Ars subtilior in Organ Playing c.1380–1420

Another Glimpse into a Late Medieval Unwritten Performance Practice

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We have long known that the organ was a key element in the solemnization of late medieval liturgy. Evidence for the existence of church organs and professional organists in the fourteenth century is omnipresent throughout Europe.¹ Church customaries, ordinals, and references in different kinds of historical documents give us a rough sense of the liturgical uses of the organ, namely the chant-organ *alternatim* practice at Mass and Vespers and the performance of keyboard arrangements of vocal compositions such as motets and secular songs. In contrast to contemporaneous repertoires of vocal polyphony, however, surviving sources of keyboard music are extremely rare.² This lack of sources is primarily due to the

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Manuscript abbreviations and sigla for archives, libraries and modern editions:

Apt 16bis: Apt, Cathédrale Ste Anne, Trésor 16bis

Chantilly: Chantilly, Musée Condé, MS 564

Cividale 79: Cividale del Friuli, Museo Archeologico Nazionale, Cod. 79

Faenza 117: Faenza, Biblioteca Comunale, MS 117

Ivrea 115: Ivrea, Biblioteca Capitolare, MS CXV

Madrid 1361: Madrid, Biblioteca Nacional de España, M1361

Madrid 20486: Madrid, Biblioteca Nacional de España, MS 20486

Mallorca: Palma de Mallorca, Arxiu de la Catedral, Cantoral del Convent de la Concepció

Mod A: Modena, Biblioteca Estense, MS α.M.5.24

Reina: Paris, Bibliothèque nationale de France, nouv. acq. fr. 6771 (Codex Reina)

Robertsbridge: London, British Library, Add. 28550 (Robertsbridge fragment)

Torino J.II.9: Torino, Biblioteca Nazionale Universitaria, MS J.II.9

ACT: Archivo Catedral de Toledo

BCT: Biblioteca Catedral de Toledo

OF: Libro de Obra y Fábrica (Archivo Catedral de Toledo)

CMM: *Corpus Mensurabilis Musicae* (American Institute of Musicology)

PMFC: *Polyphonic Music of the Fourteenth Century* (Monaco: Editions de l’Oiseau-lyre)

¹ References to organs and organists in fourteenth-century European institutions, both religious and secular, are literally uncountable. For a capsulized overview, see Peter Williams, *A New History of the Organ* (London and Boston: Indiana University Press, 1980): 46–51, where he summarizes how „organs were known in cathedrals less as an exception and more as a norm.“

² Only seven sources are currently known to represent fourteenth-century keyboard traditions, most of them being fragmentary manuscripts or transmitting isolated pieces. These sources are edited and/or discussed in *Keyboard Music of the Late Middle Ages in Codex Faenza 117*, ed. Dragan Plamenac (CMM 57, Rome: American Institute of Musicology, 1972); Pedro Memelsdorff, *The Codex Faenza 117*, 2 vols. (Lucca: LIM, 2013); Giulio Cattin, „Ricerche sulla musica a S. Giustina di Padova all’inizio del Quattrocento,“ *Annales Musicologiques* 7 (1977): 17–41; Agostino Ziino, „Un antico

essentially unwritten nature of instrumental performance practice in this period, which makes it difficult – if not impossible – to reconstruct the richness and diversity of fourteenth-century organ culture. The few surviving manuscripts of keyboard music from this period show a considerable variety of notations, contrapuntal textures and ornamental styles,³ which obviously implies that other organ ‘schools’ and even ‘personal styles’ existed in many other places where no written trace has been preserved at all. Occasionally, contemporaneous treatises on flourished counterpoint and written samples of discant practice afford a glimpse not only of singers’ but also of organists’ skills in improvised counterpoint.⁴

This essay examines a very exceptional written record of a performance practice cultivated in Toledo Cathedral, in which melodic and contrapuntal ornamentation on monophonic chant were extemporized. The manuscript, now preserved in Madrid, transmits a monophonic mensural Credo, whose Amen was provided with a flourished counterpoint in *Ars subtilior* style likely to be performed on the organ.⁵ In order to provide a meaningful context for this source, I shall first introduce the background of Toledo Cathedral and explore the role of organs and organists in both liturgy and music teaching. In subsequent sections, I will analyse the piece’s notational features and scribal process and, finally, discuss the significance of this witness within a broader context of relations between unwritten performance practice and the development of complex rhythmic notation in the late fourteenth century. The overall discussion sheds new light on the interactions between eccle-

‘Kyrie’ a due voci per strumento a tastiera,” *Nuova rivista musicale italiana* 15/4 (1981): 628–633; Michael Scott Cuthbert, *Trecento Fragments and Polyphony Beyond the Codex* (PhD diss., Harvard University, 2006): 408–409 and elsewhere; Maria van Daalen and Frank L. Harrison, “Two Keyboard Intabulations of the Late Fourteenth Century,” *Tijdschrift van de Vereniging voor Nederlandse Muziekgeschiedenis* 34/2 (1984): 97–108; Thurston Dart, “A New Source of Early English Organ Music,” *Music & Letters* 35/3 (1954): 201–204; *Keyboard Music of the Fourteenth and Fifteenth Centuries*, ed. Willi Apel (Stuttgart: American Institute of Musicology, 1963).

³ Compare, for example, the ornamental styles transmitted in English and Italian keyboard sources – no French keyboard manuscript from the fourteenth century has been preserved.

⁴ For a list of treatises Anne Stone, “Glimpses of the Unwritten Tradition in Some *Ars subtilior* Works,” *Musica Disciplina* 50 (1996): 59–93. See also Klaus-Jürgen Sachs, *Der Contrapunctus im 14. und 15. Jahrhundert* (Wiesbaden: Franz Steiner, 1974).

⁵ The term *Ars subtilior* was introduced into musicology by Ursula Günther to refer to the musical style that emerged in the late fourteenth century and which is characterized by a rhythmic complexity that goes far beyond the possibilities offered by the classical *Ars nova* theory. Ursula Günther, “Das Ende der *Ars nova*,” *Die Musikforschung* 16 (1963): 105–120; idem, “Die *Ars subtilior*,” *Hamburger Jahrbuch für Musikwissenschaft* 11 (1991): 277–288. For more recent studies on the *Ars subtilior* phenomenon, see Anne Stone, *Writing Rhythm in Late Medieval Italy: Notation and Musical Style in the Manuscript Modena, Biblioteca Estense, Alpha.M.5.24* (PhD diss., Harvard University, 1994); Jason Stoessel, *The Captive Scribe: The Context and Culture of Scribal and Notational Process in the Music of the Ars subtilior*, 2 vols. (PhD diss., University of New England, 2002); Yolanda Plumley, “An ‘Episode in the South’? *Ars subtilior* and Patronage of French Princes,” *Early Music History* 22 (2003): 103–168; Uri Smilansky, *Rethinking Ars subtilior: Context, Language, Study and Performance* (PhD, University of Exeter, 2010).

siastical and courtly musical cultures in the formation and dissemination of the *Ars subtilior* style.

Organists and music teachers at Toledo Cathedral

The history of Toledo Cathedral begins in 1085 with the conquest of Muslim Toledo by the Christian king Alfonso VI of León and Castile. Very soon after the capture of the city, the necessary adaptations were made in order to enable Christian worship in its principal mosque, and Pope Urban II granted it the status of „Primate See“ over all the other episcopal sees in Hispania. In other words: Toledo became Spain's ecclesiastical capital, at least symbolically. The Christianised mosque remained nearly intact through the first quarter of the thirteenth century; the current Gothic structure began to be built in 1226.⁶ For centuries to come, the Metropolitan Archdiocese of Toledo enjoyed international reputation as the second richest after that of Rome.⁷

References to masters of polyphony and organ players at Toledo Cathedral begin to appear in the twelfth and thirteenth centuries. Administrative records and obituaries from that period mention the names of at least four persons holding the title of „organista“ or „magister organista.“⁸ Although we cannot be sure what the exact functions of these *organistae* were, we might suppose that they took on duties similar to those of the *magister* or *doctor in organo* of Burgos Cathedral, first documented in 1222. By 1250 the cathedral chapter of Burgos had established a twofold salary that paid the *doctor in organo* not only for his teaching duties but also for his service of playing the organ during the most solemn liturgical celebrations („ad pulsanda organa consuetis solemnitatibus“).⁹

Payments to organists at Toledo Cathedral are more clearly documented in books of accounts from the fourteenth century onwards, particularly in the series entitled *Libros de Obra y Fábrica* (hereinafter OF).¹⁰ Thus we know the names of six organists who served at Toledo Cathedral between c.1350 and 1425:

⁶ For an overview of Toledo Cathedral in the central and late Middle Ages, see Tom Nickson, *Toledo Cathedral: Building Histories in Medieval Castile* (Pennsylvania State University Press, 2015).

⁷ For an introduction to the cathedral's organizational and liturgical aspects, see María José Lop Otín, *La Catedral de Toledo en la Edad Media* (Toledo: ITSI, 2008).

⁸ David Catalunya, „Thirteenth-century *organistae* in Castile,“ *Orgelpark Research Reports* 4 (2017): 105–140 (Open Access at orgelpark.nl).

⁹ *Ibid.*, pp. 112–113.

¹⁰ The *Obra y Fábrica* was a department of the cathedral chapter directly responsible for anything relating to the construction of the building, its preservation, and its ornamentation.

- Pedro González (between 1354 and 1411)¹¹
- Ruy González (1355)¹²
- Alfonso Fernández (1384)¹³
- García Esteban (1384)¹⁴
- Miguel Sánchez (between 1418 and 1432)¹⁵
- Juan Alonso de Ronda (between 1425 and 1427)¹⁶

All of them had further occupations besides playing the organ, namely those of chaplain and *magister claustralis*. The *magister claustralis* (or *claustrero*, in the vernacular Castilian) was the music teacher of the choirboys and other cathedral clerics. Pedro González (fl.1354–1411) was indeed a *magister claustralis* who was paid a supplementary salary for playing the organ. Alfonso Fernández was also paid for playing the organ in 1384, and the same name appears in 1418 as a cantor „who had the job of teaching mensural polyphony to the choirboys.“¹⁷

Like in thirteenth-century Burgos, the double function of the *magister claustralis* as a music teacher and an organist was rendered official in the cathedral *Constitutiones* of Toledo. Those promulgated in 1357 by Archbishop Blas Fernández of Toledo stipulate that:¹⁸

Ad officium magistri claustralis pertinet docere et instruere pueros seu clericellos chori, et alios beneficiatos ecclesie in cantu et vsu ecclesie diligenter, et eorum defectus seu errores circa officium etiam choro corrigere et emendare ... Item, ad ipsum claustralem pertinet, si ad id eruditus sufficiens existat, pulsatio organorum, et pro onere pulsationis huiusmodi, centum de rectorio et tecentos sexaginta et quinque de fabrica ecclesie morapetinos ... et pro onere claustris decem denarios diebus singulis percipiat, prout in constitutione de portione quotidiana habetur.¹⁹
(The task of the *magister claustralis* is to teach and instruct diligently the children or choirboys and other church beneficiaries in singing and the customs of the church, and to correct and

¹¹ See François Reynaud, *La polyphonie tolédane et son milieu, des premiers témoignages aux environs de 1600* (Turnhout: Brepols, 1996) 154–165. Payments „por los órganos“ in 1354 (OF 927, ff. 35, 42, 51), 1355 (OF 1046, ff. 14 v, 16 r, 21 v, 29 r, 29 v), 1372 (OF 929, f. 49 v), 1379 (OF 930, ff. 65 v, 71 v, 77 r), 1400 (OF 930, f. 67 r) and 1411 (OF 930, f. 98 v).

