

THE RHYTHM OF ORGANUM PURUM*

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My topic is a controversial one. Indeed few topics in musicology have been more controversial. In 1967, in the volume of commentary to his edition of the music treatise of Anonymous IV,¹ Fritz Reckow gave a summary of opinions and the results of research conducted up to that time.² Almost all possible points of view had been advanced, from Ludwig's,³ Peter Wagner's,⁴ and Besseler's⁵ suggestions of improvisatory freedom, to Handschin⁶ and Günter Birkner,⁷ who thought that the interpretation should be according to modal or even Franconian principles, to the equalist proposals of Anselm Hughes.⁸ The most acrimonious exchanges took place between Apel⁹ and Waite.¹⁰ Waite insisted upon a rigorously modal interpretation and went so far as to transcribe the whole of the *Magnus Liber*, as it appears in *W*₁, into modal rhythm. Apel argued for the application of the rules of consonance, which produce a rhythm that is clearly non-modal. (Later, Apel wrote that the rules of consonance could not be definitely considered as "die endgültige Lösung des Problems der Duplumnotation,"¹¹ and suggested transcriptions in equal notes according to the proposals of Anselm Hughes.) Later writers tended to group themselves as being either for or against Waite's ideas. Bukofzer¹² and Zamminer¹³ argued

*The ideas presented here were conceived during the preparation of a performance of the Notre Dame Mass for Pentecost, a performance that took place at Stanford University on May 30, 1982—the eight-hundredth anniversary of the consecration of the high altar at the Cathedral of Notre Dame in Paris.

¹Fritz Reckow, *Der Musiktraktat des Anonymus 4*, vol. 2, Beihefte zum Archiv für Musikwissenschaft, vol. 5 (Wiesbaden, 1967).

²*op. cit.*, pp. 73–75.

³Friedrich Ludwig, "Die liturgischen Organa Leonins und Perotins," in *Riemann-Festschrift* (Leipzig, 1909).

⁴Peter Wagner, "Zum Organum Crucifixum in carne," *Archiv für Musikwissenschaft* VI (1924), 405ff.

⁵Heinrich Besseler, *Die Musik des Mittelalters und der Renaissance*, Handbuch der Musikwissenschaft, ed. Bücken (Potsdam, 1931–34).

⁶Jacques Handschin, "Zu den 'Quellen der Motetten ältesten Stils,'" *Archiv für Musikwissenschaft* VI (1924), 247ff.

⁷Günter Birkner, "Die Gesänge des Graduale Karlsruhe Pm 16" (Ph.D. dissertation, Freiburg, 1951).

⁸Anselm Hughes, "Music in Fixed Rhythm," in *The New Oxford History of Music*, vol. 2 (London, 1954), pp. 311–52.

⁹Willi Apel, "From St. Martial to Notre Dame," *Journal of the American Musicological Society* II (1949), 145–58; Willi Apel and William Waite, Communications, in *Journal of the American Musicological Society* V (1952), 272ff.; Willi Apel, *The Notation of Polyphonic Music: 900–1600*, 5th ed. (Cambridge, Massachusetts, 1961), p. 448.

¹⁰William Waite, *The Rhythm of Twelfth-Century Polyphony: Its Theory and Practice*, Yale Studies in the History of Music, vol. 2 (New Haven, 1954).

¹¹Willi Apel, *Die Notation der Polyphonen Musik 900–1600* (Wiesbaden, 1970), p. 302.

¹²Manfred Bukofzer, Review of William Waite, *The Rhythm of Twelfth-Century Polyphony*, in *Notes* XII (1955), 232–36.

¹³Frieder Zamminer, *Der vatikanische Organum-Traktat (Otob. lat. 3025): Organum-Praxis der frühen Notre Dame-Schule und ihrer Vorstufen*, Münchner Veröffentlichung zur Musikgeschichte, vol. 2, ed. Georgiades (Tutzing, 1959).

for the more flexible approach, and Jammers¹⁴ thought the modal-rhythmic interpretation anachronistic. Parrish¹⁵ suggested a mensuralist rendition, whereas Luther Dittmer¹⁶ and Heinrich Husmann¹⁷ were in full agreement with Waite.

Since the publication of Reckow's edition and commentary, further work on this question has been done by other scholars, as well as by Reckow himself.¹⁸ Hans Tischler¹⁹ was convinced that modal rhythm would be the basis for a transcription of the *organa dupla*, as was Karp,²⁰ with whom Tischler disagreed only in certain details. Flotzinger²¹ suggested that not only the passages in *organum purum* but the whole *Magnus Liber* was originally in a rhythmically free style. In his review of Flotzinger's book, Sanders²² pointed out correctly that "Nur weil Leoninus *optimus organista* genannt wurde, braucht man nicht anzunehmen, dass er keinen Diskant schrieb,"²³ but certainly assumed that organal rhythm was not modal. In an essay published in 1971,²⁴ Eggebrecht discussed the issue of the transcription of *organum purum*. He pointed out that any transcription into modern notation is necessarily a falsification of the original, and suggested a method for transcribing that would leave the free and improvisatory nature of the music intact. "Die 'Komposition' gibt es erst in Zusammenwirken von Notator und Cantor beim Akt der Ausführung."²⁵ In his critical edition of Johannes de Garlandia's treatise, Reimer also clearly interprets Garlandia as defining the rhythm of *organum per se* as non-modal.²⁶ In his dissertation,²⁷ Roesner took Garlandia's *modus non rectus* to mean a basically modal scheme that was broken up or expanded by *fractio* or *reductio modi*. This was based closely on Waite's views.²⁸ In a later article,²⁹ Roesner

¹⁴Ewald Jammers, *Anfänge der abendländischen Musik*, Sammlung musikwissenschaftlicher Abhandlungen, vol. 31 (Strasbourg, 1955).

¹⁵Carl Parrish, *The Notation of Medieval Music* (New York, 1957).

¹⁶Luther Dittmer, *A Central Source of Notre-Dame Polyphony. Facsimile, Reconstruction, Catalogue raisonné, Discussion and Transcriptions*, Mediaeval Musical Manuscripts, vol. 3 (Brooklyn, 1959).

¹⁷Heinrich Husmann, "Notre-Dame-Epoche," in *Die Musik in Geschichte und Gegenwart*, vol. 9 (Kassel and Basel, 1961).

¹⁸Reckow did not mention the study of Arnold Geering (*Die Organa und Mehrstimmigen Conductus in den Handschriften des deutschen Sprachgebietes von 13. bis 16. Jahrhundert* [Bern, 1952]), in which Geering says of the held-tone style:

Ihre Auswertung für die Rhythmisierung bleibt allerdings in manchen Fällen dunkel, da ein einheitliches System nach Art der Modal-Theorie nicht aufgefunden werden kann.

(*op. cit.*, p. 49).

¹⁹Hans Tischler, "A Propos a Critical Edition of the Parisian Organa Dupla," *Acta Musicologica* XL (1968), 28-43.

²⁰Theodore Karp, "Towards a Critical Edition of Notre Dame Organa Dupla," *The Musical Quarterly* XLII (1966), 350-67.

²¹Rudolf Flotzinger, *Der Discantussatz im Magnus Liber und seiner Nachfolge, mit Beiträgen zur Frage der sogenannten Notre-Dame-Handschriften*, Wiener Musikwissenschaftliche Beiträge, vol. 8 (Vienna, 1969).

²²Ernest H. Sanders, "Notre-Dame-Probleme," *Die Musikforschung* XXV (1972), 338-42.

²³*loc. cit.*, p. 340.

²⁴Hans Heinrich Eggebrecht, "Organum purum," in *Musikalische Edition im Wandel des historischen Bewusstseins*, ed. Georgiades (Kassel, 1971).

