Did Vitry write an *Ars vetus et nova*?

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A tome point early in the second quarter of the fourteenth century, a writer named Jacobus wrote the seventh and final book of his mammoth work of music theory titled "The Mirror of Music" (*Speculum musicae*, hereafter *SM*). The purpose of book 7, Jacobus explained in the introduction, was to defend the art of *musica mensurabilis* (measurable music), as it had been sung and written about in the late thirteenth century by an older generation (the *antiqui*), against the practices of the new generation active at the time of Jacobus's writing (the *moderni*):

de mensurabili etiam multi inter quos eminet Franco Teutonicus et alius quidam qui Aristoteles nuncupatur, nunc nostris temporibus novi recentesque venerunt de mensurabili tractantes musica, parentes suos doctores antiquos parum reverentes, quin potius! illorum bonam doctrinam and on measurable music [there were] many, among whom Franco the German stands out, and another particular individual named Aristotle. Now today there have come new and modern men writing on mensural music, revering their forebears—the old teachers—little, indeed, in some

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in aliquibus mutantes, corrumpentes, reprobantes, annulantes factis, quidquid verbis protestentur, cum curiale bonique moris sit illos in bene dictis imitari, in dubiis ipsos excusare, ipsos exponere. Haec igitur in modo cantandi ipsorum et amplius in eorum tractatibus considerans indolui et ex tunc principali et primaria intentione ad Antiquorum excusationem quaedam de musica mensurabili scribere disposui. ways changing their sound doctrine, corrupting, criticizing, annulling what they [the *antiqui*] had done (however much in words they say this is not so), when it would be courtly and good in manner to imitate those things they [the antiqui] have said well, [and] in doubtful matters, to excuse them, to explain them. Therefore, in considering these things in their manner of singing and more so in their treatises. I was troubled, and then decided to write down certain things concerning mensural music, with the principal and primary intent being a defense of the Ancients.¹

Jacobus singled out those who, in their treatises (*in eorum tractatibus*), had corrupted, criticized, and annulled the teachings of the *antiqui*. In the passage above he named two thirteenth-century music theorists: Franco of Cologne and Aristotle (=Lambertus).² Throughout *SM*, Jacobus cites many authors by name, including the theorists Boethius, Guido, and Franco multiple times.³ By contrast, Jacobus did not deign to name

¹ Jacobi Leodiensis Speculum musicae, ed. Roger Bragard, Corpus scriptorum de musica, vol. 3 (Rome: American Institute of Musicology, 1955–1973), 7.1.5–7, 5–6. Citations of Bragard's edition follow this format: book.chapter.sentence, page. The translations from the Latin are my own unless otherwise indicated. After I had completed the first draft of this article, Rob Wegman posted his excellent translation of *SM* book 7 on his academia.edu page ("Jacobus: The Mirror of Music [c. 1325], book VII," parts 1–4, Rob C. Wegman, trans., available at https://princeton.academia.edu/RobCWegman/Translations). In response to Wegman's interpretation of *SM* book 7 were translated by Oliver Strunk and revised by James McKinnon; my translations have also benefited from reading their interpretations. See James McKinnon, ed., *Strunk's Source Readings in Music History: Vol. 2, The Early Christian Period and the Latin Middle Ages*, Revised Edition (New York: W. W. Norton & Company, 1998), 159–68.

² Jacobus uses the name Aristotle to refer to the theorist otherwise known as Lambertus. Jacobus's use of the name Aristotle probably reflects a specific transmission of Lambertus's treatise that is unattributed but copied following another text—the *Secreta secretorum*—that has the annotation "editus ab Aristotle" (as found in Paris, Bibliothèque nationale, lat. 6755.2). See Christian Meyer, ed., and Karen Desmond, trans., *The* "Ars musica" *attributed to Magister Lambertus/Aristoteles*, RMA Monograph Series, vol. 27 (Farnham: Ashgate, 2015), x.

 3 Boethius is cited hundreds of times throughout the seven books of *SM*; Guido is mentioned by name 53 times in book 6; Franco 42 times in book 7. My reference to the

individually any of his contemporaries (the *moderni*), although we know Jacobus had read many treatises by them (at least fifteen, he tells us), and the anecdotes he recounts, including his description of a performance of ars nova motets, give the impression that he knew at least some of the *moderni* personally.⁴

In book 7 Jacobus quotes and analyzes several passages from treatises by the fourteenth-century mathematician, astronomer, and music theorist Jehan des Murs. Sarah Fuller has claimed, however, that Jacobus's references to other ars nova theories are "jumbled as though pieced together from personal recollections and experiences."⁵ Yet, as I will demonstrate, rather than comprising a haphazard compilation of jumbled memories, Jacobus's argument in book 7 is clearly structured around the analysis of a handful of key texts by Franco, Lambertus, des Murs, and one other unnamed modernus, and in this it resembles the structure of the other six books of SM, which each focus on the exegesis of a small number of written texts.⁶ The purpose of the present study is to reconstitute the content of the treatise by this unnamed *modernus* that is quoted at length by Jacobus, and that has not been commented on in previous scholarship. I situate this treatise within the context of ars nova

author of SM as simply Jacobus is made in light of the recent important discovery by Margaret Bent relating to the identity of the theorist. While the theorist has most often been referred to in the modern literature by the name Jacques de Liège, this name is a twentieth-century invention, based on the belief of Roger Bragard and others that Jacobus hailed from Liège. Previously, I had corroborated the identification of the author of SM as Jacobus de Montibus (first proposed by Richard Crocker and Oliver Ellsworth), and suggested he may be identical with the man of the same name, from the province of Hainaut, who held a canonicate at the collegiate church of St. Paul in Liège. Bent's discovery of a reference to a music treatise manuscript that is most certainly SM in the April 1419 will of Matteo da Brescia (canon of Vicenza, and a composer), and whose author is identified in the inventory of the Vicenza sacristy dated 1457 as Magister Jacobus de Ispania, throws doubt on the identification of the author of SM with the canon of St. Paul. It also opens up a new realm of possibilities concerning the sphere of influence and activity of the author of *SM*. It is still possible that the theorist could have been known by both names—de Montibus and de Ispania-so for the moment, I prefer to refer to our author here as simply Jacobus. For a preliminary account of her discovery of Magister Jacobus de Ispania, see Margaret Bent, "Jacobus de Ispania?- Ein Zwischenbericht," in Nationes, Gentes und die Musik im Mittelalter, ed. Frank Hentschel and Marie Winkelmüller (Berlin: Walter de Gruyter, 2014), 407-22. Bent presented on Jacobus de Ispania at the Annual Meeting of the American Musicological Society in New Orleans in 2012 and at the International Symposium on Medieval and Early Renaissance Music at Kloster Neustift/Novacella (Italy) in June 2013. On Jacobus de Montibus, see Karen Desmond, "New Light on Jacobus, Author of Speculum musicae," Plainsong and Medieval Music 9, no. 1 (2000): 19-40.

⁴ On his reading of fifteen treatises see *SM* 7.6.23, 17. On his descriptions of hearing ars nova motets in performance see SM 7.48.9–11, 95. ⁵ Sarah Fuller, "A Phantom Treatise of the Fourteenth Century? The Ars nova,"

Journal of Musicology 4, no. 1 (1985): 23-50.

⁶ On the structure and argument of the other books of SM, see Karen Desmond, "Behind the Mirror: Revealing the Contexts of Jacobus's Speculum musicae" (Ph.D. diss., New York University, 2009).

theory in the first half of the fourteenth century and explore its relationship to other witnesses of *ars nova* theory attributed to the poet-composer and royal bureaucrat Philippe de Vitry. This exploration necessitates a return to Fuller's question of whether Vitry actually authored a theoretical treatise on the *ars nova*, and to the hypothesis she suggests of a primarily oral transmission of Vitriacan theory in the first half of the fourteenth century.

The Treatise of the doctor modernus

Chapters 26–30 of book 7 of Jacobus's *SM* constitute a sustained treatment of the notational theories of a single unnamed fourteenth-century theorist. Jehan des Murs is not the primary focus in these chapters: it is in the outer sections of book 7 that Jacobus most directly counters his music theory, tackling des Murs's theories on discant practice and consonance; his definitions of musical time in general and the measurement of it according to the *gradus* system; and the so-called nine conclusions that close des Murs's ground-breaking *Notitia artis musicae* (hereafter *Notitia*).⁷

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These five chapters are contained within the large central section of book 7 (ch. 20–37) that deals directly with the practical matters of how to draw and interpret note shapes—the *figurae* or figures of mensural notation. This central section contains unattributed quotations and points of theory that are, for the most part, not found within the treatises of des Murs. Through a careful reading of the demonstrative adjectives that Jacobus uses for the proponents of these new theories, such as his references to "this teacher" (*hic doctor*), and his more explicit references across chapters that link an "aforesaid teacher" (*tactus doctor*) to "a certain modern teacher" (*quidam modernus doctor*), it becomes evident that most of the notational theories on the *figurae* examined by Jacobus in chapters 26–30 can be attributed to a single individual.

There had been just three types of simple figures (*figurae*) in the mensural notation codified by Franco of Cologne in his influential *Ars cantus mensurabilis* (c. 1280): the long, breve, and semibreve.⁸ These three species were represented in notation by three noteshapes that in turn could represent six possible durations, using the breve (or *tempus*) as a point of reference (table 1). Franco allowed for one modification to

⁷ Chapters 3–10 of *SM* book 7 treat definitions of discant, including a long analysis of two passages from des Murs's *Musica speculativa* (ch. 3 and 7); chapters 11–17 are on *tempus* in general, with a rebuttal of several passages from des Murs's *Notitia* and *Compendium*; chapters 38–40 consider the concept of imperfection with quotations from the *Compendium*; and chapters 40–44 are on *Notitia*'s nine conclusions.

⁸ See chapter 4 (*De figuris sive signis cantus mensurabilis*) in Franco de Colonia, *Ars cantus mensurabilis*, ed. Gilbert Reaney and André Gilles, Corpus scriptorum de musica, vol. 18 ([Dallas, Texas]: American Institute of Musicology, 1974), 29–31.

species	subspecies	noteshape	duration (relative to breve)
long	duplex long		6
	perfect long		3
	imperfect long		2
breve	altera breve		2
	<i>recta</i> breve		1
semibreve	major semibreve	•	2/3
	minor semibreve	•	1/3

TABLE 1 Species, names, shapes, and durations of notes in the Franconian system

one note shape: he included a duplex long drawn with a notehead twice the horizontal length of a long. This note was held for twice the duration of a long (a long was worth three breves, thus a duplex long equaled six breves); Franco, however, still classified the duplex long as a subspecies of long. He listed two other species of long note: the perfect long was held for three breves, and an imperfect was held for two breves. There were two species of breve, *recta* and *altera*, and either two or three semibreves could fill the duration represented by a regular (*recta*) breve.

By the time Jacobus wrote his treatise, the number of ways in which notes were figured and interpreted had multiplied significantly. Jehan des Murs's system, which he first outlined in his *Notitia*, written c. 1320,⁹

⁹ One of *Notitia*'s manuscript sources includes this sentence: "Completum est hoc opus anno domini 1319. Explicit" (F-Pn lat. 7378A, f. 60vb). This date is not included in any other copy of Notitia, however, and even in F-Pn lat. 7378A the date is placed before the nine conclusions that close the text. In the introduction to one of his mathematical treatises (the Canones tabule tabularum), however, Jehan des Murs commented that in 1321 "knowledge of the art of music" (notitia artis musicae), both plainchant and mensural, was made clear to him. See Lawrence Gushee, "New Sources for the Biography of Johannes de Muris," Journal of the American Musicological Society 22, no. 1 (1969): 3-26, esp. 6. Heinrich Besseler took this comment to imply that des Murs's treatise that begins "Princeps philosophorum Aristotelis" (and that Ulrich Michels subsequently edited as the Notitia artis musicae) was composed in 1321. See Heinrich Besseler, "Studien zur Musik des Mittelalters II. Die Motette von Franko von Köln bis Philipp von Vitry," *Archiv für Musikwissenschaft* 8 (1927): 137–258, esp. 182. The modern edition of this text is *Johannes de Muris*, *Notitia artis musicae et* Compendium musicae. Petrus de Sancto Dionysio, Tractatus de musica, ed. Ulrich Michels, Corpus scriptorum de musica, vol. 17 ([Dallas, Texas]: American Institute of Musicology, 1972). Nevertheless, as José Chabás and Bernard Goldstein have recently written with reference to Jehan's comment, it is "by no means evident that John of Murs's intention was to present a list of his writings." See José Chabás and Bernard R. Goldstein, The Alfonsine Tables of Toledo, Archimedes: New Studies in the History and Philosophy of Science and Technology, vol. 8 (Dordrecht: Kluwer, 2003), 278.

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grade	name	noteshape	duration (relative to minim)
1 (maximodus)	longissima		81
	longior		54
	longa		27
2 (<i>modus</i>)	perfecta		27
	imperfecta		18
	brevis		9
3 (tempus)	brevis		9
	brevior		6
	brevissima	•	3
4 (prolatio)	parva	•	3
	minor	•	2
	minima	•	1

TABLE 2

Jehan des Murs's four grades of perfect note values (Notitia 2.5)

proposed that a note—theoretically, at least—could have a duration anywhere on a scale from 1 to 81 (table 2). This is a world away from Franco's six rhythmic durations.¹⁰ Along with the addition of signs and rules that allowed for a more precise measurement of, and differentiation between, types of longs, breves, and semibreves, the mensural system was expanded at its outer limits to allow for shorter short notes and (much) longer long notes.

In his central chapters on the *figurae*, Jacobus was at pains to highlight the inconsistencies in how the *moderni* drew these notes, the variety of names they gave to them, and the theories they used to justify their modifications to the notation of the *ars antiqua*. Much of the modern scholarship on the transition from *ars antiqua* to *ars nova* notation has focused on the interpretation of short notes.¹¹ But Jacobus shows particular concern for how long notes were drawn and interpreted by the

¹⁰ Franco's durations could be thought of as encompassing a scale from 1 to 18 (i.e., a duplex long is worth 18 semibreves), although Franco never described them in this way. ¹¹ See, for example, Johannes Wolf, *Geschichte der Mensuralnotation von 1250–1460: nach den theoretischen und praktischen Quellen*, 3 vols. (Leipzig: Breitkopf & Härtel, 1904; repr. Hildesheim: Georg Olms, 1965), 1:20–61. Willi Apel, *The Notation of Polyphonic Music 900–1600* (Oxford City Press, 1941), 318–27. *Le Roman de Fauvel in the Edition of Mesire Chaillou de Pesstain: A Reproduction in Facsimile of the Complete Manuscript, Paris, Bibliothèque Nationale, fonds français 146, introduction by François Avril, Nancy Freeman Regalado, and Edward H. Roesner, ed. Edward Roesner, François Avril, and Nancy Freeman Regalado (New York: Broude Brothers, 1990), 30–38.*

moderni. As we will see, he gave attention to four aspects of the long (*longa*): 1) the *larga*, or duplex long; 2) longs longer than the *larga*; 3) the imperfection of the duplex long and the notation of duplex longs in ligatures; and 4) songs composed from "imperfect" longs. Perhaps, as seems to be reflected in Jacobus's chapters, many of the problems that the *moderni* were trying to sort out were related to the precise representation and interpretation of long notes. After all, as any musician knows, one can always fudge the short notes as long as it is possible to determine where you are within the measure of a piece.

The *larga* or duplex long: Some of the *moderni*, Jacobus argues in chapter 26, claimed that a duplex long had a value of nine breves or *tempora*. Jacobus specifically credits one teacher with this theory:

Cum enim, ut dicit hic doctor, quaelibet notula in valore debeat triplicari, ut semibrevis tres valet minimas, breves tres semibreves, longa tres breves, ergo duplex longa, vel melius larga, procul dubio tres longas, scilicet novem tempora valere debet. For since, as this teacher says, any note could be tripled in value, so that a semibreve is worth three minims, breves three semibreves, [and] a long three breves, therefore a duplex long, or better a *larga*, doubtless ought to be worth three longs, namely nine breves.¹²

For the sake of clarity, I will give "this teacher" a name: *doctor modernus* (modern teacher). For Jacobus often uses this phrase within these chapters to refer to this man, with the caveat that Jacobus also uses this epithet elsewhere to refer specifically to Jehan des Murs.

According to Jacobus the *doctor modernus* proposed that if we accept that any note may be tripled in value, it is possible to have a value three times as long as a long. The note shape of the duplex long was thus appropriated to represent a duration of nine breves (*tempora*). The *doctor modernus* suggests a better name for this noteshape: the *larga*, a more appropriate name, since this shape is not used in this instance to indicate a doubled long.¹³

¹² SM 7.26.2, 54.

¹³ Peter Lefferts's survey of the term *larga* in mensural theory finds it used mostly by English theorists, such as John Hanboys, Thomas Walsingham, Willelmus, John Torkesey, and the author of the anonymous text *Lbl21455* (appendix 1 contains the abbreviations I use for the anonymous *ars nova* texts). Peter M. Lefferts, "An Anonymous Treatise of the Theory of Frater Robertus de Brunham," in *Quellen und Studien zur Musiktheorie des Mittelalters*, vol. 3, ed. Michael Bernhard (Munich: C.H. Beck, 2001), 237–44. According to Lefferts, there is no thirteenth-century prehistory for the use of the term. It is found, however, in some non-English treatises: Petrus de Sancto Dionysio's version of des Murs's *Notitia* so copied in Chicago, Newberry Library (hereafter *US-Cn*) Ms. 54.1 by the English scribe, Frater G. de Anglia; and in three treatises copied in the manuscript Rome, Vatican Library (hereafter

In proposing that the note shape of the duplex long could have the value of nine *tempora*, Jacobus writes, the *moderni* insinuate that "Franco, Petrus de Cruce, and certain others" were in error.¹⁴ Jacobus specifically berates the *doctor modernus*:

Dicendum quod hic doctor irrationabiliter Franconem, Petrum de Cruce et ceteros increpat doctores qui temporibus suis fuerunt ita valentes et quorum memoria benedictionem habeat. Et incurialiter nimis asserit illos errasse. Caveat sibi ne in multis amplius ipse erret *in tractatu suo* in quo multa ponit ridicula et quandoque contra se ipsum ire videtur. Sed hoc ostendere dimitto. It must be said that this teacher irrationally scolds Franco, Petrus de Cruce, and other teachers who in their time were worthy, and whose memory ought to receive blessing. And, uncourteously, and to an excessive degree, he claims that they were in error. Let him take care that he not err to a greater degree in the many statements *in his own treatise*, in which he posits many ridiculous things, on occasion seeming to contradict himself. But I decline to show this.¹⁵

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Note Jacobus's use of the adverb *incurialiter*: the *doctor modernus* stands accused of criticizing Franco and Petrus de Cruce in a manner that is the opposite of courtly and that does not show the proper deference to the older generation of theorists.¹⁶ But, perhaps more significantly, we learn that the *doctor modernus* had written a treatise (noted in italics in the quote above), in which he had proposed many theories (characterized by Jacobus as ridiculous and contradictory).