¹² OF 1046, ff. 14 v, 16 r, 21 v, 29 r, 29 v. He and Pedro González were both *racioneros* (prebendary canons) of the Dean Choir. See Reynaud, *La polyphonie tolédane*, p. 154. Barbieri claims to have traced him as „Ruy González, capellán de la Reina, tocador de los órganos“ in the *Libros de pagas del tercio postrimero* of 1355. Francisco Asenjo Barbieri, *Biografías y documentos sobre música y músicos españoles*, ed. Emilio Casares (Madrid: Fundación Banco Exterior, 1986): 422.

¹³ OF 760, f. 22 v. Payment „por los órganos.“

¹⁴ Ibid., f. 28 v. Payment „por los órganos.“

¹⁵ Documents from 1418 (OF 761, f. 4r: „capellán ... que ovo de aver de oficio del tañer de los órganos“), 1425 (OF 783, f. 13 v); 1429 (OF 767, f. 11 r), 1431 (OF 768, f. 11 r) and 1432 (OF 769, f. 10 r). Barbieri traced him in books of accounts from 1424, 1425, 1426, 1427, 1431, 1432, 1436. Barbieri, *Biografías*, p. 434.

¹⁶ Documents from 1425 (OF 783, f. 13 v), 1426 (OF 764, f. 10) and 1427 (OF 765, f. 9).

¹⁷ OF 761, f. 4v: „Alfonso Fernández, cantor ... que ovo de aver su oficio de mostrar a los moços el canto de órgano.“ Barbieri, *Biografías*, p. 211. „Canto de órgano“ is the usual term for mensural polyphony in the vernacular Castilian.

¹⁸ The cathedral *Constitutiones* by Archbishop Blas are preserved in various manuscripts. The earliest copy is in ACT, MS 23-17. Citations in this article are from ACT, SC, lib. 2. A later copy is preserved in Madrid, Biblioteca Nacional, MS 13021.

¹⁹ ACT, SC, lib. 2, f. 25 v [f. xv v], *De officio magistri claustralis*.

amend their defects or errors concerning their tasks in the choir ... Likewise, if sufficiently learned in this matter, the *magistrer claustralis* is also to play the organ, and for the work of playing the organ, shall be paid 100 *morabetinos* by the refectory and 365 by the church *fabrica* ... and for the teaching work, 10 dinars per day, as is stipulated in the constitution on daily payment.)

Because the music teacher was often an organist himself, not surprisingly the organ was used in musical education and helped materializing the perception of theoretical principles. Organ keyboards were especially useful to illustrate hexachord and *musica ficta* theory. Around 1400–1410, a „teacher of plainsong, counterpoint, and mensural polyphony“ of Seville Cathedral – whose treatise is preserved in Toledo – instructed his pupils to look at the organ keyboard, where the accidental tones were visible even „with the usual signs written [above the keys].“²⁰ Here the teacher was obviously referring to the note-names that were customarily written above the organ keys, as they appear on the surviving remnants of the Norrlanda organ from c.1370–1400.²¹

In Toledo Cathedral, if not the major church organ, smaller instruments like the Norrlanda organ were used to accompany the chant on a regular basis, and the *Constitutiones* of 1357 specify that it was the *precentor* who was responsible for ensuring and organizing the operation of the organ's bellows:

Precentoris officium est, ut diuina officia debito modo in ecclesia fiant, se vigilem exhibere; ... clericellorum chori insolentias, et quecunque alia negotia, questiones et lites, que inter eosdem emerint, prout sibi videbitur, punire et terminare ... et ad organa pulsanda compellere; et si clericelli non affuerint, capellani per decanum ad id compellantur.²²

(The task of the precentor is being vigilant so that the divine offices be properly held in the church; ... punishing and ending all insolence and any other matter or disagreement arising among the choirboys ... and making them [the choirboys] operate [the bellows of] the organ;²³ and if the choirboys are not present, the chaplains must be made to do so by the dean.)

The same cathedral *Constitutiones* stipulate that the organ was always to be heard during the celebration of the Mass on the most solemn feast days, even when there was no procession to be held:

²⁰ Fernand Estevan: *Reglas de canto plano è de contrapunto è de canto de organo*, ed. María Pilar Escudero (Madrid: Editorial Alpuerto, 1984; reprint 2002), p. 95 (f. 12r): „E muchos disen que las conjuntas non son verdaderas, mas ve a los órganos, que así las fallarás sennaladas estas conjuntas con los signos de yuso escriptos.“ See also Karl-Werner Gimpel, „Gregorian Chant and Musica Ficta: New Observations from Spanish Theory of the Early Renaissance,“ *Recerca musicològica* 6–7 (1986–87): 5–27, at 10–11.

²¹ The remnants of the Norrlanda organ are currently on display in the National Historical Museum in Stockholm. See Göran Tegnér, „L'orgue de Norrlanda et quelques autres vestiges d'orgues médiévaux en Suède,“ in *Les orgues gothiques*, ed. Marcel Pérès (Paris: Créaphis, 2000): 207–220 (picture of the organ keyboard on p. 211). See also Karl Bormann, *Die gotische Orgel zu Halberstadt: Eine Studie über mittelalterlichen Orgelbau* (Berlin: Verlag Merseburger, 1966): 28–37, and Peter Williams, *The Organ in Western Culture, 750–1250* (Cambridge and New York: Cambridge University Press, 1993): 343.

²² ACT, SC, lib. 2, f. 22v [f. xii v], *De officio precentoris*.

²³ Since this task is entrusted to the choirboys, here „organa pulsanda“ should be understood as operating the bellows of the organ.

De festiuitatibus vero sex caparum, post dictam domini Roderici ordinationem de nouo institutis, taliter duximus ordinandum: ut in ipsis officium in missa cum sex capis et organorum pulsatione sollemniter tantummodo celebretur, non tamen ratione festi processio fiat.²⁴
 (On feast days of six copes²⁵ instituted ex novo by order of [archbishop] don Rodrigo, we decided the following: on such feast days, only the Office of the Mass with six copes and the playing of the organ will be held solemnly, even if, because of the feast day, no procession needs be held.)

In solemn processions, rather than accompanying or alternating with chant, the large organ was played simultaneously with the ringing of all church bells, which gives us an idea of its massive volume of sound. An ordinance from c.1400 emphasises that major feast days should be celebrated with the greatest possible solemnity.²⁶ In describing how the processions must be carried out in those solemn celebrations, the ordinance specifies that „a cluster with all the bells be made and the organ be played“ after the prayer at the third station of the procession.²⁷

Although the city of Toledo had long been home to reputed organ builders,²⁸ and evidence suggests that Toledo Cathedral had owned large church organs since early times,²⁹ the earliest known record of any organ-building activity at the cathedral dates from 1418. By then, the organ-builder Fray Giraldo was working on the

²⁴ ACT, SC, lib. 2, f. 16 v [f. vi v].

²⁵ „Six copes“ refers to the number of presiding canons who wore pluvial copes at Mass.

²⁶ BCT, 42–31, ff. 1r–3v: „deseando e queriendo acresçentar el seruiçio de Dios e dela dicha eglezia, et por que es cosa razonable que en quanto la fiesta es mayor e más ornada, tanto más le deuen ser fecha mayor sollenpnidat e más onrada.“

²⁷ Ibid., f. 2v: „que sea fecho clauso con todas las campanas et que tangan los órganos.“ The source provides a list of new feast days on which the organ was to sound in processions, among which are: „Translatio Sancti Benedicti, ordenóla el cabildo que la fagan de seys capas con processión et órganos“ (f. 5v); „Sant Antolín ordenólo don Gutier Gómez, abbat de fusiello, que lo fagan de .vi. capas con processión et órganos“ (f. 71r); „Santa Odolia, ordenóla don Iohannes Cabeça de Vaca, obispo de Coymbra, de .vi. capas con processión et órganos“ (f. 71r); „Sant Lucas que ordenó el cabildo que lo fezesen de .vi. capas con processión et órganos“ (f. 78r); „la batalla del salado quando el rey don Alfonso venció al rey de Benamarín en .xxx. días de octubre, que fue lunes, era de mill et .ccc.^{os} et .lxx. et ocho annos [i.e. 1240] ... Esta dicha fiesta se ordenó que se reze et cante de su lectura perpetua, et á se de faser processión solepne con órganos“ (f. 78r).

²⁸ An organ builder from Toledo, „Martinus Ferrandiç, civis Tholetane, magister organorum,“ was engaged in 1345 to build a big organ at Barcelona Cathedral. Josep Baucells, „Les noticies més antigues sobre els orgues de la Catedral de Barcelona,“ *Medievalia* 8 (1988): 41–74, at 70–71.

²⁹ In addition to the evidence presented above, the cathedral *Constitutiones* from 1374 by Archbishop Gómez Manrique mention the „door“ that gave access to the organ, close to which a procession had to pass: „permaioorem processionem, iuxta ianuam organorum vbi statim erit caput prime stationis“ (BCT, MS 23-17, f. 36r, modern foliation). Although we cannot be certain of the date on which large organs began to be installed in Toledo, we do know that by 1284 the Salamanca Cathedral had a large organ accessible by stairs through a door. An obituary from Salamanca Cathedral records that Fernán Núñez (a canon who died in 1284) „yace a la puerta por donde solían sobir a los órganos“ (note that the document employs the past tense to refer to the use of this door). According to the same obituary, Juan Pérez, a *racionero* of Salamanca Cathedral, also entered near the door that had given access to the big organ („la puerta por donde solían estar los órganos grandes“). Archivo de la Catedral de Salamanca, Caj. 67, *Capitulario de la Catedral de Salamanca, Memorias de los Aniversarios y Fiestas que hace el Cabildo*, ff. ix r and xii v respectively.

construction of a new church organ.³⁰ Here the term „órganos mayores“ obviously implies that the cathedral owned other, smaller, organs to accompany the chant in the choir and in other chapels, and slightly later documents do, in fact, mention the „órganos menores.“³¹ We also know that other portative organs were even carried in processions outside the cathedral.³²

Fray Giraldo's organ was wind-powered by eight bellows and had two keyboards starting with C.³³ Giraldo, however, died sometime before September 1424 without having concluded the construction work, although the organ's principal stop seems already to have been playable by then. In September 1424 the cathedral chapter made a new contract with the successor of Fray Giraldo, Juan Rodríguez de Córdoba; of particular interest is the contract's request for a re-working of the organ's two keyboards:

Otrosy, que los dos juegos, como están fechos, que se pongan en manera que el vn juego non enbargue al otro quando se tañieren, e que sean bien blandos para tañer, et que faga otros juegos más largos que los que estauan fechos e auia fecho frey Giraldo por quanto non eran muy ligeros nin tan bien labrados.³⁴

(Likewise, that the two keyboards, as they are built, be placed in such way that one keyboard does not activate the other when they are played, and that they be soft to the touch; and that he make other keyboards [with] longer [keys] than the ones Fray Giraldo had made, which were not very soft and so well-made.)