²⁵*op. cit.*, p. 108.

²⁶Erich Reimer, *Johannes de Garlandia: De Mensurabili musica*, vol. 2, Beihefte zum Archiv für Musikwissenschaft, vol. 11 (Wiesbaden, 1972), p. 36.

²⁷Edward Roesner, "The Manuscript Wolfenbüttel, Herzog-August-Bibliothek, 628 Helmstadiensis: A Study of its Origins and of its Eleventh Fascicle," 2 vols. (Ph.D. dissertation, New York University, 1974).

²⁸See Waite, *The Rhythm*, p. 123.

²⁹Edward Roesner, "The Performance of Parisian Organum," *Early Music* VII (1979), 174-89.

still believed that *organum purum* was conceived in modal rhythm, but found a disparity between theory and practice. Levy³⁰ described early *organum duplum* passages as “rhythmically less regular” and supported Eggebrecht’s views on transcription. In a response to Levy, Tischler³¹ wrote that the “free-flowing rhythm” of *organum purum* was “conceived within an overall metric plan related to what later was to become the first rhythmic mode,” claimed that all rhythm must have meter, and, despite a concentration on issues of transcription, did not mention Eggebrecht’s essay. More recently, Tischler has described organal style as one in which “the slow-paced chant *cantus firmus* carries a rhythmically highly varied melody without strong metric drive,” and also speaks of the upper voice in *organum* as being “a rather free-flowing melody.”³² Treitler³³ argues for an accental interpretation of twelfth- and thirteenth-century music, but includes a structural and compositional analysis of a section of *organum purum* to facilitate ambiguities in a (basically modal) interpretation. Sanders believes that *organum* was developed before the full modal system and that it partakes of a certain “rhythmic freedom and flexibility.”³⁴ The views of Fritz Reckow are represented in many publications.³⁵ He shows that the theorists of the thirteenth century clearly differentiate between the rhythm of discant and that of *organum per se/organum purum*, and argues that the latter must originally have been performed in a rhythm that was free from a modal structure. This view has been endorsed by Flotzinger.³⁶

With the appearance of new critical editions of some of the major theorists in recent years (among them Reckow’s own edition of Anonymous IV), many misconceptions of earlier commentators can now be cleared away and a less puzzling and more thoroughgoing view of the situation can be obtained.

Before continuing with a close analysis of the words of the theorists, however, a few paragraphs will be devoted to a discussion of the still apparently widely-held interpretation of Waite—that “*discantus*, *copula* and *organum* are styles differentiated from one another by the specific relationship of one voice to another rather than on the basis of any special

³⁰Kenneth Levy, “A Dominican Organum Duplum,” *Journal of the American Musicological Society* XXVII (1974), 183–211.

³¹Hans Tischler, “Apropos of a Newly Discovered Organum,” *Journal of the American Musicological Society* XXVIII (1975), 515–26.

³²Hans Tischler, “The Structure of Notre-Dame Organa,” *Acta Musicologica* XLIX (1977), 193–99.

³³Leo Treitler, “Regarding Meter and Rhythm in the Ars Antiqua,” *The Musical Quarterly* LXV (1979), 524–58.

³⁴Ernest H. Sanders, “Consonance and Rhythm in the Organum of the 12th and 13th Centuries,” *Journal of the American Musicological Society* XXXIII (1980), 264–86. In an exchange of letters between Sanders and Treitler, the issue of the rhythm of *organum purum* is not addressed (*Journal of the American Musicological Society* XXXIII [1980], 602–11).

³⁵Fritz Reckow, *Der Musiktraktat*, vol. 2; idem, “Organum,” in *Handwörterbuch der musikalischen Terminologie* (Wiesbaden, 1971–); idem, “Das Organum,” in *Gattungen der Musik in Einzeldarstellungen: Gedenkschrift für Leo Schrade*, vol. 1, ed. Arlt, Lichtenhahn, and Oesch (Bern, 1973); idem, “Organum-Begriff und frühe Mehrstimmigkeit: Zugleich ein Beitrag zur Bedeutung des ‘Instrumentalen’ in der spätantiken und mittelalterlichen Musiktheorie,” in *Forum Musicologicum*, vol. 1 (Bern, 1975).

³⁶Rudolf Flotzinger, “Organum,” in *The New Grove Dictionary of Music and Musicians*, ed. Sadie (London, 1980).

rhythmic differences. In all three cases modal rhythm is maintained. . . .”³⁷

Reckow has clearly shown that Waite’s theories were based upon significant inaccuracies in the Coussemaker editions upon which Waite relied. For example, Coussemaker has:

Organum per se dicitur id esse, quidquid profertur secundum aliquem modum rectum aut non rectum.³⁸

(*Organum per se* is said to be that which is performed according to a certain mode that is *rectus* or *non rectus*.)

Whereas the manuscript reads:

Organum per se dicitur id esse, quidquid profertur secundum aliquem modum non rectum sed non rectum.³⁹

(*Organum per se* is said to be that which is performed according to a certain mode that is not *rectus* but *non rectus*.)

Waite also used the incorrect reading in Coussemaker for another vital sentence in *Garlandia*:

In non recto vero sumitur longa et brevis in primo modo, sed ex contingenti.⁴⁰

(In a *non rectus* mode, the long and breve are taken in the first way [? mode], but according to the context.)

although this had already been corrected in Cserba’s edition⁴¹ according to the manuscript:

. . . sumitur longa et brevis non primo modo, sed ex contingenti.⁴²

(. . . the long and the breve are taken not in the first way, but according to the context.)

These misreadings, together with some inaccurate translations and fundamental misinterpretations⁴³ of the theorists, seriously vitiated Waite’s work and his understanding not only of the basic nature of *organum purum* but also of *copula*.⁴⁴

³⁷William Waite, *The Rhythm*, p. 119.

³⁸Charles Edmond Henri de Coussemaker, *Scriptorum de musica medii aevi nova series*, vol. 1 (Paris, 1864), p. 114.

Throughout this paper, all translations are my own, and are as literal as possible.

³⁹For a discussion of this passage, see Jeremy Yudkin, “The *Copula* According to Johannes de Garlandia,” *Musica Disciplina* XXXIV (1980), 68, note 4; and cf. Reckow, *Der Musiktraktat*, vol. 2, pp. 35–37; Reimer, *Johannes de Garlandia*, vol. 2, pp. 37–38; Waite, *The Rhythm*, pp. 112–13; and Roesner, “The Manuscript,” p. 191.

⁴⁰Coussemaker, *Scriptorum*, vol. 1, p. 114.

⁴¹Simon M. Cserba, *Hieronymus de Moravia O.P.: Tractatus de musica*, Freiburger Studien zur Musikwissenschaft, 2nd series, vol. 2 (Regensburg, 1935).

⁴²*op. cit.*, p. 225.

⁴³See Reckow, *Der Musiktraktat*, vol. 2, p. 45, note 23; p. 49, note 32; p. 76, note 25.

⁴⁴See Reckow, *Die Copula*, p. 17, note 2; p. 56, notes 1, 2; and Jeremy Yudkin, “The *Copula*,” 68.