Two theorists echo the wording of this passage later in the fourteenth century, and both may also have known the treatise of the *doctor modernus*. The notion that a long can be tripled (*triplicari*) is discussed in the *Quatuor principalia* written by the English theorist John of Tewkesbury in 1351.¹⁷ The Italian fourteenth-century theorist Johannes Vetulus

I-Rvat) Barber. lat. Ms. 307, namely: 1) in Johannes Vetulus de Anagnia's *Liber de musica*, 2) in the anonymous text *Ps.-Theodon*, and 3) in an anonymous addition on f. 24v (ibid., 242).

¹⁴ *SM* 7.26.1, 54.

¹⁵ SM 7.26.3, 54–5 (italics mine).

¹⁶ Jacobus repeats this same point regarding the valuation of the duplex long later in book 7, and again highlights the uncourteous manner of the *doctor modernus* and his disrespect for Franco and Petrus de Cruce: "this teacher seems to speak uncourteously" (*incurialiter loqui videtur ille doctor*). See SM 7.46.14–15, 89–90.

¹⁷ John of Tewkesbury, *Quatuor principalia*, ed. Edmond de Coussemaker, in *Scriptorum de musica medii aevi. Novam seriem a Gerbertina alteram collegit nuncque primum edidit E. de Coussemaker*, 4 vols. (Paris: A. Durand, 1876; facsimile edition, G. Olms: Hildesheim, 1963), 4:264. On John of Tewkesbury and the *Quatuor principalia*, see Luminita Florea Aluas, "The 'Quatuor principalia musicae': A Critical Edition and Translation, with Introduction and Commentary" (Ph.D. diss., Indiana University, 1996).

de Anagnia invokes these concepts more explicitly and also uses the term larga:

Et si duplicatur corpus dictae longae, potest duplicari et triplicari valor. Et quando valor praedictae longae duplicatur, praedicta duplicata vocatur imperfecta larga vel duplex longa.

And if the notehead of the said long is doubled, its value can be doubled or tripled. And when the value of the aforesaid long is doubled, the aforesaid doubled long may be called an imperfect *larga* or a duplex long.¹⁸

These largae (duplex and triplex longs, or imperfect and perfect *largae*) were not the longest note values proposed by the *doctor modernus*. Jacobus closes chapter 26 by indicating that his criticisms of the *doctor* modernus will continue in the next chapter since "the aforesaid teacher puts forward certain duplex largae that we will now discuss" (ponit enim tactus doctor quasdam largas duplices de quibus aliquid statim dicatur).¹⁹

Extra-long long notes: Chapter 27 opens as follows:

Sciendum, inquit praetactus doctor quod sicut duplex longa per breves diminuitur, sic per caudas augetur. Unde notandum quod corpus eius ultra modum consuetum valet tot perfectiones vel imperfectiones quot continet caudas sive breves divisas.

It must be known, says the aforesaid teacher, that just as the duplex long is diminished through breves, thus it is augmented through strokes. Whence it must be noted that its notehead, which is extended beyond its normal size, is worth as many perfections or imperfections as strokes or divided breves it contains.²⁰

Leaving aside for the moment the first theory on the imperfection of the duplex long mentioned by the *doctor modernus*, this passage describes an extra-long long that has vertical strokes (caudae) drawn through the body of the note. A few chapters back, in chapter 23, Jacobus had briefly mentioned a teacher who placed a particular variety of long note that he called a *larga* or *pilosa*: literally, a hairy long.²¹ In chapter 27, Jacobus lists

¹⁸ Johannes Vetulus de Anagnia, *Liber de musica*, ed. Frederick Hammond, Corpus scriptorum de musica, vol. 27 (Neuhausen-Stuttgart: Hänssler Verlag, American Institute of Musicology), 66.

¹⁹ SM 7.26.7, 55. ²⁰ SM 7.27.1, 55.

²¹ "But a certain modern teacher places certain other long notes that he calls *largae* or pilosae." (Ponit autem quidam doctor modernus alias quasdam longas notulas quas largas vocat vel pilosas). SM 7.23.9, 50. Jacobus refers to the proponent of this theory as a "doctor modernus," and he is most likely identical with the *doctor modernus* under consideration here.

a third name for this extra-long note whose length is indicated by the number of vertical strokes drawn through it: *fissa* (a note "having-been-cleaved" or split).²² In his description of this "figura ultra modum consuetum" Jacobus cites a specific chapter number from the treatise of the *doctor modernus* (see italics):

Et idem infra, *undecimo capitulo sui* operis: Quadrata, inquit, nota habens figuram ultra modum consuetum, sive metam duplicis longae, plures caudas continens, sive duas, sive tres, sive plures ascendentes <vel descendentes> alias et alias, sive breves in se continens divisas, larga vocatur, ut haec quae sequitur. And below *in the eleventh chapter of his work*: a quadratic note, he says, having a figuration beyond the usual manner, or beyond the limits of a duplex long, containing many strokes, either two, or three, or more, some ascending and others <descending>, or containing in itself divided breves, is called a *larga*, like this which follows.²³

Jacobus then gives a notated example of these long notes drawn with vertical strokes (fig. 1).

Long notes of this type are described in a number of fourteenthcentury anonymous texts copied in France (*CS3anon4*, fig. 2), Italy (*Ps.-Theodon*, fig. 3), Spain (*Angles1958*, where it is called a *longa duplex* and points are used rather than strokes; fig. 4), and England (Robertus de Handlo's *Regule*).²⁴ The theoretical description with the closest word-forword match with *SM* is *CS3anon4* (fig. 2), whose notated example is also similar to the one notated in *SM*. The description in *CS3anon4* reads:

²² "That teacher therefore places duplex longs, which he calls *largae* or *fissae*, and he tails them with many tails not only in their extremities but also in the middle, above, and below" (*Ponit igitur doctor iste longas duplices quas largas vocat vel fissas et istas multis caudat caudis quia non solum in extremitatibus, sed in medio sursum vel deorsum). SM 7.27.3, 56.*

²⁴ CS3anon⁴, 34. Ps.-Theodon, 46–47. Angles1958, 21. Peter Lefferts, ed., Robertus de Handlo, Regule, The Rules and Johannes Hanboys, Summa, The Summa: A New Critical Text and Translation (Lincoln: University of Nebraska Press, 1991), 116. Johannes Hanboys, in chapter 13 of his Summa, discusses longs such as these containing three to nine longs within the context of a chapter that quotes Johannes de Garlandia. In this chapter, however, Hanboys calls them longs, not largae (although elsewhere in his treatise he does use the term larga). Ibid., 263–69. The term larga is used to refer to a note worth nine longs in an anonymous commentary on Boethius copied in Oxford, Bodleian Library (hereafter GB-Ob) Bodley 77. See Lefferts, "An Anonymous Treatise of the Theory of Frater Robertus de Brunham," 237. The only extant treatise (other than CS3anon4) that contains the exact phrase "ultra modum consuetum" is the Declaratio musicae disciplinae by the fifteenth-century Italian theorist Ugolino of Orvieto. Ugolino of Orvieto, Declaratio musicae disciplinae, ed. Albert Seay, Corpus scriptorum de musica, vol. 7 (Rome: American Institute of Musicology, 1959), 2:64.

²³ SM 7.27.2, 56.

sugerne. Un nondum als and euce vitra modu collectu valet tat periones ? Impfriones at arms audas fine brenes duifas 2 idem infra vi aplo fiu ops Dis que no folu mactremutator of 1 medio fuz luz vel vers des fum vona tales monuelas novallet eu moltru set quès aliquis bre a primeat ad est nam spiceta se deres innatura e quès mons he nours in quadrate infais extremutator ve ingulis au Dont & botos iste longas duplices quis laigns vocat al fillus 2 istes mins audat au Ciendu maje practice doctor of fie duples longer p breues dummer fie p audres Dar John 2 mag madro. Ogna abylio gra alegaliens gra vanens gra molen at. gra munduas gra vadaas. Om notar Agnas gra plampao gra applen 28 eality yromae Dia pot qd Arapenles zu vões dat gra platone Guideat note tales asonfra m.p. Je hie doctor longam duplice pont ee ligabale no falu alignatura lu ve hipra probatu ef 2 pultiter in truplier logatura. q2 fm integuos 2 alus modernos 2 THIRD AUNEIL ombar Quadratet mout nour bus figam die mos ofuctu fue meen Jupliers lonze ples audous genes fue duas fue tres fue ples aften, alus 2 alus fue breues mpe genes duufas, larga vocat du ber que Bequiture :naus ung solu prouttut aung ver liger longa fimples & mligatura tiplica Inligatura binazia 2 ai vina liveui ligat hie Detaz longa duplice fe:-Invertha vo ligatures even ponentes emedie duase breum mode que freque detail], with permission of the Bibliothèque nationale de France)

FIGURE 1. Corpus ultra modum consuetum in Jacobus, SM 7.27 (Paris, Bibliothèque nationale de France, lat. 7207, f. 284v

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FIGURE 2. Corpus ultra modum consuetum in CS3anon4 (Paris, Bibliothèque Nationale lat. 15128, f. 129r [detail], with permission of the Bibliothèque Nationale de France)

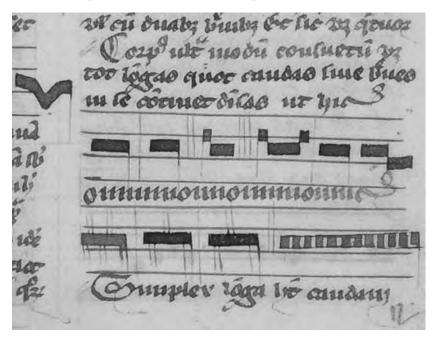


FIGURE 3. Caudae through the maxima long in Ps.-Theodon (Rome, Biblioteca Apostolica Vaticana, Barberini latini 307, f. 24v [detail] ©2014 Biblioteca Apostolica Vaticana, by permission of Biblioteca Apostolica Vaticana, with all rights reserved)

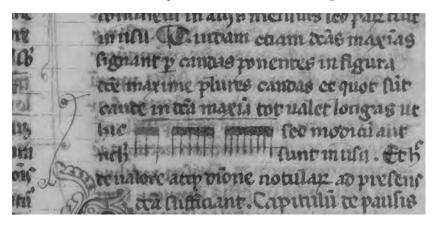


FIGURE 4. Longae duplices with points above in Anglès1958 (Barcelona, Arxiu Capitular, A.C.B. Miscellània 23-4, f. 4r [detail]. Copyright © Arxiu Catedral de Barcelona, Drets Reservats. Prohibida la reproducció total o parcial.)

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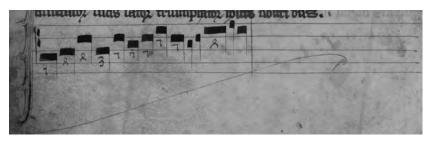
"Its notehead [which is extended] beyond the usual manner, is worth as many longs as the strokes or divided breves it contains."²⁵

These longs are less commonly found in practical sources, although there are examples of longs marked off by arabic numerals in the early fourteenth-century English fragment *EIRE-Dtc* Ms. 519 (fig. 5); and in the fourteenth-century Spanish polyphonic manuscript known as the Las Huelgas Codex dots are drawn above some longs to indicate their length, similar to the description and example given in *Anglès1958* (fig. 4).²⁶

²⁵ "Corpus ultra modum consuetum valet tot longas quot caudas sive breves in se continet diversas." CS3anon4, 34.
 ²⁶ With thanks to David Cataluyna, who is working on a new edition of the Barcelona

²⁶ With thanks to David Cataluyna, who is working on a new edition of the Barcelona *ars nova* theory treatise and who pointed me to the example in the Las Huelgas Codex (Burgos, Monasterio de Santa Maria la Real de las Huelgas, without shelf mark) of a long drawn with two dots above (beginning of second stave, f. 141r). Thanks also to those who participated in a Facebook discussion on these notes in the Ars Nova Facebook group (personal communication, private Facebook group, 13 July 2013). For facsimile images of

FIGURE 5. Lengths of longs indicated by Arabic numerals (Dublin, Trinity College Library, Ms. 519, f. 1v [detail], with permission)



These extra-long longs, i.e., longs longer than the triplex long, were not part of the *gradus* system that Jehan des Murs systematized c. 1320 (table 2). Later in the fourteenth century, English theorists (such as Willelmus and John Torkesey) expanded des Murs's *gradus* system to include such longer notes (and shorter notes too).²⁷ Yet, roughly contemporaneous with the writing of *SM*, we find two references to an extended *gradus* system of five levels. These references occur in the commentary on des Murs's *Notitia* written by Petrus de Sancto Dionysio, an Augustinian monk and music theorist, who is documented in Naples, Avignon, and Paris between 1317 and 1332.²⁸ Petrus deemed this additional level of the *gradus* system, which he attributes to a Phillipotus and which had a longest note that was triple the length of a triplex long (27 breves or 243 minims, the same as described by Jacobus above), as unnecessary and irregular:

Verumptamen Phillipotus addit unum gradum ratione graduum comparationis, quem gradum non reprobo tamquam impossibilem, sed mihi non videtur necessarius nec regularis propter ductiones ternarii superius declaratas. But nevertheless Philip adds one degree by reason of comparison of degrees; I do not reject this degree as impossible, but it does seem to me neither necessary nor regular according to the products of the ternary discussed above.²⁹

these longs see *El Còdex musical de las Huelgas*, ed. Higini Anglès, 3 vols. (Barcelona: Institut d'Estudis Catalans, Biblioteca de Catalunya, 1931), 2:f. 141r.

²⁷ On the connections between Torkesey, Willelmus, and the Chicago theory manuscript (*US-Cn* Ms. 54.1), see Renata Pieragostini, "Augustinian Networks and the Chicago Music Theory Manuscript," *Plainsong and Medieval Music* 22 (2013): 65–85.

²⁸ On Petrus de Sancto Dionysio, see Carla Vivarelli, "Di una pretesa scuola napoletana': Sowing the Seeds of the *Ars nova* at the Court of Robert of Anjou," *The Journal of Musicology* 24, no. 2 (2007): 272–96.

²⁹ For the two references to Phillipotus in the treatise of Petrus de Sancto Dionysio, see *Johannes de Muris Notitia artis musicae*, ed. Ulrich Michels, 154, 156. The scribe of *US-Cn* Ms. 54.1 used the name Phillipotus to refer to a Philippus earlier in the manuscript where

Perhaps the extra-long long notes described by Jacobus were those that comprised this speculative fifth level of the *gradus* system described by Petrus and attributed to Philip. In any case, discussion of the *doctor modernus*'s hairy note provoked an emotional response from Jacobus:

Utinam tales monstruosas nominasset!, cum monstrum sit quando aliquid plus habet quam pertineat ad eius naturam consuetam, sicut defectus in natura est quando minus habet. Notulae autem quadratae in suis extremitatibus vel angulis caudari solent et nunquam in medio. O quanta abusio, quanta illegalitas, quanta vanitas, quanta insolentia, quanta inutilitas, quanta ruditas! O in notarum figuris quanta praesumptio, quanta confusio!

Oh, if only he had not named such monstrosities! For it is monstrous whenever something has more than pertains to its usual nature, just as it is a defect in nature when something has less. Square notes moreover ought to have strokes placed at the extremities or at the angles and never through their middle. Oh, so much abuse, so much illegality, so much vanity, so much insolence, so much uselessness, so much rudeness! Oh, so much presumption in the figuring of the notes, so much confusion!³⁰

The imperfection of the duplex long and the notation of duplex longs in ligatures: In chapter 27 Jacobus also castigates the *doctor modernus* for the theory that duplex longs can be imperfected by neighboring breves. (In Franconian theory, only a perfect long can be imperfected by a neighboring breve.) When Jacobus cites the theory of the *doctor modernus* he specifies that it is found within the eighth chapter of his work:

Imponit tamen hic doctor arti veteri quod in ipsa contineatur tactus modus notandi in quo scilicet brevis cum longa ligatur duplici vel cum duabus brevibus. Dicit enim *in octavo capitulo suis operis* sic: Videmus in arte veteri quod, quando sola brevis ligatur Nevertheless this teacher attributes to the old art that it contained within itself the aforesaid manner of notating, namely where the breve is joined in ligature with a duplex long or with two breves. For he says *in the eighth chapter of his work* thus: we see in the old art that

he incorrectly attributed the *Tractatus de diversis figuris* of Philippus de Caserta (or Egidius de Murino) to Phillopotus Andreas ("tractatus magistri Phillipoti Andree artis nove") and where he wrote the explicit for *Omni desideranti* ("Explicit ars perfecta in musica magistri Philippoti de Vitriaco"). It is possible therefore that the reference in Petrus's treatise to Phillipotus is to a Philippus. Leofranc Holford-Strevens notes that -potus was used as diminutive (personal communication, 21 May 2014).

³⁰ SM 7.27.4–5, 56.

cum longa duplici, duplex illa longa quinque tantum valet tempora et, quando duo breves a quolibet latere illi iunguntur, quattuor valet tempora.

whenever a single breve is joined in ligature with a duplex long, that duplex long is worth only five tempora, and, whenever two breves are joined at either side of that long, it is worth four tempora.³¹

A duplex long that can be imperfected by neighboring breves results in a note that has a duration of four or five breves, a duration not found in the ars antiqua of Franco. These imperfected duplex longs were, according to the notated example given by Jacobus, sometimes drawn within ligatures: either as the second note of a two-part ligature or as the middle note of a three-note ligature (fig. 1). Jacobus later describes this notation as irrational: "that author irrationally joins the duplex long in ligature" (actor iste irrationabiliter duplicem ligat longam). And, keeping track of the references that imply Jacobus is working from a written text, it noted that Jacobus here refers to the *doctor modernus* as an author.³²

The rule of the *doctor modernus* concerning the imperfection of the duplex long is found in many fourteenth-century ars nova texts, including Pn7378A, Rvat307, Pn14741, Lbl21455, CS3anon4, CS3anon3, *CS2anon2*, *Omni desideranti*, and Handlo's *Regule*.³³ The notated example given by Jacobus to illustrate duplex longs in ligature has a concordance in CS3anon4 (compare figs.1 and 2), although the closest match to the text of SM is found in CS3anon3.³⁴ When Jacobus cites this theoretical point he specifies that it is found within the eighth chapter of the work by the same author he mentioned earlier (and from which he had previously cited the eleventh chapter). This teaching is found as the eighth chapter in Omni desideranti and the eighth sentence of Pn7378A: their organization of these texts may therefore reflect the structure of both their and Jacobus's sources.35

Jacobus appears particularly annoyed by the doctor modernus's misleading characterization of this practice as belonging to the old art (ars vetus), and he launches into a pointed criticism of the author, this time

³¹ SM 7.27.9–10, 56–7 (italics mine).