If organ performance at Toledo Cathedral had reached a level of virtuosity comparable to that of the repertoire transmitted in **Faenza 117** or the **Robertsbridge** fragment, this would certainly have justified the need to lengthen and lighten the organ's keys. Yet, as in the case of the vast majority of European cathedrals in this period, we know almost nothing specific about the organist's actual skills and playing styles. Only a short musical passage notated in a liturgical codex appears to shed some light on the organist's *savoir-faire* at Toledo Cathedral.

³⁰ OF 761 (July 4, 1418) payment of 1000 *maravedís* to Fray Giraldo, due to him for his work on the organ („que tiene de auer del adobo que fizo delos órganos“). A copy of this OF book is preserved in Madrid, Biblioteca Nacional, MS 14033.74. Cited in Robert Stevenson, *Spanish Music in the Age of Columbus* (The Hague: Martinus Nijhoff, 1960): 120.

³¹ OF 762 (1424), f. 28: „mantenimiento del maestro de los órganos menores, que los afinó e los asentó.“

³² Fray Pedro purchased two organs for the Corpus Christi procession in 1429 (OF 767, f. 44 v).

³³ In 1428, Fray Pedro „the watchmaker“ (*relojero*) made certain repairs on the eight bellows and was also required to soften the two keyboards again. Barbieri, *Biografías*, p. 369.

³⁴ OF 762, f. 219 r, September 1424, *Órganos mayores de la iglesia de Toledo*; in the margin: „órganos que se afinaron e asentaron, los quales fizo Fray Giraldo, e porque murió el dicho Fra Giraldo, ovieron los de afinar e asentar en lo contenido.“ Other passages contain information about the keyboard compass the chorus composition: „Primeramente, que desde el primero punto que será çefaut fasta el punto de alamire, que son seys puntos, de les debaxo que fuesen e sean çenzillas de vn principal solo et sus conjuntas, e dende adelante, que sean dobladas segund que se requiere a la obra ... Otrosy, la ordenaçión de los caños de dentro, que tengan sus quintos e que ponga toda la otra melodía segunt quel sabe qués menester e esté fecha e ordenada.“

Manuscript Madrid 1361 and its Scribe β

We must thus turn our attention to manuscript **Madrid 1361**, a beautiful gradual from the late thirteenth-century that was used intensively as a practical source in Toledo Cathedral through the fourteenth and fifteenth centuries.³⁵ The manuscript contains an endless number of marginal annotations and corrections, and the few folios that its main scribe left blank were used by various other scribes to notate additional pieces of monophonic and polyphonic music in the fourteenth and fifteenth centuries. Among these additions is the mensural Credo whose Amen, I suggest, offers a glimpse into the counterpoint skills of a cathedral organist.

Before discussing the Credo's scribal and musical features in detail, it is worth taking a quick look at the scribe's further activity within the codex. Gómez Muntané, in her 1991 study of the manuscript, referred to the codex's main scribe as Scribe A while later scribes were identified with letters of the Greek alphabet.³⁶ The mensural Credo in question was notated by Scribe β on f. 178r–v (see Figures 1a–b and Example 1).

Scribe β notated his Credo (f. 178r–v) next to another mensural Credo previously copied on f. 177r–v by Scribe α. In order to complete his work, Scribe β had to erase the work of another secondary hand who had already used f. 178v; only the lower half of the page escaped Scribe β's erasure. This shows Scribe β's strong interest in notating his Credo right next to that of Scribe α. Furthermore, Scribe β reworked Scribe α's piece by adding some minims to its original, simpler rhythmic texture of breves and semibreves (see Figure 2 and Example 2).

Scribe β's contact with 'simple polyphony' is also suggestive. On f. 196v he copied *Iuste iudex*, a three-part composition in homophonic style (see Figure 3 and Example 3), which is in great contrast with the flourished counterpoint of the Credo's Amen. *Iuste iudex* is an *unicum* in **Madrid 1361**, although its texture and characteristic third-plus-fifth sonority brings to mind the *Ave maris stella* transmitted in **Apt 16bis** (f. 15v).³⁷

³⁵ The Toledo provenance of **Madrid 1361** has been firmly established in J. Janini and J. Serrano, *Manuscritos litúrgicos de la Biblioteca Nacional* (Madrid: Dirección General de Archivos y Bibliotecas, 1969): 284; David Catalunya, „¿Ars subtilior en Toledo? Un indicio en el códice M1361 de la Biblioteca Nacional de Madrid,“ *Anuario Musical* 66 (2011): 3–46, at 17–19; Arturo Tello, „Europa en el camino hacia Toledo: Una presentación de los repertorios de tropos y secuencias toledanos,“ in *A musicological gift: Libro homenaje for Jane Morlet Hardie*, ed. K. Nelson and M. Gómez Muntané (Lions Bay: The Institute of Mediaeval Music, 2013): 325–354, at 336–337. The manuscript has also been described by Anglès, who mistakenly states that it is „monastic“ and „of Catalan origin.“ Higiní Anglès and José Subirà, *Catálogo Musical de la Biblioteca Nacional de Madrid*, 2 vols. (Barcelona: CSIC, 1946–51): 99–105. The description in RISM (vol. B IV 2, ed. G. Reaney, 1969, pp. 97–98) is based on Anglès.

³⁶ Maricarmen Gómez Muntané, „Autour du répertoire du XIVE siècle du manuscrit M1361 de la Bibliothèque Nationale de Madrid,“ in *Aspects de la musique liturgique au Moyen Age. Actes des Colloques de Royaumont de 1986, 1987 et 1988*, ed. Christian Meyer (Paris: Creaphis, 1991): 245–260; reedited in *L'Ars nova italiana del Trecento* 6. *Atti del Congresso internazionale, Certaldo, 19–21 luglio 1987*, ed. Giulio Cattin (Certaldo: Edizioni Polis, 1992): 193–207.

³⁷ See the **Apt 16bis** *Ave maris stella* in PMFC 23B, no. 80; *Iuste iudex* is also edited in PMFC 23B, no. 88.

Furthermore, Scribe β reveals himself as a ‚user‘ of the liturgical corpus of the manuscript. The main copyist of the codex (Scribe A) had left three incomplete Alleluya on ff. 150 v–151 r and 152 r, of which he copied only the text. A later scribe, whom I call Scribe *m*, completed the musical notation of these three Alleluya. Although Scribe *m* shares many notational features with Scribe β , the size of his pen is slightly smaller and his black ink is clearly different from that used by Scribe β , which has a browner tone. Scribe β ’s hand, pen and ink, however, are recognizable in a minor correction in the text of the Alleluya on f. 151 r. Scribe *m* took the trouble to erase a segment of the original text in order to adapt its alignment to the new music; Scribe β , in turn, added two syllables that Scribe *m* had forgotten to rewrite (see Figure 4).

The late additions to **Madrid 1361** include the annexation of a bifolio at the end of the codex,³⁸ on which a three-part Gloria was copied by a different scribe (Scribe δ). This Gloria, an *unicum* in **Madrid 1361** attributed to a certain Petrus,³⁹ is the longest and most elaborate piece of polyphonic music added into the codex (see Example 4).⁴⁰ It consists of three sections, each one concluding with an isorhythmic passage. The piece is in the so-called „chanson style“ or „discant style“ characteristic of the late fourteenth-century sacred repertory transmitted in sources such as **Apt 16bis**.

This Gloria may represent a token of the repertory of complex polyphony that was circulating at Toledo Cathedral by the late fourteenth century, and with which Scribe β must surely have been familiar. In fact, the scribe who copied it shares many calligraphic features with Scribe β in the musical notation. This network of scribal connections in turn suggests a cohesive group of scribes within Toledo Cathedral, who belonged to the same ‚school‘. Yet the musical skills of Scribe β are far beyond those of a mere copyist.

The Credo on f. 178 – arte de melodía

The monophonic mensural Credo that Scribe β copied on f. 178 r–v is known through three other sources: **Ivrea 115** (f. 64 v), **Cividale 79** (ff. 1v+4 r) and **Mallorca** (ff. 54 v–55 v). All three of these concordances share a simple rhythmic texture of breves and semibreves.⁴¹ The version in **Madrid 1361**, however, exhibits unique, extensive ornamented passages that include groups of up to six minims and a variety of rhythmic figurations for which the scribe resorted to void notation and red coloration (see Example 1). The ornamented passages relate to entire verses of

³⁸ The size of this bifolio (ff. 189–199) is slightly smaller than the rest of the codex, and the quality of the parchment is significantly lower – apparently it had not been properly polished to receive writing. Codicological features strongly suggest that the bifolio did not belong to a larger codex of polyphonic music.

³⁹ Catalunya, „*Ars subtilior* en Toledo?“, p. 15.

⁴⁰ Edited in CMM 29, no. 33 (pp. 54–55), and PMFC 23A, no. 41 (pp. 168–171).

⁴¹ The **Mallorca** version includes some minims in the style of Scribe β ’s additions to Scribe α ’s Credo.

the Credo, while other verses retain the simple rhythmic texture of the concordant sources. Plain and ornamented verses are indeed organized according to an *alternatim* structure as shown in Table 1.