Despite Reckow's clear and convincing exposition, however, Waite's doctrine is still being espoused. In his detailed analysis of the notation of the manuscript W_1 ,⁴⁵ though he differed in several important points from Waite, Roesner proposed a basically modal rhythm for *organum purum*. In order to arrive at this interpretation, Roesner followed the manuscript P (Paris, Bibliothèque Nationale fonds latin 16663) for portions of Garlandia's treatise,⁴⁶ despite Reimer's convincing proof that P does not represent the original treatise, but a later, amended, version.⁴⁷

Roesner also relied on a study by Erickson⁴⁸ that purported to prove the existence of modal rhythm in *organum purum* through computer analysis of consonance level. Apart from some rash statements ("Post-Garlandian theorists, such as Anonymous IV and Franco [and perhaps the St. Emmeram Anonymous], assume that the entire duplum is in modal rhythm"),⁴⁹ Erickson's methodology is faulty. He shows that the dissonance level (tested well by his narrow criteria) in *organum purum* ranges from 6 per cent to 20 per cent. Yet he makes no parallel study of discant to serve as a control. More damaging still is Erickson's classification (buried on p. 77 of the computer printout) of the sixth as a consonance. Johannes de Garlandia, the Anonymous of St. Emmeram, Anonymous IV, and even Franco all agree in excluding the sixth from the consonances, or specifically classifying it as a dissonance.⁵⁰

In two later articles,⁵¹ Roesner's views were somewhat modified. He wrote that the rhythm of *organum purum* "often appears to have only a slight relationship with the patterns of rhythmic modes taught by theorists of the 13th century,"⁵² suggesting that the rhythmic modes were merely theoretical constructs and that *modus rectus* and *non rectus* were simply opposite extremes of the same rhythmic concept.⁵³

More recently Roesner appears to have returned to his earlier ideas regarding the rhythm of *organum purum*: "Although I have interpreted the theoretical evidence in a wholly different manner from William Waite, the results of the present study suggest a manner of transcription for sustained-tone organum that is not unlike the one presented in *The Rhythm of Twelfth-Century Polyphony* in its broad outlines"⁵⁴

⁴⁵Roesner, "The Manuscript."

⁴⁶See Roesner, "The Manuscript," p. 192, note 59.

⁴⁷Reimer, *Johannes de Garlandia*, vol. 2, pp. 1–7.

⁴⁸Raymond Erickson, "Rhythmic Problems and Melodic Structure in Organum Purum: A Computer-Assisted Study" (Ph.D. dissertation, Yale University, 1970).

⁴⁹*op. cit.*, p. 6.

⁵⁰See the table in S. Gut, "La Notion de consonance chez les théoriciens du moyen âge," *Acta Musicologica* XLVIII (1976), 22; and the present article, note 109.

⁵¹Edward Roesner, "The Performance," 174–89, and "The Problem of Chronology in the Transmission of Organum Duplum," in *Music in Medieval and Early Modern Europe: Patronage, Sources and Texts*, ed. Iain Fenlon (Cambridge, 1981).

⁵²"The Performance," 184.

⁵³"The Problem," pp. 379–80.

⁵⁴Edward Roesner, "Johannes de Garlandia on *organum in speciali*," in *Early Music History: Studies in Medieval and Early Modern Music*, vol. 2 (Cambridge, 1982), p. 158, note 84.

I can find no evidence to support the notion that Garlandia's rules of consonance were intended to apply only to "key structural points" (*op. cit.*, p. 137), an idea that Roesner borrows from Ernest Sanders' article, "Consonance and Rhythm." (For further objections, see the letter from Fritz Reckow in Communications, *Journal of the American Musicological Society* XXXIV [1981], 588–90.)

In fact, a careful reading of the treatises shows that *organum per se* *organum purum* was originally performed in a rhythm that was free from a modal structure. So thoroughly do the words of the thirteenth-century theorists support a non-modal interpretation for *organum purum* that the evidence cannot be ignored.

Johannes de Garlandia:

Organum per se dicitur id esse, quidquid profertur secundum aliquem modum non rectum, sed non rectum. Rectus modus sumitur hic ille, per quem discantus profertur. Non rectus dicitur ad differentiam alicuius rectae, (quia) longae et breves rectae sumuntur debito modo primo et principaliter. In non recta vero sumitur longa et brevis non primo modo, sed ex contingenti.⁵⁵

(*Organum per se* is said to be that which is performed according to a certain mode that is not *rectus* but *non rectus*. A *rectus* mode is used here to mean that by which *discantus* is performed. *Non rectus* differs from a certain *recta* [*mensura*], (because) the *rectae* longs and breves are taken in the required way first and foremost. But in *non recta* [*mensura*] the long and breve are taken not in the first way, but according to the context.)

This passage has been much discussed and emended,⁵⁶ but its import is clear. *Organum per se* is performed differently from *discant*. *Discant* is performed in *modus rectus*; *organum per se*, in *modus non rectus*. Garlandia takes the expression *modus rectus* from Grammar, used there to describe the indicative mood,⁵⁷ and creates the neologism *modus non rectus*.⁵⁸ In *modus non rectus*, or [*mensura*] *non recta*, the notes are not performed modally,⁵⁹ but *ex contingenti*.

Contingens is a term from the Trivium. It is a technical term from Logic, meaning that which may or may not be, as opposed to that which is necessarily. Boethius uses the word as a translation of Aristotle's τὸ ἐνδεχόμενον and defines it as follows:

Contingens autem secundum Aristotelicam sententiam est, quodcumque aut casus fert aut ex libero cuiuslibet arbitrio et propria voluntate venit aut facilitate naturae in utramque partem redire possibile est, ut fiat scilicet et non fiat.⁶⁰

(*Contingens*, however, according to Aristotle's view, is whatever either chance brings or comes from anyone's free will and their own wish, or, through the

⁵⁵XII:4–7. Text and citations for Johannes de Garlandia are according to Reimer's edition (Erich Reimer, *Johannes de Garlandia: De Mensurabili musica*, vol. 1, Beihefte zum Archiv für Musikwissenschaft, vol. 10 [Wiesbaden, 1972]), unless otherwise specified.

⁵⁶See note 39.

⁵⁷e.g., Priscian, *Praeexercitamina*:

Nunc autem de ea quae ad exercitationem pertinet dicimus; quam variis proferre modis solemus, per rectum indicativum, . . . (Keil, *Grammatici Latini* [Leipzig, 1855–80], vol. 3, p. 431)

(But now we speak about that which pertains to practice; and this we usually put forth in various modes: the *rectus*, which is the indicative, . . .)

⁵⁸I have not found any parallel usage of *modus non rectus* in the grammarians.

⁵⁹Whether *primo modo* means here "in the first mode" or refers in general to the "first method," i.e., *rectus modus* or *ille per quem discantus profertur*, is, from the point of view of the present discussion, immaterial; though Reimer believes the latter. See *Johannes de Garlandia*, vol. 2, p. 38.

⁶⁰Boethius, *Commentarii in librum Aristotelis περὶ ἐπιδημείας*, ed. Meiser (Leipzig, 1977), vol. 2, p. 190.

willingness of nature, can occur either way, that is to say so that it may happen and it may not happen.)

Boethius explains this definition in more detail later:

Contingentia autem sunt (ut supra iam diximus) quaecumque vel ad esse vel ad non esse aequaliter sese habent, et sicut ipsa indefinitum habent esse et non esse, ita quoque de his adfirmationes (et negationes) indefinitam habent veritatem vel falsitatem, cum una semper vera sit, semper altera falsa, sed quae vera quaeve falsa sit, nondum in contingentibus notum est. Nam sicut quae sunt necessaria esse, in his esse definitum est, quae autem sunt impossibilia esse, in his non esse definitum est, ita quae et possunt esse et possunt non esse, in his neque esse neque non esse est definitum, sed veritas et falsitas ex eo quod est esse rei et ex eo quod est non esse rei sumitur.⁶¹

(*Contingentia*, however, are [as we have just said above] whatever have equal potential either to be or not be, and just as their being and not being is indefinite, so also affirmations (and negations) about them are indefinite as to truth or falsehood, since one is always true, and the other always false, but which is true or which is false, is not yet known in *contingentia*. For just as in those things which are necessary to be, being is definite, but in those things which are impossible to be, not being is definite; so in those things which both can be and can not be, neither being nor not being is definite, but truth and falsehood are taken from that which is the being of something and from that which is the not being of something.)