96–97. ³³ Pn7378A, 57; Rvat307/Pn14741, 25; Lbl21455, 74; CS3anon4, 39; CS3anon3, 89; and Differenced Robertus de Handlo, 118. CS3anon2, 14. Omni desideranti, 120. Handlo in Lefferts, ed., Robertus de Handlo, 118.

³⁴ Desmond, "Texts in Play," 99–101. The passage in *CS3anon3* is as follows: "And in the old art we see that whenever a single breve is joined with a duplex long, that duplex long is worth but five tempora, as shown here" (Item in veteri arte vidimus quod quando sola brevis ligatur cum duplici longa, illa duplex longa non valet nisi quinque tempora, ut hic patet). Ibid., 89.

³⁵ Desmond, "Texts in Play," 101.

³² SM 7.27.8, 56. Franco specifically proscribed this practice. See Karen Desmond, "Texts in Play: The Ars nova and its Hypertexts," Musica disciplina 57 (2012): 81-153, esp.

for his deceit in claiming to faithfully describe the old and new practices of mensural notation:

Hic doctor, qui veterem artem atque novam intendit in opere suo divulgare fideliter quae veteris sunt et quae novae, debet repetere et non imponere Veteribus quae minime dixerunt. Utrum autem hoc observet, iudicent qui Antiquorum opera de hac materia nec non et Modernorum diligenter inspexerunt. Sed forsan tactus doctor aliquam artem vocat veterem quae de novo cantandi modo tractat et notandi. Tanta enim variatio inter Modernos iam facta est ut priores ipsorum veteres vocentur respectu aliorum.

This teacher, who claims to faithfully lay out in his work the old and new art, ought to reexamine which elements are of the old and which of the new, and to not attribute to the Ancients things about which they said little. But those who have diligently examined the works of the Ancients and the Moderns on this matter should judge whether he pays attention to this. But perhaps the aforesaid teacher calls some Art old where he discusses the new way of singing and notating. For there is already so much variation among the moderns that their prior [efforts] could be called old compared to others.³⁶

Three of the short *ars nova* texts—namely *CS3anon3*, *CS3anon4*, and *Omni desideranti*—contain an opening statement that closely matches the sentiment and wording of the first sentence quoted here, indicating their intent to outline in a short compendium elements of the old and new arts of mensurable music.³⁷ The *Omni desideranti* treatise provides the closest match word for word with Jacobus's quotation from the *doctor modernus*.³⁸

Songs composed from "imperfects": Jacobus continues his references to the *doctor modernus* in chapter 29:

³⁶ SM 7.27.14–15, 57.

³⁷ Fuller, "Phantom Treatise," 48. Fuller also notes that a similar sentiment is expressed in *Pn7378A*, although not in its opening statement, but within the main body of the text.

the text. ³⁸ The opening statement of *Omni desideranti* is as follows: "This treatise on music was composed by the venerable Master Philippe de Vitry. For anyone wishing to gain knowledge of the techniques of measurable music, both new and old, I venture here to outline faithfully, insofar as I am able, certain rules presented in a short compendium" (*Tractatus iste super musicam composuit venerabilis magister Philippus de Vitriaco. Omni desideranti notitiam artis mensurabilis musicae tam novae quam veteris obtinere certas hic rationes praesentes sub brevi compendio pro posse meo propono fideliter adsignare*). Desmond, "Texts in Play," 116–17. The only texts to use the adjective *fideliter* are Jacobus's citation given above and the *Omni desideranti*. Ibid., 102.

Sed dicunt Moderni quod finaliter in cantibus ex imperfectis omnia reducuntur ad aequalitatem. Ideo ponunt Moderni imperfectum, vel cantum, esse possibile sicut perfectum, sed tum³⁹ non videtur stare aliud dictum eiusdem doctoris ubi ait quod est modus imperfectus perfectae mensurae et modus perfectus imperfectae mensurae.

But the moderns say that, in the end, all things are reduced to equality in songs made from imperfects. Thus the moderns claim that an imperfect thing or song is just as possible as a perfect one, but then this seems to contradict the statement of the same teacher where he says that there is an imperfect mode of perfect measure and a perfect mode of imperfect measure.⁴⁰

The *doctor modernus* outlines two of the four possible combinations of mode (termed perfect or imperfect according to whether the long is worth three or two breves) and tempus (or measure, which is termed perfect or imperfect according to whether the breve or *tempus* is measured by three or two semibreves): perfect mode with imperfect *tempus* (L=3B, B=2S) and imperfect mode with perfect *tempus* (L=2B, B=3S). In each case the long is worth six semibreves and thus these two different combinations of mode and *tempus* may be reduced to equality as stated in the quoted passage.

Earlier in chapter 23, and also at the beginning of chapter 29, Jacobus had made reference to the four possible combinations of mode and tempus according to the moderni, which included, in addition to the two described above, the imperfect mode with imperfect *tempus* (L=4S) and the perfect mode with perfect *tempus* (L=9S).⁴¹ The same statement outlining these four possible combinations is found in Pn7378A, Rvat307, and Pn14741, and in some sources of Jehan des Murs's Notitia.⁴² Directly following this statement on the four possible combinations of mode and tempus in chapter 23, Jacobus exclaims: "If only this speculation had not descended into practice!" (Utinam haec speculatio ad praxim non descendisset!).43

Jacobus makes a similar complaint in chapter 45 that the practice of the ars nova followed the theoretical speculation on it (that is, the theory was devised first, and the musical compositions came after):

⁴² *Pn7378A*; *CSM 8*, 67; and *Rvat307/Pn14741* in ibid., 25; as well as Jehan des Murs, Notitia 2.10.11–12, 95.

43 SM 7.23.11, 50.

³⁹ For *tum*, Bragard's edition reads "cum <tacto dicto>." Wegman's emendation to tum makes more sense: see Wegman, "Jacobus: the Mirror of Music (c. 1325), Book VII," Part 3, 63. ⁴⁰ SM 7.29.8, 59.

⁴¹ SM 7.23.10, 50; SM 7.29.1, 58.

Quod si ars nova de tactis imperfectionibus speculative solum loqueretur, magis esset tolerandum, sed non sic est. Imperfectionem enim ad praxim nimis extendunt; plus imperfectis utuntur quam perfectis, plus modis imperfectis quam perfectis et per consequens mensuris. If the new art were to speak of the aforesaid imperfections only in a speculative way, it would be more tolerable, but it is not so. For they have excessively extended [them] in practice, they use more imperfects than perfects, more imperfect modes than perfect, and as a consequence, [more imperfect than perfect] measures.⁴⁴

Indeed, according to Jacobus, the *doctor modernus* not only theorized these combinations of mode and *tempus*, but also supported their use in practice and approved of songs composed from imperfects.⁴⁵ In chapter 30, Jacobus states that the *doctor modernus* disputed the contention that songs ought to be formed only from perfect longs because their ternary nature is a proper reflection of the Holy Trinity:

Dicit enim quod, antequam Deus assumeret humanam, salva Dei essentia, ex imperfectis cantus esse poterat. Item cum similiter sic Deus trinus est in personis, sicut unus in substantia, non plus debet cantus naturalis referri in Trinitatem divinam quam in unitatem. Item sive cantetur ex perfectis sive ex imperfectis, neque plus neque minus Deus trinus et unus. For he says that, before God had assumed human form without violation of God's essence, a song could have been made from imperfects. And thus since God is at the same time three in person yet one in substance, a natural song ought no more refer to the divine in the Trinity than in unity. And whether sung from perfects or from imperfects, God is no more or no less three and one.⁴⁶

Jacobus devotes the remainder of chapter 30 to a phrase-by-phrase examination and (mostly theological) refutation of the above passage.

⁴⁶ SM 7.30.1–2, 60. Many theorists, following the references found in Franco and Lambertus, made a brief reference to the relationship between the perfect long and the Holy Trinity. These include Jehan des Murs, Marchettus da Padova, Walter Odington, John Tewkesbury, Johannes Hanboys, Willelmus and the author of the anonymous *ars nova* texts (*Pn7378A*, *Rvat307*, *Pn14741*, *Lbl21455*, *Ps.-Theodon*, *Omni desideranti*). The only reference in an extant treatise linking descriptions of the Trinity, God appearing in human form, and mensural notation is found in Johannes Vetulus de Anagnia, *Liber de musica*, 28–29.

⁴⁴ SM 7.45.8, 87.

⁴⁵ SM 7.30.1, 60.

To summarize, the above analysis of chapters 26 to 30 has demonstrated that the treatise of the *doctor modernus* contained the following theoretical points:

- That long notes called *largae*, *pilosae*, or *fissae*, drawn longer than their usual size, have their length indicated by strokes drawn through the notehead.
- Any note value can be tripled, thus a duplex long or *larga* can contain nine breves.
- A duplex long may be imperfected by a breve following it, or by breves preceding and following it, resulting in an imperfected duplex long worth either five or four breves.
- Duplex longs may be drawn within ligatures.
- There are four combinations of mode and measure (*tempus*) termed perfectly perfect, perfectly imperfect, imperfectly perfect, and imperfectly imperfect.
- Perfectly imperfect longs and imperfectly perfect longs are equipollent (reduced to equality).
- And, whether songs are composed from perfect or imperfect values, God is no less three persons in one.

In addition, the *doctor modernus* promised to outline faithfully in his treatise the elements of both the old and new arts of mensural music, and he approved of songs composed using imperfect note values. Parallel passages that outline the above theories are found in many fourteenthcentury theory texts, and were noted in the above analysis, including: Handlo's *Regule*, John of Tewkesbury's *Quatuor principalia*, Johannes de Vetulus Anagnia's *Liber de musica*, and the anonymous texts *Pn7378A*, *Rvat307*, *Pn14741*, *Lbl21455*, *CS3anon2*, *CS3anon3*, *CS3anon4*, *Anglès1958*, *Ps.-Theodon*, and *Omni desideranti*. The relationship of the *doctor modernus*'s treatises to these concordant texts will be explored in more detail below.

The above analysis has considered Jacobus's discussion of the *doctor modernus*'s treatise in chapters 23, 26–30, and 46. It is difficult to say for certain whether the *doctor modernus* is quoted elsewhere in *SM*. As mentioned, Jacobus also uses the epithet *doctor modernus* to refer to Jehan des Murs.⁴⁷ As such, when Jacobus attributes quotations or theories

 $^{^{47}}$ See appendix 2. Sometimes Jacobus also uses substantive adjectives to refer to the teachings of "another" or "others," although these tend to be briefer asides—such as the passage in chapter 24 where Jacobus outlines the different ways the *moderni* draw semibreves (*SM* 7.24.5–11, 51–52) or in chapter 47 where he outlines the different mensuration signs in use (*SM* 7.47.6–14, 92–93).

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to a modern teacher that are at a further remove from these contiguous chapters, caution must be exercised.

Jacobus uses the noun teacher (*doctor*) fifty-eight times in book 7. Seventeen of these instances are references to plural *doctores*, most often with reference to the *antiqui* or to teachers of music in general, and with six references to modern teachers. (His usual method of referring to the modern teachers is simply as *moderni* without following it with the noun *doctores*.) His use of the singular *doctor*, however, is quite restricted. Of the forty-one instances of *doctor*, three refer to Lambertus, nineteen to Jehan des Murs, sixteen to our *doctor modernus*, and three are ambiguous references (appendix 2). I will briefly outline these three ambiguous references here, which may be quotations from our *doctor modernus*, and also add a fourth possible reference. The three ambiguous references concern mode, speed of performance, and mensuration signs. The fourth possible reference concerns semibreves.

Mode: In chapter 18 Jacobus quotes four definitions of mode. In the *ars antiqua*, mode was understood as a regularly recurring pattern of rhythmic values: for example, Franco outlined five different rhythmic patterns used in mensurable music, and Lambertus outlined nine. The first three definitions of mode in *SM* 7 chapter 18 are *verbatim* quotes from the treatises of Franco, Lambertus, and Jehan des Murs.⁴⁸ A fourth quote that Jacobus attributed to a *doctor modernus* remains unidentified:

Item aliter: Modus est cantandi maneries quae ex longis vel ex longarum perfectionibus per aequipollentiam colligitur. Et secundum hanc descriptionem, modus non videtur respicere cantus ex imperfectis compositos, cum tamen data sit ab *uno doctore moderno* qui utitur imperfectis. And otherwise: "Mode is the manner of singing with respect to longs, or it is reckoned from the perfections of longs through equipollence." And according to this description, mode does not seem to encompass songs composed from imperfects, but nevertheless it [this definition] was given by *a modern teacher* who uses imperfects.⁴⁹

This *doctor modernus* cannot be identified as Jehan des Murs since the quote on mode immediately preceding this one (and distinguished as *aliter*) is taken from Jehan des Murs's *Compendium*. In *ars nova* theory the term mode had acquired a new meaning, and no longer referred to the patterns of longs, breves, and semibreves found in *ars antiqua* treatises. Rather, mode in the *ars nova* refers specifically to the measurement of

⁴⁸ See *SM* 7.18.1–3, 39.

⁴⁹ SM 7.18.4, 39–40 (italics mine).

longs, and whether these longs are measured in threes (perfect) or twos (imperfect). The quotation above reflects the *ars nova* use of the term mode. If this quotation does originate from the treatise of our *doctor modernus*, then it implies that he not only approved of imperfects in compositions, but used them in his own compositions, that is, he was a composer.

Speed of performance: In chapter 17, Jacobus quotes from two authors regarding different speeds of performance. One of these authors is identified as a *doctor modernus* and this short quotation given here by Jacobus is also found in three *ars nova* texts (*Rvat307*, *Pn14741* and *Pn7378A*) that have concordances elsewhere (as outlined above) with the treatise of the *doctor modernus*.

Alius autem haec ascribens tempori perfecto sic ait: Sciendum tempus perfectum esse triplex: minimum, medium et maius. Dicendum igitur quod, ubi dixerunt, Antiqui tempus perfectum non esse divisibiles in plures semibreves quam tres, intelligunt de cita mensuratio, et hoc approbat quidam modernus doctor de Francone. Dicit enim quod tempus minimum posuit Franco cum brevis tres semibreves dividitur adeo strictas ut ulterius sint indivisibiles But another, who ascribes this to a perfect *tempus*, says this: one must know that perfect *tempus* is threefold-minimum, medium and major. It must be said, therefore, that where the Ancients have said that perfect *tempus* is not divisible into more semibreves than three, they understand this about fast measurement, and a certain modern teacher confirms this from Franco. For he says that Franco posited the minimum *tempus* when the breve is divided into three close semibreves such that they are not divisible any further.⁵⁰

In this passage, this *doctor modernus* invokes Franco, as Jacobus indicates elsewhere that our *doctor modernus* was wont to do, in the passage from chapter 26 cited above, and in the corresponding passage from chapter 46.⁵¹

Mensuration signs: In chapter 47 (contiguous to chapter 46, which contains content definitively linked to our *doctor modernus*), Jacobus outlines in detail the various mensuration signs used by the moderns (who are referred to as a group using plural verb forms). There is an aside, however, where Jacobus directly criticizes "he who posits this teaching"

⁵⁰ *SM* 7.17.1–3, 35. Translation modified from that given in Wegman, "Jacobus: the Mirror of Music (c. 1325), Book VII," Part 2, 37. A concordant passage is found in *Rvat307* (29), and, without mentioning Franco, also in *Pn7378A* (69).

⁵¹ See above nn. 15 and 16.

(*qui ponit hanc doctrinam*) and the vocabulary of this criticism echoes Jacobus's previous criticisms of the *doctor modernus*, especially his use of the verb *increpare* (which is only used five times in book 7, four of which are in descriptions of the *doctor modernus*'s behavior):

Et qui ponit hanc doctrinam multum increpat illos qui hanc ignorant, idiotas et insipientes ipsos reputans, cum enim iacet hic magna scientia, magna sapientia (sintque haec positiva!) et per alium modum vel alios multos modos quam per illos possunt tempus perfectum et imperfectum, si ponantur, abinvicem discerni! And he who posits this teaching greatly scolds those who are ignorant of it, calling them uneducated and foolish, for here is set forth great science, great wisdom (and let these be positive things!) and, through another way or many other ways than those, they can discern in turn perfect and imperfect *tempus*, if they are set down.⁵²

This chapter contains several direct quotations found in the *ars nova* texts *Rvat307*, *Pn14741*, and *Pn7378A*, with abbreviations of these descriptions of the mensuration signs also found in *CS3anon3*, *CSanon4*, *Wolfanon4*, and *Omni desideranti.*⁵³

Semibreves: There is a lengthy unidentifed quote in chapter 34 attributed only to an unnamed "author" (*actor*). Although it is located at some distance from chapters 26–30, it is included here as an important (and previously unexamined) passage that describes the debate over how to articulate and notate the shorter notes of *ars nova* notation. It could potentially be a quotation from our *doctor modernus*. There are no concordances of the text or content of this quotation with any extant treatise:

Dicit enim unus ipsorum sic: "Quid dicetur si quisquam instet quascumque notas cuiuscumque generis fuerint aut speciei (longas duplices et simplices perfectas aut imperfectas, breves primas et alteras perfecti temporis imperfective, semibreves maiores, minores et minimas, si sic eas For this is what one of them says: "What should one say if someone were to argue that any notes, of whatever genus or species they may be (duplex and simplex longs, both perfect and imperfect, first and altered breves of both perfect or imperfect *tempus*, or major, minor, and minim semibreves, if it

⁵² SM 7.27.7, 92.