Table 1: *Alternatim* structure of the Credo in *Madrid 1361*, f. 178r–v

VERSE	STYLE	NOTATION
<i>Patrem omnipotentem</i>	Simple	Black (no minims)
<i>Et in unum dominum</i>	Ornamented	Black, red, void (with minims)
<i>Et ex patre natum</i>	Simple	Black (no minims)
<i>Genitum non factum</i>	Ornamented	Void, red, only 3 black notes at the beginning (with minims)
<i>Qui propter nos</i>	Simple	Black (no minims)
<i>Crucifixus</i>	Ornamented	Void, red (with minims)
<i>Et resurrexit</i>	Simple	Black (no minims)
<i>Et iterum</i>	Ornamented	Void, red (with minims)
<i>Et in Spiritum</i>	Simple	Black (no minims)
<i>Qui cum Patre</i>	Ornamented	Void, red (with minims)
<i>Et unam sanctam</i>	Simple	Black (no minims)
<i>Confiteor</i>	Ornamented	Void, red (with minims)
<i>Et expecto</i>	Simple	Black (no minims)
<i>Amen</i>	Polyphonic	Tenor: Black (no minims) Counterpoint: proportional signs ,3' and ,4', mensural sign C, minims and semiminims

Details in the choice of notational devices and in the alignment of text and music reveal that Scribe β himself inserted the ornamented passages with a certain degree of spontaneity. The text is uniformly distributed throughout the piece, from which it follows that it was copied in full prior to the notation of the music above it. In fact, the rendering of the entire text is characteristic of quasi-syllabic music and does not behave differently in simple and ornamented verses. The horizontal spacing of the musical notation thus became visibly irregular in the ornamented sections; the lack of space for the ornamental figurations obliged the scribe to compress the note-bodies drastically (see for example the words „unigenitum“ and „peccatorum“ in Figure 5). Nonetheless, a few words were split in order to accommodate micro-melismas (see for example the words „se-culo,“ and „ce-lis“ in Figure 5). Yet paradoxically, most of these words belong to unornamented sections. The only split word appearing in an ornamented section is „fa-cta“ (at the end of the second ornamented verse), although precisely the melody on this word (a four-note scale) remained unornamented. Significantly, the same word is also split in *Ivrea* 115. The Toledo scribe obviously provided the spacing necessary for the micro-melismas he saw on his exemplar, from which he copied the entire text and the music of

the unornamented verses. All of the foregoing strongly suggests that the extensive melodic ornaments were not present in the exemplar available to Scribe β , otherwise he would have left the necessary space for such eye-catching passages.⁴²

While the unornamented verses are notated in black notation and contain no minims, the ornamented sections are in major prolation and make use of void notation and red coloration. Scribe β employed three different pens, one for each type of notation (black, red, void).⁴³ In this piece, red coloration indicates imperfection – that is, the division of the breve into three imperfect semibreves instead of two perfect semibreves. Void notation, however, has no obvious mensural or proportional meaning; given the fact that the plain verses do not contain minims, there is no distinction to be made at that level. Most likely, here void notation is used merely as a sort of visual marker, perhaps to emphasize the *alternatim* structure.

Yet the crystal-clear consistency of this notational ‘system’ is not apparent at the beginning of the piece, but rather was developed over the first two ornamented verses until becoming rigorously systematic from the third onwards. The first ornamented verse (*Et in unum dominum*) starts with a combination of black and red notation; towards the end of the verse, the scribe replaces the black notation with white. The second ornamented section (*Genitum non factum*) begins with a group of three black notes followed by another group of red notes, and from this point on follows a combination of void and red notation. The rest of the ornamented verses are notated exclusively in void and red notation. Here we see a scribe experimenting with different notational techniques, trying one and then another, changing his mind and, throughout the process, deciding which one is the most suitable for his purpose. Once the system was established, he followed it consistently.

Scribe β ’s version of this Credo thus becomes the earliest witness of an elusive, unwritten performance practice of plainchant embellishment at Toledo Cathedral, which is referred to in writings from the fifteenth until the nineteenth century as *melodía*, *canto de melodía*, *canto melódico*, *cantus melodicus*, or *cantus eugenianus*.⁴⁴ The earliest known definition and description of this practice is found

⁴² There is little doubt that both the text and the music were copied by the same person; both were written with the same ink, and the other piece copied by the same scribe, *Iuste iudex*, shows identical palaeographical features in both music and text, including the rubrics „tenor“ and „contra[tenor].“

⁴³ The use of two different pens for black and red notation was a common practice in order to avoid the mixing of inks. The third pen was used for the void notation and is characterized by its thickness. Because the ink frequently runs into the body of the notes, void notation is at times hard to distinguish from black notation. The shape and thickness of this pen prompted the scribe to draw a different form of *custos* for the passages in void notation. The quick alternation of these three pens within the same piece – especially at the beginning of the first two ornamented verses – makes it highly improbable that more than one scribe was involved in copying this Credo. Scribe β used the same thick pen to add minims to Scribe α ’s Credo on f. 177.

⁴⁴ Its origins, however, remain uncertain. According to Romero de Ávila (1774), the tradition of *canto de melodía*, or *cantus eugenianus*, originated with Eugene II, the Visigothic archbishop of Toledo (†657), and existed only at Toledo Cathedral, where it was held in the highest esteem. For an overview of the *canto de melodía* tradition and its historiography, see Gümpel, „Cauntus

in an early sixteenth-century treatise entitled *Arte de melodía sobre canto lano y canto d'órgano*.⁴⁵ According to its anonymous author, the art of *melodía* consists of „ornamenting and gracing the melodies of plainchant.“⁴⁶ The treatise includes a description of the „principal note shapes of the plainchant,“ that is, the note shapes of mensural notation, which, according to the theorist, „were invented in order to give movement (*ayre*) to plainchant.“⁴⁷ Similar definitions and descriptions are found in seventeenth- and eighteenth-century writings, often relating the *melodía* practice to the choirboys. In the words of Sebastian de Covarrubias (1611), *melodía* „is a certain skill that makes the voice and the chant smooth and sweet, and in the Holy Church of Toledo there is a particular master who teaches the choirboys this skill, because not everyone is able to attain it.“⁴⁸ Francisco Marcos y Navas (1776) defines *canto melódico* as „a sort of gloss, with which the choirboys of the Holy Church of Toledo adorn the verses of the [Office of the] Hours and other things.“⁴⁹ Gerónimo Romero de Ávila (1774), himself a *maestro de melodía* at Toledo Cathedral,⁵⁰ adds that the *melodía* embellishments were sung in „alternatim cum

eugenianus;“ idem, „El canto melódico de Toledo: algunas reflexiones sobre su origen y estilo,“ *Recerca Musicològica* 8 (1988): 25–45; Luciano Serrano, „Historia de la música en Toledo,“ *Revista de archivos, bibliotecas y museos* 11 (1907): 219–43; Germán Prado and Casiano Rojo, *El canto mozárabe* (Barcelona: Diputación Provincial, 1929).

⁴⁵ That is, *The art of melodía on plainchant and polyphony*. The text makes explicit references to Toledo. The treatise is preserved in Barcelona, Biblioteca de Catalunya, MS 1325, ff. 21r–24v. Edited in Gumpel, „El canto melódico,“ pp. 38–45.

⁴⁶ f. 22r, „ornar y agraciarse los sonos del canto lano“ (Chapter 2).

⁴⁷ f. 21r, „fueron inuentadas para dar ayre al canto lano“ (Chapter 1). In the introduction to the treatise, the anonymous author also suggests a connection between the art of *melodía* and the performance of Mozarabic chant: See Gumpel, „El canto melódico,“ pp. 34 and 38. Interestingly, the so-called ‚Mozarabic choirbooks‘ commissioned in 1503 by Cardinal Jiménez de Cisneros for daily use in the Mozarabic Chapel of Toledo Cathedral are entirely notated in mensural notation. For more on the Cisneros Choirbooks, see Carmen Julia Gutiérrez, „Los Cantorales mozárabes de Cisneros,“ *Mélanges de la Casa de Velázquez* 49/1 (2019): 185–222 (open access at <https://journals.openedition.org/mcv/9834>), and Susan Boynton, *Silent Music: Medieval Song and the Construction of History in Eighteenth-century Spain* (New York: University Press, 2011). For a facsimile reproduction of the four choirbooks, see *Los cantorales mozárabes de Cisneros. Catedral de Toledo*, 2 vols., ed. Ángel Fernández Collado *et al.* (Toledo: Cabildo de la Catedral Primada de Toledo, 2011).

⁴⁸ Sebastián de Covarrubias, *Tesoro de la Lengua Castellana o Española* (Madrid, 1611), p. 545: „Melodía es en música cierto primor que haze la voz y el canto suaue y dulce; y en la santa yglesia de Toledo ay maestro particular que enseña a los infantes de coro este primor, porque no todos le alcançan.“ Digital reproduction available at <http://fondosdigitales.us.es/fondos/libros/765/16/tesoro-de-la-lengua-castellana-o-espanola/>

⁴⁹ Francisco Marcos y Navas, *Arte o compendio general del canto-llano, figurado y órgano* (Madrid, [1776]), p. 5: „Canto Melódico es una cierta glosa, con que los niños de la Santa Iglesia de Toledo adornan los versículos de las Horas, y otras cosas.“ Gumpel, „Cauntus eugenianus,“ p. 407.

⁵⁰ Romero de Ávila held the post of *maestro de melodía* from 1749 until his death in 1779. Gumpel, „Cauntus eugenianus,“ p. 407, citing F. Rubio Piqueras, *Música y Músicos Toledanos* (Toledo: Plaez, 1923): 69.

cantu Gregoriano,” and provides an example of this elusive, unwritten performance practice (see Example 5).⁵¹

Karl-Werner Gümpel states that the Toledo *canto de melodía* tradition is documented only from 1448 to 1851.⁵² The earliest evidence he cites is a document dated 1448, which specifies that the duties of the *magister claustralis* include the instruction of the cathedral clerics and choirboys in „cantu seu musica de melodía.”⁵³ Nonetheless, a *Libro de Obra y Fábrica* from 1425 records payments to the *racionero* (prebendary canon) Juan González de Jaén for teaching the choirboys „canto llano e melodía,” and the same person is also documented in 1418 as having taught mensural polyphony („canto de órgano”).⁵⁴ These dates are indeed much closer to the late additions to **Madrid 1361**.

The Credo's Amen – Subtilitas in organ performance?

Scribe β's version of this Credo represents an exceptional written witness not only of the elusive *canto de melodía* practice, but also of the more widespread custom of extemporizing flourished counterpoints on liturgical melodies. According to the *alternatim* pattern shown in Table 1 above, the Amen should have been the last ornamented section of the Credo. Yet instead of melodic ornamentation, Scribe β provided the Amen with a polyphonic amplification, which in fact operates as a concluding climax (see Example 6). The flourished counterpoint lacks text and, given its rhythmic-melodic texture that apparently leaves no room for breathing, there are good reasons for assuming that it was intended to be performed instrumentally.⁵⁵

⁵¹ That is, alternating ornamented and unornamented verses (base chant) within the same piece. Romero de Avila wrote his treatise *Sobre el Canto Gothico, y Eugeniano, vulgo Melodía* in 1774 at the request of Cardinal Francisco Antonio de Lorenzana. The original manuscript is now preserved in Toledo's Public Library (MS R.177). A Latin version of the treatise was printed one year later under the title *Cantus Eugeniani seu melodici explanatio* in Lorenzana's *Breviarium gothicum* (Toledo, 1775): pp. xxvi–xxix. Text reproduced in J. P. Migne, *Patrologiae cursus completus*, Series latina 86 (Paris: Garnier Frères, 1850): col. 33–36.

⁵² Gümpel, „Cantus eugenianus,” p. 407.

⁵³ „ad docendum seu instruendum clericulos vel pueros predictae ecclesie in divinis officiis et presertim cantu seu musica de melodía.” Bull granted by pope Nicholas V in 1448 in response to a complaint from the Toledo dean, who was concerned about the negligence with which *claustreros* performed this important task, due to the insufficiency of their remuneration. BCT, MS 42-29 (*Libro de Arcayos*), ff. 62r–63v and 66v. Lop Otín, *El Cabildo*, p. 321. Note that González Ruiz („La escuela de Toledo,” p. 188) mistakenly cites this reference as the *Constitutiones* of Archbishop Blas Fernández of Toledo.