Thomas Aquinas wrote simply:

Contingens est quod potest esse et non esse.⁶²

(*Contingens* is what can be and not be.)

Therefore what *Garlandia* means here is that in *mensura non recta* the longs and breves are chosen according to an open range of possibilities, rather than by the strict rules of the rhythmic modes.

The possibilities are circumscribed by the last few sentences of this final chapter, in which Johannes de *Garlandia* gives three rules for the recognition of longs and shorts:

Longae et breves in organo tali modo dinoscuntur, scilicet per (concordantiam), per figuram, per paenultimam. Unde regula: omne id, quod accidit in aliquo secundum virtutem (concordantiarum), dicitur longum. Alia regula: quidquid figuratur longum secundum organa ante pausationem vel loco (concordantiae) dicitur longum. Alia regula: quidquid accipitur ante longam pausationem vel ante perfectam concordantiam dicitur esse longum.⁶³

⁶¹*op. cit.*, vol. 2, p. 200.

⁶²*Summa Theologica* (Rome, 1882), p. 86.

⁶³XIII:11–14.

(Longs and breves in *organum* are recognized in this way, that is to say through <concord>, through the notation, through the penultimate. Whence the rule: everything that happens in some position according to the virtue of the <concord>, is said to be long. Another rule: whatever is notated long according to the *organa* before a rest or in [the?] place <of a concord> is said to be long. Another rule: whatever is accepted before a long rest or before a perfect concord is said to be long.)

These rules provide the basis for an understanding of the rhythm of *organum purum*, as I shall show below. Garlandia's discussion, however, was also the model for the two most important later thirteenth-century treatments of this issue: those of the Anonymous of St. Emmeram and Anonymous IV, and it will be instructive therefore to analyze these treatises at this point.⁶⁴

The Anonymous of St. Emmeram makes clear the basic and fundamental differences between the rhythm of discant and that of *organum per se*:

In precedenti capitulo fecit actor mentionem breuiter de discantu, qui sub certa diminutione temporum et etiam quantitate nec non et exigentia regulari per districtum terminum coartatur. In hoc autem capitulo de speciali organo quod et duplex dicitur uult actor facere mentionem, quod si per se positum sit reperitum, more suo gradiens, regularum metas sub certa figurarum ac temporum serie distributas, transcendere aut interrumpere non ueretur, ex quo resultat irregularitas subtiliter intuenti. Cum ergo precedens capitulum per certas regulas coartetur, istud siquidem earum rectitudini sepius sit repugnans. Sicut enim regulare ante irregulare, sic precedens capitulum ordinari dicitur ante istud.⁶⁵

(In the preceding chapter the author briefly made mention of *discantus*, which, under a fixed breaking up and also quantity of the *tempora*, as well as a regular measure, is confined through strict limits. But in this chapter the author wants to make mention of particular *organum* which is said to be of two kinds. If it is found placed *per se*, moving in its own manner, it is not afraid to transcend or interrupt the boundaries of the rules, distributed under a fixed series of notated signs and *tempora*, from which results an irregularity to him who is paying attention carefully. Since therefore the preceding chapter is confined through fixed rules, this one indeed may be more often opposed to their strictness. For

⁶⁴To describe the later imitations of Garlandia as "defective citations" or as "bearing false witness" (Roesner, "Johannes de Garlandia," p. 141) is seriously to misunderstand the nature of thirteenth-century scholarly writing. As Lawrence Gushee has written: "There is perhaps a tendency to rely excessively on the mere fact of concordance as an index of a theorist's point of view. What is equally or even more important is the context in which a statement is found and ways in which its original meaning may be altered." (My emphasis.) I have drawn attention to this practice in my article "The Anonymous of St. Emmeram and Anonymous IV on the *Copula*," *The Musical Quarterly* (forthcoming), and I have made more detailed comments on the whole issue in my paper "Imitatio and Originality in Thirteenth-Century Music Theory," delivered at the 49th Annual Meeting of the American Musicological Society, Louisville, Kentucky, October 27–30, 1983.

⁶⁵127:11–22. Text and citations for the Anonymous of St. Emmeram are according to Heinrich Sowa, *Ein anonymes glossierter Mensuraltraktat 1279*, Königsberger Studien zur Musikwissenschaft, vol. 9 (Kassel, 1930), unless otherwise specified.

A complete translation of the St. Emmeram treatise is in preparation.

just as regular is said to be arranged before irregular, so the preceding chapter is arranged before this one.)

Here a new concept has been introduced: that of *irregularitas*. At this time *irregularis* was not a simple grammatical term, but meant “contrary to the rules of the Church” or “against canon law”⁶⁶—the *regula* being the rule by which officers of the Church were bound. It was not used in the ordinary grammatical sense until the seventeenth century.⁶⁷ The force of the vocabulary strongly suggests a carefree or wilful attitude (“regularum metas . . . transcendere aut interrumpere non veretur. . . .”).

The final sentence is a further hint of Scholastic orderliness and rationality. The author, however, is clearly not disturbed by the wayward character of *organum per se*. Indeed, he lavishes upon it his greatest praise and enthusiasm.⁶⁸

Et scias quod ista species inter cetera cantuum genera sonorum modulos purpurat et insignit; nam per eam queque uocum sonoritas instrumentis siue naturalibus siue artificialibus concordata est reducibilis ad numerum recte uocis. Ideoque istam speciem siue illud capitulum ad consumationem huius opusculi decreuimus reservandum.⁶⁹

(And you should know that that species amongst the other types of music adorns and distinguishes the melodies of sounds; for through it a certain sonority of voices, concordated with either natural or artificial instruments, is reducible to the number of a *recta* voice. And so we decided that that species or that chapter should be reserved for the consummation of this little work.)

“Purpuro” and “insignio” are terms of embellishment and ornamentation, reaching back to late Classical times of distinction and grandeur. But the Scholastic rationalization is evident in the justification of *organum per se* as “reducibilis ad numerum recte uocis,” the *recte* clearly being an attempt to counteract the irrationality of the concept *modus non rectus* above. This rationalization must not, however, blind us to the inalienable fact that *organum per se* is not to be considered as belonging to those species of *musica mensurabilis* that are performed in modal rhythm, i.e., *discantus* and *copula*. This is stressed once more by the Anonymous of St. Emmeram in a further gloss when he writes:

Hic dicit actor, quod organum speciale dupliciter sumitur uel consideratur scilicet aut per se aut cum alio. Si per se regularum artis deuiat a preceptis, nam per uarias concordantias distributum recte mensure seu regularis habitudinem negligit dulcedine melodie. Hinc est quia rectum modum spernere uoluit, alium qui non rectus dicitur appetendo. . . .⁷⁰

⁶⁶See *Mediae Latinitatis Lexicon Minus*, ed. Niermeyer (Lieden, 1976); *A Glossary of Later Latin to 600 A.D.*, ed. Souter (Oxford, 1949; rev. ed 1964); *Revised Medieval Latin Word-List*, ed. Latham (London, 1965).

⁶⁷See *Word-List*, p. 260.

⁶⁸Earlier the author had evinced similar zeal:

. . . de organo speciali, quod omne genus cantuum superat dulcedine melodie . . . [11:25–26]

(. . . about *organum speciale*, which conquers all kinds of song by the sweetness of its melody . . .)

⁶⁹127:35–128:5.

⁷⁰129:27–32.

(Here the author says that *organum speciale* is taken or considered in two ways, that is to say either *per se* or *cum alio*. If it is *per se*, it deviates from the precepts of the rules of the art, for, distributed through various concords, it neglects the condition of *recta* or regular measure by the sweetness of its melody. Hence it is that it wanted to reject the *rectus* mode, seeking another which is called *non rectus*. . . .)