⁵³ Jacobus's passage on mensuration signs is at *SM* 7.47.5–14, 92–3. The text of *Rvat307* is closely concordant (f. 19v-20r; transcription available online at *Philippe de Vitry Ars nova, VITANV MBA VB307*, Thesaurus Musicarum Latinarum, data entry by John Gray, School of Music, Indiana University, available at http://www.chmtl.indiana.edu/tml/ 14th/VITANV_MBAVB307.html), as is the passage in *Pn7378A* (*CSM* 8, 65, 67).

nuncupare liceat) nullis novis signis, figuris aut tractibus indigere, plicis superfluentibus, cum quisque cantus mensurabilis lente celeriterque proferri valorque notarum omnium sine plicis et tractibus possint compendiusque praenosci? Confusio quidem diversorum tractuum cantorem quemvis etiam disertum praepedit, ipsum non sinens cantum, alias invisum, variis tractibus et plicis occupatum canere prolatis vocibus indilate, nam intuendo continendoque pariter ocellus seducitur decantantis, causa figurationis pereunte finaliter adinventa. Ob hoc enim praecise notarum inventa fuit figuratio ut cantor, de ipsarum valore primitus hesitans, praenotata figuratione quiesceret canere non nequiret incertitudine procul mota." Haec sunt verba actoris qui consequenter dicit: "Quid ad dictam instantiam sim responsurus? Non invenio eidemque consentirem pro maiore parte, Vetustos imitando, nisi usus potentia cohiberet."

is proper so to call them) do not require new signs, figures, or lines, [or] superfluous *plicas*, since every measurable song can be performed both slow and fast, and the value of all the notes known more succinctly, without plicas and lines? Indeed the confusion of different lines proves an impediment to every singer, no matter how eloquent, by not allowing him to sing, with sounds uttered without delay, a song that [he has] not otherwise seen, [and which is] riddled with different lines and *plicas*; for the eye of the singer, looking and retaining equally, is led astray because of the figuration, the invention[s] being destroyed at last. For the figuration of notes was invented with precision in order that the singer, who was at first unsure about the value of [those notes], could relax because the figuration was well notated, and would not [any longer] be unable to sing, because uncertainty had been removed." These are the words of the author who consequently says: "What should I say in response to the said argument? I do not find, and I would, for the most part, have agreed with the same man, if, following the ancients, the power of use did not prevent it."54

Described here is a conversation between various factions of *moderni*, with three voices at play: Jacobus, an author, and another individual. The author quoted by Jacobus first outlines an argument posed by another

 $^{^{54}}$ SM 7.34.5–9, 66. I am grateful to Rob Wegman for his help in translating this passage.

theorist that there is no need for extra strokes or modifications to note shapes because the pattern of the notes will indicate to the singer how to interpret groups of semibreves according to known rhythmic patterns. Notation of this sort may be found in the interpolated *Roman de Fauvel* (Paris, Bibliothèque Nationale, f. fr. 146).⁵⁵ The goal was a notation that did not have multiple strokes or dots that would distract singers, or cause them to delay inappropriately while trying to remember how to interpret a particular notational modification. These stock rhythmic patterns were laid out in a number of anonymous *ars nova* texts (penultimate row in table 3), and have been described by Edward Roesner as the "last vestiges of a 'modal' approach."⁵⁶ The author quoted by Jacobus, however, favors a more flexible approach that would have rendered less rigidly patterned rhythms, with strokes appended to specific note shapes to aid the interpretation of the rhythmic values. Jacobus quotes this passage to illustrate the confusion between these diverse approaches of the *moderni*.

This quotation is also interesting because Jacobus specifically refers to the "words of the author" (*verba actoris*). In the following sentence, this author is also called a teacher (*huius doctor*). It is possible that this author and teacher, who prefers the use of strokes, is the same person as our *doctor modernus*, who we know prescribed the use of strokes to measure the extra-long long (*ultra modum consuetum*). Yet, because of the distance in the text between this quote and chapters on the treatise of the *doctor modernus* (four chapters later, within chap. 34), and the lack of a distinguishing reference linking back to the previous references in chapters 26–30, it is impossible to say for sure.

Was Vitry Jacobus's doctor modernus?

Table 3 summarizes the theoretical points Jacobus attributed to the *doctor modernus* and indicates when parallel passages are found in *ars nova* treatises copied in the fourteenth and early fifteenth centuries. The shaded grey rows of table 3 indicate content that might possibly be attributed to our *doctor modernus*. As we have seen, some of these concordances are similar in substance but are worded differently. Some, however, match almost word for word. Many of these short *ars nova* texts also have lengthy passages of textual concordance with each other: some of these texts are anonymous, and some contain attributions to Philippe de Vitry (as indicated in the last row of table 3). The table also lists four longer texts (the anonymous *Ps.-Theodon*, Handlo's *Regule*, John of Tewkesbury's *Quatuor*

⁵⁶ Ibid., 34.

⁵⁵ See Le Roman de Fauvel, 33.

 TABLE 3

 Theories Jacobus attributed to the *doctor modernus* as found in *ars nova* texts

	Pn7378A	CS3anon4	Pn14741	Rvat307	CS3anon3	Omni	Lbl21455	CS3anon2	Angles1958	Wolf1908	PsTheodon	Robertus de Handlo	John of Tewkesbury	Johannes Vetulus de Anagnia
fissa/pilosa		\checkmark							\checkmark		\checkmark	\checkmark		
"triplicari"/larga imperfect duplex L = 4 or 5 B	\checkmark			\checkmark	\checkmark	\checkmark	\checkmark							
L = 4 or 5 B duplex L in ligature		\checkmark			\checkmark	\checkmark		\checkmark				\checkmark		
4 combos mode+ <i>tempus</i> mode+ <i>tempus</i> : "reduce to equality"	\checkmark		\checkmark	\checkmark										
imperfects do not negate trinitarian nature of God outline <i>ars vetus</i>	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark							
and <i>ars nova</i> mode reckoned through the perfections of longs through equipollence														
3 speeds	✓			✓									\checkmark	
mensuration signs	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark				\checkmark	\checkmark		\checkmark	
added to semibreves	\checkmark	√		~	\checkmark		~	√	\checkmark	√	\checkmark	~	~	
[semibreve		*		*	*			*			*			
patterns] mention Vitry by name	*			*	*	*					*		*	

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principalia, and Johannes Vetulus de Anagnia's *Liber de musica*) that report *ars nova* theories gleaned from various sources, not unlike book 7 of *SM*. Some of these authors also specifically mention Philippe de Vitry by name as one of their sources (again, indicated in the last row of table 3).

Four of the short texts listed in table 3 are well-known to musicologists, namely *Pn7378A*, *Pn14741*, *Rvat307*, and *Lbl21455*, since they were edited in 1964 in the eighth volume of the series *Corpus scriptorum de musica* (*CSM*) as witnesses to a treatise by Philippe de Vitry (that the editors titled *Ars Nova*), and that were subsequently the focus of an important article by Fuller.⁵⁷ Another text copied in the manuscript Siena, Biblioteca Comunale L.V.30 was also edited in *CSM*8 and analyzed by Fuller. This text, however, is actually one of three witnesses to a treatise transmitted in a further two sources with the incipit "Omni desideranti notitiam" (*Omni* in table 3) and edited recently in *Musica disciplina*.⁵⁸ This treatise is attributed in two of its three sources to Vitry. The other four anonymous texts in table 3 (*CS3anon4*, *CS3anon2*, *Angles1958* and *Wolfanon4*) date approximately from the first half of the fourteenth century and transmit some of the same *ars nova* theories as the texts edited in *CSM* 8 and *Omni desideranti*.

Fuller's article raised doubts about whether the texts edited in *CSM*8 should be attributed to Vitry. Fuller proposed that *Pn7378A*, *Pn14741*, *Rvat307*, *Lbl21455* and *SienaLV30* were too dissimilar in text, theory, and structure to be witnesses to a stable exemplar and that no image of central document emerges from a comparison of them. She suggested instead that these five texts represent formulations by disciples of Vitry of their master's teachings, and that "no formal treatise by de Vitry was in circulation."⁵⁹

The analysis presented above suggested that the theories of the *doctor modernus* were transmitted in a formal treatise, due to Jacobus's references to specific chapter numbers, and his references to the *doctor modernus* as an author (*actor*) and to his *tractatus*. From table 3, and the preceding analysis, we also see that the treatise of the *doctor modernus* proposed theories found in other texts that have either explicits

⁵⁷ CSM 8; Fuller, "Phantom Treatise." CSM 8, Rvat307 and Pn14741 were edited together as two witnesses to a text the editors called "The Ars Nova of Philippe de Vitry" and placed as the first text in their edition (*Philippi de Vitriaco Ars nova*, ed. Gilbert Reaney, André Gilles, and Jean Maillard, Corpus scriptorum de musica, vol. 8 ([Rome]: The American Institute of Musicology, 1964), 13–32). *Pn7378A* was edited separately as a "witness" (*témoignage*) to Vitry's Ars Nova (ibid., 52–70); the third text in the volume is *Lbl21455* and described as "A London Source for the Ars Nova of Philippe de Vitry" (ibid., 71–78). CSM 8 also contains an edition of CS3anon3, which the editors claim is closely related to Vitry's Ars Nova.

⁵⁸ Desmond, "Texts in Play."

⁵⁹ Fuller, "Phantom Treatise," 43.

attributing them to Philippe de Vitry, or that mention Vitry as a source (see the last row of table 3). Thus two hypotheses emerge concerning the treatise of the *doctor modernus*: perhaps Jacobus's source was yet another formulation by a disciple of Vitry, or perhaps the formal treatise known to Jacobus was also the exemplar for at least some of the texts listed in table 3. If we accept the latter hypothesis, we must also allow for the possibility that Vitry was the author of this written exemplar—that is, Vitry possibly is the *doctor modernus*—since many of the copyists and authors of the texts in table 3 identify their source as Vitry. Conversely, if Vitry is not the *doctor modernus*, then we must accept that Jacobus directed his ire and several complete chapters within book 7 at a second-hand witness of these theories, while at the same time believing this author to be the originator and developer of these theories.

In order to evaluate which of these hypotheses is more likely, it is necessary to reconsider the claim that no image of a central document emerges from a comparison of the *ars nova* texts. A full examination and comparison of all the texts listed in table 3 is beyond the scope of this article; two aspects, however, will be examined here. The following section focuses on a smaller subset of texts from table 3 that exhibit the closest relationships with one another and with the treatise of the *doctor modernus*, namely, the five texts edited in *CSM*8, and *CS3anon4* and *Omni desideranti*. In addition to examining the structural and textual parallels between these texts, I will briefly consider whether these textual and structural similarities are likely to derive from a written or oral exemplar.

The ars vetus

Jacobus alerts us to a fundamental structural aspect of the *doctor modernus*'s treatise: that its author claims to faithfully outline elements of the old art (*ars vetus*) and the new art (*ars nova*) of mensurable music. Franco's *Ars cantus mensurabilis*, an *ars antiqua* treatise, served as a primary *auctoritas* for those writing on mensurable music in the fourteenth century. Many abbreviated digests of Franco's treatise—known by their incipit "Gaudent brevitate moderni"—circulated widely, particularly in Italy. Franco's *Ars* also served as the basis for other more substantial and expansive treatments of mensural notation, such as Marchettus da Padova's *Pomerium* (1319), Handlo's *Regule*, and Tewkesbury's *Quatuor principalia*.

Two of the texts listed in table 3 (*Pn7378A* and *CS3anon4*) have a clearly defined *ars vetus* section closely modeled on the structure of Franco's treatise (fig. 6). The text that has the most parallels with the treatise of the *doctor modernus* is *Pn7378A* (table 3). *Pn7378A* contains a statement concerning its comparison of the old and new art; it is divided

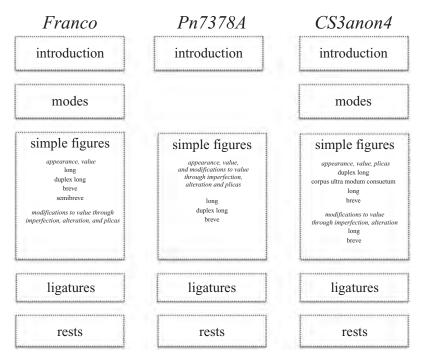


FIGURE 6. Ars vetus structure

into two parts that treat the *ars vetus* and *ars nova*; and there is an explicit that attributes this text to Philippe de Vitry ("here ends a certain art of measuring motets compiled by master Philippe de Vitry, master in music"). The manuscript source of *Pn7378A* has one of the earliest copying dates for the texts listed in table 3: it was copied in the mid fourteenth century in Paris.⁶⁰ The text *CS3anon4* is also transmitted in a mid-fourteenth-century French manuscript, *F-Pn* fonds latin 15128.⁶¹

⁶⁰ For an inventory of this manuscript, see also Michels, ed., *Johannes de Muris Notitia*. Also see Pascale Duhamel, "L'enseignement de la musique à l'Université de Paris d'après le manuscrit BnF lat.7378A," *Acta Musicologica* 79, no. 2 (2007): 263–89. This is one of our earliest manuscript witnesses to *ars nova* theory, although recent studies have tentatively dated the copying of *Wolfanon4* to c. 1350. See Christian Thomas Leitmeir, "Arguing with Spirituality against Spirituality. A Cistercian Apologia for Mensural Music by Petrus dictus Palma ociosa (1336)," *Archa verbi. Yearbook for the Study of Medieval Theology* 4 (2007): 155–99. ⁶¹ Three *ars nova* texts are copied in this manuscript: *CS3anon2* on ff. 120–122v;

CS3anon3 on ff. 120–122v; *CS3anon3* on ff. 127–129; and *CS3anon4* on ff. 129–131v. *FPn* fonds latin 15128 also transmits the *Gaudent brevitate moderni* treatise by Johannes dictus Balloce (ff. 122v–124) and an excerpt from Lambertus's Ars musica (ff. 124–127). The manuscript surviving as *FPn* fonds latin 15128 must represent just a portion of a larger treatise since the music treatises are foliated as

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Since the figures were the primary concern of these new texts, these texts do not transmit the material found in chapters 1-2 and 11-15 of Franco. The primary differences between *Pn7378A/CS3anon4* and Franco may be summarized as follows (fig. 6): Franco first describes the physical characteristics and the value (that is, the duration) of each simple figure by turn (long, breve, and semibreve in chapter 4), and then lists the ways these values may be altered (by imperfection, alteration, and by *plicas* in chapter 5-6). In Pn7378A/CS3anon4, the three aspects-appearance, value, and how the value is altered—are described for the long and breve in turn, but not the semibreve, as this figure will be dealt with in the ars nova section. Franco's text does not discuss imperfecting the duplex long, whereas *Pn7378A/CS3anon4* does; note that this is the theory explicitly attributed by Jacobus to the doctor modernus. Pn7378A also contains the important theoretical distinction not in Franco that longs may be measured by perfect and imperfect mode; as we have seen, Jacobus discussed this point at length in chapters 29 and 30. CS3anon4 includes the description of the extra-long long (corpus ultra modum consultum) attributed by Jacobus to the *doctor modernus*. Franco's chapters on ligatures are more detailed, and include a longer exposition on the rules of propriety and perfection, whereas Pn7378A/CS3anon4 both condense the ligature descriptions. There are long passages of textual concordance between the ars vetus sections of Pn7378A and CS3anon4, suggesting that at some point in their transmission history they had a common exemplar (appendix 3 contains a table outlining these passages of textual concordance).⁶²

As in the Old Art, so in the New

Pn7378A and *CS3Anon4* each transmit an *ars nova* section that directly follows the *ars vetus* section just outlined. In general terms, the *ars nova* section may be understood as consisting of two parts: 1) a series of rules

ff. 120–130v, followed by a wordbook from classical authors foliated 139–154v. The initial 119 folios are missing. Based on an examination of the black and white digital images of this manuscript, all the music treatises appear to be copied by the same hand.

⁶² A third text in table 3 contains elements of the *ars vetus* and some passages of textual concordance with *Pn7378A* and *CS3anon4: Lbl21455*, which was copied c. 1400 in England. Fuller concluded that *Lbl21455* was not even "a witness to the de Vitrian teaching tradition" (Fuller, "A Phantom Treatise," 27), although Lefferts has since convincingly demonstrated that the London *Ars nova* edited in *CSM*8 comprises two separate texts, the first of which (copied on ff. 3r–4v) Lefferts contends ought to be reinstated as a "not-too-distant witness to the de Vitrian teaching tradition." Lefferts, "An Anonymous Treatise of the Theory of Frater Robertus de Brunham," 219. Lefferts calls this first text "Anonymous I of London 21455" (ff. 3r–4v) and has re-edited it (ibid., 246–51). *Lbl21455*, unlike *Pn7378A* and *CS3anon4*, grafts several passages directly from Franco and is structured as an integrated presentation of *ars nova* and *ars vetus* theory, in which all the simple figures (including the semibreve and minim) are presented in sequence.

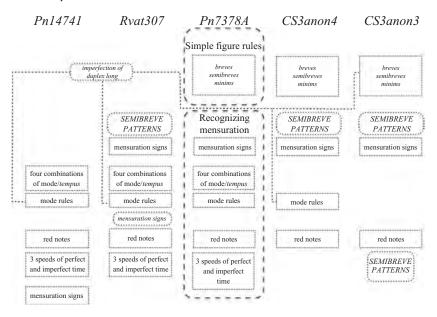


FIGURE 7. Ars nova structure

and descriptions pertaining to the simple figures of the *ars nova*; and 2) a series of rules and examples that assist in the recognition of a motet's mensuration, in other words, outlining how one might figure out whether the mode or *tempus* of a composition is perfect or imperfect (fig. 7).

Three of the *ars nova* texts under consideration transmit the section on the simple figures (*Pn7378A*, *CS3anon3*, and *CS3anon4*), and their texts demonstrate a high degree of concordance.⁶³ This section outlines

⁶³ In his dissertation, John Douglas Gray outlines correspondences in a number of these short *ars nova* texts that substantiate the hypothesis of the existence of a common source. He presents a number of tables that highlight the correspondences between *Pn7378A*, *Rvat307*, *Pn14741*, *CS3anon3* and *CS3anon4*. John Douglas Gray, "The *Ars nova* Treatises Attributed to Philippe de Vitry: Translations and Commentary" (Ph.D. diss., University of Colorado at Boulder, 1996), esp. 64–81, 99–112, and 118–31. Assessing the evidence presented by Gray, David Maw is convinced of the necessity of a common written exemplar: David Maw, "Trespasser mesure': Meter in Machaut's Polyphonic Songs," *Journal of Musicology* 21, no. 1 (2004): 53. Rob Wegman's academia.edu page hosts a useful comparative table containing the texts of *Rvat307*, *Pn7378A*, *Pn14741*, *Lbl21455*, and *CS3anon3* and the version of *Quatuor principalia* found in *GB-Lbl* Add. 4909. The section on the breve rules transmitted in *Pn7378A* and *CS3anon3* is shown in Wegman's table. (*CS3anon4*, which is not included in Wegman's table, also is concordant here.) Rob C. Wegman, "Philippe de Vitry: Ars nova (c. 1315–1320)," 7–14, available at http://www.academia.edu/3387130/Philippe_de_Vitry_Ars_nova_c.1315-20_.

the *ars nova* figures of breve, semibreve, and minim, and is structured around a syntactical element that articulates a key conceptual underpinning for *ars nova* theory: that there is an equivalence between the relationship of the long to the breve (as outlined in the *ars vetus*) and the relationships that exist between the breve and semibreve, and between the semibreve and minim. This concept is introduced and reiterated via a repeated syntactical element: "just as in the old art...so in the new art" (*sicut in veteri arte... sic in nova arte*).

