapes. It has been suggested that the variation between red and void black coloration is indicative of nationalistic lines of division,²⁹ although the source situation would scarcely support such a proposition in light of the prevalence of both types of coloration in sources copied by Italian scribes. Whether red or void black coloration was used may have had more to do with scribal preferences and resources or demands of the repertoire on notational process. Type 1a coloration has the property of *minima* equivalence between colorated and non-colorated notes. This factor also equips this type of coloration as an alternative to changes in mensuration through mensuration signs. This occurs principally in [2,3]. Indeed, there is an exchange of mensurations signs for coloration and vice versa between multiple transmissions of certain works that supports the semantic equivalence of both devices. I discuss particular instances of the exchange of coloration and mensuration signs in the next chapter. However, when prolation is minor, an equivalence of *semibreves* also occurs. This situation results in special circumstances related to augmented notation, which will be discussed below.

Type 1(= 1a+1b) coloration and its property of *minima* equivalence has a special role in the notation of the *ars subtilior* in relation to the processes of *syncopa*. It is demonstrable that scribes and composers associated with this repertoire used the property of Type 1 coloration as a substitute device for the processes of *syncopa* involving the p.d. and p.p. At the same time, this process, which will be henceforth referred to as *syncopa colorata*, greatly expanded the possibilities in the division of perfections into imperfect durations interpolated by the inherently perfect durations.

While several works use groups of colorated notes in regular *tempus* groupings, several interpolate these groupings with black notes, giving the appearance of an isolated colorated *semibrevis* here, a colorated *brevis* there. Coloration serves a double purpose. It indicates a duration that could not be contextually indicated in regular black notation. It also clearly shows the division of perfections in *syncopa*, so that in [2,3], for example, the appearance of

a colorated *brevis* at the beginning of a passage is complemented by a colorated *semibrevis* appearing after a series of interpolating black notes. It plausibly demonstrates the limits of the *syncopa* by framing black perfections that are sung against the tempus and prolation boundaries, which are frequently maintained in other parts of the polyphonic texture, inherent to the *integer valor*. The realignment of all parts after the colorated *semibrevis* would arguably act as a signpost to the performers of complex polyphonic lines.

Although most examples of *syncopa colorata* are limited to divisions at the *semibrevis* level, the notation of Jacob de Senleches especially and to some extent Trebor utilise the property of *minima* equivalence inherent to Type 1a coloration to their advantage by using isolated colorated *minime* in a process which supplants the device of the p.d. in *syncopa*. Figure 4.1 shows a diplomatic copy (which also reproduces text underlay) of the beginning of Jacob de Senleches' *En attendant esperance* which contains four instances of *syncopa colorata* in the space of twelve and a half *breves* in [2,3] (cf. Vol. II, App. A, No. 37). Each *syncopa* group is shown by a group of conjoined arrow heads which are labelled A-D.

Figure 4.1: *Syncopa colorata* in the beginning of S in Senleches' *En attendant esperance* (MOe5.24).

En attendant esperance conforter lhoume qui veut
En attendant se deduit de porte en a ten dant

Group A in Figure 4.1 is an example of *syncopa colorata* commonly found in the repertoire where the last red *semibrevis* is separated by a pair of black *minime* (the second of which must be altered). Group B shows the less common use of *syncopa colorata* at the *minima* level where an imperfect *semibrevis* is completed by the initial red *minima pausa* and the final red *minima*. Changing the colour of this *minima* produces two effects. In the first instance it prevents the alteration of the *minima* if, as a black *minima*, it was paired with the previous black *minima*, and, consequently, it forces the aforementioned black *minima* to imperfect the last *semibrevis* of the previous *binaria c.o.p.* Group C sees the syncopation of a red perfection by a single black *minima* which subsequently remotely-imperfects the next *brevis* (relationship shown in Figure 4.1 by a dashed slur). The use of a black *minima* in a passage of red notes conveys the need for this note to imperfect the next black *brevis*. The situation also demonstrates a playful inversion of coloration relationships. Group D illustrates a more

²⁹ Richard Rastall, *The Notation of Western Music*, London, 1983, p. 82.

advanced form of *syncopa colorata* where void red *sesquitercia* note groups are interpolated by regular black *semibreves*. The result is a temporary displacement of one-and-a-half *minime*.

I have previously argued that the process of *syncopa colorata* at the *minima* level is a particular trait of Jacob de Senleches' notational style, a position which is supported by the preservation of this special device in many of his works in their collective transmissions alongside works which use *syncopa* at the *minima* level effected by the p.d.³⁰ The observation that the same device is preserved in Trebor's *Se July Cesar* is not detrimental to my position (*vid.* Vol. II, App. A, No. 39). The styles of Senleches and Trebor show particular relationships that I view as indicative of a close musical if not personal relationship between these two composers. This is particularly the case in Senleches' earlier ballade *Fuions de ci* (Vol. II, App. A, No. 17), which laments the death in September 1382 of Alionor of Aragón, Queen of Castile, and Trebor's *En seumeillant m'a vint une vesion* (Vol. II, App. A, No. 39), which celebrates King John of Aragón's Sardinian expedition in 1388. The likely presence of Senleches in the employ of Alionor in the early 1380s and Trebor's close ties with her king-brother at Aragón may be sufficient grounds for proposing contacts between these composers in this decade. But the stylistic similarities of Senleches *Fuions de ci* and Trebor's *En seumeillant* also support this proposition.

Both works are composed in minor prolation, *Fuions* in perfect *tempus* and *En seumeillant* imperfect. A constant feature of both works is the syncopation of one or more voices. Admittedly, Senleches' work is much more liberal in its use of *syncopa* in all voices. It also uses coloration to indicate imperfect *longe* and *breves* to create a further level of syncopation. Trebor's ballade, on the other hand, makes no use of coloration and there are only occasional episodes where the T employs syncopation beyond the *semibrevis*. Common features, however, link these two works. Both works use pre-cadential melodic figures involving interlocked descending thirds, or a scale descent in *semibreves* that are displaced by one *minima*. Both works fragment the melody with rests, resulting in specific words being sung on notes separated from the surrounding phrases by rests. Beyond the level of stylistic features common to a particular composer, both works access a broader set of stylistic features, which might be called the syncopated style. In its purest form, this style does not employ devices associated with the *ars subtilior*, but it makes frequent use of *syncopa* techniques which often result in a blurring of the mensuration. This is witnessed in cadences

³⁰ Stoessel, *op. cit.*, pp. 141-142.

whose resolution occurs at locations not on the first perfection of the *tempus*. This syncopated style is also replicated in Trebor's *Se Alixandre et Hector* (Vol. II, App. A, No. 40). These distinct stylistic similarities and the use of a rare notational device suggest points of contact between these two composers. Whether these points of contact are direct (personal) or indirect (cultural) is a matter for future investigation.

Type 1b, augmenting or perfecting coloration with *minima* equivalence occurs in minor prolation. It has a special, but by no means universal, association with works in *tempus perfectum diminutum*. Semantically, this type of coloration is identical to the p.p., although it clearly serves in the ambivalent role of a proportional signifier, dependent, as is the case with Type 1 coloration, on the mensural context.

Type 2a coloration involves the use of full red, void black or void red coloration with a *sesquialtera* relationship at the *minima* level. Type 2b coloration denotes the opposite relationship of 2:3 at the *minima* level. Both forms of coloration are notable for their extension of *ars nova* principles of coloration to the level of the *minima* and *semiminima*. However, a level of ambiguity is also introduced into the notational record where the red *minima* in Type 2 (=2a+2b) coloration is indistinguishable from Type 1 coloration based on its appearance. The problem of this ambiguity can be inferred from the particular effort taken by the scribe of Tn J.II.9 to avoid the notation of *sesquialtere minime* in preference to an extrinsic proportional indicator. Context, however, plays an important role in the meaning of this form of coloration when it occurs in the remainder of the repertoire.

Table 4.1 (*vid.* p. 195) does not detail the use of coloration in a third principal source of the *ars subtilior* Tn J.II.9. In this source, coloration is for the greater part confined to Type 1a, although Type 2a coloration is found in nine chansons³¹ but only when these colorated passages contain *semiminime*. Elsewhere in this manuscript, passages requiring *minime* to be sung in a *sesquialtera* proportion use the proportion sign 3 or $\frac{3}{2}$ except in the cases where mensuration signs connected to a canon are employed instead. I suggest that these notational idiosyncrasies developed out of a scribal concern for *minima* equivalence in red coloration (the only form of coloration used in this manuscript) but that the presence of the *semiminime* acted as an additional intrinsic indication of the specific meaning of coloration required therein. The remarkable uniformity of notational devices and idiosyncrasies in this

³¹ *Je ne puis avoir plaisir* (#202, f. 112v), *Se de mon mal delivre prestement* (#230, f. 124v), *Flour de beaute* (#238, f. 128v), *La belle et la gente rose* (#252, f. 133v), *Le mois de may* (#273, f. 143v), *Il faut pour trover un*

source suggests the strong hand of its music scribe or, as Leech-Wilkinson has broadly suggested,³² the possibility that the whole manuscript represents the works of a single composer. The total absence of concordances with other collections, despite the presence of several literary and musical *topoi*, may suggest that the collection was composed for a singular purpose, ostensibly in relation to the Cypriot Court of the Luisignans.³³

Type 3 coloration involves a *sesquitercia* relationship at the *minima* level, which also results in a false³⁴ *dupla* proportion at the *semibrevis*. Its obviation of the principle of *minima* equivalence of Type 1 coloration marks a significant shift in notational process towards the end of the fourteenth century. Red, void black or, most commonly in the principal *ars subtilior* sources, void red coloration is used to signify this proportional relationship. It is possible that the void red mode of significance developed out of a desire to distinguish Type 3 coloration from Type 1 coloration. Several late fourteenth and early fifteenth century theorists acknowledge the existence of Type 3 coloration,³⁵ although it is not always met with approval. Prosdocimus de Beldemandis, for example, objects to this mode of signification on the grounds of strict mathematical relationships. His comments on this type of coloration, in denying that they can be logically derived, indicate that this form of coloration and its realisation was perpetuated orally by musical practice.³⁶

Type 4 coloration sees the use of void black or red coloration to indicate a *dupla* relationship at the *minima* level. An obvious link between this form of coloration and the fifteenth century form of the *semiminima* as a colorated *minima* can be immediately drawn, although additional observations suggest the instability of this form which resided in its ambiguous nature in relation to Coloration Types 1 and 2. In the two instances only found in CH 564 where void black *minime* are written to indicate *semiminime*, their realisation is assisted by the presence of Type 2a (red) and Type 3 (void red) coloration. As the number of decisions regarding the meaning of void black coloration is thereby reduced, context

bon port (#313, f. 153v), *Je prens d'amour noriture* (#315, f. 154r), *Il n'ai pas celui* (#316, f. 154r), *Quant Dieu vora de qui vient tout grace* (#317, f. 154r)

³² Daniel Leech-Wilkinson, 'Review: *The Codex J.II.9, Torino, Biblioteca Nazionale Universitaria: Facsimile Edition*', *Plainsong and Medieval Music*, vol. 10, no. 1, 2001, pp. 91-94.

³³ *Vid.* Richard H. Hoppin, 'The Cypriot-French repertory of the Manuscript Torino, Biblioteca Nazionale, J.II.9', *Musica Disciplina*, vol. 9, 1957, pp. 79-125; Barbara Wiemes, 'Historical figures from Cyprus mentioned in the Manuscript Torino J.II.9', in *The Cypriot-French Repertory of the Manuscript Torino J.II.9*, eds U. Günther and L. Finscher, Neuhausen-Stuttgart, 1995.

³⁴ False because the relationship between the prolation of the black and red *semibreves* is not preserved. As Type 2 coloration occurs exclusively in works with major prolation, the change of the prolation in a passage of Type 2 coloration is always in a minor prolation (relative to the *semibrevis* in Type 2 coloration).

³⁵ *Vid.* Stoessel, *op. cit.*, pp. 143-144.

coupled with repertorial knowledge may have been sufficient to render their meaning. In the four cases of red *dupla* coloration in CH 564 and MOe5.24, two instances (CH 564 47 and MOe5.24 17) also contain a canon which verbally specifies the meaning of this coloration. While the lack of additional signifiers may be a factor in the inclusion of a canon and, despite the fact that CH 564 54 contains red coloration that must be rendered as either Type 1a or Type 4 relationships without verbal clarification, the presence of canons suggests that this form of coloration was far from an established notational norm. At the same time, the lot of this particular note shape, especially in relation to its use to indicate the duration of a *semiminima*, is tied to the scribal struggle alluded to earlier concerning the division of the *minima*. *Dupla* coloration's role relative to the *semiminima* must be regarded as one facet in notational experimentation, which, despite an apparent but teleological potential, appears only to succeed as a dominant form after the third decade of the fifteenth century.

Type 5 coloration is compound coloration. Six instances can be distinguished in MOe5.24 and CH 564, all making use of void red coloration. Type 5's coloration of coloration, that is the voiding of red coloration, is distinct from Type 3 void red coloration. As Type 1a coloration prevents the division of the *minima* by coloration, and Type 2a coloration consists solely of *sesquialtera* relationships at all levels of mensuration, Type 5 coloration marks a compromise where red coloration retains *minima* equivalence of Type 1a coloration, while the application of void coloration functions as Type 2a coloration. Examples of this form of coloration may be found in CH 564 110 and MOe5.24 102.

Type 5 coloration also exists as a double application of Type 2a coloration that results in a 9:4 proportion in relation to the *minima*. Perhaps the most interesting example of this compound coloration occurs in two out of three transmissions of Philipoctus de Caserta's *Par les bons Gedeon et Sanson*. In the S at BB. 59-60 (Vol. II, App. A, No. 33), two sources, CH 564 and Tn T.III.2 transmit void red *ternaria* indicating that three imperfect *breves* must be sung in the duration of two perfect *breves* in the mensuration [2,3]. The implication is that there is equivalence between black and red *breves*. In the third transmission of this work found in MOe5.24, the same *ternaria* is written merely using red ink, the implication being that red *breves* are also sung in a 3:2 proportion. Another example of this latter variation may be observed in the S of Matheus de Perusio's *Le*

³⁶ Stoessel, *op. cit.*, p. 143-144.

greygnour bien (MOe5.24 62) at BB. 62-64 where it is applied at the *minima* level (*vid.* Vol. II, App. A, No. 41).

Type 6 coloration is particoloration, or the half-coloration of a single note form.³⁷ This coloration is always executed with a vertical division of the body of the note shape, so that the left side is drawn in one colour of ink, the right in another. The particoloration of the *semibrevis* is unique to two works that occur in CH 564 ascribed to Senleches and Rodericus (as S. Uciredor) respectively. In Senleches' *Je me merveil* a black and white *semibrevis* indicates the duration of two-and-a-half *minime* in [2,3]. In Rodericus' *Angolorum psalat*, a half-void red *semibrevis* indicates the duration of one-and-three-quarters *minime*, through the combination of Type 1a and Type 3 colorations.

Type 7 coloration involves a group of compositions whose notation use coloration in a special role. Jacob de Senleches' *La harpe de melodie* (Vol. II, App. A, No. 42) is accompanied by a canon which, besides indicating the resolution of a second canonic voice, specifies that black and white notes in the S are sung at half their usual duration. The *minime* of red notes in the S are equivalent with the black *minime* in the T. A similar relationship exists in the relationship between black and red notes in Rodericus' *Angolorum psalat* where red *minime* in the T are equivalent to black *minime* in the S, but black notes in the T only are sung at half the duration of their red counterparts. The interpretation of this relationship is not readily apparent to the reader of the notation in the form of a canon, although the situation of a portion of the S's text laden with biblical references below the T, *Retro mordens ut fera pessima* ("Biting back like the fiercest of beasts"), may suggest the unusual relationship between colorated and non-colorated note shapes in the T.³⁸

The prominence of Coloration Types 1-3 in practice is clearly demonstrated in Table 4.1. While several ink types are used across several different Coloration Types, their distinctive meaning, with some decision-making and experimentation, is arrived at firstly in relation to their context denoted by mensuration and, secondly, the presence of other forms of coloration or notational devices such as special note shapes and/or mensuration signs. Scribes and composers, in seeking means by which they could notationally represent their intentions, also used additional meanings of coloration, but as the scribal record indicates, often clarified their intention by the application of verbal instructions.

³⁷ Cf. Stoessel, *op. cit.*, p. 146.

³⁸ Nors S. Josephson, 'Rodericus, Angolorum psalat', *Musica Disciplina*, vol. 25, 1971, pp. 113-126.

Before proceeding to a discussion of the role of special note shapes in the notation of the *ars subtilior*, mention should be made of one further notational development that can be observed in the notational record of the *ars subtilior*. The phenomenon of substitute coloration involves the use of mensuration signs in quick succession in a procedure that might otherwise be expressed through coloration. A clear example of the exchange of coloration and mensuration signs occurs in the collective transmissions of Philipoctus de Caserta's *En remirant*. In CH 564 and Pn 6771, void red Type 3 coloration is used in the S. In the MOe5.24 transmission of this work, instances of this proportional relationship are written in black notation preceded by the *sesquitercia* mensuration sign \circ (*vid.* Vol. II, App. B, No. 15, *Variants* S 12.1, Ct 5.4, T 14.2 *et passim*). The same equivalence of meaning is also witnessed in the two transmissions of Johannes Suzoy's *Prophilius, un des nobles de Roume* (*vid.* Vol. II, App. B, No. 43, *Variants*). While the reading at S 11.1 and 38.1 in CH 564 (f. 35v) employs the sign \circ to indicate the *sesquitercia* proportion, the fragmentary Lowlands source NL-Uu 1846² (f. 20v) employs void red Type 3 coloration.

The previous paragraphs, in their systematisation of coloration in the music of the *ars subtilior*, also demonstrate several weaknesses that may have been the catalysts for further experimentation. Evidence suggests that before the stylistic demands of the *ars subtilior* style, Type 1a coloration was only occasionally used. On the basis of extant repertoire and its historical references already detailed in Chapters 2 and 3, all remaining Coloration Types appear to have been developed in the last quarter of the fourteenth century in response to musical developments which sought to express a greater number of temporal divisions or proportional relationships. The mere diversity of meanings of coloration suggests experimentation in notational devices that could hardly confine itself to the single device of coloration. In parallel and often in concert with developments in coloration techniques, composers sought to express temporal divisions using other principles of notation. These additional but no less important devices are the use of special note shapes and mensuration signs. While discussion of the latter device is reserved for the next chapter, this chapter will continue with an examination of perhaps the most complex element of the various notational practices associated with the *ars subtilior*: special note shapes.

4.2. Special note shapes

One of the most fascinating elements in the notation of the music of the *ars subtilior* is the proliferation of special note shapes used to denote various durations. Attention³⁹ has been drawn to a remark on the diversity of note shapes made by Walter Odington in his *De speculatione musice* where he wrote there are:

...magna figurarum diversitas quae in melodiis istius temporis reperitur quia quot
<sunt nota>tores tot sunt novarum inventores figurarum.⁴⁰

However, despite his colourful simile, it is unlikely that the early fourteenth century Englishman Odington was referring to note shapes of the *ars subtilior*.⁴¹ It is possible that he was referring to new notes such as the *minima* and the swallow-tailed *semibrevis* of English notation practice.

On the other hand, Guido's well-known ballade *Or voit tout en aventure* (CH 564, f. 25v; *vid.* Vol. II, App. A, No. 44) appears to refer to this aspect of notational development in the later fourteenth century if one considers the use of litotes in the text in conjunction with the special note forms used to record the music itself.⁴² Line 10 of the text of *Or voit*

³⁹ *Vid.* Busse Berger, *op.cit.*, pp. 179-180.

⁴⁰ "...a great diversity of note shapes which are discovered in the today's melodies since there are as many writers of music as there are inventors of new note shapes."; F. Hammond, *op.cit.*, p. 42.

⁴¹ Cf. Oliver B. Ellsworth, (ed.), *The Berkeley Manuscript, University of California Music Library, MS. 744 (olim Phillipps 4450)*, Greek and Latin Music Theory 2, Lincoln and London, 1984, p 125, fn. 8.

⁴² The text with translation is as follows:

	<i>Or voit tout en aventure</i>	Now everything seems left to chance
	<i>Puis qu'[a]insi me conveient fayre</i>	Since I must thus compose
	<i>A la nouvelle figure</i>	with the new figures
	<i>Qui doit a chascun desplayre.</i>	which displease everyone.
5	<i>Que c'est trestout en contraire</i>	It is completely contrary
	<i>de bon art qui est parfayt:</i>	To the good art which is perfect.
	<i>Certes se n'est pas bien fayt.</i>	Certainly, if it is not done well.
	<i>Nos faysons contre nature</i>	We compose against nature
	<i>de ce qu'est ben fayte deffayre;</i>	to destroy that which is done well.
10	<i>Que Philippe qui mais ne dure</i>	For which Philippe, who just died,
	<i>Nos dona boin examplaire.</i>	gave us a good example.
	<i>Nos laisons tous ses afayres</i>	We lay aside all his rules
	<i>Por Marquet le contrefayt.</i>	Because Marchettus does the opposite.
	<i>Certes se n'est pas bien fayt.</i>	Certainly, if it is not done well.
15	<i>L'art de Marquet n'a mesure,</i>	Marchettus' art has no measure
	<i>N'onques riens ne sant parfayre;</i>	and never can anything be perfected.
	<i>C'est trop grant outrecuidure</i>	It is very presumptuous
	<i>D'ansuir et de portayre</i>	to follow and to draw
	<i>Ces figures, et tout traire</i>	these figures, and all varied, drag away
20	<i>L'oull varieus de bon trayt.</i>	the eye from the good manner.

tout suggests that it was written after the death of Philippe de Vitry (1291-1361), although how much later remains to be determined. Although the inclusion in the ballade's text of the names of two contemporary, leading musician-theorists Marchettus de Padua and Philippe de Vitry may be due more to the influence a musico-literary *topos* as also found in works such as Jacopo da Bologna's *Oselletto selvazo*,⁴³ several elements of the text refer to musical notation. On its surface, the text of *Or voit tout* complains that the musician must use new note shapes to compose music, figures which meet with the disapproval of many because they appear contrary to the art of both De Vitry and Marchettus.

Yet, *Or voit tout* is notated in the "good art" or mensural notation of De Vitry. It also uses two additional special note shapes:  and .⁴⁴ Both figures represent the duration of half a *minima*, that is a *semiminima*, which at first glance would support a literal reading of the text. However, by noting that each figure is used in a specific manner which implies a different division of the *semibrevis*, a clue to the more subtle meaning of the text of *Or voit tout*, which is on an equal footing with its rhythmic subtleties, becomes apparent. The figure  represents a division of the perfect *semibrevis* into two groups of three (as      where  =                                           

is clearly intended in the original notation through the use of these new figures as an extension of *ars nova* notational processes supports an ironic reading of the text.

This reading of *Or voit tout* is enhanced by considering the evolution of a sixth simple note shape during the fourteenth century. The *semiminima* shared with the *minima* in the *ars nova* mensural system the property of equivalence between mensurations. Yet, its absence or formal variation in theoretical and practical sources of the fourteenth and fifteenth centuries suggests that the *semiminima*'s development was neither uniform nor universal in this period.⁴⁶ Guillaume de Machaut appears to have never used the *semiminima*. In as much as it attests to the variability of forms as well as the lack of scribal intervention, Codex Chantilly, for example, contains no less than ten different note shapes which express the duration equal to the *semiminima* (See Table 4.4, p. 216). This variability is replicated throughout theoretical literature (See Table 4.3, p. 212). This situation is also illustrated by the presence of a different *semiminima* shape in each of the three transmissions of Philipoctus de Caserta's *En remirant*.⁴⁷ While the *semiminima* eventually achieved formal stability in the fifteenth century, despite continued oscillation between the flagged and colored *minima* types,⁴⁸ its development in the fourteenth century is closely tied to the processes of special note shapes through its differentiation from the *minima* by the addition of a flag, tail, or change of colour. Guido's *Or voit tout* is but another (even if relatively early) manifestation of this experimentation. The difficulty with the *semiminima* demonstrated by theoretical and practical records was itself responsible for the processes of augmented notation.⁴⁹

⁴⁶ Cf. Stoessel, *op. cit.*, pp. 147-48, where I draw attention to the absence of the *semiminima* in the writing on music by Johannes de Muris and the difficulty of attributing the invention of the form to Philippe de Vitry on the basis of the disparate *Ars Nova* treatise tradition. Q.v. Michael Walter, 'Kennt die *Ars nova*-Lehre die Semiminima?', *Acta Musicologica*, vol. 66, no. 1, 1994, pp. 41-58. One should take into account the cautious note of the late fourteenth century anonymous author of the *Quatuor principalia musicae* which includes the well-known statement: *Qui autem dicunt predictum Philippum crochutam vel semiminimam aut dragmam fecisse, aut eis consensisse, errant, ut in motetis suis intuenti manifeste apparet.* ("He, who however says that the aforementioned Philippe <de Vitry> made or approved of the crochet, *semiminima* or *dragma*, is incorrect, as is clearly apparent to anyone considering his motets."); Luminita Florea Aluas, "The *Quatuor principalia musicae*: A Critical Edition and Translation, with Introduction and Commentary", Ph.D thesis, Indiana University, 1996, p. 382.

⁴⁷ *Vid.* Chapter 3, p. 160.

⁴⁸ Charles Hamm concluded that the shift from flagged to colored *semiminime* occurred in the works of Du Fay c. 1431, in *A Chronology of the Works of Guillaume Dufay based on a Study of Mensural Practice*, Princeton Studies in Music 1, Princeton, 1964, pp. 26-27; q.v. *idem*, 'Dating a group of Dufay's works', *Journal of the American Musicological Society*, vol. 15, no. 1, 1962, pp. 65-71. However, according to Hamm (*A Chronology of the Works of Guillaume Dufay*, pp. 53-55), the flagged form was often maintained in augmented major prolation, the colored form in minor prolations.

⁴⁹ Günther, 'Der Gebrauch des *Tempus perfectum diminutum* in der Handschrift Chantilly', pp. 277-78.

The special note shapes⁵⁰ can be explained in terms of a limited number of notational processes. This presents a situation which removes any notion that the scribes of the *ars subtilior* were inconsistent and replaces it with the proposition that these notational systems resulted from creative problem solving and extension of an established system of notation in order to represent a greater variety of rhythmic nuances. Besides the device of coloration, as discussed above, notational processes in relation to special note shapes can be reduced to two systems: the first is proportional, that is multiplicative and divisive; the second is arithmetic, in that it employs additive or subtractive processes.

Both systems involve the modification, and thereby differentiation, of the set of basic note shapes outlined at the beginning of this chapter. Already, the use of coloration to modify intrinsically the nature of these same note forms has been described. In the case of special note shapes of a proportional nature, intrinsic differentiation occurs through the addition of stems, of flags, of *virgule* (short curved stems), or other shapes. Arithmetic note shapes on the other hand involve the use of various parts of simple note forms, which are in turn composed into a single shape. But this group also includes a sub-group whose note shapes are created by the graphical subtraction of part of a simple note. Both arithmetic sub-groups – composite and reduced respectively – involve the addition or subtraction of an invariable unit from a whole.

A central problem in the discussion of special note shapes is determining their ethnographic origins. From a practical perspective, special note shapes are not confined to sources of the *ars subtilior* but are frequently found throughout collections of *trecento* repertoire. Yet, the unusual note shapes in the *trecento* repertoire, despite their general graphical affinities, seldom achieved the same degree of complexity with respect to the division of musical time as in the repertoire of the *ars subtilior*. Any observation made in the present day is also skewed by the fact that most of the collections of the *ars subtilior* repertoire originated in Italy from the hands of Italian scribes. There is a lack of significantly complete collections from this period copied north of the Alps which might be used to test in the first instance notions that special note shapes are exclusively Italianate. At the same time most collections of *trecento* music are considerably later than the composers whose works they represent. The diversity of special note shapes preserved by Italian scribes

⁵⁰ Cursory treatments of special note shapes are found in Apel, *Notation of Polyphonic Music*, pp. 371-73; *idem*, *French Secular Music of the Late Fourteenth Century*, p. 8; Reynolds, “Evolution of Notational Practices in Manuscripts Written between 1400 -- 1450”, pp. 75-79.

from work to work in the sources of the *ars subtilior* style, itself suggests that the situation is perhaps more complex than has been hitherto proposed. It appears more likely that the situation represents a set of reciprocal influences whose origins lie in notational and musical developments on both sides of the Alps and beyond. Theoretical literature, though often articulated by Italians, is not so one sided in its outlook and bespeaks of several note systems in terms of their ethnographic basis. Thus, the remainder of this section challenges the appellation “Italianate” which is frequently applied to these special note shapes. The central proposition of what follows is that the description Franco-Italian can be applied to many of these special note shapes in order to account for their apparently broad distribution and various semantic guises.

Several contemporary theorists acknowledged the existence of additional note shapes beyond the standard 5 (or 6 including the *semiminima*). The use of an additional upwards or downwards stem to differentiate note shapes was one particular form of *differentia* which had its basis in the mensural system in relation to the properties of various ligatures and *longa-brevis* forms.⁵¹ As already discussed in Chapter 1, it was through the addition of a superior stem to the *semibrevis* that the *minima* evolved in the second phase of *ars nova* notation. The early use of inferior stems is evidenced in the music accompanying the *Roman de Fauvel* in Pn 146, and it and the superior stem also formed the basis of distinguishing durational patterns in the earliest musical notation of the *trecento* according to the *via artis*, that is when durational patterning deviated from the prescriptive patterns associated with undifferentiated *semibreves* of the *via nature*.⁵²

Through an analogy with the device of the superior stem, theorists sought to explain the creation of the new note shapes of the *semibrevis caudata* (◆) and *dragma* (or *fusa/fuisel*)(◆). In a lengthy digression in the commentary on the section of the *Expositiones* regarding distinguishing perfect and imperfect durations from one another, Prosdocimus de Beldemandis in 1404 quite explicitly refers to a practice of creating new forms using the tail or stem when he writes:

⁵¹ Gallo, ‘*Figura and regula: Notation and theory in the tradition of musica mensurabilis*’, p. 46.

⁵² *vid.* Vecchi, *op.cit.*, pp. 97ff. For a practical manifestation closely resembling this system, one should look to the manuscript, Rome, Biblioteca Apostolica Vaticana, Rossiano 215 (=Codex Rossi). Q.v. Chapter 5, p. 251 of the present study.

*Possumus etiam per appositionem caudarum extraneas figuras fabricare, hoc est extraneorum valorum, et hoc bene et cum rationibus satis evidentibus...*⁵³

Concerning the effect of various tails, Prosdocimus offers the following statement:

*Sed cum cauda superius tracta et cauda inferius tracta sint opposita et cauda superius tracta habeat diminuere, ut patere bene consideranti, sequitur quod cauda inferius tracta hebeat suum oppositum operari, scilicet augmentare...*⁵⁴

In a passage describing the logic behind the value of the figure , which its author terms a *fusa*, the third Berkeley Anonymous treatise in 1375 states that:

*Nam sicut cauda sursum alleviat aliquando pro medietate, sic cauda deorsum tendens debet pro medietate per oppositum aggravari, si sursum tollat per oppositum deorsum debet augere.*⁵⁵

Using this principle, the theorist then explains that the *fusa* or *dragma* should have the duration of one-and-a-half *minime*, adding that the downward tail can also add a third of the value to the figure.

While Prosdocimus' use of *diminuere* ("to diminish") and *augmentare* ("to augment") gives no explicit proportional relationship that defines how he believes either stem diminishes/augments the note, he does refer to the practice of his contemporaries, with a great amount of vituperation for their *irrationabilis truffe* ("thoughtless swindles"), who assign proportional diminution to upper or lower stems. Furthermore, his discussion of these figures occurs in the context of a response to his "contemporaries' extraneous methods for proportioning figures" (Chap LXI, sent. 101). The terms *alleviare* ("to lighten"), *pro medietate* ("by a half"), *aggravari* ("to make heavy") and *augere* ("to increase") used by the Berkeley Anonymous cannot be easily singled out as terms of proportionality, and may indeed tend towards ambivalence. Perhaps the only treatise to articulate the meaning of note shapes clearly in relation to proportional concepts occurs in the case of the early fifteenth century *Regule de Contrapunto* by a certain Antonio de Leno. This vernacular

⁵³ "We are also able by the application of tails to make extraneous note shapes, that is of extraneous durations, and this is good and satisfactory in its evident rationality..."; Gallo, *Prosdocimi de Beldemandi Opera I: Expositiones*, chap. LXI, sent. 52.

⁵⁴ "But since the tail drawn above <a note> and a tail drawn below are opposite and the tail drawn above has to diminish, it follows that the tail drawn below has to operate as its opposite, namely to augment..."; Gallo, *Prosdocimi de Beldemandi Opera I: Expositiones*, chap. LXI, sent. 55.

⁵⁵ "For just as a stem above <a note> sometimes lightens by a half, so too a stem hanging below (a note) ought to do the opposite and make it heavier by a half: if it reduces above, in the opposite manner below it ought to increase"; Ellsworth, *op. cit.*, pp. 126.21-128.2.

treatise sets out various note shapes in a system of notation that has fully succumbed to French *ars nova* principles such as alteration of the *minima* and the p.d.⁵⁶

Although there are difficulties in the single surviving transmission of Antonio de Leno's *Regulae de contrapuncto*, especially in relation to the passage concerning *proportio sesquialtera*, the relationships shown in Table 4.2 are apparent in relation to proportional note shapes.

Table 4.2: Proportional note shapes in Antonio de Leno's *Regule de contrapuncto*.⁵⁷

Proportion (<i>minima</i> level)	Note shape	Comments
<i>Proportio sesquitercia</i>		pp. 32-33.
<i>Proportio sesquialtera</i>		pp. 33-34. Text describes 3:2 proportion at <i>minima</i> level, although the following musical example appears to demonstrate the <i>sesquitercia</i> proportion.
<i>Proportio dupla</i>		pp. 34-35. <i>Croduze che hanno croduzo el revolto de sopra</i>
<i>Proportio superbiciens</i>		pp. 35-36. More correctly <i>proportio dupla superbipartiens tercia</i> (8:3).
<i>Proportio tripla</i>		pp. 36-37. <i>...sono croduze di sopra et hanno la coda de soto despicata senza crocimento nessuno.</i>
<i>Proportio quadrupla</i>		pp. 37-38. <i>...sono croduze di sopra et di soto cola coda langa de soto quanto di sopra collo crocimento a l'una et a l'altra.</i>

The use of stems and flags as indicators of proportional relationships is central to Antonio's system. The upper right-hand flag indicates a 2:1 relationship, the lower stem a 3:1, and the lower flagged stems a 2:1, which when multiplied by the 2:1 relationship evident in the *semiminima*, results in the 4:1 proportion. Through these various *differentia*, significative and therefore semiotic distinctions reflective of proportional concepts are thus achieved.⁵⁸

⁵⁶ *vid.* Albert Seay, (ed.), *Antonio de Leno: Regulae de contrapuncto*, Colorado College Music Press Critical Texts 1, Colorado Springs, 1977, pp. 28-29 (=A. de Leno).

⁵⁷ Page numbers given in the table reflect the location of relative passages in the edition of Seay, *op. cit.*

⁵⁸ At a practical level, the system discussed by Antonio corresponds with that found in Bu 2216 and the keyboard tabulations of FZc 117. For details of Antonio's notation used in Bu 2216, *vid.* F. Alberto Gallo, (ed.), *Il codice Musicale 2216 della Biblioteca Univeritaria di Bologna*, Bologna, 1968, vol. 2, pp. 14-15. On the notation of FZc 117 *vid.* Michael Kugler, *Die Tastenmusik im Codex Faenza*, Münchner Veröffentlichungen zur Musikgeschichte 21, Tutzing, 1972, pp. 23-34.

The strongest argument for the proportional nature of certain special note shapes can be arrived at through the empirical observation of scribal practices. The semantic equivalence of special note shapes and proportions achieved through mensuration signs is demonstrated in the case of the collective transmissions of Philipoctus de Caserta's *En attendant souffrir m'estuet*.⁵⁹ Whereas a 2:3 proportion in [2,3] is indicated in three sources using *dragme*, the fourth source (MOe5.24) sees the same passage written using a proportional mensuration sign and simple black note forms, resulting in the following equivalence: $[\odot] \begin{array}{c} | \\ \blacklozenge \\ | \end{array} = \begin{array}{c} | \\ \blacklozenge \\ | \end{array} \begin{array}{c} | \\ \blacklozenge \\ | \end{array} = [\odot] \begin{array}{c} | \\ \blacklozenge \\ | \end{array} \begin{array}{c} | \\ \blacklozenge \\ | \end{array} \begin{array}{c} | \\ \blacklozenge \\ | \end{array}$. A similar situation occurs in the mensuration [2,3] in passages in Philipoctus de Caserta's *De ma dolour* where in MOe5.24 it is written as three *dragme* but is found instead as three colored *semibreves* in CH 564.⁶⁰ However, the *dragme* in MOe5.24 are ambiguous in their nature, as one may read them as a proportional indicator (3:2) or as arithmetic forms, which, as will be explained below, are equal to two conjoined *minime*.

The consistency of the scribe of Tn J.II.9 should be again noted in this respect. As has been stated above, there is no evidence of the use of Type 3 coloration in this scribe's work. Except in the case of a handful of works which use unusual mensuration signs attached to a canon, *sesquitercia* relationships are expressed either through simple note shapes preceded by the sign \odot or by using the dragma (\blacklozenge) and what might be termed the *semidragma* (\blacklozenge) in the following relationship:⁶¹

$$\begin{array}{c} \updownarrow \\ \blacklozenge \\ | \end{array} \begin{array}{c} \updownarrow \\ \blacklozenge \\ | \end{array} \begin{array}{c} \updownarrow \\ \blacklozenge \\ | \end{array} \begin{array}{c} \updownarrow \\ \blacklozenge \\ | \end{array} = \begin{array}{c} | \\ \blacklozenge \\ | \end{array} \begin{array}{c} | \\ \blacklozenge \\ | \end{array} = \begin{array}{c} | \\ \blacklozenge \\ | \end{array} \begin{array}{c} | \\ \blacklozenge \\ | \end{array}$$

Table 4.3 collects together known instances of special note shapes discussed by musical theorists of the fourteenth and fifteenth centuries which are based on principles of proportional signification. Thus, it omits arithmetic note shapes, which will be discussed below. I have been careful to preserve the various modes by which the *semiminima* and related forms were indicated in Figures 1-5 of Table 4.3 in order to highlight their diversity.

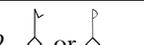
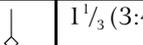
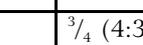
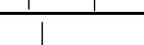
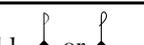
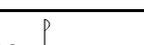
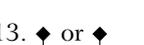
⁵⁹ MOe5.24, f. 20r; CH 564, f. 33v; Pn 6771, f. 84v; GR 197, 3r + Hdc 2387 1v.

⁶⁰ *vid.* S 21.1 and 60.1, Ct 35.2 in Vol. II, App. B, No. 31, *Variants*.

⁶¹ Cf. Reynolds, "Evolution of Notational Practices in Manuscripts Written between 1400 -- 1450", pp. 78-79.

⁶² I am aware that the issue of the *semiminima* and its duration is dependent in *trecento* notations on the *divisiones*. Moreover, the issue of substitute *quaternaria* and modes of writing the *duodenaria* in late works of *trecento* composers is an additional factor, the detailed exploration of which is beyond the scope of the present discussion.

Table 4.3: Proportional special note shapes in French and Italian *musica mensurabilis* treatises from the Late 14th and Early 15th centuries.⁶³

Figures	Value in \blacklozenge	Name	Sources	Comments
1. 	$\frac{1}{2}$ (2:1)	<i>semiminima, crozuda</i> (Leno)	BA2, 126.13-15; TPMI, 229a; Ars D, 76a & 80a; SC, p. 72; A. de Leno, 34.	Leno: <i>proportio dupla</i> (2:1) in [2,3]
2. 	$\frac{1}{2}$ (2:1)	<i>semiminima</i>	ArsM, p. 248; TF 82.4f; tFT 3b.20;	tFT: [2,2];
3. 	$\frac{3}{4}$ (4:3)	<i>addita</i> (BA2); <i>minima imperfecta</i> (TF); <i>semiminima</i> (Anon X)	BA2, 124.3-6; Anon X, 413b; Th. de Campo, 185a; TF: 84.11-14;	Anon X & Theo. de Campo: major prolation
4. 	$\frac{2}{3}$ (3:2)	<i>semiminima</i>	TPMI, CS III, 229a;	
5. 	$\frac{3}{4}$ (4:3)	<i>crozude el revolto de sopra a mane sinistra</i>	A. de Leno, 32;	Leno: major prolation, 4:3
6. 	$1\frac{1}{2}$ (2:3)	<i>fusa, minima caudata sursum et deorsum</i> (Anon X).	BA2, 126.16-18; ArsM, p. 224; A. de Leno, 31. Anon X, 414a.	BA2: major prolation; ArsM: [2,3]; Leno: ex. major prolation; Anon X: [2,3]
7. a.  or b. 	$1\frac{1}{3}$ (3:4)	<i>(fusa)</i>	BA2, 126.18-21; TF 84.6f(<i>vacua</i>); tFT 3b.19 (<i>vacua</i>)	TF: minor prolation; tFT: [2,2];
8. 	2 (3:2 \blacklozenge)	<i>dragma or (fusa); fuises</i> (BN lat. 15128)	ArsM, p. 224; TF 84.4f; SC p. 76; ArsD, CS III, 107a; BN lat. 15128, p. 88.	ArsM: [2,3]; TF: major prolation; SC: [2,3];
9.  or 	$\frac{3}{4}$ (4:3)	<i>(fusa)</i>	ArsM, p. 226 (cf. Anon V, CS III, 394a)	ArsM: <i>cum sit minoris valoris</i>
10. 	$\frac{3}{4}$, $\frac{1}{2}$, $\frac{2}{3}$, $\frac{4}{3}$ (4:3, 2:1, 3:2, 3:4)	<i>minima vacua, minima imperfecta</i>	ArsM. p. 228; TF 88.6f; tFT 3a.6, 3a.3, 3a.4; SC p.73; A. de Leno, 35;	ArsM: $\frac{3}{4}$, major prolation, $\frac{4}{3}$ -[2,2] (augment.); TF: $\frac{2}{3}$, minor prolation; tFT $\frac{3}{4}$ -[2,3], $\frac{1}{2}$ -[3,3], $\frac{2}{3}$ -[3,2]; Leno: <i>duplasuperbiciens</i> (8:3).
11. 	$\frac{1}{2}$ (2:1) (Anon X), $\frac{1}{3}$ (3:1) (Leno)	<i>minima semiminarum</i> (Anon X)	Anon X, CS III, 414a; A. De Leno, 36;	Anon X: major prolation; Leno: major prolation, <i>proportio tripla</i>
12. 	$\frac{1}{4}$ (4:1)		A. de Leno, 37;	Leno: major prolation, <i>proportio quadrupla</i> .
13. 	2 (Leno), 3 (BA2), (5,6)	<i>(semibrevis caudata)</i>	A. de Leno, 31; ArsD, 107a; BA2, 128.8; (BN lat. 15128, pp. 89-91);	Leno, BA2, BN lat. 15128: major prolation;

⁶³ The key to abbreviations used in Table 4.3 are as follows: CS III: Coussemaker, *op.cit.*, vol. 3; Anon X: Anonymous X in: CS III; A. de Leno: A. Seay (ed.), *Antonio de Leno: Regulae de contrapunto*, Colorado Springs, 1977; ArsD = Johannes de Muris, *Ars discantus* in: CS III; ArsM = C. M. Balensuela, *op.cit.*; BA2 = Ellsworth, *op.cit.*; SC = A. Gilles & C. Sweeney (eds), *Anonymus: De Semibrevis Caudatis*, CSM 13, s.l., 1971; TPMI: Prosdocius de Beldemandis, *Tractatus practice de musica mensurabili ad modum Ytalicorum*, in: CS III; Th. de Campo: (Pseudo-)Theodoricus de Campo, *De musica mensurabili* in: CS III; TF = Schreuer, *op.cit.*; tFT = *Tractatulus de figuris et temporibus* in F. Alberto Gallo, (ed.), *Mensurabilis Musicae Tractatuli*, Antiquae Musicae Italicae Scriptores I, Bologna, 1966.

The realisation of Figures 4 and 5 in Table 4.3 demonstrates a link to the notation employed in *trecento* sources. While the simple *semiminima* (\blacklozenge) is often employed in a duple relationship to the *minima*,⁶⁴ its appearance in groups of three to indicate a *sesquialtera* proportion in relation to the *minima* as either $\blacklozenge\blacklozenge\blacklozenge$ or $\blacklozenge\blacklozenge\blacklozenge$ is a common feature of *trecento* sources.

There is a question of how musical palaeography should begin to regard special note shapes as they appear in musical sources. Johannes Wolf grouped the use of these forms according to the composer of the works in which they appeared.⁶⁵ In his study of *trecento* notational processes, Kurt von Fischer concluded that in general terms the *sesquialtera* group $\blacklozenge\blacklozenge\blacklozenge$ was typical for manuscripts with a Tuscan origin (Fn 26, Lbm 29987, Pn 568 and Fl 87) and $\blacklozenge\blacklozenge\blacklozenge$ was common in northern Italian sources (Pn 6771, Las 184, Padua A).⁶⁶ While von Fischer notes exceptions to these generalisations in Pn 568, Pn 6771 and Fl 87, his and Wolf's observations should be tempered by new methodologies, particularly those demonstrated by John Nádas in his studies of several *trecento* sources, including Pn 568, Pn 6771 and Fl 87. In the case of Pn 568,⁶⁷ the division of the use of either form down scribal lines becomes immediately apparent and suggests less uniformity in this Florentine source than von Fischer wants us to believe.

Von Fischer also comments on the use of the *dragma* in the *trecento* manuscripts Pn 568, Lbm 29987, Fl 87 and Fn 26.⁶⁸ Generally, their meaning is confined to a duration of two *minime*, often in the role of an imperfect *semibrevis* in passages of syncopation in the Italian *tempus imperfectum*.⁶⁹ Although their semiotic nature remains ambiguous, it is possible that duration of the *dragme* in *trecento* notation resides in an arithmetic process through the addition or composition of two simple note forms into one shape, i.e. $\blacklozenge = \blacklozenge + \blacklozenge$. The details of this system are given below. Already in Pn 568, French

⁶⁴ I am aware that the issue of the *semiminima* and its duration is dependent in *trecento* notations on the *divisiones*. Moreover, the issue of substitute *quaternaria* and modes of writing the *duodenaria* in late works of *trecento* composers is an additional factor, the detailed exploration of which is beyond the scope of the present discussion.