By way of contrast, the Anonymous of St. Emmeram describes *organum cum alio* as being clearly controlled by the laws of modal rhythm:

Cum alio dicitur, quidquid profertur per aliquam rectam mensuram ut dictum est superius. . . .⁷¹

(*Cum alio* is said to be that which is performed through a certain *recta mensura* as has been said above. . . .)

Ostenso superius qualiter organum speciale siue duplex per se positum reperitur, in hoc loco uult actor ostendere quomodo et qualiter cum alio copulatur, dicens quod quociensconque cum alio organo fit repertum, coartatur habitudine regulari et discantus modum et ordinem induit proportionaliter in omnibus et importat.⁷²

(Having shown above in what way *organum speciale* or *duplex* placed *per se* is found, in this place the author wants to show how and in what way it is joined with another [*cum alio*], saying that whenever it is found with another *organum*, it is confined by the regular condition, and takes on and brings in the manner and order of *discantus* proportionally in all things.)

This corresponds closely to the statement of Johannes de Garlandia:

Organum autem (cum alio) dicitur, quidquid profertur per (aliquam) rectam mensuram, ut dictum est superius.⁷³

(*Organum (cum alio)* is said to be that which is performed according to (some) *recta mensura*, as has been said above.)

As a final discussion before his rhetorical peroration, the Anonymous of St. Emmeram gives rules for the recognition of long and short notes in *organum speciale*:

In fine sui capituli uult actor quandam regulam inserere generalem, que ad cognitionem totius capituli dicitur oportuna quo ad uoces plenius et perfectius discernendas, que talis: organum speciale cognoscitur per penultimam, per concordantiam, per figuram. Alia insequitur regula, quod quicquid inuenitur ante longam pausationem, dicitur esse longum. Tercia et ultima est, quod quicquid

⁷¹127:31–32.

⁷²130:22–27.

⁷³XIII:8.

figuratur longum secundum modum organi ante perfectam concordantiam, dicitur esse longum.⁷⁴

(At the end of his chapter the author wants to introduce a certain general rule, which for the understanding of the whole chapter is said to be suitable, whereby the voices may be more fully and more perfectly discerned, which is this: *organum speciale* is understood [? recognized] by the penultimate, by concord, by notation. Another rule follows, that whatever is found before a long pause, is said to be long. The third and last is, that whatever is notated long according to the way of *organum* before a perfect concord, is said to be long.)

It will be noticed here that some small but critical changes have been made in the rules of consonance as handed down by Garlandia. In the first place, the rules are established for *organum speciale* as a whole, which includes both *organum per se* and *organum cum alio*. This is something of a puzzle. Several times in the course of this final chapter, the author uses the word *duplex* as an alternative adjective to the word *specialis*:

. . . organi specialis quod et duplex dicitur . . .⁷⁵

(. . . of *organum speciale* which is said to be *duplex*. . .)

In hoc autem capitulo de speciali organo quod et duplex dicitur. . .⁷⁶

(In this chapter, however, about *organum speciale*, which is said to be *duplex*. . .)

. . . organum speciale sive duplex. . .⁷⁷

(. . . *organum speciale* or *duplex*. . .)

. . .organum speciale sive duplex. . .⁷⁸

(. . . *organum speciale* or *duplex*. . .)

Nowhere, however, does the author use the alternative appellation when describing the division of *organum speciale* into two kinds:

Notandum quod organum dicitur multipliciter, aut per se, aut cum alio.⁷⁹

⁷⁴130:28-35.

⁷⁵127:3.

⁷⁶127:14-15.

⁷⁷128:26.

⁷⁸130:23.

⁷⁹127:23-24.

(It should be noted that *organum* is said in many ways, either *per se* or *cum alio*.)

Hic dicit actor, quod organum speciale dupliciter sumitur uel consideratur scilicet aut *per se* aut *cum alio*.⁸⁰

(Here the author says that *organum speciale* is taken or considered in two ways, that is to say either *per se* or *cum alio*.)

Indeed, the last sentence includes the adverb *dupliciter* in place of the more common alternative adjective *duplex*, and by its assonance glosses over the omission in this case.

There is at least an ambiguity in the terminology. Clearly the author could not have used the expression *organum duplex* when speaking of a further subdivision into *organum cum alio*. Indeed, he deliberately does not do so, as has been shown. The likelihood, therefore, is that in giving rules for the recognition of longs and shorts in *organum speciale*, the Anonymous of St. Emmeram was considering only the species *organum per se*. Indeed, we have already been informed that one subdivision of *organum speciale*, that is to say *organum cum alio*, takes on the rhythm of *discant*, i.e., modal rhythm:

. . . quociensconque cum alio organo fit repertum, coartatur habitudine regulari et *discantus* modum et ordinem induit proportionaliter in omnibus et importat.⁸¹

(. . . whenever it is found with another *organum*, it is confined by the regular condition, and takes on and brings in the manner and order of *discantus* proportionally in all things.)

The ambiguity may stem from the phraseology of Garlandia himself, whose treatise was so patently a model for that of the Anonymous of St. Emmeram. For the passage on the rules of consonance in Garlandia begins:

Longae et breves in organo tali modo dinoscuntur, scilicet . . .⁸²

(Longs and breves in *organum* are recognized in this way, that is to say . . .)

and not:

Longae et breves in organo *per se* tali modo dinoscuntur, scilicet . . .

(Longs and breves in *organum per se* are recognized in this way, that is to say . . .)

It is unlikely that either of these authors would be giving rules for the establishment of long and short notes in *organum cum alio*, since, as they both make clear:

⁸⁰129:27–29.

⁸¹130:25–27.

⁸²XIII:11.

Organum autem (cum alio) dicitur, quicquid profertur per (aliquam) rectam mensuram, ut dictum est superius.⁸³

(*Organum (cum alio)*, however, is said to be that which is performed through (some) *recta mensura*, as has been said above.)

Cum alio dicitur, quicquid profertur per aliquam rectam mensuram ut dictum est superius.⁸⁴

(*Cum alio* is said to be that which is performed through some *recta mensura* as has been said above.)

The rules for *recta mensura* are those with which both authors have been primarily concerned for the majority of their treatises, before discussing *organum per se*. The assumption that the authors are in fact concerned with *organum per se* and the rules for its rhythm in this case is confirmed by the phraseology of Anonymous IV, who, in a parallel passage towards the end of his treatise, writes:

In puro autem organo multiplici via et modo longae et breves cognoscuntur.⁸⁵

(In *organum purum*, however, the longs and breves are recognized by many ways and methods.)

An actual change made by the Anonymous of St. Emmeram in the rules as handed down by Garlandia concerns the subtle suppression of Garlandia's first rule, the most important and significant of the three. By turning Garlandia's introductory statement:

Longae et breves in organo tali modo dinoscuntur . . .⁸⁶

(Longs and breves in *organum* are distinguished in this way . . .)

into a so-called *regulam generalem*:

In fine sui capituli uult actor quandam regulam inserere generalem, que ad cognitionem totius capituli dicitur oportuna quo ad uoces plenius et perfectius discernendas, que talis: organum speciale cognoscitur per penultimam, per concordantiam, per figuram.⁸⁷

(At the end of his chapter the author wants to introduce a certain general rule, which for the understanding of the whole chapter is said to be suitable, whereby the notes may be more fully and more perfectly discerned, which is this: *or-*

⁸³Garlandia, XIII:8.

⁸⁴Anon. St. Emmeram, 127:31–32.

⁸⁵86:13–14.

⁸⁶XIII:11.