In this way, theories set forth in the *ars vetus* are appropriated for the *ars nova*. For example: just as in the old art, perfect longs are measured in threes, so in the new art, perfect breves and semibreves are measured in twos, so in the new art, imperfect breves and semibreves are measured in twos. Just as in the old art, a breve imperfects the long, so in the new art, a semibreve imperfects the breve, and a minim the semibreve. Just as in the old art, the second of two breves is *altera*, so in the new art, the second of two semibreves is *altera*, and the second of two minims is *altera*. In *SM* 7 Jacobus criticizes the irrationality of the imperfect breve in chapter 32, and the teaching that the breve and semibreve may be imperfected by neighboring note values in chapter 38 (directly following his chapters on the semibreve).

The second part of the *ars nova* (which is labeled in figure 7 as the recognizing mensuration section) contains passages that detail: 1) the mensuration signs; 2) the fourfold combination of mode and *tempus*; 3) the mode rules, or how to tell whether a mode is perfect or imperfect based on the placement of the longs and long rests; 4) red notes (coloration); and 5) the three speeds of perfect and imperfect *tempus*. Each of these theories, with the exception of coloration, was singled out for comment by Jacobus: the theory of the various combinations of mode and *tempus* was attributed to the treatise of the *doctor modernus*, and I suggested above the possibility that the theories on the mensuration signs and on the three speeds of *tempus* were also quoted from the *doctor modernus*'s treatise.

The section on recognizing mensuration is abbreviated in *CS3anon4* and the passages on the four combinations of mode/*tempus* and on the three speeds of perfect and imperfect *tempus* are omitted, while a passage on semibreves patterns is included (fig. 7). Similarly, in *CS3anon3*, a text that includes only the briefest of references to the *ars vetus*, the section on the *ars nova* simple figures is followed by passages detailing semibreve patterns within an abbreviated section on recognizing mensuration.⁶⁴

⁶⁴ The only elements of the *ars vetus* section that are included in *CSanon3* are the opening introductory paragraph and a paragraph on the modes that is concluded with the

The section on recognizing mensuration is, however, contained in full in *Rvat307* and *Pn14741* (fig. 7). Neither of these texts contains an *ars vetus*, nor do they transmit the simple figures section of the *ars nova*. Fuller described these texts as fragments.⁶⁵

Pn14741 is copied in a French manuscript, FPn lat. 14741, dated by Michels to the fifteenth century with a Parisian provenance (the Abbey of St. Victor).⁶⁶ The manuscript contains music treatises on just its first eight folios, including an anonymous fourteenth-century mensural text (known today as Anonymous OP) and a handful of excerpts from the music treatises of Jehan des Murs. Pn14741 begins midline directly after Jehan des Murs's *Compendium* with no break or capital letter to indicate the beginning of a new text.⁶⁷

Rvat307 was copied in Italy c. 1400. A portion of the manuscript *I-Rvat* Barb. lat. 307 is now housed in the St-Paul Klosterbibliothek (hereafter *A-SP*) with the shelf number Ms. $135/1.^{68}$ Lawrence Gushee compiled an inventory of *I-Rvat* 307 + *A-SP* 135/1 that lists twenty-four items: the most substantial are the treatises of Johannes Vetulus de Anagnia (ff. 1–16) and *Ps.-Theodon* (ff. 29–35a). The remaining items are either short sets of rules or tables and excerpts from longer treatises; for example, we find excerpts of one chapter from Marchettus da Padova's *Lucidiarum* (treatise 4, chap. 1) and excerpted passages from Jehan des Murs's *Notitia* (book 2, chap. 8, conclusions 1, 2, 3, 6, and 9).⁶⁹

phrase "See the rest in the *Ars* of Master Franco" (*Vide residuum in arte Magistri Franconis*). The scribe of this version has recognized that most of the *ars vetus* simply repeats the theories of Franco's *Ars*, a text that the scribe had already copied in this manuscript (*F-Pn* lat. 15128) in an abbreviated version attributed to Johannes dictus Balloce (ff. 122v–124).

⁶⁵ Fuller, "Phantom Treatise," 25-6.

⁶⁶ Pn14741 is on ff. 2–4. Michels inventories this manuscript in his introduction to his des Murs edition; nevertheless, he omits the non-music items: *Johannes de Muris Notitia*, XX. On Anon. OP see Ulrich Michels, "Der Musiktraktat des Anonymus OP. Ein frühes Theoretiker-Zeugnis der Ars nova," *Archiv für Musikwissenschaft* 26 (1969): 49–62.

⁶⁷ A diplomatic transcription of this text that shows how it directly follows des Murs's *Compendium* and is followed by Anon. OP is on the TML website (*FPn* lat. 14741, ff. 2-6v), *Anonymous [Compendium musicae], ANOQUAE MPBN1474,* Thesaurus Musicarum Latinarum, data entry by John Gray and Oliver B. Ellsworth, School of Music, Indiana University, available at http://www.chmtl.indiana.edu/tml/14th/ANOQUAE_MPBN1474.html.

⁶⁸ Ff. 17–24 were removed at some point and housed in St-Paul. The remaining folia are housed in the Vatican library; it also seems that ff. 41–61 of the original manuscript of 62 folios have gone astray. Lawrence Gushee, "The *Tabula Monochordi* of *Magister Nicolaus de Luduno*," in *Essays on Medieval Music in Honor of David G. Hughes*, ed. Graeme M. Boone (Cambridge, MA: Harvard University Press, 1995), 117–52, esp. 118.

⁶⁹ Gushee lists the five separate inventories of the Barberini manuscript (ibid., 120–21), and then compiles a very useful "Frankenstein's monster" (his words) from Silverstein's and Frederick Hammond's catalogues of *I-Rvat* 307 + A-SP 135/1, supplemented by Michels's inventory of *A-SP* 135/1 (ibid., 122–5). He dates the manuscript to c. 1400, plus or minus thirty years, and says it is of south Italian origin.

	Pn7378A	Rvat307	Pn14741
Mensuration signs	62ra, 64 - 62rb, 2	16.3-4, 10	[=18.a-b; see below]
Four combinations of mode/ <i>tempus</i>	62rb, 2-5	17.2-3	17.2-3
Mode rules	62rb, 5-16	17.4-14	17.4-14
Mode/ <i>tempus</i> motet examples	62rb, 16-22	17.15-26	17.15-26
[Mensuration signs]	_	18.1-6	
Red notes and motet examples	62rb, 22-33	19.1-12	19.1-12
Speeds of tempus	62rb, 33-47	20.1-24.5	<20-24>.1-6
[Mensuration signs]	[= 62ra, 64 - 62rb, 2]	[= 16.3-10]	18.a-b

TABLE 4 Three witnesses to the section on recognizing mensuration

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The fragmentary transmission of the texts of *Rvat307* and *Pn14741* is thus possibly explained by the scribal habit demonstrated in their host manuscripts, but it needs not subtract from their importance as witnesses to the early *ars nova* theoretical tradition. It may be the case that the exemplars of *Rvat307* and *Pn14741* were also fragmentary, and that they too contained only the recognizing mensuration teachings. But it is also possible that the scribes of *F-Pn* lat. 14741 and *I-Rvat* Barb. 307 had complete and longer source texts in front of them that may have resembled the exemplar of *Pn7378A* and that they chose, as they did on other occasions in these manuscripts, to copy only an excerpt from their exemplars.

Pn14741 transmits solely the section on recognizing mensuration (fig. 7), which it does in full, with just one structural difference from *Pn7378A*: the passage on mensuration signs is found at the end rather than the beginning of *Pn14741* (table 4). Similarly, the entire section on recognizing mensuration is transmitted in *Rvat307*: the difference in this text is the presence of a second passage on the mensuration signs. Table 4 lists the corresponding line numbers (according to the *CSM* edition) for the sections of these three texts that are almost exactly equivalent. (*CS3anon3* and *CS3anon4* transmit abbreviated versions of the section on recognizing mensuration, touching on the mensuration signs, red notes, and perfect and imperfect *tempus*, but containing none of the references to motet examples [fig. 7]).

The following passage on *tempus perfectum* demonstrates the degree of textual concordance between *Pn7378A*, *Pn14741*, and *Rvat307*:

<i>Pn7378A</i> <u>Modus et perfectum</u> <u>tempus continentur in</u> <u>moteti</u> tenore qui vocatur <u>DEUS JUDEX;</u>	Pn14741 Modus perfectus et tempus perfectum insimul continentur in moteto <i>Deus Iudex</i> . Quare est modus perfectus quia semper tria tempora pro perfeccione accipiuntur Quare de tempore perfecto quia quodlibet tempus in tres equales partitur semibreues. Modus perfectus de tempore imperfecto continetur in <i>bona condit</i>	Rvat307 <u>Modus</u> imperfectus <u>et</u> <u>tempus perfectum</u> <u>continentur in</u> quodam <u>insimili</u> qui uocatur <u>Deus</u> <u>iudex</u> fortis. <u>Modus est perfectus quia</u> <u>semper tria tempora pro</u> qualibet <u>perfectione</u> <u>accipiuntur.</u> [nota in marg.] Tunc est perfectum quia quolibet <u>tempus in tres partitur</u> <u>semibreues.</u>	
<u>modus inperfectus et</u> <u>tempus inperfectum</u> <u>continentur in moteti</u> tenore qui vocatur <u>ADESTO.</u>	<u>Modus autem</u> <u>imperfectus et tempus</u> <u>imperfectum</u> <u>continentur in moteto</u> <u>Adesto.</u> Quare est modus imperfectus <u>quia duo</u> <u>tempora pro perfeccione</u> capiuntur. Quare de <u>tempore</u> imperfecto quia <u>quodlibet tempus non</u> <u>partitur nisi in due</u> <u>equales semibreues.</u>	<u>Modus imperfectus et</u> <u>tempus imperfectum</u> <u>continentur in Adesto.</u> <u>quia ibi duo tempora pro</u> <u>perfectione qualibet</u> <u>accipiuntur. et quolibet</u> <u>tempore non partitur</u> <u>nisi in duas partes</u> <u>equales semibreues.</u>	475
<u>Modus perfectus ex</u> <u>tempore inperfecto</u> <u>continetur in BONA</u> <u>CONDIT.</u>	<u>Modus perfectus de</u> <u>tempore imperfecto</u> <u>continetur in <i>bona condit.</i></u> Quare est modus perfectus uisum est supra Quare tempus imperfectum uisum est eciam.	<u>Modus perfectus ex</u> <u>tempore imperfecto</u> <u>continentur In <i>bona</i></u> <u>condit.</u>	
<u>Modus inperfectus ex</u> <u>tempore perfecto in</u> (MARIE) PRECONIO.		<u>Tempus perfectum et</u> modus imperfectus In <i>misera per liconia.</i>	
<u>Tempus partim</u> <u>perfectum et partim</u> <u>inperfectum (et modus</u> <u>etiam) continetur in</u> <u>GARISON.</u>	<u>Tempus partim</u> <u>perfectum et partim</u> <u>imperfectum et modus</u> <u>continentur</u> in moteto <u>Garison</u> selonc nature.	<u>Tempus partim</u> <u>perfectum et partim</u> <u>imperfectum et modus</u> <u>etiam continentur In</u> <u>garison.</u> ⁷⁰	

 $^{^{70}}$ Pn7378A, 67, 69; the excerpt from Pn14741 is taken from the diplomatic transcription of this text from the original manuscript and available online (op. cit.). Rvat307 is also taken from the diplomatic transcription available online (http://www.chmtl. indiana.edu/tml/14th/VITANV_MBAVB307.html).

The recognizing mensuration section also lists a number of specific compositions that exemplify either a particular combination of mode and *tempus* or the use of coloration to alter the mensuration. A number of these motets are known to us from fourteenth-century musical sources, although many are as yet unidentified (indicated with square brackets in table 5). The examples listed in *Pn7378A*, *Pn14741*, and *Rvat307* have multiple concordances and are shown by the shaded grey rows in table 5; the examples on prolation are unique to *Pn14741*.⁷¹

The degree of concordance (in text and motet examples) between *Pn7378A*, *Rvat307*, and *Pn14741* must imply that at some stage in their transmission all three texts had an ancestor text in common. *Rvat307* and *Pn14741* may represent excerpts from a longer exemplar that resembled *Pn7378A* and included both an *ars vetus* and an *ars nova* section.

A clue may lie in a key difference between the section on recognizing mensuration of Pn7378A and Pn14741/Rvat307.⁷² In the passage on the rules about mode both Rvat307 and Pn14741 insert the rule concerning the imperfection of the duplex long.⁷³ This rule was outlined within the *ars vetus* section of Pn7378A and CS3anon4. Rvat307 also includes a definition of the *brevis altera* (an *ars antiqua* note value) within its passage on *ars nova* rules about mode, followed by the comment "as was seen in the old art" (*ut visum est in arte veteri*).⁷⁴ The placement of the duplex long teaching within the mode rules passage of the *ars nova* in Pn14741/Rvat307 lends support to the hypothesis that these scribes chose to copy only those elements of

⁷¹ Directly preceding the section on prolation examples in *Pn14741*, the scribe notes "cum causa vetustatis aliqua sint dimissa super." Fuller translates this as "and since, due to age, some things are missing above," causing her to speculate that due to "the decrepit state of his source... this redaction of *ars nova* teaching is partial and incomplete, and even the scribe recognizes the inadequacy of his exemplar." Fuller, "Phantom Treatise," 26. Reading this comment in its entire context, an alternate, more liberal translation might read: "some examples are not included in the above because of [the] age [of the exemplar]." The scribe is noting that the exemplar does not contain examples that illustrate prolation (because the exemplar is quite an old source and was written prior to the conceptualization of prolation), and so the scribe will now fill in some more modern examples that illustrate major and minor prolation. It is not a comment on the deterioration of the exemplar, but indicates that the scribe considers the exemplar to be somewhat out of date.

⁷² The presence of the passage on the semibreve patterns in *Rvat307*, *CS3anon3*, and *CS3anon4* is trickier to explain. The need to interpret semibreves according to preordained patterns is made redundant by a notation system that adds ascending and descending tails to semibreves to indicate their specific durations. Do these passages on semibreve patterns in *Rvat307*, *CS3anon3*, and *CS3anon4* reflect the original exemplar, which for some reason included an extended reference to these patterns, or do they represent an interpolation by the scribes of the versions from some other exemplar? This awaits further study.

⁷³ Rvat307/Pn14741, 25. CS3anon4 includes a brief restatement of this theory within its ars nova section in the context of describing the remote imperfection of the long by a semibreve. CS3anon3 includes the theory in its ars nova section while outlining the simple figures (fig. 7).

74 Rvat307/Pn14741, 25.

	112000	e ortantiorito	
	Pn7378A	Pn14741	Rvat307
Mode/tempus			
Orbis/Vos pastores			Orbis orbatur
[Deus iudex] Firmissime/Adesto	Deus judex Adesto	Deus Iudex Adesto sancta trinitas	Deus iudex fortis Adesto vetus
Colla/Bona [Preconio]	Bona condit Preconio	Bona condit	Bona condit Misera per liconia
Douce/Garison	Garison	Garison selonc nature	Garison
Zolomina/Nazarea		Nazarea que decora	
Red notes			
[Thomas tibi obsequia]		Thomas tibi obsequia	Thoma tibi obsequia
Tuba/In arboris	In arboris	In arboris epyro	In arboris
[Plures errores]			Plures errores sunt
[Gratia miseri]			Gratia miseri
[Quant amors]	Quant amors		Quant amors
[Claerburg]			Claerburg
[Lampadis]		Lampadis os manuum	0
Douce/Garison	Garison		Garison
Garrit/In nova	In nova fert animus	In nova fert animus	In nova sit animus
Prolation			
Mon chant/Qui doloreux		Qui doloreux	
[Imperatrix anglica]		Imperatrix anglica	
[O maria affectu]		O Maria affectu	
Vos/Gratissima		Gratissima uirginis species	
Qui/Ha fortune		Qui des promesses de fortune se fie	

TABLE 5 Motet citations

their exemplar that were relevant at their time of copying. The passage on duplex longs was thus excerpted from the *ars vetus* and retained by its insertion into the passage on mode rules in *Pn14741* and *Rvat307*; in a similar fashion the *brevis altera* statement was inserted in *Rvat307*.

There are certain redundancies in the texts that transmit both an *ars vetus* and an *ars nova*, for example, in the teaching on the *altera* breve found in *Pn7378A*. The rules on the *altera* breve are found in *ars antiqua* treatises and are included in the *ars vetus* of *Pn7378A*. In the *ars nova*, this concept of *altera*tion is used as the basis for measuring the relative values of two consecutive semibreves (where the value of the second semibreve is *altera*) and so the theory is repeated in the *ars nova* section almost word for word:

Pn7378A Ars vetus

Altera vero brevis valet duo tempora, et fit quotiescumque in modo perfecto <u>due breves inter</u> <u>duas longas ponuntur vel inter</u> <u>longam et punctum et e converso</u> vel quando pausa unius temporis et brevis inter duas longas ponuntur quia tunc unica <u>brevis est altera et</u> <u>valet duo tempora</u> ut hic.

Pn7378A Ars nova

Item sciendum, ut habemus in veteri arte (quod) quando <u>due</u> <u>breves in modo perfecto inter duas</u> <u>longas ponuntur vel inter longam</u> <u>et punctum vel e converso, secunda</u> <u>brevis est altera et duo valet</u> <u>tempora.</u> Eodem modo quando due semibreves in prolatione perfecta inter duas breves ponuntur vel inter brevem et punctum et e converso secunda semibrevis est altera et valet duas semibreves.⁷⁵

The redundancies between the *ars vetus* and *ars nova* appear to have led to a situation whereby either the *ars vetus* section could be almost entirely omitted (as we find in *Pn14741*, *Rvat307*, *CS3anon3*), or writers could choose to combine the *ars vetus* and *ars nova* sections into their own integrated presentations of *ars nova* theory (as we find in *Lbl21455*, *Wolfanon4*, and *Omni desideranti*).

A closer look at the *Omni desideranti* treatise reveals that it contains enough similarities to the *ars vetus/ars nova* texts *Pn7378A*, *Rvat307*, *Pn14741*, and the versions found in *CS3anon3* and *CS3anon4*, to suggest that its exemplar was also related to the ancestor text (hereafter, *Ars vetus et ars nova*) that informed these five texts.

Omni desideranti survives in three northern Italian manuscripts copied in the late fourteenth and fifteenth centuries.⁷⁶ It presents a systematized

⁷⁵ Pn7378A, 59, 63–5.

⁷⁶ Desmond, "Texts in Play," 88–89.