⁶⁵ Wolf, *op.cit.*, vol. 1, p. 306.

⁶⁶ Kurt von Fischer, *Studien zur italienischen Musik des Trecento und frühen Quattrocento*, Bern, 1956, p. 119.

⁶⁷ Nádas, "The Transmission of Trecento Secular Polyphony", pp. 261-271.

⁶⁸ von Fischer, *Studien zur italienischen Musik des Trecento und frühen Quattrocento*, p. 120.

⁶⁹ *Vid.* Wolf, *op.cit.*, pp. 308-9. Here, *tempus imperfectum*, often indicated by the *signa divisionis .i.*, is equivalent to the *senaria gallica* (*vid.* Chap. 5, p. 248) which has a ternary division of its two *semibreves*, and is therefore equivalent to the French mensuration [2,3].

notational process is prevalent in those works employing the *dragma* to such an extent that the role of the *pontellus* in delimiting *tempus* boundaries has been lost and the use of the *punctus* assumed the role of the p.d. and p.p. Note, for example, the realisation of the passage in *Sotto verdi fraschetti molt' augelli* by Ser Gherardello da Firenze as transmitted in Pn 568 (f. 26v):

$$[.i.] \begin{array}{c} \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \\ \blacklozenge \blacklozenge \blacklozenge \blacklozenge \blacklozenge \blacklozenge \blacklozenge \blacklozenge \end{array} = \text{g} \begin{array}{c} \text{♪} \end{array}$$

The original notation relies upon the first *punctus* being a p.d. that causes the imperfection of the first simple *semibrevis* by the subsequent *minima*. Figure 4.2 gives the three extant readings from the beginning of the *secunda pars* of *Sotto verdi*.⁷⁰

Figure 4.2: Transmitted readings at beginning of *secunda pars* of Gherardello's *Sotto verdi*.

Fn 26 represents the reading closest to *trecento* notational processes. Unlike Pn 568 and Fn 26, Lbm 29987 makes no use of the *signum divisionis* *.i.*. Furthermore, it appears that the passage in question in Lbm 29987 has actually been rewritten in [3,2], resulting in some changes in the last part of the phrase not found in the other two sources. Pn 568 preserves the *divisio senaria imperfecta* (= [2,3]) indicated in Fn 26, but relies on alteration of the fifth *minima* immediately before the *dragma* and other French notational processes already described above. It is obvious that the reading in Pn 568, as in Lbm 29987, is a subsequent recasting of this mid-century Florentine composition by its scribe that utilises and adapts newer notational processes.

The Florentine manuscripts Pn 568 (after 1408) and Fl 87 (1410-15) all demonstrate the influence of French notational processes through the occasional use of mensuration signs rather than *signa divisionis*, the lack of the *pontellus* and French principles

⁷⁰ The other readings are found in GB-Lbm 29987, f. 44v and Fn 26, ff. 88v-89.

of alteration and imperfection.⁷¹ The presence of French techniques as far south as Florence, and possibly further, is evident in the first decade of the fifteenth century. The Paduan source Pn 6771 presents an alternation of notation processes along scribal lines that vary between *trecento* and *ars nova* techniques. The presence of the *dragma* in the music of *trecento* sources, whose notation has already succumbed to ostensibly French processes, challenges assumptions concerning the ethnographic origin of this form. Undoubtedly the role of the scribe is a crucial factor in this consideration as is the actual dating of the copying of the source. The scribes of later manuscripts already demonstrate new influences that appear to derive from *ars nova* techniques. This aspect of the source situation questions whether particular note shapes should be referred to as “Italianate”.

Complete lists of note shapes used in the two principal sources of the *ars subtilior* CH 564 and MOe5.24 are given in Table 4.4 and Table 4.5 respectively, with forms grouped accord to their nature. Figures 1a-c, 2, 3, 4, 6d and 10b in Table 4.4 and Figures 1a-c, 2 and 14 in Table 4.5 are note shapes which are used to indicate variously the duration of a *semiminima*. To this group should be added the void black and full red *minime* which, through particular uses of coloration described in the previous section, can also denote the *semiminima*. In Figures 1a, 1c, 2, 3 of Table 4.4 and Figures 1a, 1c and 2 of Table 4.5 the principal differential is a looped flag. However, such a device is not always an indicator of a duple relationship as can be seen from the differing values of Figures 2 and 3 in Table 4.4 and Figure 2 in Table 4.5. The same note shape can also indicate a *sesquitercia* or *sesquialtera* relationship relative to the *minima*. The *dragma* form shown as Figure 6d in Table 4.4 is directly related to Figure 6c in the same table. Both note shapes occur in the same work and rely on the principles of coloration. Figure 6d is the imperfection of Figure 6c.

⁷¹ Vid. von Fischer, *Studien zur italienischen Musik des Trecento und frühen Quattrocento*, p. 122.

Table 4.4: Special note shapes in CH 564.⁷²

Figures	Value [in \blacklozenge] (proportion)	Mensural context and comments
1. a.  (1), b.  , c.  , d.  (42), d.  (47, 54)	$\frac{1}{2}$ (2:1)	1, 42, 54: [2,3]; 27, 28: [2,3] in 3x2 groups; 47: 2:1 relative to [3,3] indicated in canon, but also 3:2 red on 4:3 sign (C).
2. 	7, 60, 92, 93: $\frac{1}{2}$ (2:1); 65: $\frac{3}{4}$ (4:3)	65, 93: [2,3]; 60, 92: [3,3].
3. 	65: $\frac{3}{8}$ (8:3); 35, 36: $\frac{1}{2}$ (2:1).	35, 36: [2,3]; 65: [2,3], 1/2 of figure 2.
4. 	27, 28: $\frac{1}{2}$ (2:1); 77: $\frac{3}{4}$	27, 28: [2,3] in groups of 2x3 as  . 77: [2,3]
5. a.  & b.  (57)	25, 50, 58: 3 (2:3 Sbr), but 58: $4\frac{1}{2}$ (2:3) also; 57: $2\frac{1}{4}$ (4:9) & $1\frac{1}{2}$ (red=3:2 ); 67: 2 (3:2); 56: $1\frac{1}{3}$ (3:4)	25, 50, [3,2] <i>dim.</i> ; 58: [3,2], sometimes <i>dim.</i> , but also [3,3]; 57: [3,3]; 67: [2,3] (<i>dim.</i>); 56: [2,2].
6. a.  , b.  (67), c.  (25, 57) & d.  (57)	42, 92: 2 (3:2 Sbr); 10, 19, 25, 45, 48, 50, 58, 60, 67: $1\frac{1}{2}$ (2:3); 50?, 67 (w): $1\frac{1}{3}$ (4:3); 25: 1; 64, 100, 57(r): $\frac{3}{4}$ (4:3); 56: $\frac{2}{3}$ (3:2); 71: $\frac{4}{9}$ (9:4); 57(v.r.): $\frac{1}{2}$.	10, 19, 42, 45, 48, 64, 100: [2,3]; 60, 92: [3,3]; 25, 50, 56: [3,2]; 67: [2,3]; 25: [3,2] + \circ , 4:3 by 3:2. 57: [3,3], v.r.=3:2 r.; 71: [2,2]; 58: [3,2] sometimes <i>dim.</i> & [3,3] <i>dim.</i>
7. a.  & b. 	77: $2\frac{1}{4}$ (4:9), $1\frac{1}{2}$ (r)	77: [2 & 3,3]
8. 	77: $\frac{1}{3}$ (3:1)	77: [2 & 3, 3].
9. 	68: $\frac{5}{6}$ (3:2 $\frac{1}{2}$)	68: [2,3].
10. a.  (67) & b.  (68)	67: $\frac{2}{3}$ (3:2); 68: $\frac{1}{2}$ (2:1)	67: [2,3] (<i>dim.</i>); 68: [2,3], indicates 3:2 on 4:3
11. 	64: $1\frac{1}{2}$ (2:3, 4:3 Sbr)	64: [3,2].
12. 	60, 66: $\frac{3}{4}$	60: [3,3]; 66: [2,3]

⁷² For abbreviations used in Table 4.4 and Table 4.5 please refer to the key found at the beginning of this study. Additional abbreviations used: r.= red coloration, v.r.= void red coloration; w.= void black coloration, *eras.* = erased. The numbers in brackets in Column 1 and before colons in columns 2 and 3 in both tables refer to the item number of the work in which the note shape occurs.

Table 4.5: Special note shapes in MOe5.24.

Figures	Value [in \downarrow](proportion)	Mensural context and comments
1. a.  (1, 2, 3, 7, 9, 10, 11, 12, 14, 43, 59, 60, 62, 65, 68, 73, 82, 87, 88, 89, 91, 93, 97, 102), b.  (17, 48), c.  (29)	$\frac{1}{2}$ (2:1)	1, 7, 11, 43, 60, 87, 97: [2,2]; 2, 3, 14, 59, 65, 89, 91, 102: [2,3]; 12, 88, 93: [3,2]; 68: [3,3]; 9: [3,2], S only; 62: [2,3] and [2,2], <i>brevis</i> equivalent; 73: [3,2] and in 3:2; 82: [2,3] and [2,2] at 4:3; 17: [2,2] and in 3:2, canon requires red = 2:1; 48: [2,3]; 29: [2,2].
2. 	65: $\frac{3}{4}$ (4:3); 43: $\frac{2}{3}$ (3:2)	65: [2,3]; 43: [2,3]; cf. 7b.
3. a.  , b.  (68, 80), c.  (73)	36, 66: 3 (2:3 \blacklozenge); 68: $2\frac{1}{4}$ (4:9); 68 (r): $1\frac{1}{2}$ (4:3) 34: 2 (3:2 \blacklozenge); 73(w), 80: $1\frac{1}{3}$ (3:2 \blacklozenge)	36, 66: [3,2] <i>dim.</i> ; 68: [3,3]; 34: [2,3]; 73, 80: [3,2]
4. a.  , b. 	18, 20, 27, 36, [62], 63, 66, 75(Ct), 80, 82: $1\frac{1}{2}$ (3:2); 77(r), 82(r): $1\frac{1}{3}$ (3:4); 36(r): 1 (3:2 of 2:3); 68 (r): $\frac{3}{4}$ (4:3); 60: $\frac{4}{9}$ (9:4).	18, 20, 75, 82: [2,3]; 63, 77, 80: [3,2]; 27, 36, 66: [3,2] <i>dim.</i> ; 82(r): [2,2] <i>dim.</i> ; 68: [3,3]; 60: [2,2]; 62: [2,3] Ct., <i>eras.</i> , <i>em.</i>  .
5.  (73)	$2\frac{2}{3}$ (3:2 \square)	73: [3,2], $\square = \diamond\diamond$
6. 	$2\frac{1}{2}$ (2:5?)	28: [3,2]; 65, 90: [2,3].
7. a.  (14, 28, 46, 59, [62], 65, 75, 77, 85, 87, 90), b.  (65, 43), c.  (73).	$1\frac{1}{2}$ (2:3?); 43: $1\frac{1}{3}$	14, 46, 59, 65, 75, 85, 90: [2,3]; 28, 73, 77: [3,2]; 87: [2,2]; 62: [2,3], <i>eras.</i> Ct only.
8. a.  (43) b.  (14).	$1\frac{2}{3}$ (3:5?)	14: [2,3], <i>err.</i> ?; 43: [2,2].
9. 	$\frac{3}{4}$ (4:3?)	77: [3,2].
10. a.  (91, 95), b.  (95), c.  (102)	91, 95: $\frac{1}{4}$ (4:1?), 95(w), 102: $\frac{1}{6}$ (6:1).	 = $\frac{1}{2}$ \blacklozenge ;  = $\frac{1}{2}$ \diamond ($\diamond\diamond\diamond = \blacklozenge$); 95, 102: [2,3].
11. a.  (97), b.  (102)	$1\frac{2}{3}$	97: [2,3], w. portion is red in ms. 102: [2,3].
12. 	$\frac{5}{6}$ (6:5)	79: [2,3].  <i>eras.</i>
13.  (79)	$\frac{1}{2}$ (2:1)	67: [2,3], indicates 3:2 of 4:3.

Figures 1b and 4 in Table 4.4, which I have already mentioned in relation to Guido's *Or voit tout*, rely on proportional signification through the use of two different inferior stems: one with a flag, the other without. Although these note shapes bear semblance to those given by Antonio de Leno, it is apparent the inferior stem does not modify the nature of the *semiminima* form, but further clarifies the proportional relationship of either note shape to the *semibrevis*. The simple downward stem indicates a duple division of a tripartite *semibrevis*, the flagged inferior stem the triple division of the bipartite *semibrevis*. However, Figure 4 also has a different meaning that derives from the flagging of the *dragma* (Figure 6a). I will postpone discussion of Figure 10b until a subsequent paragraph.

The note shapes which appear to have the most variable nature in the repertoire of the *ars subtilior* are the *semibrevis caudata* and the *dragma*, shown in their essential form as Figures 5a and 6a in Table 4.4 and Figures 3a and 4a in Table 4.5. However, if one considers these note shapes according to the context of their mensuration (shown after the item number of each work in the right-most column of each table) and separates those forms found transmitted in the music of Philipoctus de Caserta, a systematic application of these forms based on a proportional meaning of their stems can be observed. The basic, uncolored form of the *semibrevis caudata* (◆) represents an inverse relationship relative to the division of the *tempus* in a work. Thus, while in [3,2] and [3,3] one finds two *semibreves caudate* in the place of three *semibreves*, but in [2,3] and [2,2] three *semibreves caudate* occur in the place of two *semibreves*. This explains the variable duration of this note shape relative to *minime*: four-and-a-half in [3,3],⁷³ three in [3,2],⁷⁴ two in [2,3]⁷⁵ and one-and-a-third in [2,2]⁷⁶.

At first sight, the use of the *dragma* in CH 564 (Figure 6a-d in Table 4.4) appears erratic and non-systematic. Again, temporary exclusion of the works of Philipoctus de Caserta reveals a clearer picture of the possible realisations of *dragma*, which can be confined to three types. Type 1 is the most frequent type and occurs in nine works⁷⁷ in CH 564. Its duration is equivalent to one-and-a-half *minime* with a *subsesquialtera* (2:3) relationship at the *minima* level usually implied by groupings of these note shapes. This usage occurs in both

⁷³ CH 564, #58.

⁷⁴ CH 564, #25, 50, 58.

⁷⁵ CH 564, #67.

⁷⁶ CH 564, #56.

⁷⁷ CH 564, #10, 19, 45 (Philipoctus), 48, 50, 58, 60 and 67.

minor and major prolations. Two works see the occurrence of the Type 2 *dragme* equivalent to two *minime*.⁷⁸ Both occur in passages in major prolation. Another two works contain Type 3 *dragme* that are realised in a *sesquitercia* proportion relative to the *minima*. Again, both works are in major prolation. Once again by excluding the works of Philipoctus de Caserta that occur in MOe5.24, one observes that simple *dragme* in this manuscript are always realised according to Type 1 (*vid.* Figure 4a&b in Table 4.5). Only Type 1 *dragme* occur in Tn J.II.9. While the Type 2 *dragme* show an affinity to notational process in late *trecento* sources discussed above, the first and third types are clearly related in their meaning and distinct from the Italian practice.⁷⁹

Of particular interest is the use of *dragme* in the multiple transmissions of Johannes Vaillant's *Par maintes foys* (for transnotation *vid.* Vol. II, App. A, No. 45). Table 4.6 compares the various note shapes used to denote the *subsesquialtera* and *sesquitercia* relationships.

Table 4.6: Note shapes found throughout the extant transmission of Johannes Vaillant's *Par maintes foys*.

Source	2:3 at 	4:3 at 
CH 564		
B-MLeclercq + B-Bc 1		
Iu ss, Wn 2777, Las 184		
GR 197		
Mbs 14274		 or 

The CH 564-transmission of *Par maintes foys* is the only source to use Type 3 *dragme*. Other sources use either red or flagged (imperfect) *sesquitercie minime* (BLeclercq + Bc 1, Iu ss, Wn 2777, Las 184) or transmit a different rhythm using the common full black, right flagged *semiminima* (GR 197, Mbs 14274). All other sources with the exception of CH 564 and GR 197 preserve *dragme* with a Type 1 significance. CH 564 instead takes the bold step of dotting a *minima* to increase its value by a half to achieve an equivalent duration.

⁷⁸ CH 564, #42, 92.

⁷⁹ One clear exception to this categorisation of the *dragme* occurs in a section of [2,3] in B. 26 of the S of CH 564, # 50. Here I read three *dragme* equal to four *minime*. Their value in this particular passage does not agree with the other occurrences of *dragme* in this work, and suggests in light of similar durations in CH 564 #67 and MOe5.24 #77 & 82 that the *dragme* in question were void or red in the exemplar or original.

The very idea of perfecting the “imperfectible and indivisible” *minima* is a notion foreign to French musical theory. The central Italian source GR 197 appears to prefer an arithmetic note shape, whose significance is discussed below, to indicate the same duration of one-and-a-half *minime*. This variation of note shapes in the transmissions of *Par maintes foys* is a potent example of scribal processes at work. The use of Type 1 *dragme* in the Lowlands fragment BLEclercq + Bc 1 in concert with its wide transmission throughout extant sources again questions the notion of an Italianate currency of the meaning of this form.

As can be observed in relation to Figures 6-8 in Table 4.3, all three *dragma*-types were codified by theorists during the late fourteenth/early fifteenth centuries. A tacit admission concerning the variable meaning of these note shapes occurs in the *Ars cantus mensurata per modos iuros*. The anonymous author of this treatise describes both *dragma*-Types 1 and 2.⁸⁰ That this author gives *dragme* as examples of proportional notation in parallel with different forms of coloration (void black and full red), again indicates the semantic equivalence of both notational processes. Coloration also plays a part in altering the meaning (that is signifying it through *differentia*) of the simple black note forms. Just as coloration imperfects simple note forms, coloration was also used to the same effect on the *dragma*, giving rise to the additional durations found in Figure 6 of Table 4.4 and Figure 4 of Table 4.5.

Several exceptions to the derived rules given above in relation to the *semibrevis caudata* and *dragma* are apparent in the surviving transmissions of works ascribed to Philipoctus de Caserta. All three transmissions of *En remirant* (MOe5.24, f. 34v; CH 564, f. 39r (#57); Pn6771, f. 80v) contain *semibreves caudate* which must be rendered at a 4:3 proportion relative to the *semibrevis* in [3,3], rather than the 2:3 proportion as found in all other works in *tempus perfectum*. The use of full red *semibreves caudate* at S 31 (*vid.* Vol. II, App. A, No. 15) follows the principles of imperfecting Type 2a coloration whereby two entwined relationships are observed. The former value of *caudate* is reduced by a third from $2\frac{1}{4}$ to $1\frac{1}{2}$ *minime*, a duration most frequently indicated in other works, including those of Philipoctus, by a *dragma*. At the same time, a 4:3 relationship is maintained between red, imperfect *semibreves* and red *caudate*. No full black *dragme* appear in this work. Full red *dragme* demonstrate a 4:3 relationship to *minime* and can be viewed as a logical derivative of the red *caudata*. As already stated, the CH 564 transmission of *En remirant* provides one further *dragma* that is void red and indicates the duration of half a *minima*. The additional level of coloration, voiding the body of the note, again imperfects the red *dragma* ($=\frac{3}{4}$

minima) by a third. This is a special case, as the other uses of void red coloration in *En remirant* require a *sesquitercia* proportion at the *minima* level. The notational process associated with this particular note shape relies on multiple imperfection by coloration, which also implies levels of cumulative proportions. Further discussion of this feature is found in Chapter 6 of the present study.

With due consideration to the properties of coloration, it can be concluded that all special note forms in *En remirant* indicate a *sesquitercia* relationship with their relative *gradus* (that is *caudata*->*semibrevis*, *dragma*->*minima*). At first glance, all transmissions of *En remirant* appear to indulge in clever equivoques through the use of void red coloration or the proportional mensuration sign \odot . The duration of the full red *dragma* and *caudate* are equivalent to the *minima* and *semibrevis* respectively in void red ink (CH 564, Pn 6771) or after the sign \odot (MOe5.24). Thus, the following relationships are observed:

$$\begin{array}{l}
 \begin{array}{c} \lrcorner \quad \quad \quad \quad \lrcorner \\ \blacklozenge \blacklozenge \blacklozenge \blacklozenge \\ \uparrow \uparrow \uparrow \uparrow \end{array} = \begin{array}{c} \blacklozenge \blacklozenge \blacklozenge \blacklozenge \\ \uparrow \uparrow \uparrow \uparrow \end{array} = \begin{array}{c} \lrcorner \quad \lrcorner \\ \odot \quad \blacklozenge \blacklozenge \end{array} \\
 \\
 \begin{array}{c} \lrcorner \quad \quad \quad \quad \lrcorner \\ \blacklozenge \blacklozenge \blacklozenge \\ \uparrow \uparrow \uparrow \end{array} = \begin{array}{c} \lrcorner \quad \quad \quad \quad \lrcorner \\ \blacklozenge \blacklozenge \blacklozenge \\ \uparrow \uparrow \uparrow \end{array} = [\odot] \blacklozenge \blacklozenge = \begin{array}{c} \lrcorner \quad \quad \quad \quad \lrcorner \\ \diamond \diamond \diamond \diamond \\ \uparrow \uparrow \uparrow \uparrow \end{array} \text{ or } \odot \blacklozenge \blacklozenge \blacklozenge \blacklozenge \\
 \\
 \begin{array}{c} \lrcorner \quad \lrcorner \\ \blacklozenge \blacklozenge \\ \uparrow \uparrow \end{array} = \begin{array}{c} \lrcorner \quad \quad \quad \quad \lrcorner \\ \blacklozenge \blacklozenge \blacklozenge \blacklozenge \\ \uparrow \uparrow \uparrow \uparrow \end{array} = [\odot] \blacklozenge \blacklozenge = \begin{array}{c} \lrcorner \quad \quad \quad \quad \lrcorner \\ \diamond \diamond \diamond \diamond \\ \uparrow \uparrow \uparrow \uparrow \end{array} \text{ or } \odot \blacklozenge \blacklozenge \blacklozenge \blacklozenge
 \end{array}$$

The duration of a black *caudata* could be written as a dotted (perfected) void red *semibrevis*. That this does not occur appears to be the key to this work and gives rise to the meaning of the red *caudata* and *dragma*. The necessity of rendering four black *caudate* in the space of three perfect *semibreves* is apparent through the counterpoint at S 17 and 50 (*vid.* Vol. II, App. A, No. 15). This gives a richer meaning to the notational process, as it soon becomes apparent that the special note shapes in this work do not involve equivocal relationships. That the red *caudate* and *dragma* at S 30-31 are construed in the space of a colorated, imperfect *brevis* suggests that these forms carry an additional level of meaning not resident in void red coloration. This additional level of meaning, only apparent in the original notation, resides in the fact that *tempus* is imperfect at this point of time by virtue of red coloration. The displacement of phrase/cadence structures from the beginning of the *outrépasse* (S 26) would seem to be a critical factor in the ostensibly authorial decision to practice this manner of notation.

⁸⁰ Balensuela, *op. cit.*, pp. 224-226.

Two further unique meanings in relation to the *dragma* are found in the works of Philipoctus. In all three transmissions of his *Par les bons Gedeon et Sanson* (CH 564, MOe5.24, Tn T.III.2) nine black *dragme* must be sung in the time of four *minime* in [2,2] (*vid.* Vol. II, App. A, No. 33, S 62). But the unusual nature of this reading is only arrived at by a canon found in all three transmissions which specifies that *note caudate ab ultraque parte cantentur in proportione dupla sesquiquarta* (“notes with tails from both sides are sung in a 9:4 proportion”).⁸¹ Aside from clarifying the actual intent of the note shape, the canon is significant in that it requires that these note shapes be construed proportionally.

Dragme found in Philipoctus’ *Il n’est nulz homs* (CH 564, f. 38v) appear to take their special meaning from the use of *semibreves caudate* which also occur in this work (*vid.* Vol. II, App. A, No. 46). The latter form at S 42.2 denotes an expected *sesquialtera* relationship to the imperfect *semibreves* in [2,2]. *Dragme* at S 21-23 are also to be sung in a *sesquialtera* relationship, but at the *minima* level. A parallel can be thus seen between *Il n’est nulz homs* with its application of a *sesquialtera* at both *gradus* (*semibrevis* and *minima*) and the application of *sesquitercia* in *En remirant*. In both works, the presence of the *semibrevis caudata* in a special relationship to the *semibrevis*, within the space of a *tempus*, is a key to the realisation of other special note shapes found in each work.

Hitherto, I have focused my attention on those note shapes that use a flag or a simple stem to indicate a new significance to a particular note form. Before proceeding to a discussion of one further notational process exclusively found in works ascribed to Jacob de Senleches and Rodericus, I draw attention to the hybrid note shape in Figure 11 of Table 4.4. This note form, uniquely found in Trebor’s *Helas pitie envers moy* (CH 564, f. 42r), appears to wed two notational processes. While it has already been established that the *semibrevis caudata* indicates a duration of three *minime* in [3,2] (the mensuration of *Helas pitie*), the duration of one-and-a-half *minime* is achieved through an analogy with the *semiminima*’s flag and its implicit duple relationship. The form  (S 14) is effectively a *semi-semibrevis caudata* (*vid.* Vol. II, App. A, No. 47). The answer to why the scribe or, perhaps more plausibly based on its unique nature, the composer would have used this form, resides in the presence of Type 3 *dragme* in the same work. The frequently implied relationship of

⁸¹ The reading of the canon given here is that found in Tn T.III.2, which also closely resembles the one found in CH 564. The scribe or his exemplar of MOe5.24 has omitted the adjective “dupla” in specifying the proportion. Clearly, in the contrapuntal context, a 5:4 proportion cannot apply.

dragme to *semibreves caudate* is 2:1 ($\begin{array}{c} | \\ | \\ \blacklozenge \\ | \\ \blacklozenge \\ | \\ | \end{array}$). That the less common Type 3 *dragme* were required may have been indicated by the usual form of the *semi-semibrevis caudata* in Trebor's work. Through intrinsic modes of signification at several levels, only the full meaning of this work's notation would become apparent to readers of this work.

The notation of Jacob de Senleches and Rodericus employs a device whose uniqueness, but almost uniform transmission, can be regarded as a notational process developed by these composers and/or possibly their unknown colleagues composing music in northern Spain and southern France. I see this notational device, which is peculiar to their works, as having no relationship with added-stem forms, and therefore witness no dependence on systems that might be considered Italianate. The process of notation I have previously called *virgula*-notation is still proportional in its nature, but sees the addition of a small curved tail above or below a simple or sometimes already-complex note shape.

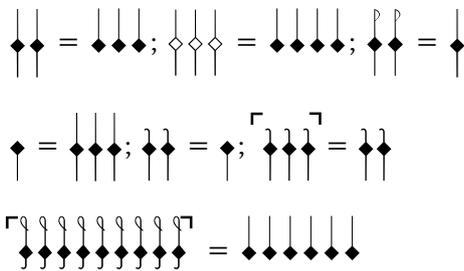
Two examples of *virgula* note shapes are found in the surviving transmissions of works by Jacob de Senleches. In both cases, these note shapes include a *virgula* facing to the right added to the bottom of a colorated *minima*. In *En attendant esperance*, the addition of the right-facing *virgula* to a void red *minima* ($\begin{array}{c} \square \\ \blacklozenge \\ \blacklozenge \end{array}$ [CH 564] or $\begin{array}{c} \square \\ \blacklozenge \\ \blacklozenge \end{array}$ [MOe5.24]) results in a duration of half-a-*minima* (*vid.* Vol. II, App. A, No. 37). The value would appear to derive from the *sesquitercia* nature of void red notes being multiplied by the *sesquialtera* nature of the lower right-facing *virgula*.⁸² In Senleches *La harpe de melodie*, three void black note shapes ($\begin{array}{c} \blacklozenge \\ \blacklozenge \end{array}$ [CH 564] or $\begin{array}{c} \blacklozenge \\ \blacklozenge \end{array}$ [US-Cn 54.1]) are sung in the space of two void black *minime*. (In this work, a void black *minima* is equivalent to a black *minima*.) The consistent use of this device with only slight modifications, and their consistent meaning strongly suggests that these note shapes are authorial.⁸³

The exceptional *Angelorum psalat* by Rodericus, which is transmitted only in CH 564, represents the summit of notational endeavour in its use of note shapes. Aside from red and void red coloration, particoloration (black-red and full red-void red) and Indo-

⁸² I have discussed the various readings in detail in Stoessel, *op. cit.*, pp. 156-158.

⁸³ The unique note shape which occurs in Jacob de Senleches' *En attendant esperance* as shown by Figure 9 in Table 4.4 and Figure 12 in Table 4.5 lacks any precise significance when viewed in the context of other notational devices used in Senleches' works, although it must indicate five-sixths of a *minima* and function as a memorial prompt. The appearance of the note shape found in MOe5.24 is not representative of its exemplar. Close examination of the manuscript suggests that the note shape as it originally appeared in MOe5.24 was identical to that found in CH 564. The short *virgula* at the top of the note was then erased in MOe5.24 and a

Arabic numerals, it employs no less than five different special note shapes in their basic form. (Two additional forms are derived from these note shapes through the process of coloration.) The following relationships are apparent:



The use of a Type 1 *dragma* (\blacklozenge) connects this work to French usage, while the *subsquitercia* void *dragma* is also found in Senleches' *La harpe de melodie*. The form \blacklozenge indicates a duple division of the *semibrevis caudate* or a *subsquialtera* relationship with the *dragma*. Thus in an analogy to the use of stems, the right-facing virgula indicates a 3:2 relationship in relation to the note to which it is added and the left facing virgula a 2:3 relationship. The coloration of \blacklozenge results in a duration equivalent to the *dragma* in this work.

It has been shown that a limited set of *differentia* are observable in the drawing of proportional special note shapes of the *ars subtilior*, especially in its two principal sources MOe5.24 and CH 564. The significance of these *differentia* is most commonly limited to a 3:2 or its opposite 2:3 proportion. A myriad of other proportional relationships is created through additional intrinsic elements such as coloration. But this system of stems and *virgule* is sometimes subverted or given over to different meanings. In particular, the notated music of Philipoctus de Caserta demonstrates several variations of meaning which are nonetheless self-consistent. The preservation of these idiosyncrasies across collective transmissions of several works highlights a particular aspect of Philipoctus' notational style, one that is in most cases preserved by scribes.

The use of *differentia* is not limited to the music of the *ars subtilior*, although the most notable instances involve a set of *differentia* which are unique to their repertoire. The well known example of the double transmission of Lorenzo Masini's *Ita se n'era star nel paradiso* in Fl 87 (ff. 45v-46r, 46v-47r) sees, in an attempt to adapt the work to French notational processes, the first version notated with various novel note shapes (\blacklozenge) to indicate

long stem with a looped flag drawn in its place. Several other variants which occur in the double transmission of *En attendant esperance* are discussed in Stoessel, *op. cit.*, pp. 156-158.

proportional relationships,⁸⁴ while the second transmission employs the Italian system of *divisiones* and their signs which obviate the need to signify proportional relationships inherent between the respective *divisiones*.⁸⁵ Undoubtedly the work of an imaginative scribe, the unique notational process of the first transmission of *Ita se n'era star nel paradiso* in Fl 87 also highlights the struggle of its scribes to adapt older readings into a notation readable in the second decade of the fifteenth century. What is curious about the notational processes invented by this scribe is that they avoid or are without the knowledge of the developments in French notation in the hands of both French scribes and its native Italian scribes, especially the Lombards. Yet, the scribe could not be ignorant of French modes of notation if one considers the general nature of transmissions of the *trecento* repertoire in Fl 87. All show varying degrees of assimilation of French processes, particularly the omission of the *pontellus* and the use of French mensuration signs. Furthermore, the works of Zacharias which appear in Fl 87 provide examples of notational processes, particularly the use of *sesquitercia* coloration, which might have provided a solution to some of the issues that existed in the adaptation of Lorenzo's *Ita se n'era star in paradiso* into a notation more typically French. Ironically, the avoidance of advanced French techniques produced a result that was arguably more obscure to most readers than the original.

I now turn to the theory of arithmetic note shapes. As was stated in Chapter 1, the outright purpose of the author of the *Tractatus Figurarum* was to invent a notational process, *vis-à-vis* note shapes, which might otherwise express proportional relationships in music. The treatise is invaluable for understanding notational practices in practical sources, but only one figure in the *Tractatus Figurarum* has been employed in the surviving repertoire. This perspective after centuries of evident loss and destruction of musical sources need not mitigate the system in the *Tractatus Figurarum* to being purely theoretical. In fact, the principles it sets down can be applied to several practical manifestations.

⁸⁴ For the duration of these note shapes, *vid.* Johannes Wolf, *op.cit.*, vol. 1, p. 331. Nino Pirrotta tentatively attributes the first version of *Ita se n'era star nel paradiso*, which he assesses as the rewriting of *duodenaria* and *octonaria* as *senaria perfecta* and *quaternaria*, to Lorenzo's hand in his 'On Landini and Ser Lorenzo', *Musica Disciplina*, vol. 48, 1994, p. 7. This view is affirmed in Marco Flisi, 'Notazione francese e italiana: Lorenzo da Firenze e la sperimentazione notazionale', in *Problemi e metodi della filologia musicale*, ed. S. Campagnolo, Didattica della filologia musicale II, Lucca, 2000, pp. 21-27. On the literary context of this work's text and a comparison of its setting by Lorenzo Masini and Vincenzo da Rimini, *vid.* Michael Long, 'Ita se n'era star nel paradiso: the metamorphoses of an Ovidian madrigal in Trecento Italy', in *L'ars Nova del Trecento VI*, eds G. Cattin and P. D. Vecchia, Certaldo, 1992, pp. 257-268.

Two devices are employed to create new durations in the *Tractatus Figurarum*. The first is the use of the *ars nova* device of *punctus perfectionis* (p.p.) or *punctus additionis* that increases the duration it follows by a half. Although this device was developed in *ars nova* notation to perfect imperfect durations, its use towards the end of the fourteenth century, particularly in relation to the *minima* whose nature is neither perfect or imperfect, appears to have loosened earlier precepts. However, this device is also extended to include a hollow *punctum* (°) that adds the value of half a *minima* to the note it follows.⁸⁶ Both types of *puncti* are used to modify the value of note shapes. The second device fundamental to the various note shapes developed in the *Tractatus Figurarum* is the practice of composite note shapes. Principally by the addition of the *minima* or *semiminima*, the latter of which takes on a void black form in the *Tractatus Figurarum*, to various simple note shapes, new durations were formed. This composition of note shapes is achieved by taking the note form to be added, rotating it 180 degrees and combining the two forms so that they share a common body that exhibits the traits of both note shapes. Table 4.7 contains a list of special note shapes found in the *Tractatus Figurarum*, including a *resolutio* showing their composite parts, their duration, proportional relationship with the *minima* and name or description.

⁸⁵ For a discussion of the problems of adapting the *divisiones duodenaria* and *novenaria* to French notation, *vid.* Long, “Musical Tastes in Fourteenth-century Italy”, pp. 88-92.

⁸⁶ Q.v. Prosdocimus’ condemnation of the practice of hollowing the dot based on properties of the indivisible point in Euclidean geometry in Gallo, *Prosdocimi de Beldemandi Opera 1: Expositiones*, chap. LXI, sent. 94-99.

Table 4.7: Special note shapes in *Tractatus Figurarum*.

Figure	Resolutio	Duration and proportion ($\blacklozenge=1$)	Name/Description
	-	$\frac{3}{4}$ (4:3)	<i>minima imperfecta</i>
	$\frac{2}{3}$ of (i.e. imperfected)	$\frac{1}{2}$ (2:1)	<i>semiminima</i>
	\blacklozenge (3) + ($\frac{1}{2}$) + \cdot (1)	$4\frac{1}{2}$ (2:9, 2:3 Sbr)	-
	\blacklozenge (1) + \blacklozenge (1)	2 (2:2, 3:2 Sbr)	<i>minima caudata superius et inferius</i>
	($\frac{2}{3}$) + ($\frac{2}{3}$)	$1\frac{1}{3}$ (3:4)	[<i>minima caudata superius et inferius</i>] <i>evacuata</i>
	\blacklozenge (1) + ($\frac{3}{4}$)	$1\frac{3}{4}$ (4:7)	<i>Figura superius et inferius caudata et inferius retorta</i>
	\blacklozenge (1) + ($\frac{3}{4}$) + \circ ($\frac{1}{2}$)	$2\frac{1}{4}$ (4:9)	-
	\blacklozenge (1) + ($\frac{1}{2}$)	$1\frac{1}{2}$ (2:3)	<i>Minima semiplena et inferius semivacua superius et inferius caudata et inferius retorta</i>

The presentation of these special note shapes in the *Tractatus Figurarum* is followed by a discussion of their use in the various *ars nova* mensurations. The epilogue to the treatise contains a telling phrase in reference to the use of these signs in discant:

*Ponendo rubeas de modo discandi qui dicitur secundum illos de francia vulgariter trayn vel traynour est fortior modus quam syncopare.*⁸⁷

It is clear from the examples that follow this statement that *traynour* refers not only to the use of red notes to sing proportionally, but to special note shapes such as the void *dragma* (). *Trayn* or *traynour* must be related to the French verb *trainer* ('to draw out, to drag'), and must refer to how singing proportionally (by lengthening or shorting durations pulls) against the normal divisions of musical time in other voices. The manner in which these terms are spoken of appears to distance the scribe from French musicians, particularly the use of the demonstrative pronoun of the third person *illi* ("those men, those men over there") which always denotes separation and greater distance from the subject in both classical and medieval Latin (as opposed to the first person *hi*).

⁸⁷ "Placing red notes in the manner of discanting which is called in the vulgar tongue according to those from France *trayn* or *traynour* is a manner more bold than to syncopate."; Schreuer, *op. cit.*, pp. 99.13-100.2.

Philip Schreier draws attention to the use of similar terminology in the fourth part of the *Quatuor principalia musice* and the *Tractatus Figurarum*. In the *Quatuor principalia musice*, an extensive music treatise likely compiled by monk John Tewkesbury at Oxford in 1351,⁸⁸ the concept of singing four against three *minime* includes a reference to the French (*Gallice*) term *treyn*, Latin *tractus*, which is often called *syncopa*.⁸⁹ Luminata Aluas' conclusion that the probable autograph of the *Quatuor principalia* is dated to 1351⁹⁰ suggests that its reference to *treyn* is a very early reference to this French musical term. The shift in the *Tractatus Figurarum*, which sees *trayn* or *traynour* separated from *syncopa*, may represent a chronological development in the separation of polymetricism from displacement syncopation, or it may indicate that the term *syncopa* was applied more freely at times than defined in theoretical circles. Essentially, the equivalence of *treyn* and *syncopa* in the *Quatuor principalia* might be understood as indicative of the increased complexity of polymetricism beyond the original 3:2 proportion at the *semibrevis*, which could also be achieved in certain instances by the processes of displacement syncopation (*syncopa*). The concept of *tractus*, *trayn* (*treyn*) or *traynour* appears to refer to a rhythmic aesthetic which resided in the increased proportionality or polymetricism evident in the music of the late fourteenth century and onwards. The association of this aesthetic with French music and its wider dissemination beyond the geographical confines of French speaking regions is clear in both the *Tractatus Figurarum* and the *Quatuor principalia musice*.

A second treatise on arithmetic note shapes, the *Tractatulus de figuris et temporibus*, appears to be a commentary on, or derivative of, several music treatises, one of which appears to be the *Tractatus Figurarum*. It is perhaps notable that the *Tractatulus de figuris et temporibus* appears in the same manuscript in which three copies of the *Tractatus Figurarum* are contained.⁹¹ After introducing the four prolations of the *ars nova* and discussing coloration, including *sesquialtera* and *sesquitercia* at the *minima* level, the author of the

⁸⁸ For the strong suggestion that this treatise, at times considered anonymous or by Simon Tunstede, was by John of Tewksbury, *vid.* Aluas, *op.cit.*, pp. 5-29.

⁸⁹ *Equipollencie enim supradicte atque redutiones musicam pronuntiandi, difficultates causant, que quidem difficultates tractus gallice treyns et sincope a multis nominantur*. See the recent edition in Aluas, *op. cit.*, p. 455.

⁹⁰ Aluas, *op. cit.*, p. 13.

⁹¹ Seville, Catedral Metropolitana, Biblioteca Capitulana y Colombina, 5.2.25, ff. 93r-94v; *Tractatus figurarum*: ff. 84r-85v, f. 87 (partial), f. 114r-116r. Edition: Gallo, *Mensurabilis Musicae Tractatuli*, pp. 75-89. Described with inventory by *idem*, 'Alcune fonti poco note di musica teorica e pratica', in *L'Ars nova italiana del Trecento: Convegni di studio 1961-67 [=Ars nova italiana del trecento II]*, ed. F. A. Gallo, Certaldo, 1968, pp. 59-73. This manuscript is actually a collection of fascicles bound together in the second half of the seventeenth century.

Tractatulus de figuris et temporibus details several special note shapes whose invention he attributes to Philipoctus de Caserta.⁹² In all but one instance, the figures presented in the *Tractatulus* are identical to those in the *Tractatus Figurarum*. That particular instance () is hardly significant since it also gives in later examples a note shape () for the same duration that agrees with the *Tractatus Figurarum*. At the conclusion of this section, the author of the *Tractatulus de figuris et temporibus* ends with *Et sufficit de figuris francigenis* (“And this suffices concerning French note shapes”) to separate what preceded from the subsequent section on *figure et tempores ytalicae* (“Italian note shapes and mensurations”).

In an appendix to the copy of *Ars (musice)* of Dutchman Johannes Boen as it appears only in a Venetian manuscript,⁹³ there is mention of the use of invented note shapes to denote proportional relationships. A reference to his previous treatise (*nostra Musica*) may indicate that the appendix was added to the *Ars* by Boen in the latter part of the fourteenth century. Concerning the origins of a particular type of note shape, Boen has the following to offer:

Aliquotiens inveniuntur figure mirabiliter ordinate ab uno lombardo nomine Gwilgon habentem modum pronuntiandi secundum proportionem et tamen subiectum musice ignorante. Et eo istas figuras sibi ordinavit in hunc modum scilicet quod tales figure:  secundarie que vocantur semidragma punctata et uncata valent tres.⁹⁴

⁹² As suggested in previous paragraphs, the notational record of Philipoctus de Caserta's works appears to preserve idiosyncratic uses of special note shapes. Considering the diverse sources of his music, one may reasonably conjecture that this phenomenon is linked to the Philipoctus' own (archetypal) notational process, rather than the result of a single apotype which modified the original notation. On the basis of different notational processes which can be witnessed between Philipoctus' works and the *Tractatus figurarum*, several scholars have been right to question the attribution of the *Tractatus figurarum* to Philipoctus, *vid.* Schreier, *op. cit.*, p. 5; Stone, 'Che cosa c'è di più sottile riguardo l'ars subtilior?', pp. 29-30. The presence of a manuscript tradition that ascribed the *Tractatus figurarum* to Philipoctus may be the source of the attribution of the invention of the arithmetic note shapes to Philipoctus by the author of the *Tractatulus de figuris et temporibus*. Yet, there will always exist some uncertainty as to whether Philipoctus could have developed these note shapes late in his career and subsequent to the circulation of his extant works, and whether this can be reconciled with Johannes Boen's statement (*vid. infra*) that a note shape that appears to be arithmetic was invented by a Lombard, Gwilgon. As Wulf Arlt has noted, the alternative attribution of the *Tractatus figurarum* to Egidius de Morino appears to have resulted from a false attribution inherited from a single exemplar, *vid.* Wulf Arlt, 'Der Tractatus figurarum - ein Beitrag zur Musiklehre der "ars subtilior"', *Schweizer Beiträge zur Musikwissenschaft*, vol. 1, no. 1, 1972, p. 44.

⁹³ Venice, Biblioteca Nazionale Marciana, lat. VIII 24 (=3434).

⁹⁴ "At times figures amazingly constructed were invented by a Lombard named Gwilgon, who considered the manner of performing according to proportions and yet was unacquainted with the subject of music. And thus he constructs these figures in this manner, namely such secondary figures... which are called dotted and hooked *semidragme* <and> are worth three." I have read *uncata* as *uncinata*; F. Alberto Gallo, (ed.), *Ars (Musicae) Johannis Boen*, pp. 40-41.

Although the value of the actual figure is not entirely clear, the degree of similarity of this note shape to those found in the *Tractatus Figurarum* and *Tractatulus de figuris et temporibus* cannot be ignored. Boen's view that these note shapes were invented by a Lombard named Gwilgon offers evidence that composite note shapes are an Italian invention some time after 1375.⁹⁵ This situation clarifies the problem of French terms and appellations encountered in the *Tractatus Figurarum* and *Tractatulus de figuris et temporibus*. On their own, there is a clear designation of non-native elements in music theory which suggests both treatises are the works of authors outside France or circles of French musicians.

Should the Lombard Gwilgon have existed, his approach to musical notation as reflected by the *Tractatus Figurarum* and *Tractatulus de figuris et temporibus* demonstrates an awareness of musical concepts in French music, specifically proportionality. In this respect, Boen is clear when he states that these note shapes were invented by a Lombard *habente modum pronuntiandi secundum proportiones*. However, it is clear that the arithmetic system of notation itself is not French in its origin, but an Italian adaptation of French concepts and notation to develop alternative modes of signification. In doing so, the nature of arithmetic note shapes avoided the ambiguities of the contextually dependent proportional note shapes. Each arithmetic note shape relied on durations which possessed in the purest French mensural notation a universal value despite the actual mensurations: the *minima* and *semiminima*. A new range of proportional relationships became available that could be indicated unambiguously.⁹⁶

Turning to the surviving repertoire, arithmetic note shapes are found for the most part in the works of Matheus de Perusio transmitted in MOe5.24. Their use is not limited to this composer as shown above with respect to the GR 197 transmission of *Par maintes foyes* and as will be subsequently shown in relation to Paolo Tenorista's *Amor da po' che tu ti maravigli* preserved in Pn 568. Figures 6-10 in Table 4.5 (see above p. 217) are arithmetic note shapes observable in MOe5.24. Figures 6-8, which require the addition of one note shape to the other, are closest to the system described in the *Tractatus Figurarum*. These figures are based on the following relationships:

⁹⁵ On the dating of the *Ars*, *vid.* Gallo, *Ars (Musicae) Johannes Boen*, p. 14.