⁵⁴ OF 761 (1418), f. 4v. Barbieri, *Biografías*, p. 240. Reynaud, *La polyphonie toledane*, p. 100.

⁵⁵ The scribe's meticulous treatment of the text – see, for example, his intervention in the Alleluia on f. 151r, analysed above – makes it unlikely that he simply forgot to provide the flourished counterpoint with a text. Performance experiments with modern singers specialized in late medieval repertoires also suggest that this flourished counterpoint does not represent idiomatic vocal performance. Rather, the passage looks more typical of keyboard performance. Evidence that keyboard players were able to deal with non-synoptically intabulated short passages is found in the Faenza Codex, where a scribal accident on f. 79v caused the tenor line to be placed after, rather than underneath, the flourished counterpoint. See Memelsdorff, *The Codex Faenza 117*, pp. 58–59.

Although the codex **Faenza 117** – the most extensive keyboard source of the period – does not transmit any Credo setting,⁵⁶ there is ample evidence that Credos were often performed with the organ. The Florentine chronicler Filippo Villani (c.1381) reports that „in our greater church the Credo [*symbolum*] was sung in part with the organ and in part with the choir,” and describes „the usual insertion of the organ“ in the Credo as an „antique custom.”⁵⁷ On the Iberian Peninsula, the fourteenth-century *Consueta* or customary of Gerona Cathedral contains countless references to organ performance in the liturgy, where an extensive number of chants – mostly sequences, hymns, Kyrie, Gloria, Credo and Benedicamus – bear indistinctly the indications „pulsatur cum organo,” „tangitur cum organo,” „cantatur cum organo,” „dicitur cum organo,” or simply „cum organo.”⁵⁸ An annotation of particular interest, appearing several times throughout the Gerona *Consueta*, reads „Credo maior cum organo.”⁵⁹ The *Credo maior* – also known as *Credo cardinalis* – is a monophonic mensural composition very similar in style to the Madrid Credo, which later became the Credo IV of the *Liber Usualis*.⁶⁰ A fourteenth-century manuscript from a Franciscan church in Todi transmits another, similar, mensural Credo – the *Credo regis* – prescribed to be performed with the organ.⁶¹ Here the organ-choir *alternatim* pattern is clarified with the marginal

⁵⁶ The earliest known organ setting of a Credo is preserved in the Buxheim Organ Book. For a discussion of the problems of an *alternatim* interpretation of this organ setting, see F. Mark Siebert, „Mass Sections in the ‚Buxheim Organ Book’: A Few Points,” *The Musical Quarterly* 50/3 (1964): 353–366.

⁵⁷ „Quorum primus [Bartholus], cum partim organo, partim modulatis per concentum vocibus in nostra maiori ecclesia symbolum caneretur tam suavi dulcique sono artisque diligentia eundem intonuit, ut relicta consueta interpositione organi, cum magno concursu populi, naturalem sequentis harmoniam, deinceps vivis vocibus caneretur, primusque omnium antiquam consuetudinem chori virilis et organi aboleri coegit.” *Philippi Villani: Liber de civitatis Florentiae famosis civibus*, ed. Gustavo C. Galletti (Firenze: Mazzoni, 1847): 34; *Philippi Villani: De origine civitatis Florentie et de eiusdem famosis civibus*, ed. Giuliano Tanturli (Padua: Editrice Antenore, 1997), 408 (XXV, 3).

⁵⁸ Gerona, Arxiu de la Catedral, MS 9. Although all of these references to the organ were inserted as marginal annotations in the first half of the fifteenth century, evidence of the liturgical use of the organ in Gerona Cathedral dates back to 1368. On April 19 of that year, Raymundo Geronella, a beneficiary of the cathedral, was granted an annual salary for playing the organ on certain feast days: „pro organis certis diebus annis tangentibus in ecclesiae gerundensis,” Arxiu de la Catedral de Girona, Llibre de Calçada, f. 117r. Document edited in Julio-Miguel García Llovera, *De organo vetero hispanico. Zur Frühgeschichte der Orgel in Spanien* (St. Ottilien: EOS Verlag, 1987): 301. See also Francisco Civil, „El órgano y los organistas de la Catedral de Gerona durante los siglos XIV–XVI,” *Anuario Musical* 9 (1954): 217–250.

⁵⁹ See, for example, f. 30r (*In die epiphantie*) and elsewhere.

⁶⁰ The *Credo maior*, or *Credo cardinalis*, is transmitted in an early fifteenth-century Proser-Troper from Gerona (now preserved in Barcelona, Biblioteca de Catalunya, M911, ff. 155v–157r), where it is followed by the same mensural copied in **Madrid 1361** on ff. 177r–v. For more on the origins and transmission of the *Credo cardinalis*, see Marco Gozzi, „I prototipi del canto fratto: Credo regis e Credo cardinalis,” in *Cantus fractus italiano: un’antologia*, ed. Marco Gozzi (Hildesheim: Georg Olms Verlag, 2010): 138–154. See also Marco Gozzi, „Alle origini del canto fratto: il ‚Credo Cardinalis,’” *Musica e storia* 14/2 (2006): 245–302. On the term „Credo maior,” see Thomas Forrest Kelly, *Plain-song in the Age of Polyphony* (Cambridge: Cambridge University Press, 1992): 183.

⁶¹ Todi, Biblioteca Comunale, MS 73, f. 6v–8r. Credo edited and analysed in Fabrizio Mastroianni, „Il Credo regis di Todi,” in *Cantus fractus italiano*, ed. Gozzi, pp. 155–164.

annotations „organum“ and „chorus;“ not coincidentally, the Amen bears the annotation „organum.“ The performance of the Madrid Credo, as transmitted by Scribe β, presumably involved an alternation between the choir (unornamented verses) and a soloist (ornamented verses), while the flourished organ intervention was reserved for the Amen.⁶²

The most striking feature of this seemingly instrumental setting lies in the richness and variety of its rhythmic figurations. In barely one line, the counterpoint's rhythmic flow passes through four different mensural proportions, three of which involve subdivisions of the breve and the semibreve that go far beyond the possibilities offered by the French, classical *Ars nova* theory. This complexity of the counterpoint's rhythmic notation is indeed characteristic of the so-called *Ars subtilior* style.

Precisely because of this notational complexity, the contrapuntal relationship between the textless fragment and the Credo's Amen has been contested territory in twentieth-century musicological literature. In 1962 Hanna Ståblein-Harder explicitly mentioned this fragment „with apparently no connection with the Amen,“⁶³ an opinion that Gómez Muntané followed in 1987/1992 when she referred to the „petit fragment vocal ou instrumental, dans tout cas sans texte, qui utilise des signes de mesure.“⁶⁴ In 1993 Karl Kügle commented very briefly on this Credo merely to point out that the textless fragment was in fact „a *discantus* part in *Ars subtilior* style for the Amen.“⁶⁵ Yet in 1998/2009 Gómez Muntané attempted to rebut Kügle's hypothesis by arguing that there was no basis whatsoever for claiming a polyphonic relationship between the textless fragment and the Credo's Amen.⁶⁶ She accused Kügle of forcing the polyphonic coordination by introducing four „emendations“ in his transcription, without which the polyphony could never work. If we remove these emendations, insisted Gómez Muntané, „we must assume that [the Amen] is

⁶² We could even speculate whether the choir was accompanied in unison by a small organ in the unornamented verses – instrumental accompaniment in unison with plainchant is fully documented in later periods, see Juan Ruiz Jiménez, „Ministriles y extravagantes en la celebración religiosa,“ in *Políticas y prácticas musicales en el mundo de Felipe II*, ed. J. Griffith and J. S. Pajares (Madrid: ICCMU, 2004): 199–239, at 211.

⁶³ Hanna Ståblein-Harder, *Fourteenth-Century Mass Music in France: Critical Text, Companion Volume to CMM 29* (Musicological Studies and Documents 7, Rome: American Institute of Musicology, 1962): 170.

⁶⁴ Gómez Muntané, „Autour du répertoire“ (Certaldo), p. 195.

⁶⁵ Karl Kügle, „A fresh look at the liturgical settings in manuscript Ivrea, Bibl. Cap. 115,“ *Revista de Musicología* 16/4 (1993): 2458–2459, at 2466. Kügle mistakenly refers to this piece as a Gloria.

⁶⁶ Maricarmen Gómez Muntané, „Una fuente desatendida con repertorio sacro mensural de fines del medioevo: el cantoral del Convento de la Concepción de Palma de Mallorca,“ *Nassarre* 14/2 (1998): 333–374, at 354–355, re-edited in *Bolletí de la Societat Arqueològica Lul·liana* 54 (1998): 45–64, and in *Borderlines Areas in Fourteenth and Fifteenth-Century Music*, ed. K. Kügle and L. Welker (Münster and Middleton: American Institute of Musicology, 2009): 63–94. Gómez Muntané insisted on the same idea in her book *La Música Medieval en España* (Kassel: Edition Reichenberger, 2001): 251.

monophonic, and that it is followed by a brief one-part fragment, vocal or perhaps instrumental, which may or may not be related to the preceding *Patrem*.⁶⁷

A closer look at the counterpoint features of the proposed transcription in Example 6, however, makes it clear that here we are not dealing with two melodies merely superimposed at random. Obviously, the contrapuntal relationship between the textless fragment and the Credo's Amen is anything but casual. Details such as the play of appoggiaturas in a 3→5 motion at the beginning of the passage, the repetition of the contrapuntal scheme 3...7-6-5→8 with two different rhythmic surfaces in the central section, and the varied, well-balanced use of the basic contrapuntal intervals throughout the fragment reveal a highly sophisticated musical sensibility. Even the final cadence's parallel fifth seems characteristic of fourteenth-century organ performance.⁶⁸ How then to explain the notational issues that led Gómez Muntané to question the fragment's polyphonic viability?

In attempting to answer this question, the old controversy surrounding the textless fragment and how it relates to the Credo's Amen will serve us as a pretext for re-examining the passage's notational features and uncovering further connections with contemporaneous sources and repertoires.

Proportional signs

According to Gómez Muntané, Kügler introduced the following „emendations“ in his transcription: (1) he interpreted the numeral 4 as a *proportio tripla* instead of *quadrupla*; (2) he kept the value of the breve constant in C and C , thus interpreting C in proportion *sesquialtera*;⁶⁹ (3) he reduced by half the value of the long and the semibreve that precede the final note; and (4) he removed the B-flat from the clef in order to avoid a tritone.

Besides the obvious fact that the counterpoint line does not have any B-flat in the clef as Gómez Muntané claimed – and, accordingly, there is no tritone to be avoided –, her interpretation of the proportional and mensural signs merits further discussion.