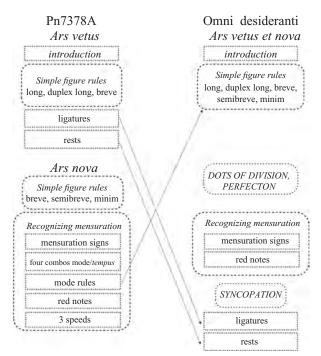


FIGURE 8. The structure of Pn7378A and Omni desideranti

version of *ars nova* theory that integrates the *ars vetus* and *ars nova* elements and eliminates redundancies of the sort just described in *Pn7378A*. The ordering of topics is different from *Pn7378A*, although aspects of its structure remain, and there are significant passages of concordance between *Omni desideranti* and *Pn7378A* (appendix 3). Figure 8 outlines how the structure of *Omni desideranti* relates to *Pn7378A*.

The separate sections on the simple figures that were contained within the *ars vetus* and *ars nova* of *Pn7378A* are combined into a single section in *Omni desideranti*.⁷⁷ The passage on the rules about mode, which is positioned in *Pn7378A* in the *ars nova* section, finds its place in the section on simple figures of *Omni desideranti*, since its theories apply directly to the interpretation of the longs in perfect and imperfect mode. And it is here that we find the theory on the imperfection of the duplex long attributed by Jacobus to the *doctor modernus*. Two new

⁷⁷ *Lbl21455* also integrates the *Ars vetus* and *ars nova* elements, although this text retains only theories on the simple figures and ligatures, and omits the recognizing mensuration section.

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sections are added in *Omni desideranti*: one on the points of perfection and division and one on syncopation. 78

Omni desideranti is attributed in two of its three manuscript sources to Vitry.⁷⁹ At some point in its transmission, the copyists of *Omni desideranti* either thought this text was by Vitry or knew it as a reformulation of the *Ars vetus et ars nova* text that they associated with Vitry. Incidentally, if the *Ars vetus et ars nova* text was revised relatively quickly into the version found in *Omni desideranti*, this may explain why there is no extant version of the complete *Ars vetus et ars nova* text, other than the version preserved in *Pn7378A*. If Vitry was the author of the *Ars vetus et ars nova* text, the possibility also exists that Vitry himself rewrote it as *Omni desideranti*, so as to integrate the old and new arts more systematically, and to loosen the dependence of his original text on the *auctoritas* of Franco.⁸⁰

Assessing the witnesses to the Ars vetus et ars nova

Thus, *Pn7378A* emerges both as the text that demonstrates the closest textual parallels to the treatise of the *doctor modernus* as described by Jacobus, and as the text that represents the most complete extant version of the *Ars vetus et ars nova* ancestor text. Although it does not transmit the theory on the extra-long long, the term *larga*, nor the discursion on the Trinity, *Pn7378A* nevertheless includes the remaining elements Jacobus attributes to the treatise of the *doctor modernus*, in addition to the elements proposed as possibly originating in the treatise by the *doctor modernus* (table 3). The writer of *Pn7378A* may have excluded these passages because they may have been regarded as obsolete at the time of copying, or as too discursive or speculative for the abbreviated style of *Pn7378A*.

⁷⁸ The second half of *Omni desideranti* that results from this reorganization of the *Ars* vetus et ars nova is almost identical with the second half of the *Libellus cantus mensurabilis* (the popular codification of ars nova theory that has been dated to c. 1340 and was often attributed by medieval scribes to Jehan des Murs). If we accept *Omni desideranti* as a reorganization and systemization of theory already formulated in the *Ars vetus et ars nova*, we ought to allow for the possibility, as I have suggested elsewhere, that *Omni desideranti* was written before the *Libellus*, and that the second half of the *Libellus* was copied from *Omni desideranti*, and not the other way around. Desmond, "Texts in Play," 90–94.

⁷⁹ The Chicago source opens with the following: "This treatise on music was composed by the venerable Master Philippe de Vitry" (*Tractatus iste super musicam composuit venerabilis magister Philippus de Vitriaco*); the Siena source has the following variation: "Sub brevissimo compendio Philippo de Vitriaco in musica incipit." Desmond, "Texts in Play," 116–17. The explicit of the Chicago reads: "Here ends the Perfect Art of Music of Master Philippe de Vitry" (*Explicit ars perfecta in musica magistri Philippoti de Vitriaco*); and the Siena source has: "Explicit Philippus de Vitriaco." Ibid., 146–47.

⁸⁰ Many other fourteenth-century music theory texts survive in reworked and reorganized versions: for example, the *Musica speculativa* of Jehan des Murs, the *Quatuor Principalia* of John of Tewkesbury, or Marchettus da Padova's *Pomerium*. The witness of Pn7378A has been questioned on the grounds that it is simply an abridged digest. This characterization is in part due to the appearance of the *F-Pn* lat. 7378A manuscript: with its tiny and highly abbreviated script, lack of decoration and music examples, and poor quality parchment, it is very different in appearance from a presentation manuscript such as *Us-Cn* Ms. 54.1, which transmits the *Omni desideranti*.⁸¹ Certainly some passages of *Pn7378A* are abbreviated. Furthermore, although the pointers to the music examples remain in the text (*ut hic*), the actual notation was not copied, and no space was left for copying them at a later stage. Yet many passages within *Pn7378A* are as expansive and detailed as the other texts in table 3 (see also the passages in appendix 3).

Perhaps the examples were not given in the exemplar for Pn7378A, or perhaps the compiler-scribe of the *FPn* lat. 7378A manuscript, given his interest in astronomy and mathematics, was interested only in quickly copying the text and had no desire (or perhaps did not have the skill) to copy the full music examples. Fuller's article suggested that Pn7378A "stands at least one step away from a more complete forbear that could as well have been oral as written," but it is also possible that Pn7378A reflects a written exemplar that a student of the quadrividal sciences copied in haste.⁸² The very existence of the "ut hic" pointers, however, bolsters the contention that the scribe was copying from a written exemplar, as does the fact that the other texts copied by this scribe in this manuscript had written exemplars. This student abbreviated the text in places and left out some passages and music examples, but otherwise may have produced a relatively accurate copy of the text and structure of the exemplar, just as he did when he copied Jehan des Murs's and Levi ben

⁸¹ This small volume (dimensions 22.5 cm x 16 cm) squeezes roughly 1,500 words onto each page. To view the difference between it and Us-Cn Ms. 54.1, see the images on Gallica of \hat{F} -Pn lat. 7378A at http://gallica.bnf.fr/ark:/12148/btv1b525016914/f127.item (this is the page where the explicit to Vitry is found) and the images of Omni desideranti from Us-Cn Ms. 54.1 available at http://www.arsmusicae.org/chicago.xml. F-Pn lat. 7378A most likely belonged to a student of the mathematical sciences at Paris university, judging from the volume's contents, which contain the thirteenth- and fourteenth-century writings on arithmetic, astronomy, geometry, and optics by Campanus of Novara, Jordanus de Nemore, Roger Bacon, Jean de Lignères, Levi Ben Gerson, Nicole Oresme, and Jehan des Murs. One of the scribes, Nicholas de Iude, recorded his name on f. 66b ("Scriptum per Nicolaum Judeum" in the explicit to Jordanus de Nemore's De planisphaerii figuratione). Nicholas passed the exam of determinance at the faculty of arts in Paris along with his brother, the astronomer Thémon le Juif, in 1349. Danielle Jacquart, "Rapport de la table ronde: Les disciplines du quadrivium," in L'Enseignement des disciplines à la Faculté des arts (Paris et Oxford, XIIe-XVe siècles), ed. Olga Weijers and Louis Holtz (Leuven: Brepols, 1997), 239-47, esp. 242. The date 1362 is recorded in the explicit of the first treatise copied in the first layer of the manuscript (ff. 1-19 have different measurements to ff. 20-85), but we cannot infer from this the date of copying of the subsequent layers.

⁸² Fuller, "Phantom Treatise," 26.

Gerson's texts on music, astronomy, and mathematics into this same manuscript.

The Ars vetus et nova texts examined here offer a refracted image of their exemplars. I have outlined some possible scenarios for how the writers of these texts appropriated what they found in the exemplar and made it their own. In addition, the exemplars known to the writers of these texts may have been at a number of removes from the exemplar known to the compiler-scribe of the *F-Pn* lat. 7378A manuscript. A complete philological analysis of the texts listed in table 3 should illuminate more exactly the relationships between them, but the above brief comparison of *Pn7378A*, *Pn14741*, *Rvat307*, *CS3anon3*, *CS3anon4*, *Lbl21455*, and *Omni desideranti* supports the theory that a common source informs aspects of their structure and texts, and I would contend that the hypothesis of a written ancestor in common better explains their exact correspondences in text, structure, and content.

In addition to the two *Omni desideranti* witnesses, three other texts closely related to the *Ars vetus et nova* ancestor text—*Pn7378A*, *CS3anon3*, and *Rvat307*— have attributions to Vitry.⁸³ Fuller's primary challenge to these attributions is that the extant texts are too diverse to project an image of a central textual predecessor that informs them, and that *Pn7378A* and *Rvat307* "diverge enough in substance that if one is the de Vitry work, the other cannot be."⁸⁴ My preliminary analysis here offers an alternate reading: I concur with Fuller on the diverse nature of these texts; nevertheless, I have offered some explanations as to how and why the writers of these *ars vetus et ars nova* texts altered these texts, while also suggesting that their similarities point to a common written ancestor text. If we accept that *Pn7378A* and *Rvat307* could derive from a common ancestor text on the evidence of the similarities in structure, text, and music examples outlined above, and given that both these texts are

⁸³ Ibid., 33–34.

⁸⁴ Ibid., 33. A full consideration of all the attributions to Vitry and contemporaneous commentary on his contribution to music theory is beyond the scope of this article. We might briefly note, however, that he is named in this regard in at least thirteen fourteenthand fifteenth-century music theory treatises. Fuller discusses the explicits of *Rvat307*, *Pn7378A*, and the incipits and explicits of the Chicago and Siena witnesses *Omni desideranti*, the statements referring to Vitry in *CS3anon3*, *CS3anon7*, *Ps.-Theodon*, John of Tewkesbury (in his *Quatuor principalia*), and the *Ps.-Mur. arg.* (ibid., 25–30, 32–42). There are also references to Vitry in the *De origine et effectu musicae* (probably derived from Tewkesbury) and in the anonymous *Tractatus de cantu figurativo*. Gilbert Reaney, "The Anonymous Treatise *De origine et effectu musicae*: An Early 15th Century Commonplace Book of Music Theory," *Musica Disciplina* 37 (1983): 101–19. *Anonymi Tractatus de cantu figurativo et de contrapuncto (c. 1430–1520)*, ed. Christian Meyer, Corpus scriptorum de musica, vol. 41 (Neuhausen-Stuttgart: American Institute of Musicology; Hänssler-Verlag, 1997). There are also attributions to Vitry of an *Ars contrapunctus* (Coussemaker, *Scriptorum*, III.23–27) and the *Liber musicalium* (Coussemaker, *Scriptorum*, III.35–46). attributed to Vitry, we must admit the possibility that Vitry was the author of the ancestor text.

Final thoughts

In the conclusion to her article on Vitry's Ars nova, Fuller writes:

No one of the surviving versions need bear the burden of being the authoritative "state of the text." Each can be understood as a particular manifestation of the teaching as comprehended by some individual and reported in the context of his own time and circumstances.⁸⁵

This statement can remain true even if we posit a written exemplar in common that informed many of these texts. Each of the short ars nova texts listed in table 3 is a particular manifestation of its exemplar that is representative of the concerns of a particular individual writer at a particular time. I have used the term writer to describe those who produced these texts rather than the binarily opposed categories of author and scribe, with the active agency of one versus the relative passivity of the other. These writers engaged with the Ars vetus et nova ancestor text along a continuum that ranged from the passive activity of direct copying to a more active intellectual engagement with a text through rewriting. The writers of Rvat307 and Pn14741 exist at the more passive end of the continuum, although both transmit only an excerpt of their exemplar.⁸⁶ The writer of *Pn7378A* appears to have passively copied the structure of an exemplar closely related to the Ars vetus et nova ancestor text, but actively omitted some theories from it and abbreviated it in specific ways. The writers of CS3anon3 and CSanon4 omitted even more theory than Pn7378A, although the degree of their textual concordance with Pn7378A, Rvat307, and Pn14741 shows they also copied passively their exemplar (an exemplar closely related to the Ars vetus et nova ancestor text) in some passages. We also have writers who actively rewrote their exemplars and produced new texts that nonetheless still retained significant traces of the Ars vetus et nova ancestor: Lbl21455, Omni desideranti, and Wolfanon4 fall into this category. Finally, there are writers who quoted or paraphrased the Ars vetus et nova ancestor text or a text closely related to it: John of Tewkesbury, Robertus de Handlo, Anglès1958, Ps.-Theodon, Johannes Vetulus de Anagnia, and Jacobus fall into this category.

⁸⁵ Fuller, "Phantom Treatise," 43.

⁸⁶ The term exemplar is used here to refer to a pre-existing text that was used by these writers, and that was derived from the common ancestor text, the *Ars vetus et nova*, although there may have been a number of intermediate copies between the ancestor text and the exemplar used by these writers.

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Acceptance of the variance present in these texts does not require that we posit that their exemplars represent formulations by Vitry's disciples of his oral teachings. Rather, the mutability of the Ars vetus et nova ancestor text seems characteristic of an emergent ars mensurabilis, an ars whose precepts were later solidified in treatises such as the Omni desideranti and the Libellus cantus mensurabilis. While negotiating the relationship between orality and literacy is recognized as key to understanding medieval cultural production, an examination of how orality informed the transmission of music theory is far beyond the scope of this article. It is a question that has not yet been addressed in any serious way in the musicological literature.⁸⁷ Although music theory at this time was almost exclusively transmitted in Latin, a language tied to written forms of communication, written music theory did not require a specific degree of fixity in its transmission, and even written texts were flexible and mutable. Paul Zumthor's description of the "complex unity" of the medieval text is applicable here: a text's apparent unity results from a synthesis of the work of various authors, such as performers and scribes. A medieval text is fundamentally mobile.⁸⁸

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The mobility or fluidity of the medieval text—the quality that Zumthor termed *mouvance*—includes literate transmission within this complex unity. That successive individuals (authors, scribes, and compilers) engaged with the *Ars vetus et nova* on a practical and intellectual basis does not, however, have to imply a diffuse set of exemplars for all these texts that derived from an oral dissemination of this set of theories. It is true that the level of variance between the texts examined here is quite high in comparison to some other musico-theoretical works. On the other hand, even Franco's *Ars cantus mensurabilis* and Jehan des Murs's *Musica speculativa*—two texts that enjoyed relatively stable transmissions—nonetheless demonstrate substantial variation in their textual witnesses. Most music theory texts of the late medieval period are extant in only one source, but of those copied in more than one source, many have complete versions in just one or two manuscripts, with excerpts in

⁸⁷ The scholarship on literacy and orality in medieval culture is vast. Major contributions include those of Walter Ong and Jack Goody. See, for example, Walter J. Ong, *Orality and Literacy: The Technologizing of the Word* (London: Methuen, 1982); Jack Goody, *The Interface between the Written and the Oral* (Cambridge: Cambridge University Press, 1987). A comprehensive historiographical introduction to the field is found in Charles F. Briggs, "Historiographical Essay: Literacy, Reading, and Writing in the Medieval West," *Journal of Medieval History* 26, no. 4 (2000): 397–420. A recent useful volume of essays explores the dialectic between orality and literacy in the Middle Ages, and the relationships between oral and written: Mark Chinca and Christopher Young, eds., *Orality and Literacy in the Middle Ages: Essays on a Conjunction and its Consequences in Honour of D. H. Green* (Turnhout: Brepols, 2005).

⁸⁸ Paul Zumthor, Essai de poétique médiévale, Collection poétique (Paris: Seuil, 1972), 73.

other manuscripts.⁸⁹ Other important musico-theoretical works survive in several versions (or recensions), for example: Johannes de Garlandia's *Musica plana*, Marchettus da Padova's *Pomerium*, des Murs's *Musica speculativa*, the *Libellus cantus mensurabilis*, and John of Tewkesbury's *Quatuor principalia*. If the *Ars vetus et nova* was revised relatively quickly into the version presented in the *Omni desideranti* treatise, this may have had an impact on the number of subsequent complete copies made of *Ars vetus et nova*, or the lack thereof.

Furthermore, manipulation of texts through commentary and gloss, and through redaction and abbreviation is typical of medieval *textual* composition. For fourteenth-century music theorists, Franco's text was one such *auctoritas* that they manipulated in this way, as we have seen, for example, in the appropriation of its structure and vocabulary in the Ars vetus et nova treatise. I have suggested that the Ars vetus et nova treatise was itself subjected to further manipulation by the writers under consideration in this study. Jan Ziolkowski writes of the "intense textuality" of the medieval period, where "auctoritates made a transition from being principally the people of authority to being the texts themselves, or extracts from the texts themselves, that confer authority."⁹⁰ Ziolkowski's description of the inherent tension in the thirteenth-century scholasticism between the newfound scientific reason (*ratio*) and the *auctoritas* of older writings brings to mind Jacobus's criticisms of how the doctor modernus misused his auctoritates. Ziolkowski writes: "Even when an author had no authority, he could conjure up one so as to dispel suspicion ... [there was] an ostensible incongruity in the simultaneity of both a deep faith in auctores and a willingness to tamper with the authenticity of those auctores."91

The Vitriacan teaching tradition hypothesis, which has won general acceptance in the musicological literature, contends that although many of the texts in table 3 identified Vitry as the originator of *ars nova* theory, Vitry did not engage with the Latin musico-theoretical tradition as an

⁸⁹ For example: the *Ars musica* of Lambertus survives in a complete version in only one thirteenth-century source (*F-Pn* lat. 11266). There is a further complete version in a fifteenth-century manuscript (*I-Su* L.V.30), but only partial copies in *F-Pn* lat. 6755.2; Erfurt, Wissenschaftliche Allgemeinbibliothek, 8° 94; and in the printed volume by Johannes Herwagius, *Opera Bedae venerabilis* (Basel, 1563), vol. 1, col. 404–34. For a full description of these sources see Meyer, ed., *The* "Ars musica" attributed to Magister Lambertus/Aristotelis, xi–xvi.