⁹⁶ Arlt, *op.cit.*, p. 53.

$$\begin{aligned}
 \text{♩} &= \text{♩} + \text{♩}; & \text{♩} &= \text{♩} + \text{♩}; \\
 \text{♩} &= \text{♩} \left(\frac{3}{4} \text{ or } \frac{2}{3}\right) + \text{♩} \left(\frac{3}{4} \text{ or } \frac{2}{3}\right); \\
 \text{♩} &= \text{♩} + \text{♩} \left(\frac{1}{2}\right); & \text{♩} &= \text{♩} + \text{♩} \left(\frac{2}{3}\right)
 \end{aligned}$$

As I have already discussed Bartholomeus de Bononia's use of Figure 7c and the unique position of this note shape across theory and practice, I move on to other arithmetic forms. Figures 9 and 10a-c in Table 4.5 involve the subtraction of part of the duration of a simple note shape by the removal of a proportionate part of the note's body. Thus in Figure 9, the removal of a quarter of the note's body reduces its duration to three-quarters of a *minima*. Figures 11a and 11b in Table 4.5 are ambiguous in their nature. Their duration, however, is not ambiguous, but is arrived at by two possible methods. Both figures may be construed as the particoloration of a Type 2 (arithmetic) *dragma*, or as the addition of a *minima* and an imperfect *minima*. In view of the usual practice of particoloration, which divides the note's body vertically, I would favour the first rationale. This conclusion does not completely exclude this note shape from the arithmetic category, as its basis feasibly lies in a Type 2 *dragma*.

Works ascribed to Matheus de Perusio in MOe5.24 use Figures 7a, 7b, 8b, 9, 10a-c and 11a-b shown in Table 4.5. The use of subtractive note shapes is a particularly salient feature of a notational style that must have direct links to Matheus. It marks a notational process that has abandoned the indivisibility of the *minima* and/or *semiminima* into smaller parts, but at the same time maintains the absolute equivalence of both durations across mensurations. It also demonstrates a reluctance to resort to processes of diminution, and does not attempt, whether it was possible or otherwise, to use advanced proportionality with Indo-Arabic numerals. An advantage of this inventive form of notation is its simple mathematical process, which can be still readily grasped today.⁹⁷

⁹⁷ For a detailed reappraisal of notational processes in perhaps Matheus' most intricate work, *Le greygnour bien*, *vid.* Maria Teresa Rosa Barezzani, 'Una rilettura di *Le Greygnour Bien* di Matteo da Perugia', in *Philomusica online*, vol. 1, [path: <http://spfm.unipv.it/philomusica/Rosab.htm>], 2001-2002. Barezzani notes the recent study on the compilation of manuscripts and Italian exponents of the *ars subtilior* by Carla Vivarelli, "L'Ars subtilior in Italia: le composizioni francesi di Filippotto e Antonello da Caserta nel codice Estense α.M.5.24", Tesi di Diploma in Paleografia e Filologia Musicale, Università degli studi di Pavia, Scuola di Paleografia e Filologia Musicale di Cremona, 1998-99. At the time of the completion of the present study, I was regrettably unable to consult the findings of this author.

An important observation arises from considering a *Credo* setting by Zacharias (MOe5,24, f. 23v-25r, #43). In all other transmissions of this work, the S is present in a simpler, unornamented form. Scholars have speculated over who was responsible for this richly and masterly ornamented S transmitted in MOe5.24.⁹⁸ The consensus has vacillated between either Matheus de Perusio or Zacharias himself as its author. Based on its notational process, however, there is some doubt cast over the view that Matheus de Perusio had a hand in this ornamented S.

Instead of *sesquialtera* coloration at the *minima* level as found in several works by Matheus, the ornamented S of Zacharias' *Credo* uses the reverse flagged note shape  to indicate the duration of two-thirds of a *minima*. As already discussed above, this sign is common in sources of *trecento* music from the late fourteenth and early fifteenth centuries. This note shape gives rise to the form shown in Figure 7b in Table 4.5 used to indicate the duration of one-and-a-third *minime*. The only other occurrence of this note shape is found in Matheus de Perusio's *Le grant desir* (MOe5.24, f. 33v, #65). However, the duration indicated by this note shape in this instance is one-and-a-half *minime*, resulting from the different contextual value of the fundamental note shape () of three-quarters of a *minima*.

This aspect on its own is not sufficient evidence on its own to argue against Matheus' role in the ornamental S for Zacharias' *Credo*. However, the case is strengthened by observing the presence of a further arithmetic note shape which is unique to this work, and whose duration is always indicated using a different note shape in the surviving works of Matheus de Perusio. The note shape in question is the form , which indicates the duration of one-and-two-thirds *minime*. Works ascribed to Matheus de Perusio use Figures 8b and 11a-b in Table 4.5 to indicate this same duration. All these figures rely on the process of coloration beyond the *minima*. While the avoidance of the notational process of coloration is not a categorical argument against Matheus' role in the ornamented S of Zacharias' *Credo*, especially in view of the aforementioned use of the reversed flagged note shape rather than *sesquitercia* coloration found in Matheus' *Le grant desir*, the collective differences suggest that this ornamentation is removed from the notational processes broadly apparent in the

⁹⁸ Layton, *op.cit.*, pp. 297-98; von Fischer and Gallo, *Italian Sacred and Ceremonial Music*, p. 273. Layton's view that the ornamented line was composed by Matheus de Perusio is accepted by Anne Stone in a broad discussion of virtuoso improvisation and its manifestation in the music of the *ars subtilior* in her 'Glimpses of the unwritten tradition in some *ars subtilior* works', *Musica Disciplina*, vol. 50, 1996, pp. 77-84.

Matheus' works as transmitted in MOe5.24. While one is wont to err on the side of caution when considering the role of scribes in the modification and adaptation of notational process in their copying, the preservation of a notational process in this ornamented S of Zacharias' *Credo* is apparent through the unique meaning of the reverse flagged form in MOe5.24. On the other hand, this conclusion does not favour Zacharias' role in the ornamentation of this voice, as the notational processes preserved with his works in MOe5.24, Las 184 and Fl 87 involve complete assimilation of French notational processes including *sesquitercia* coloration. The question of the identity of the *glossator* responsible for the ornamented S in MOe5.24 thus remains open, although the possibility that the scribe of this transmission was himself responsible can be seriously entertained in light of his observably high level of competency across a broad range of notational practices.

Before concluding this discussion on note shapes, I would like to draw attention to the use of an arithmetic form in Paolo Tenorista's *Amor da po' che tu ti maravigli* as transmitted solely in Pn 568. A diplomatic transcription of this work into score, preserving features such as original clefs, signatures and note shapes is shown in Figure 4.3. Editorial accidentals appear above the staves.

Figure 4.3: *Amor da po' che tuti maravigli* by Paolo Tenorista da Firenze.

Paolo Tenorista da Firenze

F-Pn 568, f. 79v.

S
A - mor, da po' che tu ma - ra - vi - gli del - la mia gre -
Ct
A - mor, da po' che tu ma - ra - vi - gli del - la mia gre -
T
1 A - mor, da po' che tu ma - ra - vi - gli del - la mia gre - ve
pe - na. el tu' ar - co raf - fre - na e del tuo ser - vo, o -
pe na. el tu' ar - co raf - fre - na e del tuo ser - vo,
me, pie - tà ti pi gli.
o - mé, o - mé, pie - tà ti pi gli.

Se che tu fe - ti ma ra - vi o mie sig - no - no
ra - to e gli, non ti fu
ra - to e gli, non ti fu

29

re, re tem - tro - pe - ral col - po - tuo fe - ro - c'e cru
van - dol dis - ar - ma to e san - za scu
van - dol dis - ar - ma to e san - za scu
van - dol dis - ar - ma to e san - za scu
van - dol dis - ar - ma to e san - za scu
van - dol dis - ar - ma to e san - za scu

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re, re tem - tro - pe - ral col - po - tuo fe - ro - c'e cru
van - dol dis - ar - ma to e san - za scu
van - dol dis - ar - ma to e san - za scu
van - dol dis - ar - ma to e san - za scu
van - dol dis - ar - ma to e san - za scu
van - dol dis - ar - ma to e san - za scu

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On the basis of Paolo's biography which indicates he lived into the fourth decade of the fifteenth century,⁹⁹ it is not impossible to suggest that as a younger man he might have been witness to, and an experimenter in, new notational practices. Yet scribal intervention, as will be seen, is a major factor in the surviving transmission of this work. *Amor da po'* makes use of the advanced technique of Type 2a coloration at the *semiminima* level. From these void black sesquialteral *semiminime* (\diamond), an arithmetic note shape is created which combines two *semiminima* (\diamond).¹⁰⁰ The work also employs the same arithmetic note shape found in MOe5.24 and GR 197 to indicate the duration of one-and-a-half *minime* (\blacklozenge). Note also that *semiminime* are written after the Tuscan fashion (\blacklozenge). One further unusual device is used in this work: a hollow dot after a *minima* is used to increase its value by one-third of a *minima*. While not the same type of dot described in the *Tractatus Figurarum*, its logic is patently clear in that if a dot adds half of the duration of the note it follows, then a voided, hence imperfect, dot adds two-thirds of half (=one-third) of the duration of the note it follows.

In the sole transmission of *Amor da po'*, neither arithmetic figure is strictly correct in the context of the two types of *semiminime* employed in this work and the theory of the *Tractatus Figurarum*. Rotation of either *semiminima* form through 180 degrees would render a lower flag in the arithmetic note shape facing in the opposite direction to that presently found in Pn 568. This was not always the case. Close inspection of the original leads to the conclusion that all double-tailed void forms were originally drawn with a lower flag-loop facing to the left. All these flag-loops have been subsequently erased and drawn to the right. In the case of the double tailed black note shapes, there are no signs of erasure or modification. I suggest that the scribal alterations were made in order to provide semiotic equivalence between the black and void double-tailed forms. A possible cause of this discrepancy may have arisen if the scribe of this work in Pn 568 chose to copy right-flagged *semiminime* as left-flagged *semiminime*, but preserved the original form of the void and black double tailed forms. Realising the error he had committed through the presence of conflicting semiotic elements, the scribe chose to modify the

⁹⁹ The most recent research argues that from at least 1417 Dominus Paulus Abbas de Florentina was a prominent member of Florentine ecclesiastical society. His last testament made in failing health in 1436 may suggest his death shortly after this time, *vid.* Günther, Nádas and Stinson, *op.cit.*, pp. 203-246.

¹⁰⁰ The first and third note shapes which appear in the third group of void note forms in the superius of *Amor da po* are incorrect through the absence of a superior flag.

inferior flags of void double tailed forms. The presence of this modification is a good indication that the scribe of this work in Pn 568 was active in modifying the notational text transmitted in his exemplar.¹⁰¹

From both a theoretical and practical perspective, the system of arithmetic note shapes is concise and semantically unambiguous. In this respect, it is surprising that the system itself was not more successful and widely used. Yet, what evidence there is points to its limited cultivation in northern Italy, perhaps disseminated by figures like Matheus de Perusio. Its small circle of practitioners and close association with a particular aesthetic is suggested not only by the source situation, but also by its failure to endure or be adopted by subsequent composers and scribes. The fate of all special note shapes, arithmetic and proportional, was determined by competing or subsequent notational systems, most notably proportions using Indo-Arabic numerals. The latter appear to have been a novelty that subsequently gained favourable reception into the musical canon, both theoretical and practical, and resulted in the redundancy of special note shapes.

4.3. Conclusions

In the course of this chapter, I have proposed that the development of special note shapes can be delineated along ethnographic and authorial lines. In the realm of proportional note shapes, the extant transmissions of works composed by Philipoctus de Caserta demonstrate several unique features that can be reconciled to a unique appreciation of these note types. This appreciation differs significantly from the same forms found throughout the *ars subtilior* repertoire. While a definite conclusion concerning the origin of Philipoctus' notational process remains obscured by this composer's shadowy biography, a stability in the extant transmissions (allowing for the roles of individual scribes) suggests an early cementing of notational processes in Philipoctus' works which is possibly authorial. Similarly, the notational processes observed in the works of Jacob de Senleches, Rodericus and Trebor demonstrate several

¹⁰¹ The issue of scribal intervention in Pn 568 raises a whole set of questions concerning the role of this particular scribe and his relation to the composer Paolo Tenorista. Nádas argues that the scribe of *Amor da po'*, whom he labels as Scribe D, had, along with his Scribe B, a special connection to Paolo Tenorista by virtue of their access to many *unica* including those in the most advanced notation and with embellished voices; *vid.* Nádas, "The Transmission of Trecento Secular Polyphony", pp. 335-336. Of vital importance, but currently impossible to answer, is the question of whether the corrections in *Amor da po'* were executed by Scribe D or another scribe associated with Pn 568. If Scribe D was responsible for the corrections in *Amor da po'*, it is difficult at one level to imagine his direct connection to Paolo Tenorista.

unique elements that can be attributed to their origin possibly in northern Spain or southern France. On the other hand, the system of arithmetic note shapes appears to have been a north Italian development. There is possibly evidence of arithmetic note shapes as far south as Rome if one recalls the form in the transmission of *Par maintes foyes* appearing in GR 197, although it is possible that transmission is a copy from a northern source.¹⁰² At any rate, the use of arithmetic note shapes at Florence is testified by the Pn 568 transmission of Paolo Tenorista's *Amor da po' che tu ti maravigli*.

At a broader level, I have argued for the existence of a set of intellectual values ostensibly connected to late medieval philosophy, especially its adoption (not without interpretation) of Aristotelean ontology and hermeneutics. In particular, the *Doctrine of Being* and its basis in formal causes remains a salient feature of theoretical conceptualisation of musical notation. The very fact that this conceptualisation is not unique to musical dialectic but was shared among the liberal arts demonstrates the presence of a broad intellectual culture. The ability to readily demonstrate these same concepts in practical manifestations of musical notation also argues for the presence of this intellectual culture in musical culture, whether it is unconsciously inherited or actively manipulated by scribes according to these received concepts. It marks a situation where the inventors of special notes shapes, and other modes of notation witnessed in the music of the *ars subtilior*, are naturally creatures of their age, whose thoughts and actions, even if rarely knowable in each instance, are respondent to concepts promulgated among the educated (and not so well educated) during the late fourteenth and early fifteenth centuries. In the next chapter, I move from the intrinsic to the extrinsic by continuing this dialogue with musical notation and examining the factors in the use and development of mensuration signs during the fourteenth century.

¹⁰² *Vid.* Chapter 3, pp. 163-170.

Chapter 5 :

The use of mensuration signs in French and Italian notational systems: Observations concerning theory, practice and semiotic intertextuality

...notandum quod antiqui, ymmo et moderni licet raro, ponebant talia signa ut cantor primo aspectu sciret cognoscere cuius mesure esset cantus sibi propositus.¹

In a recent article discussing the origins and early use of the so-called cut or *tempus perfectum diminutum* sign (ϕ), Margaret Bent stated: “Among a great variety of proportional signs and colorations used around and after 1400, very few notational usages could have been viewed as standard representations of particular temporal relationships; conversely, very few temporal relationships enjoyed monopoly of a single sign.”² Indeed, few historians of musical notation would disagree with the view that notational practice in the polyphony of the late fourteenth century in France and Italy is in general marked by a great flourish of notational experimentation and innovation motivated especially by concerns for the representation of rhythmic nuances integral to its various styles. It is in the music of the *ars subtilior* that a peak in the breadth of notational devices can be observed not only in the use of special note forms, but in the use of mensuration signs. Yet, the use of mensuration signs in this style extends beyond merely indicating extrinsically changes in mensuration, but also to signalling intricate proportional relationships between voices.

The initial impetus behind this chapter was to fill some of the gap, lamented by certain musicologists,³ between the comprehensive scholarship on these signs in contemporary musical theory and their practical use in extant sources.⁴ Thus, this chapter

¹ “...it should be noted that the ancients, and indeed the moderns although rarely, did place such signs so that the singer at first sight might understand and recognise the mensuration of the song placed before him.” Thus writes Prosdociamus de Beldemandis on the use of mensuration signs in 1404; *vid.* F. Alberto Gallo, (ed.), *Prosdociami de Beldemandi Opera 1: Expositiones*, Chap LVI, sent. 18.

² Margaret Bent, ‘The early use of the sign ϕ ’, *Early Music*, vol. 24, no. 2, 1996, pp. 202.

³ Peter Lefferts, ‘Review: Mensuration and Proportion Signs: Origins and Evolution’, *Music and Letters*, vol. 76, no. 1, 1995, p. 80.

⁴ The most comprehensive studies of mensuration signs in French notation are: Busse Berger, *op.cit.*; Johannes Wolf, *op.cit.*, vol. 1, pp. 91-103; J. A. Bank, *Tactus, Tempo and Notation in Mensural Music from the 13th to the 17th century*, Amsterdam, 1972.

begins at the beginning of the fourteenth century, when developments in mensural notation, both north and south of the Alps, saw an increased number of possible musical divisions of time being indicated by notation. From its earliest stages, the theorists of mensural notation realised the need to indicate changes in mensuration extrinsically and hence the need for distinct signs. Yet, an examination of the French and Italian mensural traditions suggests less uniform elements existed in the theories of mensural signs in France and Italy. Additionally, there is little evidence in practical sources until the last quarter of the fourteenth century that mensuration signs in both mensural systems were seen as necessary when the mensuration of most works could be readily determined from intrinsic elements.

This situation affords an opportunity to observe the use of mensuration signs in musical notation in terms of a cultural process. It is in this light that I examine the reception of French notational processes into the early fifteenth century re-notation of the works of two mid-fourteenth century masters of Florence, Lorenzo Masini and Gherardello da Firenze. In highlighting the processes adopted by early fifteenth century Italian scribes to translate notational elements native to mid-century Florentine notation, I seek to bring into relief the influence of late fourteenth century, French notational process, largely associated with the *ars subtilior*, upon scribes in Italy. This situation informs the reader not only of the cultural values espoused by particular scribes, but it brings to the foreground the dynamism of subsequent scribes in the preservation, modification and cultural re-invigoration of older repertoires.

The situation that will be seen in relation to the transmitted works of the *ars subtilior* parallels in many respects scribal process witnessed in relation to the late transmission of *trecento* repertoires. I argue that the scribal record of the *ars subtilior* and associated repertoires reflect various stages of notational process. These various mensural states shift from transmission to transmission, so that re-notation often resulted from a new scribal context. Based on the assumption that different cultural contexts evoked various mensural practices, I locate specific examples of semiotic intertextuality in the works of Matheus de Sancto Johanne and Philipoctus de Caserta. The presence of limited notational processes among works thematically and chronologically linked suggest the existence of a particular notational culture which may have had its origins in southern France and northern Italy. In doing so, I demonstrate that, like special note shapes in this period, mensuration signs are outward reflections of a cultural process which is preserved in the semiotic process of mensural notation.

5.1. Mensuration signs in French notational theory

The tradition, which was to affect the subsequent notational systems, due perhaps to the downfall of the Italian notational system no later than 1430, was the French system of mensural notation. As has been already discussed in the previous chapter, both the French and Italian systems of mensuration were centred around the thirteenth century concepts of perfection (divisibility by three) and imperfection (divisibility by two) as a way of defining the relationship between each successive *gradus* or step in the division of time. In French notational theory, the relationship of the *brevis* (■) to the *longa* (■) was referred to as *modus* (mode), of the *semibrevis* (◆) to the *brevis* as *tempus*, and of the *minima* (♣) to the *semibrevis* as *prolatio* (prolation). Through the implication that the subsequent divisions of *tempus* and *prolatio* would be identical in either perfect or imperfect mode, four principal mensurations of *tempus* and prolation were formulated. These are shown in Table 5.1.

Table 5.1: The four principal mensurations of French *musica mensurabilis*.

	■			■						
tempus	◆◆◆			◆◆◆			◆◆		◆◆	
prolatio	♣♣♣	♣♣♣	♣♣♣	♣♣	♣♣	♣♣	♣♣♣	♣♣♣	♣♣	♣♣
Mensuration sign c. 1400.	⊙			○			⊙		○	
Name of mensuration	<i>tempus perfectum prolatinis maioris</i>			<i>Tempus perfectum prolatinis minoris</i>			<i>Tempus imperfectum prolationis maioris</i>		<i>Tempus imperfectum prolationis minoris</i>	
Abbreviation	[3,3]			[3,2]			[2,3]		[2,2]	

As will be recalled from the previous chapter, the important coefficient of this system in French music was *minima* equivalence which results in two different durations for *semibreves* (that is a perfect *semibrevis* equal to three *minime* and an imperfect *semibrevis* equal to two *minime*) and three different durations for a *brevis* (each one equivalent to the duration of either 9, 6 or 4 *minime*).

Any assessment of development and theoretical codification of mensuration signs during the fourteenth century must take into account several factors. The first concerns the transmission of theory to the present day. Treatises on *musica mensurabilis* of the *ars nova* are often transmitted in sources copied a considerable time after they were conceivably

written. Furthermore, a critical appraisal of a treatise's transmission with due attention to the possibility of scribal emendation or additions by glossators during a long period of use must be taken into account.

The theory of mensuration signs and the actual forms found in theoretical writings during the course of the fourteenth century varies. Johannes de Muris' earliest treatises on music, the *Notitia artis musicae* written in 1321 and the *Compendium musicae practicae* (c. 1322), which sets out the *gradus* system and refines concepts such as alteration and imperfection, makes no mention of mensuration signs. One is hesitant to turn to a set of treatises once subsumed within the so-called *Ars nova* of Philippe de Vitry and regard them as a single tradition. Recent scholarship has argued that this disparate set of sources cannot represent a single authorial intent.⁵ Rather, they appear to represent separate traditions that continued to be copied and/or modified throughout the fourteenth century. A further problem stemming from the surviving transmissions of this group of sources is that the earliest extant transmission must be from the late fourteenth century.

The treatise in the manuscript Rome, Biblioteca Apostolica Vaticana, Barberini lat. 307 (ff. 17r-20v) forms the basis of Gilbert Reaney's edition, which he entitled *Ars nova*. It represents the earliest traditions with tangible links to the early *ars nova* style. Here, two types of signs are given: 1) the signs for perfect and imperfect mode consisting of a rectangle containing three or two horizontal lines respectively (, ) and which are described verbally and graphically, and 2) the signs for perfect mode and *tempus* and imperfect mode and *tempus* which are described as O containing three lines and C containing two lines respectively, although the example found in this source uses dots in the place of lines.⁶ Another late fourteenth century source Paris, Bibliothèque Nationale, fonds lat. 14741 (*olim* St. Victor 680) (=F-Pn 14741) contains several readings close to the Vatican treatise. In this transmission, which was also employed by Reaney in his edition, the figures are

⁵ Sarah Fuller, 'A phantom treatise of the fourteenth century? The *ars nova*', *Journal of Musicology*, vol. 4, no. 1, 1985-86, pp. 23-50. One should also note Andrew Wathey's view that the ascription of several works on musical theory to Philippe de Vitry by northern Italian scribes may be due to the poet-composer's subsequent reputation among Italian Petrarchists and their students. *vid.* Andrew Wathey, 'The motets of Philippe de Vitry and the fourteenth-century renaissance', *Early Music History*, vol. 12, 1993, pp. 132-133.

⁶ Rome, Biblioteca Apostolica Vaticana, Barberini lat. 307, f. 20r as found in John Gray, Oliver B. Ellsworth and Michael W. Lundell (eds), 'Ars nova (Rome, Biblioteca Apostolica Vaticana, Barberini lat. 307, ff. 17r-20v)', *Thesaurus Musicarum Latinarum*, no date (accessed 2nd Nov. 2000), <http://www.music.indiana.edu/tml/14th/VITANV_MBAVB307.html>. Cf. Reaney, Gilles and Maillard, (eds), *Philippi de Vitriaco Ars Nova*, p. 27, chap. XVIII, sent. 2-5.

drawn as O containing three parallel vertical lines and C containing two parallel horizontal lines. However, the treatise in F-Pn 14741 distinguishes itself from the Vatican treatise by the presence of a chapter (also included in Reaney's edition⁷) which describes mensuration signs used to indicate *tempus*. For perfect *tempus*, a circle O or three vertical strokes on a staff line are prescribed, while one uses a semicircle C or two vertical strokes in imperfect *tempus*.⁸ An important observation to be noted with regard to the musical examples furnished in the Paris manuscript, which uses either the circle or semicircle, is that prolation in both cases must be major despite the absence of any explicit indication to indicate this. From this, it might be suggested that *tempus* mensuration signs have no extrinsic relationship to prolation. Rather the intrinsic properties of note groups, rests and dots indicate this level of mensuration.

A further treatise connected to the *Ars nova* tradition by its previous editors was the *Omni desiderati notitiam* treatise transmitted in both manuscripts Seville, Biblioteca Capitola y Colombina, 5.2.25, ff. 63r-64v and Chicago, Newberry Library, MS 54.1, ff. 52v-56v. This is the same treatise that Coussemaker entitled in his edition the *Ars perfecta in musica Magistri Philippi de Vitriaco*. However, the ascription to De Vitry occurs only in the Newberry manuscript. As Sarah Fuller states,⁹ this treatise represents a late stage in the development of French notation in the fourteenth century, and it shows greater affinity to the tradition of the *Libellus cantus mensurabilis*, the popular handbook on mensural notation usually ascribed to Johannes de Muris, than the traditions described in the previous paragraphs. The *Omni desiderati notitiam* from the last decade of the fourteenth century and found in what is now the Newberry manuscript, sees the use of *tempus*-prolation mensuration signs where *tempus* is denoted by a circle or semicircle and prolation by three or

⁷ Reaney *et al.*, *op.cit.*, ch. XVI.

⁸ I have disregarded Reaney's emendation in Ch. XVI.6 of the MS reading *brevis* to *semibrevis*. The passage at hand is clearly describing the appropriate ternary division of perfect *tempus*. One further source connected to this *ars nova* "group" is Paris, Bibliothèque Nationale, fonds latin 7378A. In this source *tempus* mensuration signs are described thus: *Ad temporis perfecti designationem anteponitur circulus rotundus, quia forma rotunda perfecta est, et aliquando tres tractuli, et utrumque est bonum, ut hic <exemplum deest>. Ad temporis imperfecti designationem inponitur semicirculus et aliquando duo tractuli <baculi Gilles, err.> et utrumque est bonum...*(for indicating perfect time, a round circle is placed beforehand because the round form is perfect, and sometimes the little lines: either is acceptable, as here:...For the indication of imperfect time there is placed a semicircle and sometimes two little lines, and either is acceptable...), André Gilles, 'Un temoignage inedit de l'enseignement de Philippe de Vitry', in *Philippi de Vitriaco Ars Nova*, pp. 65-67.

⁹ Fuller, 'A phantom treatise of the fourteenth century?', p. 29.

two dots placed inside the *tempus* sign (⊕, ⊙, ⊗, ⊚). As will be seen below, this transmission appears to represent a theoretical *status quo* in relation to mensuration signs.

As such, the evidence supplied by the *Ars nova* suite of treatises and the late dates of surviving manuscripts provides few clues as to the chronological order of the theoretical codification of mensuration signs. However, Jacobus de Liège,¹⁰ champion of the *ars vetus*, provides the most telling observations of his contemporaries' modern notational practices. The seventh book of his *Speculum musicae* was possibly written between June 1323 and 1324/25.¹¹ Chapter XLVII, which commences with a comparison of the old and new musical notation in terms of which contains the greatest freedom,¹² lists several uses of mensuration signs in the new art reported to be current at that time. Several signs demonstrate affinities to the *Ars nova* Vatican treatise described above. The signs for *tempus imperfectum* are given as O or three lines, which *debent tangere lineam et aliquis de spatio utriusque lineam lateris*. This echoes the possibly earlier treatise¹³ entitled *Compendium musicae mensurabilis tam veteris quam novae* which states that perfect time may be indicated by either the circle or three strokes and imperfect time by a semicircle or two strokes.¹⁴ Similarly, the *Speculum musicae* also mentions rectangular mode signs, containing two or three lines, which are also found in the *Ars nova* Vatican treatise. One also finds in the *Speculum musicae* the same *modus-tempus* signs in the form of circle/semicircle containing two or three strokes as those found in the Paris *Ars nova* source (Pn 14741). However, Jacobus also gives other irregular forms including two semicircles to denote imperfection (it is unclear whether this refers to *tempus* or *modus*), and M and N to indicate *modus perfectus* and *imperfectus* respectively. Jacobus reports the Moderns held the latter signs analogous to the use of O and

¹⁰ Recently, Karen Desmond in her 'New light on Jacobus, author of *Speculum musicae*', *Plainsong and Medieval Music*, vol. 9, no. 1, 2000, pp. 19-40, has strengthened the hypothesis originally made by Oliver Ellsworth (*op.cit.*, pp. 9-10), that Jacobus de Liège might also be Jacobus de Montibus named in the fourth treatise of the Berkeley manuscript. Desmond details a Jacobus de Montibus who held a canonicate at St. Paul's of Liège, may have been a *magister scholorum*, and died between 1337 and 1343. Such dates accord well with the writing of the *Speculum musicae*.

¹¹ Ulrich Michels, *Die Musiktraktate des Johannes de Muris*, Beihefte zum Archiv für Musikwissenschaft 8, Wiesbaden, 1970, pp. 50ff.

¹² Jacob employs a reversed analogy where the new art of notation and all its prescriptions is compared to the Old Testament (*lex veta*) and the old art of notation to the New Testament (*lex nova*) with its simplicity and freedom. Jacobus argues that mensuration signs are but another constraint on the new art.

¹³ *Vid.* Busse Berger, *op.cit.*, p. 12.

¹⁴ *Pro tempore perfecto denotando ponitur circulus rotundus vel tres tractuli; pro imperfecto vero ponuntur semicirculi ve duo tractatuli...*; Gilbert Reaney, *Compendium musicae mensurabilis tam veteris quam novae artis*, in *Corpus Scriptorum de Musicae* 30, 1982, p. 40.

C. Jacobus also reports that the signs O and C are held by some Moderns to be significative of the perfection/imperfection of *modus* as well as *tempus*.

The collective testimony of Jacobus de Liège and the early *Ars nova* treatises suggests, from a theoretical perspective, that the earliest use of mensuration signs in the French *ars nova* was established by the third decade of the fourteenth century. These signs appear to signify *modus* and/or *tempus* only. Indeed, the term *prolatio* is used by Jacobus de Liège in his *Speculum musicae* not as a term to denote the measurement of the *semibrevis*, but rather as a term related to the measurement of simultaneous vocal production.¹⁵ The development of the extrinsic signification of prolation would appear to be a subsequent development based on the O and C *tempus* mensuration signs.

Even at a later date, there are suggestions that the notion of *tempus* only mensuration signs persisted. The treatise *De semibrevis caudatis*,¹⁶ once ascribed to Theodoricus de Campo, is clearly an anonymous work from the last quarter of the fourteenth century which describes, among other things, techniques associated with the *ars subtilior* style. These include special note forms such as the *dragma*, *syncopa* (using both the *punctus divisionis* and coloration), dotted *minime* and *sesquitercia* coloration of *minime*. However, in the chapter on mensuration signs, only the older O/C *tempus* signs are given.

The progress from *tempus* only to *tempus-prolatio* mensuration signs can be gauged from the perspective of the widely circulated¹⁷ *Ars practica cantus mensurabilis secundum Johannem de Muris*¹⁸ (which I will continue to refer to as the *Libellus*¹⁹). Ulrich Michels dates this treatise to c. 1340.²⁰ The collective transmissions of this treatise on mensural music

¹⁵ F. Joseph Smith, *Jacobi Leodiensis Speculum Musicae, A Commentary*, Musicological Studies XLIII, Henryville, 1983, vol. 3, p. 19.

¹⁶ Critical Edition: Sweeney and Gilles, *op.cit.*

¹⁷ For a list and discussion of extant sources of the *Libellus* *vid.* Daniel S. Katz, “The Earliest Sources for the *Libellus cantus mensurabilis secundum Johannem de Muris*”, Ph. D. thesis, Duke University, 1989, pp. 1-4, 9-23.

¹⁸ The most recent edition and assessment of the transmission of the *Libellus* is found in Berktold, *op.cit.* Berktold identifies two major *recensiones*, A and B, of the *Libellus* in addition to a *recensio minor* and several *recensiones variae* which have their basis in the *Libellus*. Based on surviving instances of transmission, *Recensiones majores* A and B are observed both north and south of the Alps, but especially in northern Italy. Evidence of the transmission of the *recensio minor* is to be found only in North-western Europe and England. Berktold notes Oliver Ellsworth’s previous conclusions that the Berkeley treatises of c. 1375 are based in part on the *recensio minor*: *vid. ibid.*, pp. X-XXIX. On the earliest datable sources of the *Libellus*, *vid.* Katz, *op. cit.* pp. 43-210.

¹⁹ For the sake of convenience, I will continue to preserve herein the modern musicological phenomenon by referring to this treatise as the *Libellus <practice cantus mensurabilis secundum Johannem de Muris>*. On the title of this treatise, *vid.* Katz, *op. cit.*, p. 24, fn. 51.

²⁰ Ulrich Michels, *Die Musiktraktate des Johannes de Muris*, p. 28. Heinrich Bessler dated the *Libellus* between 1340-1350 in ‘Johannes de Muris’, in *Die Musik in Geschichte und Gegenwart*, 1st edn, ed. F. Blume, Kassel, vol. 7, 1958, col. 110.

suggest it either introduced or codified the use of two or three dots within the circular *tempus* signs. The view that the multiple dotted mensuration signs preceded the simpler form is suggested by the third treatise from the so-called Berkeley treatises. This treatise, which uses the *recensio minor* of the *Libellus* as its basis, details *modus*, *tempus* and *tempus*-prolation signs – the last as a combination of circular forms and two or three dots.²¹ The treatise, as found in the Berkeley manuscript, contains an explicit for 12th January, 1375. Although not contained in manuscripts from the same period, the *Ars cantus mensurabilis mensurata per modos iuros* is a tract on *musica mensurabilis* contemporaneous with the Berkeley treatise.²² It contains the same list of mensuration signs including *tempus*-prolation types.²³

After their introduction towards the middle of the fourteenth century, the four basic *tempus*-prolation signs (⊕, ⊙, ⊗, ⊘) appear to have stabilised in French notational theory during the last quarter of the fourteenth century, although by at least the last decades of the fourteenth century theorists report a final change in their form. The earliest theoretical reference to the use of a single dot to indicate major prolation and its absence to indicate minor prolation occurs in the *Summa musice* of the Englishman Johannes Hanboys which dates from *circa* 1375.²⁴ Here O indicates that *breves* are perfect, ○ that they are imperfect, while a single internal dot indicates “perfect” prolation, its absence “imperfect” prolation.²⁵ Peter Lefferts believes that the adaptation of the *gradus* system of Johannes de Muris and others to Robertus de Handlo’s earlier system (in turn closely related to concepts found in early Italian theorists such as Marchettus de Padua) demonstrates that Hanboys only had knowledge of earlier fourteenth century notational developments on the continent. Yet, the presence of the *tempus*-prolation mensuration signs, as opposed to *modus-tempus* signs,

²¹ Ellsworth, *op.cit.*, pp. 170-71.

²² Balensuela, *op.cit.*, pp. 82-87.

²³ Balensuela, *op.cit.*, pp. 218-19.

²⁴ Peter M. Lefferts, (ed.), *Robertus de Handlo Regule and Johannes Hanboys Summa*, Greek and Latin Music Series, Lincoln and London, 1991, p. xi. A single dot to indicate major prolation, its absence minor prolation is also found in another English author referred to as Thomas Walsingham in his *Regule Magister Thome Walsingham*, found in London, British Library, Lansdowne 763, f. 101r as found in John Gray, Peter M. Lefferts and Michael W. Lundell (eds), 'Regule Magistri. Thome Walsingham. De figuris compositis. et non compositis. et de cantu perfecto et imperfecto. et De modis. incipiunt', *Thesaurus Musicarum Latinarum*, no date (accessed 12th December, 2000), <http://www.music.indiana.edu/tml/14th/WALREGU_MLBLL763.html>. Cf. Gilbert Reaney, ed., *Johannes Hothby, Opera omnia de musica mensurabili; Thomas Walsingham, Regulae de musica mensurabili*, Corpus scriptorum de musica 31, Neuhausen-Stuttgart 1983, p. 84. Andrew Hughes states that it is likely that this is the same person as the chronicler Thomas Walsingham (†1422) in Andrew Hughes, 'Walsingham, Thomas', in *The New Grove Dictionary of Music and Musicians*, 2nd edn, ed. S. Sadie, London, 2001, vol. 27, p. 51.

²⁵ Lefferts, *Robertus de Handlo Regule and Johannes Hanboys Summa*, p. 266.

demonstrates knowledge of developments in mid-century French notational theory. From a practical perspective, the system contained in the *Summa* concurs approximately with those found in England in the first half of the fourteenth century. However, as Lefferts states, this system was largely abandoned in favour of the French notational system by the time Hanboys wrote his treatise.²⁶ Hanboys' use of a single dot to indicate prolation (or, in his terms not uncommon in continental theory, perfection or imperfection of the *semibrevis*) suggests either that Hanboys may have innovated the single dot system or simply copied it from his continental colleagues.

One further apparent discrepancy in Hanboys' list of mensural signs is the use of a reversed C to indicate imperfect *tempus*. However, as will be seen below, there is evidence of this practice among musicians whose works demonstrate association with Avignon and northern Italy. Furthermore, in light of the easing in Anglo-French relations in the Peace of 1360-69, Andrew Wathey has uncovered evidence of musicians from the Languedoc region visiting and serving in the royal chapels of England.²⁷ Similarly, several English musicians travelled to the new English territories in Brittany from whence they could witness continental practices. This presents an opportunity for explaining Hanboys' awareness of contemporary continental practices. The evidence from this theorist therefore assumes a new significance whereby the argument of insular isolation is swept aside by a greater understanding of political and social relationships in this period.

On the continent, the Cn 54.1 transmission of the *Libellus* (ff. 43r-49v) from Pavia c. 1391 sees the use of just one internal dot to indicate major prolation.²⁸ In 1404, the Paduan theorist, Prosdocimus de Beldemandis complains that some contemporary musicians have reduced the number of dots to indicate prolation by two, so that one dot rather than three indicates major prolation and no dots rather than two for minor prolation.²⁹ Two and a half decades later, Ugolino d'Orvieto again censures the practice.³⁰ But, as suggested by the

²⁶ Lefferts, *Robertus de Handlo Regule and Johannes Hanboys Summa*, p. 64.

²⁷ Andrew Wathey, 'The Peace of 1360-69 and Anglo-French musical relations', *Early Music History*, vol. 9, 1989, pp. 129-174.

²⁸ Berkold, *op. cit.*, pp. 47-48 (critical apparatus to Chap. 6, sent. 2-4). Cn 54.1 contains one of the earliest datable transmissions of the *Libellus*. Yet, it witnesses a particular practice of mensuration signs not central to the *Libellus* tradition wherein most of the main sources preserve mensuration signs with multiple dots of prolation.

²⁹ Gallo, *Prosdocimi de Beldemandi Opera 1: Expositiones*, chap. LVI, sent 40.

³⁰ Albert Seay, (ed.), *Vgolini de Vrbevetani Declaratio Musicae Disciplinae*, *Corpus Scriptorum de Musica* 7, Rome, 1960, vol. 2, pp. 200-201.

Cn 54.1-transmission of the *Libellus*, the battle to maintain the older *tempus*-prolation signs was probably lost before Prosdocimus committed his thoughts to the page.

Concerning the reduction of the dots of prolation by two, it is possible that the cause of Prosdocimus' and Ugolino's protests lay not in a conservative agendum but in the philosophical and therefore theoretical bases of these signs. Despite Anna Maria Busse Berger's erudite attempt to link mensuration signs to Roman numerals and the abacus, I am inclined to agree with Stanley Boorman's assessment that the use of the circle and semicircle may have more to do with the concept of unitary perfection.³¹ The analogy of the circle to perfection resonates through the *musica mensurabilis* treatises.³² With regard to the use of three dots to indicate prolation, theorists are quite clear that the analogy of perfection resides in the doctrine of the Holy Trinity, perhaps wedded to Pythagorean rationality whereby the number three was considered a perfect, indivisible form, while the numeral two was imperfect by its unitary removal from a state of perfection. On the other hand, Euclidean geometry holds that the point is indivisible, without magnitude or quantity, and therefore perfect in its absence of imperfectible parts. It is perhaps this shift from a theological basis to a mathematical, increasingly secular viewpoint that troubled early fifteenth century theorists.

5.2. *The signa divisionis in Italian notation and theory*

Before proceeding to a discussion of the early use of mensuration signs in French notation, an overview of the use of *signa divisionis* or mensuration signs in Italian notation and theory is appropriate. Italian theory and notation developed from the innovations of the early *ars nova* notation (such as found in the Roman de Fauvel, discussed in Chapter 1) by extending the late *ars antiqua* practice of notating more than three *semibreves* to a *brevis*. Instead of only four basic divisions of the *brevis* as in French notation, Italian notation permitted up to ten divisions based on three successive levels of division by either two or three, although the tenth division (3x3x3) was purely theoretical. The realisation of strings of *semibreves* was determined by the governing division and the presence of a *pontellus* (=p.d.) separating *semibreves* into groups. The last device was inherited from the *ars antiqua*. The

³¹ Stanley Boorman, 'Review: Anna Maria Busse Berger, *Mensuration and Proportion Signs...*', *Plainsong and Medieval Music*, vol. 9, no. 1, 2000, p. 68.

³² Prosdocimus de Beldemandis writes concerning *modus* and *tempus* sign (stroke and circle forms): *...quod hoc fuit pro tanto, quoniam cum perfectio consistat in numero ternario et imperfectio in binario...* ("...but this was as such since in the ternary number there resides perfection and, in the binary <number>, imperfection..."), Gallo, *Prosdocimi de Beldemandi Opera I: Expositiones*, chap. LVI, sent 39.

realisation of the rhythmic duration within these metric units was determined in its earliest stage by the understood "natural" conventions (*via nature*) which were modified (*via artis*) by the addition of tails above (sometimes flagged to form a *semiminima*), below or to the side of a *semibrevis*.³³

The first division involved either the perfect (into three equal parts) or imperfect division (into two equal parts) of the *brevis*. The second division permitted the perfect or imperfect division of those parts created in the first division. The third division extended this process to the next level. This relationship is demonstrated by Table 5.2.

Table 5.2: The divisions of *tempus* in early Italian *trecento* mensural music theory.³⁴

	■			
	Perfect tempus		Imperfect tempus	
	2	3	2	3
1 st division	Ternaria (3) ◆◆◆		Binaria (2) ◆◆	
2 nd division	Senaria perfectum or yतालिकुम (3x2) ◆◆◆◆◆◆	Novenaria (3x3) ◆◆◆◆◆◆◆◆◆	Quaternaria (2x2) ◆◆◆◆	Senaria imperfecta or gallica (2x3) ◆◆◆◆◆◆
3 rd division	Duodenaria (3x2x2) ◆◆◆◆◆◆◆◆◆◆	(3x3x3) ◆◆◆◆◆◆◆◆◆◆ ◆◆◆◆◆◆◆◆◆◆ ◆◆◆◆◆◆◆◆◆◆	Octonaria (2x2x2) ◆◆◆◆◆◆◆◆◆◆	Duodenaria (2x2x3) ◆◆◆◆◆◆◆◆◆◆

Theoretical writings on early *trecento* mensural notation suggest that the imperfect *brevis* was temporally distinct from the perfect *brevis*.³⁵ This implies a situation where all *breves* in *divisiones* with perfect *tempus* are, in terms of their duration, equivalent, as are all

³³ Vecchi, *op.cit.*, pp. 103ff. Q.v. Apel, *Notation of Polyphonic Music*, pp. 368-384.

³⁴ Adapted from Vecchi, *op.cit.*, p. 181.

³⁵ *Remanet ergo quod tempus imperfectum de se et essentialiter solum duas partes in quantitate perfecti temporis comprehendat* ("It follows therefore that imperfect time alone and essentially includes only two parts in the size of perfect time"), Vecchi, *op.cit.*, p. 161; *Per subtractionem autem factam ab intellectu, de parte scilicet temporis perfecti, musica fit scientia de tempore imperfecto* ("By the subtraction, however, made by the intellect of part of namely perfect time, there is knowledge of music in imperfect time"), *ibid.*, p. 163. Guido frater writes: *Tempus enim imperfectum deficit a perfecto ad minus in tertia parte sui, et dividitur primaria divisione in duas semibrevis equales que in valore equivalent duabus de tribus primarie divisionis perfecti temporis...* ("For imperfect time changes from perfect <time> to the lesser <time> in its third part, and it is divided in the primary division into two equal semibreves which are equivalent in value to two of the three <semibrevis> of perfect time..."); Gallo, *Mensurabilis Musicae Tractatuli*, p. 35.

breves in imperfect *tempus*. As a result of this equivalence, a *sesquitercia* relationship existed at the level of the *semibrevis minima* between *novenaria* and *duodenaria*, and *senaria imperfecta* and *octonaria*.³⁶ However, in the second half of the fourteenth century, and as a result of the introduction of the French concept of *mutatio qualitatis*, there occurs equivalence of *minime* between the .sp. and .si.³⁷ As will be discussed below, this system of relationships is further complicated in this period by the rewriting of *duodenaria* and *octonaria* with multiples of substitute *quaternaria*.

Although it appears that the initial system of divisions in Italian notation was well developed before Marchettus de Padua codified it in his *Pomerium musice*, circa 1318, he is the first surviving theorist to mention the *signa divisionis*. Marchettus states that in compositions that change their mensuration, the composer should make his intentions clear by providing a sign indicating the new division of time.³⁸ Marchettus advocates the following signs, which are effectively abbreviations of theoretical nomenclature:³⁹

.p. = <i>tempus perfectum</i>	or	.t. = <i>divisio ternaria</i>
.i. = <i>tempus imperfectum</i>	or	.b. = <i>divisio binaria</i>

In a chapter describing the differences between the Italian and French notational systems and their realisation, Marchettus mentions the use of signs to indicate the French (*gallicum*) or Italian (*ytalicum*) division of *tempus imperfectum*. The French division was into two groups of three, the Italian into two groups of two. Where there is an alternation of both types of division, Marchettus suggests that the signs .G. (=French division) or .Y. (=Italian division) be placed above (rather than beside) the sign for *tempus imperfectum*. When a song is notated entirely in either imperfect division, only .G. or .Y. should be written at its beginning.⁴⁰ These signs, however, are never used in practice, but are replaced by the .q. = *quaternaria* and .si. = *senaria imperfecta* (or .sg. *senaria gallica*) signs.

Marchettus' reported system of signs, however, does not go beyond the second division of time in the Italian notational system. This lacuna seems to have been filled by 1330-40 when the anonymous author of *De diversis maneriebus in musica mensurabili* includes

³⁶ Marco Gozzi, 'La cosiddetta *Longanotation*: Nuove prospettive sulla notazione italiana del Trecento', *Musica Disciplina*, vol. 49, 1995, p. 141.