The diminution 4:1 that Gómez Muntané suggests is rather infrequent in late medieval music as a proportion between equal figures. This rare proportion is occasionally found in manuscript **Torino J.II.9**, where it is expressed with the sign $\odot$,⁷⁰

⁶⁷ „hay que suponer que [el Amen] es monódico y que tras el sigue un breve fragmento vocal o tal vez instrumental a una voz, relacionado o no con el *Patrem* que le precede.“ Gómez Muntané, „Una fuente desatendida“ (*Nassarre*), p. 355.

⁶⁸ **Robertsbridge** and **Faenza 117** offer many examples of parallel fifths. In **Faenza 117**, cadential parallels are especially frequent in the sacred repertoire (flourished counterpoints on chant melodies).

⁶⁹ According to the classical *Ars nova* theory, a breve in C is two minims longer than in C . By keeping the value of the breve constant, Kügler interprets the passage in C in proportion 3:2 (*sesquialtera*) with respect to the fragment's opening passage in C .

⁷⁰ See, for example, *Se de mon mal delivre prestement* (**Torino J.II.9**, ff. 124v–125). This source is edited in *The Cypriot-French Repertory of the Manuscript Torino*, *Biblioteca Nazionale*, **J.II.9**, 4 vols., ed. Richard Hoppin (CMM 21, Rome: American Institute of Musicology, 1960). For a facsimile repro-

and less frequently with the numeral 4.⁷¹ In this source the most frequent meaning of the numeral 4 is the proportion 4:3,⁷² but it can also mean other proportions such as 5:2.⁷³ The manuscripts **Chantilly** and **Mod A**, on the other hand, show a much more consistent use of the numeral 4. In these two sources, when the piece's base mensuration is in major prolation, 4 very often means *proportio dupla*,⁷⁴ while in a context of minor prolation it means *proportio tripla*.⁷⁵ Accordingly, there is no obstacle to interpreting the numeral 4 in the Madrid textless fragment as a *mutatio qualitatis* of the *proportio tripla* previously expressed by the numeral 3 – that is, now organizing the minims into three groups of four, instead of four groups of three.

As for the interpretation of the mensural sign $\subset$ with a proportional meaning (in this case, *sesquialtera* proportion), the *Ars subtilior* repertory transmitted in **Chantilly** and **Mod A** provides us with various examples in which mensural signs acquire proportional meanings.⁷⁶ Hence, in the absence of an explanatory *canon*, the meaning of proportional and mensural signs must necessarily be deduced from the context in which they appear. In the Madrid textless fragment, the polyphonic coordination of the passage in $\subset$ is even clarified by means of a *signum congruentiae* (transcribed in Example 6 as a fermata).

The scribal process

In the light of all of the foregoing, only one of the four „emendations“ that Gómez Muntané attributed to Kügler stands: the reduction by half of the value of the long and the semibreve that precede the final note. Yet the replacement of a breve and a minim with a long and a semibreve, rather than a scribal error, looks more like a choice. Emendating the rhythm of the tenor line would actually be the most economical solution. Once again, the simplest explanation for this mensural accident lies in the combination of copying and composition processes. If the

duction of the manuscript, see *Il Codice J.II.9. Torino, Biblioteca Nazionale Universitaria*, ed. K. Kügler and I. Data (Lucca: LIM, 1999).

⁷¹ See *Je prens d'amour noriture* (**Torino J.II.9**, f. 154r).

⁷² See, among others, *Se de mon mal* (**Torino J.II.9**, ff. 124v–125r); *Celle en qui j'ai mise m'amour* (**Torino J.II.9**, f. 131r); *Sur toute fleur la rose est colourie* (**Torino J.II.9**, f. 137r).

⁷³ See *Puis que ame sui doucement* (**Torino J.II.9**, f. 107r).

⁷⁴ See, for example, *Medee fu* (**Chantilly**, f. 24v): „Canon: ad figuram 3, in preporcione sesquialtera; ad binaria in preporcione sesquitercia; ad quaternariam in proporcione dupla...“ See also *L'orques Arthus* (**Chantilly**, f. 40v).

⁷⁵ See, for example, *Ma douce amour*, by Hasprois (**Mod A**, f. 28r): „Canon: ad figuram ternariam [*i.e.* 3] in proporcione sexquialtera cantetur, ad binariam [in proporcione] dupla, ad quaternariam vero [in proporcione] tripla cantetur.“ That is, 2 = 2:1; 3 = 3:2; 4 = 3:1. The numeral 3 can also represent different proportions, such as 3:1, 3:2, or even 9:6. For example, in *Se doulz espoir* by Corradus de Pistoia (**Mod A**, f. 31v), the numeral 3 means 3:1; in *Angelorum psalat* by Rodericus (**Chantilly**, f. 48v), it means proportion 3:2; in *Belle, bonne, sage* by Cordier (**Chantilly**, f. 11v), it means 9:6.

⁷⁶ To give just one example, in Johannes de Jauna's *Une dame requis* (**Mod A**, f. 12r, with base mensuration $\subset$) the value of the breve remains constant even when the signs $\subset$, $\odot$ and $\circ$ mark changes of mensuration.

scribe invented the flourished counterpoint himself after having copied the Amen melody as he saw it in his unornamented exemplar, only towards the end of the extemporary composition process might he have realized that the musical gestures he was creating demanded a longer final cadence.⁷⁷ From *tempus* 1 through 7 the flourished counterpoint's rhythmic flow accelerates gradually. *Tempus* 7 reaches the speed climax, while the deceleration passage in *C* in *tempus* 8 serves to prepare an elongated final cadence, thus creating a remarkable *ritardando* effect that counteracts the intensive *accelerando* in *tempora* 1–7.⁷⁸ Thereafter, the scribe either forgot to return to the tenor line in order to modify its rhythmic notation,⁷⁹ or, more likely, considered it unnecessary to do so.⁸⁰

Here, like in the *alternatim* ornamented sections, evidence hints once again at the scribe's active role in the transformation of the piece. While the large-scale structural parameters of the Credo's new version were possibly present in the scribe's mind even before he begun copying the text, the melodic and contrapuntal ornamental details seem to have materialized extemporaneously during the writing process.

The spontaneous character of the scribe's intervention, in turn, clearly indicates his fluent familiarity with actual performance practice. More specifically, the scribe's profile seems to match that of a *magister claustralis* of Toledo Cathedral, who taught the choirboys the art of *canto de melodía* and received an extra salary for playing the organ; someone like Alfonso Fernández, who is documented as a *magister claustralis* and an organist in 1384, or Juan González, who is documented as having taught *canto de órgano* and *canto de melodía* in 1418 and 1425 (see above). Indeed, such a rare written record of what were generally unwritten performance

⁷⁷ A similar case, in which the composition of a flourished counterpoint on a liturgical tenor gave rise to minor modifications in the tenor's rhythm, is found in a fourteenth-century manuscript from Tuscany. The manuscript contains, among others, a counterpoint treatise by Paolo da Firenze and what looks like a counterpoint exercise on the melody of the Kyrie *Cunctipotens* by a user of the theoretical manuscript. An erasure in the tenor line betrays a „ripensamento“ motivated by the „*intentio contrapuncti*“ chosen by the scribe. Pedro Memelsdorff, „Siena 36 rivisitata: Paolo da Firenze, Johannes Ciconia, e l'interrelazione di polifonia e trattatistica in fonti del primo Quattrocento,“ *Acta Musicologica* 76 (2004): 159–191, esp. 178.

⁷⁸ Manuscript **Torino J.II.9** contains the most extreme examples of this type of written agogics, in which extensive passages of flourished counterpoint accelerate and decelerate with extraordinary fluency. See for example *Je prens d'amour noriture* (**Torino J.II.9**, f. 154r), *The Cypriot-French Repertory*, ed. Hoppin, vol. IV: *Virelais and Rondeaux* (CMM 21/IV), p. 53.

⁷⁹ To do so, it would have sufficed to erase and modify the shape of the two last notes of the ligature, making them square instead of oblique.

⁸⁰ Michael Scott Cuthbert has shown that this type of mensural disagreement in cadences is a common phenomenon in *cantus planus binatim* settings: „That these notational errors are systematic at penultimate notes of phrases suggests not scribal sloppiness but rather a practice of flexible rhythm just prior to the cadence. Like final notes, which often do not agree in duration, the preceding notes may have been held at the liberty of the singers.“ Cuthbert, *Trecento Fragments*, p. 383.

practices must have had a pedagogical purpose.⁸¹ Perhaps the same ornamental principles were also to be applied to the other mensural Credo, copied by Scribe α on the preceding folio? – Curiously, these two mensural Credos share the same Amen melody in **Madrid 1361**.⁸²

The unwritten background of the so-called Ars subtilior style

If the interpretation proposed here holds, this polyphonic setting offers us a priceless glimpse into a cathedral cantor/organist's contrapuntal skills in late fourteenth-century Toledo. With this idea in mind, the passage's unusual notational complexity brings to the fore further questions about the relationship between the so-called *Ars subtilior* style and the widespread practice of extemporizing flourished counterpoints on liturgical tenors. If the Madrid witness reflects actual performance practice, rather than an exercise in compositional engineering,⁸³ the scribe's use of complex notational devices appears aimed at capturing or emulating the rhythmic flexibility of improvised counterpoint. This hypothesis is in line with Anne Stone's reflections on the role of ornamentation and performance practice in shaping the development of the *Ars subtilior* rhythmic notation.⁸⁴ In her 1994 dissertation, Stone analysed a polyphonic Credo by Zacara da Teramo, whose cantus part is profusely ornamented in manuscript **Mod A**.⁸⁵ She notes that the **Mod A** version of this Credo „contains a multitude of invented note shapes that function clearly as ornamentation upon the simpler line transmitted in concordant sources,“ and considers that it could be „a record of a performance practice in which extensive ornamentation of the cantus line takes place.“⁸⁶ This, argued Stone, „suggests that one possible context for the invention of note shapes in this period was the attempt to record a practice of improvisation.“⁸⁷

⁸¹ In any case, noticeable physical evidence of page turns (especially on the folio that contains this Credo) indicates that the manuscript was actually used for rehearsing and perhaps even for performance.

⁸² Even more curiously, in Scribe α 's version, the Amen's penultimate note is a long, which matches the counterpoint of Scribe β 's counterpoint.

⁸³ In his influential handbook of music notation, Willi Apel transmitted the image of a cerebral and mathematical *Ars subtilior*, rich in technical artifices but poor in spontaneity and expressivity: „It is in this period that the musical notation far exceeds its natural limitations as a servant to music, but rather becomes its master, a goal in itself and an arena for intellectual sophistries.“ This opinion influenced other popular handbooks of music history, such as Richard Hoppin's *Medieval Music* (New York: Norton, 1978). Willi Apel, *The Notation of Polyphonic Music, 900–1600* (Cambridge, Massachusetts: The Mediaeval Academy of America, 1942; reprint 1953), Chap. 9, „Mannered Notation,“ p. 403.

⁸⁴ Stone, *Writing Rhythm*, see especially pp. 153–165. See also idem, „Glimpses of the unwritten tradition,“ and idem, „Che cosa c'è di più sottile riguardando l'*Ars subtilior*?“, *Rivista Italiana di Musicologia* 31 (1996): 3–31.