⁹⁰ Jan M. Ziołkowski, "Cultures of Authority in the Long Twelfth Century," *Journal of English and Germanic Philology* 108, no. 4 (2009): 427.
 ⁹¹ Ibid., 438–39. In the Latin textual culture of the later Middle Ages, written rather

⁹¹ Ibid., 438–39. In the Latin textual culture of the later Middle Ages, written rather than oral works could serve as *auctoritates*. Mary Carruthers has written that "both 'authority' and 'author' were conceived in entirely textual terms, for an 'auctor' is simply one whose writings are full of 'authorities.'" Mary Carruthers, *The Book of Memory: A Study of Memory in Medieval Culture* (Cambridge: Cambridge University Press, 1990), 190.

*auctor.*⁹² It supposes that Vitry never set down his *ars nova* theories in writing and that his activity as a theorist was confined to his oral explanations of how his motets ought to be performed. One result of the acceptance of this hypothesis is that the theoretical aspects of the emergence of the *ars nova* have been downplayed: the notion of individuals active in theorizing on the system of mensurable music, and setting down these precepts in writing as theory has been dismissed in favor of a narrative that supposes an autonomous gradual accretion of new compositional techniques, despite the fact that Jacobus specifically states that *ars nova* theory preceded its practice.

Here I have suggested instead the possibility that Jacobus's *doctor modernus* was the author of the text that was the common ancestor for many of the table 3 texts, and that this author was most likely Philippe de Vitry. This possibility rests on the acceptance of the following: 1) that what we know of the treatise of the *doctor modernus* resembles the proposed ancestor text, which I have called the *Ars vetus et nova*, that informed the texts in table 3; and 2) that we accept that the attributions of some of the texts in table 3 to Philippe de Vitry imply his authorship of the ancestor text. This possibility is still a hypothesis, and it is not watertight. Yet it offers the simplest explanation for the source situation left to us today.

If Vitry is the *doctor modernus*, it appears as if Vitry and Jacobus had a personal (and tense) relationship. Jacobus's discussion of Jehan des Murs's theories follow the scholastic disputation technique of presenting the opposing side in a dispassionate manner, and then refuting it pointby-point, and he remains squarely focused on the particular point of music theory in hand. Jacobus's criticisms of the *doctor modernus*, however, are outlined in more emotive language. In fact, this language is restricted for the most part to those passages in the book that detail or directly follow quotations from the *doctor modernus*.⁹³

One of Jacobus's primary complaints was that the *doctor modernus* had not shown due deference to older theorists, had treated them in a fashion that was the opposite of courtly, and had appropriated and illegitimately

⁹³ Many of these reactive passages were quoted above. For example, Jacobus's use of the adverb "irrationally" (*irrationabiliter*) is found twelve times in book 7. All of these instances are contained within the central chapters on the note figurations, either in the chapters we can directly attribute to the *doctor modernus*, or in reference to the practice of adding strokes to semibreves.

⁹² The Grove Music Online entry on Vitry notes that Fuller's arguments on the tenuous connection between the Ars nova and Vitry "have won general acceptance," while the new MGG labels the treatise "apokryph." Andrew Wathey and Margaret Bent, "Vitry, Philippe de," in Grove Music Online. Oxford Music Online, http://www.oxfordmusiconline.com/ subscriber/article/grove/music/29535. Karl Kügle, "Vitry, Philippe de," in Die Musik in Geschichte und Gegenwart: Allgemeine Enzyklopädie der Musik, ed. Ludwig Finscher, vol. 10: Personenteil (Kassel and New York: Bärenreiter, 1994–2008).

manipulated some of the theories transmitted in Franco's Ars cantus mensurabilis. The vituperative nature ascribed to the doctor modernus by Jacobus fits with what we know of Vitry's character and manner.⁹⁴ Perhaps one further clue might be found in Jacobus's focus on the doctor *modernus*'s lengthy discussion and argument concerning the relationship of the Trinity to perfect and imperfect measure: Vitry's motet Firmissime/ Adesto, which was cited as an example in Pn7378A, Rvat307, and Pn14741, has a triplum and motetus that sing a song of praise to the Trinity, although the motet is measured (ironically, to make a point?) in imperfect modus and imperfect tempus.⁹⁵

If Jacobus and Vitry were acquainted, it is likely that they encountered each other in Paris. Jacobus's connections to Paris are demonstrated through his mentions of the city in SM book 7.96 In addition, Jacobus's sources for SM book 7 demonstrate connections to the Parisian university milieu.97 He quotes extensively from six texts: Lambertus's Ars musica (c. 1270?), Franco's Ars cantus mensurabilis (c. 1280), Jehan des Murs's Notitia (1319/1321), Musica speculativa (1323/1325), and Compendium (probably 1320s), and the *doctor modernus*'s treatise. From a preliminary analysis, Jacobus's quotations from these attributed treatises appear to match most clearly manuscript sources that have links to Paris and to the Sorbonne.⁹⁸ For example, the quotations from Franco in *SM* match most clearly the readings in the two earliest Parisian sources for Franco: *F-Pn* lat. 11267 and lat. 16663 (the latter was bequeathed by Peter of Limoges to the Sorbonne library in 1306), and the quotations from Lambertus match the

⁹⁴ The motet *Cum statua/Hugo* is one of the more famous examples of the kind of attack Vitry could launch on an opponent. Anna Zayaruznaya is currently at work on a monograph about Philippe de Vitry that will address these vitriolic aspects of Vitry's personality (personal communication).

⁹⁵ Zayaruznaya has discovered a quotation of *Firmissime/Adesto* that is sung to the text "Now therefore let us venerate the holy Trinity and Unity" in the Beatius/Cum humanum motet she has reconstructed. See Anna Zayaruznaya, "Quotation, Perfection, and the Eloquence of Form: Introducing Beatius/Cum humanum," Plainsong & Medieval Music 24, no. 2 (2015): 129-166. Zayaruznaya suggests that Firmissime/Adesto may have been the impetus for the discussions of perfection, imperfection, and Trinity documented in SM book 7. Eddie Vetter proposed that Firmissime/Adesto may have been written as a manifesto on perfect and imperfect measure in his "Philippe de Vitry and the Holy Trinity: An Early Manifesto of the Ars Nova," in Liber amicorum Chris Maas-Essays in Musicology in Honour of Chris Maas on his 65th Anniversary, ed. Rob Wegman and Eddie Vetter (Amsterdam: Institute of Musicology, University of Amsterdam, 1987), 4-14.

 ⁹⁶ Desmond, "New Light on Jacobus," 20–22.
 ⁹⁷ The entirety of *SM* demonstrates Jacobus's use of written sources: books 2, 4, and 5 are glosses and analyses of Boethius, book 3 subjects the arithmetic of Jordanus de Nemore to a similar approach, and book 6 quotes long passages from several plainchant treatises and provides gloss and commentary on them. See Desmond, "Behind the Mirror." Jacobus will often pepper his text with phrases such as "I have found one teacher who ... " or "I have not been able to find ... ", demonstrating the intense textuality of Jacobus's endeavor, and his reliance on written sources.

 98 I will examine the sources used by Jacobus in SM book 7 in a future study.

readings in the earliest Parisian source for Lambertus: *F-Pn* lat. 11266 (a manuscript with tangential links to the Sorbonne).⁹⁹ Similarly, Jacobus's readings for *Notitia*, *Musica speculativa*, and *Compendium* each demonstrate the closest concordances with the Parisian transmissions of these works.¹⁰⁰

Given the pattern of Jacobus's sources for book 7, it seems likely the treatise of *doctor modernus* emanated from this Parisian milieu. Might there also be connections to the Collège de Sorbonne and the faculties of the mathematical sciences and theology, like those found with the other mensural theory sources that have readings closest to those found in Jacobus?¹⁰¹ The circle of scholars connected to music theory, mathematics, and the Sorbonne at various times during the 1320s and 1330s included the music theorists Jehan des Murs and Petrus de Sancto Dionysio.¹⁰² Both men are also known to have spent time at the papal court in Avignon, which was, as noted by Andrew Wathey and Margaret Bent "a focal point in Vitry's network of political and intellectual contacts," a network that also included Levi Ben Gerson. As noted earlier, it is this group of texts and writers-Jehan des Murs's music theory treatises, Gerson's Tractatus de harmonicis numeris, and the Prognostications for the Conjunction of Saturn and Jupiter by des Murs, Gerson, and Firminus de Bella Valle (fl. 1338–1345)—that are found in close proximity in the one manuscript

⁹⁹ On the Franco sources see Michel Huglo, "La place du *Tractatus de Musica* dans l'histoire de la théorie musicale du XIIIe siècle: étude codicologique," in *Jérôme de Moravie: un théoricien de la musique dans le milieu intellectuel parisien du XIIIe siècle*, ed. Christian Meyer (Paris: Créaphis, 1992), 33–42, esp. 34. Copies of the *De elementis arithmetice artis* of Jordanus de Nemore (*F-Pn* lat. 16644 and *F-Pn* lat. 16198) and the *Quodlibets* of Godfrey of Fontaines (*F-Pn* lat. 16607), works known to Jacobus, also were in the Sorbonne Library. See Karen Desmond, "Behind the Mirror," 53, 74–75. On the links of the Lambertus manuscript *F-Pn* lat. 11266 to the University of Paris see Mark E. Everist, "Music and Theory in Late Thirteenth-Century Paris: The Manuscript Paris, Bibliothèque Nationale, fonds lat. 11266," *RMA Research Chronicle* 17 (1981): 52–64. ¹⁰⁰ Jacobus's readings for *Notitia* are closest to those found in *US-Cn* Ms. 54.1, which

¹⁰⁰ Jacobus's readings for *Notitia* are closest to those found in *US-Cn* Ms. 54.1, which transmits Petrus de Sancto Dionysio's unique version of *Notitia* that Petrus may have completed while at Paris. *Musica speculativa* appear to match those found in a smaller subset of three sources that Christian Falkenroth labels version A/B, two of which are Parisian, one from Dijon. Jacobus's quotations from the *Compendium* appear closest to the readings found in *A-SP* Ms. 264/4, a fifteenth-century manuscript that has a possible provenance of Paris and the Sorbonne.

¹⁰¹ One issue worthy of further exploration is the predominance of English treatises that contain theories similar to those of Jacobus's *doctor modernus*. These English authors also may have known the *Ars vetus et nova*. Alternately, Jacobus himself might have been aware of the English theoretical tradition. The complex interactions among theorists of France, Italy, and England are yet to be fully understood, and some important and paradigm-shifting leads are provided in the recent work of Peter Lefferts (Lefferts, "An Anonymous Treatise of the Theory of Frater Robertus de Brunham"), Renate Pieragostini (Pieragostini, "Augustinian Networks and the Chicago Music Theory Manuscript"), and Carla Vivarelli (Vivarelli, "Di una pretesa scuola napoletan': Sowing the Seeds of the Ars nova at the Court of Robert of Anjou").

 102 On Jehan des Murs's connections to the Sorbonne, see Gushee, "New Sources," 15–19.

source that contains the most complete version of the Ars vetus et nova: F-Pn lat. 7378A.¹⁰³

Ronald Barthes tells us that "to give a text an Author is to impose a limit on that text, to furnish it with a final signified, to close the writing."¹⁰⁴ In this particular case, I would suggest the opposite. Removing Vitry as an author of *ars nova* theory effectively closed off comment on the evidence of the *ars nova* texts and what these texts can tell us about the emergence of the *ars nova* musical style. But to return Vitry to the text opens anew questions regarding the state of survival and the particular transmission of the *Ars vetus et nova*, the nature of the work itself and the theory it articulated, the role of scribes and readers in the mutability of its text, and, finally, why Jacobus was so incensed by this particular work of music theory. This is not to suggest that we should or even need to find an *Urtext* or attempt a stemma for an *Ars vetus et ars nova* authored by Vitry, but perhaps it is time we reconsidered its existence.

Appendix 1

This is a listing of the abbreviations used in this article for the anonymous *ars nova* texts. It lists the abbreviation, the text incipit, the manuscript source, the most recent edition, and the reference used in the *Lexicon musicum Latinum medii aevi* (hereafter LML; available at http://www.lml.badw.de) online database, and the copying date of the manuscript as given in LML in parentheses.

Anglès1958	"Ad evidentiam cantus organici est sciendum" in E-Bc
	(Barcelona, Arxiu Capitular) 23-1, ff. 1–4v. Higini
	Anglès, "De cantu organico: tratado de un autor catalán
	del siglo XIV," Anuario musical 13 (1958): 18-24. LML:
	ANON. Barcin. I (c. 1350)
CS3anon2	"Ad evidentiam valoris notularum" in in F-Pn (Paris,
	Bibliothèque nationale) fonds. lat. 15128, ff. 120–22v.
	Anonymous, De valore notularum tam veteris quam novae artis
	in Anonymus, De valore notularum tam veteris quam novae artis
	(Ms. Paris, Bibl. Nat., lat. 15128). Anonymus, Compendium
	musicae mensurabilis tam veteris quam novae artis (Ms. Paris,

¹⁰³ On the prognostications written by des Murs, Firmin de Beauval, and Levi ben Gerson for Clement VI see Bernard R. Goldstein and David Pingree, *Levi ben Gerson's Prognostication for the Conjunction of 1345*, Transactions of the American Philosophical Society Held at Philadelphia for Promoting Useful Knowledge, vol. 80, no. 6 (Philadelphia: The American Philosophical Society, 1990), 7. Wathey suggests that Vitry may have contributed to the series of prognostications on the conjunction of Saturn and Jupiter. Wathey and Bent, "Vitry, Philippe de."

¹⁰⁴ Ronald Barthes, "The Death of the Author," in *Image-Music-Text* (New York: Hill and Wang, 1977), 147.

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	Bibl. Nat., lat. 15128). Anonymus, De diversis maneriebus in musica mensurabili (Ms. Saint-Dié, Bibl. Municipale 42), 13–28. LML: ANON. Paris I (fourteenth century)
CS3anon3	"Quoniam per ignorantiam artis musice" in <i>F-Pn</i> fonds. lat. 15128, ff. 127–129. <i>Philippi de Vitriaco Ars nova</i> , ed. Gilbert Reaney, André Gilles, and Jean Maillard, Corpus scriptorum de musica, vol. 8 ([Rome]: American Institute of Musicology, 1964), 84–93. LML: TRAD. PHIL. II. (fourteenth century)
CS3anon4	"Si quis artem musice mensurabilis tam veterem quam novam" in F-Pn fonds. lat. 15128, ff. 129–31v. Anonymus, De valore notularum tam veteris quam novae artis (Ms. Paris, Bibl. Nat., lat. 15128). Anonymus, Compendium musicae mensurabilis tam veteris quam novae artis (Ms. Paris, Bibl. Nat., lat. 15128). Anonymus, De diversis maneriebus in musica mensurabili (Ms. Saint-Dié, Bibl. Municipale 42), ed. Gilbert Reaney, Corpus scriptorum de musica, vol. 30 (Neuhausen-Stuttgart: Hänssler-Verlag, American Institute of Musicology, 1982), 33–41. LML: ANON. Paris. II. (fourteenth century)
Lbl21455	"Cum de mensurabili musica sit nostro" in <i>GB-Lbl</i> (London, British Library) Add. 21455, ff. 3–4v. <i>Philippi</i> <i>de Vitriaco Ars nova</i> , 73–7; Peter M. Lefferts, "An Anonymous Treatise of the Theory of Frater Robertus de Brunham," in <i>Quellen und Studien zur Musiktheorie des</i> <i>Mittelalters</i> , ed. Michael Bernhard, vol. 3 (Munich: C.H. Beck, 2001), 247–51. LML: MENS. Cum de. (c. 1400)
Omni desideranti	"Omni desideranti notitiam" in US-Cn (Chicago, Newberry Library), Ms. 4.1, ff. 53r–56v; E-Sc (Seville, Biblioteca capitular), Ms. 5.2.25, ff. 63r-64v; I-Su (Siena, Biblioteca comunale), Ms. L.V.30, ff. 129r-v. Karen Desmond, "Texts in Play: The Ars nova and its Hypertexts," Musica disciplina 57 (2012): 115–47. http:// www.arsmusicae.org. LML: TRAD. PHIL. III. (Cn, end fourteenth century [1391]; Sc, mid-fourteenth century to beg. fifteenth century; Su, end fifteenth century)
Pn14741	"Cum de signis temporis variationem demonstrantibus" in <i>F-Pn</i> fonds. Lat. 14741, ff. 4–5. <i>Philippi de Vitriaco Ars</i> <i>nova</i> , 22–31. LML: PHIL. VITR. (fifteenth century)
Pn7378A	"Sex sunt species principales sive concordantiae" in F-Pn, 7378A, ff. 61va-62b. Philippi de Vitriaco Ars nova, 55–69. LML: TRAD. PHIL. I (fourteenth century [1362])

PsTheodon	"Omnis ars sive doctrina honorabiliorem habet rationem" in <i>I-Rvat</i> (Rome, Vatican Library), Barb. lat. 307, ff. 21r–27. <i>Anonymus: De musica mensurabili;</i> <i>Anonymus: De semibrevibus caudatis</i> , ed. Cecily Sweeney and André Gilles, Corpus scriptorum de musica, vol. 13 ([Dallas, Texas]: American Institute of Musicology, 1971), 13–28. LML: PSTHEODON. (first part of fifteenth century)
Rvat307	"Sex minimae possunt poni pro tempore imperfecto" in <i>I-Rvat</i> , Barb. lat. 307, ff. 17–20v. Ibid., 23–31. LML: PHIL. VITR. (first part of fifteenth century)
Wolfanon4	"Primo punctus quadratus vel nota quadrata est duplex" in <i>D-Ef</i> (Erfurt, Wissenschaftliche Allgemeinbibliothek), Ms. 8° 94, 68v–70. Johannes Wolf, "Ein anonymer Musiktraktat aus der ersten Zeit der 'Ars Nova,'" <i>Kirchenmusikalisches Jahrbuch</i> 21 (1908): 33–8. LML: MENS. Primo punctus. (c. 1350)

Appendix 2

The following table lists the occurrences of the term *doctor* (singular noun) in book 7 of *SM*. The italic font indicates references to the *doctor modernus* who is the subject of this study; the bold font indicates the three ambiguous references that may also refer to our *doctor modernus*.