⁸⁷130:28–32.

rganum speciale is understood [?recognized] by the penultimate, by concord, by notation.)

the St. Emmeram Anonymous manages to leave out Garlandia's first rule entirely. The statement is descriptive rather than prescriptive.⁸⁸

Despite these changes, however, the author has followed Garlandia's precepts closely: *rganum per se* is not governed by modal rhythm; it moves in its own manner ("more suo"); and the length of the notes is determined by the penultimate, by concord, and by notation.

These precepts receive their fullest expression in the last major treatise of Notre Dame theory: that of Anonymous IV.

The final chapter of the treatise of Anonymous IV contains the most detailed treatment of *rganum purum* in all three authors. The chapter begins with a discussion of *modi irregulares*:

Septimum capitulum tractat de modis irregularibus; qui modi dicuntur voluntarii et sunt multiplices.⁸⁹

(The seventh chapter deals with irregular modes; and these modes are called *voluntarii* and are numerous.)

The force of the word *irregularis* has been discussed before.⁹⁰ The word *voluntarius* is also significant, since it has overtones of the wilfulness in which the Anonymous of St. Emmeram seemed to take such delight.⁹¹ It seems that what is being described here is a performance technique. The author appears to be struggling for a vocabulary to describe subtleties that are not amenable to description. A wide variety of unusual note-lengths is mentioned: *longa media*, *brevis parva*, *longa nimia*, *longa tarda*, *mediocris*, *festinans*, etc. It seems likely that this complex list is the result of a desire to explain rationally a method of performance that was not expressed, or expressible, by the notation:

Nota, (quod ad) cognitionem puri organi praedicti modi irregulares sufficient cum quibusdam aliis postpositis. Iterato nota, quod sufficit de modo figurandi iuxta descriptionem eorundem, ut superius plenius patet; et est figuratio consimilis sicut in aliis regularibus, quamvis in aliquibus sit differentia etc.⁹²

(Note (that for) the understanding of *rganum purum* the aforementioned irregular modes will suffice with certain other things mentioned later. Again note

⁸⁸Cf. Reckow, *Der Musiktraktat*, vol. 2, p. 44, note 21.

⁸⁹84:12–13. Text and citations for Anonymous IV are according to Reckow's edition (Fritz Reckow, *Der Musiktraktat des Anonymus 4*, vol. 1, Beihefte zum Archiv für Musikwissenschaft, vol. 5 [Wiesbaden, 1967]), unless otherwise specified.

A new, complete translation of the Anonymous IV treatise is in press, to be published by the American Institute of Musicology as volume 40 in the series *Musicological Studies and Documents*.

⁹⁰See above, pp. 12–13.

⁹¹See *Revised Medieval Latin Word-List*, s.v. "voluntarius."

⁹²85:23–27.

that the description of them suffices for the method of their notation, as is made clear more fully above; and their notation is exactly the same as in the other regular modes, although in some there is a difference etc.)

Even the length of the rest is left up to the performer, clearly implying free or improvisatory performance:

Pausiones vero valde voluntarie procedunt secundum quod melius videbitur cantori vel operatori . . .⁹³

(Rests, however, proceed very voluntarily according to what seems best to the singer or performer . . .)

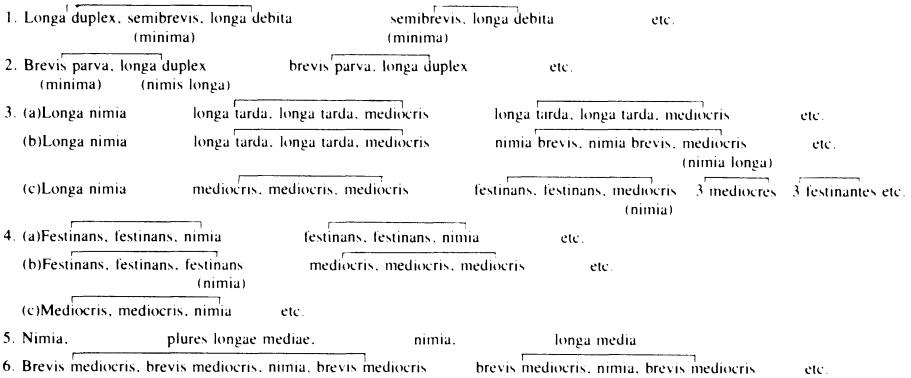
The association with *organum purum* is clear, as it is also above in the statement:

Et iste modus dicitur primus irregularis, et bene competit organo puro.⁹⁴

(And that mode is called the first irregular mode, and is well suited for *organum purum*.)

The chart below gives a simplified scheme of the irregular modes as described by Anonymous IV, and reflecting the ligature patterns implicit in his description.⁹⁵

Figure 1. *MODI IRREGULARES*



⁹³85:28–29.

⁹⁴84:19–20.

⁹⁵A notational scheme, in modern equivalents, is given in the article “Notation,” in *The New Grove Dictionary*. There is a danger, however, in transcription, as there is in translation. Both add a further layer of obscurity to issues where what is needed is the closest possible contact with the original.

It can be seen from this chart that the patterning and arrangement of these notes, despite their occasionally curious and unusual names, follows the ligature patterns of the rhythmic modes in their regular format. It seems, therefore, that Anonymous IV is attempting, through the invention of a new system of modes that he calls irregular, to rationalize and systematize a rhythm that in its very nature was not amenable to such systematization.⁹⁶ Even the positing of the system of irregular modes, however, does not cover the flexible rhythm of *organum purum*. And Anonymous IV clearly recognizes that fact, for he describes a seventh mode:

Et iuxta septem dona spiritus sancti est septimus modus nobilissimus et dignissimus, magis voluntarius et placens. Et iste modus est modus permixtus et communis et est de omnibus duobus supradictis et de omnibus tribus et de omnibus quatuor etc. Et proprie loquendo denominatur organum purum et nobile etc.⁹⁷

(And in accordance with the seven gifts of the Holy Spirit is the seventh mode—most noble and worthy, more voluntary and pleasing. And this mode is a mixed and common mode, and it is made up of all the two-note ligatures mentioned above and all the three-note ligatures and all the four-note ligatures etc. And properly speaking it is called pure and noble *organum* etc.)

Here, finally, is the answer to the problem of how to rationalize the rhythm of *organum purum*. By describing a mode that is made up of all possible

⁹⁶Reckow sees this rather differently:

Der Anstoss zur Bildung des Systems der sechs Modi irregulares ist jetzt klar zu erkennen. Es ist die in allgemeinerer Form bereits bei Franco beobachtete Tendenz, auch die Organum-Melismen (genauer: neben der Copula auch das Organum per se) modalrhythmisch eindeutig zu erfassen, um auf diese Weise das Organum purum den übrigen (ausnahmslos modalrhythmisch komponierten) Species der modernen Mehrstimmigkeit anzugleichen.

(*Der Musiktraktat*, vol. 2, p. 56.)

⁹⁷85:18–22.

combinations of ligatures, and is *permixtus et communis*,⁹⁸ any possibility can be covered and, therefore, of course, any rhythm. There is evident relief in finding such a neat solution; the so-called mode is carefully aligned with spiritual authority (“iuxta septem dona spiritus sancti . . .”),⁹⁹ and Anonymous IV, while sharing the Anonymous of St. Emmeram’s aesthetic rapture over the beauty of the effect, also unequivocally identifies this

⁹⁸*Permixtus* and *communis* are general words with common meanings (“mixed together, commingled,” and “general, universal.”) However it is important to note that both words also have specialized meanings in the studies of the Trivium. Cicero used the word *permixtus* to refer to a confused type of speech (*Orator ad M. Brutum* 56, 187 [ed. Orelli and Baiter, *Opera Omnia*, vol. 1 (Zürich, 1845)]):

. . . quibus (intervallis longis et brevibus) implicata atque permixta oratio.