⁸⁵ **Mod A**, ff. 23v–25r. Edited in PMFC 13, no. 21.

⁸⁶ Stone, *Writing Rhythm*, p. 153.

⁸⁷ *Ibid.*, p. 155.

In the light of Zacara's Credo, Stone examines the function of invented note shapes in other *Ars subtilior* pieces, such as Jacob de Senlenches' *En attendant esperance*, and concludes that, while the rhythmic surface of these pieces is extremely complex, groups of invented note shapes „always take up the durational space of a large note value, here usually the semibreve, and virtually always coincide with the start of a semibreve in the tenor.“⁸⁸ In other words: even in the most complex masterpieces of mensural engineering, invented note shapes are used to express flourished counterpoints with extraordinary rhythmic flexibility, a stylistic feature that might have had some sort of background in unwritten performance practice.

Stone supports her hypothesis by quoting passages from various contemporaneous theoretical treatises that hint at the idea that rhythmic complexity existed in performance practice prior to the invention of a notational system capable of expressing it in written form. One of the most striking assertions of the primacy of the rhythmic idea over its notational expression comes in the famous *Tractatus figurarum*, a fourteenth-century treatise that describes an intricate system of invented note shapes aimed at expressing counterpoints with a different mensuration from its tenor line.⁸⁹ The anonymous author explains the motivation that induced him to compile the treatise: „because it would be very incongruous for that which can be performed not to be able to be written.“⁹⁰

In addition to Stone's observations, it is worth noting here that some of the organ pieces transmitted in the codex **Faenza 117** make use of similar note shapes to express ornamental figures like those found in the **Mod A** version of Zacara's Credo. Many Faenza pieces combine binary and ternary subdivisions at all levels below the breve (semibreve, minim, semiminim and fusa) in order to produce smooth changes of speed within a diversity of rhythmic figurations. In some of these pieces, the complex rhythmic notation is clearly aimed at emulating flexible agogics, even creating *rubato* – that is, *accelerando/rallentando* – effects.⁹¹

The Madrid textless counterpoint, however, does not make use of invented note shapes. Instead, it uses proportional signs. And even if the passage emulates a practice of extemporized counterpoint, its scribe was very much at home in the rhythmic notation of written compositions of the *Ars subtilior* repertory. This raises further questions about the assimilation of the *Ars subtilior* style on the Iberian Peninsula. While we have long known that Jacob de Senleches and other *Ars subtil-*

⁸⁸ Stone, *Writing Rhythm*, pp. 157–165 (quotation from p. 163).

⁸⁹ Edited and translated in *Tractatus Figurarum. Treatise on Noteshapes*, ed. Philip E. Schreur (Lincoln and London: University of Nebraska Press, 1989). No fewer than fourteen copies of the treatise survive, which may be indicative of the great interest in complex rhythmic notation that arose among musicians and theorists of the time.

⁹⁰ „Quia esset multum inconveniens quod illud quod potest pronuntiari non posset scribi et clare ostendere tractatum hunc parvulum ordinare curavi.“ *Tractatus figurarum*, ed. Schreur, pp. 72–73. Stone, *Writing Rhythm*, pp. 156–157.

⁹¹ See, for example, *Elas mon cuor* (II) and *Biance flour* in *Keyboard Music*, ed. Plamenac, nos. 14 and 24. **Faenza 117**'s rhythmical variety is greater than can be expressed consistently by means note shapes. Memelsdorff, *The Codex Faenza 117*, pp. 110–121 and 143–148.

ior composers spent some time in Castile, Navarre and Aragon, the lack of Iberian sources transmitting this kind of repertory continues to puzzle modern scholars.⁹² The *Ars subtilior* thus remains a truly elusive episode in Spanish music history. How did Madrid 1361's Scribe β get in contact with *Ars subtilior* notational technics? What kind of manuscript sources was he familiar with?

Although no collection of *Ars nova* or *Ars subtilior* polyphony has been preserved in Toledo Cathedral, inventories and records of payments show that the cathedral school owned manuscripts from which the choirboys learned the art of mensural polyphony. We also know that the books recorded in the inventories and administrative accounts represent only a portion of the manuscripts that were in circulation at Toledo Cathedral. Each cathedral beneficiary with choir obligations had to provide himself with the necessary liturgical books at his own expense.⁹³ This was probably also the case of singers and teachers specializing in polyphonic music, who used to possess their own personal collections.⁹⁴ Only books for collective use were directly commissioned by the cathedral, the orders being charged to the *Obra y Fábrica*.⁹⁵ Toledo Cathedral has owned books of polyphonic music since the first half of the fourteenth century or even earlier.⁹⁶ Unfortunately, many

⁹² Senleches appears to have served at the court of Leonor, queen of Castile, to whom he dedicated the ballade *Fuions de ci* on the occasion of her death in 1382 (*Chantilly*, f. 17 r; *Mod A*, ff. 15 v–16 r; and *Reina*, f. 61 v). In 1383, Senleches is documented as having spent some time in the royal house of Navarre, from which he received a payment allowing him to return to the service of the Aragonese cardinal Pedro de Luna (the future pope Benedict XIII), his new protector after the death of Queen Leonor. Nonetheless, the work of Senleches has survived solely in Italian and French manuscripts (a total of six known sources). Higiní Anglès, *Historia de la música medieval en Navarra* (Pamplona: Aranzadi, 1970): 225.

⁹³ On many occasions, personal books circulated from hand to hand without ever entering the institutional library. José Janini and Ramón González Ruiz, *Manuscritos litúrgicos de la Catedral de Toledo* (Toledo: Diputación Provincial, 1977): 14–15. For a further exploration of the formation of the cathedral library, see González Ruiz, *Hombres y libros de Toledo* (Madrid: Fundación Ramón Areces, 1997). See also González Ruiz, „La Biblioteca Capitular de Toledo en el siglo XIV,” *Toletum* 6 (1973): 29–56.

⁹⁴ Andrew Wathey also points out that books of polyphony generally belonged to the singers who used them, and not to the institutions where they were used. Andrew Wathey, „The production of books of liturgical polyphony,” in *Book Production and Publishing in Britain, 1375–1475*, ed. J. Griffiths and D. A. Pearsall (Cambridge: Cambridge University Press, 1989): 143–161, at 149–150.

⁹⁵ The cathedral did not have an official *scriptorium*, but rather entrusted the production of books to specialized workshops, monasteries, and individual clergymen, including cathedral cantors, *magistri*, and other canons. For more on book production and trade in medieval Toledo, see Janini and González Ruiz, *Manuscritos litúrgicos de la Catedral de Toledo*, pp. 11–20; González Ruiz, *Hombres y Libros*; González Ruiz, „La Biblioteca Capitular,” Reynaud, *La polyphonie toledane*.

⁹⁶ An inventory of Toledo Cathedral from the second quarter of the fourteenth century records a „librete pequennuelo de canto de órgano” (a little tiny book of polyphony), possibly a manuscript in octavo format similar to thirteenth-century sources such as Madrid 20486. The same inventory records another „libro de órgano pintado *secundum mensuram et tempus*,” which might refer to a miniated book of mensural polyphony. Yet the fact that a part of the sentence is in Latin, while the rest of the inventory is all drafted in the vernacular Castilian, could also suggest that the Latin words were excerpted from a title written on the first folio of the book (perhaps something like *De organo secundum mensura et tempus*? Could this be an indication of a treatise on mensural music?). While

Libros de Obra y Fábrica from the second half of the fourteenth century have been lost. References to books of polyphony, however, re-appear in the early fifteenth century.⁹⁷ The *Libro de Obra y Fábrica* of 1418 records payments for purchasing and compiling at least two books of polyphony. That year, the *racionero* Alfonso Martínez bought from a Franciscan monk „a book of mensural polyphony (*canto de órgano*) ... from which the choirboys learn the mensural polyphony in school;“⁹⁸ likewise, the *racionero* Loys García was also paid for compiling another book of mensural polyphony in five gatherings and a half.⁹⁹

The three-part Gloria copied into the additional bifolio attached to **Madrid 1361** (see Example 3), might represent a reliable token of the kind of polyphonic repertory transmitted by these lost books from Toledo Cathedral. Furthermore, surviving fragments from more than fifteen different manuscripts of the late fourteenth and early fifteenth centuries, now preserved in Valladolid, Madrid, Burgos, Barcelona, Tarragona and elsewhere, bear witness of the common type of polyphonic repertory that circulated in and among Iberian ecclesiastical institutions.¹⁰⁰ All those

palaeographical and codicological evidence points towards a dating of the inventory to the first half of the fourteenth century, one of its records („Item una capa ... que dio este nuestro sennor el arçobispo Don Gil, siendo arcediano de Calatrava“) suggests that the document was drafted between 1338 and 1350, the years in which Gil Álvarez de Albornoz was archbishop of Toledo. Higiní Anglès identified the „librete pequennuelo de canto de órgano“ with manuscript **Madrid 20486** (*La música a Catalunya*, p. 258, fn. 1); this hypothesis was convincingly rejected by Juan Carlos Asensio in his *El Códice de Madrid. Biblioteca Nacional, MS 20486. Polifonías del siglo XIII* (Madrid: Editorial Alpuerto, 1997): 14–19. The inventory is now preserved in Madrid, Biblioteca Nacional, MS 7217/2. Edited in Luis Pérez de Guzmán, „Un inventario del siglo XIV de la Catedral de Toledo (La Biblia de San Luis),“ *Boletín de la Real Academia de la Historia* 89 (1926): 373–419, references to polyphonic books at pp. 388 and 402.

⁹⁷ See Michael Noone, „The Copying and Acquisition of Polyphony at Toledo Cathedral 1418–1542: The Evidence from Inventories and Payment Documents,“ forthcoming. I thank Michael Noone for sharing a draft of his work prior to its publication.

⁹⁸ OF 761, 18 May 1418: „a Frey Johan, frayle profeso de la orden de Sant Francisco, quatro florines de oro del cuño de Aragón que ovo de aver por razón de un libro de canto de órgano que dél compró, puntado, para por donde aprendan los moços cleriçones el canto de órgano en la escuela.“ Noone, „The Copying,“ doc. 1; Reynaud, *La polyphonie tolédane*, p. 348.

⁹⁹ OF 761, 8 October 1418: „quatroçientos mrs. que ovo de aver por su trabajo de raer un libro de canto de órgano de la dicha egleſia de cinco quadernos e medio de cantos viejos que tenia e los punto e escrivió de solemnpnes cantos de órgano onrrosos.“ Noone, „The Copying,“ doc. 2. According to Noone, the payment is for the labour of scraping clean an old book, which suggests palimpsest. Document also cited in Reynaud, *La polyphonie tolédane*, pp. 348 and 360.