³⁷ Long, "Musical Tastes in Fourteenth-Century Italy", pp. 60-61.

³⁸ Vecchi, *op.cit.*, p. 164.

³⁹ Vecchi, *loc.cit.*

⁴⁰ Vecchi, *op.cit.*, pp. 179-180.

the following signs to indicate more precisely two of the second division and two of the third division of time:⁴¹

.s. = *senaria maneries (sive divisio)*

.n. = *novenaria maneries (sive divisio)*

.o. = *octonaria maneries (sive divisio)*

.d. = *duodenaria maneries (sive divisio)*

The complete development of this system of abbreviations is found in the *Tractatus practice cantus mensurabilis ad modum ytalicorum* by Prosdocimus de Beldemandis. This treatise was written at the very end of period that witnessed the practice of Italian notation, and in many respects parallels Jacobus de Liège's *Speculum musice* through its appeal to philosophic argument to protect a dying tradition. Prosdocimus distinguishes between two types of tempus signs: *signa generalia* and *signa magis specialia*. The general signs are the same as those given by Marchettus (.t., .b., .p., .i.). The more specialised signs are:

Q = *tempus quaternarium*

SP = *tempus senarium perfectum*

SI = *tempus senarium imperfectum*

O = *tempus octenarium*

N = *tempus novenarium*

D = *tempus duodenarium*

A comprehensive investigation of the use of mensuration sign throughout the surviving repertoire of works notated in the Italian manner is beyond the scope of this present investigation. However, some observations can be made. The earliest surviving source in Italian notation is the Codex Rossi, which may have been copied as late as 1370 in northern Italy.⁴² Although I will not attempt to emulate Nino Pirrotta's magisterial assessment of Codex Rossi's notation,⁴³ it can be stated that *signa divisionis* occur with great regularity in this manuscript. Each sign largely agrees with those found in the Italian theoretical literature, although the meaning of .m. in conjunction with .q. and .o. is unknown. Pirrotta suggests that .m. may be an abbreviation for *maior*, indicating a slower

⁴¹ F. Alberto Gallo, *La teoria della notazione in Italia dalla fine del XIII all'inizio del XV secolo*, Bologna, 1966, p. 56.

⁴² Rome, Biblioteca Apostolica Vaticana Rossiano 215 & Ostiglia, Fondazione Opera Pia don Guiseppe Greggiati, fragmenti. Published in colour facsimile as Nino Pirrotta, (ed.), *Il codice Rossi 215*, Ars nova 2, Lucca, 1992.

⁴³ Pirrotta, *Il codice Rossi 215*, pp. 108-111. Q.v. Nino Pirrotta, 'A Sommacampagna Codex of the Italian Ars Nova', in *Isham Library Papers*, ed. G. M. Boone, Cambridge (Massachusetts), 1995, pp. 319-20.

tempo of the *quaternaria* and *octonaria* divisions. The two divisions of the *senaria* are indicated by .sg. (= *senaria gallica*, 2x3) and .sy. (= *senaria ytalica*, 3x2). In almost all cases, the mensuration of the work is shown at its beginning with the *signum divisionis* drawn in red ink. However, as Pirrotta notes, the scribe's attention occasionally wanders and sections, which an Italian medieval musician might intuit to be in a different division of time, are not always indicated by *signa divisionis*.⁴⁴ This manuscript is also unique in its use of .t. to indicate the *ternaria* division, which occurs nowhere else in the repertoire.⁴⁵ *Pontelli* frame each *brevis* measure and the p.a. never occurs.

The regularity of *signa divisionis* found in Codex Rossi is not repeated in most other sources written in Italian notation. This fact may have resulted from the efforts of scribes to reform traditional Italian notation as the fourteenth century progresses. While there are indications that French mensural concepts were gradually assimilated into theory,⁴⁶ it is possible that some changes were motivated at an earlier stage by purely native aspirations. A most significant change occurs in the (re-)notation of the *octonaria* and *duodenaria* divisions into multiples of substitute *quaternaria*.⁴⁷ French influences, however, also resulted in the writing out of *via nature* rhythms, the elimination of Italian special note shapes by the *punctus additionis* and the elimination of the increasing superfluous *pontellus*.⁴⁸ However, because the Italian *divisiones* were redefined in terms of French mensural theory (that is the

⁴⁴ Pirrotta, *Il codice Rossi 215*, p. 108.

⁴⁵ Pirrotta, *Il codice Rossi 215*, p. 109.

⁴⁶ Gallo, *La teoria della notazione in Italia*.

⁴⁷ The subject of notational development in *trecento* sources has for several decades been a source of much debate. I follow the recent argument of Gozzi in 'La cosiddetta *Longanotation*', who argues that the (re-)notation of *octonaria* and *duodenaria* divisions shows a greater concern to *semibrevis* and *brevis* division of time rather than *modus*, which Kurt von Fischer maintained was a fundamental aspect of this form of notation when he entitled it *Longanotation* in his *Studien zur italienischen Musik des Trecento und frühen Quattrocento*, pp. 111-113. But perhaps the most difficult aspect of von Fischer's treatment revolves around the conclusion: "Brevisnotation ist italiensich, Longanotation französisch" (*ibid.*, p. 112). Gozzi's argument is largely prompted by Long's exploration of these phenomena in "Musical Tastes in Fourteenth-Century Italy", pp. 68-87. Here, Long argues that, as particularly evident by the preservation of the natural *sesquitercia* proportion of .o. and .d. relative to .si. and .n., that a conceptual difference existed between French *modus*- and Italian *longanotation*. As such, this invalidates von Fischer's generalisation. Theoretical treatments of the substitute *quaternaria* are discussed in F. Alberto Gallo, *La teoria della notazione in Italia*, pp. 84-85 & *idem*, 'Die Notationlehre in 14. und 15. Jahrhundert', pp. 326, 329ff. Prosdocius de Beldemandis provides the keenest insight into this practice, albeit from the second decade of the fifteenth century, in his condemnation of substitute *quaternaria* in his *Tractatus practice cantus mensurabilis ad modum ytalicorum*, in Coussemaker, *op.cit.*, vol. 3, p. 235, translated Jay A. Huff, (ed.), *Prosdocius de Beldemandis: A Treatise on the Practice of Mensural Music in the Italian Manner*, Musicological Studies and Documents 29, s.l., 1972, 27-28.

⁴⁸ Eugene Fellin, 'The notation-types of trecento music', in *L'Ars nova italiana del trecento IV*, ed. A. Ziino, Certaldo, 1979, pp. 211-23. Fellin proposes that between Italian notation and French notation, two other types of Franco-Italian notation occur: the first predominantly characterised by the use of substitute

four prolations),⁴⁹ the analogical *signa divisionis* frequently remained in use, even when all other elements of Italian notation had succumbed to French devices.

John Nádas has proposed⁵⁰ that variation in notational practices can be shown at the scribal level, perhaps on the basis of a scribe's training and background. In a large collection of the *trecento* repertoire, Fn 26, Nádas demonstrates that Scribe B often preserves older traits of the Italian notational systems including *signa divisionis* and *pontelli*, while Scribes C and A appear to be transforming their Italian exemplars by introducing elements from French notation, using *signa divisionis* only when absolutely necessary (as in the French system), avoiding the *semibrevis maior* (♠) and avoiding the *pontellus* in favour of the *p.a.* Such is the case in multiple transmissions of works from the *trecento* repertoire that appear in two or more notational systems.

Even *signa divisionis* succumbed to the influence of French elements and French mensuration signs were introduced by scribes into works of a decidedly Italian origin. Several works by Italian composers in the last gathering (the fourteenth) of Pn 568 bear witness to this. Two settings from the ordinary, a *Gloria* (ff. 131v-133r)⁵¹ by Ser Gherardello da Firenze and a *Sanctus* (136v-137r)⁵² by Ser Lorenzo (Masini) da Firenze are also found in Rome, Biblioteca Apostolica Vaticana, Urb. Lat. 1419, (Rvat 1419) ff. 88v-90r and 90v-91r respectively.

The composers Gherardello and Lorenzo da Firenze appear to have been active in the middle of the fourteenth century and precede the generation of Florentine composers that included Francesco Landini.⁵³ However, it is likely that Pn 568 was compiled no earlier than 1406.⁵⁴ According to Nádas, its origins are suggested by its initial emphasis on

quaternaria; the second a simple note for note substitution of French for Italian note values. Both groups still use the *signa divisionis*.

⁴⁹ Gallo, *La teoria della notazione in Italia*, pp. 80-84.

⁵⁰ Nádas, 'The structure of MS Panciatichi 26 and the transmission of Trecento polyphony', pp. 414-419.

⁵¹ Transnotation (based upon both sources) in von Fischer and Gallo, *Italian Sacred Music*, pp. 5-8.

⁵² Transnotation in von Fischer and Gallo, *Italian Sacred Music*, pp. 73-75.

⁵³ Documentation suggests Gherardello's presence in Florence from 1343 until his death in 1362 or 1363, *vid.* Frank D'Accone, 'Music and musicians at the Florentine monastery of Santa Trinita', *Quadrivium*, vol. 12, 1971, pp. 142-150, and Blake Wilson, *Music and Merchants: The Laudesi Companies of Republican Florence*, Oxford, 1992, p. 163. Lorenzo Masini is documented in the archives of the church of San Lorenzo in Florence from 1348 to his death in 1373, *vid.* F. Alberto Gallo, 'Lorenzo Masini e Francesco degli Organi in S. Lorenzo', *Studi Musicali*, vol. 4, 1975, pp. 57-63. For a recent view on the relationship between Masini and Landini, *vid.* Pirrotta, 'On Landini and Ser Lorenzo', pp. 5-13.

⁵⁴ Gilbert Reaney, 'The Manuscript Paris, Bibliotheque nationale, fonds italien 568 (Pit)', *Musica Disciplina*, vol. 14, 1960, p. 34. Gatherings 6 and 8 are slightly later additions to Pn 568 by Scribe D (Nádas) whose privileged role in the transmission of Paolo Tenorista's repertoire is witnessed by the several

the limited contemporary Florentine repertoire of particularly Paolo Tenorista and Francesco Landini. There is some interest in other Florentine composers, but the number of works represented is small in relation to other anthologies of the *trecento* repertoire. A French repertoire and some contemporary works outside that city were also included.⁵⁵ It is also likely, especially considering the cursive *bastarda* script, that Rvat 1419 also dates from the early fifteenth century,⁵⁶ although no precise date can be ascertained from this aspect alone. While it is possible that both transmissions represented therein are modifications of the original notation, Rvat 1419, although undoubtedly a copy, contains a form of notation whose existence may plausibly date back to mid-century notational developments.⁵⁷

Gherardello's two-voice *Gloria* is transmitted in Pn 568 in a notation heavily influenced by French elements. The first section commences with both a *modus* and *tempus* sign (☉☐☐☐) which appears to indicate perfect *modus* and imperfect, perhaps diminished, *tempus*. Both voices at the beginning of the *Qui tollis* are marked with ☉ indicating *tempus perfectum minoris*, the *Cum sancto spiritu* with ☉ indicating *tempus perfectum maioris*, and the *Amen* with ☉ once again.⁵⁸ The flagged *semiminima* (♩) is used while the reverse flagged form (♩) indicates a 3:2 relationship to the *minima*. The *punctus additionis* appears regularly (see especially the *Gratias agimus tibi*), the *punctus divisionis* only occurring when absolutely necessary for the delimitation of mensural time units. The assimilation of French techniques is complete in this transmission.

The transmission of Gherardello's *Gloria* in Rvat 1419 presents a very different set of notational principles. French mensuration signs are entirely absent, but one Italian *signum divisionis* is found in both voices at the beginning of the *Qui tollis*: .p. indicating the

unique works in these gatherings and by his role in copying Tenorista works into the Lowinsky Fragment and Las 184, ff. XCIXv-Cv, *vid.* Pirrotta, *Paolo Tenorista in a New Fragment of the Italian Ars Nova*, p. 18. Ursula Günther provides a *terminus post quem* of 1406-08 for the copying of these gatherings in Günther, 'Zur Datierung des Madrigals 'Godi Firenze' und de Handschrift Paris, B.N. fonds it. 568 (Pit)', pp. 99-119. However, Gherardello's and Lorenzo's polyphonic settings are part of the old corpus' second layer of copying by Scribe B, *vid.* Nádas, "The Transmission of Trecento Secular Polyphony", pp. 216-316.

⁵⁵ Nádas, "The Transmission of Trecento Secular Polyphony", p. 288.

⁵⁶ Cf. von Fischer and Lütolf, *Handschriften mit Mehrstimmiger Musik des 14., 15., und 16. Jahrhunderts*, pp. 1030-1032

⁵⁷ As Nino Pirrotta observed, the practice of notating *octonaria* and *duodenaria* division by a substitute *quaternaria* division is typical of a middle Florentine school of 1350-1365, in his *The Music of Fourteenth Century Italy*, vol. 3, pp. iv. As Long in "Musical Tastes in Fourteenth-Century Italy", p. 80, argues, the existence of a modified *quaternaria* (as a replacement for *duodenaria*) is evident in Codex Rossi, thereby extending the practice further into the past than Pirrotta had supposed.

⁵⁸ The *tempus-prolatio* signs with two or three internal dots on 131v-137v of Pn 568 represent a rare appearance of these signs outside theoretical writings.

division of the *brevis* of 3x2. The *pontellus* is used more frequently than in Pn 568 and the reversed-flagged *semiminima* also occurs, although there is rhythmic variation over the text "hominibus" in the Roman source as shown by Figure 5.1.

Figure 5.1: Superius variants at the beginning of Gherardello da Firenze's *Gloria* in Pn 568 and Rvat 1419.

The reverse is the case in the T of the *Qui tollis* section of this *Gloria*, where the *pontellus* occurs frequently in Rvat 1419, while Pn 568 relies instead on the significance of the mensural sign and ligature groupings as shown in Figure 5.2.

Figure 5.2: Notation of T of Gherardello de Firenze's *Qui tollis* in Pn 568 and Rvat 1419.

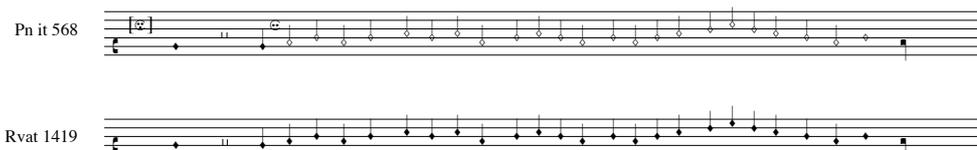
In the critical notes to their transnotation of Gherardello's *Gloria*, Kurt von Fischer and F. Alberto Gallo state that, in both cases (Rvat 1419 and Pn 568), the first section of the *Gloria* may have been an adaptation of the original *duodenaria* division using a substitute *quaternaria*.⁵⁹ However, the record left by the scribe of Pn 568 demonstrates a sensitivity in transferring the concepts of *sesquitercia* relationships of *duodenaria* (or perhaps the *quaternaria*) in relation to the *novenaria* (⊕), and perhaps the *senaria perfecta* (⊕) if a *minima* equivalence with *senaria imperfecta* can be said to exist, into terms expressed by French mensuration signs. The reversed C sign therefore has a proportional significance found in most of the *ars subtilior* repertoire to be discussed below.

In the Pn 568 transmission of Lorenzo da Firenze's *Sanctus*, one finds the mensuration signs ⊕ (at beginning of *Benedictus*), ⊖ (towards end of *Benedictus*) and ⊕ (beginning of *Osanna*). Neither mensuration signs nor *signa divisionis* appear in the Rvat 1419 transmission. Observations concerning the use of other notational elements made

⁵⁹ von Fischer and Gallo, *Italian Sacred Music*, p. 192. Fischer and Gallo's language is couched in terms of *modus*-notation.

above with respect to Gherardello's *Gloria* also apply, although the *semiminima* (♯) and the *sesquialtera minima* (♯) are now correctly differentiated in Rvat 1419. A telling confirmation of the scribe's concern for the re-notation into French style occurs in the last part of the *Benedictus* in Pn 568. As shown in Figure 5.3, the scribe of Pn 568 appears to have re-notated the passage through the use of coloration coupled with a mensuration sign.⁶⁰

Figure 5.3: Conclusion of *Benedictus* by Lorenzo da Firenze in Pn 568 and Rvat 1419 (S only).



Although it is uncertain whether the change to the *octonaria* division could have been inferred by a reader of Rvat 1419 (with the possibility of the scribal omission of the sign), the notation of the scribe of Pn 568 demonstrates his desire to convey an understood proportional relationship (*sesquitercia*), which undoubtedly existed in his exemplar as *octonaria* or *quaternaria dupla* in the S against *senaria imperfecta* in the T. It is possible that the scribe had a limited understanding of full red/void red *sesquitercia* notation practice in the music of the *ars subtilior* since *c.* 1380 and sought to emulate this device by writing void black *minime* governed by *tempus imperfectum*.

Nonetheless, Scribe B's use of French mensuration signs – even if some appear archaic in their use of multiple dots of prolation – coupled with other notational devices (such as coloration) demonstrates an ingenious adaptation of French concepts at the beginning of the fifteenth century to mid-fourteenth century Italian musical process. This is especially evident when the scribe is faced with the challenge of re-notating Italian sesquitercial relationships at the *minima* level into a form of French notation. The lengths to which the scribe of Pn 568 goes to re-notate these works,⁶¹ when such simple solutions existed in the Italian system, may indicate the level of his enculturation by French

⁶⁰ Johannes Wolf believed the void note forms in Lorenzo's *Benedictus* to be an example of the diverse manner of writing *semiminime*, in *Geschichte der Mensural-Notation*, vol. 1, p. 305. However, a closer analogy between full red *sesquitercia* notation in the early *ars subtilior* and these void forms appears more likely since Scribe B always uses the conventional form of the *semiminima* (♯) in the earlier sections of this work and other works which he copies, including Gherardello's *Gloria* described above.

⁶¹ Nádas, "The Transmission of Trecento Secular Polyphony", p. 323 notes that the scribe of these two works (among others) in the last fascicle, which he calls Scribe B, also modernises the secular repertoire which he copied into the earlier gatherings of Pn 568 by eliminating *semibreves caudate* and *puncti divisionis*. He also rewrites one-pitch ligatures as a single, larger note. It is notable that in Gherardello's *Intrando ad abitar* (ff.

notational practices. It is also possibly indicative of a cultural position evident in late *trecento* Florence whereby French composers (such as Guillelmus da Francia) and proponents of French techniques (such as Landini and Paolo Tenorista) played a role in promoting certain notational styles in circles which possibly included the scribes of Pn 568.

5.3. The early practical application of mensuration signs in French notation

At the beginning of this chapter, I suggested that the picture of theoretical exposition was more complex than indicated by most scholars of music theory of the fourteenth century. This assessment stems from the premise that theoretical tracts, which are often used today as proof of the existence of certain practices at the time of their writing, may in fact be accumulations of scribal additions and modifications reflective of a desire to contemporise and extend established traditions and authorities. In turning to the use of mensuration signs in the notation of musical sources, I will also adopt a similar critical approach in my assessment of their historical development.

The earliest surviving example of a *tempus* sign, as identified by F. Alberto Gallo,⁶² occurs in the musical additions to the *Roman de Fauvel* (Pn 146, f. 4r & ff. 10v-11r) where two strokes resembling *semibreves pause* indicate that the *tempus* should be read as imperfect in these works. However, in Pn 146, these signs appear to be the exception rather than the rule. Clearly, the practice resembles the previously-mentioned device codified early in *ars nova* theory. The compilation of the Pn 146 edition of the *Roman de Fauvel* between 1316-18⁶³ suggests that this device is perhaps the earliest mensuration sign subsequently codified by musical theorists.

In light of the currently received and apparently sound position that the contents of extant musical sources represent only part of the total (notated) musical repertoire of the fourteenth century, it is difficult to categorically determine the practical use of mensural signs in musical notation before *c.* 1400. It appears to have been an accepted fact among both scribes and theorists that it was not necessary to indicate the mensuration of a notated work even well into the early years of the fifteenth century when the use of signs is more

27v-28r) Scribe B mixes *signa divisionis* with French mensuration signs (⊙ and p.). The use of .n. in the place of ⊙ in the Fl 87 version of this work is discussed in Wolf, *Geschichte der Mensural-Notation*, p. 320.

⁶² Gallo, 'Die Notationslehre in 14. und 15. Jahrhundert', p. 287.

⁶³ Roesner *et al.*, *Le Roman de Fauvel in the edition of Mesire Chaillou de Pestain*, p. 49.

frequently observed in surviving sources from that period.⁶⁴ Ob 213 is representative of this late stage where mensuration signs are frequent but not universal. This manuscript was compiled in the 1420s and 1430s. Even in this period, it appears that mensuration was only extrinsically signified when absolutely necessary. The situation appears changed significantly by the 1440-1450s when one observes the almost universal use of mensuration signs at the beginning of each voice in a notated work.

Returning to the fourteenth century, the extant transmissions of the music of Guillaume de Machaut demonstrate with reasonable certainty that he never used mensuration signs in his works, even in the single case where a change of mensuration was required in his Rondeau 10, *Rose, liz, printemps*.⁶⁵ Mensuration signs do appear in two works by Machaut in the Machaut MS E.⁶⁶ However, the signs would appear to be later scribal additions to this source which itself was compiled well after the composer's death. Machaut E belonged to the Duke of Berry and appears to have been compiled *circa* 1390 from a tradition slightly outside that of the several earlier manuscripts, which Machaut himself appears to have had a significant role in organising and supervising.⁶⁷ In one work, *Biaute qui toutes autres*, the alternation of O and C in the *T* anticipates the use of mensuration signs in the process of substitute coloration as described in the previous chapter. In all other sources of the former work, passages affected by the *tempus imperfectum* sign in Machaut E are written instead in full red or void coloration.⁶⁸

⁶⁴ At the end of his gloss on Johannes de Muris' *Libellus*, Prosdocius de Beldemandis provides an *annexum* detailing guidelines for the 'recognition of the mensuration of songs' (*cognoscendi mensuras cantuum*). These deal mostly with *puncti* and coloration but also recommend trial and error by singing the work through and observing the resulting counterpoint, *vid.* Gallo, *Prosdocimi de Beldemandi Opera I: Expositiones*, annexum, sent. 1-17.

⁶⁵ Richard Hoppin, 'Notational licenses of Guillaume de Machaut', *Musica Disciplina*, vol. 14, 1960, pp. 20-23.

⁶⁶ Paris, Bibliothèque Nationale, fonds fr. 9221. There is a *tempus perfectum* (*prolationis minoris*) sign at the beginning of fol. 150r, *De triste cuer faire joyeusement - Quant vrais amans aime amoureusement - Certes, je di et s'en quier jugement*, there is an exchange of O and C signs in the *T* of the ballade *Biaute qui toutes autre pere envers moy*, f. 152v. A facsimile of the latter occurs in Apel, *Notation of Polyphonic Music*, p. 359. Other surviving musical sources of this work include London: New York: Wildenstein Collection, fol. 298 (2/2) (Vogüe MS); Bibliothèque Nationale, fonds français 1584 (= Machaut A), fol. 455v; Bibliothèque Nationale, fonds français 1585 (= Machaut B), fol. 296r; Bibliothèque Nationale, fonds français 1586 (=Machaut C), fol. 159r; Bibliothèque Nationale, fonds français 22546 (=Machaut G), fol. 135r; Utrecht, Universiteitsbibliotheek 1846 (shelfmark 6 E 37), fol. 29r.

⁶⁷ Bent, 'The Machaut Manuscripts Vg, B and E', pp. 61, 73; Earp, 'Machaut's role in the production of manuscripts of his works', pp. 461-503.

⁶⁸ Apel, *Notation of Polyphonic Music*, p. 356.

Another surviving example using mensuration signs before 1400 occurs in the Codex Ivrea, a so-called French source "made in Italy".⁶⁹ In this source (ff. 23v-24r), the motet *Douce playsance/Garison selon nature/Neuma quinti toni*, which is possibly by Philippe de Vitry, employs the signs O and C in regular alternation in all voices, although the signs are redundant in the *T* as coloration is also used in passages in *tempus imperfectum*. Theoretical writings from the fourteenth century cite this motet as an example of both the use of different *tempora* in a single work and the use of coloration in a *T*. However, the fourteenth century theoretical tradition concerning the use of *tempora* in *Douce playsance* is bipartite in that one tradition cites it merely as an example of the use of different *tempora* (through coloration) in a single work without explicit reference to mensuration signs,⁷⁰ while another tradition discusses this motet in relation to the use of mensuration signs.⁷¹ It is possible that mensuration signs were not required in the upper voices as it could be inferred from the *T*.

However, a curious observation arises from the consideration of prolation in *Douce playsance*, which is, in fact, always major. The signs in Codex Ivrea lack internal dots (three or one) of any kind. That the signs in this instance refer only to *tempora* recalls the somewhat earlier mensuration sign theory wherein signs indicate *tempus* only and prolation was determined through the intrinsic signification of note forms and groupings. The difficulty with this proposition lies not with its reality but with the uncertainty that is encountered if we considered the geographical currency of Codex Ivrea and theoretical tracts. However, as will be detailed below, evidence of similar usage in late works suggests that *tempus*-prolation signs were not universally accepted signs of mensuration even in the late fourteenth century.

⁶⁹ For a comprehensive study of manuscript Ivrea, Biblioteca capitolare 115 (RISM I-IV 115) see Karl Kügle, *The Manuscript Ivrea, Biblioteca Capitolare 115: Studies in the Transmission and Composition of Ars Nova Polyphony*, Ottawa, 1997; also Karl Kügle, 'Codex Ivrea, Bibl. cap. 115: A French Source 'made in Italy'', *Revista de Musicología*, vol. 13, 1990, pp. 527-61; Andrew Tomasello, 'Scribal design in the compilation of Ivrea MS 115', *Musica Disciplina*, vol. 42, 1988, pp. 73-100. Kügle argues that the main corpus of Codex Ivrea, which includes *Douce playsance*, was copied by two associated Savoyard clerics at Ivrea (in the Piedmont Region at entrance to the Valle d'Aosta) in the 1380s and 1390s (Kügle, *The Manuscript Ivrea*, p. 75).

⁷⁰ Rome, Biblioteca Apostolica Vaticana, Barberini lat. 307, f. 20r. Reaney *et al*, *Philippi de Vitriaco Ars Nova*, p. 27, 29; *cf. q.v* Anonymous, *Ars mensurandi motetos in ibid.*, p. 69.

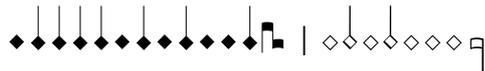
⁷¹ Paris, Bibliothèque Nationale, lat. 14741, f. 4r & 5r; *cf.* Rome, Biblioteca Apostolica Vaticana, Barberini lat. 307, f. 24r.

5.4. *The use of tempus mensuration signs in works in the ars subtilior style*

The *ars subtilior* sees the proliferation of mensuration signs in musical notation stemming from the style's concern for polymensuralism and proportionality. Notational process in this style was now firmly based in the French system. The Latin-texted ballade *Inclite flos orti gebenensis* by Mayhuet de Joan occurs in CH 564 (f. 41r) and MOe5.24 (f. 15r). The version in MOe5.24 is transmitted in full black notation throughout, employing only simple note forms and orthodox ligatures. The Ct is notated in the mensuration [3,2] throughout which is indicated by the sign \circ at its beginning. The signs \circ , \odot , and \ominus all occur in the S while \odot , \circ , \odot , and \ominus are found in the T. All signs are conventional in their meaning (*vid.* Table 5.1 above). There is *minima* equivalence between all mensurations.

The transmission of *Inclite flos orti gebenensis* found in CH 564 presents a fascinating system of notation through its variation of notational devices when compared to MOe5.24 (Vol. II, App. A, No. 48). The most notable visual difference between both transmissions is the use in CH 564 of full red note forms in conjunction with the mensuration signs \circ or \ominus to notate passages in minor prolation.⁷² Furthermore, passages in MOe5.24, whose major prolation is indicated by the presence of the dot in the appropriate mensuration sign, are written in CH 564 as black notes preceded by either \circ and \ominus without internal dots. Different *tempora* are also used so that the final phrase of the ballade in the S is written in MOe5.24 as \odot followed by black notes, while CH 564 has \circ followed by black notes. The fourth change in mensuration in CH 564 is avoided in MOe5.24 by the re-writing of rhythmic durations in the affected passage. The use of mensuration signs in both versions is summarised in Table 5.3.

⁷² Most mensural signs in CH 564 are drawn in red ink, a phenomenon which is inconsequential to their meaning. Several minor rhythmic variants are also found between transmissions of this work, such as the reversal of the rhythm in at S 1.1 from *brevis-semibrevis* to *semibrevis-brevis*, or vice versa. The lapsographical error at Ct 35.3-49.3 in CH 564 in conjunction with the variant reading at S 1.1 clearly indicates that both transmissions share no direct relationship with each other. It remains highly probable that both transmissions represent distinct branches in a hypothetical stemma.



*Itemcoloribus, subscriptionibus, pausis et signis perfectum distinguitur ab imperfecto et etiam cognoscitur.*⁷³

The implication that coloration often indicates minor prolation is used in the notation of *Inclite flos* as found in CH 564 through the assumption that major prolation is always indicated by black note forms.^{73a}

One obvious obstacle to the present hypothesis is that the Ct of *Inclite flos* in CH 564 must be realised in minor prolation, but it is notated in that MS in full black notation. However, since this voice continues in the same mensuration throughout, the intrinsic indications supplied by note groups and dots of addition may be deemed sufficiently rich in information not to warrant the use of red ink.

Also related to the present discussion is the use of the sign \circ before passages of red *breves* in the *Mot* of Johannes Alanus' motet *Sub Arturo pleb vallata/Fons citharizancium/In omnem terram* also found in CH 564 (item 111, ff. 70v-71r).⁷⁴ This device requires a string of red *breves* be sung imperfectly, indicating that the combination of the sign and coloration signifies [2,2] with *minima* equivalence to the mensuration [2,3] affecting all black notes in the work. In the same work, the mensuration sign \circ is absent in cases when the colorated passages consist of only red *semibreves*. Without the sign, a degree of ambiguity exists at a practical level in relation to the duration of red *breves*. They may be either perfect or imperfect. In the concordant reading of this motet in Bc 15 (ff. 225-226r; *Trip* fragment f. 342v), the passages in question are rewritten as C with void black *breves*. As such, the relationship between concordant readings in this regard parallels the observations regarding differences observed between the transmissions of *Inclite flos* in CH 564 and MOe5.24.

⁷³ "Likewise mode, time and prolation are also indicated by red or void notes and by black <notes>, when they are varied in any song. Thus if black, red or void longs are found in any song: black are of the perfect mode and red or void <longs> are of the imperfect mode, as here: <example>. Likewise black, red or void breves are found: black are of the perfect time and red or void <breves> are of imperfect time, as here: <example>; Likewise black semibreves are in major prolation, red or void <semibreves> are in minor <prolation>, as here <example>."; This reading represents *Recensio major A* as found in Berktold, *op. cit.*, pp. 48-51 (Chap. 6, sent. 5-9).

^{73a} Concerning the use of mensuration signs and coloration in the CH 564-transmission of *Inclite flos*, Anne Stone concludes in her 'A singer at the fountain', p. 382, that coloration is misused in conjunction with eccentric mensurations signs to contribute to the visual appearance of the work. An alternative view is that the notation is in fact correct: a position which is considered here.

⁷⁴ Transnotation in Günther, *The Motets of the Manuscripts Chantilly Musée Condé 564 (olim 1047) and Modena, Biblioteca estense α.M.5.24 (olim lat 568)*, pp. 49-52.

Rather than conclude that the sign \circ is erroneous in CH 564,⁷⁵ its presence should be regarded as a valid indication of mensuration within a particular context affecting the CH 564-transmission of the work.

The use of \circ in CH 564 with red coloration as opposed to simply C in MOe5.24 and the later Bc 15 to indicate [2,2] also warrants discussion. Musical theorists from this period usually associate \circ with the *sesquitercia* proportion at the *minima* level.⁷⁶ However, other theorists and musical practice suggest that there was an interchangeability of C and \circ at the end of the fourteenth century. Written in 1411, Johannes Ciconia's *De proportionibus* contains a chapter which not only supports the equivalence of these two signs, but which also strengthens the central hypothesis of this present chapter by suggesting a multitude of notational devices to indicate identical mensurations. In full, the passages reads:

*Auctores diversi, scilicet precipue Magister Francho de Colonia prothonotarius, Johannes de Muris, et Marchetus de Padua, sic ordinaverunt cifras et signa pertinentes ad praticam musice mensurate, videlicet in modis, temporis, et prolationibus, ut hic habetur. Et primo ad tale signum: \square cognoscitur esse modi perfecti, vel sic: |; aut sic: 3. Item ad tale signum: \square cognoscitur esse modi imperfecti, vel sic: |; aut sic: 2. Item ad tale signum: \odot cognoscitur esse temporis perfecti maioris, vel sic: \odot , aut sic: $\frac{3}{3}$. Item ad tale signum: \circ cognoscitur esse temporis perfecti minoris, vel sic: $\frac{2}{3}$. Item ad tale signum: \odot cognoscitur esse temporis imperfecti maioris, vel sic: \odot aut sic: $\frac{3}{2}$. Item ad tale signum: C cognoscitur esse temporis imperfecti minoris, vel sic: \circ , aut sic: $\frac{2}{2}$. Et nota quod nos debemus semper concordare cum proportionibus suprascriptis cifras et signa suprascripta. Et hec de proportionibus, signis, cifris, et vocabulis antiquis sufficiant, ad laudem Yhesu Christi et gloriose virginis Marie eius matris. Amen. Explicit liber de proportionibus musice Johannis de Ciconiis, canonici paduani, in orbe famosissimi musici, in existentia conditus in civitate patavina, anno Domini 1411.*⁷⁷

⁷⁵ Günther, *The Motets of the Manuscripts Chantilly Musée Condé 564 (olim 1047) and Modena, Biblioteca estense α.M.5.24 (olim lat 568)*, p. liv.

⁷⁶ Prosdocimus notes the regular use of this sign among moderns, although he prefers the use of proportional signs to convey the proportional relationship more clearly, *vid.* Gallo, *Prosdocimi de Beldemandi Opera 1: Expositiones*, chap. LXI, sent 31-34.

⁷⁷ "Diverse authors, especially the first-notator Franco of Cologne, Johannes de Muris and Marchettus de Padua, ordered ciphers and signs pertinent to the practice of measured music, namely in mode, time and prolation, as is seen here: and firstly at such a sign <rectangle with three strokes>, or thus: <line with three dots>, or thus: 3, perfect mode <lit. being of perfect mode, etc.> is understood. Likewise at such a sign: <rectangle with two strokes> or thus: <line with two dots> or thus: 2, imperfect mode is understood. Likewise at such a sign <circle with three dots> or thus 3/3, perfect major time is understood; Likewise, at such a sign <circle>, or thus 2/3, perfect minor time is understood. Likewise at such a sign <C with three dots>, or thus: <C with one dot>, or thus 3/2 imperfect major time is understood; likewise at such a sign C, or thus: <reversed C>, or thus 2/2, imperfect minor time is understood. And note that we ought always make ciphers and signs written above agree with proportions written above. And this suffices concerning proportions, signs, ciphers and old terms, for the praise of Jesus Christ and his mother the glorious Virgin Mary. Amen. Thus finishes the book concerning proportions in music by Johannes Ciconia, canon of Padua, most famous

The use of red coloration in CH 564 with the mensuration sign \circ appears to reinforce the concept of imperfection.

Anne Stone has already drawn attention to the correspondence between Ciconia's alternative [2,2] sign in his *De proportionibus* and the use of mensural signs in a particular transmission of a work ascribed elsewhere to him.⁷⁸ Johannes Ciconia's *Sus une fontayne* appears to be an intertextual homage (or at least nod) to the master composer of the later fourteenth century Philipoctus de Caserta.⁷⁹ As already noted above, the work survives in two sources MOe5.24 (f. 27r) and Ob 229 (f. Dv). Besides the several variants between both transmissions of *Sus une fontayne*, these transmissions also differ from one another in their notational process particularly in relation to the use of mensural signs. As will be detailed further, the MOe5.24 version transmits a relatively orthodox set of notational conventions, while Ob 229 contains less usual devices that demonstrate some similarities with *Inclite flos orti gebenensis*.

Both versions of *Sus une fontayne* are notated in black note shapes throughout. In MOe5.24, the signs \odot , \circ , \circ are used to indicate [2,3], [2,2] and [3,2] respectively. Additionally, the sign \circ indicates in this source a *sesquitercia* proportion at the *minima* level. Ob 229, however, presents a different set of mensural signs in corresponding locations. Meaning of the sign \circ remains unchanged ([3,2]), but [2,2] is indicated by \circ , [2,3] by \circ and the *sesquitercia* proportion at the *minima* level by the numeral 3. The correspondence of these relationships is shown in Table 5.4.

musician in the world, completed in the city of Padua, in the year of our Lord, 1411.”; Oliver B. Ellsworth, (ed.), *Johannes Ciconia: Nova Musica and De Proportionibus*, Greek and Latin Music Theory 9, Lincoln and London, 1993, pp. 440-43.

⁷⁸ Stone, ‘A singer at the fountain’, p. 385. *Q.v eadem*, “Writing Rhythm in Late Medieval Italy”, pp. 119-120. Just as in the case of the CH 564-transmission of *Inclite flos*, my reading of the use of mensuration signs in the Ob 229-transmission of *Sus une fontayne* contrasts with that found in Stone’s ‘A singer at the fountain’. While the following paragraphs do not engage the work at the level of musico-literary narrative strategies as Stone does, I share the view that the use of mensuration signs in the Ob 229-transmission of *Sus une fontayne* should be taken seriously (*ibid.*, p. 369). The issue of diverse practices which lies at the heart of this present chapter, however, throws into question Stone’s assertion that the notational practices in the MOe5.24-transmission of *Sus une fontayne* (and *Inclite flos*) are normative. At the time and place MOe5.24 was copied, such practices may have been considered “normative”. However, as I have already demonstrated through my survey of notational theory and practice, the notion of normative practices in fourteenth-century music is best discarded in favour of diversity, both conjunct and disjunct.

⁷⁹ On studies examining citation and intertextual relationships this and related works *vid. supra*, Chapter 2, p. 50, fn. 81.

Table 5.4: A comparison of mensuration signs in two transmissions of *Sus une fontayne*.

mensuration	MOe5.24	Ob 229
[3,2]	○	○
[2,3]	◉	○
[2,2]	○	○
<i>Proportio sesquitercia</i>	○	3

The Ob 229 transmission of *Sus une fontayne* appears to avoid or be unaware of dots of prolation in mensuration signs. The use of coloration to define prolation in the CH 564 transmission of *Inclite flos orti gebenensis*, is not found in the Ob 229 transmission of *Sus une fontayne*, however, once again the intrinsic indications of prolation by means of note groupings and *puncti* may have been deemed sufficient information for the determination of prolation. Similarities also exist in the use of the reversed C in *Sus une fontayne* of Ob 229 and *Inclite flos orti gebenensis* in CH 564, despite the lack of coloration in Ob 229. The use of the numeral 3 to indicate *proportio sesquitercia* in Ob 229 (rather than the more usual meaning of *sesquialtera*) may be explained as an extension of proportional nomenclature, that is *sesquitercia* means “one more than three”.

Other works from the repertoire also demonstrate less conventional uses of mensuration signs. The identical use of C with black note forms to indicate [2,3] is found in Trebor's *Quant joyne cuer en may est amoureux* (CH 564, f. 31r; *vid.* Vol. II, App. A, No. 49). In the refrain of this work's uppermost voice, the *sesquialtera* effect of ○ is cancelled by C. The subsequent passage must be realised in [2,3]. Likewise, both transmissions of Philipoctus de Caserta's *Par le grant senz d'Adriane* (CH 564, f. 37v; Pn 568, 125v-126r⁸⁰) see the use of the sign C to indicate [2,3] (*vid.* Vol. II, App. A, No. 21). Red coloration (void in Pn 568) serves as an intrinsic indication of the prolation of black note forms through obvious ternary groupings that rely on imperfect *semibreves*. Black *semibreves* must therefore

⁸⁰ According to Nadas, “The Transmission of trecento Secular Polyphony”, pp. 234, 286, Scribe D, who was responsible for the addition of gatherings 6 and 8 to Pn 568, also copied *Par les grant senz* into this manuscript's 13th gathering which hitherto contained works mostly added by Scribe B. On the dating of Scribe D's activity in Pn 568, see above. The inclusion of *Par les grant senz* demonstrates Scribe D's interest in *avant garde* techniques also present in notationally advanced compositions of Paolo Tenorista in gathering 8, especially *Amor da po che tu ti meravigli*. Another work by Paolo, *Era Venus*, also notated by Scribe D sees the use of a *modus-tempus* sign of ○ above 3 to indicate *modus perfectum, tempus imperfectum minoris*, *vid.* Wolf, *Geschichte der Mensural-Notation*, p. 321.

be perfect or of the major prolation. Similarities between these last two works and *Inclite flos orti gebenensis* and *Sus une fontayne*, however, do not extend to the use of the reversed C mensuration sign. In *Quant joyne cuer en may est amoureux* and *Par le grant senz d'Adriane* this sign always indicates a *sesquitercia* proportion at the *minima* level (or in respect to major prolation).

As such, the use of mensuration signs in the aforementioned works represents an extension of one facet of *ars nova* notational techniques. There is sufficient evidence from *ars nova* theory and late copies of *ars nova* repertoire to suggest that the O and C (or \odot) mensuration signs sometimes indicated *tempus* only and that dots of prolation within signs were not always used or deemed necessary. It is unlikely that these practices are representative of mainstream, northern French notational practices. Rather, if one considers what is known about the composers of the works described above and the relationship of their text to historical events, it might be concluded that the practices described above are indicative of notational tendencies towards the end of the fourteenth century.

At a superficial level, the text of *Par le grant senz d'Adriane* appears as conventional Ancient Greek mythological subjects combined with themes from *l'amour courtois*.⁸¹ As realised by literary scholars at the beginning of the twentieth century (but undoubtedly also

⁸¹ The text and its translation is as follows:

<p><i>Par le grant senz d'Adriane le sage, Fu Theseüs gardes de periller Quant a son tour li convient le voyage En la maison Dedalus essayer.</i></p> <p>5 <i>Puis la trahi et la vost essillier Fortrait li a un iouel de grant pris Qu'avoir ne puet sanz O couvert de lis.</i></p>	<p>By the good sense of Ariadne the wise Theseus was protected from peril When in his turn he travels to attempt Daedalus' labyrinth. Then he betrayed her and wished to exile her Snatching for himself a jewel of great worth That none can have without O covered by the lily.</p>
<p><i>Adriane est si noble de linage Et si puissant c'on la puet reconter.</i></p> <p>10 <i>Le iouel ot de son propre heritage Que Theseüs s'efforsa d'usurper Et pour l'avoir le tienent en grant dangier Se secours n'a, se iouel est peris Qu'avoir ne puet sanz O couvert de lis.</i></p>	<p>Ariadne is of such a noble line And so powerful that one can recount it. The jewel was her true inheritance that Theseüs tried hard to usurp and to have it, place it in great danger. There is no help, the jewel is lost That none can have without O covered by the lily.</p>
<p>15 <i>Mais le lis est de si tres haut parage, Bel a veoir, plaisant a mainer Riche on pouvoir, de si parfait courage Qu'a la dame puet sa vertu envier Roulant ne Hector ne li faut souhaidier</i></p> <p>20 <i>Pour secourir le iouel de grant pris, Qu'avoir ne puet sanz O couvert de lis.</i></p>	<p>But the lily is of such high extraction, Handsome to see, pleasant in bearing, Rich in power of such perfect courage That he can offer his virtue to the lady. Neither Roland nor Hector need she wish for to protect the jewel of great worth That none can have without O covered by the lily.</p>

obvious to the composer's contemporaneous audience), the text of Philipoctus' *Par le grant senz d'Adriane* refers to events in the Kingdom of Naples.⁸² On 1st June 1381, Charles Durazzo (=Theseus) usurped the throne from his former guardian Queen Johanna (=Ariadne) of Naples.⁸³ The Kingdom of Naples or its throne is referred to in the text as *le iouel* ("the jewel"). This seizure of power from its pro-Clementine ruler was openly encouraged by the Roman Pope Urban VI (1378-89). However, Avignonese Pope Clement VII (1378-94) countered by condoning a campaign by Louis I, Duke of Anjou, to recover his title. Louis' claim to the throne of Naples was the result of previous machinations by Clement VII whereby he convinced Johanna to continue the Angevin rule of Naples and to name Louis her heir in 1380. Hence the lily most appropriately represents Louis, prince of the House of French Valois (whose arms bore the *fleur-de-lys*). As Nigel Wilkins states, this is made plain by the solution of the puzzle in the refrain of the ballade: "O covering the LIS (lily)" = LOIS, which is the common spelling of Louis in the fourteenth century.⁸⁴

In light of these references to historical events, *Par le grant senz d'Adriane* could only have been written before the murder of Queen Johanna on 12 May, 1382 although this news did not reach Louis until September when he had already embarked upon his Italian campaign. The earliest possible date for the chanson's composition is likely January 1382 when Louis began preparing for his campaign in Avignon to reclaim the Kingdom of Naples for himself and Rome for Clement VII.⁸⁵ Unfortunately, there is little internal indication of where this work might have been composed, although it is curious that the work focuses on the politics of the Kingdom of Naples rather than the reclamation of Rome. However, it may simply be a case of the composer's own interest in the fate of the Kingdom in which his town of origin, Caserta, laid.

The text of *Inclite flos orti gebenensis* also contains references to persons and events in the late fourteenth century which intersect those alluded to in *Par le grant senz d'Adriane*.

⁸² Delisle, *Institut de France, Le Musée Condé. Le Cabinet des livres. Manuscrits II*, p. 280.

⁸³ Urban VI proclaimed Durazzo King of Naples on 1st June, however, his forces only entered Naples on 16th July.

⁸⁴ Wilkins, 'Some notes on Philipoctus de Caserta (c.1360?-1435)', pp. 82-99. Additional meaning may be read into the text of this ballade. The orthography of *Adriane* as opposed to *Ariadne* may provide further clues to the text. As such *Adriane* bears a striking resemblance to the name of the kingdom created by Clement for Louis I d'Anjou, *Adria*. Reference to *Adriane* in the ballade may therefore contain a double meaning. The first line may also mean "by the great sense (of the imminent formation) of the kingdom of *Adria*", while the second line can be read as an attempt to legitimise Clement's creation of the Kingdom of *Adria*.