(. . . a confused [with long and short spaces] and *permixta* speech.)

Communis in Grammar had several meanings. It denoted a verb that had both active and passive force. See, for example, Priscian, *Institutiones Grammaticae* 8, 8 (ed. Keil, *Grammatici Latini*, vol. 2, p. 374):

(Verba) in “or” vero terminantia tres species habent: passivam, quae ex activis nascitur et semper passionem significat exceptis supra dictis; communem, quae una terminatione tam actionem quam passionem significat; deponentem, quae cum similem habeat communibus positionem in “or” desinendi, tamen deponens vocatur. . . .

([Verbs] that end in “or” have three species: passive, which derives from the active ones and always signifies the passive except as said above; *communis*, which signifies both the active and the passive with the same ending; and deponent, which, although it has a similar position to the *communis* verbs with its ending in “or,” yet is called deponent. . . .)

Donatus also used the word in this sense (*Ars Grammatica* 2, 12 [ed. Keil, *Grammatici Latini*, vol. 4, p. 383]):

(Verba) communia sunt quae “r” littera terminantur et in duas formas cadunt, patientis et agentis, ut *scrutor* criminor: dicimus enim *scrutor* te et *scrutor* a te, *criminor* te et *criminor* a te.

([Verbs] are *communis* which end with the letter “r” and fall into two forms: passive and active, like *scrutor* and *criminor*; for we say “I examine [*scrutor*] you,” and “I am examined [*scrutor*] by you;” “I accuse [*criminor*] you,” and “I am accused [*criminor*] by you.”)

Communis was also used to refer to a word of both masculine and feminine (or masculine, feminine, and neuter) gender. See Charisius, *Institutiones Grammaticae* 2, 6 (ed. Keil, *Grammatici Latini*, vol. 1, p. 153):

Genera nominum sunt tria vel, ut quibusdam placet, quinque, masculinum femininum neutrum commune promiscuum . . . Commune autem ex his fit duobus modis. Sunt communia aut ex genere masculino et feminino, ut hic et haec canis, aut ex genere masculino feminino et neutro, ut hic et haec et hoc [felis].

(There are three types of nouns, or as some people think, five: masculine, feminine, neuter, *communis*, and promiscuous . . . *Communis* occurs in two ways. *Communis* nouns are either masculine and feminine, as with dog [masculine and feminine]; or masculine, feminine, and neuter, as with [cat] [masculine, feminine, and neuter].)

Finally, and most significantly for the present context, *communis* was the word used to describe a syllable that could be either long or short (Probus?, *De ultimis syllabis liber ad Caelestinum* XV, 1 [ed. Keil, *Grammatici Latini*, vol. 4, p. 258]):

Communes syllabae naturales duobus modis incurrunt, aut in singulis vocalibus aut duabus coniunctis quas Graeci diphthongos vocant. Communis syllaba . . . est enim longa in hoc versu:

Glauco et Panopeae et Inoo Melic.,
in isto autem brevis eadem [producta], “te Corydon o Alexi.”

(Natural *communis* syllables occur in two ways, either in single vowels or in two joined together, which the Greeks call diphthongs. For a *communis* syllable is long in this verse: “Glauco et Panopeae et Inoo Melic.,” but the same one is short in this verse, “Te Corydon o Alexi.”)

⁹⁹Roesner has given a useful sketch of some of the theological background to this analogy. (“Johannes de Garlandia,” pp. 147–49.)

seventh mode with *organum purum*: “Et proprie loquendo denominatur organum purum et nobile etc.” The seventh mode “is called” *organum purum et nobile etc.*¹⁰⁰

The final proof that, despite his invention of the concept of the irregular modes, Anonymous IV clearly does not view the rhythm of *organum purum* as modal, is given in the sixth chapter of the treatise, where he writes:

Est et sextum volumen de organo in duplo ut Iudea et Ierusalem et Constantes, quod quidem numquam fit in triplo neque potest fieri propter quendam modum proprium, quem habet extraneum aliis, et quia longae sunt nimis longae et breves nimis breves. Et videtur esse modus irregulativus quoad modos supradictos ipsius discantus, quamvis in se sit regularis etc.¹⁰¹

(And there is a sixth volume of *organum* in *duplum*, like “Iudea et Ierusalem” and “Constantes,” which indeed never occurs in *tripulum*, nor can occur that way, on account of a certain mode of its own which it has that is different [*extraneum*] from the others, and because the longs are too long and the breves too short. And it seems to be an irregular [*irregulativus*] mode compared to the above-mentioned modes of the discant itself, although it is regular in itself etc.)

It is not “Iudea et Ierusalem” (and its verse “Constantes”) which cannot be set *in triplo* (there is in fact such a setting),¹⁰² but *organum in duplo* in general. Despite the rationalization of the *modus irregulativus*, and “quamvis in se sit regularis,”¹⁰³ the rhythm is too free to allow another

¹⁰⁰Compare Anonymous IV’s rationalizations with those of Jacobus of Liège. See Reckow, *Der Musiktraktat*, vol. 2, p. 60, note 5.

¹⁰¹82:20–25.

¹⁰²F. 46^v and W₂.6.

¹⁰³This corresponds to the Anonymous of St. Emmeram’s formulation:

Et nota quod licet (organum per se) rectam relinquat mensuram, tamen habet modum et mensuram in se. [130:4–5].

(And note that although (organum per se) abandons *recta mensura*, yet it has mode and *mensura* in itself.)

(The *tamen* was given from the manuscript in place of Sowa’s incorrect reading *cum*, by Reckow [*Der Musiktraktat*, vol. 2, p. 61, note 6].)

Reckow is quite wrong in saying that the Anonymous of St. Emmeram discusses mensural notation in connection with *organum purum*, and that the same theorist believes that *organum purum* can be extended to three parts (*Der Musiktraktat*, vol. 2, pp. 43 and 45). Reckow has mistakenly associated *organum speciale* with *organum per se*. In fact, as we have seen, *organum speciale* includes both *organum per se* and *organum cum alio*; and the Anonymous of St. Emmeram is clearly speaking figuratively when he says:

. . . quomodo et qualiter cum alio copulatur . . . [130:24–25]

(. . . how and in what manner it is joined with another . . .)

and

. . . quotienscumque cum alio organo (sit) repertum . . . [130:25]

(. . . as many times as it is found with another *organum* . . .)

As Reckow himself has pointed out (*Der Musiktraktat*, vol. 2, p. 8, note 29), there is no example in the Notre Dame repertoire of an *organum duplum* being expanded to a *tripulum* (in some *tripula*, however, a consciousness of an earlier *duplum* on the same chant is evident [see *Das Organum*, pp. 482–85]).

part to be aligned with it. If it were modal, even with longer longs and shorter shorts, this would not be the case.

The rules of consonance in Anonymous IV are greatly expanded from those given by the previous two authors. The passage in question runs from 86:13 - 89:2, and is summarized here in schematic form:

1. Omnis punctus primus—longa parva, tarda, vel media. Si concordans, tenor resonans sive redundans; si non concordans, tenor tacens vel quiescens.
 2. Omnis punctus paenultimus ante longam pausationem est longus.
 3. Omnis punctus paenultimus perceptus longus per modum, sive concordans sive non.
 4. Binariae:
 - primus—longus si concordans
 - brevis si discordans (except if penultimate)
 - ultimus—longus si concordans
 - minime [?] si discordans (except if penultimate)
 5. Ternariae:
 - primus—longus si concordans
 - brevis si discordans
 - secundarius—longus si concordans
 - brevis si discordans (except if penultimate)
 - ultimus—longus si concordans
 - brevis si discordans (except if penultimate)
 6. Quaternariae:
 - omnis punctus—longus si concordans
 - brevis si discordans
 7. Duo puncta in eodem sono, sive in concordantia sive non, —longa florata.
 8. Currentes aequaliter pro posse et velociter descendunt.
 9. Sunt quandoque plurimae longae, sive concordantes sive non.
 10. Est quaedam duplex longa florata. Et illa ponitur in principio . . . semper erit concordans.
 11. Finis multiplici modo finitur.
-
- (1. Every first note—*longa parva*, *tarda*, or *media*. If concordant, the tenor will be sounding or held over; if not concordant, the tenor will be silent or remain quiet.
 2. Every penultimate note before a long rest is long.
 3. Every penultimate note perceived long by mode will be long, whether it is concordant or not.