¹⁰⁰ The Valladolid fragment transmits Zacara's unornamented version of the Credo cited above and three other *Ars nova* Credos, see Jesús Martín Galán, „Una nueva fuente para el estudio del *Ars nova* en Castilla,“ *Revista de Musicología* 20/1 (1997): 77–102. For the Madrid and Burgos fragments, see François Reynaud, „Les sections de messe d'un fragment de tropaire espagnol inconnu,“ in *Les sources en Musicologie* (Paris: Centre National de la Recherche Scientifique, 1981): 87–106, and José López-Caló, „El motete de Gormaz-Burgos. Una nueva aportación al *Ars nova* en España,“ *Revista de Musicología* 9 (1986): 545–556. For the Catalan fragments, see David Catalunya, „Polyphonic Music of the Fourteenth Century in Aragon,“ in *Disiecta Membra Musicae*, ed. G. Varelli (Berlin: De Gruyter, 2020), pp. 117–163 (Open Access at degruyter.com). For a new fragment in Portugal, see Manuel Pedro Ferreira, *Antologia de Música em Portugal na Idade Média e no Renascimento*, 2 vols. (Lisboa: Cesem, 2008): I, pp. 49–50, Figure 6 and Plates XIII–XIV.

witnesses show that the notational devices found in the Madrid textless counterpoint were generally absent from Iberian collections of sacred polyphony.

More likely, **Madrid 1361**'s Scribe β also had contact with the kind of secular compositions transmitted in the Chantilly Codex. He made use of proportional signs suspiciously similar in meaning and function to those found in pieces like the anonymous ballade *Medee fu* (**Chantilly**, f. 24v),¹⁰¹ where the numeral 4 appears in brief passages of flourished counterpoint with rhythmic figurations similar to those in **Madrid 1361** (see Figure 6 and Example 7).

A possible contact of organists and cantors of Toledo Cathedral with secular, courtly polyphony appears tenuously reflected in administrative records. For example, Ruy González, a *racionero* (prebendary canon) of the Dean's choir of Toledo Cathedral, is recorded in 1355 as an organist „of the queen,“¹⁰² and we might suppose that a similar pattern of connections between the cathedral choir and the royal court persisted through the late fourteenth century. Furthermore, some *Ars subtilior* composers also served at papal Avignon, with which Toledo Cathedral was in direct contact.¹⁰³

We might even speculate whether secular polyphony was performed instrumentally on the organ at Toledo Cathedral, as often occurred in Italian cathedrals and churches and surely in many other places.¹⁰⁴ In *Il Saporetto*, Simone Prodenzani (c.1415) describes a fictional organ performance that takes place during a Vespers service for Christmas Eve; after the Magnificat and the final Benedicamus, the organ continues performing pieces of secular music, as was actually customary in contemporaneous Florentine churches.¹⁰⁵ Prodenzani highlights that „no *stampita* was heard there, but rather the usual ecclesiastical music.“ Among the organ pieces he deemed appropriate for this liturgical context is Senleches' *La harpe de melodie*, whose two-part version indeed works perfectly on the keyboard. *La harpe de melodie* has a rhythmically simple tenor line, over which a flourished cantus part plays with rubato-like ornamental figurations.¹⁰⁶ Two-part arrangements of other *Ars subtilior* pieces such as *Medee fu*, which makes use of proportional numerals, would work equally well on the keyboard.

¹⁰¹ Includes the subscription „Canon: ad figuram ... quaternariam in proporcione dupla“ (**Chantilly**, f. 24v). Edited in PMFC 18, no. 26, and Stoessel, *The Captive Scribe*, II, pp. 49–52.

¹⁰² „capellán de la Reina, tocador de los órganos“ (might refer to Maria of Portugal, mother of King Peter I of Castile). Barbieri, *Biografías*, p. 422; Reynaud, *La polyphonie tolédane*, p. 154.

¹⁰³ See Plumley, „An ‚Episode in the South?,“ and Yolanda Plumley and Anne Stone, *Codex Chantilly, Bibliothèque du Château de Chantilly Ms. 564. Introduction* [to the facsimile edition] (Turnhout: Brepols, 2008): 134.

¹⁰⁴ See Richard Robinson, „The Faenza Codex: The Case for Solo Organ Revisited,“ *The Journal of Musicology* 34/4 (2017): 610–646.

¹⁰⁵ In fact, the archbishop of Florence Antonino Pierozzi (1389–1459) condemned the widespread custom of performing ballatas and other kinds of secular music on the organ. For both Pierozzi's and Prodenzani's references and further bibliography, see Robinson, „The Faenza Codex,“ pp. 612–616.

¹⁰⁶ See Stoessel's revision of *La harpe*'s copy in Chantilly in his *The Captive Scribe*, I, p. 54–57, and II, no. 42, pp. 193–195.

Only a few decades after Prodenzani's literary recreation, Teodoro da Montefeltro wrote a letter describing an actual organ performance by Bianca de' Medici before Pope Pius II. Here the writer highlights the rhythmical aspects of her playing:

Poi le menò in sala et fece sonare la dita Biancha de organi, la qualle sona benissimo cum bonissimi ponti he porporcione he misura avantazata.

(Then he took them into a hall and had the organ played by Bianca, who plays very well with fine phrases and proportions and sophisticated rhythm.¹⁰⁷)

Although we do not know what kind of mensural proportions and sophisticated rhythms she performed, this testimony reminds us once again of the role of instrumental performance in the development of a taste for complex rhythms in polyphonic music.

Not coincidentally, various well-known *Ars subtilior* composers were themselves instrumentalists, which implies that, besides mastering the most complex notational technics, they were also immersed in a musical world of basically unwritten performance practice. Barlotomeo da Bologna was an organist, Senleches was a harpist, and even a singer like Matteo da Perugia, who composed both secular and sacred polyphony, taught improvised counterpoint (*biscanto*) at Milan Cathedral, where he worked in close collaboration with the organist Monti da Prato.¹⁰⁸ **Madrid 1361** adds one more piece of evidence to this historical puzzle. Scribe β fits the profile of a music teacher and organist of Toledo Cathedral, a *magister claustralis* who dealt with mensural and non-mensural chant, simple and complex polyphony, melodic and contrapuntal ornamentation, vocal and instrumental performance. The version of the Credo he notated into **Madrid 1361** must indeed have had a pedagogical purpose. His seemingly spontaneous contrapuntal ornamentation of the Credo's Amen thus affords another small glimpse into the vast sea of unwritten performance practice from which the *Ars subtilior* phenomenon emerged in the late fourteenth century.

¹⁰⁷ Prizer translates „misura avantazata“ as „impressive rhythm.“ William F. Prizer, „Games of Venus: Secular Vocal Music in the Late Quattrocento and Early Cinquecento,“ *The Journal of Musicology* 9/1 (1991): 3–56.

¹⁰⁸ Claudio Sartori, „Matteo da Perugia e Bertrand Feragut i due primi Maestri di Cappella del Duomo di Milano,“ *Acta Musicologica* 28/1 (1956): 12–27.

aeterni omnipotentis. factoris celi et terre visibilium omnium et invisibilium. Et
 in unum dominum ihesum christum filium dei unigenitum. Et ex patre natum ante
 omnia secula deum de deo lumine de lumine deum verum de deo vero. Genitum non factum
 consubstantialem patri per quem omnia facta sunt. Qui propter nos homines et
 propter nostram salutem descendit de caelis et incarnatus est de spiritu sancto ex
 maria virgine et homo factus est. Quia etiam pro nobis sub iudicio pilato
 passus est et sepultus est. Et resurrexit tertia die secundum scripturas et ascendit in celum
 sedet ad dexteram patris. Et iterum venturus est cum gloria iudicare vivos et mortuos
 cuius autem regni non erit finis. Et in spiritum sanctum dominum et vivificantem qui ex
 patre filioque procedit. Qui cum patre et filio simul adoratur et conglorificatur

Figure 1a: Madrid 1361, Scribe β's Credo on f. 178r–v

Figure 1b: Madrid 1361, Scribe β's Credo continued (f. 178v)

Ivrea 115
Pa - trem om - ni - po - ten - tem. Fa - cto - rem ce - li et ter - re vi - si - bi - li - um.

Madrid 1361
Pa - trem om - ni - po - ten - tem. Fa - cto - rem ce - li et ter - re vi - si - bi - li - um.

Iv
om - ni - um et in - vi - si - bi - li - um. Et in u - num do - mi - num je - sum chri -

Md
om - ni - um et in - vi - si - bi - li - um. Et in u - num do - mi - num je - sum chri -

Iv
stum fi - li - um de - i u - ni - ge - ni - tum.

Md
stum fi - li - um de - i u - ni - ge - ni - tum.

Iv
Et ex pa - tre na - tum an - te om - ni - a se - cu - la de - um de - o lu - men de lu - mi - ne

Md
Et ex pa - tre na - tum an - te om - ni - a se - cu - la de - um de - o lu - men de lu - mi - ne

Iv
de - um ve - rum de de - o ve - ro. Ge - ni - tum non fac - tum con sub -

Md
de - um ve - rum de de - o ve - ro. Ge - ni - tum non fa - ctum, con - sub -

Iv
stan - ci - a - lem pa - tri per quem om - ni - a fac - ta sunt

Md
stan - ci - a - lem pa - tri per - quem om - ni - a fa - cta sunt.

Example 1: Madrid 1361, Scribe β 's Credo on f. 178r–v, comparison with Ivrea 115's version (beginning)

Figure 2: Madrid 1361, Scribe α 's Credo on f. 177 r-v (beginning)

Example 2: Madrid 1361, Scribe β 's intervention on Scribe α 's Credo, f. 177 r-v (beginning)

Figure 3: Madrid 1361, Scribe β 's *Iuste iudex* on f. 196 v

[I]u - ste ju - dex, Ihe - su Chri - ste, Re - gnum rex et Do - mi ne,
Qui cum Pa - tre, re - gnas sem - per, Et cum san - cto Fla - mi ne,

8 Contra[tenor]
8 Tenor

Example 3: Madrid 1361, Scribe β 's *Iuste iudex* on f. 196 v (beginning)

Scribe m (black ink)
Scribe A
erased
Scribe m (black ink)
Scribe β
Scribe A

Figure 4: Madrid 1361, Scribe β 's intervention on f. 151 r

Et in ter - ra pax ho - mi - ni - bus bo - nae vo -

Example 4: Madrid 1361, Gloria on ff. 189 v–199 r (beginning)

Figure 5: Graphic density

Textus

Glossa duplex

Example 5: Romero de Ávila’s example of *canto de melodía* (1774)

acceleration → ← deceleration

Counterpoint: 8 4-3 6-5 8 3 7-6, 6-5 8 3 7-6, 6-5 8 3 5 5

Example 6: Madrid 1361, Credo's Amen on f. 178 v

Figure 6: *Medee fu* from Chantilly (f. 24 v), beginning of the upper voice's B section

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3. dont el - le fu hi - re tier - re ;
6. ce n'est pas bo - ne ma - nie - re,
9. qu'E - laine, a la bel - le chie - re,

Example 7: *Medee fu*, excerpt as edited in PMFC 18 (no. 26)