⁸⁵ Plumley, 'Citation and allusion in the late *ars nova*: the case of *Esperance* and the *En attendant* songs', p. 355, fn. 109.

There is little doubt that *Inclite flos orti gebenensis* refers to Avignonese Pope Clement VII, formerly Robert of Geneva.⁸⁶ The second strophe of the ballade refers to allegiances Clement had gained shortly after his taking of office in 1378. The favour of the *Ortus hispanensis* ("Spanish garden" or "Spanish born") was that of the Kingdom of Castile which was granted in May, 1381. The *virgultus Gallorum* ("tree of the French") had supported Clement since 1379.⁸⁷ The last stanza is unfortunately too corrupt to provide any specific additional meaning, although some may be salvaged from the text.⁸⁸ As such, the first two lines describe one who is "more just than the just" (*iustis hic iustior*) acting on Clement's behalf (*pro te*). Following Rosenberg's suggestion, Andrew Tomasello has argued that *celiferus encis*, in the first line of strophe three, may refer to the Mont Cénis found in the western

⁸⁶ The subject of the ballade is referred to as *Inclite flos orti gebenensis* ("O renowned flower of Geneva's garden"). *Ortus* is read as *hortus* with the understanding that the orthography in CH 564 is indicative of a common trait among scribes whose mother-tongue is a Romance language and "h" is largely silent. There is some ambiguity, however, at the beginning of the second strophe where *ortus* may mean 'born' (from *orior*, *oriri*, *ortus*). However, retaining the horticultural theme gives greater integrity to the ballade overall. If there is any further doubt concerning the identity of the ballade's subject, the tenor voice label in CH 564 is followed by the rubric *pro papa Clement*. ("For the pope Clement").

⁸⁷ Tomasello, *Music and Ritual at Papal Avignon 1309-1403*, p. 41; cf. Günther, 'Zur Biographie einiger Komponisten der Ars Subtilior', pp. 172-199. There are some indications that the cardinals had in principle support from the Kings of France and Castile before the election of Robert of Geneva at Fondi 20th September, 1378: vid. Walter Ullman, *The Origins of the Great Schism*, s.l., 1967, p. 55. This point has also been recently re-articulated by Di Bacco and Nádas, 'The Papal Chapels and Italian Sources of Polyphony during the Great Schism', p. 47, fn. 7.

⁸⁸ The manuscript reading of the text in CH 564 (2nd and 3rd strophes appear only in this MS) is as follows, with problematic words in bold type and punctuation as found in MS, with a plausible translation:

<p><i>Inclite flos orti gebenensis</i> <i>cuius odor balssamis dulcior</i> <i>prestantibus roribus immensis</i> <i>orbem reple <but replet MOe5.24> ceteris altior</i> 5 <i>salveque iocundare</i> <i>nec ad terram velit <but velis MOe5.24> declinare</i> <i>propter paucum ventum. Nam dicitur</i> <i>In adversis virtus perficitur.</i></p>	<p>O renowned flower of Geneva's garden whose fragrance is sweeter than balsam, with outstanding, infinite perfume it fills the world, loftier than the rest. Hail and rejoice! Do not turn your sails for land on account of little wind. For it is said that "in adversities virtue is perfected."</p>
<p>10 <i>Tibi fauet ortus hispanensis</i> <i>gallorumque uirgultus carior.</i> <i>Ortulanum producens extensis</i> <i>brachiis qui viredis pocior.</i> <i>Prorutis observare <pro ruinis CH 564></i> <i>te satagit. idcirco letare</i> 15 <i>nam te si quis turbare uicitur <turbat, evincitur Rosenberg></i> <i>In adversis virtus perficitur.</i></p>	<p>To you, the garden of Spain is favourable And the tree of France dearer, Producing a garden of outstretched Branches which, more potent than the overthrown weeds, is enough for you to see. Therefore be joyful For it conquers whoever disturbs you: "In adversities virtue is perfected."</p>
<p><i>Pro te floris <flores Rosenberg> celciferus encis</i> <i>ferit namque iustis hic iustior.</i> <i>veridicis certat pro te foncis</i> 20 <i>quo favente quisque velociter.</i> <i>quo (or suo?) ductus iubare</i> <i>se prosternat tis <sic> pedibus</i> <i>quare si leteris sapit quod subditur.</i> <i>In advercis <sic> virtus perficitur.</i></p>	<p>For you, this heaven bearing sword of the flower therefore smites, more just than the just. He contends for you with true words of the fountain, Each man, by his favour, is swifter lead by him to do his bidding, he prostrates himself at your feet For, if you rejoice, he knows what was replaced: In adversities virtue is perfected.</p>

Alps, in what was formerly the Kingdom of Savoy. Tomasello has further argued that, with emendation to the reading of the third line of this strophe, the subject of the third strophe might be Amadeus VI, the Green Count of Savoy, who participated with Louis I d'Anjou in his short-lived campaign in central Italy.⁸⁹ Amadeus also met his death in Italy in 1383.⁹⁰

Rosenberg's and Tomasello's readings are, however, purely conjectural.⁹¹ While it can be said that the third strophe refers to an advocate of Clement, no certain indications of this person's identity can be gleaned from the text in its present state. It is possible that the text refers to Louis I d'Anjou or Amadeus VI of Savoy whose joint campaign in Italy promised an end to the schism by removing Clement's opponents. However, the verb *certare* has both military and secular connotations. To struggle by means of *veredicti fontis* ("the fountain's truths") may indicate one who contends for Clement with rhetorical or poetic invective. The association of the fountain with poetic inspiration is a phenomenon well known to medieval scholarship. However, there is no statement that alludes to the recovery of the Kingdom of Naples or of Rome itself. Rather the text centres on the recognition of Clement's papacy and the persuasive agent who will bring it greater support. It is still therefore likely that *Inclite flos orti gebenensis* was written at the beginning of the Schism when Clement was securing alliances in France, the Iberian peninsula and parts of Italy.

⁸⁹ Tomasello, *Music and Ritual at Papal Avignon 1309-1403*, pp. 41-42. Tomasello advocates the reading of "For this mountain (or man) of the green spring, more just than the just, struggles on your behalf. By which favoring splendor, each, having been more quickly lead for you, prostrates himself at your feet.", *loc. cit.* Unfortunately this rendering as it stands is poor, omitting several aspects of the original, such as the first verb. The suggestion by Samuel N. Rosenberg, editor of the texts in Willi Apel's edition *French Secular Compositions of the Fourteenth Century*, Corpus Mensurabilis Musicae 53, s.l., 1970, vol. 3, p. LVI, that the third line of the third strophe may have originally read *viriditas certat pro te frondis* ("The green of the leafy bough fights for you") also supports Tomasello's reading. It is also possible that the original read *flores celifer Cineris / ferit* (i.e. (celifer-)us->con->cin, with first two steps as abbreviations), "heaven-bearer of Cénis <i.e. Mount Cénis> shall bear flowers."

⁹⁰ On the life and rule of Amadeus VI of Savoy *vid.* Eugene L. Cox, *The Green Count of Savoy: Amadeus and Transalpine Savoy in the Fourteenth Century*, Princeton, 1967. See especially *ibid.*, pp. 319-349 on his role in Anjou's Italian campaign and his death.

⁹¹ Another possible reading is *Pro te floris celsiferus ensis / Ferit namque iustis hic iustior. / Veredictis certat pro te fontis / Quo favente quisque velocior / Suo ductus iubare / Se prosternat tuis pedibus...* ("This heaven bearing sword of the flower therefore smites for you, more just than the just. It contends for you with true words of the fountain, by it favouring each man, who having been lead more swiftly by its bidding, prostrates himself at your feet.") [My translation.] The emendation of *encis->ensis* is supported by the last line where one finds *advercis* for *adversis*. The correction of *celciferus* to *celiferus* seems warranted as it seems to be a conflation of *celsus* (lofty)[or *celsitudo*="great"] and *celifer* (heaven-bearing). The shift of *veridicis* to *veredictis* or even *veridictis* (from *vere dicere* "to speak truthfully") is an equally appropriate response to this Gallicism (*cf. véridique*). There is, however, still a question over the lack of a direct object that one might expect to find after the first verb, *ferit*, which possibly indicates that meaning of the first line of this strophe is irrevocably lost. Rosenberg emended *ferit* to *fert* (he/she/it bears), which results in a shortening of the line to nine rather than ten syllables. Decasyllabic lines occur throughout this ballade on all other lines except the fifth of each strophe.

Additional data is supplied by biographical details of the composer of *Inclite flos orti gebenensis*. Based on the assumption that Mayhuet de Joan and Matheus de Sancto Johannes are synonymous, archival research has unearthed several cases of an individual with the latter name. A member of Louis I d'Anjou's chapel bears it in a supplication to Clement VII dated 17 November, 1378.⁹² The name Matheus de Sancto Johanne also occurs first among members of chapel of Clement VII in the *Introitus et Exitus* books of 30th October and 20th December, 1382.⁹³ Considering the connections of *Inclite flos orti gebenensis* to Clement, scholars have suggested that Matheus de Sancto Johanne, who was a chapel singer, can be identified as the composer of this work. The individuals in the employ of both Louis I d'Anjou and Clement are most likely the same person. Ursula Günther suggests that Matheus might have seized the opportunity to be transferred into the employment of Clement VII before the end of May 1382, when Louis d'Anjou departed Avignon after several months of preparations before setting out on his Italian expedition to recover the Kingdom of Naples.⁹⁴ At Avignon, Matheus appears to have remained in the employ of Clement until at least April 1386.⁹⁵ It is therefore possible that Matheus [=Mayhuet] wrote this work for celebrations before Louis' departure on his fateful expedition.⁹⁶

⁹² Hoppin and Clercx, 'Notes biographiques sur quelques musiciens français du XIV siècle', p. 76. This document also indicates Louis' early recognition of Clement.

⁹³ Günther, 'Zur Biographie einiger Komponisten der Ars Subtilior', p. 180; cf. Tomasello, *Music and Ritual at Papal Avignon 1309-1403*, pp. 252-3. The supplication does mention that Matheus had served Clement previously, but in what capacity is unknown.

⁹⁴ Günther, 'Zur Biographie einiger Komponisten der Ars Subtilior', p. 183.

⁹⁵ That Matheus was dead by 12th July 1391 is indicated by the conferral of the chaplaincy of Beaufort (Cambrai), previously reserved by Matheus, to Johannes Vittrarii on that date (Tomasello, *loc. cit.*). The early career of Matheus is discussed by Andrew Wathey, 'The Peace of 1360-69 and Anglo-French musical relations', pp. 144-150. Wathey equates a "Matheu Seintjon", who is named in a request made on 13 May 1368 for safe-conducts for certain members of the household chapel of Queen Philippa (queen of Edward III) to leave England for France (*ibid.*, pp. 144-45, edition of document on p. 161), to Matheus de Sancto Johanne. Wathey also states that Matheus de Sancto Johanne "very likely joined the Duke of Anjou's expedition to Rodez and the Rouergue in 1377; he was probably also with the duke's chapel at Avignon in 1380" (*ibid.*, pp. 147-8). He dismisses, however, Günther's suggestion that Matheus was also a clerk to the Duke of Orléans due to the confusion made in the edition to which Günther referred between Louis de Orléans and his son Charles. Wathey speculates that Matheus' English employment may be due to the fact that his place of origin (Thérouanne) now lay in English territory gained in the Treaty of Brétigny (1360). However, it appears that Matheus may have made his way to England in the employ of Enguerrand de Coucy (*vid.* Di Bacco and Nádas, 'The papal chapels and Italian sources of polyphony during the Great Schism', p. 46-47, fn 7). As suggested by Wathey, this association with England strengthens the case for the attribution of the work *Are post libamina* by Mayshuet in London, British Library, Additional 57950 (olim Old Hall, Library of St. Edmund's College) to Matheus de Sancto Johanne. *Q.v.* Andrew Wathey, 'Matheus de Sancto Johanne', in *The New Grove Dictionary of Music and Musicians*, 2nd edn, ed. S. Sadie, London, 2001, vol. 16, pp. 120-1.

⁹⁶ There is a "Mathieu du monastère Saint Jehan" found in 1363 as a chaplain in the service of Queen Johanna of Naples. Hoppin and Clercx, *loc. cit.*, argue that this individual might have passed into Louis I

It seems, therefore that both *Inclite flos orti gebenensis* and *Par le grant senz d'Adriane* were composed within the first few years of the Schism. Both works demonstrate connections with Clementine politics in this period and both may be connected to the Angevin aspirations in central Italy. Unfortunately, the text of each work lacks any indication of the geographical situation in which these works would have been composed. However, the central role in 1382 of Avignon as Louis d'Anjou's spring-board into Italy and the apparent transferral of Matheus de Sancto Johanne from the employ of Anjou to Clement in that same year, strongly suggests that *Inclite flos orti gebenensis* was written at Avignon, either to impress his future patron or advocate his departing prince.

The presence of Philipoctus de Caserta at Avignon is by no means certain if at all likely. Another work also attributed to him, *Par les bons Gedeon et Sanson*, advocates *le souverayn pape s'appelle Clement*. However, this need not indicate that Philipoctus was a servant of Clement, but could indicate he was employed in the court of a Clementine adherent. Genievre Thibault suggested in 1969 that another work ascribed to Philipoctus, *En attendant souffrir m'estuet* hinted at relations with the court of Bernabò Visconti (†1385) through its use of the latter's motto (*souffrir m'estuet*).⁹⁷ Although not strictly Clementine, the Visconti demonstrated a preference for doctrinal ambiguity when it suited their political ends. Reinhard Strohm used the association of *En attendant souffrir m'estuet* to argue the hypothesis that Philipoctus was in the service of the Visconti at Milan,⁹⁸ and that *Par le grant senz d'Adriane* may have been written during Anjou's visit to Milan in 1382 en route to central Italy.⁹⁹ Recently, in her study detailing some aspects of intertextuality in the works of the *ars subtilior*, Yolanda Plumley has argued against the Visconti hypothesis by suggesting that it would be unlikely that a musician in the employ of the Visconti would have written a work with such a staunch political position as *Par les bons Gedeon et Sanson*.¹⁰⁰ Plumley then repropose that Philipoctus "clearly...was in the service of someone from the Avignon camp" and, based on a complex nexus of intertexts, he can be situated in a circle of composers

d'Anjou's service upon his inheritance of the Kingdom of Naples. Günther ('Zur Biographie einiger Komponisten der Ars Subtilior', pp. 183-4) has observed, however, that since Matheus de Sancto Johanne is already in the service of Louis in 1379, as indicated by the supplication to Clement, and that Anjou's adoption was only finalised in 1380, it is unlikely that the monk of Naples is Matheus de Sancto Johanne. Cf. Wathey, 'The Peace of 1360-69 and Anglo-French musical relations', p. 148.

⁹⁷ Thibault, 'Emblèmes et devises des Visconti dans les oeuvres musicales du trecento', p. 152.

⁹⁸ Strohm, 'Filippotto da Caserta, ovvero i francesi in Lombardia', p. 69.

⁹⁹ Strohm, *The Rise of European Music, 1380-1500*, p. 52.

¹⁰⁰ Plumley, 'Citation and allusion in the late *ars nova*: the case of *Esperance* and the *En attendant* songs', p. 356.

including Matheus de Sancto Johanne, Senleches, Hasprois and Johannes de Alte Curie. She suggests that one of the Neapolitans at Avignon (such as Antonio de la Ratta, count of Caserta and Anjou's counsellor in April 1382), Clement or one of the cardinals at Avignon may have been Philipoctus' employer. The former suggestion is particularly attractive considering the aforementioned concern in this text for Neapolitan politics rather than the reclamation of Rome.

It is tempting to conclude from the similar idiosyncrasies in the use of mensuration signs in *Inclite flos orti gebenensis* and *Par le grant senz d'Adriane* that these notational traits are indicative of a transalpine school of notation. However, Trebor's *Quant joyne cuer en may est amoureux*, previously mentioned for some similarities to *Par le grant senz d'Adriane*, appears to describe the colours in the arms of King John I of Aragón (1350-1396).¹⁰¹ Likewise, Trebor's ballade *En seumeillant m'a vint une vesion* (CH 564, f. 21v) refers to John I of Aragón's expedition to Sardinia in 1388-9,¹⁰² while his *Passerose de beaute* (CH 564, f. 21r), which contains intertextual relationships with Eustache Deschamps' ballade dedicated to her mother Maria of Bar, appears to refer to Yolande of Bar after her marriage to John I of Aragón in 1380.¹⁰³ Two other compositions by Trebor, *Se July Cesar, Rolant et Artus* (CH 564, f. 43r) and *Se Alixandre et Hector* (CH 564, f. 30r),¹⁰⁴ contain references to the rulers of Foix (respectively Gaston III and Mathieu I). However, the last four works avoid any type of mensural signs and may therefore only be used as an indication of the approximate period in which Trebor was active as a composer.

If the use of mensural signs in *Quant joyne cuer en may est amoureux* is reflective of earlier practices, possibly those of its composer, it suggests a more general geographic extent for those same practices evident in works from the 1380s. It is arguable that the use of mensural signs described above occupy one strata in a socio-culturally based practice among particularly French, or French enculturated, musicians whose notational process and musical works have an international scope. This is not to say that these practices are exclusive, but

¹⁰¹ Reaney, 'The Manuscript Chantilly, Musée Condé', p. 78; Willi Apel thought the reference was to Charles II of Navarre, in *French Secular Music of the Late Fourteenth Century*, p. 2b; While Reaney points out that the colours described are those of the house of Aragón, Hirshberg suggests that the line *roy puissant viennent de lointain paiz* may also refer to John's Sardinian expedition, in Hirshberg, "The Music of the Late Fourteenth Century", p. 276. cf. Gómez, 'La musique a la maison royale de Navarre a fin du moyen-âge et le chantre Johan Robert', p. 139.

¹⁰² Hoppin and Clercx, 'Notes biographiques sur quelques musiciens français du XIV siecle', p. 79.

¹⁰³ Gómez, 'La musique a la maison royale de Navarre a fin du moyen-âge et le chantre Johan Robert ', p. 145.

rather they represent one movement within the multiple notational practices evident within this period.

5.5. Proportional uses of mensuration signs in the ars subtilior

The most common proportional mensuration sign during this period was \circ . This usage is separate to its use as an alternative sign of [2,2] described in the previous section. The question arises as to how musicians and scribes conceptualised these signs. In his discussion of this sign in 1404, it seems that Prosdocimus de Beldemandis considered the sign to be an indicator of proportional diminution when he wrote that, while he cannot see any mathematical reason why it should be so, the sign \circ “diminuit ad sesquiterciam”.¹⁰⁵ It is not immediately obvious to which level of mensuration this proportion should be applied. It is clear from another passage in the same chapter of the *Expositiones* that Prosdocimus considers \circ to be another sign for indicating *fractio* (=proportion).¹⁰⁶ Immediately prior to this statement, Prosdocimus also specifies that in the case of Indo-Arabic fractions, *fractiones* are reckoned at the *minima* level. It seems likely, therefore, that the *sesquitercia* proportion of \circ is described relative to the *minima*. There is little in Prosdocimus’ statement to suggest that the sign was conceived (at least for him) in terms of mensuration, so the assumption that the sign in the *ars subtilior* indicates [2,2] *diminutum per medium* (2:1),¹⁰⁷ that is $\odot \blacksquare = \circ \blacksquare = \circ \blacksquare \blacksquare$, is fallacious. However, it is clear from the verb *diminuere* that Prosdocimus considers this a process by which the durations of note values are reduced. While this assessment from a theoretical perspective is borne out for the most part by practice, there are, however, some indications that the meaning of this sign changes according to contextual determinants.

¹⁰⁴ Günther, ‘Eine Ballade auf Mathieu de Foix’, pp. 69-81. Cf. Gordon K. Greene, ‘Trebor’, in *The New Grove Dictionary of Music and Musicians*, ed. S. Sadie, London, 1980, vol. 19, p. 126.

¹⁰⁵ ‘Diminishes to the 4:3 proportion’; Gallo, *Prosdocimi de Beldemandi Opera 1: Expositiones*, Chap. LXI, sent. 34. The use by Prosdocimus of a proportional qualification with *diminuere* possibly betrays the view that, while not all diminution and augmentation is proportional, all proportions cause precise diminution or augmentation. It is, in my view, a matter of simple semantics: the verb *diminuere* and its participle *diminutum* without any further qualification can only indicate reduction of an imprecise nature.

¹⁰⁶ *...etiam fractio potest cognosci secundum aliquos per aliud signum, scilicet semicirculum transversum sive dextrum respicientem partem sinistram, ut hic: \circ* (“...according to some men proportion is also able to be known by other signs, namely the reversed semicircle or with the right part facing left, as here...”); Gallo, *Prosdocimi de Beldemandi Opera 1: Expositiones*, Chap. LXI, sent. 31.

¹⁰⁷ Apel, *Notation of Polyphonic Music*, p. 418; Anne Stone, “Writing Rhythm in Late Medieval Italy”, p. 73.

In the three principal sources of the *ars subtilior*, the sign \circ occurs most commonly in [2,3].¹⁰⁸ In all cases, there results a *sesquitercia* proportion at the *minima* level (and a duple proportion of the imperfect *semibrevis* to the perfect *semibrevis*). The only exceptions occur in *Puisque ame sui doucement* (Tn J.II.9, f. 107r)¹⁰⁹ and *Je prens d'amour noriture* (Tn J.II.9, f. 145r)¹¹⁰, where canons specify them as indicators of the proportions of 3:2 and 5:2 at the *minima* respectively. The same *sesquitercia* relationship is found in one work from the repertoire in [3,3], *En remirant vo douce pourtraiture* by Philipoctus de Caserta.¹¹¹ It is noteworthy that the two anonymous works in CH 564, *En Albion de fluns* and *De tous les moys* only ever use this sign in conjunction with full red notes, thereby resulting in a *proportio dupla* at the *minima* level, that is $4:3 \times 3:2 = 2:1$ (*vid.* Vol. II, App. A, No. 50, Ct 21 *et passim*; Vol.II, App. A, No. 22, Ct 1.3 *et passim*). Where a strict *proportio sesquitercia* at the *minima* is required in this work, void red note forms are used instead. Furthermore, it also appears that the substitute mensuration sign $\frac{2}{2}$ in Anthonellus de Caserta's *Dame d'onour en qui tout mon cuer maynt* is analogous to \circ in that it signifies that same sesquitercial proportion in relation to [2,3].

¹⁰⁸ Jo. de Alte curie, *Se doit il plus en biau semblant*, CH 564 f. 15v; Trebor, *Quant joyne cuer*, CH 564 f. 31r; Philipoctus de Caserta, *Par le grant senz d'Adriane*, CH 564 f. 37v; Anon., *En Albion de fluns*, CH 564 f. 47v; Anon., *De tous le moys*, CH 564 f. 48r; Matheus de Perusio, *Gloria*, MOe5.24 1v-2r; Anon., *En un vergier clos par mesure*, MOe5.24 f. 18v; Philipoctus de Caserta, *En attendant souffrir m'estuet*, MOe5.24 f. 20r; Jo. Cicionia, *Sus une fontayne*, MOe5.24 ff. 26v-27r; Matheus de Perusio, *Le greygnour bien*, MOe5.24 ff. 31v-32r; Matheus de Perusio, *Dame souvrayne*, MOe5.24 f. 38r; M. de Perusio, *Se pour loyalment*, MOe5.24 f. 43v; M. de Perusio, *Pour bel acueil*, MOe5.24 f. 44v; M. de Perusio, *Sera quel zorno may*, MOe5.24 ff. 47v-48r; M. de Perusio, *Gloria*, MOe5.24 ff. 49v-50r; Anon., *Pour haut et liement chanter*, Tn J.II.9 f. 104v; Anon., *Je ne quid pas*, Tn J.II.9 f. 112r; Anon., *Se vrai secours*, Tn J.II.9 f. 114v-115r; Anon., *L'esperer sans aucun bien*, Tn J.II.9 f. 132v; Anon., *Tout houte veut*, Tn J.II.9 f. 134v-135r; Anon., *Je ne desir forsque vo douce amour*, Tn J.II.9 f. 135v; Anon., *La belle qu'ai chiere lie*, Tn J.II.9 ff. 135v-136r; Anon., *Esvellons nous mes tres parfaits amis*, Tn J.II.9 f. 136v; Anon., *S'aucunne fois fortune son effort contre moy*, Tn J.II.9 f. 138v; Anon., *Il n'est amant qui n'a le cuer espris de loiaute*, Tn J.II.9 f. 152r; Anon., *La dame ou mon cuer se retrait*, Tn J.II.9 f. 152r; Anon., *Il faut pour trouver un bon port*, Tn J.II.9 f. 153v; Anon., *Mener chiere lie doit*, Tn J.II.9 f. 155v; Anon., *Combien que tout houte est forme de cendre*, Tn J.II.9 f. 156r; Anon., *Parle qui veut ie veuil loiaument vivre*, Tn J.II.9 f. 158r.

¹⁰⁹ For a transnotation of this work, *vid.* Richard H. Hoppin, (ed.), *The Cypriot-French Repertory of the Manuscript Torino, Biblioteca Nazionale, J.II.9, Corpus Mensurabilis Musicae 21, Rome, 1963, vol. IV, No. 45 (Virelai 17).*

¹¹⁰ For a transnotation of this work, *vid.* Hoppin, *The Cypriot-French Repertory of the Manuscript Torino, Biblioteca Nazionale, J.II.9, 1963, vol. III, No. 26.*

¹¹¹ However, as noted in Chapter 4, p. 203, this mensuration sign is only used in one out of three extant transmissions of this work. Unlike the MOe5.24-reading, the transmissions of *En remirant* in CH 564 and Pn 6771 use void red coloration. Busse Berger also notes the use of \circ in [3,3] in the Old Hall manuscript (London, British Library, Add. 57590), in a *Credo* by Bittering, f. 66v-67r, in *op.cit.*, p. 174; *q.v. eadem*, 'The Origin and Early History of Proportion Signs', *Journal of the American Musicological Society*, vol. 41, no. 3, 1988, p. 411;

The sign \circ is also employed, but with less frequency, in [3,2] (O).¹¹² However, two facts indicate a conceptual shift in the use of that sign in this particular mensuration. The first is that only *semibreves* or *breves* are found in passages affected by this sign. From this, the implication is that the *sesquitercia* relationship is now intended at the *semibrevis* level (although it would exist at the *minima* level also). Secondly, it is possible that all works in CH 564¹¹³ and MOe5.24 using \circ in \circ are notated in augmented note values, which must be diminished (by a half?) upon their execution. It follows that if in the change from natural to augmented notation there is a shift from the *semibrevis* to the *brevis* as the primary time unit (or *tactus*), then there is likewise a corresponding shift of the proportional significance of \circ from the *prolatio* level to the *tempus* level. It is noteworthy that in Anthonellus de Caserta's *Tres noble dame* (Vol. II, App. A, No. 52) the meaning of the sign in the context of [3,2] *dim* is explained by the canon: *Uicumque inveneris signum imperfectum minoris cantetur in modo epitrito*.¹¹⁴ This first-hand witness to the practice once again articulates the sign's meaning in terms of a *sesquialtera* (=epitritus) proportion.

The discussion cannot proceed without mentioning the awkward use of \circ combined with special note shapes in the CH 564 (f. 24r; *vid.* Vol. II, App. A, No. 7) and Fn 26 (ff. 104v-105r) transmissions of the anonymous *Je ne puis avoir plaisir* where $\circ \blacklozenge = \circ \blacklozenge\blacklozenge$ = $\circ \blacklozenge\blacklozenge\blacklozenge$. Even without the mensuration sign \circ , one could realise the rhythms based on the special note shapes alone. In the third transmission of this work in MOe5.24 (f. 20v), the scribe of MOe5.24 appears more correct in consistently writing \circ where the scribes of CH 564 and Fn 26 write \circ . This is especially so if one considers the sign \circ to be a means of governing relationships between the special note shapes whose duration is already understood by their intrinsic nature which cause augmentation through a proportional relationship to the *semibrevis*. Furthermore, in the CH 564 and Fn 26 transmissions, it is inconceivable that the unnecessary plurality, which arises if simple note forms are substituted to produce the equivoques of $\circ \blacklozenge = \circ \blacksquare$ and $\circ \blacklozenge = \circ \blacklozenge$, should exist. Indeed, the special note shapes lose all meaning if a *proportio sesquitercia* at the *semibrevis* level is

¹¹² Susay, *Prophlias un des nobles de Roume*, CH 564 f. 35v; Anthonellus de Caserta, *Tres noble dame*, MOe5.24 f. 28v; Matheus de Perusio, *Gia de rete d'amour*, MOe5.24, f. 46v. Busse Berger notes the phenomenon in 3 works from the Old Hall MS in *Mensuration and Proportion Signs*, p. 174.

¹¹³ *Vid.* Günther, 'Der Gebrauch des *Tempus perfectum diminutum* in der Handschrift Chantilly', pp. 277-297.

¹¹⁴ "Wheresoever you find the imperfect minor sign, it must be sung in the proportion of 4:3."

effected according to the sign \circ before their realisation. In addition, other variants in the transmission in MOe5.24 provide effective solutions in their own right and can hardly be considered errors as Ursula Günther argues.¹¹⁵ Rather, the scribes of CH 564 and Fn 26 appear to over-compensate by writing the sign \circ before groups of special note shapes.¹¹⁶

This hypothesis is strengthened by comparison of *Je ne puis avoir plaisir* to another work which uses the same special note shapes (\blacklozenge , \blacklozenge) within the framework of *tempus perfectum diminutum*. The anonymous *Je la remire sans mesure* (Vol. II, App. A, No. 53) is transmitted in three sources (MOe5.24, f.34r; Pn6771, f. 80r; Pn 568, ff. 126v-127r). However, as Anne Stone has previously observed,¹¹⁷ these transmissions differ from one another especially in their placement of the mensural signs O and C. Stone suggests, particularly in the case of MOe5.24 and Pn 568,¹¹⁸ that different mensural concepts are embodied in the variants between these two transmissions. While the scribe of MOe5.24 consistently employs the mensural sign C to govern passages of *semibreves caudate* and *dragme* (thereby suggesting a conceptualisation of the special signs in terms of augmentation reminiscent of *Je ne puis avoir plaisir*) several passages of these note shapes are preceded instead by O in Pn 568 suggesting that these notes are thought of in terms of their proportional relation to *tempus perfectum*. However, Stone fails to mention that the transmission of *Je la remire sans mesure* in Pn 568 is by no means consistent in its use of mensural sign O before passages of *caudate* and *dragme*. Several passages are preceded instead by C as in the transmission in MOe5.24. Rather than suggesting that the scribe of MOe5.24 had copied from a version similar to Pn 568,¹¹⁹ it is more probable that Pn 568 represents an incomplete recasting of the work in terms of the proportional significance of the special signs.

The view that \circ operates proportionally at the *semibrevis* level in *tempus perfectum diminutum* is strengthened by a comparison with a work in the same mensuration, *Le sault perilleux* by Galiot (*vid.* Vol. II, App. A, No. 54). A canon indicates that the following relationships are conveyed by the respective mensuration signs: $\circ = 4:3$, $\oplus = 3:2$, $\odot =$

¹¹⁵ Günther, 'Die Anwendung der Diminution in der Handschrift Chantilly 1047', p. 5.

¹¹⁶ Or in Anne Stone's terms ("Writing Rhythm in Late Medieval Italy", p. 132): "thus \circ , which causes diminution, is used to ensure that the dragme are made proportionally to the diminished semibreve".

¹¹⁷ Stone, "Writing rhythm in late medieval Italy", pp. 133-138.

¹¹⁸ The transmission in Pn 6771 omits all mensuration signs, although the special note forms are still present.

¹¹⁹ Stone, "Writing rhythm in late medieval Italy", p. 136.

9:8.¹²⁰ It seems highly unlikely that proportions are reckoned on the *minima* level in this piece especially in the case of the sign \odot . A 3:2 proportion at the *minima* level would imply a binary division of the *brevis*, whereas a ternary division can only produce the correct realisation of this work. Interestingly, the last proportion (\odot) refers not to the preceding mensuration in the same voice but to the lower voices, which are executing a 4:3 proportion on [3,2] *dim* (signalled by \circ). While the sign \circ is not used in this work, the fact that there is a conceptual shift in the reckoning of proportions in augmented notation supports the hypothesis that \circ operates at the *semibrevis* level in [3,2] *dim*.

Several instances of other mensuration signs without *canones* or written instructions to explain them are found in the *ars subtilior* repertoire and beyond.¹²¹ Besides the use of cut signs, such as ϕ (which will be discussed in the following chapter), all occurrences can be explained as means of indicating a *sesquialtera* proportion in a vertical or horizontal relation to *tempus imperfectum*. Two works occur in CH 564 in which a 3:2 proportion is intended in reference to the preceding mensuration. Matheus de Sancto Johanne's *Je chante ung chant* (f. 16r; *vid.* Vol. II, App. A, No. 55) employs O with red notes in the S and Ct to indicate the singing of a [3,2] in the original mensuration [2,2] or *sesquialtera* proportion at the *semibrevis*.¹²² Figure 5.4 illustrates its use in a portion of the S voice this work.

¹²⁰ *In proportione epitriti ad semicirculum cantetur, ad circulum cum duobus punctis in proportione emiolij et ad circulum cum tribus in proportione epogdooy.* (At the semicircle it is sung in the proportion 4:3, at the circle with two dots in the proportion 3:2, and at the circle with three dots in the proportion 9:8.) The meaning of these Ancient Greek terms is as such: Hemiolios (ἡμιόλιος) = one-and-a-half, i.e. *sesquialtera*, epitritos (ἐπιτριτος) = one-and-a-third, i.e. *sesquitercia*, and epogdoos (ἐπιῶδοος) = one-and-one-eighth, i.e. *sesquioctava*. The use of latinised Ancient Greek terms to denote proportions rather than Latin ones is unusual, and suggests that the composer (or scribe) is seeking to cultivate an air of learnedness. Cf. Günther, 'Der Gebrauch des *Tempus perfectum diminutum* in der Handschrift Chantilly', p. 294.

¹²¹ Additional works in the fifteenth century employing cumulative proportional mensuration signs without written instructions indicating their meaning are discussed in Chapter 7.

¹²² Busse Berger notes similar uses of mensuration signs in the Old Hall MS, in *Mensuration and Proportion Signs*, p. 172.

Figure 5.4: Refrain of *Je chante ung chant* by Matheus de Sancto Johannes, CH 564, f. 16r (S only).

However, the unique transmission in CH 564 is not without problems. The first instance of \circ at the end of the first section appears to have been miswritten as \odot . The passage in question can be correctly read in \circ *dim. per terciam partem* ($= [3,2]$ diminished by a third) without any changes to the preserved notation, although strict isorhythm between the first and second section of this rondeau is lost.

In the anonymous *Ung lion say* (CH 564, f. 28v; Vol. II, App. A, No. 56), one finds the mensuration signs \odot , \odot and \odot which have the respective meanings of a $[2,2]$, $[2,3]$ and $[3,2]$ division of the *brevis*. However, a correct reading of this work is only achieved if \odot ■ = \odot ■, that is with a *sesquitercia* proportion between the *minime* of \odot and the *minime* of \odot .¹²³ There is a possibility that \odot may also signify a 3:2 proportion at the *semibrevis* level, although this cannot be determined from the work itself as $[3,2]$ occurs solely in the context of the *ourepasse* simultaneously in all voices (although it is not indicated in the T). The only other mensuration sign used in this $[3,2]$ section is \circ , but it is used in close conjunction with full red note forms to achieve a 2:1 proportion, that is $4:3 \times 3:2$. It appears that this meaning is limited by the full red note forms since the immediately subsequent passage in void red note forms (indicating 4:3 at the *minima* level) renders the previous mensuration sign redundant.

In MOe5.24, two instances of the proportional use of mensuration signs indicating a *sesquialtera* proportion at the *minima* level occur without any accompanying written cues. These are Matheus de Perusio's *Dame que i'aym sour toutes de ma enfance* (ff. 10v-11r; *vid.* Vol. II, App. A, No. 57) and his *ars subtilior* essay *Le greynour bien* (ff. 31v-32r; *vid.* Vol. II,

¹²³ Busse Berger notes an identical use of mensuration signs in a *Gloria* by Damett in the Old Hall MS, ff. 33v-34r, in *loc. cit.*

App. A, No. 41). In the first work, the S commences in [2,3] (indicated by ☉). The Ct and T are at first notated in [2,2] (not indicated by any signs), but at this point with *minima* equivalence with the S. It is only when the mensuration sign O occurs in the S (BB. 28-38, 51-56, 71ff), that a 3:2 proportional relationship organised as [3,2] is required at the *minima* level both in a vertical relation with C in the lower voices and in a horizontal relation with the preceding [2,3] mensuration in the S. In the second work, the S and T commence in [2,2] (not indicated by mensuration signs), while the Ct commences in the mensuration [2,3] (indicated by ☉), but with implied *brevis* equivalence between these mensurations and a *sesquialtera* proportion at the *minima* level. However, when the same proportion is required in the horizontal aspect in the S and T, full red *sesquialtera* coloration at the *minima* level is used. It is perhaps erroneous to consider the occurrence of ○ in the Ct, thereby achieving a *sesquitercia* relationship at the *minima* level, to operate as a sign indicating *proportio dupla* with respect to [2,2] in the S and T of this latter work.¹²⁴

The two aforementioned uses of proportional mensuration signs (○ and *sesquialtera* ☉/○ to ☉) may represent effective solutions within the French mensural system to notate Italian concepts embodied in the relation of *octonaria* and *senaria perfecta divisiones* described at the beginning of this chapter. Although works such as *Le greygnour bien* involve further complications of diminution and augmentation coloration, a certain simplicity which originally resided in the Italian system is emulated to result in a notational representation which in its first instance avoids issues of special note forms and at least one additional level of proportionality. Thus, by merely using black note forms in the Ct of *Le greygnour bien*, a *sesquialtera* proportion results relative to the outer voices (S and T). Additional coloration in the Ct produces, relative to the outer voices, a *sesquialtera* proportion at the *semibrevis* level through red coloration and a *proportio dupla* at the *minima* level through void red coloration. Had coloration or special note shapes been employed from the outset of the Ct, the notation of this passage in coloration would have been further complicated.¹²⁵

¹²⁴ Busse Berger cites this as one of two examples of ○ used to indicate *proportio dupla* in *Mensuration and Proportion Signs*, p. 410, fn. 21. She likewise seriously errs by suggesting that the same sign indicates *proportio dupla* in Philipoctus' *Par le grant senz d'Adriane*. As discussed above, major prolation exists intrinsically within the *imperfect tempus* indicated by the sign ○.

¹²⁵ The lengths to which the anonymous composer(s) go(es) to notate a *proportio dupla* in *En Albion de fluns* and *De tous les moys* can be cited as support for this claim (see above on ○).

The last group of works to be discussed finds the meaning of mensuration signs indicated by a canon. Table 5.5 summarises the proportional meanings imparted to various mensuration signs by verbal instructions. An examination of this table shows that there is little uniformity in the use of mensuration signs and their meaning, although some logic resides in their use in *Le sault perilleux* (Vol. II, App. A, No. 54), *Ne Geneive* (Vol. II, App. A, No. 59) and *Une dame requis* (Vol. II, App. A, No. 60) in that all signs communicate an appropriate division of time but within the premise of *brevis* equivalence. It is noteworthy, however, that the canon in only one work is couched in terms of *brevis* equivalence, namely *Une dame requis*. Aside from *Le sault perilleux* for reasons discussed above, proportions are appropriately considered in terms of their relation to the *minima*.

Table 5.5: Meaning of mensuration signs attached to a canon in works in the *ars subtilior* style.¹²⁶

Work, composer and source	I.V.	Unit	3:2	4:3	9:8	9:4	Other	Remarks
<i>Je prens d'amour noriture</i> Anon. Tn J.II.9, 154r.	[2,3]	Min				(9)	⊙ = 2:3, ⊕ = 10:3, ○ = 5:2	Also uses other Indo-Arabic numerals
<i>Le sault perilleux</i> Galiot CH 564, 37r.	[3,2] <i>dim.</i>	Sbr	⊙	⊕	⊙			9:8 relative to ⊕ = 4:3.
<i>Puisque ame sui doucement</i> Anon. Tn J.II.9, 107r.	[2,3]	Min	○	⊙			⊕ = 2:1, ⊕ = 7:3;	Also uses Indo-Arabic numerals
<i>Puisque je sui fumeur</i> Jehan Hasprois CH 564, 34v.	[3,3]	Min		○			○ + red = 2:1.	
<i>Se doit il plus en biaux</i> Jo. de Altecuria, CH 564, 15v.	[2,3]	Min		(○)	⊙		⊕ ■ = ○ ■	<i>Vid.</i> Vol. II, App. A, No. 58.
<i>Ne Geneive</i> Jo. Cuvelier CH 564, 41v.	[2,2]	Min	⊙			⊙	(2, 3)	Also uses Indo-Arabic numerals
<i>Se de mon mal ddivre prestant</i> ¹²⁷ Anon. Tn J.II.9, 124v-125r.	[2,3]	Min	(3)	(4)			⊕ = 4:1.	
<i>Sur toute fleur</i> ¹²⁸ Anon. Tn J.II.9, 137r.	[2,3]	Min	(3)	(4)		(9)	⊙ = 2:3, ⊕ = 3:4, ⊕ = 7:3, ⊙ = 10:3	Also uses other Indo-Arabic numerals
<i>Une dame requis</i> Frater Johannes de Janua MOe5.24, 12r.	[2,2]	Sbr	⊕ = ○			⊕		

¹²⁶ Key to additional abbreviations: I.V. = initial mensuration (*integer valor*), Unit = durational level to which proportions apply.

¹²⁷ For a transnotation of this work, *vid.* Hoppin, *The Cypriot-French Repertory of the Manuscript Torino, Biblioteca Nazionale, J.II.9, 1963, vol. III, No. 67.*

¹²⁸ For a transnotation of this work, *vid.* Hoppin, *The Cypriot-French Repertory of the Manuscript Torino, Biblioteca Nazionale, J.II.9, vol. III, No. 97.*

Several works in Table 5.5 share the same concerns as the previous group for notating *sesquialtera* and *sesquitercia*. However, while the occurrence of 9:8 and 9:4 proportions may also be (hypothetically) found in one form or another of Italian notation, several proportions (especially those found in Tn J.II.9) demonstrate a radical shift in proportional conceptualisation which marks a break between the older traditions of Italian notation and the mature style of the *ars subtilior*.

In terms of the appearance of the actual signs shown in Table 5.5, there is little departure from the formal types established in *musica mensurabilis* theory and practice. In several instances, the more archaic forms of mensuration signs are requisitioned by the scribe or composer, and recast into their new role by the accompanying set of written instructions. The recasting of more current mensuration signs bespeaks of a mental agility required in interpreting those works. The performer must effectively disengage from the more common meaning of those signs and bear in mind their immediate meaning in relation to the work being performed. The effect of this repositioning of mental signposts asks several questions which cannot be addressed here. The first concerns their effect on the process of committing a work to memory. The second consists of the ability of the performer to correctly grasp proportional terms, both Latin and Greek-derived, and apply them in the polyphonic context. Even without answers to these questions, we begin to grasp the degree of proficiency required by this repertoire. At the same time, this challenge to the learned singer may have been one in which he/she delighted.

5.6. Conclusions

This chapter has taken the opportunity of demonstrating the development and diversity of mensuration signs preserved in theoretical and musical sources from the fourteenth and early fifteenth centuries. In it, I asked the reader to put aside any misconceptions which might be grounded in a monolithic view of notational practice in this period, which tends to subsume all forms under the descriptive titles of either French or Italian notation. In doing so, I believe I have identified instances of notational practices that are significantly different from the generally received view. In particular, I have identified the practice of using of *tempus* signs without extrinsically indicating prolation, and situated this practice within a relatively confined geographic and temporal space. That Matheus de Sancto Johanne, Philipoctus de Caserta and Trebor appear to have resorted to this particular notational practice in the early 1380s possibly raises more questions than it

provides answers. Is this a form of notational intertextuality or is it simply a school of notation shared by collegiate composers? The case of Philipoctus de Caserta and Matheus de Sancto Johanne is further complicated by the similarity of the textual content of their political chansons, although there are possibly enough differences in their texts to suggest that Matheus' interests in political affairs was somewhat different from those of Philipoctus. Matheus' *Inclite flos* emphasises the role of the French and Spanish kingdoms in their support for the Schismatic party at Avignon, while Philipoctus' *Par le grant senz d'Adriane* appears more concerned with the politics of the composer's own region of origin, the Kingdom of Naples. There may be enough in this observation to suggest that neither composer had the benefit of personally knowing the other,¹²⁹ and that the issue of notational intertextuality should be given further consideration in future research.

This chapter has also seen the continuation of a thematic thread that runs throughout this present study by examining the role of scribes in shaping and reshaping the notation in the sources of music we have before us today. The adoption and modification of French notational principles by Italian scribes discussed in the previous chapter in relation to special note shapes is also evident in the use of mensuration signs. The Italian scribe who copied the mid-fourteenth century works of Gherardello and Lorenzo da Firenze into Pn 568 provides the most resonant image of this confluence of musical cultures through the medium of its symbolic representation. This scribe, like so many of the scribes discussed in this chapter, often sought to apply more recent notational processes to older repertoires. The saliency of this observation resides in the evidence it furnishes that a repertoire, sometimes more than fifty years old, remained in circulation and in the minds of the musicians and scribes who were charged with its care. This bespeaks of a tacit acknowledgment on the behalf of the scribe concerning the continuing value of various repertoires.

Finally, looking forward to the next chapter which discusses the use of one further extrinsic device in the musical notation of the *ars subtilior*, I ask the reader to recall the distinction I made at the beginning of Chapter 4 of this present study between intrinsic and extrinsic modes of signification. The present chapter has served to reinforce this distinction by illustrating the behaviour of the initial type of extrinsic signification in relation to the

¹²⁹ On textual citations shared by Philipoctus' *En remirant* and Matheus' *Sans vous ne puis*, *vid.* Plumley 'Ciconia's *Sus une fontayne* and the legacy of Philipoctus de Caserta'; Dulong, "La ballade polyphonique à la fin du moyen âge", pp. 76-81. Plumley uses this relationship to strengthen the view expressed in her 'Citation and allusion in the late *ars nova*' that Philipoctus and Matheus "were active in the same milieu". I broadly

division of time in musical notation of the fourteenth century. I have shown that between these two modes of signification, there are forms of notation where extrinsic signification is only partially still reliant on intrinsic elements to communicate the required rhythmic divisions and durations in mensural music. The shift, which occurred during the second half of the fourteenth and first decades of the fifteenth centuries, from intrinsic to extrinsic indications of musical time is a gradual one. In light of the repertoire preserved by this symbol-system, it is a development ultimately tied to stylistic demands for more complex temporal relationships in the rich polyphony of the *ars subtilior*.

agree with this view, but I observe also that the breadth of this *cultural* milieu requires (and is undergoing *pace* Plumley and Stone) further definition.