7.5.6, 12	des Murs	"contra quendam modernum doctorem"
7.6.3, 14	des Murs	"quidam modernus doctor"
	des Murs	"illius doctoris"
	des Murs	"ad dicta doctoris"
7.6.16, 16	des Murs	"verba tacta doctoris"
7.8.2, 20	des Murs	"tactus doctor"
7.11.1, 26	des Murs	"quidam modernus doctor"
7.11.2, 26	des Murs	"hic doctor"
7.11.5, 26	Lambertus	"Alius doctor, qui Aristoteles nominatur"
7.12.2, 27	Lambertus	"quae est doctoris qui Aristoteles nuncupatur"
7.17.2, 35	?	"hoc approbat quidam modernus doctor de
		Francone"
7.18.4, 40	?	"ab uno doctore moderno qui utitur
		imperfectis"
7.19.12, 42	Lambertus	"Ex hoc patet doctorem hunc"
7.20.7, 44	des Murs	"quidam modernus doctor"
7.23.1, 49	des Murs	"unus doctor modernus"

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7.23.3, 49	des Murs	"secundum hunc doctorem"
7.23.4, 49	des Murs	"hic doctor"
7.23.6, 50	des Murs	"tactum doctorem"
7.23.9, 50		"quidam doctor modernus"
7.24.1, 51	des Murs	"unus doctor modernus"
7.24.2, 51	des Murs	"hic doctor"
7.24.3, 51	des Murs	"hunc doctorem"
	des Murs	"hunc doctorem"
7.24.4, 51	des Murs	"hunc doctorem"
7.26.2, 54		"hic doctor"
7.26. <i>3</i> , 54		"hic doctor"
7.26.7, 55		"tactus doctor"
7.27.1, 55		"praetactus doctor"
7.27.3, 56		"doctor iste"
7.27.6, 56		"hic doctor"
		"hic doctor"
7.27.9, 56		"hic doctor"
7.27.14, 57		"Hic doctor"
7.27.15, 57		"tactus doctor"
7.29.8, 59		"dictum eiusdem doctor"
7.30.1, 60		"tactus doctor"
7.34.10, 66	5	"salva gratia huius doctoris"
7.41.9, 81	des Murs	"secundum hunc doctorem"
7.46.14,		"unus doctor modernus"
<i>89–90</i>		
		"Hic doctor"
7.46.15, 90		"ille doctor"

Supplemental Material

Appendix 3 is accessible through the online version of the article available at http://doi.org/10.1525/jm.2015.32.4.441.

ABSTRACT

In book 7 of his *Speculum musicae*, the fourteenth-century music theorist Jacobus structures a defense of music as it had been practiced in the thirteenth century by such eminent musicians and theorists as Lambertus, Franco, and Petrus de Cruce against the practices of certain unnamed *moderni* active at the time of Jacobus's writing. While Jacobus's

quotations from various theoretical works by Jehan des Murs have long been recognized, it previously had been supposed that the remaining quotations were jumbled references from many different theorists. With specific reference to Philippe de Vitry only two quotations from the text edited in vol. 8, Corpus scriptorum de musica, had been identified previously. In fact, there is substantial sustained treatment of a single author, whom I have termed the *doctor modernus* and who is not Jehan des Murs, that occupies at least five contiguous central chapters of book 7. Following Jacobus's practice in the previous six books of commentary on a handful of specific works, the writing of Book 7 appears to have been structured around the written works of just four theorists: Lambert, Franco, Jehan des Murs, and the doctor modernus. Furthermore, Jacobus's vehemence toward the *doctor modernus* was particularly pronounced and may indicate a personal relationship between the two men. His treatise is quoted with reference to some fundamental ars nova theories, such as extension of long notes beyond the *duplex* long, remote imperfection, the use of imperfect longs, and imperfect measure in general, and his treatise is described as outlining the precepts of both the old and new arts. The similarities between the treatise of the *doctor modernus* and many ars nova theory texts (some of which were attributed to Vitry) hints at the possibility that the treatise of the *doctor modernus* may have been the ancestor text that these other texts had in common, and hence also that Philippe de Vitry may have been the author of the text known to Jacobus, whose subject was the Ars vetus et nova.

Keywords: ars nova, Jacobus, motet, notation, Speculum musicae, Philippe de Vitry

APPENDIX 3.

Comparison between the texts of *ars vetus* theory in *Pn7378A*, *CS3anon4*, and *Omni desideranti*. (Music examples are not included in this table: please consult the editions listed in Appendix 1 for the content of the music examples.)

Ignoratis principiis necesse est artem ignorare. Notularum quedam (dicuntur) duplices longe, quedam bonge, quedam minime. A longis tanquam a simplicioribus debemus inchoare.Si quis artem musice mensurabilis tam ueteram quam nouam sub compendio exemplo prospicere desideret. In huius punti sedulo dicta tam ueterum quam modernorum. Et opiniones eorundem si idem sedulo studeat complete reperiat.[1] Tractatus iste super musicam composuit venerabilis magister Philippus de Vitriaco. Omni desideranti notitiam artis mensurabilis musicae tam novae quam veteris optinere [<i>sic</i>] [<i>corr.</i> obtinere] certas hic rationes praesentes sub brevi compendio pro posse meo propono fideliter adsignare. Cum antiquitatem per Franconem notum est omnibus tradidisse novitatem, quae per Philippum in maiori parte subtiliter invenisse, et quia voces seu notulas proportionabiliter oportet in hoc opere mensurare prout longae vel breves semibreves ac minimae figurantur, ergo ad figurationem et walorem ipsarum brevier		1 /	
valoreni ipsarani breviter	ignorare. Notularum quedam (dicuntur) duplices longe, quedam longe, quedam breves, quedam semibreves et quedam minime. A longis tanquam a simplicioribus	tam ueteram quam nouam sub compendio exemplo prospicere desideret. In huius punti sedulo dicta tam ueterum quam modernorum. Et opiniones eorundem si idem sedulo studeat complete reperiat.	 composuit venerabilis magister Philippus de Vitriaco. Omni desideranti notitiam artis mensurabilis musicae tam novae quam veteris optinere [sic] [corr. obtinere] certas hic rationes praesentes sub brevi compendio pro posse meo propono fideliter adsignare. Cum antiquitatem per Franconem notum est omnibus tradidisse novitatem, quae per Philippum in maiori parte subtiliter invenisse, et quia voces seu notulas proportionabiliter oportet in hoc opere mensurare prout longae vel breves semibreves ac minimae

(continued)

procedamus.

APPENDIX 3. (continued)

Simplex longa est que quadratum <u>habet corpus et a dextro latere</u> <u>caudam</u> sive ascendendo sive descendendo ut hic. Et in modo perfecto tria valet tempora, inperfecto duo. <u>Si autem habet</u> <u>duas caudas sive lateris dextri cauda</u> <u>sit longior, tunc fit longa; si sinister,</u> <u>tunc fit brevis, ut patet hic.</u>

Duplex longa est notula que habetduplex corpus respectu longe eta dextro latere caudamascendendo sive descendendo uthic. In modo perfecto sex valettempora et inperfecto 4.Inperficitur respectu etiam longein modo perfecto, scilicet quandosola brevis vel due cum eajungantur, quia tunc necessario 5vel quatuor valet tempora ut hic.

Duplex longa ualet sex tempora in
modo perfecto. In imperfecto uero
quatuor sed in perfecto modo
duobus modis imperficitur uel cum
sola breui. Et sic ualet quinque
tempora uel cum duabus breuibus
Et sic ualet quatuor.

Corpus ultra modum consuetum ualet tot longas quot caudas siue breues in se continet diuisas ut hic [music example]

Simplex longa habet caudam a dextro latere et corpus quadratum

Que uero a sinistro latere habet caudam. illa dicitur breuis Et debet cani cum plica. <u>que uero habet</u> <u>duas caudas cantatur cum plica.</u> <u>unde si sinistra sit longior breuis</u> <u>est si uero dextra sit longior longa</u> <u>dicitur ut hic</u> [music example] [2] Longa sub forma quadrata figurata habens tractum a parte dextra, descendentem vel adscendentem, vel duos quorum dextram [corr. dexter] excedit in longitudine sinistrum. Et tunc illa nota dicitur plica longa <u>et valet tria</u> tempora in modo perfecto, duo autem in imperfecto.

[8] Est quaedam alia nota sub forma quadrata habens tractum a parte dextra, vel duos quorum dexter et contra, sicut ipsa longa, sed in duplo est latior ipsa longa, et tunc ipsa nota dicitur duplex longa, et valet 6 [expan. sex] tempora in modo perfecto, et quatuor in imperfecto. Et imperficitur duobus modis tantum, videlicet, a sola brevi sequenti non praecedenti, sicut inferius hic probabo, vel quando plusquam 3 [expan. tres] breves sequuntur ipsam dupplicem [*sic*] [*corr.* duplicem], et tunc non valet nisi quinque tempora, ut hic patet. [music example]

Quinque modis scimus quod longa in modo perfecto tria valet tempora: primo si longa longam sequitur, semper prima longa tria valet tempora ut hic; secundo [-59-] si longam inmediate punctillus qui perfectionis dicitur signum (xxxx) precedat vel sequatur semper prima longa tria valet tempora ut hic; tertio si longam due breves sequantur nulla brevi precedente ut hic; quarto si longam tres breves sequantur nulla brevi precedente ut hic; quinto si longam quinque breves sequantur nulla brevi precedente quinta brevis altera debet esse ut hic.

Longa quatuor modis demonstratur esse inperfecta, primo si longam sola brevis antecedat ut hic; secundo si longam sola brevis ut hic sequatur; tertio si longam due breves sequantur vel 3, ita tamen Longa fit trium temporum quatuor modis. primo si longam longa sequatur tunc ualet semper tria tempora quicquid precedat si sit in modo perfecto. secundo si punctus perfeccionis sequatur. tunc eciam quicquid precedat siue sequatur. siue sit in modo perfecto siue n modo imperfecto semper ualet tria tempora tercio si due breues sequantur nulla breui precedente. quarto si tres breues sequantur nulla breui precedente ut patet in hoc exemplo [music example]

- [6] <u>Si autem duae vel tres breves</u> <u>tantum sequuntur ipsam longam</u> <u>a nulla sola brevi praecedente,</u> <u>a qua posset imperfici, perfecta est</u> <u>longa ipsa,</u> nisi punctus divisionis ponatur inter primam brevem et secundam, vel inter primam et alias subsequentes.
- [7] C. <u>Item longa ante longam in</u> <u>modo perfecto perfecta est. Et</u> <u>longa post quam punctus qui</u> <u>dicitur perfectus immediate</u> <u>ponitur similiter perfecta in modo</u> <u>perfecto [corr. imperfecto] ut hic</u> [music example]
- Tot modis cognoscitur longa esse duorum temporum primo si longam sola breuis sequatur secundo si sola breuis precedat tercio si due uel tres breues uel plures ponantur post [ponun ante
- [5] Item <u>longa licet valeat tria</u> <u>tempora in modo perfecto, sicut</u> <u>dictum est tamen tribus</u> <u>imperficitur, videlicet quando sola</u> <u>brevis sequitur, aut praecedit, vel</u> <u>quando plures quam tres breves</u>

(continued)

4

quod post primam brevem punctus divisionis ponatur ut hic; quarto si 4 breves longam sequantur ut hic. Istud autem intelligendum (de modo et tempore perfecto) quod quando plures breves longam sequuntur quarum possunt alterari quecumque 4 vel 7 vel 10 sequuntur, necesse est judicari duorum temporum, nisi punctus perfectionis ponatur ibidem. Notandum est etiam quod si post longam breves infinite ponantur, tres pro perfectione sunt computate et ultime perfectioni due breves reperiuntur: ita ultima debet alterari brevis; secundum confusionem, propter hoc ut magis pateat cantanti, punctus etiam ultimas duas breves apponi debet, et potius ponunt longam si tria tempora valere debeant, ut hic.

corr.] longam ita quod puctus diuisionis ponatur post primam breuam ita quod prima breuis ordinetur cum prima longa. quarco et ultimo si plure breues quam tres sequantur si tamen non sequantur quinque uel sex quia tunc longa precedens erit trium temporum nisi sola breuis precedat et quinta erit altera id est duorum temporum ut patet hic [music example] <u>ipsam sequuntur similiter</u> <u>imperficitur ut hic [</u>music example] Brevis notula sic formatur et dividitur et alteratur. Recta brevis est ista que tantum valet unum tempus. <u>Altera</u> <u>vero brevis valet duo tempora, et fit</u> <u>quotiescumque in modo perfecto</u> <u>due breves inter duas longas</u> <u>ponuntur vel inter longam et</u> <u>punctum et e converso vel quando</u> <u>pausa unius temporis et brevis inter</u> <u>duas longas ponuntur quia tunc</u> <u>unica brevis est altera et valet duo</u> <u>tempora ut hic.</u> Breuis est duplex scilicet recta et altera. quoniam <u>quocienscumque</u> <u>due breues ponuntur inter duas</u> <u>longas uel inter [longam] et pausa</u> uel quando equipollens [breui] <u>et</u> <u>breuis ponuntur inter duas longas</u> <u>[uel] quando inter longam et</u> <u>punctum [ponuntur] due breues</u> <u>uel e conuerso. secunda illarum</u> <u>breuium uocatur altera et ualet duo</u> <u>tempora ut patet hic in exemplo</u> [exemplo ante corr.] [music example] [13] Item brevium quaedam recta et quaedam altera, nuncupatur, recta valet unum, altera vero duo. Unde quotienscumque duae breves inveniuntur inter duas longas, prima recta est. Alteraque secunda, et vocatur altera, quia [alteratur, nam sua *sic*] alteratur natura sua [*corr.*] cum ipsa brevis naturaliter tantum unum tempus valet et duo quotiens alteratur. Item quando duae breves reperiuntur inter punctum divisionis et longam, vel inter longam et punctum, secunda similiter alteratur, ut hic [music example]

De ligaturis breviter est dicendum: omnis <u>igitur ligature carentis tractu</u> <u>quolibet cujus secunda ascendit</u> <u>prima brevis ut hic.</u> Per regulam a contrario subsequitur: omnis ligature carentis tractu quolibet cujus secunda descendit prima Quando secunda alicuius ligature ascendit sine tractu prima breuis. si [habeat] tractum descentem longa fit [si] uero <u>secunda descendat</u> <u>prima est longa</u> si signum ponatur descendens [breuis] fit si autem signum ponitur [ascendens] <u>siue</u> [33] Nunc de primis et ultimis ligaturis videamus <u>sicut ars quod</u> <u>prima ascendens, semper est brevis,</u> <u>nisi a parte dextra tractum habuerit</u> <u>descendentem. Similiter omnis</u> <u>ultima ascendens brevis, nisi</u> <u>ponatur super penultimam vel</u>

APPENDIX

(continued)

<u>longa</u> ut hic. Quandocumque signum (a parte sinistra) apponitur ascendendo, <u>(si secunda) ascendat</u> <u>sive descendat, prime due note</u> <u>illius ligature non nisi solum</u> <u>tempus valent ut hic.</u> Quandocumque signum descendens a parte sinistra apponitur, si secunda ascendat sive descendat, primam facit esse brevem ut hic.

De <u>mediis</u> breviter dicendum est quod voces medie nullatenus inquinantur ut hic, (<u>nisi</u> tamen <u>due</u> <u>vel quinque essent medie quia</u> <u>secunda sive quinta in modo</u> <u>perfecto alteratur</u> ut hic.)

De finalibus breviter est dicendum quod <u>omnis finalis ascendens brevis</u> <u>est</u> ut hic, nisi tamen due vel quinque essent medie quia secunda secunda illius ligature [ascendat] siue descendat prime due [non] ualent nisi unum tempus quia quelibet [est] semibreuis ut patet in hoc exemplo [music example]

<u>Omnes</u> [omnis ante corr.] <u>medie</u> <u>sunt breues</u> nisi <u>tm due uel</u> <u>quinique essent quia tunc secunda</u> <u>uel quinta alteratur.</u>

<u>Omnis finalis ascendens est breuis</u> <u>nisi [habeat] caudam uel nisi</u> <u>ponatur [ordine] prepostero</u> id est situetur aduerso capite <u>quia tunc fit</u> <u>a parte dextra tractum</u> <u>ascendentem similiter</u> <u>descendentem, ut hic.</u> [music example]

[34] Item omnis tractus ascendens in prima positione ligatura descendentis vel ascendentis facit primas esse semibreves. Et <u>omnes</u> <u>mediae sunt breves</u> cuiuscumque sint ligaturae. Ut hic. [music example]

[32] Ligaturarum alia ascendens, alia descendens. Et quia ars loquitur de primis, mediis et ultimis earum, idcirco de primis et ultimis ligaturae sive quinta in modo perfecto alteratur ut hic nisi ordine prius posito ponatur quia tunc fit longa, vel <u>si signum a latere dextro</u> <u>ascendendo vel descendendo</u> <u>apponatur quia tunc fit longa</u> ut hic. Per regulam a contrario subsequitur: <u>omnis finalis</u> <u>descendens longa est ut hic, nisi sit</u> <u>configurata, quia tunc breviatur ut</u> <u>hic.</u>

Tandem de pausis dicendum est: sicut omni mensurabiliter cantare refert, sic et pausare. Unde pausarum secundum antiquos 4 sunt genera. <u>Est igitur pausa trium</u> temporum, nec est major in arte; pausa duorum temporum, pausa <u>unius temporis, pausa</u> <u>semitemporis. Pausa trium</u> temporum tria spatia continet et tantam moram facit tacendo quantum tria tempora longa. Omnis finalis descendens est longa nisi sit configurata quia tunc est breuis ut patet [hic] [music example]

 Pausa ualet tot tempora quot continet spacia.

 Pausa que continet dimidium spacium cum sola linea ualet unam semibreuam

 longa in modo perfecto fit trium temporum ante pausam duorum temporum ut patet in hoc exemplo [music example]

 descendentis, primo videamus sicut dicit ars prima descendens sine tractu longa est, sed <u>si habuerit</u> <u>tractum a parte sinistra</u> <u>descendentem, dicitur esse brevis.</u> <u>Similiter omnis ultima ligaturae</u> <u>descendentis longa est, nisi fuerit in</u> aliquo corpore figurata, ut hic inferius patebit. [music example]

[35] Pausa est vocum omissio, seu asperitate [corr. aspiratio] mensurata per tot corporibus quot fuerit figurata. <u>Unde pausa valet tot</u> tempora quot continet spatia. <u>Nam</u> si tenet unum, valet unum. Si tenet duo, valet duo. Si tenet tria, valet tria. Si tenet quatuor, immensurabilis est. Sed illa pausa quae tenet dimidium spatium descendendo valet unam semibrevem de prolatione qua

(continued)

APPENDIX 3. (continued)

pronuntiando. Pausa duorum temporum [-63-] duo spatia continet et tantam moram facit tacendo quantum (duo tempora pronuntiando; pausa unius temporis unum spatium continet et tantam moram facit tacendo quantum) solum tempus pronuntiando. Pausa semitemporis semispatium continet et tantam moram facit tacendo quantum dimidium tempus pronuntiando. Explicit (ars). fuerit. Quid ergo fiet de pausa minimae cum minor pausa non possit inveniri quam dimidii spatii. Dico breviter et hoc tenetur ab omnibus expertis in scientia, quod pausa semibrevis debet descendere inferius a linea. Pausa vero minimae debet ascendere superius a linea, tenens dimidium spatium, ut hic: [music example]