4. *Binariae*: first note—long if it is concordant
—short if it is discordant (except if penultimate)
last note—long if it is concordant
—*minime* [?] if it is discordant (except if penultimate)
5. *Ternariae*: first note—long if it is concordant
—short if it is discordant
second note—long if it is concordant
—short if it is discordant (except if penultimate)
last note—long if it is concordant
—short if it is discordant (except if penultimate)
6. *Quaternariae*: every note—long if it is concordant
—short if it is discordant
7. Two notes on the same pitch, whether in a concord or not—*longa florata*.
8. *Currentes* descend quickly and as equally as possible.
9. There are sometimes several longs, whether concordant or not.
10. There is a certain *duplex longa florata*. And it is placed in the beginning It will always be concordant.
11. The ending can finish in many ways.)

The net result of these rules is, again, similar to the precepts laid down by Garlandia. With certain specific exceptions (opening notes, penultimate notes before a long rest, two notes on the same pitch, *currentes*, occasional passages of consistently long notes, and some endings), a note is long if it is consonant, short if it is dissonant.

Let us summarize. All three theorists considered here agree on the following: *Organum purum* is not performed in modal rhythm,¹⁰⁴ but according to a system that is governed (with specific exceptions) by the consonance level of its individual notes.

Some commentators who reached this same conclusion in the past attempted to transcribe passages of *organum purum* in accordance with these rules. All of them confessed to failure in their attempts. Apel tried to follow the theoretical precepts, but was later forced to resort to equal-note transcriptions.¹⁰⁵ Reckow experimented with transcriptions according to consonance, but ultimately admitted facing “unüberwindlichen Probleme-

¹⁰⁴The most conclusive argument against the application of modal rhythm to *organum purum* is provided by an understanding of *copula* (see Yudkin, “The *Copula*,” and “The Anonymous of St. Emmeram”). For if, of the three species of polyphony (*discantus*, *copula*, and *organum*), it is *copula* that is performed with modal rhythm over a held tenor-tone, then this presents the clearest picture of what *organum purum* is not.

¹⁰⁵See p. 355.

men.”¹⁰⁶ Even Eggebrecht, who has argued against transcription into modern notation altogether, wrote that “Die Konkordanzregel . . . scheint . . . in der geforderten starren Anwendung dem ‘untheoretischen,’ irrationalen Grundzug dieser Kunst ebensowenig zu entsprechen wie die Versuche modal-rationaler Lesung.”¹⁰⁷

The single error that confounded these attempts to reproduce *organum purum* according to the “rules of consonance” was, in my view, the limitation of the notes to only two or three rhythmic values. It was this that led to the clearly unsatisfactory results, and to the belief that “der originale rhythmische Charakter des Leoninischen Organum (ist) grundsätzlich nicht rekonstruierbar.”¹⁰⁸

Consonance and dissonance, however, are not absolutes. They are not opposites. They are not good and bad, *nobilis et vilis*, producing only two different kinds of notes. All intervals lie along a *spectrum* of consonance and dissonance, and they can therefore be represented by a spectrum of note-values. There is no reason to limit the notes to only two or three rhythmic values. Taking into account those special cases noted by Anonymous IV—penultimate notes, *currentes*, and so on—the length of each note in *organum purum* can be derived directly from its level of consonance. Just because these values cannot easily be written down does not mean that they cannot easily be performed.

There follows a chart which shows the intervals distributed along the spectrum of consonance and dissonance according to the order of Johannes de Garlandia:¹⁰⁹

1 8 5 4 M3 m3 M2 m7 M6 m6 M7 m2 A4
Consonance-----Dissonance

A singer bearing in mind this spectrum of intervals can reproduce a range of note values in his performance of *organum purum* that is directly derived from the consonance level of the notes he is singing (a task made easier, of course, by the fact that he is singing against long-held notes in the chant).

The result is a performance of great subtlety and flexibility—a performance with a wide variety of note-lengths—a performance that is both *non rectus, irregularis, and voluntarius*.

¹⁰⁶See Reckow, *Der Musiktraktat*, vol. 2, pp. 76–91.

¹⁰⁷Hans Heinrich Eggebrecht, “Organum purum,” p. 107.

¹⁰⁸Reckow, *Der Musiktraktat*, vol. 2, p. 90.

Before preparing the performance for which the present ideas were generated, I had also written that the rhythm of *organum purum* “may never be revealed to us at all.” (Jeremy Yudkin, “Notre Dame Theory: A Study of Terminology, Including a New Translation of the Music Treatise of Anonymous IV” [Ph.D. dissertation, Stanford University, 1982], p. 48.)

¹⁰⁹The order of the intervals in the chart is taken from the discussion in Garlandia’s chapter XI:1–17. In chapter IX the implied positions of M2 and M6 appear to be reversed (see IX:25–34, and cf. Richard Crocker, “Discant, Counterpoint, and Harmony,” *Journal of the American Musicological Society* XV [1962], 3.) The Anonymous of St. Emmeram gives the same order for 1 8 5 4 M3 and m3, but prefers not to discuss the other intervals (see 117:12–15 and 121:1–12). Anonymous IV also gives 1 8 5 4 M3 and m3, and does not formally rank the other intervals (see 63:13–64:1, 67:3–8, 77:24–28, 85:31–34.)

When Anonymous IV described that “most noble and worthy” construct that he called the seventh mode, he said that it was made up of “all the two-note ligatures mentioned above and all the three-note ligatures and all the four-note ligatures.” The ligatures “mentioned above” are in fact those from that other construct, the system of irregular modes, which contains that extraordinary range of note-values for which Anonymous IV had to invent new names.

I suggest that this is the solution to the seeming dichotomy between the two methods of performance outlined by Anonymous IV,¹¹⁰ and that these constructs are precisely the way that a Scholastic theoretician would have rationalized a method of performance such as I have described.

Anonymous IV names ten rhythmic values used in these constructs: *longa duplex*, *semibrevis*, *brevis parva*, *longa nimia*, *longa tarda*, *mediocris*, *nimia brevis*, *festinans*, *longa media*, *brevis mediocris*. Together with the normal rhythmic values available to singers (*brevis*, *longa*, *longa ultra mensurabilis*), the total number of rhythmic values to be used in *organum purum* is thirteen—exactly the same as the number of melodic intervals on the consonance-dissonance spectrum.

But perhaps this is only a coincidence.

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¹¹⁰Reckow felt that there was a clear contradiction “der aus dem Nebeneinanderstellen derart entgegengesetzter Rhythmisierungsmethoden entsteht.” (*Der Musiktraktat*, vol. 2, p. 32.) It has also been suggested that the two systems represented different historical stages. (See Reckow, *Der Musiktraktat*, vol. 2, pp. 34 and 64; and Flotzinger, “Organum,” in *The New Grove Dictionary*.)

Norman E. Smith is the most recent scholar to have suggested that over the years organum passages were recast into modal form. Though there is not a large number of examples that reveal this process, the ones that Professor Smith has uncovered are most telling. (Paper presented at the Eighteenth International Congress on Medieval Studies, Kalamazoo, Michigan, May 5-8, 1983.)