Chapter 6 :

Algorism, proportionality and the notation of the ars subtilior: Some observations on the dating of the works by Baude Cordier

In her monograph *Mensuration and Proportions Signs*, Anna Maria Busse Berger suggests that the advent of proportional signs using Indo-Arabic fractions in European musical notation was precipitated by the problem of ambiguity in notational devices consisting of novel coloration, note shapes and mensural signs as found especially in works in the late fourteenth century *ars subtilior* style.¹ While I, for the most part, agree with Busse Berger's assessment, there is a need to revise her statements concerning the broader context of the cultural movement towards a popular arithmetic, which includes proportionality. Busse Berger's assessment² that the presence of Indo-Arabic numerals is indicative of newly cultivated proportional concepts in music of the late fifteenth century does not accord with the intrinsic nature of musical notation of the *ars subtilior* in the late fourteenth century before the prevalence of those numerals. Indeed, it appears to conflate two essentially separate issues – the use of proportions and the role of Indo-Arabic numerals in musical notation. It is my thesis that the musical notation of the *ars subtilior* demonstrates a profound interest in proportionality at a level that already demonstrates the presence of new proportional mentality. This mentality was in turn instrumental in the adoption of Indo-Arabic numerals into music notation by a simple process of association, thereby marking the end of a long period of intense notational evolution seen in the fourteenth century as a whole.

This chapter's investigation of the rise of new proportionality in the music and notation of the *ars subtilior* is divided into two parts. In the first part, I outline the general history of proportions and Indo-Arabic arithmetic in the middle ages. In particular, I examine the relationship of Indo-Arabic numerals, when they first appear in musical notation in extant manuscripts, with proportional concepts. In this first part, I also discuss examples from the *ars subtilior* that demonstrate the presence of a new proportionality including those works that do not expressly use the new numerals. The second part of this

¹ Busse Berger, *Mensuration and Proportion Signs*, pp. 178-182.

² Busse Berger, *Mensuration and Proportion Signs*, p. 209.

chapter examines the notation of works ascribed to the composer Baude Cordier. By comparing the works of Baude Cordier, which demonstrate a fully developed system of proportionality relying on Indo-Arabic numerals, with the works of composers such as Jacob de Senleches and Johannes Suzoy, this chapter seeks to redress discrepancies in the currently received version of Cordier's biography which stands diametrically opposed to the history of arithmetic mentality and is at odds with the evidence of notational development provided by the sources of the *ars subtilior*.

6.1. The rise of algorism in European culture

According to Fabrizio della Seta, the rediscovery of the Euclid's *Elements* and its translation³ into Latin in the thirteenth century by Campanus de Novaria introduced the potential for a new concept of proportionality to medieval Latin culture.⁴ This potential lay in the definition of proportions in the *Elements* V, 3:

*Proportio est habitudo duarum quantaecunque sint eiusdem generis quantitum, certa alterius ad alteram habitudo.*⁵

As will be seen below, the statement that proportions are descriptions of the relationship between two quantities of the same type has particular resonance in the early theory of proportions in music which stated that proportions were only ever reckoned in relation to the *minima*. Euclidean proportionality underwent several modifications during the fourteenth century when it was chiefly associated with continuous quantities by natural philosophers. The Merton Calculator, Thomas Bradwardine (c. 1290-1349), in particular, was instrumental in his synthesis of Boethian-Pythagorean proportionality into an expanded Euclidean system based on the distinction between discrete and continuous quantities respectively. Moreover, his use of the terminology “proportions of proportions” to describe geometric or proportional acceleration (or proportional differentia of velocity) influenced subsequent scholars in their considerations of continua composed of irrational, that is non-discrete or infinite, quantities. The concept of Bradwardinean proportions in

³ Adelard of Bath also translated some of the *Elements* in the 12th century, *vid.* H.L.L. Busard (ed.), *The First Latin Translation of Euclid's Elements commonly ascribed to Adelard of Bath : Books I-VIII and Books X.36-XV.2*, Toronto, 1983.

⁴ In this brief survey of proportionality, I have summarised the excellent assessment of its development by Fabrizio della Seta in his ‘Proportio: Vicende di un concetto tra scolastica e umanesimo’, in *In cantu et in sermone: A Nino Pirrotta nel suo 80° compleanno*, eds F. della Seta and F. Piperno, Italian Medieval and Renaissance Studies 2, Firenze, 1992, pp. 75-99.

⁵ “Proportion is the relationship of two quantities that are of the same what-so-ever sized type, a determined relationship of one to the other.”

relation to irrational quantities was further developed by Nicholas Oresme (c.1320-1382), especially in his considerations of proportional acceleration in his *De configurationibus qualitatum et motuum*,⁶ although his first treatment of Bradwardine's theorem occurs in the earlier *De proportionibus proportionum*. Further dissemination of these concepts is evidenced in the writings of Biagio da Parma, Prosdocimus de Beldemandis and Ugolino d'Orvieto.

Bradwardinean proportions distinguished themselves from Pythagorean-Boethean proportions. Pythagorean-Boethean proportions described the relation of discrete parts to a whole. Bradwardinean proportions described the relation of parts to each other. Bradwardinean proportions relied on multiplicative arithmetic, while Pythagorean-Boethean proportions were of a purely additive nature. A fundamental element of Bradwardinean multiplicative proportionality, was algorism. In his development of Bradwardine's theorems, Nicholas Oresme's *De proportionibus proportionum* explicitly states the relationship of the new proportionality with algorism:

*Si autem volueris per artem proportionum maioris inequalitatis alteri addere tunc oportet denominationem unius per denominationem alterius multiplicare. Et si volueris unam ab altera subtrahere hoc facies denominationem unius per denominationem alterius dividendo. Denominationum inventio postea docebit; quarum multiplicatio atque divisio habetur per algorismum.*⁷

While I will not concern myself here with greater inequalities, the last part of the previous passage leaves little doubt that the processes of algorism were associated with the multiplication and division of proportions.

An assessment of the reception of Indo-Arabic numerals into medieval Europe is problematic if one looks beyond generalities and argues that there exist distinct periods wherein Indo-Arabic numerals were adopted into specific parts of its culture. In his fascinating reading of medieval culture, *Reason and Society in the Middle Ages*, Alexander Murray writes concerning the history of the adoption of Indo-Arabic numerals in the middle ages:

The new numerals were available, complete with instructions to any educated persons who wanted them by 1200. It was only c. 1400 that they began an

⁶ Cf. Tanay, *Noting Music, Marking Culture*, pp. 239-244.

⁷ "If however you wish to add a greater inequality to another through the art of proportions, then it is appropriate to multiply one *denominatio* by another. And if you wish to subtract one from the other, do this by dividing one *denominatio* by the other. The finding of the *denominatio* will be taught below; their multiplication and division is gained by algorism."; Edward Grant, (ed.), *Nicole Oresme: De proportionibus proportionum and Ad pauca respicientes*, Madison and London, pp. 142-144. According to Grant, *op. cit.*, p. 12, the *De proportionibus proportionum* must have been written after 1361 in light of the dedication in Oresme's *Algorismus proportionum* to Philippe de Vitry, then Bishop of Meaux (1351-61).

effective conquest of all literate culture. This delay is our opportunity. The pattern of the numerals' adoption will reflect, not any foreign technological bombardment, but native aspirations and pressures.⁸

Murray's statement, admittedly, is only an approximation. Yet, his statement rings true in the context of extant musical sources where the period around 1400 does see the introduction of these numerals into musical notation. More importantly, I would like to pursue Murray's suggestion that an examination of the "pattern of the numeral's adoption", which I read as their adoption into musical notation, presents scholarship (*sc.* musicology) with the opportunity to discern those same "native aspirations and pressures" in its own unique, but not exclusive, context.

Algorism in the middle ages can be seen as a set of calculative processes employing Indo-Arabic numerals. This system was introduced into Europe sometime before 1143 through Latin translation(s) of the *Treatise on Calculation with Hindu Numerals* by the Arabic mathematician and astronomer Muhummad ibn Musa al-Khwarizimi.⁹ This treatise was frequently referred to by the Latin transliteration of the author's name as the *Algorimus*.¹⁰ Treatises by European authors based on the *De numero indorum* proliferated during the thirteenth century with notable works such as the *Carmen de algorismo* (c. 1225) by Alexander de Villa Dei and the *Algorismus vulgaris* (c. 1240) by John of Holywood or Halifax (otherwise known as Sacrobosco) becoming staples in the liberal arts programs of many universities.¹¹ Petrus Philomenus' enhancement of Sacrobosco's treatise in 1291 continued to be used in the university curriculum up to the sixteenth century.¹²

The calculative processes sent down in these treatises involve those familiar to persons today with basic numeracy. The *Carmen de Algorismo*, after setting out the forms of the Indo-Arabic numerals including the zero, which is strictly called the *cifra* (from the Arabic *al-cifr* = 'the vacant one'), and stressing the importance of reading numbers from

⁸ Oxford, 1978, pp. 167-8.

⁹ Some historians of mathematics attribute the introduction of Indo-Arabic numerals to Gerbert d'Aurillac (945-1003), later (999) Pope Sylvester II, although a sign for zero was not present and Gerbert "did not understand the full significance of the Indo-Arabic system.", *vid.* Victor J. Katz, *A History of Mathematics: An introduction*, 2nd edn, Reading (Massachusetts), 1998, pp. 289-90. The first translation of the *Algorismus* into Latin appears to have been made by Adelard of Bath (fl. 1116-1142).

¹⁰ *vid.* Michael S. Mahoney, 'Mathematics,' in *The Dictionary of the Middle Ages*, ed. J. R. Strayer, New York, 1987, vol. 8, pp. 208ff.

¹¹ Mahoney, *op.cit.*, p. 209. An edition of the *Carmen de Algorismo* may be found in Robert Steele, ed., *The Earliest Arithmetics in English*, London, 1922, pp. 72-80. Steele's edition also includes a middle English gloss on the *Carmen de Algorismo* and similarly a middle English translation of John of Holyword's *Algorismus* (or *De Arte Numerandi*).

¹² Mahoney, *op.cit.*, 209.

right to left (a concept presumably alien to the occidental medieval *litteratus*), proceeds to describe in order addition, subtraction, duplication, mediation or halving (including the notation of a half remainder in the case of uneven numbers), multiplication (including mental), division, square root and the cube root. The elements of algorism eventually contributing to its success lies in its conciseness of figures, its almost limitless rational bounds, its propensity for mental calculation without tools, and the establishment of central principles of calculation which could be expanded to other systems such as fractions.

Simultaneous with the advent of works concerning integer calculations, a series of new treatises on the manipulation of fractions, beginning with the *Tractatus minutiarum* and *Demonstratio de minutiis* of Jordanus Nemorarius (fl. 1220),¹³ demonstrated the inventiveness of European scholars by their adaptation of the algorithmic processes for new numeric systems. Perhaps the most widely read work on fractions was Jean de Lignères' *Algorismus de minutiis* (c. 1340), written specifically for astronomical applications, by which the familiar form of numerator/denominator was made popular.¹⁴ This last development was to have the most profound influence on music. While the principles of fractions in the form of Boethian-Pythagorean ratios had been a familiar aspect of medieval mathematics,¹⁵ the Indo-Arab system played an important role in the expansion of arithmetic thought both in terms of conceptualisation and its influence beyond the university and cloister walls.

The acceptance of the new arithmetic into universities was a gradual one, although some progress is witnessed in the fourteenth century.¹⁶ At Paris, one finds authors such as the aforementioned Petrus Philolomenus, Jean de Lignères, Johannes de Muris and Nicholas Oresme. At Oxford, the Calculators such as Richard Swineshead, William Heytesbury, John Dumbleton, and the *Doctor profundus* Thomas Bradwardine numbered among mathematical writers who detailed or utilised the new arithmetic in their tracts. Clearly, the lofty work on kinematics undertaken by the Oxford Calculators and Oresme was not for

¹³ Mahoney, *loc.cit.*

¹⁴ Concerning this treatise's wide readership, *vid.* Mahoney, *op.cit.*, p. 209. An edition of this work may be found in H. Busard, ed., *Het Rekenen met breuken in de Middeleeuwen, in het bijzonder bij Johannes de Lineriis*, Mededelingen van de koninklijke Vlaamse Academie voor Wetenschappen, Letteren en schone Kunsten van Belgie 30, Brussels, 1968, pp. 21-36. The use of the horizontal bar in fractions appears to have been invented by Arab mathematicians, from whom Europeans adopted the practice, *vid.* David E. Smith, *History of Mathematics*, New York, 1958, vol. 2, pp. 215-216.

¹⁵ By ratio, I am not referring to the notational system of x:y, invented in the seventeenth century, but rather verbal descriptions (e.g. *quatuor ad tres*) or terms (e.g. *sesquitercia*).

¹⁶ The present assessment draws on Smith, *op.cit.*, vol. 1, pp. 230-240.

general consumption. A better indication of the mathematical diet at Oxford is given in the statutes of 1408 which specifies the bachelor's curriculum should include some knowledge of *algorismus integrorum* (integer arithmetic) and *computus ecclesiasticus* (calculation of the ecclesiastic calendar).¹⁷ In Italy, Andalò di Negro, Paolo Dagomari and Master Biagio of Parma wrote on arithmetic. Dagomari's *Trattato d'Abbaco*, which contained some commercial arithmetic, also hints at the teachings of the mid-century Italian *maesti d'abbaci*, such as Maestro Dardi di Pisa and Antonio de' Mazzinghi, particularly in schools oriented towards the education of the rising mercantile class, and their promotion of the Indo-Arabic system, algorism and algebra,¹⁸ despite some resistance to change.¹⁹

6.2. *Algorism in theory and practice of mensural music*

The preliminary survey of the use of Indo-Arabic numerals in mensural music treatises by Christopher Page reveals the adoption of the symbol set by music theorists from c. 1300 onwards.²⁰ Even Jacobus de Liège, who was an opponent to the new notational system of the *ars nova*, not only employs Indo-Arabic numerals in his *Speculum musicae* but also cites directly from a treatise on algorism by Jordanus Nemorarius.²¹ However, it is plain that algorism was not the only form of mathematics influencing the mensural music of the *ars nova*. Influence of Euclidean geometry, specifically algebra, is perhaps best exemplified by the case of the renowned Jewish astronomer and mathematician Leo Hebraeus (alias Gersonides) whom Philippe de Vitry, a foremost advocate and practitioner of the *ars nova*, asked to establish a proof that the *ars nova* system of divisions would yield discrete results

¹⁷ Smith, p. 245. On the importance of a knowledge of algorism in *computus* *vid.* Christopher Page, *Discarding Images : Reflections on Music and Culture in Medieval France*, Oxford, 1993, pp. 130-1.

¹⁸ V. J. Katz, *op. cit.*, p. 343.

¹⁹ Commerce (particularly that of Italy) and government were closely associated with the new numeracy, despite certain examples of conservatism and lack of preparedness to adopt Indo-Arabic numerals, *vid.* Murray, *op.cit.*, 188-203. The examples of vernacular glosses and translations of treatises on algorism found in Steele, *op.cit.*, may attest to the widening popularity of algorism in fourteenth- and fifteenth-century England. For a more recent discussion on this increasing awareness during the fourteenth century, *vid.* Paul Acker, 'The emergence of an arithmetic mentality in Middle English literature,' *The Chaucer Review*, 28, 1993, pp. 293-302. Similar evidence is found on the continent with the thirteenth century, Old French treatise by Philippe de Thaon which discusses the skill of *computus* in light of Indo-Arabic numerals and the importance of such knowledge for clerics, *vid.* Christopher Page, *op.cit.*, pp. 130-1. For another view on the influence of arithmetic thought on music, *vid.* Busse Berger, *Mensuration and Proportion Signs*, pp. 198-210 & *eadem*, 'Musical proportions and arithmetic in the late Middle Ages and the Renaissance,' *Musica Disciplina*, 44, 1990, pp. 89-118.

²⁰ Page, *op.cit.*, pp. 131-136.

²¹ Page, *op.cit.*, p. 136. Page also illustrates the dichotomy which exists in the music treatise *De musica* (c. 1300) by Johannes de Grocheio, a contemporary of Jacques de Liège, in that its author employs Roman numerals in his discussion of Boethian-Pythagorean arithmetic proportions and Indo-Arabic numerals in the sections on mensural notation.

without the possibility of the various divisions of the same quantity of smallest units.²² Beyond mathematical influences, Dorit Tanay has proposed that *ars nova* and *ars subtilior* music theory and the music itself is permeated by medieval logic not only through the adoption of its terminology and dialectic processes but more specifically in its reflection of philosophic sophistries also found in contemporary writings on natural philosophy by the Oxford Calculators, William of Ockham and Nicholas Oresme.²³

It is therefore not surprising to discern the influence of elements of the other six liberal arts upon music, especially when one considers what is known about the chief practitioners and theorists of the music of the fourteenth century. Among the generation of composers working in the *ars subtilior* style, there are several whose title or biographical data indicates that they belonged to a holy order,²⁴ a situation that, for the most part, would necessitate university training.²⁵ With an understanding of the education that these roles often required in the middle ages, one might safely assume that many composers and musicians were imbued to varying degrees with the diverse concepts embodied in the liberal arts. Notable musical theorists Johannes de Muris and Prosdocimus de Beldemandis are also known for their discussions on arithmetic, geometry and astronomy.²⁶ The learned, early

²² Eric Werner, 'The mathematical foundation of Philippe de Vitry's *Ars Nova*,' *Journal of the American Musicological Society*, 9, 1956, pp. 128-32.

²³ Tanay, *Noting Music, Marking Culture*; q.v. eadem, "'Nos faysons contre Nature...': Fourteenth-century *Sophismata* and the musical Avant Garde,' *Journal of the History of Ideas*, 59, 1998, pp. 29-51.

²⁴ Some examples include: Anthonellus 'Marot' de Caserta appears to have been an abbot, if the testimony of the fragment PAas 75 is accepted and if the composer of the Italian texted works is identical to the individual who composed the French-texted works in the *ars subtilior* style attributed to Anthonellus de Caserta. Master Egidius, composer of *Franchois sunt nobles* (MOe5.24, f. 11r) and *Courtois et sages* (MOe5.24, f. 35r; Pn 6771, f. 54r) was a member of the Augustinian order, as was Corradus de Pistoria (*ordo heremitarum*) and possibly Johannes de Janua (=Genoa) who are both referred to as *frater* ('Brother'). Bartholomeus de Bononia appears to have been a Benedictine. Antonius Zacharias is a notable exception by his being a married layman, although recent advances in his biography reveal that he was employed as a *scriptor* in the Roman court and member of the Bolognese papal chapel, *vid.* Chapter 3, pp. 137-140. Unfortunately, little is known of the leading composers Jacob de Senleches and Philipoctus de Caserta which might indicate their education, although both (the former indirectly) may have been associated with the Court of Giangaleazzo Visconti at Pavia, *vid.* Strohm, 'Filippotto da Caserta, ovvero i francesi in Lombardia', pp. 65-74. Several composers are referred to as *Magister* ('Master'), which may indicate that they had taken their university degree, although it was also a title accorded to respected persons.

²⁵ The successful study of theology, canon law, the *trivium* (grammar, rhetoric and dialectic) and plainchant were the usual requirements for those seeking to bear sacerdotal office, *vid.* Murray, *op.cit.*, p. 226. While the situation is complicated by the crisis in literacy c. 1400 (*ibid.*, 309ff), the works of the composers themselves act as testimony to their technical competence at a literary and musical level.

²⁶ Johannes de Muris is known to have written two treatises on music including his famous *Ars nove musice*, four treatises on arithmetic and two treatises on astronomy; *vid.* Lawrence Gushee, 'New sources for the biography of Johannes de Muris,' *Journal of the American Musicological Society*, 22, 1969, pp. 6-8. An anonymous fifteenth century copy of a music treatise also suggests De Muris may have also composed music (Page, *Discarding Images*, p. 113). Prosdocimus de Beldemandis wrote eight treatises on music, including one on speculative music, two treatises on arithmetic including a treatise on integer algorism, nine treatises on

fifteenth century theorist Ugolino of Orvieto was also a composer and a chapel singer for the Roman pope Gregory XII (r. 1406-1415).²⁷

The period encompassing the practice of the *ars subtilior* style (c. 1380-c. 1415) saw the appearance of Indo-Arabic numerals in musical sources. It will be recalled from previous chapters that, prior to this stage in the development of notation, the second decade of the fourteenth century had seen the expansion of notation by the addition of the *minima*. Further innovations witnessed on the two vying, quasi-national fronts include the use of the *quatre prolacions* in French notation and the use of the *divisiones* in Italian notation. In the previous chapter, I described the introduction and various uses of mensuration signs in the French and Italian notational systems. There, I concluded that the advent of this extrinsic mode of signification occurred in practice relatively late and primarily as a response to the demands of the *ars subtilior* style itself.

Close on the heels of mensuration signs being used in practice to indicate more complex relationships in music, Indo-Arabic numerals also began to appear in musical notation. Three regular²⁸ uses of these numerals in musical sources can be identified: i) the use of Indo-Arabic fractions to indicate mensuration, that is, as a substitute for mensural signs; ii) the use of single numerals (2, 3 and 4) with or without a mensuration sign to denote a simple proportion (sometimes in conjunction with a verbal canon); and iii) the use of complex proportions written as fractions (which is closely related to the second practice).

astronomy and one treatise on geometry; *vid.* Jan Herlinger (ed.), *Prosdocimo de' Belledemando: Contrapunctus*, Lincoln and London, 1984, pp. 2-4. While Johannes de Muris and Prosdocimus are extraordinary exponents of the *quadrivium*, it remains uncertain whether such a broad experience would be available to students of theology. However, a rudimentary knowledge of arithmetic was required for the *computus* (calculation of moveable events in the liturgical year) which during the thirteenth century had begun to use algorism, *vid.* Page, *op.cit.*, pp. 124-131.

²⁷ Di Bacco and Nádas, 'The papal chapels and Italian sources of polyphony during the Great Schism', p. 50, fn. 17; Ugolino is documented as a singer in the chapel of Gregory XII in May 1413. In 1417 it appears Ugolino was employed as one of two *cantores* at the Florentine cathedral of Santa Reparata (=Santa Maria del Fiore), *vid.* D'Accone, 'Music and musicians at Santa Maria del Fiore in the early Quattrocento', pp. 106 & 120. *Q.v.* Albert Seay, 'Ugolino of Orvieto: theorist and composer,' *Musica Disciplina*, 9, 1955, pp. 111-66.

²⁸ Some irregular uses of Indo-Arabic numerals, which nonetheless reflect the tightening grip of Indo-Arabic numerals upon musical thought in the early fifteenth century can also be observed in MOe5.24: the numerals 8 and 3 in the *tenor faciens contratenorem* in the *Gloria: spiritus et alme* on ff. 2v-3r indicate the number of *pause breves* before the derived *contratenor* enters after the *tenor*. The numerals 1-5 are found in the two uppermost voices of the next *Gloria* in MOe5.24 (ff. 4v-4r) and are used to enumerate successive *talee*. Transnotations and critical notes detailing these processes may be found in von Fischer and Gallo, *Italian Sacred and Ceremonial music*, #16 & 17 (transnotations), p. 271 (notes). Christopher Page provides a later fifteenth century example, wherein Indo-Arabic numerals are used to indicate the number of *minime* in each duration over which each is written, found in the MS Cambridge, Trinity College, R.14.26, f. 37r in *op.cit.*, p. 118.

The first practice will be described briefly before proceeding to the second and third uses of Indo-Arabic numerals used as indicators of proportionality.

The use of Indo-Arabic fractions as substitute mensuration signs is found in only two extant works from this period: Anthonellus de Caserta's *Dame d'onour en qui tout mon cuer maynt* (MOe5.24, f. 40v; *vid.* Vol. II, App. A, No. 61), which employs $\frac{3}{2}$, $\frac{2}{2}$ and $\frac{2}{3}$, and Goscalch's *En nul estat* (CH 564, f. 39v; *vid.* Vol. II, App. A, No. 5), which employs $\frac{3}{3}$, $\frac{3}{2}$, $\frac{2}{2}$ and $\frac{2}{3}$. The earliest theoretical explanation of how these signs should be interpreted is found in the *Tractatus Secundus* of the Berkeley Manuscript dated *circa* 1375:

*Item solent poni cifre numeri ternarii et binarii, una supra aliam directe. Inferior designat tempus, superior vero prolacionem.*²⁹

These signs do not function as proportion signs but as alternative mensuration signs with *minima* equivalence between one another except in the case of $\frac{2}{2}$ in *Dame d'onour en qu* substitute. In this work alone, instead of indicating *tempus imperfectum minoris* with *minima* equivalence,³⁰ this sign indicates *tempus imperfectum minoris diminutum* at a *sesquitercia* proportion in relation to the regular *minima*. Based on the rareness of this device, and an ascription in one source, some scholars have suggested that the Berkeley treatise was written, and these signs invented, by Goscalch himself.³¹

The use of single numerals in the course of a composition to indicate proportional relationships is first found in works contained in the two principal sources of the *ars subtilior*, namely CH 564 and MOe5.24. Table 6.1 shows list from these manuscripts in addition to works of a similar style found in other sources which employ the numerals 2, 3 and 4 to indicate proportional relationships.³²

²⁹ Likewise ciphers of ternary and binary numbers are wont to be placed one directly over the other. The lower <number> indicates the tempus, the upper indeed the prolacion'; Ellsworth, *The Berkeley Manuscript, University of California Music Library, MS. 744*, p. 170. In Busse Berger, 'The origin and early history of proportion signs', p. 413, references to this and later authors discussing the signs may also be found.

³⁰ The use of these signs in *En nul estat* is complicated by the alternation of diminution between voices and sections. It may be purely coincidental that this sign ($\frac{2}{2}$) always occurs in passages whose note values must be diminished.

³¹ Ellsworth, *The Berkeley Manuscript*, pp. 13-15.

³² This use of numerals has no connection to the *modus cum tempore* signs found in sources compiled after c. 1440. On this device, *vid.* Busse Berger, *Mensuration and Proportion Signs*, pp. 149-163.

Table 6.1: Use of simple numerals to indicate proportions in notation of *ars subtilior*.³³

Work and Composer	Source(s)	<i>sesquialtera</i>	<i>sesquitercia</i>	other	Comments
<i>Amans, ames secretement</i> Baude Cordier	Ob 213, 123r.			2 = pr. dupla on [3,3]. 3 = pr. tripla on [3,2] and [3,2].	Other mensuration signs and proportions also employed. Numerals are cumulative but cancelled by mensuration signs.
<i>Angolorum psalat</i> Rodericus	CH 564, f. 48v.			2 = pr. subdupla (augmented) on [2,3]. 3 = pr. subtripla augmented on [2,3].	Proportional signs refer to <i>integer valor</i> only (non-cumulative).
<i>Belle, bonne, sage</i> Baude Cordier	CH 564, 11v			3 = pr. tripla on [2,3].	Other mensuration signs and proportions also employed. Numerals are cumulative but cancelled by mensuration signs.
<i>Credo</i> Anon.	Tn T.III.2, 17v-18r.			2 = pr. dupla on [2,3]	Numerals cancelled by mensuration signs. T and Ct diminished on third iteration according to canon.
<i>Lorques Arthus</i> Jo. Cuvelier	CH 564, 40v	3 = pr. 3:2 on [2,3].	2 = pr 4:3 on [2,3]	4 = pr. dupla on [2,3].	Canon explains signs. Proportional signs refer to <i>integer valor</i> only (non-cumulative).
<i>Ma douce amour</i> Jo. Simonis de Haspre	MOe524, 28r; CH564, 34r; Ob 213, 123r.	3 = pr. 3:2 on [3,2].		2 = pr. dupla on [3,2]. 4 = pr. tripla on [3,2].	Canon explains signs. Proportional signs refer to <i>integer valor</i> only (non-cumulative).
<i>Medee fu en amer</i> Anon.	CH 564, 24v; Ob 213, 116v117r; Fn 26, 105v-106r.	3 = pr. 3:2 on [2,3] = [3,3] dim.	2 = pr. 4:3 on [2,3] = [2,2] dupla.	4 = pr. dupla on [2,3].	Canon explains signs. Proportional signs refer to <i>integer valor</i> only (non-cumulative).
<i>Ne Geneive</i> Jo. Cuvelier	CH 564, 41v.			2 = pr. dupla on [2,2]. 3 = tripla on [2,2]	Canon explains signs. Proportional signs refer to <i>integer valor</i> only (non-cumulative).

³³ Key to addition abbreviations and terms used in Table 6.1: [II, 2]= *modus impefectus tempus impefectum*, [III,3]=*modus perfectus tempus perfectum*, *dupla* = 2:1, *sesquialtera* = 3:2, *sesquitercia* = 4:3. The terms cumulative and non-cumulative are explained below.

<i>Plorans ploravi</i> Zacharias	Tn T.III.2, 1r (frag.); Las 184, LXIv - LXIIr.		2 + void notes = 4:3 on [2,3] = [2,2] dupla.		Notated in void red in Las 184. (non- cumulative?)
<i>Que pena maior</i> Bartholomeus de Bologna	MOe5.24, 37r.	3 = t. 3:2 on [3,2].		2 = pr. dupla on [3,2].	Canon explains signs. 3 operates at the Sbr level. Proportional signs refer to <i>integer valor</i> only (non- cumulative).
<i>S'aincy estoit</i> Solage	CH 564, f. 36r.			2 = [II,2]; 3 = [3,3].	If durations are diminished, numerals refer to <i>modus</i> ; if normal, numerals refer to <i>tempus</i> .
<i>Se doulz espour</i> Corradus de Pistoia	MOe5.24, 31v	3 = t. 3:2 on [2,2] = [3,2] dim.		2 = t. 2:3 on [3,2] dim; cancels 3 = [2,2]	Numerals are cumulative?
<i>Sus une fontayne</i> Johannes Ciconia	Ob 229, 56v; MOe5.24, 27r;		3 = pr. 4:3		3 only occurs in Ob 229; \circ used in MOe5.24. Proportional signs refer to <i>integer valor</i> only (non- cumulative).

The following observations can be drawn from the data in Table 6.1:

1. The most common meaning of the numeral 2 in works either with or without an explanatory canon is duple proportion with respect to the prolation (or at the *minima* level). Furthermore, in cases where 2 is used in conjunction with a canon or coloration (such as in *Lorques Arthus*, *Medee fu* and *Plorans ploravi*) and in the mensuration *tempus imperfectum prolationis maioris*, the *tempus* is diminished by a half with the result of a *sesquitercia* proportion at the *minima* level.
2. The use of the numeral 3 with or without a canon is by no means consistent, although three works without a canon use 3 to indicate triple proportion. Corradus de Pistoria's *Se doulz espour* (Vol. II, App. A, No. 62) and the Ob 229 version of Ciconia's *Sus une fontayne* (Vol. II, App. A, No. 30) use the numeral 3 to indicate two very different effects of *sesquialtera* at the *semibrevis* level (explained, however, by a canon in Bartholomeus de Bologna's *Que pena maior*) and *sesquitercia* at the *minima* level respectively. The work by Ciconia also occurs in MOe5.24, but here it employs the mensuration sign \circ to indicate *sesquitercia* according to widespread conventions observable in principal sources and theorists.
3. The numeral 4 is only ever used in conjunction with a canon in three works. The similarity of the use of 2, 3 and 4 in Johannes Cuvelier's *Lorques Arthus* (Vol. II, App. A, No. 63) and the anonymous *Medee fu* (Vol. II, App. A, No. 10) has prompted some

commentators to propose that both works are by the same composer.³⁴ This use of 4 in these two works, unlike Jehan Hasprois' *Ma douce amour* (Vol. 2, App. A, No. 65), can be seen to demonstrate rational relationships since, within a *tempus*, four *semibreves* are now sung in the space of two. This relationship, as will be seen, reappears in a work possibly composed at a later date and certainly in a different part of Europe, which instead demonstrates an early stage of fractional proportion signs: Anthonellus' de Caserta's *Amour m'a le cuer mis*.

It can be concluded from the previous observations that single numerals demonstrate proportional relationships, frequently causing a re-division of the prolation (*minima* level), which are often logical within a mensural context. However, some works remain cryptic in their use of Indo-Arabic numerals. The Ob 229 version of *Sus une fontayne* appears to have employed the numeral 3 solely for its unusual nature or perhaps in association with proportional nomenclature (*sesquitercia*). Solage's *S'aincy estoit* (Vol. II, App. A, No. 65) also represents an unusual practice where the numerals 3 and 2 appear to indicate *modus* in passages in augmented notation and *tempus* in normal notation.³⁵ However, an indication of the rudimentary state of the use of numerals in these sources is testified to by the frequency of canons being used to clarify the desired intent. While these lone numerals may alone be considered indications of multiple or superparticular proportions,³⁶ in several of the works in Table 6.1 they appear to be qualitative signifiers whose meaning depends on verbal instructions.³⁷

The earliest, surviving theoretical definition of the third use of Indo-Arabic numerals in the form of fractions indicating proportions occurs in 1404 in the *Expositiones* of Prosdocius de Beldemandis.³⁸ In arguing that the notational device of void red *minime*

³⁴ Günther, 'Die Anwendung der Diminution in der Handschrift Chantilly 1047,' p. 19.

³⁵ Willi Apel maintained that the numerals in this work referred to *tempus*, Apel, *French Secular Music of the Late Fourteenth Century*, p. 9a. This, however, appears unlikely as the numerals would be incorrect in 2 out of 6 occurrences, whereas my solution only encounters difficulty in the refrain section of the Tenor voice where the *tempus* is ambiguous. On the structural use of augmented notation in this work *vid.* Günther, 'Der Gebrauch des Tempus perfectum diminutum in der Handschrift Chantilly', p. 280.

³⁶ The meaning of the names of various species of proportions used in this article, which are derived from medieval nomenclature, may be defined for a ratio of $x:y$, both of which are positive integers and $x \geq y$, and a is a positive integer, as such: a simple (*simplex*) proportion occurs when $x=y$ (e.g. 2:2), a multiple proportion when $x=ay$ (e.g. 3:1), superparticular when $x-y = 1$ (e.g. 4:3), superpartient when $y > x-y > 1$ (e.g. 5:3), multiple superparticular when $x-ay = 1$ (e.g. 5:2), multiple superpartient when $x-ay = 1$, and multiple superpartient when $y > x-ay > 1$ (e.g. 8:3). The prefix sub- denotes the inversion of these relationships; *q.v.* Apel, *Notation of Polyphonic Music*, p. 146.

³⁷ Cf. Busse Berger, *Mensuration and Proportion Signs*, p. 182.

³⁸ The only surviving version of the *Expositiones* is the revision of the lost 1404 version made by Prosdocius in 1412, *vid.* Gallo, *Prosdocius de Beldemandi Opera 1: Expositiones*, p. 7. It is arguable that the

representing *sesquitercia* or *sesquialtera* proportions is mathematically erroneous, Prosdocimus advocates the proportions $\frac{4}{3}$ and $\frac{3}{2}$ in their place, stating that:

...ista sunt signa comunissima, quoniam conveniunt omnibus figuris, scilicet maximis, longis, brevibus, semibrevibus, minimis et semiminimis atque omnibus earum pausis.³⁹

In this reading, *comunissima* does not indicate that the usage is widespread or commonly practised, but that the sign can accommodate proportions at every *gradus* of durations and their rests.⁴⁰ While this statement supports Busse Berger's assessment that proportions facilitated the scribe and composer with the simple means of notating all durations or pauses accurately without resorting to unusual, often ambiguous note shapes found at the height of the *ars subtilior*, in the broader context of the passage in which it occurs, the previous statement demonstrates that Prosdocimus saw fractions as a viable and simpler alternative to other notational devices indicating proportions already present in musical practice and notation, such as advanced coloration. The weight of this assessment will become evident in the subsequent paragraphs.

The limited number of examples of fractions used to represent proportions in the extant repertoire of the *ars subtilior* style operate in the manner whereby a number of durations after the sign, as indicated by the numerator (upper numeral), are equal to the number of durations before the sign, as indicated by the denominator (lower numeral). It

1404 version also contained the section on proportions discussed herein, since its context depends on the prior discussion of advanced notational devices typical of the late fourteenth century, such as *sesquitercia* coloration. The likelihood of its prior existence is strengthened by the fact that the fractions $\frac{2}{1}$, $\frac{3}{1}$, $\frac{3}{2}$ and $\frac{4}{3}$ are discussed by Prosdocimus in 1408 in his treatise largely based on the *Expositiones*, the *Tractatus practice de musica mensurabili* (edited in Coussemaker, *op.cit.*, vol. 3, pp. 200-228). The *Libellus* by De Muris contains a section discussing the diminution of tenors in motets by a half and a third which may be viewed as the earliest discussion of durational proportions.

³⁹ "...those signs are most accommodating since they suit all notes, namely *maxime, longe, breves, semibreves, minime* and *semiminime* as well as all rests of these (note values)."; Gallo, *Prosdocimi de Beldemanti Opera 1: Expositiones*, ch. LXI sent. 23. cf. Prosdocimus' *Tractatus practice de musica mensurabilis* where, after detailing several common proportions, the theorist suggests that the range of proportions which could theoretically be employed was infinite, in Coussemaker, *op.cit.*, pp. 218f.

⁴⁰ Ugolino d'Orvieto writes c. 1430: *Ideo quae accidunt mensuris possunt proportionatis convenire notis, ea enim sunt notarum perfectio et imperfectio, alteratio, puncti perfectio et divisio, ligaturae positio, ingeniosa syncopatio, vocum pausatio, augmentatio, diminutio, colorata notarum positio, talea, evacuatio, colorum transmutatio, et signorum positio, ut cum suis tractalis quadranguli, et cum suis puncti circuli vel semicirculi.* ("Therefore, perfection and imperfection of notes, alteration, points of perfection and division, the placing of ligatures, ingenious syncopation, rests, augmentation, diminution, the placing of coloured notes, talea, the hollowing out of notes, the changing of colour, and the placing of signs, such as the square with its strokes and the circle or semicircle with their dot, which occur in measures, are suitable for proportional notation"), Seay, *Vgolini de Vrbevetani Declaratio Musicae Disciplinae*, vol. 2, ch. VI-7, sent. 12.

remains, however, to be noted that although Prosdocimus and his successors referred to these signs as fractions, they are nothing more than proportions (which are identical to ratios) relating one part to another without adhering to strict mathematical principles of fractions. The use of the term *fractio* by musical theorists to describe one Indo-Arabic numeral superimposed over another in musical notation to indicate a proportional relationship belies a mathematical inexactitude wherein, for example, the fraction $\frac{3}{2}$ does not result in an increase of a note's temporal duration by a half, but an increase by one part of a unit formerly divided by two sub-units. If a strict mathematical relationship relative to the change in length of the subsequent unit in relation to the former, which occurs in the 3:2 proportion, were to be expressed mathematically, it would consist of the fraction $\frac{2}{3}$. This notation, mathematically speaking, would denote that the subsequent duration is (through multiplication) two-thirds the duration of the previous equivocal duration. Despite this (nonetheless conventional) contradiction, the following discussion will persist in the use of the term fraction to denote one Indo-Arabic numeral placed above another in mensural notation. At issue, however, is whether one can observe algorithmic processes at a date earlier than that previously accorded to music.

At this time (unlike in the subsequent periods), the unit of reference to which proportions are related is usually the *minima*.⁴¹ Anthonellus de Caserta's *Amour m'a le cuer mis*, found in MOe5.24, may be the earliest surviving example of fractions used to denote proportions,⁴² and, as with many other examples, numerical indications of proportionality operate at the *minima* level. A diplomatic copy of its opening and transnotation is found in Figure 6.1 (A complete transnotation can be found in Vol. II, App. A, No. 66).

⁴¹ Prosdocimus de Beldemandis writes: *Propter quod scire debes, quod quotienscumque proportionantur figure per talia signa, solum proportionantur in respectu ad minimas earum si minime non sunt et se minime sunt inter se proportionantur sine aliquo respectu.* ("Therefore you ought to know that whensoever notes are proportioned by such signs, they are only proportioned with respect to their minims: with or without minims among them they are proportioned with respect to nothing else."); Gallo, *Prosdocimi de Beldemandi Opera 1: Expositiones*, ch. LXI sent. 28.

⁴² On the basis that none of Anthonellus' works are found in CH 564, a manuscript whose textual references demonstrate a *terminus ante quem non* of 1395 (*vid.* Günther, 'Eine Ballade auf Mathieu de Foix', pp. 69-81), but that his works appear in MOe5.24 and Pn 6771 in sections dating from c. 1400-1410, it may be conjectured that Anthonellus was active around the beginning of the fifteenth century

Figure 6.1: Opening of Anthonellus de Caserta's *Amour m'a le cuer mis* (MOe5.24, f. 32v.)⁴³

The image displays a musical score for the opening of Anthonellus de Caserta's *Amour m'a le cuer mis* (MOe5.24, f. 32v.). The score is presented in a modern transnotation format, featuring three systems of staves. Each system includes a vocal line (treble clef) and two instrumental lines (bass clefs). The first system is labeled 'MOe5.24' and includes the parts for 'Contrateneur' and 'Teneur'. The lyrics are: '1. A mour m'a le cuer mis et en tel mar-ti / 2. Et sou uent fois pense et sou-ent sos-pi'. The second system continues the lyrics: 're, Que sou'. The third system includes the lyrics: 'que uent mayn-tes can-'. The score includes various musical notations such as note values, rests, and ligatures. The first system has a 9/6 time signature, and the second system has a 4/2 time signature. The score is marked with measure numbers 1, 7, and 12.

This work demonstrates an early phase in the use of proportions in which they are non-cumulative. Unlike cumulative proportions, which refer to the immediately previous

⁴³ N.B. Ligature marks are not shown in transnotations, but they should be inferred by the reader from the original notation.

temporal division, non-cumulative proportions relate only to the original mensuration or *integer valor* of the work in which they occur. For example, in the third system of Figure 6.1, the non-cumulative proportion $\frac{4}{2}$ preceding S 13, a ratio which shows an affinity with the aforementioned use of the numeral 4 in *Lorques Arthus* and *Medee fu*, results in durations whose values are halved relative to the same note values in the original mensuration or at a proportion of 2:1. If proportions were cumulative in this work, the proportional relationship of durations in relation to the original mensuration would be 3:1 if we also take into consideration the earlier proportion of $\frac{9}{6}$ preceding B. 8, i.e. $4/2 \times 9/6 = 3$.⁴⁴ This is clearly not the case in the context of the lower voices of this work. This non-cumulative practice is likely a residue of Boethian-Pythagorean thought,⁴⁵ most frequently witnessed in treatises from this period which deal with the division of the monochord, where each string division is expressed as a ratio in relation to the string's overall length.

In the works of Baude Cordier, proportions are always cumulative. Figure 6.2 shows the canonic upper voice of Cordier's *Tout par compas*,⁴⁶ the only version of which is found on one of the two inserted leaves beginning Codex Chantilly (A complete transnotation of this work can be found in Vol. II, App. A, No. 67).

⁴⁴ Rather than being considered unrefined, the use of the unreduced fraction $4/2$ in *Amour m'a le cuer mis* may be explained as an indication of temporal subdivisions of three groups of four rather than two groups of six relative to the *brevis* in the *integer valor*.

⁴⁵ *vid.* Busse Berger, *Mensuration and Proportion Signs*, p. 204.

⁴⁶ *Tout par compas* has long been examined and re-examined by modern musicology especially with regards to a transcribable solution, *vid.* Pierre Aubry, *Les plus anciens monuments la musique française*, Paris, 1905 [reprint: New York, 1969]; H. Reimann, *Handbuch der Musikgeschichte*, vol. 1, part 2, Leipzig, 1905, pp. 350; J. Handschin, 'The Summer Canon and its background,' *Musica Disciplina*, vol. 3, 1949, p. 84; Carl Parrish, *The Notation of Medieval Music*, New York, 1957, pp. 187-95; Ursula Günther, 'Der Gebrauch des *Tempus perfectum diminutum* in der Handschrift Chantilly', pp. 277-297; John Bergsagel, 'Cordier's circular canon,' *The Musical Times*, 113, 1972, pp. 1175-77; R. Meylan, 'Reparation de la roue de Cordier,' *Musica Disciplina*, 26, 1972, pp. 69-71; Carol Williams, 'Two examples of Mannerist notation in the late fourteenth century,' *Miscellanea Musicologica*, 2, 1980, pp. 111-128.

Figure 6.2: Canonic upper voice of Baude Cordier's *Tout par compas*.

CH 564

1.4.7. Tout par gar temps
3. Re
5. Trois

5
com - pas suy com - po - ses
de - com suy dis - po - ses,
en - tiers par toys po - ses

10
2.8. en ces - te ro - de pro - pre - ment pour moy chan -
6. cha cer me pues io - yeu - se - ment s'en chan - tant

15
ter plus seu - re - ment
as vray sen - te - ment.

That proportions in this work are cumulative is clearly shown by the proportion preceding B. 12 in Figure 6.2, which effects a *sesquitercia* proportion within the major prolation. This in turn is cancelled by its opposite, 3:4, in B. 13, thereby restoring the original mensuration.

The distinction set out above between cumulative and non-cumulative proportions using Indo-Arabic fractions is considered by Busse Berger as an important indication of their chronological development, in that there was an historical progression towards cumulative proportionality.⁴⁷ However, the concept of cumulative or algorithmic proportionality was already employed by composers of the *ars subtilior* style. Rather than resorting to the extrinsic device of Indo-Arabic numerals, it can be generally said that many composers at first sought to express compound proportions by altering the intrinsic nature of note forms

⁴⁷ Busse Berger, *Mensuration and Proportion Signs*, p. 204 *et passim*.

through the modification of their colour and/or adding additional tails and/or flags. As such, this represented an extension of two different inventions witnessed with the birth of *ars nova* notation: the addition of the upward tail to form the *minima*, and red coloration. However, as seen in Chapter 4, the expansion of this system resulted in a complex array of note shapes that often existed on a piece-by-piece basis. This situation may have caused composers to look again to the foundations of *ars nova* notation where the prior existence of mensuration signs prompted the exploration of this extrinsic mode of signification by using unusual mensural signs or tying certain coloration or note shapes to verbal instructions to express proportional relationships. This eventual shift in the notational paradigm consequently paved the way for the introduction of the new numerals and a simplification of musical representation. However, the direct association of proportionality, especially of a cumulative nature, with Indo-Arabic numerals in the form of fractions occurred only at the very end of the cultivation of the *ars subtilior*.

Johannes Suzoy's *Pythagoras, Jobal et Orpheüs* is one such work in the *ars subtilior* style whose notation seeks to indicate cumulative proportional relationships with mensuration signs and verbal instructions. Little is known about this composer apart from the conjecture that he was the son of the Pierre de Susay who in 1332 was a clergyman in the French royal chapel,⁴⁸ and the possibility that he was the same person mentioned as a living contemporary by the anonymous author of the *Règles de la seconde rhétorique*,⁴⁹ a tract on French poetic forms and devices written between 1406 and 1408.⁵⁰ One transmission of *Pythagoras, Jobal et Orpheüs* is found in Codex Chantilly (f. 30v). A second transmission of this work occurs on ff. 4v-5r of the Boverio fragments (=Tn T.III.2).⁵¹ Tn T.III.2 was copied in northern Italy in the second decade of the fifteenth century and demonstrates connections to the Pisan papacy (1409-1415) at Bologna, and the northern Italian

⁴⁸ Reaney, 'The Manuscript Chantilly, Musée Conde, 1047', pp. 77-78

⁴⁹ M.E. Langlois, *op.cit.*, p. 14.

⁵⁰ The dating provided here is based upon the necessity that the *Règles* was completed after the deaths of the two *rhétoriques* Eustache Deschamps (c.1346-1406) and Jean Froissart (1333?-1400/1 or 1410?). The *Reglès* also mentions Tapissier as his contemporary (*de present*), which on the face of it would suggest that the tract was completed before 1408 if we take that date as Wright's presumed *obit* for the Burgundian musician Jean Tapissier, *vid.* Wright, 'Tapissier and Cordier: New documents and conjectures', p. 184. On Suzoy, *cf.* Ursula Günther, 'Susay [Suzoy], Jo(hannes),' in *The New Grove Dictionary of Music and Musicians*, 2nd edn, vol. 24, p. 732. Both Günther maintain that Suzoy's works were written in the 1380s. There is a Gloria attributed to a 'Suzay' in the MS Apt 16bis, f. 25v. For a summary of discussions on the attribution of this work *vid.* Giulio Cattin and Francesco Facchin (eds.), *French Sacred Music*, Monaco, 1989, p. 478.

⁵¹ A colour facsimile may be found in Ziino, *Il codice T. III. 2*.

cultivation of French music.⁵² The transmission of *Pythagoras, Jobal et Orpheüs* in Tn T.III.2 provides a crucial chronological framework that permits observations concerning current notational practices as typified by this manuscript's scribes.

Besides the notational variance between both versions, the transmission of *Pythagoras, Jobal et Orpheüs* in Tn T.III.2 is notable for its use of proportional mensuration signs.⁵³ Figure 6.3 below diplomatically reproduces the final part of the *S* of this work from both manuscripts with a transnotation given below. (A complete transnotation based on Tn T.III.2 can be found in Vol. II, App. A, No. 68).

Figure 6.3: Notational variance in the *S* of *Pythagoras, Jobal et Orpheüs* in Tn T.III.2 and CH 564.

In terms of variance between transmissions of musical works from this period, the notational devices are quite different, but they result in virtually identical readings. In other words, semantic integrity is maintained despite semiotic variation. Whereas Chantilly transmits the conventional mensural sign *O* to indicate *sesquialtera* at the *semibrevis* level, the Tn T.III.2 scribe uses the equally suitable device of red coloration sometimes in conjunction with the aforementioned mensuration sign. Such exchange of mensuration signs for coloration, and vice versa, is a common feature of this period, and in many respects explains the variants to be discussed below.

⁵² *vid.* Ziino, *Il codice T. III. 2*, pp. 102-111.

⁵³ Busse Berger discusses similar uses of mensuration signs to indicate proportional relationships in her *Mensuration and Proportions Signs*, pp. 164-178. The source discussed here was obviously not available at the time of her book's publication.

The next part of the phrase beginning on the second system of Figure 6.3 is marked in CH 564 with the subscription indicating that the duration of the written values must be halved (*hec cantetur per medium usque ad signum* = ‘this must be sung by halving <the durations> right up to the <mensuration> sign’). Equivalent meaning is conveyed in the Boverio fragments where the scribe instead employs the unusual mensuration sign \odot ⁵⁴ in conjunction with the canon found at the end of the tenor: *Canon Iste ballate. videlicet quod semicirculum et sursum in proportione dupla et alique prout Iacent tam in cantu quam in tenore* (‘This ballade’s canon: namely that the semicircle also facing upwards [indicates the passage is] in the proportion 2:1 and the rest just as they are written both in the *cantus* and in the *tenor*’).⁵⁵

After the *semibrevis* rest, the second system of Figure 6.3, the transmission found in CH 564 uses ambiguous full red coloration to denote a *proportio sesquitercia* organised as [2,2], resulting overall in a proportion of 8:3 (*proportio dupla superbipartiens tercias*). The transmission in Tn T.III.2 instead employs the mensuration sign \circ to indicate the same *sesquitercia* proportion in addition to the aforementioned upwards facing mensuration sign. The accumulation or multiplication of these signs in Boverio results in the same proportion found in Codex Chantilly of 8:3 at the *minima*.⁵⁶ However, the reiteration of the mensural sign \circ is unnecessary in this case. This is confirmed by the near identical end of the ballade’s *clos*, where \circ only is used in the equivalent position. The drawing of mensural signs in red ink in Boverio is inconsequential. The use of void red note forms after the

⁵⁴ A similar, but unrelated sign is mention in the *Regulae cantus mensurati secundum Johann Otteby* as signifying *proportio subsesquialtera*, *vid.* Reaney, *Opera omnia de musica mensurabili Johannes Hothby*, p. 54.

⁵⁵ The reading of this canon remains unclear due to the lacuna created by clasps perforating the paper at this point. There is some uncertainty whether the reading is *et sursum* or *reversum*. Ziino maintains the ambiguity in *Il codice T. III. 2*, pp. 57 & 113.

⁵⁶ Later examples of similar compound mensuration signs ($\text{\textcircled{d}}$, $\text{\textcircled{f}}$, $\text{\textcircled{e}}$) are found in a *Confiteor* from the *unicum* transmission of the anonymous *Missa L'ardant désir* found in Rome (Città del Vaticano), Biblioteca Apostolica Vaticana, Capella Sistina 51, ff. 98v-99r. While the work itself possibly dates from the 1460s, the choirbook itself was most likely copied sometime in the decade after 1470. A transnotation of the relative passage preserving the original mensuration signs can be found in Rex Eakins, (ed.), *An Editorial Transnotation of the Manuscript Capella Sistina 51, Biblioteca Apostolica Vaticana, Città del Vaticano: Liber Missarum*, Collected Works XVII/3, Ottawa, 2001, pp. 123-124. Eakins also notes the presence of additional esoteric elements in the transmission of this mass, *ibid.*, pp. xxxv-xxxvi. For an alternative interpretation of the *Confiteor*, *vid.* Rob Wegman, ‘Another Mass by Busnoys?’, *Music and Letters*, vol. 71, 1990, pp. 14-16. Busse Berger (*Mensuration and Proportion Signs*, 170-1) also notes a similar sign ($\text{\textcircled{e}}$) in the *Qui propter nos* of Reginald Liebert's *Gloria* in the Trent, Museo Provinciale d'Arte, Castello del Buonconsiglio, MS 92, f. 59v, a source compiled c.1435-43. An example of a compound mensural sign not drawn in a vertical arrangement but horizontally, is found at the beginning the *contratenor* of Baude Cordier's *Pour le deffault* ($\text{\textcircled{c}}$); Ob 213, f. 108v).

proportio dupla sign is initially puzzling, however, due to its redundancy. It is plausible that this coloration is a legacy from an earlier version of this work in which void red notation alone indicated *proportio dupla*. Alternatively, it may function to delimit the duration for which the proportion applies, with a return to the *integer valor* indicated by full black note forms. While both versions of this work contain ambiguities whose resolution is only made apparent - as is the case for most of *musica mensurabilis* - by their context, their identical outcomes, which result from the self-consistent application of coloration coupled with unusual mensuration signs and verbal instructions, testify to the semantic validity of each transmission.

The underlying proportional thought revealed by both transmissions of this work is complex and highly sophisticated in that it relies on the accumulation or multiplication of proportional relationships. This alone indicates the presence of an arithmetic mentality cultivated by algorism. Yet, the re-notation of at least one or more versions of this work suggests that proportional fractions and Indo-Arabic numerals in musical notation were not in wide use in northern Italy even in the second decade of the fifteenth century. It is possible but highly conjectural that both versions represent a reworking of the scribal exemplar. The CH 564-transmission of *Pythagoras, Jobal et Orpheüs* preserves the practice of ambiguous full red *sesquitercia* notation which may hark back to an earlier practice in the 1380-90s, while the void red notes in Tn T.III.2 are equivoques descended possibly from its exemplar. While it is difficult to state which version is the latest, both demonstrate a tradition of cumulative proportional notation employing mensuration signs and canons, but not Indo-Arabic numerals, that extends into the fifteenth century. As detailed above, scribes in both the older layer of Codex Chantilly (that is excluding the two Cordier inserts) and MOe5.24 employ Indo-Arabic numerals, although the level of complexity occurring in relation to this device does not extend to cumulative proportionality. Instead, as *Pythagoras, Jobal et Orpheüs* and other works in the repertoire demonstrate,⁵⁷ cumulative proportional signification beyond the use of special note shapes was achieved by the use of mensuration signs or verbal instructions often in conjunction with coloration.

⁵⁷ e.g. the anonymous *En Albion de fluns* (CH 564, f. 47v) notates several proportional relationships, including [3,2] *dim.* and [2,3] *dim.* by the combination of the sign \circ with full red and void red coloration respectively. Similar relationships are found in the next two works in CH 564, *De tous les moys* and Rodericus' *Angelorum psallat*. See Chapter 5, p. 274. Details of similar although slightly later devices used in English sources may be found in Andrew Hughes, 'Mensuration and proportion in early fifteenth century English music,' *Acta Musicologica*, 37, 1965, pp. 48-61.

Another pertinent facet in the history of musical notation in the early fifteenth century is provided by the Franco-Cypriot secular repertoire found in Tn J.II.9. The insular nature of this late source of music in the *ars subtilior* style, which was possibly compiled sometime between 1413 and 1422 in the Cypriot court of Janus de Luisignan and Charlotte de Bourbon,⁵⁸ prevents any direct comparison with works from the continent. However, the notation of this manuscript demonstrates several features in common with those found in MOe5.24 and CH 564 including special note shapes, advanced coloration and proportional mensuration signs.⁵⁹ While Richard Hoppin has wittingly generalised that "its notation is in fact considerably simpler <than MOe5.24 and CH 564>...straight forward and unequivocal...",⁶⁰ I would temper this statement with the observation that the notation of MOe5.24 and CH 564 is also contextually unequivocal in most cases despite the presence of a richer set of complex note shapes. However, the transitional nature of Tn J.II.9's notation is revealed by the admixture of devices used to denote proportional relationships. The only proportion written as an Indo-Arabic fraction is $\frac{3}{2}$. This always denotes the proportion of 3:2 at the minima level. Like in the continental repertoire, more complex proportional relationships in Tn J.II.9 are indicated by single numerals and unusual mensuration signs, which are usually explained by an accompanying set of verbal instructions.⁶¹ Tn J.II.9's proportions do represent daring departures from the usual superparticular and multiple superparticular proportions in the surviving mainland repertoire, to include superpartient and multiple superpartient proportions. Yet, proportions are never cumulative, but are still governed by Pythagorean-Boethian concepts.⁶² The scribe of Tn J.II.9 appears to be aware of developments in musical notation as described by Prosdocimus de Beldemandis, but he is likely tied to the older notational concepts that permeate this manuscript.

⁵⁸ Hoppin, 'The Cypriot-French repertory of the Manuscript Torino, Biblioteca Nazionale, J.II.9', pp. 92-93.

⁵⁹ Cf. Hoppin, 'The Cypriot-French repertory of the Manuscript Torino, Biblioteca Nazionale, J.II.9', pp. 104-106.

⁶⁰ Richard H. Hoppin, 'The Manuscript J.II.9. in the Biblioteca Nazionale of Torino,' in *L'Arts Nova Italiana del Trecento I*, Certando, 1963, pp. 81-82.

⁶¹ *Vid.* Table 5.5, p. 280.

⁶² It is true that in Tn J.II.9, as Busse Berger puts it, "...the introduction of the fraction resulted in the use of proportions not naturally inherent in the mensural system, that is, numbers not divisible by two or by three" (*Mensuration and Proportion Signs*, p. 181). However, this statement, in light of the complex proportions indicated by mensuration signs in Tn J.II.9, strengthens my argument concerning the influence of algorithm before the introduction of Indo-Arabic fractions into musical notation.

6.3. Baude Cordier reconsidered

I now turn my attention to the composer Baude Cordier and his works, which demonstrate some of the earliest uses of cumulative proportionality. The problem with Baude Cordier's works and their dating revolves around the issue of his identity. Earlier scholars maintained that Baude Cordier was active in the first or second decades of the fifteenth century.⁶³ In an article published in 1973, Craig Wright challenged this view by arguing that Cordier could be identified with Baude Fresnel, who served Philip the Bold, Duke of Burgundy, as a valet and harpist from 1384, and that Cordier is merely a sobriquet in a similar vein to Fresnel's colleague Jean de Noyers who was referred to frequently in documents as "Jehan de Noyers, dit Tapissier".⁶⁴

However, the evidence is at best circumstantial for Wright's duly cautious conjecture. It rests on (1) the coincidence of the composer's *Tout par compas* stating that Cordier was from Rheims, as was Fresnel, (2) that a *Gloria*, ascribed elsewhere to Cordier,⁶⁵ is found in the manuscript Apt 16bis, whose contents are largely representative of composers documented at the court of Burgundy,⁶⁶ and (3) that the *Amen* of Cordier's *Gloria* is "almost

⁶³ An example of a past author struggling with the Fresnel hypothesis may be found in Gilbert Reaney, 'Cordier, Baude,' in S. Sadie (ed.), *The New Grove Dictionary of Music and Musicians*, London, 1980, vol. 4, pp. 767-8. Reaney firstly gives an approximate date of c. 1400 for the composition of *Tout par compas* and then discusses Wright's conjecture which he assumes results in a dating up to a decade or more earlier. The same entry was reprinted with little change in *The New Grove Dictionary of Music and Musicians*, 2nd ed., London, 2001, vol. 6, pp. 455-456, although additional literature after 1980 is cited to support Reaney's previous objection to Wright's hypothesis.

⁶⁴ Wright, 'Tapissier and Cordier: New documents and conjectures,' pp. 177-98. *q.v. idem, Music at the Court of Burgundy 1364-1419: A Documentary History*, pp. 124-134, 166-8, *et passim*.

⁶⁵ A Credo lacking an ascription is found on f. 26v-27r of Apt 16bis which corresponds to a work found in Bc 15 ascribed to "baudet cordier".

⁶⁶ While ascriptions in Apt 16bis demonstrate connections to Burgundy, Andrew Tomasello's hypothesis concerning its connection to Avignon can no longer be proven on account of the recent re-reading of Vatican *Introitus et Exitus* 372, 83r. Instead of the original reading *Jo. de Bosco P<ellison>. servit*, which was used by Tomasello to argue that the composer Pelison named in Apt was identical to Johannes de Bosco, Ursula Günther and her colleagues find the correct reading to consist of two names: *Jo. de Bosco Jo. Frewit, vid.* Ursula Günther, 'Composers at the court of the antipopes in Avignon: Research in the Vatican Archives,' in *Musicology and Archival Research*, ed. Barbara Hagg, Frank Daelemans, and André Vanrie, Bruxelles, 1994, pp. 328-337. Similarly, Tomasello's conjecture that the manuscript was planned and executed mostly by Richardus de Bozonvilla (=Scribe C), a member of the chapel of Benedict (XIII) between 1395 and 1405, and it was completed before the departure of Benedict and his retinue from Avignon in 1403, must also be questioned. There is significant amplitude in the dating of watermarks in the fifth and sixth paper fascicles of Apt 16bis to argue for its completion as late as the second decade of the fifteenth century. *Vid.* Tomasello, *Music and Ritual at Papal Avignon*, pp. 123-50. It is also possible that Cordier's *Gloria* (assuming the Bc 15 ascription is correct) is the work of a younger Cordier. Additionally, the likelihood that Tapissier's *Credo* was entered in Apt 16bis after Cordier's *Gloria* is not an absolute determinant in the chronological priority of one work over the other, if one considers other factors such as availability of exemplar, geographic proximity of composers and scribal organisation. The last category is a feature of Apt 16bis.

identical, note for note" to an *Amen* in a *Credo* by Tapissier (Apt 16bis, ff. 34v-35r), thereby constituting a pairing.⁶⁷ Shortly after its publication, Richard Hoppin dismissed Wright's hypothesis by arguing that, unlike Tapissier, nowhere is the sobriquet "Cordier" found in documents from the court of Burgundy.⁶⁸ Despite the superficial merit of Wright's conjecture, there remains no concrete evidence to suggest that Cordier and Fresnel are one and the same. Yet, even the most recent writers on this period have not hesitated in accepting this hypothesis as a historical fact.⁶⁹ The central problem with Wright's conjecture is Baude Fresnel's death in 1397/98: the corollary that Cordier's works were composed prior to this date paints a picture of an explosive development of notational devices which, upon the background of the greater part of the *ars subtilior* repertoire, appear anachronistic or extraordinarily visionary.⁷⁰

As can be seen in the third measure of Figure 6.2 (pg. 300), *Tout par compas* also uses the mensuration sign \ominus to indicate *tempus perfectum diminutum*. In Cordier's works found in CH 564 and Ob 213,⁷¹ this sign always signifies that the duration of written note values must be diminished by one half. This meaning relies on its simultaneous use with other undiminished integral mensurations. The sign \ominus appears to have been an alternative or predecessor to the more familiar form of ϕ in use from *circa* 1420 onwards.⁷² Similar

⁶⁷ While "note for note" is perhaps an exaggeration, both *Amens* contain significant melodic quotations of one another. For a transnotation of these works *vid.* Cattin and Facchin, *French Sacred Music*, 1989, #33 & #53. For a recent discussion of the pairing of Tapissier's *Credo* with *Glorias* by both Cordier and Thomas Fabri *vid.* Robert E. Palmer, 'Squaring the triangle: Interrelations and their meanings in some early fifteenth century mass pairs,' *Journal of Musicology* 16, 1998, pp. 494-518. Palmer has also discussed Wright's hypothesis and argues in its favour on the basis of these relationships.

⁶⁸ Hoppin, *Medieval Music*, p. 486.

⁶⁹ *Cf.* Strohm, *The Rise of European Music, 1380-1500*, pp. 144 *et passim*.

⁷⁰ Margaret Bent states that "a date late in the 1410s or even 1420s would accord better with their [*sc.* Cordier's composition's] style and usage" in her 'The early use of the sign ϕ ', p. 223, endnote 2. Likewise, based on stylistic considerations, Ursula Günther suggests "that Cordier must be regarded as a composer of the early fifteenth century" in her 'Polymetric rondeaux from Machaut to Dufay: Some style-analytical observations', in *Studies in Sources and Style: Essays in Honor of Jan LaRue*, eds E. K. Wolf and E. H. Roesner, Madison, 1990, p. 102.

⁷¹ Oxford, Bodleian Library, ms Canonici Misc. 213 is a source written for the greater part in white notation containing works either bearing or alluding to dates from 1422 to May 1436 (in Venice), *vid.* David Fallows (ed.), *Oxford, Bodleian Library, MS. Canon. Misc. 213*, pp. 18-19; Gilbert Reaney, 'The Manuscript Oxford, Bodleian library, canonici misc. 213,' *Musica Disciplina*, 9, 1956, pp. 73-104; A facsimile of the complete MS may be found in Fallows, *Oxford, Bodleian Library, MS. Canon. Misc. 213*.

⁷² I ask that the reader refer to studies concerning the subsequent use of 'cut' signs in the fifteenth century. The problem of whether such signs, when appearing simultaneously in all parts, indicate an exact doubling of time, or a slightly faster tempo than the sign without the stroke, has received extensive treatment in recent literature: *vid.* Eunice Schroeder, 'The stroke comes full circle: ϕ and c in writings on music, ca. 1450-1540', *Musica Disciplina*, vol. 36, 1982, pp. 133-137; Rob Wegman, 'What is *acceleratio mensurae*?', *Music and Letters*, vol. 73, 1992, pp. 522-23; Anna Maria Busse Berger, 'Cut signs in fifteenth-century musical practice', in *Music in Renaissance Cities and Courts: Studies in Honor of Lewis Lockwood*, eds J. A. Owens and A. M. Cummings,

notational practices are also found in Bc 15, a source contemporary to Ob 213.⁷³ That the stroke through a mensural sign is always used in Cordier's works to indicate *proportio dupla* (or *diminutum per medium*) is confirmed by the examination of another work found ascribed to him in Ob 213. In this manuscript, the rondeau *Amans, ames secretement* (f. 123r; *vid.* Vol. II, App. A, No. 69)⁷⁴ was perhaps suitably entered below Hasprois' *Ma douce amour, je me doy bien complaindre*, a work already listed above as one containing Indo-Arabic numerals attached to a verbal canon. Although *Amans, ames secretement* does not employ proportional fractions, the following set of mensuration signs are used without any other explanation in this very compact, late *ars subtilior* essay:

1. ○, ⊙, C, ⊕ Used in regular capacity, with *minima* equivalence
2. ∅, ℄ and ℄ Indicate regular mensuration with a 2:1 proportion at the *minima* level.
3. ⊙ 3 and ○ 3 Indicate regular mensuration with a 3:1 proportion at the *minima* level.

In the second category, the diagonal stroke is equivalent in meaning to the horizontal or vertical stroke and is the result of a simple scribal trait. The use of the compound proportion/mensuration signs in the third category to indicate *proportio tripla* is analogous to the use of the numeral 3 in another of Cordier's works in Codex Chantilly, *Belle, bonne, sage*.

Michigan, 1997, pp. 101-112; Alexander Blanchy, 'Reading Tinctoris for guidance on tempo', in *Antoine Busnoys: Method, Meaning, and Context in Late Medieval Music*, ed. P. Higgins, Oxford, 1999, pp. 399-427. For a thorough survey of late fifteenth and early sixteenth theoretical attitudes on cut-signs, *vid.* Busse Berger, *Mensuration and Proportion Signs*, pp. 125-148. Margaret Bent's series of studies concerning the interpretation of these signs is a work in progress which questions several conclusions drawn by previous scholarship and readings of contemporary theory, *vid.* Margaret Bent, 'The early use of the sign ϕ ', pp. 199-225; *eadem*, 'The use of Cut Signatures in sacred music by Ockeghem and his contemporaries', in *Johannes Ockeghem: Actes du XLe Colloque internationale d'études humansites*, ed. P. Vendrix, Paris, 1998, pp. 641-680; *eadem*, 'The use of Cut Signatures in sacred music by Binchois', in *Binchois Studies*, eds A. Kirkman and D. Slavin, Oxford, 2000, pp. 277-312. For one reaction to Bent's scholarship, *vid.* Rob Wegman, 'Different strokes for different folks? On tempo and diminution in fifteenth-century music', *Journal of the American Musicological Society*, vol. 53, no. 3, 2000, pp. 461-505, and Bent's response in 'On the interpretation of ϕ in the fifteenth century: A response to Rob Wegman', *Journal of the American Musicological Society*, vol. 53, no. 3, 2000, pp. 598-612. The use of a cut sign in one voice only of a polyphonic composition, which indicates a simple proportional relationship at the *minima* (2:1), should not be confused with the former issue. In addition to the articles given above, the following published discussions on the related issue of *tempus perfectum diminutum* should be noted: Heinrich Bessler, *Bourdon und Fauxbourdon: Studien zum Ursprung der Niederländischen Musik*, Leipzig, 1950, pp. 121-138; Günther, 'Der Gebrauch des *Tempus perfectum diminutum* in der Handschrift Chantilly', pp. 277-297; Reynolds, *op.cit.*, pp. 350-398. Reynolds addresses the issue of re-notation of \ominus into ϕ (*ibid.*, pp. 387-392), which has been recently rekindled in relation to the motets in Bc 15 by Julie E. Cumming in her *The Motet in the Age of Du Fay*, Cambridge, 1999, pp. 99-146.

⁷³ *vid.* Bobby Wayne Cox, 'Pseudo Augmentation' in the Manuscript Bologna, Civico Museo Bibliographico Musicale, Q 15 (BL)', *Journal of Musicology*, vol. 1, no. 4, 1982, pp. 419-448. The term 'pseudo-augmentation' used by Cox and others, describes the *dupla* relationship between *minime* in integral major prolation and cut minor prolation.

⁷⁴ A facsimile may be found in Apel, *Notation of Polyphonic Music*, p. 175.

In general, many unusual mensuration signs found in especially the older repertoire of the seventh and eighth gatherings of Ob 213 rely on the same processes used to alter mensural signs in *Amans, ames secretement*. Another work in Ob 213, whose use of mensuration signs is very similar to Cordier's usage, is Gillet Velut's *Laissies ester vostres chans* (f. 100r).⁷⁵ There is some evidence to suggest that Velut was present at Cambrai in 1409, and may have been among the retinue of Charlotte of Bourbon that travelled to the household of her new husband, Janus de Luisignan, in Cyprus.⁷⁶ This, and similar biographical data of composers of the early fifteenth century,⁷⁷ may account for the broad geographical distribution of the older works in Ob 213 and their notational devices.

As a means of further gauging the differences between Cordier's works and works dating from the late fourteenth or very early fifteenth centuries, and if the Fresnel hypothesis is to be reconsidered, a comparison of two works demonstrating similar musical outcomes is in order. A comparison between Cordier's *Tout par compas* and Jacob de Senleches' *La harpe de melodie*⁷⁸ is appropriate since both works utilise a pair of canonic

⁷⁵ The anonymous *Tant plus je voy* also found in Ob 213 (f. 124r) bears superficial similarities with Cordier's apparent notational style. However, the meaning of mensuration signs in this work is significantly different in that cut signs govern *modus* and *tempus*, and the numeral 2 indicates prolation is imperfect. On the basis of these advanced devices, it seems unlikely that this work might be attributed to Cordier, as Reaney tentatively proposed in his edition of this work (in *Early Fifteenth Century Music*, vol. 4, *Corpus Mensurabilis Musicae* 11, [Rome], 1955, p. xiv), unless Cordier was still active in the 1420s. It should also be noted that the resulting musical rendering shows few complexities and is clearly linked to the new style.

⁷⁶ Strohm, *The Rise of European Music*, p. 145. On the listing of a "Gillet Velliout" among the priests in Charlotte de Bourbon's retinue and the possible identification of this person with Gillet Velut, *vid.* Hoppin, 'The Cypriot-French repertory of the Manuscript Torino, Biblioteca Nazionale, J.II.9,' p. 89. The composers Guillaume Legrant, Nicholas Grenon, Pierre Fontaine, Jean Cesaris, Jean/Jacques Charité and Mahieu Paultet whose works occur in the older repertoire of gatherings 5-8 of Ob 213 are documented to have been present at various times between 1405-16 at the Sainte-Chapelle of Bourges, an institute founded and maintained by Jean I, Duke of Berry (1340-1416), *vid.* Paula Higgins, 'Music and musicians at the Sainte-Chapelle of the Bourges Palace, 1405-1515', pp. 689-701. For a summary concerning the associations of these and other composers in Ob 213 with the courts of Burgundy, and the cathedrals of Cambrai and Laon during this period, *vid.* Strohm, *The Rise of European Music*, pp. 145-150.

⁷⁷ The early fifteenth century sees the continuation of a trend witnessed in the late fourteenth century of French and Flemish musicians and composers in the employ of courts and institutes in Italy and Spain. The early career of Guillaume Du Fay (native of Cambrai) is exemplary for the many years he spent in Italy. On Du Fay's early career and possible connections to the court of Carlo Malatesta during the period 1420-23, *vid.* Alejandro Enrique Planchart, 'The early career of Guillaume Du Fay,' *Journal of the American Musicological Society*, vol. 46, 1993, pp. 361-62. On his residency at Bologna 1426-28 and subsequent appointment to the papal chapel at Rome 1429-1434, *vid. idem*, 'Guillaume du Fay's benefices and his relationship to the Court of Burgundy,' *Early Music History*, vol. 8, 1988, pp. 125-131.

⁷⁸ *La harpe de melodie* has also retained a large portion of scholarly interest, *vid.* Josephson, 'Die Konkordanz zu "en nul estat" und "La harpe de melodie"', pp. 292-300; *idem*, 'Vier Beispiele der ars subtilior,' *Archiv für Musikwissenschaft*, 27, 1970, pp. 41-58; Willi Apel, 'La harpe de melodie,' in *Scritti in onore di Luigi Ronga*, Milan and Naples, 1973; Tilman Seebass, 'The visualisation of music through pictorial imagery and notation in late medieval France', in *Studies in the Performance of Late Medieval Music*, pp. 19-33; Reinhard Strohm, 'La harpe de melodie, oder Das Kunstwerk als Akt de Zueignung', in *Das musikalische*

upper voices, are notated in a pictorial fashion, and can be discerned to employ similar proportional thought, albeit transmitted in a very different manner. Although a version of *La harpe de melodie* is also found in CH 564, the source used for this comparison is the manuscript Chicago, Newberry Library, ms. 54.1 (US-Cn 54.1) where Senleches' work is notated in an irregular fashion on the strings of an illustration of a harp, each of its strings representing a pitch.⁷⁹ The Newberry version also represents the earliest and most faithful extant copy by an English scribe, Brother William, made in Pavia in Lombardy sometime around 1391.⁸⁰ The date of composition for this work can reasonably conjectured to be the late 1380s or very early nineties. Hence, under Wright's hypothesis, this work and *Tout par compas* would be contemporaneous.

The pictorial aspect of both works is not merely *Augenmusik*, but in both cases is integral to the understanding of the text. The refrain of *La harpe de melodie* reads:

*La harpe de melodie
faite sanz mirancholie
par plasir.
doit bien cescun resjoir
pour l'armonie oïr, sonner,
et veïr.*⁸¹

The concept of visual harmony alluded to in the text of *La harpe de melodie* is only fully understood upon seeing its pictorial representation as found in Cn 54.1. Similarly, the first four lines the text of *Tout par compas* hint at the work being a musical round simply because the music is notated on staves inscribed by a compass.⁸²

*Tout par compas suy composes
en ceste rode proprement.
Pour moy chanter plus seurement
Regarde com suy disposes.*⁸³

Kunstwerke. Festschrift Carl Dahlhaus zum 60. Geburtstag, ed. H. Danuser, H. d. L. Motte, S. Leopold and N. Miller, Köln, 1988.

⁷⁹ Facsimiles of this version of *La harpe de melodie* appear in Seebass, 'The visualisation of music through pictorial imagery and notation in late medieval France', plate V, and Richard Hoppin, ed., *Anthology of Medieval Music*, New York, 1978, front cover.

⁸⁰ A critical assessment of variants, both musical and textual may be found in Josephson, 'Die Konkordanz zu "en nul estat" und "La harpe de melodie"', pp. 195-300.

⁸¹ "The melodious harp, made without melancholy to please. Well might all rejoice in hearing, playing and seeing its harmony."

⁸² Numerous facsimiles of this work have been published in the twentieth century, including Pierre Aubry, *Les plus anciens monuments*, pl. XXII (black & white), Freidrich Gennrich (ed.), *Übertragungsmaterial zum Abriß der Mensuralnotation des XIV und ersten häfte des XV Jahrhunderts*, Langen bei Frankfurt, 1965, Tab. XX (black and red); Bent, 'The early use of the sign ϕ ', p. 225.

⁸³ "All by a compass I am properly composed in this round. To sing me most accurately, note how I am written down."

The difference between these verbal instructions lies in the audience to which they are directed. In *La harpe de melodie*, it is plain that the text addresses both the performer and the listener, while in *Tout par compas* the text is solely directed to the performer on the composer's behalf. While one could imagine the scenario suggested by Reinhard Strohm where the illustration of the harp was presented beforehand to the composer's patron for contemplation during the performance of the work,⁸⁴ the text of Cordier's work appears to be addressed to musicians only, suggesting that the work may have been created as a diversion for skilled performers.⁸⁵ However, the visual aspect of the notated score remains an integral part of the experience of both of these works.

Both *La harpe de melodie* and *Tout par compas* begin with the same *integer valor* ([2,3]) and both utilise diminution by a half, although upon different mensurations. Table 6.2 compares techniques used to notate various durations in both works.

Table 6.2: Notational devices in Senleches' *La harpe de melodie* and Cordier's *Tout par compas* compared.

Proportion (with respect to <i>integer valor</i>)	<i>La harpe de melodie</i>	<i>Tout par compas</i>
a. 2:1 (<i>dupla</i>) within <i>prolatio</i>	$[\odot] \downarrow \downarrow$ (or $\diamond \diamond$) = $[\odot] \uparrow \downarrow$ (with canon)	$\ominus \downarrow \downarrow = \odot \downarrow$
b. 3:2 within <i>tempus</i>	$[\odot] \square \square \square = [\odot] \blacksquare \blacksquare$ (dim.)	$\odot \uparrow \diamond \diamond \diamond = \odot \diamond \diamond$
c. 3:2 within <i>tempus diminutum</i>	$[\odot] \downarrow \downarrow \downarrow = [\odot] \diamond \diamond = [\odot] \uparrow \downarrow$	$\ominus \diamond \diamond \diamond = \odot \diamond$
d. 3:2 within <i>prolatio diminuta</i>	$[\odot] \downarrow \downarrow \downarrow = [\odot] \downarrow \downarrow$	$\ominus \frac{3}{2} \downarrow \downarrow \downarrow = \ominus \downarrow \downarrow$
e. 2:3 within <i>prolatio</i>	$[\odot] \downarrow \downarrow = [\odot] \downarrow \downarrow \downarrow$ (diminished by half)	$\odot \frac{4}{3} \diamond \diamond = \odot \downarrow \downarrow \downarrow$ (2 x <i>La harpe</i>)
f. 3:4 within <i>tempus imperfectum diminutum</i>	$[\odot] \downarrow \downarrow \downarrow = [\odot] \square = [\odot] \downarrow \downarrow \downarrow \downarrow$	$[\ominus \frac{3}{2} \uparrow \diamond \diamond \diamond]$ (Not in actual piece, but my conjecture.)

⁸⁴ Reinhard Strohm, *The Rise of European Music*, pp. 57-8

⁸⁵ The additional three strophes accompanying this work are in a different rhyme and syllable number scheme (although still in rondeau form) and are addressed to certain 'seigneurs', who are asked 'Pries pour celi qui m'a fait' ("pray ye for him who composed me"). The question of whether these lines should be sung to the music has vexed scholarship for most of the 20th century, and continues to do so this century, *vid. supra*, fn. 46. Granted the difficulty of setting these strophes to the music, these lines may have been recited before the performance. The voice, the personification of the round itself, remains current in all sections of the text.

As shown by row *a* of Table 6.2, Senleches' composition employs red coloration in conjunction with a canon found in an accompanying rondeau which specifies: *Par blanc et noir per mi sans oblier / lay le tonant ou tu li feras tort* ('Let the black and white notes sound by half without forgetting or you will do them wrong').⁸⁶ Observing this instruction in the upper voice results in black and void notes whose duration at the *minima* level is halved relative to red notes. However, red notes in the upper voice are equivalent in duration to black notes in the *tenor*. White notes in the upper voice behave in the normal manner by providing a *sesquialtera* proportion at the *semibrevis* level with black *minima* equivalence. As also shown by rows *c* to *f* in Table 6.2, further re-division of time in *La harpe de melodie* relative to void and black durations is achieved by complex note shapes employing stems and flags.⁸⁷

Tout par compas, on the other hand, achieves the same proportions mainly through fractions, mensural signs and some coloration, avoiding the more complex note shapes found in *La harpe de melodie*. As shown in rows *a*, *c*, *d* & *f* of Table 6.2, diminution by a half is indicated by the mensuration sign \ominus , whose nature has been described above. As shown in rows *c* to *f* of Table 6.2, *Tout par compas* employs simple note shapes within the proportions $\frac{3}{2}$ and $\frac{4}{3}$ as well as proportional mensurations and thus it can be stated that the composer's mind was firmly entrenched in the arithmetic mentality and that he used Indo-Arabic numerals as an unambiguous expressions of his intent. Yet, it cannot be denied that Jacob de Senleches' *La harpe de melodie* contains evidence of arithmetic, proportional thought processes. The note shape ♩ , for example, relies on cumulative proportions. The voiding of a note shape indicates a *sesquialtera* proportion at the *semibrevis* level (with *minima* equivalence) and the addition of the downward flagged stem to the void *minima* indicates a further *sesquialtera* proportion at the *minima*.

The issue, however, is complicated by Cordier's flamboyant complexity and fondness for notational equivoques in contrast to Senleches' precise economy in notation. In her article *Gebrauch des tempus perfectum diminutum*,⁸⁸ Ursula Günther saw these notational

⁸⁶ Translated in Hoppin, *Anthology of Medieval Music*, p. 171. Nors Josephson correctly interpreted the canon in 'Die Konkordanz zu "en nul estat" und "La harpe de melodie"', p. 299, fn. 13.

⁸⁷ A full discussion of these note shapes can be found on page 223 of this present study.

⁸⁸ Günther, 'Der Gebrauch des *Tempus perfectum diminutum* in der Handschrift Chantilly', p. 282.

practices in the first half of *Tout par compas* as an imitation of an earlier style, but in a manner which suggests complexity for its own sake. The beginning of *Tout par compas* best clarifies this statement (See Figure 6.2, p. 300). In the upper voice after the initial *minima* up-beat, a new mensuration is indicated by a compound sign of $\frac{3}{1}$ requiring [3,3] in *proportio tripla*. Yet, only *breves* and *semibreves* are employed after this sign. Granted that this notation is not indicative of a lost performance practice, to a composer or musical scribe of the *ars subtilior*, it would most likely have been far simpler to notate this passage in *semibreves* and *minime* in regular [3,3]. Instead, Cordier's compositional *ethos* appears to emulate the *ars subtilior* style, a style which is no longer central to musical experience but has been misconstrued as notational complexity rather than the notational representation of complex musical relationships. While Cordier's notation may be seen as a parody on his contemporaries' musical style, the presence of Indo-Arabic fractions and cut mensuration signs in the notation of his compositions suggests that Cordier was active after the peak of the *ars subtilior* style which appears to have occurred in the last years of the fourteenth century.

Setting aside for a moment concerns regarding the influence of geography and culture on the scribes of manuscripts, it is patently clear that, between the completion of Tn J.II.9 and the Boverio fragments, and the completion of Ob 213, there were significant shifts in notational process paralleling the shifts in musical styles between these sources. The *ars subtilior* repertoire in Tn J.II.9 and Tn T.III.2 represents the end of a tradition, whereas Ob 213 contains the works of a new generation of oftentimes Italian based composers which includes the young Guillaume Du Fay. Yet, the scribe of Ob 213 was also interested in collecting the music of Du Fay's predecessors, and the presence of Cordier in this document by no means assures him of a later dating. However, as the previous paragraphs have argued, the most telling indications of Cordier's chronology lies in his notation.

I would like to conclude by examining three distinct, although by no means exclusive, possibilities which might resolve the conflict between notational and cultural data supplied in the paragraphs above and Wright's Cordier hypothesis. Firstly, it might be argued that, based upon the likelihood or fact that Codex Chantilly, the Modena manuscript and Boverio fragments were compiled outside France, Baude Fresnel was an innovator living in Burgundy whose notational techniques were unknown to his contemporaries in Italy. This situation, however, appears improbable if the early discussion of fractions used to indicate

proportions by Prosdocimus de Beldemandis and the prevalence of algorism in northern Italian culture is recalled. Indeed, on this basis it does not seem too bold to propose that musicians in northern Italy played a significant role in the development of fractional proportions in musical notation. Furthermore, religious (especially the ecumenical councils) and political circumstances, and the general francophile tendencies of this period in many courts outside the kingdom of France suggests that it was unlikely that current French thought was foreign to northern Italy.⁸⁹ Indeed, the Venetian manuscript Ob 213, which contains the greatest number of works ascribed to Cordier, can be seen as extant testimony of his reputation in northern Italy.

On the other hand, one might conjecture that Cordier's works were all re-notated by fifteenth century scribes from exemplars employing notational devices closer to those found in the works of Suzoy or perhaps Senleches. While re-notation at a minor level is a feature of some works in the *ars subtilior* repertoire, there is no surviving evidence to suggest that complex notation, as in the works of composers such as Senleches and Suzoy, was rewritten using Indo-Arabic proportions and cut sign notation. The temporal gap between the peak of the *ars subtilior* style and the introduction of Indo-Arabic proportion signs is simply too great in terms of notational and musical chronology to warrant this situation. Furthermore, the similarity of notational devices in his Chantilly inserts and works in Ob 213 tend to indicate that the notation found in these sources reflects Cordier's idiom.

Finally, there is the undeniable possibility that Baude Cordier was not Baude Fresnel, but a composer who was active in the first two decades of the fifteenth century. As detailed at the beginning of this section, the currently received version of Baude Cordier's biography demonstrates several weaknesses by linking him to the renowned Burgundian harpist, Baude Fresnel, not only in its lack of irrefutable evidence but in the corollary that Cordier's works would have been composed before 1397/98. The surviving scribal evidence argues against Craig Wright's hypothesis on several fronts. Firstly, the association of Indo-Arabic fractions with cumulative, proportional relationships in music was a late development that is only generally witnessed in the third decade of the fifteenth century by Ob 213. When fractions are first encountered in Anthonellus de Caserta's *Amour m'a le cuer mis*, they show no relation

⁸⁹ Early fifteenth century catalogues from libraries of the great houses of northern Italy, such as the Gonzaga, Visconti and d'Este, show that a substantial part of the collections (between 10 and 20 per cent) consisted of French manuscripts, *vid.* David Fallows, 'French as a courtly language in fifteenth century Italy: the musical evidence,' *Renaissance Studies*, 3, 1989, pp. 429-441. Michael Long also demonstrates the

to the cumulative proportionality especially typical of French composers, such as Senleches and Suzoy, but are still couched in the age-old concepts of Boethean-Pythagorean ratios. This aspect and the use of cut mensurations signs suggests that Cordier's works belong to innovations which occurred towards the end of the first quarter of the fifteenth century. Next, there is the absence of Cordier's secular works in the older layer (Layer I) of Codex Chantilly and any other compilations of French music before the third decade of the fifteenth century. While chance or scribal taste obviously mitigate this observation to a lower status, it is strange that a composer who is accorded so much space in Ob 213 should not have at least one work transmitted in the sources of the *ars subtilior* repertoire proper if he was active before their compilation. Finally, there is the nature of Cordier's notational and musical style which can be perceived as a mannered imitation of older *ars subtilior* techniques, often employing ostensibly redundant equivoques and complexity for its own sake.

6.4. *Conclusions*

Throughout the preceding discussion, I have demonstrated that musical notation of the *ars subtilior* contains elements connected to wider cultural, especially intellectual, movements. The years around the beginning of the fifteenth century witness the emergence of a new popular arithmetic mentality that was nurtured by a growing interest in Indo-Arabic numerals and, more importantly, the methods of quick calculation facilitated by them. However, that the notational devices of composers such as Senleches and Suzoy were clearly influenced by advanced concepts of this new arithmetic mentality, but without the tell-tale presence of the Indo-Arabic numerals themselves, requires reconsideration of the view that the presence of Indo-Arabic numerals alone equates to a new arithmetic mentality. This conclusion challenges currently held wisdom. Yet the step of using the actual symbols that formed the basis of algorism indicates that, while the notational devices of the *ars subtilior* are by no means deficient in their nature, they lack a permanence and wide spread adoption which tends to indicate ongoing experimentation under the influence of the Indo-Arabic fractions and the growing dominance of this symbol-system in medieval culture. With the arithmetic concepts already in place, it was only a matter of time before the musical scribes in approximately the second decade of the fifteenth century took the

influence of French thought on the intellectual élite in *trecento* Florence in Long, 'Francesco Landini and the Florentine cultural élite', pp. 83-99.

logical step of using Indo-Arabic numerals/fractions themselves as precise indications of rhythmic proportions. This evaluation is ironic in that with the simple, uniform system of notation achieved, the interest or necessity of the style which brought it about appears to have declined to handful of dedicatory or exhibition pieces in the fifteenth century.⁹⁰

⁹⁰ On the extended but relatively rare cultivation of *ars subtilior* techniques into the fifteenth and sixteenth centuries, *vid.* David Fallows, 'The end of the *ars subtilior*', *Basler Jahrbuch für Historische Musikpraxis*, 20, 1996, pp. 21-40.

Epilogue

This study has addressed the need to reconsider the music of the *ars subtilior* as embodied in its notation from the perspective of its reception by musicians and scribes on the Italian peninsula during the earliest years of the fifteenth century. This focus was in part dictated by the dating and origins proposed for CH 564 and MOe5.24, which concluded that these principal sources of the *ars subtilior* were produced by scribes active in Italian centres. Both these manuscripts clearly represent local receptions of the *ars subtilior* style, but each from a very different perspective. CH 564, most likely the product of a Florentine professional workshop, represents for the most part a retrospective anthology of the masterpieces of the *ars subtilior* as it was cultivated in France at its height during the 1380s and 1390s. MOe5.24 on the other hand is a monument to the reception, assimilation and extension of the *ars subtilior* style and techniques by Italian masters. In this manuscript, the influence of French masters remains acknowledged through the presence of a select number of their works alongside early Italian proponents of the style, specifically Philipoctus de Caserta.

I have identified in CH 564 revisions made subsequent to this source's completion which suggest a knowledge, however general, of the *ars subtilior* style which extends beyond the ineptitudes (and hamstringing on the part of his exemplars) of this manuscript's principal scribe (Scribe β). This aspect itself attests to this style's cultivation in Florentine circles, perhaps under the auspices of the Augustinians of Santo Spirito, in the early fifteenth century. Conversely, the scribes (α & β) of MOe5.24 represent musician-scribes whose knowledge of *ars subtilior* techniques was extensive and plausibly based upon personal and professional experience. Scribe α appears to have had special access to the works of Matheus de Perusio, a fact that is also attested to by the presence of newly composed Cts by Matheus in another fragment (PAas 75) copied by this same scribe. The alterations made by Scribe β (Layers I and II) in MOe5.24 also suggest a continuing musical currency for the repertoire copied. The careful recasting of semiotic devices by this scribe, as with many scribes from this period, betrays an understanding of the semantics of this style. Such an understanding could only reside in continued cultivation.

The use of various semiotic devices is central to our understanding of the development, or at times plurality, of notational styles in this period. In the case of special note shapes and mensuration signs, I have concluded that practices can be delineated along

ethnographic lines (which also reside in chronological frameworks). The significance of these ethnographically oriented explanations is ultimately their contribution to our appreciation of the culture that fostered the *ars subtilior* style and the social contexts in which it resided. The development of a unique system of note shapes in Lombardy, distinct from proportional systems of notes shapes and coloration witnessed elsewhere, indicates the importance of the *ars subtilior* style and its reception/adaptation by composers in this region. The notated works of Matheus de Perusio remain central witnesses to this tradition, although its practice appears to have extended as far as Rome.

On a broader level, I have argued that musical notation, still a vibrant and new symbolic language, was subject to the influence of other aspects of intellectual culture during the fourteenth and early fifteenth centuries. The role of metalinguistic theory (evolved from Aristotelean doctrine) was a discernible influence upon musical notation, both theoretically and practically, which resulted in the increased use of extrinsic modes of signification in addition to, or in preference to, intrinsic modes. In relation to the development of extrinsic modes of signification, I identify the advent of algorism in music and its notation in the years around 1400. Importantly, I ask for a revision of received views by demonstrating that algorithmic processes exist in music of the late fourteenth century in advance of the actual use in musical notation of the sign-system central to algorism, namely Indo-Arabic numerals. Even in the earliest uses of Indo-Arabic numerals in the musical notation of *ars subtilior* works, composers and scribes appear more often concerned with their novel appearance than their implicit meaning. This situation, nonetheless, highlights the freshness of Indo-Arabic numerals to medieval scribes, a freshness that is obscured today by this sign-system's mundane dominance.

The symbiosis of music and culture is central to this study's claims. The view that the semiotic system directly associated with the music of the *ars subtilior* contains elements which link it to innovative movements of intellectual culture permits the conclusion that the *ars subtilior* itself was progressive and innovative. Nowhere is this more significant than in the case of MOe5.24. By proposing that this source contains in part a chanson repertoire associated with individuals connected to proto-humanistic circles in northern Italy, I demonstrate a newly acquired role for this genre and the *ars subtilior* style. An endurance of a set of stylistic elements, whose context originally resided in the courts and social institutes of France but in turn were adapted/developed in parallel in proto-humanistic circles in Italy, is apparent. The register of this flamboyant polyphonic style is as apt for nobility as it is for

the aspiring patrician or mercantile classes in the context of their emergent humanism. The enduring nature of the *ars subtilior* style possibly resides in its intellectual accomplishment and the necessity for the most accomplished performers in its execution.

The calibre of the performer of this repertoire remains central to this style's continued cultivation in Italy during a period of great upheaval and political instability in France, as were developments on the Italian peninsula, which resulted in the transplantation of French and Franco-Flemish musicians and composers into Italian centres. Even then, those ultramontanes no doubt encountered Italians whose knowledge of French techniques and performance abilities must have rivalled even the best French polyphonist. Although only one aspect of Italian musical culture, the strong presence of the *ars subtilior* in Italy among native practitioners, surely facilitated the arrival of the next generation of French composers. When Guillaume Du Fay penned his *Resvellies vous* (Ob 213, f. 126v) in 1423 for the wedding of Carlo Malatesta to Vittoria di Lorenzo Colonna at Rimini, he employed a late form of the *ars subtilior* style for the pleasure of his Italian patron. But nowhere else in his chansons from this same period does Du Fay employ this same style. *Resvellies vous* appears to be a response to the requirements of culture and circumstance wherein the suitability of the *ars subtilior* as a mode of musical celebration in the case of a noble wedding is maintained. The salient feature of this observation is that in at least the court of Carlo Malatesta, *ars subtilior* aesthetics remain viable and desirable as late as 1423.

The *ars subtilior* style represents a broad range of characteristic manipulations of musical elements. I have argued that representations of these stylistic elements are tied to concepts resident in the cultures of this period. The significance of this conclusion lies in its contribution to our understanding of this music. My ultimate goal is to inform the performer and listener of these cultural concepts that are often far removed from our own experiences. For, despite the fact that I have for the most part limited this study to palaeographic and semiotic issues, I desire more than anything to hear this repertoire performed in a manner which seeks to recreate those aspects of culture described herein. The actual means by which the re-creation of this style takes place is essentially a matter for performers. Although we can scarcely know how this music sounded from one place to the next, the reciprocal influence of scholarship and performance practice can lead to a carefully considered re-creation of one or more threads of the fabric of medieval culture. Ultimately, this informed position acts as a prism through which the dim light of the past is refracted onto the present. It serves to illuminate more fully our own experience and bridge the gap

between surviving artefacts and our own (post-)modern preconceptions. In this way, this study has sought to bring to light further knowledge that significantly contributes to our growing understanding of the music of the *ars subtilior*.

Addendum

During a conversation on 18th February 2001, Pedro Memelsdorff informed me in general terms that his study of manuscript accidentals in MOe5.24 was almost complete. Thus, it was much to my disappointment to learn that his findings¹ had been published too late to be considered in the body of this present study. I take this opportunity to respond here to his important study and to examine its conclusions regarding the creation of the outer gatherings of MOe5.24. Memelsdorff's study challenges several previous conclusions concerning the outer gatherings of MOe5.24. He largely overturns Pirrotta's theory that the two outer gatherings existed in the first instance as a protogathering. Instead, it is proposed that Gathering 1 was added to the inner gatherings as it began to be filled with works, but that Gathering 5 was not associated with this new compilation at this stage. Tantamount to this conclusion is that the freehand preparation of f. zr closely corresponds to the page layout of Gatherings 2 and 4 and, therefore, must have been associated at one time with either of these gatherings. But perhaps the most significant new conclusion arrived at by Memelsdorff concerns the possibility of multiple exemplars being used by the copyist of the outer gatherings. By proposing that certain segments of the outer gatherings demonstrate different scribal behaviours in the application of manuscript accidentals, Memelsdorff concludes that the outer gatherings depend on two or possibly three exemplars. He suggests that this scenario indicates that the outer gatherings must be distanced from Matheus de Perusio, again contrary to Pirrotta and more recently Stone.² In conjunction with keen observation of essentially three different pen and ink types, Memelsdorff arrives at an ingenious reconstruction of the order of copying and compilation of the outer gatherings. Memelsdorff's study is a bold and welcome contribution to the debate concerning the nature and origin of MOe5.24. Granted that he admits in his concluding remarks that it is a "first attempt to reconstruct the genesis and compilation process of the outer gatherings of ModA",³ there are, however, several questions raised by the conclusions drawn in his study. His conclusions impact minimally upon my discussion of the inner gatherings of MOe5.24. Instead, Memelsdorff seeks to answer several questions concerning the genesis of the outer gatherings not attempted in my own study of MOe5.24.

¹ Pedro Memelsdorff, 'What's in a sign? The \sharp and the copying process of a medieval manuscript: the Codex Modena, Biblioteca Estense, a.M.5.24 (olim lat. 568)', *Studi Musicali*, vol. 30, 2001, pp. 255-79.

² See above, pp. 95 and 97-98.

³ Memelsdorff, 'What's in a sign?', p. 297.

Although I do not dismiss Pirrotta's notion of a protogathering consisting of Gatherings 1 and 5 of the present manuscript, I do suggest that several works could have only been entered into their respective gatherings after the hypothetical protogathering had been split.⁴ It is inescapable that the outer gatherings were prepared in a uniform manner, although the absence of prick marks in the fifth gathering⁵ suggests in hindsight that the gatherings were not prepared as a single unit. Similar layout and presentation suggests a close proximity of each gathering to the other at an early stage. Whether each outer gathering represents a separate project, as proposed by Memelsdorff,⁶ is debatable. Pertinent to Memelsdorff's argument is the conclusion that f. z originally followed f. 40v and that the fifth gathering was commenced as a collection independent of the new compilation consisting of Gatherings 1-4. The dissociation of Gathering 5 from a Gatherings 1-4 project is useful in explaining the palimpsest of *Gratiosus fervidus* on f. 16r by Scribe α in preference of the copy of the same work on f. 50v and its replacement by *Pres du soloil*. Yet, the intermediate position of f. z is an obvious lynch-pin in Memelsdorff's argument concerning the late addition of Gathering 5.

Memelsdorff's conclusion that f. z originally followed either Gathering 2 or 4 is based upon the similar (vertical) dimensions of the writing space on f. zr. There are questions, however, over whether ff. 20v or 40v could have been used as a template for the ruling of staves without a rastrum (but evidently using a rule) on f. zr. Unfortunately, I was not in a position to examine Memelsdorff's findings by returning to the actual manuscript. However, using a technique of digital overlay of images of MOe5.24 scanned from microfilm (with correct scaling confirmed by staff and page widths), I was able to note certain discrepancies between the disposition of the staves (right side) of ff. 20v and 40v with the beginning of those on f. zr. Freehand lines on f. zr were clearly ruled from left to right, presumably using right end of staves on a facing page as a template. (There is a general lack of correspondence to the left end of staves on ff. 20v and 40r.) Staff dispositions on f. zr do not match for either the fifth and sixth staves of f. 20v or the 9th staff on f. 40v (that is the distance between staves 8 and 9 on f. 40v is smaller than on f. zr). These small observations leave some doubt over whether f. zr originally shared a relationship with the final leaves of either Gathering 2 or 4 when it was ruled with staves. Yet, it is curious that the disposition of

⁴ See above, p. 101.

⁵ See above, p. 100.

⁶ Memelsdorff, 'What's in a sign?', p. 274.

staves on f. zr shows a near perfect correspondence to the disposition of staves on left-hand side of f. 11r. Further measurements, perhaps with the assistance of a life-size transparency of f. zr, need to be made on the actual manuscript before any definite proofs (if at all) are established.

Memelsdorff notes⁷ the inscription on the spine edge of f. zr discovered by Alessandra Fiori. My independent discovery of the same inscription is reported above in the body of this study⁸ wherein I arrived at a slightly different, perhaps more cautious, reading of the inscription as *Nota figurata. Sumite [lacuna] del çacara* rather than *Nota figurare Sumite Karissimi del Zacara* offered by Memelsdorff (Memelsdorff reports that Fiori reads *Hora figurate. Sumite Karissimi del Zacara*). Reading this inscription as a catchword to the second gathering, Memelsdorff's suggestion⁹ that f. z may have formed the rear flyleaf to the lost original first gathering is plausible. This situation may explain the lack of correspondence between staff positions on f. zr with ff. 20v and 40v if one was to speculate that the original first gathering was prepared similar to Gatherings 2 and 4, but with staff dispositions reflected by the position of staves on f. zr. In other words, zr was ruled using a template that consisted of the lost first gathering. This situation throws some doubt on the need to transpose f. zr to an intermediate position after f. 40v, as Memelsdorff requires in his reconstruction of MOe5.24's genesis.¹⁰ Some inconsistencies in Memelsdorff's account of the assembly of the manuscript are suggested by his association of the f. z flyleaf with the new first gathering (the one that presently survives) also. Here, he concludes that f. z is still empty when transposed to after f. 40v. Is Memelsdorff proposing that f. z was a flyleaf to both the old and new first gatherings? Memelsdorff also speculates that ff. a and z were joined at this point.¹¹ The slightly smaller dimensions of a and z certainly suggest that they formed a bifolio or were cut as single leaves simultaneously. There is some question, however, mainly due to the non-corresponding disposition of staves and the possibility of its association with a lost gathering, of whether ff. a and z were actually associated the new first gathering until after the copy process had begun in earnest. The leaves may have been simply appropriated from the discarded old first gathering with staves freshly ruled on f. zr.

⁷ Memelsdorff, 'What's in a sign?', p. 271.

⁸ See above, p. 99.

⁹ Memelsdorff, 'What's in a sign?', p. 272.

¹⁰ Memelsdorff, 'What's in a sign?', p. 272.

¹¹ Memelsdorff, 'What's in a sign?', p. 273.

Also crucial to Memelsdorff's reconstruction of the genesis of the outer gatherings are his meticulous observations concerning pen and ink types in them. His hypothesis concerning multiple exemplars is also brought to bear upon the discussion. The problem with the methods of establishing this hypothesis, however, is discussed below. On their own, pen and ink types are sufficient for demonstrating copying layers in the outer gatherings. Essentially, Memelsdorff identifies three copying layers in the outer gatherings with some incursions into the inner gatherings:

Layer I: ff. av, 1r-2r, 9v-10v, 41r-44r (broad nibbed writing implement, light to darker brown ink).

Layer II: ff. 2v-9r, 44v-50v, including Cts by Matheus de Perusio and manuscript accidentals in inner gatherings (broad nibbed writing implement, near black ink)

Layer III: ff. zr, 16r (palimpsest)¹²

The numbering of layers above reflects the order of copying Memelsdorff assigns to the outer gatherings. (Memelsdorff does not refer to copying layers as such, although this is clearly what he intends.) Of significance is Memelsdorff's view that *Dame que i'aym sour toutes* (ff. 10v-11r) and the motet *Ave sancta mundi* (ff. av-1r) are respectively the penultimate and ultimate entries in Layer I in the first gathering. Yet, there is little internal evidence (even in light of Memelsdorff's theory concerning multiple exemplars) to suggest that Layer I chronologically precedes Layer II. In my estimation, the copying of works onto the exterior pages of a gathering might suggest that Layer I actually post-dates Layer II. External faces of gatherings were often the last to be filled in music manuscripts of this period.¹³ This permits a reiteration of a former view that these gatherings may have already contained music (copied in Layer II) before their association with the inner gatherings of MOe5.24. This might have included the transmission of *Gratiosus fervidus* on f. 50v. This scenario might also paint a picture of a copying project consisting of both Gatherings 1 and 5 which commenced with Matheus' sacred works, but soon moved to incorporate his songs.

Memelsdorff considers the entry of alternative Cts into Layer II as a secondary and final element of this layer that depended on a third exemplar: a Contratenor-book (to use Memelsdorff's terminology). The conclusion that these Cts represent late entries is based the different form of "C" initial is used for their labels. I would question, however, this conclusion by noting the work of the same scribe in PAas 75. In those fragments, both

¹² Memelsdorff, 'What's in a sign?', pp. 269-278. Layers described here are not to be confused with those described in the body of this study.

¹³ *Vid.* Nádas, 'The Reina Codex revisited', p. 102; *idem*, 'The structure of MS Panciatichi and the transmission of Trecento polyphony', p. 410.

forms of the “C” initial are used in alternative Cts by Matheus de Perusio.¹⁴ These additional voices appear to have been entered contemporaneously with the main portion of each respective work and their initials bear no specific significance. I am not convinced that a different form of initial indicates that Cts added to MOe5.24 are from a separate exemplar. Nor am I convinced that these Cts were copied after all other works using a “normal C” initial. Certainly, these Cts were copied after the main entries on the pages beneath which they appear.

Memelsdorff himself offers additional support for the conclusion that Layer II marks the initial phase in copying by observing¹⁵ that the coordination of manuscript accidentals between Machaut’s *Se vous n’estes* in the fourth gathering and its *Alius Ct* by Matheus de Perusio in Gathering I “would seem to confirm” the inner and outer gatherings remained separated and used independently from one another. This observation, however, seems inconsistent with the view that the Layer I entry of the Ct of *Dame que i’aym sour toutes* across both gatherings effectively ties Gathering I to Gathering 2 before the addition of Layer 2 entries. I see little reason to challenge the chronological position of Layer III that Memelsdorff situates in the final phase of the copying process. The following alternative scenario can be proposed: with the copying of Layers II (including alternative Cts) and I completed (in that order), Layer III continues to preserve Matheus de Perusio’s songs by copying *Dame de honour* onto the blank staves of f. zr taken from the old first gathering, and *Pres du soloil* over the palimpsest of *Gratiosus fervidus*, f. 16r.

I have left the aspect of Memelsdorff’s study I find the most problematic to last. This concerns his assessment of the use of manuscript accidentals in the outer layers. Observing that three types of manuscript accidentals are used in this portion of MOe5.24 (b, † and ‡),¹⁶ Memelsdorff attributes what is perceived as different behaviours in the use of these particular forms to the presence of at least two exemplars, each employing a different system for indicating pitch inflections and hexachord positions that is reproduced by the copying scribe. Memelsdorff uses this conclusion to distance the outer gatherings from the direct influence of

¹⁴ Matheus’ Cts for Ciconia’s *Lizadra donna* and Antonello Marot da Caserta’s *Più char che’l sole* use the “normal” (closed) “C”, while his Ct for Fontaine’s *Pour vous tenir* and Ct secundus (by Matheus?) of Bertrand Feragut’s *De yre et de dueyl* use the open “C”. The Ct of *Ayes pitie de moy belle* and *Je languis d’amer mort* both use the “normal C”.

¹⁵ Memelsdorff, ‘What’s in a sign?’, p. 277, fn. 67.

¹⁶ This is highlighted as a special feature of Scribe α on pp. 106-108 above. Memelsdorff attributes the same meaning to the † with and without internal, ornamenting dots, Memelsdorff, ‘What’s in a sign?’, p. 256,

Matheus de Perusio. This conclusion is significant. Although not stated by Memelsdorff, the compilation of an anthology of a composer's works outside his direct influence attributes a greater significance to this composer in terms of his influence and wider reception. This proposed revision, especially in conjunction with the discovery of Matheus de Perusio's works during last decade in a source (CH-BEsu) not directly related to MOe5.24 and PAas 75, requires future reconsideration of his role in the music of the early fifteenth century. However, while Memelsdorff's conclusions concerning multiple exemplars are innovative, I firmly believe that they are methodologically flawed.

Early in his study,¹⁷ Memelsdorff constructs a hierarchy of manuscript accidentals by proposing that all be divided into either accidentals written next to the clef (which he refers to as extrinsic signs) or accidentals written within the staff (which he refers to as intrinsic signs). In the first instance, I am curious to learn from whence does this terminology derive and what is the basis for making it (be it historical or empirical). Unfortunately, no further explanation of this terminology is provided, although it is clear that it is crucial to the ensuing discussion. I reject Memelsdorff's classification of manuscript accidentals on the following bases.¹⁸ In the first instance, Memelsdorff's model seems to invert the understanding of musical notation as might be construed from a historical perspective. One such historical perspective might take the ontological model of musical notation prevalent in

fn. 9.

¹⁷ Memelsdorff, 'What's in a sign?', p. 259.

¹⁸ I must assume that the reader is acquainted with theories of manuscript accidentals and *musica ficta*. The following studies represents a selection of secondary literature that has significantly contributed (although I cannot explicitly indicate in the present context whether their contribution has been positive or negative in their effect) to my understanding of these issues: Richard H. Hoppin, 'Partial signatures and *musica ficta* in some early 15th-century sources', *Journal of the American Musicological Society*, vol. 6, no. 3, 1953, pp. 197-215; Margaret Bent, '*Musica recta* and *musica ficta*', *Musica Disciplina*, vol. 26, 1972, pp. 73-100; *eadem*, 'Diatonic *ficta*', *Early Music History*, vol. 4, 1984, pp. 1-48; *eadem*, 'The grammar of early music: Preconditions for analysis', in *Tonal Structures in Early Music*, ed. C. C. Judd, New York and London, 1998, pp. 15-59; Karol Berger, *Musica Ficta: Theories of Accidental Inflections in Vocal Polyphony from Marchetto da Padua to Gioseffo Zarlino*, Cambridge, 1987; Thomas Brothers, *Chromatic Beauty in the Late Medieval Chanson*, Cambridge, 1997; Andrew Hughes, *Manuscript Accidentals: Ficta in Focus 1350-1450*, Rome, 1972; Elizabeth Leach, 'Interpretation and counterpoint: The case of Guillaume de Machaut's *De toutes flours* (B 31)', *Music Analysis*, vol. 19, no. 3, 2000, pp. 321-351; Peter Urquhart, 'Three sample problems in editorial accidentals in chansons by Busnoys and Ockeghem', in *Music in Renaissance Cities and Courts: Studies in Honor of Lewis Lockwood*, eds J. A. Owens and A. M. Cummings, Michigan, 1997, pp. 465-481. Many of Bent's important studies on manuscript and editorial accidentals are now contained in a single volume that consolidates her views on issues such as the significance of hexachords, *musica ficta* and *gammaut* transposition, *vid.* Margaret Bent, *Counterpoint, Composition and Musica Ficta*, New York and London, 2002. I also note, in light of the issues discussed herein, the article by Pedro Memelsdorff, '"Le grant desir": Verschlüsselte Chromatik bei Matteo da Perugia', in *Provokation und Tradition : Erfahrungen mit Alten Musik (Festschrift Klaus L. Neumann)*, eds H.-M. Linde and R. Rapp, Stuttgart, 2000, pp. 55-83. I further articulate my position on the interpretation of

music theory of the fourteenth century (as discussed in Chapter 4 of this present study in relation to mensural notation). According to this model, signatures (as indicators of the *recta gammaut*) can be equated with an intrinsic or essential nature. Departures from the intrinsic *recta gammaut* brought about by internal accidentals (in particular *ficta*) would be construed as *accidentia* and therefore operate extrinsically. Transpositions of the *gammaut* by internal manuscript accidentals may be regarded as intrinsic in their nature. Secondly, there is little to suggest that a manuscript accidental at the beginning of a staff functions in a significantly different way to a great number of manuscript accidents (especially *b*) occurring internally on a staff. It is frequently the case across collective transmissions of a work to witness the use of a signature at the beginning of the staff in one source and the same “signature” significantly delayed in another source. An example occurs in the Ct of Jacob de Senleches’ *En attendant esperance*, where the one flat signature occurring at the beginning of the Ct voice in CH 564 is delayed some six *tempora* until just before the first instance of the pitch-name *b* in MOe5.24. The use of accidentals at the beginning of a work represents a particular application of accidentals wherein the transposed *gammaut* is established in the first instance. Internal transposition functions in exactly the same manner although in the context of a previously established relative pitch hierarchy. In each case the function is identical – to establish a specific order of intervals residing in the meaning of accidentals in relation to the hexachordal system.

I am thus concerned that Memelsdorff’s model for different scribal behaviours as a reflection of different exemplars is based upon a false premise. I am also troubled that the false premise is used to suggest an empirical model for the use of “Marchettan” leading tones in the music of Matheus de Perusio. Marchettus’ division of the tone has aroused the curiosity of especially Jan Herlinger¹⁹ and several subsequent scholars/performers, and Memelsdorff’s curiosity is undoubtedly invoked by his worthy goal of bringing new understanding to the performance and listening of this music. There is, in my estimation, little to support his conclusion (whose argument is necessarily left incomplete to pursue the central issues of his paper) that manuscript accidentals in particular portions of the outer gatherings reflect a notational practice seeking to encode “Marchettan” leading tones. The following paragraphs will establish and articulate my rebuttal.

manuscript accidentals and provision of editorial accidentals in the introduction to Appendix A in Volume 2 of this present study.

Based upon his extrinsic/intrinsic categorisation of manuscript accidentals, Memelsdorff²⁰ concludes that the perceived behaviour exhibited by manuscript accidentals can be divided into two groups that reflect at least two different exemplars. These are labelled groups Alpha and Beta by Memelsdorff, wherein:

1. Alpha consists of entries on ff. (a), 1r-3r, 7v-10v(+11r), 41r-45v, 50r-v and z.
2. Beta consists of entries on ff. 3v-7r, 46r-49r.

Group Beta is evaluated to demonstrate a consistent behaviour wherein

1. ♯ appears only after an intrinsic ♭ and permanently cancels the ♭.
2. ♯ is not repeated unless another intrinsic ♭ occurs
3. An intrinsic ♭ is not cancelled by ♯.
4. Where ♯ cancels extrinsic ♭, ♯ “is used also for permutations and *paenultima*”.

Group Alpha is association with “Marchettan” leading tones, wherein:

1. ♯ cancels either intrinsic or extrinsic ♭.
2. ♯ can cancel intrinsic ♭.
3. ♯ may not be preceded by ♭, but cause a pitch inflection. This often occurs at the beginning of staves.
4. ♯ after ♯ on the same pitch may indicate a Marchettan leading tone.

The problem with Memelsdorff’s system of categories is that it unfairly differentiates between signatures (or extrinsic signs to use Memelsdorff’s false terminology) and internal accidentals. It also ignores some fundamental principles operating in the original. Foremost among these is the significance of the new staff. A new staff without any signatures can only indicate the relative location of pitch structures through its clef. *Gammaut* locators operating in the previous staff must be restated in the form of signature to indicate the continuation of the same *gammaut*. Also, Memelsdorff’s conclusions do not factor in the role of implicit solmisation in the relation to certain manuscript accidentals. The presence of a ♯ (as an indication of *mi*) midway through a work suggests that the same pitch-name was previously solmised to the syllable *fa*. Furthermore, if the sign ♯ appears in an unusual position, that is, in a position in the natural *gammaut* that cannot be solmised to the syllable *fa* in the *recta* system of hexachords, then one must ask whether the natural *gammaut* is operating at all, or whether a transposed *gammaut* is implied contextually by the subsequent use of this sign and the relationships exhibited contrapuntally between voices. My view is that the use of manuscript accidentals in the outer gatherings is wholly consistent with a single system of locating pitch structures. Rather than representing multiple exemplars,

¹⁹ Jan W. Herlinger, ‘Marchetto’s division of the whole tone’, *Journal of the American Musicological Society*, vol. 34, no. 2, 1981, pp. 193-216.

²⁰ Memelsdorff, ‘What’s in a sign?’, p. 260.

accidentals reflect a single scribal intention, that for reasons set out below, originated with the scribe of the outer gatherings. I will now suggest another rationale for the usage of manuscript accidentals in the outer gatherings, and proceed to demonstrate the uniform application of these principles across Memelsdorff's Alpha and Beta groups. These conclusions pertain at this point of time only to the scribal behaviour of the outer gatherings of MOe5.24, and should not be extrapolated, for example, to the manuscript accidentals appearing in the inner gatherings copied by my Scribe β .

1. \sharp occurs on pitch names that can be explicitly or implicitly solmised *fa*. It possesses a significant degree of prescriptiveness and indicates either:
 - a. The hard hexachord of a *gammaut*.
 - b. A sharpwards transposition of the *gammaut*. It locates the hard hexachord in that *gammaut*.
 - c. It cancels the effect of a \flat but only in such a way that it indicates a preference for the hard hexachord over the soft in the established *gammaut*.
2. $\#$ indicates *musica ficta*, i.e. pitch inflection beyond *recta gammaut*. Its degree of prescriptiveness is relatively weak, usually limited to a single operation often delimited by a cadential function. It does not cause permanent transposition or mutation.
3. \flat occurs on pitch names that can be explicitly or implicitly solmised *mi*. It possesses a significant degree of prescriptiveness and indicates either:
 - a. The soft hexachord of the *recta gammaut*. The inflection remains in operation until cancelled explicitly by a manuscript accidental or implicitly by contrapuntal behaviours.
 - b. A flatwards transposition of the *gammaut*. It remains in effect until cancelled either implicitly by \sharp or contrapuntal relations between voices.
 - c. A cancellation of a hard hexachord or *gammaut* transposition, which may also entail additional transposition.
4. The effects of accidentals do not carry over from the previous staff. This explains why signatures are usually repeated at the beginning of staves. A new staff overrides all behaviours described above.
5. All *gammaut* positions are subject to *musica ficta*, both notated and implicit. Melodic behaviour and contrapuntal context form core determinants in the editorial application of implicit inflections.
6. Whether a "signature" appears at the beginning or within a staff is not significant apart from the recognition that a sign indicating a *gammaut* position at the very beginning of a work lacks the same context of an internal *gammaut* transposition.
7. As a coefficient of points 1 and 3, *gammaut* transpositions can only be indicated by \sharp or \flat .

To demonstrate the redundancy of Memelsdorff's classification of manuscript accidentals in the face of a equally competitive, if not more viable theory based on principles of solmisation, limitations placed upon the scope of this response require me to take one song from each behavioural group (Alpha and Beta) proposed by Memelsdorff. These are *Helas Avril* (MOe5.24, f. 45r) from Group Alpha and *Ne me chaut* (MOe5.24, f. 48r) from Group Beta.

Figure A.1 provides a transnotation of the first 42 BB of Matheus de Perusio's *Helas, Avril*. Manuscript accidentals are preserved in forms and relative positions that correspond to the original. Editorial accidentals are shown above the staff, including those inflections explicitly required by manuscript accidentals and those understood to operate implicitly. The sign // appearing above staves indicates the beginning of a new staff in the original. Additional details relating to editorial policy are explained in Volume 2 of this present study.

Figure A.1: Matheus de Perusio, *Helas Avril*, BB. 1-42.

I-MOe5.24, f. 45r. Matheus de Perusio

The image displays three systems of musical notation for the vocal parts of 'Helas Avril'. Each system consists of three staves: Soprano (S), Contratenor (Ct), and Tenor (T). The lyrics are written below the Soprano staff. The first system covers measures 1-6, the second system covers measures 7-12, and the third system covers measures 13-18. The notation includes various accidentals (sharps, naturals, flats) and ornaments (trills, mordents). The Soprano part features several triplets and a double bar line (//) at the end of the second system. The Contratenor and Tenor parts provide harmonic support with sustained notes and moving lines. The page number 13 is visible at the bottom left of the third system.

Soprano (S): 1. He - las, A - vril, par ton doulz re - ve -

Contratenor (Ct):

Tenor (T): 1 Tenor

7

13

7

13

nir J'ay de dou - lour plus que di - re ne

say Quant si te voy io -

Figure A.1 (cont.)

Figure A.1 (cont.) displays four systems of musical notation, each consisting of a vocal line (treble clef) and a piano accompaniment (bass clef). The lyrics are: "li no - vel et gay de flours ves - tus en ioy - e", "sans es - may plain d'o - dours, de ly - esse", "et ie n'en ay que de - sir", and "so - ve - nir, plaindre et ler - mir." The score includes various musical notations such as triplets, slurs, and dynamic markings like *MS*. The systems are numbered 19, 25, 31, and 37.

Ct and T of *Helas Avril* lack signatures or transposing accidentals. The unsuitability of $\flat\flat$ in these voices (i.e. soft hexachord in natural *gammut*) suggests that all voices operate in a once sharpward transposed *gammut* located on G. The use of the hard and soft hexachords is not prescribed but is implied contrapuntally. *Musica ficta* on c and G is implied

or specified (eg. T 6.2, Ct 15). The beginning of the S (1.1-3.1) contains no indication of *gammaut* location other than the clef that suggests a natural *gammaut*. Yet, a degree of ambiguity must exist in this initial passage with the notation of $\natural g$ at S 3.2. The presence of this accident suggests retrospectively that a *gammaut* on d operates before this sign. This suggests that from the outset, voices in this work exhibit a relationship that is common to the majority of works noted in conflicting or differentiated signatures in this period.

The sign $\natural g$ at S 3.2 signals that the syllable *mi* must now be sung at this position in place of a former *fa* syllable and results in an inflection of g by a chromatic semitone. At the same time, its capacity as a hard hexachord effects a further sharpwards transposition of the *gammaut* to one based on A. This requires the editorial inflection of several subsequent pitch names in response to the new hierarchy of intervals. The occurrence of $\flat d$ in S 6 marks a particular form of accidental also occurring in Matheus de Perusio's *Le grant desir* found in the 4th gathering of MOe5.24. Unlike *Le grant desir*, the context for the interpretation of this accidental is clearly established by the $\natural g$ in S 3. As a *gammaut* is already operating where the pitch name d is already solmised *fa*, the use of \flat on this syllable does not inflect the pitch it precedes, but it establishes a soft hexachord on a (in preference to a hard hexachord on b), and effectively indicates a *gammaut* based on E. The recurrence of $\natural g$ at the beginning of S 10 is necessary after the beginning of a new staff and acts to re-establish the location of the *gammaut* (on a). The $\flat d$ at S 16.1 functions exactly as when it last occurred in S 6 and ensures a prolonged cadential figure that Memelsdorff aptly refers to as the *clausula peruscina*.²¹ Because g in the E-*gammaut* is already sung to the syllable *mi*, the $\natural g$ at S 16.3 establishes the soft hexachord of the a-*gammaut*. The $\flat c$ at S 19.1 enables the d-*gammaut* briefly before a return to the soft hexachord of the a-*gammaut*. The occurrence of a new staff at S 23 causes a reversion to the natural *gammaut*. This explains the $\sharp f$ at S 26.1 that represents a one-off instance of *musica ficta* in the context of the natural *gammaut*. (S 28.2 is inflected editorially as *ficta* in acknowledgment of implicit contrapuntal behaviours in lower voices.)

An a-*gammaut* is established briefly at S 30, but $\flat c'$ and $\flat f$ quickly shift the pitch organisation back to a g-*gammaut* via the d-*gammaut*. The g-*gammaut* is in operation in S 34 when $\sharp g$ is employed to indicate a once-off *ficta* inflection. Because the melodic line descends after the cadential figure in S 34, the soft hexachord is favoured editorially (hence f-natural at the end of S 34). The $\flat c$ in S 35 establishes a d-*gammaut* temporarily, but this is

quickly cancelled by the beginning of a new staff. Again, the natural *gammaut* is operating and $\sharp c$ is used to indicate a single precadential inflection. This situation possible betrays an exemplar where there was no staff break between 35 and 36. Memelsdorff does not attribute any significance to the staff break at this point when he observes²² that the same phrase repeated in the third part of this work uses only the sign \natural in the same location as in S 35. There is no staff break in the second occurrence of this passage. It is perhaps notable that $\flat f$ appears in the second statement in a position corresponding to S 36.3 in its first occurrence. If nothing else, comparison of these two readings confirms once again that new staves wipe the slate clean in relation to previous *gammaut* transpositions. Transpositions are only restored at the beginning of a new staff by restating the pertinent signs (i.e. as signatures). But my reading further highlights certain inadequacies in Memelsdorff's reading. The $\sharp c$ is required in the first instance of this passage at S 36 because the inflection is *ficta* in a natural *gammaut*. It is not required in the second statement because the \natural continues to operate until $\flat f$ signifies the soft hexachord of a new *gammaut*. Both statements contain only one further manuscript accidental: $\sharp c$ indicating a precadential instance of *musica ficta*. While there is a degree of ambiguity in relation to which *gammaut* is operating in this final portion of the first and last section of the S (the natural *gammaut* in the first section, the *g-gammaut* with soft hexachord in the second), their pitch structures are identical.

This brief analysis of manuscript accidentals and their meaning in *Helas Avril* confirms that this work from Memelsdorff's Group Alpha exhibits the seven principles of behaviours set out above. Significantly, it demonstrates that *ficta* signs are construed in a manner consistent with the operating *gammaut*. It also confirms that new staves cancel the effect of manuscript accidentals in the previous staff. Finally, it undermines the pretext used by Memelsdorff to propose a system of Marchettan inflections in Group Alpha. The logic that Memelsdorff searches for²³ in the use of these signs is evident in the behavioural principles established here. The sign \natural indicates a strongly prescriptive hard hexachord position over a soft hexachord position (either implicit or explicit) which often effects a particular *gammaut* in light of which subsequent accidentals are interpreted. The sign \sharp , on the other hand, is short lived in its effect and signals a *ficta* relationship. There is no need to

²¹ Memelsdorff, 'What's in a sign?', p. 267.

²² Memelsdorff, 'What's in a sign?', p. 267.

²³ Memelsdorff, 'What's in a sign?', p. 268.

resort to an explanation based on microtonally adjusted inflections. I would be the first to hesitate in denying that the Marchettan system of inflections may have a place in the performance practice of this music. I, however, see no justification for its practice in the behaviour of manuscript accidentals in this particular work. With these points in mind, I now turn to *Ne me chaut*, a song situated by Memelsdorff among the Group Beta works.²⁴

Figure A.2 (See p. 335 below) provides a complete transnotation of the two-voice virelai *Ne me chaut*. Again, it reproduces the form and location of all manuscript accidentals, indicating their meaning editorially. Staff breaks are again indicated by //. *Ne me chaut* exhibits none of the complex system of inflections present in *Helas Avril*, but contains sufficient manuscript accidentals to analyse their behaviour. The T operates with a one-flat signature throughout. Aside from $\flat\flat$ used twice in signature positions, only two other manuscript accidentals are found in T 8 and 16, both $\sharp\flat$. In both instances, the sign \sharp clearly indicates a once-off inflection in response to a cadential function. It overrides the effect of \flat for only one pitch. (I have chosen to inflect editorially $\flat\flat$ in T 18 as a continuation of a cadential function. It is possible that the \sharp in T 16 is actually an indication of this cadential inflection at the end of a phrase.) Because $\sharp\flat$ is judged an instance of *musica ficta*, I have read the T in an *f-gammaut*. An editorial preference for the soft hexachord explains the choice of an e-flat inflection for the first six BB of this work. The hard hexachord is implied by rising melodic lines and cadential structures (eg. B 40) from B. 19 onwards.

The S of *Ne me chaut* commences with a $\flat\flat'$ sign. In light of subsequent use of $\flat\flat'$ and the lack of $\flat\flat'$ repeated at the beginning of staves, I read this sign as an indication of the soft hexachord in the natural *gammaut*. Thus, once again from the outset, this work demonstrates a behaviour consistent with most compositions of this period which is inherent in the use of differentiated signatures in that upper voices are located in a *gammaut* one transposition higher than the lower voices. The occurrence of $\flat\epsilon$ at S 7.3 indicates a transposition to the *f-gammaut*. The effect of the soft hexachord is immediately cancelled in favour of the hard hexachord by $\flat\epsilon$ at the beginning of S 9. This initiates a two BB cadential function that Memelsdorff might also refer to as a *clausula peruscina*.

²⁴ Memelsdorff, 'What's in a sign?', p. 261.

Figure A.2: Matheus de Perusio, *Ne me chaut.*

I-MOe5.24, f. 48r. Matheus de Perusio

1.5. Ne
4. Quar

me pour chaut ma vos - tre i'ay

mau - par - ler chier di -

tres plus chier Que

tes au - piz que vous sa - ves
vous au - tres tels me blas - mer

Car ie vueil bien - que
Quar hom co - nois - tra bien sa - ches

Que ie ne vous pris
Que ie ne suy pas

un di - ner. 2. Vous au - tres lo - che -
vos - tre per. 3. Ne me tres lo - ues

tif mes - dis - sant de Car tou - tes ver - tus
pas tant ne quant Car ie ne suy

e - ne - mis. pas vostre a - mis.

13 19 25 31 37 43

The $\flat e$ at S 15 continues to locate pitch names in a *f-gammaut* after the beginning of a new staff, but again the soft hexachord is cancelled in favour of the hard hexachord at S 16. The $\flat\flat'$ at S 21 marks a return to the natural *gammaut*. The natural *gammaut* continues to operate for the rest of this work, although the composer's/scribe's preference for hard or soft hexachords of this *gammaut* is clearly indicated by $\flat b'$ at S 29 and S 40 and $\flat\flat'$ at S 31 and S 41. Because the natural *gammaut* operates from B. 21 onwards, cadential *ficta* inflections on *f* and *c'* are indicated by \sharp . Unfortunately, the position of manuscript accidentals in the S of *Ne me chaut* contributes little to proving that new staves cancel previous accidentals. However, it is clear that a consistent operation of manuscript accidentals identical to those in *Helas Avril* can be identified.

Indeed, the model proposed here explains many of the difficulties encountered by Memelsdorff in his categorisation of the behaviour of manuscript accidentals in the outer gatherings of MOe5.24. In a footnote at the bottom of page 261 of his study, Memelsdorff notes that, in relation to the use of the sign \flat in *Trover ne puis* and *Già da rete d'amor libera et sciolta*, "the difficulty lies in deciding whether some of their flats <i.e. \flat > are intrinsic or not." In *Trover ne puis* (*vid.* Figure A.3 on page 337), the occurrence of $\flat e$ at the beginning of the fourth staff and after the 29th note in the same staff without any in interpolating $\flat e$ is considered problematic by Memelsdorff. However, I observe that the melodic line descends to E on the 21st note of this same staff which sounds as E-natural (i.e. as the hard hexachord) in anticipation of the same inflections in the Ct and T voice in subsequent BB. This implicit operation of the hard hexachord would seem to warrant the re-confirmation of the soft hexachord when the melodic line again ascends to the octave above. The \sharp on the *e* just after the second instance of $\flat e$ on the fourth staff does not cancel the effect of $\flat e$ (as Memelsdorff suggests) but it effects a once-off *ficta* inflection in relation the $\flat\flat$ -*gammaut* briefly established beforehand by $\flat a'$ before the last pair of *minime pause* of the staff. The instance of $\flat e$ at the beginning of the fourth staff is problematic in Memelsdorff's categorisation as the only sign occurring before this one is also $\flat e$ above the ninth note of the third staff. If anything, the restatement of $\flat e$ at the beginning of the fourth staff vindicates my view that a new staff cancels the effect of previous signs. Much of the subsequent remarks made by Memelsdorff concerning the use of \flat and \sharp in the lower voice of *Trover ne puis* can be consistently explained as either indicating the soft or hard hexachord of the current or new *gammaut* (note especially the end of the 7th staff) or the placement of *ficta* tones on the 4th and 7th degrees of the $\flat\flat$ -*gammaut* operating this voice. Memelsdorff's

choice not to include this work in Group Beta, however, mitigates these conclusions to a lesser status. The instances of flats Memelsdorff also puzzles over in *Già da rete* as well as *Ne me chaut* (discussed above), in both cases involve the use of flats at the beginning of a staff to indicate a preference for the soft hexachord in relation to the established *gammaut*.

Figure A.3: Matheus de Perusio, *Trover ne puis*, MOe5.24, f. 46r (trimmed).

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By now referring back to Memelsdorff's groups (*vid.* p. 328 above), the following rebuttals are proposed:

1. A new staff cancels the effect of previous manuscript accidentals. A *gammaut* is re-established by a signature or subsequent accidentals on the staff.

2. There is no significant difference in the meaning of \flat and \natural either at the beginning of a staff or within a staff. Both signs merely indicate a soft or hard hexachord position respectively, which in turn might establish a particular *gammaut* of pitch relationships. Context, however, is critical in determining whether the signs cause permutation or transposition. Both signs possess a significant degree of prescription that contrasts sharply with the once-off inflection caused by \sharp .
3. \flat can appear after \natural whenever a continued shift from the soft to hard hexachord is required. It may also appear on a pitch-name that is implicitly solmised *mi* in the hard hexachord beforehand. Alternatively, it may establish the hexachord from the onset when implicit indications of not sufficiently evident.
4. \natural can appear after \flat whenever a continued shift from the soft to hard hexachord is required. It may also appear on a pitch-name that is implicitly solmised *fa* in the soft hexachord beforehand. On the other hand, it may establish the hexachord from the onset when a degree of ambiguity exists.
5. \sharp indicates a once-off *ficta* inflection. The effect of a previous \natural or \flat continues to operate after this *ficta* inflection.
6. \sharp after \natural on the same pitch indicates a *gammaut* shift has occurred between the signs and that the second sign indicates a one-off instance of *musica ficta*.

As such, the uniform system of manuscript accidentals across Memelsdorff's Groups Alpha and Beta distinguishes between the operation of *recta* signs (I include those that cause transposed *gammauts*) and *ficta* signs. It embodies a degree of precision that is often lacking in the inner gatherings of MOe5.24 (only \sharp and \flat are used) and in CH 564 (which prefers \natural to \sharp). Exceptions to this observation occur in works in the inner gathering of MOe5.24 like *Le grant desir*, but the binary system of manuscripts accidentals cannot be compared in a simple way to the ternary system used in the outer gatherings. The notational practice in the outer gatherings, particularly in *Helas Avril*, represents yet another aspect of notational *subtilitas* that is shared with those works in the inner gatherings which seems to respond to new stylistic demands placed upon contrapuntal and rhythmic language.

Returning, however, to the task at hand, I make the following assessments concerning the significance of Memelsdorff's study in relation to this present study. The protogathering theory, while considerably diminished in the present study, is dismissed by Memelsdorff. Memelsdorff and I, however, reach a similar conclusion that the outer gatherings were formed as quinions before the copying process was commenced, although I leave open the option that some works were already copied into the outer gatherings before their association with the inner gatherings. In doing so, I question the order of copying layers attributed to the outer gatherings by Memelsdorff, although I do not disagree with his excellent account of ink and pen types in them. I have demonstrated here that a reasonable degree of uncertainty exist in relation to Memelsdorff's conclusion that f. z original followed

ff. 20 or 40. This throws some doubt on the conclusion that Gathering V remained separated from the collection until late in the compilation process.

Finally, I have questioned an aspect introduced in Memelsdorff's study that explores the possibility of multiple exemplars being used for the outer gatherings based on the use of manuscript accidentals. The premise that accidentals at the beginning of a staff are in some way different to those encountered in the midst of a staff is employed without any articulation of its basis. If its basis is a purely empirical one, then my provision of a model that is based on historical grounds (solmisation practice, somewhat informed by modern views on *gammaut* transposition) and confirmed by empirical data suggests its non-exclusivity and fallibility. At the same time, the alternative model I have provided demonstrates that exceptions noted by Memelsdorff under his categorisation of manuscript accidentals are unexceptional under the model proposed here. The model I have provided here actually argues from the strong hand of a scribe who has a particularly precise manner of controlling pitch-organisation according to held conventions (like the cancelling effect of new staves). Internal variation, such as that found in *Helas Avril*, suggests the scribe is in control of these conventions and adjusts his text accordingly. This view is also borne out by several accidentals erased by this scribe in recognition of these principles. One notes, for example, the erased ♯ in the fourth staff of *Ave sancta mundi* (f. 1r). The sign is unnecessary here because the same strongly prescriptive sign already occurs earlier in the staff. Again, this might suggest the correction of a reading made in the first instance by the scribe of the outer gatherings from an exemplar (formed using similar conventions for manuscript accidentals) wherein the second instance of ♯ corresponded to the beginning of a new staff.

The burden of proof rests upon the ability of the scholar to articulate an effective argument and the methods used to establish a hypothesis. Because the basis of Memelsdorff's methodology is flawed and the behaviours of manuscript accidentals he observes can be readily explained using another method (as I have done above), I do not think that the case for multiple exemplars has been proven. Although framed as a preliminary study, I believe that further steps could have been taken by Memelsdorff to explain why he arrived at a certain copying order (or at least refute any other reasonable possibilities) and why the fifth gathering should have been dissociated from the collection of songs in Gatherings 2-4 of MOe5.24. Questions of how the inner gatherings became associated with the outer ones, as well as of where the manuscript was compiled and its early provenance remain unanswered. I have provided some speculative answers to these

questions in Chapter 3 of this present study, but I also acknowledge (as I believe Mr Memelsdorff might also) that definitive answers to these questions reside in a continuing, careful re-evaluation of this important manuscript from the perspective of sound methodologies.

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